

**Before the  
COPYRIGHT ROYALTY JUDGES  
Washington, D.C.**

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**In the Matter of** )  
 )  
**Distribution of the** )  
**2004 and 2005** )  
**Cable Royalty Funds** )  
 )

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**Docket No. 2007-3 CRB CD 2004-2005**

**Testimony of  
Dr. Gregory M. Duncan**

**June 1, 2009**

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WRITTEN DIRECT TESTIMONY  
OF DR. GREGORY M. DUNCAN

**I. INTRODUCTION AND SUMMARY OF CONCLUSIONS**

1. The Joint Sports Claimants (JSC) have asked for my opinion on: (a) whether the use of a constant sum survey is an appropriate method of measuring the relative value of the different categories of distant signal programming retransmitted by cable operators pursuant to the compulsory licensing provisions of the Copyright Act; and (b) whether the constant sum survey, which JSC is offering in this proceeding, was based on reliable principles and methods and conducted in such a manner as to produce reliable results. I believe that both questions should be answered in the affirmative.

**II. QUALIFICATIONS**

2. I have a Ph.D. in Economics and a Master's degree in Statistics. Much of my academic research is and has been in econometrics, specifically, methods for surveys and analyzing survey data. As an industrial economist I have designed, fielded, and analyzed dozens of surveys. All have used one form or another of trade-off or conjoint analysis, which is an area in which the constant sum methodology figures prominently. Currently, I teach econometrics at the University of California, Berkeley. I am also a Managing Director at the Huron Consulting Group in San Francisco. Huron is a publicly held consulting firm with roughly 2,600 professionals worldwide. Prior to my current appointments, I was Senior Vice President at National Economic Research Associates where I founded and headed two practices. Before that I was a Senior Staff Scientist at GTE (now Verizon) Laboratories, where I led the company's efforts in marketing research, statistics, applied mathematics, and economics. I have been a tenured Full Professor of both Economics and of Statistics and have taught at Northwestern

University, Washington State University, and Boston University. I have published extensively and have supervised the theses and dissertations of dozens of students. My curriculum vitae appears in Appendix A.

### III. BACKGROUND

3. Section 111 of the Copyright Act of 1976 grants cable operators compulsory licenses to retransmit broadcast stations outside the local markets of those stations (distant signals), provided that the cable operators pay a statutorily prescribed royalty and submit statements of account to the Copyright Office. The Copyright Royalty Judges allocate the royalties among eligible copyright owners (Claimants), those with non-network programming on the distant signals. Previously, the Copyright Arbitration Royalty Panels (CARP), subject to review by the Librarian of Congress and Register of Copyrights, and the Copyright Royalty Tribunal (CRT) had that responsibility.

4. In "Phase I" of the distribution proceedings, Claimants are divided into groups based on the content provided. In prior proceedings, the CARP and CRT sought to allocate the royalties among these groups according to the relative market valuations of the different content categories they represented. Because cable operators retransmit distant broadcast signals in their entirety, the market values of various types of programming cannot be directly observed. Thus, survey methodologies, such as the constant sum method that seeks to represent the outcome of hypothetical bargaining processes, have been used to determine relative market values.

5. Since the first copyright proceeding in 1978, the JSC has submitted constant sum surveys to measure the relative market values of distant signal

programming categories. The National Association of Broadcasters likewise submitted constant sum surveys in the 1983 proceeding. Canadian Claimants also submitted constant sum surveys to estimate the relative values of programming categories on Canadian signals in the 1990-92, 1998-99, and 2000-03 proceedings. The history of the extensive use of constant sum surveys in these proceedings is contained in the report prepared by Bortz Media & Sports Group, Inc., entitled "Cable Operator Valuation of Distant Signal Non-Network Programming: 2004-05" (JSC 04-05 Ex. 1) ("Bortz Report"), which I have reviewed in connection with providing this testimony.

#### **IV. USING CONSTANT SUM SCALE TO MEASURE RELATIVE PROGRAMMING VALUE**

##### **A. The Constant Sum Methodology**

6. The constant sum methodology measures the relative importance of attributes of products by allocating a fixed amount, for example, 100 points, to these items in proportion to their value to the respondents. The most important attributes receive the greatest number of points. The constant sum methodology is an example of a comparative rating scale. Constant sum forces the respondent to "allocate" his or her evaluations and has the effect of standardizing each scale across persons, since all scores must add to the same constant (e.g., 100). As such, the constant sum procedure requires the respondent to make a comparative evaluation of the items under consideration.<sup>1</sup> That is, respondents "judge each attribute with direct reference to the other attributes being evaluated."<sup>2</sup>

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<sup>1</sup> Gilbert A. Churchill, Jr. & Dawn Iacobucci, *Marketing Research: Methodological Foundations* 282 (9th ed. 2005) (hereinafter "Churchill and Iacobucci").

<sup>2</sup> *Id.*

7. The constant sum methodology is particularly useful in situations where an analyst wishes to evaluate the impact of specific factors on resource allocation.

Examples include:

- Product managers allocating total marketing budget among advertising, sales promotion, and trade promotion
- Sales managers dividing total compensation package for salespeople among straight salary, commission, and non-monetary incentives
- Financial investors allocating their investment dollars among stocks, bonds, and various other financial instruments<sup>3</sup>

8. The Bortz survey is very similar to these resource allocation decisions. In particular, the Bortz survey measures relative value with explicit reference to a budget for distant signal non-network programming. Respondents are asked, "how much do you think each such type of programming was worth, if anything, on a comparative basis, in terms of attracting and retaining subscribers?"<sup>4</sup> They are then asked, "What percentage, if any, of the fixed dollar amount would you spend on" specific program categories on distant signals actually carried by the respondents.<sup>5</sup> These questions elicit the respondents' relative market valuations of the different program types, that is, the relative amount the respondent would be willing to pay for each program category if required to negotiate for that category.

#### **B. Benefits of the Constant Sum Methodology**

9. The "constant sum method has become quite popular in marketing research primarily because of its simplicity and ease of instructions."<sup>6</sup> From a market

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<sup>3</sup> Wayne S. Desarbo, Venkatram Ramaswamy & Rabikar Chatterjee, *Analyzing Constant-Sum Multiple Criterion Data: A Segment-Level Approach*, 32 J. Mktg. Res. 222, 222 (1995).

<sup>4</sup> Bortz Report (JSC 04-05 Ex. 1, Appendix B).

<sup>5</sup> *Id.*

<sup>6</sup> Carl D. McDaniel & Roger H. Gates, *Marketing Research Essentials* 244 (2d ed. 1997).

research standpoint, one of the chief benefits of using a constant sum survey is that it mimics the process used by purchasers, who make decisions. Constant sum surveys reduce the number of alternatives as a way of deciding which attributes actually matter and help eliminate carryover from one attribute to the next.<sup>7</sup> “The points assigned in these scales could be evenly distributed, but they tend not to be; evidence that raters try to choose which attributes matter more.”<sup>8</sup>

10. The constant sum method is one out of a group of techniques referred to as conjoint analysis. All versions of conjoint analysis require the respondents to trade off attributes of offerings in one way or another. Properly designed, such survey-based trade-offs can reveal the decisions a respondent would make in market or other decision-making environments.

11. There are many versions of conjoint analysis. They are by and large equivalent,<sup>9</sup> and the choice between them depends on the ease of implementation and interpretability. In some contexts, one version or another may be easier to administer or produce results that are more direct. In any case, conjoint methods have been used for well over 50 years and are explicitly developed to mimic markets and market outcomes, which as I understand it is the objective of this proceeding.<sup>10</sup>

12. I believe that the constant sum methodology is appropriate to determine the relative market value of the distant signal programming categories carried by cable

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<sup>7</sup> Carryover is the same as a consistent response pattern and is seen when a respondent gives all attributes the same value as the whole with little or no distinction.

<sup>8</sup> Churchill and Iacobucci at 282.

<sup>9</sup> Pablo Marshall & Eric T. Bradlow, *A Unified Approach to Conjoint Analysis Models*, 97 J. Am. Stat. Ass'n 674, 674-682 (2002).

<sup>10</sup> Andrew L. Comrey, *A Proposed Method for Absolute Ratio Scaling*, 15 Psychometrika 317, 317-325 (1950).

operators. My opinion is consistent with that of experts in prior proceedings who have examined the Bortz survey. For example:

13. Professor Leonard Reid of the University of Georgia testified that not only is the constant sum technique “a valid and well-accepted research tool . . . . used in marketing research,”<sup>11</sup> but also that the methodology is simple; it allows the use of sophisticated statistical procedures; it reveals comparative judgments; it eliminates consistent positive, negative, or neutral response patterns; and it provides information predictive of behavioral tendencies.<sup>12</sup>

14. Dr. Joel Axelrod, who conducted the seminal study validating the constant sum methodology as a predictor of behavior, testified that the constant sum scale parallels the decision process used by decision makers. He stated, “Constant Sum questions are particularly appropriate when . . . one seeks information about relative values.”<sup>13</sup>

15. Dr. Samuel Book, testified that he “[does] not believe there would have been any better way of determining how cable operators would have allocated their programming budgets” than by using the constant sum methodology.<sup>14</sup>

16. I agree with the above conclusions.

## **V. THE SURVEY WAS METHODOLOGICALLY SOUND**

### **A. Fundamental Issues in Survey Research**

17. The first issue to be addressed in evaluating a particular survey concerns the composition of the sample. The sampling units, that is, the people to be contacted, must be able to provide answers to the questions asked. In this case, the purpose of the

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<sup>11</sup> Testimony of Dr. Leonard N. Reid (1989 Proceeding) (JSC 04-05 Ex. 11 at 3-4).

<sup>12</sup> *Id.*

<sup>13</sup> Testimony of Dr. Joel Axelrod (1990-92 Proceeding) (JSC 04-05 Ex. 12 at 3).

<sup>14</sup> Testimony of Dr. Samuel H. Book (1989 Proceeding) (“Book Testimony”) (JSC 04-05 Ex. 13 at 2).



Bortz survey is to determine the relative values that cable operators attribute to various program categories on the distant signals they carry. Consequently, the cable operators and, specifically, the programming decision-makers (and not, for example, the viewers) are the relevant group to be sampled. Note that the respondents in the study are all executives involved in program decision making, thus the composition of the study is appropriate.

18. The second issue is whether the sample is a probability sample, that is, does every member of the population have a known and positive probability of being sampled. The Bortz study uses an optimal stratified sampling method referred to as the *cum  $\sqrt{f}$*  rule of Dalenius and Hodges,<sup>15</sup> which satisfies this requirement and gives reasonable assurance that the boundaries of the strata sufficiently reduce the sample error.<sup>16</sup> In sampling, strata refer to subsets of the population that may be over or under sampled relative to their proportion. This over or under sampling is done to maximize the precision of estimates, such as the hypothetical allocation of royalty payments by cable system operators among the types of programming represented in this proceeding (“allocation patterns”). In the Bortz study the strata were based on copyright royalty payments. In 2005, for instance, there were four strata: systems paying \$239,845 or more; systems paying between \$239,844 and \$65,345; systems paying between \$65,344 and \$23,845; and systems paying less than \$23,845. Concentrating on systems paying less than \$23,845 (“small systems”) and systems paying more than \$239,845 (“large

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<sup>15</sup> T. Dalenius & J.L. Hodges, Jr., *Minimum Variance Stratification*, 54 J. Am. Stat. Ass’n 88, 88-101 (1959).

<sup>16</sup> See Bortz Report (JSC 04-05 Ex. 1 at 44-45).

systems”), we find there are 755 and 39 systems, respectively.<sup>17</sup> With random sampling one would need to sample many systems to end up with a sufficient number of large systems. One would have many more small systems than necessary to precisely predict the allocation patterns of small systems. Alternatively, were one to try to cut down on the number of small systems yielded by random sampling by reducing the sample size, there would be an insufficient number of large systems for accurate estimation of large system allocation patterns. Random sampling would result either in unacceptable imprecision in estimating allocation patterns across all sizes of cable systems or result in an unnecessarily large and expensive sample. Surveys are expensive; the desire is to maximize the precision for a given number of interviews or minimize the cost for a desired level of accuracy. The method used in this study was designed to sample proportionately more systems that make greater contributions.<sup>18</sup> “This approach is intended to ensure that responses to the survey would provide a statistically valid predictor for allocation of royalty payments.”<sup>19</sup> At the same time, the approach minimizes the cost of doing the survey, at least as much as possible in keeping with the desire for precision.

19. The third and related issue is the adequacy of the sample size. The sample size is large enough if the standard errors are small enough to allow precise estimates. The standard errors in the Bortz study are roughly 1 percentage point for the allocations

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<sup>17</sup> Some systems were excluded from the population because they only carried Public Television or Canadian programming. An appropriate comparison cannot be made because these systems only carried one programming type. To the extent one wanted survey results to reflect values cable operators place on channels with one programming type, an adjustment to the relevant universe would be necessary.

<sup>18</sup> *See id.* at 44.

<sup>19</sup> *Id.* at 44.

to the most important categories.<sup>20</sup> In my experience, these are quite small. Here, we also benefit from having a relatively stable set of survey results over the years.

20. The fourth issue concerns nonresponse bias. Nonresponse bias is the effect on results of nonrespondents being systematically different from respondents. For example, if one wants to estimate the average height of people in a classroom and all the basketball players and football players refuse to give their height, the average will likely be biased downward. In contrast, if the same number of students refuse to participate, but the refusal is uncorrelated with their height, then there will be no such bias. Barring systematic nonresponses, this should not be an issue. Moreover, nonresponse bias is less of a concern when a large fraction of the population responds. It is also less of a concern if a large number of potential respondents, in fact, respond. In the Bortz studies, response rates that range from 65 to 68 percent were obtained for the key constant sum question (Question 4) in 2004 and 2005.<sup>21</sup> These rates are much higher than survey researchers often achieve. Moreover, many of the strata have sample sizes that are large relative to the size of the strata; for example, the sampling plan called for contacting all eligible operators in the top stratum, and these operators account for more than a quarter of the royalties paid.<sup>22</sup> Consequently, I believe that the sample size and the response rates are appropriate.

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<sup>20</sup> The standard error of roughly 1 percent corresponds to an absolute confidence interval of roughly  $\pm 2$  percent for the most important categories. Note that the standard error in each of the strata is roughly the same. Under random sampling this would not be true. The standard errors for the strata representing the larger part of the population (small systems) would be smaller and perhaps very much smaller than the standard errors for the strata representing a smaller part of the population (large systems). This would be unacceptable if a smaller part of the population were the most controversial part of the population. It is the stratified sampling that allows control over the accuracy of the results in each stratum. This feature accounts for stratified sampling being preferred by most statisticians.

<sup>21</sup> Bortz Report (JSC 04-05 Ex. 1 at 47).

<sup>22</sup> *Id.* at 45 (Table A-2).

21. The final issue concerns the design of the instrument, that is, the phrasing and the structure of the questions. Here, we want to know if the respondents understand the questions and if they can answer them. I believe that the questions in the Bortz survey are phrased adequately to obtain reliable results, particularly because the respondents make the type of decisions posed by the questions in the survey on a regular basis as part of their professional responsibilities.<sup>23</sup>

**B. Evolution of the Surveys**

22. Over the past 25 years, JSC has submitted the results of numerous constant sum surveys designed to measure what cable operators would have paid on a relative basis for different programming types on distant signals had they negotiated with program owners. The details of these studies have evolved, primarily, in response to criticisms raised in the distribution proceedings. In my experience, the best surveys are those that, like the Bortz survey, have developed over time and that are fielded on a regular basis.

23. Turning to specific issues, the major improvements to the survey process include: (1) fielding the survey in the year after royalty payments have been collected so that respondents have a clear recollection of the programming decisions made in that year, (2) identifying and interviewing the person most responsible for programming decisions, (3) providing appropriate definitions of seven programming categories to which royalty payments are distributed, and (4) focusing respondents on the decision to spend money on programming from distant channels by (a) providing lists of the specific

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<sup>23</sup> See Book Testimony (JSC 04-05 Ex. 13 at 3). My understanding is that a significant amount of movies, syndicated programming, and devotional programming on WGN, a very popular distant signal, is not "compensable" under the Copyright Act. Because cable operators here were asked to value all programming on WGN, and not simply the compensable programming, I believe that any relative values assigned by operators to those categories would be a maximum value.

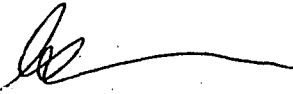
distant channels that each respondent carries and (b) framing the allocation question as distributing a programming budget over the five to seven specific categories of programming.

24. In terms of the underlying objective of determining how much cable operators would pay for programs carried by distant signals, the refinements to the survey process have addressed two primary requirements: (1) making certain that the survey respondents would have been involved in the negotiations that the royalty distribution process is intended to emulate, and (2) aligning the specifics of the survey questions as closely as possible with what cable operators would have paid for programming during such negotiations. In other words, do the survey administrators talk to the right decision makers, and, if so, do the questions asked and answered measure the right thing? Based on my own experience in identifying survey respondents and presenting them with questions that provide economically reliable valuations as well as my independent review of current and earlier vintages of the Bortz survey, I concur with the conclusions of the most recent CARP Report and the other experts that the Bortz survey is designed to produce results that reasonably emulate the payments cable operators would have made had they acquired programs through open negotiations.<sup>24</sup> Thus, I believe that the Bortz survey was based on sound principles and tested methods and that it was conducted in such a way that its results can be deemed reliable.

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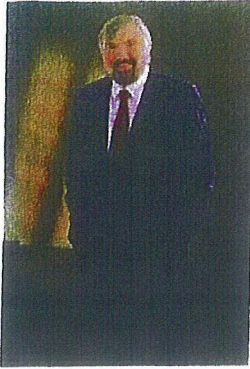
<sup>24</sup> See Report of the Copyright Royalty Tribunal in Docket No. CRT 91-2-89CD, 57 Fed. Reg. 15,286, 15,300 (Apr. 27, 1992) ("The high standards of procedure that obtained in the 1983 survey were again followed in the 1989 survey."); Report of the Copyright Arbitration Royalty Panel in Docket No. 2001-08 CD 98-99 at 18-19 (Oct. 21, 2003) (noting that the Panel in the 1990-92 Proceeding conceded that the survey was "well designed" and had not suggested any changes in the underlying methodology). See also Book Testimony (JSC 04-05 Ex. 13 at 2) ("The Bortz study was competently designed and implemented. It utilized generally accepted methods of sampling, questionnaire design and interviewing.").

I declare under the penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

  
\_\_\_\_\_  
Gregory M. Duncan

June 01, 2008  
Date

**Appendix A:  
Curriculum Vitae**



## Gregory M. Duncan

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### Curriculum Vitae

Dr. Gregory Duncan provides consulting in Economics, Statistics, Simulation Methods, Marketing Research, Antitrust, Intellectual Property, Financial Industries, Energy and Telecommunications.

Dr. Duncan has directed projects in telecommunications, energy, antitrust, market research, intellectual property, financial markets, sampling and labor. He has provided testimony and testified on a variety of telecommunications, labor, and transportation issues before numerous state public utility commissions and legislatures, the Interstate Commerce Commission, the Federal Communications Commission. He has also provided testimony on antitrust and labor cases in state and federal courts. He has been quoted in newspapers, such as the Wall Street Journal, and has appeared on televised talk shows such as Lou Dobbs Moneyline.

Dr. Duncan developed market research studies to estimate elasticities and market share losses, based on the same studies developed optimal pricing models, and models explaining the telecommunications meltdown as a logical consequence of the Telecommunications Act of 1996. He investigated and testified to the use of cost models, cost allocations and price cap estimation and construction in both the energy and the telecommunications industries. He has advised on and/or testified for clients on class certification issues, auction mechanisms, firm valuation and bankruptcy, antitrust issues, damages issues, international trade, and market effects of mergers.

### Professional experience

Previously, he was Senior Vice President at National Economic Research Associates (NERA) and headed its worldwide Telecommunication Strategy and Advice Practice, was a member of the board of directors, and headed the San Francisco office. He was the founder of NERA's Auctions Practice which developed strategies for the various spectrum auctions throughout the world as well as designing and running energy auctions (Basic Service Generation) in New Jersey, Illinois and other states.

Prior to NERA, Dr. Duncan was a Staff Scientist and Principal Member of the Technical Staff at Verizon (GTE) Laboratories, Inc. He has been a Full Professor, with tenure, in both Economics and in Statistics. In addition to his current appointment at Duke, has held positions at the University of California, Berkeley, Northwestern University, Washington State University, Boston University and the University of Southern California. He publishes and has published in a variety of areas including telecommunications, market research, demand, supply and revenue, cost and production analysis, labor, transportation, and theoretical econometrics. He is an expert in and early contributor to the literature on discrete choice modeling, semiparametrics, and simulation methods.

Representative examples of Dr. Duncan's engagement experience include:

- Damages expert in class action involving for-profit colleges and alleged misrepresentation of the value of a degree. (deposed, settled)
- Expert in dispute against FTC over calling card disclosures and damages. (deposed, settled)
- Expert in Lanham Act case where allegation is that incomplete service disclosure caused market share and profit loss to competitors. (settled)
- Expert in dispute over value of advertised attribute that allegedly was absent from a product. Class certification and damages.
- Witness for ATT in tax dispute with IRS over tax treatment of universal service funds. (Deposed, trial set)
- Provided damages estimates for setting reserves for a company that had lost a shareholder class action. Model predicted the number of damaged shares and the probability that the share owners would self identify and prove damages.
- Witness for ATT in the Handset Locking Class Action. Damages witness. (deposed, case pending)
- Witness for ATT in the Early Termination fee Class Actions. Class certification witness. (report filed)





- For underwriters of IPO, analyzed and validated software product for simultaneously optimizing millions of retirement portfolios
- Developed and critiqued large computer cost and revenue models used in access pricing and helped develop access pricing rules for large a railroad.
- Developed models of loan pricing and offerings for large banks
- Developed real time pricing models and provided models for investment bankers to determine likely prices for the assets when auctioned for large electric companies
- Developed financial models supporting proposed divestiture of generation assets for large electric companies. Models were required in determining optimal pricing going forward to estimate cash flows.
- Developed Incremental Cost models for energy companies.
- Developed price cap mechanisms for German Utility Consortium
- Developed integrated intermodal choice of transport to terminals for a barge company
- Member of National Academy of Sciences Workshop on Trucking Deregulation, which led to the deregulation of the US trucking industry
- Directed Transportation related PhD dissertations on: optimal barge unloading and optimal port management, optimal grain terminal management, and empty back haul problem in trucking and effect on prices
- Critiqued the Uniform Rail Costing System for the Interstate Commerce Commission

#### For large communications companies

- Developed methods to determine license fees, royalties, and valuing patents. Involved determining optimal pricing strategies and estimating revenues under different licensing and royalty scenarios.
- Created model for examining pricing decisions and product offerings. Used simulated annealing optimization to sort through combinations of product offerings to find optimal set. Determined optimal prices for initial offerings.
- Developed price and offering optimization models used to streamline offerings reduce wasteful cannibalization and maximize revenue
- Responsible for survey research design, implementation and analysis to determine price elasticities and service offering sensitivities for input into large scale optimization model
- Developed model determining costs and initial prices of new wireless network
- Designed model for estimating costs of installed network and expansions. Required optimization of network design. Used neural networks and genetic algorithms.
- Developed a econometric based simulation model that demonstrated provision of roaming to competitors was uneconomic at the terms and conditions proposed.

#### Large Scale Financial Modeling

- Using statistical methods, developed tools to detect money laundering and developed a large scale loan loss model for a large bank.
- Retained to perform Federal Reserve required review of computer models material to bottom line for two large banks
- Developed and refined models to predict required reserves for future claims for large insurance companies
- Reviewed and developed revisions to large scale demand forecasting systems for large electric companies
- Developed models to identify fraud using neural networks, models to identify credit risk, and simulation methods for Operations Research, Marketing Research and engineering for large communications companies
- Lead a group of two dozen or so Mathematicians, Statisticians, Operations Researchers, Economists and Marketing researchers at large industrial laboratory.
- Developed statistical methods for identifying possible backdating of executive options and performed lost profits calculations where determining the pricing that would have occurred but for the alleged act was at the core for a number of firms

#### Auctions

- Participated in various US, European and Asian PCS, and 3G, and energy Auctions. Responsibilities included team formation, analysis oversight, valuation, and competitive analysis. For client companies, participated in developing bidding strategy, developing valuations, staffing war rooms, providing software and training for bidders. For governmental agencies helped in designing auction and developing rules.

#### Marketing Research and Survey Design

- Adaptive conjoint studies for CentraNet Services (1990-1994)
- Conjoint studies for Inter and IntraLATA toll pricing (Annually beginning in 1991, in 32 states over 3 years)
- Rank ordered conjoint studies for toll presubscription pricing and product design(1996)
- Rank ordered conjoint studies for cellphone design(1994)
- Attitudinal service quality and consumer satisfaction surveys (annual 1987-1994)



- Analysis and critique of GTE-TeleGo survey results. (1993)
- Adaptive conjoint to estimate value of PCS spectrum auction properties.(1992-1996)
- Designed time and motion survey to determine time spent in porting numbers in cellphone customer support centers.(2006)
- Designed stratified survey to determine errors in audits of insurance policies.(2006)
- Adaptive hyperbolic survey to determine willingness to pay for clean water.(2006)
- Designed stratified survey to determine counts of documents to be examined before destruction to guarantee 99% or more met criteria for destruction.
- In Re: Cellphone Termination Fee Cases (2008) testimony on flaws in plaintiffs survey design.(2007)
- Courses in survey design taught:
  - Survey Design (Washington State University Department of Statistics)
  - Survey Methods (Deloitte CPE course for Senior Managers and above)
  - Discrete Choice and Conjoint Methods in Applied Econometrics(University of California, Berkeley)
- Research using survey methods or developing survey methodology.
  - "Specification and Estimation in the Mixed Continuous Discrete Dependent Variable Model in Classical Production Theory," *Econometrica* (1980), 48, No. 4, pp. 839-852.
  - "Wage Determination in the Union and Non union Sectors: A Simultaneous Equations Approach," with D. Leigh, *Industrial and Labor Relations Review* (1980), 34, No. 1, pp. 24-34.
  - "A Semiparametric Censored Regression Estimator," *Journal of Econometrics* (1986), 32, No. 1, pp. 5-34.
  - "Editor's Introduction," *Journal of Econometrics* 32, 1986.
  - "The Endogeneity of Union Status: An Empirical Test, with D. Leigh," *Journal of Labor Economics* (1985), 3, No. 3, pp. 385-401.
  - "Evaluation of an Alcohol Abuse Prevention Program: Correcting for Self Selection," with T.K. Greenfield, *Resources in Education* (1985) (ERIC #ED253807).
- Thesis and Dissertations Using Survey and Sampling Methods Directed:
  - Andrew Gill (Economics)
  - Tiffany Chong (Economics)
  - Carol Tremblay (Economics)
  - Cathleen Lueue(Economics)
  - Wesley Wilson(Economics)
  - Robert Tichy (Statistics)

#### Testimony experience

##### **Antitrust, Valuation, Intellectual Property, Market Structure and Damages:**

- In Re: Cellphone Termination Fee Cases, Dr. Duncan is providing testimony on behalf of ATT Wireless and Cingular, the legacy companies that now form ATT Mobility. Issues include class certification and damages. Testimony by deposition on class certification, trials pending.
- In *FTC v. Alternatel et al.* on behalf of defendants, Dr. Duncan filed testimony and was deposed on the matter of whether defendants had misled calling card purchasers as to the value of the cards and as to the amount of damages card holders may have suffered. (Rebuttal report and deposition.)
- In the matter of the arbitration between: Adrienne Travis and Sue Stacy, et al. v. Rhodes Colleges, Inc. et al. class action alleging nationally accredited colleges misrepresented value of degree relative to degrees from regionally accredited colleges. Rebuttal report.
- In Re; *AT&T v USA* US District Court , Western District of Texas. on behalf ATT Dr. Duncan has filed testimony on the \$1b dispute between the IRS and ATT over whether distributions from the Universal Service Fund are non-shareholder contributions to capital or ordinary income. Expert report and rebuttal, and deposition, trial set.
- On behalf of a major telecommunications company, Dr. Duncan provided testimony on the appropriate compensation for rights of way that the company used to run fiber optic cable through a major U.S. city on abandoned rail roadbed. Rebuttal report and deposition.
- For large natural gas pipeline, developed arguments and methods for determining the right of way fees as well as the fair market value of Native American land crossed by pipelines.
- Sacramento Metropolitan Cable Television Commission. "Municipal Provision of Broadband: Fallacies in the Consultant Report and Lessons Learned in the Telecommunications Meltdown." Testimony (not under oath) on behalf of SBC November 2002.



- American Arbitration Association on behalf of Leap Wireless International, Inc. In the matter of MCG PCS, Inc., MCG PCS Licensee Corporation, Inc. Dr. Michael C. Gelfand and Leap Wireless International, Inc. "Expert Report on Behalf of Leap Wireless International, Inc.," October 25, 2001. "Rebuttal of MCG's Expert Reports," November 19, 2001. Direct Testimony, February 4, 2002. (Issue was fair market value of spectrum.)
- United States District Court for the District of Delaware on behalf of Broadcom Corporation. Intel Corporation v. Broadcom Corporation, October 2001.
- California Public Utilities Commission (Application No. A.01-02-012) on behalf of Verizon California. "In the Matter of the Application of Verizon California Inc. (U 1002 C), a Corporation, for Authority to Re-Categorize Inside Wire Maintenance Plans and Billable Repair Service from Category II to Category III Service Offerings." Rebuttal Testimony, July 27, 2001.
- United States' Bankruptcy Court for the District of Arizona on behalf of New World Coffee. Einstein's Chapter 11 bankruptcy proceeding pursuant to Section 363 of the Bankruptcy Code (In re: Einstein/Noah Bagel Corp., Case No. 00-44447-EFC-CGC). "Expert Report prepared for New World Coffee – Manhattan Bagel, Inc.," May 30, 2001.
- U.S. District Court of the Southern District of New York (No. 93 Civ. 3707) on behalf of NCA. National Communications Association, Inc. v. AT&T Corp. Analysis of Damages, October 1999. Deposition, November 18-19, 1999.
- U.S. District Court, Southern District of New York (No. 95 Civ. 1398) on behalf of World Wide Communications, World Wide Communications, Inc. v. AT&T Corp., Analysis of Damages, 1999.
- U.S. District Court, Western District of Washington, Electric Lightwave, Inc. v. U S WEST, Inc., Preliminary, Supplemental Reports on Damage Claims, Testimony by Deposition and at Arbitration, 1998.
- Federal Trade Commission. Econometrics consultant for the FTC on the FTC Cereals Antitrust case (1978-1980)

#### **Labor, Labor Class Certification:**

- United States District Court for the Eastern District of Virginia, Alexandria Division (Civil Action No. 00-1631-A) on behalf of Broadwing Communications, Inc. "Douglas Pasko v. Broadwing Communications, Inc." Affidavit, January 19, 2001 and Testimony on May 8, 2001. (issue: lost wages due to alleged constructive termination) Testimony by deposition.
- United States District Court for the Eastern District of Virginia, Alexandria Division (Civil Action No. 00-1605-A) on behalf of Broadwing Communications, Inc. "Jeffrey H. Swinton v. Broadwing Communications, Inc." Affidavit, December 27, 2000.
- California Public Utilities Commission PBOP California. Rebuttal Testimony, 1993.
- Washington State Senate Ways and Means Committee. "The Relationship Between Washington State Employment and State Economic Policy." 1986.

#### **Price Cap, Rate of Return & Performance Based Regulation:**

- North Carolina Utilities Commission (Docket No. P-19, SUB 277) on behalf of Verizon South Inc. "Application of Verizon South Inc. for, and Election of, Price Regulation." Testimony, October, 2004. Rebuttal March 2005.
- Public Service Commission of Wisconsin (Docket No. 1-AC-193) on behalf of Verizon North and Wisconsin Bell (SBC) in Wisconsin. "Rulemaking to Revise Wisconsin Administrative Code Chapter PSC 163, Telecommunications Utility Price Regulation, Regarding the Productivity Offset Factor." Affidavit, January 12, 2003.
- North Carolina Utilities Commission (Docket No. P-19, SUB 277) on behalf of Verizon South Inc. "Application of Verizon South Inc. for, and Election of, Price Regulation." Testimony, July 16, 2002 Rebuttal November 2002.
- Wisconsin State Senate Committee on Health, Utilities, Veterans & Military Affairs on behalf of Verizon North. "In Opposition to Clearinghouse Rule 00-155 Relating to Wisconsin Administrative Code Chapter PSC 163." Testimony, November 7, 2001. ( Did the Public Service Commission of Wisconsin Correctly determine of Productivity Offset in Price Cap Regulation as require by statute.)
- Public Service Commission of Wisconsin (Docket No. 1-AC-193) on behalf of Verizon North in Wisconsin. "Rulemaking to Revise Wisconsin Administrative Code Chapter PSC 163, Telecommunications Utility Price Regulation, Regarding the Productivity Offset Factor." Affidavit, December 12, 2000.
- Federal Communications Commission (CC Docket No. 94-1, 96-262) on behalf of GTE. "In the Matter of Price Cap Performance Review for Local Exchange Carriers, Access Charge Reform." Affidavit, January 24, 2000.
- Federal Communications Commission on behalf of GTE "The Productivity Factor in the LEC Price Cap Formula Should Reflect Achievable Productivity Gains." Affidavit, February 14, 1997.
- California Public Utilities Commission (A.92-05-002) on behalf of GTE. California NRF Review, 1995.

#### **Performance Measures & Incentives:**



- New Jersey Board of Public Utilities (Docket Nos. TX95120631, TO96070519, TO98010035, TO98060343 & TX98010010). "In Support of the Brief of Bell Atlantic-New Jersey in Support of Its Performance Incentive Plan." Affidavit, July 24, 2000.
- Federal Communications Commission (Docket No. 99-295) on behalf of Bell Atlantic-New York. "Application by Bell Atlantic-New York, et al. For Authorization to Provide In-Region InterLATA Services in New York." Declaration, November 8, 1999.
- New York Public Service Commission (Case Nos. 97-C-0271, 99-C-0949) on behalf of Bell Atlantic-New York. "Bell Atlantic-New York's Petition For Approval of the Amended Performance Assurance Plan and Amended Change Control Assurance Plan." Affidavit, October 8, 1999.
- Pennsylvania Public Utilities Commission (Docket No. P-00991643) on behalf of Bell Atlantic-Pennsylvania, Inc. "Joint Petition of Nextlink Pennsylvania, Inc., et al. for an Order Establishing a Formal Investigation of Performance Standards, Remedies and Operations Support Systems Testing for Bell Atlantic-Pennsylvania, Inc." Direct Testimony, June 8, 1999. Rebuttal Testimony, June 14, 1999.

**Cost Modeling (Including ROE, ROI issues):**

- California Public Utilities Commission (R.93-04-003; I.93-04-002) on behalf of GTE. "Review of GTE California Collocation Model." Testimony, December 18, 1998.
- Federal Communications Commission (Docket Nos. 96-45, 97-160) on behalf of GTE. "In the Matter of Federal-State Joint Board on Universal Service Forward-Looking Mechanism for High Cost Support for Non-Rural Local Exchange Carriers." Affidavit, December 1998.
- Missouri Public Utilities Commission (Case No. TO-98-329) on behalf of GTE Midwest Inc. "In the Matter of an Investigation Into Various Issues Related to the Missouri Universal Service Fund. An Analysis of the HAI Model Release 5.0a." Affidavit, September 21, 1998. Rebuttal Testimony, September 25, 1998.
- Washington Utilities and Transportation Commission (Docket No. UT-980311a) on behalf of GTE Northwest Inc. "In the Matter of Determining Cost for Universal Service." Response Testimony filed August 3, 1998. Rebuttal Testimony, August 24, 1998.
- Texas Public Utility Commission (Docket No. 18515) on behalf of GTE Southwest, Inc. "Compliance Proceeding for Implementation of the Texas High Cost Universal Service Plan. In Connection With the Hatfield Model 5.0(a)." Rebuttal Testimony, February 27, 1998, July 15-16, 1998. Second Supplemental Direct Testimony, July 1, 1998.
- Nebraska Public Service Commission on behalf of GTE Midwest Inc. "Analysis of the Hatfield Model, Version 5.0A." Direct Testimony filed April 8, 1998.
- Idaho Public Utilities Commission (Case No. GNR-T-97-22) on behalf of GTE Northwest, Inc. "In the Matter of the Investigation to Determine an Appropriate Cost Model Using Forward-Looking Economic Costs For Calculating the Costs of Basic Telecommunications Services in Idaho. Analysis of the Hatfield Model, version 5.0a." Rebuttal Testimony, March 2, 1998.
- Texas Public Utilities Commission (Docket No. 18515) on behalf of GTE Southwest Inc. "In the Matter of Compliance Proceedings for Implementation of the Texas High Cost Universal Service Plan." Rebuttal Testimony, February 27, 1998.
- Minnesota Public Utilities Commission (Docket No. P-999/M-97-909) on behalf of Contel of Minnesota, Inc. d/b/a GTE Minnesota. "Analysis of the Hatfield Model, Version 5.0." Rebuttal and Supplemental Testimony, January 23, 1998.
- Minnesota Public Utilities Commission (Docket No. P-999/M-97-909) on behalf of Contel of Minnesota, Inc. d/b/a GTE Minnesota. "Analysis of the Hatfield Model version 4.0." Rebuttal Testimony, November 24, 1997.
- New Mexico State Corporation Commission (Docket Nos. 96-310-TC; 97-334-TC) on behalf of GTE Southwest Inc., New Mexico Operations. "Analysis of the Hatfield Model Release 4.0." Rebuttal Testimony, November 1997.
- Rebuttal Testimony on behalf of GTE Hawaiian Telephone Inc. (Docket No. 7702), "Economic and Algorithmic Errors in the "Updated" Hatfield Model Release 3.1." August 28, 1997.
- Direct Testimony on behalf of GTE California Inc. "Economic and Algorithmic Errors in the "Updated" Hatfield Model Release 3.1." July 1, 1997.
- Washington Utilities and Transportation Commission (Docket No. UT-960369, UT-960370, UT-960371) on behalf of GTE. "In the Matter of the Pricing Proceeding for Interconnection, Unbundled Elements, Transport and Termination, and Resale (Hatfield Model)." Direct Testimony, March 27, 1997. Rebuttal Testimony, April 25, 1997. Supplemental Testimony, June 12, 1997.
- New Mexico State Corporation Commission (Docket No. 97-35-TC) on behalf of GTE Southwest Inc. "In the Matter of the Interconnection Contract Negotiations Between AT&T Communications of the Mountain States, Inc., and GTE Southwest Inc Pursuant to 47 U.S.C. Section 252 of the Telecommunications Act of 1996." Direct Testimony, March 31, 1997.
- Public Utility Commission of Texas (Docket No. 16476) on behalf of GTE Southwest Inc. "Petition of American Communications Services, Inc. et al., For Arbitration of Unresolved Interconnection Issues with GTE Southwest Inc."

- and Contel of Texas, Inc. Pursuant to the Federal Telecommunications Act of 1996. In the Matter of Sprint Communications Company L.P.'s Petition For Arbitration of Interconnection Rates, Terms, Conditions and Related Agreements with GTE Southwest Inc. and Contel of Texas, Inc." Direct Testimony filed November 12, 1996.
- Oregon Public Utility Commission on behalf of GTE Northwest Inc. "In the Matter of the Petition of AT&T Communications of the Pacific Northwest, Inc. For Arbitration of Interconnection Rates, Terms and Conditions with GTE Northwest Inc., Pursuant to 47 U.S.C. Sec. 252(B) of the Telecommunications Act of 1996. Economic Evaluation of Version 2.2 of the Hatfield Model." October 3, 1996. Supplemental Testimony, October 8, 1996.
  - Washington State Utilities and Transportation Commission (Docket No. UT-960338, UT-960348, UT-960307) on behalf of GTE Northwest Inc. "An Economic Evaluation of the Hatfield Cost Model Version 2.2." October 1996.
  - Nebraska Public Service Commission (Docket No. C-1400) on behalf of GTE. "In the Matter of the Interconnection Contract Negotiations Between AT&T Communications of the Midwest, Inc. and GTE Midwest U.S.C. section 252. Economic Evaluation of Version 2.2 of the Hatfield model." Affidavit, September 9, 1996.
  - California Public Utilities Commission on behalf of GTE. "Rulemaking on the Commission's Own Motion to Govern Open Access to Bottleneck Services and Establish a Framework for Network Architecture Development of Dominant Carrier Networks. Investigation on the Commission's Own Motion into Open Access and Network Architecture Development of Dominant Carrier Networks. An Economic Evaluation of the Hatfield Cost Model Version 2.2.2." 1996.
  - Interstate Commerce Commission. "A Critique of the Uniform Rail Costing System." 1982.

#### **Pricing (including ROE, ROI issues):**

- Public Utility Commission of the State of Idaho (Case No. GTE-T-97-3, ATT-T-97-1) on behalf of GTE Northwest Inc. "In the Matter of AT&T Communications of the Mountain States, Inc. Petition For Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 of the Rates, Terms and Conditions of Interconnection with GTE Northwest Inc. Economic and Algorithmic Errors in the Hatfield Model Release 3.1." Rebuttal Testimony, May 5, 1997.
- California Public Utilities Commission (R.93-04-003/1.93-04-002) on behalf of GTE. "Rulemaking on the Commission's Own Motion to Govern Open Access to Bottleneck Services and Establish a Framework for Network Architecture Development of Dominant Carrier Networks. Investigation on the Commission's Own Motion into Open Access and Network Architecture Development of Dominant Carrier Networks." NRF I.95-05-047. Analysis of Benchmark Cost Model; Development of GTE Cost Model and Position on Pricing." Testimony and supporting studies, 1996.
- Florida Public Service Commission (PSC 950984-TP) on behalf of GTE. "Petitions by AT&T Communications of the Southern States, Inc., et al. for Arbitration of Certain Terms and Conditions of a Proposed Agreement with GTE Florida Incorporated Concerning Interconnection and Resale Under the Telecommunications Act of 1996 (Interconnection and Unbundling). An Economic Evaluation of the Hatfield Cost Model Version 2.2.2." 1996.
- Texas Public Utility Commission (Docket Nos. 16300, 16355) on behalf of GTE Southwest Inc. "Petition of AT&T Communications of the Southwest, Inc for Compulsory Arbitration to Establish an Interconnection Agreement Between AT&T and GTE Southwest, Inc. and Contel of Texas Inc. Petition of MCI Telecommunications Corporation For Arbitration with GTE Southwest Inc. and Contel of Texas Inc." Direct Testimony, October 14, 1996.
- California Public Utilities Commission (R.95-04-043, I.95-04-044) on behalf of GTE. "Order Initiating Rulemaking on the Commission's Own Motion Into Competition For Local Exchange Service. Order Instituting Investigation on the Commission's Own Motion Into Competition For Local Exchange Service." Deposition, December 13, 1995.

#### **Demand Modeling:**

- Kentucky Supreme Court on behalf of GTE. Stay of Kentucky Public Utilities Commission 1+, Local Competition Order. Estimate of irreparable damages. March 1995.
- Florida Public Service Commission on behalf of GTE. 1+ Presubscription Hearings, 1995.
- Florida Public Service Commission on behalf of GTE. Stay of Florida Public Utilities Commission 1+ Local Competition Order. Refiled, August 1995.
- Michigan Public Utilities Commission on behalf of GTE. Stay of Michigan Public Utilities Commission 1+, Local Competition Order. July 1995.
- Florida Public Service Commission on behalf of GTE. Stay of Florida Public Utilities Commission 1+, Local Competition Order. February 1995.
- Florida Public Service Commission on behalf of GTE. 1+ Presubscription Hearings. Development of Position, Testimony and Supporting Studies, 1994.
- California Public Utilities Commission IRD (I.87-11-033) on behalf of GTE. Direct and Rebuttal Testimony on Elasticities, 1990.

#### **Statistical:**

- California Tax Equalization Board on behalf of GTE. "Alleged Undercollection of 911 Tax." (Provided alternative estimate of losses in state revenues (damages ) due to error in GTE billing system)1995.
- Sampling and estimation methodology for time and motion study of the additional time to services new customers who are keeping their old numbers as opposed to new customers who are assigned new numbers. Using treatment effect models, showed that the firm indeed had improved service during the period ordered. 2007
- For a large company, developed statistical model of market pricing that showed that the executives had not engaged in price-gouging as alleged. 2007

**Education and certification**

- University of California, Berkeley; Ph.D., Economics
- University of California, Berkeley; M.A., Statistics
- University of Washington, B.A. Economics and English

**Professional associations**

- American Bar Association, Associate Member, Antitrust Section
- American Economic Association
- American Statistical Association
- California Public Utility Counsel
- Econometric Society
- Institute of Mathematical Statistics


**Speaking engagements**

- "Early Termination Fees as Risk Management Tools" Advanced Workshop in Regulation and Competition 28th Annual Western Conference, Monterey, CA, 2009
- "Estimating the Value of and Willingness to Pay for Clean Water", Advanced Workshop in Regulation and Competition 27th Annual Western Conference, Monterey, CA, 2008
- "Defeating Class Certification," Alston-Byrd/Deloitte CLE Meeting on Class Certification Issues for Inside Counsel, New York, NY 2007
- "Transmission Utilities and Rights of Way Pricing Policy on Tribal Trust Lands," Advanced Workshop in Regulation and Competition 26th Annual Eastern Conference, Skytop, Pennsylvania, 2007
- "Infeasibility of Business Plans Based on Unbundling," Advanced Workshop in Regulation and Competition 18th Annual Western Conference Monterey, California, 2007
- "The Economics of Municipal Entry into Broadband," Advanced Workshop in Regulation and Competition 17th Annual Western Conference San Diego, California, 2004
- "The Telecommunications Meltdown: Causes, Consequences and Cautions Going Forward," ,Advanced Workshop in Regulation and Competition 16th Annual Western Conference San Diego, California, 2003
- "Valuation of Previously Auctioned Properties: A Hedonic Approach to Valuing Radio Spectrum" , Advanced Workshop in Regulation and Competition 15th Annual Western Conference San Diego, California, 2002
- "Early Due Diligence: Economic Considerations Cautions and Warnings," Law Seminars International's Municipal Broadband Conference in San Francisco, CA, September 9, 2002.
- "Disposing of Telecommunications Assets: Why, Who, and How," Law Seminars International's Fifth Annual Conference on Telecommunications Infrastructure in Seattle, WA, August 15, 2002.
- "Broadband Competition: Practical Realities, Trends," presented at the VIII Meeting of the Telecommunications Industry, IESE Business School, Madrid, Spain, May 29, 2002.
- "Cross Platform Competition: Practical Realities, Trends," Law Seminars International's Seventh Annual Telecommunications Conference in Seattle, WA, April 5, 2002.
- "Performance Parity Incentives for Competitive Local Telecommunications Markets, " Advanced Workshop in Regulation and Competition 13th Annual Western Conference, Monterey, California, 2000
- "Divestitures: The Pressure to Become Leaner and More Focused," Law Seminars International's Sixth Annual Telecommunications Conference in Seattle, WA, April 12, 2001.
- "Defining the Increment: Consequences of the Iowa Utilities Board v. Federal Communications Commission, July 2000 Decision," National Association of Regulatory Utility Commissioners 112th Annual Convention, San Diego, CA, November 11, 2000.
- "The Economics of Online Marketing: The Importance of Getting on the Net and Getting There First," Law Seminars International's Intellectual Property Rights and Marketing Online Conference, Minneapolis, MN, July 20-21, 2000.

- "Mergers and Acquisitions in a Regulatory Market: What Does Regulation Mean for Telecommunications Mergers and Acquisitions?" Infocom Forum, Lisbon, Portugal, June 19, 2000.
- "Viability of Niche Players: Will Economies of Scale and Scope Determine Survival," presented at Law Seminars International's Fifth Annual Telecommunications Conference, Seattle, WA, April 13, 2000.

**Courses Taught (Since 2002)**

- Sampling Design and Analysis of Finite Populations (Deloitte Training 2006-2007 )
- Advanced Intellectual Property (Deloitte Training 2006-2007)
- Basics of Intellectual Property (Deloitte Training 2006-2007)
- Advanced Econometrics (Deloitte)
- Applied Econometrics (Graduate course, University of California, Berkeley, 2007)
- Honors Econometrics (Undergraduate course, University of California, Berkeley, 2002-present)
- Introductory Econometrics (Undergraduate course, University of California, Berkeley, 2002-present)
- Intermediate Microeconomics (Undergraduate course, University of California, Berkeley, 2008)




**Courses Taught (Before 2002)**

- Graduate and Undergraduate Econometrics
- Financial Economics
- Money, Banking, and the Structure of the Banking Industry
- Graduate and Undergraduate Microeconomic Theory
- Mathematical Economics
- Industrial Organization and The Structure of Network Industries
- Non-market theories of economic decision-making
- Linear Models (Statistics)
- Non-parametric Statistics (Statistics)
- Survey and Sampling Methods(Statistics-Psychology-Marketing)
- Linear Algebra (Mathematics)
- Optimization in Abstract Vector Spaces (Mathematics-Graduate)
- Labor Economics
- Undergraduate Macroeconomics



**Publications**

- "The Effect of Illegal Dumping on Residential Home Prices: A New Hedonic Approach to Measuring Asset Risk" *Journal of Risk and Uncertainty* (forthcoming 2007 pending revision) with Jeffery Morris
  - "The Structure of the Telecommunications Industry: The Role of Regulation in the Meltdown and Preventing a Recurrence", Chapter 16, in *The Handbook of International Regulation*, Michael Crew et al. Editor. Edward Elgar 2006.
  - "IntraLATA Toll Demand Modeling: A Dynamic Analysis of Revenue and Usage Data," *Information Economics and Policy* 6 (1994): 163-178.
  - "The Use and Misuse of Econometricians," *Marginal Cost Techniques for Telephone Services*, William Pollard, Editor, National Regulatory Research Institute (1991).
  - "The Effect of Probabilistic Demand Structures on The Structure of Cost Functions," *Journal of Risk and Uncertainty* (1990), 3, 3, pp. 211-220. (Simulation based model)
  - "Telecommunications Cost Functions II: Panel Data and Heterogeneous Technological Change," with R. Tobin, in S. Bhattacharya and S. Brubaker, Editors, *Telecommunications Costing in a Dynamic Environment* (1989).
  - "Telecommunications Cost Functions I: Capacity, Random Demand and Technological Change," with R. Tobin, in H. Trebing, Editor, *New Regulatory Concepts: Issues and Controversies* (1988), Michigan State University Press.
  - "A Simplified Approach to M Estimation with Application to Two Stage Estimators," *Journal of Econometrics* (1987), 34, pp. 373-389.
  - "Review of Newbold and Bos Stochastic Parameter Regression," *Journal of Marketing Research* (1986).
  - "Review of Feldman, *Multiple Regression in Practice*," *Journal of Marketing Research* (1986).
  - "A Semiparametric Censored Regression Estimator," *Journal of Econometrics* (1986), 32, No. 1, pp. 5-34.
  - "Editor's Introduction," *Journal of Econometrics* 32, 1986.
  - "The Endogeneity of Union Status: An Empirical Test, with D. Leigh," *Journal of Labor Economics* (1985), 3, No. 3, pp. 385-401.
  - "Evaluation of an Alcohol Abuse Prevention Program: Correcting for Self Selection," with T.K. Greenfield, *Resources in Education* (1985) (ERIC #ED253807).
  - "Impact of International Trade Shocks on Wage Adjustments in Canada: A Comment," in Peter Chinloy and Ernst W. Stromsdorfer, Editors, *Adjustments in Labor Markets: An International Comparison*, Academic Press (1985).
  - "Econometric Evaluation of New Technology with an Application to Integrated Pest Management," with D. Hall, *American Journal of Agricultural Economics* (1984), 66, No. 5.
  - "Comments on Manski's Adaptive Estimation of Nonlinear Regression Models," *Econometric Reviews* (1984).
  - "Sample Selectivity as a Proxy Variable Problem: On the Use and Misuse of Gaussian Selectivity Corrections," *Research in Labor Economics* (1983), 6, supplement 2, pp. 333-345.
  - "Estimation and Inference in Heteroscedastic Systems of Equations," *International Economic Review* (1983), 24, No. 3, pp. 559-566.
  - "Comment on Koenker's Robust Methods of Econometrics," *Econometric Reviews* (1982), 1, No. 2, pp. 257-262.
  - "Specification and Estimation in the Mixed Continuous Discrete Dependent Variable Model in Classical Production Theory," *Econometrica* (1980), 48, No. 4, pp. 839-852.
- 



- "Wage Determination in the Union and Non union Sectors: A Simultaneous Equations Approach," with D. Leigh, *Industrial and Labor Relations Review* (1980), 34, No. 1, pp. 24 34.
- "Data Sets That Exceed Computer Limits: Efficient Estimation and a Test of the Normal Approximation," *Journal of Econometrics* (1980), 14, pp. 257 264.
- "Empirical Studies of Returns to Scale of the Regulated Trucking Sector," in R. Braeutigam and R. Baesemann, Editors, *Motor Carrier Economic Regulation*, National Academy of Sciences (1978).





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TESTIMONY OF DR. LEONARD N. REID  
BEFORE THE COPYRIGHT ROYALTY TRIBUNAL  
August 1991

I am Professor and Department Head of the Department of Advertising and Public Relations at the Grady College of Journalism and Mass Communication at The University of Georgia, Athens, Georgia. A copy of my resume is attached to this testimony.

I have been asked by the Joint Sports Claimants (JSC) to comment on the concerns that the Copyright Royalty Tribunal expressed in the 1983 copyright royalty distribution proceeding regarding the constant sum technique employed in JSC's survey of cable operators. I have also been asked to evaluate the viewing study submitted by the Motion Picture Association of America in the 1983 proceeding in light of the same concerns.

My views on these matters are set forth in the report entitled "Use of the Constant Sum Measure and Nielsen Audience Data in Cable Royalty Distribution Proceedings" (August 1991), which is being submitted to the CRT as Sports Exhibit 2.

June 1991

Leonard N. Reid, Ph.D.

Department of Advertising and Public Relations  
Grady College of Journalism and Mass Communication  
The University of Georgia  
Athens, Georgia 30602  
(404) 542-4791

**BIOGRAPHICAL INFORMATION**

Date of Birth: November 30, 1949, Lawrenceville, Virginia.

Marital Status: Married, one child.

Residence: 485 Sandstone Drive  
Athens, Georgia 30605  
(404) 353-3639

**EDUCATION**

Ph.D. (Communication Research), University of Illinois, 1978.

M.S. (Advertising), University of Illinois, 1975.

B.S. (Business), Virginia Commonwealth University, 1973.

**ACADEMIC APPOINTMENTS**

1986 - present Professor of Advertising and Department Head  
Department of Advertising and Public Relations  
Grady College of Journalism and Mass Communication  
The University of Georgia

1980 - 1985 Associate Professor of Advertising  
Department of Advertising and Public Relations  
College of Journalism and Mass Communication  
The University of Georgia

1977 - 1980 Assistant Professor of Advertising  
Department of Advertising  
College of Communication Arts  
Michigan State University

1976 - 1977 Lecturer in Marketing  
Department of Marketing  
College of Business  
Arizona State University

1975 - 1976 Visiting Instructor of Advertising  
Department of Advertising  
College of Communication  
University of Illinois

SCHOLARLY EDITORIAL ACTIVITIES

- 1991 - 1992 Editor, Proceedings of the American Academy of Advertising
- 1991 - present Editorial Board, Journal of Advertising
- 1987 - 1991 Editor, Journal of Advertising
- 1980 - present Editorial Board, Current Issues and Research in Advertising
- 1977 - present Ad Hoc Reviewer for the Journal of Advertising, Journal of Marketing Research, Journal of Business Research, Journal of Broadcasting and Electronic Media, and manuscript submissions to the annual meetings of the American Academy of Advertising, American Marketing Association, Southern Marketing Association, Atlantic Marketing Association, Association for Education in Journalism and Mass Communication, and Association for Consumer Research.

PROFESSIONAL SERVICE ACTIVITIES

Vice President, American Academy of Advertising, 1991-1992.

Member of the Research Committee, American Academy of Advertising, 1978-1985. Committee administers the grant program of the organization.

Member of the Publication Committee, American Academy of Advertising, 1984-1987. Committee manages the Journal of Advertising and other organization publications.

External Promotion/Tenure Evaluator for Arizona State University (1983-84, 1984-85), University of South Carolina (1983-84), University of Texas at Austin (1985-86, 1989-90, 1990-91), York University (1988-89), Rutgers University (1989-90), University of Oklahoma (1988-89), University of Colorado (1986-87, 1987-88), University of Illinois (1987-88), University of Massachusetts-Amherst (1990-91), Southern Methodist University (1990-91), Virginia Tech University (1990-91), Auburn University (1990-91), University of Kentucky (1990-91), and University of Houston (1991-92).

BOOKS AND BOOK CHAPTERS

Advertising: Its Role in Modern Marketing, 7th ed., The Dryden Press, 1990 (with S. Watson Dunn, Arnold M. Barban, and Dean M. Krugman).

Effects of Product Puffery in Print Advertisements: An Experiment," in Alan D. Fletcher and Donald W. Jugenheimer, eds., Problems and Practices in Advertising Research: Readings and Workbook, Grid, Inc., 1982, pp. 149-157 (with Bruce G. Vanden Bergh).

## SCHOLARLY JOURNAL ARTICLES

- "Toward an Associative Model of Advertising Creativity," Journal of Advertising, 5:4 (Fall 1976), pp. 24-29 (with Herbert J. Rotfeld).
- "Advertiser-Supplied Message Research: Extending the Advertising Substantiation Program," Journal of Consumer Affairs, 11:1 (Summer 1977), pp. 128-134 (with Herbert J. Rotfeld).
- "Are Advertising Educators Good Judges of Creative Talent?," Journal of Advertising, (Summer 1977), pp. 42-44.
- "Factors Affecting Creativity in Generation of Advertising," Journalism Quarterly, 55:4 (Winter 1978), pp. 781-785.
- "Potential Secondary Effects of Regulating Children's Television Advertising," Journal of Advertising, 8:1 (Winter 1979), pp. 9-14 (with Herbert J. Rotfeld).
- "Viewing Rules as Mediating Factors of Children's Responses to Commercials," Journal of Broadcasting, 23:1 (Winter 1979), pp. 15-26.
- "Children's Interaction With Commercials," Symbolic Interaction, 2:2 (Fall 1979), pp. 79-96 (with Charles F. Frazer).
- "A Shopping List Experiment of the Impact of Advertising on Brand Image," Journal of Advertising, 8:2 (Spring 1979), pp. 25-28 (with Lauranne Buchanan).
- "The Impact of Family Group Interaction on Children's Understanding of Television Advertising," Journal of Advertising, 8:3 (Summer 1979), pp. 13-19.
- "Key Visuals as Correlates of Interest in TV Ads," Journalism Quarterly, 56:4 (Winter 1979), pp. 863-866 (with David H. Hahn).
- "Sports Illustrated's Coverage of Women in Sports," Journalism Quarterly, 56:4 (Winter 1979), pp. 859-861 (with Lawrence C. Soley).
- "Studying the Child/Television Advertising Relationship: A Symbolic Interactionist Approach," Journal of Advertising, 8:4 (Fall 1979), pp. 13-19 (with Charles F. Frazer).
- "How Informative Are Ads on Children's TV Shows?," Journalism Quarterly, 58:1 (Spring 1980), pp. 108-111 (with Herbert J. Rotfeld).
- "Children's Use of Television Commercials to Initiate Social Interaction in Family Viewing Situations," Journal of Broadcasting, 24:2 (Spring 1980), pp. 149-158 (with Charles F. Frazer).
- "Family Income, TV Viewing, and Children's Cereal Ratings," Journalism Quarterly, 57:2 (Summer 1980), pp. 327-330 (with William O. Bearden and Jesse E. Teel).
- "Reducing Computer Costs of Students Using SPSS," Journalism Educator, 35:2 (July 1980), pp. 44-46 (with Lawrence C. Soley and Bruce G. Vanden Bergh).
- "Puffery and Magazine Readership," Journal of Marketing, 44:2 (Spring 1980), pp. 78-81 (with Bruce G. Vanden Bergh).

- "The 'Public Interest' as Defined by FCC Policy Makers," Journal of Broadcasting, 24;3 (Summer 1980), pp. 311-325 (with Dean M. Krugman).
- "Blacks in Introductory Ads," Journalism Quarterly, 57:3 (Autumn 1980), pp. 485-488 (with Bruce G. Vanden Bergh).
- "Levels-of-Processing in Memory for the Recall and Recognition of Television Commercials," Current Issues and Research in Advertising, 3 (1980), pp. 135-145 (with Lawrence C. Soley).
- "Effects of Product Puffery on Response to Print Advertisements," Current Issues and Research in Advertising, 3 (1980), pp. 123-134 (with Bruce G. Vanden Bergh).
- "Television at Play," Journal of Communication, 30:4 (Autumn 1980), pp. 66-73 (with Charles F. Frazer).
- "A Comparison of Influences on Fixed and Grid Radio Advertising Rates," Journal of Advertising, 9:4 (Fall 1980), pp. 15-19 (with Lawrence C. Soley and Jesse E. Teel).
- "Does Source Affect Response to Direct Advocacy Print Advertisements?," Journal of Business Research, 9 (1981), pp. 309-319 (with Lawrence C. Soley and Bruce Vanden Bergh).
- "Replication in Advertising Research: 1977, 1978, 1979," Journal of Advertising, 10:1 (Winter 1981), pp. 3-13 (with Lawrence C. Soley and Roger D. Wimmer).
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- "Another Look at the 'Decorative' Female Model: The Recognition of Visual and Verbal Ad Components," Current Issues and Research in Advertising, 4 (1981), pp. 123-133 (with Lawrence C. Soley).
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- "Predicting the Creatives in Advertising," Proceedings of the 1978 Meeting of the American Academy of Advertising, 1978, pp. 123-127.
- "An Experimental Analysis of the Impact of Advertising on Brand Image," in Proceedings of the 1978 Annual Meeting of the American Academy of Advertising, 1978, pp. 185-187 (with Leta C. Strube and Lauranne Buchanan).
- "Income and TV Viewing as Mediating Factors of Children's Ability to Evaluate Heavily Advertised Cereals," in Proceedings of the 1979 Annual Meeting of the American Academy of Advertising, 1979, pp. 66-68 (with William O. Bearden and Jesse E. Teel).
- "The Role of Newspaper Advertisements in the Confirmation or Disconfirmation of Consumer Expectations in a Product Trial Situation," in Proceedings of the 1980 Annual Meeting of the American Academy of Advertising, 1980, pp. 61-64 (with Bruce G. Vanden Bergh).

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- "Statistical Analyses in the Journal of Advertising: 1972-1979," in Proceedings of the 1981 Annual Meeting of the American Academy of Advertising, 1981, pp. 118-122 (with Lawrence C. Soley).
- "The Response of White Consumers to Integrated Advertising -- The Socially Consumed Product," in Proceedings of the 1981 Annual Meeting of the American Academy of Advertising, 1981, pp. 86-89 (with Herbert J. Rotfeld and Gary E. Wilcox).
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- "Decision Systems Analysis in Advertising Organizations," in Proceedings of the 1984 Annual Meeting of the American Academy of Advertising, 1984, pp. 59-61 (with Dean M. Krugman).
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## UNPUBLISHED SCHOLARLY CONFERENCE PAPERS

- "Regulating Children's Television Advertising: Reassessing Parental Responsibility," Association of Education in Journalism and Mass Communication, Seattle, WA, August 1978.
- "A Sociological Study of Children's Use of Television Commercials to Initiate Social Interaction in Family Viewing Situation," Association for Education in Journalism and Mass Communication, Seattle, WA, August 1978 (with Charles F. Frazer).
- "A Symbolic Interactionist Approach to Studying the Child/Television Relationship," International Communication Association, Philadelphia, PA, April 1979.
- "A Model for Measuring Puffery Effects," Association for Education in Journalism and Mass Communication, Houston, TX, August 1979.
- "Children's Interactional Experience with Television Advertising as an Index of Viewing Sophistication," Association for Education in Journalism and Mass Communication, Houston, TX, August 1979 (with Charles F. Frazer).
- "Adolescents' Perceptions of Foreign-Made Products: Implications for Advertising Strategy," Association for Education in Journalism and Mass Communication, Houston, TX, August 1979 (with Bruce G. Vanden Bergh).
- "Male Readership Differences in Liquor Ads Employing Nonsensical and Sexual Humor," Association for Education in Journalism and Mass Communication, Boston, MA, August 1980 (with Bruce G. Vanden Bergh).
- "Advertising Effects on Alcohol Brand Preference Images," Association for Education in Journalism and Mass Communication, Boston, MA, August 1980 (with Charles K. Atkin and Martin M. Block).

- "Agency Researchers' Perception of Uses and Users of Copy Research," Association for Education in Journalism and Mass Communication, Gainesville, FL, August 1984 (with Charles T. Salmon).
- "Defining the Core of Advertising Knowledge," American Academy of Advertising, Denver, CO, April 1984 (with Dean M. Krugman).
- "The Credibility of Advocacy Advertising: Implications for Advertising and Public Relation Strategies," International Communication Association, Honolulu, Hawaii, May 1985 (with Charles T. Salmon and James Pokrzywczynski; a Top Three Conference paper).
- "Changes in the Content of Print Cigarette Ads, 1954-1986," American Marketing Association, Washington, DC, August 1990 (with Karen Whitehill King and Young Sook Moon).

#### RESEARCH AWARDS AND GRANTS

- "Creativity in Advertising," Faculty Research Grants Program, Michigan State University, 1977-78, \$1,500.
- "Analysis of Ad Characteristics Affecting Readership," Faculty Research Grants program, Michigan State University, 1978-79, \$4,000.
- "Alcoholic Beverage Advertising: Content and Effects," Bureau of Tobacco, Alcohol, and Firearms, U.S. Government, 1978-79, \$100,000 (co-investigator).
- "Effect of Source Attribution on Response to Advocacy Advertising," Faculty Research Grants Program, Michigan State University, 1979-1980, \$1,500.
- "Decorative Models in Advertising," College of Journalism and Mass Communication Research Grant, University of Georgia, 1980-81, \$1,500.
- "Attitudes Toward Advertising's Social and Economic Effects," College of Journalism and Mass Communication Research Grant, University of Georgia, 1981-82, \$1,500.
- "Informational Value of Advertising," College of Journalism and Mass Communication Research Grant, 1982-83, \$1,500.
- "Anti-Drinking and Driving PSAs," Institute for Behavioral Research, The University of Georgia Mentoring Program, \$3,000 (with Karen Whitehill King).

#### RECOGNITION OF SCHOLARLY WORK

- Ranked "Most Prolific" author of articles published in the major advertising journals (Journal of Advertising, Journal of Advertising Research, and Current Issues and Research in Advertising), from inaugural issues through 1988. Thomas E. Barry, "Publication Productivity in Three Leading U.S. Advertising Journals: Inaugural Issues Through 1988," Journal of Advertising, 19:1 (1990), pp. 52-60.
- Ranked "Top Author" of articles published in the nine major mass communication journals from 1980 through 1985. Bradley S. Greenberg and John C. Schweitzer, "Mass Communication Scholars' Revisited and Revised," Journalism Quarterly, 66:2 (Summer 1989), pp. 473-475.

Ranked second among "Most Prolific" authors in eight leading marketing journals from 1983-1984. Gary L. Clark, "Productivity Ratings of Institutions Based on Publication in Eight Marketing Journals: 1983-1984," Journal of Marketing Education, Fall 1985, pp. 12-23.

Ranked in "Top 75 Authors" in the field of communication from 1915-1985. Nancy F. Burroughs, Dianne M. Christopher, J. Cole Ady, and Elizabeth A. McGreal, "Top Published Authors in Communication Studies, 1915-1985," ACA Bulletin, January 1989, pp. 37-45.

#### TEACHING AWARDS AND ACTIVITIES

Superior Teaching Award, University of Georgia, 1984.

Teacher-Scholar Award for Excellence in Teaching, Michigan State University, 1978.

Faculty, Institute of Advanced Advertising Studies, American Association of Advertising Agencies, 1983-86.

Taught undergraduate and graduate classes in advertising and society, advertising management, advertising research, mass media economics, and qualitative research methods, 1974 - present.

Developed graduate seminars in mass media economics, advertising management, advertising media planning, qualitative research methods, audience behavior, and advertising research, University of Georgia, 1983-1987. Two of the seminars, advertising management and advertising media planning, are cross-listed with the Department of Marketing.

Ph.D. chair of the following Ph.D. dissertation committees:  
Young Sook Moon (graduated 1990)  
Subir Sengupta (graduated 1991)  
Eric Haley (in progress)  
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Member of Ph.D. dissertation committees of numerous communication and marketing students.

#### ADMINISTRATIVE EXPERIENCE

Head, Department of Advertising and Public Relations, University of Georgia, 1983 - present. Responsibilities include the administration and management of 14 faculty and 2 secretaries.

Committee Member, Ph.D. Administrative Committee, 1983 - present. Responsibilities include applicant selection and curriculum management.

Dean's Executive Committee, College of Journalism and Mass Communication, 1983 - present. Responsibilities include policy and management decisions involving the College.

University Promotion and Tenure Committee, University of Georgia, 1988 - 1990. Responsibilities included chairing an area committee, 1988 - 1989, and serving on university-wide review committee.

President's Advisory Committee, University of Georgia, 1991 - present.  
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Served as Research and Expert Consultant for numerous clients, including the Tobacco Institute, Henderson Advertising, Ross Advertising, Caterpillar Tractor Company, BBDO/Atlanta, Standard Telephone Company, The Consumer Marketing Group, Mansours Department Stores, Inc., McMaster Meighen/Canada, Imperial Tobacco Company, RJR/McDonald/Canada, and Major League Baseball.

Served as Editorial Consultant for numerous publishers, including Prentice-Hall, The Dryden Press, W. C. Brown Company, Lexington Books, McGraw-Hill, MacMillan, and Randon House Publishers.

SPORTS  
EXHIBIT 2

USE OF THE CONSTANT SUM MEASURE AND NIELSEN  
AUDIENCE DATA IN CABLE ROYALTY DISTRIBUTION PROCEEDINGS

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## I. INTRODUCTION

In previous proceedings before the Copyright Royalty Tribunal (CRT), the Joint Sports Claimants (JSC) presented surveys designed to measure cable operators' perceived value of sports programming in relation to other categories of distant-signal non-network programming. The surveys, conducted first by the advertising agency of Batten, Barten, Durstine, and Osborne (BBDO), and later by the consulting firm of Browne, Bortz & Coddington, Inc. (BBC), used the constant sum technique to establish program-category valuation of randomly selected samples of cable operators. In the same proceedings the Motion Picture Association of America (MPAA) presented studies based on A.C. Nielsen audience data. These studies were offered as evidence of the amount of cable subscriber "viewing" that each distant-signal program category received.

The CRT said that it accorded "far greater weight" to the MPAA viewing study than to the constant sum surveys in allocating the 1983 cable copyright fund (see p. 12808 of 1983 Final Determination). The CRT favored the MPAA viewing data for two primary reasons (see p. 12808-12809).

The first reason involved the relationship between the survey results and actual behavior. The CRT concluded that the

MPAA viewing study was "the only study to measure behavior," and that constant sum studies reported results which are not indicative of actual behavior. In the words of the Tribunal (see p. 12809):

...it is recognized by surveyors that how people say they behave and how they do behave are quite different. This difference is exacerbated by the very nature of asking a subscriber or a cable employee over the phone to engage in a twenty minute exercise of allocating program preferences.

Such an exercise, added the Tribunal, "takes into account no 'real world' factors" and "carries no consequences."

The second reason involved recall problems associated with the time of data collection. The Tribunal concluded that the viewing study was more reliable because it was the only one conducted during 1983, the relevant year (see p. 12808). The Tribunal agreed with the MPAA that the 1983 JSC constant sum survey was flawed by "recall" problems because it was conducted in 1985.

In order to address the CRT's concerns, two changes were made in the 1989 constant sum survey conducted by Bortz & Company for the Joint Sports Claimants. First, cable operators were asked to estimate the relative value of the distant-signal non-network programming they carried in 1989 by allocating 100 percent of a "fixed program budget;" in the 1983 survey the respondents allocated 100 percent of the "value" of their distant

signals. Second, the interviews in the 1989 survey were conducted in late 1989 and early 1990.

It should be noted that I was retained by the Joint Sports Claimants prior to their conducting the 1989 survey, and that I recommended the foregoing changes in consultation with Bortz & Company.

## II. PURPOSE OF REPORT

I have been requested by the Joint Sports Claimants to comment on the CRT's concern with the constant sum technique -- specifically, the relationship between constant sum survey results and actual behavior. I also have been asked to evaluate the MPAA viewing study in light of the CRT's concerns regarding behavior and recall.

## III. SUMMARY OF VIEWS

The constant sum technique, such as that employed in the 1989 JSC survey, is a valid and well-accepted research tool. It is often used in marketing research because:

- \* it is simple in design and easy to use.
- \* its measurement properties allow the application of sophisticated statistical procedures.
- \* it reveals relative comparative judgments of items in an alternative set.
- \* it eliminates consistent positive, negative, or neutral response patterns.

\* it yields substantial information that is predictive of behavioral tendencies.

In marketing and other research, the constant sum is frequently utilized as a means of determining how surveyed respondents are likely to act in a choice situation. In any instance where self-reported measures are used to collect information, one cannot be absolutely certain that such information is predictive of actual behavior. Nevertheless, those engaged in market research have traditionally relied upon constant sum measures as an accurate gauge of behavioral intentions. Furthermore, the studies that exist demonstrate that the constant sum technique provides a reliable and useful indicator of actual behavior.

The concerns over behavior and recall that the Tribunal expressed in the 1983 proceeding over the JSC constant sum survey are similar to the types of concerns that have been expressed by market researchers over Nielsen diary-based audience data. Such data are not direct measures of actual viewing behavior. Rather, they are dependent upon individual reporting of past behavior; they are thus susceptible to faulty recall and other problems affecting accuracy. Considerable sums of money of course have been invested by advertisers and others in relying upon Nielsen diary-based audience data. The same, however, may be said about reliance upon data derived from constant sum surveys and similar research.

The above views are discussed more fully in the following pages. By way of summary, I believe that the constant sum technique is an appropriate research tool to determine (among other things) how cable operators would likely have allocated their program rights payments. Also, from the standpoint of the CRT's concerns regarding behavior and recall, I see no valid reason to favor the MPAA's viewing studies over the JSC's constant sum surveys.

#### IV. DISCUSSION

##### A. The Constant Sum Measure

##### 1. Character of the Constant Sum Scale

The constant sum scale was introduced to the field of marketing research through the work of J. P. Guilford and W. S. Torgerson. Both Guilford and Torgerson were psychologists who published major books on psychological measurement: Guilford published Psychometric Methods in 1954, and Torgerson published Theory and Methods of Scaling in 1958.

The constant sum scale is a widely accepted and often-used measurement tool in marketing research (see for example, Alreck and Settle, 1985; Axelrod, 1986; Churchill, 1983; Green and Tull, 1978; Hughes, 1971; Parasuraman, 1986; Peterson, 1988; Tull and Hawkins, 1987). The measurement technique is used for concept testing, price sensitivity studies, simulated shopping studies, advertising testing, and segmentation research (Axelrod, 1986).

It has been used to study consumer preferences for branded goods, medical services, travel decisions, and radio stations (e.g., Abernethy, 1989; Conant, Mokwa, and Wood, 1987; Green and Srinivasan, 1978; Monahan, 1987; Mulbacher and Botschen, 1988; Pasumarty, Karney, and Morley, 1987; Sutherland and Brown, 1991; Woodside and Carr, 1988; Woodside and Shinn, 1988; Woodside and Wilson, 1985). Other applications of the constant sum measure can be found in psychology (e.g., Budescu, Zwick, and Rapoport, 1986; Spence, 1990), anthropology (e.g., Roberts, Chaio, and Pandey, 1975; Roberts, Strand, and Burmeister, 1971), and game theory (e.g., James, 1990; Michener, Clazer, and Richardson, 1989; Wolf and Shubik, 1977).

The constant sum is a popular measurement technique because of its simplicity, ease of use, suitability for sophisticated statistical procedures, and ability to yield substantial information (Green and Tull 1978). As noted by a number of authors, including Pamela L. Alreck and Robert B. Settle in The Survey Research Handbook (1985) and Donald Tull and Del Hawkins in Marketing Research (1987), the constant sum technique is particularly well-suited for measuring behavioral intentions, past actions, and evaluative preferences.

In practice, the constant sum scaling technique is employed to determine how proportions of some resource (e.g., money, time, etc.) or activity (e.g., purchase behavior) are allocated among two or more alternatives (Churchill, 1983; Peterson, 1988; Tull

and Hawkins, 1987). The proportions to be allocated are numerically defined, generally 10 or 100 points (Tull and Hawkins, 1987). The allocation is based on each respondent's perceived judgment of the alternatives being evaluated, and provides diagnostic information on the relative preference for and importance of each alternative in the alternative set (Churchill, 1983; Tull and Hawkins, 1987). According to Robert Peterson (1988), the constant sum scaling technique allows fine discriminations to be made among evaluated alternatives, based on respondents' relative judgment of the alternative set.

As a scaling technique, the constant sum scale falls into the comparative scale category. Unlike the noncomparative rating approach, comparative scales involve judgments with direct reference to the other alternatives being evaluated. That is, subjects are asked to evaluate each alternative relative to the others in an alternative set.

As a comparative scaling technique, the constant sum scale has a natural starting point of zero, which means the sum to be divided is fixed across all respondents (e.g., lowest possible rating is zero; the highest possible is one hundred) (Parasuraman, 1986). Alternatives can be evaluated two items at a time in a paired-comparison procedure or more than two at a time in a quadric procedure. According to Donald S. Tull and Del I. Hawkins (1987), the quadric procedure is most common in

marketing research. It should be noted that the 1989 JSC survey, as well as past JSC surveys, used the quadric procedure.

Because respondents more readily understand numerical differences, the constant sum scale directly addresses one of the basic problems of psychological measurement -- the assessment of psychological distance between alternative items (Hughes, 1971). By virtue of the technique's fixed-scale format, the constant sum scale measures how much more important one alternative is relative to others -- meaning that an allocation of 50 and 25 points between two alternatives confirms that one alternative is perceived as twice as important as the other (Tull and Hawkins, 1987).

As a measurement approach, the constant sum scaling technique tends to eliminate "halo effects," that is, the tendency of respondents to answer in a consistent positive, neutral, or negative pattern with regard to the alternative set (Clancy and Garsen, 1970). As noted by G. David Hughes in Attitude Measurement for Marketing Strategies (1971), the constant sum technique is less susceptible than noncomparative scales to individual response style such as "yea saying" or "nea saying" and to differences in interpretation of scale labels (such as good, very good, etc.). In other words, compared to other evaluative scales the constant sum technique tends to reduce "false reporting" tendencies.



## 2. Comparative Evaluations

Two studies have specifically addressed the question of the predictiveness of the constant sum measure in relation to other scaling techniques. The first study, conducted by Joel N. Axelrod, then with the Xerox Corporation, appeared following an exchange over the merits of comparative scales within the pages of a 1966 issue of the Journal of Advertising Research (Blankenship, 1966; Haller, 1966). The Axelrod study, entitled "Attitude Measures That Predict Purchase," appeared in a 1968 issue of the Journal of Advertising Research. Eleven years later in 1979, Russell I. Haley, a professor of marketing at the University of New Hampshire, and Peter B. Case, a specialist in advertising and media research with the General Electric Company, published a replication of Axelrod's study entitled "Testing Thirteen Attitude Scales for Agreement and Brand Discrimination" in the Journal of Marketing. Both studies are considered classic works by marketing specialists, and are often cited in marketing research texts (for example; Alreck and Settle, 1985; Churchill, 1983; Green and Tull, 1978; Hughes, 1971; Parasuraman, 1986; Peterson, 1988; Tull and Hawkins, 1987).

### a. The Axelrod Study

Axelrod (1968) compared ten different survey research measures with respect to (a) their ability to discriminate among choice alternatives within a category (i.e., the property of sensitivity); (b) their ability to produce the same results over

different samples of respondents (i.e., the property of stability); and (c) their ability to predict subsequent behavior (i.e., the property of predictive power). The ten measures compared were: (1) the Lottery measure, (2) the +5 to -5 Rating Scale, (3) the Predisposition-to-Buy Scale, (4) the Constant Sum Scale, (5) Paired Comparisons, (6) Forced Switching, (7) Advertising Recall, (8) First and Second Choices, (9) Awareness, and (10) Buying Game.

In the constant sum procedure, subjects were asked to allocate "11 cards" among a predetermined set of brands to indicate the likelihood of brand purchase. A person's preference score was simply the number of cards allocated to each brand. Axelrod labeled each measure an intermediate criterion (I.C.), meaning that a psychological response to a stimulus measured in Time 1 is assessed relative to its predictiveness, or correspondence, with a measured response to the same stimulus in Time 2. In Axelrod's (1968, p. 3) words:

The marketer needs a more immediate measure of the effects of manipulations -- a measure that reflects the immediate effect of a stimulus on a consumer but also predicts his subsequent purchase behavior. Such a measure is called an Intermediate Criterion, or I.C. for short.

In other words, the intermediate criterion (I.C.) is a proxy measure that validly predicts behavior.

To determine the short-term and long-term predictiveness of the measures, interviews were carried out with samples of 2,000

and 2,500 women from different cities. Short-term predictiveness was measured at three- and five-week intervals, while long-term predictiveness was measured after five months. Axelrod found that first brand awareness (i.e., name all brands that you can think of; also known as top-of-mind awareness) and the constant sum measure were the most stable and predictive measures of purchase behavior (i.e., of the 8 measures retained after the sensitivity phase of the study). In particular, Axelrod found that the constant sum was the best measure of repeat purchase, that is, the probability that a person will keep buying the same brand. From the aggregate data, Axelrod (1968, p. 17) concluded:

In those situations where research users are concerned not only with short-term predictions, but also with providing diagnostic information -- what beliefs are held by those who are going to switch to various brands, what do they like, want, etc. -- the Constant Sum is superior because it spreads customers along a continuum.

In other words, the constant sum most accurately reflects how customers fall in relation to the various categories of possible behavior.

**b. The Haley and Case Study**

Haley and Case (1979) conducted a comparative study of thirteen popular rating scales to determine (1) which scales are related (i.e., consistency of the measures themselves; measuring the same thing), and (2) which discriminated best among brands of frequently purchased packaged goods. The thirteen scales,

including two versions of the constant sum measure, were culled from a longer list of testing scales partly on the basis of popularity and diversity.

The scales were tested across six packaged goods categories with relatively high purchase frequency and sales concentration among a small set of brands. The subjects were 630 women over age 18 who were responsible for family shopping. One constant sum scale asked subjects to allocate ten pennies among the selected brands as an indication of brand liking; the other measure, a paired comparison procedure, asked subjects to allocate 10 points among pairs of brands.

Haley and Case found that the constant sum measure was one of five scales to adequately discriminate among brand liking and to be strongly associated with current brand usage. In other words, the constant sum technique was one of the measures that most accurately reflected the brand preferences of the tested sample of respondents.

### 3. Field Applications

The pragmatic value of the constant sum technique for measurement purposes may be demonstrated by its application in the field. Though no industry-wide surveys are publicly available, large marketing research firms such as Decision Research, Eric Marder & Associates, Maritz Marketing Research, McCollum/Spielman Worldwide, Oxtoby-Smith, and Marketeam/Doane Marketing Research, use the constant sum technique in numerous

marketing surveys each year. The two industry-based applications described below are presented to illustrate the utility of the constant sum for the actual practice of marketing research.

a. The Assessor Model

The constant sum technique is incorporated as a fundamental measurement component of the ASSESSOR Model. The model was developed at the Massachusetts Institute of Technology, and first described by Alvin J. Silk and Glen L. Urban in a 1978 Journal of Marketing Research article entitled "Pre-Test-Market Evaluation of New Packaged Goods: A Model and Measurement Methodology."

According to Silk and Urban, the ASSESSOR Model and its measurement procedure were developed to estimate sales potential for new products before they are test marketed, in an effort to reduce product failures and test costs. As employed in the model, the constant sum measure is used to evaluate brand preference among a set of tested brands. The constant sum procedure was selected, as noted by Silk and Urban, because of its superior ability to elicit preference judgments from consumers. In practice, the ASSESSOR Model has been used by a number of major marketers to test more than 1,000 products.

b. Coca-Cola's QCT

Another example of a field application of the constant sum procedure is provided by Coca-Cola's QCT (Quantitative Copy Testing). QCT is an instrument that was developed and utilized by Coke to test advertising effectiveness. Included among the

cognitive and attitudinal scales is a constant sum scale designed to measure brand-purchase likelihood.

In the procedure, subjects are asked to allocate 10 points among a set of soft drink brands. Each point, as defined in the procedure, represents one future purchase. The total points allocated per brand is interpreted to mean likelihood of future purchase -- the more points given to a particular brand, the greater the likelihood that brand will be purchased.

It should also be noted that Coke has used the constant sum technique in non-advertising tests. In product tests, Coke uses the technique to measure brand preference. This application is similar to the use of the constant sum in the ASSESSOR Model.

B. Nielsen Audience Data

As noted above, the CRT favored the MPAA viewing study in part because the study measures "actual behavior" and was conducted in the relevant year. However, I do not believe the Nielsen data, which underlie the MPAA study, are immune to recall problems. Nor are the Nielsen audience data a direct measure of "viewing" behavior.

Diaries suffer from problems of nonresponse and response error. Though I will deal mainly with problems of response error in the following paragraphs, it should be noted that nonresponse error is particularly troublesome for diaries. Typically, diaries are completed by only 50% of those households sampled, and those individuals who fill out and return diaries tend to be

systematically different from nonrespondents in significant ways (e.g., younger people, especially males, are less responsive; blacks are less likely to complete and return; and heavy viewers are more likely to return diaries than are other viewer-types). The CRT's concerns regarding behavior and recall are problems of response error, and are inherently associated with the diary method of data collection.

The Nielsen-based MPAA study is the product of self-reported recall of past behavior; it is dependent upon individuals completing diaries of their viewing behavior. These diaries are often reconstructed from memory. When diaries are used to determine program ratings, viewing behavior is not directly measured; rather, viewers' recall of past viewing behavior is measured. As documented in the literature, diary-based audience data (such as those which underlie the MPAA study) reflect "faulty recall" and should not be equated with absolute viewing behavior.

One reason why Nielsen diary-based ratings are susceptible to recall problems is that viewers who complete Nielsen diaries have little involvement in the measurement process; they are not directly or professionally concerned with the process of measuring viewing. Furthermore, viewers may forget which programs they watched when completing diaries; they may make honest reporting mistakes; and they may enter false viewing choices in order to reflect more "socially acceptable" viewing

(Fletcher and Bowers, 1991; Ogles and Howard, 1990; Sissors and Bumba, 1989).

Perhaps even more important (given the nature of the CRT proceedings) is the fact that recall of viewing is a particular problem for cable TV subscribers. According to Ogles and Howard (1990) and to Sissors and Bumba (1989), audience data from cable TV homes tend to be inaccurate because there are too many stations for diary keepers to remember; it simply takes too much time and attention to detail for cable subscribers to complete diaries.

In summary, the CRT's concerns regarding behavior and recall apply also to MPAA viewing studies. Nielsen diary-based data neither directly measure actual viewing behavior, nor are they immune to faulty recall.



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APPENDIX A

# Keeping Up with Changes in Broadcast Audience Measurement: Diaries and People Meters

By Robert M. Ogles and Herbert H. Howard

The measurement of radio and television audiences has been an important activity since the beginning of broadcasting in the United States. Early radio ratings were derived by telephone recall (Crossley's Co-operative Analysis of Broadcasting), the telephone coincidental method (C. E. Hooper), passive meters (the A.C. Nielsen audiometer), and roster-recall (The Pulse). More exotic methods were also used, such as measuring responses to premium offers on children's programs or recruiting college students and off duty police officers to ask drivers stopped at traffic lights which stations they were listening to. More recently, structured diaries were central to both radio and television ratings (e.g., Sterling & Kittross, 1970; Fornatale & Mills, 1980). Today, the latest innovation in audience data gathering is the people meter, a type of electronic diary that is used to measure network television viewing.

Although passive meters are used in conjunction with diaries to measure non-network (local) TV audiences in 12 to 15 of the largest markets, the A. C. Nielsen and Arbitron Companies continue to use the diary method to measure local TV audiences in other markets. The network radio audience is measured by telephone recall (RADAR). Local listenership is assessed by the diary method (Arbitron) and the telephone coincidental technique, in which potential audience members are simply called to ask what program or station they are listening to at the time (Birch).

Most broadcast educators are familiar with structured diaries themselves, which are logs typically divided into 15 or 30 minute intervals. On the other hand, broadcast educators may be less familiar with diary methodology as a form of survey research because it is infrequently studied compared to other common methods such

as personal interviews, mail questionnaires, and telephone sampling techniques. In addition, broadcast educators may not be familiar with the problems inherent in newer methodologies such as people meters. Here, we review some of the biases and analytical problems associated with these techniques and make suggestions regarding what we should try to help our students appreciate when teaching them about the latest developments in audience measurements.

## A brief background on diaries and people meters

### Television Ratings

Although the people meter may be the most significant development in audience research during the past 35 years, the use of meters to measure audience patterns dates back to the 1930s. In 1942, the Nielsen Audiometer became the foundation for network radio ratings. Its purpose was to record

the time listening began and ended (i.e., when the set was turned on and off) and the station to which the radio was tuned. In 1950, the Nielsen Television Index (NTI) was launched, using a similar passive tuning device for TV. In reality, those household meters were merely set meters, which detected the tuning activity of the set to which they were attached.

Until recently Nielsen, the preeminent television ratings firm, measured nationwide viewing by combining demographic data from 865 diary respondents and viewing data from 1,700 households wired with "passive" set meters, which recorded when a television was turned on, the station to which it was tuned, any channel changes, and when the set was turned off. These electronic meters were linked to Nielsen computers via special telephone lines (Daley, 1986; A. C. Nielsen, 1980).

Resistance to the use of diaries by advertising agencies crystallized with the development of "active" people meters. Instead of requiring written diary entries, these electronic devices measured television usage by individual viewers who pushed buttons on a key pad at prescribed times while watching. The people meter was developed by London-based AGB Research, which conducted extensive pilot testing and planned to launch its service in the United States in 1987. However, the entrenched Nielsen organization countered with its own people meter system and won the fierce competitive struggle to provide people meter service to the U. S. Arbitron also came out with its people meter version, ScanAmerica, which so far has been used in only a few markets.

Slightly larger than a TV channel selector, the people meter is a hand-held device attached to each television set in a house-

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Network executives resisted people meters at first

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hold. A specific button is assigned to each member of the family. Each time a person selects a program of any kind — broadcast television, cable, or videocassette — the appropriate button is pushed. Thus, the people meter gives agency, advertiser, and media subscribers virtually instant (next morning) feedback 52 weeks a year on the size and demographic composition of those who viewed a particular program (Gay, 1985).

### Diary challenge

Why was the diary method challenged? Sandomir (1986) reports two reasons. First, the proliferation of viewing choices brought about by cable, satellite, and video recording equipment made diaries increasingly difficult to fill out. Second, advertising professionals believed people meters were methodologically more precise than diaries because they enabled ratings firms to assess very detailed demographic information about broadcast audiences, including ratings for individual commercial messages. Young & Rubicam Executive Vice President Joseph Ostrow said "all evidence shows [the people meter] is a more accurate representation of viewing habits" than are written diaries (Sandomir, 1986, p. 39). In addition to their presumably greater accuracy, people meters also were favored because of their ability to deliver viewing information instantly 52 weeks a year. Other factors cited were a growing unwillingness by the public to fill out diaries, as well as "halo" biases introduced when viewers filled out diaries hours or days after viewing when perhaps they were more likely to remember only their favorite or better known programs.

While advertising executives initially tended to favor people meters, network executives were hesitant to endorse their adoption because preliminary people meter data indicated approximately 10% lower average ratings for network shows compared to diary-based ratings. Losses among adult viewers occurred during both daytime and prime-time, while the most severe losses (25 to 30%) took place among child viewers on Saturday morning. Late-night network viewing, however, increased with the people meter measurements (Sandomir, 1986, p. 39).

### Understating

In addition to concerns about "understating" the size and composition of the audience, network executives initially

criticized the people meter sample frame (list of survey respondents) for including too many pay-TV households and a disproportionate number of young families. They also cited the inability of young children to handle the people meter control buttons and the erratic week-to-week variations of ratings for specific programs during the test period. Forgetting to use the people meter device as a result of fatigue with the system was another concern stated by network broadcasters (Gay, 1988).

Officials of the broadcast networks proposed a hybrid approach to a measurement system: conventional passive metering to measure total audience size; and people meters, instead of diaries, to measure demographics. But USA Network President Kay Koplovitz said "the two-sample proposal sacrifices validity, reliability, sample size and sample efficiency for a presumed, short-term economic advantage to the broadcast networks. One large sample will simply provide better quality data than two small combined samples" ("Koplovitz decries," 1986). Dr. William Baker, president of Group W Television, expressed a similar opinion. Baker warned against making a historic break with the past based on *insufficient evidence that people meters are any less flawed than diaries* ("Group W's Baker,"

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## Many methodological issues linger

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1985. *Italics supplied*). We consider this to be an important point for broadcast educators.

The dispute was exacerbated by the entry into the domestic broadcast rating industry of British-based AGB Research, which proposed to use people meters exclusively. At about the same time, a Seattle-based entity, R. D. Percy Co., wired 1,400 households in the New York market with people meters that were both "active" and "passive." All viewers in a household had access to a remote control device whereby their responses to questions presented on the screen were measured. The "Percy system" featured a heat sensor (instead of buttons to push) which recorded which individuals were seated in the room during the programs and commercial breaks ("New measurement

device," 1986). The developer touted the fact that this passive system could overcome an inherent problem in active people meters whereby a person could leave the room and fail to punch out. Critics countered that pet dogs might register on the Percy meter; company officials, however, claimed pets could be singled out and not included in the final data (Gay, 1986).

### People meter methods

Nielsen began national data collections with its people meter in the fall of 1986. It also continued to use the diary method until August, 1987, providing parallel reports to clients during the 1986-87 season that were based on both the diary/passive-meter system and a sample of 1,000 people meters. The number of people meters in the Nielsen national sample subsequently has been increased to 1,400 ("You know about," 1989). Now that the people meter has supplanted the diary in network ratings, its impact on the television industry can be summarized in a decrease in reported network viewing during the daytime and primetime, great variations in network evening news audiences from night-to-night, and as much as a 20% drop in the viewing of Saturday morning children's shows. The television networks have also changed certain business practices, including making guarantees ("make goods") for lower-than-expected ratings in the "upfront" marketing of fall advertising time ("New meters seen," 1986).

Methodological issues include questionable compliance with on-screen requests to "punch in" the names of the viewers, the use of the people meters by children, and a 50% rate of decline-to-participate among potential respondents. There may be technology related bias associated with the latter, as data indicates those who agree to have their television sets wired for people meters are comparatively more comfortable with video and television technology. Obviously, these individuals may not be representative of the general population (Linger, 1988).

### Local Television Ratings

Market-by-market ratings are produced four times per year ("sweeps") by Nielsen and Arbitron. Both firms rely primarily on the diary method for gathering in the more than 200 U. S. television markets. However, both companies have been racing to launch metered-overnight ratings services in the largest markets, where the economics can justify the expense. At present, both Arbitron and Nielsen use passive

meters for tuning information and dairies for demographics in each of the top-10 markets, plus a few others ("Metering of markets," 1986).

#### Radio Ratings

The only firm that measures the network radio audience is RADAR, Radio's All-Dimension Audience Research, financed by the radio networks under contract with Statistical Research, Inc. Issued twice a year, the RADAR report is based on 6,000 telephone respondents who are asked to recall their listening activity (Head & Sterling, 1986, p. 376).

#### Diary method primary

The diary method continues to be the primary instrument used to measure local radio listening, primarily because the estimation of away-from-home radio use in various settings such as automobiles and lightweight headsets is not amenable to passive metering. (The original Nielsen

once shift from AM to FM and the resulting proliferation of station choices among listeners. Birch capitalized on an important bias of the diary method: Young persons tend not to complete dairies. Many stations with youth target demographics fare comparatively better with telephone-coincidental than diary-generated ratings. By 1987 Birch offered monthly reports and quarterly ratings in 125 markets (Head & Sterling, 1987, p. 376).

Arbitron has recognized another problem with the diary method. The return rate for minorities generally is low, resulting in an underestimation of their media use.<sup>1</sup> To counter this bias, Arbitron employs expanded sample frames and differential survey treatments (DST) for populations containing significant proportions of black and Hispanic persons. These treatments entail sampling from households with unlisted telephone numbers based on files of potential telephone numbers from which known listed numbers, known business numbers, and nonresidential exchanges have been eliminated. Increased cash incentives and follow-up procedures are used to stimulate interest in the survey and to encourage minority diary respondents to fill in and return their dairies. As of this writing, reaching the black survey respondent remains problematic (Corbitt, 1989).

Moreover, because diary return rates hover around 40% ("Arbitron says," 1987), Arbitron has established a procedure to correct for insufficient sample size. A buffer sample is drawn manually, though in the same manner as the original computer-drawn sample. If initial diary returns appear low, the buffer sample is used to augment the original sample, but only to the extent necessary to ensure representativeness (Arbitron Ratings Company, 1985).

Another methodological development is the daypart diary, which is designed to prevent respondents' confusion about time of day by eliminating the need for a.m. and p.m. designations. Although this diary design may reduce errors in crediting stations with listeners, a general decline in radio listening evident before the change to the daypart diary persists ("Arbitron says," 1987).

#### Diary criticisms

Even with these safeguards, Arbitron publications report criticisms of the diary method. Two of the the more common are that dairies are filled out on the last days of survey weeks, and that dairies measure only habitual use of favorite stations. Arbitron

officials hold that these criticisms are not valid (Bosley, 1986). Nevertheless, the Arbitron diary continues to be refined. Company officials are experimenting with changes in graphic design, paper stock, and language composition ("Arbitron says," 1987).

Foster (1978) identified basic questions which must be addressed by users of diary-based ratings: Was it clear when respondents were to make notations in the dairies? Should it be whenever the program changed, the dial was changed, or the composition of the audience before the set changed? Or, was it acceptable to fill in the information at the end of the day? Was one station more socially acceptable to view or listen to than another? Did respondents elevate to a high priority news, documentaries, or cultural programs they rarely bother to watch or listen to? Howard and Kievman (1983) recognized another problem with the diary method: heightened consciousness of viewing and listening associated with knowing one's media use is being measured, which could lead to artificial program choices and inflated media use, or so-called Hawthorne effects.<sup>2</sup> Some research firms discard the first week of data from diary respondents in an attempt to correct for this possibility. We raise another issue: Do listeners and viewers always know what they are listening to or viewing? When scanning the radio dial or slipping through the cable channels, some audience members may spend significant time listening to or viewing programming, but tune away before discovering the name of the program or its source.

#### What should we emphasize when we teach about ratings biases?

The biases inherent in broadcast audience research are not likely to be eliminated by people meters, as evidenced by the words of one people meter respondent: "We watch mostly PBS and, on cable, Arts and Entertainment. . . This is my chance to let the people who put on the shows know what I want. So I turn on PBS, even when I'm not that interested, just to keep it up there in the ratings" (Unger, 1988, p. 24). Instead, people meters merely add to the number of tradeoffs among instrument biases: diary vs. questionnaire, diary vs. phone coincidental, diary vs. people meter, etc. Any "active" measure of radio and television audiences remains problematic. Nevertheless, such measures enable collection of detailed data about media use.

## Biases remain that threaten the believability of ratings

Audimeter for radio was introduced before the age of television, when living rooms had console radios.)

The dominant radio ratings firm, Arbitron, estimates both radio and television use based on diary respondents selected from households with telephones located within geographic (market) survey areas. As of August, 1989, Arbitron measured 79 markets year-round, 148 markets at least twice a year, and a total of 260 markets at least once a year ("Counsel on the advisory," 1989). In 1978, a competitor, Birch, began offering ratings based on the telephone coincidental method. The emergence of Birch seemed to parallel the audi-

Some students may be tempted to assume that because a viewer is punching buttons on a key pad instead of making entries in a diary, the accuracy of broadcast ratings is increased. Indeed, diaries may overestimate network television viewing audiences, and people meters may underestimate them—depending on the type of viewing situation, the time of day, and the individual viewer at the people meter controls. Nevertheless, even if people meters are found to assess television viewing more accurately than diaries, there are qualitative biases that could render people-meter based ratings suspect.

Whether a less-flawed instrument will

### Fewer flaws

ever be devised is anybody's guess. In the meantime, it is unreasonable to expect the broadcast ratings industry to emphasize the limitations of its services. Such criticism is our job as broadcast educators. A prudent aim would be to help students understand the complexity of human behavior and the difficulty of its measurement by tracing the history and development of broadcast ratings and showing that each technological development is subject to fundamental biases which can be traced to variations in the structure of society and individual differences among audience members. By doing so, our students should be prepared to evaluate critically the future refinements in instrumentation that undoubtedly will emerge from advances in technology.

### Notes

<sup>1</sup>Among diary respondents, Steeves and Bostain (1942) report a nonsignificant trend in the opposite direction for ethnic and racial minorities.

<sup>2</sup>Controversy exists concerning the origin and existence of the Hawthorne effect. See Rice (1982).

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# Audience Research: Broadcast



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**A**dvertising researchers expend a considerable amount of money and effort to measure audiences of advertising vehicles because advertisers want to know the size and characteristics of the audiences they reach with their advertising messages. Although advertising agencies and other users of audience information must pay for the data, most of the cost of measuring audiences is borne by the media vehicles being measured. The cost can be extremely high; individual stations may have to pay thousands or even hundreds of thousands of dollars each to have their audiences measured.

There is no absolute requirement that media have their audiences measured. In fact, many publications and broadcast stations elect not to be measured because of the prohibitive expense. Audience measurement is a virtual requirement, however, for stations and publications that hope to garner significant amounts of national advertising. Many buyers of advertising, including agencies and advertisers, have policies against buying advertising from newspapers or magazines that do not have audited circulations.

While most vehicles in a market are usually measured by audience measurement companies, only the ones that pay for the service are allowed to use the resulting audience data for their own promotion purposes. For example, some radio stations may decide not to pay for the measurement services of either Arbitron or Birch. The stations of those audiences will still be measured and reported, but those stations will not be able to promote their audience figures.

The research companies discussed in Chapters 15 and 16 are the most widely used sources of syndicated audience data. Broadcast audience services discussed in this chapter include network radio (RADAR<sup>®</sup>), spot radio (Birch, Arbitron), spot television (Arbitron, Nielsen Station Index), and network television (Nielsen Television Index, TvQ). Print audience sources are discussed in Chapter 16.

## ••• Data Gathering Procedures

Companies that gather and report broadcast audience data use three basic methods. With *diaries* or other self-report techniques, respondents keep their own records of media exposure. *Interviews* rely on another person to question the respondent—in person or on the telephone—about media exposure. *Meters* are electronic devices that record television viewing automatically. Each technique has advantages and problems.

### ••• Diaries

A diary is a printed booklet in which individuals record their television viewing, radio listening, or other media exposure. Diaries are used primarily because they are inexpensive compared to other methods. About the only expense unique to diaries is postage, which is lower than the cost of interviews or meters. (All the methods have expenses related to sample selection, data analysis, and printing.) Diaries are the principal method used for local radio and television audience measurements, which require several hundred completed diaries in each market. Thus lower cost is a critical factor.

#### *Problems with Diaries*

Diaries are subject to the faulty memories of people who fill them out. Ideally, researchers hope that respondents keep diaries close to their television sets and radios and update them as they watch or listen. It is likely, however, that most diary entries are made only periodically or at the end of the survey period—usually one week. Respondents are likely to forget some details of their listening or viewing. It is also probable that only one family member (usually an adult female) reports viewing and listening for all others in the household. If she does that near the end of the diary week—as many probably do—the errors can be even greater.

Some respondents might also make honest mistakes in completing diaries because they get confused about station call letters and channel numbers. That can be a particular problem for people who watch cable television. For example, a person might

be watching WXXX-TV, which is broadcast over the air on channel 5. On the cable system, WXXX-TV might be carried on channel 9. Viewers have difficulty keeping all that sorted out in their minds. (Some viewers cannot even make the association between a station's call letters and its channel number.)

Diary information could also be incorrect because of deliberate untruthfulness by respondents. For example, some people who regularly watch daytime soap operas might not want to admit such behavior, even in an anonymous diary. It is easy for them to write the name of a more socially acceptable program — or nothing at all — in the diary. Another potential problem with diaries is the fact that people must be able to read and write to complete a diary. The U.S. Council on Literacy estimates that 20 percent of Americans are functionally illiterate, meaning they presumably do not have the verbal skills required to complete television or radio diaries.

Diaries require a considerable amount of time to process after the data have been gathered. Respondents must mail the diaries back to the company, and many forget to do that immediately. Diaries must be checked for completeness and accuracy and must be prepared for computer analysis before the rating books can be printed and mailed to users. That process can take several weeks.

### . . . Interviews

Interviews can be conducted in person or by telephone. Either way, researchers have more control over data gathering than is true with self-report techniques such as diaries. Interviewers can probe for more complete answers or can explain questions that respondents might not understand. Such probing or explanation would not be possible with a diary or other form of printed self-report. Interviewers can also make sure that all needed information is collected. Diaries, on the other hand, are often returned to the company with important information left out. In some studies, interviewers call respondents and ask them to verbalize a diary by recalling their listening or viewing for the previous day.

Interviewers can also control the source of the information instead of leaving it to chance. In some audience surveys, for example, it might be important to have an equal number of male and female respondents, and interviewers could control that. Researchers have very little control over who fills out a diary.

Researchers can monitor and supervise telephone interviewers more easily than face-to-face interviews. Research firms that conduct telephone surveys usually do them from specially equipped facilities with many interviewers in one room. Supervisors are able to monitor telephone interviewers as they make their calls.

#### *Problems with Interviews*

Memory problems are not necessarily eliminated by interviews, for respondents may still be asked to remember their viewing or listening behavior for the previous few hours or days. They might legitimately forget what they watched or might lie to interviewers for fear of embarrassment.

A greater problem — and also true to a lesser extent with diaries — is a reluctance to cooperate with interviewers. Many people are reluctant to participate in surveys

because they don't want to talk to strangers, they are too busy to be bothered, or they fear their name will be put on a mailing list. That reluctance to participate has become an acute problem for companies that use personal interviews; interviewers sometimes have doors slammed in their faces. In some urban areas, they may face dangers from physical assaults.

Finally, interviews are more costly and time consuming than some other methods. A single personal interview may require more than an hour to complete, and the transportation time required to get from interview to interview might make it difficult to complete more than three or four interviews per day. Telephone interviews can be done more quickly and more economically, of course, but they must be brief. In addition, a respondent can easily hang up before finishing a telephone interview. It also takes a long time to process and distribute the information gathered by personal or telephone interviews.

### . . . Meters

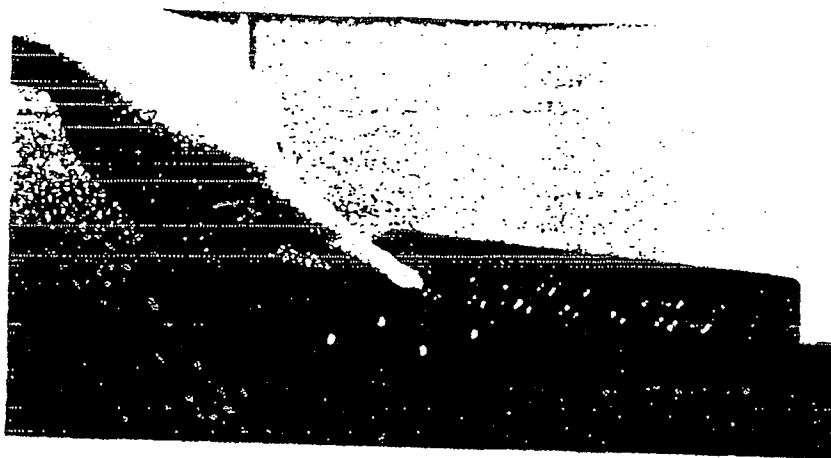
Meters are electronic devices that automatically record the duration of time that a television set is turned on and the station to which it is tuned. No action or effort is required by viewers. That eliminates memory and accuracy problems associated with diaries or interviews. The meters are connected to the research company's central computer, which regularly and automatically collects data stored in the meters. That reduces the time needed to process and distribute audience data to users. Many large advertising agencies have online computer connections with audience measurement companies and can receive television audience data a day or two after a telecast.

#### *The People Meter*

Television audience measurement underwent significant changes in the late 1980s with the introduction of the people meter to measure network television audiences. Prior to that time, meters measured only television set usage — the station that a television set was tuned to. To ascertain the composition or characteristics (demographics) of network program audiences, research companies used a separate sample of households that maintained diaries to report the kinds of people who were watching the programs. The diaries allowed them to report on what individual family members watched. In addition to using a different sample of households than the metered households, that methodology suffered from the problems of diaries in general.

Nielsen Media Research's introduction of the people meter changed much of that. It is a small device that looks like a calculator or a remote control unit. (See Exhibit 15.1.) Each family member has a different assigned button, and there are extra buttons for guests. The meter automatically records the station being viewed, and individual viewers are supposed to press their buttons when they start to watch and press them again when they leave the room. The people meter is like a miniature computer, and each family member's age, gender, and other demographic information is stored in it. (Guests enter that information when they use the meter.) Both television viewing and demographic characteristics are now measured by people meters in one sample, and Nielsen no longer uses diaries for its network audience composition studies.

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**Exhibit 15.1** The Nielsen people meter that is used to record television viewing by different family members

#### *Problems with Meters*

A major problem with meters is that they do not measure whether anyone is watching the television set while it is turned on. Some studies have shown that up to 25 percent of the time that sets are turned on, no one is in the room watching. That may be true during long program segments as well as commercial breaks. People meters have not solved that problem, for viewers must press a button to indicate they are in the room, and some may forget or ignore the button.

What is needed, and what the research industry is working toward, is a truly *passive* measuring device, one that can record viewing by individual viewers without requiring any action on their part. The technology for such passive meters is available, but costs and concerns about privacy are hindering their implementation. It would be technically feasible, for example, to give viewers a device to wear (or even to implant it under their skin) that would emit an electronic signal that could be read by a meter on the television set. It is also feasible for heat-sensing devices to identify and record the presence of individual viewers in the room while the set is turned on. (Such heat-sensing devices are sensitive enough to detect the presence of family pets.) To many people, however, devices like those pose threats of government surveillance. In addition, passive meters will detect only the presence of an individual in the room; they will not ascertain whether the person is watching or paying attention to the program or commercial.

Media researchers and television network executives are concerned about people meter problems with young children and with guests. Young children may not understand how to operate the people meter, and they are probably less likely than adults to remember to press the buttons. The requirement for guests in the household to provide demographic information when they watch is also seen as a hindrance.<sup>1</sup>

Another major problem with meters is the expense of installing and maintaining them. Consequently, meters are limited to the measurement of network television audiences and the audiences of television stations in the fifteen or so largest markets in the country. Stations in smaller markets simply could not afford to pay for audience measurement by meters.

A couple of other problems are associated with television audience measurement, although not necessarily only with meters. One is the problem of out-of-home viewers, people who watch television at work or in hotels, dormitories, or bars and who are effectively beyond the reach of audience measurement companies. One study estimated that 5 million people watch "Monday Night Football" in bars, hotels, and dormitories, that 3.1 million college students watch daytime television in dormitories, and that 2.6 million women watch daytime television at work.<sup>2</sup> It remains to be seen whether the costs of alleviating such problems can be justified in light of the improved precision of measurement.

The second problem concerns the difficulty of measuring the use of videocassette recorders to play prerecorded cassettes (rentals) and to play back programs recorded off the air. Nielsen Media Research does measure the viewing of prerecorded cassettes by families in its people meter sample, but there is not yet universal agreement about how to measure and to count viewers of programs recorded off the air. For example, should such viewing be counted if it takes place more than one or two days after the program was originally telecast?<sup>3</sup>

### ... RADAR®

Network radio audiences are measured by Radio's All Dimension Audience Research (RADAR®). It was established in 1967 and has been operated by Statistical Research, Inc. (SRI) since 1972. Data are gathered by day-after telephone recall interviews of respondents for a seven-day period. Interviews with approximately 12,000 people are conducted throughout the year.

RADAR® reports audiences of stations that carry specific network programs and network commercials. To do that, it relies on network clearance reports—lists of stations that carried specific network programs and commercials.

### ... RADAR® Samples

SRI first generates a sample of possible telephone numbers that are allocated among the 111 U.S. telephone area codes. In that procedure, a computer generates four-digit numbers that are paired with central office (exchange) prefixes. That random-digit dialing procedure gives each telephone household (even those with unlisted numbers) an equal chance of being selected, so SRI does not make any other effort to contact households that might otherwise be underrepresented, such as minority households.

THIRD EDITION

Advertising  
Media  
Planning

Jack Z. Sissors  
Lincoln Bumba



NTC Business Books  
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member of the family (up to eight members. A special unit containing sixteen buttons is available for larger families).

Before the unit is ready for use, a field representative collects demographic data about age and sex of each family member. These data are recorded in a control unit. Each button must be pressed at the beginning and end of each viewing. Visitors must key-in their sex and age on two special buttons. There is also a small key-pad for people to make viewing entries from across the room. (See Figure 4-1.)

The AGB meter is also in the form of a small box that sits on top of the television set. It is an audience monitor. It has a series of seven push buttons on it—one button is assigned to each family member. It comes with a separate hand-held device, about the size of a package of cigarettes, with buttons on it that must be pressed to indicate viewing. When viewers press a button on this pad to indicate that they are viewing, a light goes on in the box. They must also press a button to indicate when to stop viewing. That box also flashes when the set is turned on so that people will be reminded to press the buttons of the smaller unit. Also, at intervals, all the lights in the box on top of the set flash to remind viewers to cooperate. A basic metering unit can measure up to four television sets and can even monitor VCRs.

ScanAmerica has a device that flashes a question mark in the left-hand corner of the screen. Family members who are watching have a small handheld device which allows them to move a pointer on the TV screen to an identification number. Then they move the pointer over to an X to indicate that they are watching.

Information from these meters are returned over telephone lines to a centrally located computer. The demographics of each family member are already stored in the computer's memory, and are combined with viewing data to provide program ratings of people's viewing. Meters are supposed to be kept by a sample of homes for a period of five years, when the sample is replaced.

### The Need for People Meters

Ratings based on diary measurements have long been considered inadequate. But for years, there was no technique available to improve them. A list of diaries' inadequacies includes the following:

1. Most of the measurements were limited to a seven-day period. Therefore it was not possible to measure the cumulative tune-in for a four-week period of a demographic audience segment (for example, women aged 18-49). Of course, estimates could be, and were, made to provide this kind of information.  
Nielsen, for example, required a sample of viewers to fill out diaries for one week only, only about a fourth of its entire sample. This data was then unified into a four-week figure. On a nationwide basis, Nielsen collected demographic data for only thirty-nine weeks of a year, making it difficult to know the cumulative audience for certain time periods.
2. It was found that the last days of diary measurement were not necessarily as accurate as the first days in a seven-day period.



FIGURE 4-1. Nielsen's People Meter (with Hand-Held Remote Unit)  
Reprinted courtesy of Nielsen Media Research.

3. Diaries tended to provide higher ratings for higher-rated shows. This indicates that respondents of diary samples may have reported their "typical" (rather than actual) viewing habits when filling out the diaries, thereby inflating the ratings of the more popular higher-rated shows.
4. People who can neither read nor write (or whose literacy skills were poorly developed) were not likely to fill out diaries. Some estimates of their number run as high as 20 percent of the total U.S. population.
5. Children and older people were not likely to fill out the diaries completely, to do it accurately, or to return them.
6. Diaries tended to inflate the number of viewers per viewing households in a sample. Therefore, the costs per thousands were lower than they should have been.
7. Ratings from cable TV homes tended to be lower than they should have been, presumably, because there were too many stations for diary keepers to remember, or it simply took too much time and attention to detail to fill out diaries.
8. Many diaries were not completed, and of those that were, only half may have been usable. Therefore the returns were nonrepresentative of the universe being measured.

### Advantages of People Meters

The advantages of people meters for media planning purposes are as follows:

1. People meters are easier to use than diaries because no writing is necessary. Presumably, this fact may make measurements of TV watching more accurate than diaries.
2. Because writing is not necessary, the sample size and the characteristics of the universe being measured tend to be more representative than a diary sample.
3. Cable viewing may be much more accurately measured than it was in the past because viewers must only press buttons in order to record their cable viewing.
4. Measurements of cumulative viewing over a period of consecutive weeks result in reach and frequencies of demographic segments of target audiences that are measured directly. This direct measurement was not previously possible.
5. Reports of viewing can be made much more quickly because there are no long delays caused by the time taken to mail in diaries, edit and tabulate them.
6. People meters can measure movement of people in and out of the viewing room. If there is excessive movement, it may indicate that less attention is being paid to the program.



REBUTTAL TESTIMONY OF JOEL N. AXELROD

I have been asked by the Joint Sports Claimants to respond to testimony of Dr. Stanley Besen, a witness for the Motion Picture Association of America in the 1990-92 cable royalty distribution proceeding. Dr. Besen criticized certain market research (specifically, constant sum surveys of cable operators) conducted by Bortz & Company. For the reasons I will discuss, I do not believe that Dr. Besen's criticisms are justified.

1. Qualifications

I am President of BRX/Global, Inc., an international market research and consulting firm. Founded in 1972, BRX/Global, Inc. conducts market research, primarily for Fortune 500 companies. Approximately 75% of its research is international in scope. BRX has frequently utilized the constant sum methodology to aid a variety of clients in making various business decisions, including pricing decisions.

I graduated from Brown University in 1954 with Honors in Psychology and in 1958 earned a Ph.D. in Social Psychology from the University of Rochester. From 1958 to 1963, I worked in advertising research for several major advertising agencies. I then became Manager of Advertising Research at Lever Brothers with responsibility for the development of improved techniques for measuring advertising effectiveness.

While at Lever Brothers, I conducted what has become a seminal study validating use of the "Constant Sum Scale" to predict purchase behavior ("Attitude

Measures That Predict Purchase". Journal of Advertising Research, March 1968). The results of my study were later confirmed in research done under the auspices of the Advertising Research Foundation (Russell I. Haley and Peter B. Case, "Testing Thirteen Attitude Scales for Agreement and Brand Discrimination", Journal of Marketing (1979)).

In 1966 I joined the Xerox Corporation as Director of Marketing Research. For the next six years, I held a variety of positions including Corporate Planning Manager, Manager of Business Development and a Group Program Manager with P&L responsibility.

I was elected to the Conference Board Council on Marketing Research, and served as Chairman of the Association of National Advertisers Planning and Evaluation Committee. I have frequently spoken at meetings sponsored by the advertising Research Foundation, the American Marketing Association and the Canadian Professional Market Research Society. I have authored one book entitled, "Choosing the Best Advertising Alternative". I have a second book entitled "Brand Equity Systems<sup>(SM)</sup>: The Warrior's Weapon" which will be published later this year.

## 2. Testimony

The purpose of the Bortz surveys was to determine the relative values that cable operators placed upon certain categories of "distant signal" programming they had carried during the preceding year. With the assistance of others both inside and outside his firm, Bortz designed a survey which utilized the constant sum scale; cable operators were asked to allocate a distant signal program budget among the different

program categories. Burke Marketing Research administered the survey over the telephone to nearly 200 cable operators each year.

Besen took the position that the responses to the Bortz surveys do not accurately reflect the relative values that cable operators attached to the program categories measured. He criticized the responses as "simply answers to questions". (Tr. 6343) He suggested that one could not expect to receive accurate answers in a short telephone interview which posed a "hypothetical" question. (Tr. 6376, 6381)

I do not agree with Besen's criticisms of the Bortz surveys. Short telephone interviews are widely used in business to business research. Often they are the only way to obtain information from a representative sample of busy executives.

Moreover, the respondents to the Bortz survey were not simply answering any sort of questions. They were responding to a constant sum question. The constant sum technique is widely used and its predictive validity for purchase behavior has been amply documented in my published research as well as research reported by Haley and Case.

The unique contribution of the constant sum scale is that it forces the respondent to think in terms of relative value, which precisely parallels the decision process that the business executive faces. Constant Sum questions are particularly appropriate when, as here, one seeks information about relative values. Use of the constant sum scale here was within accepted business practice.

Survey research is imperfect, and therefore it is invariably open to the type of criticism advanced by Besen. Nevertheless, survey research (including research using

constant sum scales) is routinely relied upon by the business world to make a variety of decisions involving substantial amounts of money. When conducted properly, surveys provide decision makers with useful information on which important decisions can be based.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 13 February 1996

Joel N. Axelrod  
Joel N. Axelrod





**TESTIMONY OF SAMUEL H. BOOK, Ph.D.  
PRESIDENT, MALARKEY-TAYLOR RESEARCH**

August 1991

## 1. Introduction

I am president of the market research division of Malarkey-Taylor Associates, Inc. (MTA), the country's oldest, most experienced consulting firm specializing in cable television, with over 25 years of continuous consulting and research service to the cable industry. During the past five years, I have designed and conducted more than 100 statistically projectable surveys for cable operators, cable programmers, wireless cable companies and major international firms and governments contemplating entry into cable TV. Previously, I spent four years as research director for a Los Angeles market research firm; I designed and conducted hundreds of motion picture surveys for movie studios and independent producers. A copy of my resume is attached to this testimony.

The following companies, among others, have used and relied upon survey data and analysis which I provided while at Malarkey-Taylor: Continental Cablevision, Comcast Cable Communications, Jones Intercable, Time-Warner, American Television & Communications, Tele-Communications, Inc., Hughes Communications, Showtime Networks, Tribune Broadcasting, United Video, and Times-Mirror Corp. These studies included telephone surveys and personal interviews among cable consumers and cable operators.

I have been asked by the Joint Sports Claimants (JSC) to provide my opinions concerning the Bortz & Company constant sum survey of cable operators that has been submitted to the Copyright Royalty Tribunal (CRT) in the 1989 cable royalty distribution proceeding. (Cable Operator Valuation of Distant Signal Non-Network Programming, 1989, dated August 1991). I also have been asked to present my views of the criticisms made of a similar JSC constant sum survey during the 1983 cable royalty distribution proceeding.

## 2. 1989 Bortz Survey

Based on my market research experience and training, I would accept the 1989 Bortz survey results as valid and reliable, within the margins-of-error and confidence levels stipulated in the survey report. I believe the study provides accurate estimates of the relative amounts that cable operators would have spent in 1989 on the different categories of distant signal non-network programming they carried.

The constant sum method utilized in the Bortz study is appropriate for the purpose of assessing how cable operators would have allocated programming budgets among distant signal non-network programming categories. In fact, I do not believe there would have been any better way of determining how cable operators would have allocated their programming budgets. Constant sum surveys are often used in cable industry market research, and they are relied upon in the cable industry, especially in research situations where respondent trade-offs must be considered.

The Bortz study was competently designed and implemented. It utilized generally accepted methods of sampling, questionnaire design and interviewing. In addition, the survey response rate was outstanding at nearly 80 percent for the key survey question, thereby ensuring a high degree of confidence in the projectability of survey data to cable operators-at-large. Consistency of the 1989 survey data with prior constant sum survey data submitted to the CRT provides further confirmation of the 1989 study's acceptability.

## 3. Survey Criticisms Raised in 1983 Proceedings

During the 1983 cable royalty distribution proceeding, several parties presented a number of surveys of cable operators and cable subscribers. Professor Alan Rubin, a consultant retained by the Motion Picture Association of America, criticized each of those surveys. The CRT relied upon Professor Rubin's testimony in part as a basis for discounting the weight to be accorded to JSC's 1983 constant sum survey. In my opinion, the various criticisms advanced by Professor Rubin and relied on by the CRT do not provide a valid basis for discounting the 1989 Bortz constant sum study.

a. Recall

I agree with Professor Rubin that the reliability of survey data decreases when there is a long time lag between the survey and the behavior in question. Professor Rubin correctly pointed out that "[w]e cannot expect to gather meaningful information from people about how they would have acted two years ago." (Rubin, p.4) The Tribunal also accepted this criticism. (Fed. Reg. 12795)

However, the 1989 constant sum survey of cable operators was conducted at the end of 1989 and beginning of 1990. Therefore, the two-year lag in the 1983 cable operator survey does not apply to the 1989 survey. In the 1989 Bortz survey, some respondents, surveyed in 1989, were asked how they would allocate their program budgets for 1989. Other respondents, surveyed in early 1990, were asked how they would have allocated their programming budgets in 1989. Whereas consumers cannot be expected to recall their behavior in the recent or distant past, cable operators would be expected to recall what they would have done as part of their professional responsibilities a few months ago. Consequently, recall criticism of the 1989 constant sum survey of cable operators does not have the validity of Professor Rubin's criticism of the 1983 survey.

b. Constant Sum Techniques

Professor Rubin testified that the constant sum technique was "inappropriate" because "[o]perators and subscribers were asked to do something completely abnormal to their routine cable television behaviors. They were asked to break out specific categories of programs and to report how valuable each type of program was to them." (Rubin, p.5) The same issue was raised in the Tribunal's 1983 Final Determination, where it was stated that Rubin found the constant sum survey "to be an activity that neither cable operators nor subscribers do in actuality . . . ." (Fed. Reg. 12795).

It may be abnormal for subscribers and TV viewers to break out categories of programs and report on their relative value, but it is not an abnormal task for cable operators. Although cable operators typically "program whole signals" (Fed. Reg. 12795), they engage in exercises similar to constant sum allocation when evaluating those signals. Cable operators are frequently called upon to assess the value of alternative types of programming--sports, movies, series, documentaries, news, etc.--when deciding to carry a new program service or drop an existing service. The 1989 Bortz survey asked cable operators to do what they often do as part of their jobs, namely to allocate percentages

of a fixed budget to different program categories based on the value of those categories in attracting and retaining subscribers.

The 1989 constant sum survey improved upon the 1983 survey by a small but significant change in the wording of the constant sum question. In 1983 cable operators were asked to allocate the value of program categories, while in 1989 cable operators were asked to allocate their 1989 program budget across program categories. The 1989 research exercise was more realistic than in 1983, since cable operators are used to thinking in terms of budget allocations.

c. The Interview Process

Professor Rubin questioned whether respondents could reliably recall values placed on program categories "in the very few minutes provided by a telephone interview." (Rubin, pp. 5-6) The Tribunal likewise noted Professor Rubin's testimony that "this type of exercise conducted in a few minutes over the telephone could not accomplish the goals of the survey." (Fed. Reg. 12795; see also p. 12809).

I believe such concerns are unwarranted. The survey instrument was appropriately designed to be easily administered and understood on the telephone. The questions were clearly worded and the instrument was concise and narrowly focussed on the key constant sum questions. I believe the questionnaire would have captured and held respondents' attention for sufficient time to complete the constant sum exercise accurately and reliably.

The respondents were cable system executives. In my opinion, they should have had no difficulty understanding and answering the questions posed in the survey. They also should have been familiar with the terminology and definitions used in the surveys.

Malarkey-Taylor and other cable research firms with which I am familiar have conducted numerous telephone surveys of cable operators in recent years, and the results have been relied upon by our clients. These surveys usually require 15 to 20 minutes to complete on the phone. My experience has been that cable operators are typically able to understand the questions and to respond in a thoughtful, meaningful and reliable manner to questions posed in a brief telephone interview.

The survey process used by Bortz, as well as the design of survey instruments, was up to professional standards. An independent, third-party research firm, the highly respected and experienced Burke Marketing Research, administered the surveys, thereby minimizing the possibility of interviewer bias and strengthening confidence in the survey results.

#### 4. Conclusion

Malarkey-Taylor has conducted many different types of cable industry surveys during the past few years, including studies for seven of the top-ten cable industry MSOs, scores of surveys for smaller cable operators, in-depth market studies for cable programmers and dozens of surveys for firms introducing new technologies. I have also reviewed and analyzed numerous surveys of cable consumers and operators conducted by other research organizations.

I believe that the 1989 Bortz study was well designed and professionally implemented, and I believe it can be relied upon to determine how cable operators would have allocated programming budgets among various program categories. Professor Rubin's criticisms of the 1983 surveys of cable operators are, in my opinion, not valid as a basis for discounting the results of the 1989 Bortz constant sum study. The Bortz 1989 study rectified a few deficiencies in the 1983 study, especially by eliminating the time lag between the surveys and the behavior which cable operators were being asked to recall and by changing the allocation exercise to focus on program budgets rather than program value. These improvements overcame some of Professor Rubin's criticisms, while other criticisms emanating from the 1983 proceedings were simply not justified.

## SAMUEL H. BOOK, Ph.D.

Dr. Book is president of the research division of Malarkey-Taylor Associates. He is a professional economist and market researcher, specializing in the design and implementation of consumer studies and economic analyses of telecommunications, cable television, and related technologies. Dr. Book has extensive experience in conducting focus groups, designing and managing statistically valid consumer surveys, writing in-depth reports on business, economic, and consumer aspects of cable television, wireless cable, direct broadcast satellite, home video, and other technologies. He has developed and used analytical models for cost-benefit studies and economic feasibility studies.

From 1970 to 1979 Dr. Book was a university professor in Toronto, where he developed and taught courses in economics and management at the MBA and undergraduate levels. From 1980 to 1984, as research director of The National Research Group, he produced over 300 market research studies for the movie industry using a variety of data collection and sampling methods, including focus groups, telephone surveys, and audience research.

### Qualifications and accomplishments include:

- ◆ Ph.D. in Economics, Columbia University, New York, NY.
- ◆ Research Director, National Research Group, Los Angeles, CA.
- ◆ Assistant Professor, Faculty of Administrative Studies, York University, Toronto, Ontario, Canada.
- ◆ Senior Research Consultant, The Ontario Arts Council.

### Speeches and presentations:

- ◆ Spoke on "The Economics of Cable System Overbuilds" at The Florida Cable Television convention, The Eastern Cable Show and Florida Public Service Board, and The Western Cable Show.
- ◆ Speech, "Cable Rate Sensitivity" presented at the Great Lakes Cable Convention.
- ◆ Spoke as panelist at PKA Associates Overbuild Seminar.
- ◆ Spoke on techniques of cable viewership research at a CTAM seminar.
- ◆ Presented studies of cable system overbuilds at:
  - City Council meeting in Naples, FL,
  - County Commissioners hearing in Reston, VA.



**CORRECTION**

**Before the  
COPYRIGHT ROYALTY JUDGES  
Washington, DC  
Docket No. 2007-3 CRB CD 2004-2005**

**Written Direct Testimony of**

**JAMES M. TRAUTMAN**

**June 1, 2009**

Written Direct Testimony of  
JAMES M. TRAUTMAN

I am James M. Trautman, Managing Director of Bortz Media & Sports Group, Inc ("Bortz Media"). I am sponsoring JSC 04-05 Ex. 1, entitled "Cable Operator Valuation of Distant Signal Non-Network Programming: 2004-05" ("Bortz Report"). The report was prepared under my supervision by Bortz Media at the request of the Joint Sports Claimants ("JSC").

As Managing Director of Bortz Media, my duties include providing strategic planning, economic and financial analysis for media and professional sports organizations. I have had primary responsibility for management of all of the cable operator studies conducted by Bortz Media for the JSC. I have advised cable television system operators, cable programming networks, owners of programming content and rights, and other entities with interests in the cable television industry for more than 25 years. In this capacity, I have directed market research assignments addressing a wide range of issues affecting the cable industry.

A copy of my resume is attached as Appendix A.

I declare under the penalty of perjury that the foregoing is true and correct.

  
James M. Trautman

9/29/09  
Date



**JAMES M. TRAUTMAN**

**EXPERIENCE:**

July 1988 to present ... Managing Director, Bortz Media & Sports Group, Inc. ... has overall administrative responsibility for the firm, while also directing Bortz Media's media/telecommunications practice ... specialist in research and assessment of cable industry market/competitive trends and business planning for programming ventures.

Examples of consulting experience include:

- Prepared business plans, evaluated prospects, estimated the value of and/or provided business development support to more than 50 proposed cable programming ventures and existing basic cable networks. Clients/properties have ranged from planning stage concepts to "niche" services in the early stages of development (e.g., ZDTV, Classic Sports Network) to widely penetrated networks such as Lifetime and ESPN. Assignments have encompassed market research, initial business planning, marketing/sales planning, contract negotiations, and service implementation. Has also periodically provided analysis and expert testimony in litigation involving the value of and/or market prospects for cable programming networks. Clients have included A&E Television Networks, MTV Networks, CBS Cable, Disney/ABC, Gannett, Ziff-Davis, Times Mirror, The Washington Post Company, Major League Baseball, Crown Media, Vulcan Ventures, the Public Broadcasting Service (PBS) and the United States Olympic Committee (USOC).
- Has directed Bortz Media's cable industry competitive assessment practice since launching this practice in 1996. Services provided on a continuous basis to two major cable MSOs during this time frame include ongoing analysis of wireline, satellite and other competitors, addressing strategies, economics, technical capabilities/constraints and the overall threat profile presented by market-level cable competitors. In connection with these engagements, have developed market level strategic and tactical plans for cable operators to address competition. These analytical and planning efforts have emphasized strategies centering on the development/deployment of new products and technologies, including digital settop boxes, video-on-demand, HDTV, interactive television, high-speed Internet and telephone service.
- Examples of technology and new product-related assignments for cable clients have included:
  - ✓ Research and recommendations to Comcast regarding the pricing and packaging of the company's initial digital service tiers in preparation for the deployment of digital settop boxes.
  - ✓ For Cox and Comcast, assessment of the relative merits of cable HFC networks and telephone company FTTP/N networks from a consumer perspective, emphasizing the relative advantages and disadvantages of each approach in terms of services and features provided to subscribers. This

assessment formed the basis for detailed recommendations regarding client positioning and communications strategies in responding to telephone company marketing initiatives.

- ✓ For Cox, a comprehensive assessment of current and likely future DBS technology and marketing initiatives as a basis for devising key Cox product and marketing strategies.
- ✓ Also for Cox, analysis of HDTV opportunities and timing considerations with respect to deployment of HDTV services.
- ✓ Evaluation of the competitive landscape and technology/regulatory issues in the builder/developer and MDU market segments for two MSOs, resulting in development of business strategies to most effectively serve these highly competitive segments.
- From the mid-1980s to the present, has managed Bortz Media's research and analysis and provided expert testimony in conjunction with the proceedings of the Copyright Arbitration Royalty Panel (formerly the Copyright Royalty Tribunal). Has employed survey research among cable operators and industry level financial and market analysis to assess the relative value of various types of programming carried on distant broadcast signals. In addition, has testified regarding the factors that underlie cable operator program network carriage decisions, as well as the factors that determine the value of programming in a free marketplace.
- In addition to copyright-related research, has designed, managed and executed a wide range of quantitative and qualitative research assignments, including statistically representative national (as well as local and regional) telephone surveys, internet-based surveys, focus groups, one-on-one interviews and new product trials. Illustrative projects are briefly summarized below:
  - ✓ *Local advertising sales research.* Since 1987, has designed and conducted annual surveys of cable system advertising sales executives in order to determine the advertising performance of, sales prospects for and overall affiliate satisfaction with selected program networks and their competitors. Clients have used findings from these studies extensively for internal planning purposes as well as in communications to and negotiations with affiliates.
  - ✓ Consumer and business-to-business quantitative surveys have measured awareness, interest, demand and price sensitivity with regard to various telecommunications products and services including telephony, high-speed data, cable television and new services/applications such as digital cable tiers, premium programming concepts, and interactive television. Similar studies have addressed attitudes toward and usage of existing cable television products and services. Examples of assignments include:
    - Telephone (and in-home) surveys were executed to assess demand, define programming network carriage and packaging, and establish pricing for subscription television and telecommunications services in more than 20 countries.

- Telephone surveys (and focus groups) were used to assist Comcast in defining initial packaging and pricing strategies for the launch of digital cable.
- Extensive quantitative research (along with focus groups) formed the basis for assessing the feasibility, as well as establishing pricing and marketing strategies, for the NBA's League Pass programming service.
- ✓ Has designed and moderated focus group research addressing a variety of new product and service opportunities. Examples include:
  - As noted above, focus groups have been conducted to assist in defining packaging and marketing strategies for new cable services, including digital cable tiers and the NBA's League Pass service.
  - For several sports franchises, focus groups (along with in-person executive interviews) have been conducted to assist in the evaluation of premium seating and luxury suite demand and pricing in connection with the construction of new facilities.
  - Focus groups were completed with public television viewers to assess their interest in and reaction to various public television websites.
- Currently providing comprehensive expert support and testimony on behalf of cable industry equipment supplier Scientific-Atlanta, Inc. in connection with class action litigation. Support and testimony addresses cable industry financial performance, growth characteristics, technology trends, marketing practices, supplier characteristics and other factors.
- Provided comprehensive expert support and testimony on behalf of an individual defendant in connection with an action brought by the Justice Department against Charter Communications and several Charter executives. Support and testimony related to a variety of issues including subscriber growth expectations and results for Charter and the market conditions that affected those expectations.
- On behalf of the National Cable & Telecommunications Association (NCTA), authored An Analysis of the Cable Industry's Impact on the U.S. Economy. This comprehensive economic impact analysis, released in June 2008, analyzed cable industry subscriber growth patterns and operating characteristics and utilized input-output modeling techniques to evaluate cable industry financial flows and quantify the industry's direct and indirect contributions to U.S. employment, personal income and gross economic output. Earlier versions of this analysis were prepared in 2003, 1998, 1990 and 1986.
- Analyzed financial prospects and estimated fair market value of over 100 cable television properties both domestically and internationally. Assessments of current and future cable television economics have also been developed on a recurring basis for a major financial institution, as well as an international consulting organization. Have provided litigation support on multiple occasions addressing the

fair market value of various cable properties, as well as cable system operational practices and strategies.

- In 2004, developed a comprehensive statistical and research-based model for estimating market-level subscribers to various cable and satellite services, including basic, digital, cable modem and DSL customers.
- In the mid-1980s, developed and conducted an annual Cable Operating Performance Benchmarks study for participating MSOs on behalf of the National Cable & Telecommunications Association. This study focused on the interrelationships between operating characteristics and financial performance at the cable system level, utilizing detailed operating, financial and market information from more than 150 separate cable systems. Separate industry level analyses have addressed the industry's economics and financial characteristics on numerous subsequent occasions.
- For a major broadcast network, assessed digital television opportunities, considered technological and market factors in defining a digital television strategic focus, and developed recommendations relating to cable distribution.
- Provided comprehensive digital transition business planning assistance to the Corporation for Public Broadcasting, the Association of Public Television Stations, the Ford Foundation, the James Irvine Foundation and selected individual public broadcasters. These assignments assessed new service opportunities and involved working with individual PTV licensees to develop digital service/financial models. Elements of the projects included assessment of the overall media environment and its implications for PTV (focusing on the impact of emerging technologies), exploration of digital capacity utilization issues and alternatives (including data-driven, interactive and commerce-based applications), and evaluation of partnership opportunities.
- Assisted various public broadcasting organizations in numerous engagements since the mid-1980s. In addition to the assignments noted above, these have included development of comprehensive market analyses, development of service and operating structure recommendations for stations, evaluation of advertising potential, assessment of merchandising and licensing practices, support of negotiations for programming distribution, and assessment of Internet opportunities.
- Analyzed financial prospects and estimated fair market value for numerous commercial television station properties, including both affiliates and independents in markets ranging from the largest to the smallest. Analyses evaluate market trends and likely future market capture in terms of both advertising revenue and audience, resulting in the development of pro forma financial projections.

1983 to July 1988 ... Senior Associate, Browne, Bortz & Coddington, Inc. ... project work similar to that described above.

**EDUCATION:**

M.B.A., Finance (1990), University of Colorado  
B.S., Economics (1982), Claremont McKenna College, Claremont, California

**LITIGATION/OTHER:**

Expert testimony has been provided in litigation involving various subjects including prospects for program networks, the market value of programming, the status of/trends in the cable and satellite industries and the value of cable systems. Clients have included Arnold & Porter; Winston & Strawn; Snell & Wilmer; Davis Wright Tremaine; Holme, Roberts & Owen; Dow, Lohnes & Albertson and Baird Holm.

Author of An Analysis of Cable Television's Impact on the U.S. Economy and Public Television's Transition to a Digital Future. Co-Author of Public Television in the Information Age; Great Expectations: A Television Manager's Guide to the Future; and Sports on Television: A Whole New Ballgame.





# **Cable Operator Valuation of Distant Signal Non-Network Programming: 2004-05**

June 1, 2009

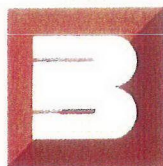


# **Cable Operator Valuation of Distant Signal Non-Network Programming: 2004-05**

— Prepared by —

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4582 S. Ulster Street  
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Denver, Colorado 80237**

**June 1, 2009**



# **Cable Operator Valuation of Distant Signal Non-Network Programming: 2004-05**

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## SECTION I. INTRODUCTION AND SUMMARY

The Copyright Royalty Board (CRB) allocates among copyright owners the compulsory licensing royalties paid by cable systems to retransmit broadcast stations. Our understanding is that in doing so, the CRB determines what the cable systems would have paid, on a relative basis, for the different types of non-network programming on the distant television stations they carried -- if, in fact, they had been required to negotiate in an open market absent compulsory licensing. During the past twenty-five years, the Joint Sports Claimants (JSC) have retained the principals of Bortz Media & Sports Group, Inc.<sup>1</sup> to establish and to implement a methodology for determining how such royalties would be allocated among different groups of copyright owners in such a market. This report summarizes our findings for the years 2004 and 2005. It also compares them with the findings that we presented to the Copyright Arbitration Royalty Panel (CARP) for the years 1998 to 1999 (the last cable distribution proceeding).<sup>2</sup>

### A. Cable Operator Surveys

The cornerstone of our analysis is a survey of cable system operators (i.e., those responsible for paying the royalties at issue). For 2004 and 2005, as in all prior years, we sought to determine how cable operators valued, on a relative basis, the different categories of non-network distant signal television programming that they carried in

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<sup>1</sup> Bortz Media & Sports Group, Inc. operated under the name Bortz & Company prior to January 1998. For purposes of this report, all references to the Company use the name Bortz Media & Sports Group, Inc. or Bortz Media.

<sup>2</sup> Prior to the formation of the CRB in 2004, allocation of cable royalties was the responsibility of the CARP (subject to review by the Librarian of Congress and Register of Copyrights) and, until 1993, the Copyright Royalty Tribunal (CRT).

those years.<sup>3</sup> Each year we asked a random sample of cable operators how they would allocate a fixed budget among the different programming categories on the distant signals they actually carried in the preceding year (i.e., a "constant sum" approach). The results of our survey reflect the collective valuations made by the respondents.

As the CARP noted in its report allocating the 1990-92 cable royalties, our approach has the advantage of answering essentially the same question as the CARP (now CRB) must answer:

"The critical significance of the Bortz surveys is the essential question it poses to cable system operators, that is: What is the relative value of the type of programming actually broadcast in terms of attracting and retaining subscribers? That is largely the question the Panel poses when it constructs a simulated market. Further, the question asks the cable system operator to consider the same categories we are presented here in the form of claimant groups – that is, sports, movies, and the others. That is also what the Panel must do."<sup>4</sup>

As the CARP also noted, our surveys have been "focused more directly than any other evidence to the issue presented: relative market value."<sup>5</sup>

We describe in greater detail below the historical background and methodology of the Bortz surveys, including the manner in which we have sought to respond to the

---

<sup>3</sup>. As discussed in Section III, Bortz Media has been responsible for the design and implementation of multiple cable operator surveys in connection with the cable royalty distribution proceedings going back to the 1983 proceeding and including surveys conducted annually since 1991.

<sup>4</sup> Report of the Copyright Arbitration Royalty Panel in Docket No. 94-3 CARP CD 90-92 at 65 (May 31, 1996) (hereinafter, "1990-92 CARP Report").

<sup>5</sup> *Id.* at 65.



various issues raised in prior distribution proceedings by the CARP, CRT and experts concerning these surveys (see Sections II.A and B and Appendix A).

### **B. Results of the 2004-05 Cable Operator Surveys**

We discuss in Section II.C below the results of the 2004 and 2005 surveys. The key finding is that cable operators would have allocated their 2004 and 2005 distant signal programming budgets as follows:

**Table I-1.  
Distant Signal Programming Valuation Studies, 2004-05**

	2004	2005
Live professional and college team sports	33.5%	36.9%
Movies	17.8	19.2
Syndicated shows, series and specials	18.7	18.4
News and public affairs programs	18.4	14.8
Devotional and religious programming	7.8	6.6
PBS and all other programming on non-commercial signals	3.5	3.7
All programming on Canadian signals	<u>0.2</u>	<u>0.3</u>
Total*	100.0%	100.0%

\*Columns may not add to total due to rounding.

As Table I-1 reflects, in both 2004 and 2005, cable operators valued the live professional and collegiate sports programming on the distant signals they carried more highly than any other programming category. They would have allocated the largest percentage of a distant signal programming budget (33.5 percent in 2004 and 36.9 percent in 2005) to live professional and collegiate sports programming. The sports allocation is approximately twice that of the next most highly valued program category.

The value attributed to sports by cable operators is approximately equal to the aggregate value attributed to the two categories (movies and syndicated programming) represented by Program Suppliers in this proceeding – notwithstanding that movies and

syndicated programs on distant signals occupy more total hours and generate more cumulative "viewing hours" than sports programming. This result is consistent with the pattern evident in marketplace transactions, in which JSC programming typically commands a relative market value disproportionate to its share of broadcast time or viewing hours.<sup>6</sup>

Cable operators allocated 18.4 percent (2004) and 14.8 percent (2005) of the value of their distant signal non-network programming to news and public affairs programs, followed by devotional programming (7.8 percent in 2004 and 6.6 percent in 2005), programming on public television stations (3.5 percent in 2004 and 3.7 percent in 2005), and programming on Canadian distant signals (0.2 percent in 2004 and 0.3 percent in 2005).

As discussed further in Section II, respondents were only asked to allocate value to public television and Canadian programming in instances where their systems carried such stations as distant signals.<sup>7</sup> Approximately one-third of cable systems that carried distant signals in 2004-05 carried public television signals as distant signals; less than four percent of cable systems that carried distant signals in 2004-05 carried Canadian signals as distant signals. Among systems that carried public television distant signals, respondents allocated an average value of 11.3 percent to public television programming in 2004 and 10.6 percent in 2005. For systems that carried Canadian distant signals, the average value attributed to the programming on these signals was 3.0 percent in 2004 and 3.8 percent in 2005.

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<sup>6</sup> Analysis of this pattern was presented in the Bortz report submitted in the 1998-99 cable proceeding (see JSC 04-05 Ex. 2) as well as in the Testimony of Larry D. Gerbrandt of Paul Kagan Associates, Inc., submitted in the 1990-92 cable proceeding (see JSC 04-05 Ex. 3).

<sup>7</sup> Further, as discussed in Section II and Appendix A, systems carrying only public television or Canadian signals were excluded from the survey.

### C. Comparison with 1998-99 Cable Operator Surveys

Over a period of more than two decades, JSC and other parties have commissioned numerous surveys of cable operators similar to those that we are presenting in this proceeding. In fact, since 1988, these surveys have been conducted annually. The JSC surveys, most of which have been designed by Bortz Media & Sports Group, Inc., have all employed a constant sum approach similar (in most instances identical) to that described above.

Results for 2004 and 2005 are similar to results obtained in the surveys submitted in the 1998-99 CARP cable royalty distribution proceeding and in other years (see Section III below). Sports has consistently been accorded the highest value, followed by movies, syndicated and news programming, devotional programming, public television programming, and Canadian programming.

Table I-2 compares the results of the 2004-05 surveys with the results of the 1998-99 surveys.

**Table I-2.**  
**Comparison of Distant Signal Programming Valuation Studies,**  
**1998-1999 and 2004-2005**

	1998	1999	2004	2005
Live professional and college team sports	37.0%	38.8%	33.5%	36.9%
Movies	21.9	22.0	17.8	19.2
Syndicated shows, series and specials	17.8	15.8	18.7	18.4
News and public affairs programs	14.8	14.7	18.4	14.8
Devotional and religious programming	5.3	5.7	7.8	6.6
PBS and all other programming on non-commercial signals	2.9	2.9	3.5	3.7
All programming on Canadian signals	<u>0.4</u>	<u>0.2</u>	<u>0.2</u>	<u>0.3</u>
Total*	100.0%	100.0%	100.0%	100.0%

\*Columns may not add to total due to rounding.

As in any survey, there is a certain amount of variability in the survey results from year-to-year. As discussed further in Section III, such variability is considered in the confidence intervals associated with the specific results (or "point estimates") for each year.<sup>8</sup> Thus, while there are some differences in the specific point estimates for the various program categories over the four years shown above, the variations are generally minor. Most of the point estimates for 2004-2005 are within the confidence intervals surrounding the 1998 and the 1999 point estimates. The point estimates for some categories in 2004 and 2005 are slightly outside of the confidence intervals of point estimates in 1998 or 1999. However, based on my experience with the cable television industry, I am not aware of any significant market changes between 1998-99 and 2004-05 suggesting that the survey results reflect any significant change in the relative values of the different non-network programming types on distant signals.

<sup>8</sup> Confidence intervals reflect the uncertainty surrounding a point estimate of value obtained using a sample-based survey methodology.

#### D. Analysis of 2004-05 Survey Results

In its report allocating the 1998-99 cable royalties, the CARP concluded that the Bortz survey was “an extremely robust (powerfully and reliably predictive) model for determining relative value” of the programming categories represented by JSC, the Program Suppliers and the National Association of Broadcasters.<sup>9</sup> It also determined that the Bortz survey was “more reliable than any other methodology presented” in determining the relative market value of these three claimant groups.<sup>10</sup> Accordingly, the CARP tied the royalty awards of each of these claimant groups directly to its shares in the Bortz surveys.

The CARP, however, did not rely upon the Bortz survey results to determine the awards to the Devotional Claimants (who had agreed to accept a share less than that reflected in the Bortz surveys). The CARP also did not rely upon the Bortz survey results to determine the awards to PBS, primarily because the Bortz survey respondents did not include those whose systems carried only distant public television signals. The CARP did conclude that the Bortz survey results provide a “floor” on the PBS award. In addition, the CARP did not rely upon the Bortz survey results to determine the award to the Canadians because of the small number of 1998-99 respondents that carried distant Canadian signals (two in 1998 and three in 1999). The CARP determined, however, that the Canadian award should be tied to, among other things, a comparable constant sum survey of cable operators conducted by the Canadians.

<sup>9</sup> Report of the Copyright Arbitration Royalty Panel in Docket No. 2001-08 CD 98-99 at 31 (Oct. 21, 2003) (“1998-99 CARP Report”).

<sup>10</sup> *Id.*

As we have previously acknowledged, it is appropriate to adjust the Bortz survey results to account for cable operators that carry only PBS and/or only Canadian distant signals (neither of which are included in our survey). We proposed a methodology for adjusting our results to account for this factor in the 1998-99 proceeding, but the CARP did not accept that adjustment methodology (see pages 39-40 of Appendix A below).

In addition, the CARP observed (and we have acknowledged) that respondents to our survey are not informed that substantial portions of the movies and syndicated programming on Superstation WGN (the most widely carried distant signal) are not compensable in this proceeding because these programs are not broadcast by WGN on its over-the-air Chicago signal; thus, the values that respondents to our survey attribute to these categories likely represent a "ceiling" in that respondents are considering all programming on WGN rather than just the compensable programming on WGN. In the 1998-99 proceeding, PBS proposed a methodology for adjusting the Bortz survey results to account for this issue, but the CARP did not accept that methodology. The same issue affects the Devotional Claimants since a significant amount of the Devotional programming on WGN also is non-compensable in this proceeding.

In summary, we believe that our survey results provide a valid and reliable estimate of how cable operators valued the different types of non-network programming categories on the distant signals they actually carried in 2004 and 2005, and by extension the best approximation of how the cable operators themselves would have allocated the compulsory licensing royalties they paid to carry that programming. However, we recognize that some adjustment to the specific point estimates of the survey results may be appropriate to account for both the exclusion of systems that

carry only PBS or Canadian distant signals, as well as to account for the fact that survey respondents are not informed that certain movies, syndicated and devotional programming on Superstation WGN are non-compensable.

## SECTION II. THE 2004-05 CABLE OPERATOR SURVEYS

This section provides a brief historical background on the cable operator surveys presented in cable copyright proceedings, summarizes the methodology underlying the 2004 and 2005 Bortz Media surveys, and sets forth the results of the 2004 and 2005 surveys.

### A. Historical Background

Over a period of nearly thirty years, JSC has commissioned surveys of cable operators in connection with cable copyright royalty distribution proceedings. Other parties, specifically the National Association of Broadcasters (NAB), the Devotional Claimants and Public Broadcasting Service (PBS), have supported the JSC surveys in prior proceedings (with or without adjustments). NAB also submitted a cable operator survey to the Copyright Royalty Tribunal (CRT) in the 1983 proceeding, and the Canadian Claimants submitted cable operator surveys in the 1990-92, 1998-99 and 2000-03 proceedings. The purpose of all these surveys has been to determine how cable operators value, on a relative basis, the different categories of non-network programming on the distant signals that they carried.

There have been important similarities in the methodology employed in conducting these surveys, including the use of "constant sum" questions that allow the cable operators themselves to place relative values on different program types. The constant sum approach used in the surveys conducted by JSC, the NAB and the Canadians is a well-recognized market research tool that is used in a variety of contexts when a comparative value measure is being sought. As noted above, this tool allows respondents to address the same task that has confronted first the Copyright Royalty



Tribunal, more recently the Copyright Arbitration Royalty Panel and now the Copyright Royalty Board – that is, the task of allocating a fixed amount among several program categories based upon the relative value of those categories. Numerous expert witnesses for JSC and other parties have testified in support of the value and relevance of cable operator surveys, as well as the validity of the constant sum approach.

Bortz Media principals were initially retained by the JSC to determine the comparative value of distant signal non-network programming in 1983, and sought to improve upon earlier cable operator surveys. In the more than twenty-five years that have followed, a continual effort to refine and improve the Bortz Media cable operator surveys has been made – giving consideration to issues raised by the CRT and CARP, as well as by other claimants. The surveys completed for 2004 and 2005 reflect the benefit of those efforts.

## **B. Research Methodology**

The research methodology employed in designing and conducting the 2004 and 2005 cable operator surveys is described in detail in Appendix A to this report. A brief overview is provided below.

In each of the 2004 and 2005 studies, as in prior studies, we surveyed only “Form 3” systems, which accounted for over 95 percent of the cable royalty payments. We utilized a “stratified” random sampling approach to select the systems to be surveyed, with the stratification based on copyright royalty payments (i.e., those cable operators who paid the greatest amount of royalties had the greatest likelihood of being included in our sample). This approach was intended to ensure that the responses we received would provide a statistically valid predictor for the allocation of royalty payments by all Form 3 cable systems that carried distant signals.

Questionnaires for the 2004 and 2005 studies were designed so that respondents had the qualifications and information necessary to address the key constant sum valuation question. The initial survey question "screened" potential respondents for their involvement in making decisions related to the carriage of distant signals, resulting in a qualified respondent group consisting overwhelmingly of general managers, marketing directors/managers and programming directors/managers. Respondents were (on multiple occasions) read a list of the distant signals actually carried by the systems based on filings they made at the Copyright Office and were specifically instructed to consider only the non-network programming on those distant signals.

Qualified respondents were asked preparatory questions about the popularity and advertising usage of distant signal non-network programming. These initial questions were intended to focus the respondent on the value of various programming types. Respondents were then asked the key constant sum question, which required them to allocate a distant signal non-network programming budget among different program categories.

Ted Heiman & Associates, a leading cable industry market research firm, was retained to conduct the telephone surveys in both years. Only interviewers who specialize in surveying professional and managerial personnel were utilized; interviewers were not told the name of the client or given any information, other than that on the questionnaire, regarding the nature of the study. Response rates of 65 percent and 68 percent were obtained on the key constant sum question in 2004 and 2005, respectively, comparable to or above response rates achieved in the 1998 and 1999 surveys.

## C. 2004-05 Cable Operator Survey Results

**1. Budget allocation.** The value of distant signal programming to cable operators lies primarily in its ability to attract and to retain subscribers – particularly since cable operators may not insert any advertising on distant signals. As such, we designed the key survey question in the 2004 and 2005 studies to measure the relative value to cable operators, in terms of attracting and retaining subscribers, of the different categories of non-network distant signal programming carried by their systems. Consistent with the task faced by the CRB, operators were asked to express this relative value allocation in terms of a percentage of a finite pool (a programming “budget”) that would have been allocated among the various types of programming.

In each of the 2004 and 2005 studies, cable operators allocated the largest percentage of their distant signal non-network programming budget to live professional and college sports. Sports programming was accorded 33.5 percent of the value in 2004 and 36.9 percent in 2005 (see Table II-1 below). The two categories represented by MPAA in this proceeding, movies and syndicated shows, series and specials, ranked between second and fourth in each of the two surveys. The total allocation to these two categories was 36.5 percent in 2004 and 37.6 percent in 2005, or approximately the same as the sports allocation.

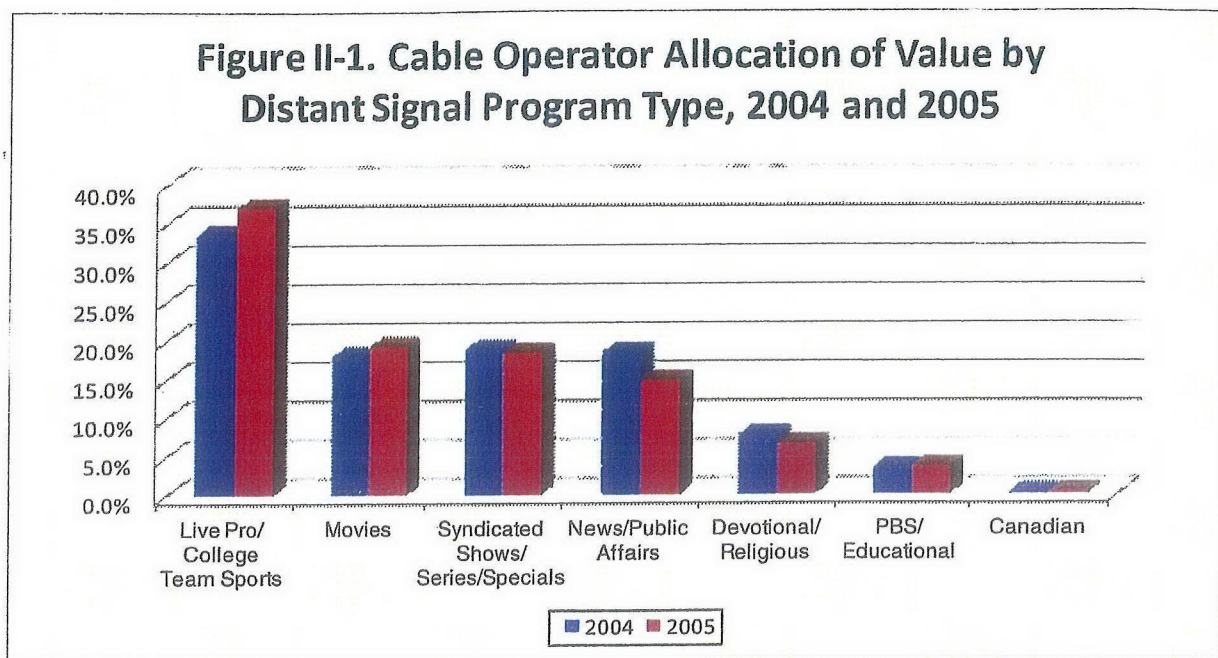
**Table II-1.**  
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	2004	2005
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News and public affairs programs	18.4	14.8
Devotional and religious programming	7.8	6.6
PBS and all other programming on non-commercial signals	3.5	3.7
All programming on Canadian signals	<u>0.2</u>	<u>0.3</u>
Total*	100.0%	100.0%

\*Columns may not add to total due to rounding.

Cable operators allocated 18.4 percent (2004) and 14.8 percent (2005) of the value of their distant signal non-network programming to news and public affairs programs, followed by devotional programming (7.8 percent in 2004 and 6.6 percent in 2005), programming on public television stations (3.5 percent in 2004 and 3.7 percent in 2005), and programming on Canadian distant signals (0.2 percent in 2004 and 0.3 percent in 2005).

Survey responses for 2004 and 2005 are illustrated graphically in Figure II-1.



**2. PBS and Canadian allocations.** Respondents were asked to allocate value to public television and Canadian programming only in instances when their systems actually carried such stations as distant signals. As shown on Table II-2 below, respondents at systems that carried public television distant signals allocated an average value of 11.3 percent to public television programming in 2004 and 10.6 percent in 2005.<sup>11</sup>

<sup>11</sup> In 2004, 59 of the 162 responding systems carried one or more public television distant signals and were therefore asked to assign a value to distant signal public television programming. In 2005, 68 of the 171 responding systems carried one or more public television distant signals.

**Table II-2.**  
**Distant Signal Programming Value Among Systems**  
**Carrying Public Television Distant Signals, 2004-05**

	2004	2005
Live professional and college team sports	25.3%	36.2%
News and public affairs programs	20.0	17.2
Movies	17.3	16.4
Syndicated shows, series and specials	18.3	13.7
PBS and all other programming on non-commercial signals	11.3	10.6
Devotional and religious programming	7.2	5.8
All programming on Canadian signals	<u>0.6</u>	<u>0.2</u>
Total*	100.0%	100.0%

\*Columns may not add to total due to rounding.

Table II-3 shows that, for systems that carried Canadian distant signals, the average value attributed to the programming on these signals was 3.0 percent in 2004 and 3.8 percent in 2005.<sup>12</sup>

<sup>12</sup> In 2004, 11 of the 162 responding systems carried one or more Canadian distant signals and were therefore asked to assign a value to distant signal Canadian programming. In 2005, 13 of the 171 responding systems carried one or more Canadian distant signals. It should be noted that the comparable numbers in 1998 and 1999 were two of 138 and three of 132, respectively.

**Table II-3.**  
**Distant Signal Programming Value Among Systems**  
**Carrying Canadian Distant Signals, 2004-05**

	2004	2005
Live professional and college team sports	29.4%	41.8%
News and public affairs programs	25.1	16.6
Movies	11.4	15.8
Syndicated shows, series and specials	18.3	13.0
Devotional and religious programming	7.0	5.1
PBS and all other programming on non-commercial signals	5.8	3.9
All programming on Canadian signals	<u>3.0</u>	<u>3.8</u>
Total	100.0%	100.0%

**3. Responses to preparatory questions.** Respondents were asked to identify the types of distant signal programming they carried that were most popular with their subscribers. This question was asked on an unaided basis (i.e., respondents were not read a list of programming categories), and responses were tabulated without weighting by the amount of royalties paid by the responding systems. Multiple responses were allowed. The responses to this question are summarized below on Table II-4.

**Table II-4.  
Distant Signal Program Popularity Among Subscribers, By Program Type,  
2004 and 2005**

Response	Percent "Most Popular with Subscribers"	
	2004	2005
Live professional and college team sports	75.7%	65.7%
Syndicated shows, series and specials	29.1	35.6
Movies	20.4	28.7
News and public affairs programs	28.9	19.0
PBS and all other programming on non-commercial signals	13.2	5.2
Devotional and religious programming	0.9	3.4
All programming on Canadian signals	0.0	0.4
Other*	<u>0.2</u>	<u>0.0</u>
<b>Total**</b>	<b>168.4%</b>	<b>158.0%</b>

\*The other category as reported by Bortz Media included certain responses that were reclassified to other categories upon review by Bortz Media.

\*\*Total exceeds 100 percent due to multiple responses.

Cable operators were also asked whether they used distant signal programming as part of their advertising and promotional efforts. As shown below on Table II-5, only about 11 percent of respondents reported using distant signal programming in their advertising and promotional efforts in 2004, and the percentage was less than five percent in 2005.

**Table II-5.  
Percent of Systems Using Distant Signal Programming  
in Cable Advertising and Promotion, 2004 and 2005**

Response	2004	2005
Use distant signal programming ("yes")	11.1%	4.9%
Do not use distant signal programming ("no")	88.9	95.1
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>



The cable systems that did use distant signal non-network programming in their advertising and promotional efforts were asked which types of programming they featured in these efforts. This question was first asked on an unaided basis, and respondents were then asked specifically about their use of programming types not mentioned on an unaided basis. As with the popularity question, responses were not weighted by the amount of royalty paid by the responding systems. The responses to this question are summarized on Table II-6.

**Table II-6.**  
**Use of Distant Signal Programming in Cable Advertising and Promotion,**  
**Percent of Systems Using By Program Type, 2004 and 2005**

Response	Percent of Systems Using Programming Category*	
	2004	2005
Live professional and college team sports	75.6%	96.1%
Movies	12.2	80.5
News and public affairs	58.7	62.2
Syndicated shows, series and specials	27.3	62.2
PBS and all other programming on non-commercial signals	7.4	55.7
All programming on Canadian signals	0.0	3.9
Devotional and religious programming	0.0	0.0
Other	<u>0.0</u>	<u>2.6</u>
Total**	181.2%	363.2%

\*All percentages based only on respondents using distant signal programming for advertising/promotion.

\*\*Total exceeds 100 percent due to multiple responses.

Finally, respondents that featured distant signal non-network programming in their advertising and promotional efforts were asked which of the types of programming that they featured was most important. The responses to this question are summarized in Table II-7.

**Table II-7.**  
**Use of Distant Signal Programming in Cable Advertising and Promotion,**  
**Most Important Program Type, 2004 and 2005**

Response	Percent "Most Important"	
	2004	2005
News and public affairs	17.6%	45.2%
Live professional and college team sports	50.2	44.4
Movies	5.6	2.6
Syndicated shows, series and specials	21.7	0.0
PBS and all other programming on non-commercial signals	1.9	0.0
Devotional and religious programming	0.0	0.0
All programming on Canadian signals	0.0	0.0
Other/Don't Know	<u>3.1</u>	<u>7.8</u>
Total*	100.0%	100.0%

\*Columns may not add to total due to rounding.

Responses to both the "programming featured" and "most important to feature" questions should be viewed with caution based on the very limited number of respondents that reported using distant signal programming in their advertising and promotional efforts.

### SECTION III. COMPARISON OF 2004-05 CABLE OPERATOR SURVEY RESULTS WITH THE RESULTS OF PRIOR CABLE OPERATOR SURVEYS

This section compares the results of the 2004 and 2005 cable operator surveys to the results of surveys conducted for prior years, focusing on the surveys addressing the years 1998 and 1999 that were submitted in the most recent CARP cable proceedings. Table III-1 shows the results of the constant sum surveys conducted on behalf of JSC and NAB. It demonstrates that, notwithstanding a number of changes in methodology over the years (many in response to issues raised by the CRT, CARPs or other parties), the results have been relatively consistent. For example, since 1983 JSC programming has consistently received the highest value by cable system operators in the constant sum surveys.<sup>13</sup>

As noted above, we believe it is useful to compare the results of our surveys over the years for the purpose of understanding broad trends in response patterns (i.e., for identifying long-term consistency in values or a long-term increase or decline in value for a particular category). At the same time, it is also important to understand that the surveys are not designed as a "tracking study."<sup>14</sup> Rather, a unique and different sample of potential respondents is selected from the Form 3 universe each year. As

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<sup>13</sup> The early (1978-1980) cable operator surveys showed movies as the most highly valued programming. The 1978 survey placed a particularly high value on movies, but it was rightly criticized for not properly informing the respondents that they were valuing the programming shown on distant signals, as opposed to cable programming services including premium movie services such as HBO and Showtime.

such, some variability in results from year-to-year is to be expected, based in part on differences in samples and also on the variability in results inherent in any individual survey.

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<sup>14</sup> In a tracking study, the same group of respondents is asked the same questions over a period of time in order to monitor changes in attitudes or behavior during that time period.

**Table III-1.  
Summary of Cable Operator Distant Signal Programming Value Allocations, 1978-2005**

	Year	Live Professional & College Team Sports	Movies	Syndicated Shows, Series and Specials	News and Public Affairs	Devotional	PBS and Non-Comm.	Canadian	Total*
BBDO	1978	\$27	66	5	2	NA	NA	NA	\$100.00
	1979 - MSOs	\$35.00	38.00	10.57	9.40	NA	7.03	NA	\$100.00
	1979 - Managers	\$33.98	42.98	10.62	6.21	NA	6.21	NA	\$100.00
	1980	\$32.95	37.76	11.76	12.62	NA	4.91	NA	\$100.00
ELRA	1983	\$35.66	25.02	15.84	13.33	7.24	2.51	0.40	\$100.00
BBC	1983	36.1%	30.2	18.6	12.1	NA	3.1	NA	100.0%
Bortz & Company	1986	38.5%	25.1	17.5	11.3	3.5	4.1	0.1	100.0%
	1989	34.2%	31.2	16.9	11.8	4.3	1.3	0.2	100.0%
Burke	1990	37.2%	30.1	14.5	11.9	3.6	2.7	-	100.0%
Bortz & Company	1991	36.3%	25.7	15.6	14.8	4.3	2.9	0.5	100.0%
	1992	38.8%	25.6	16.0	12.4	3.9	3.0	0.3	100.0%
	1993	43.4%	23.4	14.4	12.6	4.0	2.0	0.2	100.0%
	1994	39.7%	26.3	16.4	11.2	3.7	2.1	0.5	100.0%
	1995	41.4%	25.8	16.3	10.8	2.1	3.4	0.3	100.0%
	1996	36.9%	22.3	16.8	16.4	4.5	2.8	0.4	100.0%
	1997	42.5%	20.7	15.8	14.3	2.3	3.7	0.6	100.0%
	1998	37.0%	21.9	17.8	14.8	5.3	2.9	0.4	100.0%
Bortz Media & Sports Group	1999	38.5%	22.0	15.8	14.7	5.7	2.9	0.2	100.0%
	2000	35.4%	23.6	16.2	15.6	6.6	2.6	-	100.0%
	2001	35.4%	20.1	13.6	16.5	6.2	2.9	0.3	100.0%
	2002	36.2%	20.6	16.8	16.3	6.4	3.9	-	100.0%
	2003	37.8%	20.1	15.6	17.3	6.1	3.0	0.2	100.0%
	2004	33.5%	17.8	18.7	18.4	7.8	3.5	0.2	100.0%
	2005	36.9%	19.2	18.4	14.8	6.6	3.7	0.3	100.0%

\*Rows may not add to total due to rounding.

NOTE: Prior to 1992, category definitions, the number of categories addressed and the research methodology of individual surveys summarized above varied, in some cases significantly.

Table III-2 summarizes value ranges by programming category in 1998-99 and 2004-05, factoring in the confidence intervals associated with the estimate for each programming category in each year. See Appendix A at 50-53. Confidence intervals reflect the uncertainty surrounding a point estimate of value obtained using a sample-based survey methodology. The range presented therefore illustrates the range of possible "true values" that would have been obtained (in this case, with 95% confidence) if all Form 3 systems that carried distant signals in 2004-05 had been surveyed.

**Table III-2.  
Comparison of Distant Signal Programming Valuation Studies, 1998-2005\***

	1998	1999	2004	2005
Live professional and college team sports	34.3% - 39.7%	35.9% - 41.9%	31.2% - 35.8%	34.4% - 39.4%
Movies	20.3 - 23.5	20.1 - 24.1	16.5 - 19.1	17.4 - 21.0
Syndicated shows, series and specials	16.2 - 19.4	14.0 - 17.2	16.5 - 20.9	16.3 - 20.5
News and public affairs programs	13.0 - 16.6	12.4 - 16.8	16.7 - 20.1	13.1 - 16.5
Devotional and religious programming	4.5 - 6.1	4.7 - 6.9	7.1 - 8.5	5.8 - 7.4
PBS and all other programming on non-commercial signals	1.9 - 3.9	1.6 - 4.2	2.6 - 4.4	2.8 - 4.6
All programming on Canadian signals	0.0 - 0.9	0.0 - 0.4	0.0 - 0.4	0.1 - 0.5

\*Range reflects potential values for each year based on 95% confidence interval.

## APPENDIX A. CABLE OPERATOR SURVEY HISTORICAL BACKGROUND AND METHODOLOGY

Appendix A initially summarizes the history and evolution of cable operator surveys conducted in conjunction with CRT and CARP proceedings. This appendix then describes the methodology used in questionnaire design, sampling and interviewing for the cable operator surveys completed for 2004 and 2005, and it provides a statistical evaluation of survey results. The 2004 and 2005 survey instruments are set forth in Appendix B.

### A. Historical Background

1. 1989 and prior surveys. Bortz Media principals (as members of Browne, Bortz & Coddington, Inc. [BBC]) were initially retained by JSC to determine the comparative value of distant signal non-network programming in 1983. With the assistance of Drs. Michael Wirth (Professor and Chairperson of the Department of Mass Communications) and George Bardwell (Professor of Mathematics and Statistics) of the University of Denver, BBC designed a study employing a constant sum survey technique to determine cable operators' valuation of distant signal non-network programming. The survey was executed by Burke Marketing Research (one of the largest market research firms in the United States), with administrative involvement and oversight by BBC. In developing the study, BBC sought to improve upon earlier constant sum studies that had been performed by the Batten, Barton, Durstine & Osborn, Inc. (BBDO) Research Department on behalf of the JSC and submitted in the 1978, 1979 and 1980 CRT proceedings. In particular, BBC sought to be responsive to concerns expressed by the Tribunal with respect to the prior BBDO studies and thus made several improvements in an effort to address those concerns.

This initial BBC study was presented to the Tribunal in the 1983 proceeding, as was an independent study completed by the ELRA Group for the National Association of Broadcasters (NAB). The results of the BBC and ELRA surveys were similar, and the findings of both studies were also generally consistent with those of the earlier BBDO surveys. See Table III-1.

Bortz Media principals were again retained by the JSC to develop surveys for both 1986 and 1989. The 1986 case was settled and therefore the results of this study were not presented in the 1986 proceeding. Results for 1986, which were subsequently presented to the CRT in the 1989 proceeding, were similar to those of the 1983 BBC and ELRA surveys. See Table III-1.

The study design for the 1989 survey reflected additional efforts to resolve issues raised by the Tribunal – in this instance focusing on issues raised in the CRT's decision in the 1983 case (which had not yet been released at the time the 1986 study was conducted). Survey and sample design again reflected the input of Drs. Wirth and Bardwell, as well as the assistance of Dr. Leonard Reid (Professor and Head of the Department of Advertising at the University of Georgia) who testified in the 1989 proceeding. Burke Marketing Research executed the survey. Results of the 1989 study were presented to the Tribunal in the 1989 proceeding. These results were comparable to those obtained in all of the prior constant sum studies. See Table III-1.

The 1989 study was supported by the NAB, PBS and the Devotional Claimants. The study was, however, criticized by the Program Suppliers. In its 1989 Final Determination, the CRT accorded weight to the Bortz survey and specifically acknowledged improvements made over the 1983 study. The Tribunal, however,



accepted certain of the Program Suppliers' criticisms and chose not to accord full weight to the survey results.

2. 1990 through 1992 surveys. In our 1989 report to the CRT, we also presented the results of a survey for 1990 that the Joint Sports Claimants had retained Burke Marketing Research to execute. Burke used the same sample and essentially the same questionnaire used by Bortz for the 1989 survey. The 1990 results were similar to the results of all prior surveys. See Table III-1.

Prior to the release of the Tribunal's 1989 Final Determination, Bortz conducted a survey (executed by Burke) for 1991 employing essentially the same methodology as in 1989 and 1990. The 1991 results were again similar to those of prior surveys. See Table III-1.

Following the release of the 1989 Final Determination in April 1992, Bortz made several modifications in designing a survey for 1992. Questionnaire and sample development again relied upon Drs. Wirth and Bardwell of the University of Denver, along with Dr. Samuel Book (President of MTA Marketing) who had testified in the 1989 proceeding. The resulting questionnaire (again executed by Burke) incorporated changes that were responsive to Program Suppliers' criticisms that had been accepted by the CRT in the 1989 proceedings. In essence, the 1992 survey reflected the culmination of a decade of improvements and refinements intended to enhance the accuracy and applicability of the Bortz cable operator survey for the purpose of assessing the relative value of distant signal programming. Even with these refinements, the results of the 1992 survey were again comparable to those obtained in earlier surveys. See Table III-1.

The Canadian Claimants conducted constant sum surveys of cable operators carrying distant Canadian signals in 1991 and 1992. The surveys were designed to estimate the relative values of the different types of programming on the Canadian signals, and (similar to the Bortz Media surveys) asked respondents to allocate a percentage of total programming value among six types of programming on these signals.

**3. 1993 through 2005 surveys.** Bortz Media has conducted surveys from 1993 forward, employing the same methodology, questionnaire and sampling design as in 1992. Telephone interviewing was performed by Burke Marketing Research through 1997. In 1998 through 2000, Bortz Media retained Creative & Response Research to conduct telephone interviewing. Ted Heiman & Associates provided telephone interviewing services for the years 2001 forward.

It is also worth noting that the Canadian Claimants conducted similar constant sum surveys that were presented in both the 1998-99 and 2000-03 cable royalty distribution proceedings.

#### **B. Response to Issues Raised by the CRT**

As indicated above, different constant sum surveys, conducted by Bortz Media principals and others, have been performed since the commencement of the CRT proceedings. Beginning in 1983 the basic approach and methodology have remained essentially the same. However, as suggested in the preceding historical review, Bortz Media has made a number of refinements over the years to address concerns raised in prior proceedings. Certain refinements made in response to issues raised by the CRT are summarized below. Issues raised by the CARP are discussed in the next section.

**1. Respondent qualifications.** The early BBDO surveys were directed at top executives of cable multiple system operators (MSOs). Beginning in 1983, BBC redesigned the survey to focus on interviewing management personnel at the cable system level in order to obtain responses from the person at the system "most familiar with programming carried by the system." The interviewers initially asked for the system general manager; if this was not the person "most familiar," the interviewer asked to be directed to the appropriate individual.

The Tribunal determined in the 1983 proceeding that the BBC survey "was designed to ascertain the proper individual."<sup>15</sup> The same qualifier was used in the 1989 through 1991 studies. However, in its 1989 Final Determination the CRT expressed concern regarding the qualifications of approximately 11 percent of the survey respondents and also indicated uncertainty with respect to the involvement of the respondents in the program budgeting process.<sup>16</sup>

We believe respondents to the 1989 through 1991 surveys were qualified and were likely involved in program budgeting, as they were overwhelmingly individuals with general management, marketing or programming responsibilities. In conducting numerous market research studies and many other analyses involving cable systems operations for approximately two decades, it is our experience that these are the individuals at the system level most responsible for decisions (including budgeting) regarding programming. Further, in several instances where the titles of respondents did not imply programming oversight, the systems involved were small properties where

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<sup>15</sup> Report of the Copyright Royalty Tribunal in Docket No. CRT 84-1 83CD, 51 Fed. Reg. 12,792, 12810 (Apr. 15, 1986).

<sup>16</sup> Report of the Copyright Royalty Tribunal in Docket No. CRT 91-2-89CD, 57 Fed. Reg. 15,286, 15,301 (Apr. 27, 1992).

individuals frequently have multiple responsibilities. Nevertheless, in light of the concerns expressed by the CRT in the 1989 case, the initial respondent qualifying question was modified in the 1992 and subsequent surveys to ensure that the respondent was the person "most responsible for programming decisions at the cable system." This approach has been utilized in all subsequent surveys, and as indicated later in this appendix, respondents in 2004 and 2005 consisted overwhelmingly of general managers or senior programming and marketing executives (see *infra* pages 47-48).

2. Category definitions. Since the survey was first introduced into these proceedings, concerns have been expressed regarding the wording of descriptions of the various programming types. In the 1983 study, BBC developed category definitions that improved upon those used in earlier surveys; ELRA also provided new category definitions. The BBC categories were retained in the 1986 through 1991 surveys while two new categories were added in the 1986 to 1992 surveys to represent the Devotional and Canadian Claimants.

We believe the descriptions used in these surveys provided respondents with clearly distinguishable and readily understood categories for which they were able to allocate value. We also acknowledge the potential for certain "fringe" programming to be interpreted as belonging in one category when for the purposes of these proceedings it may belong in another. However, categories must be defined as concisely as possible. Moreover, we believe the use of examples is inappropriate in that it necessarily excludes programming types not included as examples.

While acknowledging the complexity of the task, the Tribunal in its 1989 Determination continued to express a desire for enhanced programming definitions.<sup>17</sup> In response, beginning with the 1992 survey Bortz Media incorporated the use of modified category descriptors based on definitions developed by the CRT itself to further aid respondents in accurately distinguishing among categories. In particular, adjustments were made to the syndicated and station-produced programming categories. The category definitions used in the 1992 survey have been used in all subsequent surveys including those conducted for 1998, 1999, 2004 and 2005.

**3. Excluded systems and program categories.** The objective of our surveys has been to determine the relative value that cable operators attach to the different categories of non-network programming on the distant signals that they actually carried. Consistent with that objective, not all cable systems are eligible for inclusion in our survey samples; nor are all survey respondents asked to value all types of programming represented in the royalty allocation proceedings. We discuss below the specific circumstances in which systems and programming categories are excluded from consideration.

The first situation involves Form 1 and 2 systems. Only Form 3 systems are eligible for inclusion in our samples. Form 1 and 2 systems have been excluded from our analysis because distant signal carriage data for these systems are not readily available – restricting our ability to question systems in this group about the signals that they actually carried. As explained below, we determine the identity of the particular distant signals for each Form 3 cable system in our sample by examining that system's Statement of Account filing at the Copyright Office; we then refer to these specific

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<sup>17</sup> *Id.* at 15,300.

distant signals in the survey questionnaire so that there is no confusion concerning the programming the respondent is asked to value. While the Copyright Office Statements of Account identify the distant signals that Form 3 cable systems carry, they do not do so for Form 1 and 2 systems. It should be noted that the Form 1 and 2 systems accounted for less than five percent of the 2004 and 2005 royalties. Furthermore, neither the CRT nor the CARP ever suggested that Form 1 and 2 systems should be included in our samples.

The second situation involves individual programming categories in instances where those categories were not among the distant signal programming carried by a particular cable system. In all of our surveys, questions regarding public television and/or Canadian stations have been deleted in instances where a cable system did not carry such stations, and respondents have not been asked to make a programming allocation to these categories. The CRT expressed concern regarding this approach in both the 1983 and 1989 proceedings. Bortz Media agrees with the Tribunal's Determination in the 1989 proceeding that programming not carried may have had a certain value and possibly would have been carried had it been available at a lower price (i.e., at a price that was less than that being charged under the statutory royalty rate). At the same time, we also concur with the Tribunal's 1989 conclusion that our survey design is intended to measure value based on programming actually carried and that questions regarding any distant signal programming in instances where it was not carried would cause confusion.<sup>18</sup>

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<sup>18</sup> *Id.* at 15,299–300. Note that if values were attributed to noncommercial and Canadian stations where no such stations were actually carried, the same approach would need to be followed for cable systems that carried no distant commercial signals or no distant signals at all.

Finally, we have not surveyed cable systems that carry no distant signals or cable systems that carry only a distant signal for which comparisons among the relevant Phase I program categories cannot be made (i.e., those that carried only a distant PBS station or only a distant Canadian station). As explained above, we have sought to determine the relative values of the different types of programming actually carried by the cable operator respondents. It is not possible to obtain an estimate of relative value where the cable operator carries no distant signals or carries only one type of distant signal programming. Further, as discussed in Section I, we acknowledge that an adjustment should be made to the Bortz survey results to account for cable operators that carry only PBS and/or only Canadian distant signals (which are not included in our survey).

**4. Respondent recall.** In the 1983 proceeding, the Tribunal expressed concern regarding the ability of respondents to recall programming actually carried in 1983, given that the BBC study presented in the 1983 proceeding was not actually conducted until 1985. To address this concern, surveys since 1989 have been conducted as close to the end of the year in question as is possible based on data availability from the Copyright Office. In fact, the 1989, 1990 and 1992 surveys were initiated during December of the survey year. In its 1989 Determination, the CRT acknowledged that this was an improvement, but continued to be concerned that respondents would have been unable to recall all of the individual programs they were being asked to value.<sup>19</sup>

In 2004 and 2005 (as in several prior years), surveying began in the summer of the year following the subject year. Bortz Media believes that the timing of the recent

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<sup>19</sup> *Id.* at 15,300.

surveys is appropriate in that it allows respondents to consider the value of programming immediately following the period in which it aired. Most important with respect to recall, however, is the recognition that cable system operators (in our experience) do not (and cannot) identify all programs on any particular program service in deciding whether to carry that service and how much to pay for it. Rather, in those marketplace dealings, operators make decisions based on a dominant impression of what is included on the service and its corresponding value. In other words, as in our surveys, marketplace programming decisions are made by cable operators without identifying every individual title. We believe that the respondents to the surveys did have such a dominant impression of the programming on distant signals.

**5. Signal carriage data.** The Tribunal criticized the BBDO surveys for failing to focus respondents on the actual distant signals carried. To address this criticism, the BBC study for 1983 and all subsequent surveys have incorporated actual signal carriage information obtained from Copyright Office Statements of Account.

**6. Budget allocation process.** In its 1983 Determination, the Tribunal raised questions regarding the formulation of the constant sum question and its relationship to tasks actually performed by cable operators. The 1983 constant sum question asked respondents to allocate "value" assuming that the total value of distant signal non-network programming was 100 percent. Bortz Media modified the question in the 1989 study to ask respondents to allocate a programming budget – a task closely related to activities operators actually perform.

While the Tribunal acknowledged in its 1989 Determination that this approach was an improvement, there was still concern regarding the short time period allowed for



respondents to consider their allocations in responding to a telephone survey.<sup>20</sup> Implicit in this assessment is the notion that further consideration might lead to different responses. As noted before, we believe responses to our survey reflect dominant impressions of programming value formed by respondents in their ongoing decision-making processes regarding programming and that survey results would not be materially different if respondents were given more time to consider their answers.

However, the allocation question for 1992 and all subsequent surveys was modified to ensure that respondents considered the question in a more formal manner. Respondents were first instructed to write down the programming categories and to think about their relative value; they were then asked to write down their estimates for each category. Subsequently, the interviewer reviewed the estimates for each category with the respondent to allow for any changes upon reconsideration.

7. Call backs. In the 1989 proceeding, the MPAA criticized Bortz Media's study on the basis that the repeated call backs which were necessary to obtain completed interviews raised questions as to the validity of the survey responses. The MPAA claimants said that a maximum of three attempts should be made to any one respondent. However, all of the interviews in the 2004 and 2005 studies were completed with a maximum of four direct contacts (including voice mail messages) with the respondent. Other call attempts reflect efforts to identify and/or directly contact the appropriate respondent and are common in executive interviewing.

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<sup>20</sup> *Id.* at 15,301.

### C. Response to Issues Raised by the CARP

The CARP addressed certain issues related to the Bortz survey methodology in both the 1990-92 and 1998-99 proceedings.

**1. Survey length.** The 1990-92 CARP expressed concern that respondents were asked to draw conclusions regarding value in the course of a 10 minute survey whereas the CARP itself required a period of six months to answer a similar question. While we understand the issue raised by the 1990-92 CARP, we also must emphasize that respondents to our survey make determinations regarding the relative value of programming on a regular basis. They are experienced and highly knowledgeable regarding the cable industry, the programming that they carry and the interests of their subscribers. We believe that they have a dominant impression of the value of the programming on the distant signals that they carry and that our survey reflects that collective impression.

The 1998-99 CARP shared this view, noting that, while "the interviews are relatively brief," the responding cable operators "are frequently called upon to assess the relative value of alternative types of programming such as news, sports, movies and series when deciding whether to carry a new program service or drop an existing service."<sup>21</sup> Thus, the 1998-99 CARP concluded that this factor did not provide a basis for adjusting the "Bortz share" of any particular claimant group.

**2. Supply side.** The 1990-92 CARP also observed that the survey does not account for "the 'supply' side of the supply and demand equation in an open market." This CARP stated that the constant sum question should have asked "what would the

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<sup>21</sup> 1998-99 CARP Report at 19-20.

cable system operator have to and be willing to spend."<sup>22</sup> We believe, however, that the survey does reflect the respondents' understanding of the marketplace prices of the different kinds of programming – which is a reflection of the "supply side." The cable system operators surveyed are active in the marketplace for cable programming and are familiar with the rates charged by the sellers of various genres of cable networks.

The 1998-99 CARP acknowledged that the Bortz survey does not directly survey the seller's perspective. However, the CARP concluded that "this does not materially undermine the utility of Bortz, and does not inform us whether any particular claimant group should receive more or less than implied by the Bortz survey."<sup>23</sup> Further, the 1998-99 CARP expressed the opinion that "the demand side would more likely determine relative values of programming in an unregulated marketplace."<sup>24</sup>

In our view, if anything, it is JSC programming that experiences the greatest negative impact from any failure of the survey to take into account the "supply side" of the equation. It is our experience that, as suppliers of programming, JSC members are able to negotiate the highest possible prices for their programming in the open market. Indeed, JSC programming commands an extremely high price relative to other kinds of programming in the open market, where both supplier and customer are present. Based on this marketplace evidence, we believe there is no reason that "supply side" considerations would warrant a reduction in the JSC's award from that shown in the cable operator survey.

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<sup>22</sup> 1990-92 CARP Report at 65.

<sup>23</sup> 1998-99 CARP Report at 22.

<sup>24</sup> *Id.* at 22.

**3. Attitudes versus conduct.** The 1990-92 CARP noted that the constant sum question is a measure of "attitudes" rather than "conduct." However, the 1998-99 CARP did not see this as a concern, noting that "uncontroverted testimony and years of research indicate rather conclusively that constant sum methodology, as utilized in the Bortz survey, is highly predictive of actual marketplace behavior."<sup>25</sup>

Moreover, the marketplace value of JSC programming relative to other types of programming is evidence of conduct. When cable systems meet copyright owners in the marketplace – their "conduct" shows that JSC programming is highly valued relative to other types of programming.

**4. Value of programming not carried.** Addressing an issue raised by PBS, both the 1990-92 and 1998-99 CARPs noted that programming that is not carried may nevertheless have some value to cable operators that is not captured through the Bortz survey methodology. However, both appear to have shared our view that it would not be possible to adjust the survey methodology to address this issue without causing confusion. In addition to causing confusion, we note that it would seem implausible (if not impossible) to determine at what level each "rejected" signal was valued, and how the various programming categories on those signals contributed to establishing that value.

**5. Carriage of compensable sports programming.** An issue was raised in the 1998-99 proceeding concerning the allocation of value to sports programming in instances where it was unclear that compensable sports programming was carried by a particular cable system's distant signals. In that proceeding, it was determined that one 1999 respondent had allocated value to sports programming even though that system

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<sup>25</sup> *Id.* at 21.

may not have carried such programming. In order to correct for this, Bortz Media removed the responses for that system from its calculations – an approach that the CARP found appropriate.<sup>26</sup>

For 2004 and 2005, Bortz Media conducted an extensive review of the programming carried by distant signals represented on the cable systems responding to our survey to verify that systems allocating value to sports programming actually carried compensable sports programming. Based on this review, we were unable to verify that compensable sports programming was carried by two responding cable systems in 2004, as well as one system in 2005.<sup>27</sup>

Using the same approach as the CARP accepted in the 1998-99 proceeding, we have tabulated the 2004 and 2005 survey results excluding these respondents. As shown below in Table A-1, the results are nearly identical to those obtained when these respondents are included in the survey.

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<sup>26</sup> *Id.* at 21.

<sup>27</sup> It is possible that some or all of these identified systems did carry compensable sports programming. For example, in one of the instances, we were able to determine that distant signals on the responding cable system consistently carried compensable sports programming in several years other than the year in which this system was included in the survey (2004). However, program listings and other information specific to 2004 were unavailable for the distant signals in question. As such, we could not definitively verify that such programming was carried in 2004.

Table A-1.

<b>2004 and 2005 Programming Value Allocations (Excluding Systems Without Verified Compensable Sports Programming)</b>		
	2004	2005
Live professional and college team sports	33.5%	37.0%
Movies	17.8	19.3
Syndicated shows, series and specials	18.7	18.5
News and public affairs programs	18.4	14.6
Devotional and religious programming	7.8	6.6
PBS and all other programming on non-commercial signals	3.5	3.8
All programming on Canadian signals	<u>0.2</u>	<u>0.4</u>
<b>Total*</b>	<b>100.0%</b>	<b>100.0%</b>

\*Columns may not add to total due to rounding.

**6. PBS and Canadian value adjustments.** Addressing issues related to public television and Canadian programming, the 1998-99 CARP noted that (as we acknowledged in the 1998-99 proceeding and discuss in Section I of this report) the Bortz survey understated the value of these programming categories by excluding from the survey any systems that carried only public television and/or Canadian signals. In the 1998-99 proceeding, we proposed an adjustment methodology that combined the Bortz survey results for these two categories of programming with the royalty fees generated by the "PBS-only" and "Canadian-only" cable systems that were excluded from the Bortz survey.<sup>28</sup>

The Panel acknowledged that the Bortz survey was valuable in establishing a "floor" for public television's value, but did not accept the Bortz adjustment proposal for valuing either public television or Canadian programming. In making its public

<sup>28</sup> Testimony of James M. Trautman (JSC 04-05 Ex. 4)

television determination, the Panel expressed concern that the Bortz adjustment methodology did not account for the “automatic zero” issue raised by PTV (i.e., the value of public television programming not carried), and also indicated that the proposed adjustments “rel[ie]d too heavily on the fee generation methodology.”<sup>29</sup> As noted above, we believe that value exists in programming not carried for all programming types at issue in this proceeding, and that no determination can reasonably be made as to which, if any, category is most affected by this issue.

**7. WGN Substitution.** Finally, the 1998-99 CARP identified the issue of “WGN Substitution” as an issue potentially affecting the value accorded to program suppliers (i.e., the movies and syndicated series categories).<sup>30</sup> This is because a substantial portion of the movie and syndicated programming carried by superstation WGN is not compensable – a fact that could not be known by respondents to the Bortz survey. As noted in Section I, this issue also applies to devotional programming on WGN – a significant percentage of which is not compensable.

In our view, this issue suggests that the survey allocations for these categories represent a “ceiling” on the relative value that should be assigned to each when considering the potential impact of substitution.

#### **D. 2004 and 2005 Survey Methodology**

**1. Questionnaire design.** The survey instrument for each year was drafted by Bortz Media, giving consideration to earlier Bortz Media survey instruments and responding to issues raised by the CARP and CRT in prior proceedings. Data as to

<sup>29</sup> 1998-99 CARP Report at 24. The 1998-99 CARP also did not accept an adjustment methodology proposed on behalf of public television by Dr. William Fairley. *Id.*

<sup>30</sup> *Id.* at 26-28. The CARP did not accept an adjustment proposed by the PTV Claimants to account for this issue. *Id.* at 26-28.

carriage of distant signal broadcast stations by cable operators were compiled by Bortz Media from 2004 and 2005 Statements of Account that were filed with the Copyright Office.

The initial survey question screened survey respondents, requiring an affirmation that the respondent was the individual "most responsible for programming decisions" made by the system during the year in question. After qualifying the respondent and identifying the distant signals carried by the respondent's cables system, the interviewer then asked each respondent which types of programming broadcast by its stations were "most popular" with its subscribers. This question was asked on an "unaided" basis – in other words, respondents were not given a list of programming categories from which to choose. Multiple responses were permitted to this question.

The third survey question addressed the use of distant signal programming for advertising and promotional purposes, and was asked in multiple parts. Respondents were first asked if they utilized any distant signal programming in advertising and promotional efforts to attract or retain subscribers. The question referred directly to the distant signal stations identified by the interviewer in the prior question (Q. 2).

Respondents who did use distant signal programming in their marketing efforts were then asked a series of follow-up questions addressing the specific types of programming utilized. They were first asked about usage on an unaided basis; follow-up questions asked specifically about usage of any programming types not mentioned. Only respondents whose systems carried PBS/educational and/or Canadian stations on a distant signal basis were asked about marketing use of these program types.



Finally, respondents were asked which of the program types used in advertising and promotion (including those identified on either an aided or unaided basis) was most important to their marketing efforts.

In the fourth and final survey question, Bortz Media utilized a constant sum approach for estimating cable operators' valuation of the various types of distant signal non-network programming, requiring the respondent to allocate a percentage of a finite pool to each of the program categories.

In order to avoid confusion as to the actual stations and programming under consideration in the survey, each respondent was read a list of the specific distant signal stations actually carried by his or her system. Individual stations were identified for each respondent based on Statements of Account filed with the Copyright Office. The questionnaire design was such that the list of stations was read for the second time during the operator valuation question (it was also read in question 2).

As further clarification, respondents were specifically instructed not to consider any national network programming from ABC, CBS, and NBC (to avoid possible confusion, this instruction was deleted in instances where no network affiliated stations were carried).

Five to seven program categories were used in all four surveys, depending upon whether or not the respondent's cable system carried distant PBS/educational and/or Canadian stations. The categories were:

- Movies broadcast during (survey year) by the U.S. commercial stations listed;

- Live professional and college team sports broadcast during (survey year) by the U.S. commercial stations listed;
- Syndicated shows, series and specials distributed to more than one television station and broadcast during (survey year) by the U.S. commercial stations listed;
- News and public affairs programs produced by or for any of the U.S. commercial stations listed, for broadcast during (survey year) only by that station;
- PBS and all other programming broadcast during (survey year) by U.S. noncommercial station \_\_\_\_\_;
- Devotional and religious programming broadcast during (survey year) by the U.S. commercial stations listed; and
- All programming broadcast during (survey year) by Canadian Station \_\_\_\_\_.

If no PBS or Canadian stations were carried, the operator was not asked to value these program types.

Respondents were asked to estimate the relative value to their systems of these programming categories, thinking in terms of the percentage of a fixed dollar amount they would spend for each programming type.

Program categories were read once so that the respondent had a chance to think about them, and the respondent was instructed to write the categories down. The

program types were then reread to allow the respondent to write down their estimates and provide them to the interviewer. The program types were randomly ordered to prevent ordering bias. The interviewer then reviewed the program categories and estimates with the respondent, providing the respondent an opportunity to revise the estimates if necessary. As discussed previously, both the writing down of categories and responses and the category-by-category review of responses in these surveys reflect changes made in response to comments from the CRT that were incorporated starting with the 1992 survey.

**2. Cable system sampling.** The cable system operator sampling plans were developed by Bortz Media, based on the design parameters initially developed for previous surveys by Dr. George E. Bardwell, Consultant in Mathematics and Statistics, and Professor of Mathematics and Statistics at the University of Denver. Sample selection was conducted by Bortz Media professional staff.

A stratified random sampling approach was utilized, with the stratification based on copyright royalty payments. As noted above, only Form 3 systems, which contributed approximately 95 percent of the royalties each year, were eligible for inclusion in the sample. Royalty data were obtained from Statements of Account filed with the Copyright Office. The sampling plans were constructed so that proportionately more systems with large royalty payments were sampled relative to systems with small royalty payments. This approach is intended to ensure that responses to the survey would provide a statistically valid predictor for allocation of royalty payments.

The sample design included four strata of royalty classes, one of which (largest royalty payers) required that all systems within that stratum be included in the sample. The boundaries of the remaining three strata were constructed using the 'cum square

root of f rule' applied to a frequency distribution of royalty payments in \$500 increments. This rule gives reasonable assurance the calculated stratum boundaries are maximally effective in reducing the sampling error for a given sample size. Neyman's allocation formulas provide an optimum allocation of the total samples to each stratum so as to achieve minimum sampling error in the overall survey estimates.

The required stratification and certain associated statistics for each study are summarized in Table A-2 below.

**Table A-2.**  
**Stratification Statistics for 2004 and 2005 Surveys\***

Royalty Stratum	Number of Systems	Mean Royalty	Percent of Total Royalties	Royalty Standard Deviation	Original Sample Size**	Final Eligible Sample
<b>2004</b>						
\$0 - 20,628	936	\$10,104	14.4%	\$4,772	65	53
\$20,629 - 59,628	432	35,897	23.5	10,873	68	54
\$59,629 - 207,129	234	103,077	36.6	37,199	129	109
\$207,130 or more	<u>45</u>	373,148	<u>25.5</u>	253,603	<u>45</u>	<u>35</u>
Total/Average	1,647		100.0%		307	251
<b>2005</b>						
\$0 - 23,844	755	\$12,269	14.3%	\$5,150	58	46
\$23,845 - 65,344	378	39,639	23.1	11,372	64	56
\$65,345 - 239,844	210	114,824	37.2	44,527	140	118
\$239,845 or more	<u>39</u>	420,366	<u>25.3</u>	202,246	<u>39</u>	<u>31</u>
Total/Average	1,382		100.0%		301	251

\*Stratification statistics are based on the first reporting period of each year.

\*\*Includes all sampled systems. In 2004, 43 systems not carrying distant signals, nine systems carrying only PBS signals, and one carrying only Canadian signals were discarded. In addition, two systems could not be located at the Copyright Office and one system was determined to be a duplicate. In 2005, 39 systems not carrying distant signals, seven carrying only PBS signals, two carrying only PBS and Canadian signals, and one carrying only Canadian signals were discarded. In addition, one system could not be located at the Copyright Office.

Sample systems were randomly selected from each stratum in accordance with the sample size requirements given in the foregoing table and using randomly selected starts.

In both 2004 and 2005, a number of the systems selected within the initial sample frame reported above carried no distant signals. As discussed above at page 32, these systems were ineligible, since there was no set of signals/programming that would form the necessary basis upon which to conduct the survey among these systems. Similarly, some systems sampled carried only a distant PBS and/or only a distant Canadian signal. As discussed above on page 32, these systems were also excluded.

**3. Survey.** Telephone surveying in the 2004 and 2005 studies was completed by Ted Heiman & Associates (THA). James M. Trautman, Managing Director, and Brian Broderick, Senior Vice President, of Bortz Media oversaw selection and training of interviewers. Only interviewers specializing in surveying professional and managerial personnel were utilized. Supervisors listened to interviews over the initial phases of the studies to ensure that interviewers understood the subject matter, were communicating properly with survey respondents and were accurately recording the information supplied by the respondents.

Dates during which surveys were completed are as follows.

Study Year	Survey Period
2004	7/28/05-9/23/05
2005	7/23/06-11/20/06

Calls were placed between 8:30 a.m. and 4:30 p.m. Central Standard Time. Interviewers were instructed to call back as often as necessary to obtain a completed interview or refusal. While up to 30 calls were made to some systems, virtually every completed interview required only one or two direct contacts with the eventual respondent.

Interviewers were not told the name of the client or given any information, other than that on the survey form, regarding the nature of the study.

**4. Survey completion.** Interviews were completed with between 65 and 68 percent of cable systems included in the sample frame provided to THA:

	Eligible Sample	Surveys Completed	Response Rate to Q4
2004	251	162	64.5%
2005	251	171	68.1

**5. Respondent qualifications.** In contacting cable systems, interviewers were instructed to ask first for the system general manager and to confirm that the manager was the person at the system "most responsible for programming decisions made" by the system. If the general manager did not fit the description, the interviewer was instructed to ask for the person who was most responsible for programming decisions. In all cases, the eventual survey respondent, whether or not the system manager, was required to answer affirmatively the qualifying question. As indicated in Table A-3, respondents were overwhelmingly individuals with general management, marketing or programming responsibilities.

**Table A-3.**  
**Persons Most Responsible for Programming Decisions,**  
**By Job Title, 2004 and 2005**

Job Title	2004		2005	
	Number of Respondents	Percent of Total	Number of Respondents	Percent of Total
SVP, Regl. VP or VP Marketing/Marketing Director	62	38.3%	47	27.5%
General Manager/Manager/Area VP or Director/Regional VP or SVP	40	24.7	71	41.5
Marketing Manager/Marketing Operations Dir./Marketing Coordinator/Regl. Mktg. Mgr.	17	10.5	17	9.9
VP or Dir. Sales & Marketing/Regl. Dir. Sales & Marketing	17	10.5	11	6.4
VP, Director or Manager Operations/Regl. VP or Director Operations	10	6.2	5	2.9
Product or Programming Director or Manager	9	5.6	7	4.1
VP or SVP	5	3.1	7	4.1
Other	2	1.2	6	3.5
<b>Total*</b>	<b>162</b>	<b>100.1%</b>	<b>171</b>	<b>100.1%</b>

\*Does not equal 100.0 percent due to rounding.

**6. Estimation procedures.** In both studies, two different methodologies were used in making estimates for all systems based on the sample responses. For question 4 (valuation by program type), a ratio estimation methodology was used. This methodology weights responses by another variable. In this case, the responses (valuation of each type of programming) were weighted by the total royalty that the respondent's system had paid for the first reporting period of 2004 or 2005. Larger systems with greater royalty payments were given a greater weight compared with smaller systems in determining the average value of each type of programming. For the sample systems, the total royalty and percent of value by program type was known. For all other systems not in the sample, total royalties were also known. Statistically, knowledge of royalties for the total universe of systems improves the reliability of the estimates by reducing the uncertainty in this component of the estimation methodology.

For questions 2 and 3, the focus was not on value but rather on subscriber and advertising preference. In this case, there was no other supplemental variable available which related to preference for all systems, including those not in the sample. Therefore, the ratio estimation methodology did not apply to making estimates based on responses to these questions and a more straightforward method was applied in which all sample stations carried an equal weight after accounting for different sample sizes by strata. Formulas for calculating these statistics are set forth below.

a. *Statistical estimation procedures for question 4.* The following sets forth the mathematical and statistical basis for the valuation estimates obtained for the key constant sum question:



$h$  = stratum index,

$p_{ih}$  = proportionate value of program type  $x$  estimated by sample system  $i$  in stratum  $h$  from questionnaire,

$t_{ih}$  = total royalty of sample system  $i$  in stratum  $h$ .

$T_h$  = total royalty of all (sample and nonsample) systems in stratum  $h$ ,

$x_{ih}$  =  $p_{ih} t_{ih}$  = value of program type  $x$  to system  $i$  in stratum  $h$ ,

$n_h$  = number of sample systems responding in stratum  $h$ ,

$N_h$  = total number of systems in stratum  $h$ ,

$$T_x = \frac{\sum_{h=1}^4 \sum_{i=1}^{n_h} x_{ih}}{\sum_{h=1}^4 \sum_{i=1}^{n_h} t_{ih}} T_h = \text{estimated total value of program type } x,$$

$$S_{xh}^2 = \frac{\sum_{i=1}^{n_h} x_{ih}^2 - \frac{\left(\sum_{i=1}^{n_h} x_{ih}\right)^2}{n_h}}{n_h} = \text{sample variance of value of program type } x \text{ in stratum } h,$$

$$S_{th}^2 = \frac{\sum_{i=1}^{n_h} t_{ih}^2 - \frac{\left(\sum_{i=1}^{n_h} t_{ih}\right)^2}{n_h}}{n_h} = \text{sample variance of royalty in stratum } h,$$

$$R_h = \frac{\sum_{i=1}^{n_h} x_{ih}}{\sum_{i=1}^{n_h} t_{ih}} = \text{ratio estimate of proportionate value of program type } x \text{ for stratum } h,$$

$$r_h = \frac{n_h \sum_{i=1}^{n_h} x_{ih} t_{ih} - \sum_{i=1}^{n_h} x_{ih} \sum_{i=1}^{n_h} t_{ih}}{n_h S_{th} S_x} = \text{Pearson's correlation coefficient between } x_h \text{ and } t_h \text{ in stratum } h,$$

$$V(T_x) = \sum_{h=1}^4 \frac{N_h}{n_h - 1} (N_h - n_h) (S_{xh}^2 + S_{th}^2 R_h^2 - 2R_h r_h S_{xh} S_{th}) = \text{variance of estimate of total value of program } x.$$

*b. Statistical estimation procedures for questions 2 and 3.* The following sets forth the mathematical and statistical basis for the estimates obtained for questions 2 and 3.

$h$  = stratum index,  
 $n_h$  = number of sample systems responding in stratum  $h$ ,  
 $N_h$  = total number of systems in stratum  $h$ ,  
 $N$  = total systems in sample frame,  
 $t_{xh}$  = total number of positive answers for given cell for question  $x$  in stratum  $h$ ,  
 $p_{xh}$  =  $t_{xh}/n_h$  = estimated proportion of positive answers for given cell for question  $x$  in stratum  $h$ ,

$P_x$  =  $\frac{\sum_{h=1}^4 P_{xh} N_h}{N}$  = estimated proportion positive answers for given cell for question  $x$ ,

$V(P_x)$  =  $\frac{1}{N^2} \sum_{h=1}^4 \frac{N_h}{n_h - 1} (N_h - n_h) p_{xh} (1 - p_{xh})$  = variance of estimated proportion  $P_x$

**7. Evaluation of survey estimates.** The 95 percent confidence intervals for the estimates included in this report for the years 2004 and 2005 are set forth below.

2004

Question 4. Cable Operator Allocation of Distant Signal Program Budget

Category	Percent Allocation	Absolute Confidence Interval
Live professional and college team sports	33.5%	±2.3
Syndicated shows, series and specials	18.7	2.2
News and public affairs	18.4	1.7
Movies	17.8	1.3
Devotional and religious	7.8	0.7
PBS and all other non-commercial	3.5	0.9
Canadian	0.2	0.2
Total	100.0%*	

\*Column does not add to total due to rounding

**Question 2. Distant Programming Popularity Among Subscribers**

Category	Percent Allocation*	Absolute Confidence Interval
Live professional and college team sports	75.7%	±8.6
Syndicated shows, series and specials	29.1	9.1
News and public affairs	28.9	9.4
Movies	20.4	7.9
PBS and all other non-commercial	13.2	7.1
Devotional and religious	0.9	1.4
Canadian	0.0	0.0
Other	0.2	0.4

\*Multiple responses are allowed to this question.

**Question 3a. Use of Distant Signal Programming for Advertising/ Promotional Purposes**

Category	Percent Allocation	Absolute Confidence Interval
Yes	11.1%	±6.3
No	88.9	
Total	100.0%	

**Question 3b/3c. Combined Aided/Unaided Advertising/Promotional Use of Distant Signal Programming by Type**

Category	Percent Allocation	Absolute Confidence Interval
Live professional and college team sports	75.6%	NA
News and public affairs	58.7	NA
Syndicated shows, series and specials	27.3	NA
Movies	12.2	NA
PBS and all other non-commercial	7.4	NA
Devotional and religious	0.0	NA
Canadian	0.0	NA
Other	0.0	NA

\*Multiple responses are allowed to this question.

**Question 3d. Most Important Distant Signal Programming for Advertising/Promotional Purposes**

Category	Percent Allocation	Absolute Confidence Interval
Live professional and college team sports	50.2%	NA
Syndicated shows, series and specials	21.7	NA
News and public affairs	17.6	NA
Movies	5.6	NA
PBS and all other non-commercial	1.9	NA
Devotional and religious	0.0	NA
Canadian	0.0	NA
Other	0.0	NA
Don't know/no response	3.1	NA
<b>Total</b>	<b>100.0%*</b>	

\*Column does not add to total due to rounding.

**2005**

**Question 4. Cable Operator Allocation of Distant Signal Program Budget**

Category	Percent Allocation	Absolute Confidence Interval
Live professional and college team sports	36.9%	±2.5
Movies	19.2	1.8
Syndicated shows, series and specials	18.4	2.1
News and public affairs	14.8	1.7
Devotional and religious	6.6	0.8
PBS and all other non-commercial	3.7	0.9
Canadian	0.3	0.2
<b>Total</b>	<b>100.0%*</b>	

\*Column does not add to total due to rounding.

**Question 2. Distant Programming Popularity Among Subscribers**

Category	Percent Allocation	Absolute Confidence Interval
Live professional and college team sports	65.7%	±10.5
Syndicated shows, series and specials	35.6	10.5
Movies	28.7	10.0
News and public affairs	19.0	8.2
PBS and all other non-commercial	5.2	5.2
Devotional and religious	3.4	4.0
Canadian	0.4	0.4
Other	0.0	0.0

\*Multiple responses are allowed to this question.

**Question 3a. Use of Distant Signal Programming for Advertising/ Promotional Purposes**

Category	Percent Allocation	Absolute Confidence Interval
Yes	4.9%	±4.1
No	95.1	
Total	100.0%	

**Question 3b/3c. Combined Aided/Unaided Advertising/Promotional Use of Distant Signal Programming by Type**

Category	Percent Allocation	Absolute Confidence Interval
Live professional and college team sports	96.1%	NA
Movies	80.5	NA
Syndicated shows, series and specials	62.2	NA
News and public affairs	62.2	NA
PBS and all other non-commercial	55.7	NA
Canadian	3.9	NA
Devotional and religious	0.0	NA
Other	2.6	NA

\*Multiple responses are allowed to this question.

**Question 3d. Most Important Distant Signal Programming for Advertising/Promotional Purposes**

Category	Percent Allocation	Absolute Confidence Interval
News and public affairs	45.2%	NA
Live professional and college team sports	44.4	NA
Movies	2.6	NA
Syndicated shows, series and specials	0.0	NA
PBS and all other non-commercial	0.0	NA
Devotional and religious	0.0	NA
Canadian	0.0	NA
Other	7.8	NA
Total	100.0%	

**APPENDIX B. SURVEY INSTRUMENTS**

2004  
SYSTEM OPERATOR  
PROGRAMMING QUESTIONNAIRE

VERSION H

System Name: \_\_\_\_\_  
City / State: \_\_\_\_\_  
Subscribers: \_\_\_\_\_ Remit Number \_\_\_\_\_  
Respondent's Name: \_\_\_\_\_  
Position: \_\_\_\_\_  
Telephone Number: \_\_\_\_\_  
Date: \_\_\_\_\_  
Interviewer: \_\_\_\_\_

(ASK TO SPEAK WITH SYSTEM MANAGER. IF UNAVAILABLE, CONFIRM HE / SHE IS PERSON AT THE SYSTEM MOST RESPONSIBLE FOR PROGRAMMING DECISIONS AND ARRANGE CALL BACK. IF NOT, ASK TO SPEAK WITH THE PERSON AT THE SYSTEM MOST RESPONSIBLE FOR PROGRAMMING DECISIONS.)

Hello, I'm \_\_\_\_\_ from \_\_\_\_\_. We are conducting a short national survey among randomly selected cable systems regarding the programming they carry. I only have a few questions.

1. Are you the person at your system most responsible for programming decisions made by your system during 2004 or not?

Yes ..... 1

No ..... 2

ASK TO SPEAK WITH PERSON AT THE SYSTEM MOST RESPONSIBLE FOR PROGRAMMING DECISIONS. REPEAT INTRODUCTION AND Q.1.

2a. Industry data indicate that during 2004 your system carried the following broadcast stations from other cities:

<u>Com/ Non/ Call Letters</u>	<u>Can</u>	<u>Affil</u>	<u>City</u>	INSERT DISTANT SIGNAL CALL LETTERS, CITY AND AFFILIATION

2b. Thinking back to 2004, what types of programming broadcast by these stations, other than any national network programming from ABC, CBS and NBC, do you think were most popular with your subscribers? (DO NOT READ LIST; RECORD ALL PROGRAMMING TYPES MENTIONED)

- Movies ..... 1
  - Live professional and college team sports ..... 2
  - Syndicated shows, series and specials ..... 3
  - News and public affairs programs ..... 4
  - PBS and all other programming broadcast by noncommercial station \_\_\_\_\_ 5
  - Devotional and religious programming ..... 6
  - All programming broadcast by Canadian station \_\_\_\_\_ 7
  - Other (SPECIFY) ..... 8
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_



3a. Did you feature any programming broadcast by the stations I mentioned, other than any national network programming from ABC, CBS and NBC, in your 2004 advertising and promotional efforts to attract and retain subscribers or not?

Yes ..... 1  
 No ..... 2 GO TO Q.4

3b. What types of programming broadcast by these stations did you feature in your 2004 subscriber acquisition and retention advertising and promotion? (DO NOT READ LIST--RECORD BELOW UNDER Q.3b, "UNAIDED")

(FOR EACH TYPE OF PROGRAMMING NOT MENTIONED IN Q.3b, ASK:)

3c. Did you also feature (INSERT EACH PROGRAMMING TYPE NOT MENTIONED) broadcast by these stations in your 2004 advertising and promotion to attract and retain subscribers or not? (RECORD BELOW UNDER Q.3c, "AIDED")

3d. You said you used (READ ALL PROGRAMMING TYPES CHECKED IN Q.3b or 3c) from the stations I mentioned in 2004 subscription and retention advertising and promotion. Which of these do you feel was the most important programming type to feature in subscriber acquisition and retention advertising and promotion? Which was the next most important programming type? Which programming type was least important? (RECORD BELOW UNDER Q.3d, "IMPORTANT" IN APPROPRIATE COLUMN. IF TWO OR FEWER WERE MENTIONED, MODIFY QUESTION ACCORDINGLY)

ndom 2.	Q.3b. Unaided	Q.3c. Aided	Q.3d. Important		
			Most	2nd	Least
) Movies	1	1	1	1	1
) Live professional and college team sports	2	2	2	2	2
) Syndicated shows, series and specials	3	3	3	3	3
) News and public affairs programs	4	4	4	4	4
) PBS and all other programming broadcast by noncommercial station _____	5	5	5	5	5
) Devotional/religious programming	6	6	6	6	6
) All programming broadcast by Canadian station _____	7	7	7	7	7
Other (SPECIFY BELOW)					
_____	8	8	8	8	8
_____	9	9	9	9	9
_____	10	10	10	10	10

4a. Now, I would like you to estimate the relative value to your cable system of each type of programming actually broadcast by the stations I mentioned during 2004, other than any national network programming from ABC, CBS and NBC. That is, how much do you think each such type of programming was worth, if anything, on a comparative basis, in terms of attracting and retaining subscribers. We are only interested in U.S. commercial station(s) \_\_\_\_\_, U.S. non commercial station(s) \_\_\_\_\_, and Canadian station(s) \_\_\_\_\_.

I'll read all the program types that were broadcast by these stations to give you a chance to think about them; please write the categories down as I am reading them. (READ PROGRAM TYPES IN ORDER OF RANDOM SEQUENCE NUMBER.) Assume you had a fixed dollar amount to spend in order to acquire all the programming actually broadcast during 2004 by the stations I listed. What percentage, if any, of the fixed dollar amount would you spend for each type of programming? Please write down your estimates, and make sure they add to 100 percent.

What percentage, if any, of the fixed dollar amount would you spend on (READ FIRST PROGRAM TYPE)? And what percentage, if any, would you spend on (READ NEXT PROGRAM TYPE)? (COMPLETE LIST IN THIS MANNER.)

<u>Random Sequence</u>	<u>Percent</u>
( ) <u>Movies</u> broadcast during 2004 by the U.S. commercial stations I listed.....	_____
( ) <u>Live professional and college team sports</u> broadcast during 2004 by the U.S. commercial stations I listed.....	_____
( ) <u>Syndicated shows, series and specials</u> distributed to more than one television station and broadcast during 2004 by the U.S. commercial stations I listed. ....	_____
( ) <u>News and public affairs programs</u> produced by or for any of the U.S. commercial stations I listed, for broadcast during 2004 only by that station..	_____
( ) <u>PBS and all other programming</u> broadcast during 2004 by U.S. noncommercial station _____	_____
( ) <u>Devotional and religious programming</u> broadcast during 2004 by the U.S. commercial stations I listed. ....	_____
( ) <u>All programming</u> broadcast during 2004 by Canadian station _____	_____
TOTAL .....	_____

PERCENTAGES MUST ADD TO 100 PERCENT; PROMPT RESPONDENT IF THEY DO NOT.

4b. Now I'm going to read back the categories and your estimates. (REREAD CATEGORIES AND RESPONSES IN RANDOM SEQUENCE ORDER TO ALLOW RESPONDENT TO REVIEW THE ESTIMATES.)

Are there any changes you would like to make? (RECORD ANY CHANGES BY CROSSING OUT ORIGINAL RESPONSE AND WRITING IN REVISED RESPONSE NEXT TO IT. PERCENTAGES MUST STILL ADD TO 100 PERCENT; PROMPT RESPONDENT IF THEY DO NOT.)

Thank you for your time and cooperation.

2005  
SYSTEM OPERATOR  
PROGRAMMING QUESTIONNAIRE

VERSION H

System Name: \_\_\_\_\_

City / State: \_\_\_\_\_

Subscribers: \_\_\_\_\_ Remit Number \_\_\_\_\_

Respondent's Name: \_\_\_\_\_

Position: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Date: \_\_\_\_\_

Interviewer: \_\_\_\_\_

(ASK TO SPEAK WITH SYSTEM MANAGER. IF UNAVAILABLE, CONFIRM HE / SHE IS PERSON AT THE SYSTEM MOST RESPONSIBLE FOR PROGRAMMING DECISIONS AND ARRANGE CALL BACK. IF NOT, ASK TO SPEAK WITH THE PERSON AT THE SYSTEM MOST RESPONSIBLE FOR PROGRAMMING DECISIONS.)

Hello, I'm \_\_\_\_\_ from \_\_\_\_\_. We are conducting a short national survey among randomly selected cable systems regarding the programming they carry. I only have a few questions.

1. Are you the person at your system most responsible for programming decisions made by your system during 2005 or not?

Yes ..... 1  
No ..... 2

ASK TO SPEAK WITH PERSON AT THE SYSTEM MOST RESPONSIBLE FOR PROGRAMMING DECISIONS. REPEAT INTRODUCTION AND Q.1.

2a. Industry data indicate that during 2005 your system carried the following broadcast stations from other cities:

<u>Com/ Non/ Call Letters</u>	<u>Can</u>	<u>Affil</u>	<u>City</u>	INSERT DISTANT SIGNAL CALL LETTERS, CITY AND AFFILIATION

2b. Thinking back to 2005, what types of programming broadcast by these stations, other than any national network programming from ABC, CBS and NBC, do you think were most popular with your subscribers? (DO NOT READ LIST; RECORD ALL PROGRAMMING TYPES MENTIONED)

- Movies ..... 1
  - Live professional and college team sports ..... 2
  - Syndicated shows, series and specials ..... 3
  - News and public affairs programs ..... 4
  - PBS and all other programming broadcast by noncommercial station \_\_\_\_\_ 5
  - Devotional and religious programming ..... 6
  - All programming broadcast by Canadian station \_\_\_\_\_ 7
  - Other (SPECIFY) ..... 8
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

3a. Did you feature any programming broadcast by the stations I mentioned, other than any national network programming from ABC, CBS and NBC, in your 2005 advertising and promotional efforts to attract and retain subscribers or not?

Yes ..... 1  
 No ..... 2 GO TO Q.4

3b. What types of programming broadcast by these stations did you feature in your 2005 subscriber acquisition and retention advertising and promotion? (DO NOT READ LIST-RECORD BELOW UNDER Q.3b, "UNAIDED")

(FOR EACH TYPE OF PROGRAMMING NOT MENTIONED IN Q.3b, ASK:)

3c. Did you also feature (INSERT EACH PROGRAMMING TYPE NOT MENTIONED) broadcast by these stations in your 2005 advertising and promotion to attract and retain subscribers or not? (RECORD BELOW UNDER Q.3c, "AIDED")

3d. You said you used (READ ALL PROGRAMMING TYPES CHECKED IN Q.3b or 3c) from the stations I mentioned in 2005 subscription and retention advertising and promotion. Which of these do you feel was the most important programming type to feature in subscriber acquisition and retention advertising and promotion? Which was the next most important programming type? Which programming type was least important? (RECORD BELOW UNDER Q.3d, "IMPORTANT" IN APPROPRIATE COLUMN. IF TWO OR FEWER WERE MENTIONED, MODIFY QUESTION ACCORDINGLY)

andom a.	Q.3b. Unaided	Q.3c. Aided	Q.3d. Important		
			Most	2nd	Least
) Movies	1	1	1	1	1
) Live professional and college team sports	2	2	2	2	2
) Syndicated shows, series and specials	3	3	3	3	3
) News and public affairs programs	4	4	4	4	4
) PBS and all other programming broadcast by noncommercial station _____	5	5	5	5	5
) Devotional/religious programming	6	6	6	6	6
) All programming broadcast by Canadian station _____	7	7	7	7	7
Other (SPECIFY BELOW)					
_____	8	8	8	8	8
_____	9	9	9	9	9
_____	10	10	10	10	10

4a. Now, I would like you to estimate the relative value to your cable system of each type of programming actually broadcast by the stations I mentioned during 2005, other than any national network programming from ABC, CBS and NBC. That is, how much do you think each such type of programming was worth, if anything, on a comparative basis, in terms of attracting and retaining subscribers. We are only interested in U.S. commercial station(s) \_\_\_\_\_, U.S. non commercial station(s) \_\_\_\_\_, and Canadian station(s) \_\_\_\_\_.

I'll read all the program types that were broadcast by these stations to give you a chance to think about them; please write the categories down as I am reading them. (READ PROGRAM TYPES IN ORDER OF RANDOM SEQUENCE NUMBER.) Assume you had a fixed dollar amount to spend in order to acquire all the programming actually broadcast during 2005 by the stations I listed. What percentage, if any, of the fixed dollar amount would you spend for each type of programming? Please write down your estimates, and make sure they add to 100 percent.

What percentage, if any, of the fixed dollar amount would you spend on (READ FIRST PROGRAM TYPE)? And what percentage, if any, would you spend on (READ NEXT PROGRAM TYPE)? (COMPLETE LIST IN THIS MANNER.)

<u>Random Sequence</u>	<u>Percent</u>
( ) <u>Movies</u> broadcast during 2005 by the U.S. commercial stations I listed. ....	_____
( ) <u>Live professional and college team sports</u> broadcast during 2005 by the U.S. commercial stations I listed. ....	_____
( ) <u>Syndicated shows, series and specials</u> distributed to more than one television station and broadcast during 2005 by the U.S. commercial stations I listed. ....	_____
( ) <u>News and public affairs programs</u> produced by or for any of the U.S. commercial stations I listed, for broadcast during 2005 only by that station. .	_____
( ) <u>PBS and all other programming</u> broadcast during 2005 by U.S. noncommercial station _____.	_____
( ) <u>Devotional and religious programming</u> broadcast during 2005 by the U.S. commercial stations I listed. ....	_____
( ) <u>All programming broadcast during 2005 by Canadian station</u> _____.	_____
TOTAL .....	_____

PERCENTAGES MUST ADD TO 100 PERCENT; PROMPT RESPONDENT IF THEY DO NOT.

4b. Now I'm going to read back the categories and your estimates. (REREAD CATEGORIES AND RESPONSES IN RANDOM SEQUENCE ORDER TO ALLOW RESPONDENT TO REVIEW THE ESTIMATES.)

Are there any changes you would like to make? (RECORD ANY CHANGES BY CROSSING OUT ORIGINAL RESPONSE AND WRITING IN REVISED RESPONSE NEXT TO IT. PERCENTAGES MUST STILL ADD TO 100 PERCENT; PROMPT RESPONDENT IF THEY DO NOT.)

Thank you for your time and cooperation.



**B**

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Before the  
COPYRIGHT ROYALTY JUDGES  
Washington, D.C.

---

In the Matter of )  
)  
)

Distribution of the )  
2004 and 2005 )  
Cable Royalty Funds )  
)  

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Docket No. 2007-3 CRB CD 2004-2005

Testimony of  
Robert W. Crandall

June 1, 2009

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Appendix A Curriculum Vitae

## I. QUALIFICATIONS

1. My name is Robert W. Crandall. I have been a Senior Fellow in Economic Studies at the Brookings Institution since 1978. Prior to that I was the Acting Director, Deputy Director, and Assistant Director of the Council of Wage and Price Stability in the Executive Office of the President, and between 1974 and 1975 I was an Adviser to Commissioner Glen Robinson of the Federal Communications Commission ("FCC"). I was an Assistant Professor and Associate Professor of Economics at MIT between 1966 and 1974.

2. I have written widely on telecommunications policy, the economics of broadcasting, and the economics of cable television. In 1971 and 1972, I published articles on the FCC financial-interest/syndication rules in *The Journal of Law and Economics* and the *Bell Journal of Economics*. In 1974, I co-authored an article on cable television profitability in *The Journal of Business*. In 1974, I also published an article on the economics of network television in *Public Policy*. In 1978, I published an article on the economic effect of television broadcast regulation in *Regulation*. In 1981, Stanley Besen and I coauthored a paper on cable television regulation that was published in *Law and Contemporary Problems*. In 1990, I conducted a number of empirical studies of the cable television industry that were submitted in various FCC proceedings on behalf of TCI and are incorporated into a chapter in Bruce Owen and Steven Wildman's *Video Economics*, published by Harvard University Press in 1992. I am the co-author of two books released in 1996 by the Brookings Institution: *Talk is Cheap: The Promise of Regulatory Reform in North American Telecommunications* (with Professor Leonard

Waverman) and *Cable TV: Regulation or Competition?* (with former FCC Commissioner Harold Furchtgott-Roth) and the author of *Competition and Chaos: U.S. Telecommunications since the 1996 Telecom Act*, published by the Brookings Institution in 2005.

3. I have served as a consultant to several government agencies and participated in a variety of government advisory panels. Between 1967 and 1968, I was a consultant to the Justice Department on a variety of network television and motion picture issues. Between 1978 and 1979, I served as a consultant to the FCC on the deregulation of signal carriage rules for cable television. I have also served as a consultant to several clients on matters relating to copyright and product licensing issues -- including the National Cable Television Association, the three major television broadcast networks, and other cable and broadcast industry clients.

4. I testified before the Copyright Royalty Tribunal on behalf of the Joint Sports Claimants ("JSC") in the 1989 cable royalty distribution proceeding and on behalf of the National Cable Television Association in the 1981 proceeding to adjust cable royalty rates. I also testified before the Copyright Arbitration Royalty Panel on behalf of JSC in the 1990-92 and 1998-99 cable royalty distribution proceedings.

5. I am offering this testimony on behalf of JSC in my individual capacity and not as an employee of the Brookings Institution, which does not take institutional positions with respect to specific legislation, litigation, or regulatory proceedings.

6. A copy of my curriculum vitae is attached as Appendix A.

## II. INTRODUCTION AND SUMMARY

7. In this testimony, I conclude that:

- The copyright royalties paid by cable systems to import distant broadcast signals should be allocated as they would have been allocated by marketplace transactions.
- The best evidence on how the marketplace would have allocated these royalties is to be found in constant sum surveys of cable system executives who are asked how they would have allocated a fixed budget for imported distant broadcast signals.

### **III. THE COPYRIGHT ROYALTY JUDGES SHOULD ALLOCATE THE 2004-05 CABLE ROYALTY FUNDS AS THEY WOULD HAVE BEEN ALLOCATED IN A MARKET.**

8. Typically, a copyright holder of non-network programming on a broadcast television station is directly compensated by that station for the use of the copyrighted programming at a rate negotiated between the station and the copyright holder. The broadcast station generates revenues from broadcasting the copyrighted programming through advertising inserted in the programs. When a cable system retransmits a “distant” broadcast station’s<sup>1</sup> signal over its facilities, the programming on that broadcast station becomes available to a larger audience than otherwise. Because the retransmitted signal contains the programming of many different copyright holders, Congress thought that there would be large transaction costs if the cable system operator had to negotiate individually with each of these numerous copyright holders for the rights to offer all of the programs offered over that signal.

9. Accordingly, Congress established compulsory licensing as a substitute for arms-length transactions between cable systems and individual copyright holders of

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<sup>1</sup> A distant broadcast station, in general, is a station that is not located in the cable system’s television market and whose carriage was not mandated under the FCC’s 1976 or current “must carry” rules.

distant-signal programming.<sup>2</sup> The terms of the compulsory license are set by statute. The resulting license fees paid by cable systems are collected by the Copyright Office in a cable royalty fund to be distributed to the copyright owners whose “non-network”<sup>3</sup> programming has been retransmitted on distant broadcast signals.

10. Congress initially gave the authority to distribute these royalties to the Copyright Royalty Tribunal (“CRT”). The CRT was replaced with the Copyright Arbitration Royalty Panel (“CARP”), which in turn was replaced by the current Copyright Royalty Judge system for royalty distribution.

11. The CRT and CARP concluded that the allocation of royalties must be based on how copyright holders would have been compensated in a market environment.<sup>4</sup> Thus, in the last litigated proceeding (covering the royalty years 1998 and 1999), the CARP concluded that “one distribution criterion appears to have stood the ‘test of time’ and has served as the principal basis for allocating cable copyright royalties -- ‘relative marketplace value.’”<sup>5</sup> In other words, the CARP’s “primary objective is to ‘simulate [relative] market valuation’ as if no compulsory license existed.”<sup>6</sup> It then proceeded to analyze a hypothetical marketplace in which “absent a compulsory license, the distant

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<sup>2</sup> Copyright Act of 1976, Pub. L. No. 94-553 § 111, 90 Stat. 2541 (1976).

<sup>3</sup> A “non-network” broadcast signal is the signal of a broadcast station that is not affiliated with the major television networks ABC, CBS and NBC. My understanding is that Fox is not considered a network for purposes of Section 111.

<sup>4</sup> *Nat’l Ass’n of Broadcasters v. Copyright Royalty Tribunal*, 772 F.2d 922, 939 (D.C. Cir. 1985) (CRT “should rely, as it has in the past, on marketplace criteria”); Report of the Copyright Royalty Tribunal in Docket No. CRT 79-1, 45 Fed. Reg. 63,026, 63,037 (Sept. 23, 1980) (compulsory license should not deprive any copyright owner of “relative copyright payment [it] would have received in a free marketplace”); Report of the Copyright Arbitration Royalty Panel in Docket No. 94-3 CARP CD 90-92 at 23-24 (May 31, 1996) (hereinafter, “1990-92 CARP Report”).

<sup>5</sup> Report of the Copyright Arbitration Royalty Panel in Docket No. 2001-08 CD 98-99 at 9 (Oct. 21, 2003) (hereinafter, “1998-99 CARP Report”).

<sup>6</sup> *Id.* at 10.

signal retransmission market would not be fundamentally different than under the compulsory license.”<sup>7</sup>

12. From an economist’s perspective, using a market valuation approach is the appropriate way to determine the royalty shares that should be awarded to each of the claimants. Congress intended the compulsory license to be a more efficient way of compensating copyright owners by eliminating the transaction costs that would result from direct negotiations between cable systems and all of the copyright owners of programming retransmitted on distant signals.<sup>8</sup> I am not aware of any evidence that Congress, through the compulsory license, intended to change the relative distributions that any claimant group would have received in a market. Although the statute does not set forth specific criteria governing how the royalty fund should be divided among the various programming categories, the CRT and CARP conclusions that distributions should approximate relative market value make economic sense because they replicate the hypothetical market value of the copyrights used.<sup>9</sup> Such a division of the royalty fund preserves as much as possible the free-market incentives that would otherwise exist for copyright holders to create content and permit its use over-the-air.

#### **IV. THE BORTZ CONSTANT SUM SURVEY IS AN APPROPRIATE MEASURE OF THE RELATIVE VALUE OF DISTANT SIGNAL PROGRAMMING**

13. In a competitive environment, a market transaction would compensate a copyright holder according to the copyrighted program’s marginal contribution to cable-

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<sup>7</sup> *Id.* at 12.

<sup>8</sup> “The Committee recognizes, however, that it would be impractical and unduly burdensome to require every cable system to negotiate with every copyright owner whose work was retransmitted by a cable system. Accordingly, the Committee has determined to . . . establish a compulsory copyright license . . .” H.R. Rep. No. 94-1476, 89 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5704.

<sup>9</sup> I have discussed this point in more detail in my testimony in prior proceedings. *See* Testimony of Robert W. Crandall (1990-92 Proceeding) (JSC 04-05 Ex. 5 at 7).



system net revenues. In other words, the cable operator would be willing to buy rights to the programming directly or indirectly from the copyright holder according to how much additional revenue the cable operator would generate by retransmitting the copyrighted programming.

14. Determining this "market value" for specific types of programming is difficult. The compulsory license requires the cable operator to pay a minimum royalty every six months even if no programming is retransmitted over that period. Moreover, the cable operator may not insert commercials or otherwise modify the distant signal. As a result, it is almost impossible to determine the precise marginal contribution to a cable system of a specific copyright holder's programming on a distant signal. Therefore, one must look for other evidence to estimate a hypothetical market between copyright holders and cable system operators.

15. The parties in the Phase I proceedings have generally advocated using one of two competing methodologies for determining marketplace value of retransmitted programming: constant sum surveys of cable system managers and household viewing studies.<sup>10</sup> Constant sum surveys ask cable system managers to allocate a percentage of a hypothetical programming budget for the non-network distant signals that they carry to each of the various programming categories – sports, movies, syndicated television series, devotional programs, public television programming, Canadian programming and locally-originated broadcast programming. Household viewing studies use data collected

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<sup>10</sup> Various regression analyses have also been offered from time-to-time in these proceedings, including by the JSC in the 1979 proceeding, Program Suppliers in the 1990-92 proceeding and by the Commercial Television claimants in the 1998-99 proceeding. The 1998-99 CARP noted that the regression analysis presented in that proceeding was useful in that it provided some corroboration of the results of the Bortz survey. 1998-99 CARP Report at 50.

by A.C. Nielsen to estimate the number of hours that households watch each program category.

16. As I have explained in earlier proceedings, the constant sum survey is the best tool to answer the question presented in this proceeding. In my testimony for the 1989 proceeding, I explained the economic theory underlying assessments of relative market value and discussed how the constant sum survey – the “Bortz survey” – was the best evidence of those values. *See* Testimony of Robert W. Crandall (JSC 04-05 Ex. 6 at 9-14). In the 1998-99 proceeding, I explained again the value of the Bortz survey data in showing relative market value and discussed why earlier criticisms of the survey were not well-founded. *See* Testimony of Robert W. Crandall (JSC 04-05 Ex. 5).

17. As I also have discussed in my prior testimony, over time, the CRT and the CARP relied increasingly (and properly) on the constant sum surveys of cable executives, the Bortz survey and its predecessors, as the best estimate of relative marketplace value of the copyrighted programming imported by cable systems.<sup>11</sup> *See* JSC 04-05 Ex. 5. In the latest CARP decision, the Panel decided that “the Bortz survey is more reliable than any other methodology presented in this proceeding for determining the relative marketplace value of [the JSC, Program Suppliers and Commercial Television] claimant groups.”<sup>12</sup>

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<sup>11</sup> The CARP considered but rejected the Nielsen viewing study sponsored by the Program Suppliers in the 1998-99 proceeding finding that it “does not afford an independent basis for determining relative value.” 1998-99 CARP Report at 44. The CARP explained that because the Nielsen Study “‘fails to measure the value of the retransmitted programming in terms of its ability to attract and retain subscribers,’ it can not be used to measure directly relative value to [cable system operators].” *Id.* at 38. As I have testified in prior proceedings, this conclusion is consistent with my own views of the Nielsen study. *See* Testimony of Robert W. Crandall (1990-92 Proceeding) (JSC 04-05 Ex. 7); (1989 Proceeding) (JSC 04-05 Ex. 6 at 15-18).

<sup>12</sup> 1998-99 CARP Report at 31. The Panel also found that the Bortz results would serve as a “floor” for determining the relative marketplace value of PTV and that the Canadians were not sufficiently represented in that survey. *Id.* The Panel resolved the Canadians’ share by relying in part on a

18. The advantage of the constant sum survey is that it attempts to measure the relative value that cable system operators place on various program categories. Since these operators would make the program purchasing decisions in the marketplace that would exist but for the compulsory copyright license, this type of survey provides the best information on the operation of the hypothetical marketplace in the absence of actual data on programming purchases, which do not exist. The Bortz survey has been conducted for over 25 years in connection with these proceedings and, over that time, has been refined and improved to respond to various criticisms.<sup>13</sup> In my opinion, it is a robust and reliable instrument with a significant track record.<sup>14</sup>

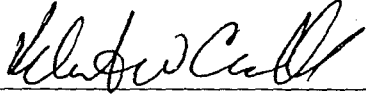
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separate constant sum survey conducted by the Canadians. The Panel did not reach the question of application of the Bortz results to determine the Devotionals' share because they had settled. *Id.* at 72-73.

<sup>13</sup> For a detailed history of the use of constant sum surveys in previous proceedings, see Section II.A of the Bortz Report (JSC 04-05 Ex. 1 at 10-11).

<sup>14</sup> The 1989 CRT, 1990-92 CARP and 1998-99 CARP reports discuss the various witnesses who have supported the Bortz survey during those proceedings. See Report of the Copyright Royalty Tribunal in Docket No. CRT 91-2-89CD, 57 Fed. Reg. 15,286, 15,292-95 (Apr. 27, 1992); 1990-92 CARP Report at 45-54; and 1998-99 CARP Report at 19-31, respectively. Economists who have supported the Bortz survey over the various proceedings include Vanderbilt University economist Dr. David Scheffman (1990-92; testifying on rebuttal for PTV) (JSC 04-05 Ex. 8 at 21-23); Boston University economist Dr. Michael Salinger (1990-92; testifying for Devotionals) (JSC 04-05 Ex. 9 at 6-10); and valuation expert Paul Much (1990-92; testifying for CTV) (JSC 04-05 Ex. 10 at 2-6).

I declare under the penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.



Robert W. Crandall

May 29, 2009

Date

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PUBLICATIONS:

Books:

*Competition and Chaos: U.S. Telecommunications since the 1996 Act.* Washington, DC: The Brookings Institution, 2005.

*Broadband: Should We Regulate High-Speed Internet Access?* (edited with James Alleman), AEI Brookings Joint Center for Regulatory Studies, 2002.

*Telecommunications Liberalization on Two Sides of the Atlantic.* (with Martin Cave) AEI Brookings Joint Center for Regulatory Studies, 2001.

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Puerto Rico Telephone Company (2007) – Testimony before Puerto Rico Telecommunications Regulatory Board

Before the  
COPYRIGHT ROYALTY JUDGES  
Washington, D.C.

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In the Matter of )  
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Distribution of the )  
2004 and 2005 )  
Cable Royalty Funds )  
\_\_\_\_\_ )

Docket No. 2007-3 CRB CD 2004-2005

Testimony of  
Judith Meyka

June 1, 2009

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## I. INTRODUCTION AND SUMMARY

1. My name is Judith Meyka and I have over 15 years of experience in the cable television industry, including experience as an executive responsible for the valuation and acquisition of television programming for major cable MSOs (multiple system operators). I am submitting this testimony to the Copyright Royalty Judges on behalf of the Joint Sports Claimants ("JSC") in connection with the 2004-2005 Cable Royalty Distribution Proceeding.

2. I understand that this proceeding involves the distribution of the compulsory licensing royalties paid by cable operators to distribute non-network programming on distant signals during the years 2004 and 2005. I further understand that the goal in distributing these royalties among the copyright owners of the programming is to allocate the royalties so that each group of copyright owners receives, as a percentage, what it would have received in a free marketplace if there were no compulsory license. This means that there must be a relative value assigned to each category of distant signal programming, i.e., live professional and collegiate team sports, movies, syndicated programs, news and public affairs programs, public television programming, Canadian programming and devotional programming.

3. At the request of JSC, I have reviewed the report of Bortz Media & Sports Group, Inc. ("Bortz") entitled "Cable Operator Valuation of Distant Signal Non-Network Programming: 2004-05," dated June 1, 2009 (JSC 04-05 Ex. 1). That Report discusses the results of two constant sum surveys in which a random sample of cable operators were asked to value the different types of programming on the distant signals they carried

during the years 2004 and 2005, respectively. The purpose of my testimony is to assess those results in light of my experience in the cable industry.

4. As explained more fully below, I believe the Bortz survey results are consistent with my experience as a cable industry programming executive. In particular, I agree that live professional and collegiate sports programming is, and was during 2004-2005, the most valuable type of non-network programming on distant signals. In a marketplace absent compulsory licensing, cable operators likely would have allocated no less than 33-37% of their distant signal non-network programming budget to acquire that programming, as reflected in the Bortz survey results. I also agree, as set forth in the Bortz survey results, that there were no changes in the marketplace between the years 1998-1999 and 2004-2005 that would have significantly affected the relative market values of sports and the other categories of non-network programming on distant signals.

## II. QUALIFICATIONS

5. I became involved in the cable industry in 1992 after I joined the law firm of Ballard Spahr Andrews & Ingersoll. As an associate attorney, I acted as counsel to the programming group Tele-Communications, Inc. ("TCI"), then the largest and most influential MSO in the country. My work with TCI included participation in the negotiation of retransmission consent agreements with broadcast television stations entered into as a result of the implementation of the 1992 Cable Act and the negotiation of cable network distribution agreements.

6. In 1998, I became Vice President of Programming for MediaOne, then a major MSO with over five million subscribers. In 2000, AT&T Broadband acquired MediaOne and I remained with the company in the same position. AT&T Broadband had

previously acquired TCI and had become the largest MSO in the country. My responsibilities with both companies included securing distribution rights for cable television programming. I also supervised the acquisition of international programming content and participated in the development of advanced products such as video on demand.

7. In 2002, Comcast acquired AT&T Broadband. I then took a position as Senior Vice President of Distribution with iNDemand, a pay-per-view and on demand movie and sports distribution entity owned by several MSOs including Comcast and Time Warner Cable. I was responsible for all matters related to the distribution of the programming content offered by iNDemand to the various cable operators.

8. In 2003, I accepted a position with Adelphia Communications to lead its programming group as Senior Vice President of Programming. At the time, Adelphia was the fifth largest cable operator with over five million subscribers located throughout 31 states. I was responsible for acquiring and managing distribution rights for programming valued in excess of \$1 billion annually. I coordinated programming efforts with the company's five regional divisions and oversaw the composition of all channel line-ups. It was my responsibility to develop and implement programming strategies that most effectively promoted the growth of the subscriber base and the rollout of advanced distribution platforms.

9. I remained at Adelphia until August 2006 when the company was sold to Comcast and Time Warner Cable. Since that time, I have worked as an independent consultant providing guidance and advice to cable industry clients including television content providers and new and established programming distribution companies.

10. Throughout my career in the cable industry, I have been closely involved with video programming (including distant signal programming) and the myriad issues relating to the purchase and distribution of this content. I have negotiated hundreds of cable programming distribution agreements and broadcast retransmission consent agreements. My responsibilities have required me to develop an understanding of, and appreciation for, the variety of available programming, the value of various program offerings and the financial ramifications for securing different types of programming.

### **III. DETERMINANTS OF MARKET VALUE**

11. Subscribers are the lifeblood of the cable operator because without them, there is no business. Subscribers can be gained or lost based on the programming offered to them by a distributor. Cable operators, therefore, must constantly assess the value of the programming they include within a channel line-up to ensure maximum subscriber satisfaction. The value of any particular programming to a cable operator is derived from the perceived value of such programming to the subscriber. The higher the perceived value to the subscriber, the more potential such programming has to attract and retain such subscribers.

12. The cable industry is a competitive marketplace with cable operators competing against other distributors for fee-paying subscribers. The objective for any distributor is to provide programming options that will result in maximum subscriber growth and minimal loss of existing subscribers. While other factors may ultimately influence a decision of whether or not to carry a particular channel, the type of programming on that channel is of paramount importance. This is particularly true of distant signals carried pursuant to the compulsory licensing provisions of Section 111 of

the Copyright Act. By law, a cable operator may not insert local advertising spots within a distant signal and, thus, there is no opportunity to receive advertising revenue to offset any of the cost of the channel. Including a distant signal on a channel line-up must bring value to that line-up by increasing its attractiveness to subscribers. MSOs carry distant signals based solely on the value of the programming on the signal and the potential impact of the signal on subscriber numbers.

**IV. THE BORTZ SURVEY**

13. I understand that the Bortz survey of cable operators is conducted each year to determine the relative value cable operators place on the various types of non-network programming transmitted by distant signals. The results of the 2004 and 2005 surveys as set forth in Table I-1 of the Bortz Report are as follows:

**Table I-1.  
Distant Signal Programming Valuation Studies, 2004-05**

	2004	2005
Live professional and college team spots	33.5%	36.9%
Movies	17.8	19.2
Syndicated shows, series and specials	18.7	18.4
News and public affairs programs	18.4	14.8
Devotional and religious programming	7.8	6.6
PBS and all other programming on non-commercial signals	3.5	3.7
All programming on Canadian signals	<u>0.2</u>	<u>0.3</u>
Total*	100.0%	100.0%

\*Columns may not add to total due to rounding.

14. The 2004-2005 Bortz survey results are similar to those reflected in the 1998-1999 Bortz surveys. A comparison of the results of the 1998-1999 and 2004-2005 surveys are shown in Table I-2 of the Bortz Report as set forth below:



**Table I-2.**  
**Comparison of Distant Signal Programming Valuation Studies,**  
**1998-1999 and 2004-2005**

	1998	1999	2004	2005
Live professional and college team sports	37.0%	38.8%	33.5%	36.9%
Movies	21.9	22.0	17.8	19.2
Syndicated shows, series and specials	17.8	15.8	18.7	18.4
News and public affairs programs	14.8	14.7	18.4	14.8
Devotional and religious programming	5.3	5.7	7.8	6.6
PBS and all other programming on non-commercial signals	2.9	2.9	3.5	3.7
All programming on Canadian signals	<u>0.4</u>	<u>0.2</u>	<u>0.2</u>	<u>0.3</u>
Total*	100.0%	100.0%	100.0%	100.0%

\*Columns may not add to total due to rounding.

15. As discussed above, the value of any particular category of distant signal programming is directly related to the ability of the programming to attract and retain subscribers. Each cable operator, given the particular circumstances of its system, is likely to value the various categories of programming differently. Based on my experience in the cable television industry, however, I believe the Bortz survey results provide an accurate assessment of how the cable industry as a whole would have allocated its distant signal royalty payments for the years 2004 and 2005.

16. I further believe that the general consistency between the 1998-1999 and 2004-2005 survey results accurately reflects the fact that there were no changes in the marketplace during this period that would have significantly affected the relative values of the different categories of programming on distant signals. This is not to say that the cable industry remained static during such period. The cable industry continually goes through shifts and changes. From 1998 to 2005 there were several large mergers or

acquisitions of cable companies which resulted in increased consolidation within the industry and a smaller number of total cable operators controlling a larger portion of the total cable subscriber universe. Further, there was a significant advancement of new distribution technologies during this time period. It was an important growth phase for the deployment of the "on-demand" platform which provided subscribers with a selection of thousands of hours of programming to watch at a time of their choosing. It was also a time of increased distribution and utilization of the digital video recorder (DVR), a technological advancement over the VCR, which allowed a subscriber to record any television program for time-shifted viewing. These innovations were of great importance to the overall growth of the cable industry, but they did not, in my opinion, significantly affect the *relative* values that the industry as a whole ascribed to the different categories of non-network programming on distant signals.

**A. Sports Programming**

17. The Bortz surveys show that cable operators valued live sports programming more than any other category of distant signal programming. In 2004, they would have allocated 33.5% of their distant signal programming budget to live sports programming and, in 2005, they would have allocated 36.9% of that budget. These results are generally consistent with my experience; indeed, I believe they represent a conservative estimate of the relative amounts that cable operators would have paid for the live non-network sports programming on distant signals during the years 2004 and 2005.

18. Other witnesses with substantial cable industry experience have appeared in prior cable royalty distribution proceedings to explain why the cable industry values

sports programming so highly. I have reviewed the written testimony of the following witnesses:

- June Travis, the former Executive Vice President, Chief Operating Officer and Board member of the National Cable and Telecommunications Association (“NCTA”), an executive at what had been the nation’s largest MSO and Chief Operating Officer of a medium-sized MSO. *See* JSC 04-05 Ex. 14
- Judith Allen, a marketing and programming executive with a major cable network and two large MSOs. *See* JSC 04-05 Ex. 15
- Michael Egan, co-owner of a small MSO and programming executive at a large MSO. *See* JSC 04-04 Ex. 16
- Jerry Maglio, a marketing and programming executive with a small MSO and what was at the time the third largest MSO. *See* JSC 04-05 Ex. 17
- Trygve Myhren, President of a small MSO and former Chairman and CEO of a mid-sized MSO. *See* JSC 04-05 Ex 18
- James P. Mooney, President and CEO of the NCTA. *See* JSC 04-05 Ex. 19
- Robert Wussler, the former CEO of Superstation WTBS. *See* JSC 04-05 Ex. 20
- Roger Werner, the former CEO of ESPN, Inc. *See* JSC 04-05 Ex. 21

19. I agree with the statements made by these witnesses concerning the value of live sports programming to the cable operator. I also believe that the reasons given by

these witnesses as to why live sports programming is valued so highly by cable operators are still relevant and equally applicable to the period 2004-2005.

20. It has long been the case that live sports programming is the most expensive programming purchased by cable operators. It is considered "must-have" marquee programming necessary to attract new subscribers and keep existing subscribers satisfied. Live sports programming was the primary driver of the increase in cable penetration in the 1990s and continues to be the focus of the competition for subscribers between cable operators and satellite television distributors.

21. Sports are an important and integral part of our culture and society. Fans will often schedule their lives around a live televised sporting event. It is the most unique programming offered by a cable operator in that it is live, non-repeat programming presented in real time and generally available on only one outlet (i.e., one network or channel). Unlike other types of programming, it is one-of-a-kind. You cannot substitute one game for another, one team for another or one sport for another. A passionate sports fan is willing to spend money to watch his or her team play and is not hesitant to switch out video providers if one is not able to make that happen. For the cable operator, this means that sports programming plays a significant role in the composition of a channel line-up and in the successful acquisition and retention of subscribers.

22. Sports fans are also the most vocal and passionate when it comes to their desired sports programming. They are intensely loyal to their teams whether they themselves are local to that team or they are a "displaced" fan located in another city looking for access to their teams' events. They may not subscribe to a cable operator's services if particular sports programming is not available and they are the first to respond

or voice an opinion if a channel with sports programming is dropped or is even believed to be at risk of being dropped from an operator's line-up. Because of its importance to a sports enthusiast, a cable system's decision to drop a channel with popular sports programming can and does result in the loss of subscribers and thus a loss of revenue.

23. In the years 2004 and 2005, the most significant distant signal was Superstation WGN, a Chicago TV station. At that time, WGN was carried by approximately 72% of all Form 3 systems which carried a distant signal.<sup>1</sup> In fact, during this period, the royalties paid to carry WGN represented approximately 63% to 65% of all royalties paid by all Form 3 systems to carry distant signals.<sup>2</sup> In terms of its ability to attract and retain subscribers, the sports programming on WGN, which included the Major League Baseball telecasts of the Cubs and White Sox and the National Basketball Association telecasts of the Chicago Bulls, was the most valuable programming that WGN offered to cable operators. In some cases and on certain channel line-ups, WGN was a staple that had been carried for many years and was well known to subscribers as "home" to the above-mentioned sports programming. The live sports programming on WGN provided popular programming not available elsewhere and brought great value to the cable operator's subscriber offering. For the cable operator, carrying live sports programming on WGN enhanced the value and appeal of a channel line-up resulting in increased subscriber satisfaction.

24. It was during 2004-2005, while at Adelphia, that I had the opportunity to meet with WGN representatives to discuss their request for additional launches of the signal beyond the markets where it was already carried. The conversation was focused

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<sup>1</sup> Source: Cable Data Corporation (JSC 04-05 Ex. 22).

<sup>2</sup> *Id.*

on increasing the availability of the live sports programming carried on WGN to more subscribers and the value the addition of that programming would bring to a channel line-up. The primary reason to launch WGN was to bring unique, desired programming in the form of live sports programming to a market because it had the greatest impact on increasing subscriber satisfaction and ultimately attracting new subscribers or keeping existing subscribers.

25. Other than WGN, the majority of distant signals carried by cable operators during the years 2004-2005 were local or regional distant signals imported into a nearby cable system. These channels were included within a line-up to provide popular regional sports programming or local interest or news programming from a larger market or neighboring state. Again, there was value to the cable operator in being able to offer programming that was unavailable elsewhere and had a particular significance to the subscriber. Sports programming shown on regionally-available distant signals also provided the cable operator with a strong vehicle to support subscriber acquisition and retention campaigns and ultimately the growth of subscriber numbers.

**B. Other Programming**

26. As set forth in Table I-1 above, the Bortz surveys show that cable operators, in 2004 and 2005, would have allocated somewhere between 15-19% of their distant signal programming budget to each of the categories of movies, syndicated programming and news and local affairs programming. Other categories such as public television, devotional programming and Canadian programming received much smaller allocations -- although the smaller allocations for public television and Canadian programming are at least partially attributable to the fact that a relatively smaller number

of cable systems carry such programming on a distant signal basis. These results generally align with my beliefs as to how the cable industry would have allocated its total distant signal programming budget for the years 2004 and 2005. I would add, however, that it is possible that a cable operator in a system without a local public television programming station might place a higher value on that category of programming because of the nature of the content in that it is generally unavailable elsewhere and includes popular programs (such as certain children's shows) that are readily recognized by a subscriber.

27. As previously expressed, subscriber satisfaction is key to growing and retaining subscribers. Subscriber satisfaction comes from offering customers a mix and blend of programming that fulfills their desires for video programming and produces the greatest subscriber demand. News and local interest programming, public television programming, movies and syndicated programming are all a part of that mix. Live sports programming, local news and public affairs programming and public television programming are particularly important components of the offering because they bring unique content that may not be available on other channels in the line-up.<sup>3</sup> By contrast, movies and syndicated programs are more readily available elsewhere and fungible with other similar programming and thus are not as effective in attracting and retaining subscribers for the cable operator.

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<sup>3</sup> To a lesser extent, devotional and Canadian programming may also add a unique element to the programming mix that might otherwise be unavailable to a cable operator.

I declare under the penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

*Judith Meyka*  
Judith Meyka

*June 1, 2009*  
Date



**Before the  
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Washington, D.C.**

In the Matter of )

Distribution of the 2004-2005 )  
Cable Royalty Funds )

) Docket No. 2007-3 CRB CD 2004-2005

**TESTIMONY OF JOHN F. WILSON**

**June 1, 2009**

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Distribution of the 2004-2005 )  
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Docket No. 2007-3 CRB CD 2004-2005

**TESTIMONY OF JOHN F. WILSON**

I am the Senior Vice President and Chief TV Programming Executive at the Public Broadcasting Service ("PBS"). In this capacity, I oversee all PBS television programming services, including the National Program Service, children's, fundraising, and syndicated programming.

My television career began at PBS member station KAET in Phoenix, where I held a variety of positions in production and programming, including Program Director, from 1982 to 1994. During that period, I produced programs that aired nationally on PBS as well as hundreds of hours of live, local programming. I also served on the Arizona Humanities Council as a panelist where I reviewed submissions for media grants.

I joined PBS in 1994 as Director of Program Scheduling and Planning. During the period in question, 2004 and 2005, I held the title of Senior Vice President and Co-Chief Program Executive. In that capacity, I had direct responsibility for the public television programming that PBS supports and distributes to its member stations. I was also heavily involved in the promotion of public television programming to member stations and the public,

and I worked closely with the many public television stations and independent producers who provide public television its rich array of programming.

Under my leadership, we significantly increased our programming and promotion budget through strategic partnerships and new approaches to contract negotiations. As a result, we were able to strengthen and reinvigorate the pillars of our schedule in 2004 and 2005, as well as develop new series, like the public affairs programs FLASHPOINTS USA and TUCKER CARLSON: UNFILTERED.

During this time, I also shaped PBS's role in digital broadcasting. Public television has been a leader in the nationwide transition to digital television. In 2005, 324 of the nation's 348 public television stations offered digital broadcast services. That same year, PBS launched the HD Channel, making it the first broadcaster to provide an around-the-clock packaged channel consisting entirely of high-definition content. Cable operators, which experienced increasing competition from satellite and telco providers of pay-television services during this time, saw such digital service offerings as a way to differentiate their own video services in the market. Consequently, public television stations were able to provide cable operators a unique and highly-valuable programming service.

In 2004 and 2005, we continued to offer our marquee children's programming, like SESAME STREET and READING RAINBOW; science programming, such as NOVA and NATURE; dramatic programming, like MASTERPIECE THEATRE and MYSTERY!; performing arts programming, including GREAT PERFORMANCES and LIVE FROM LINCOLN CENTER; and news and public affairs programming, including FRONTLINE and THE NEWS HOUR WITH JIM LEHRER.

Other key initiatives that I developed in 2004 and 2005 included the national Health Initiative and a comprehensive strategic plan for PBS. The Health Initiative included the funding of four important programs — DEPRESSION, FIGHTING FAT: AMERICA'S OBESITY EPIDEMIC, HEART DISEASE: THE HIDDEN EPIDEMIC, and WAR ON CANCER. I also spearheaded a strategic plan at PBS designed to: (1) increase accessibility to PBS programming, (2) expand science and nature programs, (3) strengthen core programs, (4) reinforce MASTERPIECE THEATRE/MYSTERY!, (5) develop new broad-appeal programs, (6) continue research in support of limited series and specials, and (7) continue research on history and performance genres.

I understand that this proceeding seeks to determine the relative values of programming to cable operators that retransmit distant television signals. Through my involvement with PBS programming during the past 27 years, I have become acutely aware of what programming appeals to viewers. I also understand the decisions that cable operators must make when choosing what programming to carry, and I understand the factors that influence those decisions.

Cable operators value programming that attracts and retains subscribers. Accordingly, it is important to focus in this proceeding on the attributes of programming that help cable operators make their service appealing to subscribers and that add to the diversity and value of the overall programming mix. Public television programming is uniquely situated to directly benefit cable operators in these ways.

**I. CABLE OPERATORS THAT RETRANSMITTED DISTANT PUBLIC TELEVISION SIGNALS IN 2004 AND 2005 PROVIDED SUBSCRIBERS WITH A UNIQUELY VALUABLE PROGRAMMING SERVICE.**

The incredible diversity of high-quality programming found on public television in 2004 and 2005 simply was not available in any comparable form on commercial television.

For this reason, the inclusion of a distant public television signal was essential for many cable operators, whether they had access to a local public television station or not.

**A. An Overview of Public Television and Its Programming**

To better understand why public television is so unique, it is important to have a general appreciation of how the public television system is structured and of the ways in which public television programming is developed and acquired.

**1. PBS Members**

The vast majority of public television stations are members of PBS.<sup>1</sup> These public television stations operate in communities throughout the United States and its territories. There is a tremendous diversity among these stations in terms of their ownership, their mission, and their programming content. Some are community licensees governed by a board of trustees from the community; others are state licensees owned by a state board of education or other state agency; others are owned and operated by universities or colleges; and still others are owned by cities, counties, or local school districts.

PBS offers a host of programming services on behalf of its members. It provides financial support for new programming, develops programming initiatives and strategies, and distributes programming to member stations via satellite from PBS's facilities in Virginia. PBS does not itself produce programs, but rather provides financial support to programming developed by independent producers and individual public television stations. PBS also engages in significant research and promotional activities to support public television programming.

While PBS cooperates with its member stations to better coordinate the carriage and scheduling of public television programs across the country, member stations remain entirely

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<sup>1</sup> More details on the overall structure of public television are found at PTV 04-05 Ex. 1.

autonomous in their programming decisions. Each station is free to define its own particular focus, to decide on its mix of programming, and to formulate a schedule for its programs. Many public television stations have created distinctive identities for themselves in local communities across the country, and as a result there is a wide variety of programming types and scheduling diversity on different public television stations.

## **2. PBS Programming Sources**

The public television programming distributed by PBS to its members comes from a variety of sources.<sup>2</sup> The National Programming Service (NPS) is the primary source of programming for member stations. In 2004 and 2005, it provided the full variety of public television programming, including informational, dramatic, performance, and children's programming, to the 348 PBS member stations.

In addition to the NPS, PBS also offers stations PBS Kids, PBS You, and the HD Channel, which are fully packaged, 24-hour channels of programming. Stations also have access to a wide variety of additional PBS programs through PBS Plus, PBS Fundraising Programming, and the Schedule X Suite, a set of fully-packaged, 24-hour channels for stations to broadcast or to feed to cable systems' headends.

Local public television stations can also acquire diverse and original programming from sources other than PBS. National and regional services such as American Public Television, Central Educational Network, and National Education Telecommunications

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<sup>2</sup> In this proceeding, PBS is representing its member stations plus all other copyright owners who have made claims for programming carried on public television stations during the years 2004 and 2005. These public television claimants are listed in PTV 04-05 Ex. 3.



Association make programming available to public television stations on an ongoing basis, entirely outside of PBS's distribution service.

Local public television stations also produce their own original programming for broadcast. These programs are on occasion distributed nationally by PBS, and added further variety, distinction and value to the cable operators that retransmitted public television signals in 2004 and 2005. Examples of programs acquired for national distribution in 2004 and 2005 include THE NEWS HOUR WITH JIM LEHRER and LIFE & TIMES OF FRIDA KAHLO, both of which were produced here in Washington, D.C. by WETA. From WGBH, our flagship station in Boston, came well-known series such as NOVA, MYSTERY!, FRONTLINE, ANTIQUES ROADSHOW, and ZOOM. Another prolific producer of programs is Thirteen/WNET in New York. Each season it makes the arts available in living rooms throughout the nation with AMERICAN MASTERS and GREAT PERFORMANCES. Maryland Public Television produced WALL STREET WEEK WITH FORTUNE, and WPBT produced NIGHTLY BUSINESS REPORT. Our stations west of the Mississippi are also highly productive and added to the diversity of programming on PBS in 2004 and 2005. For example, Oregon Public Broadcasting produced HISTORY DETECTIVES; KCET in Los Angeles produced AMERICAN FAMILY; and KQED in San Francisco produced CHINA INSIDE.

**B. Public Television Offers a Rich Diversity of Programming That Benefited Cable Operators That Chose To Retransmit Distant Public Television Signals in 2004 and 2005.**

A hallmark of the programming available on public television is its diversity, particularly when compared to commercial television. Public television offers program options

that are simply not available in any comparable form on commercial television.<sup>3</sup> Even in the face of increasing competition from specialty cable channels, public television remains the only service to offer the “best of the best” programming in many areas, with an unmatched consistency week after week and year after year.

In 2004 and 2005, PBS provided its member stations with access to over 3700 hours of original, first-run programming.<sup>4</sup> These programs are created for public television by producers throughout the country, as well as through co-productions with international producers. This programming is explicitly formulated and structured to achieve diversity in terms of content, format and audience. (The programming charts at PTV 04-05 Ex. 8 illustrate the varied mix of programming that PBS offers.) This type of programming is, by its nature, unlikely to ever be found on commercial television because any one program may not maximize viewing audience and would not successfully compete for advertising dollars. As Al Jerome, president and CEO of Los Angeles public television station KCET-TV and former president of the NBC owned-and-operated stations, explained in 2004, “PBS is in a better position to provide programming that other broadcasters are not interested in, since public television does not face the same constraints for-profit media outlets must contend with.”<sup>5</sup>

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<sup>3</sup> The Copyright Royalty Tribunal noted the diversity and unique attributes of public television programming: “public television programs occupy a unique place in the cable television marketplace by presenting diverse programming that is not available on commercial signals.” 1982 Copyright Royalty Distribution Determination, 49 Fed. Reg. 37653, 37655 (1984).

<sup>4</sup> For FY 2004, PBS provided its member stations with 1829 hours of original programming for all genres. In FY 2005, that number increased to 1932.

<sup>5</sup> Christopher Lisotta, “PBS Sets Diversity Curve: Broadcaster Touts Its Multicultural Slate, ‘Maya & Miguel’ Debut,” Television Week, Sept. 6, 2004.

A brief sampling of some of our highlights from 2004 are included in the DVD that I have provided at PTV 04-05 Ex. 2. PBS's complete national programming schedules for 2004 and 2005 are found at PTV 04-05 Ex. 8.

### **1. PBS Children's Programs**

One of the unique benefits provided by public television is in the field of children's programming. A cable operator that retransmits a distant public television signal is unquestionably able to appeal particularly to the many cable households that have young children. Based on my long experience in the industry, I know that public television enjoys a particularly avid viewership among young children. Likewise, I know that the parents of those children place especially heavy value on the educational children's programming of public television and that parents appreciate that public television programming is free of commercial advertisements. For example, PBS KIDS is ranked first in children's programming by parents of children aged 2 through 11.<sup>6</sup> This appeal directly benefits cable operators by allowing them to attract and retain parents as subscribers. A cable operator without a public television station on its system would be at a significant disadvantage in attracting parents with small children.

PBS offers a diverse mix of children's programs especially designed for discrete age groups. One roster of programs is oriented toward preschoolers (ages 2 to 5), and another is directed toward elementary school children (ages 6 to 12). The children's programs offered by PBS have been designed as educational programs with specific learning objectives in mind.<sup>7</sup>

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<sup>6</sup> Harris Interactive Poll, July 2005 (1,354 parents polled).

<sup>7</sup> Different PBS children's programs are designed to address the development of physical/motor skills, social/emotional skills, critical thinking/problem solving, language/literacy, cognitive skills, science, life skills, the appreciation and understanding of cultural/social diversity, and music/art appreciation and performance.

Educational consultants and child development specialists play important roles in the development of these programs.

In 2004 and 2005, we worked hard to maintain and advance PBS's position as the number one destination for children's programming — programming that kids want to watch and that parents trust. Despite being “[i]n an era when children have unprecedented choices of what to watch — via broadcast and cable television, videos, computer games, even DVDs in their family cars — ‘Sesame Street’ is still the gold standard of kids’ educational programming.”<sup>8</sup> In addition to SESAME STREET, programs airing in 2004 and 2005, such as ARTHUR, BARNEY & FRIENDS, DRAGON TALES, CLIFFORD THE BIG RED DOG, TELETUBBIES, ZOOM (a variety program by and for school-age children), MISTER ROGERS NEIGHBORHOOD, CAILLOU, and READING RAINBOW, helped preschoolers prepare for school and formal learning by providing a greater awareness of letters, numbers, and an introduction to social skills and ethics in group play settings. In 2004, PBS also launched the PBS Kids GO! Block, with new shows POSTCARDS FROM BUSTER, IT'S A BIG BIG WORLD, and CURIOUS GEORGE quickly becoming popular additions to the line-up.

MAYA & MIGUEL, which targets kids ages 6 to 11, was also a new edition to the programming line-up. The program, which highlights the adventures of a set of Hispanic twins and their bilingual parrot, not only includes English and Spanish dialogue, but also helps children learn that America is a nation of many cultures and languages: in the program, the twins' mother is Mexican, their father is Puerto Rican, and Maya's best friend is part of a first-generation Chinese-American family.

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<sup>8</sup> Suzanne C. Ryan, “‘Sesame Street’ Marks 35 Years on the Block in Crowded World of Kids’ Media, It’s Going Strong,” Boston Globe, at N7 (Apr. 4, 2004).

## 2. PBS Programming in a Variety of Subject Areas

Beyond children's programs, PBS offers an extremely wide variety of programming for general audiences of all ages. Many of these programs are also uniquely designed as telecourses and are created by teams of talented producers working closely with experts.

**History.** In 2004 and 2005, we proactively developed and introduced a new history series, HISTORY DETECTIVES. American history also was presented through, among other programs, BLACK PRESS: SOLDIERS WITHOUT SWORDS and our signature series THE AMERICAN EXPERIENCE. World cultures and world history were shown through programs like CHINA INSIDE, ELUSIVE PEACE, MARIE ANTOINETTE, and WALKING THE BIBLE.

In a three-part series produced exclusively for PBS, GUNS, GERMS, AND STEEL explores the theories of Pulitzer Prize-winning scientist Jared Diamond. The series, which aired in 2005, includes historical re-enactments and traces the rise and fall of societies around the world. Some of the world's leading historians, archaeologists, biologists, and anthropologists share their perspectives on how the power of guns, germs, and steel shaped the progress of human civilization.

**Science, Medicine, and Technology.** The latest developments in science, medicine and technology were addressed in ways that the public can understand and to which they can relate. For example, these topics were explored in-depth on series such as NOVA and SCIENTIFIC AMERICAN FRONTIERS. Natural history was covered in the PBS series NATURE, as well as limited series like NATIONAL GEOGRAPHIC SPECIALS. The documentary THE FORGETTING: A PORTRAIT OF ALZHEIMER'S portrayed several families struggling with Alzheimer's and provided critical information on the effects of the

disease. It also explained the research being done to slow the progression of this devastating disease. Although the number of Alzheimer's cases around the U.S. has skyrocketed to 5 million, this powerful documentary, and other programming like it, could be found only on public television.

***The Arts.*** Classics of world literature were brought to the screen through MASTERPIECE THEATRE. The performing arts were featured on GREAT PERFORMANCES, which included ballet, drama, modern dance, musical theater, opera and orchestral performances. Other live or taped special events on public television in 2004 and 2005 included OPERATUNITY, A CAPITOL FOURTH, and THE NATIONAL MEMORIAL DAY CONCERT. In addition, ART IN THE 21<sup>ST</sup> CENTURY provided viewers in even the most remote rural areas access to many of America's most celebrated pieces of artwork, including works from Georgia O'Keefe, Jackson Pollock, and Andy Warhol.

Critics have recognized the void that public television fills when it comes to programming on the arts. In 2005, Tim Page of The Washington Post wrote, "Over the past few decades, classical music has become a rarer and rarer commodity on network television. . . . Which is why a four-part television series that will be presented by WETA, Channel 26, this weekend and next deserves your attention. . . . They manage to convey some important information about an increasingly neglected art."<sup>9</sup> In 2004 and 2005, public television continued to offer access to some of the top musical performances through LIVE FROM LINCOLN CENTER, which included performances like the "New York Philharmonic Opening Night," and GREAT PERFORMANCES, which included "From Shtetl to Swing."

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<sup>9</sup> Tim Page, "PBS's Classical 'Conversations' Is a Concert in Words," The Washington Post, June 18, 2005.

*News and Public Affairs.* PBS presented a large number of award-winning programs offering news analysis and covering public affairs. For example, in 2004 and 2005, FRONTLINE earned two Alfred I. duPont-Columbia University Awards, a Peabody Award, and two Emmy Awards. THE NEWSHOUR WITH JIM LEHRER received a Peabody Award and an Emmy Award during this period.

Along with FRONTLINE and THE NEWSHOUR WITH JIM LEHRER, WASHINGTON WEEK, WALL STREET WEEK WITH FORTUNE, and NIGHTLY BUSINESS REPORT were among the important programs in this category during 2004 and 2005. We also introduced two new public affairs series: FLASHPOINTS USA and TUCKER CARLSON: UNFILTERED.

PBS continued to be the most trusted source of news and public affairs programming, with four in ten people saying they trust PBS “a great deal” in this regard.<sup>10</sup> In 2004, THE NEWSHOUR WITH JIM LEHRER also was voted the most “objective” and “credible” weekday news program among opinion leaders.<sup>11</sup>

We once again offered viewers in-depth and comprehensive Presidential election coverage in 2004. PBS was the only entity among the major over-the-air broadcasters to offer full live coverage of the events from the podium of the Democratic and Republican National Conventions. With an average of 2.9 million viewers a night, PBS attracted more viewers than the competing cable news outlets.<sup>12</sup>

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<sup>10</sup> Roper Public Affairs & Media, *Roper Public Opinion Poll on PBS: 2005 Update*, February 2005, at [http://www.pbs.org/roperpoll2005/roper2005\\_files/frame.html](http://www.pbs.org/roperpoll2005/roper2005_files/frame.html).

<sup>11</sup> Erdos & Morgan, *Opinion Leaders Study*, April-June 2004 (1,692 opinion leaders).

<sup>12</sup> Elizabeth Jensen, “PBS Carries Convention Momentum into N.Y.,” Los Angeles Times, Aug. 30, 2004.

### **3. PBS Programs Featuring Various Regions and Ethnic Groups**

Public television programming also has significant ethnic and regional diversity.

In 2004 and 2005, we focused on bringing to the schedule a greater number of programs that reflect the diversity of our nation. For example, PBS brought the Tony Hillerman Native American novels to life as part of the MYSTERY! series. PBS also brought the first and only Latino American drama series, AMERICAN FAMILY, to national broadcast. During this time, PBS presented one-of-a-kind programming such as: BLACK PRESS: SOLDIERS WITHOUT SWORDS; the LIFE & TIMES OF FRIDA KAHLO, which frames the extraordinary life of twentieth century Mexican artist Frida Kahlo in relation to the full spectrum of the historical and cultural influences that shaped her work; SEARCHING FOR ASIAN AMERICA, a special featuring three, intimate profiles exemplifying the lives of Asian Americans in the U.S.; and VISIONES, a series examining the nation's diverse Latino communities and how they have been able to keep their artistic expressions alive.

Public television also presented a range of programming about many different regions throughout the country. For example, PBS offered CALIFORNIA BEYOND THE DREAM and NIAGARA FALLS in 2004.

### **4. Programming Services for Deaf and Visually-Impaired Viewers**

Public broadcasting has been a leader in ensuring that all Americans have access to quality television programming. Public broadcasting pioneered access to television for disabled audiences through its introduction of captioning for deaf and hard-of-hearing viewers over thirty years ago. In 1990, PBS extended access to television to blind and visually impaired individuals with the introduction of Descriptive Video Service. Public television stations strengthened its commitment to improving access to programming in 2004 and 2005. For example, in 2005, ninety-six stations produced local content using the Secondary Audio Program



(SAP) channel for the hearing impaired, and, in collaboration with Stevie Wonder, public television stations offered the first music video accessible via descriptive narration.

#### **5. Independently Produced Programming on Public Television Stations**

Public television acquires a considerable amount of valuable programming from unaffiliated independent producers, distinguishing it from commercial broadcast television and cable networks. These producers contribute hundreds of hours each year of original, high-quality programming that are not available anywhere on commercial broadcast television or cable networks. In 2004 and 2005, more than three-quarters of PBS's programming involved independent producers. To provide just a few examples, KEN BURNS' AMERICAN LIVES by Florentine Films, BLACK PRESS: SOLDIERS WITHOUT SWORDS by Stanley Nelson, INDEPENDENT LENS by Independent TV Service, and P.O.V. by American Documentary, Inc., each offered unique perspectives on important public issues.

#### **6. Local Programming on Public Television Stations**

In contrast to commercial broadcasting, which is centralized, the public television system remains decentralized. Every public broadcasting station is under local control or ownership. Public television stations are increasingly the only locally owned and operated media outlet in their communities. Unlike any other programming service, public television stations provide programming that is responsive to the needs of their communities, relying on input from local governing boards, community advisors, volunteers, and partnerships with local organizations.

One way in which stations serve their local communities is by producing and airing programming solely for their own use or for limited regional distribution. For example, in 2004 and 2005:

- KUAT-TV in Tucson, Arizona, produced REFLEXIONES DOMINGO, a weekly Spanish language current affairs program.
- Working with a local mosque to coordinate an educational effort to combat growing discrimination against Muslims, KBDI-TV in Denver, Colorado, produced a special call-in program dedicated to increasing understanding of Denver's Muslim community.
- KLCS-TV in Los Angeles, California, produced ADELANTE! WITH JOSE HUIZAR, an education information program produced in English and Spanish.
- WCSY-TV in Syracuse, New York, created the series MY SO-CALLED DISABILITY, which addresses the concerns and needs of individuals with physical and mental disabilities.
- WEDU-TV in Tampa, Florida, hosted SAVING FLORIDA'S KIDS, a roundtable discussion highlighting the needs of children in foster care and the importance of adult involvement in the state's foster-to-adopt program.

One would be hard pressed to find similar programming on the commercial broadcast or cable networks.

Locally produced programming provides cable operators retransmitting distant signals with yet another benefit: an additional public television station that contains locally-produced programming of regional interest that is not necessarily available on the local public television station.

#### **7. PBS Educational Initiatives**

As a reflection of the obvious contrast between public television and commercial programming, several PBS programs include special educational components that allow viewers to register at local colleges and obtain college credit upon the completion of pertinent

requirements. In 2004 and 2005, a vast array of public television programs were broadcast in conjunction with these college-credit programs at colleges nationwide.

In addition, more than 105 million households had access to the GED CONNECTION series in 2005, which was broadcast by 243 public television stations, and more than 70 million households had access to WORKPLACE ESSENTIAL SKILLS, which was carried by 176 public television stations nationwide.

The Ready to Learn service is one of public broadcasting's most ambitious efforts at combining television, online services, caregiver workshops, teacher/parent training, and media literacy information to help children become and stay ready to learn. The Ready to Learn service was launched in 1994 and is supported by funding from CPB, the U.S. Department of Education, and PBS. The Ready to Learn service helps prepare children ages zero to eight for success in school through educational television programming and other services, and it is targeted to the parents and teachers of children most at risk of not entering school ready for success, such as children in families that have a low income, have limited literacy, do not use English as their primary language, have young children with disabilities, or live in rural areas.

**C. The Unique Mix of Quality Programming Available on Distant Public Television Signals Benefits Cable Operators.**

In 2004 and 2005, specialty cable channels, with names like "Discovery Channel," "Arts & Entertainment," "The Learning Channel," "Animal Planet," and "The History Channel," attempted to compete in a number of the programming niches traditionally occupied by public television by offering facially similar programming. Public television, however, is unique among these look-alike channels in that each public television station offers a mix of the best of each programming genre represented by the look-alikes.

The specialty cable channels have to fill around-the-clock schedules with programming related only to their niches, such as science, culture, education, nature, or history. This inevitably leads to inclusion of programming that is not always the most recent or of the highest quality. Public television, on the other hand, offers programming in a multitude of genres, allowing it to select the “best of the best” programming in each area. Public television is known not only for its science programming or cultural programming or educational programming or nature programming or history programming. It is known for providing an immense variety of the highest-quality programming from these genres and more. Because two of the attributes of programming that cable subscribers value most are high-quality programming and a wide variety of programming, public television stations provide significant value to cable operators, who can offer with just one distant public television channel the equivalent of perhaps a dozen specialty channels.

Viewers recognize the difference in quality between public television and the cable knock-offs. In a 2004 study conducted by City Square Associates and commissioned by the Corporation for Public Broadcasting, one viewer remarked, “When I think Discovery Channel, I think high school, when I think of [PBS’s] NOVA, I think of college.”<sup>13</sup> Another viewer indicated that the specialty cable channels lack real substance, stating “Sometimes when I’m watching the History Channel, it’s just a lot of pictures going by.”<sup>14</sup>

Moreover, viewers consistently rank PBS as much more valuable than commercial television and cable television. In 2004, close to six in ten rated PBS “very

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<sup>13</sup> Corporation for Public Broadcasting, *Ten Viewer-Based Principles to Guide the Development of a Primetime Programming Strategy for Public Television*, at 4 (Sept. 2004). This report is attached as PTV 04-05 Ex. 6.

<sup>14</sup> *Id.* at 9.

important” (59 percent), versus four in ten or fewer who feel this way about commercial (40 percent) or cable (36 percent) television.<sup>15</sup> PBS also garnered much higher ratings of satisfaction than either commercial or cable television. About one third say they are “very” satisfied with PBS (34 percent in 2004 and 38 percent in 2005), versus one quarter (24 percent in 2004 and 21 percent in 2005) who feel this way about cable television and just 16 percent for commercial television.<sup>16</sup> PBS is the most trusted source of news and public affairs programming among television programmers. In 2005, PBS was one of the few programmers that gained trust with viewers in this category from 2004 to 2005 (40 to 41 percent). All of the other news outlets except NPR were down, and three of the cable networks were down significantly: CNN (33 to 28 percent), MSNBC (21 to 17 percent), and CBS (20 to 16 percent).

The diverse and high-quality programming on public television, and thus the attractiveness of public television to cable subscribers, is not lost on cable operators. They realize that carrying at least one public television service is imperative. They also realize that the programming diversity offered by additional public television services is a strong incentive to add additional distant public television signals.

**D. The Scheduling Variety Made Possible by Distant Public Television Signals Benefited Cable Operators in 2004 and 2005.**

Distant retransmission of public television signals leads to diversity of another kind that directly benefits cable operators. Unlike the programming provided by the commercial networks to their affiliates, PBS member stations do not broadcast the diverse array of quality

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<sup>15</sup> Roper Public Affairs & Media, *Roper Public Opinion Poll on PBS*, February 2004, at [http://www.pbs.org/roperpoll2004/pbs\\_roper.html](http://www.pbs.org/roperpoll2004/pbs_roper.html).

<sup>16</sup> *Id.*; Roper Public Affairs & Media, *Roper Public Opinion Poll on PBS: 2005 Update*, February 2005, at [http://www.pbs.org/roperpoll2005/roper2005\\_files/frame.html](http://www.pbs.org/roperpoll2005/roper2005_files/frame.html).

programming available from PBS on the same schedule. Rather, stations have the autonomy to air programming according to their best judgment.

Consequently, when a distant public television signal is retransmitted into a market with a local public television signal, one of the stations will typically adjust its programming schedule (to the extent the schedules are duplicative) in order to avoid or minimize schedule and program duplication. For example, one station usually will shift the timing of the national programming it carries and/or choose to air programming that is not available on the other signal. Sometimes a local station will differentiate its programming in response to the retransmission of a distant signal; in other cases, a smaller station will differentiate its programming in order to make it more attractive for carriage as a distant signal by a cable system in a nearby large market.

One example of intentional schedule differentiation is found in Phenix City, Alabama. Phenix City is near the Georgia-Alabama state border, and in 2005, both the local station WJSP and distant station WAIQ were carried by the cable system serving the Phenix City area. Each station aired locally-produced programming to set itself apart from the other station. For example, based on programming aired in a single week in January 2005, WAIQ produced ALABAMA EXPERIENCE (a history series), DISCOVERING ALABAMA (a documentary on the natural history and heritage of Alabama), and THE RURAL STUDIO (a program profiling the Rural Studio of Auburn University, where architecture students design and build one-of-a-kind homes and community spaces for one of the nation's poorest regions). WJSP produced GEORGIA OUTDOORS (a series airing four times a week for outdoor enthusiasts), GEORGIA WEEK IN REVIEW (a weekly public affairs series), and LAWMAKERS 2005 (a program that airs every night during the legislative session). In addition, while WAIQ produced ALABAMA

AT WORK, a documentary series profiling Alabama businesses, WJSP produced GEORGIA BUSINESS REPORT, a weekly series covering business and financial news. Additional examples of how public television stations carried by cable operators differentiated their programming in 2005 are provided in PTV 04-05 Ex. 5.

When television viewers realize that a cable system carries multiple public television services that provide schedule diversity, they perceive the cable system as providing a more attractive service. A cable operator who chooses to import one or more distant signals in addition to carrying a local public television station is able to offer its subscribers access to a broader array of public television programming and more scheduling choices (because the same program may be available on different stations at different times of the day). The schedule diversity provided by the retransmission of distant public television signals thus allows cable systems to attract and retain subscribers.

**E. Public Television Programming's Widespread Critical Acclaim Substantially Benefited Cable Subscribers and Operators in 2004 and 2005.**

Another measure of the benefit of distant retransmission of public television is the widespread critical acclaim that our programming consistently receives.<sup>17</sup> The television industry long has recognized the uniquely high quality of public television programming. And television critics consistently recommend public television programs as the ones worth watching.

For its 2004 and 2005 seasons, for example, PBS programs won numerous awards and accolades. The Peabody and duPont-Columbia awards are considered the highest honors in

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<sup>17</sup> Included at PTV 04-05 Ex. 4 is a listing of awards that public television programming received for the years 2004 and 2005. PTV 04-05 Ex. 7 includes illustrative newspaper articles and critical commentary touting public television programming.

the television profession. The Peabody award recognizes overall excellence in television,<sup>18</sup> and the duPont-Columbia award, which is affiliated with the Columbia University School of Journalism, recognizes particular achievement in broadcast journalism.<sup>19</sup> For its 2004 and 2005 seasons PBS programs won 6 duPont-Columbia University awards and 10 Peabody awards, more than all other broadcast or cable networks combined. PBS also won 50 Emmy awards, including 14 Emmy awards for news and documentaries, 2 Emmy awards for business and financial reporting, 17 daytime Emmy awards, and 17 primetime Emmys. In children's programming, PBS consistently tops all other broadcast and cable networks combined in terms of its Emmy awards. In addition, in 2005 PBS earned 2 IDA Distinguished Documentary Achievement Awards for P.O.V. "Street Fight" and AMERICA'S LOST LANDSCAPE: THE TALLGRASS PRAIRIE. In that same year, PBS also won 2 NAACP Image Awards and was nominated for 10 Writers' Guild of America Awards. See PTV 04-05 Ex. 4 (illustrative list of programming awards to public television).

Recommendations given by television critics reinforce the same point. Included at PTV 04-05 Ex. 7 is a compilation of just a few of the many enthusiastic reviews given to the watershed events in public television programming in 2004 and 2005. In addition, in 2004 and 2005, public television garnered over 150,700 column inches of editorial coverage in a selection of national publications. If paid advertising, this coverage would have been worth over \$73 million. Clearly, public television is widely recognized as offering innovative, superior programming that is simply different from the offerings of commercial television.

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<sup>18</sup> See The University of Georgia, The Peabody Awards, available at <http://www.peabody.uga.edu>.

<sup>19</sup> See Columbia University Graduate School of Journalism, The Alfred I. duPont-Columbia University Awards, available at <http://www.jrn.columbia.edu/events/duPont/>.



When programming is so widely acclaimed, there are obvious and important benefits to cable operators who can offer that programming to their subscribers. A cable operator that could not offer an attractive mix of public television programming would be lacking the most widely acclaimed programming on television today. Similarly, subscribers surely would see major deficiencies in the programming mix of a cable operator that did not offer a full slate of the programs that television critics and the industry single out as being particularly noteworthy. The 2004 report commissioned by the Corporation for Public Broadcasting demonstrates that many of the attributes most sought by subscribers in programming are the attributes of PBS. These attributes include trustworthiness, high quality, intelligence, balance, uniqueness, engagement, and variety. See PTV 04-05 Ex. 6.

**F. PBS's Promotional Activities in 2004 and 2005 Provided Value to Cable Operators That Retransmitted Public Television Signals in 2004 and 2005.**

Throughout 2004 and 2005, PBS undertook a number of significant new promotional initiatives — unprecedented in their scope and focus — aimed directly at increasing the attractiveness and visibility of public television as a major alternative to commercial television. The result was that public television maintained its established role as a highly visible, attractive, and uniquely valuable source of alternative programming for cable operators that retransmitted distant public television signals.

For example, during 2004 and 2005, PBS selected numerous high-profile programs to support through paid media, on-air promotion, publicity and special events. Just a few of the programs supported include: FRONTLINE, NOVA, ANTIQUES ROADSHOW, AMERICAN EXPERIENCE, FLASHPOINTS WITH BRYANT GUMBEL AND GWEN IFILL, AMERICAN MASTERS, AMERICAN FAMILY, P.O.V., WASHINGTON WEEK,

JAPAN: MEMOIRS OF A SECRET EMPIRE, CHARLIE ROSE, VIDEO GAME REVOLUTION, and BROADWAY: THE AMERICAN MUSICAL.

Promotional support included placing ads in TV Guide, national magazines (e.g., People, Time, Newsweek, New Yorker, Atlantic Monthly, Harpers, U.S. News & World Report, and Oprah), the national newspaper USA Today, and banner ads on selected Internet sites.

During this same period, PBS developed and launched PBS SPROUT, a cable television channel for PBS children's programs and services. The launch included new animation packaging, heavy on-air promotion, an extensive paid media campaign and major publicity support. PBS's launch of the cable network heightened awareness of and demand for the high-quality children's programming that local public television stations offer.

These promotional developments bear directly on the benefits to cable operators from the retransmission of distant public television signals. PBS's strong visibility and presence in the television marketplace and its major programming initiatives in 2004 and 2005 clearly increased the value of public television programming as a distant signal for cable operators. Given our highly publicized track record of providing first-run programming of substantial nationwide interest to television viewers, cable operators were aware that their subscribers found public television programming of real interest. That subscriber demand made retransmitting a distant public television signal a true necessity for those operators that did not have access to a local public television signal, and also encouraged cable operators to add additional public television services through distant retransmission so as to offer programming and scheduling diversity.

**II. THE FUNDING AND EXPENSE OF PUBLIC TELEVISION DEMONSTRATE ITS VALUE TO CABLE OPERATORS.**

**A. Voluntary Contributions by Public Television Viewers Show the Avidity of Their Interest in Public Television Programming.**

The largest single source of funding for public television is the voluntary contributions made by public television viewers across the country. For instance, public television raises more money in voluntary contributions from subscribers than it receives in federal support from the Corporation for Public Broadcasting. In FY 2004, the public made voluntary contributions to public television that amounted to roughly \$372 million. Similarly, in FY 2005, PBS received approximately \$373 million in voluntary contributions.

The fact that public television viewers across the country are willing to make voluntary contributions in these amounts is powerful evidence of their avid interest in our programming. By its very nature, much of our programming is not likely to attract large nationwide viewing audiences. Instead, we attract a highly loyal viewership for different programming niches. Viewers' loyalty is manifest in the willingness of so many individuals to make contributions to something that they are, of course, entitled to watch for free. This loyalty also is important to cable operators who capitalize on it by retransmitting distant public television signals.

**B. Public Television Constantly Faces Funding Pressures.**

Even though PBS is charged by law with serving the informational and educational needs of the American public, PBS and its member stations must nonetheless operate as a business enterprise. The availability of capital is directly related to which projects are and are not undertaken. Accordingly, we must try to predict and act in accordance with the marketplace in order to succeed.

The creators of public television programming — including local public television stations and independent producers such as Sesame Workshop — produce programs primarily by attracting financial backing from PBS as well as foundations and corporations. There are many more requests for funding than can be met by PBS's limited resources.

Funding pressures are a constant concern, even for successful, well-established programs, which are under constant pressure to reduce their budgets without sacrificing the quality necessary to compete in an increasingly competitive marketplace. Public television stations, too, face constant pressure to increase revenues from viewers and local benefactors and to develop new approaches for serving the needs of their communities. Local stations often must fund their own initial program development and production costs.

PBS has the unenviable role of trying to accommodate its member stations, which want better, more extensive programming at lower cost, and at the same time, to meet the needs of program producers, including those same local stations, who are full of new ideas but constrained by funds — and who in any event have continually increasing demands for funds simply to support established programs. Producers of public television programming constantly labor under the cloud of an uncertain financial future. Nearly all spend as much time seeking to raise funds as actually practicing their art. The fact of life at PBS is that the availability of funds, such as the royalty awards at issue in this case, makes a difference as to what can and cannot be produced, both by independent producers and local stations. When cable operators reap the benefits of public television's quality programming by retransmitting distant public television signals, public television should receive its fair share of the royalties paid for those retransmissions.

**C. Public Television Programming Is Expensive.**

As noted above, PBS offers its member stations nearly 2,000 hours of original, first-run programming each year. This is an extremely expensive proposition. The large volume of documentary and public interest programming on public television each year is particularly expensive. Documentary production can cost up to \$1 million an hour, depending on production timelines, the amount of location shooting, and where the location shooting takes place. These types of programming can require exhaustive, expensive research and background work and may need years of time and investment to bear fruit. PBS is in fact unique in the amount of money it spends on program research — research that commercial television will not support on any sort of regular basis.

We also have to search constantly for funding to support new programming of even the most successful ongoing programs on public television, including such programs as THE NEWSHOUR WITH JIM LEHRER, FRONTLINE and GREAT PERFORMANCES. Without being able to rely on advertising dollars, public television by its very nature has no programming that is free from funding pressures because it is a “commercial success.”

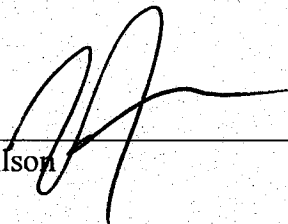
Again, when cable operators reap the benefits of providing quality public television programming that is necessarily expensive to produce, public television’s share of the cable royalty fund should reflect the value inherent in the retransmitted programming.

\* \* \*

**DECLARATION**

I, John F. Wilson, declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge, information and belief.

John F. Wilson

A handwritten signature in black ink, appearing to be 'JF Wilson', written over a horizontal line.

Executed this 29th day of  
May 2009.

# Tab 1





## PBS: An Overview

### PBS in Brief

- A private, nonprofit corporation founded in 1996 whose members are America's public TV stations.
- Provides quality TV programming and related services to 348 noncommercial stations serving all 50 states, Puerto Rico, the U.S. Virgin Islands, Guam and American Samoa.
- PBS oversees program acquisition, distribution and promotion; education services; new media ventures; fundraising support; engineering and technology development; and video marketing.

### PBS Member Stations

- 169 noncommercial, educational licensees operate 349 PBS member stations
- Of the 169 licensees, 86 are community organizations, 57 are colleges/universities, 20 are state authorities and 6 are local educational or municipal authorities.

### The Public Television Audience

- The public TV audience reflects the social and economic makeup of the nation.
- PBS and its member stations reach nearly 90 million people each week through on-air and online content.

### PBS Education Services

- PBS Ready To Learn helps to increase school readiness for all of America's children with an unrivaled line-up of educational and entertaining children's programming each weekday, coupled with short educational video spots. The value and impact of these programs are enhanced through outreach services provided by more than 140 local PBS stations to their communities, including workshops, free children's books, a magazine and other learning resources to help parents, teachers and child-care providers prepare young children to enter school ready to learn. Developed in cooperation with the U.S. Department of Education, PBS Ready To Learn has helped nearly one million parents and teachers prepare eight million children for success in school.
- PBS TeacherSource helps preK-12 educators learn effective ways to incorporate online tools in the classroom through nearly 5,000 free lesson plans, teachers' guides, homeschooling guidance and other resourceful activities — all correlated to national and state curriculum standards.
- Funded by the U.S. Department of Education, PBS TeacherLine provides high-quality professional teacher development through more than 90 online facilitated courses in reading, mathematics, science, curriculum & instruction and technology integration.
- The PBS Adult Learning Service, a partnership involving local PBS stations and colleges, provides college credit TV courses to nearly 500,000 students each academic year.

### PBS Programming Activities

- The National Programming Service is the major package of programs that PBS distributes to its member stations. It features television's best children's, cultural, educational, history, nature, news, public affairs, science and skills programming.
- Programs are obtained from PBS stations, independent producers and sources around the world. PBS does not produce programs.

### PBS Digital Leadership

- PBS.org is not only one of the most visited dot-org Web site in the world, it is also the home of comprehensive companion Web sites for more than 1,000 PBS television programs and specials, as well as original Web content and real-time learning adventures. With hundreds of thousands of pages of content to explore, visitors to award-winning pbs.org can delve further into the subjects they most enjoy — from news to history and the arts to science and technology.
- PBS member stations are digital television leaders, from groundbreaking work in interactive TV and a monthly schedule of original high-definition programming (on the PBS HD Channel) to the PBS KIDS Channel and PBS YOU multicast services.

### Public TV Funding

- Public TV's total national, regional and local revenue in FY02 totaled more than \$1.6 billion, according to the Corporation for Public Broadcasting (CPB). Leading sources of revenue: members (22.7%); state governments (18.2%); CPB and federal grants/contracts (18%); businesses (15.8%); state colleges and universities (6.5%); and foundations (6.7%).
- More than 4 million individuals and families contributed \$361 million to public TV in FY02.

### PBS Budget

- PBS' operating revenue in fiscal year 2004 was \$333 million dollars. Leading sources of revenue included: station assessments (47%); CPB and federal grants (24%); royalties, license fees, satellite services and investment income (14%) and educational product sales (12%).
- Leading expenditures for PBS in fiscal year 2004 included: programming and promotion (72%); member and educational services (15%); satellite interconnection and technical services (9%); general and administrative (4%).

Be more



PBS

## PBS: AN OVERVIEW

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### **PBS Education Services**

- PBS was chosen the number one television and video resource for classroom programming in the country for the third year in a row in 2005, according to a survey conducted by Grunwald Associates. PBS VIDEO extends the reach of PBS programming by distributing video products to educational institutions and libraries throughout the United States and Canada. PBS VIDEO has been a trusted provider of classroom resources for more than 25 years
- Developed in cooperation with the U.S. Department of Education, PBS Ready To Learn ([www.pbs.org/readytolearn](http://www.pbs.org/readytolearn)) has helped nearly one million parents and teachers prepare eight million children for success in school through local training seminars, free children's books and PBS KIDS and PBS KIDS GO! TV programming, coupled with educational video spots and accompanying Web sites.
- PBS TeacherSource ([www.pbs.org/teachersource](http://www.pbs.org/teachersource)) helps preK-12 educators learn effective ways to incorporate online tools in the classroom through nearly 4,000 free lesson plans, teachers' guides, homeschooling guidance and other resourceful activities — all correlated to national and state curriculum standards.
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### **PBS.org**

- PBS.org — one of the most trafficked dot-org Web sites in the world\* — is the home of comprehensive companion Web sites for more than 1,300 PBS television programs and specials, as well as original Web-only content and real-time learning adventures.
- With more than 175,000 pages of content to explore, visitors to pbs.org can delve further into the subjects they most enjoy — from news to history and the arts to science and technology. *So far in 2005, pbs.org has averaged more than 35 million unique visits and 394 million page views per month. In 2004, pbs.org had more than 4.2 billion pageviews.\*\**

\*Source: Nielsen NetRatings

\*\*Statistics for the PBS "supersites" - PBS KIDS ([www.pbskids.org](http://www.pbskids.org)), PBS TeacherSource ([www.pbs.org/teachersource](http://www.pbs.org/teachersource)) and PBS Parents ([www.pbs.org/parents](http://www.pbs.org/parents)) are included as part of the overall pbs.org traffic figure. All figures are based on internal server statistics (Jan-May 2005).

# Tab 2



**DVD**

**PBS Programming Highlights  
for the 2004 Season**



# Tab 3





**Public Television Claimants - 2004 Cable Royalty Funds**

AGICOA

Alabama Educational Television Commission  
 Alamo Public Telecommunications Council  
 Alaska Public Television Inc.  
 All Global Media  
 Alvin H. Perlmutter Inc.  
 Amarillo Junior College District  
 American Documentary Inc.  
 American Lives II Film Project LLC  
 Apostrophe S Productions  
 Arizona Board of Regents, Arizona State University  
 Arizona Board of Regents, University of Arizona  
 Arkansas Educational Television Commission  
 Atlanta Board of Education  
 Audio-Visual Copyright Society trading as Screenrights  
 Award Productions Inc.  
 Ball State University  
 Barnstormer Productions (Jefferey Lehmann d/b/a)  
 Barry Telecommunications Inc.  
 Bates Technical College  
 BBC Worldwide Americas, Inc.  
 Berkow & Berkow Curriculum Development  
 Big Comfy Corp.  
 Big Productions  
 Black Hawk College  
 Blue Ridge Public Television Inc.  
 Board of Control, Grand Valley State University  
 Board of Control, Northern Michigan University  
 Board of Governors of State Colleges and Universities  
 Board of Regents of Florida, Acting for and on behalf of Florida State University  
 Board of Regents of Missouri State University  
 Board of Regents of the University of Michigan  
 Board of Regents of the University of Wisconsin System  
 Board of Regents, New Mexico State University  
 Board of Regents, State of Florida  
 Board of Trustees of Michigan State University  
 Board of Trustees of the University of Illinois  
 Board of Trustees, Community College District #508  
 Board of Trustees, Pensacola Junior College  
 Board of Trustees, The California State University for San Diego State University  
 Body Electric Corp. of America  
 Bowling Green State University  
 Brazos Valley Public Broadcasting Foundation  
 Brevard Community College  
 Brigham Young University  
 Broadway Film Project Inc.  
 Buena Vista Television

Canadian Broadcasting Corp.  
 Capital Community Broadcasting Inc.  
 Capital of Texas Public Telecommunications Council  
 CBS Broadcasting  
 CCI Entertainment Ltd.  
 Central Michigan University  
 Central Texas College  
 Central Wyoming College  
 Channel 5 Public Broadcasting Inc.  
 Charlotte-Mecklenburg Public Broadcasting Authority  
 Clark County School District  
 Classic Media Inc.  
 Colorado Public Television Inc. (formerly Front Range Educational Media Corp.)  
 Commonwealth Public Broadcasting Corporation  
 Community Communications Inc.  
 Community Television Foundation of South Florida Inc.  
 Community Television of Southern California  
 Compact Collections Limited  
 Connecticut Public Broadcasting Inc.  
 Consortium for Mathematics and its applications  
 Cookie Jar Entertainment Inc.  
 Corporation for Educational Radio and Television  
 D.L. Taffner Ltd.  
 Dade County School Board  
 Dallas County Community College District  
 Davenport Films (Thomas Davenport d/b/a)  
 Daytona Beach Community College  
 Delta College  
 Detroit Educational Television Foundation  
 Devillier Donegan Enterprises LP (now Ronald Devillier and other successors)  
 DIC Entertainment Corp.  
 Duluth-Superior Area Educational Television  
 East Tennessee Public Communications Corporation  
 Eastern New Mexico University  
 Educational Broadcasting Corporation  
 Educational Broadcasting Foundation Inc.  
 Educational Film Center  
 El Paso Public Television Foundation Inc.  
 Family Communications Inc.  
 Fifty Rubies Productions (Dakkan Abbe d/b/a)  
 Fintage Publishing and Collection B.V.  
 Florida Gulf Coast University  
 Florida West Coast Public Broadcasting Inc.  
 Fort Wayne Public Television  
 Foundation for Advancements in Science and Education  
 Fox Entertainment Group Inc.  
 FremantleMedia North America Inc.

Galan Inc.  
 Georgia Public Telecommunications Commission  
 Great Plains Ntl Instructional Television Library  
 (succeeded by GPN LLC)  
 Greater Chattanooga Public Television Corporation  
 Greater Cincinnati TV Educational Foundation  
 Greater Dayton Public Television Inc.  
 Greater New Orleans Educational Television  
 Foundation  
 Greater Washington Educational  
 Telecommunications Association Inc.  
 Guam Educational Telecommunications  
 Corporation  
 Hampton Roads Educational Telecommunications  
 Association Inc.  
 Hawaii Public Television Foundation  
 Hearst Entertainment  
 Home Box Office Inc.  
 Hometown Video Publishing Inc.  
 Hortus, Ltd.  
 Howard University  
 Ideastream  
 IFTA Collections f/k/a AFMA Collections  
 Illinois Valley Public Telecommunications Corp.  
 Independent Television Service  
 Intelcom Intelligent Telecommunications  
 Intermediary Copyright Services (Edward S.  
 Hammerman, Esq.)  
 International Telecommunication Services Inc.  
 Iowa Public Broadcasting Board  
 John F. Kennedy Center for the Performing Arts  
 Kansas Public Telecommunications Services Inc.  
 KCTS Television  
 Kentucky Authority for Educational Television  
 KOCE-TV Foundation  
 KSMQ Public Service Media Inc. (formerly  
 Southern Minnesota Quality Broadcasting Inc.)  
 KVIE Inc.  
 Lehigh Valley Public Telecommunications Corp.  
 Lives and Legacies Films, Inc.  
 Los Angeles Unified School District  
 Louisiana Educational Television Authority  
 Lutzker & Lutzker LLP o/b/o Jim Scalem  
 Productions et al.  
 Macneil/Lehrer Productions  
 Maine Public Broadcasting Corporation  
 Marjorie Poore Productions Inc.  
 Martha Stewart Living Omnimedia Inc.  
 Mary Ann Esposito Inc.  
 Maryland Public Broadcasting Commission  
 Metro-Goldwyn-Mayer Studios Inc.  
 Metropolitan Indianapolis Public Broadcasting Inc.  
 Michiana Public Broadcasting Corporation  
 Michigan Magazine Co. Inc.  
 Mid-South Public Communications Foundation  
 Milwaukee Area Technical College District Board  
 Mississippi Authority for Educational Television  
 Mountain Lake Public Telecommunications  
 Council Inc.  
 MPI Media Productions Intl Inc.  
 Nashville Public Television, Incorporated  
 NBC Universal Inc.  
 Nebraska Educational Telecommunications  
 Commission  
 Nelvana Limited  
 New Jersey Public Broadcasting Authority  
 New River Media (succeeded by Grace Creek  
 Media)  
 NFL Films  
 NGHT Inc. d/b/a National Geographic Television  
 and Film  
 North Texas Public Broadcasting Inc.  
 Northeastern Educational Television of Ohio Inc.  
 Northeastern Pennsylvania Educational Television  
 Association Inc.  
 Northern California Educational Television  
 Association Inc.  
 Northern California Public Broadcasting Inc.  
 (formerly KQED Inc. + KTEH Foundation)  
 Northern Minnesota Public Television Inc.  
 Northwest Indiana Public Broadcasting Inc.  
 Office of Television Operations, Government of  
 American Samoa  
 Ohio State University  
 Ohio University  
 Oklahoma Educational Television Authority  
 Oliver Productions Inc.  
 Ontario Educational Communications Authority  
 Oregon Public Broadcasting  
 Pacific Street Film Projects Inc.  
 Paramount Pictures, A Viacom Company  
 Partisan Pictures Inc.  
 Peace X Peace  
 Pennsylvania State University  
 Permian Basin Public Telecommunications Inc.  
 Persephone Productions Inc.  
 Porchlight Entertainment Inc.  
 Prairie Public Broadcasting Inc.  
 Public Affairs Television Inc.  
 Public Broadcasting Council of Central New York  
 Inc.  
 Public Broadcasting Foundation of Northwest Ohio  
 Public Broadcasting of Northwest Pennsylvania  
 Inc.  
 Public Broadcasting Service  
 Public Television 19 Inc.  
 Puerto Rico Public Broadcasting Corporation  
 Quartet International Inc.  
 Ragdoll Limited  
 Recording Industry Association of America  
 Redwood Empire Public TV Inc.

Regents of the University of New Mexico and  
 Board of Education, Albuquerque Public Schools  
 RGV Educational Broadcasting Inc.  
 Rhode Island Public Telecommunications  
 Authority  
 Rhombus Media Inc.  
 Rocky Mountain Public Broadcasting Network,  
 Inc. (formerly Council for Public Television,  
 Channel 6, Inc.)  
 Rural California Broadcasting Inc.  
 San Bernardino Community College District  
 San Mateo County Community College District  
 Sandra Carter Productions  
 Santa Fe Productions Inc.  
 Saybrook Productions Inc.  
 Scholastic Entertainment Inc.  
 Sesame Workshop  
 Shenandoah Valley ETV Corporation  
 Sistema Universitario Ana G. Mendez Inc.  
 Slim Goodbody Corporation  
 Smoky Hills Public Television Corp.  
 Sony Pictures Television Inc.  
 Sound Venture Productions Ottawa Limited  
 South Carolina Educational Television  
 Commission  
 South Dakota Board of Directors for Educational  
 Telecommunications  
 South Texas Public Broadcasting System  
 Southern Illinois University Board of Trustees  
 Southern Oregon Public Television Inc.  
 Spokane School District #81  
 St. Lawrence Valley Educational Television  
 Council Inc.  
 St. Louis Regional Educational and Public  
 Television Commission  
 State Board of Education; (also, for KAID: The  
 Board of Regents for the University of Idaho)  
 State Board of Regents (Montana State University/  
 University of Montana)  
 Texas A&M University  
 Texas Tech University  
 TJI Productions (succeeded by TJI Ventures  
 LLC)  
 Tony Brown Productions Inc.  
 Transworld International/International  
 Management Group  
 Tri-State Public Teleplex Inc. (formerly Southwest  
 Indiana Public Broadcasting Inc.)  
 Trustees of Columbia University in the City of  
 New York d/b/a Columbia University Seminars  
 on Media and Society  
 Trustees of Indiana University  
 Twin Cities Public Television Inc.  
 University of Alaska  
 University of Central Missouri Board of Regents  
 University of Houston  
 University of Nebraska  
 University of New Hampshire/New Hampshire  
 Public Television  
 University of North Carolina  
 University of South Florida  
 University of Utah  
 Upper Cumberland Broadcast Council  
 Valley Public Television Inc.  
 Vermont ETV Inc. d/b/a Vermont Public  
 Television  
 Vincennes University  
 Vine's Eye Productions Inc.  
 Virgin Islands Public Television System  
 Vulcan Productions Inc.  
 Washburn University of Topeka  
 Washington State University  
 Welk Group d/b/a Lawrence Welk Syndication  
 West Central Illinois Educational  
 Telecommunications Corporation  
 (CONVOCOM)  
 West Central Minnesota Educational TV Company  
 West Tennessee Public Television Council Inc.  
 West Virginia Educational Broadcasting Authority  
 Western Instructional Television Inc.  
 Western Kentucky University  
 Western New York Public Broadcasting  
 Association  
 WGBH Educational Foundation  
 WHYY Inc.  
 Window to the World Communications, Inc.  
 Wisconsin Educational Communications Board  
 WITF Inc.  
 WJCT Inc.  
 WMHT Educational Telecommunications  
 Woodgrain Productions Inc.  
 Worldwide Subsidy Group LLC  
 Worldwide Subsidy Group LLC d/b/a Independent  
 Producers Group  
 WQED Multimedia  
 WSKG Public Telecommunications Council  
 WXXI Public Broadcasting Council  
 Yanni Inc.  
 Zipporah Films Inc. - Frederick Wiseman

**Public Television Claimants - 2005 Cable Royalty Funds**

Agency for Instructional Technology  
 AGICOA  
 Alabama Educational Television Commission  
 Alamo Public Telecommunications Council  
 Alaska Public Television Inc.  
 All Global Media LLC  
 Alvin H. Perlmutter, Inc.  
 Amarillo Junior College District  
 American Documentary Inc.  
 American Lives II Film Project LLC  
 Arizona Board of Regents, Arizona State University  
 Arizona Board of Regents, University of Arizona  
 Arkansas Educational Television Commission  
 Art 21, Inc.  
 Atlanta Board of Education  
 Audio-Visual Copyright Society trading as Screenrights  
 Ball State University  
 Barnstormer Productions (Jeffrey Lehmann d/b/a)  
 Barry Telecommunications Inc.  
 Bates Technical College  
 BBC Worldwide Americas, Inc.  
 Berkow and Berkow Curriculum Development  
 Big Comfy Corp.  
 Big Productions  
 Black Hawk College  
 Blue Ridge Public Television Inc.  
 Board of Control, Grand Valley State University  
 Board of Control, Northern Michigan University  
 Board of Governors of State Colleges and Universities  
 Board of Regents of Florida, Acting for and on behalf of Florida State University  
 Board of Regents of Missouri State University  
 Board of Regents of the University of Michigan  
 Board of Regents of the University of Wisconsin System  
 Board of Regents, New Mexico State University  
 Board of Regents, State of Florida  
 Board of Trustees of Michigan State University  
 Board of Trustees of the University of Illinois  
 Board of Trustees, Community College District #508  
 Board of Trustees, Pensacola Junior College  
 Board of Trustees, The California State University for San Diego State University  
 Body Electric Corporation of America  
 Bowling Green State University  
 Brazos Valley Public Broadcasting Foundation  
 Brevard Community College  
 Brigham Young University  
 Broadway Film Project, Inc.  
 Buena Vista Television /Touchstone Television  
 Canadian Broadcasting Corp.  
 Capital Community Broadcasting Inc.  
 Capital of Texas Public Telecommunications Council  
 Catticus Corporation & Quest Productions  
 CBS Broadcasting, Inc.  
 Central Michigan University  
 Central Texas College  
 Central Wyoming College  
 Channel 5 Public Broadcasting Inc.  
 Character Studies Production Inc.  
 Charlotte-Mecklenburg Public Broadcasting Authority  
 Clark County School District  
 Colorado Public Television Inc. (formerly Front Range Educational Media Corp.)  
 Commonwealth Public Broadcasting Corporation  
 Community Communications Inc.  
 Community Television Foundation of South Florida Inc.  
 Community Television of Southern California  
 Compact Collections Limited  
 Connecticut Public Broadcasting Inc.  
 Consortium for Mathematics and Its Applications  
 Cookie Jar Entertainment Inc.  
 Dade County School Board  
 Dallas County Community College District  
 Davenport Films (Thomas Davenport d/b/a)  
 David Grubin Productions  
 Daytona Beach Community College  
 Delta College  
 Detroit Educational Television Foundation  
 Devillier Donegan Enterprises LP (now Ronald Devillier and other successors)  
 Duluth-Superior Area Educational Television  
 East Tennessee Public Communications Corporation  
 Eastern New Mexico University  
 Educational Broadcasting Corporation  
 Educational Broadcasting Foundation Inc.  
 El Paso Public Television Foundation Inc.  
 Family Communications Inc.  
 Fintage Publishing and Collection B.V.  
 Florida Gulf Coast University  
 Florida West Coast Public Broadcasting Inc.  
 Food For Thought Productions  
 Fort Wayne Public Television  
 Foundation for Advancements in Science and Education d/b/a FASE Productions

Fox Entertainment Group, Inc.  
 Frantic Films Corporation  
 Fred Friendly Seminars, Inc.  
 FremantleMedia North America, Inc.  
 Galan Incorporated  
 Gary Spetz/Gary Spetz Watercolors  
 Georgia Public Telecommunications  
 Commission  
 GPN LLC division of Educate, Inc. (succeeded  
 by GPN LLC division of Smarterville LLC)  
 Greater Chattanooga Public Television  
 Corporation  
 Greater Cincinnati TV Educational Foundation  
 Greater Dayton Public Television Inc.  
 Greater New Orleans Educational Television  
 Foundation  
 Greater Washington Educational  
 Telecommunications Association Inc.  
 Guam Educational Telecommunications  
 Corporation  
 Hampton Roads Educational  
 Telecommunications Association Inc.  
 Hawaii Public Television Foundation  
 Hearst Entertainment  
 Home Box Office  
 Hometime Video Publishing, Inc.  
 Hortus, Ltd.  
 Howard University  
 Ideastream  
 IFTA Collections (f/k/a AFMA Collections)  
 Illinois Valley Public Telecommunications Corp.  
 Independent Television Service  
 Intelcom  
 Intermediary Copyright Royalty Services  
 International Telecommunication Services, Inc.  
 Iowa Public Broadcasting Board  
 John F. Kennedy Center for the Performing Arts  
 Kansas Public Telecommunications Services Inc.  
 KCTS Television  
 Kentucky Authority for Educational Television  
 KOCE-TV Foundation  
 KSMQ Public Service Media Inc. (formerly  
 Southern Minnesota Quality Broadcasting  
 Inc.)  
 KVIE Inc.  
 Lehigh Valley Public Telecommunications Corp.  
 Lives and Legacies Films, Inc.  
 Los Angeles County Arts Commission  
 Los Angeles Unified School District  
 Louisiana Educational Television Authority  
 Lutzker & Lutzker LLP o/b/o Jim Scalem  
 Productions; Mirabel Scalem Productions;  
 The Liberace Foundation for the Performing  
 and Creative Arts  
 Lyons Partnership, L.P.  
 MacNeil/Lehrer Productions  
 Maine Public Broadcasting Corporation  
 Marjorie Poore Productions, Inc.  
 Martha Stewart Living Omnimedia, Inc.  
 Maryland Public Broadcasting Commission  
 Metro-Goldwyn-Mayer Studios Inc.  
 Metropolitan Indianapolis Public Broadcasting  
 Inc.  
 Michiana Public Broadcasting Corporation  
 Michigan Magazine Company  
 Mid-South Public Communications Foundation  
 Milwaukee Area Technical College District  
 Board  
 Mississippi Authority for Educational Television  
 Mountain Lake Public Telecommunications  
 Council Inc.  
 MPI Media Productions International Inc.  
 Nashville Public Television, Inc.  
 NBC Universal Inc.  
 Nebraska Educational Telecommunications  
 Commission  
 Nelvana Limited  
 New Jersey Public Broadcasting Authority  
 New River Media, Inc. (succeeded by Grace  
 Creek Media Inc.)  
 NFL Films  
 NGHT, Inc. d/b/a National Geographic  
 Television and Film  
 North Texas Public Broadcasting Inc.  
 Northeastern Educational Television of Ohio Inc.  
 Northeastern Pennsylvania Educational  
 Television Association Inc.  
 Northern California Educational Television  
 Association Inc.  
 Northern California Public Broadcasting Inc.  
 (formerly KQED Inc. + KTEH Foundation)  
 Northern Minnesota Public Television Inc.  
 Northwest Indiana Public Broadcasting Inc.  
 Office of Television Operations, Government of  
 American Samoa  
 Ohio State University  
 Ohio University  
 Oklahoma Educational Television Authority  
 Oliver Productions Inc.  
 Ontario Educational Communications Authority  
 (known as TVOntario)  
 Oregon Public Broadcasting  
 Paramount Pictures, A Viacom Company  
 Pennsylvania State University  
 Permian Basin Public Telecommunications Inc.  
 Persephone Productions Inc.  
 PorchLight Entertainment, Inc.  
 Prairie Public Broadcasting Inc.  
 Public Affairs Television, Inc.  
 Public Broadcasting Council of Central New  
 York Inc.

Public Broadcasting Foundation of Northwest Ohio  
 Public Broadcasting of Northwest Pennsylvania Inc.  
 Public Broadcasting Service  
 Public Television 19 Inc.  
 Puerto Rico Public Broadcasting Corporation  
 Quartet International, Inc.  
 Redwood Empire Public TV Inc.  
 Regents of the University of New Mexico and Board of Education, Albuquerque Public Schools  
 RGV Educational Broadcasting Inc.  
 Rhode Island Public Telecommunications Authority  
 Rocky Mountain Public Broadcasting Network, Inc. (formerly Council for Public Television, Channel 6, Inc.)  
 Rural California Broadcasting Inc.  
 San Bernardino Community College District  
 San Mateo County Community College District  
 Santa Fe Productions  
 Scholastic Entertainment Inc.  
 Sesame Workshop  
 Shenandoah Valley ETV Corporation  
 Sistema Universitario Ana G. Mendez Inc.  
 Slim Goodbody Corporation  
 Smoky Hills Public Television Corp.  
 Sony Pictures Television Inc.  
 Sound Venture Productions Ottawa Limited  
 South Carolina Educational Television Commission  
 South Dakota Board of Directors for Educational Telecommunications  
 South Texas Public Broadcasting System  
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 St. Lawrence Valley Educational Television Council Inc.  
 St. Louis Regional Educational and Public Television Commission  
 State Board of Education; (also, for KAID: The Board of Regents for the University of Idaho)  
 State Board of Regents (Montana State University/ University of Montana)  
 Texas A&M University  
 Texas Tech University  
 This Old House Ventures, Inc.  
 TJL Ventures LLC  
 Transworld International/International Management Group  
 Tri-State Public Teleplex Inc. (formerly Southwest Indiana Public Broadcasting Inc.)  
 Trustees of Columbia University in the City of New York d/b/a Columbia University Seminars on Media and Society  
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 Twin Cities Public Television Inc.  
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 University of Central Missouri Board of Regents  
 University of Houston  
 University of Nebraska  
 University of New Hampshire/New Hampshire Public Television  
 University of North Carolina  
 University of South Florida  
 University of Utah  
 Upper Cumberland Broadcast Council  
 Valley Public Television Inc.  
 Vermont ETV Inc. d/b/a Vermont Public Television  
 Vincennes University  
 Virgin Islands Public Television System  
 Warner Bros. Domestic Television Distribution  
 Washburn University of Topeka  
 Washington State University  
 Welk Group d/b/a Lawrence Welk Syndication  
 West Central Illinois Educational Telecommunications Corporation (CONVOCOM)  
 West Central Minnesota Educational TV Company  
 West Tennessee Public Television Council Inc.  
 West Virginia Educational Broadcasting Authority  
 Western Instructional Television, Inc.  
 Western Kentucky University  
 Western New York Public Broadcasting Association  
 WGBH Educational Foundation  
 WHYY Inc.  
 Window to the World Communications, Inc.  
 Wisconsin Educational Communications Board  
 WITF Inc.  
 WJCT Inc.  
 WMHT Educational Telecommunications  
 Woodgrain Productions Inc.  
 Worldwide Subsidy Group LLC d/b/a Independent Producers Group  
 Worldwide Subsidy Group, LLC  
 WQED Multimedia  
 WSKG Public Telecommunications Council  
 WXXI Public Broadcasting Council  
 Yanni Inc.  
 Zipporah Films, Inc.

# Tab 4





## 2004 TELEVISION AWARDS

### ALFRED I. DUPONT-COLUMBIA UNIVERSITY AWARDS

*Hoxie: The First Stand*  
*Ghosts of Rwanda*  
*Truth, War and Consequences*  
*Louisiana: Currents of Change*

### PEABODY AWARDS

*NewsHour with Jim Lehrer*  
*NOVA The Elegant Universe with Brian Green*  
*P.O.V. Flag Wars*  
*P.O.V. Two Towns of Jasper*  
*Frontline "A Dangerous Business"*  
*Great Performances, Degas and the Dance*  
*American Experience, The Murder of Emmett Till*  
*Hoxie: The First Stand*

**Bill Moyers**  
Individual Peabody Award for contributions to public affairs television

### DAYTIME EMMY AWARDS

*Sesame Street*  
Outstanding Pre-School Series  
Outstanding Directing in a Children's Series  
Outstanding Achievement in Sound Mixing  
Outstanding Achievement in Multiple Camera Editing  
Outstanding Achievement in Lighting Direction  
Outstanding Achievement in Costume Design/Styling

### NEWS AND DOCUMENTARY EMMY AWARDS

*NOVA Battle of the X-Planes*  
Outstanding Coverage of a Current News Story - Long Form  
*Frontline "Burden of Innocence"*  
Outstanding Investigative Journalism - Long Form

***Watergate Plus 30: Shaw of History***

Outstanding Informational Programming - Long Form

***American Experience, The Center of the World***

Outstanding Historical Programming - Long Form

***American Experience, The Pill***

Outstanding Science, Technology and Nature Programming

***Now with Bill Moyers, Inside The Pentagon***

Best Report in a News Magazine

***Independent Lens, Be Good, Smile Pretty***

Best Documentary

***NOVA The Elegant Universe with Brian Green***

Outstanding Individual Achievement - Editing

**PRIMETIME EMMY AWARDS**

***The Forgetting: A Portrait of Alzheimer's***

Outstanding Nonfiction Special

***American Masters***

Outstanding Nonfiction Series

***Martin Scorsese Presents The Blues***

Outstanding Cinematography

***American Masters: Judy Garland By Myself***

Outstanding Picture Editing

Outstanding Writing, Nonfiction Series

***Great Performances, Harry Connick, Jr.***

Outstanding Music Direction

***Live from Lincoln Center, Lincoln Center Celebrates Balanchine***

Outstanding Special Class Program

**IDA DISTINGUISHED DOCUMENTARY ACHIEVEMENT AWARDS**

***Independent Lens, Imelda***

IDA/ABC News VideoSource Award

***American Masters***

IDA Continuing Series Award

***The New Americans***

IDA Limited Series Award

## **2005 TELEVISION AWARDS**

### **ALFRED I. DUPONT-COLUMBIA UNIVERSITY AWARDS**

*Frontline* "Al Qaeda's New Front"

*Frontline* "The Secret History of the Credit Card"

### **PEABODY AWARDS**

*American Experience, Tupperware!*

### **PRIMETIME EMMY AWARDS**

*Broadway: The American Musical*

Outstanding Nonfiction Series

Outstanding Sound Mixing for Nonfiction Programming (Single or Multi-Camera)

*Great Performances, Eric Clapton Crossroads Guitar Festival*

Outstanding Picture Editing for a Special

*Masterpiece Theatre, The Lost Prince*

Outstanding Art Direction for a Miniseries or Movie

Outstanding Costumes for a Miniseries, Movie or Special

Outstanding Miniseries

*Live from Lincoln Center, Stephen Sondheim's 'Passion'*

Outstanding Special Class Program

*Unforgivable Blackness: The Rise and Fall of Jack Johnson*

Outstanding Nonfiction Special

Outstanding Voice-over Performance

Outstanding Writing for Nonfiction Programming

### **NEWS AND DOCUMENTARY EMMY AWARDS**

*American Experience, The Fight*

Outstanding Individual Achievement in a Craft: Writing

*DNA: The Human Race*

Outstanding Science, Technology and Nature Programming

*Frontline* "The Secret History of the Credit Card"

Outstanding Investigative Journalism - Long Form

*National Geographic Specials "Arlington: Field of Honor"*

Outstanding Individual Achievement in a Craft: Direction

*Nature "Pale Male"*

Outstanding Individual Achievement in a Craft: Writing

***Wide Angle "Ladies First"***

Outstanding Continuing Coverage of a News Story - Long Form

**BUSINESS & FINANCIAL REPORTING EMMY AWARDS**

***The NewsHour with Jim Lehrer "The Price of Oil: Winners and Losers"***

Outstanding Interpretation and/or Analysis of a Business News Story - Newsmagazines & Long Form

***Nightly Business Report "China's Emergence as an International Economic Power"***

Outstanding Extended Coverage of a Business Story

**DAYTIME EMMY AWARDS**

***Clifford's Puppy Days***

Outstanding Performer in an Animated Program

***Jakers! the Adventures of Piggley Winks***

Outstanding Achievement in Music Direction and Composition

Outstanding Individual Achievement in Animation

***Reading Rainbow***

Outstanding Children's Series

Outstanding Achievement in Single - Camera Photography (Film or Electronic)

Outstanding Achievement in Single - Camera Editing

Outstanding Writing in a Children's Series

***Sesame Street***

Outstanding Pre-School Children's Series (for the 11th consecutive year)

Outstanding Directing in a Children's Series

Outstanding Performer in a Children's Series

Outstanding Achievement in Art Direction/Set Decoration/Scenic Design

**NAACP IMAGE AWARDS**

***Reading Rainbow***

Outstanding Performance in a Television Youth/Children's Series/Special

***Tavis Smiley***

Outstanding Television News, Talk or Information - Series or Special

**IDA DISTINGUISHED DOCUMENTARY ACHIEVEMENT AWARDS**

***P.O.V. Street Fight***

***America's Lost Landscape: The Tallgrass Prairie***

# Tab 5



**PROGRAMMING DIFFERENTIATION IN AREAS WITH MULTIPLE  
PUBLIC TELEVISION STATIONS CARRIED BY CABLE OPERATORS**

**Phenix City, Alabama**

Examples of differentiation in the Phenix City area, served by WAIQ Montgomery and WJSP Columbus, GA. Week of January 24 to 30, 2005.

**WAIQ**

- *Alabama at Work*. Locally produced documentary series profiling Alabama businesses.
- *Alabama Experience*. Locally produced Alabama history series.
- *Discovering Alabama*. Locally produced documentary on the natural history and heritage of Alabama.
- *The Rural Studio*. A program profiling the Rural Studio of Auburn University, where architecture students design and build one-of-a-kind homes and community spaces for one of the nation's poorest regions.

**WJSP**

- *Georgia Business Report*. Weekly series covering business and financial news.
- *Georgia Outdoors*. Locally produced series airing four times a week for environmentalists, conservationists, and outdoor enthusiasts in Georgia.
- *Georgia Week in Review*. Weekly public affairs series.
- *Lawmakers 2005*. Airs every night during the legislative session.

**Woodland, California**

Examples of differentiation in the Woodland area, served by KVIE Sacramento and KQED San Francisco. Week of January 24 to 30, 2005.

**KQED**

- *This Week in Northern California*. Weekly current affairs program.
- *Crossroads Café*. Part of an Adult Learning Project that offers free tutorial services and free workbooks for its adult learners.

**KVIE**

- *Central Valley Chronicles*. Series on local people and places, airing once a week.
- *California Heartland*. Series on California agriculture that airs twice a week.
- *California's Gold*. Regional stories airing twice a week.
- *New Valley*. Series on the issues that are transforming the Central Valley into California's next frontier.

**Rensselaer, Indiana**

Examples of differentiation in the Rensselaer, Indiana area, served by WYIN and WTTW in nearby Chicago. Week of January 24 to 30, 2005.

**WTTW**

- *Chicago Tonight*. Local public affairs program airing weeknights.
- *Arts Across Illinois*. Local host Phil Ponce explores how art shapes identity.
- *Chicago Dance Project*
- *Chicago Stories*. Locally produced series that delivers stories from the pages of Chicago's history.
- *High School Basketball*. Live coverage of Chicago public league games.

**WYIN**

- *Across Indiana*
- *Communities Building*
- *Indiana Week in Review*
- *Inside Indiana Business*
- *Inside Valpo Basketball*

**Hagerstown, Maryland**

Examples of differentiation in the Hagerstown area, served by WWPB and WETA in nearby Washington, DC. Week of January 24 to 30, 2005.

**WETA**

- *Washington Style*

**WWPB**

- *Outdoors Maryland*. Hour-long visual essay airing multiple times per week that depicts Maryland's diverse collection of ecosystems.
- *State Circle*. Analysis of major political issues and pending bills in Maryland.

**Bryan, Texas**

Examples of differentiation in the Woodland area, served by KAMU and KUHT in nearby Houston. Week of January 24 to 30, 2005.

**KUHT**

- *The Territory*. Locally produced independent film series airing once a week.
- *The Connection*. Weekly half-hour round-table discussion about the important issues that affect the Greater Houston area.
- *Government in Action*

**KAMU**

- *Texas Politics*
- *The Aggie Sports Connection*
- *Life in the Balance: the Healthcare Crisis in Texas*



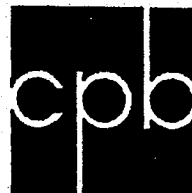
# Tab 6



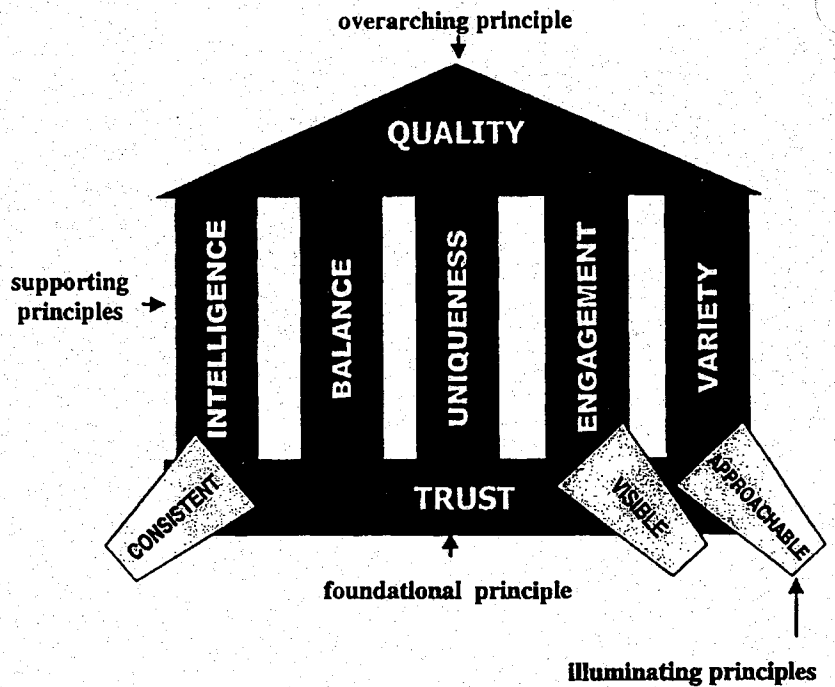
**Ten Viewer-Based Principles  
to Guide the Development of  
a Primetime Programming Strategy  
for Public Television**

**September 2004**

**Commlssioned by:**



**Corporation  
for Public  
Broadcasting**



### PRINCIPLES

The intention of CPB's *Consumer Insight Research* conducted in Fall 2003 was not only to lay critical groundwork for the quantitative benchmark study of Public Television (PTV) viewing conducted in Spring 2004; it was also to search for—even retrieve—a set of viewer-based primetime programming principles that would be actionable for the spectrum of professional disciplines that make PTV possible and successful.

In other words, is there a consistent pattern of viewer beliefs, feelings, and behaviors, which we call *Principles*, emerging from this research meaningful and universal enough to serve as a reliable guide to inform not only primetime program and schedule development, but also the core mission, strategy and tactics of public television?

We believe that there is, and it is presented here in provisional form—a work in progress—in order to stimulate reflection, discussion and application. There are ten such *PTV Principles* and, since they are interrelated and form an integral whole, the model of a building has been used to present them.

## Foundational Principle

### 1. TRUST

*The programming respects the viewer and engenders trust with the "public" who are at the heart of Public Television.*

Public television is perceived by viewers to be a sanctuary of non-commercialism and trustworthiness in a media marketplace dominated by monolithic corporations trying to find new ways to sell their products (including their programs). It is "Old Faithful," as one viewer called it.

Many viewers complained about network or cable programming that failed to respect the viewer. This failure to respect (and the resulting lack of trust) has two distinct but related expressions. The first is a perception of pandering to advertisers, slanting the content of programming to benefit the financial interests of someone other than the viewer. One viewer, for example, complained about interviewers who routinely interview celebrities who seem to be there mainly to talk about their shows. ("And by the way, how's your soap?") The second is a pandering to viewers: for example, hyping programming that does not deliver on its promise, or exaggerating and sensationalizing just to grab viewers' attention.

By contrast, public television—in its commitment to non-commercialism—signals respect for its audience and engenders their trust by avoiding even the appearance of pandering. By virtue of membership in public television, moreover, some viewers actually feel they are "owners" or "stockholders" in the station and that they "have a voice." They trust that stations have their interests at heart rather than the profits of a corporation.

This sort of trust not only provides a foundation for viewer loyalty, it also allows for viewer serendipity. While many viewers watch a program based on their initial interest in a topic, some viewers have so much trust in the programming of public television that he or she will watch a program, even if it's not the kind of show they'd normally watch, *just because* it is broadcast on public television. One delighted viewer had watched a recent documentary about the first transcontinental trip across the United States by automobile for just that reason.

In addition, viewers expressed a universal belief that public television can be trusted with their children. Not only do they count on public television for children's programming that is superior to what is found anywhere else on television, they trust that there is nothing on public television that they would be concerned or embarrassed if their children (or their mothers-in-law) saw it. Nor will the children in their lives be bombarded by commercial images while viewing.

Most have no plans to abandon commercial television, but they are unquestionably glad that the option of public television is there for them.

## Overarching Principle

### 2. QUALITY

*The programming is written and produced according to the highest standards of quality, both in its content and aesthetic form.*

Whereas much of what is found in other places on television allows viewers to “zone out” and “leave my brain off” on the one hand, or creates “overstimulation” on the other, public television is an oasis for “active minds.” Viewers across the regional, demographic, and psychographic spectrum, identified public television as “quality programming.” Furthermore, they perceive it as attaining a higher standard than network or cable stations. There was a sense that, whatever public television does, “it does right”—from costumes and sets, to production quality, writing, and overall sensibility. Metaphors for this quality include public television’s status as a “classic,” programs as “food for the mind,” and “grace, a gift we don’t deserve.”

This recognition of quality extends across a diverse spectrum of genres and formats. Even genres, such as “reality TV,” which are usually associated with the lowest standards of taste are viewed as enhanced by public television. For example, viewers appreciated the program *Pioneer Quest* and *Frontier House* as educational despite their reality TV origins, and some identified documentaries on such programs as *Frontline* and *Antiques Road Show* as “reality to me. The Real Reality TV,” in opposition to the scripted and staged “reality” that is often associated with the genre.

Given the quality of public broadcasting, however, it is not easily accessible to a cursory viewer. It is the exact opposite of “background noise” that allows for “multi-tasking.” Viewers who are looking to “veg out” generally look elsewhere.

## Supporting Principles

### 3. INTELLIGENCE

*The programming is intelligent, substantial, and challenging to viewers.*

In the fog of the television world, where much of the content is "dumbed down" or is simply "fluff" or "brain candy" without even the pretense of intellectual merit, public television is a beacon of intelligent programming. Many viewers rate public television as smarter or more intellectual than either network or cable programming. Sometimes this difference is expressed in the language of grade levels. "Networks to me are really at a fifth grade level" or "[The History Channel] is elementary grade level as where I'm looking for something college level" or "When I think Discovery Channel, I think high school, when I think of NOVA, I think of college."

Programming is more detailed and covers issues in more depth. It is more scholarly, based on more research. It is also more accurate. One viewer worried about the accuracy of some historical re-enactments on other stations: "what is made up and what is factual?"

Such high intellectual standards, of course, may be intimidating to some. Yet many viewers also found that the high-powered intellectual content was expressed in ways that were "comprehensible to the non-expert," without ever condescending or "insulting my intelligence."



## 4. BALANCE

*The programming is balanced and impartial, presenting factual information with a minimum of spin, bang, and glitz.*

In a frenzied media market, viewers realize that news programming often uses glitz and confrontational circuses of talking heads, just to be heard above the fray. By contrast, news and public affairs programming on public television is seen as "not an argument, but a discussion." It is "conversational . . . not confrontational." It avoids the bangs and whistles, the smoke and mirrors, and just reports the facts.

As a consequence, public television is viewed as balanced and impartial by persons of all political persuasions, even those who view public radio as left-leaning. And when there is passion or excitement about a controversial issue, it is perceived by viewers as emanating from genuine knowledge and authentic conviction rather than a producers' desire to manufacture some kind of spectacle.

This reputation for balance and perspective is enhanced by public television's non-commercial status. Since the news is not beholden to advertisers eager for maximized ratings, the style and content are not sensational. Rather than run stories on "entertainmenty kinds of things . . . what is going on in Hollywood" or "Lacy Peterson or Kobi Bryant" or "Gay nuns and drugs," they stick to traditional news stories and treat them in more depth and detail. Rather than tooting their own horns, hyping their program, "patting their own asses," they can just report the news.

## 5. UNIQUENESS

*The programming is often unique, offering a different perspective, an unusual format, or a source for otherwise marginalized information or entertainment.*

For all the ballyhooed diversity in broadcasting in the age of cable and satellite, viewers believe that there are still programs—and kinds of program—that could only find a home on public television.

First—at least in those markets that have it—is quality local programming. In an age of so-called diversity, much of television is still produced in the media centers on both coasts, often yielding a “cookie cutter” style and a homogenized, national content. Yet, some of the most popular programming on public television is locally produced and consumed, far from those media centers. Programs like *Tennessee Crossroads*, *Oregon Art Beat*, *Oregon Field Guide*, *Greater Boston*, and *Donnybrook* have their enthusiastic proponents who compare these programs to local news programs which focus more on anchor personalities and sensational crime stories—treating pressing local issues only in sound bites and exploring the local community in only the most superficial way.

Second, viewers identified some genres and specific programs as potential orphans without public television. Some viewers, for instance, perceive that period dramas such as those featured on *Masterpiece Theatre* have all but disappeared from commercial television. Almost all dramas (and this includes premium cable channels such as Bravo or HBO) have a contemporary setting—a definite lack for the television viewer who looks to be taken to places “I’d otherwise never have the chance to go” and to do things “I’d otherwise never the chance to do.”

Finally, viewers identify specific content or topics that would only be explored by public television. Whether reporting on the Nobel Prize winners or the political situation in Liberia—public television provides perspective on material often neglected by other news outlets, which are perceived to be more “Hollywood” or celebrity-oriented.

## 6. ENGAGEMENT

*Programming entertains by engaging viewers' interest rather than teasing them with “fluff.”*

Much of television is designed to entertain, but the best programs do so by engaging the audience, with “good characters and a good story.” While many viewers pointed to network or cable television as well as public television programs (e.g., *CSI*, *Law and Order*, *Everybody Loves Raymond*) as a source of quality entertainment, the principles are essentially the same in either case. In order to engage an audience, the program must be “well-written.” A well-written program involves good dialogue, plots that are unpredictable, characters and settings that are realistic (or at least based in reality). Poor shows attempt to engage the audience with false suspense that fails to present an interesting denouement. It is these shows that resort to hype or tawdry teasers (“tits and ass”).

Public television has at least two advantages in engaging viewers. First, many public television viewers dissolve the distinction between information (or education) and entertainment. For these viewers, the pursuit of knowledge is so engrossing, it becomes enjoyable—“learning, but not like school.” This is at the heart of the attraction many male viewers seem to feel with respect to *Frontline*.

Second, since public television is commercial-free it does not "break the flow of the show" and allows the viewer to engage in the plot or characters without interruption. Thus it prevents one source of viewer frustration (and potential flight), the commercial break: "I usually switch channels a lot in between commercials . . . but it didn't have any commercials . . . so it kept my attention."

By the same token, public television's relatively limited inventory of drama and comedy (with their relatable characters and suspenseful plot lines), as well as its preference for sobriety and straightforwardness, leave it without some of the natural hooks and emotional ties that sometimes bind viewers to commercial television. The challenge will be to address this circumstance without chipping away at the all-important foundation of trust or undermining the pediment of quality on which viewers depend.

## 7. VARIETY

*Programming is diverse and is not limited to a single genre, perspective or niche.*

Many viewers of public television appear to have an unusually wide range of interests, and appreciate the range of material—from science and drama to history and current events—that their local PBS stations carry. Though those with cable or satellite reception make ample use of other channels—the History Channel, Discovery, HGTV—these do not appear to have replaced public television in the viewers' minds or hearts.

One supposed advantage to cable channels is their appeal to a niche market. If the only thing a channel must produce is programming about food or history or golf, then it should be possible to do this well and become a destination for all those interested in those pursuits.

PRINCIPLES FOR THE DEVELOPMENT OF A PRIMETIME PROGRAMMING STRATEGY

However, while niche programming may create an identity for a cable channel, there is no guarantee it will produce an identity for any individual show airing on that channel. Programs on the same basic topic, with the same basic look and feel blend into one another—creating no program differentiation or imperative to watch, since pretty much the same thing can be found on that channel at any time of day.

Moreover, there is no guarantee of quality. Indeed, in an attempt to stock a cable service with many shows of a similar genre or subject matter, there is always the danger of being spread too thin. "Sometimes when I'm watching the History Channel, it's just a lot of pictures going by."

Finally, the well-balanced person of many pursuits, will need to search a wide variety of such niche channels in order to create a well-balanced diet of television fare. Viewers of public television, themselves interested in a wide variety of topics and interest, appreciate the "anti-niche" character of public television. "We'll miss the variety of PBS . . . there's just such a range of different things."

## Illuminating Principles

### 8. CONSISTENT

*Programs are scheduled with as much consistency as possible, in such a manner as to make it easy for viewers to find what they like and to engender regular viewing habits.*

While network television engenders viewer loyalty by maintaining a stable schedule of program from week-to-week, many viewers complain that they have a difficult time finding their favorite public television programs. "PBS kind of throws me off because they don't always have the same thing on all the time." "I have to stumble across it." Like shoppers at a grocery store that alters the location of its merchandise on a weekly basis, these viewers either fail to find what they're looking for, never develop a set of habits around public television, or else abandon "the store" altogether in favor of one that's easier to navigate.

Some of the dislocation may result from pledge drives that substitute different programs for standard fare. Dislocation also occurs when the regular schedule is pre-empted by special multi-part, heavily promoted, and frequently repeated series deemed to be have special value or unusual fund-raising potential.

Whatever the reason, it is clear that such dislocation constitutes an added burden for the viewer—making it difficult to find favorite programs or creating disappointment or confusion when he or she looks for those programs and finds something else instead.

In addition, the practice whereby programs are frequently repeated—either on the same station or on another public

station in the same viewing area—appears to have made many viewers complacent in their viewing of public television. Given the prospect of seemingly unlimited opportunities to view a program, they often postpone their watching for a more convenient time that never arrives. “One reason I didn’t make a point to watch it . . . There’s going to be another opportunity to watch it.” The value of a product is somewhat related to its scarcity: a product that seems to have an unlimited supply is sure to be underappreciated—consider the native New Yorker who has never visited the State of Liberty or the Empire State Building.

## 9. VISIBLE

*Without compromising its non-commercial format, programs are promoted in a strategic way so as to remind avid viewers of their favorites and attract more casual viewers for whom public television may not be top-of-mind.*

Network and cable television have ample opportunities to inform their viewers of upcoming programs and—according to viewers—limitless resources to advertise elsewhere. The networks, it appears, do a good job of letting the viewer know what they’re watching when they’re watching it, or helping them to recognize a program more quickly when flipping from channel to channel. The opportunities for promoting programming on public television are presumed by these viewers to be far more limited. For many, public television just doesn’t appear on their radar screen: “People just don’t realize they’re there.” On numerous occasions, lighter viewers expressed the sentiment, “If I knew they had that, I’d probably watch it” or “I’m going to check that out!”

Among the ways viewers say they come to public television are the example or urging of trusted teachers, friends, and family

members. Sometimes it is the natural process of maturation—with the attendant change in personal life style and interests—that has them beginning to watch public television in the evening rather than some of what they'd otherwise do. Some appealed to their own childhood experience or that of their children, though this sometimes worked against public television in that they were less apt to think of it in connection with their own adult needs and interests.

They also believe that if public television were to advertise itself in the other media venues they use more often—network television or cable channels, for example—they would be more conscious of what's available for them and check it out more frequently.

## 10. APPROACHABLE

*Programs should be presented, whenever aesthetically possible, in a manner that facilitates their integration into the life style of the ordinary viewer.*

Sometimes programs on public television can involve a large commitment of time, either several hours in one night, or several consecutive nights in a week. However, in an age when many people are overworked, under-rested, and struggling to manage chaotic lives, even avid fans of public television can be wary of such a commitment. Rather than become involved with a program which they cannot commit to, they will forgo it entirely.

While it is important to maintain the flow of a program and not chop it into so many disconnected bits, it is also important that viewers don't have to commit to a marathon viewing experience. Many otherwise enthusiastic participants in public television may have the ambition to start—but be too exhausted to finish!—the race.





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# Tab 7



**PBS in the News**  
Selected Articles

**PBS AND CABLE WON VIEWERS FROM RIVALS**

New York Times

July 29, 2004

By Bill Carter

On a night when every major broadcast network declined to cover even one minute of the Democratic National Convention, millions of viewers clearly went looking for alternatives - and found them in the cable news networks and one other broadcast network, PBS.

The Public Broadcasting Service pulled in an unexpected horde of viewers on Tuesday, about 3 million, up from 2.5 million for Monday night and about a million more than its normal audience, for three hours of prime-time convention coverage.

The viewing totals also increased at the three all-news cable channels on Tuesday night, most likely thanks to viewers who might have otherwise watched one of the network channels. For the night, CNN again had the most viewers, 2.362 million, just ahead of Fox News, which had 2.340 million. MSNBC also showed an impressive jump with 1.4 million.

But all told, about 9 million viewers watched the prime-time coverage of the convention on the cable channels and PBS, down from the 13.5 million who had watched on the broadcast networks alone the night before, when all three of them devoted an hour each to the convention.

For the networks, an audience of 9 million is not likely to induce any commitments of more coverage. No network voiced regret about passing up coverage Tuesday night. "I think everyone at the networks would say the evidence shows that three nights of coverage, one hour a night is exactly right," said Allison Gollust, the spokeswoman for NBC News.

At PBS, the feeling is the opposite. "The networks came here with a premise, that an audience is not going to watch convention coverage," said Rob Lynn, director of communications for "The NewsHour With Jim Lehrer." "We came with a different mind set, that if we provided good coverage with good context, people were going to go for it. And we've been attracting people in droves."

On cable Tuesday night, the biggest attraction by far was Bill O'Reilly's hour from 8 to 9 p.m. on Fox News, in which he interviewed Michael Moore, the filmmaker, drawing just over 3 million viewers. But in the 10 p.m. hour, when the major speeches took place, MSNBC, with 1.85 million viewers, edged Fox News, which had 1.84 million. CNN drew just under 3 million.

## PBS CARRIES CONVENTION MOMENTUM INTO N.Y.

Los Angeles Times

Aug 30, 2004

By Elizabeth Jensen

NEW YORK — When the Republican National Convention gets underway tonight, PBS will again be alone among the major over-the-air broadcasters to offer full live coverage of events from the podium.

The decision this year by the big broadcast networks to pare their political convention coverage of each party to major speeches on just three of the four nights opened the door for PBS to attract more viewers. The public broadcaster saw its ratings jump 23% from four years ago for its coverage of the Democrats' gathering in July, to an average of 2.9 million viewers a night. The other over-the-air broadcasters easily topped that by a million viewers or more each in the limited hours of their coverage, but PBS still attracted a larger audience than the all-news cable rivals (which were led by CNN's average of 2.3 million viewers for the week, followed by Fox News Channel's 2 million and MSNBC's 1.3 million).

For the Republican convention, Jim Lehrer will anchor PBS coverage from New York from 5 to 8 nightly and can be seen on KCET.

Elsewhere, cable's C-SPAN will carry gavel-to-gavel coverage of the podium happenings. In addition, the network has struck a deal with the Time Warner, Cox and Comcast cable systems to offer day-later replays of major convention speeches on systems that have video-on-demand. The C-SPAN website also will have archival replays of major convention speeches.

Cable news networks CNN, Fox News and MSNBC will have full day and evening convention coverage interspersed with commentary and interviews. CNBC's early evening programs will be broadcast from the convention, as will Comedy Central's faux news program "The Daily Show With Jon Stewart." HDNet will provide nightly coverage in high-definition format. ABC, CBS and NBC will air an hour each, beginning at 7 p.m., Tuesday, Wednesday and Thursday. Highlights those nights, respectively, are speeches by California Gov. Arnold Schwarzenegger, Vice President Dick Cheney and the nomination acceptance speech by President Bush.

For Los Angeles-area viewers with access to digital cable, ABC News is also offering extended convention coverage, anchored in the evening by Peter Jennings. The service, "ABC News Now," is also available on broadband.

Spanish-language networks Telemundo and Univision will report from the RNC, and both will carry the president's Thursday acceptance speech live.

Many radio talk show hosts are broadcasting from the convention this week (including KABC-AM's Bill O'Reilly, Sean Hannity and Larry Elder), as is National Public Radio, which plans full coverage of the evening proceedings.

PBS SETS DIVERSITY CURVE: BROADCASTER TOUTS ITS MULTICULTURAL SLATE,  
'MAYA & MIGUEL' DEBUT

Television Week  
September 6, 2004

By Christopher Lisotta

Children's programming on public television has a long history of celebrating diversity, thanks to shows such as "Sesame Street," "Reading Rainbow" and "Between the Lions," which feature multicultural casts and story lines. There's also "Dragon Tales," with two Mexican-American characters, and "Sagwa," which spotlights Asian culture. This season, PBS is taking its commitment a step further by launching several new shows that focus on the Hispanic American experience, one of which also seeks to bolster kids' basic language skills.

Scholastic Entertainment's "Maya & Miguel," an animated half-hour that highlights the adventures of Hispanic twins and their bilingual parrot, will premiere on the network Oct. 11 as part of its two-hour after-school programming block, PBS Kids Go!

The creation of shows such as "Maya & Miguel" makes sense, considering the increasing diversity of the country, and in turn, the increasing diversity of the PBS audience. According to Linda Simensky, senior director, children's programming at PBS, the conventional wisdom that public television is the domain of rich white viewers who can well afford other viewing options couldn't be more wrong. "We have research that shows our minority audiences percentages are very close to the percentage of minorities in the United States, so we are confident that we are serving viewing interests for all ages," she said.

Ms. Simensky described Latino kids as "currently underserved, due to a lack of children's television programming which reflects their life experiences."

The show is an amalgam of various cultures. The twins' mother is of Mexican descent and their father is Puerto Rican. Maya's best friend, Maggie, is a product of a first-generation Chinese American family.

Deborah Forte, president of Scholastic Entertainment and "Maya & Miguel's" executive producer, said the show was developed with two primary goals: to promote the value of a multicultural society and to support English-language learners. But at the same time "Maya & Miguel" had to be as accessible to young audiences as possible.

"When children see the show they will see a fast-paced, very commercial-looking animated comedy," she said. "But we've drawn upon research from language experts involved in development, so we are really trying to do this right."

Ms. Forte said the show was not born out of the need to fulfill a PBS mandate, but grew out of her own idea of what she wanted to see creatively in children's television.

"It came from a notion I've been playing with for awhile about an animated sitcom that was inspired by the comedy of Lucille Ball," Ms. Forte said. "I thought it would be great to have a brother and sister to play off each other like Lucy and Ricky did."

Although the characters Maya and Miguel are U.S.-born English speakers without accents, their cousin, Tito, is a recent immigrant and will serve as the show's model English-language learner. The twins' parrot Paco allows the show to repeat words and phrases in an unobtrusive fashion, an important tool in teaching children language skills.

"It's a nice way to support the more formal language learning they are learning in school," Ms. Forte said.

Scholastic Entertainment is also launching a Web site in both English and Spanish that will encourage language acquisition through interactive content and other Web-based activities. Ms. Forte said the site will also have bilingual pages for adult care-givers. "There's a lot more going on than the show itself," she said.

Al Jerome, president and CEO of Los Angeles public television station KCET-TV, sees shows like "Maya & Miguel" not as just a nice idea but as something crucial to his station's relevance.

"It's really taking cognizance of what's going on in our marketplace and in the country," he said. "In the Los Angeles market, the Latino audience is a fact of life."

Mr. Jerome said this is why KCET also produced the prime-time drama "American Family" and why it is producing dual series for care-givers of pre-kindergarten-age children, "A Place of Our Own" and "Los Niños en Su Casa." Although not directed at children, the two shows, one in English and one in Spanish, are designed to give parents and the skills they need to prepare kids for school.

With child development experts stressing that the first five years of life are crucial in setting the pace for learning later on, early child care-givers have never been considered so important. "One-third are not prepared for kindergarten," Mr. Jerome said of California 5-year-olds. "It's very difficult to make up that deficit. We think we are going to make a major contribution." Both programs premiere Sept. 13 on public TV stations throughout California.

In addition, Galan has developed a six-part series exploring the artistic contributions from the nation's different Latino communities. The series, "Visiones: Latino Art and Culture," runs nationally on PBS throughout September, which is Hispanic Heritage Month, and into October.

Mr. Jerome, who was president of the NBC owned-and-operated stations, said PBS is in a better position to provide programming that other broadcasters are not interested in, since public television does not face the same constraints for-profit media outlets must contend with.

"The advertiser-based marketplace has become so short-term that innovation becomes a little more challenged," he said.

But he also noted that programming like "Maya & Miguel" and the two care-giver-targeted series serve a broader purpose, since they show producers they can program for niche audiences and provide formats that can be imitated. For Mr. Jerome, PBS has always been a leader in developing groundbreaking programs that reflect cultural diversity, particularly for younger audiences.



## ELMO PROMOTES PLAN TO MAKE KIDS EAT RIGHT

The Associated Press

October 16, 2004

WASHINGTON (AP) - In a walnut-paneled Senate conference room, Sesame Street's Elmo bounced, a senator practiced a jump shot, and a gaggle of preschoolers squealed. So much for congressional decorum.

Joining play with politics Thursday, the children's TV show characters and lawmakers promoted new programs to encourage youngsters to eat better, be active more, and not grow up fat.

Sesame Workshop, the nonprofit educational organization behind the kids' TV mainstay, launched its Healthy Habits for Life initiative, while Senate Majority Leader Bill Frist, R-Tenn., and Sen. Ron Wyden, D-Ore., promoted school exercise and nutrition legislation they plan to introduce.

The Sesame initiative includes two public service announcements, as well as plans for a traveling museum exhibit on diet and exercise. Starting in the spring of 2005, Sesame Street will allot more time to healthy food choices and physical activities.

Frist and Wyden would develop and promote model programs on diet and physical activity in schools.

For the kids, however, the most important participants were the ones in fake fur. The children sat as still as they could, gazing up at a puppet stand as Elmo and fellow monster Rosita tried to lead by example, munching plastic carrots and bouncing through exercises.

"Elmo runs all the time," Elmo declared.

The senators also did some leading by example. Frist, a physician, advised Elmo, "Stay hydrated." Wyden, who played basketball at the University of California, Santa Barbara, demonstrated his jump shot form, leaping several inches off the floor.

"Keep working," Elmo advised him.

CONGRESS, MEDIA CAN HELP SAFEGUARD OUR FREEDOMS  
Buffalo News (New York)  
November 5, 2004

Regardless of the result of the 2004 presidential election, there are two key concerns that I submit are worthy of our efforts if we are to safeguard our freedoms.

First, we must know the truth in order to understand our national reality.

We can be assisted in that quest by an unbiased media that work hard to present facts, not preferred fiction. We need to insist on this from our print media but most especially from television and radio outlets. The Constitution guarantees a free press, but we also need a press that strives to deliver accurate information, not propaganda, to the public.

In the television arena, C-Span and PBS come closest to this standard at present. We certainly don't need news programming that serves to inflame the differences in an already seriously divided country. I would appeal to media outlets to consider the good of the country and for individuals to think about their media choices. Do we want hatreds to intensify or do we want understandings to develop?

Second, we need to insist that our Congress take on its constitutional responsibility to declare war when it is necessary. Our government was designed with three branches in order to balance the power and protect us from the abuse of power by any one branch. We need to respect, protect and advocate for that balance by conveying our concerns directly to our representatives. If we have a strong, fair and free press, we can enlist it in this effort to safeguard our democracy.

PBS EVOLVES, KEEPS ITS TRADITION INTACT: PUBLIC TV MAINTAINS COMMITMENT TO DOCS IN THE AGE OF REALITY

Television Week

January 2005

By Jacque Jones

With series such as "Survivor" and "The Apprentice" capturing large audiences, even PBS, the grandfather of all reality broadcasters, has had to take notice.

"[Reality] has changed the vocabulary of television. And it's changed the expectation of audiences," said Jacoba Atlas, PBS's senior VP of programming. "You ignore it at your own peril."

Of course, no one can accuse the network of ignoring reality programming. That genre took much of its production technique from the field of documentaries, which helped put PBS on the map.

Still, shows like "Frontline," which has won every major broadcast journalism award since its 1983 inception, are a far cry from the reality series currently making waves on broadcast and cable. David Fanning, "Frontline's" creator and senior executive producer, joked that people have tried to avoid the term "documentary" for years. "It summons up the classroom," he said.

#### No Fake Reality

Maybe so, but at PBS, documentary remains a proud tradition. "The danger about what's being done now is that it ratchets up the drama in a really fake way," said Ms. Atlas. "Mark Burnett ['Survivor'] is an excellent producer, but he calls his work unscripted drama, not documentary, and I think that's true."

Lois Vossen, who produces "Independent Lens," a PBS series showcasing the work of independent filmmakers, said people constantly tell her they want to see "real" reality television, not a manipulated, over-shot facsimile. "People are moved by what's genuine," she said. "That said, when you look at the number of people who voted for 'American Idol,' it was about a third of the number that voted in the last election."

Ms. Vossen said staying true to the mission of independent film is easy, but reaching a mainstream audience is a challenge. The key, according to many documentarians, is to take what's good about reality television and produce one's own brand of it on PBS.

While there's little chance of "The Bachelor" appearing on PBS, the network is currently doing reality in its own way. "Colonial House," which premiered last week, is, like "Frontier House" before it, part of an attempt to establish a new genre that network executives call "experiential history." The concept is to take 21st century people back to a historical time and have them live life under those circumstances.

Focusing on basic issues of food, shelter and entertaining the children without television or Gameboys is the challenge that makes "Colonial House" a true reality experiment. And if that's not scary enough, swearing gets a participant pilloried.

So far, the series and its similarly themed predecessor have been a great success for the network. "[They've] cut across all demographics and brought a tremendous viewership to us," said Ms. Atlas, who added that she is not conflicted by the format. "We're still based in real history. And we're not setting up phony conflict," she said.

For the real purists, there are still the traditional PBS documentary series, as well as frequent miniseries and specials from the likes of filmmakers such as Ken Burns. Commercial networks, with their budgetary constraints and ratings concerns, simply don't have the luxury of developing such shows.

For example, David Sutherland, a longtime documentarian, has spent the past three years shooting film of teenage boys in Appalachia. "Filmmakers who can work for public broadcasting often have already made their reputation and can get the funding they need," Ms. Atlas said. "They also have the patience and the wherewithal to take the long form and really stay with something."

Yet the harsh financial reality of documentary filmmaking is a struggle for those who need to earn a living and support their families. Most can't make such a long-term commitment to a project. Mr. Sutherland, in fact, mortgaged his house to complete a previous film.

PBS was actually first out of the box in the reality programming race. When "An American Family" (not to be confused with "American Family," the current PBS scripted series from Gregory Nava) aired in 1973, viewers got their first glimpse of nonmanipulated drama with real people.

Without ratings to worry about or sponsors to court, PBS has always been in a protected class. But network executives have not been without their worries.

Ms. Atlas admitted to a touch of envy for the BBC, which is fully funded by the British government. "The struggle is not to find talented filmmakers. They're out there. It's to get funding for those filmmakers in a timely manner so they can get on the air," Ms. Atlas said.

"But we're lucky. The things that are code words at the networks-"speed it up, make it funnier"-are just never said here."

Still, while PBS producers may not worry as much about ratings as those at the commercial networks, they certainly want to attract an audience. "It's hard to find us in the clutter," Mr. Fanning said. "There's so much information out there-people shouting at each other on interview shows and the endless news cycles on the 24-hour news stations. Add to that blogs and checking the Net. That's the hour I'd like to have them watch 'Frontline.'"

2004-2005 TV Reviews  
Selected Articles

DOC SHOWS FAMILIES RAVAGED BY ALZHEIMER'S

Associated Press

Jan 18, 2004

By Frazier Moore

"The Forgetting: A Portrait of Alzheimer's" tells you everything you never wanted to know, but better be aware of, about Alzheimer's disease.

This important documentary, based on David Shenk's best-selling book of the same title, begins with two vital points:

\_ No one is immune from this deadly affliction.

\_ With the aging of the U.S. population, the number of Alzheimer's cases is skyrocketing accordingly. From 500,000 cases 15 years ago, there are 5 million today, with a full-scale epidemic likely in less than a decade as the first baby boomers reach age 65.

The economic cost of Alzheimer's, in health care and lost productivity, is an estimated \$100 billion, according to the film. Without remedies, the disease could escalate to bring the nation to financial ruin.

"The Forgetting," which airs Wednesday at 9 p.m. EST on most PBS stations, is a combination of many elements. It looks back at the history of a malady so rare a century ago it didn't have a name.

It portrays several families ravaged by this cruel disease (along with each victim, Alzheimer's takes a terrible toll on loved ones and caretakers).

It tracks how, during a period ranging from eight to 20 years, this disease robs each victim of memory, a sense of self, and, in time, the ability even to swallow and breathe.

And it covers the research under way to slow the disease's progression, which, in lieu of outright cure or prevention, would buy the patient (and the nation) precious time.

Following the 90-minute documentary is a valuable half-hour special, "Alzheimer's: The Help You Need," with David Hyde Pierce ("Frasier") leading a discussion with a panel of experts as questions about the disease, and support resources for those it inflicts, are addressed.

In a phone interview, the actor, who watched both his grandfather and father suffer from the disease, recalled: "Long before the person actually passes away, they are taken from you."

But despite his painful personal experience, "I'm glad," he said, "that I'm one of the people who has been made aware of this disease and how close it is to all of us."

Today he is a board member of the Alzheimer's Association and an advocate in the fight to raise money and find a cure.

"As in every war, it's very important to know your enemy and what you're up against," he said in urging people to watch the two broadcasts. "Whether or not this disease comes to you on these TV programs, it's coming to your house."

## TAKING PULSE OF BLACK AMERICA

Baltimore Sun Television Critic

February 2, 2004

By David Zurawik

A renowned Harvard University professor, who is attempting to document African-American life 35 years after the death of Dr. Martin Luther King Jr., visits one of the most wretched public housing projects in the nation, Chicago's Robert Taylor Homes.

The professor, Henry Louis Gates Jr., and his small film crew stand in a dirty, graffiti-scarred lobby waiting for an elevator to take them to the 11th floor, where the professor will interview a 30-year resident of the building. He wants to ask her how she thinks things have gone for African-Americans in the years since the death of Dr. King.

There are two elevators, but only one is working in the tower where some 1,000 residents live. When it finally arrives, it is so rickety, hot and crowded, that Gates is afraid to ride in it. He turns instead to a stairwell down the hall.

"I'm claustrophobic in elevators, anyway," he says in voiceover as the camera follows his long, slow journey up the stairs. "After 15 minutes, thinking about the heat inside that electric casket, I head for the stairs. I'd rather walk than get trapped in that thing. But this is routine for people here."

A fear of ramshackle elevators may seem trivial, but this scene exemplifies the small, human touches that make *America Beyond the Color Line* gleam with honesty amid a season of trumped-up reality shows. The provocative and illuminating two-part documentary airs tomorrow and Wednesday nights on PBS.

The film of Gates climbing steps as he admits his phobia, radiates such authenticity that joining him seems like the most natural thing in the world to do. As he climbs, the narration and images are skillfully combined to evoke how it feels on the hot and sticky stairway, how it feels to live in the run-down building.

*America Beyond the Color Line* offers viewers a rare chance to journey through various parts of black culture and life with an engaging and genuinely wise guide. And as he plumbs "the color line," Gates, the W.E.B DuBois professor of humanities at Harvard, doesn't limit his investigations to the Chicago housing projects. (The show's title comes from DuBois who said the great problem of 20th century American life is "the problem of the color line.")

The first segment begins as Gates travels to Memphis, Birmingham and Atlanta - the holy cities of the Civil Rights movement - tracing the migration of African-Americans back to the South. Along the way, he interviews residents of military bases, politicians, policemen and celebrities including movie star Morgan Freeman and poet Maya Angelou. He also speaks with residents of all-black, gated, suburban communities where the homes start at \$750,000.

He doesn't mince words when describing these exclusive enclaves as "segregation." He ends the hour sitting beside the tomb of King, whom he identifies as his "hero," wondering about blacks who choose to live only with "people in their own class who look like them."

"When I think about all that Dr. King lived for and died for - and in a word that vision was integration - I can't help but wonder what Dr. King would think of this whole thing," Gates says.

He leaves the Deep South to visit Chicago, then New York and Washington where he sits down with such African-Americans of corporate and political achievement as hip-hop mogul Russell Simmons, chess grandmaster Maurice Ashley, power-broker Vernon Jordan, Secretary of State Colin Powell and Franklin Raines, the CEO of the Fannie Mae Corp. On the heels of interviewing Simmons, Gates listens as Powell condemns, in no uncertain terms, many of the images and messages pumped into the popular culture by black entrepreneurs such as Simmons.

Gates' quest to chart the main currents of African-American life concludes in California where so many great American journeys end. In an effort to understand the role of "cultural gatekeepers" in the making and selling of black images, he talks to stars such as Samuel L. Jackson, Nia Long, Don Cheadle, Chris Tucker and Alicia Keys. The producers with whom he visits include composer Quincy Jones and Regency Films founder Arnon Milchan.

Gates asks Cheadle point blank if he thinks efforts by the National Association for the Advancement of Colored People (NAACP) have been helpful in opening doors for persons of color in Hollywood, and the actor says no.

"This isn't bricklaying, it's acting," Cheadle says. "'It's not as simple as just saying we need more numbers."

The film also explores the rarely discussed issue of differences in opportunity based on shades of skin color among African-Americans. As Gates puts it, "If you're light, you're all right. If you're brown, hang around. But if you're black, you better get back." The black actors to whom he speaks, say African-Americans themselves help enforce the standard.

While it is a documentary, *America Beyond the Color Line* is not the standard, Ken-Burns-inspired, kind of documentary that has come to dominate American public television in the last 15 years. Made for the BBC and PBS by a British production company, it is more closely modeled after such BBC productions as the *Life* series in which David Attenborough explored the world of nature. In its long-ago glory years, CBS News adapted the model to put correspondents like Bill Moyers and Charles Kuralt on the road exploring America.

How one feels about such documentaries often depends on how one feels about the correspondents who typically write their own copy, appear in nearly every frame and share their thoughts with viewers when they are not interviewing the people they encounter on their trip. There is a lot to like when Gates is the correspondent.

Gates' expertise is a given, but what's surprising is how quickly and gracefully he can lay out a framework for the complicated issues and trends he's trying to chronicle. For example, as he approaches the Robert Taylor Homes in Chicago, he lays the groundwork for his interviews by pondering why tens of thousands of African-Americans still live at or below the poverty line though the black middle class in the last three decades has expanded significantly.

"Scholars on the left say that the system is to blame. It's a legacy grandfathered by slavery, fathered by Jim Crow racism and nurtured by de facto segregation and job discrimination," Gates says.



"Scholars on the right say its their own fault," he continues. "Too dependant on government handouts, they're lazy, irresponsible, and have no self-reliance. They have decided to be poor.

"Neither argument satisfies me," he concludes as he opens the building's door. "Both deny the human face and voice of poverty that lie behind the statistics we hear so often. I'm going to find some answers from the people who live here themselves."

In the end, Gates is more interested in offering an array of answers from the people he interviews than he is in coming to conclusions and trying to package them as a singular truth.

When he finally makes it to the 11th floor, he meets Caroline Massenberg, who has lived there since the 1970s. She raised three children and is helping to raise five grandchildren. One has just made it into college in Tennessee. She hates life in the building because of "the guns, and the gangs and the drugs and the violence." She blames it on what she calls "bad parents."

As Gates and the woman stand on the balcony looking down through ugly, heavy-gauge wire at the playground below, he says in voiceover, "No statistics can convey Mrs. Massenberg's pain - the poignancy of her dilemma and her powerlessness in the face of the forces arrayed against her despite all her good intentions and hard work."

He asks her if she considers it a "blessing" that the building is about to be torn down.

"Yes," she says hesitatingly. "But you move. You get an apartment - something in a nice neighborhood. These same people are going to move right next door. They're going to take their bad attitudes and the same bad things they're doing here and they're going to be your next door neighbor."

There are no easy answers, and America Beyond the Color Line with Henry Louis Gates Jr. is one of those rare television programs willing to speak that truth.

A PBS PROGRAM EXPLORES THE RISE AND FALL OF JUDY GARLAND WITHOUT THE USUAL TEAR-PROVOKING EXCESS

Orlando Sentinel Television Critic

February 22, 2004

By Hal Boedeker

Judy, Judy, Judy -- the fascination with Judy Garland never ends because her story marries talent with tragedy in haunting ways.

Books have explored the sex, drugs and anguish in Garland's saga. A 2001 ABC miniseries, starring Emmy-winner Judy Davis, integrated the highs and lows of Garland's life. A classy new documentary from PBS' American Masters, premiering Wednesday, takes the refreshing approach of profiling Garland through her music.

Judy Garland: By Myself captures the performer's essence better than a tell-all portrait ever could. (Let's face it, tell-all usually means: Misses the point.) Fans will probably learn little new information, but director Susan Lacy assembles marvelous clips with panache.

The film starts by revealing that Garland recounted her life to a tape recorder. That bombshell yields few insights, and the tapes were of such poor quality that Garland's words are spoken by an actress: Isabel Keating, who plays the singer on Broadway in *The Boy From Oz*.

If that device is initially distracting, Lacy makes another decision that bolsters the film. She offers only vintage audio of speakers talking about Garland, an approach that keeps the focus on the singer.

Those speakers range from former husband Vincente Minnelli and director George Cukor (*A Star Is Born*) to MGM studio colleagues Mickey Rooney, Van Johnson and June Allyson.

"Judy was so fragile," Allyson says. "People thought she was really a tough lady. She wasn't. You were almost afraid she would break, 'cause she broke so many times."

The program becomes a sentimental journey because some speakers have recently died: Robert Stack, Buddy Ebsen and Ann Miller. There are delightful clips of late-night host Jack Paar, who brought out Garland the hilarious raconteur.

Judy Garland: By Myself tells Garland's story sympathetically but without maudlin excess. The program describes her problems -- drug addictions, unhappy marriages, mental problems -- but doesn't belabor them.

The film explains how Garland's mother, Ethel Gumm, and MGM boss Louis B. Mayer pushed the child performer to stardom. Mayer wanted Garland for *The Wizard of Oz*, her greatest film, but he derided her weight problems by calling her "my little hunchback."

MGM was a taskmaster that warped her self-esteem. The studio put her on pep pills and sleeping pills that damaged health. Her mother pushed Garland to abort her first child so as not to slow the studio machine, which later worked her to exhaustion and dropped her at age 28.

One speaker says she was dealt a bad hand, yet seeing her simply as a victim undercuts her gifts and resilience. By Myself seems to say: Why shed a tear when you can share Garland's joy?

This profile in song draws on tunes she made movie favorites: "Have Yourself a Merry Little Christmas," "The Man That Got Away," "Get Happy" and "Over the Rainbow."

The documentary culls entertaining clips from her short-lived CBS variety series, which fell victim to network interference and the high ratings of NBC's Bonanza.

It was another instance of television wasting a singular performer. Still, the clips show that Garland offered a bonanza of talent with such guest stars as Peggy Lee, Lena Horne, Ethel Merman and Tony Bennett. Garland and Barbra Streisand were well-matched partners when mixing "Get Happy" and "Happy Days Are Here Again."

The documentary opens with Garland doing "By Myself" and concludes with a poignant "Through the Years." Along the way, she's as equally mesmerizing on "Zing Went the Strings (Of My Heart)," "You Made Me Love You" and "Stormy Weather."

In writing the lyrics for her signature song, "Over the Rainbow," E.Y. "Yip" Harburg felt Garland's longing and wondered if she'd ever be happy. Perhaps she never was, yet she provided abundant pleasure for four decades before her death in 1969.

In the clear-eyed Judy Garland: By Myself, the music soars over the sorrow. That's the way it should be. With Garland, the talent matters more than the tragedy -- a point that's often lost in a tell-all age.

STAR RATING: \* \* \* \*

## RETURN OF 'AMERICAN FAMILY' OFFERS PANOPLY OF LATIN STARS

Hartford Courant TV Critic

April 2 2004

By Roger Catlin

"American Family" made its mark during its first season in 2002. It was not only the first drama series on broadcast television with a Latino cast, it was also the first original American episodic drama PBS had presented in decades.

That's not to mention a cast that read like a who's who of Latin actors, topped by Edward James Olmos, Esai Morales, Sonia Braga and Raquel Welch.

For its second season, creator Gregory Nava, who made his name with such films as "El Norte," "Mi Familia" and "Selena," brings a cinematic tone as well as an expanded title.

"American Family - Journey of Dreams," which begins a 13-week run Sunday on PBS, is written as one long miniseries, picking up threads from various generations of the Gonzalez family across a letterboxed screen with several impressive cinematic flourishes. The most remarkable one, in the opening episode, is a wedding reception scene that goes on 38 minutes in what seems to be a single shot.

The gala East L.A. marriage of Morales' Esteban Gonzalez to Ofelia (Kate del Castillo) affords the Gonzalez family patriarch (Olmos) a chance to raise a glass and introduce all of his grown children to anyone who has not seen the first season.

It also helps set up this season's utterly contemporary conflicts. Besides its other firsts, mark "American Family" as the first drama to track the national divisions regarding the war in Iraq.

It happens when the golden son Conrado (this year played by Yancey Arias) is about to be shipped off to Kuwait as an Army doctor in the days before the invasion. Olmos' Jess Gonzalez is both proud and worried as he recalls his service in the Korean War, whose horrors he largely keeps to himself, and butts heads with his strong-willed daughter Nina (Constance Marie), who just as strongly opposes the war.

This conflict can play out a little heavy-handedly, especially as it initially unfolds, with Jess spouting about "you liberals" and Nina repeating her party line.

But there are deeper complexities at work, as the story keeps returning to Jess' grandmother's journey to America in 1915 amid the mayhem of the Mexican revolution. It's a journey that involves a "magic compass" that guides her north and a curse that will supposedly befall her family for generations.

The story also moves back to the early 1990s, when Conrado begins to feel he is starting to be part of his parents' dreams and not his own as he enters medical school. At the same time, he meets a first love, who gets away. Going even further back, to his childhood, he is haunted by a vision of his grandmother in the attic.

There are a lot of side stories and family members to cover in 13 weeks and Nava will have his hands full trying to tell all of their stories. Indeed, the series' biggest name, Welch, who plays

former would-be entertainer Aunt Dora, isn't seen in the first two episodes. Instead, the story largely follows Conrado to the front lines of Iraq, where he has run-ins with harder-line Army personnel, including one played by Lynn Whitfield. She's one of several additions to the already large cast. Others include Arias, taking over the Conrado role originated by Kurt Caceres, and Patricia Velasquez, who portrays the grandmother as a young woman struggling north.

The cast is full of recognizable faces. Besides Olmos and Welch, known for their film roles, Marie portrays the wife on "George Lopez"; Morales is on "NYPD Blue"; and Rachel Ticotin, whose character married into the Gonzalez family, was the mother on "Skin." Jesse Borrego, who portrays an old gang associate of Morales, plays agent Gael on "24"; Arias starred in "Kingpin"; and Velasquez has a recurring role on "Arrested Development."

The juggling of their schedules to make such a richly varied Gonzalez family mirrors the labor of love obviously behind the whole work.

The miniseries "American Family -- Journey of Dreams" begins its 13-week run Sunday at 6 p.m. on CPTV.

## HER DET. JANE TENNISON, THE THINKING VIEWER'S COP, IS OLDER, WISER AND SCRAPPY ENOUGH TO BEST THE BIG BOYS AT THEIR OWN GAME

Newsday

April 18, 2004

By Noel Holston

"Prime Suspect," the sixth coming of which arrives Sunday night at 9 via PBS' "Masterpiece Theatre," was a revelation when it premiered on the network's "Mystery!" anthology in 1992. Although "Cagney & Lacey" (1982-88, CBS) had introduced feminist concerns to the conventional police drama and "Hill Street Blues" (1981-87, NBC) had rendered "super-cop" procedurals like "Kojak" and "Baretta" passe with its serialized stories and distinctly fallible characters, "Prime Suspect" made even the best of that golden age of homegrown cop shows look faintly cartoonlike.

What is now known - and sold on DVD (see accompanying story) - as "Prime Suspect 1" introduced Detective Chief Inspector Jane Tennison, a newly promoted homicide commander with the London Metropolitan Police. She was up against a difficult first case, trying to snare a serial killer with the "help" of an all-male squad whose members ranged from wary to openly misogynist.

Tennison was an unprecedentedly brave characterization. Rather than present her as a pearl among male chauvinist swine, series creator Lynda LaPlante and star Helen Mirren made Tennison highly capable but sometimes strident and tactless, so primed for workplace slights that she couldn't detect sincere courtesy, so obsessed with succeeding that she drove away the decent bloke who loved her. In one of the series' boldest sequences, Tennison arrived late for her elderly father's birthday party because she couldn't pass up her chance to be on "Crime Night," a sort of "Britain's Most Wanted," and then scolded him because he hadn't set the VCR to capture her performance for posterity.

And we thought "NYPD Blue's" Andy Sipowicz was a mold-breaking cop because he was a recovering alcoholic.

Even more refreshing, "Prime Suspect" didn't merely respect viewers, it insisted they work. Events that set the story in motion happened fast. Dialogue was not encoded with overt character identifications and background information. A character's fleeting facial expression might tell you more than his or her words. In its intricacy and sophistication, it was more akin to a Scott Turow crime novel, such as "Presumed Innocent," than a "Hill Street" or an "NYPD."

American TV crime drama closed the gap in the dozen years since Tennison cracked her first big case, largely thanks to HBO series such as the intricate character mosaic "The Wire." But "Prime Suspect 6" - produced by commercial Granada Television, not the BBC - demonstrates that the series and its star still can play with the big boys.

Typical of its predecessors, "Prime Suspect 6: The Last Witness" begins with the discovery of a decomposing corpse. "Prime Suspect" rarely depicts violent acts, just their aftermath. It was gruesome in this respect long before "CSI: Crime Scene Investigation" was a twinkle in Anthony Zuiker's eye. The dead woman eventually is identified as a Bosnian immigrant who was working at a London hotel as a maid.

Our heroine, difficult as ever, has a new form of discrimination to contend with. At age 54, Detective Superintendent Tennison is being encouraged by suspiciously solicitous higher-ups to think about taking the early retirement that's her contractual right and spare herself the stress of her job.

She responds to their "concern" by pulling rank on her top assistant and taking his big case. The investigation leads to a covered-up massacre in the Balkans a decade earlier. The war-crimes theme and the suave villain in Peter Berry's script may remind you of "Marathon Man," William Goldman's novel about Nazis in hiding.

The two-part production is the first Tennison mystery since 1996. Many fans had given the franchise up for dead. Mirren wasn't so keen on reviving it herself.

"I was quite resistant to the idea of coming back, only because it had been so good before," Mirren said in an interview at PBS' midseason preview in January. "It's very difficult, you know, with this kind of television - original scripts, four-hour stories. It's very difficult to keep that standard high.

"That's one of the reasons we've never made it into a - you know, an ongoing, sort of weekly series," she said. "We've only ever tried to make it what is known over here as 'event' television. I didn't want it to take a step down. And I didn't know if it was still relevant six, seven years later. Life moves pretty rapidly. And I wanted it to be relevant."

Her qualms were soothed by executive producer Andy Harries of Granada and producer David Boulter. "They found me a wonderful writer [Berry] and a very, very wonderful, hot, young director [Tom Hooper], who I think did a fantastic job," she said.

The latest "Prime Suspect" is, in fact, the most visually dynamic, so much like a stylish feature film that some hard-core aficionados may miss the unkind lighting and the authentically institutional look and feel of previous installments. No one is likely to grumble about Berry's teleplay, however, for it has the complexity, nuance and grit of LaPlante's terrific scripts for the first and third miniseries.

"I do think we tend to spell things out less in Britain," Mirren said. "We give ourselves the luxury of having a four-hour story. We don't have to tell the story in an hour or even two hours. We can achieve a kind of complexity that other programs can't because of the requirements of time."

Tennison is Mirren's signature character, despite having appeared in dozens of movies and having played classical characters, such as Cleopatra, multiple times on stage. But she insists she's never been affected personally by what has been described as Tennison's "train wreck" life.

"I don't live with Jane except for when I'm working on 'Prime Suspect,' and even then, I don't take her home with me," she said. "There's nothing that Jane is that's related to me."

She takes exception to the suggestion that Tennison is unhappy. "I think she's very happy," Mirren said. "She loves her job. She loves being a professional woman. She loves the demands. There is no such thing as perfect happiness. We all pay. We all make sacrifices for the things we want to do, whether it's family or work or whatever it is."

Mirren, who will turn 59 in July, was asked whether she believed women still have to put up with the sort of workplace discrimination Tennison did when the series began. "You know, society changes all the time," she said. "Things get repressed. And overtly, supposedly there is no prejudice against women any more. I believe there still is, in reality, especially women in high-powered jobs - talking about really high-powered jobs. I mean, it's very interesting that the American people find it impossible to contemplate having a woman as president. And that's just an example of a kind of universal prejudice.

"The age thing, well, we're facing an interesting conundrum," she said. "I think older people certainly are prejudiced against...in many professions." But at the same time, she said, "There are an awful lot of people - you know, the 'bulge' generation is moving through life. And people in their 40s, 50s and 60s are becoming the majority. And the majority, they have economic power and political power. So one finds that perceptions change according to those in political power and economic power."

Mirren's career choices seem anything but limited these days. This year, she starred in an acclaimed production of Eugene O'Neill's "Mourning Becomes Electra" at the National Theater in London. She was on the big screen this year in "Calendar Girls" and has three movies on the way, including "Raising Helen," in which she co-stars with Kate Hudson and John Cusack.

Someone suggested that there seemed to be a thread running through many of her roles - women who are highly competent and have tremendous drive but also meet with frustrating obstacles. But Mirren dismissed the notion of some great career design.

"All great roles are to do with conflict," she said. "I don't particularly see a theme there. I usually try to play [characters] who appear in the last scene. Especially on the last page. That's the most important thing of all. So I always read scripts backward. It's terrible."



A TIMELY LOOK AT HOW FAITH INFORMS BUSH PRESIDENCY

Boston Globe  
April 29, 2004

By Sam Allis

George W. Bush may be the most openly religious president in memory, yet Americans have been neither privy to his personal journey on the road to Damascus nor fully aware of the political implications of the scales falling from his eyes.

"The Jesus Factor," a report from PBS's "Frontline" documentary series, traces his spiritual development and documents how much his embrace of evangelical Christianity has informed his campaigns and his presidency. This solid, linear piece is timely for this year's presidential campaign, and relevant to the Bush messianic mission to graft democracy onto the rest of the world. If it contains no bombshells, tonight's program improves our understanding of the man.

The connection between his religious conversion and his politics is huge. In the 2000 election, almost half of his nearly 50 million votes -- about 23 million -- came from evangelicals, according to "Frontline." (Evangelicals define themselves less by their denomination than by their commitment to Jesus Christ -- their being "born again" -- and, for most, by their acceptance of the Bible as the errorless word of God.) At that time, more than 40 percent of Americans described themselves as evangelicals, and 70 percent of those evangelicals who voted were politically conservative. This bloc, quite simply, was and is Bush's most important base.

Like his father before him, Bush won the White House without carrying the Catholic vote. (Both lost among black, Hispanic, and Jewish voters as well.)

## WHAT WE LIKE: 'COLONIAL HOUSE'

Dallas Morning News  
Friday, May 21, 2004

By Ellen Henderson

What it is: Colonial House is the latest in PBS's series of "projects in experiential history." It, like Manor House, 1900 House and others before it, drops a group of 21st-century people into life in the past, complete with historically accurate living conditions and hardships.

What it's all about: Of course it's a trip back in time for these living-history volunteers, and that comes with the requisite culture shock about the absence of luxuries, free time and, er ... facilities. But it's more than that, because the participants have to cope with and abide by the customs, laws and lifestyles of the past while bringing along their modern-day sensibilities.

The contrast between now and then is especially sharp on Colonial House, given the strict moral code of that time (and the striking punishments handed out for transgressions) and the unbendable hierarchy of authority (the colony's governor makes the decisions, women and servants have no voice, etc.). Compared to the participants on, say, Frontier House, who were nearly overwhelmed by the workload but at least found themselves among equals, Colonial House's "cast" seems to find the constant work a lighter burden than the effort of continually biting their tongues and doing as they're told.

Why we like it: Mainly because it makes us feel smart for never signing up for such a project. In all seriousness, the show's main impact is its eye-opening power to prove to us 21st-century types that we're a lot less tough and a lot more coddled than our ancestors were.

And we like it that way. A meal that took four hours to prepare in colonial times can now be nuked in four minutes. Corn that once required backbreaking effort to plant and harvest can be picked up these days with a quick trip to the local supermarket. We have underwear now. Church sermons don't last three hours. And we never, ever have to eat muskrat.

Still, if this House is anything like its predecessors, the participants will walk away with something more than grateful relief to be returning to their lives of relative ease. Experiencing the day-to-day lives of your forebears firsthand can only give you a deeper understanding and a life-changing perspective on the world. And lucky viewers get to come along for the ride – without feeling the bumps in the road.

### Colonial House

Two one-hour episodes air back-to-back each Monday and Tuesday at 8 p.m. Central on PBS through May 25 and re-air at various times throughout the week. The entire series is also available for purchase on DVD and VHS. See [www.pbs.org/wnet/colonialhouse/](http://www.pbs.org/wnet/colonialhouse/) for more information.

INTELLIGENT LIFE DOES EXIST; 'ORIGINS' PROVES IT

Daily News

By David Bianculli

September 27, 2004

Tonight's season premiere of "Nova" presents the best celestial science program and host since Carl Sagan enthused about all those billions and billions of stars in "Cosmos." Astrophysicist Neil deGrasse Tyson is the guide for "Origins," and it's one of the best science series PBS, or anyone else, has presented this year.

"Origins," premiering tonight at 8 with a two-hour block on WNET/Ch. 13 (another two hours concludes the series next Tuesday), is about nothing less than what "The Hitchhiker's Guide to the Galaxy" author Douglas Adams referred to as "Life, the Universe and Everything."

It explores and explains why the Big Bang banged; why life developed on Earth and how the planet itself developed over eons; and what the central ingredients of all living things, including ourselves, really are.

For that last mystery, it turns out that, 35 years ago in her song "Woodstock," Joni Mitchell answered it before the scientists did: "We are stardust."

There's so much about "Origins" to praise and enjoy. It's a show you'll want to watch, want to tape, and most probably want to keep.

Tyson is a great guide. He's one of the first current-generation PBS hosts to emerge with the combination of knowledge, enthusiasm and charisma that typified the likes of Sagan, David Attenborough and James Burke.

Second, the images are astounding - and there are many different types of images.

There's actual film of remote, otherworldly locations from around our own planet, from giant craters to hydrogen sulfide caves. There are pictures from planetary observatories and spacebound probes. There are computer-generated images of faraway galaxies and presumed long-ago cosmic collisions that look astounding, and approximations of the earth's molten and early stages that seem delivered from a high-definition time machine.

Yet for all that, the image most likely to make you gasp in appreciative disbelief comes in next week's installment, when we witness an octopus whose ability to mimic his surroundings makes even a chameleon stick out like Boy George at an Amish farm.

The scientists interviewed in "Origins" explain all this with a flair for the simple phrase and evocative simile.

One scientist postulates that planets were formed by loose groupings of smaller, similar bits of material, like giant solar dust bunnies. Comets, says another scientist while explaining their sometimes unpredictable content, "are like cats: they both have tails, and they both do what they want to."

Carbon is the universal element referred to as "the star of the show," and the visual aids are just as relatable.

The series, with Tyson as executive editor and Thomas Levenson as executive producer, clearly is a labor of love from many teams of scientists, animators and documentary filmmakers.

It's got eye-popping animation of cataclysmic planetary collisions (no wonder the dinosaurs didn't make it), and also has very funny rants from scientists upset about such scientifically preposterous things as the literally gut-wrenching parasite from "Alien."

You'll appreciate the hard work that goes into postulating, proving and disproving theories. You'll appreciate, perhaps most of all, the miracle of time, and how it took a lack of planetary trauma more than a half-billion years to allow man to become the one species to develop technological intelligence.

We're the only creatures we know, in the entire universe, who have created television.

When it's stuff like "Origins," that all seems worth it. When it's stuff like "Blue Collar TV," I'm more impressed by the octopi and other cephalopods.

Tyson, describing the size of the universe before the Big Bang, holds up a single precious object and says that, at the time, the universe "was smaller than this pearl."

That's hard to believe - and, like "Origins," impossible to forget.

REGARDS TO BROADWAY; A SIX-PART PBS DOCUMENTARY, A VALENTINE TO THE GREAT WHITE WAY'S MUSICALS, COVERS THE BOARS FROM IRVING BERLINE TO MEL BROOKS

Newsday

October 17, 2004

By Blake Green

Caricaturist Al Hirschfeld, famous for his line drawings of theater people, was well into his 90s when he was interviewed for "Broadway: The American Musical," PBS' six-part documentary that begins airing on WNET/13 Tuesday and continues Wednesday and Thursday evenings.

"He'd seen more Broadway shows than anyone alive because he'd gone to every opening for 75 years," said Michael Kantor, who created, directed, co-wrote and co-produced the sprawling project that spans 100-plus years of this special facet of American culture. The filmmaker, who has worked on TV documentaries with Ken and Ric Burns, is also the co-author, with Laurence Maslon, of a thick, richly illustrated companion book with the same title (Bulfinch, \$60).

The landmark series, hosted by Julie Andrews, was almost a decade in the making; Kantor marks its incubation in 1996 with the first of dozens of interviews with Hirschfeld, who spoke reassuringly about the survival of Broadway. "The form changes; you have to roll with the punches," says the bearded, elfin artist in "Putting It Together: 1980-Present," Thursday's sixth and final segment.

#### Theater's optimistic future

The subject of a round of recent interviews to promote the series, Kantor also professed optimism for the future of theater (sometimes bleakly called "the fabulous invalid"). Even after a decade in the trenches of grant proposals and fund-raising for the series, he still is enthusiastic about the musical, which he chronicles from 1893 and vaudeville to the mega-buck extravaganzas of the 21st century.

His starting point was selected, Kantor explained, because that year marked the arrival in New York of Irving Berlin, the songwriter, and Florenz Ziegfeld, the impresario, each in his own way instrumental in the development of the Broadway musical.

Berlin's contribution is more obvious - in his century on the planet, he wrote some of our most beloved popular music, including the score of 1946's "Annie Get Your Gun," which includes the entertainer's anthem, "There's No Business Like Show Business." The songwriter's music and lyrics also propel 1919's "Ziegfeld Follies," one of the revues for which Ziegfeld is remembered.

But "Give My Regards to Broadway: 1893-1927" and "Syncopated City: 1919-1933," the first two hours of the series, establish Ziegfeld's place beyond presenting a vaudeville showcase for long-legged, beautiful women and wisecracking comedians.

His finely tuned roster of talent included such legends as the inimitable Fanny Brice (later the subject of "Funny Girl," a 1964 Broadway musical that became a 1968 film, both starring Barbra Streisand) and the influential black comic Bert Williams, one of the first minstrel performers to cross over into Broadway's mainstream. Williams' career "provides a window into the racial issues of the time," Kantor said.

Perhaps Ziegfeld's greatest accomplishment was producing "Show Boat," Jerome Kern and Oscar Hammerstein II's 1927 classic, considered the first musical with a story - a complex political plot concerning racism that now seems truly remarkable for its time. As host, Andrews introduces each of the series' segments, from Ziegfeld's own New Amsterdam Theatre on 42nd Street, which survived the degeneration of Times Square to be meticulously restored by the Walt Disney Company for the opening of 1997's "The Lion King." Both Michael Eisner, Disney's chairman, and Julie Taymor, the creative force behind the hugely successful, still-running musical, are featured in Thursday's final hour.

(In Wednesday night's second segment, "Oh, What a Beautiful Mornin': 1943-1960," Andrews addresses her own best-known musical theater contributions, 1956's "My Fair Lady" and 1960's "Camelot.")

In shaping the series, Kantor said he wanted to avoid the nostalgic pastiche of the "That's Entertainment" films of the 1970s, in which snippets of MGM musicals were introduced by their stars.

Rather, the goal was "to place things in historical and social context," he explained. "We tried to base each segment around certain people and a strong theme." He felt it essential to show that Broadway musicals often reflected the nation's social phenomena. The wave of immigration at the turn of the 20th century, Prohibition, the Depression, the World Wars, the sexual revolution, AIDS, 9/11. (While there's been no musical about the World Trade Center tragedy, director-choreographer Susan Stroman ( "The Producers") says in her interview that she believes the watershed event is "why audiences now want more of an escape" in their musicals.)

Determined to go "beyond the best and confront the why," Kantor said he wanted to explore the musical as a peculiarly American - and New York - form. "I think the strength of the piece is not that it's uncovering a lot of stuff never seen before, but that it weaves together a lot of material - a Gershwin show next to a Porter next to a Rodgers and Hart so you can see who influenced who."

Inspired by 'A Chorus Line'

This includes performers, as well: "Hairspray" choreographer Jerry Mitchell recounts in his interview that seeing 1975's "A Chorus Line" as a young man inspired him to learn dance steps he would later use as a performer.

Archival footage, home movies, movie musicals, still photographs, diaries, letters, existing and newly taped interviews, original cast recordings - all were possibilities for inclusion. There was no dearth of material. Kantor points out that the DVD for the series includes five additional hours of outtakes.

To compensate for the scarcity of films of many Broadway shows, songs and scenes performed elsewhere are used: Ethel Merman belts out "I've Got Rhythm" years after she first sang it in 1930's "Girl Crazy." The cast of 1968's "Hair" delights the audience of "The Ed Sullivan Show" during an appearance on his television show.

Among the most poignant talking heads are theater luminaries such as Hirschfeld and lyricist Adolph Green, both deceased. Kantor interviewed a "Ziegfeld girl," Dana O'Connell, before she

died, and talked with Frances Gershwin Godowsky, George and Ira Gershwin's late sister.

Having PBS committed to the project opened many doors, Kantor said. "It's a question of trust when you ask these estates [Cole Porter, Rodgers and Hammerstein, Leonard Bernstein, et al]. How could you do a history of Broadway without their permission?"

In their interviews, director Hal Prince and composer Stephen Sondheim, giants of Broadway musicals in the last half of the 20th century, supply interesting observations and anecdotes about their lives in the theater together and apart. (One of their collaborations, 1976's "Pacific Overtures," is scheduled for a revival on Broadway next month.)

Prince recalls seeing a Ziegfeld show: "Very innocent, very American." Sondheim describes accompanying Hammerstein, his surrogate father and mentor, and his wife to the opening of 1945's "Carousel" and being so moved by the musical's story that he wept all over Dorothy Hammerstein's fur coat.

As he talks of composing the complicated and "creepy" score of 1979's "Sweeney Todd" (directed by Prince), Sondheim, whose style sent the musical off in a new direction, explains he "thought it would be fun to see if we could scare a contemporary audience."

In the years since, the Broadway musical has continued to evolve, surviving such outside influences as the so-called "British invasion" of blockbuster musicals in the '80s ("Cats," "The Phantom of the Opera," "Les Misérables," "Miss Saigon").

To exemplify current styles, Kantor chose "Wicked," a Broadway hit with fantastic special effects. He follows the show's creative process through its opening night last year, including a discussion of its financial viability (it may pay back its investors, often not the case in Broadway musicals).

A theater poster from 1927's "Show Boat" lists ticket prices as \$1-\$5, and, with current prices having spiraled to \$100, "Broadway: The American Musical" cannot avoid addressing the crippling finances of producing a musical. Tuesday's segment begins the discussion with news clips of the first Actor's Equity strike in 1919.

Cameron Mackintosh, who produced most of those London- spawned productions, explains in his interview that "to create a show on Broadway costs twice as much as in London."

#### The effects of high costs

When he produced (and directed) "Follies" in 1971, Prince says it cost \$800,000 - "the most expensive musical ever." "Wicked" is a \$14 million production. This inflation, Kantor points out, has affected not only the type of producers - more and more frequently corporations such as Disney and, in the case of "Wicked," Universal Studios - but the type of show. Adaptations of successful movies and revivals of old shows (such as 1964's "Fiddler on the Roof," currently on Broadway) often are today's musical fare.

Nevertheless, Kantor insisted that things haven't gotten completely out of whack. To support his optimism, he quoted Jerry Orbach, the Broadway song-and- dance-man-turned "Law & Order" detective, whom he interviewed for the series. Theater tickets, Orbach points out, have always been - as they are today - about 10 times the price of movies.

Performing for your pleasure...

PBS' "Broadway: The American Musical: documentary series features two hour-long segments each evening, beginning at 9 p.m. on Channel 13.

Tuesday: "Give my Regards to Broadway: 1893-1927" and Syncopated City: 1919-1933," Among those featured are Irving Berlin, Florenz Ziegfeld, George M. Cohan, Fanny Brice, Bert Williams, Eddie Cantor, Eubie Blake, Al Jolson, Richard Rodgers and Lorenz Hart

Wednesday: "I Got Got Plenty O'Nuttin': 1930-1942" Featured are Oscar Hammerstein II, Richard Rodgers, George Gershwin, Ethel Merman, Ethel Waters, Cole Porter and Fred Astaire, plus clips of musicals from "Oklahoma!" to "The Sound of Music."

Thursday: "Tradition: 1957-1979" and "Putting It Together: 1980-Present." Featured are Bob Fosse, Stephen Sondheim, Michael Bennett, David Merrick, Cameron Mackintosh, Jonathan Larson and musicals from "A Chorus Line" to "Wicked."

There is a companion book by the same name (Bulfinch Press) and a special Web site ([www.pbs.org/broadway](http://www.pbs.org/broadway)) with information and illustrations about the Broadway musical.

Also available are a three-tape VHS set and a three-disc DVD set of the series, a five-CD boxed set with more than 100 recordings (Columbia Broadway Masterworks and Decca Broadway) and a single CD with 21 selections. Michael Kantor, the documentary's filmmaker and co-author of the book, says there is also an educational teacher's guide being sent to 15,000 secondary schools that offers the opportunity to examine American history and culture through Broadway musicals. In one of the exercises, he said, students will listen to Irving Berlin's "My New York" on the accompanying CD and be asked to write the lyrics to a song about their own hometown.



THAT'S IT -- A BILINGUAL SHOW; 'MAYA & MIGUEL' IS AN ANIMATED BLEND OF ENGLISH AND SPANISH

The Washington Post

November 11, 2004

By Luz Lazo

If you hear the phrase "Eso es!" on PBS Kids, it's time to get ready for a bilingual adventure with 10-year-old twins Maya and Miguel Santos.

That's because the minute Maya says "Eso es!" or "That's it!", Miguel and their amigos in the television series "Maya & Miguel" know she has just come up with a great idea. And that means they're in for a new adventure.

This animated series features characters who speak English and Spanish, eat chilaquiles and taco pizzas and live in a colorful and fun neighborhood.

The twins are more different than alike. Maya is three minutes younger than Miguel and she's smart, creative, ambitious and romantic. Miguel is also smart, but he's modest, patient and cool and he knows when to say, "I know you, Maya. . . ." That means he suspects she has come up with yet another idea.

Their mother, Rosa Santos, is from Mexico and their father, Santiago Santos, is from Puerto Rico -- and they run a pet store together. Everyone is bilingual in the Santos family, including their parrot, Paco, which humorously repeats after everyone (in Spanish if they have spoken in English or in English if they have spoken in Spanish).

Some third-graders at Oyster Elementary, a bilingual school in Washington, watched an episode for KidsPost and couldn't stop laughing. Johana Herrera, 7, said her favorite character was the loro (parrot).

"I really liked the bird; he was so funny! The show is very funny and the kids always have ideas about how to clean up their messes," she said.

Hannah Bernhardt, 8, said the show is "a little funny and a little serious. It is good because children who only speak Spanish understand what's happening and those who only speak English can learn a few Spanish words."

"Maya & Miguel" is not the first bilingual show for children, but it is the first of its kind that targets kids ages 6 to 11.

According to the U.S. Census, Hispanic Americans are the largest minority group in the country, with more than 37 million people. Deborah Forte of Scholastic Entertainment, the company that came up with "Maya & Miguel," says the show can help kids understand that the United States is a country of many cultures and languages.

"There are a lot of families who are bilingual," Forte said. "Our children are growing up as part of a diverse America. It's important that they recognize that."

But the show isn't just for bilingual families.

"I think all children can relate to this show. All kids who have siblings are going to relate to Maya and Miguel . . . someone who has a friend can relate, whether they are Latinos or not," Forte said.

COMPELLING 'GRIZZLY' ASKS RIGHT QUESTIONS (EXCERPT)

Chicago Tribune  
November 19, 2004

By Maureen Ryan

Grizzly bears have gone from barely surviving to thriving, but there may be a downside to their comeback.

"Nature's" compelling "The Good, The Bad, and the Grizzly" (7 p.m. Sunday, WTTW-Ch. 11) examines the threats still facing the resurgent bear population of Yellowstone National Park. Almost hunted to extinction, only to be "rescued" as a nearly tame entertainment attraction at the less enlightened Yellowstone of 40 years ago, the animals have resoundingly reclaimed their wild heritage and increased their numbers substantially.

Yet it's no surprise, given the dazzling scenery on display in this beautifully shot documentary, that the very Western states that witnessed the grizzly comeback have also seen a large surge in human populations. Not only are the majestic creatures hemmed in by development and logging in and around their wild habitats, but several of the bears' key food sources also are under threat as well.

Can bears and humans live together in peace? "Grizzly" doesn't provide easy answers, but it certainly asks the right questions...

...Speaking of mountains, a truly gripping outdoors adventure is depicted in the acclaimed docudrama "Touching the Void" (8 p.m. Sunday, WTTW-Ch. 11). Based on the true story of two British climbers who miraculously survived a disastrous 1985 climb in the Peruvian Andes, "Void" asks profound questions about life, death and friendship.

'BLACKNESS' EARNS BURNS A KNOCKOUT  
Daily News  
January 17, 2005

By David Bianculli

UNFORGIVABLE BLACKNESS: THE RISE AND FALL OF JACK JOHNSON. Tonight and tomorrow night at 9, PBS (WNET/Ch. 13). 3.5 Stars

The latest documentary from Ken Burns and company is a tightly focused look at one man, at one point in history.

Yet like Burns' more expansive "Baseball," it's a sports documentary that ends up transcending sports. And like "The Civil War," it's a period piece, with uncomfortably timely parallels about the divisiveness of race and racism.

"Unforgivable Blackness: The Rise and Fall of Jack Johnson," presented in nightly two-hour installments tonight and tomorrow at 9 on PBS (WNET/Ch. 13), is a biography of the first African-American boxing heavyweight champ.

If his name doesn't ring a bell, he's a fighter who was so imposing in the early 20th century, with such infuriating swagger outside the ring, that a search was launched to find the "great white hope" - one who could defeat this proud, powerful, often defiant black man.

In the ring, Jackson was formidable. Outside, he was just as large a figure: a sharp dresser, speeding in expensive automobiles and sleeping with a string of white women.

In retelling Johnson's story, director Burns, writer Geoffrey C. Ward and producers Dave Schaye, Paul Barnes and Burns have the benefit of silent film footage of many of Johnson's later fights, especially his championship bouts in 1908 and 1910. In the former, he faced white champion Tommy Burns in an unprecedented opportunity, as a black man, to win the heavyweight championship title. In the former, he faced undefeated, formerly retired champ Jim Jeffries in "The Battle of the Century."

"Unforgivable Blackness" uses these assets brilliantly - adding sound, slowing and stopping certain frames, and bringing each battle to life.

As always, Burns proves better than anyone in the business at isolating the drama in still photographs. From a wide shot of a boxing arena, he'll slowly focus in on a single face in the crowd - a face that seems to capture undiluted racist hatred. Or he'll have his camera pan down slowly on a photo of a bridge, to land chillingly, on the figures lynched beneath.

The narrative, which traces the persecution of Johnson as well as his boxing exploits, is given additional power by Wynton Marsalis' marvelous music and by the voices of Samuel L. Jackson as Johnson and Keith David as the narrator.

Of the on-screen experts interviewed, the most powerful are Daily News columnist Stanley Crouch (whose glee at telling parts of this story is undisguised) and James Earl Jones, whose best comments are saved for the very last, when he tells of playing Johnson on Broadway and having Muhammad Ali come to see him - and seeing lots of Johnson in himself.

You, too, will see the parallels, in and out of the ring. And when the voice of Billy Bob Thornton is heard reading the Los Angeles Times' reaction to Johnson's victory against Jeffries in 1910 - it's called "A Note to the Black Man" - you'll see and hear history come to life in a horrifyingly unvarnished way.

"Unforgivable," in many ways, is both impressively and regrettably unforgettable.

PBS'S CLASSICAL 'CONVERSATIONS' IS A CONCERT IN WORDS  
The Washington Post  
June 18, 2005

By Tim Page

Over the past few decades, classical music has become a rarer and rarer commodity on network television. Gone are the days when Leonard Bernstein would take the New York Philharmonic -- and a rapt audience -- through complicated musical concepts on the deceptively titled "Young People's Concerts" (they were equally instructive for adults). Today, we are lucky to get the Three Tenors vamping their way absentmindedly through "Singin' in the Rain" once or twice a year during fundraising weeks.

Which is why a four-part television series that will be presented by WETA, Channel 26, this weekend and next deserves your attention. The programs, collectively titled "Great Conversations in Music," were commissioned by the Library of Congress and produced and directed by Peter Rosen. They manage to convey some important information about an increasingly neglected art.

The host is Eugene Istomin, a celebrated pianist, a brilliant and cultured man and a Washingtonian of many years standing, who died of cancer in late 2003. He was very sick when he recorded these conversations between December 2001 and March 2003. Yet he brings his customary grace and good humor to the interviews; as one who had the good fortune to dine with the Istomins on several occasions, I can attest that these shows bring back long-ago evenings on Connecticut Avenue as conversations and ideas flowed late into the night.

The first of the programs -- which will air tomorrow at 1:30 -- is titled "The Pianists" and is, overall, probably the best in the series. Istomin is joined by his contemporaries Gary Graffman, Charles Rosen and Leon Fleisher and, from a younger generation, Emanuel Ax and Yefim Bronfman to discuss all aspects of professional pianism -- from how one gets started, through proper and improper ways to play Mozart, through the legacy of Rachmaninoff. (Istomin plays a moment of Rachmaninoff's underrated Piano Concerto No. 4, then adds, "It's cocktail lounge music, except that it's sublime.")

Fleisher remembers practice sessions from when he was a toddler. ("I loved it. I got lots of cookies for it.") Mentors are discussed and appraised; there is much collegial give-and-take and everybody seems to be having a grand time. Among the pianists, it is generally acknowledged that music is a great art and a difficult business, and nobody Istomin talks to would recommend the field without some serious reservations. Rosen sums up the professional criteria: "You only become a pianist if you're not willing to become anything else."

"The Composers" comes next, at 2:30 tomorrow. George Perle and Milton Babbitt, two of our leading modernists, were pushing 90 when this talk was recorded; the panel also includes composer, diarist and critic Ned Rorem (one of Istomin's closest friends); Ellen Taaffe Zwilich (who became the first woman to win the Pulitzer Prize for composition in 1983); and two younger composers, Lowell Lieberman and Richard Danielpour.

This episode does not have quite the same flow as "The Pianists," which seemed an unbroken symposium. Here, we have spliced bits and pieces from Istomin's guests -- but some of those are illuminating. Babbitt offers his creed: "I write the music I like most to hear, and for anybody else

who is interested." Rorem says that he was always aware, from earliest youth, that he was a composer, but had to find out exactly what to do about it.

Zwilich mentions that she began composing when she discovered that she found her own improvisations more interesting than "the junk that I was given as a 5-year-old to play on the piano." She also defends popular music from those among her colleagues who would dismiss it all as commercial nonsense: "I'm sure there is an underground of pop music that you don't hear that may be very interesting." (She's right.)

On June 26, two further programs will be telecast back to back: "The Virtuosos" at 1:30 and "The Conductors" at 2:30. "The Conductors" (with Zubin Mehta, James Conlon and Mstislav Rostropovich) is the least interesting in the series: All the interviews are conducted solo, and they don't generally go much deeper than the typical "20 minutes in a hotel suite" platitudes that usually result from brief encounters with the rich and famous.

But "The Virtuosos" is engaging -- a gathering of leading violinists (Pamela Frank, Jaime Laredo and Arnold Steinhardt), cellists (Lynn Harrell, Yo-Yo Ma and Sharon Robinson) and pianists (Claude Frank and Joseph Kalichstein). I particularly enjoyed Pamela Frank's thoughtful, humane and poignant definition of chamber music -- "It's a way to combat loneliness." Many more such nuggets stud "Great Conversations in Music."

**'NO DIRECTION': SCORSESE POINTS THE WAY TO DYLAN**

The Washington Post  
September 26, 2005

By Ann Hornaday

"No Direction Home" represents a great musical-cinematic summit, as no less than the great Martin Scorsese directs -- with superb control and judgment -- what surely qualifies as the definitive documentary about Bob Dylan. "No Direction Home" will be broadcast in two parts tonight and tomorrow night on PBS's "American Masters" series, and in the bargain viewers get two masters -- one a hugely influential singer and songwriter with a canny, thoroughly American knack for self-invention and the other a filmmaker with a thumb (to recycle an encomium Dylan has dodged throughout his career) firmly on the pulse of his generation.

It's a happy collaboration. "No Direction Home" offers a lively, absorbing, often deeply moving account of how Robert Zimmerman from the small mining town of Hibbing, Minn., became -- through talent, luck and calculating ambition -- the musician, icon and enigma we know as Bob Dylan. Wisely, Scorsese limits his scope to the early years, from Dylan's birth in 1941 to 1966, when he outraged fans and folk purists by going electric. The result isn't a comprehensive compendium of factoids or deep dish -- there's precious little personal information related in the 207-minute running time -- but instead a tightly focused portrait of a young artist searching for his musical and professional identity and whose search happened to bring him to the very center of the American political and cultural zeitgeist.

Most of the facts of Zimmerman's journey to Dylan are well known by now, thanks to endless hagiographic deconstructions of his life and to his own well-regarded autobiography, which came out last year. So Scorsese -- who long ago earned his rock-doc bona fides with "The Last Waltz," about the Band -- wisely structures "No Direction Home" around a central tension, in this case the startlingly hostile reception Dylan received when he toured with the Band (then called the Hawks) in Britain in 1966. When those concerts were released in 1998 as part of Dylan's ongoing "Bootleg" recording series, fans heard the famous "Judas!" episode, when a fan yelled the epithet at Dylan and the appalled singer responded with, "I don't believe you!" then ripped into a blistering version of "Like a Rolling Stone."

That song, with fans booing all the way through, opens "No Direction Home," and Scorsese returns to those contentious concerts throughout the film. They not only provide much-needed narrative tension but the ideal leitmotif for an artist who for so long has engaged in an ambivalent gavotte with his fans, as interested in courting them as he is in confounding them. "No Direction Home" gets to the heart of that ambivalence, with Dylan -- a famous trickster who began to mythologize his past almost as soon as he got to Greenwich Village in 1961 -- at least appearing to provide some straight answers to what has driven him all these years. Scorsese also interviews Dylan's longtime friends, collaborators and mentors, among them Dave Van Ronk, Liam Clancy, Maria Muldaur and Joan Baez, who recounts her personal and professional power struggles with Dylan with tart, candid affection. (One question: Where's Robbie Robertson?)

Dylan has been the subject of documentaries before, most famously in D.A. Pennebaker's 1967 "Don't Look Back." Scorsese avails himself of clips from that film, as well as Pennebaker's rarely seen "Eat the Document" and Murray Lerner's "Festival," about the Newport Folk Festival (there's footage of Dylan's notorious first electric set at the 1965 festival, but none of the legendary and probably apocryphal fistfight between folklorist Alan Lomax and Dylan manager



Albert Grossman). Perhaps only a director of Scorsese's caliber could have produced not just a fascinating portrait of Dylan's meteoric rise but a vivid social history and an obliquely witty examination of the packaging and marketing of the folk craze in the 1960s (some scenes seem plucked directly from Christopher Guest's satire "A Mighty Wind"). It should be noted that the director, with editor David Tedeschi, accomplishes all of this without the crutch of narration; the only time you hear a voice-over is when Scorsese reads a speech that Dylan wrote but never delivered when he received an award from the Emergency Civil Liberties Committee in 1963.

But the most valuable material, by far, is that of Dylan's less publicized influences -- not only Woody Guthrie but Odetta, Leadbelly, Webb Pierce and John Jacob Niles -- as well as early scenes, such as a 1963 performance of "Man of Constant Sorrow," in which an impossibly green kid from Hibbing seems literally to be finding his voice and the persona that would undergo so many transformations in successive years. Then there are the occasional grace notes, such as a goosebump-inducing duet with Johnny Cash on "I'm So Lonesome I Could Cry."

Throughout "No Direction Home," Dylan emerges as a cultural magpie -- he calls himself "a musical expeditionary" -- who is constantly reaching back into the canon even while he reinvents it, and his own songs, again and again. During one of several painful encounters with a clueless 1960s press corps, Dylan -- by then a reluctant mascot for the antiwar and civil rights movements -- is asked whether he considers himself the voice of his generation. "I think of myself as a song-and-dance man," he says simply. Gracefully interweaving Dylan's artistry and ambition, "No Direction Home" puts him in his rightful place, not only alongside America's greatest poets and visionaries but also its showmen; he's an heir to Guthrie and Jack Kerouac, it's true, but there's a playful tip of the hat as well to such archetypal entertainers as Stephen Foster, George M. Cohan and P.T. Barnum.

"No Direction Home" ends on an electrifying note, literally and figuratively, as viewers see for the first time on-screen the famous Judas performance; the moment -- defiant, thrilling and deeply emotional -- is a triumphant conclusion to a story that, gratifyingly, hasn't ended. In a postscript, Scorsese informs viewers that after his motorcycle accident in the summer of 1966, Dylan stopped touring for eight years. What the filmmaker might have added is that then, he never stopped.

No Direction Home airs at 9 p.m. on Channel 26 (90 minutes tonight; two hours tomorrow night) and on Maryland Public Television (two hours each night).

PBS UNCOVERS IMAGINATION OF AMERICAN ART 'ICONS'  
Pittsburgh Post-Gazette  
December 28, 2005

By Mary Thomas

"Imagining America: Icons of 20th Century American Art" is a fast-paced, visually seductive, entertaining and informative time travel through the Wonderland of American art with emphasis on the ways artworks reflect the times in which they were created.

A program that art lovers and history buffs will appreciate, it also demystifies a complex subject, making it accessible and enjoyable for a broad audience.

The beautifully filmed show (9 to 11 tonight on WQED) is peppered with many of American art's most celebrated images, moved along by a soundtrack ranging from Copland to Coltrane to rap that provides an aural parallel to the evolution of the visual imagery.

Most thrilling are the clips from archival interviews that momentarily return to life major figures like Georgia O'Keeffe (finding her artistic vision), Marcel Duchamp (French, but highly influential and worked in New York City), Jackson Pollock (creating a famed drip painting), Robert Smithson (constructing "Spiral Jetty") and Andy Warhol (spinning his media persona).

Adept editing keeps the interspersed interviews with more than 50 contemporary critics, curators and artists lively. Among the latter are several who have exhibited in Carnegie Internationals: John Baldessari, Mike Kelley, Kerry James Marshall, Elizabeth Murray and Edward Ruscha.

The story opens, as background, with Hudson River School founder Thomas Cole's seminal 1836 landscape painting "The Oxbow," which both celebrates and cautions about the encroachment of European civilization upon America's wilderness heritage, and ends with mass-media-inspired urban works created in the 1980s by Jean-Michel Basquiat and David Wojnarowicz. Their creations critique a culture seemingly set adrift in a sea of dissociated visuals.

The three-part century overview flows while packing in numerous factual nuggets. Subheads order the wealth of material and focus viewer attention on significant points.

Such an ambitious subject has to be selectively addressed given only two hours, and filmmakers John Carlin, Jonathan Fineberg and Hart Perry present one of various possible lines of interpretation, albeit an extremely informed one, that affirms New York's prominence of place.

One might question the iconic status of Basquiat and Wojnarowicz, who died while their careers were still rising (the former of a heroin overdose in 1988 and the latter of an AIDS-related illness in 1992). However, their inclusion does reflect the plurality and diversity that were the tenor of the times by century's end, and their compelling works are certainly part of the great throbbing beat that continues to pump the pulse of American art.

Some major movements and artists are ignored, such as heavily intellectual Minimalism and Conceptualism, but overall, "Imagining America" is a substantial achievement and a valuable contribution to efforts to bring art back into mainstream discourse, as it was at the beginning of the 20th century.

'Imagining America,' the book

A chic and graphically effervescent companion book by Carlin and Fineberg and published by Yale University Press deserves its own accolades for snazzy design layering that gives the reader options to take a visually opulent quick glide through or to linger and savor specific artworks or ideas.

While the book follows the film fairly faithfully, it's more expansive with the biographical details of featured artists' lives, discussion of the significance of and influence of their works and contextualization of visual art within that of other cultural expression, such as poetry or film. Some of the featured artists differ.

Where the film has the intimacy of artists speaking, here it's their legacy that shines. Full-color reproduction of the artworks, some also in detail, allow close examination and pondering.

Carlin, who holds a Yale doctorate as well as a law degree from Columbia University, is co-founder and CEO of Funny Garbage, a New York interactive media and broadcast production company, and co-founder and director of The Red Hot Organization, a nonprofit that's organized celebrity AIDS benefits. Fineberg, a Harvard Ph.D. who has also trained as a research candidate in psychoanalysis at Boston and Western New England Institutes for Psychoanalysis, is professor of art history and visiting professor of computer sciences at University of Illinois, Urbana-Champaign.

They dedicate the volume to "a more empathic America."

A useful, if lean, index helpfully boldfaces major artist entries. Of these 18, two are black and one is a woman; the remainder are white males. Even with the most enlightened authors and the best intentions, broad representation in the art world remains problematic. But it's an honest representation, and who was favored and who was not at a given time is part of the tale and concomitant discussion.

"Imagining America" is available at bookstores, 208 pages, 400 color illustrations, \$49.95.

'Imagining America: Icons of 20th Century American Art'

When: 9 tonight, WQED.



# Tab 8



To: General Managers  
Program Managers  
Promotion Managers  
From: John F. Wilson, Jacoba Atlas, Steven Gray, Shawn Halford  
Date: October 6, 2003

Attached please find:

- Winter 2004 National Program Service Primetime Grids
- Winter 2004 Common Carriage Designations

The winter 2004 primetime at-a-glance grids detail the most current plans for the National Program Service schedule in the upcoming season. As is always the case, these grids are subject to some change, but we are confident that the major programming elements will remain as scheduled. This schedule includes the months of January through March 2004. We plan to publish the spring 2004 schedule by the end of December.

While the winter 2004 schedule largely continues the weekly template set in motion this fall, several important new components and strategies are evident. Continuing the pattern begun this fall, Sunday nights begin with AMERICAN FAMILY at 7:00 PM and continue with NATURE at 8:00 PM, followed at 9:00 PM by EXXONMOBIL MASTERPIECE THEATRE. The new episodes from the second season of AMERICAN FAMILY will begin airing in April 2004. Note: on the attached grids, you'll see AMERICAN FAMILY listed in a special box just above each Sunday.

On Mondays, ANTIQUES ROADSHOW kicks off the new year with a new host, Lara Spencer, and an all-new season. At 9:00 PM, AMERICAN EXPERIENCE begins its 2004 season, which will continue through the spring. NOVA pairs with science programming on Tuesday nights, and INDEPENDENT LENS rounds out the night, hosted by Don Cheadle. Wednesday continues to be programmed with arts and performance programs from GREAT PERFORMANCES, AMERICAN MASTERS and LIVE FROM LINCOLN CENTER, as well as with top-notch specials and miniseries such as "*The Forgetting: A Portrait of Alzheimer's*" and "*The Medici: Godfathers of the Renaissance*."

Thursdays will continue to feature THE NEW THIS OLD HOUSE HOUR at 8:00 PM, followed at 9:00 PM by FRONTLINE. Fridays remain the home of WASHINGTON WEEK, WALL STREET WEEK WITH FORTUNE and NOW WITH BILL MOYERS.

We believe you'll want the breaks between these programs in your primetime schedule to feature PBS/NPR NEWSBRIEFS, currently slated for a national launch at the beginning of January (following a late-autumn launch for early adopters). We're setting these brief headline updates in motion to place more content in our breaks, to add a human face to PBS primetime and to add more currency and relevance to our lineup.

And after primetime concludes, we're pleased to welcome PBS' newest addition to late fringe: THE TAVIS SMILEY SHOW. If you aren't already familiar with him, Tavis Smiley is a veteran talk show host with an ongoing NPR series, and before that, a show on BET. He will bring an energetic new dynamic, talking with top newsmakers, critics and artists from diverse backgrounds in a new half-hour NPS series to begin in January.

Our goals remain consistent: to craft an NPS that will continue to garner critical acclaim and prestigious awards; foster common carriage; continue to support member stations' local development efforts; and generate national and local underwriting, as well as ancillary distribution revenue, all while educating and inspiring audiences. We're excited about the prospects for this winter's schedule, and we believe it will deliver on each of these goals.

Working with the best producers, PBS Programming Services has built on your behalf an impressive pipeline that provides a steady stream of top-quality educational, engaging programming. With each season, we strategically position these programs into a compelling national schedule that we hope will provide a strong foundation for your local services. Our work also supplies the product base for expanding distribution opportunities such as home video, pbs.org and packaged programming services, including the PBS Kids Channel and PBS You. PBS Programming Services' continuing work toward our shared goals is demonstrated throughout the winter 2004 National Program Service schedule. On the following pages, you'll find some program highlights, including specials, limited series and continuing series' special presentations, to look forward to in the upcoming season.

## **PBS Kids**

Look for a separate memo posted to PBS Express detailing the first significant changes to PBS Kids feeds since last January. Our latest addition to the PBS Kids lineup is BOOHBAH, beginning as a weekday series on January 19.

### **BOOHBAH**

Weekday half-hour from Ragdoll

From the producers of *Teletubbies*, this new live-action/animated series geared towards preschoolers fosters creative interactivity, visible learning and audience involvement, deliberately employing infectious magical movements that children love to imitate. The Boohbahs themselves are five sparkling, animated atoms of energy and fun that travel the world on a ribbon of rainbow light, in their glowing white Boohball. Responding to the chants and laughter of children, they become energized and jump into action. Then by the power of Boohbah magic, the kids send an object into Storyworld -- a sunny picture-book place of endless possibilities, where wonderful things happen and funny Storypeople find themselves in silly situations.



### **Primetime Limited Series & Specials**

#### *DNA*

5/60 from Thirteen/WNET and Windfall Films

Fifty years after Watson and Crick solved the riddle of DNA, this five-part series explores how their discovery of the double helix, the icon of life, launched a new era of biology. It tells how initial experiments with cardboard models grew into one of the most ambitious endeavors in human history. Then it travels through the five decades of scientific achievement that have enabled us to be able to read the entire DNA sequence of a human being, trace human evolutionary history and map the combinations of genes that cause disease. Interviews with Jim Watson himself and a cast of other Nobel Prize winners combine with computer animations and re-constructions of key experiments.

#### *The Forgetting: A Portrait of Alzheimer's*

1/90 (plus 30-minute follow-up discussion) from TPT

Based on the recent acclaimed book by David Shenk, this 90-minute documentary explores Alzheimer's, taking both a sweeping and intimate look at how this cruel disease affects nearly five million Americans and their loved ones. At a critical time in our nation's struggle with the disease, as it threatens to reach epidemic levels because of the aging Baby Boomer population, the special will provide viewers with information, insight, context, help and hope. It weaves together the history and biology of Alzheimer's; the intense real-world experiences of patients and caregivers; and the race to find a cure. Actor David Hyde Pierce, a devoted advocate in the fight against Alzheimer's disease, will host a 30-minute follow-up special, and extensive outreach is being planned around the project.

#### *America Beyond the Color Line with Henry Louis Gates Jr.*

2/120 from Wall to Wall Television

Professor Henry Louis Gates Jr. examines the black community's role in several key sectors of American society. The four episodes will travel to the East Coast to explore black leadership in politics, academia and business; the South to look at the legacy of the civil rights era and the region's dramatic social revolution; California to examine the cultural industries of black America -- movies, music, sports and the media; and Chicago, where a quarter of black Americans still live under the poverty line and feel politically, socially and economically disenfranchised. Interviewees range from Colin Powell, Morgan Freeman and Alicia Keys, to everyday citizens and activists living and working in black communities, to prison inmates in Chicago's infamous Cook County Prison.

### **Primetime Limited Series & Specials, continued**

#### *In Search of Shakespeare*

4/60 from Maya Vision

Hosted by intrepid traveler Michael Wood, this four-part history series explores the life and times of the world's greatest playwright, William Shakespeare. Mixing travel, adventure, interviews and specially shot sequences with the Royal Shakespeare Company on the road, the series shows his life in context with the era in which he lived, Elizabethan England, a time of surveillance, militarism and foreign wars. The Bard lived through the Spanish Armada, the Gunpowder Plot and the colonization of the New World, and saw firsthand England's Cultural Revolution, which led the English people into a new Protestant future.

#### *Innovation*

8/60 from Thirteen/WNET

This eight-part series explores dramatic stories of cutting-edge technology, looking at the quirky personalities and serendipity that make them a reality as well as the drama and politics that go on behind the scenes among colleagues, competitors and countries. Topics include technological advances in aircraft design and safety; stem cell research; the world of espionage and today's latest spy techniques and gear; bionic body parts; the proliferation of fiber optics in global communications; post-September 11th skyscraper design; the military's new high-tech weaponry; and brain fingerprinting.

#### *The Medici: Godfathers of the Renaissance*

2/120 from DDE and Lion Television

This is the story of the Medici, an extraordinary family that rose out of a small Italian community in Florence to stand at the helm of the Renaissance as the most influential dynasty in Europe for 300 years. They used charm, skill, duplicity and ruthlessness to garner unparalleled wealth and power. And they helped ignite the most important cultural and artistic revolution in Western Europe, inspiring the great artists, scientists and thinkers who gave birth to the modern world, including Michelangelo, Machiavelli, Luther, Copernicus and Galileo. An epic drama played out in the great courts, cathedrals and palaces of Europe, the series is both the tale of one family's powerful ambition and of the continent's tortured struggle to emerge from the ravages of the Dark Ages.

#### *The New Americans, an INDEPENDENT LENS Special*

2/120 + 1/180 from Kartemquin Films, ITVS and LPB

From the makers of *Hoop Dreams*, this seven-part series follows several new immigrants and refugees over the course of three years as they leave their homelands to come to the United States in search of better lives and the American Dream. The stories include those of a young Palestinian woman who marries a first-generation Palestinian American from Chicago; two young Dominicans hoping to make it in major league baseball; an Indian computer programmer riding the technology boom in Silicon Valley; Mexicans looking for steady work and a new family home; and a family of refugees from Nigeria.

### **Continuing Series**

The continuing series are the foundation of the schedule's strength. This winter, our continuing series will return with strong new episodes, including the following:

AMERICAN FAMILY continues with episodes from the first season, leading up to the new second season beginning in April.

NATURE flies with colorful macaws, examines the sacred role of the cow in India and explores the many facets of diamonds.

EXXONMOBIL MASTERPIECE THEATRE follows up an encore run of the acclaimed miniseries "*The Forsyte Saga*" with a second miniseries that continues the fortunes of the Forsytes across five new hours.

Beginning in January, ANTIQUES ROADSHOW evaluates unique treasures in new episodes featuring new host Lara Spencer.

AMERICAN EXPERIENCE tells the stories leading up to and following the Civil War in "*Abraham and Mary Lincoln: A House Divided*" and the new series "*Reconstruction: The Second Civil War.*"

NOVA spends time with the "devil docs" serving in Iraq in "*Combat Hospital.*"

ALAN ALDA IN SCIENTIFIC AMERICAN FRONTIERS offers viewers a "weight challenge" to see if they can keep their New Year's resolutions.

Host Don Cheadle introduces INDEPENDENT LENS viewers to an octogenarian cajun band, a place where middle class African Americans have vacationed for generations, and the double violation of a woman who was raped and beaten and then subjected to the numbing inhumanity of the legal system.

AMERICAN MASTERS celebrates George Balanchine's 100th birthday and invites Judy Garland to tell her story in her own words.

GREAT PERFORMANCES rings in the New Year from Vienna, re-creates the scenes of ballerinas painted by Edgar Degas and soars with new works by the Paul Taylor dance company.

LIVE FROM LINCOLN CENTER presents an intimate performance by the acclaimed Orpheus Chamber Orchestra and violinist Joshua Bell.

FRONTLINE's winter season will include a program offering new insights into the war in Iraq.

### **Pledge Opportunities**

Among the new Pledge Opportunity Specials (POPS) PBS is working on is THE MEDICI: GODFATHERS OF THE RENAISSANCE, which will feature an optional pledge version.

### **Promotion**

PBS Brand Management and Promotion is creating promotion campaigns to support this season's schedule. A complete promotion plan with details on program support, branding strategies and materials for both primetime and PBS Kids will be available on PBS Express.

### **Common Carriage Designations**

A list of programs designated for Common Carriage within the winter 2004 season is included as a part of this mailing.

We are pleased to deliver to you the winter 2004 National Program Service primetime schedule. In this season and beyond, we will ensure that PBS continues to deliver to its member stations a high-quality, diverse National Program Service that builds upon and extends the mission, depth, reach and distinction that are the hallmarks of PBS.

If you have any questions, please feel free to call:

John Wilson	703-739-5155
Jacoba Atlas	310-360-9763
Steven Gray	703-759-5012
Shawn Halford	703-739-5247

## WINTER 2004 COMMON CARRIAGE DESIGNATIONS

### Continuing Series:

- Sundays: Nature  
ExxonMobil Masterpiece Theatre
- Mondays: Antiques Roadshow  
American Experience (including "Lincolns" and "Reconstruction")
- Tuesdays: NOVA (including "Mars Dead or Alive" on Jan. 4 and 6)  
Alan Alda in Scientific American Frontiers
- Thursdays: Frontline
- Fridays: Washington Week  
Wall Street Week with FORTUNE  
NOW with Bill Moyers

### Limited Series and Specials:

Great Performances "From Vienna: The New Year's Celebration 2004"  
Great Performances "Degas and the Dance"  
American Masters "Balanchine!"  
Flashpoints USA with Bryant Gumbel and Gwen Ifill  
The Forgetting: A Portrait of Alzheimer's  
America Beyond the Color Line with Henry Louis Gates, Jr.  
In Search of Shakespeare  
Innovation  
The Medici: Godfathers of the Renaissance  
American Masters "Judy Garland" (w.t.)  
The New Americans, an "Independent Lens" Special

### Notes:

The 2003-04 Common Carriage Year began on September 14, 2003, and concludes September 11, 2004. The 2003-04 carriage year encompasses 500 hours of common carriage designations, based on the July 2001 revisions to common carriage guidelines. A detailed and updated accounting of common carriage designations appears with each month's week-by-weeks.

The period of March 4-March 28 contains no common carriage designations due to pledge activities during this time.

To: General Managers  
Program Managers  
Promotion Managers  
From: John F. Wilson, Jacoba Atlas, Steven Gray, Shawn Halford  
Date: December 31, 2003

Attached please find:

- Spring 2004 National Program Service Primetime Grids
- Spring 2004 Common Carriage Designations

The spring 2004 primetime at-a-glance grids detail the most current plans for the National Program Service schedule in the upcoming season. As is always the case, these grids are subject to some change, but we are confident that the major programming elements will remain as scheduled. This schedule includes the months of April and May 2004. We plan to publish the summer 2004 schedule by the end of February.

In addition to the eagerly-awaited homegrown living history series "*Colonial House*," the spring 2004 schedule is built on new specials and episodes from the ongoing series. Continuing the pattern begun this fall, Sunday nights begin with new episodes from the second season of AMERICAN FAMILY at 7:00 PM [Note: on the attached grids, you'll see AMERICAN FAMILY listed in a special box just above each Sunday] and continue with NATURE at 8:00 PM, followed at 9:00 PM by EXXONMOBIL MASTERPIECE THEATRE.

On Mondays, ANTIQUES ROADSHOW leads into AMERICAN EXPERIENCE. NOVA pairs with science programming on Tuesday nights, and INDEPENDENT LENS rounds out the night. Wednesday continues to be programmed with arts and performance programs from GREAT PERFORMANCES, AMERICAN MASTERS and LIVE FROM LINCOLN CENTER, as well as with top-notch specials and miniseries such as "*Small Ball: Little League Stories*" and "*Japan: Memoirs of a Secret Empire*."

Thursdays will continue to feature THE NEW THIS OLD HOUSE HOUR at 8:00 PM, followed at 9:00 PM by FRONTLINE. Fridays remain the home of WASHINGTON WEEK, WALL STREET WEEK WITH FORTUNE and NOW WITH BILL MOYERS.

We believe you'll want each break between these programs in your primetime schedule to feature the PBS/NPR NEWSBRIEF, currently launching on stations across the country. Anchors Beverly Kirk and Sheila Kast provide a human face for PBS each night while delivering the headlines that keep us current and relevant.

Our goals remain consistent: to craft an NPS that will continue to garner critical acclaim and prestigious awards; foster common carriage; continue to support member stations' local development efforts; and generate national and local underwriting, as well as ancillary distribution revenue, all while educating and inspiring audiences. We're excited about the prospects for the spring schedule, and expect it to deliver on all of these goals.

Working with the best producers, PBS Programming Services has built on your behalf an impressive pipeline that provides a steady stream of top-quality educational, engaging programming. With each season, we strategically position these programs into a compelling national schedule that we hope will provide a strong foundation for your local services. PBS Programming Services' continuing work toward our shared goals is demonstrated throughout the spring 2004 National Program Service schedule. On the following pages, you'll find some program highlights, including specials, limited series and continuing series' special presentations, to look forward to in the upcoming season.

### **Primetime Limited Series & Specials**

#### *Sesame Street Presents – The Street We Live On (w.t.)*

1/60 from Sesame Workshop

Sesame Street kicks off its 35<sup>th</sup> anniversary season with a primetime special that will also double as the first episode of the daytime season. In this special presentation, Elmo asks what life was like on Sesame Street before he was around, leading to a variety of nostalgic looks back at key moments and people in the history of Sesame Street.

#### *My Journey Home*

1/120 from WETA

A special that traverses our conflicted, cultural landscape through the perspectives of new American voices -- writer Faith Adiele, born to a Scandinavian mother and Nigerian father; journalist Andrew Lam, whose family fled Vietnam just days before the fall of Saigon; and Armando and Carlos Pena, two Mexican-American brothers from an ordinary family that has weathered extraordinary times. All of them have experienced a childhood interrupted, and came of age in an America that is grappling with the dramatic changes of new immigration and racial and cultural diversity.

#### *Small Ball: Little League Stories*

1/90 from WPSX and ITVS

Louis Alvarez and Andrew Kolker ("*Vote for Me,*" "*People Like Us*") present the world of Little League baseball, an American rite of passage, as told through the story of one California team's incredible rise to the national stage.

#### *Japan: Memoirs of a Secret Empire*

1/180 or 3/60 from DDE and Lynn Goldfarb

Japan blossomed into its Renaissance at approximately the same time as Europe. But unlike the West, it flourished not through conquest and exploration, but by fierce and defiant isolation. Between the 16th and 19th centuries, Japan was a world unto itself. And the man at the heart of this empire was Tokugawa Ieyasu, a warlord who ruled with absolute control. This period of mystery and power is explored through myriad of voices -- the Shogun, the Samurai, the Geisha, the poet, the peasant and the Westerner who glimpsed into this secret world.

### **Primetime Limited Series & Specials, continued**

#### *Colonial House*

4/120 or 8/60 from Thirteen/WNET and Wall to Wall Television

A wonderful new hands-on history series in which modern-day Americans travel back in time to live as 17th-century colonial settlers off the coast of Maine. Cameras follow the participants as they cope with the same challenges that those living in the 1620's faced. They have to abide by a set of laws they themselves write as they work together to build a community, find enough provisions for their settlement and trade with the outside world. It's a remarkable way to experience the early foundations of American society. As our spring pop-out program, an extensive promotion campaign will accompany the series, and we will double-pump the series each night in common carriage, with a suggested repeat on the weekend.

#### *Mark Russell Comedy Special*

1/60 from WNED

After a year's absence, Mark Russell returns with an hour of humor drawn from the election-year headlines.

### **Continuing Series**

The continuing series are the foundation of the schedule's strength. This spring, our continuing series will return with strong new episodes, including the following:

AMERICAN FAMILY launches its second season on April 4, with 13 new episodes featuring a set of interwoven, continuing storylines that tell the multigenerational story of the Gonzalez family.

NATURE takes flight with endangered whooping cranes raised taught to fly by scientists in "Flight School" (w.t.).

Helen Mirren returns to EXXONMOBIL MASTERPIECE THEATRE, reprising her role as DCI Jane Tennison in "*Prime Suspect 6: The Last Witness.*"

ANTIQUES ROADSHOW's eighth season continues with a stop in Savannah, followed by two "greatest hits" specials. The series producers have selected "*Roadshow Favorites*" from thousand of hours of appraisals, and "*Roadshow's Greatest Finds*" highlights the items whose values have a few digits to the left of the comma.

AMERICAN EXPERIENCE remembers the battles of Lexington and Concord in "*Patriot's Day,*" and marvels at the construction of the "*Golden Gate Bridge.*"



**Continuing Series, continued**

NOVA examines the new military technology deployed in Iraq in "*War Machines*" (w.t.).

ALAN ALDA IN SCIENTIFIC AMERICAN FRONTIERS drives some fantastic new cars, from gasoline-free hydrogen fuel cell SUVs, to sedans that anticipate drivers' mistakes in "*Future Car*."

Host Don Cheadle introduces INDEPENDENT LENS viewers to author and poet Piri Thomas, spiritual leader Ram Dass, and the absorbing stories of members of the 60's radical group The Weathermen.

P.O.V. introduces us to "*Love and Diane*," the two subjects of a frank and astonishingly intimate real-life drama of a mother and daughter desperate for love and forgiveness, but caught in a devastating cycle of addiction and poverty.

SECRETS OF THE DEAD brings us the science behind the Shroud of Turin and the military technology employed in Normandy on D-Day.

AMERICAN MASTERS profiles magazine magnate and influential Republican Henry Luce, founder of *Time*, *Fortune*, *Life* and *Sports Illustrated*.

GREAT PERFORMANCES presents American Ballet Theater's "*The Dream*," an adaptation of Shakespeare's "A Midsummer Night's Dream."

LIVE FROM LINCOLN CENTER presents a star-studded evening marking the 100<sup>th</sup> birthday of the late choreographer George Balanchine. Sarah Jessica Parker will host, and guests will include Mikhail Baryshnikov, Placido Domingo, Kevin Kline and Gil Shaham.

Ten years after the genocide that killed an estimated 800,000, FRONTLINE revisits the lessons of Rwanda.

WASHINGTON WEEK, WALL STREET WEEK WITH FORTUNE and NOW WITH BILL MOYERS continue with coverage of election year issues.

**Pledge Opportunities**

Among the new Pledge Opportunity Specials (POPS) that PBS Fundraising Programming is working on is "*The Story of Mothers and Daughters*," a three-hanky portrait of the joys and sorrows shared by all daughters and mothers.

### **Promotion**

PBS Brand Management and Promotion is creating promotion campaigns to support this season's schedule. A complete promotion plan with details on program support, branding strategies and materials for both primetime and PBS Kids will be available on PBS Express.

### **Common Carriage Designations**

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We are pleased to deliver to you the spring 2004 National Program Service primetime schedule. In this season and beyond, we will ensure that PBS continues to deliver to its member stations a high-quality, diverse National Program Service that builds upon and extends the mission, depth, reach and distinction that are the hallmarks of PBS.

If you have any questions, please feel free to call:

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Steven Gray	703-759-5012
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## **SPRING 2004 COMMON CARRIAGE DESIGNATIONS**

### Continuing Series:

- Sundays: American Family  
Nature  
ExxonMobil Masterpiece Theatre
- Mondays: Antiques Roadshow  
American Experience
- Tuesdays: NOVA  
Alan Alda in Scientific American Frontiers
- Thursdays: Frontline
- Fridays: Washington Week  
Wall Street Week with FORTUNE  
NOW with Bill Moyers

### Limited Series and Specials:

Great Performances "Dance in America: The Dream with American Ballet Theatre"  
P.O.V. "Love and Diane"  
Mark Russell Comedy Special  
American Masters "Henry Luce" (w.t.)  
Colonial House (premiere and double-pump)  
National Geographic Special "Maya" (w.t.)  
Japan: Memoirs of a Secret Empire  
National Memorial Day Concert (2004)

### Notes:

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# January 2004

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM	
Thu.1	GREAT PERFORMANCES <i>From Vienna: The New Year's Celebration 2004</i>			FRED ROGERS: AMERICA'S FAVORITE NEIGHBOR *POP*			
Fri.2	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		GREAT PROJECTS: THE BUILDING OF AMERICA [r] <i>The Big Dig</i>		4/4
Sat.3	AMERICAN FAMILY [r] [Sunday at 7pm]						
Sun.4	NOVA <i>Mars Dead or Alive</i>		EXXONMOBIL MASTERPIECE THEATRE <i>The Forsyte Saga [r]</i>		DNA (WIDESCREEN) <i>The Secret of Life</i>		1/5
Mon.5	ANTIQUES ROADSHOW <i>Chicago, IL</i>		1/3	AMERICAN EXPERIENCE <i>Abraham and Mary Lincoln: A House Divided [r]</i>			The Tavis Smiley Show begins in late fringe, 1/5
Tue.6	NOVA <i>Mars Dead or Alive (rpt./updated)</i>						
Wed.7	GREAT PERFORMANCES <i>Degas and the Dance (HDTV)</i>						
Thu.8	THE NEW THIS OLD HOUSE HOUR		FRONTLINE/WORLD #302		CONQUISTADORS WITH MICHAEL WOOD <i>The Fall of the Aztecs [r]</i>		1/4
Fri.9	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		THE PERILOUS FIGHT: AMERICA'S WORLD WAR II IN COLOR <i>Infamy</i>		1/4
Sat.10	AMERICAN FAMILY [r] [Sunday at 7pm]						Press Tour 1/10-1/11
Sun.11	NATURE <i>Animals Behaving Badly [r]</i>		EXXONMOBIL MASTERPIECE THEATRE <i>The Forsyte Saga [r]</i>		DNA (WIDESCREEN) <i>Playing God</i>		2/5
Mon.12	ANTIQUES ROADSHOW <i>Chicago, IL</i>		2/3	AMERICAN EXPERIENCE <i>Reconstruction: The Second Civil War</i>			RACHEL & ANDREW JACKSON... [r]
Tue.13	NOVA <i>Submarines, Secrets and Spies [r]</i>					INDEPENDENT LENS <i>Make 'em Dance: The Hackberry...</i>	end 2330
Wed.14	LIVE FROM LINCOLN CENTER <i>Joshua Bell at the Penthouse</i>			AMERICAN MASTERS <i>Balanchine</i>			end 2330
Thu.15	THE NEW THIS OLD HOUSE HOUR		FRONTLINE <i>From China with Love (w.t.)</i>		CONQUISTADORS WITH MICHAEL WOOD <i>The Conquest of the Incas [r]</i>		2/4
Fri.16	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		THE PERILOUS FIGHT: AMERICA'S WORLD WAR II IN COLOR <i>Battlefronts</i>		2/4
Sat.17	AMERICAN FAMILY [r] [Sunday at 7pm]						
Sun.18	NATURE (WIDESCREEN) <i>Shadow Over the Sun: A Story of Eagles</i>		EXXONMOBIL MASTERPIECE THEATRE <i>The Forsyte Saga [r]</i>		DNA (WIDESCREEN) <i>The Human Race</i>		3/5
Mon.19	ANTIQUES ROADSHOW <i>Chicago, IL</i>		3/3	AMERICAN EXPERIENCE <i>Citizen King</i>			MLK Jr. Day
Tue.20	NOVA (WIDESCREEN) <i>Secrets of the Crocodile Caves</i>		ALAN ALDA IN SCIENTIFIC AMERICAN FRONTIERS <i>Losing It</i>		INDEPENDENT LENS <i>Life Matters</i>		State of the Union Address
Wed.21	ALAN ALDA IN SCIENTIFIC AMERICAN FRONTIERS <i>Losing It (rpt.)</i>		THE FORGETTING: A PORTRAIT OF ALZHEIMER'S			FOLLOW-UP	
Thu.22	THE NEW THIS OLD HOUSE HOUR		FRONTLINE <i>Chasing Saddam's Weapons</i>		CONQUISTADORS WITH MICHAEL WOOD <i>The Search for El Dorado [r]</i>		4/4
Fri.23	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		THE PERILOUS FIGHT: AMERICA'S WORLD WAR II IN COLOR <i>Wrath</i>		3/4
Sat.24	AMERICAN FAMILY [r] [Sunday at 7pm]						
Sun.25	NATURE <i>Polar Bear Invasion [r]</i>		EXXONMOBIL MASTERPIECE THEATRE <i>The Forsyte Saga [r]</i>		DNA (WIDESCREEN) <i>Curing Cancer</i>		4/5 Golden Globes
Mon.26	ANTIQUES ROADSHOW <i>San Francisco, CA</i>		1/3	AMERICAN EXPERIENCE <i>John Brown's Holy War [r]</i>			MIXED FEELINGS: San Diego/Tijuana [r]
Tue.27	NOVA <i>Lost King of the Maya [r]</i>		FLASHPOINTS USA WITH BRYANT GUMBEL AND GWEN IFILL		INDEPENDENT LENS <i>Why Can't We Be a Family Again?/Downpour Resurfacing</i>		
Wed.28	LIVE FROM LINCOLN CENTER <i>Thomas Quasthoff Performs Mozart (w.t.)</i>			GREAT PERFORMANCES <i>DIA: Acts of Ardor: Two Dances by Paul Taylor</i>			
Thu.29	BY THE PEOPLE #103		FRONTLINE <i>Chasing the Sleeper Cell [r]</i>		CONQUISTADORS WITH MICHAEL WOOD <i>All the World is Human [r]</i>		4/4
Fri.30	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		THE PERILOUS FIGHT: AMERICA'S WORLD WAR II IN COLOR <i>Triumph</i>		4/4
Sat.31	AMERICAN FAMILY [r] [Sunday at 7pm]						

## February 2004

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM		
Sun.1	NATURE <i>The Urban Elephant [r]</i>		EXXONMOBIL MASTERPIECE THEATRE <i>The Forsyte Saga [r]</i>		DNA (WIDESCREEN) <i>Pandora's Box</i>		5/5 Super Bowl	
Mon.2	ANTIQUES ROADSHOW <i>San Francisco, CA</i>		2/3	AMERICAN EXPERIENCE <i>Remember the Alamo (WIDESCREEN)</i>		AMERICAN MASTERS <i>James Baldwin: The Price of the Ticket [r]</i> end 2330		
Tue.3	NOVA <i>Dogs and More Dogs (WIDESCREEN)</i>		AMERICA BEYOND THE COLOR LINE WITH HENRY LOUIS GATES JR. <i>South: The Black Belt/Chicago: Streets of Heaven</i>					
Wed.4	IN SEARCH OF SHAKESPEARE <i>A Time of Revolution (WIDESCREEN)</i>		1/4	East Coast: <i>Ebony Towers/Los Angeles: Black Hollywood</i>				
Thu.5	THE NEW THIS OLD HOUSE HOUR		FRONTLINE <i>American Porn [r]</i>		SECRETS OF THE PHAROHS [r] <i>Tut's Family Curse</i>		1/3 Feb. Sweeps 2/5-3/3	
Fri.6	WASHINGTON WEEK	WALL STREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		EINSTEIN'S WIFE [r]			
Sat.7	AMERICAN FAMILY [r] [Sunday at 7pm]							
Sun.8	NATURE (WIDESCREEN) <i>Diamonds</i>		EXXONMOBIL MASTERPIECE THEATRE <i>The Forsyte Saga II</i>				1/3 Grammy Awards	
Mon.9	ANTIQUES ROADSHOW <i>San Francisco, CA</i>		3/3	AMERICAN EXPERIENCE <i>Tupperware! (WIDESCREEN)</i>		A HOT DOG PROGRAM [r]		
Tue.10	NOVA <i>Descent into the Ice (HDTV)</i>		INNOVATION (WIDESCREEN) <i>Building to Extremes</i>		1	INDEPENDENT LENS <i>Nat Turner: A Troublesome Property</i>		
Wed.11	IN SEARCH OF SHAKESPEARE <i>The Lost Years (WIDESCREEN)</i>		2/4	THE MEDICI: GODFATHERS OF THE RENAISSANCE *POP* (WIDESCREEN) <i>Birth of a Dynasty/The Magnificent Medici</i>				1/2 end 2400
Thu.12	THE NEW THIS OLD HOUSE HOUR		FRONTLINE <i>Beyond Baghdad</i>		SECRETS OF THE PHAROHS [r] <i>Lost City of the Pyramids</i>		2/3	
Fri.13	WASHINGTON WEEK	WALL STREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		EXXONMOBIL MASTERPIECE THEATRE <i>The Forsyte Saga II</i> end 2400			
Sat.14	AMERICAN FAMILY [r] [Sunday at 7pm]							
Sun.15	NATURE (WIDESCREEN) <i>The Real Macaw</i>		EXXONMOBIL MASTERPIECE THEATRE <i>The Forsyte Saga II</i>		PBS HOLLYWOOD PRESENTS <i>The Gin Game [r] (HDTV)</i>		2/3 end 2330	
Mon.16	ANTIQUES ROADSHOW <i>Oklahoma City, OK</i>		1/3	AMERICAN EXPERIENCE <i>The Murder of Emmett Till [r]</i>		HOXIE: THE FIRST STAND Presidents' Day		
Tue.17	NOVA <i>Crash of Flight 111</i>		INNOVATION (WIDESCREEN) <i>Human Body Shop</i>		2	INDEPENDENT LENS <i>A Place of Our Own</i>		
Wed.18	IN SEARCH OF SHAKESPEARE <i>The Duty of Poets (WIDESCREEN)</i>		3/4	THE MEDICI: GODFATHERS OF THE RENAISSANCE *POP* (WIDESCREEN) <i>The Medici Popes/Power vs. The Truth</i>				2/2 end 2400
Thu.19	THE NEW THIS OLD HOUSE HOUR		FRONTLINE <i>Tax Me if You Can</i>		SECRETS OF THE PHAROHS [r] <i>Unwrapping the Mummy</i>		3/3	
Fri.20	WASHINGTON WEEK	WALL STREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		EXXONMOBIL MASTERPIECE THEATRE <i>The Forsyte Saga II</i> 2/3			
Sat.21	AMERICAN FAMILY [r] [Sunday at 7pm]							
Sun.22	NATURE (WIDESCREEN) <i>Holy Cow</i>		EXXONMOBIL MASTERPIECE THEATRE <i>The Forsyte Saga II</i>				3/3	
Mon.23	ANTIQUES ROADSHOW <i>Oklahoma City, OK</i>		2/3	AMERICAN EXPERIENCE <i>Public Enemy #1 [r]</i>		THE BLACK PRESS: SOLDIERS WITHOUT SWORDS [r] end 2330		
Tue.24	NOVA <i>Spies That Fly [r]</i>		INNOVATION (WIDESCREEN) <i>Spycatchers</i>		3	INDEPENDENT LENS <i>Jimmy Scott: If You Only Knew</i> end 2330		
Wed.25	IN SEARCH OF SHAKESPEARE <i>For All Time (WIDESCREEN)</i>		4/4	AMERICAN MASTERS <i>Judy Garland: By Myself</i>				
Thu.26	THE NEW THIS OLD HOUSE HOUR		FRONTLINE <i>The Invasion of Iraq</i>					
Fri.27	WASHINGTON WEEK	WALL STREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		EXXONMOBIL MASTERPIECE THEATRE <i>The Forsyte Saga II</i> 3/3 end 2400			
Sat.28	AMERICAN FAMILY [r] [Sunday at 7pm]							
Sun.29	NATURE <i>Walking with Giants: The Grizzlies of Siberia [r]</i>		EXXONMOBIL MASTERPIECE THEATRE <i>Me &amp; Mrs. Jones [r]</i>				Academy Awards	

# March 2004

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM
Mon.1	ANTIQUES ROADSHOW <i>Oklahoma City, OK</i>		3/3	AMERICAN EXPERIENCE <i>Zoot Suit Riots [r]</i>	HITLER'S SEARCH FOR THE HOLY GRAIL [r]	
Tue.2	NOVA (WIDESCREEN) <i>Life and Death in the War Zone</i>			INNOVATION (WIDESCREEN) <i>Hi-Tech War</i>	4	INDEPENDENT LENS <i>Sentencing the Victim</i>
Wed.3	SECRETS OF THE DEAD <i>Killer Flu (WIDESCREEN)</i>			GREAT PERFORMANCES <i>Concert for George (HDTV)</i>		end 233
Thu.4	THE NEW THIS OLD HOUSE HOUR			FRONTLINE <i>Inside the Teenage Brain [r]</i>	GREAT PERFORMANCES <i>Harry Connick, Jr.: Only You</i>	
Fri.5	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE		NOW WITH BILL MOYERS	SECRETS OF THE DEAD <i>Killer Flu (rpt.) (WIDESCREEN)</i>	
Sat.6	MARCH PLEDGE PERIOD					
Sun.7	NATURE <i>John Denver: Let This Be a Voice [r]</i>					
Mon.8	ANTIQUES ROADSHOW <i>Cleveland, OH [r]</i>		1/3			
Tue.9	NOVA <i>Flying Cassanovas [r]</i>					
Wed.10	MARCH PLEDGE PERIOD					
Thu.11	THE NEW THIS OLD HOUSE HOUR					
Fri.12	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE		NOW WITH BILL MOYERS		
Sat.13	MARCH PLEDGE PERIOD					
Sun.14	NATURE <i>The World of Penguins [r]</i>					
Mon.15	ANTIQUES ROADSHOW <i>Cleveland, OH [r]</i>		2/3			
Tue.16	NOVA <i>Mysterious Life of Caves [r]</i>					
Wed.17	MARCH PLEDGE PERIOD					
Thu.18	THE NEW THIS OLD HOUSE HOUR					
Fri.19	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE		NOW WITH BILL MOYERS		
Sat.20	MARCH PLEDGE PERIOD					
Sun.21	NATURE <i>Baby Tales [r]</i>					
Mon.22	ANTIQUES ROADSHOW <i>Cleveland, OH [r]</i>		3/3	AMERICAN EXPERIENCE <i>The Pill [r]</i>	THE GREAT CAMPAIGN OF 1960 [r]	
Tue.23	NOVA <i>Mysterious Mummies of China [r]</i>			ALAN ALDA IN SCIENTIFIC AMERICAN FRONTIERS <i>Unearthing Secret America [r]</i>	18	INDEPENDENT LENS <i>T-Shirt Travels</i>
Wed.24	NATIONAL GEOGRAPHIC SPECIAL <i>Inca Mummies: Secrets of a Lost World [r]</i>			AMERICAN MASTERS <i>Richard Rodgers: The Sweetest Sounds [r]</i>		
Thu.25	THE NEW THIS OLD HOUSE HOUR			FRONTLINE/WORLD #303	LAST STAND OF THE TALLGRASS PRAIRIE	
Fri.26	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE		NOW WITH BILL MOYERS	1/2	LOST LINERS [r]
Sat.27	MARCH PLEDGE PERIOD					
Sun.28	AMERICAN FAMILY [r] <i>[Sunday at 7pm]</i>			NATURE (WIDESCREEN) <i>Ireland (w.t.)</i>		
Mon.29	ANTIQUES ROADSHOW <i>Savannah, GA</i>		1/3	EXXONMOBIL MASTERPIECE THEATRE <i>My Uncle Silas II [r]</i>		
Tue.30	NOVA <i>Hunt for the Supertwister (HDTV)</i>			THE NEW AMERICANS		
Wed.31	NATIONAL GEOGRAPHIC SPECIAL <i>Whales in Crisis (w.t.)</i>					

St. Patrick's  
Day

end 2400

# April 2004

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM		
Thu.1	THE NEW THIS OLD HOUSE HOUR		FRONTLINE (WIDESCREEN) <i>Ghosts of Rwanda (w.t.)</i>					
Fri.2	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		LOST LINERS [r]	2/2		
Sat.3	AMERICAN FAMILY [Sunday at 7pm]						Daylight Savings Time	
Sun.4	SESAME STREET PRESENTS - THE STREET WE LIVE ON (w.t.)		EXXONMOBIL MASTERPIECE THEATRE <i>Daniel Deronda [r]</i>		1/2 FIESTA IN THE SKY [r] (HDTV)			
Mon.5	ANTIQUES ROADSHOW <i>Savannah, GA</i>		2/3	AMERICAN EXPERIENCE <i>Meltdown at Three Mile Island [r]</i>	TESLA: MASTER OF LIGHTNING [r]		end 2330	
Tue.6	NOVA <i>Ancient Creature of the Deep [r]</i>		INNOVATION (WIDESCREEN) <i>Crash Site Secrets</i>		INDEPENDENT LENS <i>Every Child is Born a Poet...Piri Thomas</i>		Passover	
Wed.7	SECRETS OF THE DEAD (WIDESCREEN) <i>Shroud of Christ?</i>		MY JOURNEY HOME					
Thu.8	THE NEW THIS OLD HOUSE HOUR		FRONTLINE <i>Diet Wars (w.t.)</i>		JOURNEY TO PLANET EARTH <i>On the Brink [r]</i>		1/3	
Fri.9	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		GREAT STREETS [r]	1/5		
Sat.10	AMERICAN FAMILY [Sunday at 7pm]							
Sun.11	NATURE (WIDESCREEN) <i>Flight School</i>		EXXONMOBIL MASTERPIECE THEATRE <i>Daniel Deronda [r]</i>		2/2		Easter	
Mon.12	ANTIQUES ROADSHOW <i>Savannah, GA</i>		3/3	AMERICAN EXPERIENCE (HDTV) <i>Emma Goldman</i>	DEFORD BAILEY: A LEGEND LOST			
Tue.13	NOVA <i>Life's Greatest Miracle [r] (HDTV)</i>		INNOVATION (WIDESCREEN) <i>Miracle Cell</i>		INDEPENDENT LENS <i>Love Inventory</i>		end 2330	
Wed.14	SMALL BALL: A LITTLE LEAGUE STORY (WIDESCREEN)			INTO THE ARMS OF STRANGERS: STORIES OF THE KINDERTRANSPORT [r]				end 2330
Thu.15	THE NEW THIS OLD HOUSE HOUR		FRONTLINE <i>The Man Who Knew [r]</i>		JOURNEY TO PLANET EARTH <i>Seas of Grass [r]</i>		2/3	
Fri.16	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		GREAT STREETS [r]	2/5		
Sat.17	AMERICAN FAMILY [Sunday at 7pm]						Holocaust Remembrance Day 4/18	
Sun.18	NATURE (WIDESCREEN) <i>Land of the Falling Lakes (w.t.)</i>		EXXONMOBIL MASTERPIECE THEATRE <i>Prime Suspect 6 - The Last Witness</i>		1/2			
Mon.19	ANTIQUES ROADSHOW <i>Chicago, IL (Part 1) [r]</i>		AMERICAN EXPERIENCE <i>Patriot's Day (WIDESCREEN)</i>		MARTIN LUTHER (WIDESCREEN) <i>Driven to Defiance [r]</i>		1/2	
Tue.20	NOVA (HDTV) <i>World in the Balance</i>				INDEPENDENT LENS <i>Ram Dass Fierce Grace</i>		21 end 2330	
Wed.21	GREAT PERFORMANCES (HDTV) <i>DIA: The Dream with American Ballet Theatre</i>		P.O.V. <i>Love &amp; Diane</i>					
Thu.22	THE NEW THIS OLD HOUSE HOUR		FRONTLINE <i>Son of Al Qaeda</i>		JOURNEY TO PLANET EARTH <i>Hot Zones [r]</i>		3/3	
Fri.23	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		GREAT STREETS [r]	3/5		
Sat.24	AMERICAN FAMILY [Sunday at 7pm]							
Sun.25	NATURE <i>Trail of the Cougar [r]</i>		EXXONMOBIL MASTERPIECE THEATRE <i>Prime Suspect 6 - The Last Witness</i>		2/2			
Mon.26	ANTIQUES ROADSHOW <i>Roadshow Favorites</i>		AMERICAN EXPERIENCE (WIDE...) <i>Remember the Alamo [r]</i>		MARTIN LUTHER (WIDESCREEN) <i>The Reluctant Revolutionary [r]</i>		2/2	
Tue.27	NOVA <i>Lost Treasures of Tibet [r]</i>		INNOVATION (WIDESCREEN) <i>Light Speed</i>		INDEPENDENT LENS <i>The Weather Underground</i>		end 2330	
Wed.28	MARK RUSSELL COMEDY SPECIAL		AMERICAN MASTERS <i>Henry Luce and Time-Life's America: A Vision of Empire</i>		MATISSE AND PICASSO [r] (HDTV)			
Thu.29	LIVE FROM LINCOLN CENTER <i>Haydn, Vivaldi and Yo-Yo Ma</i>		FRONTLINE <i>The Jesus Factor (w.t.)</i>		MARK RUSSELL COMEDY SPECIAL (rpt.)		May Sweeps 4/29-5/26	
Fri.30	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		GREAT STREETS [r]	4/5		

# May 2004

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM	
Sat.1	AMERICAN FAMILY [Sunday at 7pm]						
Sun.2	NATURE (WIDESCREEN) <i>Tall Blondes [r]</i>		EXXONMOBIL MASTERPIECE THEATRE <i>Prime Suspect 1 [r]</i>			1/2	
Mon.3	ANTIQUES ROADSHOW <i>Roadshow's Greatest Finds</i>		AMERICAN EXPERIENCE <i>Golden Gate Bridge</i>		THE BATTLE OF HOOD AND BISMARCK <i>The Mighty Hood (WIDESCREEN)</i>		1/2
Tue.4	NOVA <i>Battle Plan Under Fire</i>		INNOVATION (WIDESCREEN) <i>Brain Fingerprinting</i>		INDEPENDENT LENS <i>One Night at the Grand Star/Double Exposure</i>		
Wed.5	LIVE FROM LINCOLN CENTER <i>Lincoln Center Celebrates Balanchine's 100 (w.t.)</i>				SEARCHING FOR ASIAN AMERICA		end 2330
Thu.6	THE NEW THIS OLD HOUSE HOUR		FRONTLINE <i>Cyber War! [r]</i>		FIRST STEPS: AN INTERNATIONAL RESPONSE TO THE LANDMINE CRISIS (wt)		
Fri.7	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		GREAT STREETS [r]		5/5
Sat.8	THE STORY OF MOTHERS AND DAUGHTERS *Weekend POP*						
Sun.9	AMERICAN FAMILY [Sunday at 7pm]		EXXONMOBIL MASTERPIECE THEATRE <i>Prime Suspect 1 [r]</i>			2/2	Mother's Day
Mon.10	NATURE <i>The Seedy Side of Plants [r]</i>		AMERICAN EXPERIENCE <i>Tupperware! [r] (WIDESCREEN)</i>		THE BATTLE OF HOOD AND BISMARCK <i>Sink the Bismarck (WIDESCREEN)</i>		2/2
Tue.11	NOVA <i>Magnetic Storm [r]</i>		ALAN ALDA IN SCIENTIFIC AMERICAN FRONTIERS <i>Don't Forget</i>		INDEPENDENT LENS <i>Refugee</i>		
Wed.12	NATIONAL GEOGRAPHIC SPECIAL <i>Dawn of the Maya (w.t.)</i>		CAPTURING THE KILLER CROC		BROWN + 50 (w.t.)		
Thu.13	THE NEW THIS OLD HOUSE HOUR		FRONTLINE <i>The Killer at Thurston High [r]</i>		LAWRENCE OF ARABIA: THE BATTLE FOR THE ARAB WORLD (WIDESC RN)		1/2
Fri.14	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		RACE: THE POWER OF AN ILLUSION <i>The Difference Between Us</i>		1/3
Sat.15	AMERICAN FAMILY [Sunday at 7pm]						Colonial House Weekend
Sun.16	NATURE <i>Pale Male</i>		EXXONMOBIL MASTERPIECE THEATRE <i>Prime Suspect 2 [r]</i>			1/2	Stack
Mon.17	COLONIAL HOUSE (WIDESCREEN) <i>Parts 1 &amp; 2 "A New World/Harsh Reality"</i>				COLONIAL HOUSE (WIDESCREEN) (rpt.) <i>Parts 1 &amp; 2</i>		
Tue.18	<i>Parts 3 &amp; 4 "City of God/The Outsiders"</i>				<i>Parts 3 &amp; 4</i>		end 2400
Wed.19	ALAN ALDA IN SCIENTIFIC AMERICAN FRONTIERS <i>Future Car</i>		SECRETS OF THE DEAD (WIDESCREEN) <i>D-Day</i>				
Thu.20	THE NEW THIS OLD HOUSE HOUR		FRONTLINE <i>The Alternative Fix [r]</i>		LAWRENCE OF ARABIA: THE BATTLE FOR THE ARAB WORLD (WIDESC RN)		2/2
Fri.21	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		RACE: THE POWER OF AN ILLUSION <i>The Story We Tell</i>		2/3
Sat.22	AMERICAN FAMILY [Sunday at 7pm]						
Sun.23	NATURE <i>Extraordinary Cats [r]</i>		EXXONMOBIL MASTERPIECE THEATRE <i>Prime Suspect 2 [r]</i>			2/2	
Mon.24	COLONIAL HOUSE (WIDESCREEN) <i>Parts 5 &amp; 6 "Regime Change/Shake Up"</i>				COLONIAL HOUSE (WIDESCREEN) (rpt.) <i>Parts 5 &amp; 6</i>		
Tue.25	<i>Parts 7 &amp; 8 "The Reconing/Judgement Day"</i>				<i>Parts 7 &amp; 8</i>		end 2400
Wed.26	JAPAN: MEMOIRS OF A SECRET EMPIRE (WIDESCREEN)						Sweeps End
Thu.27	THE NEW THIS OLD HOUSE HOUR		FRONTLINE <i>The Way the Music Died</i>		INDEPENDENT LENS <i>Death of a Shaman</i>		
Fri.28	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		RACE: THE POWER OF AN ILLUSION <i>The House We Live In</i>		3/3
Sat.29	AMERICAN FAMILY [Sunday at 7pm]						
Sun.30	NATIONAL MEMORIAL DAY CONCERT (2004)			NATIONAL WORLD WAR II MEMORIAL: A TESTAMENT TO FREEDOM		USS WISCONSIN: THE LAST BATTLESHIP [r]	
Mon.31	ANTIQUES ROADSHOW <i>[r]</i>		AMERICAN EXPERIENCE <i>War Letters [r]</i>		AMERICAN VALOR [r]		end 2330



To: General Managers  
Program Managers  
Promotion Managers  
From: John F. Wilson, Jacoba Atlas, Steven Gray, Shawn Halford  
Date: March 8, 2004

Attached please find:

- Summer 2004 National Program Service Primetime Grids
- Summer 2004 Common Carriage Designations

The summer 2004 primetime at-a-glance grids detail the most current plans for the National Program Service schedule in the upcoming season. As is always the case, these grids are subject to some change, but we are confident that the major programming elements will remain as scheduled. This schedule includes the months of June, July and August 2004. We plan to publish the fall 2004 schedule by mid-May, to coincide with special PBS programming teleconferences May 17-19.

The summer 2004 grids show an aggressively scheduled NPS, aiming toward targeted opportunities when competition from the big four networks ebbs. Highlights include our third Tony Hillerman *American Mystery! Special, "A Thief of Time"*; the second season of HISTORY DETECTIVES; a program on controversial new theories on the earliest voyages of discovery, "*1421: The Year China Discovered America?*"; and an examination of the ancient Greek games called "*The Real Olympics.*" Our election-year coverage continues through our continuing public affairs series under the banner "*By the People: Election 2004,*" including NEWSHOUR coverage of the Democratic and Republican National Conventions.

Sunday nights begin with new four new episodes from the second season of AMERICAN FAMILY – JOURNEY OF DREAMS at 7:00 PM [Note: on the attached grids, you'll see AMERICAN FAMILY listed in a special box just above each Sunday] and continue with NATURE at 8:00 PM, followed at 9:00 PM by EXXONMOBIL MASTERPIECE THEATRE through June, and MYSTERY! beginning in July.

On Mondays, ANTIQUES ROADSHOW leads into a new season of HISTORY DETECTIVES, and over six weeks this summer, Monday is rounded out with a re-up of the critically-acclaimed and very popular series "*Liberty: The American Revolution.*" NOVA pairs with ALAN ALDA IN SCIENTIFIC AMERICAN FRONTIERS and other science programming on Tuesday nights, followed by the conclusion of the INDEPENDENT LENS season and the beginning of a new season of P.O.V. Wednesday continues to be programmed with arts and performance programs from GREAT PERFORMANCES and AMERICAN MASTERS, as

well as with top-notch specials and miniseries such as “*Rebels and Redcoats: How Britain Lost America*” and “*1421: The Year China Discovered America?*.”

Thursdays will continue to feature THE NEW THIS OLD HOUSE HOUR at 8:00 PM, followed at 9:00 PM by FRONTLINE through the end of June, and by WIDE ANGLE beginning in July. A new season of SOUNDSTAGE begins Thursdays at 10:00 PM in June. Fridays remain the home of WASHINGTON WEEK, WALL STREET WEEK WITH FORTUNE and NOW WITH BILL MOYERS, and beginning in June, the newest public affairs series in the lineup, TUCKER CARLSON: UNFILTERED (w.t.).

Our goals remain consistent: to craft an NPS that will continue to garner critical acclaim and prestigious awards; foster common carriage; continue to support member stations’ local development efforts; and generate national and local underwriting, as well as ancillary distribution revenue, all while educating and inspiring audiences. We’re excited about the prospects for the summer schedule, and expect it to deliver on all of these goals.

Working with the best producers, PBS Programming Services has built on your behalf an impressive pipeline that provides a steady stream of top-quality educational, engaging programming. With each season, we strategically position these programs into a compelling national schedule that we hope will provide a strong foundation for your local services. PBS Programming Services’ continuing work toward our shared goals is demonstrated throughout the summer 2004 National Program Service schedule. On the following pages, you’ll find some program highlights, including specials, limited series and continuing series’ special presentations, to look forward to in the upcoming season.

### **Primetime Limited Series & Specials**

#### *D-Day: Down to Earth – Return of the 507th*

1/60 from JumpCut Productions and GPTV

Sixty years later, surviving members of the 507th Parachute Infantry Regiment recount the invasion of Normandy on D-Day and battles leading up to the Battle of the Bulge. The film then culminates in an emotional reunion in 2002, when the veterans traveled to Normandy for a memorial dedicated to them and their fallen brothers.

#### *Rebels and Redcoats: How Britain Lost America*

2/120 from WGBH

This series is an exploration into the Revolutionary War and how it divided the nation between those who remained loyal to the Crown and those fighting for liberation from England. Using interviews with scholars, large-scale reconstruction, first-person narratives and a showcase of historic documents and paintings, the series travels back to the passionate, violent and sometimes tragically funny events of the 1770s.

### **Primetime Limited Series & Specials, continued**

#### *A Program About Unusual Buildings and Other Roadside Stuff*

1/60 from WQED

Rick Sebak brings his trademark flair to a road trip in search of America's most interesting, wacky and goofy buildings, celebrating places such as the Big Duck on Long Island, the National Fresh Water Fishing National Hall of Fame (in the shape of a giant fish) in Heyward, Wisconsin, and the world's largest catsup bottle, built as a water tower in Collinsville, Illinois.

#### *A Thief of Time, An American Mystery! Special*

1/120 from WGBH

An archaeologist turned pottery poacher thinks she has cracked the secret of the vanished Anasazi, when she herself vanishes. As other poachers start dropping dead, Leaphorn and Chee must piece together a case as complicated as the mysteriously decorated pots the killer covets. Starring Adam Beach, Wes Studi and Peter Fonda.

#### *Great Lodges of the Canadian Rockies*

2/60 from OPB, W.W. West and Driftwood Productions

Building on the success of "Great Lodges of the National Parks," these two new specials explore the incredible lodges of the Canadian Rockies, emphasizing the distinctive geography and history of the region.

#### *1421: The Year China Discovered America?*

1/120 from Pearson, PITV and KQED

This special examines the theories outlined by Gavin Menzies in his international best-selling book "1421: The Year China Discovered the World." An amateur historian and former submarine commander in the Royal British Navy, Menzies poses an argument that could change the way we perceive global history forever -- that Chinese admirals discovered America and Chinese junks first circled the earth. Traveling across the continent, the film will combine history, science and technology with adventure and exploration, taking viewers on their own voyage of discovery.

#### *The Real Olympics*

2/60 from Antony Thomas and Carlton Productions

To mark the Olympics' return to its birthplace of Athens in 2004, this series tells the "real" story of the original games. It compares the ancient Greek Olympics to the modern games of today, examining the ideals, the events themselves, the stories of the athletes and the politics and financial considerations that were as much a part of the Olympics 2000 years ago as they are today. This story will appeal to sports fans as well as history buffs, juxtaposing contemporary Olympic footage with re-creations of the early competitions in all their beauty and savagery.

### **Continuing Series**

The continuing series are the foundation of the schedule's strength. This summer, many continuing series will return with strong new episodes, including the following:

AMERICAN FAMILY - JOURNEY OF DREAMS continues to tell the multi-generational saga of the Gonzalez family with four new episodes in June and July.

MYSTERY! presents new whodunits including Foyles War II, new Inspector Lynley stories and a new Adam Dalgliesh miniseries, in a season that will stretch into October.

HISTORY DETECTIVES returns with 10 all-new episodes and a couple of repackaged programs. All four detectives are back on the case with new stories ranging from a cane that may have been a gift from Lewis & Clark to a body in an Annapolis, Maryland, basement that may have a connection to the English Civil War.

ALAN ALDA IN SCIENTIFIC AMERICAN FRONTIERS climbs the shrinking Alaskan glaciers, explains "dark matter" and examines theories on the first people to migrate to America.

INDEPENDENT LENS wraps up its season with a portrait of a lesbian chorus in a Midwestern college town.

P.O.V. kicks off its season with a powerful film on a new front in the immigration wars: suburban Long Island.

SECRETS OF THE DEAD uncovers a burial mound in Russia that could provide clues to the mysterious Amazon warriors of Greek legend.

Acclaimed producer/director Sydney Pollack presents a dynamic conversation with architect Frank Gehry on AMERICAN MASTERS.

GREAT PERFORMANCES presents two new programs from the San Francisco Symphony and musical director Michael Tilson Thomas, and a musical celebration of the Athens Olympics.

WIDE ANGLE returns to the schedule with 10 new films spanning the globe.

Soundstage returns with HDTV concerts from Sheryl Crow, Alanis Morissette, Lindsey Buckingham and Stevie Nicks, Steve Winwood, Joan Baez and more.

THE NEWS HOUR WITH JIM LEHRER, WASHINGTON WEEK, WALL STREET WEEK WITH FORTUNE, NOW WITH BILL MOYERS and new series TUCKER CARLSON: UNFILTERED (w.t.) focus on coverage of election year issues under the banner "*By the People: Election 2004.*"

### **Promotion**

PBS Brand Management and Promotion is creating promotion campaigns to support this season's schedule. A complete promotion plan with details on program support, branding strategies and materials for both primetime and PBS Kids will be available on PBS Express.

### **Common Carriage Designations**

A list of programs designated for Common Carriage within the summer 2004 season is included as a part of this mailing.

We are pleased to deliver to you the summer 2004 National Program Service primetime schedule. In this season and beyond, we will ensure that PBS continues to deliver to its member stations a high-quality, diverse National Program Service that builds upon and extends the mission, depth, reach and distinction that are the hallmarks of PBS.

If you have any questions, please feel free to call:

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## **SUMMER 2004 COMMON CARRIAGE DESIGNATIONS**

### Continuing Series:

- Sundays: American Family – Journey of Dreams  
Nature  
ExxonMobil Masterpiece Theatre  
Mystery! (Including “A Thief of Time” on 7/11 & 7/14)
- Mondays: Antiques Roadshow  
History Detectives
- Tuesdays: NOVA  
Alan Alda in Scientific American Frontiers
- Thursdays: Frontline  
Wide Angle
- Fridays: Washington Week  
Wall Street Week with FORTUNE  
NOW with Bill Moyers

### Limited Series and Specials:

- American Masters “Hank Williams” (w.t.)  
Flashpoints with Bryant Gumbel and Gwen Ifill  
On Stage at the White House: Governor’s Dinner (w.t.)  
American Masters “Sketches of Frank Gehry” (w.t.)  
1421: The Year China Discovered America?  
The Real Olympics  
Secrets of the Dead “Amazon Warrior Women” (w.t.)  
Great Performances “From the Acropolis: A Salute to the Games...” (w.t.)

### Notes:

No common carriage designations will be made for the following dates:

- June 1-20, due to increasing local pledge activities
- The week of July 25, due to coverage of the Democratic National Convention
- August 5-28, due to pledge activities
- The week of August 29, due to coverage of the Republican National Convention

The 2003-04 Common Carriage Year began on September 14, 2003, and concludes September 11, 2004. The 2003-04 carriage year encompasses 500 hours of common carriage designations, based on the July 2001 revisions to common carriage guidelines. A detailed and updated accounting of common carriage designations appears with each month’s week-by-weeks.

## June 2004

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM	
Tue.1	NOVA <i>Death Star [r]</i>		ALAN ALDA IN SCIENTIFIC AMERICAN FRONTIERS <i>Mysteries of the Deep [r]</i>		INDEPENDENT LENS <i>Cosmopolitan</i>		
Wed.2	D-DAY: DOWN TO EARTH - RETURN OF THE 507th		AMERICAN MASTERS (WIDESCREEN) <i>Robert Capa: In Love and War [r]</i>			USS WISCONSIN: THE LAST BATTLE... (rpt.)	
Thu.3	THE NEW THIS OLD HOUSE HOUR <i>[r]</i>		FRONTLINE <i>Tax Me If You Can [r]</i>		BRINGING DOWN A DICTATOR [r]		
Fri.4	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		D-DAY! DOWN TO EARTH - RETURN OF THE 507th (rpt.)		
Sat.5	AMERICAN FAMILY (HD) [r] [Sunday at 7pm]						
Sun.6	NATURE <i>Triumph of Life: The Four Billion Year War [r]</i>		EXXONMOBIL MASTERPIECE THEATRE <i>Foyle's War: The German Woman [r]</i>			1/4 CROWN & COUNTRY #305 [r]	
Mon.7	ANTIQUES ROADSHOW <i>Kansas City, MO, Part 3 [r]</i>		AMERICAN EXPERIENCE <i>Jimmy Carter "Jimmy Who?" [r]</i>			1/2 THE CARTERS: A CONVERSATION [r]	
Tue.8	NOVA <i>Secrets of the Mind [r]</i>		ALAN ALDA IN SCIENTIFIC AMERICAN FRONTIERS <i>Losing It [r]</i>		INDEPENDENT LENS <i>Sumo East and West</i>		
Wed.9	HORATIO'S DRIVE: AMERICA'S FIRST ROAD TRIP [r]				GREAT OLD AMUSEMENT PARKS [r]		
Thu.10	THE NEW THIS OLD HOUSE HOUR <i>[r]</i>		FRONTLINE <i>A Dangerous Business [r]</i>		FROM SWASTIKA TO JIM CROW [r]		
Fri.11	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		PEACE BY PEACE: WOMEN ON THE FRONTLINES		
Sat.12	AMERICAN FAMILY (HD) [r] [Sunday at 7pm]						
Sun.13	NATURE <i>Triumph of Life: The Mating Game [r]</i>		EXXONMOBIL MASTERPIECE THEATRE <i>Foyle's War: The White Feather [r]</i>			2/4 CROWN & COUNTRY #306 [r]	
Mon.14	ANTIQUES ROADSHOW <i>Hot Springs, AR, Part 1 [r]</i>		AMERICAN EXPERIENCE <i>Jimmy Carter "Hostage" [r]</i>			2/2 THE CARTERS: A CONVERSATION [r]	Flag Day
Tue.15	NOVA <i>Who Killed the Red Baron? [r]</i>		ALAN ALDA IN SCIENTIFIC AMERICAN FRONTIERS <i>Hot Times in Alaska</i>		INDEPENDENT LENS <i>The Amasong Chorus: Singing Out</i>		
Wed.16	THE FORGETTING: A PORTRAIT OF ALZHEIMER'S [r] (WIDESCREEN)			GREAT PERFORMANCES <i>Keeping Score: MTT on Music: The Making...</i>		GREAT PERFORMANCES end 2330 <i>Tchaikovsky Symphony #4... (HDTV)</i>	
Thu.17	THE NEW THIS OLD HOUSE HOUR <i>[r]</i>		FRONTLINE <i>The Plea</i>		SOUNDSTAGE (HDTV) <i>Fleetwood Mac</i> end 2330		
Fri.18	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		TUCKER CARLSON: UNFILTERED (w.t.)	STAYING AT A LIGHTHOUSE [r]	
Sat.19	AMERICAN FAMILY (HDTV) [Sunday at 7pm]						
Sun.20	NATURE <i>Triumph of Life: The Eternal Arms Race [r]</i>		EXXONMOBIL MASTERPIECE THEATRE <i>Foyle's War: A Lesson in Murder [r]</i>			3/4 DRIVEN TO PLAY:... ROCK GUITAR COMP.	Father's Day
Mon.21	ANTIQUES ROADSHOW <i>Hot Springs, AR, Part 2 [r]</i>		HISTORY DETECTIVES (WIDESCREEN) <i>Season Premiere</i>		LIBERTY! THE AMERICAN REVOLUTION <i>The Reluctant Revolutionaries [r]</i>	1/6	
Tue.22	NOVA <i>Volcano Above the Clouds [r] (HDTV)</i>		ALAN ALDA IN SCIENTIFIC AMERICAN FRONTIERS <i>The Dark Side of the Universe</i>		P.O.V. <i>Farmingville</i> end 2330		
Wed.23	AMERICAN MASTERS (WIDESCREEN) <i>Hank Williams: Honky Tonk Blues</i>		REBELS AND REDCOATS: HOW BRITAIN LOST AMERICA <i>The Shot Heard Around the World/American Crisis</i>			1/2	
Thu.24	THE NEW THIS OLD HOUSE HOUR <i>[r]</i>		FRONTLINE/WORLD #304		SOUNDSTAGE (HDTV) <i>Sheryl Crow</i>		1/2
Fri.25	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		TUCKER CARLSON: UNFILTERED (w.t.)	DRIVEN TO PLAY:... ROCK GUITAR...(rpt.)	
Sat.26	AMERICAN FAMILY (HDTV) [Sunday at 7pm]						
Sun.27	NATURE <i>Triumph of Life: Winning Teams [r]</i>		EXXONMOBIL MASTERPIECE THEATRE <i>Foyle's War: Eagle Day [r]</i>			4/4 FIREWOMEN [r]	
Mon.28	ANTIQUES ROADSHOW <i>Hot Springs, AR, Part 3 [r]</i>		HISTORY DETECTIVES (WIDESCREEN)		LIBERTY! THE AMERICAN REVOLUTION <i>Blows Must Decide [r]</i>	2/6	
Tue.29	NOVA <i>Fireworks! [r]</i>		FLASHPOINTS USA WITH BRYANT GUMBEL AND GWEN IFILL		P.O.V. <i>Bill's Run: A Political Journey in Rural Kansas</i>		
Wed.30	ON STAGE AT THE WHITE HOUSE <i>The Governors' Dinner</i>		REBELS AND REDCOATS: HOW BRITAIN LOST AMERICA <i>The War Moves South/The World Turned Upside Down</i>			2/2	

# July 2004

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM	
Thu.1	THE NEW THIS OLD HOUSE HOUR [r]		WIDE ANGLE Season Premiere		SOUNDSTAGE (HDTV) Sheryl Crow		2/2
Fri.2	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		TUCKER CARLSON: UNFILTERED (w.t.)	FIREWOMEN [r] (rpt.)	
Sat.3	AMERICAN FAMILY (HDTV) [Sunday at 7pm]						
Sun.4	A CAPITOL FOURTH (2004)			A CAPITOL FOURTH (2004) (rpt.)			Independence Day
Mon.5	ANTIQUES ROADSHOW Charlotte, NC, Part 1 [r]		HISTORY DETECTIVES (WIDESCREEN)		LIBERTY! THE AMERICAN REVOLUTION The Times That Try Men's Souls [r]		3/6
Tue.6	NOVA Galileo's Battle for the Heavens [r]		P.O.V. War Feels Like War				
Wed.7	NATIONAL GEOGRAPHIC SPECIAL Egypt Eternal: The Quest for Lost Tombs [r]		AMERICAN MASTERS Judy Garland: By Myself [r]				
Thu.8	THE NEW THIS OLD HOUSE HOUR [r]		WIDE ANGLE		SOUNDSTAGE (HDTV) Ronald Isley and Burt Bacharach		July Sweeps 7/8-8/4
Fri.9	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		TUCKER CARLSON: UNFILTERED (w.t.)	BACK TO THE FLOOR Central Park [r]	1/6
Sat.10	AMERICAN FAMILY (HDTV) [Sunday at 7pm]						
Sun.11	A PROGRAM ABOUT UNUSUAL BUILDINGS & OTHER ROADSIDE STUFF		A THIEF OF TIME, AN AMERICAN MYSTERY! SPECIAL (HDTV)				
Mon.12	ANTIQUES ROADSHOW Charlotte, NC, Part 2 [r]		HISTORY DETECTIVES (WIDESCREEN)		LIBERTY! THE AMERICAN REVOLUTION Oh Fatal Ambition! [r]		4/6
Tue.13	NOVA Fire Wars [r]		P.O.V. Thirst				
Wed.14	GREAT LODGES OF THE CANADIAN ROCKIES (WIDESCREEN)		A THIEF OF TIME, AN AMERICAN MYSTERY! SPECIAL (HDTV)				
Thu.15	THE NEW THIS OLD HOUSE HOUR [r]		WIDE ANGLE		SOUNDSTAGE (HDTV) Alanis Morissette		
Fri.16	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		TUCKER CARLSON: UNFILTERED (w.t.)	BACK TO THE FLOOR Burger King (r)	2/6
Sat.17	AMERICAN FAMILY (HD) [r] [Sunday at 7pm]						
Sun.18	NATURE (WIDESCREEN) The Octopus Show [r]		MYSTERY! Foyle's War II: Fifty Ships		1/4 BACK TO THE FLOOR Burger King [r] (rpt.)		
Mon.19	ANTIQUES ROADSHOW Charlotte, NC, Part 3 [r]		HISTORY DETECTIVES (WIDESCREEN)		LIBERTY! THE AMERICAN REVOLUTION The World Turned Upside Down [r]		5/6
Tue.20	NOVA Lost at Sea: The Search for Longitude [r]		ALAN ALDA IN SCIENTIFIC AMERICAN FRONTIERS Coming to America		P.O.V. Last Man Standing: Politics Texas Style		end.2330
Wed.21	GREAT LODGES OF THE CANADIAN ROCKIES (WIDESCREEN)		1421: THE YEAR CHINA DISCOVERED AMERICA?				
Thu.22	THE NEW THIS OLD HOUSE HOUR [r]		WIDE ANGLE		SOUNDSTAGE (HDTV) Lisa Marie Presley and Peter Wolf		
Fri.23	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		TUCKER CARLSON: UNFILTERED (w.t.)	BACK TO THE FLOOR Carnival Cruises [r]	3/6
Sat.24	AMERICAN FAMILY (HD) [r] [Sunday at 7pm]						
Sun.25	NATURE The Panda Baby [r]		MYSTERY! Foyle's War II: Among the Few		2/4 BACK TO THE FLOOR Carnival Cruises [r] (rpt.)		
Mon.26	ANTIQUES ROADSHOW Boston, MA, Part 1 [r]		HISTORY DETECTIVES (WIDESCREEN)		LIBERTY! THE AMERICAN REVOLUTION Are We to Be a Nation? [r]		Democratic National Convention, Boston 7/26-7/29 live 8-11pm ET
Tue.27	NOVA Russia's Nuclear Warriors [r]		ALAN ALDA IN SCIENTIFIC AMERICAN FRONTIERS Don't Forget [r]		P.O.V. Refrigerator Mothers [r]		
Wed.28	NATIONAL GEOGRAPHIC SPECIAL Diamonds of War [r]		PEOPLE LIKE US: SOCIAL CLASS IN AMERICA [r]				
Thu.29	THE NEW THIS OLD HOUSE HOUR [r]		WIDE ANGLE [r]		SOUNDSTAGE (HDTV) Michael McDonald... [r]		
Fri.30	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		TUCKER CARLSON: UNFILTERED (w.t.)	BACK TO THE FLOOR Heathrow... [r]	4/6
Sat.31							



# August 2004

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM	
	AMERICAN FAMILY (HD) [r] [Sunday at 7pm]						
Sun.1	NATURE <i>Big Red Roos</i> [r]		MYSTERY! <i>Foyle's War II: War Games</i>		3/4	BACK TO THE FLOOR <i>Heathrow... [r] (rpt.)</i>	
Mon.2	ANTIQUES ROADSHOW <i>Boston, MA, Part 2</i> [r]		HISTORY DETECTIVES (WIDESCREEN)		"IT:" A PHISH CONCERT SPECIAL (w.t.) (HDTV) <span style="float: right;">end 2330</span>		
Tue.3	NOVA <i>Last Flight of Bomber 31</i> [r]		THE REAL OLYMPICS (WIDESCREEN) <i>Death or Glory (w.t.)</i>		P.O.V. <i>A Family Undertaking</i>		
Wed.4	SECRETS OF THE DEAD (WIDESCREEN) <i>Amazon Warrior Women (w.t.)</i>		Playing to Win (w.t.)		GREAT PERFORMANCES <i>From the Acropolis: A Salute to the Games w/ Berlin Philharmonic (w.t.)</i> end 2330		
Thu.5	THE NEW THIS OLD HOUSE HOUR [r]		WIDE ANGLE		SOUNDSTAGE (HDTV)		Sweeps End 8/4
Fri.6	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		TUCKER CARLSON: UNFILTERED (w.t.)	BACK TO THE FLOOR <i>Women's Prison</i> [r] 5/6	
Sat.7							
Sun.8	NATURE <i>Song of the Earth with David Attenborough</i> [r]		MYSTERY! <i>Foyle's War II: The Funk Hole</i>		4/4		
Mon.9	ANTIQUES ROADSHOW <i>Boston, MA, Part 3</i> [r]						
Tue.10	NOVA <i>Secret of Photo 51</i> [r]						
Wed.11							
Thu.12	THE NEW THIS OLD HOUSE HOUR [r]						
Fri.13	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		TUCKER CARLSON: UNFILTERED (w.t.)		Olympic Opening
Sat.14							
Sun.15	NATURE <i>Ravens</i> [r]						
Mon.16	ANTIQUES ROADSHOW <i>New York, NY, Part 1</i> [r]		HISTORY DETECTIVES (WIDESCREEN)		THE MYSTERY OF CHACO CANYON [r]		
Tue.17	NOVA <i>Search for a Safe Cigarette</i> [r]		ALAN ALDA IN SCIENTIFIC AMERICAN FRONTIERS <i>Future Car</i> [r]		P.O.V. <i>Every Mother's Son</i>		
Wed.18	EVERGLADES, A NAKED PLANET SPECIAL [r] (WIDESCREEN)		THE MAIN STREAM [r] (HDTV)				
Thu.19	THE NEW THIS OLD HOUSE HOUR [r]		WIDE ANGLE		SOUNDSTAGE (HDTV)		
Fri.20	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		TUCKER CARLSON: UNFILTERED (w.t.)	BACK TO THE FLOOR <i>Wedgwood... [r]</i> 6/6	
Sat.21							
Sun.22	AMERICAN FAMILY (HD) [r] [Sunday at 7pm]						
Sun.22	NATURE <i>Golden Seals of the Skeleton Coast</i> [r]		MYSTERY! <i>Inspector Morse - Masonic Mysteries</i> [r]				
Mon.23	ANTIQUES ROADSHOW <i>New York, NY, Part 2</i> [r]		HISTORY DETECTIVES (WIDESCREEN)		HOXIE: THE FIRST STAND [r]		
Tue.24	NOVA <i>Battle of the X-Planes</i> [r]				P.O.V. <i>Speedo</i> <span style="float: right;">end 2330</span>		
Wed.25	THE HIDDEN ART OF HOLLYWOOD		GREAT PERFORMANCES <i>Verbier Festival (w.t.)</i> (HDTV)		CLOSING THE ACHIEVEMENT GAP		
Thu.26	THE NEW THIS OLD HOUSE HOUR [r]		WIDE ANGLE		SOUNDSTAGE (HDTV)		
Fri.27	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		TUCKER CARLSON: UNFILTERED (w.t.)	FIESTA IN THE SKY (HDTV) [r]	
Sat.28							
Sun.29	AMERICAN FAMILY (HD) [r] [Sunday at 7pm]						Olympics Closing 8/29
Sun.29	NATURE <i>Baby Tales</i> [r]		MYSTERY! <i>Inspector Morse - Infernal Serpent</i> [r]				
Mon.30	ANTIQUES ROADSHOW <i>New York, NY, Part 3</i> [r]		HISTORY DETECTIVES (WIDESCREEN)		LOS ROMEROS: ROYAL FAMILY OF THE GUITAR [r]		Republican Nat'l Conv, NY
Tue.31	NOVA <i>18 Ways to Make a Baby</i> [r]		ALAN ALDA IN SCIENTIFIC AMERICAN FRONTIERS <i>Hot Times in Alaska</i> [r]		P.O.V. [r] <i>Soldados: Chicanos in Vietnam/6th Section</i>		8/30-9/2 live 8-11pm ET

To: General Managers  
Program Managers  
Promotion Managers  
From: John F. Wilson, Jacoba Atlas, Steven Gray, Shawn Halford  
Date: May 17, 2004

Attached please find:

- Fall 2004 National Program Service Primetime Grids
- Fall 2004 Common Carriage Designations

The fall 2004 primetime at-a-glance grids detail the most current plans for the National Program Service schedule in the upcoming season. As is always the case, these grids are subject to some change, but we are confident that the major programming elements will remain as scheduled. This schedule includes the months of September, October, November and December 2004. We plan to publish the winter 2005 schedule in early October.

The fall 2004 grids show an aggressively scheduled NPS. Particularly of note is the return of FRONTLINE to Tuesday nights at 9:00 p.m. Why? FRONTLINE's audience has declined 40% since it was on Tuesdays back in 2000 – outpacing the general audience declines across the NPS schedule. The FRONTLINE demographics that have declined the most in the past three seasons on Thursday nights are younger men and women: Women 18-34 off 50%, women 35-49 off 30%, men 35-49 off 40%. The primary factor here is the Thursday night competition from CSI and ER which, on an ongoing basis, are the #1 and #2 highest-rated programs on television for college graduates — our primary index.

In order to best use our collective investment in FRONTLINE, we need to move the series off of Thursdays and away from the toughest competition of the week. Based on overlap studies that suggest more viewers watch both NOVA and FRONTLINE than just about any other combination of series in our schedule, we have moved FRONTLINE back to Tuesdays at 9:00 p.m. beginning this fall.

As we enter the back stretch of the election year, our coverage continues through our ongoing public affairs series under the banner "*By the People: Election 2004*," including FRONTLINE'S "*The Choice 2004*," a dual-biography of President George Bush and his Democratic challenger, John Kerry; and the NEWSHOUR's coverage of the Presidential Election on November 5. PBS will also carry all major Presidential and Vice Presidential debates made available to us this fall.

Other highlights in the NPS prime time schedule include three stunning new NATIONAL GEOGRAPHIC SPECIALS covering diverse subjects: "*The Great Bear Rainforest*" (w.t.), "*The Phoenicians*" (w.t.) and "*Carpetbagger Ship: The Republic*" (w.t.). And in November, on the eve of Veterans Day, a fourth new NATIONAL GEOGRAPHIC SPECIAL will explore our nation's most cherished memorial park, "*Arlington National Cemetery*" (w.t.).

Our "House" franchise continues, as we're all invited to a "*Regency House Party*." It's England in the early 1800s – the height of the age of romance. Our time-travelers live as the well-heeled regency. Their behavior is subject to the strict social protocols that governed the lives of Jane Austen's heroes and heroines. In this highly competitive and charged atmosphere, marriage, money and morals are all up for grabs.

In December, we have new holiday programming, including "*The Wonder of Christmas*" featuring the Mormon Tabernacle Choir. And as the year concludes, we say thank you and good bye to a cherished journalist. Bill Moyers retires from NOW WITH BILL MOYERS and passes the baton to David Brancaccio to carry on hosting NOW as this weekly series transitions to a half-hour format in January.

Here's a night-by-night overview of what's planned for fall:

Sunday nights begin with the final repeat episodes from the second season of AMERICAN FAMILY at 7:00 p.m. [Note: on the attached grids, you'll see AMERICAN FAMILY listed in a special box just above each Sunday.] The series' second common carriage play concludes on October 24 – and we thank you for your continuing support and carriage. At 8:00 p.m. we find a new season from NATURE, followed at 9:00 p.m. by MASTERPIECE THEATRE. While the financial support of ExxonMobil concludes, our commitment to British drama on Sunday nights remains strong. You can count on MASTERPIECE THEATRE and MYSTERY! for the long term.

On Monday, ANTIQUES ROADSHOW leads into AMERICAN EXPERIENCE, which launches its new season with a powerful new film biography from David Grubin, "RFK". The AMERICAN EXPERIENCE season continues through spring 2005.

On Tuesdays, NOVA is back with an exciting new season, now rejoined with FRONTLINE. The summer season of P.O.V. concludes, and a new INDEPENDENT LENS season begins in October at 10:00 p.m. [Note: The majority of the science programming that previously would have followed NOVA – including SECRETS OF THE DEAD and NATIONAL GEOGRAPHIC SPECIALS – will migrate to Wednesday nights.]

Wednesdays continue to be programmed with specials. Those with the broadest audience appeal are slotted in at 8:00 p.m., followed at 9:00 p.m. by an eclectic mix of documentaries, arts and performance programs, which helps build a valuable cume audience over time.

On Thursdays, THE NEW THIS OLD HOUSE HOUR has been tracking at or above primetime average for the stations scheduling it on Thursday nights. We're going to build on that by following it up at 9:00 p.m. with another hour of reality TV, in the PBS tradition. We're in discussions with the producers of ANTIQUES ROADSHOW about a new series idea – for the moment we'll call it "Antiques Roadshow Revisited" (w.t.). Hosted by Lara Spencer... it answers those nagging questions we've all had about the ultimate fate of the most valuable treasures uncovered on ANTIQUES ROADSHOW. Did the owners sell their prize possessions and reap the benefits? Or were they true to their words when they said "Oh, I'd never part with it -- it's a family heirloom!" The programs move along – they are segmented just as ANTIQUES ROADSHOW is, so the audience can join in anytime – all in a half-hour format. WGBH is piloting the series now and we hope it's possible to have it on the air this October where it will join FIND! The line-up would be THE NEW THIS OLD HOUSE HOUR at 8:00 p.m. – FIND! at 9:00 p.m. and ANTIQUES ROADSHOW REVISITED (w.t.) at 9:30 p.m. If WGBH and PBS can't get the funding together by early summer, we would have to push the start to 2005, and we'd schedule a within the week repeat of ANTIQUES ROADSHOW at 9pm as a place holder in the fall. The summer season of SOUNDSTAGE concludes in September.

Fridays remain the home of WASHINGTON WEEK, WALL STREET WEEK WITH FORTUNE, NOW WITH BILL MOYERS, and our newest public affairs series, TUCKER CARLSON: UNFILTERED. Plans are being made for a new Friday night public affairs series from the Wall Street Journal, hosted by Editor, Paul Gigot. We will share all the details about the series very soon.

Our goals remain consistent: to craft an NPS that will continue to garner critical acclaim and prestigious awards; foster common carriage; continue to support member stations' local development efforts; and generate national and local underwriting, as well as ancillary distribution revenue, all while educating and inspiring audiences. We're excited about the prospects for the fall schedule, and expect it to deliver on all of these goals.

Working with the best producers, PBS Programming Services has built on your behalf an impressive pipeline that provides a steady stream of top-quality educational, engaging programming. With each season, we strategically position these programs into a compelling national schedule that we hope will provide a strong foundation for your local services. PBS Programming Services' continuing work toward our shared goals is demonstrated throughout the fall 2004 National Program Service schedule. On the following pages, you'll find some program highlights, including specials, limited series and continuing series' special presentations, to look forward to in the upcoming season.

### **Primetime Limited Series & Specials**

#### *"Broadway: The American Musical"*

After several years in the making, this series comes to the schedule this fall as a promotional "pop-out." There is no place in the world like Broadway, and this series brings it to life in all its glory. Over six hours, *"Broadway: The American Musical"* chronicles the evolution of the musical stage throughout the 20th century. The series is generous with clips from shows ranging from "Oklahoma" and "Porgy & Bess" to "Rent" and "The Lion King," and includes on-camera interviews with many of the principals involved in creating (what began as) a uniquely American art form. *"Broadway: The American Musical"* is a production of Thirteen/WNET and producer Michael Kantor. Julie Andrews will host.

#### *"The Question of God: Sigmund Freud & C.S. Lewis"*

This four-hour limited series is based on a popular Harvard lecture course by Dr. Armand Nicholi which explores the divergent world views of Sigmund Freud and C.S. Lewis, two of the most influential thinkers of the 20th century. The series seeks to answer the fundamental question humanity faces: how do we make sense of the world around us? From WGBH and Tatge/Lasseur Productions.

*"Extreme Oil" (w.t.)*

This three-part series will examine the global oil industry, looking at where oil comes from and offering a glimpse into the lives of those people who are involved in supplying the world with its most important commodity. From the rocky shoals of the South China Sea to the tangled thickets of the Colombian rainforest, oil companies operate in the world's most difficult, dangerous areas. In their wake, armies clash, diplomats scheme and spies are scattered to the four corners of the earth. From Paladin Invision and WNET. Executive producer, Stephen Segaller.

*"They Made America"*

From the producers of AMERICAN EXPERIENCE comes *"They Made America,"* a limited series that will air in the AMERICAN EXPERIENCE night time slot in November. *"They Made America"* explores the history of innovation in America through the stories of the inventive men and women who transformed the world. From jet planes to the brassiere, the Bank of America to CNN, *"They Made America"* will explore what makes the U.S. an incubator for so much groundbreaking creativity and innovation. From WGBH.

*"Touching the Void"*

This powerful film – a promotional pop out – tells the story of two mountain climbers, Joe Simpson and Simon Yates, as they set out to climb the west face of the Siula Grande in the Peruvian Andes. It was 1985, and the men were young, fit, skilled climbers. The west face was remote and treacherous, and had not been climbed before. Following a successful three-and-a-half-day ascent, disaster struck. Simpson fell a short distance and broke several bones in his leg. With no hope of rescue, the men decided to attempt descent together in a slow, painful process that could have potentially been deadly for both. Then, things really turned bad... From Oscar-winning director Kevin MacDonal, producer John Smithson, Pathé Films and C4 in the UK.

*"This Is a Game, Ladies"*

This feature length film follows the top-ranked Rutgers University women's basketball team, The Scarlet Knights, and their legendary coach C. Vivian Stringer during the 2000/2001 seasons. From the first day at practice to the big game, we experience the daily lives of these talented female "hoopsters," following the season-changing injuries and the academic pressures that challenged them. This film is not just about basketball but the game of life. From Emmy Award-winning producer, Peter Schnall (National Geographic Special, "Air Force One") and Partisan Pictures.

*"The Wonder of Christmas"*

This is the first program in what promises to be a series of annual Christmas concerts featuring the Mormon Tabernacle Choir and guest artists, taped in the spectacular Mormon Tabernacle in Salt Lake City. This year's guest performers are Bryn Terfel and Frederica von Stade. From KUED, Salt Lake City.

### **Continuing Series**

The continuing series are the foundation of the National Program Service schedule. This fall, our continuing series will return with strong new episodes, including the following:

#### **NOVA**

"The Most Dangerous Woman in America" interweaves biography and social history to tell the extraordinary story of "Typhoid" Mary Mallon. Misidentified as a healthy carrier of typhoid fever, Mallon was incarcerated for years on an island in the East River. Her saga throws into vivid relief the emerging science of public health and the social, ethical, and legal dilemmas it posed to its pioneers at the turn of the 20th century.

#### **NATURE**

**"The Good, the Bad, and the Grizzly"**

Once on the edge of extinction, grizzlies have made a remarkable recovery. But this fierce predator is no longer content foraging in the back country. Today, bears are everywhere – and especially visible in Yellowstone National Park. And everyone has something to say about it. The return of the grizzly is a conservation success story that comes with a price.



GREAT PERFORMANCES

"Carnegie Hall Opening Night"

GREAT PERFORMANCES will return to its tradition of gala opening night concerts from Carnegie Hall, with special guests Yo-Yo Ma and Renee Fleming joining the Philadelphia Orchestra and its new music director, Christoph Eschenbach. The 90-minute concert program will feature three works by Richard Strauss: Don Juan, Op. 20; Four Last Songs with Renee Fleming as soloist; and Don Quixote, Op. 35, with solo cello performed by Yo-Yo Ma.

AMERICAN EXPERIENCE

"RFK"

This is an extraordinary tragedy in two acts from filmmaker David Grubin. In chapter one, "The Garish Sun," we learn how Bobby devotes himself to his brother John, suppressing his own ambitions. In part two, "Awful Grace of God," after an assassin's bullet takes his brother's life, RFK is bereft not only of a brother he loved, but a role that had given meaning to his life. Just as he begins to discover his own identity and move beyond the shadow of his brother, he too is cut off in his prime.

MASTERPIECE THEATRE

"Henry VIII"

MASTERPIECE THEATRE brings history's most beguiling monarch and his six wives to the small screen. Ray Winstone (Cold Mountain) stars as Henry VIII, revealing the destruction Henry often left in his wake during his extraordinary 38 year reign. From the moment Henry Tudor casts aside his faithful wife Katherine of Aragon for the bewitching and determined Anne Boleyn (Helena Bonham Carter), he sets himself on course for a series of disastrous marriages. Charles Dance and David Suchet also star.

**PBS Kids**

A separate memo detailing plans for PBS Kids programming will be issued by June 1, 2004.

## **Promotion**

PBS Brand Management and Promotion is creating promotion campaigns to support this season's schedule. A complete promotion plan with details on program support, branding strategies and materials for both primetime and PBS Kids will be available on PBS Express.

## **Common Carriage Designations**

A list of programs designated for Common Carriage within the fall 2004 season is included as a part of this mailing.

We are pleased to deliver to you the fall 2004 National Program Service primetime schedule. In this season and beyond, we will ensure that PBS continues to deliver to its member stations a high-quality, diverse National Program Service that builds upon and extends the mission, depth, reach and distinction that are the hallmarks of PBS.

If you have any questions, please feel free to call:

John Wilson	703-739-5155
Jacoba Atlas	310-360-9763
Steven Gray	703-759-5012
Shawn Halford	703-739-5247

## FALL 2004 COMMON CARRIAGE DESIGNATIONS

### Continuing Series:

Sundays: American Family – Journey of Dreams (through 10/24)  
Nature  
Mystery!  
Masterpiece Theatre

Mondays: Antiques Roadshow  
History Detectives  
American Experience

Tuesdays: NOVA (excluding 11/2 for Election Day)  
Frontline (including “The Choice 2004” on 10/12, 10/14 and 11/1)

Thursdays: Wide Angle

Fridays: Washington Week  
Wall Street Week with FORTUNE  
NOW with Bill Moyers

### Limited Series and Specials:

Great Performances “John Lennon’s Jukebox”  
Extreme Oil (w.t.)  
The Question of God: Sigmund Freud & C.S. Lewis  
A.R.T.S. (w.t.)  
The Pulse of a People (w.t.)  
PBS Hollywood Presents “Cop Shop”  
National Geographic Special “Phoenicians” (w.t.)  
Broadway: The American Musical  
Great Performances “Carnegie Hall Opening Night (2004)”  
Regency House Party  
They Made America  
National Geographic Special “Arlington National Cemetery” (w.t.)  
Touching the Void  
Great Performances “Guitar Gods” (w.t.)

### Notes:

No common carriage designations will be made for the following dates:

- The week of Aug. 29-Sept. 3, due to coverage of the Republican National Convention
- December 2-19, due to pledge activities

The 2003-04 Common Carriage Year began on September 14, 2003, and concludes September 11, 2004. The 2004-2005 Common Carriage Year begins on September 12, 2004 and concludes on September 10, 2005. Each carriage year encompasses 500 hours of common carriage designations, based on the July 2001 revisions to common carriage guidelines. A detailed and updated accounting of common carriage designations appears with each month’s week-by-weeks.

# September 2004

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM	
Wed.1	PBS CONVENTION COVERAGE -- A NEWSHOUR SPECIAL REPORT: THE REPUBLICANS <i>Live coverage 8:00 PM - 11:00 PM ET each night, 8/30-9/2</i>						
Thu.2							
Fri.3	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS	TUCKER CARLSON: UNFILTERED	CROWN OF THE CONTINENT (HD) [r]		
Sat.4	AMERICAN FAMILY (HD) [r] [Sunday at 7pm]						
Sun.5	NATURE (WIDESCREEN) <i>Extraordinary Birds [r]</i>		MYSTERY! <i>Inspector Lynley III: Playing for the Ashes</i>		1/4 VISIONES: LATINO	ART & CULTURE 1/6	
Mon.6	ANTIQUES ROADSHOW <i>Chicago, IL, Part 1 [r]</i>		HISTORY DETECTIVES (WIDESCREEN)		ALASKA'S GOLD RUSH TRAIN [r] (WIDESCREEN)		Labor Day
Tue.7	NOVA <i>Why the Towers Fell [r]</i>		FRONTLINE <i>Sacred Ground</i>		P.O.V. <i>Wattstax</i>		end 2400
Wed.8	GREAT PERFORMANCES <i>John Lennon's Jukebox</i>		THE VIDEO GAME REVOLUTION				
Thu.9	THE NEW THIS OLD HOUSE HOUR <i>[r]</i>		WIDE ANGLE		SOUNDSTAGE (HDTV) <i>Dan Fogelberg</i>		
Fri.10	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS	TUCKER CARLSON: UNFILTERED	VISIONES: LATINO	ART & CULTURE rpt.	
Sat.11	AMERICAN FAMILY (HD) [r] [Sunday at 7pm]						
Sun.12	NATURE (WIDESCREEN) <i>Australia's Little Assassins [r]</i>		MYSTERY! <i>Inspector Lynley III: In the Presence of the Enemy</i>		2/4 VISIONES: LATINO	ART & CULTURE 2/6	
Mon.13	ANTIQUES ROADSHOW <i>Chicago, IL, Part 2 [r]</i>		HISTORY DETECTIVES (WIDESCREEN)		EXTREME OIL	1/3	
Tue.14	NOVA <i>Infinite Secrets [r]</i>		SECRETS OF THE DEAD <i>Tomb of Christ [r] (WIDESCREEN)</i>		P.O.V. <i>Freedom Machines</i>		
Wed.15	NATIONAL GEOGRAPHIC SPECIAL <i>Dawn of the Maya [r]</i>		THE QUESTION OF GOD: SIGMUND FREUD & C.S. LEWIS WITH DR. ARMAND NICHOLI			1/2	Rosh Hashanah
Thu.16	THE NEW THIS OLD HOUSE HOUR <i>[r]</i>		WIDE ANGLE		SOUNDSTAGE (HDTV) <i>Steve Winwood</i>		
Fri.17	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS	TUCKER CARLSON: UNFILTERED	THE JOURNAL	EDITORIAL REPORT	
Sat.18	AMERICAN FAMILY (HD) [r] [Sunday at 7pm]						
Sun.19	NATURE (WIDESCREEN) <i>Wild Horses of Mongolia with Julia Roberts [r]</i>		MYSTERY! <i>Inspector Lynley III: A Suitable Vengeance</i>		3/4 VISIONES: LATINO	ART & CULTURE 3/6	
Mon.20	ANTIQUES ROADSHOW <i>Chicago, IL, Part 3 [r]</i>		HISTORY DETECTIVES (WIDESCREEN)		EXTREME OIL	2/3	
Tue.21	LIVE FROM LINCOLN CENTER <i>New York Philharmonic Opening Night</i>			P.O.V. <i>A Panther in Africa</i>			end 2330
Wed.22	AMERICAN TALENT		THE QUESTION OF GOD: SIGMUND FREUD & C.S. LEWIS WITH DR. ARMAND NICHOLI			2/2	
Thu.23	THE NEW THIS OLD HOUSE HOUR <i>[r]</i>		WIDE ANGLE		SOUNDSTAGE (HDTV) <i>30 Odd Foot of Grunts Feat. Russell Crowe...</i>		
Fri.24	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS	TUCKER CARLSON: UNFILTERED	THE JOURNAL	EDITORIAL REPORT	Yom Kippur
Sat.25	AMERICAN FAMILY (HD) [r] [Sunday at 7pm]						
Sun.26	NATURE (WIDESCREEN) <i>Dogs: The Early Years [r]</i>		MYSTERY! <i>Inspector Lynley III: Deception on His Mind</i>		4/4 VISIONES: LATINO	ART & CULTURE 4/6	
Mon.27	ANTIQUES ROADSHOW <i>San Francisco, CA, Part 1 [r]</i>		HISTORY DETECTIVES (WIDESCREEN)		EXTREME OIL	3/3	
Tue.28	NOVA Origins (WIDESCREEN) <i>Earth is Born / How Life Began</i>			P.O.V. <i>Lost Boys of Sudan</i>			end 2330
Wed.29	<i>Where Are the Aliens? / Back to the Beginning</i>			CRASHING THE PARTIES 2004			
Thu.30	THE NEW THIS OLD HOUSE HOUR <i>[r]</i>		DEBATES 2004: A NEWSHOUR SPECIAL REPORT <i>Presidential Debate from University of Miami, Jim Lehrer Moderating, 9-11pm ET</i>				

# October 2004

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM	
Fri.1	WASHINGTON WEEK	WALL STREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	
Sat.2	AMERICAN FAMILY (HD) [r] [Sunday at 7pm]						
Sun.3	NATURE (WIDESCREEN) <i>Cloud's Legacy: The Wild Stallion Returns [r]</i>		MYSTERY! <i>Death in Holy Orders</i>			1/2 VISIONES: LATINO ART & CULTURE 5/6	
Mon.4	ANTIQUES ROADSHOW <i>San Francisco, CA, Part 2 [r]</i>		AMERICAN EXPERIENCE <i>RFK</i>				
Tue.5	NOVA <i>The Perfect Pearl [r]</i>		DEBATES 2004: A NEWSHOUR SPECIAL REPORT <i>Vice Presidential Debate from Case Western Reserve U., Gwen Ifill Moderates, 9-11pm ET</i>				
Wed.6	SECRETS OF THE DEAD (WIDESCREEN) [r]		PBS HOLLYWOOD PRESENTS (HDTV) <i>Cop Shop</i>			VISIONES: LATINO ART & CULTURE rpt.	
Thu.7	THE NEW THIS OLD HOUSE HOUR		WIDE ANGLE		SOUNDMIX: FIVE YOUNG MUSICIANS		
Fri.8	WASHINGTON WEEK	WALL STREET WK. WITH FORTUNE	DEBATES 2004: A NEWSHOUR SPECIAL REPORT <i>Presidential Debate from Washington University, Charles Gibson Moderating, 9-11pm ET</i>				
Sat.9	AMERICAN FAMILY (HD) [r] [Sunday at 7pm]						
Sun.10	NATURE <i>John Denver: Let This Be a Voice [r]</i>		MYSTERY! <i>Death in Holy Orders</i>			2/2 VISIONES: LATINO ART & CULTURE 6/6	
Mon.11	ANTIQUES ROADSHOW <i>San Francisco, CA, Part 3 [r]</i>		AMERICAN EXPERIENCE <i>Transcontinental Railroad [r]</i>				Columbus Day
Tue.12	NOVA (WIDESCREEN) <i>The Most Dangerous Woman in America (wt)</i>		FRONTLINE (WIDESCREEN) <i>The Choice 2004</i>				
Wed.13	CAPTURING THE KILLER CROC [r] (WIDESCREEN)		DEBATES 2004: A NEWSHOUR SPECIAL REPORT <i>Presidential Debate from Arizona State University, Bob Schieffer Moderating, 9-11pm ET</i>				
Thu.14	THE NEW THIS OLD HOUSE HOUR		FRONTLINE (WIDESCREEN) <i>The Choice 2004 (rpt.)</i>				
Fri.15	WASHINGTON WEEK	WALL STREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	
Sat.16	AMERICAN FAMILY (HD) [r] [Sunday at 7pm]						
Sun.17	NATURE (WIDESCREEN) <i>Hippo Beach [r]</i>		MASTERPIECE THEATRE <i>The Lost Prince</i>			1/2	
Mon.18	LIVE FROM LINCOLN CENTER <i>Jazz Theater Opening Gala</i>		AMERICAN EXPERIENCE <i>The Fight</i>			FORT NIAGARA: THE STRUGGLE... (HDTV)	
Tue.19	NOVA <i>Neanderthal on Trial [r]</i>		BROADWAY: THE AMERICAN MUSICAL (HDTV)				
Wed.20	NATIONAL GEOGRAPHIC SPECIAL <i>Quest for the Phoenicians</i>						
Thu.21	TIME TO CHOOSE: A BY THE PEOPLE ELECTION SPECIAL						
Fri.22	WASHINGTON WEEK	WALL STREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	
Sat.23	AMERICAN FAMILY (HD) [r] [Sunday at 7pm]						
Sun.24	NATURE <i>Pale Male [r]</i>		MASTERPIECE THEATRE <i>The Lost Prince</i>			2/2	
Mon.25	ANTIQUES ROADSHOW <i>Oklahoma City, OK, Part 2 [r]</i>		AMERICAN EXPERIENCE <i>Crash of '29 [r]</i>		THE FIRST LADY: PUBLIC EXPECTATIONS, PRIVATE LIVES (HDTV)		
Tue.26	NOVA <i>The Missing Link [r]</i>		FRONTLINE (WIDESCREEN) <i>Rumsfeld's War</i>			INDEPENDENT LENS <i>The Political Dr. Suess</i>	end 2330
Wed.27	SECRETS OF THE DEAD <i>Witches Curse [r] (WIDESCREEN)</i>		GREAT PERFORMANCES <i>Carnegie Hall Opening Night. (HDTV)</i>				
Thu.28	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Oklahoma City, OK, Part 2 [r] (rpt.)</i>		PEACE BY PEACE: WOMEN ON THE FRONTLINES [r]		
Fri.29	WASHINGTON WEEK	WALL STREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	
Sat.30	AMERICAN FAMILY (HD) [r] [Sunday at 7pm]						
Sun.31	NATURE (WIDESCREEN) <i>Animals Behaving Badly [r]</i>		MASTERPIECE THEATRE <i>Talking Heads/Telling Tales</i>		A PROGRAM ABOUT UNUSUAL BUILDINGS AND OTHER ROADSIDE STUFF [r]		Halloween

# November 2004

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM	
Mon.1	ANTIQUES ROADSHOW <i>Oklahoma City, OK, Part 3 [r]</i>		FRONTLINE <i>The Choice 2004 [r]</i>				Election 11/2
Tue.2	NOVA <i>Volcano's Deadly Warning [r]</i>		KILIMANJARO, A NAKED PLANET SPECIAL [r] (WIDESCREEN)		ELECTION COVERAGE 2004: A NEWSHOUR SPECIAL REPORT		Duration TBD
Wed.3	NATIONAL GEOGRAPHIC SPECIAL <i>Last Stand of the Great Bear</i>		REGENCY HOUSE PARTY (WIDESCREEN)		1/4 BACK TO THE FLOOR <i>Burger King[r]</i>		
Thu.4	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Oklahoma City, OK, Part 3 [r] (rpt.)</i>		D-DAY: DOWN TO EARTH - RETURN OF THE 507TH [r]		Nov. Sweeps 11/4-12/1
Fri.5	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	
Sat.6							
Sun.7	NATURE <i>Chasing Big Cats</i>		MASTERPIECE THEATRE <i>Henry VIII</i>		1/2 BACK TO THE FLOOR <i>Burger K. rpt.</i>		
Mon.8	ANTIQUES ROADSHOW <i>Savannah, GA, Part 1 [r]</i>		THEY MADE AMERICA (WIDESCREEN) <i>Rebels</i>		THEY MADE AMERICA (WIDESCREEN) <i>Revolutionaries</i>		2/4
Tue.9	NOVA (WIDESCREEN) <i>America's Stone Age Explorers</i>		FRONTLINE (WIDESCREEN) <i>The Persuaders</i>		INDEPENDENT LENS <i>Polka Time</i>		
Wed.10	NATIONAL GEOGRAPHIC SPECIAL <i>Arlington: Field of Honor (HDTV)</i>		REGENCY HOUSE PARTY (WIDESCREEN)		2/4 BACK TO THE FLOOR <i>Carnival [r]</i>		
Thu.11	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Savannah, GA, Part 1 [r] (rpt.)</i>		NATIONAL WORLD WAR II MEMORIAL: A TESTAMENT TO FREEDOM [r]		Veterans Day
Fri.12	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	
Sat.13							
Sun.14	NATURE (HDTV) <i>Shark Mountain</i>		MASTERPIECE THEATRE <i>Henry VIII</i>		2/2 BACK TO THE FLOOR <i>Carnival rpt.</i>		
Mon.15	ANTIQUES ROADSHOW <i>Savannah, GA, Part 2 [r]</i>		THEY MADE AMERICA (WIDESCREEN) <i>Newcomers</i>		REPORTING AMERICA AT WAR <i>The Romance of War</i>		1/2 end 2330
Tue.16	NOVA (WIDESCREEN) <i>Great Escape</i>		FRONTLINE (WIDESCREEN) <i>Is Wal-Mart Good for America?</i>		INDEPENDENT LENS <i>Afghanistan Unveiled</i>		
Wed.17	NATIONAL GEOGRAPHIC SPECIAL <i>Civil War Gold</i>		REGENCY HOUSE PARTY (WIDESCREEN)		3/4 BACK TO THE FLOOR <i>Heathrow [r]</i>		
Thu.18	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Savannah, GA, Part 2 [r] (rpt.)</i>		FARMING THE SEAS		
Fri.19	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	
Sat.20							
Sun.21	NATURE <i>The Good, the Bad, and the Grizzly</i>		TOUCHING THE VOID		CROWN OF THE CONTINENT (HD) [r]		
Mon.22	ANTIQUES ROADSHOW <i>Savannah, GA, Part 3 [r]</i>		THEY MADE AMERICA (WIDESCREEN) <i>Empire Builders</i>		REPORTING AMERICA AT WAR <i>Which Side Are You On?</i>		1/2 end 2330
Tue.23	NOVA (WIDESCREEN) <i>Ancient Refuge in the Holy Land</i>		FRONTLINE (WIDESCREEN) <i>The Secret History of the Credit Card</i>		INDEPENDENT LENS <i>Los Angeles Now (HDTV)</i>		
Wed.24	SECRETS OF THE DEAD <i>Tragedy at the Pole [r]</i>		REGENCY HOUSE PARTY (WIDESCREEN)		4/4 BACK TO THE FLOOR <i>Wedgwood[r]</i>		
Thu.25	CHILDREN WILL LISTEN		AMERICA'S CHOIR: THE STORY OF THE MORMON TABERNACLE CHOIR (HDTV)		GEORGE JONES TRIBUTE, A SOUNDSTAGE SPECIAL (HDTV)		Thanksgiving
Fri.26	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	
Sat.27							
Sun.28	NATURE <i>Polar Bear Invasion [r]</i>		MASTERPIECE THEATRE <i>Pollyanna</i>				
Mon.29	ANTIQUES ROADSHOW <i>Roadshow Favorites [r]</i>		AMERICAN EXPERIENCE <i>Hoover Dam [r]</i>		NIAGARA FALLS, A NAKED PLANET SPECIAL (WIDESCREEN)		
Tue.30	NOVA (WIDESCREEN) <i>Dogs and More Dogs [r]</i>		FRONTLINE (WIDESCREEN) <i>Diet Wars [r]</i>		INDEPENDENT LENS <i>The Day My God Died</i>		

# December 2004

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM	
Wed.1	NATIONAL GEOGRAPHIC SPECIAL <i>Inside Special Forces [r]</i>		GREAT PERFORMANCES <i>Eric Clapton's Crossroads Guitar Festival (HDTV)</i>				Sweeps End
Thu.2	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Roadshow Favorites [r] (rpt.)</i>		CHRIS ISAAK CHRISTMAS, A SOUNDSTAGE SPECIAL (HDTV)		
Fri.3	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	
Sat.4							
Sun.5	NATURE <i>Dive to the Abyss [r]</i>						
Mon.6	ANTIQUES ROADSHOW <i>[r]</i>						
Tue.7	NOVA <i>Mountain of Ice [r]</i>		<b>DECEMBER PLEDGE PERIOD</b>				
Wed.8							Hanukkah Begins
Thu.9	THE NEW THIS OLD HOUSE HOUR						
Fri.10	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	
Sat.11							
Sun.12	NATURE <i>Horse and Rider [r]</i>						
Mon.13	ANTIQUES ROADSHOW <i>[r]</i>		GREAT PERFORMANCES <i>Rodgers &amp; Hammerstein's Cinderella</i>			SING! [r]	
Tue.14	NOVA <i>Deep Sea Invasion [r]</i>		FRONTLINE <i>Dangerous Prescription [r]</i>		INDEPENDENT LENS <i>Girl Wrestler</i>		
Wed.15	GREAT PERFORMANCES <i>Bill Irwin, Clown Prince</i>		THIS IS A GAME LADIES				
Thu.16	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>[r] (rpt.)</i>		SOUNDMIX: FIVE YOUNG MUSICIANS [r]		
Fri.17	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW WITH BILL MOYERS		TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	
Sat.18							
Sun.19	NATURE <i>Shadow Over the Sun: A Story of Eagles [r]</i>		MASTERPIECE THEATRE <i>Dr. Zhivago [r]</i>				1/2
Mon.20	ANTIQUES ROADSHOW <i>[r]</i>		AMERICAN EXPERIENCE <i>Miss America [r]</i>				
Tue.21	NOVA <i>The Elegant Universe: Einstein's Dream / The String's the Thing [r]</i>				1&2/3	INDEPENDENT LENS <i>Fine/Doki-Doki</i>	
Wed.22	CHRISTMAS WITH THE MORMON TABERNACLE CHOIR (HDTV)		CHRISTMAS AT BELMONT [r]		CHRISTMAS AT BAYLOR [r]		
Thu.23	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>[r] (rpt.)</i>		CHRISTMAS AT BELMONT [r] (rpt.)		
Fri.24	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	CHRISTMAS WITH THE MORMON TABERNACLE CHOIR (HDTV) (rpt.)		ON STAGE AT THE KENNEDY CENTER: A HOLIDAY CONCERT FOR THE TROOPS [r]		
Sat.25							Christmas
Sun.26	NATURE <i>Diamonds [r]</i>		MASTERPIECE THEATRE <i>Dr. Zhivago [r]</i>				2/2
Mon.27	ANTIQUES ROADSHOW <i>[r]</i>		AMERICAN EXPERIENCE <i>Woodrow Wilson [r]</i>			1/2	RACHEL & ANDREW JACKSON, A LOVE.. [r]
Tue.28	NOVA <i>The Elegant Universe: Welcome to the 11th... [r]</i>		3/3	FRONTLINE <i>The Alternative Fix [r]</i>	INDEPENDENT LENS <i>Short, Not Sweet</i>		
Wed.29	LIVE FROM LINCOLN CENTER <i>Sir James Galway @ the Penthouse</i>			THE CONGREGATION			end 2330
Thu.30	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>[r] (rpt.)</i>		AMERICAN TALENT [r]		
Fri.31	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	WASHINGTON NATIONAL OPERA'S DIE FLEDERMAUS				end 2330

To: General Managers, Program Managers & Promotion Managers  
From: John F. Wilson, Jacoba Atlas, Steven Gray, Shawn Halford  
Date: October 8, 2004

Attached please find:

- Winter/Spring 2005 National Program Service Primetime Grids
- Winter/Spring 2005 Common Carriage Designations

The attached winter/spring 2005 primetime at-a-glance grids detail the most current plans for the upcoming NPS schedule. As is always the case, these grids are subject to some change, but we are confident that the major programming elements will remain as scheduled. This schedule includes the months of January through May 2005. We plan to publish the summer 2005 schedule in February.

Consistency is one of the key words we've heard from the CPB-commissioned primetime 2004 audience study. The public values PBS highly but does not watch us with the frequency that we'd all like. Among the reasons cited for this disconnect is a lack of schedule consistency. Even though many of our series have been scheduled in the same time slot for decades, viewers still have a difficult time identifying when PBS series air. Some of this feeling of inconsistency may come from anthology series, which inherently look different from week to week, while some may come from pledge drives, which interrupt the weekly presence of continuing series several times each year. PBS may further interrupt weekly series footprints with stunts and preemptions. And our mix of weekly, continuing series versus specials and limited series may be one more source of inconsistency.

The winter/spring 2005 grids show a more consistently scheduled NPS. With the addition of the new spin-off series, ANTIQUES ROADSHOW FYI, and the reinvention of ALAN ALDA IN SCIENTIFIC AMERICAN FRONTIERS as weekly half-hours on Wednesdays, we now have a schedule with consistent, broad-appeal, weekly series each night in the first hour of primetime for an entire season. Beginning in May, we will bring AMERICAN MASTERS back to the schedule as a weekly series, running through the summer. And across the five months shown on the attached grids, the primetime schedule is interrupted by only one multi-



night stunt. Each of these factors addresses the consistency our audiences crave.

ANTIQUES ROADSHOW FYI and ALAN ALDA IN SCIENTIFIC AMERICAN FRONTIERS have also been developed in response to the CPB research findings that audiences find longer-form programs a barrier to viewing. The research suggests that half-hour programs and more segmented programs are more likely to appeal to viewers. Both of these series offer strong, mission-fulfilling content, and are well-paced, half-hour magazine formats, with lively, engaged and engaging hosts. Audiences can join the show at any point in the broadcast, and watch while multi-tasking at home – which is exactly how most viewers surveyed said they watch TV.

Further, the CPB study indicated that history and science are two topics our audiences prefer. So it's not surprising that both ANTIQUES ROADSHOW FYI and ALAN ALDA IN SCIENTIFIC AMERICAN FRONTIERS build off of existing franchises that have been very popular with PBS viewers. FYI spins off from our most-watched series, ANTIQUES ROADSHOW, which consistently tops a 3 rating year-round. SCIENTIFIC AMERICAN FRONTIERS attracted a very solid 2 rating in the metered markets this past season in its hour-long format. We will closely watch these two series and monitor their success as we make plans for the future of the Wednesday 8:00 PM slot.

Another component of the schedule that addresses many of the issues that arose in the CPB research is the new NOVA spin-off, NOVA'S LEADING EDGE (w.t.). This magazine-format, newsworthy science series hosted by Robert Krulwich will begin as a set of quarterly specials within the NOVA lineup, and if successful, could turn into a more regular presence in the schedule. The first NOVA'S LEADING EDGE (w.t.) will premiere in January.

In addition to spin-offs and reinventions from existing series, we have a rich season in store from all the continuing series. NOVA will return to the surface of Mars for a first-anniversary update from our rovers, Spirit and Opportunity, which are still gathering data. NATURE brings us so close to Hawaiian volcanoes' lava that our shoes almost melt. AMERICAN EXPERIENCE reveals the hidden life of America's closest enemy, Fidel Castro. And MYSTERY! rejoins the schedule earlier in 2005, with new Miss Marple stories in April. MYSTERY! continues through the summer.

### **Primetime: New Series, Limited Series & Specials**

#### **ANTIQUES ROADSHOW FYI**

26/30 from WGBH/Steamroller Entertainment

The new spin-off series answers those burning questions about the ultimate fate of the most valuable treasures uncovered on ANTIQUES ROADSHOW. While many owners swore they would never part with their prized possessions, this series reveals whether they sold their heirlooms, auctioned them off or donated them to a museum. Also included are recurring segments that highlight collectibles and feature appraisers offering tips of the antiquing trade. ANTIQUES ROADSHOW FYI is co-hosted by Lara Spencer and Clay Reynolds.

#### **ALAN ALDA IN SCIENTIFIC AMERICAN FRONTIERS**

13/30 from Chedd-Angier/CPTV

The award-winning series of science specials returns in a new half-hour format. This season, Alan Alda examines brilliant new cars that think for you – they watch for hazards, listen to you, read your lips and even know when you're distracted. Also included in the line-up are investigations into chimp brains, social robots and replacement synthetic senses such as artificial hearing and electronic retinas.

#### *Do You Speak American?*

3/60 from MacNeil/Lehrer Productions/WNET

American English gives birth to new words and idioms each day. While most linguists agree that this constant change is a sign of life and vitality, some are concerned that these perpetual alterations to the English language are eroding our society and our ability to communicate with one another. From journalist Robert MacNeil, this three-part series explores the landscape of the exceptionally rich and diverse language that reflects who we are as a people. Criss-crossing the country, MacNeil sets out to celebrate the fun, spice and diversity that Americans bring to our language, while also exploring how perpetual adaptations to it seriously affect our culture and society.

*Unforgivable Blackness: The Rise and Fall of Jack Johnson*

2/120 from Florentine Films/WETA

Acclaimed filmmaker Ken Burns recounts the powerful story of Jack Johnson, the first African-American boxer to win the most coveted of sports titles – Heavyweight Champion of the World. From his humble beginnings as the son of former slaves to his entrance into the brutal and segregated world of professional boxing, this high-definition film highlights a maverick who refused to live under the confines of his color. The story of a champion shunned by the white world and forced into exile, this film follows Johnson's struggle, in and out of the ring, to live life as a free man. Samuel L. Jackson is the voice of Johnson.

*Auschwitz: Inside the Nazi State*

6/60 from KCET/BBC

This series is an intrinsically compelling and definitive account of one of the most evil places in history, Auschwitz, and its connection to the Nazi state. Using newly available architectural plans and the latest in computer animation to re-create the concentration camp as it was first built, the series reveals the methods and the mindset behind the horrific killing machine. The broadcast is planned to coincide with the 60<sup>th</sup> anniversary of the liberation of the camp.

*Slavery and the Making of America*

4/60 from WNET

This epic series chronicles the institution of American slavery from its origins in 1619, when settlers in Virginia first purchased Africans from Dutch traders, through the arrival of the first slaves in the northern colonies, the American Revolution, the Civil War, the adoption of the 13<sup>th</sup> Amendment and Reconstruction. With such unprecedented breadth come entirely new facts and perspectives on slavery that challenge long-held notions and highlight the contradictions of a country that embraced slavery but was founded on the principle of "liberty and justice for all."

*On Stage: The Mark Twain Prize 2004*

1/90 from WETA

This year, the Mark Twain Prize for American Humor salutes "Saturday Night Live" creator Lorne Michaels. Our special features clips from the comedy show and tributes and comic performances from stars who have appeared on the show over the decades, including Dan Ackroyd, Steve Martin, Tina Fey, Chevy Chase, Molly Shannon, David Spade, Tim Meadows, Darrell Hammond and others.

*The Life and Times of Frida Kahlo*

1/90 from WETA and Amy Stechler

Nearly 50 years after her death, Frida Kahlo is celebrated as one of the great painters of the 20<sup>th</sup> century. Labeled a surrealist by many, she claimed to be painting her own reality – one balanced between a painful private life and a vibrant, irreverent public persona that stirred the imagination of the cultural and artistic elite on two continents. Through the prism of her life and art, the film explores the ancient culture of Mexico, the Mexican revolution, 20<sup>th</sup>-century Latin American Communism, and the innovative artists and writers who congregated in Mexico City.

*The Garden*

1/195 from Fred Wiseman/WNET

Madison Square Garden, the pre-eminent sports and entertainment arena, has been an American institution since the beginning of the 20<sup>th</sup> century. Including footage from the various musical, theatrical, business, animal and professional sporting events all housed within the arena's walls, this documentary reveals the inner workings of the famed amphitheater and explores the center of the American popular culture and entertainment evolution.

*National Geographic's Strange Days on Planet Earth*

4/60 from National Geographic Television/Sea Studios/WGBH/Vulcan Productions

Around the globe, scientists are racing to solve a series of mysteries, including how a one degree rise in average temperature could have such profound effects; how the disappearance of top predators affects an ecosystem; and why invasive species cause such havoc. Hosted by award-winning actor, writer and director Edward Norton (*Primal Fear*, *American History X*), this four-part series explores new discoveries about the health of the planet through engaging storytelling and innovative imaging. Constructed as a high-tech detective story, each of the episodes reveals the way that seemingly distant events connect and how they ultimately affect individual health and well-being.

*Prisoner of Paradise*

1/90 from The Illusion Company

During World War II, Kurt Gerron, a successful German-Jewish actor and director in the 1920s, was sent to a concentration camp and forced to direct a pro-Nazi propaganda film intended to persuade an increasingly suspicious world that Jews were thriving in the camps. Through interviews with survivors and archival footage from his film, the documentary will tell the startling true story of Gerron's life during the decadent years in Berlin between the two World Wars, the critical role misinformation played in keeping the world oblivious to Hitler's master plan and the remarkable search and painstaking restoration of his film, lost for decades in the aftermath of World War II.

**Continuing Series**

The continuing series are the foundation of the National Program Service schedule. This winter/spring, our continuing series will return with strong new episodes, including the following:

NATURE presents a fast-paced three-week series following a new generation of scientists working to understand the web of life deep in the world's jungle ecosystems. They come face to face with rare and deadly creatures, and witness animal behaviors and natural processes for the first time.

MASTERPIECE THEATRE takes us back to wartime in the Channel Islands, where British citizens lived under Nazi occupation, in the miniseries, "Island at War."

MYSTERY! returns to the schedule with a remake of the late-70's series "Malice Aforethought," and then launches a new "Miss Marple" series, starring Geraldine McEwan ("Vanity Fair") and Sir Derek Jacobi.

ANTIQUES ROADSHOW visits five cities this season: St. Paul, Omaha, Memphis, Reno and Portland.

AMERICAN EXPERIENCE profiles Cuban leader Fidel Castro, sexuality researcher Alfred Kinsey, silent screen star Mary Pickford and kidnapped bank robber Patty Hearst.

NOVA remembers the ultimate boy's toy, the Concorde supersonic jet; scrutinizes a map of North America purported to be made by ancient Vikings; flies a replica of the first plane to cross the English Channel; and witnesses the lengths to which the National Archives goes to preserve the Constitution, the Bill of Rights and the Declaration of Independence.

FRONTLINE will cover topics ranging from Al Qaeda cells in Europe, the Saudi royal family and mentally ill prison inmates.

INDEPENDENT LENS presents several films that have scored big on the festival circuit, including "Power Trip," about a multinational electric company losing millions of dollars a day providing power to former Soviet Georgia, where no one appears interested in actually paying a utility bill. Also in this season are "Imelda," a savvy portrait of the former first lady of the Philippines; "End of the Century: The Ramones," about the seminal punk band; and "Double Dare," a profile of women who perform as Hollywood stunt doubles.

GREAT PERFORMANCES presents a semi-staged production of Leonard Bernstein's "Candide" with the New York Philharmonic, Kristin Chenoweth and Patti LuPone.

AMERICAN MASTERS kicks off a weekly presence in May with new profiles of Hollywood's bad boy, James Dean, and handsome hero, Cary Grant.

WASHINGTON WEEK and WALL STREET WEEK WITH FORTUNE return in their usual time slots. NOW returns in January with a shorter title, a half-hour format and David Brancaccio as host. TUCKER CARLSON: UNFILTERED and THE JOURNAL EDITORIAL REPORT will each move up by a half-hour in the schedule.

### **Promotion**

PBS Brand Management and Promotion is creating promotion campaigns to support this season's schedule. A complete promotion plan with details on program support, branding strategies and materials for both primetime and PBS Kids will be available on PBS Connect.

### **PBS Kids**

A separate memo detailing plans for upcoming PBS Kids programming will be issued later in October.

### **Common Carriage Designations**

A list of programs designated for Common Carriage within the winter/spring 2005 season is included as a part of this mailing.

We are pleased to deliver to you the winter/spring 2005 National Program Service primetime schedule. In this season and beyond, we will ensure that PBS continues to deliver to its member stations a high-quality, diverse National Program Service that builds upon and extends the mission, depth, reach and distinction that are the hallmarks of PBS.

If you have any questions, please feel free to call:

John Wilson	703-739-5155
Jacoba Atlas	323-692-7851
Steven Gray	703-759-5012
Shawn Halford	703-739-5247

## WINTER/SPRING 2005 COMMON CARRIAGE DESIGNATIONS

### Continuing Series:

Sundays: Nature  
Masterpiece Theatre  
Mystery!

Mondays: Antiques Roadshow  
American Experience

Tuesdays: NOVA (including NOVA's Leading Edge (w.t.)  
Frontline (including Frontline/World)

Wednesdays: Antiques Roadshow FYI  
Alan Alda in Scientific American Frontiers  
American Masters

Fridays: Washington Week  
Wall Street Week with FORTUNE  
NOW

### Limited Series and Specials:

Great Performances "From Vienna: The New Year's Celebration"  
Do You Speak American?  
Great Performances "Leonard Bernstein's Candide w/ the NY Philharmonic"  
Unforgivable Blackness: The Rise and Fall of Jack Johnson  
Auschwitz: Inside the Nazi State  
Slavery and the Making of America  
On Stage: The Mark Twain Prize (2004)  
Great Performances "Queen Latifah in Concert" (w.t.)  
The Garden  
Great Performances "The Little Prince" (w.t.)  
Prisoner of Paradise  
National Geographic's Strange Days on Planet Earth  
National Memorial Day Concert (2005)

### Notes:

No programs will be designated for common carriage from March 4 through March 27 due to pledge activities during this time.

The 2004-2005 Common Carriage Year, September 12, 2004 to September 10, 2005, encompasses 500 hours of common carriage designations, based on the July 2001 revisions to common carriage guidelines. A detailed and updated accounting of common carriage designations appears with each month's week-by-weeks.



# January 2005

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM		
Sat.1	GREAT PERFORMANCES <i>From Vienna: The New Year's Celebration 2005</i>							New Year's Day
Sun.2	NATURE (WIDESCREEN) <i>Land of the Falling Lakes [r]</i>		MASTERPIECE THEATRE <i>Othello [r]</i>					
Mon.3	ANTIQUES ROADSHOW <i>St. Paul, MN, Part 1 - Season Premiere</i>		AMERICAN EXPERIENCE <i>Woodrow Wilson [r]</i>		2/2	STILL LIFE WITH ANIMATED DOGS[r]		
Tue.4	NOVA (WIDESCREEN) <i>Welcome to Mars</i>		FRONTLINE (WIDESCREEN) <i>The Jesus Factor [r]</i>		INDEPENDENT LENS <i>A Hard Straight</i>			
Wed.5	DO YOU SPEAK AMERICAN?							
Thu.6	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>St. Paul, MN, Part 1 (rpt.)</i>		THE NATURAL HISTORY OF THE CHICKEN [r] (WIDESCREEN)			
Fri.7	WASHINGTON WEEK	WALL STREET WK. WITH FORTUNE	NOW	TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY		
Sat.8								
Sun.9	NATURE <i>Violent Hawaii (HDTV)</i>		MASTERPIECE THEATRE <i>He Knew He Was Right</i>			1/2	CONCERTO <i>The Message [r]</i>	
Mon.10	ANTIQUES ROADSHOW <i>St. Paul, MN, Part 2</i>		AMERICAN EXPERIENCE <i>Citizen King [r]</i>					
Tue.11	NOVA (WIDESCREEN) <i>The Boldest Hoax</i>		FRONTLINE/WORLD #401		INDEPENDENT LENS <i>A Touch of Greatness</i>			
Wed.12	GREAT PERFORMANCES (HDTV) <i>Leonard Bernstein's "Candide" in Concert</i>				MEETING OSAMA BIN LADEN			
Thu.13	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>St. Paul, MN, Part 2 (rpt.)</i>		ONE MAN'S JOURNEY <i>Into the Great Solitude</i>		1/3	
Fri.14	WASHINGTON WEEK	WALL STREET WK. WITH FORTUNE	NOW	TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY		
Sat.15								PBS TCA Press Tour
Sun.16	NATURE (WIDESCREEN) <i>Silent Roar: Searching for the Snow Leopard</i>		MASTERPIECE THEATRE <i>He Knew He Was Right</i>			2/2	STAYING AT A LIGHTHOUSE [r]	
Mon.17	ANTIQUES ROADSHOW <i>St. Paul, MN, Part 3</i>		UNFORGIVABLE BLACKNESS: THE RISE AND FALL OF JACK JOHNSON (HDTV)					MLK Day
Tue.18	NOVA (WIDESCREEN) <i>Supersonic Dream</i>							
Wed.19	ANTIQUES ROADSHOW FYI	SCIENTIFIC AMER. FRONTIERS	AUSCHWITZ: INSIDE THE NAZI STATE (WIDESCREEN) <i>Surprising Beginnings/Orders and Initiatives</i>			1/3		
Thu.20	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>St. Paul, MN, Part 3 (rpt.)</i>		ONE MAN'S JOURNEY <i>Talking to Angels</i>		2/3	Inauguration
Fri.21	WASHINGTON WEEK	WALL STREET WK. WITH FORTUNE	NOW	TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY		
Sat.22								
Sun.23	NATURE (WIDESCREEN) <i>The Real Macaw [r]</i>		MASTERPIECE THEATRE <i>Island at War</i>			1/5	CONCERTO <i>From the Heart [r]</i>	
Mon.24	ANTIQUES ROADSHOW <i>Omaha, NE, Part 1</i>		AMERICAN EXPERIENCE (WIDESCREEN) <i>The Fight [r]</i>				FORT NIAGARA: THE STRUGGLE(HD)	
Tue.25	NOVA <i>NOVA scienceNOW #1</i>		FRONTLINE (WIDESCREEN) <i>Al Qaeda's New Front</i>		INDEPENDENT LENS <i>Power Trip</i>			end 2330
Wed.26	ANTIQUES ROADSHOW FYI	SCIENTIFIC AMER. FRONTIERS	AUSCHWITZ: INSIDE THE NAZI STATE (WIDESCREEN) <i>Factories of Death/Corruption</i>			2/3		
Thu.27	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Omaha, NE, Part 1 (rpt.)</i>		ONE MAN'S JOURNEY <i>The Crocodile River</i>		3/3	
Fri.28	WASHINGTON WEEK	WALL STREET WK. WITH FORTUNE	NOW	TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY		
Sat.29								
Sun.30	NATURE (WIDESCREEN) <i>Cuba: Wild Island of the Caribbean</i>		MASTERPIECE THEATRE <i>Island at War</i>			2/5	CONCERTO <i>Emotions [r]</i>	
Mon.31	ANTIQUES ROADSHOW <i>Omaha, NE, Part 2</i>		AMERICAN EXPERIENCE (WIDESCREEN) <i>Fidel Castro</i>					

## February 2005

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM	
Tue.1	NOVA <i>Treasures of the Sunken City [r]</i>		FRONTLINE (WIDESCREEN) <i>Secret History of the Credit Card [r]</i>		INDEPENDENT LENS <i>February One: The Story of the Greensboro 4</i>		
Wed.2	ANTIQUES ROADSHOW FYI	SCIENTIFIC AMER. FRONTIERS	AUSCHWITZ: INSIDE THE NAZI STATE (WIDESCREEN) <i>Murder and Intrigue/Liberation and Revenge</i>				3/3
Thu.3	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Omaha, NE, Part 2 (rpt.)</i>		THE QUILTMAKERS OF GEE'S BEND (HDTV)		Feb. Sweeps 2/3-3/2
Fri.4	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW	TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	
Sat.5							
Sun.6	NATURE (WIDESCREEN) <i>Tall Blondes [r]</i>		MASTERPIECE THEATRE <i>Island at War</i>			3/5 CONCERTO <i>Concerto Chemistry[r]</i>	Super Bowl
Mon.7	ANTIQUES ROADSHOW <i>Omaha, NE, Part 3</i>		AMERICAN EXPERIENCE <i>Building the Alaska Highway</i>		P.O.V. <i>Chisholm '72 - Unbought &amp; Unbossed</i>		end 2330
Tue.8	NOVA (WIDESCREEN) <i>The Viking Deception</i>		FRONTLINE (WIDESCREEN) <i>House of Saud</i>				
Wed.9	ANTIQUES ROADSHOW FYI	SCIENTIFIC AMER. FRONTIERS	SLAVERY AND THE MAKING OF AMERICA (WIDESCREEN) <i>The Downward Spiral/Liberty in the Air</i>				1/2
Thu.10	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Omaha, NE, Part 3 (rpt.)</i>		EGYPT'S GOLDEN EMPIRE <i>The Warrior Pharaohs [r]</i>		1/3
Fri.11	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW	TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	
Sat.12							
Sun.13	NATURE <i>From Orphan to King</i>		MASTERPIECE THEATRE <i>Island at War</i>			4/5 CONCERTO <i>A Sense of Self [r]</i>	
Mon.14	ANTIQUES ROADSHOW <i>Memphis, TN, Part 1</i>		AMERICAN EXPERIENCE (WIDESCREEN) <i>Kinsey</i>		DEFORD BAILEY: <i>A LEGEND LOST [r]</i>		
Tue.15	NOVA (WIDESCREEN) <i>Saving the National Treasures</i>		FRONTLINE (WIDESCREEN) <i>Rumsfeld's War [r]</i>		INDEPENDENT LENS <i>On a Roll: Disability and the American Dream</i>		
Wed.16	ANTIQUES ROADSHOW FYI	SCIENTIFIC AMER. FRONTIERS	SLAVERY AND THE MAKING OF AMERICA (WIDESCREEN) <i>Seeds of Destruction/The Challenge of Freedom</i>				2/2
Thu.17	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Memphis, TN, Part 1 (rpt.)</i>		EGYPT'S GOLDEN EMPIRE <i>Pharaohs of the Sun [r]</i>		2/3
Fri.18	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW	TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	
Sat.19							
Sun.20	NATURE (WIDESCREEN) <i>Snowflake: The White Gorilla</i>		MASTERPIECE THEATRE <i>Island at War</i>			5/5 CONCERTO <i>A Musical Metaphor[r]</i>	
Mon.21	ANTIQUES ROADSHOW <i>Memphis, TN, Part 2</i>		AMERICAN EXPERIENCE <i>Malcolm X: Make It Plain [r]</i>				end 2330
Tue.22	NOVA (WIDESCREEN) <i>A Daring Flight</i>		FRONTLINE (WIDESCREEN) <i>A Company of Soldiers</i>			INDEPENDENT LENS <i>Thunder in Guyana</i>	end 2330
Wed.23	ANTIQUES ROADSHOW FYI	SCIENTIFIC AMER. FRONTIERS	DIRTY WAR				
Thu.24	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Memphis, TN, Part 2 (rpt.)</i>		EGYPT'S GOLDEN EMPIRE <i>The Last Great Pharaoh [r]</i>		3/3
Fri.25	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW	TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	
Sat.26							
Sun.27	NATURE <i>White Shark/Red Triangle [r]</i>		MASTERPIECE THEATRE <i>Goodbye Mr. Chips [r]</i>				Academy Awards
Mon.28	ANTIQUES ROADSHOW <i>Memphis, TN, Part 3</i>		AMERICAN EXPERIENCE <i>Murder at Harvard [r]</i>		THE ROCKIES BY RAIL [r]		

# March 2005

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM		
Tue.1	NOVA <i>Crash of Flight 111 [r]</i>		FRONTLINE (WIDESCREEN) <i>The Soldier's Heart</i>		INDEPENDENT LENS <i>The Sisters of '77</i>			
Wed.2	ANTIQUES ROADSHOW FYI	SCIENTIFIC AMER. FRONTIERS	ON STAGE AT THE KENNEDY CENTER: THE MARK TWAIN PRIZE 2004 Honoree: <i>Lorne Michaels</i>			CROWN OF THE CONTINENT... [r] (HD)	Sweeps End	
Thu.3	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Memphis, TN, Part 3 (rpt.)</i>		A HOT DOG PROGRAM [r]			
Fri.4	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW	TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY		
Sat.5								
Sun.6	NATURE <i>The Seedy Side of Plants [r]</i>							
Mon.7	ANTIQUES ROADSHOW <i>Oklahoma City, OK, Part 1 [r]</i>							
Tue.8	NOVA <i>Orchid Hunter [r]</i>							
Wed.9	ANTIQUES ROADSHOW FYI [r]							
Thu.10	THE NEW THIS OLD HOUSE HOUR [r]		<b>MARCH PLEDGE PERIOD</b>					
Fri.11	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW	TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY		
Sat.12								
Sun.13	NATURE <i>Flight School [r]</i>							
Mon.14	ANTIQUES ROADSHOW <i>Oklahoma City, OK, Part 2 [r]</i>							
Tue.15	NOVA <i>Lost Treasures of Tibet [r]</i>							
Wed.16	ANTIQUES ROADSHOW FYI [r]							
Thu.17	THE NEW THIS OLD HOUSE HOUR [r]							
Fri.18	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW	TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY		
Sat.19								
Sun.20	NATURE <i>War Wrecks of the Coral Seas [r]</i>							
Mon.21	ANTIQUES ROADSHOW <i>Oklahoma City, OK, Part 3 [r]</i>		AMERICAN EXPERIENCE <i>Partners of the Heart [r]</i>		YALTA: PEACE, POWER AND BETRAYAL [r]			
Tue.22	NOVA <i>Dirty Bomb [r]</i>		FRONTLINE <i>Son of Al Qaeda [r]</i>		INDEPENDENT LENS <i>Sunset Story</i>			
Wed.23	ANTIQUES ROADSHOW FYI [r]	SCIENTIFIC AMER. FRONTIERS [r]	THE LIFE AND TIMES OF FRIDA KAHLO (HDTV)			A ROOM NEARBY		
Thu.24	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Oklahoma City, OK, Part 3 [r] (rpt.)</i>		HIDDEN INDIA: THE KERALA SPICELANDS [r]			
Fri.25	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW	TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY		
Sat.26								
Sun.27	NATURE (WIDESCREEN) <i>Ireland [r]</i>		MASTERPIECE THEATRE <i>Bertie &amp; Elizabeth [r]</i>					Easter
Mon.28	ANTIQUES ROADSHOW <i>Reno, NV, Part 1</i>		AMERICAN EXPERIENCE <i>Emma Goldman [r] (HDTV)</i>			A ROOM NEARBY (rpt.)		
Tue.29	NOVA (WIDESCREEN) <i>Wave that Shook the World</i>		KRAKATOA (WIDESCREEN)			INDEPENDENT LENS <i>Let the Church Say Amen</i> end 0000		
Wed.30	ANTIQUES ROADSHOW FYI	SCIENTIFIC AMER. FRONTIERS	NATIONAL GEOGRAPHIC SPECIAL <i>Lost Treasures of Afghanistan</i>		NATIONAL GEOGRAPHIC SPECIAL <i>The Sinking of the Warship Belgrano</i> end 2330			
Thu.31	LIVE FROM LINCOLN CENTER <i>Stephen Sondheim's "Passion" with Patti LuPone and Audra McDonald</i>				THE HIDDEN ART OF HOLLYWOOD [r]			

# April 2005

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM	
Fri.1	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW	TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	
Sat.2							
Sun.3	NATURE (WIDESCREEN) <i>The Venom Cure</i>		MYSTERY! <i>Malice Aforethought</i>		1/2	CONCERTO <i>The Message [r]</i>	Met Opera Meistersinger
Mon.4	ANTIQUES ROADSHOW <i>Reno, NV, Part 2</i>		AMERICAN EXPERIENCE <i>Mary Pickford</i>			SECOND HAND STORIES [r]	4/3 2-7PM ET
Tue.5	NOVA (WIDESCREEN) <i>Great Escape [r]</i>		FRONTLINE <i>Israel's Next War?</i>		INDEPENDENT LENS <i>A Lion's Trail</i>		
Wed.6	ANTIQUES ROADSHOW FYI	SCIENTIFIC AMER. FRONTIERS	GREAT PERFORMANCES (HDTV) <i>The Little Prince</i>			CONCERTO <i>From the Heart [r]</i>	
Thu.7	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Reno, NV, Part 2 (rpt.)</i>		THE MEANING OF FOOD <i>Food and Life</i>	1/3	
Fri.8	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW	TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	
Sat.9							
Sun.10	NATURE (WIDESCREEN) <i>Cloud: Wild Stallion of the Rockies [r]</i>		MYSTERY! <i>Malice Aforethought</i>		2/2	COLONIAL HOUSE [r] (WIDESCREEN) <i>A New World</i>	1/8
Mon.11	ANTIQUES ROADSHOW <i>Reno, NV, Part 3</i>		AMERICAN EXPERIENCE (WIDESCREEN) <i>The Great Transatlantic Cable</i>		JOURNEY TO PLANET EARTH <i>The State of the Planet</i>		
Tue.12	NOVA <i>Garden of Eden [r]</i>		FRONTLINE (WIDESCREEN) <i>Karl Rove - The Architect</i>		INDEPENDENT LENS <i>Keeping Time: The Life, Music... of Milt Hinton</i>		
Wed.13	ANTIQUES ROADSHOW FYI	SCIENTIFIC AMER. FRONTIERS	PRISONER OF PARADISE			ELIE WIESEL: FIRST PERSON SINGULAR	end 2330
Thu.14	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Reno, NV, Part 3 (rpt.)</i>		THE MEANING OF FOOD <i>Food and Culture</i>	2/3	
Fri.15	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW	TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	
Sat.16							
Sun.17	NATURE (WIDESCREEN) <i>Deep Jungle "New Frontiers"</i>		1/3	MYSTERY! <i>Miss Marple "Murder at the Vicarage"</i>	1/2	COLONIAL HOUSE [r] (WIDESCREEN) <i>Harsh Reality</i>	2/8
Mon.18	ANTIQUES ROADSHOW <i>Portland, OR, Part 1</i>		AMERICAN EXPERIENCE (WIDESCREEN) <i>The Massie Affair</i>		JOURNEY TO PLANET EARTH <i>Future Conditional</i>		
Tue.19	NOVA (WIDESCREEN) <i>NOVA scienceNOW #2</i>		FRONTLINE <i>Death of a Princess [r]</i>				
Wed.20	ANTIQUES ROADSHOW FYI	SCIENTIFIC AMER. FRONTIERS	NATIONAL GEOGRAPHIC'S STRANGE DAYS ON PLANET EARTH <i>Invaders/The One Degree Factor (WIDESCREEN)</i>			1/2	
Thu.21	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Portland, OR, Part 1 (rpt.)</i>		THE MEANING OF FOOD <i>Food and Family</i>	3/3	
Fri.22	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW	TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	
Sat.23							
Sun.24	NATURE (WIDESCREEN) <i>Deep Jungle "Monsters of the Forest"</i>		2/3	MYSTERY! <i>Miss Marple "Murder at the Vicarage"</i>	2/2	COLONIAL HOUSE [r] (WIDESCREEN) <i>City of God</i>	3/8
Mon.25	ANTIQUES ROADSHOW <i>Portland, OR, Part 2</i>		AMERICAN EXPERIENCE <i>The Fall of Saigon</i>		HENRY A. WALLACE (HDTV)		
Tue.26	NOVA (WIDESCREEN) <i>Ancient Refuge in the Holy Land [r]</i>		WHITE SMOKE <i>A Wide Angle Special</i>		INDEPENDENT LENS <i>End of the Century: The Ramones/Joe Strummer Rocks...</i>		end 0000
Wed.27	COOKING UNDER FIRE #101	COOKING UNDER FIRE #102	NATIONAL GEOGRAPHIC'S STRANGE DAYS ON PLANET EARTH <i>Predators/Troubled Waters (WIDESCREEN)</i>			2/2	
Thu.28	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Portland, OR, Part 2 (rpt.)</i>		AN ICE CREAM SHOW		May Sweeps 4/28-5/25
Fri.29	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW	TUCKER CARLSON: UNFILTERED	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	
Sat.30							

# May 2005

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM	
Sun.1	NATURE (WIDESCREEN) <i>Deep Jungle "The Beast Within"</i>		3/3 MYSTERY! <i>Miss Marple "Murder is Announced"</i>	1/2 COLONIAL HOUSE [r] (WIDESCREEN) <i>The Outsiders</i>			4/8
Mon.2	ANTIQUES ROADSHOW <i>Portland, OR, Part 3</i>		AMERICAN EXPERIENCE (WIDESCREEN) <i>Victory in the Pacific</i>				
Tue.3	NOVA (HDTV) <i>Hunt for the Supertwister [r]</i>		FRONTLINE <i>Memory of the Camps [r]</i>		INDEPENDENT LENS <i>The Last Letter</i>		end 2330
Wed.4	ANTIQUES ROADSHOW FYI	COOKING UNDER FIRE #103	SOMETIMES IN APRIL				end 0000
Thu.5	THE NEW THIS OLD HOUSE HOUR		SUGIHARA: CONSPIRACY OF KINDNESS			CONCERTO <i>Emotions [r]</i>	Holocaust Remembrance
Fri.6	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW	THE JOURNAL EDITORIAL REPORT	TUCKER CARLSON: UNFILTERED	TAVIS SMILEY	5/5
Sat.7							
Sun.8	NATURE <i>Holy Cow [r]</i>		2/2 MYSTERY! <i>Miss Marple "Murder is Announced"</i>	COLONIAL HOUSE [r] (WIDESCREEN) <i>Regime Change</i>		5/8	
Mon.9	ANTIQUES ROADSHOW <i>Wild Things</i>		AMERICAN EXPERIENCE (WIDESCREEN) <i>The Carter Family: Will the Circle Be Unbroken</i>		GEORGE JONES, 50 YEARS OF HITS: A SOUNDSTAGE SPECIAL EVENT [r] (HD)		
Tue.10	NOVA (WIDESCREEN) <i>Secrets of the Crocodile Caves [r]</i>		FRONTLINE (WIDESCREEN) <i>The New Asylums</i>		INDEPENDENT LENS <i>Imelda</i>		end 2330
Wed.11	ANTIQUES ROADSHOW FYI	COOKING UNDER FIRE #104	AMERICAN MASTERS (WIDESCREEN) <i>James Dean: Sense Memories</i>		GREAT PERFORMANCES (HDTV) <i>Making "The Misfits" [r]</i>		
Thu.12	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Wild Things (rpt.)</i>		DANCES OF LIFE (HDTV)		
Fri.13	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW	THE JOURNAL EDITORIAL REPORT	TUCKER CARLSON: UNFILTERED	TAVIS SMILEY	
Sat.14							
Sun.15	NATURE <i>The Dolphin Defender</i>		1/2 MYSTERY! <i>Miss Marple "What Mrs. McGillicuddy Saw"</i>	COLONIAL HOUSE [r] (WIDESCREEN) <i>Shake Up</i>		6/8	
Mon.16	ANTIQUES ROADSHOW <i>Roadshow Favorites [r]</i>		AMERICAN EXPERIENCE <i>Emmett Till [r]</i>		TIME OF FEAR		
Tue.17	NOVA (WIDESCREEN) <i>America's Stone Age Explorers [r]</i>		FRONTLINE/WORLD #402		INDEPENDENT LENS <i>Vietnam: The Next Generation</i>		
Wed.18	ANTIQUES ROADSHOW FYI	COOKING UNDER FIRE #105	AMERICAN MASTERS <i>Ray Charles - The Genius of Soul [r]</i>		GREAT PERFORMANCES <i>John Lennon's Jukebox [r]</i>		
Thu.19	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Roadshow Favorites [r] (rpt.)</i>		NIAGARA FALLS, A NAKED PLANET SPECIAL (WIDESCREEN)		
Fri.20	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW	THE JOURNAL EDITORIAL REPORT	TUCKER CARLSON: UNFILTERED	TAVIS SMILEY	
Sat.21							
Sun.22	NATURE <i>Condition Black [r]</i>		2/2 MYSTERY! <i>Miss Marple "What Mrs. McGillicuddy Saw"</i>	COLONIAL HOUSE [r] (WIDESCREEN) <i>The Reckoning</i>		7/8	
Mon.23	ANTIQUES ROADSHOW <i>Roadshow's Greatest Finds [r]</i>		AMERICAN EXPERIENCE (WIDESCREEN) <i>Guerilla: The Taking of Patty Hearst</i>			CROWN OF THE CONTINENT... (HD)[r]	
Tue.24	NOVA (WIDESCREEN) <i>The Most Dangerous Woman in America [r]</i>		FRONTLINE/WORLD #403		INDEPENDENT LENS <i>Red Hook Justice</i>		Sweeps end May 25
Wed.25	ANTIQUES ROADSHOW FYI	COOKING UNDER FIRE #106	AMERICAN MASTERS <i>Cary Grant: A Class Apart</i>			A FLEA MARKET DOUMENTARY [r]	
Thu.26	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Roadshow's Greatest Finds [r] (rpt.)</i>		AGING OUT (WIDESCREEN)		
Fri.27	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW	THE JOURNAL EDITORIAL REPORT	TUCKER CARLSON: UNFILTERED	TAVIS SMILEY	
Sat.28							
Sun.29	NATIONAL MEMORIAL DAY CONCERT (2005)			NATIONAL GEOGRAPHIC SPECIAL <i>Arlington: Field of Honor [r] (HDTV)</i>		COLONIAL HOUSE [r] (WIDE) 8/8 <i>Judgment Day</i>	
Mon.30	ANTIQUES ROADSHOW <i>Chicago, IL, Part 1 [r]</i>		AMERICAN EXPERIENCE <i>Bataan Rescue [r]</i>		AN UNTOLD TRIUMPH		Memorial Day
Tue.31	NOVA <i>Flying Casanovas [r]</i>		FRONTLINE <i>A Jew Among the Germans [r]</i>		INDEPENDENT LENS <i>Double Dare/Piki and Poko: Taking the Dare</i>		

To: General Managers, Program Managers & Promotion Managers  
From: John F. Wilson, Jacoba Atlas, Steven Gray, Shawn Halford  
Date: March 7, 2005

Attached please find:

- Summer 2005 National Program Service Primetime Grids
- Summer 2005 Common Carriage Designations

The attached summer 2005 primetime at-a-glance grids detail the most current plans for the upcoming NPS schedule. As is always the case, these grids are subject to some change, but we are confident that the major programming elements will remain as scheduled. This schedule includes the months of June through August 2005. We plan to publish an early preview of the fall 2005 schedule prior to the PBS Showcase in April.

Consistency is one of the key words we've heard from the CPB-commissioned primetime 2004 audience study. The public values PBS, but viewers still have a difficult time identifying when PBS series air and frequently cite inconsistency. Some of this feeling of inconsistency may come from anthology series, which inherently look different from week to week, while some may come from pledge drives, which interrupt the weekly presence of continuing series several times each year. PBS may further interrupt weekly series' footprints with stunts and preemptions. And our mix of weekly, continuing series versus specials and limited series may be one more source of inconsistency.

The summer 2005 grids show a more consistently scheduled NPS. With ANTIQUES ROADSHOW FYI and the conclusion of COOKING UNDER FIRE appearing weekly, followed by the continuation of the AMERICAN MASTERS season, Wednesdays will transition from a night of limited series and specials to a night of consistency throughout the summer. The summer season also encompasses the seasons of P.O.V., HISTORY DETECTIVES, WIDE ANGLE and SOUNDSTAGE, and the continuation of the seasons of NATURE, MYSTERY!, ANTIQUES ROADSHOW, NOVA and THE NEW THIS OLD HOUSE HOUR. The schedule is transformed with this emphasis on regularly scheduled continuing series, and with the decreased time allotted for limited series and one-time-only specials.

## Continuing Series

The continuing series are the foundation of the National Program Service schedule. This summer, many continuing series will return with strong new episodes, including the following:

**MYSTERY!** sizzles this summer with new Inspector Lynley stories. Nathaniel Parker and Sharon Smalls return to their roles in the Elizabeth George mysteries.

**HISTORY DETECTIVES** returns to the schedule with 10 new episodes. The four detectives are covering a range of intriguing cases, from an antique watch that may have been a gift from Wyatt Earp to 'Doc' Holliday, to a 19th-century photograph that may prove to be of the legendary Apache warrior, Geronimo.

**NOVA** presents another new installment of its Robert Krulwich-hosted magazine series, "NOVA scienceNOW."

**INDEPENDENT LENS** wraps up its season with a profile of a lost, Mexican-American village in Los Angeles destroyed by greed and baseball, and a drama about a young, gay artist struggling for acceptance, who discovers the legacies of the homosexual subcultures within the Harlem Renaissance.

**P.O.V.** kicks off another new season with a powerful film about a Lubbock, Texas, teen's confrontation with the political and social implications of her Christian upbringing.

**GREAT PERFORMANCES** follows the English National Opera's competition to uncover and prepare raw talent in "Operatunity"; explores the Jewish roots behind popular jazz; and presents the classical ballet "Swan Lake" in HDTV.

**AMERICAN MASTERS** profiles producer/director George Stevens, presents Stanley Nelson's portrait of a cappella group Sweet Honey in the Rock and covers the life and work of comedian Bob Newhart. And stay tuned for Bob Dylan this fall.

**WIDE ANGLE** returns to the schedule with 10 new programs spanning the globe.

**SOUNDSTAGE** kicks off its season with new, sizzling HDTV concerts, including Lindsey Buckingham and John Mayer.

## Limited Series & Specials

### *The New Heroes*

4/60 from OPB

In the midst of one of the largest slums in Rio de Janeiro, Maria Teresa founded a sewing cooperative that respects the environment and fair labor practices and serves as a model for community development. Two oceans away, Muhammad Yunus originated a concept of micro credit that has improved the financial lives of tens of thousands of Bangladesh families. Hosted by Robert Redford, this four-part series follows several of these social entrepreneurs as they apply for-profit business practices to creatively build better communities globally.

### *Whale Rider*

1/120 presented by Pacific Islanders in Communication

The Whangara people believe their habitation of a New Zealand coastal village dates back to a single ancestor – a chief who escaped drowning by riding to shore on the back of a whale. For the past 1,000 years, only the first-born male descendants of the whale rider have become Whangara chiefs. When the 11-year-old granddaughter of the patriarchal tribe's chief believes she is destined to be the successor, her grandfather refuses to recognize his only heir. The stunning drama, which won the audience award as the most popular film at both the Toronto and Sundance film festivals, chronicles this contemporary tale of love, rejection and triumph as the young Maori girl fights generations of tradition to fulfill her destiny. Keisha Castle-Hughes earned a Best Actress Oscar nomination for this role.

### *Guns, Germs & Steel*

3/60 from National Geographic Television/Lion TV

Based on the Pulitzer Prize-winning book of the same name, this series examines how geographical and environmental factors shaped the modern world.

Dismantling theories that human development was racially based, it explains how societies with advantages in food production achieved early success and went on to develop writing, technology, government and organized religion as well as weapons of war that enabled them to conquer pre-literate cultures.

Hosted by author Jared Diamond, the series traces the past 13,000 years of human history, unraveling the ultimate reasons for the dominance of the North and the continuing plight of the Third World.



*A Capitol Fourth (2005)*

1/90 from Capitol Concerts

Barry Bostwick returns as host of the annual Independence Day celebration broadcast live from the West Lawn of the United States Capitol and featuring the National Symphony Orchestra performing traditional July 4th favorites.

*Declining by Degrees: Higher Education at Risk (w.t.)*

1/120 from Learning Matters, Inc.

As the cost of college rises and access becomes more restricted, families must balance higher education with financial viability. And, as universities are being held more accountable, their budgets are being slashed. Traveling across the country, this special profiles four institutions. By looking at admissions, costs, campus culture, curriculum, professors and graduation rates for each, the documentary paints a portrait of a complex system struggling to improve and chronicles the changes and challenges facing American higher education.

**Promotion**

PBS Brand Management and Promotion is creating promotion campaigns to support this season's schedule. A complete promotion plan with details on program support, branding strategies and materials for both primetime and PBS Kids will be available on PBS Connect.

**Common Carriage Designations**

A list of programs designated for Common Carriage within the summer 2005 season is included as a part of this mailing.

We are pleased to deliver to you the summer 2005 National Program Service primetime schedule. In this season and beyond, we will ensure that PBS continues to deliver to its member stations a high-quality, diverse National Program Service that builds upon and extends the mission, depth, reach and distinction that are the hallmarks of PBS.

If you have any questions, please feel free to call:

John Wilson	703-739-5155	Jacoba Atlas	323-692-7851
Steven Gray	703-759-5012	Shawn Halford	703-739-5247

## SUMMER 2005 COMMON CARRIAGE DESIGNATIONS

### Continuing Series:

Sundays: Nature  
Mystery!

Mondays: Antiques Roadshow  
History Detectives

Tuesdays: NOVA  
Frontline (including Frontline/World)  
Wide Angle

Wednesdays: Antiques Roadshow FYI  
Cooking Under Fire  
American Masters

Fridays: Washington Week  
Wall Street Week with FORTUNE  
NOW

### Limited Series and Specials:

Great Performances "Operatunity"

Great Performances "Swan Lake with American Ballet Theater"

The New Heroes

A Capitol Fourth (2005)

Guns, Germs & Steel

Whale Rider (\*inadvertently omitted from hardcopy mailed to stations\*)

Great Performances "From Shtetl to Swing"

### Notes:

No programs will be designated for common carriage from June 3-June 12 due to increasing local pledge activities during this time. Similarly, no common carriage designations will be made from July 29-August 21 due to pledge activities.

The 2004-2005 Common Carriage Year, September 12, 2004 to September 17, 2005, encompasses 500 hours of common carriage designations, based on the July 2001 revisions to common carriage guidelines. A detailed and updated accounting of common carriage designations appears with each month's week-by-weeks.

## June 2005

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM	
Wed.1	ANTIQUES ROADSHOW FYI	COOKING UNDER FIRE #107	AMERICAN MASTERS <i>Ella Fitzgerald: Something to Live For [r]</i>		CONCERTO <i>Concerto Chemistry [r]</i>		
Thu.2	THE NEW THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Chicago, IL [r] (rpt.)</i>		1/3	SHORE THINGS [r]	
Fri.3	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW	THE JOURNAL EDITORIAL REPORT	TUCKER CARLSON: UNFILTERED	TAVIS SMILEY	
Sat.4							
Sun.5	FORCES OF THE WILD, A "NATURE" MINISERIES [r]		1/5	MYSTERY! <i>Miss Marple "The Body in the Library"</i>	1/2	GREAT LODGES OF THE CANADIAN ROCKIES <i>On Top of the World (WIDE)</i> 1/2	
Mon.6	ANTIQUES ROADSHOW <i>Chicago, IL [r]</i>		2/3	MARTIN LUTHER [r] (WIDESCREEN) <i>Driven to Defiance/The Reluctant Revolutionary</i>			
Tue.7	NOVA <i>Lost Roman Treasures [r]</i>		FRONTLINE (WIDESCREEN) <i>The Wall Street Fix [r]</i>		INDEPENDENT LENS <i>Chavez Ravine</i>	A ROOM NEARBY [r]	
Wed.8	ANTIQUES ROADSHOW FYI [r]	COOKING UNDER FIRE #106 [r]	AMERICAN MASTERS <i>Gene Kelly: Anatomy of a Dancer [r]</i>		CONCERTO <i>A Sense of Self [r]</i>		
Thu.9	THE NEW THIS OLD HOUSE HOUR [r]		ANTIQUES ROADSHOW <i>Chicago, IL [r] (rpt.)</i>		2/3	GREAT OLD AMUSEMENT PARKS [r]	
Fri.10	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW	THE JOURNAL EDITORIAL REPORT	TUCKER CARLSON: UNFILTERED	TAVIS SMILEY	
Sat.11							
Sun.12	FORCES OF THE WILD, A "NATURE" MINISERIES [r]		2/5	MYSTERY! <i>Miss Marple "The Body in the Library"</i>	2/2	GREAT LODGES OF THE CANADIAN ROCKIES <i>Trail of the Great Bear (WIDE)</i> 2/2	
Mon.13	ANTIQUES ROADSHOW <i>Chicago, IL [r]</i>		3/3	GREAT PERFORMANCES <i>Operatunity</i>			
Tue.14	NOVA (HDTV) <i>World in the Balance "The People Paradox" [r]</i>		1/2	FRONTLINE (WIDESCREEN) <i>Is Wal-Mart Good for America? [r]</i>	INDEPENDENT LENS <i>Brother to Brother</i> <span style="float: right;">end 2330</span>		
Wed.15	LIVE FROM LINCOLN CENTER <i>Gil Shaham's Sibelius (w.t.)</i>				AMERICAN MASTERS <i>Julia! America's Favorite Chef [r]</i>		
Thu.16	THE NEW THIS OLD HOUSE HOUR [r]		ANTIQUES ROADSHOW <i>Chicago, IL [r] (rpt.)</i>		3/3	LEGENDS OF JAZZ: THE JAZZ MASTERS (HDTV)	
Fri.17	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW	THE JOURNAL EDITORIAL REPORT	TUCKER CARLSON: UNFILTERED	TAVIS SMILEY	
Sat.18							
Sun.19	FORCES OF THE WILD, A "NATURE" MINISERIES [r]		3/5	MYSTERY! <i>Dead Gorgeous [r]</i>			
Mon.20	ANTIQUES ROADSHOW <i>San Francisco, CA [r]</i>		1/3	GREAT PERFORMANCES (HDTV) <i>Swan Lake with American Ballet Theatre</i>			
Tue.21	NOVA (HDTV) <i>World in the Balance "China Revs Up" [r]</i>		2/2	FRONTLINE (WIDESCREEN) <i>Private Warriors</i>	P.O.V. <i>The Education of Shelby Knox</i> <span style="float: right;">end 2330</span>		
Wed.22	ANTIQUES ROADSHOW FYI	COOKING UNDER FIRE #108	AMERICAN MASTERS (WIDESCREEN) <i>Quincy Jones: In the Pocket [r]</i>		CONCERTO <i>Musical Metaphor [r]</i>		
Thu.23	THE NEW THIS OLD HOUSE HOUR [r] DECLINING BY DEGREES: HIGHER EDUCATION AT RISK (w.t.) (WIDESCREEN)						
Fri.24	WASHINGTON WEEK	WALL \$TREET WK. WITH FORTUNE	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	CONCERTO <i>Musical Metaphor (rpt)</i>	
Sat.25							
Sun.26	FORCES OF THE WILD, A "NATURE" MINISERIES [r]		4/5	MYSTERY! <i>The Inspector Lynley Mysteries IV "In Pursuit of the Proper Sinner"</i>		1/4	CONCERTO <i>Musical Metaphor (rpt)</i>
Mon.27	ANTIQUES ROADSHOW FYI SPECIAL		HISTORY DETECTIVES (WIDESCREEN)		A PROGRAM ABOUT UNUSUAL BUILDINGS & OTHER ROADSIDE STUFF[r]		
Tue.28	THE NEW HEROES <i>Dreams of Sanctuary</i>		1/4	THE NEW HEROES <i>Technology of Freedom</i>	2/4	P.O.V. <i>Big Enough</i>	
Wed.29	ANTIQUES ROADSHOW FYI	COOKING UNDER FIRE #109	AMERICAN MASTERS (WIDESCREEN) <i>Raise Your Voice: Sweet Honey in the Rock</i>		CONCERTO <i>The Message [r]</i>		
Thu.30	THE NEW THIS OLD HOUSE HOUR [r]		ANTIQUES ROADSHOW <i>San Francisco, CA [r] (rpt.)</i>		2/3	SOUNDSTAGE (HDTV) <i>Michael McDonald w/Toni Braxton, Take 6....</i> <span style="float: right;">July Sweeps 6/30-7/27</span>	

# July 2005

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM	
Fri.1	WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	A PROGRAM ABOUT UNUSUAL BUILDINGS & OTHER ROADSIDE... [r] (rpt)		
Sat.2							
Sun.3	FORCES OF THE WILD, A "NATURE" MINISERIES [r]		5/5 MYSTERY! <i>The Inspector Lynley Mysteries IV "A Traitor to Memory"</i>	2/4	CONCERTO <i>The Message [r] (rpt.)</i>		
Mon.4	A CAPITOL FOURTH (2005)			A CAPITOL FOURTH (2005) (rpt.)			Independence Day
Tue.5	THE NEW HEROES <i>Power of Enterprise</i>		3/4 THE NEW HEROES <i>The Power of Knowledge</i>	4/4	P.O.V. <i>Street Fight</i>		end 2330
Wed.6	ANTIQUES ROADSHOW FYI	COOKING UNDER FIRE #110	AMERICAN MASTERS <i>Satchmo [r]</i>		GLOBALTRIBE <i>The Philippines [r]</i>		
Thu.7	THE NEW THIS OLD HOUSE HOUR [r]		ANTIQUES ROADSHOW <i>San Francisco, CA [r] (rpt.)</i>		3/3	SOUNDSTAGE (HDTV) <i>John Mayer w/ Buddy Guy, Part 1</i>	
Fri.8	WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	MEETING OSAMA BIN LADEN [r]		
Sat.9							
Sun.10	NATURE (WIDESCREEN) <i>Cloud's Legacy: The Wild Stallion Returns [r]</i>		MYSTERY! <i>The Inspector Lynley Mysteries IV "A Cry for Justice"</i>		3/4	GLOBALTRIBE <i>The Philippines [r] (rpt.)</i>	
Mon.11	ANTIQUES ROADSHOW <i>St. Paul, MN [r]</i>		1/3	HISTORY DETECTIVES (WIDESCREEN)		GUNS, GERMS & STEEL: A NATIONAL GEOGRAPHIC PRESENTATION (WIDE) 1/3	
Tue.12	NOVA <i>Mars Dead or Alive [r]</i>		WIDE ANGLE		P.O.V. <i>The Fire Next Time</i>		PBS TCA Press Tour 7/12-13
Wed.13	COOKING UNDER FIRE #111	COOKING UNDER FIRE #112	AMERICAN MASTERS <i>George Stevens: A Filmmaker's Journey</i>				
Thu.14	THE NEW THIS OLD HOUSE HOUR [r]		ANTIQUES ROADSHOW <i>St. Paul, MN [r] (rpt.)</i>		1/3	SOUNDSTAGE (HDTV) <i>John Mayer w/ Buddy Guy, Part 2</i>	
Fri.15	WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	GUNS, GERMS & STEEL: A NATIONAL GEOGRAPHIC PRESENTATION (WIDE) (rpt) 1/3		
Sat.16							
Sun.17	NATURE (WIDESCREEN) <i>Hippo Beach [r]</i>		MYSTERY! <i>The Inspector Lynley Mysteries IV "If Wishes Were Horses"</i>		4/4	GLOBALTRIBE <i>Mexico [r]</i>	
Mon.18	ANTIQUES ROADSHOW <i>St. Paul, MN [r]</i>		2/3	HISTORY DETECTIVES (WIDESCREEN)		GUNS, GERMS & STEEL: A NATIONAL GEOGRAPHIC PRESENTATION (WIDE) 2/3	
Tue.19	NOVA <i>Welcome to Mars [r]</i>		WIDE ANGLE		P.O.V. <i>The Brooklyn Connection</i>		
Wed.20	AMERICAN MASTERS <i>Bob Newhart: Unbuttoned</i>			ON STAGE AT THE KENNEDY CENTER: THE MARK TWAIN PRIZE (2002) [r] [Honoring Bob Newhart] end 2330			
Thu.21	THE NEW THIS OLD HOUSE HOUR [r]		ANTIQUES ROADSHOW <i>St. Paul, MN [r] (rpt.)</i>		2/3	SOUNDSTAGE (HDTV) <i>Lindsay Buckingham w/ Stevie Nicks</i>	
Fri.22	WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	GUNS, GERMS & STEEL: A NATIONAL GEOGRAPHIC PRESENTATION (WIDE) (rpt) 2/3		
Sat.23							
Sun.24	NATURE (WIDESCREEN) <i>The Real Macaw [r]</i>		Movie: WHALE RIDER				
Mon.25	ANTIQUES ROADSHOW <i>St. Paul, MN [r]</i>		3/3	HISTORY DETECTIVES (WIDESCREEN)		GUNS, GERMS & STEEL: A NATIONAL GEOGRAPHIC PRESENTATION (WIDE) 3/3	
Tue.26	NOVA <i>NOVA scienceNOW #3</i>		WIDE ANGLE		P.O.V. <i>The Self-Made Man</i>		
Wed.27	ANTIQUES ROADSHOW FYI	ANTIQUES ROADSHOW FYI	AMERICAN MASTERS <i>Goldwyn [r]</i>				
Thu.28	LIVE FROM LINCOLN CENTER <i>A Concert at Mozart's House (w.t.)</i>			ANTIQUES ROADSHOW FYI (rpt)	SOUNDSTAGE (HDTV) <i>The Wallflowers</i>		
Fri.29	WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	GUNS, GERMS & STEEL: A NATIONAL GEOGRAPHIC PRESENTATION (WIDE) (rpt) 3/3		
Sat.30							
Sun.31	NATURE <i>Bloody Suckers [r]</i>		MYSTERY! <i>Inspector Morse, Series V "Driven to Distraction" [r]</i>				

# August 2005

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM
Mon.1	ANTIQUES ROADSHOW <i>Savannah, GA [r]</i>		1/3 HISTORY DETECTIVES (WIDESCREEN) [r]	RAIN OF RUIN: THE BOMBING OF NAGASAKI [r]		
Tue.2	NOVA <i>Deep Sea Invasion [r]</i>		WIDE ANGLE		P.O.V. <i>In the Realms of the Unreal</i> <span style="float: right;">end 2330</span>	
Wed.3	ANTIQUES ROADSHOW FYI [r]	ANTIQUES ROADSHOW FYI [r]	AMERICAN MASTERS <i>Good Rockin' Tonight: The Legacy of Sun Records [r]</i>			
Thu.4	THE NEW THIS OLD HOUSE HOUR [r]		ANTIQUES ROADSHOW <i>Savannah, GA [r] (rpt.)</i>	1/3 SOUNDSTAGE (HDTV) <i>Heart</i>		
Fri.5	WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	RAIN OF RUIN: THE BOMBING OF NAGASAKI [r] (rpt.)	
Sat.6	<b>AUGUST PLEDGE PERIOD (8/6-8/14)</b>					
Sun.7	NATURE (WIDESCREEN) <i>Springs Eternal: Fla.'s Fountain of Youth [r]</i>		MYSTERY! <i>Inspector Morse "Deceived by Flight" [r]</i>			
Mon.8	ANTIQUES ROADSHOW <i>Savannah, GA [r]</i>		2/3			
Tue.9	NOVA <i>Secrets of Photo 51 [r]</i>				P.O.V. <i>Wattstax</i>	end 0000
Wed.10	ANTIQUES ROADSHOW FYI [r]		AMERICAN MASTERS <i>Hank Williams: Honky Tonk Blues [r]</i>			
Thu.11	THE NEW THIS OLD HOUSE HOUR [r]					
Fri.12	WASHINGTON WEEK	NOW	TAVIS SMILEY			
Sat.13						
Sun.14	NATURE <i>Trail of the Cougar [r]</i>		MYSTERY! <i>Inspector Lynley III "Playing for the Ashes" [r]</i>		1/4	
Mon.15	ANTIQUES ROADSHOW <i>Savannah, GA [r]</i>		3/3	HISTORY DETECTIVES (WIDESCREEN)	AN ICE CREAM SHOW [r]	
Tue.16	NOVA <i>Battle Plan Under Fire [r]</i>		WIDE ANGLE		P.O.V. <i>Hardwood</i>	
Wed.17	ANTIQUES ROADSHOW FYI	ANTIQUES ROADSHOW FYI [r]	AMERICAN MASTERS <i>Richard Rodgers: The Sweetest Sounds [r]</i>			
Thu.18	THE NEW THIS OLD HOUSE HOUR [r]		ANTIQUES ROADSHOW <i>Savannah, GA [r] (rpt.)</i>	3/3	SOUNDSTAGE (HDTV) <i>Joss Stone w/ Mavis Staples</i>	
Fri.19	WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	ALASKA'S GOLD RUSH TRAIN [r]	
Sat.20						
Sun.21	NATURE <i>Leopards of Yala [r]</i>		MYSTERY! <i>Inspector Lynley III "In the Presence of the Enemy" [r]</i>		2/4	VISIONES: LATINO ART& CULTURE #1[r]
Mon.22	ANTIQUES ROADSHOW <i>Omaha, NE [r]</i>		1/3	HISTORY DETECTIVES (WIDESCREEN)	BENJAMIN FRANKLIN <i>Let the Experiment Be Made [r]</i> <span style="float: right;">1/3</span>	
Tue.23	NOVA <i>Origins "Earth is Born" [r]</i>		1/4	WIDE ANGLE P.O.V. <i>Bright Leaves</i> <span style="float: right;">end 0000</span>		
Wed.24	ANTIQUES ROADSHOW FYI	ANTIQUES ROADSHOW FYI [r]	AMERICAN MASTERS <i>Ralph Ellison: An American Journey [r]</i>			VISIONES: LATINO ART& CULTURE (rpt)
Thu.25	THE NEW THIS OLD HOUSE HOUR [r]		ANTIQUES ROADSHOW <i>Omaha, NE [r] (rpt.)</i>	1/3	SOUNDSTAGE (HDTV)	
Fri.26	WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	THE ROCKIES BY RAIL [r]	
Sat.27						
Sun.28	NATURE (WIDESCREEN) <i>Holy Cow [r]</i>		MYSTERY! <i>Inspector Lynley III "A Suitable Vengeance" [r]</i>		3/4	VISIONES: LATINO ART& CULTURE #2[r]
Mon.29	ANTIQUES ROADSHOW <i>Omaha, NE [r]</i>		2/3	HISTORY DETECTIVES (WIDESCREEN)	BENJAMIN FRANKLIN <i>The Making of a Revolutionary [r]</i> <span style="float: right;">2/3</span>	
Tue.30	NOVA <i>Origins "How Life Began" [r]</i>		2/4	WIDE ANGLE P.O.V. <i>Hiding and Seeking: Faith &amp; Tolerance After the Holocaust</i> <span style="float: right;">end 2330</span>		
Wed.31	ANTIQUES ROADSHOW FYI	ANTIQUES ROADSHOW FYI [r]	AMERICAN MASTERS <i>F. Scott Fitzgerald: Winter Dreams [r]</i>			VISIONES: LATINO ART& CULTURE (rpt)

To: General Managers, Program Managers & Promotion Managers  
From: John F. Wilson, Jacoba Atlas, Steven Gray, Shawn Halford  
Date: May 27, 2005

Attached please find:

- Fall 2005 National Program Service Primetime Grids
- Fall 2005 Common Carriage Designations

The fall 2005 primetime at-a-glance grids detail the most current plans for the upcoming NPS schedule. As is always the case, these grids are subject to some change, but we are confident that the major programming elements will remain as scheduled. This schedule includes the months of June through August 2005. We plan to publish the early 2006 schedule by early October.

We're continuing to address the strategic imperatives raised by the CPB-commissioned 2004 primetime audience study. One of the key imperatives is accessibility. And consistency is one major factor. The public values PBS, but viewers still have a difficult time identifying when PBS series air and frequently cite inconsistency in the schedule. Some of this feeling of inconsistency may come from anthology series, which inherently look different from week to week. Some results from pledge drives, which interrupt the weekly presence of continuing series several times each year. PBS may further interrupt weekly series' footprints with stunts and preemptions. And our mix of weekly, continuing series versus specials and limited series may be yet another source of inconsistency.

The fall 2005 grids show a more consistently scheduled NPS. New seasons of NATURE, MASTERPIECE THEATRE, AMERICAN EXPERIENCE, NOVA, FRONTLINE and THE NEW THIS OLD HOUSE HOUR kick off this fall. The fall schedule is also home to new episodes from series such as GREAT PERFORMANCES as well as the conclusion of weekly summer series such as HISTORY DETECTIVES, MYSTERY!, P.O.V., SOUNDSTAGE, AMERICAN MASTERS and WIDE ANGLE. The schedule is transformed with this emphasis on regularly scheduled continuing series, and

with the decreased time allotted for limited series and one-time-only specials. That said, we have made room for some high-profile limited series and specials to punctuate the fall schedule.

Another strategic imperative of the primetime research is to expand the science and nature footprint. While PBS intends to pursue this suggestion, we are already beginning to realize it this fall with the return of SECRETS OF THE DEAD and specials such as *Leonardo's Dream Machines* and *Window to the Sea*.

One of the other key findings from the research is the need to develop new, broad appeal programming. In addition to ANTIQUES ROADSHOW, our broadest-drawing ongoing series, we are developing programming designed to open the door for viewers to come to public television schedules. Some of these projects in development will be novel formats, and many programs based on tried-and-true formats are ready for the fall, including SECRETS OF THE DEAD, *The Kennedy Center Presents: The Mark Twain Prize (2005)*, and *In Search of Myths and Heroes* (a series which eclipsed BBC1's audience when it was recently broadcast on BBC2, which is akin to PBS topping NBC's audience for a night).

Finally, we are holding the common carriage programs in the fall schedule to the same level of accountability as we did programs in the current season. The programs will be measured against reasonable goals in the areas of audience (both on-air and online), mission (including press coverage, outreach, awards and other points of impact), and station value (including mission, audience and membership value as defined by station managers). These program performance measures are already an important tool in determining the direction of PBS investment, development and scheduling of ongoing series, limited series and specials.

Beginning with limited series and specials, here are highlights of the fall 2005 NPS primetime schedule.

## Limited Series & Specials

### *AMERICAN MASTERS "Bob Dylan: No Direction Home"*

1/90 + 1/120 from WNET/Cappa Productions

Martin Scorsese's documentary is the first authorized film biography of the usually-reclusive Bob Dylan. We'll be showcasing the voice of his generation as the centerpiece to a tightly-knit theme week including new programs such as "Get Up, Stand Up: The Story of Pop and Protest" from WNET, "The Sixties: The Years that Shaped a Generation" from OPB, "Best of The Beatles," a recounting of the early years of The Beatles through the lens of their first drummer, Pete Best, and a special edition of ANTIQUES ROADSHOW focusing on pop collectibles of the '50s, '60s and '70s.

### *Making Schools Work with Hedrick Smith*

1/120 presented SCETV

Journalist Hedrick Smith profiles several different approaches to individual public school reform across the country and at all levels.

### *Leonardo's Dream Machines*

2/60 from Channel 4 International

For the first time, teams build some of Leonardo da Vinci's war machines to his exact specifications and scale, 500 years after they his dream machines were committed to paper.

### *Holy Warriors*

1/120 from Atlantic Productions and DDE

The dramatic story of Saladin, the Sultan of Egypt, as he led a united Arab force against Richard the Lionhearted's crusaders in a bloody struggle for Jerusalem.

### *Destination America*

4/60 from David Grubin

This new series explores the motives, expectations and experiences of immigrant groups both past and present as they make their way to America. The four episodes trace America's immigrant roots through specific groups' quest for liberty: Freedom from Want, Freedom of Religion, Freedom to Create and Freedom for Women.



### **Limited Series & Specials, continued**

#### *A Cemetery Special*

1/60 from WQED

Rick Sebak brings his personal touch to a tour of the many interesting, historical and quirky cemeteries across the country, from the burial grounds of the famous to the unmarked graves of soldiers.

#### *Rx for Survival, A Global Health Challenge*

3/120 from WGBH and Vulcan Productions

This miniseries is the centerpiece of a multimedia event designed to create awareness of and catalyze a dialogue about the roles that individuals and our nation can play in addressing serious world health issues.

#### *Pioneers of Primetime*

1/60 from Boettcher Productions

A remembrance of the funny men and women who made the transition from Vaudeville and radio to early television, from Jack Benny and Sid Caesar to George Burns and Gracie Allen.

#### *The Kennedy Center Presents: The Mark Twain Prize 2005*

1/90 from WETA

Comedians and other luminaries gather to pay tribute to this year's recipient of the Mark Twain Prize for American Humor, Steve Martin.

#### *In Search of Myths and Heroes*

4/60 from Maya Vision and WETA

Michael Wood is in great form as the presenter of this series exploring legendary people and places. Michael makes remarkable journeys in search of the real King Arthur, the mythical Shangri-La, and the ancient stories of the Queen of Sheba and Jason and the Golden Fleece.

#### *Window to the Sea*

1/60 from WNED

Viewers can take an access-all-areas tour of four American aquariums: Boston's New England Aquarium, the Monterey Bay Aquarium in California, Chicago's Shedd Aquarium and the Waikiki Aquarium in Hawaii.

### **Limited Series & Specials, continued**

*As Time Goes By Special (w.t.)*

2/60 from D.L. Taffner

A two-part special features a reunion of the full cast including Dame Judi Dench and Geoffrey Palmer. Set some time after the last season left off, the specials reveal Jean Pargetter's (Dench) anticipation for grandchildren, much to Lionel's (Palmer) dismay. The specials will be combined as a single-night pledge offering for the December drive, with a subsequent appearance in the NPS schedule.

*Imagining America: Icons of 20<sup>th</sup> Century Art*

1/120 from SCETV

This special presents the work of American artists, including Edward Hopper, Jacob Lawrence, Cindy Sherman, Keith Haring, Alfred Stieglitz, Andy Warhol, Georgia O'Keefe, Willem de Kooning and others.

### **Continuing Series**

The continuing series are the foundation of the National Program Service schedule. This fall, many continuing series will offer strong new episodes, including the following:

NATURE inquires whether animals can actually predict natural disasters.

MYSTERY!'s season concludes with "Murder Room," a new P.D. James story.

MASTERPIECE THEATRE opens up the fall season with a new story written around Doyle's Sherlock Holmes characters and starring Rupert Everett. Also on tap is an adventure-packed production of Robert Louis Stevenson's "Kidnapped."

ANTIQUES ROADSHOW presents a new special compiling pop culture collectibles from the 1950's, 60's and 70's, as part of the theme week surrounding Bob Dylan.

AMERICAN EXPERIENCE celebrates the centennial of the city of Las Vegas.

### **Continuing Series, continued**

HISTORY DETECTIVES concludes its season with new episodes through September.

NOVA tells the stories of scientists Isaac Newton and, in an unprecedented new dramatic telling, Albert Einstein, and his revolutionary theory of relativity.

FRONTLINE confronts the lasting societal impacts of the O.J. Simpson trial, ten years to the day after the verdict.

INDEPENDENT LENS begins a new season with films on such subjects as race and pop culture, the booming business of fertility treatment and sperm banks and a longitudinal look at the declining business of ranching.

GREAT PERFORMANCES brings together Eric Clapton, Jack Bruce and Ginger Baker for a much-anticipated reunion concert.

In addition to anchoring pop-out week with a profile of Bob Dylan, AMERICAN MASTERS offers a four-week "writer's block" including new films on Ernest Hemingway and Willa Cather.

SECRETS OF THE DEAD returns with three new specials, including America's wartime hunt for the talents of Nazi scientists.

### **Promotion**

PBS Brand Management and Promotion is creating promotion campaigns to support this season's schedule. A complete promotion plan with details on program support, branding strategies and materials for both primetime and PBS Kids will be available on PBS Connect.

## **Common Carriage Designations**

A list of programs designated for Common Carriage within the fall 2005 season is included as a part of this mailing.

We are pleased to deliver to you the fall 2005 National Program Service primetime schedule. In this season and beyond, we will ensure that PBS continues to deliver to its member stations a high-quality, diverse National Program Service that builds upon and extends the mission, depth, reach and distinction that are the hallmarks of PBS.

If you have any questions, please feel free to call:

John Wilson	703-739-5155
Jacoba Atlas	323-692-7851
Steven Gray	703-759-5012
Shawn Halford	703-739-5247

## FALL 2005 COMMON CARRIAGE DESIGNATIONS

### Continuing Series:

- Sundays: Nature  
Mystery!  
Masterpiece Theatre
- Mondays: Antiques Roadshow  
History Detectives  
American Experience (including "Las Vegas")
- Tuesdays: NOVA (including "E=MC<sup>2</sup>")  
Frontline (including Frontline/World, and 10/3 "OJ" special)  
Wide Angle
- Wednesdays: Antiques Roadshow FYI  
American Masters (including "Dylan" on 9/26 & 27, and one local repeat of "Dylan" designated anytime within the week of premiere)
- Fridays: Washington Week  
NOW

### Limited Series and Specials:

- In Performance at the White House: The Congressional Picnic  
Best of the Beatles  
Get Up, Stand Up: The Story of Pop & Protest  
The Sixties: The Years that Shaped a Generation  
Making Schools Work with Hedrick Smith  
Holy Warriors  
Helen of Troy  
Secrets of the Dead "The Hunt for Nazi Scientists" (w.t.)  
A Cemetery Special  
Destination America  
Rx for Survival, A Global Health Challenge  
Global Warming: The Signs and the Science  
Pioneers of Primetime  
The Kennedy Center Presents: The Mark Twain Prize (2005)  
Secrets of the Dead "Gangland Graveyard" (w.t.)  
In Search of Myths and Heroes  
Secrets of the Dead "Voyage of the Courtesans" (w.t.)  
Great Performances "Cream Reunion Concert" (w.t.)  
Great Performances "The Nightingale"  
Window to the Sea  
Imagining America: Icons of 20<sup>th</sup> Century American Art

### Notes:

No programs will be designated for common carriage from December 1-16 due to pledge. The 2004-2005 Common Carriage Year (9/12/04-9/17/05) and the 2005-2006 Common Carriage Year, (9/18/05-9/16/06), each encompass 500 hours of common carriage designations, based on the July 2001 revisions to common carriage guidelines. A detailed and updated accounting of common carriage designations appears with each month's week-by-weeks.

## September 2005

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM
Thu.1	THE NEW THIS OLD HOUSE HOUR [r]		ANTIQUES ROADSHOW <i>Omaha, NE [r] (rpt.)</i>		2/3 SOUNDSTAGE (HDTV) <i>Chris Isaak, Greatest Hits</i>	
Fri.2	WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	GRAND CANYON, (WIDESCREEN) A NAKED PLANET SPECIAL [r]	
Sat.3						
Sun.4	NATURE <i>Pale Male [r]</i>		MYSTERY! <i>Inspector Lynley III "Deception on His Mind" [r]</i>			4/4 VISIONES: LATINO ART & CULTURE #3[r] Labor Day 9/6
Mon.5	ANTIQUES ROADSHOW <i>Omaha, NE [r]</i>		3/3 HISTORY DETECTIVES (WIDESCREEN)	BENJAMIN FRANKLIN <i>The Chess Master [r]</i> end 2330		
Tue.6	NOVA <i>Origins "Where Are the Aliens?" [r]</i>		3/4 WIDE ANGLE <i>Haiti Tries Again (w.t.)</i>	P.O.V. <i>The Hobart Shakespeareans</i>		
Wed.7	ANTIQUES ROADSHOW FYI [r]	ANTIQUES ROADSHOW FYI [r]	AMERICAN MASTERS (HDTV) <i>Willa Cather: The Road Is All</i>			VISIONES: LATINO ART & CULTURE (rpt)
Thu.8	THE NEW THIS OLD HOUSE HOUR [r]		ANTIQUES ROADSHOW <i>Omaha, NE [r] (rpt.)</i>		3/3 SOUNDSTAGE (HDTV) <i>Lindsey Buckingham w/spcl. guest Stevie Nicks</i>	
Fri.9	SHELTER FROM THE STORM: A CONCERT FOR THE GULF COAST		WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY
Sat.10						
Sun.11	NATURE <i>Pale Male [r]</i>		MYSTERY! <i>Foyle's War III "The French Drop"</i>			1/4 VISIONES: LATINO ART & CULTURE #4[r]
Mon.12	ANTIQUES ROADSHOW <i>Memphis, TN [r]</i>		1/3 HISTORY DETECTIVES (WIDESCREEN)	IN THE BALANCE: BIOATTACK 1/2		
Tue.13	NOVA <i>Origins "Back to the Beginning" [r]</i>		4/4 WIDE ANGLE 1-800-INDIA	P.O.V. <i>Omar &amp; Pete (HDTV)</i> end 2330		
Wed.14	AMERICAN EXPERIENCE <i>Fatal Flood [r]</i>		AMERICAN MASTERS (HDTV) <i>Ernest Hemingway: Rivers to the Sea</i>			VISIONES: LATINO ART & CULTURE (rpt)
Thu.15	THE NEW THIS OLD HOUSE HOUR [r]		Movie: THE AUTOBIOGRAPHY OF MISS JANE PITTMAN			
Fri.16	WASHINGTON WEEK	NOW <i>Katrina: The Response</i>	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	ART IN THE TWENTY-FIRST CENTURY III <i>Power (WIDESCREEN)</i> 1/4	
Sat.17	LIVE FROM LINCOLN CENTER <i>Higher Ground: A Hurricane Relief Benefit</i> end 0100					
Sun.18	NATURE (WIDESCREEN) <i>Deep Jungle "New Frontiers" [r]</i>		1/3 MYSTERY! <i>Foyle's War III "Enemy Fire"</i>	2/4 VISIONES: LATINO ART & CULTURE #5[r]		
Mon.19	ANTIQUES ROADSHOW <i>Memphis, TN [r]</i>		2/3 HISTORY DETECTIVES (WIDESCREEN)	IN THE BALANCE: CITY UNDER SIEGE 2/2		
Tue.20	NOVA (HDTV) <i>Mystery of the Megaflood (Season Premiere)</i>		WIDE ANGLE <i>Hot Zone: Vietnam (w.t.)</i>		HIDDEN TURKEY	
Wed.21	ANTIQUES ROADSHOW FYI [r]	ANTIQUES ROADSHOW FYI [r]	AMERICAN MASTERS <i>Lucille Ball: Finding Lucy [r]</i>			VISIONES: LATINO ART & CULTURE (rpt)
Thu.22	LIVE FROM LINCOLN CENTER <i>New York Philharmonic and Lang Lang: A Night of Firsts</i>				SOUNDSTAGE (HDTV) <i>Trisha Yearwood and Sugarland...</i>	
Fri.23	WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	ART IN THE TWENTY-FIRST CENTURY III <i>Memory (WIDESCREEN)</i> 2/4	
Sat.24						
Sun.25	NATURE (WIDESCREEN) <i>Deep Jungle "Monsters of the Forest" [r]</i>		2/3 MYSTERY! <i>Foyle's War III "They Fought in the Fields"</i>	3/4 VISIONES: LATINO ART & CULTURE #6[r]		
Mon.26	ANTIQUES ROADSHOW <i>Tomorrow's Antiques (1950s-1970s)</i>		AMERICAN MASTERS <i>Bob Dylan: No Direction Home</i>			
Tue.27	NOVA <i>Ice Mummies: Frozen in Heaven [r]</i>					
Wed.28	BEST OF THE BEATLES GET UP, STAND UP: THE STORY OF POP AND PROTEST					
Thu.29	THE NEW THIS OLD HOUSE HOUR [r] THE SIXTIES: THE YEARS THAT SHAPED A GENERATION					
Fri.30	WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	ART IN THE TWENTY-FIRST CENTURY III <i>Structures (WIDESCREEN)</i> 3/4	

# October 2005

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM	
Sat.1	AMERICAN MASTERS <i>Bob Dylan: No Direction Home (rpt.) - 1730-2100</i>						
Sun.2	NATURE (WIDESCREEN) <i>Deep Jungle "The Beast Within" [r]</i>		3/3	MYSTERY! <i>Foyle's War III "A War of Nerves"</i>		4/4	SCIENTIFIC AMER. FRONTIERS #1502[r]
Mon.3	ANTIQUES ROADSHOW <i>Memphis, TN [r]</i>		3/3	LEONARDO'S DREAM MACHINES	1/2	LEONARDO'S DREAM MACHINES	2/2
Tue.4	NOVA (WIDESCREEN) <i>Sinking the Supership</i>		FRONTLINE (WIDESCREEN) <i>The OJ Verdict</i>		THE TWELFTH VAN CLIBURN INTERNATIONAL PIANO COMPETITION: In the Heart of Music		end 2330
Wed.5	GREAT PERFORMANCES <i>From Shtetl to Swing</i>		MAKING SCHOOLS WORK (WIDESCREEN) <i>With Hedrick Smith</i>				Rosh Hashanah (dusk 10/4)
Thu.6	THE THIS OLD HOUSE HOUR <i>(Season Premiere)</i>		ANTIQUES ROADSHOW <i>Memphis, TN [r] (rpt.)</i>		3/3	SOUNDSTAGE (HDTV) <i>Joss Stone w/ special guest Mavis Staples</i>	
Fri.7	WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	ART IN THE TWENTY-FIRST CENTURY III <i>Play (WIDESCREEN)</i>		4/4
Sat.8							
Sun.9	NATURE (HDTV) <i>Violent Hawaii [r]</i>		MYSTERY! <i>The Murder Room</i>		1/2	SCIENTIFIC AMER. FRONTIERS #1503[r]	
Mon.10	ANTIQUES ROADSHOW <i>Reno, NV [r]</i>		1/3	ELUSIVE PEACE: ISRAEL AND THE ARABS			end 2330
Tue.11	NOVA (HDTV) <i>Einstein's Big Idea</i>		INDEPENDENT LENS (Season Premiere) <i>Parliament Funkadelic: 1 Nation Under Groove</i>				
Wed.12	SECRETS OF THE DEAD (WIDESCREEN) <i>Amazon Warrior Women [r]</i>		HELEN OF TROY (WIDESCREEN)				Yom Kippur
Thu.13	THE THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Reno, NV [r] (rpt.)</i>		1/3	SOUNDSTAGE (HDTV) <i>Martina McBride</i>	
Fri.14	WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	DO YOU SPEAK AMERICAN? [r]		1/3
Sat.15							
Sun.16	NATURE (HDTV) <i>Shark Mountain [r]</i>		MYSTERY! <i>The Murder Room</i>		2/2	SCIENTIFIC AMER. FRONTIERS #1504[r]	
Mon.17	ANTIQUES ROADSHOW <i>Reno, NV [r]</i>		2/3	AMERICAN EXPERIENCE <i>Two Days in October (Season Premiere)</i>		RACHEL & ANDREW JACKSON... [r]	
Tue.18	NOVA (WIDESCREEN) <i>NOVA scienceNOW</i>		FRONTLINE (WIDESCREEN) <i>The Torture Question</i>		INDEPENDENT LENS <i>En Route to Baghdad</i>		end 2330
Wed.19	SECRETS OF THE DEAD (WIDESCREEN) <i>The Hunt for Nazi Scientists</i>		DESTINATION AMERICA (WIDE) <i>The Golden Door</i>		1/4	DESTINATION AMERICA (WIDE) <i>The Art of Departure</i>	2/4
Thu.20	THE THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Reno, NV [r] (rpt.)</i>		2/3	BREAKING THE SILENCE: CHILDREN'S STORIES	
Fri.21	WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	DO YOU SPEAK AMERICAN? [r]		2/3
Sat.22							
Sun.23	NATURE (WIDESCREEN) <i>Cuba: Wild Island of the Caribbean [r]</i>		MASTERPIECE THEATRE <i>Sherlock Holmes and the Case of the Silk Stocking (Season Premiere)</i>				
Mon.24	ANTIQUES ROADSHOW <i>Reno, NV [r]</i>		3/3	AMERICAN EXPERIENCE (WIDESCREEN) <i>Kinsey [r]</i>		SIGNPOST TO FREEDOM/BOYCOTT	
Tue.25	NOVA <i>Ancient Creatures of the Deep [r]</i>		FRONTLINE/WORLD <i>The Curse of Inca Gold</i>		INDEPENDENT LENS <i>The Last Cowboy</i>		end 2330
Wed.26	A CEMETERY SPECIAL		DESTINATION AMERICA (WIDE) <i>The Earth Is the Lord's</i>		3/4	DESTINATION AMERICA (WIDE) <i>Breaking Free: A Woman's Journey</i>	4/4
Thu.27	THE THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Reno, NV [r] (rpt.)</i>		3/3	SMALL FORTUNES: MICROCREDIT AND THE FUTURE OF POVERTY (HDTV)	
Fri.28	WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	DO YOU SPEAK AMERICAN? [r]		3/3
Sat.29							
Sun.30	NATURE <i>The Good, the Bad, and the Grizzly [r]</i>		MASTERPIECE THEATRE <i>Kidnapped</i>		1/2	SCIENTIFIC AMER. FRONTIERS #1505[r]	
Mon.31	ANTIQUES ROADSHOW <i>Portland, OR [r]</i>		1/3	AMERICAN EXPERIENCE <i>Race to the Moon</i>		A CEMETERY SPECIAL (rpt.)	Halloween

# November 2005

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM	
Tue.1	NOVA (WIDESCREEN) <i>Volcano Under the City</i>		Rx FOR SURVIVAL, A GLOBAL HEALTH CHALLENGE (HDTV) <i>Disease Warriors/Rise of the Superbugs</i>				
Wed.2	GLOBAL WARMING: THE SIGNS AND THE SCIENCE		Delivering the Goods/Deadly Messengers				
Thu.3	THE THIS OLD HOUSE HOUR		Back to the Basics/How Safe Are We?				Nov. Sweeps 11/3-30
Fri.4	WASHINGTON WEEK	NOW	GLOBAL HEALTH: AMERICA'S RESPONSE	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY		
Sat.5							
Sun.6	NATURE (WIDESCREEN) <i>Killers in Eden (Season Premiere)</i>		MASTERPIECE THEATRE <i>Kidnapped</i>	2/2	EVERGLADES, A NAKED PLANET SPECIAL [r] (WIDESCREEN)		
Mon.7	ANTIQUES ROADSHOW <i>Portland, OR [r]</i>		2/3	AMERICAN EXPERIENCE (WIDESCREEN) <i>Victory in the Pacific [r]</i>			
Tue.8	NOVA (WIDESCREEN) <i>Hitler's Sunken Secret</i>		FRONTLINE (WIDESCREEN) <i>The Last Abortion Clinic</i>		INDEPENDENT LENS <i>A Family at War</i>		
Wed.9	PIONEERS OF PRIMETIME		THE KENNEDY CENTER PRESENTS: THE 2005 MARK TWAIN PRIZE				
Thu.10	THE THIS OLD HOUSE HOUR		BY THE PEOPLE		PIONEERS OF PRIMETIME (rpt.)		
Fri.11	WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	THE PERILOUS FIGHT: AMERICA'S WWII IN COLOR <i>Infamy [r]</i>		Veterans Day 1/4
Sat.12							
Sun.13	NATURE (HDTV) <i>Can Animals Predict Disaster?</i>		MASTERPIECE THEATRE <i>The Virgin Queen</i>			1/2	
Mon.14	ANTIQUES ROADSHOW <i>Portland, OR [r]</i>		3/3	AMERICAN EXPERIENCE (WIDESCREEN) <i>Las Vegas: An Unconventional History</i>	SCIENTIFIC AMER. FRONTIERS #1506[r]		
Tue.15	NOVA (WIDESCREEN) <i>Newton's Dark Secrets</i>					INDEPENDENT LENS <i>Mirror Dance</i>	end 2330
Wed.16	SECRETS OF THE DEAD (WIDESCREEN) <i>Gangland Graveyard</i>		IN SEARCH OF MYTHS AND HEROES (WIDESCREEN) <i>The Queen of Sheba/Arthur: The Once &amp; Future King</i>			1/2	
Thu.17	THE THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Portland, OR [r] (rpt.)</i>	3/3	SECRETS OF THE DEAD (WIDESCREEN) <i>Gangland Graveyard (rpt.)</i>		
Fri.18	WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	THE PERILOUS FIGHT: AMERICA'S WWII IN COLOR <i>Battlefronts [r]</i>		2/4
Sat.19							
Sun.20	NATURE (WIDESCREEN) <i>Katrina's Animal Rescue</i>		MASTERPIECE THEATRE <i>The Virgin Queen</i>			2/2	
Mon.21	ANTIQUES ROADSHOW <i>Oklahoma City, OK [r]</i>		1/3	AMERICAN EXPERIENCE <i>Influenza 1918 [r]</i>	SECRETS OF THE DEAD <i>Killer Flu (updated) [r]</i>		
Tue.22	NOVA (WIDESCREEN) <i>Storm That Drowned a City</i>		FRONTLINE (WIDESCREEN) <i>The Storm</i>		INDEPENDENT LENS <i>Race Is the Place (HDTV)</i>		
Wed.23	SECRETS OF THE DEAD (WIDESCREEN) <i>Voyage of the Courtesans</i>		IN SEARCH OF MYTHS AND HEROES (WIDESCREEN) <i>Shangri-La/Jason &amp; the Golden Fleece</i>			2/2	
Thu.24	THE THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW <i>Oklahoma City, OK [r] (rpt.)</i>	1/3	DAVE MATTHEWS BAND, WEEKEND ON THE ROCKS: A SOUNDSTAGE SPCL. (HD)		Thanksgiving
Fri.25	WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	THE PERILOUS FIGHT: AMERICA'S WWII IN COLOR <i>Wrath [r]</i>		3/4
Sat.26							
Sun.27	NATURE <i>Chasing Big Cats [r]</i>		MASTERPIECE THEATRE <i>Pollyanna [r]</i>				
Mon.28	ANTIQUES ROADSHOW <i>Oklahoma City, OK [r]</i>		2/3	AMERICAN EXPERIENCE <i>Tupperware! [r]</i>	A PROGRAM ABOUT UNUSUAL BUILDINGS & OTHER ROADSIDE STUFF [r]		
Tue.29	NOVA <i>Treasures of the Sunken City [r]</i>		FRONTLINE <i>The Alternative Fix [r]</i>		INDEPENDENT LENS <i>Maid in America</i>		
Wed.30	GREAT PERFORMANCES <i>Renee Fleming: Sacred Songs and Carols</i>		GREAT PERFORMANCES <i>Cream Reunion Concert (HDTV)</i>			DRIVEN TO PLAY... GUITAR COMPET.[r]	Sweeps End



## December 2005

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM	
Thu.1	THE THIS OLD HOUSE HOUR		ENDING AIDS: THE SEARCH FOR A VACCINE (WIDESCREEN)		SOUND AND FURY [r]		World AIDS Day
Fri.2	WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	THE PERILOUS FIGHT: AMERICA'S WWII IN COLOR <i>Triumph</i> [r]		
Sat.3	<b>DECEMBER PLEDGE PERIOD</b>						
Sun.4	NATURE (WIDESCREEN) <i>Flight School</i> [r]						
Mon.5	ANTIQUES ROADSHOW <i>Oklahoma City, OK</i> [r]						3/3
Tue.6	NOVA <i>Mountain of Ice</i> [r]						
Wed.7							
Thu.8	THE THIS OLD HOUSE HOUR						
Fri.9	WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY			
Sat.10							
Sun.11	NATURE (WIDESCREEN) <i>Song of the Earth with David Attenborough</i> [r]						
Mon.12	ANTIQUES ROADSHOW <i>Roadshow Favorites</i> [r]		AMERICAN EXPERIENCE (WIDESCREEN) <i>The Fight</i> [r]			SCIENTIFIC AMER. FRONTIERS #1508 [r]	
Tue.13	NOVA <i>Secrets...Lost Empires: Pharaoh's Obelisk</i> [r]		FRONTLINE (WIDESCREEN) <i>The Persuaders</i> [r]		INDEPENDENT LENS <i>Seoul Train</i>		
Wed.14	INSIDE PASSAGE (HDTV)		AS TIME GOES BY REUNION SPECIAL		1/2	AS TIME GOES BY REUNION SPECIAL	2/2
Thu.15	THE THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW (rpt.)		L.A. HOLIDAY CELEBRATION 2005		
Fri.16	WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	DICKENS [r] <i>Secrets</i>		1/3
Sat.17							
Sun.18	NATURE (HDTV) <i>Encountering Sea Monsters</i>		MASTERPIECE THEATRE <i>The Lost Prince</i> [r]				1/2
Mon.19	ANTIQUES ROADSHOW <i>Wild Things</i> [r]		AMERICAN EXPERIENCE <i>Patriots Day</i> [r]		HOXIE: THE FIRST STAND [r]		
Tue.20	NOVA <i>Spies That Fly</i> [r]		FRONTLINE (WIDESCREEN) <i>Secret History of the Credit Card</i> [r]		INDEPENDENT LENS <i>Sisters: Portrait of a Benedictine Community</i>		
Wed.21	GREAT PERFORMANCES (HDTV) <i>The Nightingale</i>		CHRISTMAS WITH THE MORMON (HDTV) TABERNACLE CHOIR/AUDRA MCDONALD		A ST. OLAF CHRISTMAS IN NORWAY (HDTV)		
Thu.22	CHRISTMAS AT BELMONT (2005) (w.t.)		ANTIQUES ROADSHOW (rpt.)		GREAT PERFORMANCES (HDTV) <i>The Nightingale</i> (rpt.)		
Fri.23	WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	DICKENS [r] <i>Blazing Away</i>		2/3
Sat.24	ARTHUR'S PERFECT CHRISTMAS [r]		CHRISTMAS WITH THE MORMON (HDTV) TABERNACLE CHOIR/AUDRA MCDONALD (rpt.)		CHRISTMAS AT BELMONT (2005) (w.t.) (rpt.)		
Sun.25	NATURE (WIDESCREEN) <i>Big Red Roos</i> [r]		MASTERPIECE THEATRE <i>The Lost Prince</i> [r]				2/2
Mon.26	ANTIQUES ROADSHOW <i>Tomorrow's Antiques</i> [r]		AMERICAN EXPERIENCE <i>Reagan "Lifeguard"</i> [r]				1/2
Tue.27	NOVA (WIDESCREEN) <i>Wave That Shook the World</i> [r]		FRONTLINE (WIDESCREEN) <i>Diet Wars</i> [r]		INDEPENDENT LENS <i>Short Stack: Lost and Found</i>		
Wed.28	WINDOW TO THE SEA (HDTV)		IMAGINING AMERICA: ICONS OF 20TH CENTURY AMERICAN ART				
Thu.29	THE THIS OLD HOUSE HOUR		ANTIQUES ROADSHOW (rpt.)		WINDOW TO THE SEA (rpt.) (HDTV)		
Fri.30	WASHINGTON WEEK	NOW	THE JOURNAL EDITORIAL REPORT	TAVIS SMILEY	DICKENS [r] <i>Terror to the End</i>		3/3
Sat.31	LIVE FROM LINCOLN CENTER <i>New York Philharmonic New Year's Eve Gala Concert</i>						New Year's Eve



Before the  
COPYRIGHT ROYALTY JUDGES  
Washington, D.C.

\_\_\_\_\_)  
In the Matter of )  
 )  
Distribution of the )  
2004 and 2005 )  
Cable Royalty Funds )  
\_\_\_\_\_)

Docket No. 2007-3 CRB CD 2004-2005

Testimony of  
Linda McLaughlin

June 1, 2009  
Corrected September 30, 2009

## **I. Qualifications and Summary**

I am an economist and a Special Consultant at National Economic Research Associates, Inc. I have conducted research on entertainment and media industries for over 30 years. I have analyzed marketplace prices paid for copyright licenses, reasonable rates for such licenses, and the distribution of fees collected to individual rights owners in a variety of media, including cable networks, broadcast stations, television programs, motion pictures, books, music compositions and recorded songs. I have submitted reports to and/or testified before the Copyright Royalty Judges and Copyright Arbitration Royalty Panel (CARP) concerning the distribution of cable royalty funds, the distribution of satellite royalty funds, the compulsory license fee for satellite-retransmitted broadcast stations, and the costs and revenues of the record labels affiliated with the major U.S. record companies. In addition, I have submitted reports to the Federal Communications Commission and the Federal Trade Commission, and have testified before state and Federal courts and arbitrators concerning entertainment market issues. A detailed statement of my qualifications is attached as Appendix 1.

Counsel for the Public Broadcasting Service asked me to address two issues relevant to the relative value of distant Public Television (PTV) stations imported by cable operators in 2004-05: whether there has been a major change in the factors that would affect relative marketplace values between 1998-99 and 2004-05 and what the outcome of the Bortz survey would likely have been had the survey not omitted systems that imported only distant PTV and/or Canadian stations.

In summary, I conclude:

- There was no major change in the factors that would affect relative marketplace value in 2004-05. Available data indicate that there was no decrease in demand for imported PTV programming. If anything, there was a slight increase in such demand.
- Had all systems with distant signals been considered eligible, the Bortz survey would have been expected to find that cable operators attributed to PTV about 6 percent of the fixed dollar amounts they spent on the distant signals they actually imported to attract and retain subscribers in 2004-05.

## **II. No Substantial Changed Circumstances Between 1998-99 and 2004-05**

### **A. Background**

In 1998-99, the CARP awarded PTV 5.5 percent of the cable operator basic royalty fund. It reached its decision based on a prior percentage allocation to PTV and a finding of no changed circumstances since that time that affected PTV's share.<sup>1</sup>

According to previous CARP proceedings and related court decisions, the standard for determining the distribution of the royalties for cable-retransmitted distant signals among the claimant groups that supply the compensable programming is relative marketplace value. The hypothetical marketplace negotiations over such programming would occur between cable operators and broadcasters (as intermediaries for copyright owners) for the rights to retransmit entire broadcast signals.<sup>2</sup> Only demand is relevant in such negotiations—the demand by the cable operators for the distant signals they choose to import. Demand for distant signals depends on the prices and quality of the available substitutes—the local stations, cable networks and other services offered by cable operators—the additional cost (if any) of bringing the distant station to the cable system headend, and the income and taste of the cable system subscribers and potential subscribers.

### **B. Carriage**

Cable operators have a choice whether or not to carry distant signals. All systems must pay a minimum fee covering one distant signal equivalent (DSE). That is, a cable system could carry one independent station (equal to one DSE), four PTV stations or four major network affiliates (each PTV and affiliate station equals one-quarter DSE) without paying additional royalties.<sup>3</sup> Although one DSE is “free” with the minimum payment in terms of cable royalties, the distant signal(s) use bandwidth that the operator may prefer to use for cable networks or other services. As a result, many systems import no distant signals, and still others carry only a

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<sup>1</sup> Program Suppliers v. Librarian of Congress, 409 F.3d 395 at 399-400, 403-404 (D.C. Cir. 2005).

<sup>2</sup> CARP Report, Cable Royalties for the Years 1990-92, Docket No. 94-3 CARP CD-90-92, May 31, 1996, pp. 22-24; Report of the CARP to the Librarian of Congress, In the Matter of the Distribution of 1998 and 1999 Cable Royalty Funds, Docket No. 2001-8 CARP CD 98-99, October 21, 2003, pp. 9-11.

<sup>3</sup> 17 U.S.C.A. Sect. 111(f) (2008).

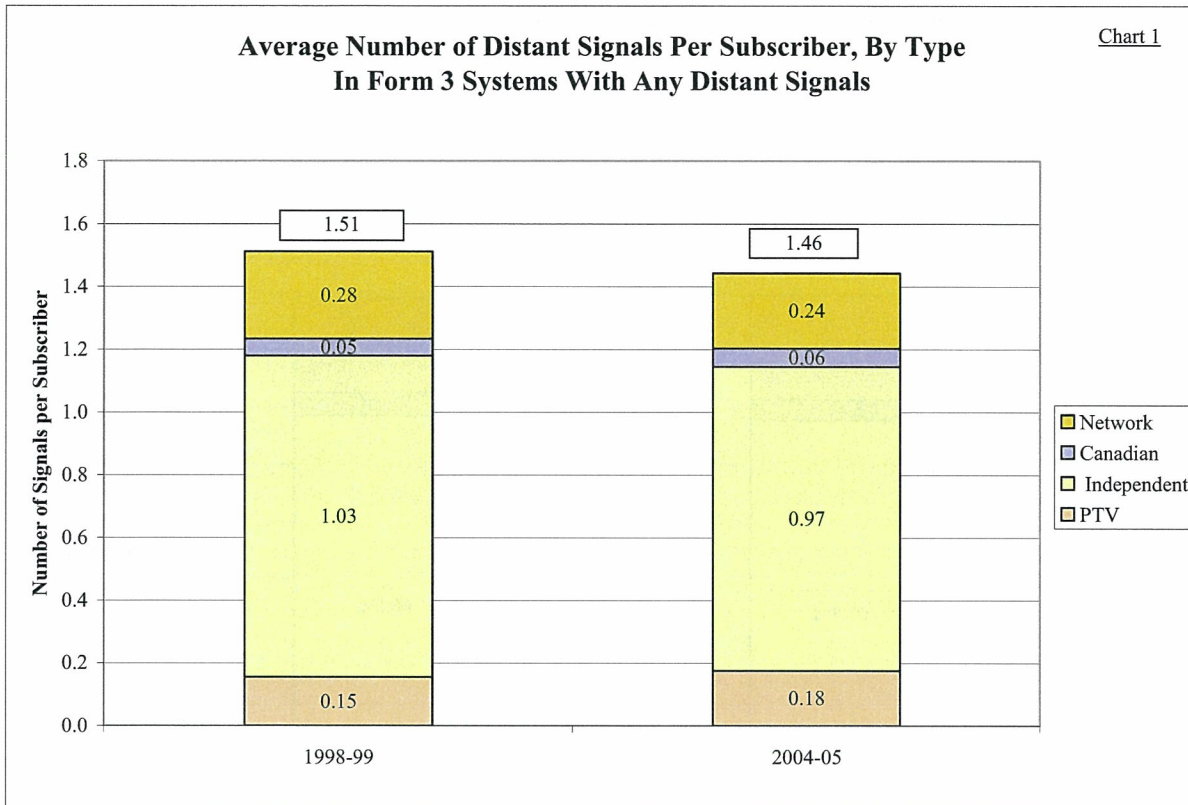
fractional DSE. In 1998-99 and 2004-05, Form 3 systems covering about 30 percent of subscribers imported less than one DSE and paid the minimum fee—about 20 percent carried no distant signals and about 10 percent carried only a fractional DSE.<sup>4</sup> For these systems, the value of a distant signal (or an additional fractional DSE) is apparently less than the value of an alternate use of the bandwidth the signal would occupy. In contrast, those systems that do choose to carry distant signals reveal by their behavior that they value the chosen signals more than alternate uses. As a result, a substantial change in the particular signals cable operators choose to carry can be a meaningful indicator of a change in cable operator demand.

Slightly more subscribers were in cable systems that chose to carry distant signals in 2004-05 (82 percent) than in 1998-99 (76 percent). On average, cable operators that carried distant signals chose to carry about the same number of distant signals per subscriber: 1.51 in 1998-99 and 1.46 in 2004-05. The composition by type of signal also remained relatively the same. For example, the average subscriber with distant signals received 0.15 PTV stations in 1998-99 and 0.18 PTV stations in 2004-05. See Chart 1.<sup>5</sup>

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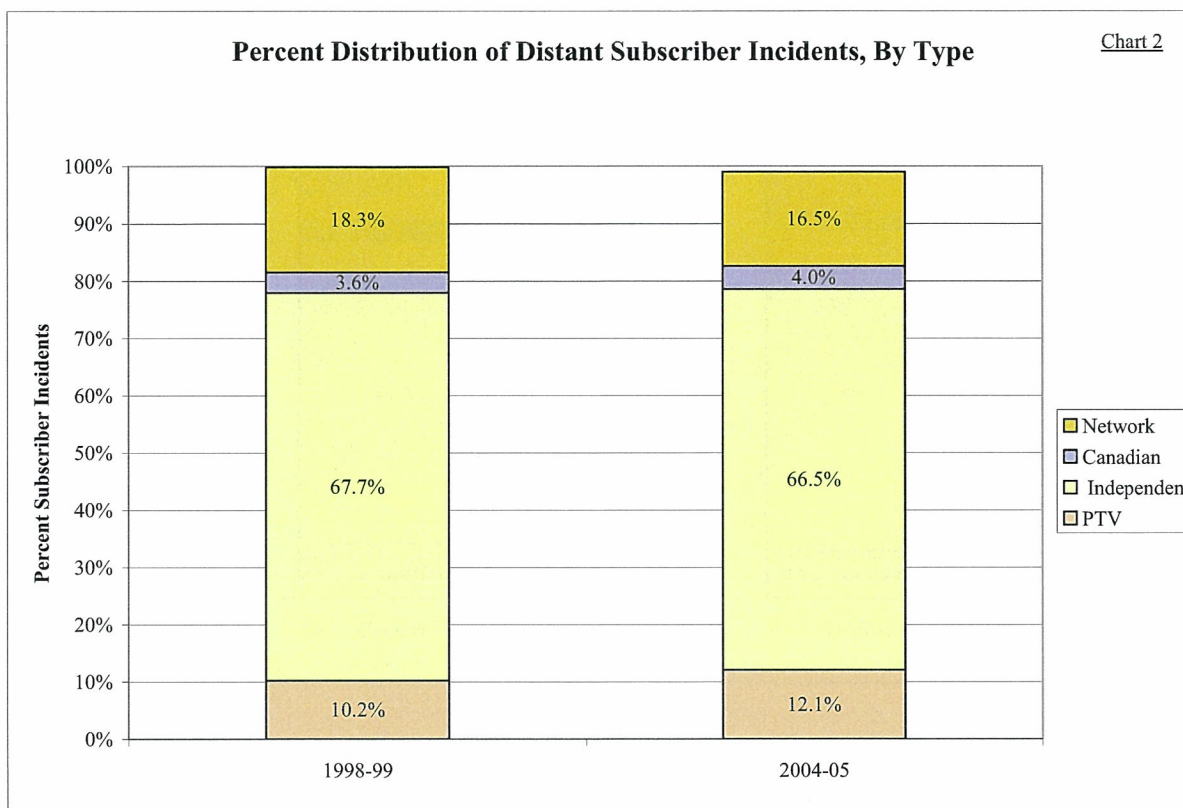
<sup>4</sup> Based on data supplied by Cable Data Corporation (CDC). These and other data in my report represent data supplied by Form 3 systems. Form 3 systems accounted for 91 percent of subscribers in 1998-99 and 94 percent in 2004-05; they paid 96 percent of royalties in 1998-99 and 97 percent in 2004-05. The CDC data used in my analyses are described in the Direct Testimony of Jonda K. Martin, also submitted in this proceeding.

<sup>5</sup> Based on data supplied by CDC. The total includes Low Power and Mexican, which averaged 0.01 signal per subscriber or less.



Another way to see that the composition of the distant signals carried remained approximately the same in 1998-99 and 2004-05 is to look at the percentage distribution of distant subscriber incidents. (One distant subscriber incident is one subscriber receiving one distant signal.) Total distant subscriber incidents increased slightly from 68.0 million in 1998-99 to 70.7 million in 2004-05. The number of distant PTV subscriber incidents increased from 7.0 million in 1998-99 to 8.5 million in 2004-05. PTV accounted for 10 percent of the distant

subscriber incidents in 1998-99 and 12 percent in 2004-05.<sup>6</sup> The percent of distant subscriber incidents for other types of signals was even more stable over the two periods. See Chart 2.<sup>7</sup>



<sup>6</sup> PTV also achieved similarly small increases by other measures. PTV accounted for 0.039 DSEs out of a per-subscriber average of 1.190 DSEs in 1998-99 and 0.044 out of 1.145 in 2004-05. PTV accounted for 3.2 percent of fees generated in 1998-99 and 3.4 in 2004-05. [Data provided by CDC.] Compared to subscriber incidents, however, PTV accounts for a smaller percentage of average DSEs per subscriber and of fees generated due to the arbitrary designation of PTV signals at one-quarter of a DSE. As I explained in an earlier report, fees generated reflect the payment framework of the compulsory license and attribution methods, rather than the value of the programming on the retransmitted stations. See Testimony of Linda McLaughlin, In the Matter of Distribution of the 2000, 2001, 2002, and 2003 Cable Royalty Funds, Docket No. 2008-2 CRB CD 2000-2003, January 30, 2009, PTV 04-05 Ex. 9.

<sup>7</sup> Based on data supplied by CDC. Low Power and Mexican stations accounted for less than 1 percent of subscriber incidents.



### C. Unadjusted Bortz Survey

Each year, Bortz Media & Sports Group, Inc. (Bortz) conducts a survey of a random sample of cable operators.<sup>8</sup> The cable operators are asked how they would allocate a fixed budget among the different programming categories on the distant signals they actually carried in the preceding year. The survey results reflect the collective valuations made by the eligible respondents. Certain potential respondents, however, are deemed ineligible: those that carry distant signals only in the PTV and/or Canadian category. For this reason, Trautman acknowledges that the survey results for PTV and Canadian program categories require adjustment.<sup>9</sup> Nevertheless, the reported survey results can provide useful information about any substantial changes in relative value between 1998-99 and 2004-05 for two reasons. First, the ineligible potential respondents are similar in the two time periods.<sup>10</sup> Second, many of the eligible survey respondents import distant PTV and/or Canadian signals along with independents and network affiliates.<sup>11</sup>

The unadjusted Bortz survey shows no substantial change in cable operators' relative values of the different types of programming. For example, in 1998-99, the surveyed cable operators attributed 2.9 percent of the value of the distant signals they imported to PTV programming in 1998 and 1999; the surveyed group attributed 3.5 percent to imported PTV programming in 2004 and 3.7 percent in 2005.<sup>12</sup> Changes in other categories between 1998-99 and 2004-05 are of similar magnitude. See Chart 3.<sup>13</sup>

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<sup>8</sup> Testimony of James M. Trautman, Bortz Media & Sports Group, Inc., Cable Operator Valuation of Distant Signal Non-Network Programming, June 1, 2009 (Trautman, 2009).

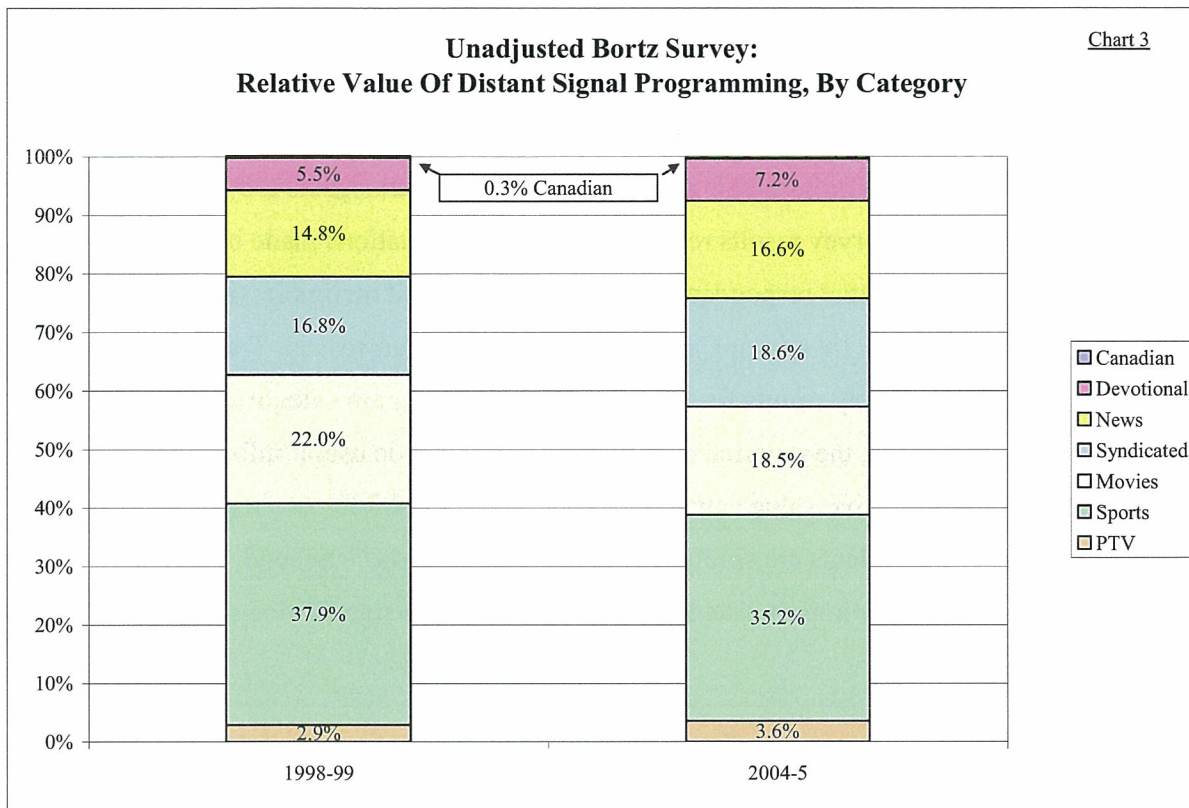
<sup>9</sup> Trautman, 2009, pp. 7-8.

<sup>10</sup> Including the omitted systems that carry only PTV and Canadian distant signals would have increased the size of the eligible sample by 6 to 8 percent in 1998-99 and 4 percent in 2004-05.

<sup>11</sup> For example, in 2004, 59 of the 162 eligible respondents carried distant PTV signals and 11 carried distant Canadian signals (Trautman, 2009, pp. 15-16).

<sup>12</sup> The observed increase is within the range of sampling variation.

<sup>13</sup> Trautman, 2009, p. 6, Table I-2. Detail may not sum due to rounding.



Based on both carriage data and the unadjusted Bortz survey, there was no substantial change in the relative demand of cable operators for imported programming between 1998-99 and 2004-05. The small changes that occurred were generally in favor of PTV programming.

### III. Augmented Bortz Survey Results

Available information allows me to compute the values the 2004 and 2005 Bortz surveys likely would have found had they not excluded from the original samples cable operators that carried only distant PTV and/or Canadian signals. I refer to the larger sample as the augmented Bortz survey.

#### A. Background

The Bortz survey asks cable operators to estimate the relative value of the different programming types broadcast by the particular distant signals they carry. Specifically, the 2004 survey asked:

Now, I would like you to estimate the relative value to your cable system of each type of programming actually broadcast by the stations I mentioned during 2004 [as those your system carried from other cities], other than any national network programming from ABC, CBS and NBC. That is, how much do you think each such type of programming was worth, if anything, on a comparative basis, in terms of attracting and retaining subscribers. We are only interested in [repeat list of distant stations carried].

Assume you had a fixed dollar amount to spend in order to acquire all the programming actually broadcast during 2004 by the stations I listed. What percentage, if any, of the fixed dollar amount would you spend for each type of programming? Please write down your estimates, and make sure they add to 100.<sup>14</sup>

The Bortz survey uses seven program categories, five of which appear on U.S. independent stations and network affiliates—movies, live professional and college sports, syndicated shows, news/public affairs and devotional/religious programming—and two of which are specific to a station type—PTV and Canadian stations.<sup>15</sup>

But for two factors, the Bortz survey results would show how the cable operators themselves would have allocated the compulsory licensing royalties they paid to carry that programming. The first factor is the omission of cable operators selected in the sample but deemed ineligible to respond because they import only PTV or Canadian distant stations. As a result of this omission, the value given for PTV and Canadian programming is a floor.<sup>16</sup> Had these omitted operators been included, they would have been restricted to “dividing the value” among only one programming category, PTV or Canadian, respectively. As a result, it is self-evident what these omitted operators would have replied, if they had been included and had followed the survey instructions: those that carried only PTV would be required to say 100 percent for PTV programming and, similarly, those that carried only Canadian stations would be

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<sup>14</sup> Trautman, 2009, Appendix B, 2004 System Operator Programming Questionnaire, 4a. A similar question was asked for 2005.

<sup>15</sup> The programming category specifically includes all programming on these station types. For PTV the category is: “PBS and all other programming broadcast during 2004 by U.S. noncommercial station \_\_\_\_ [the PTV station(s) carried by the cable operator].”

<sup>16</sup> Trautman, 2009, pp. 7-8; Report of the CARP to the Librarian of Congress, In the Matter of the Distribution of 1998 and 1999 Cable Royalty Funds, Docket No. 2001-8 CARP CD 98-99, October 21, 2003, pp. 25-26.

required to say 100 percent for programming on Canadian stations.<sup>17</sup> I added these omitted systems back into the Bortz survey. The results of the augmented Bortz survey provide an estimate of the PTV value, not a floor.

The second factor is the implied inclusion of certain noncompensable programming. In general, two categories of programming contained on some imported signals are not compensable: (1) ABC, CBS and NBC network programming and (2) certain programming, particularly movies, syndicated and devotional programming, not retransmitted from the programming broadcast by the television station WGN but inserted into the satellite-delivered WGN signal.<sup>18</sup> The survey instructs respondents to ignore the value of the noncompensable network programming but not the value of the noncompensable WGN programming. As a result, the values cable operators that import WGN ascribe to movies, syndicated series and devotional programming are likely to include both compensable and noncompensable programming, which would overstate the values of the compensable programming in these categories.

## **B. Calculation of Augmented Bortz Survey Results**

I received information identifying the cable operators picked to be surveyed but excluded because they carried only PTV or Canadian distant signals. I recalculated the survey results, assuming that these systems were eligible. I further assumed that these omitted systems would have a response rate similar to those that were eligible and that they would have followed the

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<sup>17</sup> An omitted cable operator with distant PTV and Canadian stations, but no other distant stations, would have been asked to divide the value among the two programming types. For such cable operators, the split in the relative value between PTV and Canadian station programming would not be self-evident. No such cable operators were omitted from potential respondents in 2004 and only two such operators were omitted in 2005.

<sup>18</sup> Statement of Richard V. Ducey, June 1, 2009, also submitted in this proceeding.

survey instructions. A simplified version of the recalculation for 2004 is set out below. It produces an augmented survey result of 6.8 percent for PTV in 2004.<sup>19</sup>

- 162 respondents, 64.5 percent of those eligible, gave PTV a relative value of 3.5 percent.
- Nine systems were drawn in the original sample but deemed ineligible because they carried only PTV distant signals. Had they been eligible, we would expect 64.5 percent of the 9 to respond, or 5.8 respondents, all of which would have assigned PTV stations 100% of the relative value.
- One system was in the original sample but was ineligible because it carried only a Canadian distant station. Had it been eligible, we would expect 64.5 percent of the 1 to respond, or 0.6 respondents, which would have assigned PTV stations 0% of the relative value.
- $[(162 \times 3.5\%) + (5.8 \times 100\%) + (0.6 \times 0\%)] / [162 + 5.8 + 0.6] = 6.8\%$

The actual process is more complicated due to the stratification and weighting process used by the Bortz survey. (See Appendix 2.) Nevertheless, the simplified result is similar to the augmented survey result I obtained from the more complete process: 6.2 percent for PTV.

I undertook the same steps for the 2005 survey, with one exception. Among the original sample of cable operators, there were not only those deemed ineligible because they carried only PTV distant signals (seven systems) or only Canadian distant signals (one system), but also two

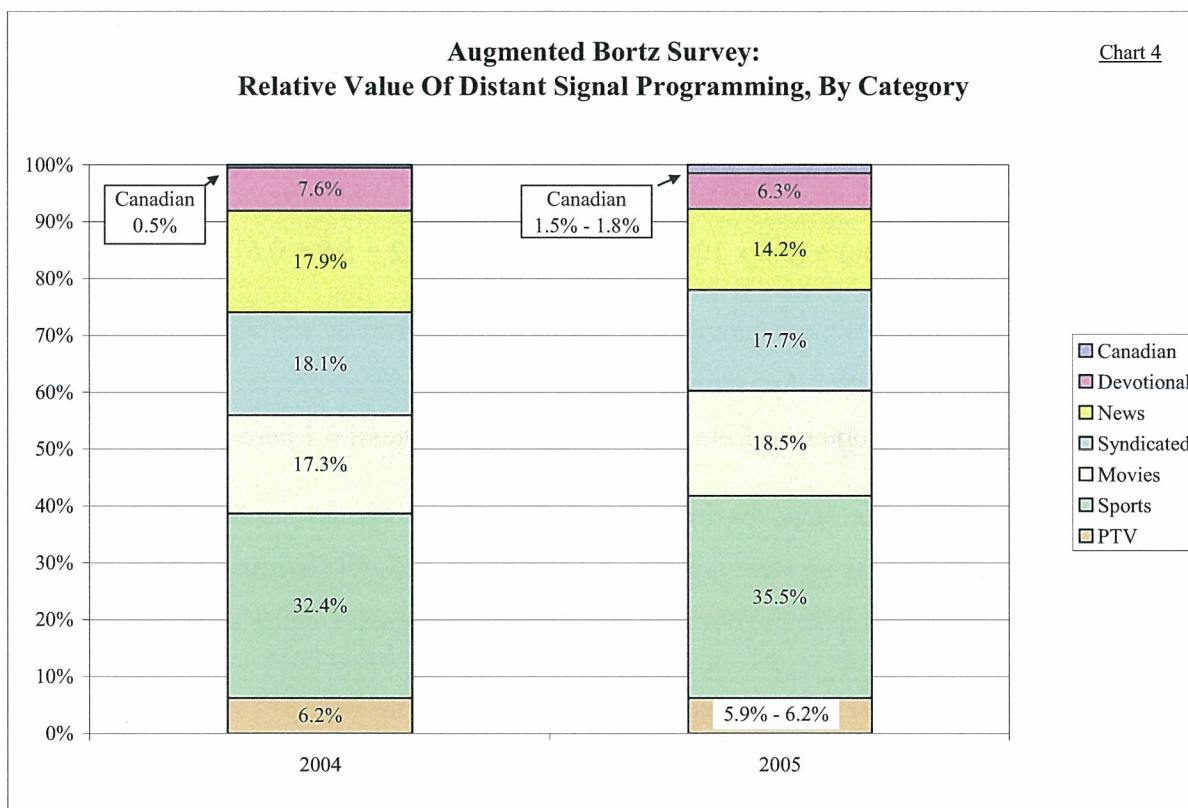
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<sup>19</sup> The relatively small size of the augmented result for PTV, like the size of the original PTV result, reflects the fact that only about 30 percent of Form 3 systems and about 25 percent of Form 3 subscribers receive a distant PTV signal (based on CDC data). The value given to PTV by respondents to the original 2004 survey for systems that carried PTV was 11 percent, a value higher than those given to Canadian and devotional programming, but less than other programming types (Trautman, 2009, p. 16, Table II-2). The augmented survey, if restricted to those that carried distant PTV stations, would give PTV a value of about 19 percent in 2004, a value in the same range as news, syndicated programming and movies, and greater than the values given to devotional and Canadian programming.

It is not surprising that distant PTV programming is highly valued by those that carry it. In 2004-05, virtually all subscribers received a local and/or distant PTV signal. A substantial portion of those with a distant PTV signal had no local PTV signal. In 2004-05, 27 percent of Form 3 subscribers with a distant PTV station had no local PTV station. [Data provided by CDC.] For such subscribers, a distant PTV signal is the only way they can receive PTV programming.

ineligible systems that carried both PTV and Canadian distant signals. Because it is unclear how respondents in the last group would have split their relative values between PTV and Canadian station programming, I used a range of responses: the extremes of 100 percent PTV/0 percent Canadian and 0 percent PTV/100 percent Canadian. My estimate for the augmented Bortz survey in 2005 is a range depending on the assumed answer of the last group: 5.9 to 6.2 percent.

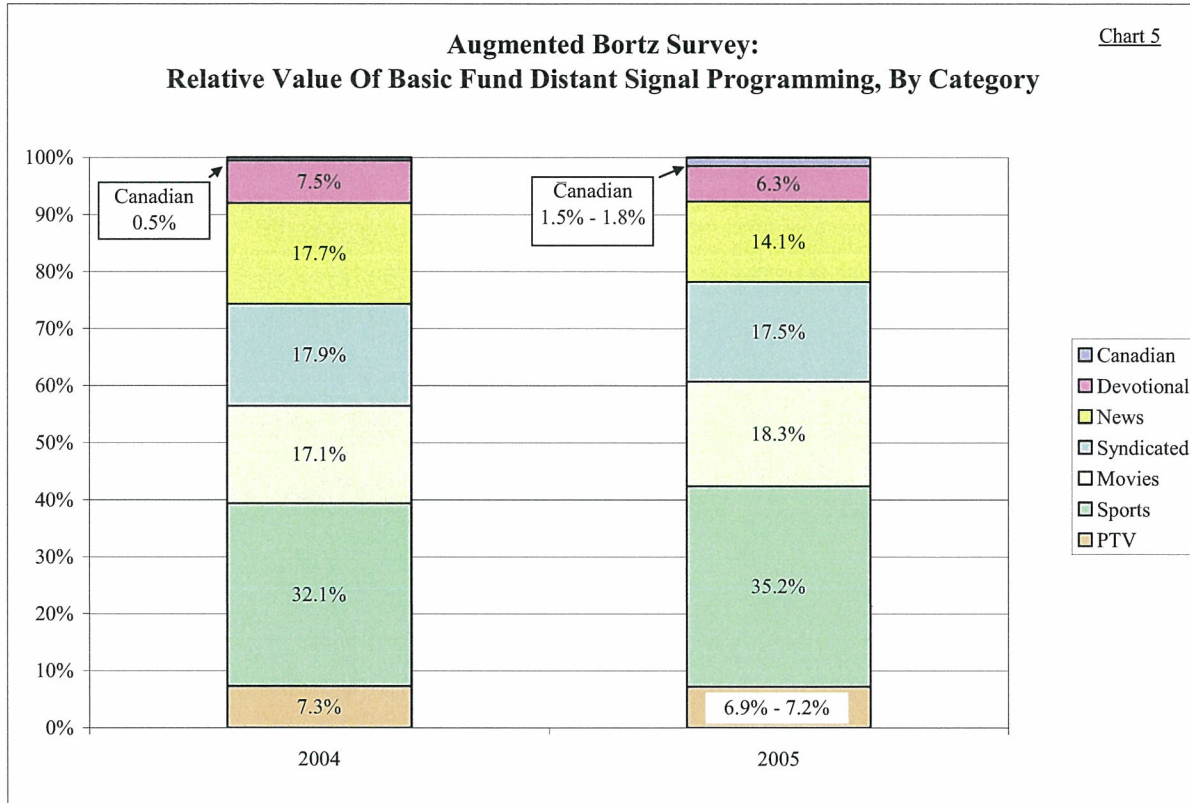
When the ten omitted systems that carried only PTV and/or Canadian distant signals are added to each year’s survey, the estimated values for PTV and Canadian programming increase and the estimated values for the five other categories decrease. The augmented results for 2004-05 for each of the seven programming categories are summarized on Chart 4.<sup>20</sup>



Both the unadjusted and augmented Bortz survey results show the percentage value of all royalties —basic, 3.75 and syndex royalties—paid by the surveyed cable systems that the respondents assign to each programming type. Since PTV receives payments from only the

<sup>20</sup> Methodology and sources are described in Appendix 2. Detail may not sum due to rounding.

basic fund, an adjustment to the augmented survey results is needed to produce PTV's share of the basic fund.<sup>21</sup> This adjustment divides the augmented PTV results by the percent of all Form 3 royalties in the basic fund: 85.0 percent in 2004 and 85.9 percent in 2005.<sup>22</sup> The adjusted PTV results equal about 7 percent. See Chart 5.<sup>23</sup>



<sup>21</sup> Report of the CARP to the Librarian of Congress, In the Matter of the Distribution of 1998 and 1999 Cable Royalty Funds, Docket No. 2001-8 CARP CD 98-99, October 21, 2003, p. 26, fn. 10.

<sup>22</sup> Based on data provided by CDC.

<sup>23</sup> Based on Chart 4 and data supplied by CDC. Since only syndicated programming participates in the syndex fund, the other categories are also adjusted for their fund participation. (The nonsyndex adjustment factor, 99.97 percent in 2004 and 2005, produces virtually no change.) All categories other than PTV are adjusted for the increase in PTV's share. Detail may not sum due to rounding.

## **IV. Conclusion**

In summary, I conclude:

- There was no major change in the factors that would affect relative marketplace value in 2004-05. The relative number of subscribers receiving distant PTV and other signals and the Bortz survey results indicate that there was no decline in the demand for imported PTV programming. In fact, there were slight increases in these values.
- The augmented Bortz survey, which includes systems that carried only PTV or Canadian distant signals, would have been expected to find that cable operators attributed to PTV about 6 percent of the fixed dollar amounts they spent on the distant signals they actually imported to attract and retain subscribers in 2004-05.



**Before the  
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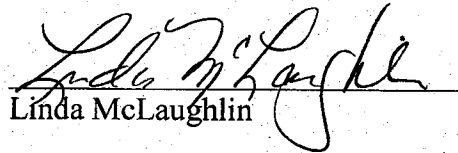
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**In the Matter of** )

**Distribution of the** )  
**2004 and 2005** )  
**Cable Royalty Funds** )  
\_\_\_\_\_ )

**Docket No. 2007-3 CRB CD 2004-2005**

**DECLARATION**

I, Linda McLaughlin, declare under penalty of perjury that the testimony of Linda McLaughlin presented in the 2004-2005 Cable Copyright Royalty Distribution Proceeding is true and correct to the best of my knowledge, information and belief.

  
Linda McLaughlin

Executed on: 5/29/2009



**Before the  
COPYRIGHT ROYALTY JUDGES  
Washington, D.C.**

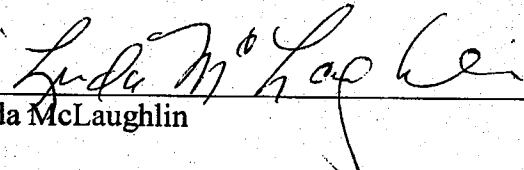
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Distribution of the 2004-2005  
Cable Royalty Funds

Docket No. 2007-3 CRB CD 2004-2005

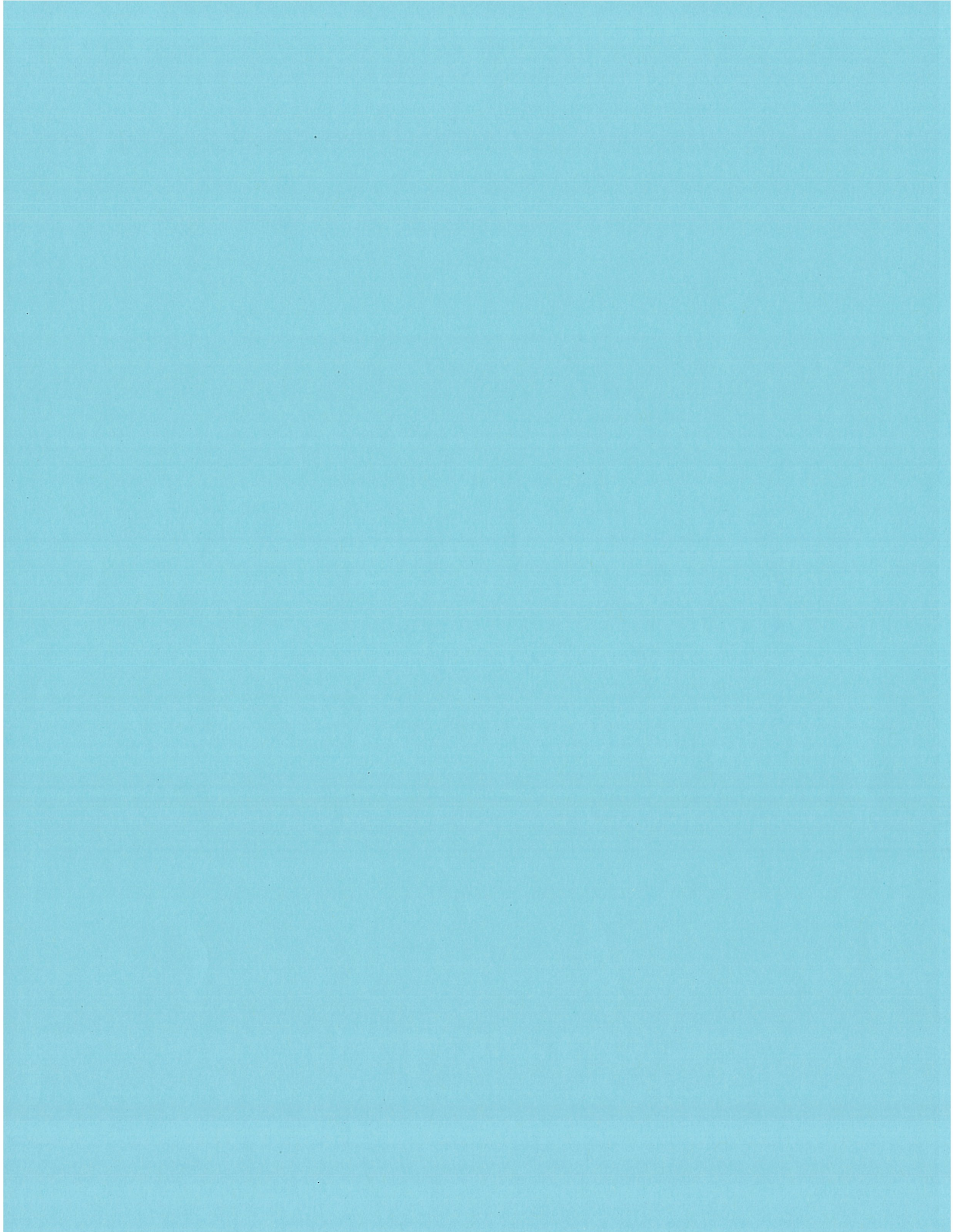
**DECLARATION**

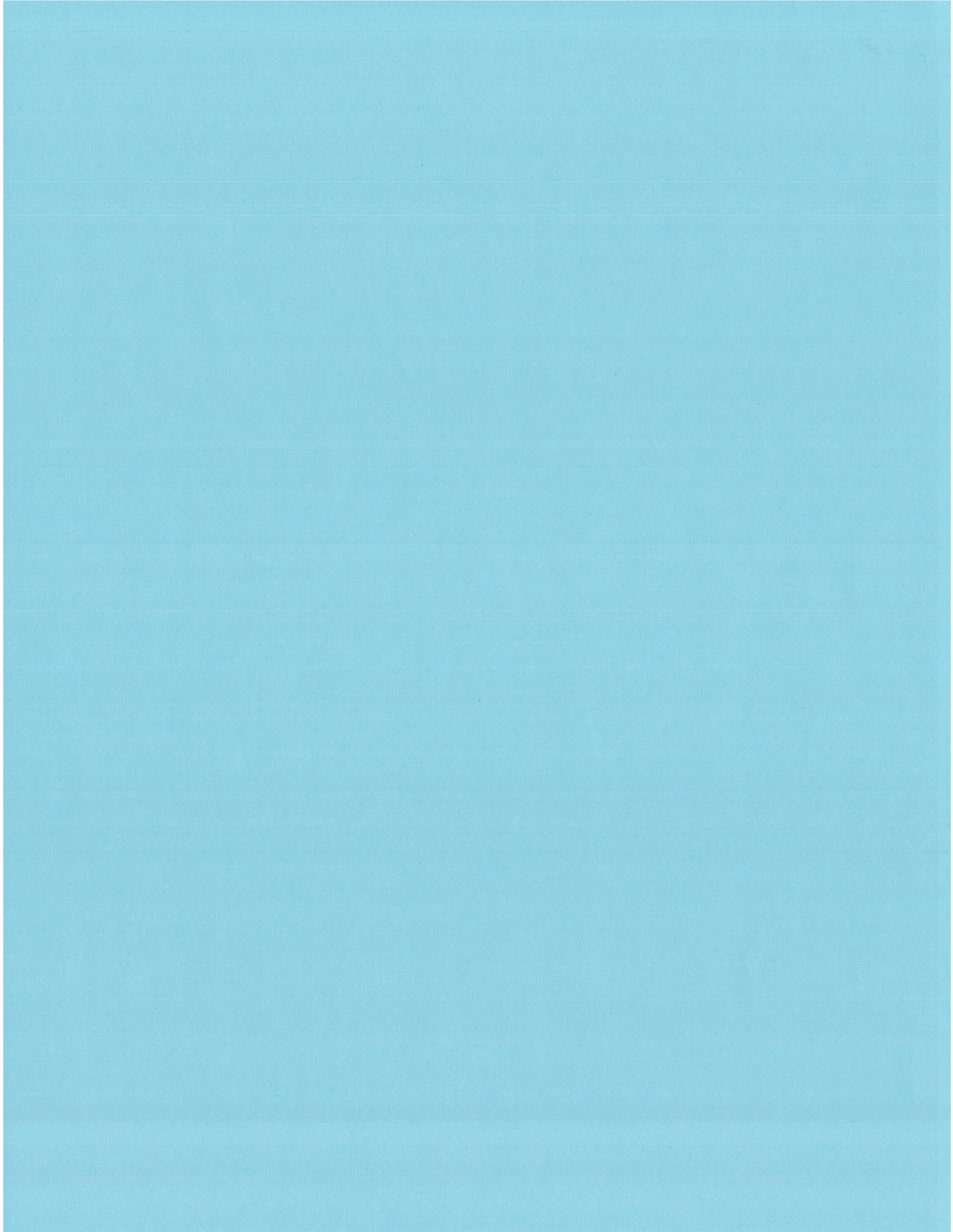
I, Linda McLaughlin, declare under penalty of perjury that the Testimony of Linda McLaughlin presented in the 2004-2005 Cable Copyright Royalty Distribution Proceeding, as corrected September 30, 2009, is true and correct.

  
\_\_\_\_\_  
Linda McLaughlin

Executed on: September 30, 2009







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**LINDA McLAUGHLIN**  
**SPECIAL CONSULTANT**

Ms. McLaughlin specializes in antitrust and trade regulation. She has prepared studies of relevant product and geographic markets, market structure and performance, the impact of mergers and acquisitions, vertical and horizontal arrangements, and pricing and purchasing practices. These studies have focused on various consumer and producer industries, with particular emphasis on media and insurance.

Her work in the media and entertainment industries also includes: analyses of proposed US Federal Communications Commission rules concerning cable and broadcast television; pricing of music copyrights and retransmitted television stations rights; evaluation of motion picture talent contracts; the impact of a new magazine introduction; the reasonableness of cable, home satellite, and recorded music projections; and the value of cable systems, cable networks, and newspaper distributors.

In the area of insurance, she has also studied the effect of state rate regulation and deregulation of large commercial transactions, as well as the causes of the liability insurance crisis and its effect on reinsurers.

In addition, Ms. McLaughlin has performed studies of impact and damages in connection with antitrust, contract, trademark, and other litigation. The firms involved in these studies have included: manufacturers of consumer electronics products, fertilizers, windows, paint, and pharmaceutical products; distributors of chemicals, steel, beverages, and telecommunications services and equipment; tobacco growers; and satellite and internet service providers.

## Education

### University of Pennsylvania

M.A., Economics, 1970

### Marquette University

B.S., *cum laude*, Mathematics, 1968

## Professional Experience

1974-

### NERA Economic Consulting

Special Consultant (since 2009)

*Specialization:* antitrust and trade regulation, intellectual property, economic damages.

*Primary industries studied:* media and entertainment, including broadcast, cable and satellite television, broadcast and satellite radio, motion pictures, recorded music, music publishing, advertising, newspapers, magazines and internet; and property-casualty and health insurance.

*Other industries studied:* telecommunications, photographic supplies, consumer electronics products, fertilizers, paint, windows, window coverings, pharmaceutical products, building products, hardware, chemicals, glass, steel, breakfast cereal, beverages, and tobacco.

1970-1974

### Hofstra University

Instructor

Taught introductory economics, intermediate microeconomics, and the application of mathematics to economics.

## Professional Activities

Member, American Economic Association and Committee on the Status of Women in the Economics Profession.

## Testimony, Reports, and Publications

*IDT Telecom, Inc., et al. v. CVT Prepaid Solutions, Inc., et al.* (D.N.J.), a Lanham Act case. Report, April 2009; deposition testimony, May 2009.

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*D. Lamar DeLoach, et al. v. Philip Morris Companies, Inc., et al.* (M.D.N.C.), an antitrust case. Report, October 2003; deposition testimony, October 2003.

*Trowbridge, et al. v. Sony Music Entertainment, Inc., et al.* (D. Me.), an antitrust case. Report, July 2003; supplemental report, October 2003; addendum, November 2003.

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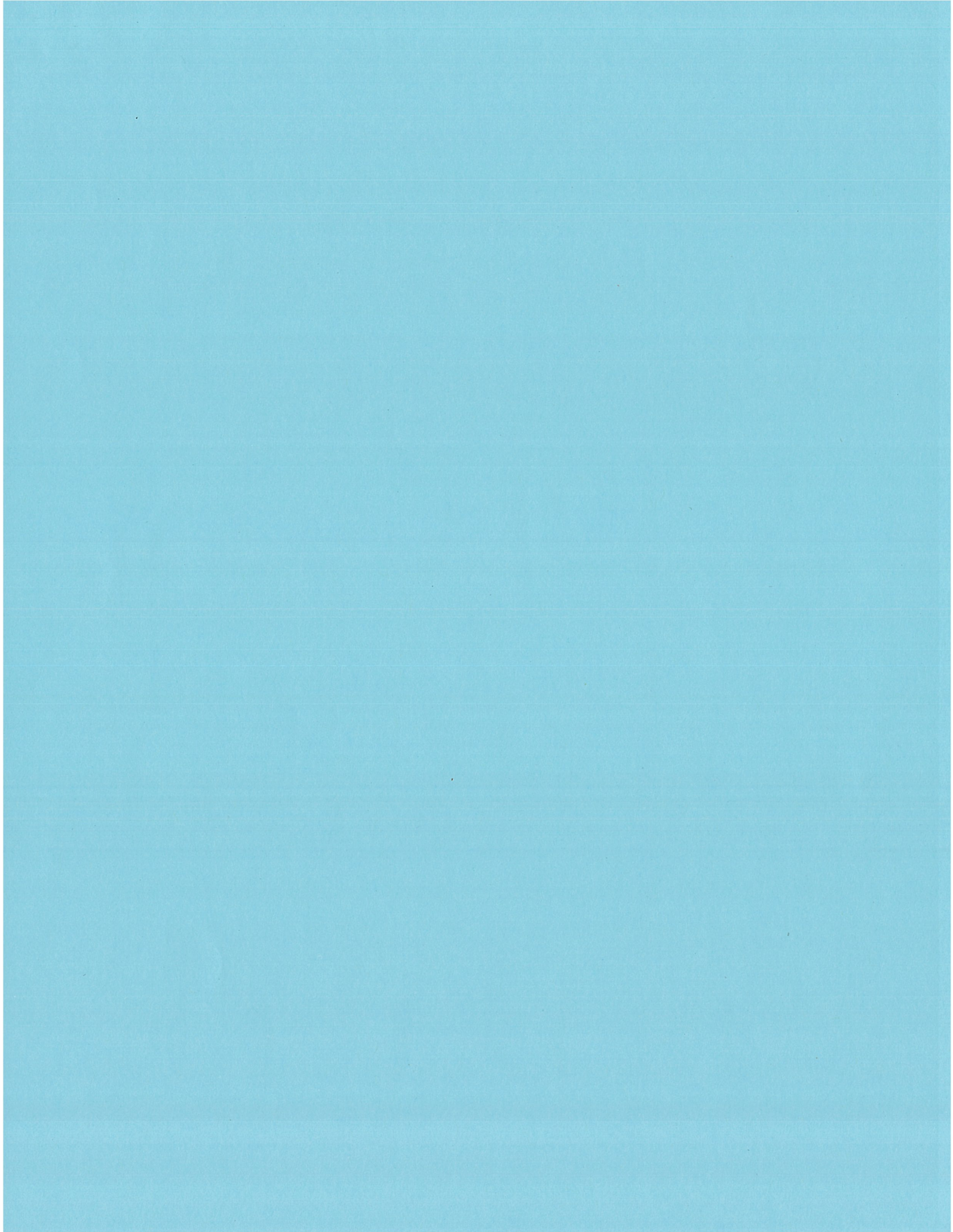
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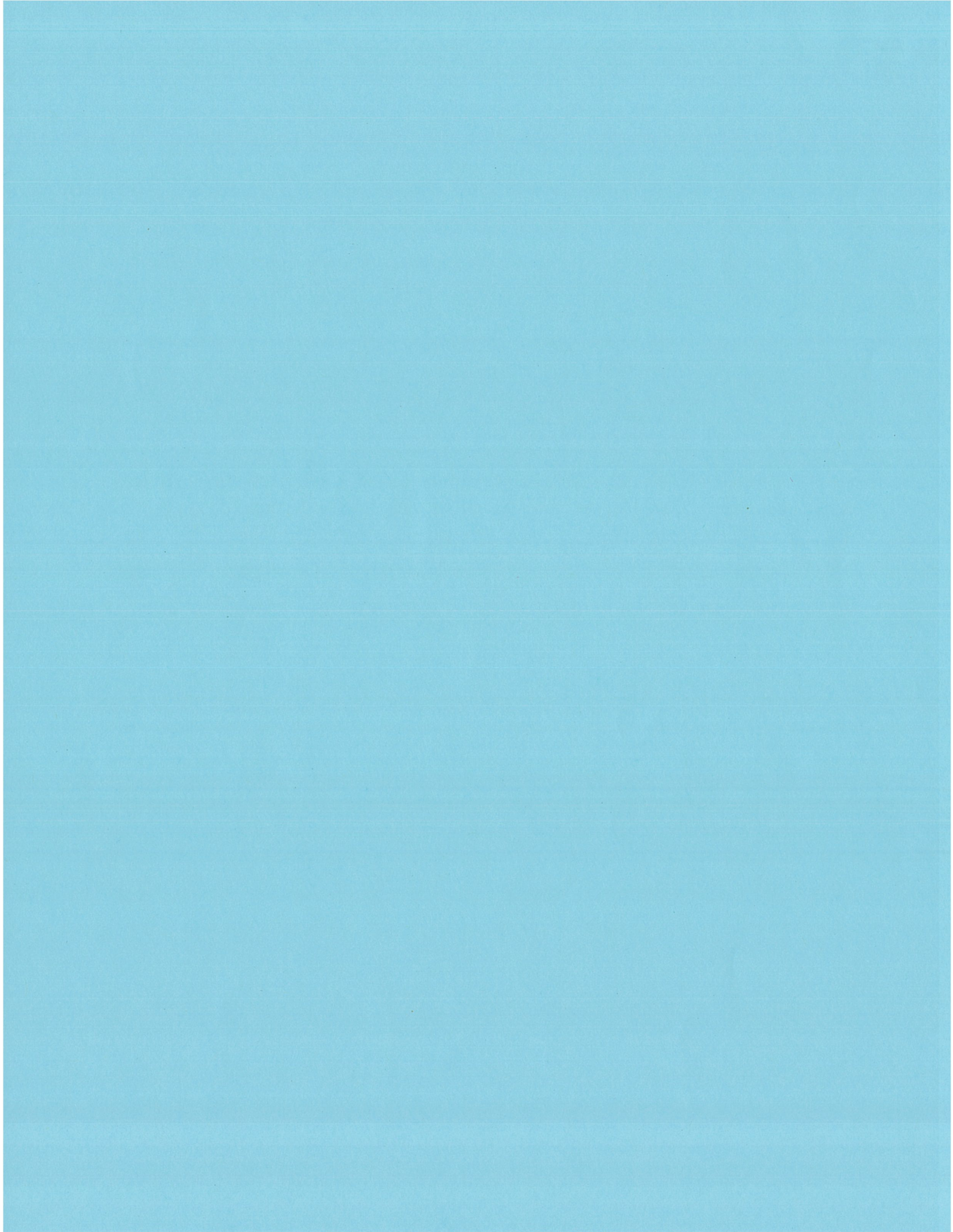
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May 2009





## Appendix 2

### Augmented Bortz Survey Sources and Methods

The Bortz survey draws a stratified random sample of cable operators, with the stratification into four groups (or strata) based on the size of the system's cable royalties. It then eliminates ineligible systems (for example, those carrying no distant signals and those carrying only PTV or Canadian distant signals)<sup>1</sup> and attempts to interview the remaining, eligible systems. Interviews were completed with 64.5 percent of the eligible sampled systems in 2004 and with 68.1 percent of those in 2005.<sup>2</sup> In order to arrive at survey estimates from the interview responses concerning valuation by program category for the total population (including those interviewed and not interviewed), Bortz used a ratio estimation methodology that weights responses based on (1) the total royalty of each respondent's system, (2) the total royalties of all respondents' systems in that same stratum, and (3) the total royalties of all (sampled and nonsampled) systems in that stratum.<sup>3</sup>

I obtained the augmented survey results based on the following data: for each of the ten omitted systems that carried PTV and/or Canadian distant signals in each year, 2004 and 2005, I received information, including the royalty, the stratum and the type of signals carried. I also received, from CDC, summaries of the original Bortz survey results for each of the four strata for 2004 and 2005, including the number of respondents, their royalties and their total value for each of the program categories.<sup>4</sup> In addition, Trautman, 2009 (p. 46, Table A-1) supplied the eligible sample and the distribution of total royalties for the four strata.

I obtained the augmented survey results by undertaking the following steps analogous to the original Bortz survey:

First, I determined which of the ten systems drawn in the original Bortz survey in 2004 and 2005 but ineligible due to carrying only PTV and/or Canadian distant signals would be likely

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<sup>1</sup> Trautman, 2009, p. 46, Table A-1.

<sup>2</sup> Trautman, 2009, pp. 47-48.

<sup>3</sup> Trautman, 2009, pp. 49-50.

<sup>4</sup> These summaries gave a single figure for each programming category in a particular strata; individual responses were not provided.

respondents. The ten systems covered all four strata. To determine the likelihood of each responding, I used the response rates specific to each stratum as the probability of an omitted system in an individual stratum being included in the overall results.<sup>5</sup>

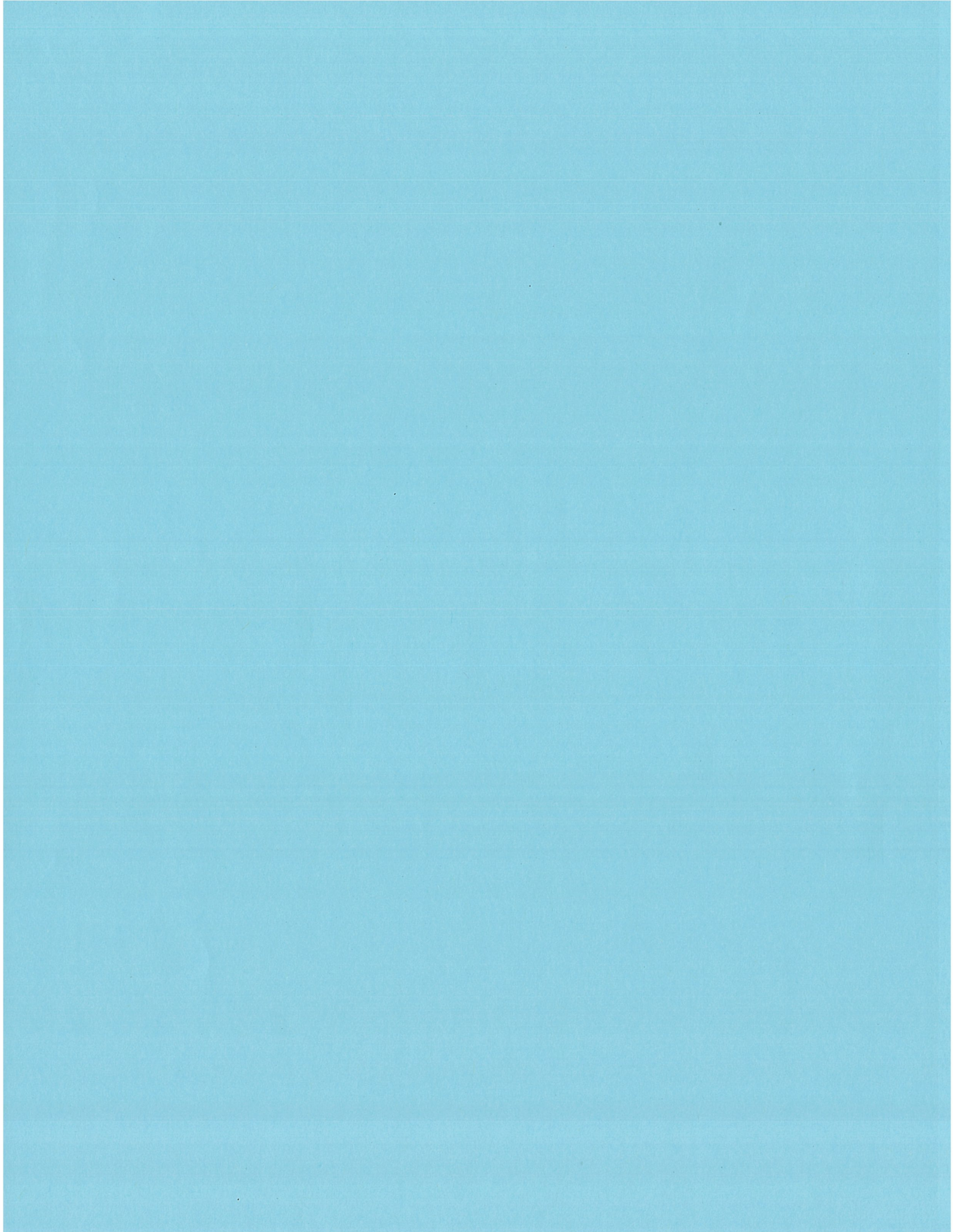
Second, I determined the responses of each system to the valuation question. For the excluded systems importing only PTV signals or only Canadian signals (all ten of the omitted systems in 2004, and eight of the ten in 2005), each was assumed to have 100 percent of its fixed dollar amounts allocated to PTV or Canadian, in accordance with the respective PTV or Canadian distant signal the system carried and 0 percent for all other program categories. In 2005, two systems carried both Canadian and PTV. I have assumed different distribution amounts for these systems to represent the extremes (i.e. 0 percent Canadian and 100 percent PTV, or 100 percent Canadian and 0 percent PTV). These extremes represent the ceiling and floor of possible outcomes for these systems.

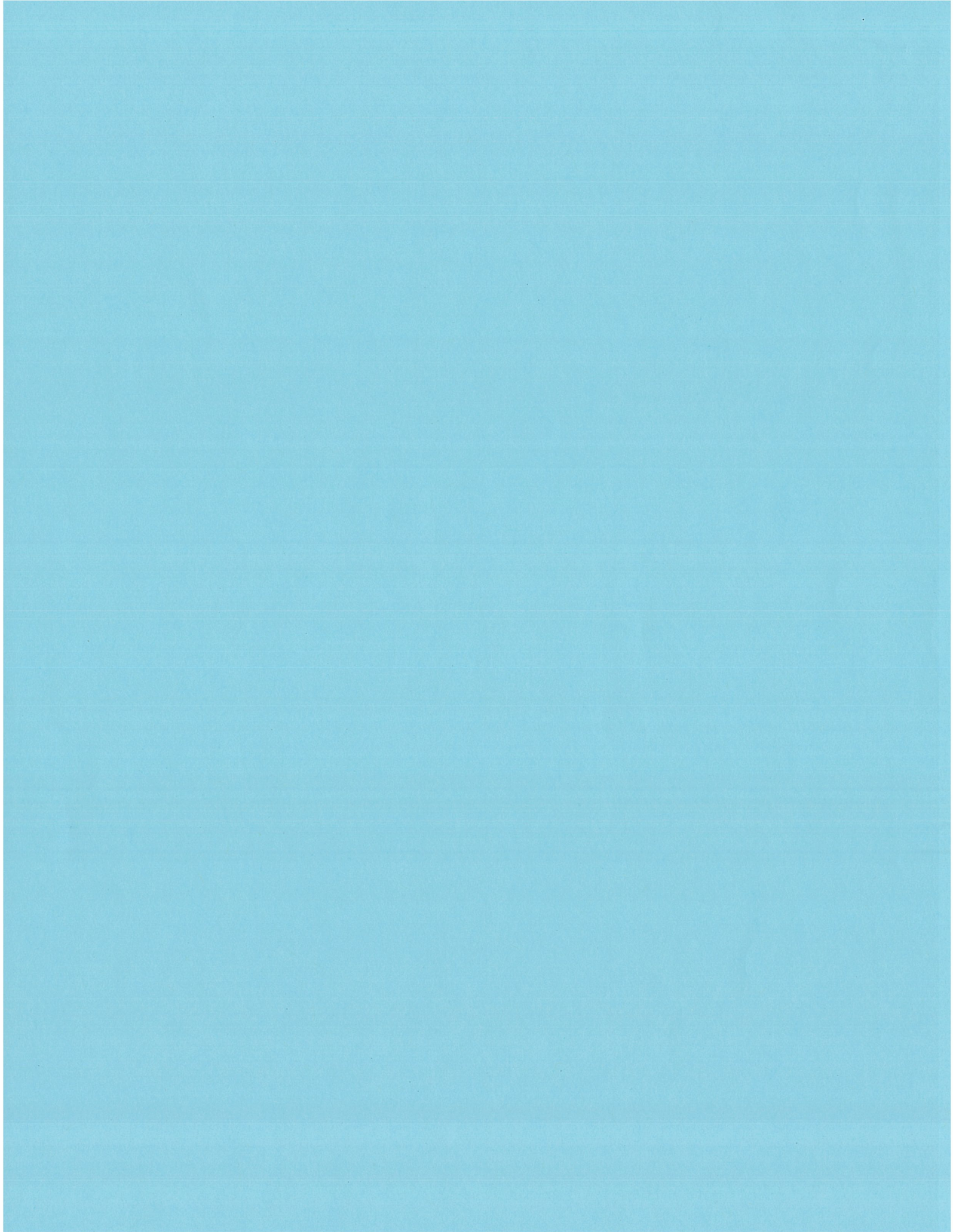
Third, I calculated the likely augmented Bortz survey results considering the following factors: (1) the probability of responding for each omitted system in each stratum, (2) the valuation response for program category x for the omitted system in each stratum, (3) the valuation response for program category x for the original respondents (as a group) in each stratum, (4) the royalty weight of each omitted system in each stratum, (5) the royalty weights for the original respondents (as a group) in each stratum, (6) the royalty weights for total royalties of all (sampled and nonsampled) systems in that stratum. The calculation is made according to the formula for the total value of program category x in the Trautman report (Trautman, 2009, pp. 49-50) with the omitted systems given both a probability weight and a royalty weight.

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<sup>5</sup> I considered running a simulation, that is, a series of independent, random trials such that the share of trials with the system included would match the overall probability for its stratum. Over a large number of trials, this method would produce a result similar to the estimation method used and would not add precision.







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**In the Matter of**

**Distribution of the  
2000, 2001, 2002, and 2003  
Cable Royalty Funds**

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**Docket No. 2008-2 CRB CD 2000-2003**

**Testimony of  
Linda McLaughlin**

**January 30, 2009**

## **I. Qualifications and Summary**

I am an economist and a Senior Vice President of National Economic Research Associates, Inc. I have conducted research on entertainment and media industries for over 30 years. I have analyzed marketplace prices paid for copyright licenses, reasonable rates for such licenses, and the distribution of fees collected to individual rights owners in a variety of media, including cable networks, broadcast stations, television programs, motion pictures, books, music compositions and recorded songs. I have submitted reports to and testified before the Copyright Arbitration Royalty Panel (CARP) and Copyright Royalty Judges concerning the compulsory license fee for satellite-retransmitted broadcast stations, the distribution of satellite royalty funds, and the costs and revenues of the record labels affiliated with the major U.S. record companies. In addition, I have submitted reports to the Federal Communications Commission and the Federal Trade Commission, and have testified before state and Federal courts and arbitrators concerning entertainment market issues. A detailed statement of my qualifications is attached as Exhibit 1.

I understand that Canadian Claimants assert that the relative value of the distant Canadian stations imported by cable operators in 2000-03 is no less than the portion of fees generated by the importation of the Canadian signals during that period. In this context, counsel for the National Association of Broadcasters and the Public Broadcasting Service asked me to address two issues: how marketplace values for cable-retransmitted broadcast programming are determined and whether fees generated for retransmitting particular stations reflect relative marketplace values.

In summary, I conclude:

- Cable retransmission is a secondary market. Relative marketplace values in such markets are based on relative programming demand.
- Fees generated reflect the payment framework of the compulsory license and attribution methods, not the relative demand for the programming on the retransmitted stations.

## II. Marketplace Prices and Quantities

According to previous CARP proceedings and related court decisions, the standard for determining the distribution of the royalties for cable-retransmitted distant signals among the claimant groups that supply the compensable programming is relative marketplace value. The hypothetical marketplace negotiation over such programming would occur between cable operators and broadcasters (as intermediaries for copyright owners) for the rights to retransmit entire broadcast signals.<sup>1</sup> Such a framework is appropriate to determine marketplace value because it reflects the nature of the decisions actually being made. Cable operators decide whether to retransmit an entire broadcast signal or instead offer a cable network or devote the bandwidth to an alternate use. If they do retransmit a distant signal, they choose which one.

Cable retransmission of distant signals is a secondary market. Supply and demand set prices and quantities in primary market negotiations, but only demand is relevant in secondary market negotiations. Secondary markets are common for entertainment content. Once the program, music or other content is created for a primary market, it can be resold in a secondary market. Previously created content is available for licensing in secondary markets, e.g., old TV programs are available to cable networks and old songs are available for TV commercials, as long as the price is greater than the transaction costs.<sup>2</sup> Transaction costs may limit the availability of rights licensing, but they do not affect the price of the licensing agreements that are concluded.<sup>3</sup> Neither does the original cost of production affect those prices. The price is determined by demand.

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<sup>1</sup> CARP Report, Cable Royalties for the Years 1990-92, May 31, 1996, pp. 22-24; Report of the CARP to the Librarian of Congress, In the Matter of the Distribution of 1998 and 1999 Cable Royalty Funds, Docket No. 2001-8 CARP CD 98-99, October 21, 2003, pp. 9-11.

<sup>2</sup> This does not mean that any revenue from the secondary market has no effect on the supply of programming. Expected revenues from the secondary market can be used to fund programming. Where secondary revenues become large relative to primary market revenues (e.g., motion pictures), expected secondary revenues can also influence the type of programming, that is, programming likely to generate more total revenues from the primary and secondary markets combined. That is not the case with respect to cable retransmission royalties, which are small relative to other program rights revenues.

<sup>3</sup> Where the seller bears the distribution cost—unlike the case of retransmitted programming—the additional cost of distribution is a relevant supply-side consideration. For example, the cost of clearing DVD rights, manufacturing a DVD, and getting it placed in stores relative to the expected DVD demand explains why some old movies are not available on DVD.

The hypothetical negotiations, then, to determine relative marketplace value are focused on the demand by the cable operators for the compensable programming in the distant signals they choose to import. Demand for distant signals depends on the prices and quality of the available substitutes—the local stations and cable networks, the additional cost (if any) of bringing the distant station to the cable system headend, and the income and taste of the cable system subscribers and potential subscribers. Among other factors, differing distant signal characteristics, local station availability and subscriber taste suggest that there will not be a single marketplace value (whether in total, per subscriber, or as a percentage of subscriber fees) for each signal imported by each cable operator. Even the same system will have a different marketplace value for different signals. For example, a system may retransmit one partially distant signal only for the purpose of carrying the same broadcast stations and other channels throughout its system, in order to save on marketing and technical cost, and retransmit another distant station to bring workplace news to those who commute to a nearby (but distant by signal designation) city. The system is likely to value the commuter-desired signal more than the system-cost-saving signal.

### **III. Demand for Imported Distant Signals Versus Compulsory License Payments**

The fees generated by cable retransmissions of distant broadcast signals depend on the payment rules, not the relative marketplace value of the retransmitted signals. The payment rules are arbitrary; they were established by legislative compromise, not relative marketplace value.<sup>4</sup> As a result, relative fees generated would not be expected to reflect relative marketplace value.

Even if each distant signal carried by a cable system were valued, in absolute terms, at more than was paid for it, the relative marketplace value of a particular signal applied to the

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<sup>4</sup> See, e.g., Copyright Royalty Tribunal, Adjustment of the Royalty Rate for Cable Systems, Docket No. CRT 81-2, November 19, 1982, 47 FR 52146 at -47, citing Jack Valenti's testimony that "the royalty fee schedule [since adjusted for inflation] was not based on any supporting data or economic analysis, but was the product of political compromises and of Congress's perception of the economic needs of the then [1976] infant cable industry," and at -54 the Tribunal's conclusion that "the current statutory rates [since adjusted for inflation] could not be considered those that would result from full marketplace conditions if the compulsory license did not exist. The rates were established as a legislative compromise, they are arbitrary, and they were intended to require only a minimum payment on the part of cable operators [footnote omitted]."

royalties collected could well be lower than the fees it generated. Suppose there are only two types of signals: higher value and lower value, with relative marketplace values at 75 and 25, respectively, but both types generate the same fees: 20 for each group. While both have marketplace values in excess of fees generated, the excess is large for one group and small for the other. If the 40 collected for the two groups were distributed according to relative marketplace value, the higher value signals would receive 30 and the other group 10. Based on relative marketplace value, the higher value group receives more than was paid for it, while the lower value group receives less than was paid for it.

An examination of the demand conditions and the payment rules shows not only that there is no relationship between the payment rules and the absolute or relative demand for different types of signals but also that, in particular circumstances, the payment rules produce higher fees for signals of lower value. Further, fees attributed to a signal are largely fees allocated to the signal, not fees generated by the signal.

The compulsory license requires payments of particular royalty percentages of the cable operators' receipts for the tier or tiers that include the distant signals. In general, the receipts are the monthly rate for that tier multiplied by the number of subscribers, and multiplied by six months to reflect the semiannual payment period:

$$\text{Specified Royalty \%} \times \text{Tier Rate} \times \text{Tier Subscribers} \times 6$$

For large cable systems, called Form 3 systems, which account for the vast majority of the subscribers and royalties paid,<sup>5</sup> the royalty percentages vary based on the number and type of imported signals.<sup>6</sup> Four aspects of the payment rules are particularly relevant:

- Depending on the characteristics of the cable operator and the retransmitted station, some stations were permitted to be retransmitted by certain cable operators under rules prevailing prior to mid-1981, while others were not. Since 1981, both categories can be retransmitted under the compulsory license but at different royalty percentages. A basic fee under one percent is charged for the formerly permitted

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<sup>5</sup> Form 3 systems accounted for 92 percent of the subscribers and 97 percent of the royalties paid in 2000-03 (Cable Data Corporation [CDC]). Data and discussion of the royalty payment system throughout this section of my report concern Form 3 systems.

<sup>6</sup> I understand that the calculation of royalties is described in detail in the Direct Testimony of Marsha Kessler, also submitted in this proceeding.

signals, while a 3.75 fee, equal to 3.75 percent, is charged for the formerly nonpermitted signals.<sup>7</sup>

- The basic and 3.75 signal royalty percentages apply to one full signal, called a Distant Signal Equivalent or DSE. Affiliates of the three major U.S. networks and educational stations are set at 0.25 of a DSE, while independents (including affiliates of Fox and minor networks and Canadian stations) are valued at one DSE.
- Within the basic fee, the first DSE is charged at 0.956 percent of receipts, the second through fourth at 0.630 percent, and the fifth or more at 0.296 percent.<sup>8</sup>
- A minimum fee equal to a basic fee for one DSE is required even if no signal or only a fractional DSE is imported.

First, whatever the royalty percentage, its application to gross receipts derived from tiers that include a variety of services, and not to receipts solely for the distant signals themselves, suggests that fees generated from distant signals will not be proportional to the marketplace value of the distant signals. The tier containing the distant signals is generally the basic service tier, which must be taken by all subscribers. The content of this tier varies widely among cable systems; it includes all local broadcast stations and public, educational and governmental channels, but also may include various distant retransmitted stations and cable networks.<sup>9</sup> The vast majority of subscribers do not specifically choose to purchase this tier but rather purchase a bundle of two tiers, basic service and expanded basic (sometimes called cable programming services), for a combined package price.<sup>10</sup> As a result, the price of the basic tier itself does not necessarily reflect the value of the services in the basic tier. Even if it did, the tier price would likely vary depending on the size and quality of the basic tier. That is, higher-priced basic tiers with distant signals likely include more channels and possibly more popular cable networks (for

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<sup>7</sup> There is a small third category, which generates a syndex fee and also arises from changes to the pre-1981 rules.

<sup>8</sup> For the five years ending June 2000, these percentages were slightly smaller: 0.893 percent for the first DSE, 0.563 percent for the second through fourth, and 0.265 percent for the fifth or more. Library of Congress, Copyright Office, Adjustment of Cable Statutory License Royalty Rates, Docket 2000-04, October 20, 2000.

<sup>9</sup> See, e.g., Federal Communications Commission, In the Matter of the Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Tenth Annual Report, MB Docket No. 03-172, January 28, 2004, ¶20, fn 25.

<sup>10</sup> In 2002, for example, approximately 90 percent of subscribers purchased the two packages combined. For systems surveyed in July 2002, the average basic service rate was \$14.45 and the total for both packages, including equipment, was \$40.11 for a total of 63 channels. Federal Communications Commission, In the Matter of Implementation of Section 3 of the Cable Television Consumer Protection and Competition Act of 1992, Report on Cable Industry Prices, MM Docket No. 92-266, July 8, 2003, ¶3 and ¶25, Table 1.



example, Discovery and CNN) that in other systems are carried in the expanded basic tier. Because of the compulsory license payment formula, a system with a higher rate for the basic tier generates more fees per subscriber for the first basic DSE than a system with a lower basic tier rate. The larger fees generated likely reflect the other attributes of the combined package, and the somewhat artificial division of the combined package into two parts, rather than a higher marketplace value for the distant signal.

Second, the 3.75 fee generates higher fees for less desirable distant signals. The difference between a basic signal and a 3.75 signal can be simply the number of such signals. For example, a cable system in a smaller market can import one distant independent station as a basic signal (at 0.956), but the second distant independent station is a 3.75 signal (at 3.75 percent). Economic theory tells us that the first independent is worth the most and the second somewhat less. In this case, relative fees attributed to the signals (the second independent is assigned the higher fees) are not in line with relative demand for the signals (the first independent has the highest value). The difference is not minor: fees attributed to the second independent are almost four times larger than fees attributed to the first independent.<sup>11</sup>

Third, the basic fee has a declining scale, as economic theory dictates, but only between the first, second and fifth DSE (i.e., no decline from second to third to fourth). Further, the magnitude of the decline is arbitrary: the second signal should not necessarily be valued at about two-thirds of the first.<sup>12</sup>

Fourth, different DSE counts are applied to different types of stations without regard to the existence of noncompensable or duplicative programming. A 0.25 DSE count is assigned to distant network affiliates, which broadcast some amount of noncompensable network

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<sup>11</sup> Systems in larger markets can generally import two or three distant independent stations under the basic fee, with any additional distant independent stations falling into the 3.75 category. See Library of Congress, Copyright Office, Section 109 Report to Congress, Notice of Inquiry, Docket No. 2007-1, April 10, 2007, p. 5, and Television Digest, 1982 Cable and Station Coverage Atlas, pp. 58a-59a, Federal Communications Commission Rules, §76.61 and §76.63. In this case, an additional distant independent station would generate fees almost four times the first one (3.75 is 3.9 times 0.956) and almost six times the second one (3.75 is 5.95 times 0.63).

<sup>12</sup> A minor example of this arbitrariness is illustrated by the increase in the relative royalty percentages for the first and second DSE when the rates were adjusted for inflation in July 2000. Just before this adjustment, the second signal fee equaled 63 percent of the first (0.563/0.893); after the adjustment the second signal fee equaled 66 percent of the first (0.630/0.956).

programming, while other stations also broadcast noncompensable network programming but are not assigned a fractional DSE count. For example, some distant Canadian stations also contain substantial amounts of noncompensable U.S. network programming (prime time and daytime programs from ABC, CBS and NBC),<sup>13</sup> yet these Canadian stations are counted as a full signal. A 0.25 DSE count is also applied to distant educational stations. Both network affiliates and educational distant stations broadcast some amount of programming duplicative of that broadcast by local stations, and even the same program retransmitted at the same time (e.g., where the distant station is affiliated with the same network as a local station in the same time zone).<sup>14</sup> Other distant stations, however, may also have substantial duplicative programming: (a) programming broadcast on Fox or minor networks, (b) syndicated programming (e.g., Oprah) and/or (c) programming broadcast by the three major U.S. networks. Some distant Canadian stations have substantial duplicative programming in all three categories.<sup>15</sup>

An economic principle is that the purchaser will not pay more than the value of a product. In the context of distant signals, the value of the signal to a cable operator must equal or exceed the extra cost of carrying it. Thus, hypothetically, fees generated by a particular imported station could reveal the minimum marketplace value of that station to the cable operator; however, the economic principle does not provide much guidance in attempting to determine the marketplace value of retransmitted signals. All systems must pay a minimum fee covering one DSE whether they import no signals, only a fractional DSE or one DSE. The minimum fee is not a technicality: Form 3 systems covering about one-quarter of subscribers import no distant signals and pay the minimum fee. Two-thirds of the subscribers in systems that do import some signals receive at most one DSE.<sup>16</sup> Thus, for most of the systems (as counted by subscribers to reflect their size) the decision to import a fractional or full DSE does not even indicate that the value of

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<sup>13</sup> See <http://web.archive.org/web/20030425085821/http://www.ctv.ca/generic/generated/tvlist/CFTOTvlist.html> for an April 2003 schedule of CFTO-TV, a CTV station and *Broadcasting & Cable*, April 28, 2003, p. 16 and May 5, 2003, p. 12 for comparable schedules in prime time for ABC, CBS, NBC, Fox, WB, UPN and Pax. CFTO's schedule also includes prime time programming from Fox and Pax, and syndicated programming in other dayparts.

<sup>14</sup> Neither the noncompensable nor the partially duplicative programming explains the particular (75 percent) reduction chosen.

<sup>15</sup> See footnote 13 above.

<sup>16</sup> CDC. Stated differently, about 25 percent of all Form 3 subscribers receive no DSEs, 50 percent receive some DSEs but no more than one, and the remaining 25 percent receive more than one.

the retransmitted signal is at least as large as the fees generated by those signals. In fact, the fees are not actually generated by the retransmitted signals; rather, they are generated by the minimum fee requirement and allocated to that signal by CDC.

Even in systems retransmitting more than one DSE, and so incurring extra cost to do so, the economic principle that the extra cost of the signal must cover its value reveals little. For example, a system that carries two basic DSEs and pays extra as a result (an extra 0.63 percent of receipts) reveals only that each DSE is worth at least the extra cost of the second signal (the 0.63 percent). CDC averages the total fee and applies the average rate, 0.793 percent of receipts, to each signal.<sup>17</sup> Thus, the fees generated by each signal, as calculated by CDC, are larger than the signal's minimum value. While averaging occurs within the basic fee group, CDC takes the opposite approach when a system imports both basic and 3.75 signals.<sup>18</sup> In this case, CDC relies on the cable operator's designation of which station is nonpermitted under the old rules, although the designation may be arbitrary when nonpermitted is defined based on the number of distant stations rather than particular type of distant station.

As a practical matter, during 2000-03, only a very small amount of importation occurred above one DSE. The average subscriber in Form 3 systems with distant signals received 1.2 DSEs.<sup>19</sup> Due to the low average number of DSEs relative to the minimum requirement, as well as CDC's allocation methods, the fees generated do not reveal the minimum value for the vast majority of the DSEs.

Of course, the extra cost of carrying the signal would not reveal the marketplace value, only the minimum value. The conversion of TBS from a superstation to a cable network illustrates that cable operators valued it much more highly than the amount they paid under the compulsory license. One commenter cited by the Copyright Office stated, "carrying the same programming as it had as a distant signal, TBS was immediately able to obtain license fees that

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<sup>17</sup> The average of 0.956 and 0.63 is 0.793.

<sup>18</sup> I understand that CDC's allocation of royalties is described in detail in the Direct Testimony of Jonda K. Martin, also submitted in this proceeding.

<sup>19</sup> CDC.

exceeded the entire 1998 royalty fund (\$165 million for TBS vs. the \$108 million for the royalty fund).<sup>20</sup>

#### **IV. Conclusion**

In summary, the fees generated do not reflect relative marketplace value; rather, they reflect the compulsory license payment formula and CDC's allocations of fees paid to particular stations. As a result, changes in fees generated do not reflect changes in relative marketplace value.

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<sup>20</sup> Library of Congress, Copyright Office, Satellite Home Viewer Extension and Reauthorization Act Section 109 Report: a Report of the Register of Copyrights, June 2008, p. 68, citing comments of Program Suppliers. The comparison cited does not give an exact measure of the extra amount cable operators were willing to pay, for example, the extra royalty amount paid for WTBS was less than the full royalty fund in 1998 and, on the other side, the operators' saving in common carrier costs is not considered; nevertheless, TBS's conversion did show that cable operators were willing to pay more for the channel than they did under the compulsory license.

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APPENDIX A

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**SENIOR VICE PRESIDENT**

Ms. McLaughlin specializes in antitrust and trade regulation. She has prepared studies of relevant product and geographic markets, market structure and performance, the impact of mergers and acquisitions, vertical and horizontal arrangements, and pricing and purchasing practices. These studies have focused on various consumer and producer industries, with particular emphasis on media and insurance.

Her work in the media and entertainment industries also includes: analyses of proposed US Federal Communications Commission rules concerning cable and broadcast television; pricing of music copyrights and retransmitted television stations rights; evaluation of motion picture talent contracts; the impact of a new magazine introduction; the reasonableness of cable, home satellite, and recorded music projections; and the value of cable systems, cable networks, and newspaper distributors.

In the area of insurance, she has also studied the effect of state rate regulation and deregulation of large commercial transactions, as well as the causes of the liability insurance crisis and its effect on reinsurers.

In addition, Ms. McLaughlin has performed studies of impact and damages in connection with antitrust, contract, trademark, and other litigation. The firms involved in these studies have included: manufacturers of consumer electronics products, fertilizers, windows, paint, and pharmaceutical products; distributors of chemicals, steel, beverages, and telecommunications services and equipment; tobacco growers; and satellite and internet service providers.

## Education

**University of Pennsylvania**  
M.A., Economics, 1970

**Marquette University**  
B.S., *cum laude*, Mathematics, 1968

## Professional Experience

- 1974- **NERA Economic Consulting**  
Senior Vice President (since 2000)  
*Specialization:* antitrust and trade regulation, intellectual property, economic damages.  
*Primary industries studied:* media and entertainment, including broadcast, cable and satellite television, broadcast and satellite radio, motion pictures, recorded music, music publishing, advertising, newspapers, magazines and internet; and property-casualty and health insurance.  
*Other industries studies:* telecommunications, photographic supplies, consumer electronics products, fertilizers, paint, windows, window coverings, pharmaceutical products, building products, hardware, chemicals, glass, steel, breakfast cereal, beverages, and tobacco.
- 1970-1974 **Hofstra University**  
Instructor  
Taught introductory economics, intermediate microeconomics, and the application of mathematics to economics.

## Professional Activities

Member, American Economic Association and Committee on the Status of Women in the Economics Profession.

## Testimony, Reports, and Publications

*In the Matter of the Arbitration between BMI, Petitioner, and Williston Community Broadcasting, et al., Respondent* (American Arbitration Association), a contract case. Affidavit, December 2008.

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December 2008

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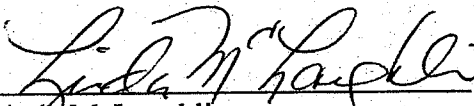
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Distribution of 2000, 2001, 2002 and )  
2003 Cable Royalty Funds )  
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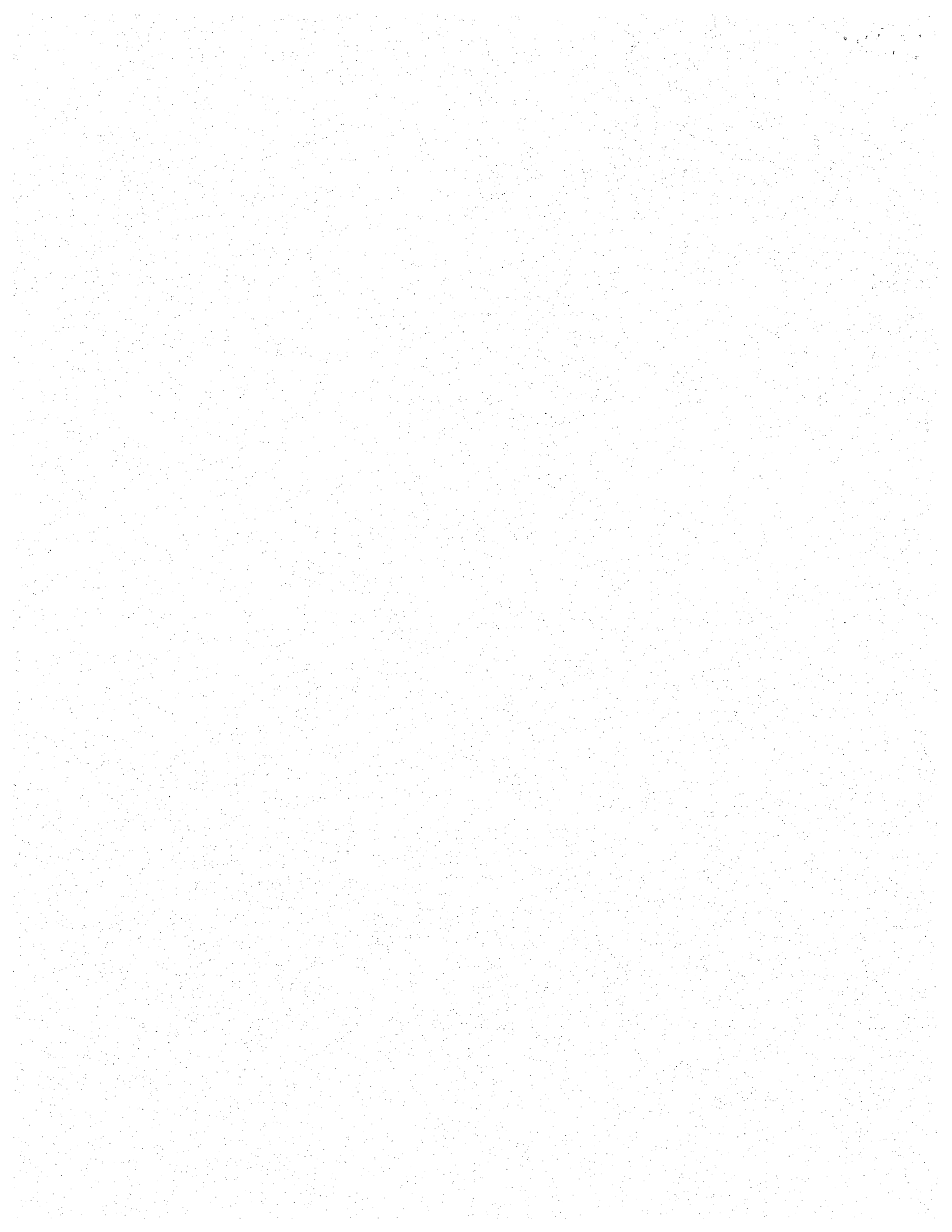
Docket No. 2008-2 CRB CD 2000-03

**DECLARATION**

I, Linda McLaughlin, declare under penalty of perjury that the Testimony of Linda McLaughlin presented in the 2000-2003 Cable Copyright Royalty Distribution Proceeding is true and correct to the best of my knowledge, information and belief.

  
\_\_\_\_\_  
Linda McLaughlin

Executed on: 1/30/2009



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In the Matter of )  
)

Distribution of the )  
2004 and 2005 )  
Cable Royalty Funds )

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Docket No. 2007-3 CRB CD 2004-2005

**Direct Testimony of**

**Jonda K. Martin**

**June 1, 2009**

**DIRECT TESTIMONY OF JONDA K. MARTIN**

**I. BIOGRAPHICAL INFORMATION**

My name is Jonda K. Martin. I provide this testimony on behalf of Commercial Television Claimants. I am the President and Owner of Cable Data Corporation (“CDC”). I have worked at CDC for over 20 years, and during this time, I have been actively involved in all aspects of the company, including research, data entry, report generation, and administration. I received a Bachelor of Science / Business Administration degree from American University, with concentrations in international business and management of information systems. I also received an MBA from the University of Maryland. I have previously testified before the Copyright Arbitration Royalty Panel (“CARP”) regarding CDC’s data collection activities in connection with the CARP’s distribution of 1998 and 1999 cable compulsory license royalties. I expect to testify before the Copyright Royalty Judges (“Judges”) in connection with distribution of the 2000, 2001, 2002, and 2003 cable compulsory license royalties.

**II. PURPOSE OF TESTIMONY**

The purpose of my testimony is to provide the Judges with an overview of CDC’s operations and describe its methodology for calculating the distances between a distant signal’s city of license and the prime city of the cable system that carries the distant signal. I will also describe how six different CDC data reports relied on by witnesses appearing on behalf of Commercial Television Claimants in this proceeding were prepared, and authenticate the CDC data underlying the testimony of those witnesses.

**III. CABLE DATA CORPORATION**

Located in Rockville, Maryland, CDC was established in 1979 to collect and analyze information on Statements of Account (“SOAs”) that cable systems file with the Licensing

Division of the Copyright Office (“Licensing Division”). CDC makes the collected information available to users either by purchase, on an as needed basis, or by subscription. CDC is the only company providing such a service. Numerous parties involved in the cable and satellite industries rely on data collected by CDC. This is particularly true for parties involved in copyright compulsory license proceedings. As a result, CDC data have been presented over the years to the Copyright Royalty Tribunal and to the CARPs in virtually all of the cable and satellite copyright royalty distribution proceedings and rate adjustment proceedings. In this proceeding, witnesses presented by Commercial Television Claimants and others are relying on CDC data to support their testimony.

I described CDC’s processes for data collection and analysis in some detail in my direct testimony, dated February 2, 2009, that was submitted on behalf of the “Settling Parties” in the distribution proceedings for the 2000, 2001, 2002, and 2003 cable royalty funds. I attach that testimony here as Appendix A, and incorporate it by reference as part of this testimony in the distribution proceedings for the 2004 and 2005 cable royalty funds.

#### **IV. METHODOLOGY FOR CALCULATING DISTANCES**

One data point that CDC generates and updates on a regular basis is the distance between a distant signal’s city of license and the “prime city” of the cable system that carries the distant signal (generally the first community named in the system’s statement of account). The location of the distant signal, the prime city of a cable system, and the distance between the two points are determined using the following methodology.

Location of the Distant Signal and the Prime City of a Cable System: CDC maintains a database that identifies latitude and longitude for numerous geographic communities. A basic source for these data is Section 76.53 of the Federal Communications Commission (FCC) rules, which lists geographic coordinates for the reference points of communities to which television

stations are licensed. When a community is not on the FCC list, CDC obtains latitude and longitude coordinates from the United States Geological Survey's Geographic Names Information System. As part of CDC's analysis of the carriage data it compiles, each distant signal's city of license and each cable system's prime city is associated with a latitude and longitude from CDC's database.

When a new or previously unidentified community is specified in a cable system's statement of account, CDC conducts a series of verifications and, if needed, additional research to confirm its location. First, CDC verifies that the cable system's statement of account lists the correct community. This is done by comparison to cable system data maintained on the FCC's website or Warren Publishing's Cable Factbook.

If there is a duplicate community name within a state, CDC generates a unique name for the community to avoid confusion in its data. For example, a common instance of duplicate community names within a state is "Green Township," which CDC might make unique by adding a reference to its county: "Green Twp-Ross Co." This differentiates one community from another to insure that CDC calculates distances between the correct reference points.

When communities are difficult to locate in order to verify their geographic coordinates, CDC refers to U.S. Census Bureau data from U.S. Gazetteer. For cable systems serving correctional facilities, CDC refers to www.corrections.com. CDC may also refer to www.epodunk.com or www.hometownlocator.com to identify the locations of smaller communities. After referring to such third party data resources, CDC typically compares each geographic community's measure of latitude and longitude to a commercial atlas to further confirm the coordinates.



Distance Between the Distant Signal and the Cable System: After a distant signal is assigned a measure of latitude and longitude according to its city of license, and a cable system is assigned a measure of latitude and longitude according to its prime city, CDC calculates the distance between those points using a proprietary algorithm. It reports the measured distance in miles as part of its carriage detail reports that show individual distant signal carriage information.

#### V. DATA PREPARED FOR THIS PROCEEDING

Witnesses for Commercial Television Claimants are relying on certain CDC data reports to support their testimony.

CDC regularly updates its databases to capture changes resulting from statement of account amendments or Licensing Division adjustments. Because these updates modify the underlying data in CDC's database, they can affect the data reported in prior CDC standardized reports and customized reports. While the impact of these updates on the overall data is generally small, the presence of difference can generate confusion and unnecessary cross-examination. To avoid discrepancies from database updates, I have provided parties to the case various runs of CDC data as they were last substantially updated on April 3, 2009. The customized CDC reports and underlying CDC data presented by Commercial Television Claimants and others in this proceeding are derived from this most recently updated database, and from several of CDC's standardized reports based on that database.

At the request of Commercial Television Claimants, I have prepared six types of reports, excerpted here as Appendices B, C, D, E, F and G. These excerpts depict the formats and data fields provided by CDC in the following data files relied on by witnesses for Commercial Television Claimants and others:

- Appendix B: CDC Distant F3 Carriage Detail (2005-2 Excerpt). This data file identifies each distant signal reported as carried by a Form 3 system on the system's statement of account for the respective accounting period. It includes, among other things, the distant signal's city of license, the system's prime city, and the CDC calculation of distance between the two.
- Appendix C: CDC F3 System Detail (2005-2 Excerpt). This data file identifies each Form 3 system filing a statement of account in the respective accounting period. It includes, among other things, the system's reported subscribers, receipts, and royalty data.
- Appendix D: CDC Station Summaries by Call Sign (2005-2 Excerpt). This data file identifies each distant signal reported as carried on either a local or a distant basis by any Form 3 system during the respective accounting period. It includes, among other things, the numbers of systems that carry the signal and their total subscribers, the numbers of systems and subscribers receiving the signal on a distant basis, and the CDC-calculated fees generated by distant carriage of the signal, if applicable.
- Appendix E: CDC Station Summaries by Station type (2003-2 to 2005-2 Excerpt). This data file identifies, among other things, the total numbers of systems carrying and subscribers receiving distant signals, by accounting period and by station type.
- Appendix F: CDC System Summaries by Form and Accounting Period (2000-1 to 2003-2 Excerpt). This data file identifies, among other things, the total number of subscribers receiving distant signals and their receipts, by accounting period and system form.
- Appendix G: CDC Account Period Summaries with Market Descriptor (2005-2 Excerpt). This data file identifies, among other things, total and average royalties, subscribers and gross receipts, by accounting period and by market size category.


Thank you for the opportunity to present this information in this proceeding. I hope that it will assist you in your deliberations.

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\_\_\_\_\_) )  
In the Matter of ) )  
 ) )  
Distribution of the ) ) Docket No. 2007-3 CRB CD 2004-2005  
2004 and 2005 ) )  
Cable Royalty Funds ) )  
\_\_\_\_\_) )

**DECLARATION**

I, Jonda K. Martin, declare under penalty of perjury that the Direct Testimony of Jonda K. Martin presented in the 2004-2005 Cable Copyright Royalty Distribution Proceeding is true and correct to the best of my knowledge, information and belief.

  
\_\_\_\_\_  
Jonda K. Martin

Dated: 5/28/2009

**APPENDIX A**

**Direct Testimony of Jonda K. Martin**

**Prior Direct Testimony of Jonda K. Martin  
In the Matter of Distribution of the  
2000, 2001, 2002, and 2003 Cable Royalty Funds  
Docket No. 2008-2 CRB CD 2000 - 2003**

Before the  
COPYRIGHT ROYALTY JUDGES  
Washington, D.C.

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In the Matter of )  
Distribution of the )  
2000, 2001, 2002, and 2003 )  
Cable Royalty Funds )  
\_\_\_\_\_ )

Docket No. 2008-2 CRB CD 2000-2003

Direct Testimony of  
Jonda K. Martin

February 2, 2009

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**DIRECT TESTIMONY OF JONDA K. MARTIN**

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## DIRECT TESTIMONY OF JONDA K. MARTIN

### I. BIOGRAPHICAL INFORMATION

My name is Jonda K. Martin. I am appearing as a witness in this proceeding on behalf of the following parties: Program Suppliers, Joint Sports Claimants, Commercial Television Claimants, Public Television Claimants, Music Claimants and Devotional Claimants (collectively, “the Settling Parties”). I am the President and Owner of Cable Data Corporation (“CDC”). I have worked at CDC for over 20 years, and during this time, I have been actively involved in all aspects of the company, including research, data-entry, report generation, and administration. I received a Bachelor of Science/Business Administration degree from American University, with concentrations in international business and management of information systems. I also received a MBA from University of Maryland. I have previously testified before the Copyright Arbitration Royalty Panel (“CARP”) regarding CDC’s data collection activities in connection with the CARP’s distribution of 1998 and 1999 cable compulsory license royalties. This is my first opportunity to testify before the Copyright Royalty Judges (“Judges”).

### II. PURPOSE OF TESTIMONY

The purpose of my testimony is to provide the Judges with an overview of CDC’s operations and describe its data collection operations and methodologies in relevant detail, including CDC’s methodology for allocating royalty payments among distant

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signals. I will also describe how the different CDC data reports presented by the parties in this proceeding were prepared and authenticate the CDC data underlying the testimony of witnesses of the Settling Parties.

### **III. CABLE DATA CORPORATION**

Located in Rockville, Maryland, CDC was established in 1979 to collect and analyze information on Statements of Account (“SOAs”) that cable systems file with the Licensing Division of the Copyright Office (“Licensing Division”). CDC makes the collected information available to users either by purchase, on an as needed basis, or by subscription. CDC is the only company providing such a service. Numerous parties involved in the cable and satellite industries rely on data collected by CDC. This is particularly true for parties involved in copyright compulsory license proceedings. As a result, CDC data have been presented over the years to the Copyright Royalty Tribunal and the CARP in virtually all of the cable and satellite copyright royalty distribution proceedings and rate adjustment proceedings. In this proceeding, witnesses presented by both the Canadian Claimants Group and the Settling Parties are relying on CDC data to support their testimony. In this section of my testimony, I will provide an overview of CDC’s operations and its data collection methodologies.

#### **A. Data Collection and System Updates**

Data collection is an integral part of CDC’s operations. CDC has two full-time employees who spend the vast majority of each work day on-location in the Licensing



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Division of the Copyright Office. Those employees record data and other information from each filed SOA on laptop computers. The employees return to CDC's office periodically to transfer the data collected at the Copyright Office on laptops to CDC's HP3000 minicomputer. Once the data are transferred to CDC's minicomputer, CDC produces standard reports and customized reports which summarize the SOA data. To keep CDC data as consistent as possible with the SOAs on file with the Licensing Division, CDC performs regular system updates to account for modifications made to a system's filing, for reasons such as for additional royalty payments and refunds issued by the Licensing Division.

#### **B. Data Reports**

CDC regularly produces two major standardized reports of aggregated cable system data. The first standardized report, the "Account Period Summary," provides a snapshot of all the SOA data collected for each accounting period. This two-page summary report tabulates the total number of systems, royalty paid, subscribers, gross receipts, number of systems with carriage, average number of stations reported, average number of distant signals reported, number of systems with zero distant signals, and average distant signal equivalents ("DSEs"). The data are grouped by accounting period, and categorized by SOA form type (Form 1-2 or Form 3), type of royalty for Form 3 systems, and market category (Top 50, Second 50, Smaller and Outside All Markets). This report allows comparison of how the royalty fund changes over time. CDC produces the Account Period Summary report both in its complete form, and also in a

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summary format that condenses the same data without market breakdown. As an example, a copy of CDC's Account Period Summary report for the 1999-1 through the 2001-2 accounting periods is attached to my testimony as Appendix A.

CDC's second standardized report is the "Station Summary" report, which is a set of reports that provides aggregated data for all stations reported in an accounting period. This report includes station type, the number of systems reporting carriage of each station, the number of distant and local subscriber instances, and an accumulation of the royalty fees attributed ("fees generated" or "fees gen") to each station as calculated by CDC. As an example, I have attached a copy of the Station Summary report for the 2000-1 accounting period to my testimony as Appendix B.

In addition to these two standardized reports, CDC also produces customized reports as requested by clients. While these customized reports may differ in format from CDC's standardized reports, they are derived from the same database and rely on the same data protocols employed by CDC that I will explain later in my testimony.

**C. Fees Generated Protocols And Allocation Of The Minimum Fee**

Cable systems pay royalties based on the total DSE value of the stations carried. One of CDC's early assignments was to provide a means to match these royalties with individual stations to show, in effect, how much of the royalty fund was attributable to each station. CDC apportions the total royalty fees paid by an individual cable system among all the distant broadcast stations the system carries. These apportioned royalties

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are known as “fees-generated” or “fees-gen.” CDC accumulates the fees-generated for each station across all of the systems reporting the station. These accumulated fees-generated and other reporting statistics are aggregated and summarized by station-type and station affiliation. It is important to recognize that CDC fees-generated protocols do not reflect a legal determination of how the royalties paid by each cable system should be allocated among the stations carried by that system. CDC’s fees-generated protocols are merely CDC’s own method of matching royalties to stations.

Under Section 111, each cable system is required to pay a minimum fee for the privilege of carrying distant retransmissions, regardless of whether the particular system actually imports any distant signals. These minimum fee payments have become more important in the fees generated allocation. Prior to 1998, the vast majority (over 99%) of fees-generated were allocated based on the actual carriage of distant signal(s) by cable systems. In other words, from the inception of the compulsory license until 1998, only a handful of Form 3 systems did not carry any distant signal. Although these systems were subject to the minimum fee, how CDC allocated those minimum fees was relatively unimportant because the amount of royalties involved was insignificant.

Throughout that period, WTBS was the most widely carried broadcast television station in the United States. During the 1997-2 accounting period, WTBS was carried as a distant signal by over 93% of Form 3 systems, representing 95.2% of all Form 3 subscribers, and that station’s carriage accounted for over 50% of fees-generated. Because WTBS was so widely carried, there were very few systems that had no distant

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signals. During the 1997-2 accounting period, only 40 Form 3 systems reported no distant signals.<sup>1</sup> However, all of that changed in 1998 when WTBS became the cable network, TBS. The number of systems carrying no distant signals increased from 40 to 459, or about 20% of all Form 3 systems, representing 25% of all Form 3 subscribers.<sup>2</sup> Cable system minimum fees grew from about \$330,000 in 1997-2 to \$11.9 million in 1998-1, which placed greater emphasis on CDC's fees-generated protocols for assigning royalties to individual stations carried by these systems.

Until recently, CDC fees-generated protocols allocated the minimum fee paid by systems carrying zero distant signals equally among all of the local stations carried by the system, reporting those amounts in CDC data reports as "local fees-generated." Also, for systems carrying at least one distant signal, but with a total system DSE value of less than 1.0, CDC's former fees-generated protocols allocated the royalty paid by each of these systems entirely to the reported distant station(s). Assume that a system carried one distant educational or network station with a DSE value of 0.25 and paid a minimum fee of \$5,000. Under CDC's former distant fees-generated protocols, the one reported distant station would get credited with the entire \$5,000 as its distant fees-generated.

In the course of the 1998-99 Phase I Cable Distribution proceeding before the CARP, I testified regarding CDC's use of these fees-generated protocols. The Canadian Claimants Group criticized CDC's then existing fees-generated protocols as not properly

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<sup>1</sup> This amounted to less than 2% of all Form 3 cable systems.

<sup>2</sup> Despite this increase in the number of systems carrying no distant signals, the total royalty fund only went down by about 32%.

allocating the minimum fees for systems that carried at least one distant signal, but which had a total DSE value less than 1.0. In response to that criticism, and in the interest of improving our protocols for allocating the minimum fee, I and others at CDC worked diligently over the last five years to create new fees-generated protocols for allocating the minimum fee. In addition to modifying CDC's protocols for allocating the minimum fees for systems carrying at least one distant signal, but with a total DSE value of less than 1.0, CDC also created a "Minimum Fee Category" for allocating fees-generated that are not deemed attributable to distant signal carriage and eliminated a designation for "local fees generated." CDC's current fees-generated protocols, which have been in place since June 2008, are summarized below.

**1. Base Rate Systems With At Least One Distant Signal And A Total DSE Equal To, Or Greater Than, 1.0.**

For systems with at least one distant signal and a total DSE equal to or greater than 1, on a system-by-system basis, CDC proportionately allocates each system's royalties among the distant stations carried according to each station's DSE value relative to the total DSEs reported. For example, a system paying a total of \$30,000 in royalty, which carries two distant network stations and one distant independent station, would have a total DSE value of 1.5 (0.25 DSE for each network and 1.0 DSE for the independent). The distant independent station is allocated two-thirds (1.0 DSE for the independent station divided by the 1.5 total system DSE) of the \$30,000 or \$20,000 in fees-generated.

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The distant network stations are each allocated \$5,000 in fees-generated, or one-sixth of the \$30,000 (0.25 DSE per network station divided by the 1.5 total system DSE).

**2. Base Rate Systems With Zero Distant Signals.**

Systems that report no distant station carriage are required to pay the “minimum fee” royalty. Since such systems report only local stations, CDC does not allocate any portion of the minimum fee paid by these systems to individual stations. For these systems, CDC allocates the entire minimum fee to the Minimum Fee Category, which is reported in the Station Summary Report. For example, if a system pays a minimum fee of \$10,000, but carries no distant stations, CDC would allocate the entire \$10,000 to its Minimum Fee Category.

**3. Base Rate Systems With At Least One Distant Signal, But Total DSE Values Less Than 1.0.**

Systems with at least one distant signal, but a total DSE value of less than 1.0 are required to pay the minimum fee royalty. For these systems, CDC proportionately allocates royalties to the distant stations based on each station’s DSE value. The balance of the royalty paid is then allocated to CDC’s Minimum Fee Category. For example, consider a system paying a minimum fee of \$15,000 that carried two distant network stations and one distant educational (non-commercial) station, each with a 0.25 DSE value, for a total system DSE of 0.75. CDC would allocate 25% of the minimum fee, or \$3,750 to each of the three distant network and educational stations reported by the

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system (0.25 x \$15,000), for a total station allocation of \$11,250, and then allocate the balance of the royalties, here \$3,750, to CDC's Minimum Fee Category. The same distant fee allocation methodology is used for each separate subscriber group reported by a system on its SOA. The fee generated amounts from each subscriber group are added together for a system total.

#### 4. Systems Subject to the 3.75% Fee

Systems that carry a nonpermitted<sup>3</sup> signal are subject to the 3.75% Fee for that carriage. Typically, systems that are subject to the 3.75% Fee are not subject to the minimum fee. For these systems, CDC determines the 3.75% fees generated for each nonpermitted signal carried by proportionately allocating each system's 3.75% royalties among the distant nonpermitted stations carried according to each station's DSE value relative to the total DSEs reported for nonpermitted stations. However, a small number of systems existed during the 2000-1 through 2003-2 accounting periods that were subject to the 3.75% Fee but that were still required to pay the minimum fee. These systems typically utilize subscriber groups on their SOAs and carry the nonpermitted signal that gives rise to the systems' 3.75% Fee to only a portion of the systems' subscribers, causing the systems' calculated royalty on their SOAs to be lower than the minimum fee that they are required to pay under Section 111. For these systems, CDC allocates the fees generated by the individual distant signals carried at the subscriber

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<sup>3</sup> "Nonpermitted" refers to a station that could not have been carried prior to June 24, 1981, the date on which the FCC eliminated its rules restricting the number of distant signals cable systems were permitted to retransmit. The 3.75% Fee is 3.75% of gross receipts per DSE, in lieu of the base rate fee.

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group level. CDC first proportionately allocates the dollar value of the system's calculated royalty for each subscriber group (as reported on its SOA) among the distant signals reported in that subscriber group according to each station's prorated DSE value. CDC then allocates the difference between the system's total calculated royalty and the total minimum fee paid by the system to the Minimum Fee Category.

#### **IV. DATA PREPARED FOR THIS PROCEEDING**

As I mentioned earlier in my testimony, all of the parties to this proceeding are relying on CDC data reports to support their respective witnesses' testimony. I understand that the parties have agreed to the authenticity of the CDC data that will be presented to the Judges in this proceeding.

CDC regularly updates its databases to capture any changes resulting from SOA amendments or other Licensing Division adjustments. Because these updates modify the underlying data in CDC's database, they can impact the data reported on prior CDC standardized reports and its customized reports. While the impact of these updates on the overall data are small, the presence of differences can lead to confusion and invite unnecessary cross-examination. To avoid any discrepancies between CDC data from different dates used in this proceeding due to database updates, the Canadian Claimants Group and the Settling Parties asked me to create a separate archived database of CDC data as they existed on November 7, 2008. This archived database was prepared by saving the CDC database of underlying data on November 7, 2008 as a separate data set,



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and creating archived copies of CDC's standardized Account Period Summary and Station Summary Reports as of November 7, 2008. All of the different customized CDC reports and underlying CDC data presented by the parties in this proceeding are derived from this archived database and the archived copies of CDC's standardized reports.

At the request of the Settling Parties, I have prepared SP Exhibit \_\_\_ (JKM-1) and SP Exhibit \_\_\_ (JKM-2). These exhibits identify each Form 3 system that carried one or more Canadian distant signals during any of the 1998-1 through 2003-2 accounting periods. They also show selected information CDC has extracted from each such system's SOAs, as well as CDC's allocation of fees-generated.

Thank you for the opportunity to present this information in this proceeding. I hope that it will assist you in your deliberations.

FORM-DESCR	TOTAL SYSTEMS	ROYALTY	Average Royalty	# SUBSCRIBERS	Average Subs	GROSS RECEIPTS	Average Receipts	# With CARR'G	AUG # SIA	AUG # DIST	# =0 Dist	AUG DSE
2001-2												
1 ONE	5,094	173,983	34	1,519,170	301	169,015,616	33,541	4,889	7,830	1,646	2,001-2	1,382
2 TWO	2,004	1,995,744	996	4,095,201	2,008	395,143,866	197,968	1,969	9,220	1,783	920	1,435
3 THREE	1,818	59,587,769	32,213	60,688,086	33,354	4,770,394,121	2,624,089	1,817	11,516	2,013	312	1,325
3 3.75% SYMDEX	239	7,201,818	30,133	6,283,346	26,123	477,362,142	1,997,333	239	11,958	4,866		1,825
TOTAL F1,2,3	8,916	60,734,496	6,812	66,162,487	7,473	5,334,753,603	682,553	8,671	8,918	1,753	1524	1,383
2001-1												
1 ONE	5,431	201,668	37	1,673,973	319	180,927,724	34,015	5,321	7,749	1,694	2,001-1	1,369
2 TWO	2,097	2,162,812	1,031	4,263,228	2,047	413,616,792	198,473	2,004	9,272	1,777	309	1,430
3 THREE	1,853	57,580,321	31,074	60,303,142	32,544	4,786,573,108	2,583,148	1,852	11,314	1,937	323	1,294
3 3.75% SYMDEX	10	6,313,462	28,069	5,616,432	24,762	475,524,852	1,777,927	1,225	11,711	4,842		1,772
TOTAL F1,2,3	9,371	39,944,801	6,397	66,240,343	7,133	5,381,117,624	581,363	9,257	8,794	1,773	1556	1,368
2000-2												
1 ONE	5,586	211,472	38	1,778,820	332	189,697,710	34,328	5,541	7,751	1,692	2,000-2	1,375
2 TWO	2,068	2,271,869	1,012	4,876,925	2,037	428,200,210	196,161	2,190	9,136	1,813	288	1,497
3 THREE	1,808	56,174,152	29,597	60,698,547	31,684	4,730,635,908	2,502,769	1,889	11,256	1,903	311	1,292
3 3.75% SYMDEX	211	5,617,387	28,623	4,923,737	22,333	373,142,351	1,777,927	211	11,673	4,531		1,759
TOTAL F1,2,3	9,690	27,810	4,635	132,216	22,036	8,326,923	1,387,754	6	10,667	2,833		1,427
1 ONE	5,016	140,482	28	1,284,399	267	138,604,909	28,715	4,844	7,611	1,694	2,000-1	1,358
2 TWO	2,519	2,047,739	807	3,705,034	1,579	380,520,354	153,932	2,478	8,965	1,021	682	1,498
3 THREE	2,507	53,697,649	24,143	60,738,269	26,328	4,958,564,374	2,149,356	2,503	10,945	1,906	380	1,305
3 3.75% SYMDEX	9	6,486,981	25,640	5,037,914	19,913	400,646,263	1,583,582	259	11,292	4,316		1,828
TOTAL F1,2,3	9,062	57,085,070	5,870	65,927,902	6,870	5,477,683,837	570,236	9,625	9,757	1,737	1371	1,369
1999-2												
1 ONE	5,370	150,361	28	1,402,514	272	145,496,630	28,304	5,146	7,490	1,694	1999-2	1,376
2 TWO	2,558	2,077,812	812	4,039,163	1,608	389,355,719	154,200	2,524	8,824	1,910	283	1,473
3 THREE	2,296	53,683,386	23,382	60,410,333	26,323	4,873,824,404	2,123,671	2,291	10,888	1,908	378	1,304
3 3.75% SYMDEX	12	5,609,965	22,898	5,049,878	20,812	372,209,752	1,519,207	243	10,992	4,339		1,787
TOTAL F1,2,3	10,224	55,913,339	5,469	65,872,012	6,609	5,408,676,753	543,804	9,963	8,610	1,798	1416	1,454
1999-1												
1 ONE	5,407	151,289	28	1,501,389	284	151,097,273	28,633	5,296	7,412	1,684	1999-1	1,351
2 TWO	2,728	2,213,448	81	4,175,750	1,625	415,233,640	154,303	2,694	8,805	1,902	673	1,463
3 THREE	2,312	52,109,792	22,579	59,286,533	25,643	4,767,943,090	2,062,260	2,311	10,814	1,865	382	1,290
3 3.75% SYMDEX	11	4,778,724	20,777	4,609,736	20,042	387,160,318	1,509,393	230	11,143	4,332		1,754
TOTAL F1,2,3	10,447	54,474,129	5,214	65,163,692	6,329	5,334,276,003	518,898	10,301	8,510	1,782	1356	1,369

APPENDIX A

DIRECT TESTIMONY OF  
JONDA K. MARTIN

APPENDIX B

DIRECT TESTIMONY OF JONDA K. MARTIN

JAN 26 2009 SUMMARY PAGES FOR FORM 3 (THREE), ACCOUNTING PERIOD: 2000-1  
 SSFJSURS

Description	TOTAL INSTANCES OF CARRIAGE		TOTAL FEES-GENERATED		NO. OF UNIQUE STATIONS TOTAL	DISTANT INSTANCES OF CARRIAGE	DISTANT SUBSCRIBER INSTANCES	DISTANT FEES-GENERATED	NO. OF UNIQUE STATIONS DISTANT
	U.S.	Educational	U.S.	Educational					
Regular Religions	3,872	126,053,936	1,348,308	0	356	626	7,312,512	1,348,308	178
Educational	13	875,404	0	0	4	0	0	0	0
	3,905	126,929,350	1,348,308	0	360	626	7,312,512	1,348,308	178
	U.S. Independent		U.S. Independent						
FOX	3,032	110,486,270	27,463,432	0	105	1,446	34,925,778	27,463,432	25
REN	2,483	65,817,737	1,984,557	0	178	258	2,369,748	1,984,557	96
Language	2	62,369	0	0	1	0	0	0	0
PAN	1,036	51,660,845	185,416	0	52	20	337,402	185,416	12
Relig & Lang	950	39,129,141	62,067	0	61	20	155,178	62,067	14
Religious	8	354,327	0	0	2	0	0	0	0
UPN	799	29,225,686	104,211	0	63	27	93,820	104,211	18
UPN-HDN	61	1,576,111	382	0	8	1	766	382	1
UPN-Paramont	1,528	52,398,349	3,082,035	0	81	229	3,966,820	3,082,035	37
HBN - Warner	1,505	48,547,257	3,844,329	0	74	314	5,360,853	3,844,329	44
Independent	11,304	399,265,892	36,726,429	0	625	2,315	47,210,365	36,726,429	247
	U.S. Low Power		U.S. Low Power						
Regular	365	9,831,536	87,985	0	230	16	99,172	87,985	14
Language	29	540,244	0	0	8	0	0	0	0
Religious	27	1,321,187	4,502	0	8	1	9,274	4,502	1
UPN-Paramont	5	63,050	0	0	1	0	0	0	0
Low Power	30	518,636	75,441	0	10	2	15,963	75,441	2
	456	12,274,653	167,928	0	257	19	124,409	167,928	17
	U.S. Network		U.S. Network						
ABC	3,025	74,084,848	1,058,368	0	215	426	3,963,198	1,058,368	135
ABC & NBC	3	33,807	67	0	1	1	151	67	1
ABC, CBS & NBC	2	11,610	689	0	1	1	3,687	689	1
CBS	3	6,428	0	0	2	0	0	0	0
CBS & NBC	3,076	73,075,665	1,130,590	0	209	434	3,941,870	1,130,590	123
HDC	4	50,000	1,184	0	2	1	6,292	1,184	1
Network	3,192	76,084,859	1,217,765	0	215	466	5,071,466	1,217,765	127
	9,215	223,347,217	3,408,663	0	645	1,329	12,986,626	3,408,663	388


JAN 26 2009 SUMMARY PAGES FOR FORM 3 (THREE), Accounting Period: 2000-1  
 85F36 UMS

Description	TOTAL INSTANCES of Carriage		TOTAL SUBSCRIBER Instances	TOTAL FEES- Generated	No. of UNIQUE Stations Total	DISTANT INSTANCES of Carriage	DISTANT SUBSCRIBER Instances	DISTANT FEES- Generated	No. of UNIQUE Stations Distant
	U.S.	Minimum Fee							
Minimum Fee	528	16,849,425	11,271,600	1	1,888	0	0	0	0
Minimum Fee	520	16,849,425	11,271,600	1		0	0	0	0
Country Subtotal:									
U.S.	25,488	780,666,337	52,922,928	1,888	4,289	67,633,912	41,651,328	830	
CANADIAN									
regular language	126	4,058,913	1,108,897	25	61	2,063,265	1,108,897	17	
Independent	23	640,931	327,529	3	23	585,832	327,529	3	
Country Subtotal:	149	4,699,844	1,516,426	28	84	2,669,097	1,516,426	20	
MEXICAN									
regular language	5	171,539	0	3	0	0	0	0	
Independent	13	815,136	24,573	2	0	0	0	0	
Country Subtotal:	19	1,328,164	24,573	9	2	17,384	24,573	2	
Country Subtotal:	37	2,314,859	24,573	14	2	17,384	24,573	2	
OVERALL Total 2000-1									
Total	25,674	787,681,240	54,463,927	1,930	4,375	70,320,393	43,192,327	852	

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I declare, under penalty of perjury, that the foregoing testimony is true and correct  
and of my personal knowledge.

Executed on February 2, 2009

  
\_\_\_\_\_  
Jonda K. Martin

APPENDIX B

Direct Testimony of Jonda K. Martin

CDC Distant F3 Carriage Detail  
2005-2 Excerpt

2005-2 CDC Détail  
F3 Carriage Detail  
(Excerpt)

Table with columns: CALL SIGN, STA, STA SUB, STA, SIG, PRIME, CITY, COUNTY, MARKET, DISTA, VIE, SIG, ST-CITY, MARKET, REC'D, OWNER, NAME, ACCT, PERIOD, CHAN, ACTI, NELS, TV, RATE, FO, RM-B, NSL, TR, R, SUBSCRI, RECEIPTS, TOTAL, ROY, GEN, FEE, 37.75, X, S, VIDE, TOTAL FIELD, FIELD.

APPENDIX C

Direct Testimony of Jonda K. Martin

CDC F3 System Detail  
2005-2 Excerpt





**APPENDIX D**

**Direct Testimony of Jonda K. Martin**

**CDC Station Summaries by Call Sign  
2005-2 Excerpt**

2005-2 CDC Station Summaries by Call Sign (Excerpt)

ACCT- PERIOD	DIGI	CALLSIGN	CHANNEL	STA-TYP	STA-SUBTYP	CALLSIGN-CITY	CALLSIGN-STATE	SS-SYS-TOT DIST-TOT	SS-SUBS-TOT	SS-SUBS-DIST-TOT	SS-FEE-GEN-TOTAL	SS-FEE-GEN-D-TOT
20052	CBAT	04	I	I	SAINT JOHN	NB	1	0	8250	0	0	0
20052	CBET	09	I	I	WINDSOR	ON	29	8	1684313	422631	328711	328711
20052	CBFT	02	I	S	MONTREAL	QU	2	2	58869	58869	48561	48561
20052	CBLT	05	I	I	TORONTO	ON	2	1	286879	176721	93195	93195
20052	CBMT	06	I	I	MONTREAL	QU	10	10	516117	196887	257530	257530
20052	CBOT	04	I	I	OTTAWA	ON	1	0	315870	0	0	0
20052	CBUT	02	I	I	VANCOUVER	BC	10	6	1077959	1001573	778247	778247
20052	CBWT	06	I	I	WINNIPEG	MB	2	2	26890	25613	23153	23153
20052	CFCF	12	I	I	MONTREAL	QU	3	2	374740	6124	4634	4634
20052	CFTO	09	I	I	TORONTO	ON	3	2	310231	180863	105336	105336
20052	CHCH	11	I	I	HAMILTON	ON	1	1	23352	4142	12141	12141
20052	CHEK	06	I	I	VICTORIA	BC	2	0	13168	0	0	0
20052	CHLT	07	I	S	SHERBROOKE	QU	4	4	161010	81262	62549	62549
20052	CICA	19	I	I	TORONTO	ON	1	0	60609	0	0	0
20052	CIII	06	I	I	TORONTO	ON	1	1	23352	4142	12141	12141
20052	CISA	07	I	I	LETHBRIDGE	AB	1	1	15031	15031	16341	16341
20052	CIVT	32	I	I	VANCOUVER	BC	1	0	49135	0	0	0
20052	CJOH	13	I	I	OTTAWA	ON	1	1	315871	30297	15995	15995
20052	CKSH	09	I	S	SHERBROOKE	QU	15	15	619116	542631	435581	435581
20052	CKVU	21	I	I	VANCOUVER	BC	2	0	13168	0	0	0
20052	CKWS	11	I	I	KINGSTON	ON	2	2	359034	111794	74138	74138
20052	CKY	07	I	I	WINNIPEG	MB	1	1	2790	1513	2492	2492
20052	DKABY	28	N	A	ABERDEEN	SD	2	0	19953	0	0	0
20052	DKADN	16	I	F	LAFAYETTE	LA	1	0	10123	0	0	0
20052	DKAMU	12	E	I	COLLEGE STATION	TX	1	0	37932	0	0	0
20052	DKARE	35	N	N	MINNEAPOLIS	MN	3	0	266009	0	0	0
20052	DKASA	27	I	F	SANTA FE	NM	2	0	146719	0	0	0
20052	DKATU	43	N	A	PORTLAND	OR	7	1	526442	31812	15052	15052
20052	DKBHE	26	E	E	RAPID CITY	SD	1	0	14123	0	0	0
20052	DKBME	22	E	E	BISMARCK	ND	1	0	28139	0	0	0
20052	DKCBA	13	I	F	SALINAS	CA	1	0	59930	0	0	0
20052	DKCNC	35	N	C	DENVER	CO	4	0	548657	0	0	0
20052	DKCOY	19	N	C	SANTA MARIA	CA	2	0	33511	0	0	0
20052	DKCPQ	18	I	F	TACOMA	WA	4	0	1013953	0	0	0
20052	DKCPT	18	E	E	KANSAS CITY	MO	3	0	122197	0	0	0
20052	DKGRA	35	N	N	SACRAMENTO	CA	0	0	539421	0	0	0
20052	DKCTS	41	E	E	SEATTLE	WA	4	0	1013953	0	0	0
20052	DKCTV	24	N	C	KANSAS CITY	MO	3	0	122197	0	0	0
20052	DKCWE	31	I	P	KANSAS CITY	MO	1	0	27079	0	0	0
20052	DKDAF	32	I	B	DALLAS	TX	2	0	72557	0	0	0
20052	DKDFW	35	N	C	DALLAS	TX	3	0	79776	0	0	0
20052	DKDKA	25	N	C	PITTSBURGH	PA	1	0	21899	0	0	0
20052	DKDLT	47	N	N	SIoux FALLS	SD	3	0	60325	0	0	0
20052	DKDSD	17	E	E	ABERDEEN	SD	2	0	19953	0	0	0
20052	DKDVR	32	I	F	DENVER	CO	5	0	601295	0	0	0
20052	DKELO	32	N	C	SIoux FALLS	SD	2	0	52939	0	0	0

APPENDIX E

Direct Testimony of Jonda K. Martin

CDC Station Summaries by Station Type  
2003-2 to 2005-2 Excerpt

2003-2 to 2005-2  
 CDC Station Summaries  
 by Station Type (Excerpt)

ACCT- PERIOD	CALL-1-X	STA-TYP-X	SS-SYSTEMS-TOT	SS-SUBS-TOT	SS-FEE-GEN-TOTAL	N-UNQ-STA	SS-SYS-DIST-TOT	SS-SUBS-DIST-TOT	SS-FEE-GEN-TOT	N-DIST
20052	U.S.	Educational	2,793	173,628,492	1,810,450	413	546	8,220,169	1,810,020	189
20052	U.S.	Independent	8,373	487,884,406	44,944,039	775	1,567	46,412,769	44,943,609	320
20052	U.S.	Low Power	500	28,598,875	791,700	282	68	775,800	791,700	45
20052	U.S.	Network	5,999	308,592,647	3,313,595	790	969	9,859,156	3,313,165	362
20052	U.S.	Minimum Fees	328	16,163,341	12,230,476	1	-	-	-	-
20052	CANADIAN	Independent	95	6,315,754	2,270,745	22	59	2,860,093	2,270,745	16
20052	MEXICAN	Independent	27	2,643,902	15,720	15	1	10,182	15,720	1
20051	U.S.	Educational	2,981	154,709,075	1,796,099	384	679	8,803,075	1,796,099	214
20051	U.S.	Independent	9,191	458,253,105	44,239,090	738	1,897	47,309,300	44,239,090	346
20051	U.S.	Low Power	552	26,591,257	774,458	288	69	672,421	774,458	45
20051	U.S.	Network	6,565	263,381,217	3,785,510	687	1,238	11,604,903	3,785,510	409
20051	U.S.	Minimum Fees	394	17,664,468	11,899,295	1	-	-	-	-
20051	CANADIAN	Independent	106	6,542,372	2,151,952	25	69	3,020,164	2,151,952	19
20051	MEXICAN	Independent	25	2,510,006	19,002	14	1	9,452	19,002	1
20042	U.S.	Educational	3,013	142,820,875	1,757,224	361	670	8,731,210	1,757,224	207
20042	U.S.	Independent	9,328	443,017,846	43,787,853	714	1,892	48,863,780	43,787,648	323
20042	U.S.	Low Power	510	21,390,278	612,197	283	54	563,970	612,197	36
20042	U.S.	Network	6,645	238,193,648	3,882,304	654	1,216	13,086,987	3,882,099	404
20042	U.S.	Minimum Fees	397	17,093,060	12,053,748	1	-	-	-	-
20042	CANADIAN	Independent	106	4,759,663	1,886,884	25	70	2,614,578	1,886,884	20
20042	MEXICAN	Independent	24	2,112,213	18,790	14	1	10,558	18,790	1
20041	U.S.	Educational	3,038	142,840,713	1,713,077	356	646	8,441,273	1,713,033	202
20041	U.S.	Independent	9,405	436,735,464	41,808,082	706	1,863	45,486,549	41,808,038	317
20041	U.S.	Low Power	519	22,680,007	664,297	276	54	622,468	664,297	35
20041	U.S.	Network	6,721	243,520,388	3,808,060	652	1,176	12,051,522	3,808,016	389
20041	U.S.	Minimum Fees	449	18,886,225	13,984,578	1	-	-	-	-
20041	CANADIAN	Independent	118	6,372,077	2,228,738	22	76	2,760,217	2,228,738	16
20041	MEXICAN	Independent	26	2,599,254	18,772	15	1	9,578	18,772	1
20032	U.S.	Educational	3,104	144,732,651	1,883,681	353	628	9,363,059	1,883,681	182
20032	U.S.	Independent	9,450	434,038,683	40,195,322	691	1,877	45,275,517	40,195,322	321
20032	U.S.	Low Power	503	20,592,832	609,648	260	51	643,153	609,648	34
20032	U.S.	Network	6,818	243,620,706	3,751,059	645	1,152	12,518,506	3,751,059	382
20032	U.S.	Minimum Fees	390	16,940,091	12,509,400	1	-	-	-	-
20032	CANADIAN	Independent	121	6,733,930	2,454,412	23	79	3,262,903	2,454,412	18
20032	MEXICAN	Independent	28	2,644,764	19,671	15	2	11,146	19,671	2

**APPENDIX F**

**Direct Testimony of Jonda K. Martin**

**CDC System Summaries by Form and Accounting Period  
2000-1 to 2003-2 Excerpt**

2000-1 to 2003-2  
CDC System Summaries by Form and Accounting Period (Excerpt)

ACCT- PERIOD FORM-DESCR	TOT- SYSTEMS	ROY-TOTAL	AVG-ROY	NUM-SOA- SYSTEMS	SUBSCRIBERS	AVG-SUBS	RECEIPTS	AVG-RCPTS	NON-ZERO- STA	AVG-STA	AVG-DIST	N-ZERO- DIST	AVG-DISE
20032 1 ONE	4,454	164,975	37	4,409	1,203,763	273	147,931,896	33,598	4409	7,995	1.661	871	1.412
20032 2 TWO	1,601	1,661,321	1,038	1,596	2,881,141	1,806	317,531,924	199,080	1595	9,507	1.917	214	1.513
20032 3 THREE	1,648	63,132,457	38,309	1,648	60,170,394	36,511	5,119,344,504	3,106,398	1648	12,201	5.811	272	1.326
20032 3 3.75%	272	8,268,442	30,399	272	8,268,442	30,399	785,047,993	2,775,912	272	13,136	5.581	0	1.775
20032 3 SYNDX	6	17,945	2,991	6	98,664	16,444	9,648,137	1,608,023	6	12,500	6.333	0	2.246
20032 TOTAL F1,2,3	7,703	64,958,753	8,433	7,653	64,255,258	8,403	5,584,808,324	730,422	7652	9,216	1.855	1357	1.415
20031 1 ONE	4,634	1,172,258	37	4,606	1,282,929	3,279	154,302,542	33,559	4607	7,858	1.626	967	1.393
20031 2 TWO	1,679	1,698,876	1,012	1,676	3,036,228	1,813	329,651,200	196,807	1676	9,455	1.892	233	1.496
20031 3 THREE	1,667	63,593,456	37,652	1,667	59,244,397	35,160	5,057,356,695	2,939,618	1667	12,092	2.200	300	1.336
20031 3 3.75%	289	8,439,180	31,372	289	7,041,553	26,177	635,829,325	2,363,678	289	12,647	5.312	0	1.795
20031 3 SYNDX	5	17,481	3,496	5	92,792	18,578	6,786,604	1,757,321	5	13,600	7.000	0	2.385
20031 TOTAL F1,2,3	7,992	65,464,570	8,202	7,969	63,563,554	7,984	5,544,230,437	696,232	7970	9,090	1.803	1500	1.404
20022 1 ONE	4,922	181,157	37	4,911	1,358,440	3,487	159,253,191	33,487	4909	7,801	1.622	978	1.380
20022 2 TWO	1,763	1,789,852	1,016	1,759	3,287,763	1,869	346,059,178	196,736	1758	9,399	1.879	237	1.475
20022 3 THREE	1,723	63,395,259	36,794	1,723	60,642,554	35,621	5,031,100,887	2,919,966	1723	12,012	2.210	308	1.352
20022 3 3.75%	289	9,272,092	32,003	289	9,861,548	34,123	809,621,918	2,801,460	289	12,848	5.294	0	1.862
20022 3 SYNDX	6	20,101	3,350	6	176,915	29,486	17,452,256	2,908,709	6	15,667	7.000	0	2.134
20022 TOTAL F1,2,3	8,406	65,356,268	7,776	8,393	65,288,727	7,786	5,536,413,256	660,355	8390	9,000	1.797	1523	1.395
20021 1 ONE	4,960	1,184,853	37	4,949	1,430,728	2,899	163,854,960	33,129	4948	7,804	1.637	955	1.388
20021 2 TWO	1,814	1,840,418	1,015	1,812	3,431,447	1,894	356,264,249	196,614	1812	9,217	1.834	266	1.466
20021 3 THREE	1,782	62,370,343	35,397	1,755	60,566,894	34,472	4,982,919,148	2,838,814	1758	11,787	2.071	306	1.321
20021 3 3.75%	238	7,282,366	30,598	238	7,223,108	30,349	593,739,187	2,494,702	238	12,462	4.916	0	1.766
20021 3 SYNDX	6	12,660	2,110	6	230,768	38,461	16,917,708	2,819,618	6	15,167	4.667	0	1.997
20021 TOTAL F1,2,3	8,537	64,395,642	7,543	8,520	65,429,069	7,686	5,503,038,357	646,124	8518	8,929	1.769	1527	1.394
20012 1 ONE	5,095	1,744,020	34	5,050	1,519,430	3,001	169,022,320	33,536	4886	7,830	1.647	920	1.383
20012 2 TWO	2,004	1,996,744	996	1,998	4,005,201	2,008	395,143,866	197,968	1969	9,220	1.785	292	1.435
20012 3 THREE	1,818	58,563,769	32,213	1,818	60,638,086	33,354	4,770,594,121	2,624,089	1817	11,516	2.013	312	1.325
20012 3 3.75%	239	7,201,818	30,133	239	6,243,346	26,123	477,362,542	1,997,333	239	11,958	4.866	0	1.825
20012 3 SYNDX	7	38,995	5,571	7	173,915	24,845	11,774,906	1,682,129	7	12,429	3.857	0	1.740
20012 TOTAL F1,2,3	8,917	60,734,533	6,811	8,866	66,162,717	7,473	5,334,760,307	602,525	8672	8,918	1.755	1524	1.383
20011 1 ONE	5,422	2,017,705	37	5,325	1,674,244	3,315	180,934,261	34,010	5322	7,749	1.644	922	1.369
20011 2 TWO	2,087	2,162,812	1,031	2,084	4,263,228	2,047	413,616,792	198,473	2084	9,222	1.777	309	1.430
20011 3 THREE	1,853	57,560,321	31,074	1,853	60,303,142	32,544	4,786,573,108	2,589,148	1853	11,314	1.937	335	1.394
20011 3 3.75%	225	6,315,462	28,069	225	5,616,432	24,952	435,324,852	1,935,666	225	11,711	4.822	0	1.772
20011 3 SYNDX	10	45,801	4,580	10	205,285	20,529	14,015,393	1,401,539	10	12,400	2.400	0	1.368
20011 TOTAL F1,2,3	9,372	59,944,838	6,386	9,262	66,240,614	7,154	5,381,124,161	581,303	9258	8,793	1.733	1556	1.368
20002 1 ONE	5,586	2,111,472	38	5,538	1,778,820	3,322	189,697,710	34,328	5541	7,751	1.692	748	1.375
20002 2 TWO	2,206	2,231,869	1,012	2,190	4,476,925	2,047	429,200,210	196,161	2190	9,156	1.815	288	1.447
20002 3 THREE	1,898	56,174,162	29,597	1,898	60,098,647	31,664	4,750,635,908	2,502,969	1889	11,256	1.903	311	1.292
20002 3 3.75%	211	5,617,387	26,623	211	4,923,739	23,335	375,142,551	1,777,927	211	11,673	4.531	0	1.754
20002 3 SYNDX	6	27,810	4,635	6	132,216	22,036	8,326,523	1,387,754	6	10,667	2.833	0	1.427
20002 TOTAL F1,2,3	9,690	58,617,503	6,049	9,626	66,354,392	6,901	5,369,533,828	558,628	9620	8,759	1.761	1347	1.376
20001 1 ONE	5,017	1,401,510	28	4,849	1,284,876	2,679	138,612,044	28,710	4845	7,611	1.654	682	1.358
20001 2 TWO	2,539	2,047,739	807	2,477	3,905,034	1,579	380,520,554	153,932	2478	8,965	1.821	309	1.448
20001 3 THREE	2,307	55,697,649	24,143	2,307	60,738,269	26,338	4,958,564,374	2,149,356	2103	10,945	1.906	380	1.405
20001 3 3.75%	253	6,486,981	25,640	253	5,037,914	19,313	400,646,263	1,583,892	253	11,292	4.336	0	1.828
20001 3 SYNDX	9	91,473	10,164	9	398,486	44,276	21,563,802	2,335,978	9	13,778	3.444	0	1.652
20001 TOTAL F1,2,3	9,863	57,885,898	5,869	9,633	65,928,179	6,870	5,477,696,972	570,178	9626	8,757	1.757	1371	1.369

APPENDIX G

Direct Testimony of Jonda K. Martin

CDC Account Period Summaries with Market Descriptor  
2005-2 Excerpt



MARKET DESCR.	TOTAL SYSTEMS	ROYALTY	AVERAGE Royalty	# SOA Subscribers	Average Subs	CROSS RECEIPTS	Average Receipts	# With CARR'G	Avg # STA	Avg DIST	#=0 Dist	Avg BSE	
2005-2 FORM: 1 (ONE)													
TOP 50	622	34,782	56	622	206,677	333	26,421,422	42,822	622	9,580	1,080	246	1,330
END 50	619	32,521	53	619	198,675	323	22,879,273	37,202	619	8,234	1,425	148	1,412
SMALLER	1,140	59,510	52	1,139	358,614	315	44,619,880	39,209	1,139	7,987	1,861	190	1,471
OUTSIDE	1,476	77,526	53	1,476	439,628	298	57,867,114	39,339	1,475	8,018	1,904	237	1,469
UNKNOWN	2	104	52	1	698	698	50,473	50,473	1	0,000		1	
SUBTOTAL	3,859	204,443	53	3,857	1,204,292	313	151,838,162	39,521	3,856	8,296	1,681	842	1,443
2005-2 FORM: 2 (TWO)													
TOP 50	180	264,971	1,472	180	974,008	2,633	50,207,313	278,930	180	12,172	1,606	40	1,559
END 50	157	216,714	1,380	157	387,768	2,470	42,574,503	271,175	157	9,975	1,726	23	1,519
SMALLER	453	723,957	1,596	453	1,292,184	2,853	131,393,652	290,052	453	10,263	2,219	64	1,888
OUTSIDE	360	483,616	1,343	360	768,070	2,139	95,425,515	265,809	360	10,075	2,247	44	1,646
SUBTOTAL	1,150	1,689,258	1,469	1,150	2,922,030	2,543	319,600,983	278,156	1,150	10,463	2,064	171	1,617
2005-2 FORM: 3 (THREE)													
TOP 50	466	32,260,246	69,228	466	35,539,884	76,266	2,953,948,409	6,338,945	466	18,047	1,845	117	1,127
END 50	220	11,099,074	50,450	218	10,112,636	46,602	887,235,282	4,088,642	218	12,174	2,573	9	1,280
SMALLER	472	21,114,589	44,734	472	11,937,577	25,291	1,195,849,554	2,533,580	472	12,104	3,294	45	1,418
OUTSIDE	107	1,666,893	15,578	107	998,913	9,336	120,252,973	1,123,860	107	11,271	3,000	11	1,558
SUBTOTAL	1,265	66,140,802	52,285	1,263	58,589,010	46,426	5,157,266,218	4,086,598	1,263	14,238	2,610	182	1,310
2005-2 FORM: 3 (3-75%)													
TOP 50	55	1,087,879	19,780	55	5,842,778	106,232	437,357,213	7,951,949	55	17,309	6,418		1,353
END 50	39	791,632	20,298	39	1,861,537	47,732	195,537,739	5,013,769	39	14,641	5,621		1,693
SMALLER	152	6,462,979	42,520	152	4,414,862	29,045	392,739,426	2,583,812	152	13,882	6,066		1,838
SUBTOTAL	246	8,342,490	33,913	246	12,119,177	49,265	1,025,634,378	4,169,245	246	14,766	6,106		1,706

FORM 1/2 Distant & USE EST'd...AVG-DIST-Incl's #=0-Dist' AVG-BSE NBT...3-75 and Syn = Subsets; Roy's = 3-75 or Syn resp.

Before the  
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Washington, D.C.

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In the Matter of )  
 )  
Distribution of the )  
2004 and 2005 )  
Cable Royalty Funds )

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Docket No. 2007-3 CRB CD 2004-2005

Statement of  
Richard V. Ducey

June 1, 2009

## **Statement of Richard V. Ducey**

I submit this Statement on behalf of the Commercial Television Claimants Group ("CTV"), which is represented in these proceedings by the National Association of Broadcasters ("NAB").

### **Background**

I am the Chief Strategy Officer for BIA Advisory Services ("BAS"). BAS is a subsidiary of BIA Financial Network ("BIA"). BAS advises media and technology companies with their business planning; technology strategies; sales strategies; market research and assessment and financial valuation. The parent company, BIA, has several other divisions including a merchant bank, software and technology companies and a financial advisory service. I served from 2000 to 2007 as president of SpectraRep, Inc., one of BIA's software and technology subsidiaries.

Prior to joining BIA in 2000, I was a senior vice president at the NAB where I ran the Research and Information Group. This group consisted of three departments (research and planning; management information systems and the library information center). I was responsible for all primary and secondary industry and policy research; information systems and technologies; and the corporate information center.

Before coming to NAB, I was on the faculty of Michigan State University in the telecommunication department. I taught graduate and undergraduate courses in research design and analysis and technology management. Since coming to Washington, DC, I've also taught strategic marketing and research courses at the University of Maryland/College Park and on the graduate faculties of George Washington University and George Mason University.

I earned my Ph.D. at Michigan State University specializing in computer and telecommunication technologies and market research. I have a M.S. from Syracuse University in Film/Radio/TV and a B.A. in Communication Studies from University of Massachusetts in Amherst.

I have authored or co-authored over sixty publications and papers in my specialty areas. I serve on the editorial review boards of several leading scholarly and industry journals in the media field.

My current understanding of the cable marketplace comes from personal experience as well as more recent consulting assignments and industry knowledge gained from reviewing academic and industry research, participating in conferences, reading trade press and generally interacting with professionals from different segments of the media industry. I spent some time working as a program manager for a cable system in North Syracuse while in graduate school.

I have had the opportunity to testify on behalf of NAB in four prior copyright proceedings conducted by the Copyright Royalty Tribunal ("CRT") and the Copyright Arbitration Royalty Panel ("CARP") dealing with award allocations from distant signal carriage royalties. I testified twice before the CRT and twice

before the CARPs that determined the 1990-1992 and 1998-1999 Phase I royalty decisions. I also testified in a Phase II proceeding involving the distribution of part of the 1986 Program Suppliers cable royalty funds to broadcast stations for their own syndicated programming. My background and qualifications are described further in Appendix 1.

## Overview

In my testimony in the 1998-1999 cable royalty proceeding, I presented evidence of very substantial changes in the cable distant signal marketplace that had occurred between the 1990-1992 and 1998-1999 proceedings. The changes, resulting in large measure from the effective withdrawal of two leading superstations from the marketplace, produced significant reductions in the amount of syndicated programming and movies that were retransmitted on distant signals, and could be observed in a corresponding reduction in the Program Suppliers share in their own viewing studies.

I am presenting similar evidence comparing the 2004-2005 period to 1990-1992 and 1998-1999. As you will see, there were no such radical shifts in the distant signal programming marketplace since the years covered by the last litigated proceeding. If anything, the trend of reductions in Program Suppliers programming continued, also largely as a result of changes in superstation programming, but at a more incremental pace.

I understand that the Bortz cable operator survey results presented by the Joint Sports Claimants in this proceeding show that the relative marketplace values of the respective claimant categories has remained generally stable over the same period. To the extent they show changes in the share of Commercial Television programming, they show an increase. The regression analysis that will be presented by CTV witness Dr. Joel Waldfogel independently corroborates the Bortz study results. In addition, the regression study, along with the programming study I describe below, provide a basis for evaluating the effect of the increasing presence of non-compensable Program Suppliers programming on superstation WGN.

## Changes in the Cable Industry: 1998-1999 vs. 2004-2005

### Industry Infrastructure, Business Model and Competitive Changes.

While the cable industry faced a good deal of competitive and technological change between 1998 and 2005, none of these changes appears significantly to have affected the cable operators' offerings of television station distant signals to their subscribers.

Among the developments in the multichannel video market during this period, satellite and telephone companies grew their video subscriber levels at the expense of cable, and streaming video via the Internet grew and began to challenge cable's core video programming service business model. In response, cable systems increased their channel capacity, and expanded their offerings of digital cable

and video on demand. Digital video recorder penetration also grew. The number of cable network services increased at the same time, accommodated both by the cable systems' increased capacity and their roll-out of digital infrastructure. Existing cable networks began offering not only their analog services but also digital high definition versions of the same content. As an example, ESPN launched its ESPN HD service in 2003.

Notable cable industry changes during 1999-2005 included the following:

- Consolidation increased, with the total number of cable systems steadily declining from 10,400 in 1999 to 7,900 by 2005. In 2001, for example, Comcast took over AT&T's cable systems, making it the largest MSO with over 22 million subscribers.
- Acquisitions were often made for the purpose of increasing efficiencies by consolidating previously separately owned systems serving contiguous communities. One of the effects was to contribute to a reduction in the number of systems filing separate Statements of Account with the Copyright Office.
- Digital and/or high definition versions of broadcast signals and cable networks began to be offered as part of cable video service tiers.
- Basic subscriber numbers, after growing continuously for decades, took a slight downturn, ending up at 65.4 million in 2005 compared with 65.9 million in 1999.
- The cable industry underwent a major infrastructure upgrade, spending a total of \$92.7 billion in capital projects (rising from \$5.6 billion in 1998 to \$10.6 billion in 2005), principally related to expanding bandwidth capacity.
- Cable's revenue from residential video rose from \$27.6 billion in 1998 to \$43.8 billion in 2005, while its total revenue from all sources grew from \$33.8 billion in 1998 to \$65.7 billion in 2005.
- The changing mix of cable services drove the contribution of basic revenues down from 65% of overall revenues in 1998 to about 50% by 2005.

Even with all these changes in the cable industry from 1999-2005, we observe only relatively incremental changes in the distant signal marketplace.

### **Comparison of the Distant Signal Market in 1998-1999 and 2004-2005**

In my 1998-1999 testimony, I presented charts showing cable royalty and distant signal carriage data to help illustrate the changes in the distant signal marketplace that had occurred between 1990-1992 and 1998-1999. I have updated those charts using data for 2000-2005, in order to show similar comparisons extended through 2004-2005.

signals show no significant change in the marketplace or in cable operator behaviors regarding distant signal carriage during that period.

## Comparison of Distant Signal Program Time from 1998-1999 to 2004-2005

### Categorization of Programs and Program Minutes

Another CTV witness, Dr. Joel Waldfogel, will explain the regression analyses he undertook to explore the statistical relationship between the royalty payments made by Form 3 cable operators for the distant signals they chose to carry in 2004-2005 and the types of programming on these stations. I will discuss my interpretation of these analyses and results in a later section of this testimony. But as part of the analyses, it was necessary to collect information on the amounts of programming in each of the categories being considered in this proceeding that were actually broadcast by the distant signals that were carried. We have used that information also to analyze the composition of the distant signal programming marketplace -- how much of each category of programming was actually retransmitted by cable operators -- in a way that allows a further point of comparison of the distant signal market in 1998-1999 and in 2004-2005.

For the regression analyses, the program data for commercial stations were provided by Tribune Media Service's TVData company, which specializes in providing television listings and program information to media and Internet companies. TVData provides program name, schedule, duration, editorial and other information, consisting of dozens of fields of data, that help in assigning programs to categories.

While the TVData program categorization is useful in its original form for its media clients, these categories and program assignments to particular categories are not precise enough to map into the categories relevant to the Copyright Royalty Board for the purpose of distant signal royalty allocations among Phase I claimant groups. Therefore, an essential, though difficult, part of preparing the TVData program information for the regressions was to match program titles to their correct categories.

We began with the definition of program categories that has been used by the Phase I parties in past proceedings, which I attach as CTV 04-05 Exhibit 5. Working with Cornerstone Research, the company that performed the data work for the regression analyses, we developed an automated rules-based approach using the data fields and information provided by TVData that could be programmed and applied to assign program titles to their correct categories for purposes of this proceeding. For example, we used the data fields indicating the program source, or program titles, that included "ABC", "NBC", or "CBS" to create a rule that excluded those programs from the analysis because they are network programs that are not part of this royalty proceeding. I reviewed the results of the application of such rules and we continued supplementing and refining them until they appeared to be categorizing programs accurately.

Based on my industry knowledge, I was able to assist both in developing and in refining program categorization rules Cornerstone Research used and modified. I reviewed tens of thousands of program listings to identify programs for which the information may not have been sufficient for final categorization through the application of filtering rules. For these program titles, I used my industry

knowledge or performed additional informal research in order to make the appropriate assignments to categories.

The job was truly massive. We sought to include every station that had been carried as a distant signal in each of the four accounting periods for 2004-2005. Including the educational stations, this amounted to from 900 to over 1,000 stations in the separate periods. Cornerstone randomly selected 21 days in each six-month period, stratified in order to produce equal representation of each of the seven days of the week, for a total of twelve randomly composed weeks' worth of program schedules across the two years. This meant that we had information for over 1.5 million hours of programming all told.

### **The Program Marketplace Comparison**

In the 1998-1999 proceeding, Dr. Mark Fratrick of BIA Financial, Inc., prepared a similar analysis. His testimony is provided as CTV 04-05 Exhibit 6. We followed essentially the same approach as he did in analyzing the data and calculating the relative amounts of programming in the distant signal marketplace. We weighted the respective program minutes from the various program categories on each station by the number of subscribers who received that station as a distant signal. In this way, we arrived at a measure of the relative availability of the various program categories in the cable marketplace. The analysis provides another way of assessing changes in the distant signal marketplace in 2004-2005 as compared with the years covered by prior proceedings.

One important issue we needed to address was the programming on WGN. As discussed in the 1998-1999 proceeding, certain programming that is retransmitted by cable systems carrying WGN as a distant signal has been substituted for the programming that originally aired on WGN in Chicago. I understand that in general this is part of an effort to make the signal "syndex-proof" by providing only programming that cable operators would not have to black out pursuant to the FCC's syndicated exclusivity rules. (Those rules could require various individual cable systems to black out different amounts of programming and different programs, since they apply only if a station in the cable system's market has acquired local broadcast rights to the same syndicated program.) But since the carriage of the substitute programs is not subject to the cable statutory license, I understand that they are non-compensable in this proceeding. Therefore, we needed to exclude all of the substitute programs on WGN before calculating the relative shares of program time. CTV 04-05 Exhibit 7 shows the total minutes of programs in each of the program categories on the distant signal WGN (referred to as "WGNA") and then the total minutes that were compensable, along with the percentage of each category. While evidence in the 1998-1999 proceeding showed that about half of the WGN program time was non-compensable, the new analysis shows that about 70 percent of the programming was non-compensable in 2004-2005, with the greatest differences in the Program Suppliers (over 78 percent non-compensable<sup>3</sup>) and Devotionals (90 percent non-compensable) programming on the distant signal. Given that WGN was by far the most widely carried distant signal, received by over 36 million subscribers in 2005, we would expect that the significant decline in the amount of compensable

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<sup>3</sup> The non-compensable Program Suppliers programming included numerous movies as well as syndicated series and infomercials.

Program Suppliers programming on the station would be reflected in a decline in the amount of Program Suppliers programming in the distant signal market as a whole.

CTV 04-05 Exhibit 8 shows the results of the overall analysis for 2004-2005, calculated after excluding the non-compensable programs on WGN. CTV 04-05 Exhibit 9 shows the comparison of these results with the program time data presented by Dr. Fratrik in the 1998-1999 proceeding. As you will see, the relative amounts of Program Suppliers programming in the marketplace declined from 77.9% in 1992 to 60.4% in 1998-1999, and then to 50.1% in 2004-2005. By contrast, the proportion of the distant signal marketplace represented by the Commercial TV program category increased from 8.8% in 1992 to 13.0% in 1998-1999 to 15.5% in 2004-2005.

Pure time measures cannot be relied upon to determine the relative marketplace value of the program categories. But the comparison of the amounts of programming actually purchased in the distant signal marketplace over time shows a steady trend of declines in the relative amount of distant signal programming in the Program Suppliers category and increases in the relative share of the Commercial TV category.

## **Distant Signal Clustering 1998-1999 versus 2004-2005**

### **Cable Data Corporation Distance Study**

For 2004 and 2005 data, I have prepared the same kind of distance analysis that was presented by Laurence J. DeFranco in the 1990-1992 and 1998-1999 Copyright Arbitration Royalty Panel Proceedings. Copies of his testimony from those proceedings are attached as CTV 04-05 Exhibit 10.<sup>4</sup>

I used data provided by Cable Data Corporation (CDC), which are being introduced by Jonda K. Martin, President and Owner of CDC, in her direct testimony in this proceeding. The data include the mileage distances between the city of license of each distant signal reported by a cable system in its statement of account and the "prime city" of the cable system, as calculated by CDC.

For purposes of preparing a distance analysis that could be compared with Mr. DeFranco's analyses for prior periods, I analyzed the data for U.S. Commercial stations carried as distant signals by Form 3 systems, after removing the same superstations<sup>5</sup> excluded from Mr. DeFranco's prior analyses.<sup>6</sup> My

<sup>4</sup> The attached Exhibit omits maps that Mr. DeFranco presented in the 1998-1999 proceeding for a different purpose, but includes all of his written testimony and exhibits regarding his distance analyses from the two prior proceedings.

<sup>5</sup> These stations were excluded from the early studies performed by Mr. DeFranco, for 1989, because they, along with WTBS, were the principal distant signals distributed nationally by satellite, and they were excluded in the 1990-1992 and 1998-1999 studies and in my 2004-2005 study for purposes of allowing direct comparisons across the years. But even if all except WGN were included in the 2004-2005 study, the percentage of distant signal incidents within 150 miles would still be about 92%.

<sup>6</sup> For the 2004-2 accounting period, I also removed the data for three distant signals that were reported as fully distant but whose city of license was the same as the "prime city" reported by the cable system.



analysis simply counted the number of distant signal incidents falling within certain distance ranges of the cable system that reported carrying the signal on a distant basis.<sup>7</sup> The results are set out in CTV 04-05 Exhibit 11, which also shows the percentage of total Form 3 non-superstation U.S. commercial distant signal incidents in each distance range and the cumulative percentages as the distance increases. As you will see, the total percentage of such distant incidents that occurred within 150 miles of the cable system that carried them was 93.3% in 2004-2 and 93.7% in 2005-2. By comparison, the percentages of distant signal incidents within 150 miles were 86.5% in 1989, 87.6% in 1992, and 89.2% in 1999.

This increase in the degree of "clustering" of distant signal carriage is relevant to the value of Commercial TV programming in the distant signal marketplace. I and other witnesses have provided many examples in prior testimony of the kinds of programming produced by commercial television stations and their appeal to cable operators and subscribers within the relatively nearby region in which they are actually carried as distant signals. For example, in my 1990-1992 testimony, I presented evidence regarding about forty different programs, including videotapes for several of them, along with maps showing the nearby areas where the 27 stations that produced those programs were actually retransmitted as distant signals. In my 1998-1999 testimony, I presented several more examples.<sup>8</sup> Witness Marcellus Alexander, who had been manager of television stations KYW-TV in Philadelphia and WJZ-TV in Baltimore, presented testimony describing his stations' programming and the appeal of that programming to the cable communities in the nearby regions where the stations were actually carried as distant signals.

In this proceeding as well, Jerald Fritz, an experienced broadcaster and General Counsel of Allbritton Communications, Inc., will provide more detail about the nature of the programs his stations produce and the appeal of those programs in the nearby regions in which they are carried as distant signals.

This information about the actual patterns of distant carriage by cable operators helps provide the real-world context for relying on the results of the Bortz studies, which show significant marketplace value shares for Commercial TV programming.

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<sup>7</sup> For purposes of this analysis, I included in the first distance tier, 35 to 50 miles, distant signals with cities of license measured as being less than 35 miles away from the "prime city" reported by the cable system. These instances represent carriage of distant or partially distant signals by systems whose geographic franchise territory extends farther than 35 miles from the city of license of the station, and are appropriately counted in the lowest distance tier.

<sup>8</sup> I also presented examples and videotapes in both proceedings of programs on the superstations that were of broad appeal to subscribers anywhere. My 1990-1992 testimony included copies of letters sent to station WGN from cable subscribers in far-flung states who expressed real interest in the WGN-produced news, sports, and public affairs programs. My 1998-1999 testimony included videotapes from WGN's "People to People" program and "Tenth Inning" post-game show that would have broad appeal to cable operators and subscribers regardless of their location. Those same programs were broadcast by WGN in 2004-2005.

## **Regression Study of Royalty Payments and Program Categories**

### **Regression Analyses**

Dr. Waldfogel has performed regression analyses using the number of program minutes in different program categories on the distant signals carried during 2004-2005 as independent or "explanatory" variables and the royalty payments by cable operators as the dependent variable. These analyses produce coefficients that essentially measure the functional relationship between the types and amounts of distant signal programming cable operators actually bought under the statutory license and what they paid for that programming.

The regression analysis provides a strong independent confirmation of the Bortz survey's direct measure of the relative market value of distant signal programs to cable operators. In the research field, studying the same question from a different analytical perspective using a different methodology and different data can provide a powerful test of the validity of a research study. Here, as explained by Dr. Waldfogel, a comparison of the implied shares that result from applying the regression coefficients to all program minutes on the distant signals carried during 2004-2005 with the "augmented" Bortz survey results representing the same universe of distant signal carriage provides very strong corroboration of the Bortz survey results.

The regression analysis produces an implied royalty share for the Commercial TV category of about 22.9%. This results from multiplying the regression coefficients for the various program categories by the number of compensable minutes of programming in each category on the distant signals carried by each Form 3 system. This calculation omits a large number of non-compensable programs that are carried when WGN is retransmitted as a distant signal, for the reasons discussed above.

When the share calculation is instead performed using all the "WGNA" program minutes rather than just those compensable in this proceeding, the resulting implied share for Commercial TV is about 20.2%, much closer to the 16.6% share measured by the Bortz survey. This suggests that any adjustment to the Bortz survey results for the purpose of reflecting the issue of the non-compensable programs on WGN would result in a higher share for Commercial TV.

Similarly, the regression study provides a basis for adjusting the Program Suppliers' Bortz survey share downwards to account for the WGN non-compensable program adjustment. The Program Suppliers share under the regression analysis using all WGN minutes is about 32.1%, compared to the Bortz survey share of about 37.1%. But the implied Program Suppliers share excluding non-compensable minutes on WGN is about 24.7%. Using this comparison, if its Bortz survey share were adjusted by the same ratio as the difference in the regression shares including and excluding the non-compensable program time, the Program Suppliers' share would be closer to 28% to 30% rather than 37%.

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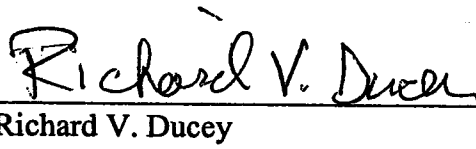
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2004 and 2005 )  
Cable Royalty Funds )  
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Docket No. 2007-3 CRB CD 2004-2005

**DECLARATION**

I, Richard V. Ducey, declare under penalty of perjury that the Statement of Richard V. Ducey presented in the 2004-2005 Cable Copyright Royalty Distribution Proceeding is true and correct to the best of my knowledge, information and belief.

  
\_\_\_\_\_  
Richard V. Ducey

Dated: 5/22/09

**APPENDIX 1**

**Statement of Richard V. Ducey**

**Background and Qualifications**

## RICHARD V. DUCEY

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### PROFILE

Strategic, interdisciplinary executive who develops vision, creates milestones and metrics, provides leadership to drive team achievements again plan. Accomplished in Internet, new media and information technologies and businesses, strategic market planning, research methods and statistical analysis. Accomplished public speaker for executive briefings, industry and academic presentations throughout the world. Co-inventor of patent pending digital datacasting alert and warning system.

### SUMMARY OF MAJOR ACCOMPLISHMENTS

- **BIA Advisory Services, LLC** - Chief Strategy Officer. Developed and lead consulting practice specializing in technology, financial and business strategies. Built an in-house and network advisory team of allied consultants focusing on digital media strategies based on my digital media ecosystem model. Key customer accounts include: Microsoft Corporation, ABC Affiliates Board; CBS Affiliates Board, NBC Affiliates Board, Fox Television Affiliates Board, The Washington Times, AccuWeather and National Association of Broadcasters.
- **SpectraRep, Inc.** – Co-founded start-up company in 2000 focusing on digital media, software and wireless distribution for government alerting and emergency response. Served as President from inception to 2007 when I left day-to-day management responsibilities. I built and led the team, developed creative innovative technology-based offers, led business development and partnerships and grew the company organically to \$5M+ in annual revenues. Key customer accounts: U.S. Department of Homeland Security, CACI, Northrop Grumman, Association of Public TV Stations. Co-inventor of patent pending Internet Protocol (IP) alerting system which implements the Common Alerting Protocol and datacast and other transport layers.
- **National Association of Broadcasters** – I formed and led what became a 21 person group as a result of my proposal to the CEO and COO. The group combined three departments: *Research & Planning* and *Marketing & Management Information Systems* and *Library and Information Center* under my leadership. We developed and optimized information and technology support for the Association's public policy agenda and member service programs, including the world's largest broadcast convention and exhibition. The group provided integrated research, planning, computing and information technology, advanced telecommunications and both electronic and print publications for the Association and the industry.

- **University Level Teaching** – I have taught innovative undergraduate and graduate seminars at several leading universities in the areas of technology, strategy and research.
- **Patents** – Led a team with a patent pending invention of an emergency alert and warning system using digital television datacasting, satellite, mobile and Internet transport layers as well as database driven and standards-based application layer.

#### EDUCATION

**Doctor of Philosophy** in Mass Media. Michigan State University, East Lansing, MI. Dissertation title: *The Adoption and Application of Computer-Based Telecommunication Technologies by Home Consumers*. June 1983.

**Master of Science** in Telecommunication/Film. Syracuse University, Syracuse, NY. August 1979.

**Bachelor of Arts** in Communication Studies. University of Massachusetts, Amherst, MA. May 1978.

#### PROFESSIONAL EXPERIENCE

- 2007--present **Chief Strategy Officer**, BIA Advisory Services (BIA Financial Network is the parent company). Responsible for overall strategic directions of BAS and its various subsidiaries including BIA Financial Network, SpectraRep and BIA Information Network.
- 2000-2007 **President**, SpectraRep, Inc., Chantilly, VA. SpectraRep is a division of BIA Financial Network (BIAfn). SpectraRep specializes in digital datacasting solutions via satellite and terrestrial digital television. Responsibilities determining the companies' strategic direction, developing sales & marketing and technology alliances and partnerships, business development and budgeting, raising external capital.
- Executive Vice President**, Strategic Advisory Group, BIA Financial Network (BIAfn). Strategic advisory services, digital media strategies, business plans, feasibility assessments, technology strategies and consulting, research and analysis.
- 2006 **Executive Vice President**, BIA Information Network. Chief executive running this branded desktop software company acquired by BIAfn.
- 2005 **Adjunct Faculty**, George Mason University, M.A. in Telecommunications Program, Course: TELE 730: Telecommunications Management. Spring 2005.
- 1991-2000 **Senior Vice President, Research and Information Group**, National Association of Broadcasters, Washington, D.C. Areas of responsibility included strategic planning, business process and data modeling and design, deploying and maintaining information technology resources, marketing and policy research and developing new publications. The group consisted of two departments: Research & Planning and Marketing & Management Information Systems. This group's mission was to optimize information and technology support for the Association's public policy agenda and member service

- programs, including the world's largest broadcast convention and exhibition. The group provided integrated research, planning, computing and information technology, advanced telecommunications, library services and both electronic and conventional publications development to the Association and the industry. The group was created based on my proposal to the President & CEO for combining several previously autonomous units (Research & Planning, Library & Information Center, Data Processing) into a single integrated division under my leadership.
- 1987-1991 **Senior Vice President, Research and Planning Department, National Association of Broadcasters, Washington, D.C.** Responsible for ten person department which conducted all phases of policy, marketing and product development research; represent NAB as industry research expert, staff liaison for NAB and industry audience research committees. Conduct NAB's long-range planning, plan major projects with and supervise outside consultants, plan major convention sessions; representative to industry and academic groups; responsible for NAB product development; offer expert testimony; prepare filings for governmental courts, agencies and legislators.
- 1989 **Adjunct Faculty, George Washington University, Graduate School of Arts & Sciences.** Course taught: "Strategic Planning and Market Management in Telecommunication," Master of Arts in Telecommunication Program.
- 1986-1987 **Vice President, Research and Planning Department, National Association of Broadcasters, Washington, D.C.**
- Adjunct Faculty, Department of Communication Arts and Theatre, Radio and Television Division, University of Maryland, College Park, MD.** Courses taught: "Strategic Market Management in Telecommunication" (RTVF 498), and "Broadcast Research Methods" (RTVF 649).
- 1985-1986 **Director of Marketing and Policy Research, National Association of Broadcasters, Washington, D.C.**
- 1983-1985 **Director of Audience Measurement and Technology Research, National Association of Broadcasters, Washington, D.C.**
- 1982-1983 **Faculty, Department of Telecommunication, Michigan State University, East Lansing, MI.** Courses taught: "Technology and the Information Society" (TC 801), "Basic Telecommunication Technology" (TC 230), "Audience Survey and Analysis" (TC 335), and "Telecommunication Computer Applications" (CAS 492). Research interests: Design, applications and effects of telecommunication technologies.
- 1979-1982 **Graduate Research Assistant, Department of Telecommunication, Michigan State University, East Lansing, MI.**
- 1979 **Announcer, WSOQ-AM/WEZG-FM, North Syracuse, NY.**
- 1978-1979 **Program Manager, Upstate Cablevision, North Syracuse, NY.**

**PATENTS**

- 2008 "System and Method for Managing Emergency Notifications Over Network," Richard V. Ducey, et al. United States Patent Application, Publication Number US 2008/0034114, February 7, 2008.

**PUBLICATIONS**

- 2007 Ducey, Rick, "Radio's Place in Advertising Ecosystem Is Local and Digital," *Advertising Age*, November 14, 2007.
- 2006 Ducey, Rick, "Strategies for the Second Half: As Digital Media Roil the Market, AOL and Nielsen Address the Wanamaker Challenge," *The Financial Manager* (BCFM), pp. 10-16, September-October 2006.
- Ducey, Rick; David Gross and Chris Versace, "Consolidation versus Innovation: The Drive for Change," *European Communications*, Autumn 2006, pp. 64-66.
- 2002 Ducey, Rick, "Datacasting," in Rice, John and Brian McKernan, eds., *Creating Digital Content*, New York, NY: McGraw-Hill, pp. 211-222, 2002.
- 2000 Ducey, Richard V., "Broadcasting in the Internet Age: Emerging Business Models for Broadcasting," in Osso, Rafael (ed.), *Handbook of Emerging Communications Technologies in the Next Decade*, Boca Raton, FL: CRC Press, pp. 297-308 (chapter 14).
- 1999 Ducey, Richard V., "Internet + DTV = UnTV," *NAB MultiMedia World Journal*, April 1999.
- 1996 Ducey, Rick, "Manager's Corner: Seven Stages of the Change Process," *Electronic Media*, October 28, 1996, p. 16.
- Ducey, Richard V., "An Overview of the American Digital Television Service Program," *Asia-Pacific Broadcasting Union Technical Review*, July-August, 1996, pp. 14-20.
- 1995 Ducey, Richard V., "A New Digital Marketplace in Information and Entertainment Services: Organizing Around Connectivity and Interoperability," *Interactive Industry Review*.
- 1994 Ducey, Richard V. and Mark R. Fratrick, *Strategic Planning Handbook for Broadcasters*, Washington, DC: National Association of Broadcasters, 1994.
- Ducey, Richard V., "Building the Information Highway: The Architecture of Convergence," *Multimedia Jahrbuch '94: Telekommunikation und Medien* (New Technology Conference Proceedings, Stuttgart, Germany), pp. 71-94, December 1994.
- 1993 Ducey, Richard V., "Riding Radio's Technology Wave," *Media Studies Journal*, Summer 1993, pp. 151-158.



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- Ducey, Richard V. and Teri Lepovitz, "The Role of Market Research in Association Strategic Planning," *Association Management*, December 1989, pp. 41-44.
- 1988 Abel, John D., Richard V. Ducey and Mark R. Fratrik, *RadiOutlook: Forces Shaping the Radio Industry*, (Washington, D.C.: National Association of Broadcasters).
- 1987 Abel, John D., Richard V. Ducey and Mark R. Fratrik, *Targeting Radio's Future*, (Washington, D.C.: National Association of Broadcasters).
- 1986 Ducey, Richard V. and Julia Portale, "Development of Foreign Language and Ethnic Broadcasting in the U.S. and its Implications for the U.S. Telecommunications Industry," in J. Miller (ed.), *Telecommunications and Equity*, (New York: Elsevier Science Publishers, 1986).
- 1985 Barbatsis, Gretchen, Kent Creswell and Richard V. Ducey, "Technology Literacy: A Model for Identifying Abilities in Telecommunication," *Telematics and Informatics*, vol. 2, no. 3, December 1985.
- Reagan, Joey, Richard V. Ducey and James Bernstein, "Local Predictors of Basic and Pay Cable Subscribership," *Journalism Quarterly*, Summer 1985.
- 1984 Baldwin, Thomas F., John D. Abel and Richard V. Ducey, *The Media Environment: Consumption and Function of Media Under the Different Conditions of Access to Media in Isolated Communities, Small Towns, Medium Cities and Metropolitan Areas*, National Science Foundation, Grant No. DAR 79-10614, Michigan State University, East Lansing, MI. April 1984.
- 1983 Ducey, Richard V., "Predicting the Adoption of Broadcasting Innovations by Relating Technical Attributes to User Needs: Implications for System Designs," *I.E.E.E. Transactions on Broadcasting*, June 1983.
- Reagan, Joey and Richard V. Ducey, "Effects of News Measure on Selection of State Government News Sources," *Journalism Quarterly*, Summer 1983.
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- 1982 Reagan, Joey and Richard V. Ducey, "Use of Mass and Non-Mass Information Sources for Polarizing Issues," *Michigan Speech Association Journal*, vol. 17, no. 1, 1982.
- 1982 Ducey, Richard V. and Robert E. Yadon, "A Human Factors Research Program for Videotex Technology," *I.E.E.E. Transactions on Broadcasting*, March 1982.

- 1981 Ducey, Richard V. and Robert E. Yadon, "Computers in the Media: A New Course in the Curriculum," *Feedback*, Spring 1981.
- 1980 Soley, Lawrence, Richard V. Ducey and Bradley S. Greenberg, Lansing's Response to the Princess," *Public Telecommunications Review*, July/August 1980.
- 1978 Dorris, William and Richard V. Ducey, "Social Psychology and Sex Roles in Film," *Teaching of Psychology*, October 1978.

**PAPERS**

- 1997 Ducey, Richard V., "Digital Terrestrial Broadcasting and the Internet," The Impact of the Internet on Communications Policy Conference, Harvard University, December 3-5, 1997.
- 1996 Ducey, Richard V., "An Overview of the American Digital Television Program," BroadcastAsia '96, World Trade Center, Singapore, June 5, 1996.
- Ducey, Richard V., "Multimedia Broadcasting and the Internet," INET '96, 6<sup>th</sup> Annual Internet Society Conference, Montreal, Canada, June 26, 1996.
- 1995 Ducey, Richard V., "How Radio Can Use Multimedia and Interactive Computer Tools Profitably Today," Leipzig Radio Show 1995, Leipzig, Germany, May 31, 1995.
- Ducey, Richard V., "Understanding How Consumer Demand Will Drive the Development and Adoption of Digital Television," Managing the Transition to Digital Television Conference, London, England, May 24, 1995.
- Ducey, Richard V., "A New Digital Marketplace in Information and Entertainment Services," Partners in Information Conference, Tele-Communications Association, Oregon Chapter, Portland, OR, May 9, 1995.
- 1994 Ducey, Richard V., "Interactive TV: Disco Fad or New Age Media?" Cable Television Administration and Marketing Convention, Chicago Hilton, Chicago, IL, July 25-27, 1994.
- Ducey, Richard V., "Who Will Deliver the Next Generation of TV to Consumers?" Interactive TV Industry Conference, Park Lane, New York, NY, July 7-8, 1994.
- Ducey, Richard V., "Where Does Broadcasting Fit in the World of Convergence? Opportunities in Multimedia Broadcasting," presented to Convergence '94: Interactive Television, Marriott Marquis, New York, NY, March 7, 1994.
- 1993 Ducey, Richard V., "Negotiating Effective Public Policy for Commercial Broadcasting: A Partnership Between Government and Broadcasting," 1993 Pan Asia Television and Radio Industry Conference, Marina Marin, Singapore, June 28, 1993.

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- Ducey, Richard V., "Reengineering Business Systems: Introducing Client-Server Architecture in a National Trade Association," International Communication Association, Annual Conference, Washington, DC, May 30, 1993.
- 1991 Ducey, Richard V., "Challenges and Opportunities in Local Television Audience Measurement: A Personal TV Diary," BBM Broadcast Research Perspectives Conference, Toronto, Canada, December 11, 1991.
- 1990 Ducey, Richard V., "Today's FM Radio Industry and Important Developments for Its Future," Edwin H. Armstrong: The Man and His Inventions Conference, The Center for Telecommunications and Information Studies, Columbia University, November 1990.
- 1989 Ducey, Richard V., "The Personal Television Diary Study: Initiatives Towards Better Measurement of Individual Viewing," Electronic Media and Research Technologies VIII, Advertising Research Foundation, New York, NY, December 14-15, 1989.
- 1989 Ducey, Richard V., "Consumer Responses to Advanced Television Systems," International Electronic Imaging Exposition & Conference, Boston, MA, October 2-5, 1989.
- Ducey, Richard V., "Application of Competitor Intelligence and Planning to Non-Profit Sector," Society of Competitive Intelligence Planners/Planning Forum Meeting, Arlington, VA, June 7, 1989.
- 1988 Ducey, Richard V., "The Role of Market Research in Association Strategic Planning," presented to the 9th Annual Marketing Research Conference, American Marketing Association, Arlington, VA, October 9-12, 1988.
- Ducey, Richard V. and Mark R. Fratrick, "Broadcasting Industry Response to New Technologies: The Complementary Roles of Stations and Consumers," presented to the 7th International Conference of the International Telecommunications Society, Massachusetts Institute of Technology, Cambridge, MA, July 1988.
- 1987 Shepard, Julian L., Ed Cohen and Richard V. Ducey, "The Challenges of Audience Measurement Research in Federal Communications Policy: A Case Study," 15th Annual Telecommunications Policy Research Conference, Airlie, VA, September, 1987.
- 1986 Ducey, Richard V., "Consumer Applications of Electronic Imaging Technology: A Social Science Perspective of Demand Pull vs. Technology Push," International Electronic Imaging Exposition and Conference, Third Annual Conference, Boston, MA, November 1986.
- 1986 Ducey, Richard V. and Carrie J. Heeter, "The Use of Telecommunication Technologies in the Prevention of Cancer," National Cancer Institute, Bethesda, MD, June 1986.

- Ducey, Richard V., "Relating Communication Needs to the Salience of Computer-Based Telecommunication Services," International Communication Association, Human Communication Technology special interest group, Chicago, IL, May 1986.
- Ducey, Richard V., "Alternatives in Local Radio Audience Measurement Systems," American Association for Public Opinion Research, 41st Annual Conference, St. Petersburg, FL, May 1986.
- Ducey, Richard V. and Robert E. Yadon, "1986 NAB Survey of Television Stations Broadcasting in Multichannel Television Sound (MTS)," National Association of Broadcasters, Annual Convention, Dallas, TX, April 1986.
- Ducey, Richard V. and Susan Beringer, "U.S. Broadcast Industry Concerns About Radio Broadcasting to Cuba and Potential Cuban Responses: The Case of Radio Marti," 14th Annual Telecommunications Policy Research Conference, Airlie, VA, April 1986.
- 1985
- Ducey, Richard V., Gretchen S. Barbatsis and Kent W. Creswell, "Defining A Construct of Telecommunication Technology Literacy and Testing for Differences Among Students, Educators and Industry Professionals," International Communication Association, Human Communication Technology special interest group, Honolulu, HI, May 1985.
- Ducey, Richard V. and Julia Portale, "Growth and Development of Foreign Language and Ethnic Broadcast Facilities, Programming and Transmissions in the U.S.: Implications and Influence on the U.S. Telecommunications Industry," 13th Annual Telecommunications Policy Research Conference, Airlie, VA, April 1985.
- Yadon, Robert E. and Richard V. Ducey, "Managing Multichannel Sound: Problems and Opportunities," National Association of Broadcasters, Annual Convention, Las Vegas, NV, April 1985.
- Bernstein, James, Joey Reagan and Richard V. Ducey, "Political Information and Knowledge in Non-Subscriber, Basic and Pay Cable Households," Broadcast Education Association, Annual Conference, Las Vegas, NV, April 1985.
- Barbatsis, Gretchen S., Kent W. Creswell and Richard V. Ducey, "Technology Literacy: Industry Demand vs. Academic Supply," Popular Culture Association, 15th Annual Convention, Louisville, KY, April 1985.
- 1984
- Ducey, Richard V., "A Survey of Local Station Involvement in Teletext," International Electronic Imaging Conference and Exposition, First Annual Conference, Boston, MA, September 1984.
- 1982
- Ducey, Richard V., "Innovative Telecommunication Technologies and the Home User: Investigating the Adoption Process," Midwest Association for Public Opinion Research, 8th Annual Conference, Chicago, IL, November 1982.

- Ducey, Richard V., "User Preferred Features of Broadcasting Innovations: An Attribute-Based Model of the Adoption Process," I.E.E. Group on Broadcasting, 32nd Annual Fall Symposium, Washington, D.C., September 1982.
- 1981 Ducey, Richard V. and Robert E. Yadon, "A Research Program to Investigate Human Factors in the Application of Videotex/Teletext Technology," I.E.E. Group on Broadcasting, 31st Annual Fall Symposium, Washington, D.C., September 1981.
- Ducey, Richard V. and Joey Reagan, "Sources for State Government News," Association for Education in Journalism, Radio-TV Journalism Division, East Lansing, MI, August 1981 (Top 3 paper).
- Ducey, Richard V., "Information As A Public Good: The Social Resource of Broadband Communication Networks," International Communication Association, Mass Communication Division, Minneapolis, MN, May 1981.
- 1977 Dorris, William and Richard V. Ducey, "Social Science Matinees: Using American Feature Films in Undergraduate Teaching," American Psychological Association, 85th Annual Convention, San Francisco, CA, August 1977.

#### OTHER PROFESSIONAL ACTIVITY

- Advisory Board**, KZO Innovations, streaming video and software services company.
- Editorial Advisory Board**, *Multichannel Video Compliance Guide: Broadband Law and Regulation*
- Founder's Advisory Board**, International Webcasting Association.
- Editorial Board**, *Multichannel Video Compliance Guide: Broadband Law and Regulation*
- Editorial Board**, *Journal of Broadcasting and Electronic Media*
- Editorial Board**, *Journal of Media Economics*
- Editorial Board**, *Journal of Radio Studies*
- Faculty Tenure Review Committees**, Served as external member on several faculty tenure review committees at major institutions including Michigan State University, University of Georgia, University of Texas and Marquette University.
- Fellow**, Center for Information and Communication Sciences, Ball State University.
- Board of Visitors**, University of Alabama, College of Communications.
- Numerous research studies, articles, reports, guest lectures, presentations, expert witness testimony and filings. These research studies, speeches and writing have been used in industry publications and meetings and to support business development, capital fund raising, legislative lobbying efforts, filings at the FCC and before other official groups such as the courts and the Copyright Royalty Tribunal.

Interviewed as telecommunication research expert by Cable News Network, Voice of America; and numerous broadcast stations and print media.

Invited speaker at a number of international universities, businesses and associations on the topics of information and telecommunication industry research and technology.

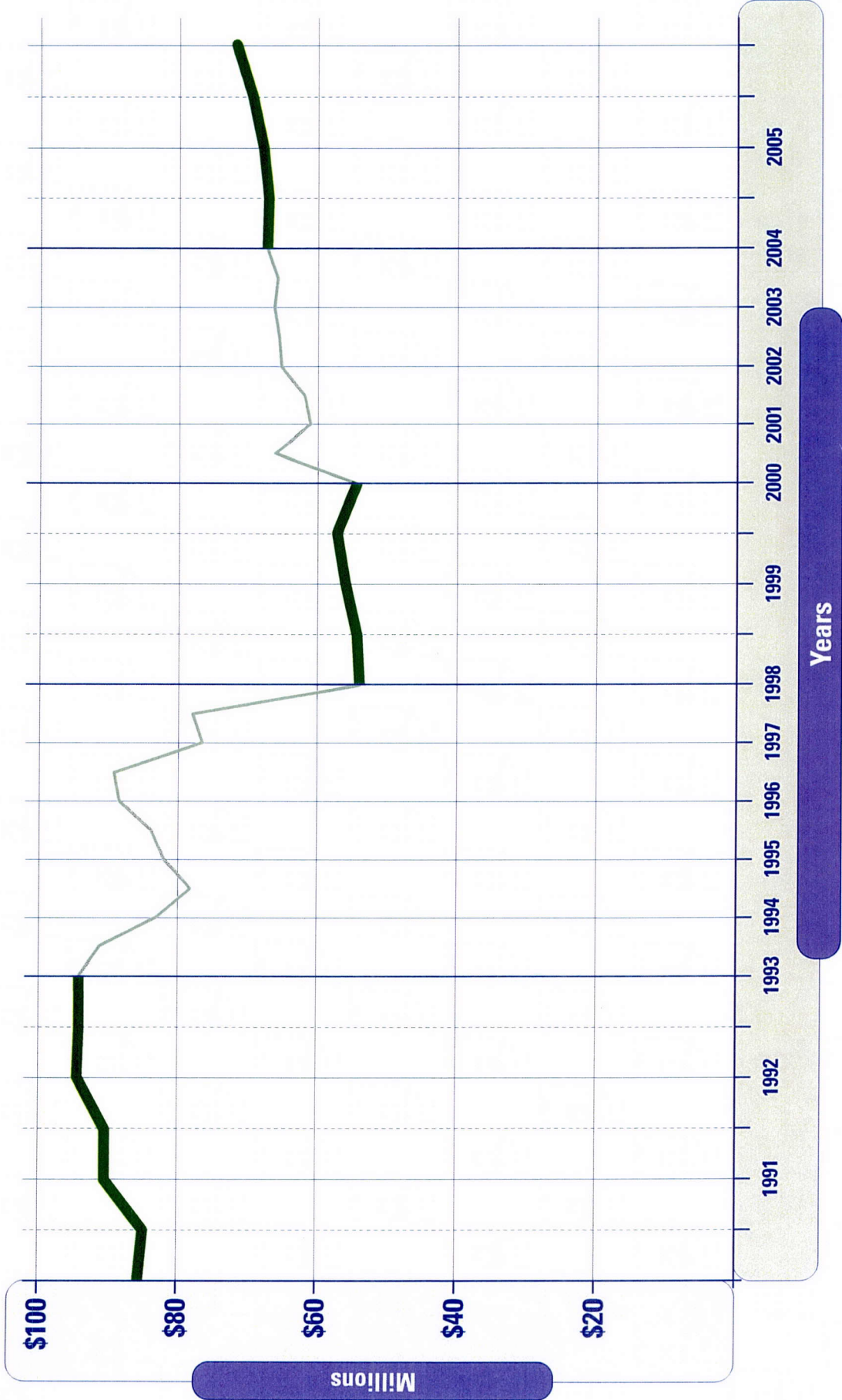
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**AVOCATIONAL INTERESTS**

- Water Quality Advisory Committee, Montgomery County, Maryland, member, appointed to three year term by County Commission, May 2008.
- Scuba instructor trainer (PADI IDC Staff Instructor, NAUI Instructor Trainer, DAN Instructor Trainer). Staff instructor for Adventure Scuba Company, Chantilly, VA.
- American Association of Underwater Sciences, Dive Safety Officer/Dive Control Officer for Magothy River Association.
- Emergency First Response Instructor Trainer (ASHI First Aid, CPR, AED, O<sub>2</sub> Administration)
- Community Emergency Response Team (CERT) Instructor Trainer certified by DHS-FEMA and Montgomery County, MD Fire/Rescue Service
- WMATA Transit Police – CERT member
- DHS Office of Domestic Preparedness certification Weapons of Mass Destruction Incident Complexities Responder
- FEMA certification IS-700 National Incident Management System
- FEMA certification IS-100 Incident Command System
- Whitewater kayak instructor (ACA certified)
- Mountain biking, fishing, and running

### Semi-Annual Cable Compulsory License Royalties Collected by Copyright Office 1990-2005

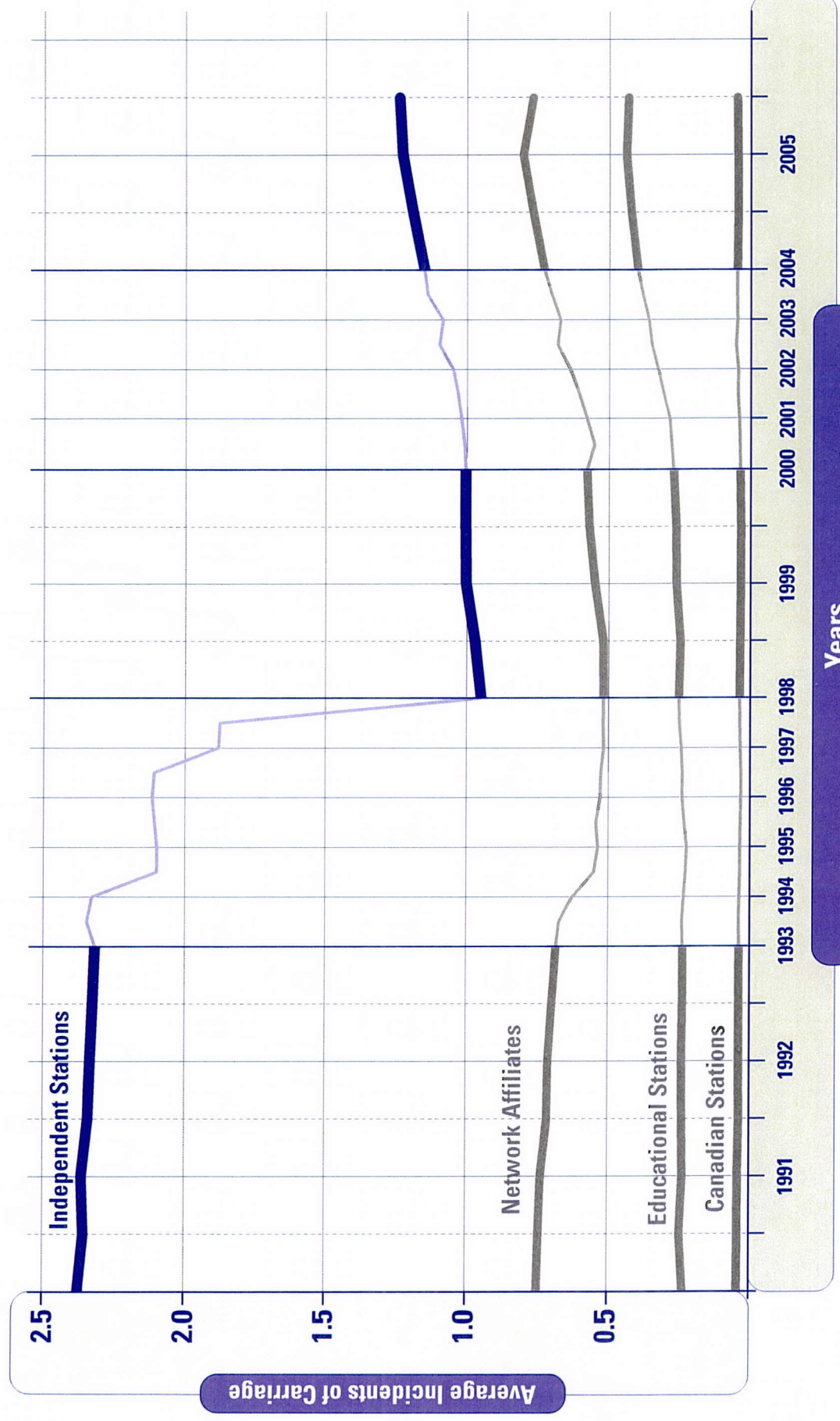
CTV 04-05  
Ex. 1



Source: Copyright Office Licensing Division

### Form 3 Distant Signal Incidents By Station Type 1990-2005

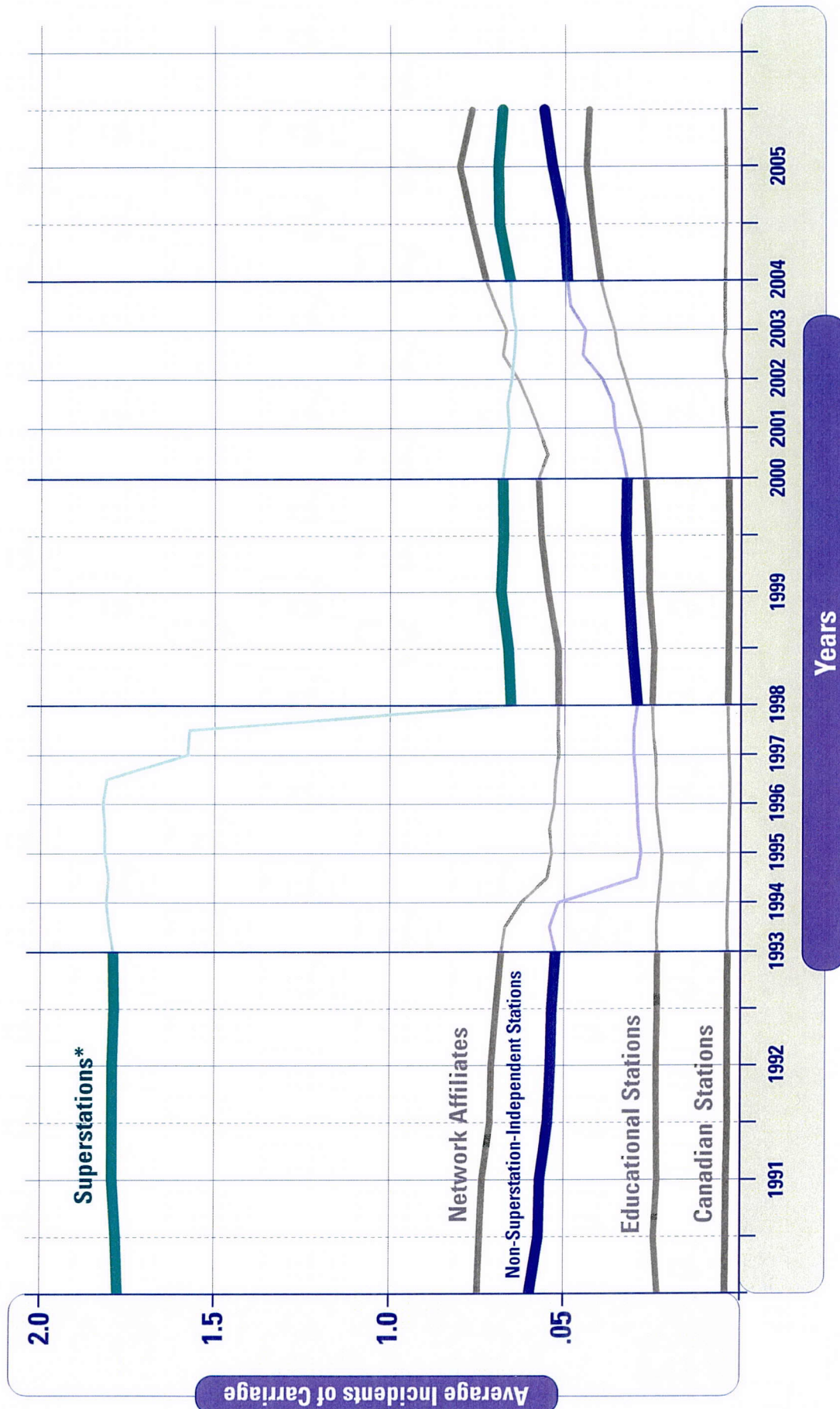
CTV 04-05  
Ex. 2





CTV 04-05  
Ex. 3

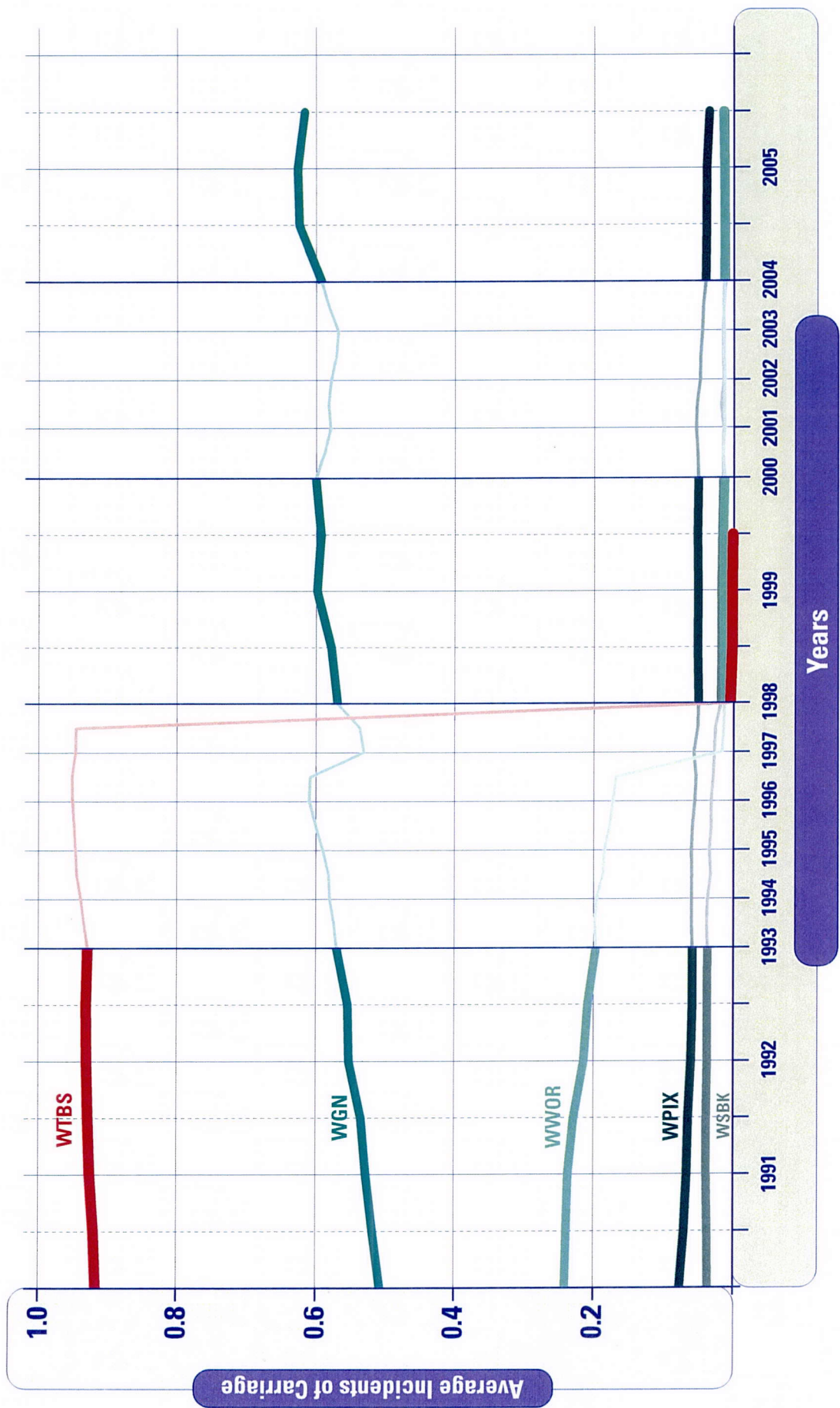
## Form 3 Distant Signal Incidents By Station Subtype 1990-2005



\* WTBS, WGN, WWOR, WPIX, WSBK

CTV 04-05  
Ex. 4

# Form 3 Superstation Distant Signal Incidents By Station 1990-2005



**PROGRAM CATEGORY DEFINITIONS**

**Program Suppliers.** Syndicated series, specials and movies, other than Devotional Claimants programs as defined below. Syndicated series and specials are defined as including (1) programs licensed to and broadcast by at least one U.S. commercial television station during the calendar year in question, (2) programs produced by or for a broadcast station that are broadcast by two or more U.S. television stations during the calendar year in question, and (3) programs produced by or for a U.S. commercial television station that are comprised predominantly of syndicated elements, such as music video shows, cartoon shows, “PM Magazine,” and locally hosted movie shows.

**Joint Sports.** Live telecasts of professional and college team sports broadcast by U.S. and Canadian television stations, except for programs coming within the Canadian Claimants category as defined below.

**Commercial Television.** Programs produced by or for a U.S. commercial television station and broadcast only by that one station during the calendar year in question and not coming within the exception described in subpart 3) of the “Program Suppliers” definition.

**Public Broadcasting.** All programs broadcast on U.S. noncommercial educational television stations.

**Devotional Claimants.** Syndicated programs of a primarily religious theme, not limited to those produced by or for religious institutions.

**Canadian Claimants.** All programs broadcast on Canadian television stations, except (1) live telecasts of Major League Baseball, National Hockey League, and U.S. college team sports, and (2) other programs owned by U.S. copyright owners.

**WGNA Minutes by Claimant Category****Minutes of programming on WGN and WGNA at the same time on the same date**

<b>Period</b>	<b>Commercial</b>	<b>Devotional</b>	<b>Program Suppliers</b>	<b>Sport</b>
2004_1	2,354	180	5,926	1,807
2004_2	2,404	180	6,090	1,329
2005_1	2,364	180	5,036	1,014
2005_2	2,836	180	4,320	982
<b>Total</b>	<b>9,958</b>	<b>720</b>	<b>21,372</b>	<b>5,132</b>

**All WGNA programs**

<b>Period</b>	<b>Commercial</b>	<b>Devotional</b>	<b>Program Suppliers</b>	<b>Sport</b>
2004_1	2,354	1,770	24,309	1,807
2004_2	2,404	1,800	24,467	1,569
2005_1	2,364	1,800	25,062	1,014
2005_2	2,836	1,860	24,562	982
<b>Total</b>	<b>9,958</b>	<b>7,230</b>	<b>98,400</b>	<b>5,372</b>

**"Matched" programming as a percentage of all WGNA programming**

<b>Period</b>	<b>Commercial</b>	<b>Devotional</b>	<b>Program Suppliers</b>	<b>Sport</b>
2004_1	100.0%	10.2%	24.4%	100.0%
2004_2	100.0%	10.0%	24.9%	84.7%
2005_1	100.0%	10.0%	20.1%	100.0%
2005_2	100.0%	9.7%	17.6%	100.0%
<b>Total</b>	<b>100.0%</b>	<b>10.0%</b>	<b>21.7%</b>	<b>95.5%</b>

Note: Unlisted claimant categories have zero minutes of programming assigned.

Source: TVData; Cable Data Corporation

## Subscriber Weighted Claimant Shares 2004 – 2005

<b>Claimant Group</b>	<b>Share of Subscriber-Weighted Compensable Minutes</b>
Program Suppliers	50.11%
Sports	4.54%
Commercial TV	15.51%
Public Broadcasting	22.26%
Devotional	2.74%
Canadian	4.52%
Low Power	0.31%
Mexican	0.00%

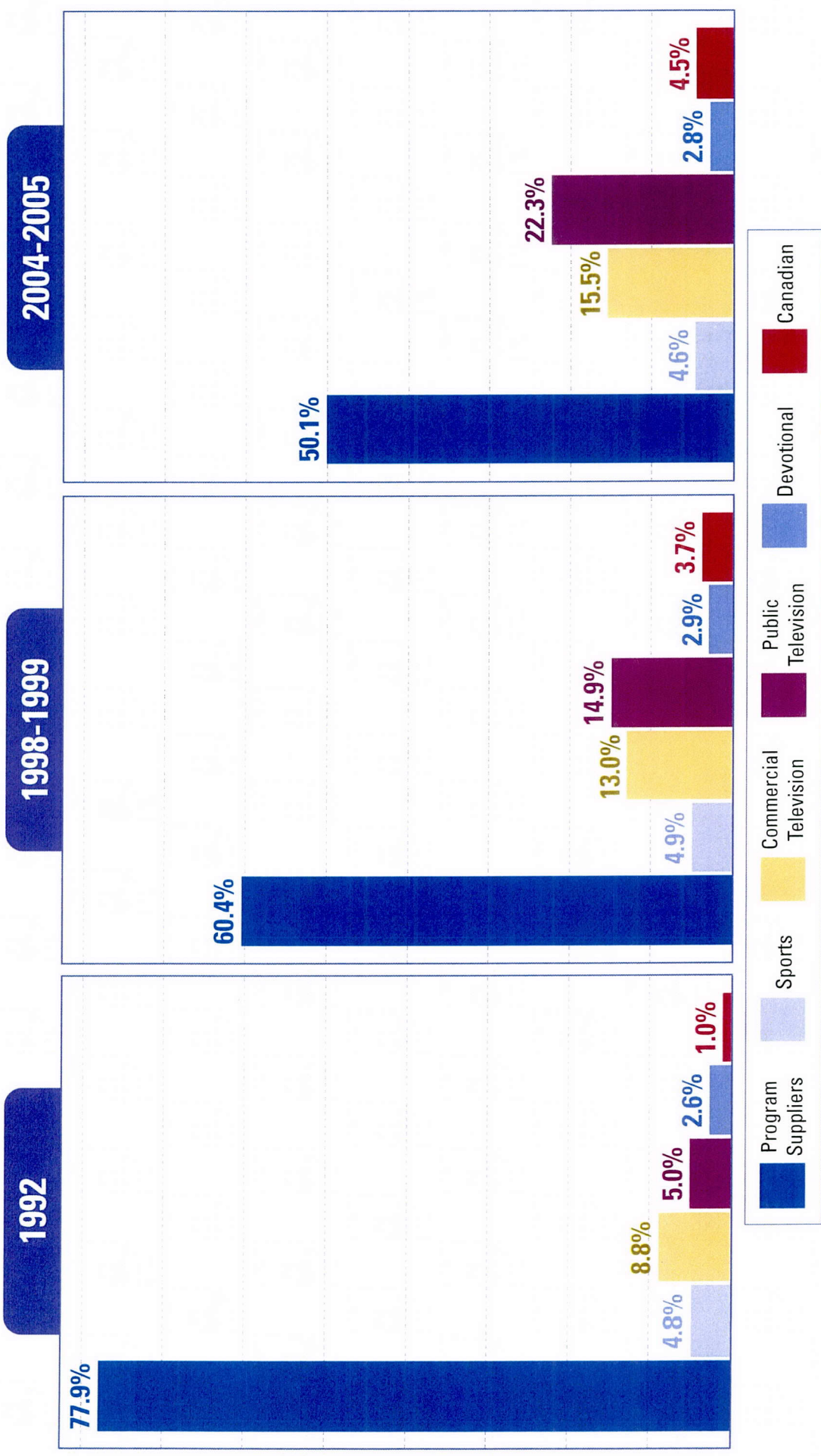
Note: Compensable claimant category minutes are weighted by the number of subscribers who have the claimant programming available to them in each accounting period and then summed over the four accounting periods. Shares are calculated from these total subscriber weighted claimant category minutes.

Source: TVData; Cable Data Corporation

CORRECTED

CTV 04-05  
Ex. 9

# Distant Signal Program Time Comparison 1992, 1998-1999, 2004-2005



Source: TV Data; Cable Data Corporation

**2004 Frequency Distribution of Distances Between Non-Superstation  
U.S. Commercial Distant Signals and Cable Communities for  
SOA Form 3 Cable Systems\***

<b>Distance in Miles</b>	<b>Number of Distant Signals</b>	<b>Percent</b>	<b>Cumulative Percentage</b>
35-50	517	24.8%	24.8%
50-100	1114	53.5%	78.3%
100-150	312	15.0%	93.3%
150-200	73	3.5%	96.8%
200-300	23	1.1%	97.9%
300-400	4	0.2%	98.1%
400-500	0	0.0%	98.1%
500-600	4	0.2%	98.3%
600-700	2	0.1%	98.4%
700-800	2	0.1%	98.5%
800-900	0	0.0%	98.5%
900-1000	0	0.0%	98.5%
1000-1500	2	0.1%	98.6%
1500-2000	24	1.2%	99.7%
2000-2500	0	0.0%	99.7%
2500+	6	0.3%	100.0%

\*Superstations WGN, WPIX, WSBK, WTBS, and WWOR were left out of analysis.

**2005 Frequency Distribution of Distances Between Non-Superstation  
U.S. Commercial Distant Signals and Cable Communities for  
SOA Form 3 Cable Systems\***

<b>Distance in Miles</b>	<b>Number of Distant Signals</b>	<b>Percent</b>	<b>Cumulative Percentage</b>
35-50	474	27.1%	27.1%
50-100	884	50.5%	77.6%
100-150	282	16.1%	93.7%
150-200	56	3.2%	96.9%
200-300	27	1.5%	98.4%
300-400	2	0.1%	98.5%
400-500	0	0.0%	98.5%
500-600	1	0.1%	98.6%
600-700	2	0.1%	98.7%
700-800	1	0.1%	98.7%
800-900	0	0.0%	98.7%
900-1000	1	0.1%	98.8%
1000-1500	1	0.1%	98.9%
1500-2000	14	0.8%	99.7%
2000-2500	0	0.0%	99.7%
2500+	6	0.3%	100.0%

\*Superstations WGN, WPIX, WSBK, WTBS, and WWOR were left out of analysis.



Before the  
COPYRIGHT ROYALTY JUDGES  
Washington, D.C.

In the Matter of  
Distribution of the  
2004 and 2005  
Cable Royalty Funds

Docket No. 2007-3 CRB CD 2004-2005

Statement of  
Joel Waldfogel

June 1, 2009

## Statement of Joel Waldfogel

### Qualifications

I am Joel Waldfogel, the Ehrenkranz Professor of Business and Public Policy at the University of Pennsylvania's Wharton School. I received a Ph.D. in economics from Stanford University in 1990. I was an assistant and later an associate professor of economics at Yale University. I came to Wharton in 1997 as an associate professor. I became a full professor in 2001 and was named the Ehrenkranz Professor in 2003. I have served as chair of the department since 2006.

I teach courses in applied microeconomics for undergraduates ("managerial economics") as well as courses on research methods for doctoral students.

I do research on topics in law and economics and industrial economics. Within industrial economics I have specialized on topics related to the media. I have written extensively on radio broadcasting, television, newspapers, and the Internet. I have also worked extensively on intellectual property piracy and, more recently, on the pricing of digital products. Much of my work concerns the relationship between audience characteristics such as size and demographic mix on the supply of programming, as well as the relationship between available programming and audience satisfaction. Some of this work is described in my book *The Tyranny of the Market* (Harvard University Press, 2007). I have published over 50 academic articles in such outlets as the *American Economic Review*, the *Journal of Political Economy*, the *Quarterly Journal of Economics*, the *RAND Journal of Economics*, the *Journal of Industrial Economics*, and numerous additional journals. I have also published two solo-authored books, and I have written articles on economics for general readers in Slate (Slate.com). My CV is attached as Appendix 1.

### Task

I have been asked by counsel for the Commercial Television Claimants Group to help address the question of an appropriate division of distant signal royalties paid under the statutory license among various content categories represented on the signals. I understand that the criterion under which this question is to be evaluated has been characterized as the "relative marketplace value" of the program categories. Witnesses in prior proceedings have addressed the characteristics of the cable distant signal marketplace. For example, economist Steven Wildman has testified regarding the economic implications of the cable system operator's (CSO's) approach to bundling programs of different types to maximize revenues from subscribers with varying preferences. A copy of Dr. Wildman's testimony is attached as Exhibit 12. Economist Andrew Joskow presented testimony in the most recent proceeding explaining that the distant

signal market is a secondary market in which the composition of the available program bundles is predetermined, and that there is no reasonable rationale for considering the “seller’s side” of the market in evaluating relative marketplace value in the statutory license market. A copy of his testimony is attached as Exhibit 13. I consider the attributes of the cable distant signal marketplace described by both of these prior witnesses in evaluating the issue at hand.

I understand that the Copyright Arbitration Royalty Panel (CARP) in the last proceeding determined that the most useful measure of relative marketplace value in these circumstances is a cable operator survey, in which cable operators are asked to allocate a constant sum among the program categories based on the relative value of the programs to them in terms of attracting and retaining subscribers.<sup>1</sup> I further understand that the Commercial Television (CTV) Claimants Group supports that survey as an appropriate basis for determining the allocation of royalties. Against this background, I have been asked to provide additional information and analysis on cable operators’ rationales for using distant signals, in light of my research on the determinants of available programming content and the resulting audience satisfaction. In addition, I have been asked to perform a regression analysis for the 2004-2005 period analogous to that performed by Dr. Gregory Rosston in the previous proceeding, which the CARP found to be useful evidence corroborating the cable operator survey results. A copy of Dr. Rosston’s testimony is attached as Exhibit 14.

In my testimony, I will first discuss aspects of the context in which CSOs choose whether – and which – distant signals to carry. This discussion helps identify factors that influence CSOs’ interest in distant signals. I will then address and discuss what CSOs’ decisions about which signals to carry reveal about the relative valuations of different types of programming carried on those distant signals.

## Context

In the main, CSOs carry three types of channels. First, they carry local broadcast stations, generally originating in the designated market area, or “DMA,” in which their franchise communities are located.<sup>2</sup> Second, they carry nationally distributed cable network channels such as CNN or Lifetime. Third, they may carry broadcast stations originating outside their DMAs. Channels in the latter category are classified as “distant signals.” Rather than negotiating prices channel by channel for this third category, CSOs pay royalties pursuant to the schedule of

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<sup>1</sup> I understand that the 2004 and 2005 cable operator surveys are being presented by Sports witness James Trautman in this proceeding.

<sup>2</sup> DMAs are television markets defined by the Nielsen television ratings company. Each DMA encompasses the group of counties in which the market’s television stations are predominantly viewed. Non-overlapping DMAs cover all of the continental United States, Hawaii and parts of Alaska.

payments Congress and the Copyright Royalty Board's (CRB's) predecessors have determined under the compulsory license.

I understand that the royalty payments for distant signals depend on a number of factors, including the cable system's gross receipts from providing any service tiers that include broadcast stations to their subscribers. Large ("Form 3") systems, with semiannual gross receipts over \$527,600, pay a royalty that depends on the number of distant signals they decide to carry.<sup>3</sup> While Form 3 systems accounted for only 20 percent of cable systems in the second half of 2005, they represented some 97 percent of the royalty payments. In brief, a first "distant signal equivalent" (DSE) costs roughly one percent of cable system gross receipts. Form 3 cable systems pay this amount as a minimum fee regardless of how few distant signals they carry. Distant signals beyond the first DSE and again beyond the fourth cost less per DSE. In addition, cable systems may be required to pay 3.75 percent of gross receipts per DSE for each "non-permitted" distant signal, which would not have been permitted to be carried under the FCC's now-defunct cable distant signal limits. Cable systems in top-100 television markets may also be required to pay a surcharge known as the "syndicated exclusivity fee" for certain narrowly defined distant signals.

It is reasonable to presume that CSOs choose channels to maximize their net revenues. Distant signals cannot be sources of advertising revenue for the cable system, but can contribute increased revenues to the extent they help attract or retain subscribers who pay the monthly subscription fees for the bundled tiers of service the CSO offers. On the other side of the equation, carrying distant signals has two kinds of costs, opportunity costs and direct money costs. First, carrying a distant signal can preclude carrying an alternative channel. Second, if distant signals divert audience from cable network channels, then because CSOs cannot advertise on the distant signals but can on the channels they control, carrying distant signals can cannibalize CSO advertising revenue. Finally, carrying distant signals beyond the first mandatory DSE payment has a direct monetary cost in terms of royalty payments, as described above, in addition to the cost of physically acquiring the distant signals for retransmission. Given the fixed royalty schedule that CSOs face for choosing additional distant signals, it is natural to assume that CSOs add stations to the bundle of distant signals they carry until the incremental benefit falls short of the incremental costs.

This background gives rise to two empirical questions:

- 1) How do CSOs decide whether and which distant signals to carry? To say this another way, which particular kind of distant signal or what characteristics of a distant signal are valuable to a particular CSO?

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<sup>3</sup> This was the cutoff for the second half of 2005. Prior to this during the 2004-2005 period, systems were classified as Form 3 if they had semiannual gross receipts in excess of \$379,600.

- 2) Given the distant signal bundles purchased by the various CSOs – and their varying mixes of programming by type – what can be said about the relative value of the various kinds of compensable programming content that is carried on the distant signals CSOs choose to retransmit?

The remainder of this testimony addresses these questions.

### **What Determines the Carriage of Distant Signals?**

The simple economic framework articulated above suggests that CSOs would be more likely to carry distant signals when the benefit of doing so is larger than the cost of doing so. The benefit of carrying distant signals arises from their potential attractiveness to additional persons who can be induced to subscribe (or continue subscribing) by the availability of the distant signals on the cable system. Distant signals should be expected to be more beneficial to systems that have less of the same kinds of programming already available from local sources.

A large volume of academic research, not to mention common sense, demonstrates that the larger the local media market, the more media products – more local radio stations, more local newspapers, and more local television channels – will be provided.<sup>4</sup> Moreover, there is clear evidence that small markets, with less locally targeted programming, tend to “import” more programming. And, in general, consumers with few local options are more likely to turn to distantly produced programming. We see this in cable television and Internet use among groups with small local populations.<sup>5</sup> We also see this in the use of non-local newspapers.<sup>6</sup> In light of the scholarly evidence, it is easy to see why cable systems in smaller markets would choose to carry distant signals: they can compensate for the relative paucity of options available locally.

A wide variety of cable network programming is available nationally, in small markets as well as large. But smaller markets will have less locally tailored programming than larger markets. One natural component of the value of distant signals is not merely providing more national

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<sup>4</sup> See Waldfoegel, Joel. “Preference Externalities: An Empirical Study of Who Benefits Whom in Differentiated-Product Markets.” *RAND Journal of Economics*, vol. 34, no. 3, Autumn 2003, pp. 557-68; George, Lisa; Waldfoegel, Joel. “Who Affects Whom in Daily Newspaper Markets?” *Journal of Political Economy*, vol. 111, no. 4, August 2003, pp. 765-84; and Waldfoegel, Joel. “Who Benefits Whom in Local Television Markets?” *Brookings-Wharton Papers on Urban Affairs*, 2004, pp. 257-84.

<sup>5</sup> See Sinai, Todd; Waldfoegel, Joel “Geography and the Internet: Is the Internet a Substitute or a Complement for Cities?” *Journal of Urban Economics*, vol. 56, no. 1, July 2004, pp. 1-24.

<sup>6</sup> See George, Lisa M; Waldfoegel, Joel. “The New York Times and the Market for Local Newspapers” *American Economic Review*, vol. 96, no. 1, March 2006, pp. 435-47.

programming options but providing nearly-local program options, such as local news from an adjacent DMA that may provide locally relevant information. For example, if the adjacent DMA is in the same state as the communities served by a CSO, the adjacent DMA's local news programs will cover political contests and issues of interest to the cable system's potential subscribers.<sup>7</sup> I understand that other CTV witnesses will provide information about the extent to which distant carriage is typically "clustered" within a relatively nearby region of the station's home market, and about the effects of same-state status for some distant cable communities.

We can test whether these rationales govern the decision to carry distant signals by examining the relationship between the availability of local programming and distant signal carriage. Are systems carrying fewer local channels likely to carry more distant signals?

We find evidence of this relationship in the 2004-2005 cable carriage data from Cable Data Corporation. In summaries showing the FCC-defined market size in which the systems are located, Form 3 systems located in "Top 50" market areas carried an average of about 16.2 local stations in the second half of 2005, and an average of about 1.8 distant signals. Smaller market systems carry fewer local signals and more distant signals: systems located in the "Second 50" markets carried 9.6 local signals and 2.6 distant signals. Systems in the next tier of market size, "Smaller Markets," carried fewer local signals, 8.8, and more distant signals, 3.3. And systems located in "Outside All TV Markets" carried an average of 8.3 local signals and 3.0 distant signals in the second half of 2005.<sup>8</sup>

This evidence indicates that the value of distant signals arises in some significant measure from compensating for what's not available locally.

### Using Royalty Payment Data to Investigate Relative Market Value

As prior royalty distribution decisions have emphasized, there is little direct market information for determining the relative market value of different types of programming. One tangible piece of market information is the size of the royalty payments that CSOs actually make. Because of the structure of the royalty formula, we cannot directly observe the relative value of the distant signals the CSOs have chosen to carry. And we certainly cannot directly observe the relative value of the separate program categories, which may be combined in varying compositions and

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<sup>7</sup> The academic literature provides evidence that the availability of local political coverage is valuable to consumers: its availability affects voter turnout. See Oberholzer-Gee, Felix; Waldfogel, Joel. "Strength in Numbers: Group Size and Political Mobilization" *Journal of Law and Economics*, vol. 48, no. 1, April 2005, pp. 73-91; and Oberholzer-Gee, Felix; Waldfogel, Joel. "Media Markets and Localism: Does Local News en Español Boost Hispanic Voter Turnout? (with Felix Oberholzer-Gee), forthcoming, *American Economic Review* (revised version of NBER Working Paper 12317, June 2006).

<sup>8</sup> Cable Data Corporation, April 1, 2009 U.S. Cable Systems Summary, 2004-1 thru 2005-2.

amounts on different distant signals. But while the royalty fees purportedly generated by the carriage of individual distant signals cannot provide a measure of relative marketplace value, the overall size of a Form 3 system's royalty payment is determined in part by the number of distant signals they carry. If a CSO is interested in maximizing its profits, then it will make carriage decisions based on the expected impact on its profits. As a result, we can learn something about the value of distant signals from the decisions CSOs make about how many such signals to carry and the concomitant royalty payment.

The pricing structure for distant signals – with systems paying a minimum fee regardless of how few they carry – affects the relationship between the royalty payment and the value systems attach to the bundle of channels they carry. When cable systems carry enough distant signals to pay above the minimum payment, changes in their demand for distant signals will manifest themselves as both increases in the value they attach to distant signals – which we cannot directly observe - as well as changes in the observed royalty payment. When royalty payments exceed the minimum, the royalty payment provides a responsive measure related to relative increases in value. As a consequence, we can expect three potential sets of circumstances: systems attaching the lowest value to distant signals pay the minimum payment and carry distant signals with DSE totaling less than 1.0, systems with higher value make the minimum payment and carry exactly one DSE, and systems attaching higher value still carry more than one DSE and make royalty payments above the minimum.

While royalty payments are not made in a way that allows the relative value of individual stations or programs to be directly observed, regression analysis allows an after-the-fact econometric investigation of data about what actually occurred in the marketplace, which can provide information about the relative values of the programming on the distant signals that CSOs chose to carry or keep.

### **Determinants of the Value of the Bundle of Distant Signal**

The task at hand is to determine how royalties from the distant signal funds should be divided among the ultimate providers of seven types of content supplied over distant signals.<sup>9</sup> The royalty distribution decisions have held that each content category should be compensated according to its “relative market value.” We cannot directly observe the relative values of the various types of programming. Instead, we can observe the bundle of distant signals that CSOs chose to carry in 2004-2005, along with the payments they made for the bundles they chose. These two pieces of information, the payments and the bundle of distant signals carried, are available from Cable Data Corporation for all of the Form 3 cable system operators.

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<sup>9</sup> These content suppliers are (1) Program Suppliers, (2) Sports, (3) Commercial TV, (4) Public TV, (5) Music, (6) Devotional, and (7) Canadian. Because Music cannot be identified separately from the programs in which it is integrated, it is not covered in the regression analysis.

Moreover, it is possible to determine the number of minutes of programming of each content type in the station bundles chosen by each CSO. These data are available for all but a relatively small number of the hundreds of stations carried as distant signals by Form 3 systems in 2004-2005 from TVData, a company that compiles and provides contemporaneous television schedule information for use in program guides, and licenses archived data for other uses. Categorizing the millions of program entries into the categories used by the CRB is a massive task, but can be accomplished with reasonable accuracy. Once the program data are categorized according to the CRB categories, we can calculate the number of minutes of programming of each content type on each distant signal, and thus the number of minutes of programming of each content type chosen by each CSO. The task of the regression analysis is essentially to infer the relative value of each type of programming from the relationship between the payment for the bundle and the mix of programming in the bundles.

For Form 3 systems, the royalty payment for a bundle of distant signals is the product of the percentage rate (which is determined by the number of DSEs carried and other factors) and the system gross receipts for program service tiers that include broadcast stations. Hence, variation across CSO distant signal royalty payments is directly affected by two basic factors, the number and type of distant signals chosen and the system gross receipts.

Arithmetically, system gross receipts are the product of the prices charged for subscriptions and the number of subscribers. Economically, system gross receipts are therefore determined by whatever determines the demand for the offerings on a cable system, including the distant signals being offered.

Features of the cable system's local market also affect the value of the bundle of distant signals purchased. As we saw above, cable systems with fewer local channels tend to import more distant signals. Importing more signals raises the number of DSEs and, in turn, raises the royalty payment for any given level of system revenue.

Once we account for the size of the system and other factors affecting a system's total royalty payments, we can examine how royalties vary with the minutes of each type of programming.

### **Regression Analysis**

Linear regression analysis is a widely used statistical technique for attributing the variation in some outcome to one or many factors. That is, it seeks to observe whether there is a relationship between the variables and the outcome and, if so, what that relationship is. When there is only one kind of outcome and one "explanatory" variable being studied, regression analysis finds the mathematical relationship that best fits the data. That is, if all of the different observed combinations between the variable and the outcome were represented as dots in an x y diagram, the regression analysis would produce the line that best fits the cloud of dots. The line would have an intercept (where it crosses the y axis) and a slope (the amount of increase in the outcome y with every increase in the variable x). The line and its intercept and slope can be characterized



by an algebraic formula,  $y(\text{fit}) = a + bx$ , where  $a$  and  $b$  are the coefficients produced by the regression procedure. In particular,  $a$  is the intercept on the  $y$ -axis, and  $b$  is the slope, showing how much the "dependent variable"  $y$  varies with a one-unit change in the explanatory variable  $x$ .

In our case we might ask, for example, how the number of distant signals carried relates to the number of local channels on a Form 3 cable system in 2004-2005. Based on our data, we might find that the coefficient is  $-0.22$ , indicating that a system with one additional local channel carries an average of  $0.22$  fewer distant channels. Regression coefficients are statistics calculated from data and are subject to sampling variation, so the point estimates come with confidence intervals. In our example above, we could say that with 95 confidence the true value for the slope coefficient relating local channels to distant channels carried runs from  $-0.23$  to  $-0.20$ .

"Multiple" regression analysis includes more than one explanatory variable. Dr. Rosston's testimony gives the useful example of trying to determine the relative values of attributes of a house. Houses vary in square footage, number of bedrooms, number of bathrooms, location, and other features, but they are sold for a single price. The various attributes of a house obviously have a direct effect on the price, but because they are not priced separately, we have no observed information about the relative value or contribution of each. Moreover, some attributes vary independently, but others may have some degree of relationship to each other, such as that the number of bathrooms may increase with the number of bedrooms, though perhaps not one-for-one. In short, just knowing the number of bedrooms in a house would not allow us to determine the price of the house. Nor would information only about the numbers of bedrooms in two houses allow us to explain completely any difference between their sales prices. But by applying regression analysis of the sales prices of numerous transactions against variables representing the separate price-affecting attributes of the houses, one could examine how the price of a house simultaneously varies with variation in each of the attributes. If all the important determinants of market price are included as variables in the regression, the calculated coefficient on the number of bedrooms shows the value (or incremental contribution to total sales price) of an additional bedroom, holding all other attributes of the house constant.

### **The Baseline Analysis**

In our context we have an analogous problem. We have a measure of the value of the bundle of distant signals (the royalty payments that are being allocated among claimants) along with measures of relevant attributes of the bundle (the number of minutes of programming of each type) and other factors that affect the total royalty payment (other determinants of system gross receipts).

In addition to the variables measuring the minutes of various types of programming, our regression model includes the following variables: the number of subscribers and total number of activated channels of the system in the previous accounting period, the average household income in the system's DMA, the count of local channels the system carried, indicators for whether the system paid the 3.75% royalty rate and whether it carried any partially distant signals, and indicators for accounting periods. Finally, the model includes indicators for whether the system made the minimum royalty payment, as well as whether it made the minimum payment and carried fewer than one DSE.

Using multiple regression analysis we can determine how the value of the distant signal bundles varies with additional minutes of each type of programming, holding everything else constant. To this end we regress observed royalty payments for the bundle on the numbers of minutes in each programming category, along with determinants of system revenue (the number of subscribers, local median income, etc.) and other determinants of the value of distant signals (the number of local channels, etc.)

The details of the data sources, regression design and specification of variables are described in Appendix 2. Table 1 reports means and standard deviations of variables used in the analysis, including both the programming minutes measures as well as other relevant factors. These represent arithmetic average values across system/accounting period observations. Program Suppliers are the largest category of minutes, averaging 42,693 per system, followed by Public TV (14,575), Commercial TV (7,816), Devotional (3,456), Sports (1,395), Canadian (1,040), Low Power (135), and Mexican (6).

**Table 1**  
**Summary Statistics**  
**Form 3 Cable Systems with Positive DSE**  
**2004 – 2005**

Variables	Mean	Standard Deviation
Minutes of Program Suppliers Programming	42,693	41,205
Minutes of Sports Programming	1,395	990
Minutes of Commercial TV Programming	7,816	9,525
Minutes of Public Broadcasting Programming	14,575	21,745
Minutes of Devotional Programming	3,456	6,724
Minutes of Canadian Programming	1,040	5,518
Minutes of Low Power Programming	135	2,011
Minutes of Mexican Programming	6	203
Number of Subscribers (Previous Accounting Period)	37,749	73,854
Indicator for Minimum Payment & DSE < 1	0.13	0.34
Indicator for Minimum Payment & DSE <= 1	0.50	0.50
Number of Activated Channels (Previous Accounting Period)	184	98
Average Household Income in Designated Marketing Area	43,959	7,670
Count of Local Channels	10	5
Indicator for Special 3.75% Royalty Rate	0.22	0.42
Indicator for Carriage of Partially Distant Signal	0.33	0.47
Total Royalty Fee Paid by Cable System in Accounting Period	43,091	75,272
Number of Observations	4,954	–

Source: TVData; Cable Data Corporation; The Lifestyle Market Analyst

Table 2 below reports the results of the regression, generally following the same specification presented by Dr. Rosston, using updated data for 2004-2005.<sup>10</sup>

**Table 2**  
**Baseline Regression Results**  
**Form 3 Cable Systems with Positive DSE**  
**2004 – 2005**

Dependent Variable: Total Royalty Fee Paid by System	
Explanatory Variables	Coefficient (Standard Error) <sup>1</sup>
Minutes of Program Suppliers Programming	0.075 ** (0.037)
Minutes of Sports Programming	2.770 ** (0.989)
Minutes of Commercial TV Programming	0.256 * (0.141)
Minutes of Public Broadcasting Programming	0.042 (0.043)
Minutes of Devotional Programming	-0.067 (0.123)
Minutes of Canadian Programming	0.282 ** (0.124)
Minutes of Low Power Programming	-0.115 (0.334)
Minutes of Mexican Programming	0.886 ** (0.413)
Number of Subscribers (Previous Accounting Period)	0.864 ** (0.029)
Indicator for Minimum Payment & DSE < 1	3737 * (1941)
Indicator for Minimum Payment & DSE ≤ 1	-14741 ** (2068)
Number of Activated Channels (Previous Accounting Period)	2.97 (5.95)
Average Household Income in Designated Marketing Area	-0.174 ** (0.071)
Count of Local Channels	448 ** (165)
Indicator for Special 3.75% Royalty Rate	21068 ** (2553)
Indicator for Carriage of Partially Distant Signal	-9269 ** (1874)
Constant	7557 ** (3046)
Indicators for Accounting Periods	YES
R-Squared	0.753
Number of Observations	4954

Note:

[1] Heteroscedasticity corrected standard errors are reported in parentheses.

\* and \*\* indicate results are significant at the 90 and 95 percent confidence levels, respectively.

Source: TVData; Cable Data Corporation; The Lifestyle Market Analyst

<sup>10</sup> Also, instead of running a separate alternative regression analysis, as Dr. Rosston did, using data only for systems that carried more than one DSE, we measured the effect of the three different minimum fee circumstances discussed above by using a single regression with two additional indicators related to minimum fee status and DSE levels.

The dependent variable in our regression is the total royalty fee paid by a Form 3 system in the particular accounting period. By far the most important determinant of variation in these total royalty payments across systems is the number of subscribers, which is as expected. A system with an additional subscriber has a royalty payment that is on average \$0.86 higher, holding other variables constant. Additional minutes of programming also add to the value of the bundle, but minutes in different categories bear different relationships to bundle value.

An additional Program Supplier minute adds \$0.075 (with a standard error of \$0.037). An additional Sports minute adds \$2.77 (\$0.989). An additional Commercial TV minute adds \$0.256 (\$0.141). An additional Public TV (PTV) minute adds \$0.042 (\$0.043).

These coefficients provide market-based measures of the value additional minutes of the various types of programming on the distant signals add to the overall royalties paid for distant signals. We can determine the total contribution of each program type to the value of the distant signal bundles by multiplying the respective coefficients by the number of *compensable* minutes of each type of programming.<sup>11</sup> For this calculation, we treat the negative coefficients as zero, on the view that additional minutes of, say, devotional programming do not detract from the overall value of a bundle of distant signals.<sup>12</sup>

Table 3 reports the royalty shares for the different types of programming resulting from this model. This model indicates that sports should get 42.36 percent of the royalty funds, program suppliers should get 24.68 percent, commercial television should get 22.86 percent, public broadcasting television should get 6.79 percent, and Canadian programming should get 3.30 percent.

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<sup>11</sup> The programs delivered on "superstation" WGN, identified as WGNA for "WGN America," include a substantial number of substituted syndicated programs and Devotional programs that are separately licensed for transmission and therefore are not eligible to receive any share of the royalties in this proceeding. Hence, in making our proposed share calculations, we consider only compensable programs.

<sup>12</sup> Although the point estimates of the coefficients for Devotional and Low Power are negative, neither is individually statistically significantly below zero. The respective estimates imply a 29 percent probability that the Devotional coefficient is above zero, and a 37 percent probability that the Low Power coefficient is above zero.

**Table 3**  
**Royalty Share Allocation Using Compensable Minutes**  
**Form 3 Cable Systems with Positive DSE**  
**2004 – 2005**

Claimant Group	Value of an Additional Minute (Coeff. From Table 2)	System-Weighted Compensable Minutes	Value of Minutes	Implied Share of Royalties	Implied Share of Royalties Excluding Mexican and Low Power
[A]	[B]	[C]	[D] = [B] * [C]	[E] = [D] / (45,845,188)	[F] = [D] / (45,820,423)
Program Suppliers	0.075 **	150,844,365	11,309,074	24.67%	24.68%
Sports	2.770 **	7,008,250	19,411,362	42.34%	42.36%
Commercial TV	0.256 *	40,878,351	10,473,058	22.84%	22.86%
Public Broadcasting	0.042	74,844,256	3,113,222	6.79%	6.79%
Devotional	-0.067	11,864,814	0	0.00%	0.00%
Canadian	0.282 **	5,373,581	1,513,708	3.30%	3.30%
Low Power	-0.115	790,231	0	0.00%	0.00%
Mexican	0.886 **	27,960	24,765	0.05%	0.00%
Total		291,631,808	45,845,188	100.00%	100.00%
Excluding Mexican & Low Power		290,813,617	45,820,423		

Note: \* and \*\* indicate results are significant at the 90 and 95 percent confidence levels, respectively.  
Source: TVData; Cable Data Corporation; The Lifestyle Market Analyst

I have tested the robustness of the regression results in a number of ways, including by testing alternative approaches suggested by other parties in the prior proceeding, as described in Appendix 3 to this testimony. My conclusion, based on my experience and expertise and on statistical tests I have applied to the study results, is that the regression results are robust, valid, and reliable within the stated confidence intervals.

It is useful to compare the results of the regression study to the results of the cable operators' survey. The cable operators' survey is based on cable operators' direct assessments of the relative value of the various kinds of distant signal programming they chose to carry on their systems. In answering the survey, cable operators are not asked to distinguish compensable from non-compensable programming. Thus, the cable operator survey results provide information on the value of all the non-network programming carried on their distant signals, including WGN. Our analysis thus far has attempted to determine the relative market value only of the compensable programming, but we can adapt our approach to calculate more directly comparable estimates of the relative value shares for all the non-network programming on distant signals.

I do this by multiplying the coefficients on the programming minutes in Table 2 by the *total* minutes in each programming category, rather than simply the compensable minutes. Table A2 in Appendix 3 describes the calculation. In addition, another adjustment is necessary to allow for a more apples-to-apples comparison. I understand that the cable operator survey omitted certain sample systems if they carried only a distant PTV or a distant Canadian signal. Since our

regressions covered all Form 3 systems, the cable operator survey results should be adjusted to represent a similarly comprehensive sample. I understand that PTV witness Linda McLaughlin addressed this issue by calculating "Augmented Bortz Survey" share percentages. Combining these two adjustments, the resulting comparisons are shown in Table 4:

**Table 4**  
**Implied Royalty Shares Using All Minutes**  
**Compared to BORTZ Shares**  
**2004 – 2005**

Claimant Group	Estimated Royalty Shares from Regression <sup>1</sup>	Augmented Bortz Share <sup>2</sup>	
		2004	2005
Program Suppliers	32.15%	35.40%	36.20%
Sports	38.73%	32.40%	35.50%
Commercial TV	20.20%	17.90%	14.20%
Public Broadcasting	6.01%	6.20%	6.05%
Devotional	0.00%	7.60%	6.30%
Canadian	2.92%	0.50%	1.65%

**Note:**

[1] To be comparable to Bortz shares, royalty shares are calculated using all WGNA minutes but omitting Low Power and Mexican

[2] Bortz shares taken from the 2009 Testimony of Linda McLaughlin. Mid-points of ranges used for Canadian and PTV.

Source: TV Data; Cable Data Corporation; The Lifestyle Market Analyst

As can be seen, the comparison shows that the royalty shares are similar for most program categories. Further, applying statistical tests using the respective confidence intervals around each of the share estimates, we cannot reject the hypotheses that these estimated shares equal the cable operator survey shares for the Program Supplier, Sports, Commercial TV, Public TV, and Canadian categories.

### Conclusion

Royalty payment data provide evidence related to the relative market value of programming carried on distant signals. Using multiple regression analysis, the data on royalty payments, analyzed in conjunction with data on the amount and mix of program content and other factors affecting royalty payments, provides information about the relative market value of the various relevant categories of program content.

Basic results from the regression approach are robust as evaluated in relation to various reasonable alternative approaches. In the baseline specification – drawn from Dr. Rosston’s approach in the previous proceeding – the commercial television share is 22.86 percent for 2004-2005, as compared with the basic cable operator survey result of 16.6 percent for 2004-2005. The cable operator survey, however, did not distinguish non-compensable programming on WGN. The comparison of the implied shares that result from the regression analysis when non-compensable programs on WGN are included is instructive, Table 5 shows the relative shares:

**Table 5**  
**Royalty Share Allocation**  
**Form 3 Cable Systems with Positive DSE**  
**2004 – 2005**

Claimant Group	Implied Share of Royalties	
	Using All WGNA Minutes	Using Compensable Minutes
Program Suppliers	32.15%	24.68%
Sports	38.73%	42.36%
Commercial TV	20.20%	22.86%
Public Broadcasting	6.01%	6.79%
Devotional	0.00%	0.00%
Canadian	2.92%	3.30%
Total	100.00%	100.00%

Source: TVData; Cable Data Corporation; The Lifestyle Market Analyst

The Commercial TV share is greater when the coefficients are used to calculate shares including only the compensable minutes. Thus the data comparison shows that if an adjustment to the cable operator survey shares is to be made in an effort to correct for the inclusion of non-compensable programming on WGN, the Commercial TV share should be increased.



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Distribution of the )  
2004 and 2005 )  
Cable Royalty Funds )  
\_\_\_\_\_ )

Docket No. 2007-3 CRB CD 2004-2005

**DECLARATION**

I, Joel Waldfogel, declare under penalty of perjury that the Statement of Joel Waldfogel presented in the 2004-2005 Cable Copyright Royalty Distribution Proceeding is true and correct to the best of my knowledge, information and belief.

  
\_\_\_\_\_  
Joel Waldfogel

Dated: May 29, 2009

**APPENDIX 1**

**Statement of Joel Waldfogel**

**Curriculum Vitae**

## Joel Waldfogel

updated: December 23, 2008

Business Address:  
Public Policy and Management  
The Wharton School  
University of Pennsylvania  
Philadelphia, PA 19104-6372  
phone: (215) 898-7148  
fax: (215) 898-7635  
waldfogj "at" wharton.upenn.edu  
<http://bpp.wharton.upenn.edu/waldfogj>

### Education

Ph. D. 1990, Economics, Stanford University

B.A. 1984, Economics, Brandeis University, *summa cum laude*, with Highest Honors

### Work Experience

Business and Public Policy Department, The Wharton School, University of Pennsylvania

Department Chair, January 2006-present

Joel S. Ehrenkranz Family Professor, 2003-present

Professor, 2001-2003

Associate Professor, 1997-2001

Associate Vice Dean for the Doctoral Program, The Wharton School, Fall 2000-2005

Dismal Science columnist, *Slate Magazine* ([www.slate.com](http://www.slate.com)), May, 2006-present.

Associate Editor, *Information Economics and Policy*, July 2004-present

Member, Editorial Board, *International Review of Law and Economics*, Jan. 2004-present

Member, Editorial Board, *B.E. Journals in Economic Analysis & Policy*, 2005-present

Consultant, The World Bank

Project on criminal conviction and labor market outcomes, 1997

Project on media use in African countries, 2007

Yale University Economics Department

Associate Professor, 1995-1997

Assistant Professor, 1990-1995

National Bureau of Economic Research, Cambridge, MA  
Research Associate, Law and Economics Program, 2002-present  
Faculty Research Fellow, Law and Economics Program, 1993-2002

John M. Olin Visiting Faculty Fellow, Yale Law School, Spring 1994

Economist, F.W. Dodge/Data Resources, Lexington, MA, 1985-1987

#### Service

Consultant to the FCC Media Ownership Working Group, 2001-2003

Member, NAS/NRC Committee on Improving Research Information and Data on Firearms, 2001-2004. The panel published a report, *Firearms and Violence: A Critical Review*, National Academy Press, Washington, DC, 2004.

Scientific Organizing Committee, Conference on Media Economics (Bologna, 2007; Zurich, 2008)

#### Distinctions

Marc and Sheri Rapaport Undergraduate Core Teaching Award, The Wharton School, May 2008

*Journal of Industrial Economics* "Best Article of the Year" Prize, 2006

Monroe-Paine Lecture, University of Missouri, October 2008

First Prize, Mexican Law and Economics Association, for "Do Sentencing Guidelines Raise the Cost of Punishment?" (with Jose Meade), October 1998

Teacher of the Year 1994, Yale Graduate Economics Club

Alfred P. Sloan Dissertation Fellowship, 1989-1990, Stanford University

John M. Olin Fellow, Stanford Law School, Summer 1988

#### Grants

University of Pennsylvania, Real Estate Center, 2004, 2005 (to support research on chain restaurants)

University of Pennsylvania, Mack Center, 2007, 2008 (to support research on video downloading and the pricing of digital products)

University of Pennsylvania, WebI/Mack Center, 2004, 2005 (to support research on music downloading and recording industry innovation)

University of Pennsylvania, WebI, 2002 (to support research on information intermediaries)

University of Pennsylvania, Wharton Electronic Commerce Forum, 2000 (to support research on the digital divide)

University of Pennsylvania Research Foundation, 1998 (with Kevin Volpp, to support research on the impacts of New Jersey health care reform)

University of Pennsylvania Research Foundation, 1998 (with Jason Scott Johnston, to support research on litigation)

Yale Social Science Faculty Research Fund, 1991, 1994 (with Steve Berry)

NSF Law and Social Science grant no. SBR-9310526, a two year grant with Ian Ayres to support research on race discrimination in Connecticut bail setting, 1993

### Books

1. *Scroogenomics*, Princeton University Press, forthcoming, 2009.
2. *The Tyranny of the Market*, Harvard University Press, Cambridge, MA, October 2007.
3. *Debt, Taxes, and Corporate Restructuring*, co-edited with John B. Shoven, Brookings Institution, Washington, D.C., 1990
4. *Firearms and Violence: A Critical Review*, National Academy Press, Washington, DC, 2004 (NRC panel member).

### Scholarly Articles in Journals

5. "Lost on the Web: Does Web Distribution Stimulate or Depress Television Viewing?" forthcoming, *Information Economics & Policy* (revised version of NBER Working Paper 13497, October 2007)
6. "Product Quality and Market Size (with Steve Berry), forthcoming, *Journal of Industrial Economics*, (revised version of NBER Working Paper 9675)

7. "Media Markets and Localism: Does Local News *en Español* Boost Hispanic Voter Turnout? (with Felix Oberholzer-Gee), forthcoming, *American Economic Review* (revised version of NBER Working Paper 12317, June 2006).
8. "Social Learning and Coordination in High-Stakes Games: Evidence from Friend or Foe" (with Felix Oberholzer-Gee and Matthew White), forthcoming, *Review of Economics and Statistics*.
9. "Close to You? Bias and Precision in Patent-Based Measures of Technological Proximity" (with Mary Benner), *Research Policy*, 2008 (revised version of NBER Working Paper 13322, August 2007).
10. Guest Editor's Introduction to Special Issue on the Economics of the Media, *Information Economics and Policy*, October 2007.
11. "The Median Voter and the Median Consumer: Local Private Goods and Residential Sorting," March 2008, *Journal of Urban Economics* (revised version of NBER Working Paper 11972, January 2006).
12. "Piracy on the Silver Screen" (with Rafael Rob), *Journal of Industrial Economics* Sept. 2007, (revised version of NBER Working Paper 12010, February 2006).
13. "Measuring the Effect of Multimarket Contact on Competition: Evidence from Radio Broadcast Ownership Deregulation." (with Julie Wulf), *Contributions to Economic Analysis and Policy*, 2006
14. "Does Information Undermine Brand? Information Intermediary Use and Preference for Branded Web Retailers." (with Lu Chen), *Journal of Industrial Economics*, December 2006 (Journal of Industrial Economics "Best Article of the Year" Prize, 2006)
15. "The *New York Times* and the Market for Local Newspapers." (with Lisa George), *American Economic Review*, 2006.
16. "Piracy on the High C's: Music Downloading, Sales Displacement, and Social Welfare." (with Rafael Rob), April 2006, *Journal of Law & Economics* (revised version of NBER Working Paper 10874, November 2004).
17. "Strength in Numbers: Group Size and Political Mobilization" (with Felix Oberholzer Gee), October 2005, *Journal of Law & Economics* (revised version of NBER Working Paper 8252, April 2001; old title: "Electoral Acceleration: The Effect of Minority Population on Minority Voter Turnout").

- Reprinted in Kyle Bagwell, ed., *The Economics of Advertising*, in Edward Elgar series, *The International Library of Critical Writings in Economics*, Mark Blaug, ed.
30. "Free Entry and Social Inefficiency in Radio Broadcasting," (with Steven Berry), *RAND Journal of Economics*, 1999, (revision of April 1996 NBER Working Paper 5528)
    - To be reprinted in Paul Joskow and Michael Waterson, eds., *Empirical Industrial Organization*, in Edward Elgar series, *The International Library of Critical Writings in Economics*, Mark Blaug, ed.
  31. "Public Radio in the U.S.: Does it Correct Market Failure or Cannibalize Commercial Stations," (with Steven Berry), *Journal of Public Economics*, 1999, (revision of June 1997 NBER working paper 6057)
  32. "Toward a Taxonomy of Disputes: New Evidence through the Prism of the Priest/Klein Model," (with Peter Siegelman), *The Journal of Legal Studies*, January 1999
  33. "The Deadweight Loss of Christmas: Reply," *American Economic Review*, December 1998
    - Reprinted in *Problèmes Économiques*, December 22, 1999
  34. "Reconciling Asymmetric Information and Divergent Expectations Theories of Litigation," *Journal of Law and Economics*, October 1998 (revision of February 1998 NBER Working Paper 6409)
  35. "Are Empirically Based Sentencing Guidelines Justified by Inter-Judge Disparity?," *International Review of Law and Economics*, September 1998
  36. "The Effect of Conviction on Income through the Life Cycle," (with Daniel Nagin), *International Review of Law and Economics*, March 1998
  37. "The Best Business Schools: A Market Based Approach," (with Joseph Tracy), *Journal of Business*, January 1997
  38. "The Deadweight Loss of Christmas: Reply," *American Economic Review*, December 1996
  39. "Sentencing Policy, Implied Demographic Welfare Weights, and the Theory of Sentencing Reform," *Journal of Public Economics*, 1996
  40. "The Administrative and Compliance Cost of Manual Highway Toll Collection: Evidence from Massachusetts and New Jersey," (with David A. Friedman), *National Tax Journal*, June 1995

18. "Do Low-Income Housing Subsidies Increase Housing Consumption?" (with Todd Sinai), *Journal of Public Economics*, December 2005 (revised version of NBER Working Paper 8709, January 2002).
19. "Does Consumer Irrationality Trump Consumer Sovereignty?" *The Review of Economics and Statistics*, November 2005.
20. "Who Benefits Whom in Local Television Markets?", *Brookings-Wharton Papers on Urban Affairs* 2003
21. "Geography and the Internet: Is the Internet a Substitute or a Complement for Cities?" (with Todd Sinai), *Journal of Urban Economics*, July 2004 (revised version of NBER Working Paper 10028, October 2003).
22. "Market Reform in New Jersey and the Effect on Mortality from Acute Myocardial Infarction." (with Kevin Volpp, Sankey Williams, Jeffrey Silber J. Sanford Schwartz, and Mark Pauly) *Health Services Research*, April 2003. (revised version of "Competition and the Quality of Hospital Care: Heart Attack Mortality after the Onset of Price Competition in New Jersey," (with Kevin Volpp), mimeo, The Wharton School, July 1998)
23. "Preference Externalities: An Empirical Study of Who Benefits Whom in Differentiated Product Markets" *RAND Journal of Economics*, 2003 (revised version of NBER Working Paper 7391, October 1999)
24. "Who Affects Whom in Daily Newspaper Markets?" (with Lisa George), *Journal of Political Economy*, 2003 (revised version of NBER Working Paper 7944, October 2000)
25. "Does Repeat Play Elicit Cooperation? Evidence from Federal Civil Litigation," (with Jason Johnston), *Journal of Legal Studies*, 2002
26. "Gifts, Cash, and Stigma," *Economic Inquiry*, 2002
27. "Race and Radio: Preference Externalities, Minority Ownership, and the Provision of Programming to Minorities" (with Peter Siegelman), *Advances in Applied Microeconomics*, volume 10, 2001
28. "Do Mergers Increase Product Variety? Evidence from Radio Broadcasting," (with Steven Berry), *Quarterly Journal of Economics*, 2001, (revision of April 1999 NBER Working Paper 7080 entitled "Mergers, Entry, and Programming Variety in Radio Broadcasting")
29. "The Effect of Price Advertising on Prices: Evidence in the Wake of 44 Liquormart," (with Jeffrey Milyo) *American Economic Review*, 1999, (revision of March 1998 NBER Working Paper 6488)



41. "The Selection Hypothesis and the Relationship between Trial and Plaintiff Victory," *Journal of Political Economy*, April 1995
  - To be reprinted in Chris William Sanchirico, ed., *Economics of Evidence, Procedure, and Litigation*, in Edward Elgar series, *Economic Approaches to Law*, Richard Posner and Francesco Parisi, series eds.
42. "Are Fine and Prison Terms Used Efficiently?: Evidence on Federal Fraud Offenders," *Journal of Law and Economics*, April 1995
  - To be reprinted in Isaac Ehrlich and Zhiqiang, eds., *The Economics of Crime*, in Edward Elgar series, *The International Library of Critical Writings in Economics*, Mark Blaug, ed.
43. "The Effects of Criminality and Conviction on the Labor Market Status of Young British Offenders," (with Daniel Nagin) *International Review of Law and Economics*, 1995
44. "Measuring the Effects of Restructuring on Corporate Performance: The Case of Management Buyouts," (with Scott Smart), *Review of Economics and Statistics*, 1994
45. "A Market Test for Race Discrimination in Bail Setting," (with Ian Ayres), *Stanford Law Review*, May 1994
  - Reprinted in Ian Ayres, *Pervasive Prejudice?*, Univ. of Chicago Press, 2001
46. "Does Conviction Have A Persistent Effect on Income and Employment?," *International Review of Law and Economics*, March 1994
47. "The Effect of Criminal Conviction on Income and the 'Trust Reposed in the Workmen'," *Journal of Human Resources*, Winter 1994
48. "The Deadweight Loss of Christmas," *American Economic Review*, December 1993
  - Reprinted in Caroline Kennedy, *A Family Christmas*, Hyperion Books, 2007.
49. "Sentences as Endogenous Taxes: Are they 'Just' or 'Efficient'?" *Journal of Law and Economics*, April 1993
50. "Real Interest Rates and the Savings and Loan Crisis: The Moral Hazard Premium," (with John Shoven and Scott Smart), Spring 1992, *Journal of Economic Perspectives*

**Other Publications (Chapters, etc.)**

51. "National Media and Local Political Participation: The Case of the New York Times" (with Lisa George), forthcoming in *Information and Public Choice: From Media Markets to Policymaking*, The World Bank.
52. "Minority-Targeted Local Media and Voter Turnout: A Summary." forthcoming in *Information and Public Choice: From Media Markets to Policymaking*, The World Bank.
53. "Should We Regulate Media Ownership?" in *Media Diversity and Localism: Meaning and Metrics*, 2006.
54. "The Selection of Cases for Trial," *The New Palgrave Dictionary of Economics and the Law*, May 1998
55. "Tax Policy, Saving, and Pension Funding," in *Pensions, Savings, and Capital Markets*, U.S. Dept. of Labor, 1996.
56. "Criminal Sentences: Are they Just or Efficient?," *Economic Times*, Spring 1995
57. "Which Flowers Will Bloom? Reactions to the USSC Research Conference," *Federal Sentencing Reporter*, July/August 1993.
58. "Guest Editor's Observations: Narrow Questions, Overstated Answers," *Federal Sentencing Reporter*, Nov./Dec. 1992./
59. "Aggregate Inter-Judge Disparity in Federal Sentencing: Evidence from Three Districts," *Federal Sentencing Reporter*, Nov./Dec. 1991

#### Active Working Papers

60. "Music for a Song: An Empirical Look at Uniform Song Prices and its Alternatives." (with Ben Shiller), The Wharton School, May 2008.
61. "Who Benefits Whom in the Neighborhood? Demographics and Retail Product Geography" Mimeo. The Wharton School. May 2006 (to appear in an NBER volume on the economics of agglomeration).
62. "Does Misery Love Company? Evidence from Pharmaceutical Markets before and After the Orphan Drug Act" (with Frank Lichtenberg). Mimeo. The Wharton School, July 2002.
63. "The Long Run Effect of Price Advertising on Prices" (with Jeff Milyo), mimeo, The Wharton School, January 2001

### Inactive Working Papers

64. "Do Noncommercial Hospitals Cannibalize Commercial Hospitals or Serve the Medically Needy?" (with Douglas Leslie), mimeo, The Wharton School, February 1998
65. "Do Sentencing Guidelines Raise the Cost of Punishment?" (with Jose Meade), NBER Working Paper 6361, January 1998
66. "A Citation-Based Test for Discrimination at Economics and Finance Journals," (with Scott Smart), NBER working paper 5460, February 1996
67. "Bargaining in the Shadow of the Judge," (with Orley Ashenfelter), mimeo, Princeton University, February 1993

### Reports

68. "Consumer Substitution among Media" (Washington, DC: FCC Media Ownership Working Group), October 2002
69. "Conviction and Labor Market Outcomes: the Existing Literature and its Possible Relevance to Developing Countries," prepared for The World Bank, October, 1997

### Doctoral Students Advised

#### Wharton

- Chair, Brett Danaher, Carnegie-Mellon Postdoc.
- Member, David Song
- Member, Leslie Schafer, PricewaterhouseCoopers.
- Member, Ted Goodman, University of Arizona
- Member, Gilbert Gimm, in progress
- Member, Hart Posen, University of Michigan
- Chair, Mike Gessner. Economic Analysis LLC.
- Member, Ted Buckley, McKinsey
- Member, Mike Furukawa, Arizona State Univ..
- Member, Gus DeFranco, 2004, Univ. of Toronto, Accounting
- Chair, Lisa George, 2001, Michigan State Economics
- Member, Phanish Puranam, 2001, London Business School
- Member, Kate Bundorf, 2000, Stanford Medical School
- Member, Kevin Volpp, 1998, Penn Medical School
- Member, Linda Bornyaz, 1998

## Yale

Chair, Jose Meade, 1997, ITAM

Chair, Doug Leslie, 1997, Veteran's Administration

Member, Jessica Holmes, 1998, Middlebury College

Member, Kristin Mancini, 1997,

Member, David Popp, 1997, Syracuse University

Member, Peter Siegelman, 1991, Fordham University

Member, Emmanuel Thorne, 1992

## **Recent Seminars**

### **2008/2009**

- TPRC, Washington DC, September 2008 (scheduled)
- INFORMS, Washington DC, October 2008 (scheduled)
- QME, New York, October 2008 (scheduled)
- Ohio State University, October 2008 (scheduled)
- University of Michigan, November 2008 (scheduled)
- Kellogg, Northwestern, December 2008 (scheduled)

### **2007/2008**

- Conference on Media Economics, Bologna, October 2007
- Keynote Speaker, Economics Network for Competition and Regulation (ENCORE), May 2008, Hilversum, the Netherlands
- Invited Speaker, Economics of Information and Communication Technologies, ZEW, July 2008, Mannheim, Germany
- Symposium on Statistical Challenges in Electronic Commerce, NYU, May 2008.
- NBER Summer Institute IO, July 2008.

### **2005/2006**

- NBER Summer Institute IO (discussant)
- NYU IO Day
- Fundacion Ramon Areces (Madrid)
- University of Chicago GSB
- AEA Meetings, Boston (Presenter: Urban Economics, Internet and Entertainment Industries; Discussant: Innovation)
- St. Johns Law School, Media Diversity Conference
- Wharton, Mack Center Mini-Conference, Discussant

### **2004/2005 Seminars**

- Yale University Econ/SOM
- USDA Product Differentiation Conference
- Harvard Business School Strategy Group
- Cornell Economics

- Berkeley/Haas
- NBER Urban Economics Conference
- Jan 2005 AEA Meetings (discussant)
- European Center for Advanced Research in Economics and Statistics, Belgium
- ENST, France

#### 2003/2004 Seminars

- NYU IO day
- Syracuse
- Dartmouth/Tuck
- Brookings Institution
- Wharton Decision Processes seminar
- Stanford Graduate School of Business (Econ & Political Economy Seminars)
- Wharton Management Department, Evolution of Organizations and Industries Seminar
- Ford Foundation Media Conference at Fordham Univ.
- Wharton Marketing Seminar
- NBER IO Winter Meetings (discussant)
- University of Toronto, Rotman School
- Kellogg
- Wharton Management Strategy and the Business Environment, discussant
- Columbia University media ownership conference
- Wharton Summer Applied Economics Seminar
- NBER Law & Econ Summer Institute (scheduled)
- NBER Innovation Summer Institute (discussant, scheduled)
- NBER IO Summer Institute (discussant, scheduled)

#### 2002/2003 Seminars

- Speaker at University of Pennsylvania Economics Day
- Panel Member, Mediatank Public Forum on Media Ownership in Philadelphia with FCC Commissioner Michael J. Copps (May 7<sup>th</sup>, 2003)
- Wharton Summer Applied Economics Seminar
- Virginia Econ
- Carnegie Mellon University Strategy Seminar
- MIT Econ
- NBER Winter Industrial Organization Meetings, Stanford

#### 2001/2002 Seminars

- Harvard University Econ
- George Mason University
- Rutgers University Econ
- NYU (Stern)
- University of Pennsylvania (Wharton)
- Dartmouth (Tuck and Econ)

- NBER Innovation Summer Institute

#### 2000/2001 Seminars

- 28<sup>th</sup> Annual Telecommunications Policy Research Conference
- University of Wisconsin, Madison, Economics Department
- Stanford GSB
- Duke Fuqua
- Washington Univ (Olin)
- Michigan State Univ Econ Dept.
- Univ of Illinois Econ Dept.
- Brandeis University Economics Dept.
- Cal – Berkeley (Haas)

#### Other Professional Activities

Referee, *American Economic Review*; *American Journal of Political Science*; *Journal of Law and Economics*; *International Review of Law and Economics*; *National Tax Journal*; *Journal of Political Economy*; *Quarterly Journal of Economics*; *Journal of Law, Economics, and Organization*; *Journal of Industrial Economics*; *Management Science*; *Journal of Labor Economics*; *Journal of Economic Education*; *Journal of Policy Analysis and Management*; *RAND Journal of Economics*.

#### Personal

Married to Mary J. Benner; two children (born 12/93 and 2/96)

#### University of Pennsylvania Service

##### 2008/2009

- Member, Planning Committee, Penn Program on Democracy, Citizenship, and Constitutionalism
- Member, Wharton School Publishing Editorial Board
- Member, Wharton School Committee of Faculty Attraction and Retention

##### 2007/2008

- Chair, Marketing Department Quinquennial Review Committee
- Member, Wharton School Faculty Survey Steering Committee
- Member, Planning Committee, Penn Program on Democracy, Citizenship, and Constitutionalism

##### 2004/2005

- Chair, Wharton Undergraduate Curriculum Review Committee
- University of Pennsylvania, Council of Graduate Faculties, member
- Wharton Doctoral Executive Committee, member
- Co-Organizer, Wharton Scholars Undergraduate Research Program

**2003/2004**

- Wharton Applied Economics Seminar, co-organizer
- Chair, Business and Public Policy Doctoral Admissions Committee
- Member, BPUB Q-Review Committee
- Business and Public Policy Search Committee, Chair
- University of Pennsylvania, Council of Graduate Faculties, member
- Wharton Doctoral Executive Committee, member
- Co-Organizer, Wharton Scholars Undergraduate Research Program

**2002/2003**

- Wharton Personnel Committee, member
- Wharton Doctoral Executive Committee, member
- Wharton Applied Economics Seminar, organizer
- Business and Public Policy Doctoral Coordinator
- Business and Public Policy Search Committee, Chair
- University of Pennsylvania, Council of Graduate Faculties, member
- University of Pennsylvania, Committee on Doctoral Degree Requirements, Rules and Regulations, member

**2001/2002**

- Wharton Personnel Committee, member
- Wharton Doctoral Executive Committee, member
- Wharton Applied Economics Seminar, co-organizer
- Business and Public Policy Doctoral Coordinator
- University of Pennsylvania, Council of Graduate Faculties, member
- University of Pennsylvania, Strategic Planning Committee (Doctoral Education)

**1999/2000**

- Wharton Research Policy Committee, member
- Wharton Applied Economics Seminar, co-organizer
- Public Policy and Management Ph.D. Program Committee
- Wharton Ad Hoc Committee on the Doctoral Program, chair
- Wharton Summer Applied Economics Seminar, founder and organizer

**1998/1999**

- Wharton MBA Curriculum Review Committee, member
- Wharton Research Policy Committee, member
- Wharton Applied Economics Seminar, co-organizer
- Public Policy and Management Ph.D. Program Committee
- Wharton Summer Applied Economics Seminar, founder and organizer

**1997/1998**

- Wharton MBA Curriculum Review Committee, member
- Public Policy and Management Ph.D. Program Committee

- **Wharton Summer Applied Economics Seminar, founder and organizer**



**APPENDIX 2**

**Statement of Joel Waldfogel**

**Methodology**

## APPENDIX 2

The data for the regression analysis consists of royalty payments, cable system characteristics, and minutes of programming, by category, for 4,954 cable system/accounting period observations over the four 6-month accounting periods covered by this proceeding. This appendix provides an overview of the data sources used in the analysis and how these sources were combined to create the final regression dataset.

### Overview of Data Sources

#### Royalty Payments and Cable System Characteristics

Data on the royalty payments paid by each system in each accounting period and the cable system characteristics were obtained from Cable Data Corporation (CDC). For each Form 3 cable system, the CDC data contain information on (1) the royalty paid by the cable system, (2) whether the system paid any royalties at the 3.75% royalty rate, (3) which distant signals each system carried and whether the signal was partially or fully distant, (4) the number of subscribers, (5) the number of local channels carried, and (6) the total number of activated channels (i.e., total channels used for all services, not just broadcast stations).

For each accounting period, two CDC datasets were used: (1) the Carriage Detail Data and (2) System Detail Data. The Carriage Detail Data contain information specifying which distant stations are carried by each system in each accounting period. An observation in this data is at the system/accounting period/station level. The dataset includes observations for some stations/system pairs in which the station is not counted as a distant signal in the royalty calculations. These stations were not included in the analyses.<sup>1</sup> The System Detail Data contain

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<sup>1</sup> The station/system pairs that were dropped from the analysis were identified by a basis of carriage code of "Z" and a DSE of 0. There were two instances in which a station with a basis of carriage code of "Z" had a positive DSE. In these cases, the observations were not dropped from the analysis. Rather, it was assumed that the basis of carriage code was incorrect and that the station was either a partially or fully distant signal. The station was assumed to be fully distant if it was an independent station with a DSE of 1 or an educational or network station with a DSE of 0.25, otherwise it was assumed to be partially distant.

information on the number of local channels carried on the system, the number of subscribers, the royalty the system paid, and whether the system paid any royalties at the 3.75% rate.<sup>2</sup>

### Programming Minutes Data

For each accounting period, information was obtained on the programming carried on the distantly carried network and independent stations during 21 randomly selected days<sup>3</sup> from TVData for all the non-educational stations that were carried as distant signals. TVData provided the program schedules for virtually all of the network, independent, and low power stations that were carried as distant signals.<sup>4</sup>

For each of the stations for which program schedule information was available from TVData, Cornerstone Research worked with Dr. Richard Ducey to categorize the minutes associated with each program aired on each station during each selected day<sup>5</sup> into one of the following program categories: (1) Network,<sup>6</sup> (2) Sports, (3) Devotional, (4) Program Suppliers, (5) Commercial TV, (6) Canadian, and (7) Mexican. Cornerstone Research and Dr. Ducey developed filters and rules, using multiple TVData data fields and other information, to accomplish initial program categorizations, which were then repeatedly reviewed and refined. The final review and categorization of any programs that were not susceptible to proper categorization by the data processing methodology were provided by Dr. Ducey. All minutes that aired on WGNA that

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<sup>2</sup> In each accounting period, the previous period's CDC Data were used to obtain the lagged number of subscribers and activated channels, meaning that data from the second accounting period in 2003 were used to obtain lagged subscriber and activated channel data for the first accounting period in 2004.

<sup>3</sup> Twenty-one days in each six-month accounting period were selected using a stratified random sampling approach that assured equal numbers would be selected of each of the seven days of the week across each accounting period. This approach was analogous to that used for the program schedule sample in the 1998-1999 proceeding programming study.

<sup>4</sup> TVData did not provide programming information for 1 distantly carried network station, 2 distantly carried independent stations, and 5 distantly carried low power stations. These stations were treated in the same manner as low power stations for which programming information is not available.

<sup>5</sup> For each sample day, programs that were aired on stations from 6:00 AM on the selected day through 5:59 AM on the following day were categorized for use in the regression. This minimized the need for the truncation adjustments that were necessary in the 1998-1999 programming study because it used a 12:00 AM to 11:59 PM broadcast day.

<sup>6</sup> Minutes of programming categorized as "network" were excluded from the regression analysis.

were not also aired on WGN were also identified. These minutes are non-compensable. The number of minutes in each program category which aired on each station were aggregated across each accounting period. The data used for the regression analysis are at the accounting period/station level.

All of the stations for which program schedules were unavailable for entire accounting periods were assumed to have been on the air 24 hours a day, implying that they aired 30,240 ( $24 \times 60 \times 21 = 30,240$ ) minutes across the 21 randomly selected days in each accounting period. In the analysis, all of these minutes are categorized as "low power minutes."

If a station was missing scheduling data for one, or a few, days in an accounting period, these minutes were filled in using an average of the minutes broadcast during the same sample strata. For example, missing time on KXYZ on Sunday from 2:00 AM to 3:00 AM would be filled in with the average mix of programming aired by KXYZ between 2:00 AM and 3:00 AM on the other sampled Sundays in the same accounting period.

All of the minutes that are aired on educational (public broadcasting) stations are categorized as "public broadcasting minutes." For public broadcasting stations that are aired less than 24 hours a day, data were obtained from the PTV Claimants Group identifying the hours during which the station was not on the air on the sample days. The number of minutes during each day in which the station was not on the air was subtracted from the total number of minutes in the day, and all on-air hours were assigned to the Public Broadcasting category.

### **Median Income Data**

Information on the median income by year and DMA were obtained from the 2004 and 2005 "The Lifestyle Market Analyst" publications (Lifestyle publications). The Lifestyle Market Analysis income data was matched to the systems that carried distant signals using the CDC Carriage Detail Data, which contains the market in which each cable system operates.

### **Overview of Construction of Regression Dataset**

To construct the regression dataset, station level minutes were first merged onto the CDC Carriage Detail Data. Next, the public broadcasting minutes for educational stations were merged onto the combined dataset. Third, all distantly carried non-public broadcasting stations for which program schedules are not available were assigned 30,240 minutes of "low power" programming.<sup>7</sup> After filling in all of the programming minutes for each station, the minutes

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<sup>7</sup> There is one system in the CDC data that carries one distant station for only a portion of each day. The CDC data do not indicate what period of day the system carries the station, but it does indicate the

(continued...)

carried on each cable system were aggregated to the accounting period (e.g., all of the program supplier minutes on the stations that are carried on a given cable system were aggregated to create the "program supplier minutes" used in the regression). This results in a dataset that is at the accounting period/cable system level. The CDC System Detail Data and the income data<sup>8</sup> were also included in this dataset.

After combining all of the datasets, the additional variables that are used in the regression were created. The total royalty fee paid by each system in each accounting period and the cable system's gross receipts for that accounting period are used to generate the minimum fee indicator variables. Specifically, the total royalty fee paid by a system is divided by the cable system's receipts for that accounting period. If this number is less than or equal to 0.956 percent for 2004 through the first accounting period in 2005 or 1.013 percent in the second accounting period of 2005 the observation is flagged as paying the minimum rate. This information was combined with the total number of DSEs the cable system carried to generate the indicator for minimum payment and DSE less than one and indicator for minimum payment and DSE less than or equal to one. Indicator variables for whether the system paid a 3.75% fee, for whether the system carried a partially distant signal, and for each accounting period were also created.

### Baseline Regression Model

The baseline regression is:

$$\text{(total royalty fee paid)} = b_0 + b_1 * (\text{program supplier minutes}) + b_2 * (\text{sports minutes}) + b_3 * (\text{commercial TV minutes}) + b_4 * (\text{public broadcasting minutes}) + b_5 * (\text{devotional minutes}) + b_6 * (\text{Canadian minutes}) + b_7 * (\text{low power minutes}) + b_8 * (\text{Mexican minutes}) + b_9 * (\text{number of subscribers, previous period}) + b_{10} * (\text{number of activated channels, previous period}) +$$


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(continued)

percentage of the day that station is carried during each accounting period. This station is assigned "low power" programming minutes based on the percentage of the day that it is carried (e.g., if the station were carried 50 percent of the time then it is assigned  $15,120 = 0.5 * 30,240$  minutes in an accounting period).

<sup>8</sup> Some CDC-defined markets were sub-markets of DMAs, in which case the median income from the entire DMA was applied to each sub-market. CDC-defined markets were matched to nearby DMAs when the CDC-defined market did not match the name of a city in the DMA name. No matching or nearby DMA could be ascertained for systems in the following markets: Guam, Micronesia, Puerto Rico, and the Virgin Islands. These systems were dropped from the regression dataset.

**b11\*(median household income in DMA) + b12\*(count of local channels) + b13\*(indicator for 3.75% royalty rate) + b14\*(indicator for carriage of partially distant signal) + b15\*(indicator for second half of 2004 accounting period) + b16\*(indicator for first half of 2005 accounting period) + b17\*(indicator for second half of 2005 accounting period) + b18\*(indicator for minimum payment and DSE less than one) + b19\*(indicator for minimum payment and DSE less than or equal to one) + random error.**

**APPENDIX 3**

**Statement of Joel Waldfogel**

**Robustness and Validity Testing**

**APPENDIX 3**

**Robustness**

The prior royalty distribution decision articulated the view that regression analysis is a corroborating complement to the cable operator survey. Some concern was expressed, however, that the regression results were not “robust.” Accordingly, we tested the robustness of the approach using conventional econometric techniques. Such techniques seek to answer questions such as how do the royalty distribution share calculations change with the inclusion or exclusion of particular variables from the specification? Or, how do they change with the use of different approaches for inferring valuations from the operator decisions about distant signal carriage?

To explore this we begin with our basic regression specification from Table 2. We then subtract control variables one at a time to see how the results of interest – here, royalty shares – changes. Table A1 on the following page reports a succession of variants on the Table 2 specification. All seven resulting commercial television shares are between 21 and 28 percent.



**Table A1**  
**Regression Sensitivity Analysis**  
**Form 3 Cable Systems With Positive DSE**  
**2004 - 2005**

Explanatory Variables	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)	
	Coefficient (Standard Error) <sup>1</sup>	Implied Royalty Share <sup>2</sup>	Coefficient (Standard Error) <sup>1</sup>	Implied Royalty Share <sup>2</sup>	Coefficient (Standard Error) <sup>1</sup>	Implied Royalty Share <sup>2</sup>	Coefficient (Standard Error) <sup>1</sup>	Implied Royalty Share <sup>2</sup>	Coefficient (Standard Error) <sup>1</sup>	Implied Royalty Share <sup>2</sup>	Coefficient (Standard Error) <sup>1</sup>	Implied Royalty Share <sup>2</sup>	Coefficient (Standard Error) <sup>1</sup>	Implied Royalty Share <sup>2</sup>	Coefficient (Standard Error) <sup>1</sup>	Implied Royalty Share <sup>2</sup>
Minutes of Program Suppliers Programming	0.075 (0.037)	24.67%	0.073 (0.036)	25.32%	0.074 (0.037)	18.62%	0.075 (0.037)	24.54%	0.064 (0.037)	21.15%	0.067 (0.037)	23.09%	0.093 (0.036)	25.20%	0.050 (0.037)	19.45%
Minutes of Sports Programming	2.770 (0.989)	42.34%	2.179 (0.886)	35.09%	3.415 (0.842)	39.74%	2.766 (0.989)	42.23%	2.930 (0.994)	44.90%	2.822 (0.992)	45.42%	2.989 (1.003)	37.71%	2.726 (0.988)	49.90%
Minutes of Commercial TV Programming	0.256 (0.141)	22.84%	0.280 (0.136)	26.33%	0.365 (0.135)	24.74%	0.259 (0.141)	23.08%	0.281 (0.142)	25.09%	0.232 (0.140)	21.74%	0.377 (0.140)	27.74%	0.217 (0.142)	22.87%
Minutes of Public Broadcasting Programming	0.042 (0.043)	6.79%	0.057 (0.039)	9.73%	0.110 (0.037)	13.71%	0.042 (0.042)	6.78%	0.034 (0.043)	5.54%	0.037 (0.043)	6.42%	0.041 (0.044)	5.52%	0.027 (0.044)	5.17%
Minutes of Devotional Programming	-0.087 (0.123)	0.00%	-0.071 (0.123)	0.00%	-0.110 (0.123)	0.00%	-0.063 (0.123)	0.00%	-0.054 (0.124)	0.00%	-0.068 (0.124)	0.00%	0.026 (0.123)	0.56%	-0.106 (0.124)	0.00%
Minutes of Canadian Programming	0.282 (0.124)	3.30%	0.282 (0.124)	3.48%	0.348 (0.120)	3.10%	0.284 (0.124)	3.33%	0.278 (0.123)	3.26%	0.266 (0.124)	3.29%	0.336 (0.129)	3.25%	0.226 (0.126)	3.13%
Minutes of Low Power Programming	-0.115 (0.334)	0.00%	-0.098 (0.334)	0.00%	-0.198 (0.364)	0.00%	-0.119 (0.364)	0.00%	-0.081 (0.332)	0.00%	-0.068 (0.338)	0.00%	-0.049 (0.315)	0.00%	-0.036 (0.343)	0.00%
Minutes of Mexican Programming	0.896 (0.413)	0.05%	0.809 (0.401)	0.05%	2.003 (0.476)	0.09%	0.873 (0.414)	0.05%	0.918 (0.419)	0.06%	0.791 (0.418)	0.05%	0.411 (0.396)	0.02%	1.170 (0.428)	0.08%
Number of Subscribers	0.864 (0.029)		0.864 (0.029)		0.858 (0.029)		0.865 (0.029)		0.864 (0.029)		0.868 (0.029)		0.865 (0.030)		0.862 (0.029)	
Indicator for Minimum Payment & DSE < 1	3737 (1941)		3737 (1941)		3709 (1943)		3709 (1943)		3531 (1964)		3248 (1964)		4727 (2019)		-342 (1633)	
Indicator for Minimum Payment & DSE < 1	-14741 (2068)		-13359 (1711)		-14741 (2076)		-14689 (2076)		-14776 (2066)		-14776 (2066)		-14131 (2143)		-12230 (1886)	
Number of Activated Channels (Previous Accounting Period)	2.97 (5.96)		2.72 (5.96)		0.84 (6.07)		0.84 (6.07)		0.84 (6.07)		0.84 (6.07)		0.84 (6.07)		0.84 (6.07)	
Average Household Income in Designated Marketing Area	-0.174 (0.071)		-0.168 (0.072)		-0.197 (0.073)		-0.171 (0.071)		-0.171 (0.071)		-0.171 (0.071)		-0.171 (0.071)		-0.179 (0.072)	
Count of Local Channels	448 (165)		430 (168)		286 (174)		461 (163)		461 (163)		325 (135)		426 (169)		423 (167)	
Indicator for Special 3.75% Royalty Rate	21068 (2583)		21168 (2576)		24725 (2843)		21104 (2568)		21104 (2568)		21014 (2560)		21014 (2560)		19613 (2390)	
Indicator for Carriage of Partially Distant Signal	-9289 (757)		-8474 (776)		-6594 (804)		-9233 (773)		-9233 (773)		-9238 (773)		-9133 (773)		-6135 (1693)	
Constant	7557 (3046)		7776 (3044)		-480 (2599)		7737 (3044)		7737 (3044)		1344 (2788)		6834 (3045)		11372 (3191)	
Indicators for Accounting Period 2004-2	-957 (1323)		-992 (1324)		665 (1333)		-957 (1323)		-957 (1324)		-965 (1324)		-870 (1325)		-944 (1329)	
Indicators for Accounting Period 2005-1	2182 (1526)		1775 (1516)		2740 (1531)		2209 (1527)		2209 (1531)		2386 (1536)		2403 (1536)		2104 (1548)	
Indicators for Accounting Period 2005-2	4021 (1556)		3711 (1629)		4660 (1652)		4066 (1649)		4066 (1649)		4907 (1654)		4652 (1646)		4096 (1675)	
R-Squared	0.753		0.753		0.748		0.753		0.753		0.752		0.744		0.751	
Number of Observations	4954		4954		4954		4954		4954		4954		4954		4954	

Note:  
 [1] Heteroscedasticity corrected standard errors are reported in parentheses.  
 [2] Calculated using total system-weighted composable minutes.  
 \* and \*\* indicate results are significant at the 90 and 95 percent confidence levels, respectively.  
 Source: TV Data, Cable Data Corporation; The Lifestyle Market Analyst

The bottom line from this analysis is that, while the divisions do vary with the specifications, they do not vary much, particularly from the standpoint of using this analysis as a potential source of corroboration for the cable operator survey.

### **Past Criticisms**

In the previous proceeding, the regression approach was subject to criticism over parameter stability across study years. We address this by testing whether the parameters vary across years. We estimate an augmented version of the basic Rosston model that allows the minutes parameters to be different in 2005 (relative to 2004). This flexible model nests the special case of constant parameters across the years. We can then test for parameter stability by testing the joint hypothesis that all of the coefficients on minutes interacted with the 2005 indicator are zero. The F-test for this joint hypothesis is 1.44, with a probability value of 0.18. The F-test for the hypothesis that all of the coefficients on minutes interacted with the 2005 indicator are zero for the claimant categories of minutes is 0.37 with a probability value of 0.90. In other words, we do not reject that the minutes parameters are equal across years. While the parameter estimates vary across years, the variation is not statistically significant.

In the previous proceeding the regression approach was criticized for potentially attributing too much of the total royalty payments to public stations. The regression was criticized because the dependent variable in the regression is total royalty payments, including those paid to the 3.75% fund, but public stations do not receive payment from the 3.75% fund. We can deal with this critique in two ways, conceptually and empirically. Conceptually, the approach we use should not over-allocate royalties to public stations. The minutes of programming on the 3.75% stations are not public minutes. Instead, those minutes appear as part of other program category variables and help to make the coefficients on those minutes appropriately higher than they might otherwise be. Given that the 3.75% minutes are thus accounted for, the inclusion of 3.75% royalties should not contaminate the public coefficient.

With that said, we can also explore whether the inclusion of the 3.75% royalty payments in the dependent variable affects the results by including an indicator variable for cable system operators including a 3.75% station in their bundle. Including such a variable allows for a different average royalty payment for bundles with and without a 3.75% station. With this variable included, the minutes coefficients are effectively determined by the variation within the "no-3.75%" group and within the "3.75%-inclusive" group. The minutes coefficients are therefore not determined by the difference between royalty payments in the 3.75% and no-3.75% groups.

The 7th column of Table A1 removes the 3.75% variable from the basic regression. Resulting revenue divisions are 25.20 percent for program suppliers, 37.71 percent for sports, 27.74 percent for commercial television, 5.52 percent for public television, 0.56 percent for devotional, 3.25 percent for Canadian, and 0 for low power, and 0.02 percent for Mexican. The public share changes little relative to the baseline specification, and the other shares are also similar.

### Comparison With Cable Operator Survey Results

A further test of the regression results is to compare them with the cable operator survey results, which collect information directly from the CSOs regarding the relative value of the programming on the distant signals they actually carry. The regression is also based on the programming on the distant signals the CSOs actually chose to carry. In order to render the shares comparable, however, we must first adjust the regression results to reflect the relative value of all programming on WGNA, including non-compensable programming, because that is the body of programming addressed in the cable operator survey. This adjustment is accomplished by first multiplying the regression coefficients by the total number of program minutes rather than just the number of compensable minutes. Table A2 shows the resulting implied shares.

**Table A2**  
**Royalty Share Allocation Using All WGNA Minutes**  
**Form 3 Cable Systems with Positive DSE**  
**2004 – 2005**

Claimant Group	Value of an Additional Minute (Coeff. From Table 2)	System-Weighted Total Minutes	Value of Minutes	Implied Share of Royalties	Implied Share of Royalties Excluding Mexican and Low Power
[A]	[B]	[C]	[D] = [B] * [C]	[E] = [D] / (51,863,215)	[F] = [D] / (51,838,451)
Program Suppliers	0.075 **	222,265,994	16,663,682	32.13%	32.15%
Sports	2.770 **	7,247,770	20,074,781	38.71%	38.73%
Commercial TV	0.256 *	40,878,351	10,473,058	20.19%	20.20%
Public Broadcasting	0.042	74,844,256	3,113,222	6.00%	6.01%
Devotional	-0.067	17,907,864	0	0.00%	0.00%
Canadian	0.282 **	5,373,581	1,513,708	2.92%	2.92%
Low Power	-0.115	790,231	0	0.00%	0.00%
Mexican	0.886 **	27,960	24,765	0.05%	0.00%
<b>Total</b>		369,336,007	51,863,215	100.00%	100.00%
Excluding Mexican & Low Power		368,517,816	51,838,451		

Note: \* and \*\* indicate results are significant at the 90 and 95 percent confidence levels, respectively.

Source: TVData; Cable Data Corporation; The Lifestyle Market Analyst

When these adjusted shares are compared with the Bortz study shares, the similarity of the results from the two independent approaches provides support for both of them.

**Statement of Jerald N. Fritz**

**CTV 2004-2005 Direct Case**

**Before the  
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Washington, D.C.**

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**In the Matter of** )

**Distribution of the** )  
**2004 and 2005** )  
**Cable Royalty Funds** )  
\_\_\_\_\_ )

**Docket No. 2007-3 CRB CD 2004-2005**

**Testimony of  
Jerald N. Fritz**

**June 1, 2009**

**Corrected October 1, 2009**

**STATEMENT OF JERALD N. FRITZ**

**I. Background**

My name is Jerald N. Fritz, and I am appearing on behalf of the Commercial Television Claimants. I am a Senior Vice President for Legal and Strategic Affairs for Allbritton Communications Company, which is based in Arlington, Virginia. I serve as general counsel for Allbritton's eight ABC-affiliated television stations, four newspapers, cable news channel, and websites and Internet ventures, and I also oversee government relations and long-term strategic planning for the group. My resume is attached as Appendix 1.

I have worked 41 years in and around the broadcasting business. Besides my legal work, I have had direct experience in many television station jobs, including news reporting, advertising sales and purchasing, station operations, writing, programming, and community relations. I have also worked in industry-wide organizations and on broadcast business and policy issues both in government and in private industry, including service as Chief of Staff of the Federal Communications Commission. I have been a Director on the NAB TV Board, and have served on the NAB's Digital Television Task Force as well as its EEO, Web Streaming and Copyright Committees. I serve on the faculty of the National Association of Broadcasters Educational Foundation's Broadcast Leadership Training Center as well as the Media Sales Institute. My public policy and strategic planning work have provided me a broad familiarity with developments in the television industry over the past several decades. I have written and spoken before Congress and elsewhere on issues such as program ownership rights, distribution platforms and copyright relationships.

**II. The News and Other Programming Produced by Television Stations in 2004 and 2005 Had a Value That Extended Beyond the Stations' Local Markets**

A wide variety of programming is included within the "Commercial Television" category, which I understand is defined for these proceedings as programs produced by or for a U.S. commercial television station and broadcast only by that station during the year. The majority of the programming in this category are newscasts produced by stations, often including morning, daytime, and evening newscasts and alerts throughout the day. But the category also includes sports-related programming, such as pre- and post-game shows, special coverage of local teams, and various coaches' shows. It includes a range of specials, highlighting news and special events of local and regional significance. Commercial television stations also produce public affairs and "magazine" shows, human interest specials, local religious services, do-it-yourself shows, special coverage of severe weather, and a variety of other programs. I understand that another Commercial Television witness, Dr. Richard Ducey, has presented examples illustrating the wide range of station-produced programs in prior proceedings. Based on my knowledge of the industry, the same sort of variety of programs was being produced by television stations in 2004-2005.

In the increasingly competitive, multi-platform program distribution industry, maintaining unique, valued programming is a primary, critical, strategic goal. Local television stations are in an unmatched position to capitalize on that need by delivering local programming unavailable from other sources. That programming is targeted to meet the informational needs of local and regional viewers and is not duplicated by other video programming providers. The availability of a deeper advertising base in larger television markets generally permits stations in those markets to support the resources needed to produce higher quality, more frequent and

broader-appeal programming, but even stations in the smallest markets provide news and informational programming available from no other provider.

### **III. Allbritton Stations' Programming Has Significant Regional Appeal**

For illustrative purposes, I describe the circumstances of six Allbritton stations that were carried as distant signals in 2005, including the locations in which they were carried and the regional appeal of the programming they produced.

In 2005, the Allbritton station carried most widely as a distant signal was KATV, in Little Rock, Arkansas. Based on data from Cable Data Corporation, thirteen "Form 3" systems carried KATV as a distant or partially distant signal in the second half of 2005. Exhibit 15 is a map showing the locations of the systems that reported carrying KATV, identified just as a dot showing the first city listed by the cable system in its Statement of Account. The systems themselves, of course, cover broader geographic areas. In addition, the map shows the television markets, defined by The Nielsen Company as Designated Market Areas or "DMAs," in which those cable communities are located, along with the DMAs' ranks, which show the relative size of the television market, with smaller numbers indicating larger markets.

As you can see from the map, the systems that carried KATV serve relatively nearby cable communities, all but the Blytheville, Arkansas, system within 150 miles of Little Rock (indicated by the dashed-line circle). Little Rock is the largest city in the state and the state's capital, and eight of the thirteen cable systems are in Arkansas.<sup>1</sup> Six of those eight are in DMAs that are assigned to different states, so their primary local signals would be from Missouri, Tennessee, Mississippi, or Louisiana, even though their subscribers reside in Arkansas. And

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<sup>1</sup> Two more, the systems in Memphis, Tennessee, and Texarkana, Texas, also serve communities in Arkansas.

most of the systems carrying KATV as a distant signal were in smaller television markets than Little Rock.

Against this backdrop, Exhibit 16 lists programs KATV produced in 2005 that fall within the Commercial Television program category. KATV produced some five hours of daily newscasts and news programs, which covered breaking news stories as well as state capitol news, state-wide weather, state-wide and regional sports, and state-wide human interest stories. KATV's news has for many years been ranked as the top rated newscast in all day-parts in the entire State of Arkansas by Nielsen, and is the recipient of numerous news awards, including Emmys for Best Newscasts and Edward R. Murrow awards for news coverage and investigative reporting. KATV was also the exclusive licensee of the University of Arkansas football and basketball programming. Under its arrangement with the University, KATV had the television rights to all non-network games, and also produced pre/post game analysis programming, weekly coaches' shows and season preview/wrap-up shows. Similarly, KATV's unique and extensive video archives are unmatched in the nation, serving as a resource for national and local stories unavailable anywhere else. For example, local and national stories about former President Clinton that relied on footage from his early political years as Arkansas Attorney General and Governor were unique to KATV. These programs would be of interest in the cable communities where KATV was carried as a distant signal.

As a state with no professional team in any major sport, University of Arkansas games and sports-related programs have an interest almost unmatched in the country. Arkansas state residents who reside in out-of-state DMAs are frequently rabid University of Arkansas Razorback fans and have intense interest in viewing any programming about the teams. The station's sports director was the "Voice of the Razorbacks," and KATV's newscasts were seen



by viewers throughout the state as having unparalleled access to the University's sports teams. Besides shows featuring coaches and teams from the University of Arkansas, the station produced a show featuring the University of Central Arkansas football coach, and a special about a Little Rock native who rose to prominence as the undisputed world middleweight boxing champion.

The station's weather alerts and special weather programming are also seen as preeminent throughout the state. KATV's Doppler weather technology permits it to provide customized forecasts and storm tracking of critical importance to residents of central Arkansas, including those in adjacent DMAs. This service is especially crucial since the markets in the state are at the confluence of "Tornado Alley" and the "Gulf Hurricane Track," making them susceptible to dangerous weather during a majority of the year.

The other five Allbritton stations carried as distant signals in 2005 showed similar patterns of carriage by relatively nearby cable systems in adjacent DMAs, including a number of instances of "partially distant" carriage where the cable system's subscribers were partially within and partially outside the station's home DMA. These instances of distant carriage are listed in Exhibit 17. The Allbritton stations similarly produced extensive programming of interest to these nearby regions. Exhibit 18 lists station-produced programs that were broadcast on these stations in 2005.

**IV. Cable Market Circumstances May Vary, But Station-Produced Programming on the Distant Stations They Choose To Carry Adds Value.**

I understand that other witnesses appearing on behalf of the Commercial Television Claimants will present evidence about the relative value cable operators attribute to Commercial

Television programming in the distant signal market as a whole, and that a survey of cable operators in 2004-2005 showed that cable operators attributed about 16 percent of the value of distant signal programming to the stations' own programs. I also understand that a comprehensive analysis of cable carriage data shows that more than 90 percent of all carriage of distant signals other than superstations occurred within 150 miles of the home city of the distant signal in 2004-2005. My experience of the industry as a whole, as well as the specific circumstances of the Allbritton stations that were carried as distant signals in 2005, are entirely consistent with that other evidence. As evidence of the importance of Little Rock programming to those residents in adjacent DMAs, Congressman Mike Ross has recently proposed legislation that would facilitate the importation of that programming to all 22 counties in Arkansas that are part of other DMAs notwithstanding the exclusive nature of any privately negotiated programming arrangements. Congressman Ross's bill would permit carriage of all programming from the Little Rock stations on cable systems and on direct-to-home satellites for residents in the in-state but out-of-market counties. Congressman Ross has specifically cited constituent demands and the need to have emergency weather bulletins from Little Rock stations throughout the state.

While every cable community has its own set of circumstances that may affect the relative value of distant signal programs, and some may differ from the KATV example, it is my opinion that the overall value of station produced programs to distant cable operators who choose to carry them is at least the 16 percent reported in the cable operator survey.

Before the  
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In the Matter of )  
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Distribution of the )  
2004 and 2005 )  
Cable Royalty Funds )  
\_\_\_\_\_ )

\_\_\_\_\_ )  
Docket No. 2007-3 CRB CD 2004-2005 )

**DECLARATION**

I, Jerald N. Fritz, declare under penalty of perjury that the Testimony of Jerald N. Fritz presented in the 2004-2005 Cable Copyright Royalty Distribution Proceeding is true and correct to the best of my knowledge, information and belief.

  
Jerald N. Fritz

Dated: May 28, 2009

Before the  
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Washington, D.C.

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In the Matter of )  
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Distribution of the )  
2004 and 2005 )  
Cable Royalty Funds )  
\_\_\_\_\_ )

Docket No. 2007-3 CRB CD 2004-2005

**DECLARATION**

I, Jerald N. Fritz, declare under penalty of perjury that the Statement of Jerald N. Fritz presented in the 2004-2005 Cable Copyright Royalty Distribution Proceeding, as corrected October 1, 2009, is true and correct.

  
Jerald N. Fritz

Dated: 9-29-09

APPENDIX 1

Testimony of Jerald N. Fritz

Resume

## **Jerald N. Fritz**

Senior Vice President, Legal and Strategic Affairs  
and General Counsel  
Allbritton Communications Company  
Arlington, VA

Jerald Fritz is Senior Vice President for Legal and Strategic Affairs for Arlington, VA-based Allbritton Communications Company. In addition to his duties as general counsel for Allbritton's eight ABC-affiliated television stations, four newspapers, cable news channel, multiple websites and Internet ventures, Mr. Fritz also oversees government relations and long term strategic planning for the group.

Mr. Fritz joined Allbritton in 1987 after serving as Chief of Staff to FCC Chairman Mark Fowler and as a primary architect of deregulatory efforts in the broadcasting and telecommunications industries. Prior to joining the Chairman's staff, he practiced communications law and taught on the adjunct faculty at George Mason University Law School. Mr. Fritz is a '73 Northwestern University graduate with a degree in Radio, Television and Film and a '76 graduate of the Notre Dame Law School where he was the Executive Editor of the *Journal of Legislation*.

Mr. Fritz has worked most station jobs, including news reporting, selling and buying advertising time, control room and studio operations, promo writing, programming, and community relations. He is the author of the *Broadcast Station Legal Audit*, an operational compliance compendium, and has lectured extensively and testified before Congress on communications law and policy and the future of the telecommunications industry, including program ownership rights, distribution platforms and copyright relationships. Mr. Fritz has helped to craft major telecommunications legislation as well as FCC regulations involving media ownership, content regulation and competitive carriers. He also has been intimately involved in the expansion of traditional lines of business for broadcasters, including 24-hour local cable news, web-casting and niche publications.

Mr. Fritz served as a Director on the NAB TV Board where he chaired the NAB-X.com Task Force for a virtual trade show and served on the NAB's Digital Television Task Force as well as its EEO, Web Streaming and Copyright Committees. A former American Bar Association Communications Law Forum Governing Committee member, Mr. Fritz is a past Forum Division Chair and is also a member of the Federal Communications Bar Association, having chaired its Continuing Education Committee. Mr. Fritz is a past co-chair of the Media Law Resource Center's Pre-Publication Review Committee and serves on the faculty of the National Association of Broadcaster's Educational Foundation's Broadcast Leadership Training Center as well as the Media Sales Institute. He currently sits on the advisory committee to the Council for Court Excellence in Washington, DC.

## Jerald N. Fritz

### Publications

- The Fairness Doctrine: Abolishing the Illusion of Fairness, *Notre Dame Journal of Legislation*, Volume 2, 1975, pp 48-57
- Hidden-Cameras – Protocol for Use, *Communications Lawyer*, Forum on Communications Law American Bar Association Volume 16, Number 4, Winter 1999, pp. 22-23
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- Checklist On Identifying/Interviewing Children As Perpetrators, Victims And/Or Witnesses, Media Law Resource Center, February, 2006
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### Testimony

- *Future of Telecommunications*, National Association of Governors, Chicago, IL, September 7, 1983
- *Political Advertising*, U.S. House of Representatives, Telecommunications Subcommittee, June 13, 1991
- *Exemptions to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies – News Monitoring and “Fair Use,”* The Copyright Office, May 9, 2003
- *Retransmission Consent*, U.S. House of Representatives, Commerce Committee, March 30, 2006

### Speeches

- *Broadcast Deregulation*, Colorado Assn. Broadcasters, Denver, CO, January 21, 1982
- *Re-pricing Telecom Services*, Telestrategies Conference, Washington, DC. February 28, 1984
- *Telecom Regulation*, Federal Bar Assn., Washington, DC, June 8, 1984
- *Bell Breakup*, Teleprocessing Symposium, San Francisco, CA, January 13, 1986
- *U.S. Broadcast Deregulation*, Federation of Australian Commercial Television Stations, Adelaide, Australia, November 28, 1986
- *Synergies of Cross-Platform Media Ownership*, International Radio and Television Society, New York, NY, February 6, 1992
- *Telecom Privatization*, Russian Consortium, Washington, DC, March 9, 1998
- *Internet “Teletreaming” of Broadcast Content*, American Women in Radio and Television, Washington, DC, May 6, 1999
- *Business of Broadcasting*, American Bar Assn. Communications Forum, Boca Raton, February 13, 1999
- *Broadcast Advertising*, American Bar Assn. Communications Forum, Las Vegas, NV, April 18, 1999
- *Newsroom Legal Issues*, Radio & Television News Directors Assn., Las Vegas, NV, April 8, 2002
- *Future of Video Distribution*, American Enterprise Institute, Washington, DC, June 13, 2002
- *Impact of Cable, DBS & Personal Video Recorder Competition*, Bear Sterns Television Industry Summit, Washington, DC November 26, 2002
- *Retransmission Consent - Cable/Broadcast Relationships*, U.S. House of Representatives Staff Briefing, April 12, 2007
- *On-Line Reporting*, Radio Television News Directors Association, Las Vegas Nevada, April 15, 2008

- *The FCC's "Public Interest" Standard*, American Bar Association Communications Forum, Las Vegas, Nevada, April 13, 2008
- *Non-Traditional Revenues*, National Association of Broadcasters Futures Summit, Monterey, California, March 23, 2009
- *The Fairness Doctrine*, Judicial Watch Seminar, The National Press Club, May 14, 2009

#### Television Interviews

- *Television Station Ownership – Future of Broadcasting*, “The Communicators,” C-SPAN, May, 18, 2008

#### Lectures

- *Changing Face of Communications Industry Competition*, Annenberg School, Northwestern University, Washington, DC May 5, 1994
- *Telecom Regulation*, UCLA Law School, Los Angeles, CA, February 1, 1992
- *Broadcast Regulation*, Boston University Law School, Boston, MA, November 8, 1993
- *Digital Television Implementation*, Northwestern University, Evanston IL, May 7, 1998
- *Syndication/Network Affiliate Programming*, Notre Dame Law School, South Bend, IN, November 1, 2002
- *Broadcast Indecency Standards*, Progress in Freedom Foundation Congressional Seminar, April 5, 2005
- *Broadcast Sales – Antitrust Pitfalls*, Media Sales Institute – Howard University, June 7, 2005
- *Prepublication/Prebroadcast Review*, Media Law Resource Center Annual Meeting, Arlington, Virginia, September 28, 2006
- *In-House Counsel Practice – New Media*, University of Virginia Law School, Charlottesville, Virginia, November 30, 2006
- *Broadcast Station Operations*, National Association of Broadcasters Education Foundation, Broadcast Leadership Training Program Faculty, 2000-present

#### Expert Testimony

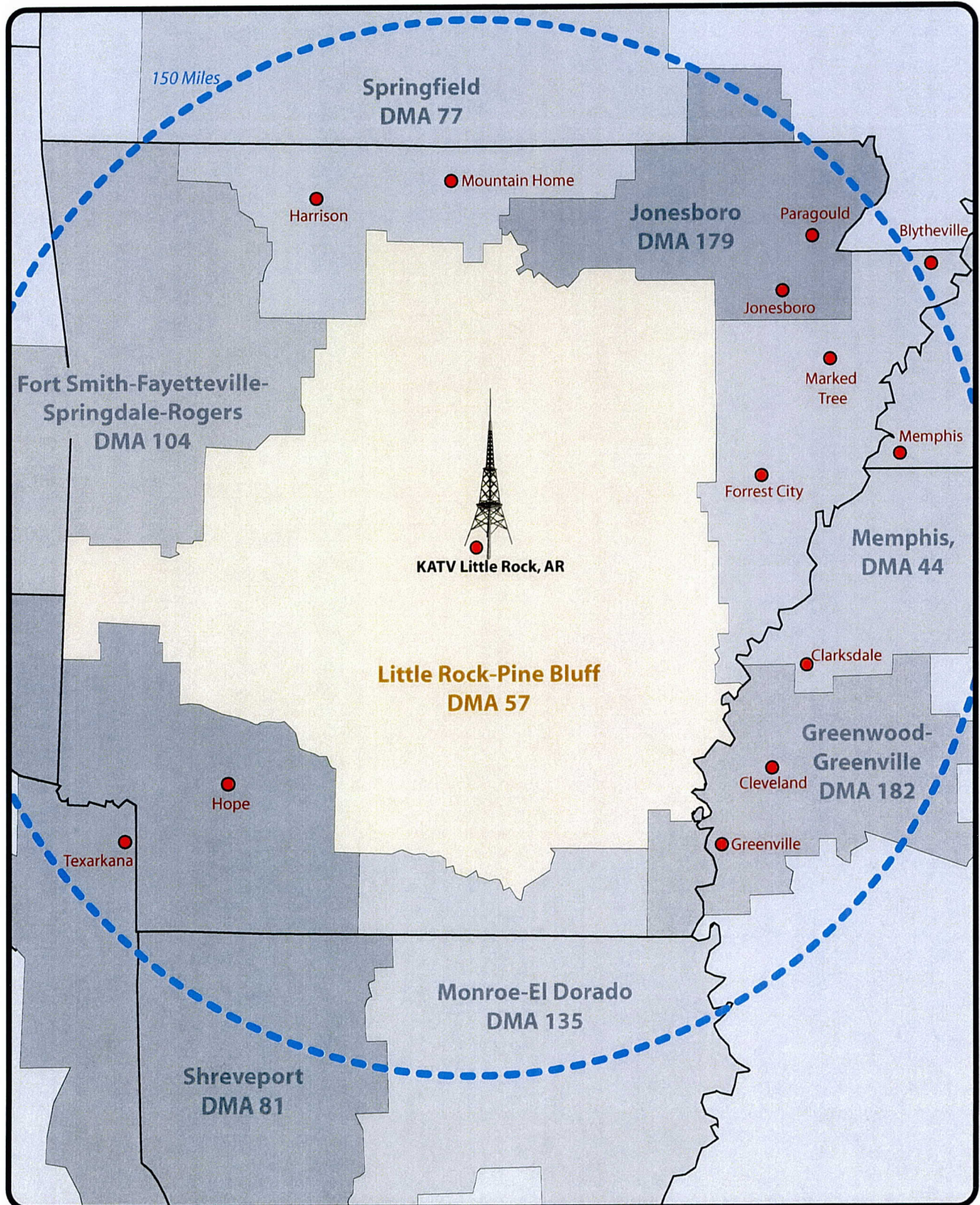
- *Jurgenson v. WUSA-TV - Gannett*, Collective Bargaining Agreement Arbitration, 1992 (Post-termination talent contract restrictions)
- *EchoStar Satellite Corporation v. TZ Azteca S.A. de C.V.*, No. 02-Civ-4890 (AKH)(Southern District of New York), March 2003 (Broadcast and Satellite industry structure and relationship)
- *Deseret Management Corporation v. United States*, No. 06-86 (U.S. Court of Federal Claims), June 2007 (Competition in the broadcast television industry)



# Form 3 Distant Carriage by Cable System

KATV - Little Rock, AR

2005



KATV  
Little Rock, Arkansas  
2005

Daybreak

One-hour weekday news program.

Daybreak – Early

One-hour weekday news program.

Good Morning Arkansas

One-hour weekday news program.

Mid-Day Arkansas

Half-hour mid-day news program.

Channel 7 News – Live at 5

Half-hour weekday evening news program.

Channel 7 News at 6

Half-hour weekday news program.

Channel 7 News – Nightside

Half-hour Sunday and weekday news program.

Saturday Daybreak

Two hour Saturday news program.

Channel 7 News at 10

Half-hour Saturday news program.

Channel 7 News – Saturday

Half-hour Saturday news program.

Channel 7 News – Sunday

Half-hour Sunday news program.

The Stan Heath Show

A weekly half-hour program produced with University of Arkansas Basketball Coach Stan Heath.

Razorback Football with Houston Nutt

A weekly program produced with University of Arkansas Razorback Football Coach Houston Nutt.

Clint Conque

Half-hour weekly show during the football season with University of Central Arkansas head football coach Clint Conque.

Jermaine Taylor Special

Special program about the Little Rock native and professional boxer who won the title of undisputed middleweight championship of the world in 2005

Saturday Morning Blitz

Weekly sports talk show.

KATV Weather Special

Coverage of special local and regional weather conditions.

Local Weather

Coverage of local weather.

SP Exhibit 22

CTV 04-05  
Ex. 17

CALLSIGN	CALL-CITY	CALL-STATE	DISTANCE	PRIME-CITY	ST-PO	COUNTY
KTUL	Tulsa	OK	71	Ponca City	OK	Kay
KTUL	Tulsa	OK	59	Stillwater	OK	Payne
WCFT	Tuscaloosa	AL	94	Alexander City	AL	Tallapoosa
WJSU	Anniston	AL	80	Oneonta	AL	Blount
WHTM	Harrisburg	PA	50	Danville Boro	PA	Montour
WHTM	Harrisburg	PA	41	Sunbury City	PA	Northumberland
WJLA	Washington	DC	107	Cumberland	MD	Allegany
WJLA	Washington	DC	47	Carroll Co	MD	Carroll
WJLA	Washington	DC	79	Chambersburg	PA	Franklin
WJLA	Washington	DC	57	Spotsylvania Co	VA	Spotsylvania
WJLA	Washington	DC	111	Keyser	WV	Mineral

Source: Cable Data Corporation

**KTUL  
2005  
Tulsa, Oklahoma**

Good Day Tulsa

One-hour weekday news program.

Good Morning Oklahoma 1st News

One-hour weekday morning news program.

Good Morning Oklahoma

One-hour weekday morning news program.

News Channel 8 at 10:30 PM

Half-hour Sunday evening news program.

News Channel 8 at 4 PM

Half-hour afternoon news program.

News Channel 8 at 5 PM

Half-hour Sunday and weekday evening news program.

News Channel 8 at 6 PM

Half-hour evening news program.

News Channel 8 at 10 PM

Half-hour Monday through Saturday news program.

You Make the Call

Half-hour Sunday local sports call-in show featuring viewers' questions and comments.

**WCFT/WJSU**  
**2005**  
**Montgomery (Anniston & Tuscaloosa), Alabama**

ABC 33/40 Good Morning Alabama  
Two-hour weekday morning news program.

ABC 33/40 News at Noon  
Half-hour weekday news program.

ABC 33/40 News at 5 PM  
Half-hour weekday evening news program.

ABC 33/40 News at 6 PM  
Half-hour evening news program seven nights a week.

ABC 33/40 News at 10 PM  
Half-hour evening news program seven nights a week.

ABC 33/40 Good Afternoon Alabama  
Half-hour weekday afternoon news program.

ABC 33/40 The Zone  
Half-hour fast-paced Sunday sports program.

**WJLA  
2005  
Washington, D.C.**

Capital Sunday

Half-hour Sunday news and public affairs program.

Choose to Save

PSA and station-produced news segments on basic personal finance.

Good Morning Washington at 5A

One-hour weekday news program.

Good Morning Washington at 6A

One-hour weekday news program.

Inside Washington

Half-hour Sunday political roundtable program.

News 7 @ Noon

Half-hour weekday news program

News 7 @ 5P

One-hour weekday news program.

News 7 @ 6P

Half-hour weekday and Saturday news program.

News 7 @ 6:30P

Half-hour Sunday news program.

News 7 @ 11P

Half-hour daily news program.

Wizards Magazine

Weekly, in-depth television magazine show that covers Washington Wizards players on and off the court.

**WHTM  
2005  
Harrisburg, Pennsylvania**

ABC27 Daybreak at 5:30 AM

Half-hour weekday morning news program.

ABC27 Daybreak at 6 AM

Half-hour weekday morning news program.

ABC27 News at Noon

Half-hour weekday news program.

ABC27 News Live at 5 PM

One hour weekday evening news program.

ABC27 News at 6 PM

Half-hour evening news program seven nights a week.

ABC27 News at 7 PM

Half-hour weekday evening news program.

ABC27 News at 11 PM

Half-hour evening news program seven nights a week.

World War II: Pennsylvania's Patriots

Weather Now



Before the  
COPYRIGHT ROYALTY JUDGES  
Washington, D.C.

**In the Matter of**

**Distribution of the 2004 and 2005  
Cable Royalty Funds**

**Docket No. 2007-3 CRB CD 2004-2005**

**WRITTEN TESTIMONY  
OF  
ALEXANDRA PATSAVAS**

## **I. INTRODUCTION**

1. My name is Alexandra Patsavas. I own and operate Chop Shop Music Supervision, which is a music supervision company for television shows and motion pictures located in Pasadena, California. Over the past 15 years I have supervised music in hundreds of television episodes and over dozens of motion pictures. I submit this statement in support of BMI, ASCAP and SESAC (the "Music Claimants"). I understand that this proceeding involves allocating the royalties paid by cable systems for carrying television programs to distant markets to the various copyright owners, including the Music Claimants.

2. The purpose of my testimony is to describe the process of music supervision for television and film in order to demonstrate the increasing importance of music to the success of films and the many kinds of television programs on which I have worked. In brief, the role of the music supervisor is to develop and create the signature sound of a film or television program. The job of music supervision is a collaborative one, working closely with all of the other creative people involved in the project, including the film or television editor, the director and the producer, to select the right songs and to identify places in the film or television program that benefit from a musical treatment. As a music supervisor, I suggest songs that make up the soundtrack of the production and engage in an extensive selection process in order to create a unique feel for the film or program. The process can be arduous. In some cases, I try hundreds of different songs before I find the song that perfectly matches the images on tape.

3. The role of the music supervisor is distinct from that of the music composer, who creates a musical score for the film or television program. Whereas the composer creates original music for the program, the music supervisor identifies existing songs from other artists that are inserted into the program as feature performance or background music.

Together, the music supervisor and the composer combine to create a specific sound for each film or television program.

4. As I will describe more fully below, while music has always been an important element of virtually all kinds of television programs, in the past 15 years many television programs have increasingly featured music to create a signature sound for the show. Programs I have worked on have included live performances by a number of new bands and have helped to introduce new music to the American public in a way traditionally more associated with radio airplay. This experience stems from the fact that both the new generation of producers creating these shows and the characters in these programs have music as an integral part of their lives. The music presented in the programs helps to capture the complexity of their lives. As a result, the role of a music supervisor has become more involved and integral to the success of a film or television program.

## II. BACKGROUND AND QUALIFICATIONS

5. I am originally from Glen Ellyn, Illinois. I attended the University of Illinois in Champaign-Urbana from 1986 - 1990. While an undergraduate I booked college rock bands both on campus and in local venues around the University. These groups included such well-known acts as They Might Be Giants, The Smashing Pumpkins and Jane's Addiction. This proved to be the start of my career-long interest in finding and promoting new musical talent.

6. While promoting concerts in college, I was introduced to Triad, a leading talent agency in Los Angeles, which represented many musical acts then touring college campuses. (Triad has since become part of the William Morris Talent Agency.) After graduating from college, I moved to Los Angeles and started out working in the mail room of

Triad. In 1991, I began work as the assistant to the office manager at BMI, the music performing rights organization, in its Los Angeles office. I stayed in this position through 1994. While at BMI I worked on numerous artist showcases, the annual BMI film/television and pop music awards dinners, and everything else involved in running the busy office. It was also during these years that I first became aware of the role that music supervisors play in the creation of television programs and films. Music supervision seemed like an exciting challenge that would combine my love for music with working closely with the creative people involved in the television and film production.

7. My first exposure to music supervision came after I left BMI and went to work for Roger Corman's Concorde Films from 1994 through 1996. Concorde Films produced a large number of "B movies" with relatively small budgets. The market for these films was mainly cable television, the video cassette market and the international market. The company needed independent rock music for the films, and I worked as either the music supervisor or the music coordinator, an assistant to the music supervisor, on many low budget films, including the B movie classic *Caged Heat 3000*. Other Concorde titles include *Rock and Roll High School* and *Little Shop of Horrors*. My responsibilities included helping with the music publishing rights, negotiating and obtaining the song clearances, and helping prepare the music cue sheets. Cue sheets are documents that list every musical cue in a given film or television episode, the timing and duration of the cue, and the names of the composers and publishers who own the performing rights. The cue sheet often lists the composer's performing rights organization as well. I understand the performing rights organizations receive these cue sheets to track the performance on television of their members' and affiliates' music.

8. Working on these low budget movies enabled me to focus on music from new bands that were unsigned. Sometimes I would bring the bands into the recording studio to cut tracks for specific projects. During the early 90's, I was particularly into the music from the burgeoning Silver Lake scene. Beck is an example of a prominent recording artist who emerged from the Silver Lake scene.

9. I subsequently left Concorde in 1997 for the opportunity to become the head of music for PM Entertainment, an independent motion picture production company in Los Angeles. While at PM, I was responsible for all the music in PM programming. One project I worked on was a television program called *LA Heat*, which aired on the TNT cable television network. Unfortunately, PM Entertainment folded after one year. I decided at that point to open up Chop Shop with my partner at the time, Emily Kaye, in 1998.

10. I have spent the past eleven years as the owner of Chop Shop Music Supervision. Chop Shop provides music supervision services on dozens of television series, including *The O.C.*, *Gossip Girl*, *Boston Public*, *Mad Men*, *Fastlane*, *Grey's Anatomy*, *Without A Trace*, *Rescue Me* and *Supernatural*, and numerous feature films such as *Twilight*, the soundtrack of which went double-platinum. I have a talented staff of three music coordinators who assist me, and we work on a large number of projects, often on very short deadlines.

### **III. THE ROLE OF A MUSIC SUPERVISOR**

11. As I mentioned earlier, the role of the music supervisor is first and foremost to develop and create the signature sound of a film or television program. Primarily, the music supervisor works with the director, producer and editor to identify places in the film or

television program that benefit from a musical treatment and selects the proper piece of music to be inserted in those places.

12. In addition to selecting the music to create a film or program's signature sound, the music supervisor is also responsible for preparing a "delivery file" for each song that will be included in the program. That file must include confirmation of the legal right to use the song from the music publisher and legal right to use the sound recording from the record label that represents the band. In many cases, the label must contact the recording artist to obtain the artist's permission to grant the master use license. Clearance of legal rights can be easy at times and sometimes it can be a heart-breaking process. Sometimes you find that the rights to the song are simply not available. One of the reasons for the complexity is the often daunting number of creative participants in a work, from the songwriters and publishers to the artists and their label representatives.

13. Permission must be obtained from all parties before a song can be edited into the final picture. Clearances must be obtained for *all* song uses. Synchronization licenses from the music publisher grant the program producer the right to synchronize the musical work in timed relation to the visual images. Master licenses grant equivalent rights to use the recorded version of the song by that particular artist.

14. It is important to point out that synch licenses do not convey the public performing right. That right is reserved so that the songwriter and publisher can receive performance right royalties from their PRO when the program is aired on cable or broadcast television, or in any of a number of new media outlets.

#### IV. USE OF MUSIC IN PROGRAMMING

15. The use of songs in television series and film is widespread. A one hour program, which runs approximately 43 minutes without the commercials, may require selection of 6 to 8 songs, each of which may be chosen to convey the setting of the scene or the different emotions of the characters. For shows produced over the past decade, based on my experience, it is common for there to be 12-14 minutes of music inserted in each program, and that does not even include the theme or underscore music.

16. In determining what music to use and how to use the music, I consider a number of factors. These considerations are best demonstrated through the work I have done in connection with a number of films and popular television shows.

17. The motion picture *Gun Shy*, which was produced by Sandra Bullock and Fortis Films, is a comedy about a legendarily tough undercover DEA agent who loses his composure after getting caught in the cross fire of a large drug deal between the Columbian and Italian drug gangs and very nearly losing his life. As music supervisor, I was responsible for identifying music that would convey to the audience the comedic nature of events that otherwise on film would appear to be desperate and violent acts by the characters. In this way, music provides the lens through which the audience can view the film. The music in *Gun Shy* also helps establish the growing romantic entanglement between the two lead stars. The music cue sheet, which identifies all of the music played in *Gun Shy*, is attached as MC 04-05 Ex. 7.

18. Chop Shop's first hit television show was *Roswell*, a science-fiction television series that aired on the WB (and later UPN) network from 1999 to 2002. The producer of the show, Jason Katims, endeavored to make the music a distinct character in the show, wanting to include from six to eight songs per episode. *Roswell* is about the lives of four alien-

human hybrids who attend a regular high school in Roswell, New Mexico. The characters spend most of the series trying to hide their alien sides. The creative direction for the show was British and somewhat dark. We used music from Grammy award winning alternative rock bands Coldplay and Radiohead to highlight science fiction elements of the show. The show also used as its opening theme Dido's "Here With Me." To further focus on popular music in the program, *Roswell* also featured bands performing live on camera, including future Grammy winner Nelly Furtado and the popular indie band Ivy. We found many new indie rock bands whose music was introduced to the public on this show and eventually released a soundtrack album on NETTWERK Records. The program shot a total of 60 episodes and was one of the first to have an online presence devoted exclusively to announcing the music in each episode, a practice that became much more common by 2004 and 2005.

19. *Roswell's* emphasis on the use of feature music in series television began a trend that has been used across a broad spectrum of programs and continues today. Indeed, many such shows now alert viewers both during and at the completion of the show as to the names of the songs that have been used and many even feature the artist singing the work, for example in a club scene. Examples of such television shows that Chop Shop worked on as music supervisor during the past ten years and that prominently use music include *Grey's Anatomy*, *Boston Public*, *Tru-Calling*, *1-800 Missing*, *Supernatural*, *Gossip Girl* and *Mad Men*.

20. One of the first shows to fully integrate music into the fabric of the entire show – and another of Chop Shop's shows – was *The O.C.*, a trend-setting "teen dramedy" show produced and written by Josh Schwartz, a young writer-producer, that ran for 4 seasons on Fox network starting in 2003. *The O.C.* generated six soundtrack albums that were hugely popular and had an online web site dedicated to the musical selections in each show. *The O.C.* is about a



group of teens growing up in Newport Beach in Orange County, California, and their wealthy parents. The show's theme song "California" by Phantom Planet memorably sets the tone of the show. The show opens with Ryan, a boy whose father and older brother are in jail and who has had his own problems with truancy from school, and was kicked out of his house by his exasperated and alcoholic mother after an arrest for car theft. Ryan is soon adopted by a wealthy Newport family, whose father was the public defender assigned to his case. Ryan falls for the girl next store, Marissa, who is already involved with another boy in school. Can Ryan and Marissa ever get together, and transcend the class bonds and obstacles that come between them? The music in the show captures the awkwardness of their early attempts at a relationship.

21. In *The O.C.* (and many current shows like it), music is the backdrop to the characters' daily activities and the focus of their parties and the emotional glue to their relationships. The indie rock music featured throughout *The O.C.* provides the signature sound of the young generation. It featured a lot of male vocals, college experimental music. Music is the backdrop to the characters' daily activities and the focus of their social life and the emotional glue to their relationships. A club called The Bait Shop where the teens hang out has had a number of live performances by famous recording acts over the seasons, including platinum selling indie rock acts such as Modest Mouse, the Killers and Death Cab for Cutie.

22. Basically what we look for music to do in a television show such as *The O.C.* is to enhance the emotion of a scene. The perfect song can make such a difference in ensuring that the emotional intent of the writers and the director is experienced by the audience. Is it the joy of birth, the pain of death, the heartbreak of a break-up. For the music supervisor, the key is matching the emotion of the music to the visuals. I may have song in mind for a scene and find that when I play it back in synch with the video, it doesn't work as well as I thought it

would. That is why the process involves constantly testing and retesting the music until the absolute perfect note is hit.

23. The music in *The O.C.* was successful in conveying the spectrum of emotions in the characters' lives. One particularly memorable live performance in *The O.C.* was by the Welsh singer-songwriter, Jem, who poignantly performed Paul McCartney's "Maybe I'm Amazed" at the wedding party scene at the end of Season 1. Ryan and Marissa dance and she reveals she loves him. We even obtained special permission from McCartney's publisher to allow the lyrics of the song to be changed from male to female. Similarly, Imogen Heap's song "Hide and Seek" is played in the climactic scene of "Dearly Beloved," the final episode of Season 2, when Marissa shoots and kills Ryan's brother, Trey, while the two brothers are fighting. This closing scene is particularly significant because there is no dialogue spoken, with only the music to convey the tragedy of the event. That scene became so popular that *Saturday Night Live* later did a parody of it, which of course, repeatedly featured the song. A third famous music scene in *The O.C.* features the Beastie Boys' "Ch-Check It Out" playing while Ryan, Summer, and Seth walk down the Sunset Strip in Las Vegas after having gambled away their money. That song perfectly captures the voyeuristic feeling of walking down Sunset Strip and went on to be a big hit. And there are others; for example, The Subways had a hit with "Rock and Roll Queen" after it appeared on *The O.C.* in November 2005. Attached as MC 04-05 Ex. 8 are music cue sheets for these three episodes of *The O.C.*.

24. The music of *The O.C.* was an essential part of the character development and the production of the show and an integral part of the show's success. Indeed, the music was so integral to that program that websites have been created that are dedicated solely to the

music on the program. Attached as MC 04-05 Ex. 9 are printouts from the website

<http://www.theoc-music.com/>.

25. This trend of incorporating pop music as a feature production element of the program has become a production mainstay. An important source song use in *Grey's Anatomy* included the song "Chasing Cars" by the band Snow Patrol, which went on to be a big hit on the charts. *Grey's Anatomy* is a primetime medical drama airing on ABC, about the surgical team at Seattle Grace Hospital. This show is trend-setting in its use of music because of the length of uninterrupted music it uses. Finally, in our latest show airing on the WB network, *Gossip Girl*, set in New York City, we chose to use a lot of electronic music and music from the new Brooklyn music scene, as well as some classic New York bands like Sonic Youth covering the Ramones, in order to give the show a real New York edge.

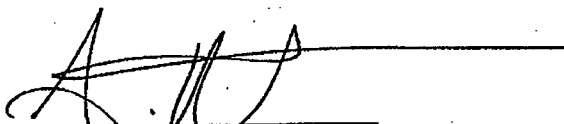
## V. CONCLUSION

26. Music is an essential and important part of all television programming. Music is valuable because it intensifies the experience for the viewer and may be used to capture the mood of a scene or create a distinct, signature sound for a film or television program. Over the past decade, including in 2004 and 2005, popular songs have been increasingly featured in episodic television and film, and some of the most memorable television moments are those scenes that set to a recognizable song. In determining the award to the Music Claimants in this proceeding, I hope the Judges consider the vital role music plays as an element in all programming.

**DECLARATION**

I declare under penalty of perjury that the foregoing is true and correct.

Dated: May 29, 2009  
South Pasadena, California

  
\_\_\_\_\_  
Alexandra Patsavas

SETTLING PARTIES

SP EXHIBIT 24  
TAB 7 (MC04-05 EX. 7)

(MUSIC CLAIMANTS)

F046250

The Walt Disney Company

10099 29-Feb-00

Show Title GUN SHY  
Episode Title: GUN SHY  
Production #: 10W9

Production Type: FF  
Production Length: 01:41  
First Air Date 02/04/2000

*dl*  
3/28/00  
*DS*

Production Company Address and Contact:  
HOLLYWOOD PICTURES

Unique Cuesheet #: DIS-10W9

Revised:  N

Phone: ( ) - ( ) - ( )  
Cue Title

**RECEIVED**  
MAR 01 2000  
MEMPHIS OFFICE

**1 HOLLYWOOD PICTURES LOGO**

P HOLPIC MUSIC, INC.  
W RLFMAN, DANNY

Timing Usage Revised  
:12 BI N  
BMI 100  
BMI 100

**2 BLUE SKIES FOR EVERYONE**

P ADMIN. BY  
P BUG MUSIC, INC.  
W SCHNEIDER, BOB  
P SHOCKORAMA MUSIC

1:43 OT BV BI N  
N/A 0  
N/A 0  
ASCAP 0  
ASCAP 0

**3 SERVED ON A PLATTER**

P HOLPIC MUSIC, INC.  
W KENT, ROLFE

:29 BI N  
BMI 100  
PRS 100

**4 BLUE SKIES FOR EVERYONE**

P ADMIN. BY  
P BUG MUSIC, INC.  
W SCHNEIDER, BOB  
P SHOCKORAMA MUSIC

:50 BV BI N  
N/A 0  
N/A 0  
ASCAP 0  
ASCAP 0

**5 DRUNK IS BETTER THAN DEAD**

P LOVE YOUR BODY MUSIC  
W TRAPPER, CHRIS  
P FORAY MUSIC

:43 OT BV BI N  
SESAC 0  
SESAC 0  
SESAC 0

**6 NIGHTMARES IN BED**

W KENT, ROLFE  
P HOLPIC MUSIC, INC.

:51 BI N  
PRS 100  
BMI 100

**7 CORPORATE TOURETTES**

P HOLPIC MUSIC, INC.  
W KENT, ROLFE

1:09 BI N  
BMI 100  
PRS 100

The Walt Disney Company

10099

29-Feb-00

<b>8</b>	<b><u>CHARLIE SHARES</u></b>	2:08	BI						N
P	HOLPIC MUSIC, INC.		BMI				100		
W	KENT, ROLFE		PRS				100		
<b>9</b>	<b><u>VOULEZ-VOUS?</u></b>	1:02	SRCE	BI					N
W	ARLING, GERRY		N/A				0		
W	CAMERON, RICHARD		N/A				0		
P	EASY TUNE MUSIC		N/A				0		
<b>10</b>	<b><u>IT'S NOT HAPPENING</u></b>	:42	BI						N
P	HOLPIC MUSIC, INC.		BMI				100		
W	KENT, ROLFE		PRS				100		
<b>11</b>	<b><u>START THE COMMOTION</u></b>	2:15	SRCE	BV	BI				N
P	EMI UNART CATALOG INC.		BMI				0		
W	KEATING, TITO		PRS				0		
W	WILSON, DON		BMI				0		
W	DOGLE, BOB		BMI				0		
W	EDWARDS, NOKIE		BMI				0		
W	TAYLOR, MEL		BMI				0		
<b>12</b>	<b><u>MARKET STRADDLE</u></b>	1:10	BI						N
P	HOLPIC MUSIC, INC.		BMI				100		
W	KENT, ROLFE		PRS				100		
<b>13</b>	<b><u>I'M YOUR BOOGIE MAN</u></b>	2:26	VDAN	SRCE	BV				N
W	CASEY, HARRY W.		BMI				0		
P	EMI LONGITUDE MUSIC		BMI				0		
W	FINCH, RICHARD R.		BMI				0		
P	HARRICK MUSIC		BMI				0		
<b>14</b>	<b><u>PISSING CONTEST</u></b>	:41	BI						N
P	HOLPIC MUSIC, INC.		BMI				100		
W	KENT, ROLFE		PRS				100		
<b>15</b>	<b><u>CLEANS KITCHEN</u></b>	:58	BV		NOWD	BI			N
P	HOLPIC MUSIC, INC.		BMI		S		100		
W	KENT, ROLFE		PRS				100		
<b>16</b>	<b><u>IS IT TOO LATE</u></b>	:51	BI						N
P	UNIVERSAL - POLYGRAM INT'L PUBLISHING, INC.		ASCAP				0		
W	WALLINGER, KARL		PRS				0		
<b>17</b>	<b><u>NO TIME TO DREAM</u></b>	:19	SRCE	BI					N
P	MAKE MINE MUSIC		ASCAP				0		
W	DALE, SYD		PRS				0		

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29-Feb-00

18	<u>IT'S A MAN'S, MAN'S, MAN'S WORLD</u>	:39	BV	BI		N
	W BROWN, JAMES			BMI	0	
	P DYNATONE PUBLISHING CO.			BMI	0	
	W NEWSOME, BETTY			BMI	0	
	P WARNER-TAMERLANE PUBL. CORP.			BMI	0	
19	<u>TARANTULA</u>	:53	BV	BI		N
	P ADMIN. BY			N/A	0	
	P BUG MUSIC, INC.			N/A	0	
	W SCHEIDER, BOB			ASCAP	0	
	P SHOCKORAMA MUSIC			ASCAP	0	
20	<u>STAYSHA BROWN</u>	:33		BI		N
	W THOMPSON, DON			BMI	0	
	W SCHEIDER, BOB			ASCAP	0	
	P UNICHAPPELLI, MUSIC, INC.			BMI	0	
	P SHOCKORAMA MUSIC			ASCAP	0	
	P BUG MUSIC, INC.			N/A	0	
	P ADMIN. BY			N/A	0	
	P ADMINISTERED BY			N/A	0	
	P CHARMACK PUBLISHING COMPANY			BMI	0	
21	<u>JUDY'S LOFT</u>	:35		BI		N
	P HOLPIC MUSIC, INC.			BMI	100	
	W KENT, ROLFE			PRS	100	
22	<u>THE GOOD LIFE</u>	2:21		BI		N
	P HOLPIC MUSIC, INC.			BMI	100	
	W KENT, ROLFE			PRS	100	
23	<u>THE DEAL WAS TWO MILLION</u>	2:33		BI		N
	P HOLPIC MUSIC, INC.			BMI	100	
	W KENT, ROLFE			PRS	100	
24	<u>FINDING JUNIPER</u>	1:07		BI		N
	P HOLPIC MUSIC, INC.			BMI	100	
	W KENT, ROLFE			PRS	100	



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29-Feb-00

ID	Title	Time	SRCE	BV	BI	Other
25	<b>THIS TIME</b>	2:13	SRCE	BV	BI	N
P	DAVINCE MUSIC		BMI		0	
W	PEREZ, LOUIS		BMI		0	
P	O.B.O.		N/A		0	
P	NO K.O. MUSIC		BMI		0	
P	BUG MUSIC		BMI		0	
P	&		N/A		0	
W	HIDALGO, DAVID		BMI		0	
26	<b>MORE THAN RAIN</b>	1:08	BV	BI		N
P	JAJAMA MUSIC		ASCAP		0	
W	WAITS, TOM		ASCAP		0	
27	<b>ALOHA CRUISE</b>	1:13	BI			N
W	KENT, ROLFE		PRS		100	
P	HOLPIC MUSIC, INC.		BMI		100	
28	<b>MOROCCAN HOME SHOW PART 1</b>	1:43	BI			N
W	FULBER, RIFYS		SOCAN		100	
P	HOLPIC MUSIC, INC.		BMI		100	
29	<b>MOROCCAN HOME SHOW PART 2</b>	1:46	BI			N
W	FULBER, RIFYS		SOCAN		100	
P	HOLPIC MUSIC, INC.		BMI		100	
30	<b>HONOLULU CALCUTTA</b>	1:57	SRCE	BI		N
P	EMPHROR NORTON MUSIC		ASCAP		0	
W	TANAKA, TOMOYUKI		JASRC		0	
31	<b>BOSSA FOR JACKIE</b>	2:27	SRCE	BV	BI	N
W	TANAKA, TOMOYUKI		JASRC		0	
W	TSURUGI, MASAKI		JASRC		0	
W	FISHER TURNER, SIMON		PRS		0	
P	SONGS OF WINDSWEPT PACIFIC		BMI		0	
32	<b>CARO MIO BEN</b>	1:00	SRCE	BV	BI	N
P	PUBLIC DOMAIN		N/A		0	
W	TRADITIONAL		N/A		0	
33	<b>PLOTTING</b>	1:04	BI			N
P	HOLPIC MUSIC, INC.		BMI		100	
W	KENT, ROLFE		PRS		100	
34	<b>JERRY FEINSTEIN</b>	1:14	BI			N
W	KENT, ROLFE		PRS		100	
P	HOLPIC MUSIC, INC.		BMI		100	

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29-Feb-00

35	<u>HELVENSHAW DISCOVERS</u>		:17 BI		N
	P HOLPIC MUSIC, INC.		BMI	100	
	W KENT, ROLFE		PRS	100	
36	<u>THE HIGH STAKES</u>		:25 BI		N
	P HOLPIC MUSIC, INC.		BMI	100	
	W KENT, ROLFE		PRS	100	
37	<u>ARE YOU THE MAN</u>		2:07 BI		N
	P HOLPIC MUSIC, INC.		BMI	100	
	W KENT, ROLFE		PRS	100	
38	<u>CHARLIE PACES THE NIGHT</u>		1:25 BI		N
	P HOLPIC MUSIC, INC.		BMI	100	
	W KENT, ROLFE		PRS	100	
39	<u>PREPARE</u>		1:18 BV	NOWD BI	N
	W FULBER, RHYS		SOCAN	S 100	
	P HOLPIC MUSIC, INC.		BMI	100	
40	<u>ARRIVAL AT WAREHOUSE</u>		:36 BI		N
	P HOLPIC MUSIC, INC.		BMI	100	
	W KENT, ROLFE		PRS	100	
41	<u>SHOOT OUT</u>		:31 BI		N
	P HOLPIC MUSIC, INC.		BMI	100	
	W KENT, ROLFE		PRS	100	
42	<u>ARE YOU A COP</u>		:23 BI		N
	P HOLPIC MUSIC, INC.		BMI	100	
	W KENT, ROLFE		PRS	100	
43	<u>ARE YOU ALIVE, MI VIDA</u>		1:07 BI		N
	P HOLPIC MUSIC, INC.		BMI	100	
	W KENT, ROLFE		PRS	100	
44	<u>PUT YOUR WEAPONS DOWN</u>		1:24 BI		N
	W KENT, ROLFE		PRS	100	
	P HOLPIC MUSIC, INC.		BMI	100	
45	<u>CHARLIE'S JIG</u>		:50 BI		N
	P HOLPIC MUSIC, INC.		BMI	100	
	W KENT, ROLFE		PRS	100	
46	<u>OPEN THAT SUITCASE</u>		:55 BI		N
	P HOLPIC MUSIC, INC.		BMI	100	
	W KENT, ROLFE		PRS	100	

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29-Feb-00

ID	Title	Time	CT	BV	BI	Other
47	<b>BLUE SKIES FOR EVERYONE</b>	:21		BV	BI	N
P	SHOCKORAMA MUSIC				ASCAP	0
P	ADMIN. BY				N/A	0
P	BUG MUSIC, INC.				N/A	0
W	SCHEIDER, BOB				ASCAP	0
48	<b>UNDER THE SUN</b>	2:11	CT	BV	BI	N
W	ALPHIN, KEN				ASCAP	0
P	FAMOUS MUSIC CORP.				ASCAP	0
P	LOVE BIG MUSIC				ASCAP	0
W	MAJER, BRIAN				ASCAP	0
P	MORAINES PARK MUSIC, A DIV. OF MORAINES MUSIC GROU				ASCAP	0
P	SIS'N BRO MUSIC COMPANY				ASCAP	0
49	<b>ROUND &amp; ROUND</b>	2:10	CT	BV	BI	N
P	ADMIN. BY				N/A	0
P	BUG MUSIC, INC.				N/A	0
W	SCHEIDER, BOB				ASCAP	0
P	SHOCKORAMA MUSIC				ASCAP	0

# SETTLING PARTIES

SP EXHIBIT 24  
TAB 8 (MC04-05 EX. 8)

(MUSIC CLAIMANTS)

PRODUCED BY WARNER BROS. TELEVISION  
 TELEVIEWED OVER THE FOX NETWORK  
 WEDNESDAY 9:00 PM-10:00PM  
 AIRDATE: MAY 5, 2004

99108002  
 RX55027  
 PRODUCTION #176526  
 TELECAST #47  
 EPISODE #27

**THE O.C.**  
**"THE TIES THAT BIND" (Prod. #176526)**

<u>NO</u>	<u>SELECTION</u>	<u>COMPOSER</u>	<u>PUBLISHER</u>	<u>HOW USED</u>	<u>TIME</u>
1M01	RECAP	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:31
1M02	FATHERHOOD	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:48
1M03	CALIFORNIA	JACQUES BRAUTBAR SAM FARRAR ALEX GREENWALD DARREN ROBINSON JASON SCHWARTZMAN	FLYING SAUCER FUEL MUSIC (ASCAP) I LIKE MUSIC (ASCAP) SHAGSTAR PUBLISHING CO. (ASCAP) BEAUCOUP BUCK, INC. (ASCAP) JOHNNY RFRFI (ASCAP)	BKG. VOCAL / MAIN TITLE	:33
1M04	FLYING HIGH	JEMMA GRIFFITHS PAUL HERMAN <i>12/5</i>	UNIVERSAL-POLYGRAM INT. PUBL., INC. O/B/O UNIVERSAL MUSIC PUBL. LTD. (ASCAP) 75% COPYRIGHT CONTROL (BMI) 25%	BKG. VOC.	1:19
1M05	ORANGE SKY	ALEXI MURDOCH	MINDBLUE MUSIC (ASCAP)	BKG. VOC.	:35
1M06	FINANCIAL TROUBLES	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:37
1M07	PACKING	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:38
1M08	CAN WE TALK?	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:01
1M09	BROTHERS	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:28
1M10	DRIVER / NORMAL SUMMER / CASTLE	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	2:14
1M11	BOATING PLANS	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:34
1M12	DECISIONS	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	2:03
1M13	DIFFERENT PERSPECTIVES	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:09
1M14	COME WITH ME	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:30
1M15	JABS / SUMMER BREEZE	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:46
1M16	MONTERRAT	JUAN PABLO CAMPODONICO	UNIVERSAL MUSICA, INC. O/B/O ITSELF AND SURCO MUSIC, INC. (ASCAP)	BKG. INST.	2:06
1M17	FAMILY DINNER	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:08
1M18	THE SEA AND THE RHYTHM	SAM BEAM	SAM BEAM (BMI)	BKG. VOC.	1:21
1M19	NO SALE	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:09

RECEIVED

JUN 11 2004

**THE O.C.**  
**"THE TIES THAT BIND" (Prod. #176526)**

<u>NO</u>	<u>SELECTION</u>	<u>COMPOSER</u>	<u>PUBLISHER</u>	<u>HOW USED</u>	<u>TIME</u>
1M20	KEEPING RYAN	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:51
1M21	NEW FAMILIES	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:01
1M22S	BRIDAL MARCH (CARLIN 118)	TRADITIONAL, ARR. BY KORPUS DU PLOOY	CARBERT SPECIAL ACCOUNTS (BMI)	BKG. INST.	:42
1M23	WEIGHTY CONNECTIONS	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:25
1M24	MAYBE I'M AMAZED	PAUL McCARTNEY	SONY / ATV TUNES LLC (ASCAP)	FEATURED SONG/VOCAL	3:17
1M25	SAYING GOODBYE	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:59
1M26	HALLELUJAH	LEONARD COHEN	SONY / ATV SONGS LLC (BMI)	BKG. VOC.	3:40
1M27	THE O.C. END TITLE	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST. / END TITLE	:30
1M28	AS TIME GOES BY	HERMAN HUPFELD	WARNER BROS., INC. (ASCAP) (WORLD EXCLUDING THE BRT'S) CARLIN MUSIC PUBL. CANADA, INC. (SOCAN) O/B/O REDWOOD MUSIC LTD. (PRS) (100% BRT'S)	LOGO	:03

PRODUCED BY WARNER BROS. TELEVISION  
 TELEVISED OVER THE FOX NETWORK  
 THURSDAY 8:00 - 9:00PM  
 AIRDATE: MAY 19, 2005

PRODUCTION #2T5124  
 TELECAST #30  
 EPISODE #24

RECEIVED  
 JUL 22 2005  
 NASH TELETYPE

99108005  
 12XSS05C

**THE O.C.**  
**"THE DEARLY BELOVED" (Prod. #2T5124)**

NO	SELECTION	COMPOSER	PUBLISHER	HOW USED	TIME
1M01	RECAP	RICHARD MARVIN	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:25
1M02 PT. A	BUMMED AND BROCHURE	RICHARD MARVIN	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:13
1M02 PT. B	NOT FOR SANDY	RICHARD MARVIN	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:10
1M03	CALIFORNIA	ALEX GREENWALD JASON SCHWARTZMAN	FLYING SAUCER FUEL MUSIC (ASCAP) I LIKE MUSIC (ASCAP) SHAGSTAR PUBLISHING CO. (ASCAP) BEAUCOUP BUCK, INC. (ASCAP) JOHNNY REBEL (ASCAP)	BKG. VOCAL / MAIN TITLE	:30
1M04	DR. WOODRUFF	RICHARD MARVIN	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:56
1M05	EL MANANA	DAMON ALBARN (BMI) BRIAN BURTON (ASCAP) JAMIE HEWLETT (BMI)	EMI BLACKWOOD MUSIC, INC. (BMI) 95% UNDERGROUND ANIMALS (ASCAP) 5%	BKG. VOC.	:43
1M06	JIMMY RETURNS	RICHARD MARVIN	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:47
1M07	CROSSES	JOSE GONZALEZ (STIM)	IMPERIAL MUSIC PUBLISHING / MISTY MUSIC (STIM)	BKG. VOC.	1:36
1M08	DRUG DEALS AND GUNS	RICHARD MARVIN	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:33
1M09	HIDE AND SEEK	IMOGEN JENNIFER HEAP	ALMO MUSIC CORP. O/B/O RONDOR MUSIC LONDON LTD. (ASCAP)	BKG. VOC.	1:30
1M10S	YOU'RE NOT THE LAW	CHARLIE TURNER <i>NA</i> BRYAN JOHNSON <i>NA</i> BEN GORDON <i>PR</i> MATT McMANAMON <i>PR</i>	THE DEAD 60, INC. (ASCAP) <i>NA</i>	BKG. VOC.	:42
1M11S	"ADAGIO" SCD 219#11 (APM)	WOLFGANG AMADEUS MOZART RON RONSTED (GEMA)	SONOTON APM (ASCAP) SONOTON MUSIC LIBRARY (GEMA)	BKG. INST.	3:01
1M12	UPSET	RICHARD MARVIN	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:58
1M13S	STAR WARS: REVENGE OF THE SITH CUE	JOHN WILLIAMS	WARNER-TAMERLANE PUBLISHING CORP. O/B/O BANTHA MUSIC (BMI)	BKG. INST.	:20
1M14S	AN HONEST MISTAKE	SAMUEL BINGHAM ENDICOTT	SONGS OF UNIVERSAL, INC. (BMI)	BKG. VOC.	2:27

**THE O.C.**  
**"THE DEARLY BELOVED" (Prod. #2T5124)**

<b>NO</b>	<b>SELECTION</b>	<b>COMPOSER</b>	<b>PUBLISHER</b>	<b>HOW USED</b>	<b>TIME</b>
1M15S	SONATA #13, K. #333. 2ND MOVEMENT	MOZART arr. by: RICK MARVIN	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:10
1M16	OUT OF CONTROL	RICHARD MARVIN	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:55
1M17S	HOT RIDE	LIAM HOWLETT (PRS) JULIETTE LEWIS (BMI) JIMMY WEBB (BMI)	JONATHAN THREE MUSIC CO. (BMI) 18.5% EMI SOSAHA MUSIC, INC. (ASCAP) / EMI VIRGIN MUSIC, INC. (ASCAP) / EMI BLACKWOOD MUSIC, INC. (BMI) 81.5%	BKG. VOC.	:48
1M18	BAD DRUG DEAL	RICHARD MARVIN	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:11
1M19S	THIS WOMAN IS DANGEROUS (SCORE CUE)	RAY HEINDORF DAVID BUTTOLPH	WB MUSIC CORP. (ASCAP)	BKG. INST.	:13
1M20 PT. A	NEEDING HELP / LEAVE TOWN	RICHARD MARVIN	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:58
1M20 PT. B	NEEDING HELP / LEAVE TOWN	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:39
1M21	SETH'S REACTION	RICHARD MARVIN	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:48
1M22 / 1M23	THE TRUTH ABOUT MARISSA AND TREY / TALKING IT OUT	RICHARD MARVIN	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:51
1M24S	FRIENDS	RYAN ADAMS	BARLAND MUSIC (BMI) ADMINISTERED BY BUG MUSIC, INC.	BKG. VOC.	:27
1M25	THE INTERVENTION	RICHARD MARVIN	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:38
1M27	GOODBYES	RICHARD MARVIN	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:40
1M28/ 1M29	COOPER REUNION / VEGAS?	RICHARD MARVIN	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:12
1M30	SUMMER TELLS SETH	RICHARD MARVIN	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:06
1M31	TWENTY TWO FOURTEEN	JAMES LEO LAVALLE	CALLINBLUE MUSIC (BMI)	BKG. INST.	:52
1M32	SETH TELLS RYAN	RICHARD MARVIN	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:05
1M33 / 1M34	THE COOPERS & A CALL / THE DEATH OF TREY	RICHARD MARVIN	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	3:30
1M35	HIDE AND SEEK	IMOGEN JENNIFER HEAP	ALMO MUSIC CORP. O/B/O RONDOR MUSIC LONDON LTD. (ASCAP)	BKG. VOC.	1:00
1M36	THE O.C. END TITLE	RICHARD MARVIN	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST. / END TITLE	:30



**THE O.C.**  
**"THE DEARLY BELOVED" (Prod. #2T5124)**

<b>NO</b>	<b>SELECTION</b>	<b>COMPOSER</b>	<b>PUBLISHER</b>	<b>HOW USED</b>	<b>TIME</b>
1M37	AS TIME GOES BY	HERMAN HUPFELD	WARNER BROS., INC. (ASCAP) (WORLD EXCLUDING THE BRT'S) CARLIN MUSIC PUBL. CANADA, INC. (SOCAN) O/B/O REDWOOD MUSIC LTD. (PRS) (100% BRT'S)	LOGO	:03

PRODUCED BY WARNER BROS. TELEVISION  
 TELEVISED OVER THE FOX NETWORK  
 WEDNESDAY 9:00 PM-10:00PM  
 AIRDATE: APRIL 28, 2004

99 108002  
 1055024

PRODUCTION #176525  
 TELECAST #46  
 EPISODE #26

**THE O.C.**  
**"THE STRIP" (Prod. #176525)**

<u>NO</u>	<u>SELECTION</u>	<u>COMPOSER</u>	<u>PUBLISHER</u>	<u>HOW USED</u>	<u>TIME</u>
1M01	RECAP	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:30
1M02	POOLHOUSE PREGNANCY	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:16
1M03	GOODNIGHT	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:25
1M04	CALIFORNIA	JACQUES BRAUTBAR SAM FARRAR ALEX GREENWALD DARREN ROBINSON JASON SCHWARTZMAN	FLYING SAUCER FUEL MUSIC (ASCAP) I LIKE MUSIC (ASCAP) SHAGGSTAR PUBLISHING CO. (ASCAP) BEAUCOUP BUCK, INC. (ASCAP) JOHNNY REBEL (ASCAP)	BKG. VOCAL / MAIN TITLE	:33
1M05	WEDDING PLANS IN THE KITCHEN	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:55
1M06	NEW HOME	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:56
1M07	I'M GOING TO VEGAS	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:07
1M08	I WANT STRIPPERS	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:31
1M09	NOT GOOD ENOUGH / MOVING	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:21
1M10	ON PARADE	EMMA GAZE RACHEL DALLEY MIA CLARKE VERITY SUSMAN	CHRYSLIS MUSIC LTD. (ASCAP)	BKG. INST.	:36
1M11	CH-CHECK IT OUT	ADAM YAUCH MICHAEL DIAMOND ADAM HOROWITZ	UNIVERSAL POLYGRAM INTERNATIONAL PUBLISHING, INC. (ASCAP)	BKG. VOC.	1:34
1M12	PENTHOUSE BOWLING	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:03
1M13	SO SWEET	JOHNATHAN RICE CHRIS KEUP LARRY KLEIN	POINT LONGSTREET PUBLISHING (ASCAP) 33.33% CHRYSLIS MUSIC O/B/O ITSELF & N.W. EXEGESIS (ASCAP) 33.34% SONGS OF MOSAIC O/B/O ITSELF & GRANTHAM DISPATCH (ASCAP) 33.33%	BKG. VOC.	:58
1M14	THE SAD VALLEY	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:08
1M15 S	JACQUELINE	ALEXANDER PAUL KAPRANOS HUNTLEY ROBERT HARDY NICHOLAS McCARTHY PAUL THOMPSON	UNIVERSAL-POLYGRAM INT. PUBL., INC. (ASCAP) O/B/O UNIVERSAL MUSIC PUBL. LTD. (ASCAP)	BKG. VOC.	1:43

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**THE O.C.**  
**"THE STRIP" (Prod. #176525)**

<u>NO</u>	<u>SELECTION</u>	<u>COMPOSER</u>	<u>PUBLISHER</u>	<u>HOW USED</u>	<u>TIME</u>
1M16 S	JACQUELINE	ALEXANDER PAUL KAPRANOS HUNTLEY ROBERT HARDY NICHOLAS Mc CARTHY PAUL THOMPSON	UNIVERSAL-POLYGRAM INT. PUBL., INC. (ASCAP) O/B/O UNIVERSAL MUSIC PUBL. LTD. (ASCAP)	BKG. VOC.	1:22
1M17	MARISSA LEARNS THERESA IS PREGNANT	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:10
1M18	HOW HIGH	ADRIAN THAWS	URBAN POISON MUSIC (ASCAP)	BKG. VOC.	1:22
1M19	BABY TALK	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:41
1M20	THE POKER GAME	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:08
1M21	THE VANISHING	EVAN CRANLEY TORQUII CAMPBELL AMY MILLAN CHRIS SELIGMAN	ARTS & CRAFTS PRODUCTIONS, INC (SOCAN)	BKG. VOC.	:49
1M22	FIRE	WILLIAM BECK LEROY BONNER MARSHALL JONES RALPH MIDDLEBROOK MARVIN PIERCE CLARENCE SATCHELL JAMES WILLIAMS	RIGHTSONG MUSIC, INC. O/B/O RICK'S MUSIC, INC. (BMI)	BKG. VOC.	1:54
1M23	THE BUYOUT	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:35
1M24	PASSING BY	HENRY BINNS SAM HARDAKER SOPHIE ALEXANDER JESSICA BARKER	UNIVERSAL-MCA MUSIC PUBLISHING, A.D.O. UNIVERSAL STUDIOS O/B/O MCA MUSIC LTD. (ASCAP)	BKG. INST.	:37
1M25	ON PARADE	EMMA GAZE RACHEL DALLEY MIA CLARKE VERITY SUSMAN	CHRYSLIS MUSIC LTD. (ASCAP)	BKG. VOC.	:55
1M26	ARGUMENT	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:24
1M27	FACE OFF	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:27
1M28	MEET YOUR DEMISE	RICHIE JAMES JESSICA REYNOLDS ALEX NOWICKI	RICHIE JAMES MUSIC (BMI)	BKG. VOC.	:35
1M29 PT A	LOUNGING AROUND	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:25
1M29 PT B	PUNCHING CALEB OUT	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:41
1M30	THE FINAL POKER PLAY	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:21

**THE O.C.**  
**"THE STRIP" (Prod. #176525)**

<u>NO</u>	<u>SELECTION</u>	<u>COMPOSER</u>	<u>PUBLISHER</u>	<u>HOW USED</u>	<u>TIME</u>
1M31	CH-CHECK IT OUT	ADAM YAUCH MICHAEL DIAMOND ADAM HOROWITZ	UNIVERSAL POLYGRAM INTERNATIONAL PUBLISHING, INC. (ASCAP)	BKG. VOC.	1:18
1M32	CALM AFTER THE	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	1:14
1M33	WHO'S IT'S DADDY	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST.	:35
1M34	THE O.C. END TITLE	CHRISTOPHER TYNG	WARNER-BARHAM MUSIC, LLC (BMI)	BKG. INST. / END TITLE	:30
1M35	AS TIME GOES BY	HERMAN HUPFELD	WARNER BROS., INC. (ASCAP) (WORLD EXCLUDING THE BRT'S) CARLIN MUSIC PUBL. CANADA, INC. (SOCAN) O/B/O REDWOOD MUSIC LTD. (PRS) (100% BRT'S)	LOGO	:03

# SETTLING PARTIES

SP EXHIBIT 24  
TAB 9 (MC04-05 EX. 9)

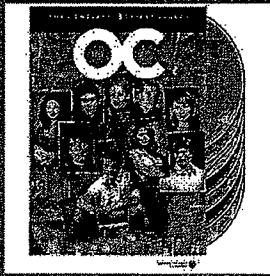
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# THE O.C. MUSIC


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### MUSIC FROM SEASON 1

Click on  to add songs to your local iTunes software.

#### Episode 1 - Premiere scene info

-  Phantom Planet - The Guest - California
-  Slightly Stoopid - Everything You Need - Sweet Honey
-  Cooler Kids - Punk Debutante - All Around the World (Punk Debutante)
-  The All-American Rejects - The All-American Rejects - Swing, Swing
-  Slack Eyed Peas - Elepbunk - Hands Up




The K.G.B - I'm A Player

-  Mazzy Star - So Tonight That I Might See - Into Dust
-  Joseph Arthur - Redemption's Son - Honey and the Moon



Maximum Roach - Let It Roll

Charm Pain - Show Me


#### Episode 2 - The Model Home

-  Rufus Wainwright - Poses - California
-  Rooney - Rooney - Terrible Person
-  Doves - The Last Broadcast - Caught by the River


Aaron D - In Your Eyes

-  The Androids - The Androids - Do It With Madonna
-  Jeff Buckley - Grace - Hallelujah

Shady Lady - We're Going Out Tonight

-  Thicke - A Beautiful World - Brand New Jones

#### Episode 3 - The Gamble

-  Brooke - Coming Home - Wanna Be Happy

James Horner Sing Sing Sing (With A Swing)

Our site features the most exclusive and complete list of music played on the O.C. tv show. Don't waste your time searching for the songs. You can now download the music directly from our iTunes links! We update as soon as a new Episode comes out, so do come back and check our site frequently!

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Turn Brakes - Ether Song - Rain City

Less Than Jake - Anthem - The Science of Selling Yourself Short



#### Episode4 - The Debut

Liz Phair - Liz Phair - Why Can't It

Leona Naess - Comatized - Lazy Days

Brassy - Gertin Wise - Play Some D

Smashing Pumpkins - Adore - To Sheila

Dido - White Flag - Single - White Flag

#### Episode5 -The Outsider

Spoon - Kill the Moonlight - The Way We Get By

Grand Skeem - Sucka MCs

The Grand Skeem -Eya Eye Oy

Black Eyed Peas - Elephunk - Let's Get Retarded

Grade 8 - Grade 8 - Brick by Brick

The Grand Skeem - The Grand Skeem - Rock Like This

Fountains of Wayne - Welcome Interstate Managers - All Kinds of Time

The Roots - Phrenology - Rolling with Heat

Yellowcard - Ocean Avenue - Way Away

#### Episode6- The Girlfriend

O.K. Go - Ok Go - You're so Damn Hot

The Runaways - The Best of the Runaways - Wait for Me

Guster - The Faders - Disco Church

Palm Street - Break

Soul Kid #1 - Americanized - (More Bounce In) California

User - Do You

Tricky - Vulnerable - Hollow

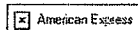
Jason Mraz - Waiting for My Rocket to Come - You and I Both

#### Episode7- The Escape

...



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☒ Luce - Luce - Good Day

☒ Death Cab for Cutie - The Photo Album - A Movie Script Ending

☒ The Chemical Brothers - Out of Control - EP - Power Move

Los Cubaztecas- Ritmo De Oro

Los Cubaztecas- La Conga De Santiago

Rockers High Fi- Going Under

☒ Mezzz Star - So Tonight That I Might See - Into Dust

☒ Something Corporate - North - Space

### Episode8- The Rescue

☒ Guster - Keep It Together - Keep It Together

☒ Paul Westerberg - Stereo - Let the Bad Times Roll

Air - Le Femme D'argent

### Episode9- The Heights

☒ South - Music from The O.C.: Mix 1 - Paint the Silence

☒ Solomon Burke - Don't Give Up On Me - Don't Give Up On Me

☒ The 88 - Music from The O.C.: Mix 1 - How Good It Can Be

### Episode10 - The Perfect Couple

☒ Aquatung - Wicker Park - Strange and Beautiful

Song plays as Ryan and Marissa make out in the pool room.

Stacy Kent - A Fine Romance

Song plays as Seth and Anna share a romantic moment on a yacht

☒ Leaves - Breathe - Breathe

Song plays as Ryan and Marissa share a tender moment in the pool room.

☒ Phantom Planet - The Guest - California

### Episode11 -The Homecoming

☒ Earlimart - Everyone Down Here - We Drink On the Job

Song plays in Seth's room as he and Ryan look at comic books.

☒ Minibaz - Fly Below the Radar - Breathe Easy

Song plays as Ryan and Marissa make out in the pool room, then talk about Ryan's brother.

☒ Trespassers William - Different Stars - Different Stars

Song plays as Ryan visits his brother in prison.

The Josh Buzon Trio- Caravan

Song plays as Seth and Summer kiss

☒ Gordon Jenkins - Ultra-Lounge, Vol. 12: Saxophobia - Caravan

Song plays as Seth and Anna kiss.



Mellow Man Ace - Vengo a Cobrar - Latinos Mundial

Song plays as Ryan visits his brother in prison who tells him to leave the past behind and work towards the future."

Alexi Murdoch - Music from The O.C.: Mix 1 - Orange Sky

Song plays as Ryan visits his brother in prison who tells him to leave the past behind and work towards the future."

## Episode12 - The Secret

The Dandy Warhols - Welcome to the Monkey House - We Used to Be Friends

1) It plays in the teaser as Seth feigns illness and Ryan busts him. 2) It plays as Seth runs into Summer and Anna and they get their revenge. 3) Then plays as Summer and Anna sit with each other and bond.

Jet - Get Born - Get What You Need

Song plays on the car radio before Luke and Ryan see Luke's dad with another man.

Belle & Sebastian - Dear Catastrophe Waitress - If She Wants Me

Song plays in the background of a Mexican restaurant as Julie and Kirsten talk.

Jet - Music from The O.C.: Mix 1 - Move On

Song plays at the end of the scene info as Seth, Luke, Ryan, and Marissa face the day at school.



## Episode13 -The Best Chrismukkah

The Ventures - Santa Claus Is Coming To Town

Song plays as Seth Cohen introduces Ryan to the concept of 'Chrismukkah'.

Ron Sexsmith - The O.C. Mix 3. Have a Very Merry Chrismukkah (Digital Version) [Soundtrack from the TV Show] - Maybe This Christmas

Song plays in the background at a high end department store as Ryan and Marissa shop.

The Dandy Warhols - Welcome to the Monkey House - (You Come In) Burned

Song in 4 spots in the scene info-In Seth's kitchen as he talks to Kirsten, in Jimmy's apartment as he talks with Julie, in a bathroom stall as Marissa drinks alcohol, in a therapist's waiting room as Marissa waits for her appointment.

Firstcom - Hannukah Lights

Peggy Lee - Christmas Cocktails - Winter Wonderland

Song plays at a fancy Christmas party the Cohen's attend.

Firstcom - Silent Night

Eartha Kitt - Martha Stewart Living Music: Jazz for the Holidays - Santa Baby

Song plays as at a Christmas party as Summer gives Seth his Christmas present herself dressed as Wonder Woman and Ann walks in.

#### Firstcom - We Wish You A Merry Christmas

#### Bright Eyes- Blue Christmas

Song plays in the background as Ryan hangs his stocking on the fireplace while he talks to Seth.

#### Episode14 - The Countdown

##### The Pattern - Real Feelness - Selling Submarines

Song plays at the Cohen house as they prepare for the party.

##### The Vacation - The Vacation - Make Up Your Mind

Song plays at the Cohen house party.

##### Brookville - Wonderfully Nothing - Walking On Moonlight

Song plays in Sandy's car as he and Kirsten talk about their marriage.

##### Alkaline Trio - Good Mourning - We've Had Enough

Song plays at a house party as Ryan weaves his way through the crowd.

##### Zero 7 - Simple Things - Destiny

The song plays at a party in Laguna Beach.

##### Dropkick Murphys - Blackout - Walk Away

Song plays as Ryan and Seth are trapped in the poolhouse together.

#### Laptop - Ratso Rizzo

Song plays as Ryan and Seth are trapped in the poolhouse together.

##### Jeni - Finally Woken - Just a Ride

The song plays at a party in Laguna Beach.

##### Singapore Sling - The Curse of Singapore Sling - Overdriver

Song plays at the Four Seasons penthouse party.

##### The Suicide Machines - A Match and Some Gasoline - Did You Ever Get a Feeling of Dread?

Song plays at the Cohen house party.

##### The Flaming Sideburns - Save Rock 'n' Roll - Flowers

Song plays at the Four Seasons penthouse party.


##### Finley Quayle & William Orbit - Music from The O.C.: Mix 1 - Dice

Song plays at the end of the scene info as Ryan finds Marissa at a New Year's Eve party and kisses her as the clock strikes midnight.

#### Episode15 - The Third Wheel

##### Eels - Shootenanny! - Saturday Morning


Song plays in the beginning of the scene info in the Cohen kitchen as everyone is getting ready to leave.

 **Seulzi - The Coast Is Never Clear - Popular Mechanics for Lovers**

Marissa and Ryan and Anna and Seth talk at school.

 **Rooney - Rooney - Sorry Sorry**

Song plays on the radio which prompts the gang to talk about the upcoming Rooney show.

 **Rooney - Rooney - Blueside**

Song plays as source from a stereo as the gang listens to the Rooney album before going to their concert.

**Laptop - Want In**

Song plays as the group arrives at a club to see a concert.

 **Ash - Free All Angels - Burn Baby Burn**

Song plays at a concert venue after the band has finished their set.

**Buva - Should I Know**

Song plays at a concert while the crowd waits for the band to go on.

 **Rooney - Rooney - I'm Shakin'**

Band appears on camera.


**Anna & Summer Sing - Thank You For Being A Friend**

 **Rooney - Rooney - Pop Stars**

Band appears on camera.




## Episode16- The Links

 **Puddle of Mudd - Away from Me - Single - Away from Me**

1) Sandy tries to teach Ryan how to golf. 2) Plays at the Cohen house as the group gathers for a road trip. 3) Oliver races Ryan in their golf carts. 4) Ryan and Seth talk to Kirsten about their weekend.

 **Martin Denny - The Exotic Sounds of Martin Denny - Quiet Village**


Song plays as Seth and Anna play jenga in their hotel room as Summer walks in and interrupts.

 **Tom Jones - 20th Century Masters - The Millennium Collection: The Best of Tom Jones - It's Not Unusual**

1) Song plays over an establishing shot of Palm Springs and in a Palm Springs hotel room as the gang arrives. 2) Oliver dances around the hotel room opening bottles of pills.

**Martin Denny - Love Dance**

1) Song plays as Summer interrupts Anna and Seth's quiet time and turns on the TV. 2) Song plays as Anna and Seth kiss on the bed in their hotel room before Seth yawns in her face.


 Enrique Iglesias - 7 - Addicted

Song plays as Summer interrupts Anna and Seth's quiet time and turns on the TV.

## Episode 17 - The Rivals

 Mosquitos - Mosquitos - Boombox


Song plays when Seth encounters Danny.

 Clinic - Walking With Thee - Come Into Our Room

1) Song plays as Ryan catches up to Marissa in the hallway. 2) Song plays in the Cohen house, continues as Ryan sneaks onto the school campus. 3) Song plays as Ryan watches Oliver give Marissa a letter. 4) Song plays as Ryan reads the letter Oliver wrote to Marissa.

 The New Amsterdams - Worse for the Wear - The Spoils of the Spoiled

Song plays in Seth's bedroom as he and Ryan talk about Oliver's letter.


 Damien Rice - O - Cannonball

Song plays as Summer and Seth talk in the hallway about Danny.


 The Thrills - So Much for the City - Big Sur

Song plays in the student lounge as Oliver taunts Ryan about stealing Marissa from him before Ryan punches him.


## Episode 18 - The Truth

 Eels - Shootenanny! - Love of the Loveless

Song plays in the Cohen Poolhouse as Ryan wastes his time before school, as he watches TV and falls furthering a funk, and when he fights with Seth.


 I Am Kloot - I Am Kloot - 3 Feet Tall

Song plays in the Lounge at Harbor High.

 Azure Ray - Hold On Love - New Resolution

Song plays as Ryan talks to Julie about Marissa, continues as Marissa and Oliver talk.

Mastersource - Watching The Game At Joes


 Turin Brakes - Ether Song - Self Help

Song plays at the end of the scene in Ryan's poolhouse as Seth and Ryan reconcile and Seth apologizes for not having Ryan's back.

## Episode 19 - The Heartbreak

 Super Furry Animals - Phantom Power - Hello Sunshine

Song plays in Summer's bedroom as her and Seth get physical.

 Mojave 3 - Spoon and Rafter - Bill Oddy

Song plays in Ryan's room as Seth comes into and tells him he lost his virginity.

 The Fire Theft - The Fire Theft - Summertime

Song plays as Ryan and Luke help set up an event at the Cicade ballroom.

🎵 Squirrel Nut Zippers - The Inevitable - Anything But Love ( Basement Jaxx Kontrol Mixx )

Song plays at the Valentine's Day Dance.

Mastersource - Dreamtime

🎵 Bob Seger & The Silver Bullet Band - Night Moves - Night Moves

Song plays as Luke shows up at Julie's door to tell her his feelings.

🎵 Ryan Adams - 241 - Single - Wonderwall

Song plays on Seth's record player as he dances with Summer on Valentine's Day, continues over Ryan and Marissa deciding the future of their relationship.

## Episode20 - The Telenovela

🎵 Preston School of Industry - Monsoon - Caught in the Rain

Song plays as Ryan and Seth walk across the campus and talk about Ryan and Marissa's relationship.

🎵 James William Hindle - Prospect Park - Leaving Trains

Song plays as Ryan and Marissa have an awkward conversation about Theresa in the school cafeteria.

🎵 Mojave 3 - Spoon and Rafer - Bluebird of Happiness

Song plays as Ryan walks with Theresa on the beach, as Marissa discusses Ryan with Theresa, and as Ryan and Theresa further complicate their relationship/friendship with a kiss.

🎵 Halloween, Alaska - Halloween, Alaska - Des Moines

Song plays as 1: Ryan comes home to find Eddie looking for Theresa and 2: as Ryan talks to Eddie about Theresa, and Marissa listens to Theresa discuss her relationship with Eddie.

🎵 Patrick Park - Loneliness Knows My Name - Something Pretty

Song plays as Seth interrupts Summer's involvement at the school kissing booth and professes his love.

## Episode21 - The Goodbye Girl

🎵 Death Cab for Cutie - Transatlanticism - A Lack of Color

Song plays as Seth talks to Anna in the hallway about her decision to move back east.

🎵 Nada Surf - Music from The O.C.: Mix 2 - If You Leave

Song plays as Seth drops off Anna at the airport and says goodbye.

Journey - Separate Ways

Song plays on the car stereo as Ryan and Seth try to get to the airport before Anna's plane leaves.

🎵 Interpol - Matador At Fifteen - Specialist

Song plays as Ryan shows up at Theresa's hotel room to talk and they end up hooking up.

🎵 Trespassers William - Different Stars - Alone


Song plays as Ryan and Theresa browse the classified ads.

## Episode22 - The L.A.


🎵 The Vines - Winnina Dava - Ride

scene


Song plays as Seth and Ryan see Luke leaving a hotel with a woman.

 The 88 - Kind of Light - How Good It Can Be

Song plays in the car as the gang is stuck in L.A. traffic.

 The Crystal Method - Legion of Boom - Born Too Slow


Song plays as the gang walks into a very "Hollywood" club.

 Secret Machines - Now Here is Nowhere - The Road Leads Where It's Led

Song plays as Ryan discovers Hailey is a stripper at an L.A. club.

 Radio 4 - Gotham! - Start a Fire


Song plays in a "Hollywood" club as Ryan catches Hailey dancing and Summer is hit on by an actor.

 Timo Maas - Loud - To Get Down

Song plays in a "Hollywood" club as Seth catches Hailey working as a dancer.


 KB-Dub - Cream Wet - Get It Krunk

Song plays at the Luna-Chicks VIP Entrance.

 The Plus Ones - It's a Calling - All the Boys


Song plays as an actor puts "his band" on the radio to impress Summer.

Kid Gloves - Espionage

 Jude - No One is Really Beautiful - Out of L.A.

Song plays over a couple scenes as the gang winds down their crazy night out in L.A.

## Episode 23 - The Nana

 Jern - Finally Woken - Just a Ride


Song plays as Jimmy checks up on Hailey and they flirt with each other.

 Modest Mouse - Float On - Single - Float On

Song plays at the engagement party in China - Ryan, Marissa are there.


Chris Murray - Heartache

Song plays at a backyard barbecue as Ryan and Marissa talk.


 Aqualung - Exclusive iTunes EP 2 - Take Me Home

Song plays in Ryan's room as Ryan and Marissa return from China.

## Episode 24 - The Proposal

 Richard Hayman And His Orchestra - An Evening in Paris - Autumn Leaves

Song plays as the movie makes everyone cry except Ryan.

 Syntax - Nip/Tuck (with Gabriel & Dresden bonus track) - Pride

Song plays as Marissa is upset about Luke and Julie.

 Christina Lux - Believe - All the Kings Horses

1) Song plays as Seth and Summer look through an old yearbook. 2) Song plays again as

Marissa and Ryan say goodbye to Luke.

Henry Mancini - Loose Caboose

Song plays as Luke watches people go in.

Sob Seger & The Silver Bullet Band - Night Moves - Night Moves

Song plays as Luke is really depressed, blows Ryan off and calls Julie.

Highwater Rising - Pillows and Records

Song plays as Marissa sees her redecorated room.

## Episode25 - The Shower

Zack Hexum - The Story So Far... - Met a Girl Like You Once

Song plays as Ryan and Marissa talk in the student lounge.

Camera Obscura - Underschievers Please Try Harder - Keep It Clean

Song plays Seth's bedroom as Seth and Summer talk about meeting her father.

Mocasin Worker - Enter the Mojo! - Right Now

The song plays at the Country Club during Julie's shower.

South - Nine Lives

The song plays as Ryan and Marissa sit together quietly in the backyard.

## Episode26 - The Strip

Electrelane - The Power Out - On Parade

The song plays as Seth and Marissa offer Ryan money to help Theresa out, and they devise a plan to "fundraise" while in Vegas.

Seaside Boys - Ch-Check It Out - Single - Ch-Check It Out

The song plays as the guys arrive to the Hard Rock Casino on the strip. "Welcome to the Vegas."

Johnathan Rice - Music from The O.C.: Mix 2 - So Sweet

The song plays as Sandy questions Caleb about the Lighthouse, and Caleb mentions that Marissa is planning on moving in with the newlyweds, not Jimmy.

Franz Ferdinand - Franz Ferdinand - Jacqueline

The song plays while Kristin asks for Hailey to help her find a stripper for Julie's bachelorette party. Meanwhile in Vegas, Ryan and Seth encounter a hot young coed named Jenn who invites them to an exclusive poker game.

Madonna - Confessions On a Dance Floor (Deluxe Version) - How High


The song plays as Jenn takes Ryan and Seth to a \$250 buy in poker game in a bar off the strip.

Sters - Heart - The Vanishing


The song plays at Julie's bachelorette party, an elegant affair Hailey arrives with firemen in tow.

Ohio Players - 20th Century Masters - The Millennium Collection: The Best of The Ohio Players - Fire

The song plays as group of impossibly hot firemen strippers arrive to Julie's party, carry her into the living room coffee table, and begin taking it all off for the bride to be.


 Zero 7 - When it Falls - Passing By

The song plays just as Summer arrives at the Hard Rock in Vegas to find Seth up in the penthouse kissing Jenn, who turns out to be a prostitute.

 The Willowz - Are Coming - Meet Your Demise

This song plays as the bachelorette party is winding down, Julie calls Halley a whore, slaps her, and they get into a rowdy catfight which ends in the swimming pool.


### Episode 27 - The Ties That Bind

 Jem - Finally Woken - Flying High

Song plays in the background as Ryan and Marisa walk together, Ryan wants to make it work between them.

 Alexi Murdoch - Music from The O.C.: Mix 1 - Orange Sky

Song plays in the background as Ryan and Marisa eat lunch together at school, and Marisa asks Ryan how he feels about Theresa's decision.

 Orquesta del Plata - Bajofondo Tango Club - Montserrat

The song plays in the background as everyone gathers for a dinner party the night before the wedding.

 Iron & Wine - The Sea & the Rhythm - EP - The Sea and the Rhythm


The song plays as Ryan, Marisa, Seth and Summer walk along the beach and remember the beginning of the year, Ryan tells them that he has to leave.

### CAR 188 - Bridal March


The song plays in the background of the wedding ceremony.

### APM - Here Comes The Bride

The song plays as Julie enters the chapel and walks down the aisle.

 Jem - Music from The O.C.: Mix 2 - Maybe I'm Amazed

Jem sings the song at the reception while everybody dances on the dancefloor, Marisa tells Ryan she understands why he has to go but that she loves him.

 Jeff Buckley - Grace - Hallelujah

The song plays in the background during the final minutes of the season finale as Ryan leaves his new home and stares out at the coastline, Marisa resigns herself to her new home, and Seth falls off into the unknown.

### SEASON 1 ON DVD





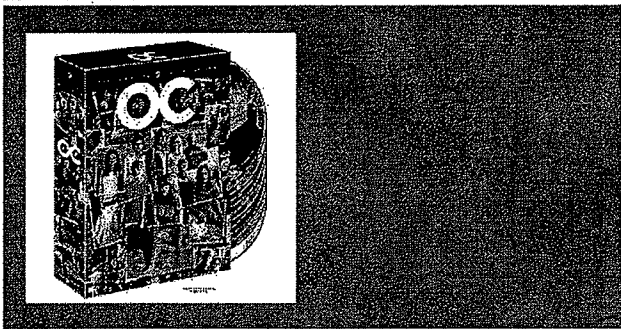


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### MUSIC FROM SEASON 2

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#### Episode 1 - The Distance

[Zero 7 - Somersault - Single - Somersault](#)

Marissa and Summer lay by the pool and talk. Marissa drowns her sorrows in an early morning "Newport Iced Tea" while Summer tries to forget about Seth.

[Dios Malos - Keep It Clean](#)

Ryan is at Theresa's house and thinks about his life now with her in China. He remembers his youth and wonders and feels nostalgic, what is he doing?

[The Album Leaf - In a Safe Place - Eastern Glow](#)

When Marissa goes with Jimmy to the Cousins, she wanders out and looks into the pool house, missing Ryan. Later that night, alone in the lifeguard tower at the beach and drinking she calls Ryan, but says nothing.

[Halloween, Alaska - Halloween, Alaska - All the Arms Around You](#)

In Portland, Ryan talks with Seth about going home. Later, after coming home at last, the boys hang out in the pool house and talk about the summer.

#### Episode 2 - The Way We Were

[The Perishers - Music from The O.C.: Mix 2 - Trouble Sleeping](#)

In the morning in the pool house, Seth discusses with Ryan how he wishes he could avoid having to go back to school for so many reasons.

[Kezner - Somewhere Only We Know - EP - Walnut Tree](#)

At the high school on the first day of school Marissa and Summer encounter Seth and Ryan as they arrive. Marissa is surprised to see Ryan, and Summer runs off to avoid Seth but he follows her.

[Elefant - Sunlight Makes Me Paranoid - Ester](#)

Summer meets Marissa in the student lounge and finds her drinking a spiked latte in the middle of the day. Marissa tells Summer about her and DJ.

[The New Year - The End Is Near - The End's Not Near](#)

At school Seth and Ryan discover that Summer is dating Zach. Later at the mansion, Ryan and Marissa talk about the summer. Ryan invites Marissa to the Nickoff Carnival.

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 **Sufjan Stevens - Music from the O.C. Mix 4 - To Be Alone With You**

In Portland, Ryan talks with Seth about going home. Later, after coming home at last, the boys hang out in the pool house and talk about the summer.


 **The Perishers - Music from The O.C.: Mix 2 - Trouble Sleeping**

At the Kickoff? Carnival, Seth remembers how they all were last year. Ryan tells Marissa that he thinks they should just be friends. Seth declares his love to Summer and apologizes but is still rejected.


### Episode 3 - The New Kids On The Block

 **A.C. Newman - The Slow Wonder - On the Table**


The song plays in the background as Seth and Ryan talk about Caleb's arrest in Seth's room after Seth realizes he is "addicted to himself."

 **The Beta Band - Assessment - Single - Assessment (Album Version)**


The song plays in the background as Ryan and Seth talk about The Bait Shop in the student lounge.

 **PET - No Yes No - EP - No Yes No**


The song plays in the background as Summer and Marissa check out Zach in the hallway at Harbor High and talk about their boy drama.

 **The Thrills - Let's Bottle Bohemia - Faded Beauty Queens**


The song plays in the background as Seth helps Alex set up The Bait Shop for a concert.

 **The Walkmen - Bows + Arrows - Little House of Sevages**


At The Bait Shop, The Walkmen perform on camera as Seth works the door while Summer arrives.

 **The Walkmen - Bows + Arrows - What's in It for Me**

At The Bait Shop, The Walkmen perform on camera as Seth explains to Summer why he got the job at the Bait Shop, then he kisses her.

 **The Perishers - Let There Be Morning - Weekends**

The song plays in the background as Seth talks to Marissa in her room about Summer.


 **Rechael Yamagata - Happenstance - Worn Me Down**

The song plays in the background as Seth sees Summer and Zach having a nice dinner, then finds Marissa sitting alone on the pier.


### Episode 4 - The New Era

 **Gomez - Split the Difference - Silence**

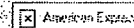
The song plays in the background as the episode opens over a Newport Beach montage. Ryan and Seth are talking in the morning before school.

 **Pinback - Summer In Abaddon - Fortress**


At the harbor quad, Ryan and Seth are discussing potential girls to date when Seth meets Lindsay for the first time. Meanwhile, Marissa and Summer discuss boy drama.

 **The Album Leaf - In a Safe Place - On Your Way**


The song plays in the background as Marissa tries to make up with DJ and invites him to the Bait Shop. Later that day the song plays as Seth and Ryan talk about their impending date and




run into Marissa and Summer. After the concert the song plays in the background as Seth attempts to talk with Summer outside the Bait Shop, she refuses and leaves with Zach. Alex and Seth later recap his girl troubles of the night, and Alex kisses Seth. QJ sees Marissa's car by the beach and finds her in the tower where they kiss.

 Mosquitos - Sunshine Barato - Domesticada

The song plays in the background as Seth helps Alex set up The Bait Shop for a concert.

 The Killers - Hot Fuss - Smile Like You Mean It


At The Bait Shop, The Killers perform while Seth and Ryan try uncomfortably to make conversation with Lindsay and Alex, when they notice Marissa and Summer are at the show.

 The Killers - Mr. Brightside (Jacques Lu Cont's Thin White Duke Mix) - Single - Mr. Brightside


At The Bait Shop, The Killers perform their song while Summer, Marissa, Seth, Ryan and all their dates experience truly awkward introductions.

The Killers - Everything Will Be Alright

Song plays in the background at The Bait Shop while Seth and Summer complain about each other to their dates


 Ambulance Ltd - LP - Primitive (The Way I Treat You)

The song plays in the background after the show while Lindsay sarcastically suggests Seth go after Summer to tell her how "fine" he is with everything. Marissa sees that QJ came to the show and approaches him.


 U2 - How to Dismantle an Atomic Bomb - Sometimes You Can't Make It On Your Own

The song plays over a message at the end of the episode, showing each of the new couples at the end of the night.


Episode 5 - The SnO.C.

 Imogen Heap - Goodnight and Go - Single - Goodnight and Go


The song plays in the background at the Bait Shop as Alex shows Seth he had the wrong idea about their kiss and kisses Homer and Amanda to prove it. Later it plays as Seth quits the Bait Shop job in an attempt to play the "Ice Man." The song plays in the background at the end of the episode when Seth and Alex kiss again.

 Phoenix - Alphabetical - Run Run Run


The song plays in the background in the car as Marissa, Ryan, Seth, and Summer endure an awkward drive to the SnO.C. dance together.

 The Faint - Wet from Birth - Desperate Guys


The song plays in the background as Summer, Seth, Ryan, and Marissa enter the SnO.C.

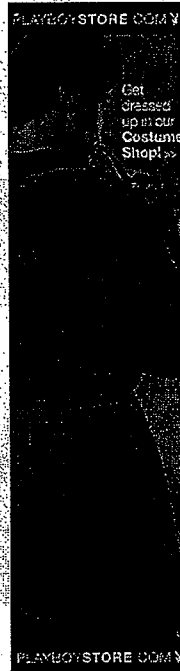
 Gwen Stefani - Love, Angel, Music, Baby - Cool

The song plays in the background as Marissa and Ryan dance together as Julie and Jimmy look on.


 Dirty Vegas - One - Closer

The song plays in the background as Zach drives to the dance after all, and Seth and Summer decide to dance together.


 Feist - Let It Die - Let It Die




The song plays in the background as Summer and Seth dance together at the SnD.C. and talk about their relationship woes. Just as Zach arrives and sees them.

 Mascott - Dreamer's Book - Turn Off / Turn On

The song plays in the background as Zach enters the Bait Shop and talks with Alex.


 Frausdots - Couture, Couture, Couture - Soft Light

The song plays in the background at the Bait Shop as Alex counsels Zach to be a man and fight for his girl.


 Magnet - On Your Side - Lay Lady Lay

The song plays in the background at the SnD.C. as Marissa and DJ dance together in front of everyone. Jimmy stops Julie from intruding and they kiss. Outside the SnD.C. Summer and Seth talk as Zach arrives.

## Episode6- The Chrismukkah That Almost Wasen't

 Eels - Dr. Seuss' How the Grinch Stole Christmas - Christmas Is Going to the Dogs


The song plays in the background of the student lounge as Marissa and Summer complain to each other about the upcoming holidays.

 Van McCoy - The Hustle and the Best of Van McCoy - The Hustle (Original Mix)

The song plays in the background on Julie's phone as her ring tone. Kirsten points out that it is Jimmy's favorite song.

 Guster - Carol of the Meows - Single - Carol of the Meows


The song plays in the background as Ryan arrives to Lindsay's house and Seth arrives at Summer's place.

 Leona Naess - Leona Naess - Christmas

The song plays in the background as Lindsay tells Ryan she doesn't want to see him anymore. Summer and Marissa talk about what a strange year it has been and Seth cancels Chrismukkah.

## CHAP 200 - Silent Night

The song plays in the background as Summer announces she has a plan to save Chrismukkah.


 Ron Sexsmith - The O.C. Mix 3: Have a Very Merry Chrismukkah (Digital Version) [Soundtrack from the TV Show] - Maybe This Christmas

The song plays in the background as Seth and Lindsay arrive to her house. The house has been decorated for Chrismukkah. Kirsten welcomes her to the family, and everyone is there as a surprise to celebrate Chrismukkah.


## Episode7- Family Ties

Olympic Hopefuls - Let's Go


The song plays in the background as Marissa and Summer talk about DJ meeting Marissa's Dad while having coffee in the student lounge.

 Modest Mouse - The Moon & Antarctica - Paper Thin Walls


The band plays the song in the Bait Shop as Seth brandishes his flask in front of Alex.

 Modest Mouse - Good News for People Who Love Bad News - The View


The band plays the song in the Bait Shop as Seth drunkenly ruins a Zach and Summer moment.

 Blue Foundation - Sweep of Days - Save This Town


The song plays in the background at the Cohen's going away party for Jimmy. Lindsay and Ryan talk awkwardly at the party.

 Martina Topley-Bird - Anything - Soul Food

The song plays as Marissa and Ryan decompress from the events of night. When Marissa leaves, Ryan hits his punching bag.


 Elliott Smith - From a Basement On the Hill - Twilight

The song plays in the background while Ryan and Lindsay escape to the pool house and reconcile their relationship.


 Modest Mouse - Good News for People Who Love Bad News - The World at Large

The song plays in the background at the end of the episode as Marissa says goodbye to Jimmy, and in the morning arrives to the Cohen's with bagels for everyone.

### Episode 8: The Power of Love

 Solomon Burke - Don't Give Up On Me - Don't Give Up On Me


The song plays in the background in the morning at the Cohen household when Sandy forgets his 20th Wedding Anniversary, but attempts to bluff his way out of it with Kirsten.

 Jay Zipper - American Whip - Baby You Should Know

The song plays in the background as Ryan & Seth discuss covering for each other obligations in the student lounge.

 Journey - Journey: Greatest Hits - Open Arms

The song plays in the background as Kirsten walks in on Ryan & Lindsay making out in the pool house.

 Matt Pond PA - Emblems - New Hampshire

The song plays in the background as Summer flirts with Zach in the student lounge, & as Seth talks with Alex who tells him his parents are worried about him. Later the song plays in the background as Ryan meets Lindsay at the harbor to ask for some space.


#### Sandy Cohen - Don't Give Up On Me

At The Bait Shop Sandy Cohen sings the song to Kirsten for their anniversary at a surprise party he planned.

#### Sandy Cohen - She's No Lady, She's My Wife

At the Bait Shop Sandy Cohen sings the song to Kirsten for their 20th anniversary while the whole gang looks on.

### Episode 9: The Ex-Factor


 Aqueduct - I Sold Gold - Hardcore Days & Softcore Nights

The song plays in the background at The Bait Shop as Alex tells Seth her ex is in town. The song plays in the background as Ryan goes to the Bait Shop to sniff out the ex situation where he meets Jody Alex's ex.


 Flunk - Morning Star - Play

The song plays in the background as Summer, Marissa, & Lindsay hang out in the VIP room of


the Bait Shop.

 The Thrills - Let's Bottle Bohemia - Saturday Night

The band plays the song on camera at The Bait Shop as the girls drink up in the VIP lounge.

 Infusion - Six Feet Above Yesterday - Girls Can Be Cruel


The song plays in the background as the boys head to The Bait Shop where Seth is determined to check out Jody.

 Jazzelicious - Jazzelicious Presents - California


The song plays in the background as Kristen & Caleb talk about supporting their spouses decisions..

 The Thrills - Let's Bottle Bohemia - Not for All the Love In the World


The song plays in the background of a restaurant as Sandy, Caleb, Kristen, & Julie debate the new ideas for the magazine.

 Tom Quick - The Best of Sublime Music, Vol. 2 - Honey Dew

The band plays the song on camera at The Bait Shop as Alex confronts Seth. Zach & Summer argue, & Ryan finds Lindsay drunk with Marissa.


 The Thrills - Let's Bottle Bohemia - The Curse of Comfort

The song plays in the background as Seth confronts Alex about lying to him, & he dumps her.


 Mark Lanegan - Bubblegum - Strange Religion

The song plays in the background in the diner as Summer sees Zach & apologizes for reacting so strangely to him treating her well.


## Episode 10 - The Accomplice

 Walking Concert - Run to Be Born - Hands Up!


The song plays in the background as Seth, Zach & Ryan walk along the pier talking about Seth's situation with Alex.

 The Black Keys - 10 A.M. Automatic - Single - 10 A.M. Automatic


The song plays while Caleb catches Marissa at home in the morning. She lies about feeling sick so she can hang out with Alex.

 Poster Children - No More Songs About Sleep and Fire - Western Springs


The song plays in the background of the student lounge as Zach convinces Seth to start his own comic.

 Interpol - Evil - Single - Evil

The song plays as Marissa convinces Alex to go get her heart necklace back from Jody in LA. Later Marissa challenges Caleb on his parenting skills. The songs play later as Marissa & Alex show up at Jody's house to get her things.

 Rilo Kiley - More Adventurous - Portions for Foxes


The song plays as the girls are driving to LA. Alex tells Marissa about her emancipation, feeling that she is free of her parents.

 Tiger Lou - Is My Head Still On - Warrnth

The song plays at Jody's place while Marissa & Jody argue over clothes & records. Jody tells Alex she wants her to stay but Marissa gets them out of it.

 Ringside - Ringside - Strangerman

The song plays as Summer finds Seth's sketchbook with drawings of her & steals it for awhile. Later Caleb and Lindsay meet for dinner where he accuses her & Ryan of "gold digging."


 Elliott Smith - Pretty (Ugly Before) - Single - Pretty (Ugly Before)

The song plays as Summer looks over Seth's drawings in amazement. Later Lindsay vents to Ryan about Caleb & thanks him for trying. Caleb finds Marissa & Alex in her room admiring her tattoo.

### Episode 11 - The Second Chance

 The Go Find - Miami - Summer Quest


The song plays in the background as Marissa and Alex hang out in the morning and Marissa decides to skip school and surf with Alex.


 The Delgados - Universal Audio - Everybody Come Down

The song plays as Summer and Seth talk about his drawings for the comic, and whether or not they can work together without weirdness.


 M. Craft - Silver and Fire - Sweets

The song plays in the background at the Bait Shop as Alex asks Marissa what exactly it is they are doing.


 Trent Dabbs - Quite Often - The Love Goes

 Reindeer Section - Son of Evil Reindeer - Carwheels

The song plays while Seth sketches Summer in her room for the comic and they have a moment together, an "almost kiss."


 Sia - Colour the Small One - The Bully

The song plays in the background as Summer and Marissa talk about having a "moment" with someone, and whether or not to try something out.


 Radzeel Yamagata - Happenstance - Reason Why

The artist sings the song on camera at the Bait Shop while Marissa walks in and finds Alex. Later Lindsay wakes Ryan up at the hospital and drives him home."


### Episode 12 - The Lonely Hearts Club

 Psepp - Tiger, My Friend - Rear Moch

The song plays in the background as Seth discusses Valentine's day with Ryan, & later as Seth & Summer have an awkward conversation before their trip to San Diego with Zach. The song also plays as Zach tells Seth about his plans for backpacking with Summer in Italy, & later as Seth, Summer, & Zach discuss sleeping arrangements in their hotel.

 Athlete - Tourist - Tourist

The song plays as Ryan shows up on Lindsay's doorstep with a rose for Valentine's day


 Belle - No Idea

Summer comments on the song playing on the radio as she, Seth, & Zach drive to San Diego.


 Trent Dabbs - Quite Often - The Love Goes

The song plays on the radio as Seth & Summer reminisce about their past trip to TJ.




 The Album Leaf - In a Safe Place - The Outer Banks


The song plays as Julie blackmails Marissa into dinner by taking her cell away. The song also plays as Sandy pays for Rebecca's hotel room & later as they muse about the past.

 Pinback - Summer In Abaddon - Non Photo-Blue

The song plays as Alex advises Marissa on how to deal with her mother & they make a date together.

 The Album Leaf - In a Safe Place - Another Day


The song plays as Seth talks to Summer and Zach before leaving San Diego.

 Jazzelicious - Brazil Remixed - Sambossa

The song plays as Marissa & Julie discuss Caleb over dinner.


**Bang Gang - Follow**

The song plays as Seth takes a bus home alone from San Diego, as Zach & Summer talk about their relationship in the hotel room.


 Bell X1 - Music In Mouth - Eve, the Apple of My Eye

The song plays as Marissa & Alex decide to have a Valentine's Day date, as Sandy comes home to Kirsten who is upset, & as Ryan & Seth walk on the pier marvelling at all the happy couples.


### Episode13 - The Test

 Sam Roberts - We Were Born In a Flame - No Sleep


The song plays as Caleb tells Lindsay he'd like to adopt her & as Seth and Zach talk in the student lounge.

 Viva Voce - Heat Can Melt Your Brain - Lesson No. 1

The song plays as Alex & Marissa talk in the Eat Shop.

 Sundayrunners - Sundayrunners - Memories Left At Sea


The song plays as Marissa can't bring herself to tell Summer about Alex.

 Lali Puna - Faking the Books - Faking the Books

The song plays as Marissa meets Alex's friends and feels conflicted.

 Stars - Set Yourself On Fire - Your Ex-Lover Is Dead

The song plays as Zach tells Seth he and Summer are going to be closer to Tuscanry and later as Seth tells Summer he is over her and wishes her well in Italy. Later the song plays as Sandy, Seth, & Ryan are depressed watching a movie together.

 Kings of Convenience - Riot On an Empty Street - Misread

The song plays as Caleb's gathering in Newport.


 Air - Talkie Walkie - Universal Traveler

The song plays as Marissa reveals her secret affair to Summer, & later as Renee tells Lindsay everything.

### Episode14 - The Rainy Day Women

 Blind Melon - Blind Melon - No Rain

The song plays as the show opens on a rainy day in Newport Beach.

 **Bell X1 - Music In Mouth - In Every Sunflower**


The song plays as Kirsten and Sandy have a serious talk as Rebecca calls. Later, the song plays as Sandy meets Rebecca in a cheap hotel to say goodbye and Sandy passes on a kiss. The song later plays as Sandy and Rebecca get in a car accident, and Rebecca flees the scene.

**Louis XIV - Faking The Books (Acoustic)**


The song plays as Alex meets Julie and Marissa tells her mother that she has a girlfriend. The song plays as Marissa tells Alex that she told Julie about their relationship. The song later plays as Seth asks Alex for his job back and finds out about Marissa and Alex. The song later plays as Seth gets Ryan to help move his boat into the pool and Seth tells Ryan about Alex and Marissa.

**Jayhawks- Save It For A Rainy Day**


The song plays as Sandy meets Rebecca at a roadside diner and tries to convince her to stay.

 **Joel Evans - Swing, Lounge, Jazz Vol. 2 - No Easy Way to Say Goodbye**

The song plays as Sandy meets Rebecca at a roadside diner and tries to convince her to stay.

 **Boyz II Men - Boyz II Men. Legacy - The Greatest Hits Collection - End of the Road**


The song plays as Seth pines over Summer and the song plays as Summer sits in her room looking at a picture of Seth on her cell phone. The song plays later as Seth is again pining alone in his room after his efforts to win Summer back fails.

 **Matt Pond PA - Music from the O.C. Mix 4 - Champagne Supernova**


The song plays at the end of the episode as Summer leaves Zach at the airport to reunite with Seth. The song continues as Sandy returns home to Kirsten on the bus, Marissa walks Alex to work and finds Ryan alone on the pier, and as Summer finds Seth in his backyard and kisses him.




**Episode15 - The Mallpisode**

 **Beck - Guero - Girl**

At Ruby's diner, Seth tells Summer about how bummed out Ryan is she suggests a mall trip to cheer everybody up.

 **Murmurs - Blender - Big Talker**


At Alex's apartment, Marissa adjusts to life living with Alex in her apartment.

 **Le Tigre - This Island - TKO**


At Alex's apartment, Marissa is cleaning up when Summer arrives & invites her to the mall.

**Pansy Division - At The Mall**


At the mall, the gang gets a "backstage pass" to the mall department store storage room for a clothes drive.

 **Sani Prekop - Who's Your New Professor - C - F**

At the mall, the gang gets trapped in the department store at night and decide to stay and have a little adventure.

 **Beck - Guero - E-Pro**


Trapped in the mall, the kids play hockey in the department store, as Summer and Marissa discover the cosmetics counter.

 **Beck - Guero - Que' Onda Guero**


In the restaurant bar, Lance blackmails Julie with something from her past.

 **Beck - Guero - Scarecrow**

At the pier arcade, Sandy and Caleb work the claw machine to win a ring for Kirsten.

 **Beck - Guero - Missing**

At the restaurant, Kirsten and Carter talk over dinner and have a little chemistry together.


 **Beck - The Late Great Daniel Johnston. Discovered Covered - True Love Will Find You In the End**

At the end of the episode, Sandy gives Kirsten the toy ring which she later replaces with her real ring she had put away. Elsewhere, Julie is upset at her home, Alex is alone in her apartment, and Ryan and Marissa are hanging out at the diner with Seth and Summer.

## Episode 16- The Blaze of Glory

 **The Futureheads - The Futureheads - Meantime**

The song plays as Seth and Ryan walk across campus thinking about this year vs. last year. Meanwhile Seth decides Marissa & Ryan should get back together. Later, the song plays as Marissa struggles to build the bonfire horse and Ryan shows up to help.

 **Brendan Benson - The Alternative to Love - What I'm Looking For**


The song plays as Kirsten learns her meeting is cancelled, and as Marissa asks Ryan to help her with the bonfire.

 **Pixies - Ooolittle - Debaser**

The song plays on the stereo as Carter dwells in self pity and Kirsten calls him out for not keeping their meeting.

**Feeder - Frequency**

The song plays as Seth accidentally calls Alex about the tent in the mall and Ryan meets Marissa to work on ideas for the bonfire. Later the song plays as Ryan and Marissa light the trojan horse bonfire and everyone looks on.

 **Scorpions - 20th Century Masters - The Millennium Collection. The Best of Scorpions - Rock You Like a Hurricane**

The song plays as Sandy goes to Lance's motel to confront him about exorbitant Julia.


 **Pinback - Summer in Abaddon - AFK**

The song plays as Alex watches Ryan leave her apartment and confronts him. Later the song plays as Ryan looks for Marissa and Alex threatens him to stay away.

 **Army Navy - Army Navy - EP - Snakes of Hawaii**


The song plays as Kirsten leaves a copy of Carter's old idealist magazine Revolution in his

mailbox.


 Joseph Arthur - Our Shadows Will Remain - A Smile That Explodes

The song plays as Alex and Marissa decide that their relationship isn't working and break up amicably.


## Episode 17 - The Brothers Grim

 Arthur Yoria - I'll Be Here Awake - Call Me

As Marissa & Summer are walking through the halls of Harbor High, Marissa gets all girlfriend-y when she hear about Ryan's troubles with his brother Trey, meanwhile Summer spots Zach on a Vespa and thinks he seems way too happy considering she just dumped him at the airport.

 The Kingdom Flying Club - Non-Fiction - Artists Are Boring


Seth starts to feel jealous as Summer fixates on why Zach seems to be so happy without her, so he calls her about Zach's hot Italian girlfriend Francesca - that had promised Zach to keep secret..

 Kasabian - Kesabian - Reason Is Treason


Ryan & Trey attempt to shop without causing too much havoc in Newport Beach, although Trey's attitude about Ryan's new digs is obvious. Fortunately, Marissa shows up and saves the day.

 Kaiser Chiefs - Employment - Saturday Night


Just as Ryan, Trey, & Marissa are leaving the store with some new clothes for Trey, a salesperson demands to look through Trey's bag - all but accusing him of stealing a watch. Trey loses it & completely freaks out, thrashing around & yelling.

 LCD Soundsystem - LCD Soundsystem - Too Much Love


At the Newport Group party at the Cohen's, Ryan runs into Marissa on his way out to look for Trey & she insists on going with him. Caleb tells Julie the adult video situation is all taken care of & not to worry, & Seth doesn't know why Summer is so pissed or what he needs to apologize about.

 Paris Texas - Like You Like An Arsonist - Like You Like An Arsonist


Marissa & Ryan arrive to Chino looking for Trey & find him in a tough neighborhood bar that Ryan used to frequent in his Chino days.

 Justin Catalano - Welcome to Vacationland - Beat Up Blue

Seth and Summer talk about Zach's fake girlfriend in Seth's room, as he finally starts to figure out why Summer could possibly be angry with him.

 Eagles Of Death Metal - Peace Love Death Metal - I Only Want You

Ryan & Marissa finally give up on Trey coming back & are about to leave when a creepy leather-jacketed guy takes a fancy to Marissa and won't leave her alone. A bar fight breaks out, Ryan is jumped by three guys, & Trey comes back in & saves them.

 Havergal - Electricita - New Innocent Tyro Allegory

After their rumble in Chino, Trey decides to come back with Ryan & Marissa to Newport Beach. When they get back to the house the Cohen family dinner happens at last.

## Episode 18 - The Risky Business

 Flunk - Morning Star - Play

in Marissa's room, Summer teases Marissa about moving into the Cohen's temporarily while they hang out before school.

#### Spoon - Gimme Fiction - Sister Jack

In the student lounge, Ryan & Seth talk about Marissa moving in with the Cohen's as Seth animatedly acts out scenarios he envisions for the two of them. Further down the hallway Seth runs into Zach & they talk about donating their comics to the auction.

#### Tangerine Dream - Love On A Real Train

Tray gets roped into helping out at the "Navepale" auction with Sandy & while moving the auction wares he comes across the glass Faberge egg from "Risky Business". Later, as Ryan takes Marissa's silver tea set to the auction store room he notices that the Faberge egg has gone missing & suspects Tray. The song plays at the very end of the episode as Ryan & Marissa's moment gets interrupted by a phone call & she ends up leaving.

#### The Chemical Brothers - Push the Button - Marvo Ging

Ryan & Seth set off to return what Tray has stolen as Marissa & Summer jump up to "assist" Sandy with the auction to stall for time. Later as Summer & Marissa are still stalling, Ryan & Seth steal back the egg from the thugs Tray sold it to & race back to the charity auction house just in time.

#### Spoon - Banquet

In the student lounge, Ryan & Seth talk about Marissa moving in with the Cohen's as Seth animatedly acts out scenarios he envisions for the two of them. Further down the hallway Seth runs into Zach & they talk about donating their comics to the auction.

#### Lou Barlow - Emoh - Legendary

Alone in their rooms, both Ryan & Marissa are having trouble sleeping & inadvertently meet in the kitchen for 6am cereal talk & an "almost" moment. Later, Marissa gives Tray the tea set auction money & then finds Ryan by the pool where they sit closely & talk.

### Episode 19 - The Rager

#### The Obscurities - Stop Dragging Me Down

Marissa tells Summer over coffee in the student lounge how Ryan got mad at her when she suggested throwing a birthday party for Trey.

#### The Church - Starfish - Under the Milky Way

Julie storms into a dive bar to meet Lance & he tells her what exactly happened when Caleb paid him a visit.

#### The Futureheads - The Futureheads - Decent Days and Nights

Ryan, Marissa, Summer & Seth check out Zach talking to Reed, who Summer thinks is just a random hottie, at the party at Caleb's mansion- somehow word has gotten out that there's a rager.

#### Daft Punk - Technologic - Single - Technologic ( Basement Jaxx Kontrol

#### Mix )


As more & more kids keep showing up at Caleb's mansion, some water polo tough guys hassle Seth so Trey steps up to protect him & winds up meeting a hot chick.

#### Whitesnake - Whitesnake - Here I Go Again

Julie & Lance are drinking together at the dive bar reminiscing about younger days & a Whitesnake concert they went to together.

#### LCD Soundsystem - LCD Soundsystem - Daft Punk Is Playing At My House


Seth & Zach argue about Reed, as Summer & Reed finally meet while touching up their make-up in the bathroom. Afterward Summer is totally pissed, confronts Seth about leading her into thinking Reed was a guy, & gets a ride home with Zach & Reed.

 Poison - Poison's Greatest Hits 1986-1996 - Every Rose Has Its Thorn

Julie & Lance slow dance to the song in a bar & Julie concludes that she thinks Caleb is going to divorce her. Lance responds by saying the whole situation is his fault & he'll "take care of Caleb" if she wants him to.


Beat Phreaks - Mi Casa

Marissa stays sober at her own party & then while walking into her bedroom, Marissa & Ryan interrupt a threesome getting busy in her bed at the party.

 Way Out West - Don't Look Now - Melt

Hanging out in her room during the party, Marissa & Ryan almost kiss but then hear a girl scream.


## Episode 20 - The O.C. Confidential

 Audible - Sky Signal - Sound Makes a Circle


Summer complains to Zach about Seth just as he arrives to apologize.

Arkarne - House On Fire


Seth and Zach meet Reed at her place & get notes on their graphic novel. Later Seth, Summer & Zach arrive to Reed's Silverlake party. At the party, Summer gets totally irritated & tells Seth she wants to leave, she ends up getting a ride from Zach.

 Death Cab for Cutie - Transatlanticism - Title and Registration

The band performs the song at The Bait Shop as Summer & Marissa arrive to the concert.

 Death Cab for Cutie - The Photo Album - A Movie Script Ending


At the concert, Marissa & Summer attempt to talk with Jess to get "hooked up" with the parson that was selling drugs at Marissa's party.

 Death Cab for Cutie - Transatlanticism - The Sound of Settling

At the Bait Shop, Ryan tries to talk with Kyle but gets shut down.

The Koreens - How Does It Feel

Trey & Sandy ambush the D.A. on his lunch break, trying to work out a deal.

 Juana Molina - Tres Cosas - Tres Cosas

Kirsten & Carter attend a wine tasting event at a Santa Barbara winery for the magazine.

 Temper Temper - Temper Temper - Trust Me

Outside the party, Trey & Sandy wait in the car for the call.

 Soulwax - Any Minute Now - E Talking

Marissa sneaks Ryan into the water polo party and she seeks out Jess.

 Home Video - No Certain Night or Morning - Superluminal

Sandy & Trey sit outside the party in the car waiting for Ryan to call.

 Bloc Party - Silent Alarm - Positive Tension (

On the beach, Ryan confronts Kyle as the deal goes down.

## Episode 21 - The Return of The Nana

### Survivor - Survivor: Greatest Hits - Eye of the Tiger

Summer works out her aggression on a punching bag while Seth tries to apologize about the Silverlake party fiasco & she suggests having a time out. Later as Summer is working out her inner rage, Zach comes in & invites her to dinner.

### Youth Group - Skeleton Jar - Shadowland

Marissa & Ryan make out in her room & Ryan tells her he has to go to Miami for Spring Break.

### Will Smith - Will Smith: Greatest Hits - Miami

The boys arrive to the Fontainebleu Hotel in Miami.

### Spoon - Gimme Fiction - I Turn My Camera On

The boys walk the strip & check out the Miami night life.

### Efterklang - Tripper - Step Aside

Marissa visits Trey & offers to hang out while Ryan is away, & Jess mocks Trey as he watches her walk to her car. Later Marissa helps Trey get a job at the Balt Shop & they plan a margarita night to celebrate. Later Trey mistakes Marissa's kindness for something else & forcefully tries to kiss Marissa. When she fights him off he gets very scary so she beats him off with a stick & runs away in terror.

### Alan Paul - Another Place and Time - Adios

At the Nana's retirement community Seth arrives to his people...the old folks, and the Nana welcomes everyone to Miami.

### Gorillaz - Demon Days - Kids With Guns

Seth kicks the old folks over with his mad shuffleboard skills & is challenged by Mary Anne. Later Mary Sue asks Seth to help her out with a dance contest if he loses. Finally, Seth tries to back out of the whipped cream contest but Mary Anne will not let it happen.

### T.I. - Bring Em Out - Single - Bring Em Out

T.I. plays on camera for Music Video Nation Spring Break, as Ryan, Seth, & Mary Anne make their way through the crowd before the contest.

### Cham Pain - Get Down

Ryan calls Marissa to check in & she hears the hoobies...

### Chorus of the Royal Opera House, Covent Garden, Luciano Pavarotti & Sir Edward Downes - Luciano Pavarotti - The Best - Rigoletto: "Questa O Quella" (Ballata)

Zach has invited Summer over to his house for dinner while his family is away, & Summer learns about gnocchii in the kitchen with Zach.


### Marc Durst Trio - Night Groove

Sandy goes with the Nana to meet her fiance Bobby. While she steps out "to stink" Sandy takes Bobby to town & threatens to have his background checked unless he backs off.

### Robbers on High Street - Wedding Crashers (Music from and Inspired By the Film) - Love Underground

Ryan fights his way through the crowd at a spring break party and ends up talking to Cody

at the bar.


 Kaiser Chiefs - Employment - Na Na Na Na Naa

Summer sees Seth participating in a Spring Break dance contest involving whipped cream, licking, & a cherry. She immediately begins making out with Zach in response.


## Episode22 - The Showdown

 Shout Out Louds - Very Loud (Bonus Track) - Single - But Then Again No


Seth & Summer admit their transgressions to each other in the student lounge... & Summer says that it shouldn't have to be so hard.

 The Cribs - The New Felias - Hey Scenesters!


Zach attempts to tell Reed that he is quitting the comic - but she quickly reminds him that he signed a contract & they'll sue him if he tries to bail.

 Of Montreal - The Sunlandic Twins - The Parry's Crashing Us


In the student lounge, trashy Jess blocks Ryans path, keeping him from Marissa & then attempts a move on him.

 Soledad Brothers - Voice of Treason - Cage That Tiger


After Seth rambles on for an hour, Reed announces Little Miss Vixen, complete with vinyl-wear & whip, who promptly steals all Atomic County attention.

 Stars - Set Yourself On Fire - The Big Fight

Julie is waiting for Caleb at Arcies for their "let's try & work this out dinner", when she gets blindsided with divorce papers.


 The Rogers Sisters - Three Fingers - Freight Elevator

Total fiasco at the comic book reading - Seth tries to apologize to Summer, Seth & Zach attack each other & roll all around the store fighting, & Summer cracks the whip on them both to make them stop.


 The Album Leaf - In a Safe Place - Twenty Two Fourteen

Kirsten is drinking at a bar, takes off Carter's necklace & decides to go home to Sandy. She calls him & apologizes while she is driving home drunk.

## Episode23 - The O Sea

 Love As Laughter - Laughter's Fifth - Dirty Lives


At the highschool Summer tells Zach & Seth that one of them is taking her to prom, & they have to decide who. Later, Summer tells Seth & Zach to flip a coin or something if they can't figure it out - they decide to wait until prom night to decide. Later, Zach & Seth finally flip the coin.

 Wilco - A Ghost Is Born - Tour EP - Panthers

Ryan finds Marissa at school & basically accuses her of something happening between her & Trey while he was away.

 My Pet Genius - Rae


Ryan finds Trey in a Chico bar, & Trey tells him that his girlfriend Marissa can't hold her liquor, that she came on to him on the beach, & that they did hook up - sorry bro.

 Bratsound - One Day


You first hear this song as Marissa and Summer are getting ready for prom. They are listening




to this CD, which is supposed to be by "Big Kobra", Summer's prom date. It plays for a second time at senior prom as Theresa gets a call from the guy she is "sort of" seeing, but decides to stay with Ryan, and Ryan finds Velchuk making out with another girl.

 Hyper - We Control - Ant Music


Summer & Zach arrive to the prom together & find Marissa standing alone, apparently Ryan called & said he was sick - but Summer doesn't buy it.

 Senza - Cabana Beach Club, Vol. 1 - Cava del Rio


At the restaurant, Seth talks prom & teenage woes with George Lucas instead of discussing the graphic novel. Reed chinks disaster.

 Phoenix - Alphabetical - Love for Granted

Phoenix - Alphabetical - Love for Granted


 The Perishers - Let There Be Morning - Nothing Like You and I

At the prom, Marissa & Summer are both alone in sacalasa-ville when Summer is named prom Queen - with no King in sight.


 Coldplay - X & Y - Fix You

At the prom, Seth rushes to the stage to apologize to Summer... they kiss & make-up, Marissa steps out for air & Ryan finds her just in time to apologize & ask for a dance together, Caleb is visiting poolside & has a heart attack, & Kirsten learns about her dad.


## Episode 24 - The Dearly Beloved

 Gorillaz - Demon Days - El Mañana


Before the funeral, tension between Marissa & Julie finally turns into a warm moment between them.

 José González - Veneer - Crosses


Summer comes to hang out with Seth & console him about his grandfather, but Seth confides that he is even more worried about his mom.

 Imogen Heap - Speak for Yourself - Hide and Seek


The song is playing as a funeral procession of cars arrives for Caleb's funeral, all Newport gathers to pay their respects. Later the song plays at the end of the episode.

 The Dead 60s - The Dead 60s - You're Not the Law

At the Bait Shop, Jess shows up to get Trey to help her with a drug deal she has planned for later that night.

 The Bravery - The Bravery - An Honest Mistake


The gang goes to the Bait Shop to get away from the wake (and Kirsten's drinking), & when they run into Trey Marissa doesn't hide how much she hates him.

 Prodigy - Always Outnumbered, Never Outgunned - Hot Ride

Jess's drug deal with the Garden Grove guys goes down at the Bait Shop, & when they try to screw her over she pulls a gun & creates pandemonium by firing off a round or two inside.

 Ryan Adams & The Cardinals - Cold Roses - Friends

Kirsten & Halley drive back from the day spa together & Halley sees how tense & anxious Kirsten is.

 The Album Leaf - In a Safe Place - Twenty Two Fourteen

Sandy drops Kirsten off at the rehab clinic & they say their goodbyes.

SEASON 2 ON DVD



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#### Episode 1 - The Aftermath

Manishevitz - City Life - Beretta

Marissa and Summer sit poolside at Marissa's place, talking about the strange turn of events and Trey's welfare.

The 88 - Over and Over - Hide Another Mistake

Seth and Summer urge the group to not worry about what will happen and to have some fun. Marissa has an idea.

Jan Broudie - Song For No One

The gang goes sailing on Jimmy's boat and spend the day on the beach together.

Teen Wolf - Way To Go

As Seth and Ryan discuss "Teen Wolf," Sandy breaks the news that there's a warrant for Ryan's arrest.

Bloc Party - Silent Alarm - Blue Light

Ryan looks for Trey in the ICU, but he is gone. He finds him at the bus station and waves goodbye to Trey as the bus pulls away.

#### Episode 2 - The Shape of Things To Come

Death Cab for Cutie - Plans - Soul Meets Body

The gang has breakfast at the diner as Summer plans how they can make their senior year the best ever.

Cobra Verde - Copycat Killers - Get the Party Started

Summer's ideas for the "kick-off Carnival" are a success but as she and Seth walk around she misses Coop.

Franz Ferdinand - Do You Want To - Single - Do You Want To

Summer calls Taylor off and then she and Seth see that Ryan and Marissa show up to the school carnival.

Phantom Planet - The O.C. Mix 5 - California 2005

The gang rides the ferris wheel, enjoying the carnival but then Marissa and Ryan have to take

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### Episode3 - The End of Innocence

 Shout Out Louds - Wish I Was Dead Pt.2 - Single - Wish I Was Dead Pt.2

Ryan, Marissa, Seth and Summer have breakfast together and hope for the best for the new school year.

 Transplants - Gangsters and Thugs - Single - Gangsters and Thugs (Explicit Album Version)


While working on the school theatre project, Seth and Summer plan a romantic interlude for Ryan and Marissa.

 Black Rebel Motorcycle Club - B.R.M.C. - Salvation

Ryan and Marissa get together. Jimmy gets beat up, and Kirsten struggles with her issues

All Sad Girls Are Beautiful - Baby Blue

Kristen comes home, she and Sandy try to work through their problems.

 Matt Pond PA - Winter Songs - In an Aeroplane Over the Sea


Ryan and Marissa walk on the beach thinking about the future, and the whole Cohen family is home together again.

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### Episode4 - The Last Waltz

 Bob Mould - Body of Song - Circles


Marissa enters her new highschool and all the students stare, later Marissa gets harassed by a tough girl in the hall. The song also plays as Ryan considers joining Marissa at the dance.

 M.I.A. - Arular - Fire, Fire


Marissa and her new friends walk into the school dance at Newport Union

Basko - Ain't No Game

Seth and Summer enter the Harbor High dance, and Taylor takes credit for how well it turned out.

 She Wants Revenge - She Wants Revenge - I Don't Want to Fall in Love


Seth calls Ryan from the dance and counsels him not to worry about Marissa.

 Infusion - Six Feet Above Yesterday - Natural

Summer is at the dance when she sees Taylor sneak off into the hallway.

 Röyksopp - The Understanding - Triumphant

Summer calls Seth she has something important to tell him.

 Youth Group - Forever Young (Music From The OC Mix 3) - Single - Forever Young

Marissa and Ryan find a song on the radio to be their song, and they slow dance.

### Episode5 - The Perfect Storm


 Orenca Fink - Invisible Ones - Blind Asylum




Summer and Marissa attempt to share the mirror while getting ready for school in Summer's room.

 Black Rebel Motorcycle Club - Howl - Weight of the World

Ryan sits in a diner trying to figure out his future & Jenny offers a solution.


 Citizens Here and Abroad - Ghosts of Tables and Chairs - Appearances

Sandy & Kirsten try to change Ryan's mind as he packs his things in his room to go work at sea on a fishing boat.


 The Dandy Warhols - Odditorium or Warlords of Mars - Holding Me Up

The gang walks on the beach and talk about Ryan's future.

## Episode 6 - The Swells

 Rogue Wave - Descended Like Vultures - Publish My Love

Sandy and Kristan discuss selling the Newport Group. Seth and Summer make plans for Ryan but get intercepted by Taylor.

 Pennywise - The Fuse - Knocked Down

Marissa walks off with Johnny at Chili's house and Summer calls Seth. Later Summer calls Seth to send Ryan to Chili's house but Taylor outlaws cell phones at the lock-in.

 Ladytron - Witching Hour - Sugar

Ryan asks if he should worry about her & Johnny, and Marissa tells Ryan that she can talk to Johnny about Trey.

 Calla - Collisions - Swagger


Seth calls Ryan from a payphone & asks him to come back. At the party, Marissa & Johnny find his girlfriend in bed with another guy.

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## Episode 7 - The Anger Management

 Rogue Wave - 10.1 - EP - Interruptions


Song plays as Marissa & Summer get ready for school in the morning.

 The Subways - Rock & Roll Queen - Single - Rock & Roll Queen


Marissa, Ryan, Summer & Seth take Johnny to the Bait Shop to cheer him up, and they watch the band play the song.

 Carmen Rizzo - The Lost Art of the Idle Moment - Travel In Time (Featuring Kate Havnevik)

The song plays at the charity benefit thrown by Kirsten, Julie & Charlotte.

 Rithma - Om Lounge - From the Vaults, Vol. 1 - Opium Dreams (From Vol. 4)

The song plays at the charity benefit thrown by Kirsten, Julie & Charlotte.

 The Subways - I Want to Hear What You Have Got to Say - Single - I Want to Hear What You Have Got to Say

The song plays as Marissa and Ryan decompress from the events of night. When Marissa leaves, Ryan hits his punching bag.

## Episode8- The Game Plan

### Nine Black Alps - Everything Is - Unsatisfied

Over breakfast, Ryan, Seth and Summer talk about which colleges they hope to attend and Marissa breaks the news that she doesn't plan to go to college.

### Dios - Los Arboles - EP - Everyday

In the student lounge, Seth wants to go to Brown and Ryan calls Johnny to make an ally to convince Marissa.

### Black Rebel Motorcycle Club - Howl - Open Invitation

The song plays as Marissa tries to fill out her college application but gets discouraged by memories of her past.

### The Talk - The Sinners of Daughters - N.Y.L.A.

The song plays at the beach as Chih talks to Johnny before the surf competition and tells Marissa he can get her a job on the surf tour.

### Bill Frisell & Petra Haden - Petra Haden and Bill Frisell - Yellow

The song plays while Seth tells Sandy he wants to go to Brown, Ryan and Marissa talk about their future, and the gang talks about college over left-overs.

## Episode9- The Disconnect

### The 68 - Kind of Light - Hard to Be You

Ryan, Seth & Marissa give Johnny a ride to his place before school.

### Fine China - The Jaws of Life - My Worst Nightmare

The song plays in the student lounge as Summer reveals to Seth that she really wants to go to Brown.

### Client - City - Come On

Ryan follows Matt into "The Big Easy," a strip club

### Billy Squier - Don't Say No - The Stroke

The song plays as Ryan gets a lap dance at the strip club and Marissa calls him from Johnny's place.

### The Invisible Men - Make It Bounce

Ryan calls Marissa from outside the strip club late at night.

### Nikka Costa - Can'tneverdidnothin' - On and On

Sandy finds Matt in the club and fires him for being irresponsible and screwing up the presentation.


### Shout Out Louds - Howl Howl Gaff Gaff (Domestic Only) - Go Sadness

Summer and Seth write their essays to Brown together. Ryan and Marissa look for each other at their houses and then finally talk on the phone and tell the truth about the past few days to each other.


## Episode10 - The Chrismukkah Bar Mitz-vahkkah

### Tom Petty & The Heartbreakers - A Very Special Christmas, Vol. 2 - Christmas All Over Again

The song plays as the gang looks over Christmas trees. Seth comes up with the idea of a Bar Mitzvah for Ryan.

 Hot Hot Heat - Christmas Day In the Sun - Single - Christmas Day In the Sun (Non-Album Track)

The song plays at the diner as the gang brainstorms a plan to raise money for Johnny's surgery.

 Dionne Warwick (With Elton John, Gladys Knight and Stevie Wonder) - Platinum & Gold Collection: Dionne Warwick - That's What Friends Are For

Seth watches his Bar Mitzvah on video and remembers the good times. Later the song plays as Ryan returns with Johnny to the Bar Mitzvah.

 Infusion - Village People - Disco Gold - Y.M.C.A.

Ryan interrupts Seth watching his Bar Mitzvah video.

APM - Silent Night

Marissa waits for Ryan at the diner, but sees Johnny outside doing some sort of shady transaction.

 The Raveonettes - The Christmas Song - Single - The Christmas Song


Ryan looks for Marissa at the diner but doesn't see her.

APM - God Rest Ye Merry Gentlemen

Marissa and Johnny meet at the diner and decide to start over.

First Com- Silent Night On The Prairie

Julia decorates her trailer and Kristen persuades her to talk with Marissa.

 David Poe - Love Is Red - Doxology

Julia shows up to Summer's house looking for Marissa, and Dr. Roberts and Julia swap secrets over a drink.


APM - Dreidel Dreidel Dreidel

Johnny excuses himself from the Newport Country Club and Marissa follows him.


Silent Night

Ryan stops Johnny from pulling a gun on the convenience store clerk.

## Episode 11 - The Safe Harbor

 Phantom Planet - Our House - Single - Our House

This song plays at the Bait Shop where the "Free Marissa" plan is born.

 Gang of Four - Return the Gift - I Love a Man In Uniform

Summer comes up with a grassroots "Free Marissa" campaign, while Ryan goes to ask Dr. Kim for help.

 Francine - 28 Plastic Blue Versions of Endings Without You... - Albany Brownout

This song plays as Summer and Seth prod Taylor into helping Marissa.

Magnet - Dancing In The Moonlight

Marissa goes to the Diner to tell the gang to put the kibosh on "Free Marissa". She wants to

stay in Public School.


 Rogue Wave - Descended Like Vultures - California

This song plays as Ryan thanks Johnny on the beach, and leads into the 2006 class photo being taken, with Marissa.

## Episode12 - The Sister Act

N.A.


## Episode13 - The Pot Stirrer

 Electric President - Electric President - Insomnia


This song first comes on while Seth and Ryan talk in the Cohen's kitchen about Seth's college options. A little while later it plays as Kaitlin and Johnny are walking and talking on the pier, and finally it is played at the very end of the episode, as each character is left all alone, and Seth lights up.

Martina Topley Bird - I Only Have Eyes For You

You hear this song as Julie Cooper and Dr. Roberts secretly meet at a bar.

 Diefenbach - Set & Drift - Favourite Friend

This song plays at a club where Marissa runs into her sister and Johnny together.

 José González - Veneer - Stay in the Shade

Kaitlin's birthday party is being set up at Dr. Roberts's house. Marissa helps set up while Kaitlin swims, and flirts with Johnny.

Howling Belis- Low Happening

This song plays as Kaitlin's party starts hoppin', Ryan and Summer arrive, and Ryan tells Marissa about Kaitlin.


 The Tao of Groove - Fresh Goods - Brand New Delhi

At Marc Ramsey's apartment, this song plays as Bill and Sandy work out a deal for the hospital.


## Episode14 - The Cliffhanger

 M. Craft - Silver and Fire - Love Knows How to Fight


This song plays while Ryan and Marissa talk about Seth's pot problem in the student lounge, and leads into Kaitlin's surf lesson with Johnny.

 Rock Kills Kid - Rock Kills Kid - EP - Hide Away

This song plays as Chili tells Johnny he needs to confront Marissa.

 James Blunt - Back to Bedlam - Fall At Your Feet (Acoustic)

This song first plays as Johnny confesses his love to Marissa on the pier. It is heard again as a drunken Johnny re-reads the letter from Marissa, and throws it in the fire, while at the beach with Kaitlin. It plays one last time as Ryan and Marissa come to rescue Johnny, and Johnny falls.

 Senza - Cabana Beach Club, Vol. 1 - Cava del Rio


At Alford's, you hear this song as Julie spies on Dr. Roberts and Laura Cross.

 Black Flag - Everything Went Black - Wasted




As Seth smokes pot in his room, he is listening to this song, only to be surprised by Summer.

## Episode 15 - The Heavy Lifting

 **Sufjan Stevens - Greetings from Michigan - The Great Lake State - For the Widows In Paradise, for the Fatherless In Ypsilanti**


This song first plays at Johnny's funeral. It plays again at the end of the episode while Kaitlin drives away from Newport with Justin, and Marissa holds the necklace from Johnny and cries.

 **Electric President - Electric President - Grand Machine No. 12**

President You hear this song at The Bait Shop where Seth and Ryan, and Summer and Marissa are preparing for Valentines Day.


 **Rocky Votolato - Makers - White Daisy Passing**

This song plays at the Valentines Day party when Justin and Kaitlin run into each other, and Seth gives Summer his note of confessions.


 **Sun Kil Moon - Tiny Cities - Neverending Math Equation**

This song plays at the Valentines Day party when Kaitlin tells Julie she is going back to school.


## Episode 16 - The Road Warrior

 **Living Things - Born Born Bom - Single - Born Bom Bom**


This song first plays during the recap of the previous episode. It plays again towards the middle of the episode while Ryan and Sadie are driving on a desert road.

 **Digby Jones - Pina Colada (And Other Early Tunes) - Under the Sea**

This song plays while Seth, Summer and Marissa are hanging out in a hot tub. It plays again when Taylor runs into Dr. Roberts at a Korean BBQ.

 **La Rocca - The Truth - If You Need the Morning**

This song begins during a montage scene at the beach on a sunny day and continues to play when Julie and Marissa talk at Julie's mobile home.

 **Boom Bip & Nina Nastasia - Blue Eyed In the Red Room - The Matter (Of Our Discussion) Featuring Nina Nastasia**


You hear this song when Ryan and Sadie are at a run down motel playing cards.

 **Tom Vek - We Have Sound - C-C (You Set the Fire In Me)**

You hear this song when Ryan and Sadie are at a run down motel playing cards.


 **Tom Vek - We Have Sound - I Ain't Saying My Goodbye's**

You hear and see Tom Vek playing this song live at the Bait Shop where Marissa sees Volchok.

 **Youth Group - Forever Young (Music From The OC Mix 5) - Single - Forever Young**

This song plays at the end of the episode while Marissa sits on a lifeguard tower at the beach and talks to Ryan on her phone.

## Episode 17 - The Journey

 **South - Music from The O.C.: Mix 1 - Paint the Silence**


Crash My Model Car - In Dreams

## Episode 18 - The Undertow


1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 23 - 24 - 25 - 26 - 27 - 28 - 29 - 30 - 31 - 32 - 33 - 34 - 35 - 36 - 37 - 38 - 39 - 40 - 41 - 42 - 43 - 44 - 45 - 46 - 47 - 48 - 49 - 50 - 51 - 52 - 53 - 54 - 55 - 56 - 57 - 58 - 59 - 60 - 61 - 62 - 63 - 64 - 65 - 66 - 67 - 68 - 69 - 70 - 71 - 72 - 73 - 74 - 75 - 76 - 77 - 78 - 79 - 80 - 81 - 82 - 83 - 84 - 85 - 86 - 87 - 88 - 89 - 90 - 91 - 92 - 93 - 94 - 95 - 96 - 97 - 98 - 99 - 100

LA KULLA - Jubbos 7 Lemy - Alyric Duka


This song plays at the beginning of the episode while Seth, Ryan, Summer and Sadie are hanging out at The Cohan's house playing video games.

 **Betie Serveert - Attagirl - Lover I Don't Have to Love**

You first hear this song while Marissa sits on the lifeguard tower thinking about calling Volchok. It plays for a second time when Marissa calls Summer, but she doesn't answer. Again, it plays when Sadie walks out on her date with Ryan, disappointed that he will be cutting it short to go see Jess. Finally the song plays at the end of the episode where Seth and Summer, Ryan and Sadie, and Marissa and Volchok hook up with each other.

 **We Are Scientists - With Love and Squalor - Inaction**


This song plays while Ryan aggressively works out with a punching bag, and thinks about Trev.

 **The Presets - Girl and the Sea - EP - Girl and the Sea**

You hear this song at the Bait Shop where Summer talks to Marissa about her love life with Seth, or lack thereof.

**Spiderbaby - Don't Pity Me**

This song plays at Jess' Party when things get out of hand. Jess' friend Kim calls Ryan for help, interrupting his date with Sadie.

 **The National Trust - Kings & Queens - It's Just Cruel**

This song plays as Ryan arrives at Jess' house. Jess has locked herself inside of the pool house and won't speak to anyone except Ryan.

**Broomheads Jacket - What If's And Maybe's**

You hear this song when Jim confronts Ryan at Jess' house after he walks in on their embrace. Jim and Ryan get physical and Ryan leaves the party.

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## Episode 19 - The Secrets and Lies

 **Oakenfold featuring Brittany Murphy - Faster Kill Pussycat - Faster Kill Pussycat**

This song plays at the beginning of the Episode at the Bait Shop. Seth and Summer analyze Ryan and Sadie's body language, trying to determine how into each other they are, than they see Volchok and Marissa making out.

**The Surge - Spin Me Around**

In the Harbor Student Lounge, Seth and Summer trade off on an arcade game while discussing if they should tell Ryan about Marissa and Volchok. They decide to keep quiet.


 **Victor Mally - Lions and Tigers and Bears - A Night In Vegas**

This song plays as Sadie and Ryan are making out in the poolhouse, and get interrupted by Seth. Seth tells Ryan through the door that Marissa and Volchok have been hooking up, and kills the mood. It plays for a second time after Sadie leaves, and Seth has his tail between his legs.

**< Luther Russell - When You're Gone**

You first hear this song in the Diner as Ryan and Sadie's date is interrupted by Volchok's buddies, seated at the table next to them, loudly talking about Marissa. It plays again when

Ryan comes back and tells Volchok's buddies to tell Volchok to meet him under the pier the next day.


 Casitone for the Painfully Alone - Etiquette - Young Shields

You hear this song at the Bar Shop when Marissa unsuccessfully tries to buy a drink.

 Oceansize - Everyone Into Position - Meredith

This song plays as Ryan gets Sadie to stay, and Marissa takes her first bump.


## Episode 20 - The Day After Tomorrow

 Tally Hall - Marvin's Marvelous Mechanical Museum - Good Day

This song first plays as Seth and Summer try on winter clothes in preparation for attending college at Brown. It continues as Ryan and Sadie make out before talking about college. You hear it again as Ryan sees Seth in the Cohen Kitchen, and they talk about college. Later in the episode the song plays as Seth, Ryan and Summer look in the mail for their college acceptance letters. Finally, you hear it while Seth is on the phone with Brown, trying to find out if his letter of denial was a mistake.

The Scotland Yard Gospel - That's All I Need


This song plays at Volchok's apartment, as he is talking to Marissa on the telephone while she is at school.

 Chris Holmes - Get Yer Yuni-Yuni's Out - China

You first hear this song as Sadie reads Ryan's palm, and they make out. The second time it plays, Seth and Summer are in the Rangerover talking about Sadie and Ryan. Summer gets mad when Seth accuses Ryan of being too young to know what he wants in a relationship, applying it to their own.

Dopo Yume - The Secret Show

In the student lounge, Summer asks Ryan if he's seen Seth, and she finds out that he hasn't invited her yet to the celebratory dinner. Then, Ryan talks to Seth about Sadie, and going away to college.


 True Love - Wings - The Crime

You hear this song at the "Sweatshirt Party" on the beach. Seth tells Summer he isn't going to Brown, and Ryan tells Marissa he is always "there" for her, while Sadie feels left out of the festivities.


Radiohead - Fog (Again) Live Version

This song plays at the end of the episode. A heartbroken Summer rips up her college collage and is consoled by Marissa, Seth and Ryan sit silently in the pool house, defeated.

## Episode 21 - The Dawn Patrol

 George Jones - 16 Biggest Hits: George Jones - A Picture of Me (Without You)


This song plays from the jukebox in a bar in Albuquerque. Ryan and Chloë talk about his mom and then they slow dance.

 Sun Kil Moon - Tiny Cities - Tiny Cities Made of Ashes


You hear this song as Ryan leaves the Diner after inviting his mom to his graduation, and Seth sits in his room, lying in bed, staring at the ceiling.

 The Vines - Vision Valley - Armysound


This song plays as Volchok and his rowdy friends wake Marissa up as she is sleeping at Volchok's pad.

 Rob Zombie - Educated Horses - Foxy, Foxy

The party at Volchok's continues. Marissa notices one of Volchok's friends putting a white substance in a beer he then gives to Heather.

 Wolfmother - Wolfmother - Woman

Again at Volchok's party, this song plays as Marissa saves Heather from getting gang raped in the van.

 Ben Harper - Both Sides of the Gun - Waiting for You

Ryan leaves Albuquerque. Sandy puts some files in a safe. Marissa comes to her mother crying and Taylor tries to cheer up Summer.

## Episode22 - The College Try

 Ms. John Soda - Notes and the Like - Hands


This song plays during a party at Wes' place at Berkeley. Marissa and Wes talk about her relationship with Ryan. Marissa then sees Ryan and talks to him about his tour of the architecture building.

Two Hours Traffic -Leave Me Alone


You hear this song when Ryan calls The Cohens from Berkeley and talks to Kirsten. The song plays in the background at the house party Ryan calls from and can only be heard when Ryan is on screen. This song can be heard up to the point when Kirsten talks to Ryan about Theresa.

Whitey - Wrap It Up

You hear this song when Seth and Summer take a walking tour of the Brown University campus. Seth tries to talk to Summer about their relationship, but Summer is unwilling to hear what Seth has to say for himself.

 Ryan Adams - 29 - Night Birds

You first hear this song play during another party at Wes' house. Wes tells Marissa that he parted too hard during his freshman year causing his grades to suffer, and Marissa tells Wes how her family fell apart and that she got kicked out of school. This song plays for a second time when Marissa is at Volchok's apartment while he is asleep and sees that he rented "The Sound Of Music" DVD. Marissa then climbs into bed to cuddle with Volchok.


 Jonathan Boyle - The Best of Sublime Music, Vol. 2 - Samina Sandwich

This song plays during a dinner event at the Newport Bay Yacht Club that Sandy and Kirsten attend. Dr. R introduces Sandy to some other Doctors while Kirsten and Julia talk.

## Episode23 - The Party Favor

 The Briefs - Steal Yer Heart - Getting Hit On At the Bank

This song plays as Seth and Ryan walk on the pier and talk about prom. Seth is trying to figure out how to ask Summer to be his date, and is also trying to convince Ryan to ask someone. Their conversation is cut short when they see Volchok making out with someone who isn't Marissa.

 Brendtson - Hello, Control - Earthquakes and Shocks

This song plays at the Ciner where Summer thinks she is meeting someone from Brown, and instead it is Seth asking her to prom. Marissa asks Volchok, and Ryan asks Theresa. Summer says "No".

 Someone Still Loves You Boris Yeltsin - Broom - Oregon Girl

You hear this song as Ryan and Marissa talk about their prom dates in the student lounge. Marissa lets Ryan know her and Volchok are still together.

#### bratsound - One Day

You first hear this song as Marissa and Summer are getting ready for prom. They are listening to this CD, which is supposed to be by "Big Korea", Summer's prom date. It plays for a second time at senior prom as Theresa gets a call from the guy who is "sort of" seeing, but decides to stay with Ryan, and Ryan finds Volchok making out with another girl.

#### Syd Matters - Syd Matters - To All of You

You hear this song as Marissa and Summer look at an old photo with Seth and Ryan, then they go to the Cohen's house to take pre-prom photos. Summer leaves Seth's confession napkin on Sandy's desk. The song plays again at the end of the episode as Marissa sits alone drinking on the Pier. Ryan and Theresa talk about the "new Marissa" and the "new Ryan", and then almost kiss.

#### Lady Sovereign - Vertically Challenged - Random

This is the first song that plays at the prom. Anna and Seth try to make Summer jealous, and Summer does the same to them. Summer takes Volchok's flask and proceeds to get drunk. Volchok gets bored and goes to smoke some pot.

#### Embrace - I Can't Come Down

The "slow dance" at the prom. During this song Summer continues drinking, Marissa looks around for Volchok, and Anna tries to convince Seth to continue on with "the plan".

#### Hard-Fi - Stars of CCTV - Gotta Reason

You hear this song at the Dixie Shop prom afterparty. People are getting rowdy. Marissa is hummed out, Seth checks on Summer and Anna convinces him to tell her the truth.

### Episode 24 - The Man of The Year

#### Bloc Party - Silent Alarm - The Pioneers

This song begins the episode as Ryan realizes he beat up Volchok pretty bad. You hear this song again when Volchok blackmails Ryan into being his lookout when he steals a car. Volchok tries to hotwire the car as Ryan yells at him that a patrol car is on its way. Volchok speeds off in the stolen car, and Ryan runs away from the scene.

#### Turing - The Pioneers - EP - The Pioneers

This different version of the previous song first plays as Ryan is driving Volchok to the hospital. It plays for a second time as Volchok is brought into the hospital and Ryan is left to reflect in the parking lot. This song plays again at the end of the episode as Seth is taken away from the Newport Bay Yacht Club in handcuffs by the police.

#### La Rocca - The Truth - Some You Give Away

You hear this song while Seth and Summer make out in Seth's room. Summer interrupts to tell Seth about the letter, but can't bring herself to say it.


#### The Vines - Vision Valley - Spaceship

This song first plays after Seth finds Kirsten drunk and passed out. Seth tucks her into bed and cleans up after her. This song plays for a second time when Kirsten goes into Seth's room to reconcile. Seth is upset with Sandy still, but Kirsten convinces him to attend Sandy's "Man of the Year" ceremony.

#### The Runaways - The Best of the Runaways - Cherry Bomb


You hear this song when Marissa initiates her plan to help Kaitlin out at Knightley School

Marissa strolls across the campus dressed as a student on her way to meet Trevor.


 **Eagles Of Death Metal - Peace Love Death Metal - Flames Go Higher**

This song plays as Marissa dresses Trevor up in a storage closet at Knightley in preparation for her striptease for him. Marissa steals Trevor's pants to get to his keys, leaves him in the closet and locks the door on her way out.


### Episode 25 - The Graduates

 **Chris Holmes - Get Yer Yurn-Yurn's Out - I Don't Care What My Friends Say**


This song first plays at the beginning of the episode when Seth arrives home. Sandy talks to Kersten, trying to figure out if Seth is lying to them, and Ryan tries to convince Seth to tell the truth about burning down the Newport Group offices. It plays again as Marissa tells Ryan she is going to help him get rid of Volchok. The song plays one last time as Ryan's mom says goodbye and leaves the Cohen's house in a cab.

 **Imogen Heap - Goodnight and Go - Single - Speeding Cars**

This song plays during the big graduation scene. Names are called, diplomas are handed out. Taylor gives her big speech.

 **Kelis - Bossy (Featuring Too Short) - Single - Bossy (Featuring Too Short)**

This song first plays as Kaitlin is decorating her new room. Julie comes in and tells her to turn down the bass. It comes on a little later in the scene after Kaitlin bossily proclaims that she will "ruin Harbor".

 **Commuter - Brightly Shining, Dimly Lit - Chapters**

This song plays as Seth, Summer, Marissa and Ryan break into the model home that Ryan once burnt down to swim in the pool, and recall downer memory lane before they go their separate ways.

**Imogen Heap - Hallelujah**

This song plays while Ryan and Marissa are on the road, saying goodbye.

### SEASON 3 ON DVD



SEASON 1	SEASON 2	SEASON 3	SEASON 4	MIX TAPE	O.C. NEWS	SHOP	CONTACT
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Episode 1 - The Avengers

Placebo - Running Up That Hill - Single - Running Up That Hill

You first hear this song while Ryan is in a dirty apartment. He takes a phone call. Sandy goes to where he is and knocks on his door, but Ryan sneaks out. Ryan leaves to meet Julie. The song plays for a second time over a recap of the episode beginning. Julie offers Ryan information and he refuses it.

Jude - Save Me - Single - Save Me

This song plays as Seth leaves a message for Summer, giving her an update about what everyone is up to back home.

Belle & Sebastian - The Life Pursuit (Bonus Tracks) - Song for Sunshine

You hear this song as Summer's friend Che urges her to come and protest against cruelty to Chickens.

Catherine Feeny - Hurricane Glass - Mr Blue (New Version)

This song plays as Summer runs into Seth in Newport, and explains that she came home to help Ryan.

Sam Roberts - Chemical City - The Bootleg Saint

This song plays at the Bar where Ryan works. Summer goes to visit him there, and tries to convince him to go see the Cohen's.

Keane - Under the Iron Sea - A Bad Dream

This song plays as Ryan packs up his belongings and Summer tells Seth she is leaving town early because she forgot about an important protest.

Episode 2 - The Gringos

The Long Winters - Putting the Days to Bed - Fire Island, A.K.

Descemer Bueno - Siete Rayo - Pa'erriba

Plastilina Mosh - Tasty + B Sides - Quiero Mi Pastilla

Banda Jerez - Corazón Ranchero - La Chirrióna

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Manu Chao - Lagrimas de Oro

Band of Horses - The End's Not Near



### Episode3 - The Cold Turkey

Get Cape. Wear Cape. Fly - One More With Feeling

This song plays at the beginning of the episode. Kirsten and Sandy talk about Ryan. Ryan talks on the phone with Julie. Seth leaves a message on Summer's answering machine.

Thom Yorke - The Eraser - Black Swan

You first hear this song as Volchok waits at the beach. It plays for a second time as Ryan talks to Volchok's friends. You hear it for a third time after Ryan talks to Volchok and there is closure.

Alexi Murdoch - Time Without Consequence - All of My Days

This song plays when Julie goes to the Cohen's house and apologizes. She then talks to Ryan about Merissa.

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### Episode4 - The Metamorphosis

Super Furry Animals - Phantom Power - Hello Sunshine

This song plays as Seth picks up Summer at the airport.

Editors - Orange Crush

You hear this song as Ryan works out on the beach and Sandy notices him.

Ranchera All Stars - Ranchera All Stars - De un Mundo Karo

This song plays as Ryan buses tables at work. Taylor sees Ryan and stops in to say, "hello" and to ask for a favor.

Zero 7 - The Garden - The Pageant of the Bizarre

You first hear this song play at the Yacht Club where Taylor and Ryan are seen talking. This song is heard again when Ryan finds Taylor at the Yacht Club some time later.

Ranchera All Stars - Ranchera All Stars - Ella

This song plays at the restaurant where Ryan works. Taylor stops by again to discuss some things.

Lady Sovereign - Love Me or Hate Me - Single - Love Me or Hate Me

This song plays at a club where Julie and her friend Facyn arrive



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 **Chingy featuring Jermaine Dupri - Hoodster - Dem Jeans**


This song plays at the club while Julie dances.

 **Ranchera All Stars - Ranchera All Stars - Pa' Todo el Año**

This song plays where Ryan is working. Taylor stops by and they talk again.

 **Ranchera All Stars - Ranchera All Stars - Siempre Hace Frio**


You hear this song play as Sandy and his friend Spitzzy run into Ryan at work. Sandy and Ryan talk.

 **Chele - 360° - Voodoo**

This song plays at a night club as Kaitlin enters.

 **Ranchera All Stars - Ranchera All Stars - Tu Solo Tu**

This song plays at the restaurant where Sandy and Spitzzy are drinking beers and watching Sports. Kirsten and Sandy talk on the phone.

 **Senza - Cabana Beach Club, Vol. 1 - Cava del Rio**


You hear this song as Ryan enters the Yacht Club to find Taylor.

 **Pogues - Pogue Mahone - Love You 'Till the End**

This song plays as Taylor and Ryan eat a tart. Seth is at the airport, the Cohen's are playing a game and Julie and Kaitlin are eating ice cream.



## Episode 5 - The Sleeping Beauty

 **Chad VanGalen - Skelliconnection - Guöbbish**

This song plays as Ryan sits on a couch and can't sleep. Seth tries to stay up with him, but he falls asleep. It plays for a second time as Ryan is in the poolhouse, unable to sleep. Taylor calls him and says she can help him with his sleeping disorder.

**Goldspot - Floan On**


You hear this song as Julie and Kaitlin practice Tennis with Spencer.

 **Zero 7 - The Garden - Waiting to Die**

At the benefit party, Seth and Kirsten watch Bullie and Julie. Taylor arrives at the party and talks to Ryan. Kaitlin arrives with Spencer.

**Elvis Perkins - While You Were Sleeping**

At the benefit party, you hear this song as Taylor and Ryan talk and dance.

 **Digby Jones - Pine Colada (And Other Early Tunes) - Under the Sex**

A little later, at the benefit party, you hear this song as Taylor overhears Seth and Ryan talking about her.

**Ben Gidsjoy - Need Music**

This song plays at the party. Kaitlin convinces Bullie to invest and Kirstin breaks the good news to Julia.

**Brothers and Sisters - Brothers and Sisters - Without You**

You hear this song as Ryan and Taylor have a moment. Summer and Seth finish talking on the phone. Seth checks on Ryan and finds him sleeping.

**Episode 6 - The Summer Bummer**

**Butch Walker - The Rise and Fall of Butch Walker and the Let's-Go-Out-Tonics! - Hot Girls in Good Moods**

You hear this song four times in a series of fantasies Ryan has.

**Youth Group - Daisychains - Single - Daisychains**

You hear this song as Summer is in her dorm room.

**Clearlake - Good Clean Fun (Nobody's Remix) - Single - Good Clean Fun (Nobody's Remix)**

This song plays as Kaitlin's party is in full swing.

**Dirty Pretty Things - Waterloo to Anywhere - Deadwood**

This song plays as Kaitlin's party is in full swing.

**Digby Jones - Fina Colada (And Other Early Tunes) - Under the Sea**

A little later, at the benefit party, you hear this song as Taylor overhears Seth and Ryan talking about her.

**Jet - Put Your Money Where Your Mouth is - Single - Put Your Money Where Your Mouth Is**

This song plays at Kaitlin's party as Ryan and Seth look for Taylor and Summer. Ryan runs into Roger and they talk about Taylor.

**The Blood Arm - Stay Put**

You first hear this song as Riley concedes to Kaitlin. It plays for a second time as Ryan confronts Taylor about what he talked about with Roger.

**Eberg - Inside Your Head - Single - Inside Your Head (Radio Edit)**

Song plays as Kaitlin surveys her party. Julie talks to Spencer and Pam. Sandy and Kirsten renew their vows. Ryan and Taylor hang out in the closet and Summer introduces Seth to pancakes.

**Episode 7 - The Chrismuk-kuh?**

**Mates of State - The O.C. Mix 6 - Covering Our Tracks - California**

This song plays over the main title sequence.

**Sia - Exit Music (Radiohead Tribute) - Paranoid Android**

You hear this song as Ryan runs into Kaitlin at the airport, and confuses her for Marissa.

**Ashtar Command - The O.C. Mix 6 - Covering Our Tracks - Into Dust**

This song plays at the end of the episode when as Ryan sits on the beach and reads a letter. It continues to play as he wakes up.

## Episode8 - The Earth Girls Are Easy

### John Digweed - Warung Beach - Single - Warung Beach

This song is heard three times throughout the show. The first time is when the Range Rover pulls up to a gas station and Taylor and Summer use the restroom. The song continues as the Range Rover chases a woman dressed as an alien who stole Taylor's purse. It is heard one last time at a warehouse where there appears to be an alien rave party going on.

### Tally Hall - The O.C. Mix 6 - Covering Our Tracks - Smile Like You Mean It

You hear this song as Ryan, Seth, Summer and Taylor head out to Las Vegas for New Years Eve.

### Si Zentner - Ultra-Lounge Volume Fourteen: Bossa Novaville - Desafinado

You hear this song at the New Years Yacht club party. Julie and Spencer talk about Bullie and Frank.

### Dogzilla - Dogzilla - Single - Dogzilla

The first time you hear this song is at the alien warehouse rave. Summer and Seth are discussing important issues when they are interrupted. Again, at the warehouse you can hear this song when Ryan and Taylor argue. Finally you can hear this song at the end of the episode during a private conversation between Frank and Julie.

### Henry Mancini - Platinum & Gold Collection: Henry Mancini - Something for Cat

This song is heard at the Yacht Club party. Julie talks to Frank while Kaitlin talks to the two Princesses. Kirsten confides in Sandy, and he thinks he recognizes Frank.



Before the  
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Washington, D.C.

**In the Matter of**

**Distribution of the 2004 and 2005  
Cable Royalty Funds**

**Docket No. 2007-3 CRB CD 2004-2005**

**WRITTEN TESTIMONY  
OF  
SETH SALTZMAN**

## **I. INTRODUCTION**

1. My name is Seth Saltzman. I am Senior Vice President of Member Management in the Performing Rights Group of the American Society of Composers, Authors and Publishers (“ASCAP”), a performing rights organization (“PRO”). A PRO is an organization that licenses the non-dramatic public performances of musical works on behalf of its songwriter and composer (collectively “writer”) and music publisher members and affiliates (writer and music publisher members and affiliates, collectively “members”). ASCAP and the other two PROs in the United States, Broadcast Music, Inc. (“BMI”) and SESAC, Inc. (“SESAC”), are collectively the Music Claimants in this proceeding.

2. I submit this statement on behalf of the Music Claimants in order: (1) to provide the Copyright Royalty Judges (the “CRJs”) with background regarding the Music Claimants — who we are, what we do, how we serve the Music Claimants’ members, and how we license users of our music, including the local broadcast television stations (“Local Stations”) that are retransmitted as distant signals by cable systems; and (2) to illustrate the range of ways in which the Local Stations publicly perform the musical works in the repertoires of the Music Claimants across all genres and styles of music — such as blues, classical, country, jazz, pop, rap, reggae, rock-and-roll, and show tunes — and the significance of such music to Local Station programming during the time period at issue in this proceeding, 2004 and 2005.

## **II. BACKGROUND AND QUALIFICATIONS**

3. I have worked at ASCAP since 1984 and have held my current position in the Performing Rights Group since 2004. Generally, the Performing Rights Group focuses on ASCAP’s core businesses of licensing and tracking the performances of our members’

works in all media (including Local Stations), royalty distributions and finance, and the systems that support these activities. In addition, the Performing Rights Group handles International Services. My responsibilities include overseeing and managing all aspects of business affairs, estates and claims, and member services. Part of my responsibility for member services includes issues relating to royalty distributions and ASCAP's systems for royalty distributions.

4. Before my current position, I was Vice President of the Member Management Group within the Performing Rights Group. In that role, I oversaw and managed all aspects of ASCAP member services, including supervising member issues relating to royalty distributions.

5. During my early tenure at ASCAP, I held various positions in ASCAP's Performance Department (now a department within ASCAP's Performing Rights Group), including service as ASCAP's Director of Performances. My responsibilities in that position included supervising the staff of the Performance Analysis Department in analyzing and crediting music used in public performances, including music performed on all domestic television broadcasts, namely broadcasts by television networks, local television stations, public television broadcasts (and retransmissions of those local television broadcasts by cable and satellite carriers) and cable program services, as well as all domestic radio broadcasts by commercial and noncommercial radio stations.

6. My background and training are in music. I graduated from the Berklee College of Music in 1981, with a major in film scoring. In addition to my work at ASCAP, over the years I have acted as a music consultant for films and as a musical director and pianist for dozens of productions by local colleges, high schools and community theater

groups. Based on my music background and my longstanding experience at ASCAP and consequent exposure to the general operations of both BMI and SESAC, I have extensive knowledge about the operation of Music Claimants generally and the various uses of music in broadcast television programming, including on the Local Stations.

7. I have testified before Copyright Arbitration Royalty Panels (“CARPs”) in the past. Specifically, I testified before the CARPs in: (i) the Noncommercial Educational Broadcasting Rate Adjustment Proceeding, Docket No. 96-6 CARP NCBRA, on behalf of ASCAP; and (ii) the Proceeding for Distribution of 1998 and 1999 Cable Royalty Funds, Docket No. 2001-8 CARP CD 98-99, on behalf of the Music Claimants.

### **III. THE MUSIC CLAIMANTS**

8. Music Claimants’ members are writers and music publishers. I understand that the CRJs are familiar with the relationship between writers and music publishers. Briefly, to allow writers both the time and incentive to write, writers have formed creative partnerships with music publishers, who handle many of the commercial aspects of the business. Among their many tasks, music publishers license various rights granted by the copyright laws, promote their writers’ works with record companies and performing artists, and provide career guidance. Some music publishers administer the catalogs of writers who form their own publishing companies.

9. But writers and publishers working together cannot do all that is necessary to ensure that the myriad public performances of their music are properly licensed and that they are fairly compensated for the public performances of their works. To assist in licensing the copyrighted musical works and collecting royalties for such performances, the

music community historically has turned to the PROs in the United States: ASCAP, BMI and SESAC. Similar societies exist today in most developed countries around the world.

10. Together, ASCAP, BMI and SESAC currently represent more than 725,000 writer and publisher members. Music Claimants are also affiliated with over 80 foreign performing rights societies around the world. Music Claimants license the public performing rights in the United States of the musical compositions of hundred of thousands of foreign writers and publishers that are members of, or affiliated with, such foreign societies, and the affiliated foreign societies license the Music Claimants' repertoires in their countries. These reciprocal license agreements ensure that licensees in every country have access to the worldwide catalog of music. Collectively, the Music Claimants are responsible for licensing the public performing rights of roughly 20 million copyrighted musical works from around the world — practically all copyrighted music in existence.

11. ASCAP and BMI operate on a not-for-profit basis. SESAC operates as a private for-profit corporation. All of the royalties collected by ASCAP and BMI for the public performances of music, less expenses and reasonable reserves, are distributed to their respective writer and publisher members.

12. The Music Claimants' vast repertoires include every musical genre — pop, country, jazz, rock, symphonic and concert, reggae, standards, new age, folk, musical theatre and cabaret, Latin, gospel, rap, hip-hop and rhythm & blues — and form the backbone of our nation's rich musical heritage.

13. Music Claimants take pride in the thousands of honors received by their members. These awards include Oscars, Grammys, Tonys, Pulitzers and Emmys. Moreover, the lifetime achievements of many of Music Claimants' illustrious members have been



celebrated by their induction into the Songwriters Hall of Fame, the Rock and Roll Hall of Fame and the Country Music Hall of Fame. The names and stories of our music greats — whether rhythm & blues, jazz, symphonic or other genre — would (and do) fill books. Indeed, every famous writer since the founding of PROs is or was a member of ASCAP, BMI or SESAC. Attached as Appendix A is a summary describing some of ASCAP's great and award winning members.

14. The vast majority of writers represented by the Music Claimants, however, are not famous, do not win awards and earn very modest royalties for the public performances of their works. Thus, the Music Claimants' services provided to our members are critical to their success. Indeed, for many writers, the performing right royalties received from the Music Claimants are their largest single source of income from the exploitation of their copyrights.

#### **IV. MUSIC CLAIMANTS' LICENSING AND DISTRIBUTION**

15. First and foremost, the Music Claimants serve as licensing clearinghouses for (1) their writer and publisher members as licensors and (2) the users of copyrighted music in the Music Claimants' repertoires as licensees. Our licensees are businesses that use music in a wide variety of industries and include: major television networks; local television stations and networks; cable and satellite stations, networks and systems; public television stations and radio stations; commercial and college radio stations; colleges and universities; restaurants and night clubs; concert and dance halls; aerobic and dance studios; theme and amusement parks; health clubs; hotels; conventions and trade shows; shopping centers and malls; airlines; retail stores; and background music services.

16. Millions of non-dramatic public performances of copyrighted music occur each day in the United States.<sup>1</sup> Given the vast number of music users and performances, it would be extremely time-consuming and costly for Music Claimants' members to locate each music user and license these performances by themselves. Instead, the Music Claimants' members grant the Music Claimants the non-exclusive authority to license the non-dramatic performance rights in their copyrighted musical works. Likewise, without the Music Claimants, users of copyrighted music would face an equally daunting task in trying to license individual musical works efficiently.

17. The Music Claimants offer the solution by licensing their repertoires in bulk to users, whether large or small. This license is often referred to as a "blanket license." Each Music Claimant grants all users, regardless of the industry, a blanket license for a fee. The Music Claimants and the local television stations (represented collectively by an industry committee) typically agree to the fee through negotiations, or, as needed and if appropriate, through rate court litigation. (Attached as MC 04-05 Ex. 1 is the Interim Fee Order on Consent dated May 1, 1998, setting the ASCAP Local Television Blanket License Fee applicable to the period January 2004 through November 2004, and attached as MC 04-05 Ex. 2 is the ASCAP Local Television Station Blanket License, setting the fee applicable to the period December 2004 through December 2005.) I understand that Michael O'Neill, BMI Senior Vice President of Licensing, will explain the licensing process in more detail.

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<sup>1</sup> Non-dramatic performances are any performances that occur outside of a staged, theatrical context. "Dramatic" or "dramatico-musical" performances, in contrast, are those one can see on theatrical stages throughout the country, such as operas, musical comedies, and other forms of musical theater. "Dramatico-musical" performances are usually licensed directly from the copyright owners.

18. In addition to their role as licensors of their members' works, the Music Claimants play the critical role of distributing royalties to their members for performances made pursuant to such licenses. To do so, the Music Claimants monitor music performances on, among other media, broadcast and cable television and radio, including performances on Local Stations. Generally, to that end, the Music Claimants strive to obtain a comprehensive picture of all music used in a given year, and how the music is used. To do this, the Music Claimants seek to match two different sources of information: (i) information about the identity of different films and television programs broadcast on each Local Station and network; and (ii) information about the music content of these films and television programs provided to the Music Claimants in the form of music cue sheets, which are generated by the movie and television program producers or provided by the members or users themselves. A copy of a music cue sheet is attached as MC 04-05 Ex. 3.

19. This information provides the basic data needed by the Music Claimants to calculate distributions of royalties to their members. Each Music Claimant follows its own distribution methodology. ASCAP bases its distribution on a "follow the dollar" principle, where the royalties collected from a given industry are paid to members whose music was used by such industry. For example, the money collected from the Local Stations is distributed solely to the members whose music appeared in such Local Station programming. In calculating a given distribution, ASCAP assigns "credits" to a specific performance. In determining the number of credits for each performance, ASCAP weighs, among other factors, how the music is used — namely, whether the music was used as a feature, as a theme or as background. I describe each of these types of uses in more detail below. Other PROs uses other distribution methodologies; for example, BMI relies upon a

rate card in calculating its distributions.

**V. MUSIC CLAIMANTS' OTHER SERVICES**

20. The benefits of membership and affiliation with ASCAP, BMI and SESAC include a variety of special services beyond licensing and distribution. On many levels, the Music Claimants' support systems nurture the creative talents of their respective writers, provide incentives and other assistance to members, offer unique opportunities for members to interact and learn from peers and provide special recognition to deserving writers. Examples of these programs are described below.

21. *Writer Workshops And Showcases:* Each year, ASCAP, BMI and SESAC each conduct workshops in major United States cities in many musical genres. Through these workshops, such as the ASCAP Television and Film Scoring Workshop, aspiring writers have an opportunity to meet with successful writers, music publishers and other leaders in the music community, and receive critiques of their works and practical advice on the music business. Similarly, each Music Claimant annually presents many writer showcases to the industry and the public, featuring some of the best new talent in the country.

22. *Special Awards Programs:* The Music Claimants grant special cash awards to writers whose works are substantially performed in non-surveyed media or venues or have unique prestige value. The Music Claimants also hold awards shows for members, such as the ASCAP Pop Music Awards and the BMI Pop Music Awards.

23. *Special Insurance And Financial Programs:* The Music Claimants have numerous innovative programs for their members and their families. Members have access to a variety of insurance programs for themselves and their families — medical, dental and life insurance, as well as musical instrument insurance, among others. ASCAP and BMI

members also have access to a nationally respected credit union, which offers a range of financial services — from loans and interest-earning checking and savings accounts to direct deposit of royalty checks and retirement plans.

24. *Leadership In The Field Of Copyright:* ASCAP, BMI and SESAC are domestic and international leaders in copyright and performing rights matters. The Music Claimants played an important role in the revision of the Copyright Act in 1976, including the creation of Section 111, and in major copyright legislation passed since then, such as the Digital Millennium Copyright Act of 1998. The Music Claimants regularly appear before Congress and state legislatures, as well as federal agencies such as the Copyright Office, testifying on matters of importance to their members and the copyright community at large. The Music Claimants' chief executives have served on President-appointed Commissions and are active in international rights-licensing organizations.

25. *Education.* Staff at ASCAP, BMI and SESAC help educate the public about copyright and performing rights and act in many leadership roles in trade and professional organizations in the field. For example, their executives serve or have served on the boards of the National Academy of Recording Arts and Sciences, the American Intellectual Property Law Association, The Copyright Society of the United States of America, and the American Bar Association Section on Intellectual Property Law. Finally, the Music Claimants' business staff and lawyers frequently guest lecture at music and law schools, music seminars and other events.

## **VI. THE LOCAL STATIONS' USE OF MUSIC**

26. If you turn on a Local Station at any given time, you will almost always hear music. From sitcom theme songs to feature performances on music talent shows like

*American Idol*. From blockbuster movie soundtrack hits to emotion-building uses on prime-time television drama series. From the professional wrestler's entry-theme as he walks toward the mat to the momentum-building organ at a baseball game. From the whimsical underscore of cartoons to background music that sets the tone for news montages. Local Station programs all use music. And lots of it.

27. Thus, music pervades, enhances and in some cases dominates the programs broadcast by the Local Stations. In particular, music performances in television programming set the overall mood, drive the story-telling, stimulate the viewer's emotions, weave the scenes of a television program or film together or serve as the very focal point of the program or movie.

28. To accomplish these myriad goals, programming aired on Local Stations use music in three primary ways: (a) as *Themes*; (b) as *Features*; and (c) as *Background* or *Underscore*. Below, I describe each type of use and illustrate how various genres of Local Station programming incorporate these uses.

#### A. THEMES

29. The theme music is the signature of the show, identifying it immediately to the viewer. A theme can open or close the show: it serves as a welcome mat and as a fond farewell. Practically every program incorporates a theme. When we first think of themes, we often think of episodic television back through the decades (much of it still airing today), such as *I Love Lucy*, *The Andy Griffith Show*, *Bewitched*, *M\*A\*S\*H*, *Happy Days*, *The Jeffersons*, *Hill Street Blues*, *Cheers*, *Friends*, *The Nanny* and even *The Simpsons*.

30. But syndicated programs other than episodic programs use themes. For example, highly rated game shows, such as *Jeopardy!* and *Wheel of Fortune*, use famous

themes. Cartoons and other children's programming also incorporate recognizable themes. Examples include themes to children's programs, such as *SpongeBob SquarePants*, *The Bugs Bunny Show*, *Scooby-Doo*, *Pokemon*, *Blues Clues* and *Drake and Josh* as well as similar programming on public television stations, such as *Sesame Street*, *Mister Rogers' Neighborhood*, *Arthur*, *Wishbone* and *Dragon Tales*. One of the most famous examples of a theme is Henry Mancini's theme to the *Pink Panther*.

31. Talk shows and other syndicated series airing primarily during the daytime, such as *Oprah*, *The Ellen DeGeneres Show*, *Divorce Court* and *The People's Court*, have famous themes as well. Likewise, daytime and other programs on public television (in addition to children's programs) incorporate memorable themes, such as the popular shows *This Old House*, *Nature*, *MYSTERY!* and *The Antiques Roadshow*. So, too, do news broadcasts and other Local Station-produced programming. Consider, for example, the opening theme to the New York NBC affiliate WNBC's local news, which incorporates the famous 3-note NBC chime.

32. Movies broadcast on Local Stations also have critically important themes. For many movies, particularly movie series, the theme becomes a dominant identifier of the movie. It is difficult to think about *Star Wars*, *Mission Impossible* (its theme, of course, originally from the television series), *Indiana Jones* or *The Godfather* without hearing their memorable themes.

33. Sports programs also use signature themes. For example, regular national sports broadcasts on FOX have prominent themes, such as the themes for Major League Baseball and the National Football League, as do local sports programs such as coverage of the New York Yankees. Moreover, both sports programming and news

programming use their themes throughout their programming as cues, which I discuss below.

## B. FEATURES

34. A feature performance of a musical work is a use that constitutes the primary focus of the audience's attention. The feature performance is the most valuable in calculating credits for ASCAP distribution purposes. In my experience, since 1999, there has been an increase in the number of feature music performances appearing on Local Station programming.

35. Feature uses appear in Local Station programming in numerous ways. For example, a feature may appear during a "musical" movie, such as *Moulin Rouge*, *Chicago* or *The Sound of Music*, where a character sings a song as part of the performance. But a movie need not focus on music as whole to make a "feature use" of music. The movie *Top Gun* — far from a musical — featured a memorable performance of *You've Lost that Loving Feeling*. Another classic example is Dooley Wilson's performance of *As Time Goes By* as the character Sam in *Casablanca*, which performance will always symbolize that movie.

36. Features can also appear during the course of an episodic television program. Examples include when a character or guest star on a show like *One Tree Hill*, *The Gilmore Girls* or *The O.C.* — shows broadcast on Local Stations — sings or performs during the program. Indeed, as Musical Claimants' witness Alexandra Patsavas, a music supervisor for shows such as *The O.C.*, testifies in more detail, over the past five to ten years, programming on Local Stations is increasingly geared towards primetime dramas targeted at a younger, more music-interested demographic, and those shows increasingly use feature performances of music — for example, by showing a popular band play at a local club visited by the characters on the series. Moreover, adult-oriented cartoons appearing on Local



Stations, such as *The Simpsons* and *Family Guy*, frequently feature musical performances, for example, as a biting means to parody the subject matter of a particular episode.

37. Perhaps no other show in television history better epitomizes the power of a feature music performance than FOX's *American Idol*, the musical talent-search show and a ratings juggernaut airing two nights (and sometimes more) a week. FOX began broadcasting *American Idol* in 2002. Its success — founded on a format consisting almost exclusively of feature music performances of multiple music genres — was immediate. I understand that each scheduled night of *American Idol* (Tuesday and Wednesday nights) was among the top-three highest Nielsen-rated shows in the United States, on average, over the 2003-2004 and 2004-2005 television viewing seasons.<sup>2</sup> Indeed, the Tuesday night airing of *American Idol* was the number-one Nielsen-rated show for the 2004-2005 viewing season.

38. The *American Idol* phenomenon has been a major boon to Local Station programming since its debut. Its success even spurred the creation of similar music-focused reality shows on Local Stations, such as FOX's successful reality show *So You Think You Can Dance* (which premiered in 2005), the launch of a live music tour premised on the *American Idol* show and multiple high-selling soundtrack albums. The *American Idol* phenomenon has dramatically increased the use of and interest in Local Station feature music performances.

39. In addition, largely by performing the songs written and published by the Music Claimants' members, numerous multi-platinum recording artists have launched their careers on *American Idol* — including 2005 winner Carrie Underwood, now a Grammy-award winner herself. *American Idol* also served to launch Jennifer Hudson's music and film

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<sup>2</sup> I understand that *CSI* was the third show among the top-three in the average Nielsen ratings.

career in 2004, leading to her break-through role in the 2007 movie *Dreamgirls*, itself a movie filled with feature music performances.

40. Live feature performances are also the foundation of syndicated music-based programs such as *Soul Train*, *Motown Live* and *It's Showtime at the Apollo*, and syndicated music award shows such as the *Soul Train Lady of Soul Awards*.

41. Feature music regularly appears on public television, which is replete with feature music programs, such as *Soundstage*, *Austin City Limits*, *Great Performances*, *Live at Lincoln Center* and *Evening at the Pops*. And, as any public television viewer can attest, numerous times a year, pledge programs engulf the airwaves with highlighted concerts and performances. Examples of concerts airing on public television during pledge periods in 2004 and 2005 include Andre Rieu's *The Flying Dutchman*, *KC and the Sunshine Band Present Get Down Tonight*, the *Cream Reunion Show* and *Michael Bublé: Caught In The Act*.

42. In addition to music-based programs, non-music based programs frequently capture the audience with feature music performances. Examples of these non-music based programs include syndicated talk shows, like *The Ellen DeGeneres Show*, which regularly invites musicians as guests and provides live or taped feature music performances. Likewise, feature music appears on local station-produced programs, such as gospel entertainment program *Singsation* on WGN, or local morning shows such as New York Fox affiliate WNYW's *Good Day New York*, which often highlight feature music performances. Locally-produced telethons also include abundant feature uses of music.

43. Finally, feature songs are found in sports programs, including high-rated national games drawing a large audience. FOX's 2005 Super Bowl XXXIX half-time show featuring Paul McCartney is a prime example.

### C. BACKGROUND AND UNDERScore

44. The final major category of music use is background use — frequently known as the underscore. The underscore comes in many varieties, plays many roles in a program — from moving along the action to setting a serious tone — and is essential to all genres of television programs and movies.

45. Background music may be instrumental music — for example, the music played during the action of *Star Wars*, *Batman*, or *Rocky* or the familiar underscore of the James Bond films. In addition to instrumental underscore, vocal songs serve as background music, integrated into the plot line of a television program or a movie.

46. Whatever the type, background music is critical to setting the emotion of a scene. Consider the impact of music on the drama of such Oscar-winning films as *A Beautiful Mind* or *Life Is Beautiful* or *The Pianist*. Another classic example of the emotional impact of music on a program is the movie *Jaws*: the music accompanying the shark's appearances exists almost as its own character to set the tone of fear associated with an impending shark attack. Indeed, background music often becomes a part of the identity of a memorable film character, such as the association of Darth Vader with portions of John Williams' score in *The Empire Strikes Back*. And in the film *Shrek*, background songs provide the romantic mood as Shrek falls in love with Fiona and the exuberant mood as Shrek becomes the hero. Furthermore, certain acclaimed movie directors, such as Cameron Crowe and Quentin Tarantino, have thrust the popular music with which they grew up into a pivotal role in their films. Notable examples include Tarantino's *Pulp Fiction*, which has music running from nearly start to finish, including during a memorable dance scene, and Crowe's *Almost Famous*, about a teenage boy who followed a rock band on tour in the early 1970s.

47. Background music critically enhances the drama of television programs, as well, including by adding intensity to the action scenes on FOX's *24* or *Prison Break*, or creating the "bar" mood of long-syndicated comedies like *Cheers*. Other television examples of background uses include songs woven into the plots of a comedy series, like *Everybody Hates Chris*, or songs that are integral to a dance routine on *Will & Grace*. Moreover, background songs add drama to emotional scenes on episodic programs, such as *7th Heaven* or *The O.C.* or *The Gilmore Girls* or *House*.

48. In addition, background music is often used to evoke a certain time and place, transporting the viewer in a way that a music-free work could not. Whether it is the rock-and-roll of the 1950s and 1960s in *Happy Days*, the ragtime in *The Sting*, or music that conjures The Old West in films such as *The Good, The Bad and The Ugly*, music sets the stage.

49. Background music is also used as transitional or bridge music between scenes, or leading to and from commercial breaks, to add cohesion between different programming segments. Think of the signature transitions on *24* or on *Seinfeld*. In fact, syndicated programming — from talk shows to game shows — rely on such "cues" (as they are known) to move in and out of commercial breaks. Likewise, sports and news programs rely on cues to move the program from segment to segment, signaling the viewer of a change in the topic or the story or the portion of a sporting event. In these instances, news and sports programs often repeat their theme music as underscore, to strengthen the show's signature.

50. Because of the critical role it plays, background music appears in all types of programming beyond the many varieties described above. It is a staple of children's programming, particularly cartoons on both commercial and public television stations.

Indeed, some cartoons play background music from start to finish, particularly those with no dialogue, such as the *Road Runner*, the *Pink Panther* and *Tom and Jerry*.

51. Public television documentaries also extensively use background music. Examples include regular PBS programming, such as *NOVA* and *American Experience*. In addition, documentary filmmakers presenting critically acclaimed films on PBS, such as Ken Burns, place an extraordinarily high value on music as an integral part of their work. In 2005, PBS first showed *Unforgivable Blackness: The Rise and Fall of Jack Johnson*, a Ken Burns documentary about the African-American boxing champion with music scored (and released as a popular soundtrack) by Wynton Marsalis.

52. Background music is similarly prevalent in locally produced programming and in sports programming. For example, consider all of the music in locally produced parade programs, such as the St. Patrick's Day Parade or the Columbus Day Parade. And news programs use popular songs during various segments, for example during news montages. In sports programming, music plays during the action of a hockey, baseball or basketball game to drive the action. Indeed, many songs would be long forgotten if it were not for their performance during sporting events (such as Gary Glitter's *Rock & Roll Part 2*). Moreover, television broadcasts of sporting events use background music to add excitement to the program. For example, FOX's NFL broadcasts use background music extensively — in pre-game and post-game coverage, when introducing players, during the half-time shows and when reviewing highlights. And can one imagine a figure skating competition without music being performed during the skaters' routines?

\* \* \* \* \*

53. I have included as Music Claimants' MC 04-05 Ex. 4 a DVD and the DVD's play list containing examples of the above-described types of music uses in programs broadcast on Local Stations retransmitted as distant signals by cable systems in 2004 or 2005. The selected examples show how critical music is to the sensory effect and story of the movie or television program, whether the music is a theme, a feature performance or background music. Specifically, among the video clips on the DVD of MC 04-05 Ex. 4 are the following musical performances: Carrie Underwood's feature performance on *American Idol* of the Heart song *Alone*, which aired March 23, 2005 on WNYW; the opening theme song to syndicated situation comedy *The Fresh Prince of Bel-Air*, which aired January 9, 2004 on WPIX; and background music in a scene in the movie *Walk on the Moon*, which aired March 27, 2005 on WGN. ASCAP maintains copies of these broadcasts as part of the ordinary course of its business.

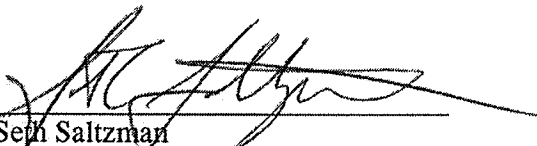
## VII. CONCLUSION

54. In sum, the Music Claimants continually strive to improve their services to the music industry and to music users. But the essence of the Music Claimants' role is to ensure that members are fairly compensated for the public performances of their musical works. Given the valuable — and increasing — role that music plays in the programming aired by Local Stations, I believe that the share of the cable compulsory license royalties sought by the Music Claimants in this proceeding is fair and essential to compensate their members for the public performance of their works in distant signals carried by the Local Stations in 2004 and 2005.

*Declaration*

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Dated: May 27, 2009  
New York, NY

  
Seth Saltzman  
Senior Vice President  
American Society of Composers,  
Authors and Publishers

**APPENDIX A**

**WRITTEN TESTIMONY  
OF  
SETH SALTZMAN**



## APPENDIX A

### **HIGHLIGHTS OF ASCAP'S REPERTORY: MEMBERS, AWARDS AND CATALOG**

ASCAP has been home to some of the greatest names in music from George Gershwin, Cole Porter, Irving Berlin, Duke Ellington, Stephen Sondheim and Leonard Bernstein to Billy Joel, Madonna, Stevie Wonder, Bruce Springsteen and Garth Brooks. ASCAP's members stretch across every genre of music. In addition, below is a sampling of ASCAP's membership in a number of genres.

**POP and ROCK:** Neil Young, James Taylor, Pearl Jam, Steeley Dan, Metallica, Joni Mitchell, Aerosmith, Beck, Tori Amos, Blink 182, Prince, Bonnie Raitt, Beastie Boys, The Cure, Natalie Merchant, Beyoncé, Justin Timberlake, The Killers, The Fray, All American Rejects, Katy Perry, OneRepublic and The Dave Matthews Band.

**R&B and HIP-HOP:** Marvin Gaye, Lauren Hill, Erykah Badu, LL Cool J, The Isley Brothers, Whitney Houston, Puff Daddy, Will Smith, Ice Cube, Dr. Dre, Jermaine Dupri, Usher, Wyclef Jean, 50 Cent, Timbaland, Pharrell Williams, Flo Rida, Ne-Yo, Akon, Lionel Richie, Smokey Robinson, Chaka Khan, Missy Elliott and Ciara.

**COUNTRY:** Alan Jackson, Reba McEntire, George Strait, Lyle Lovett, Kenny Rogers, Billy Gilman, Charley Pride, Trace Adkins, Dixie Chicks, Wynonna, Johnny Cash, Emmylou Harris, Ricky Skaggs, Brad Paisley, Kenny Chesney, Trisha Yearwood and Randy Travis.

**JAZZ:** Louis Armstrong, Cab Calloway, Ella Fitzgerald, Charlie Byrd, Artie Shaw, Billy Taylor, Count Basie, Wynton Marsalis, Quincy Jones, Benny Goodman,

Dizzie Gillespie, Roy Eldridge, Fats Waller, John Zorn, Arturo Sandoval, Benny Carter and Charlie Hunter.

**SYMPHONIC and CONCERT:** Bela Bartok, Morton Gould, Igor Stravinsky, Henry Mancini, Andre Previn, Sergei Rachmaninoff, Richard Rodgers, Peter Schickel, Aaron Copland, John Corigliano, Jerome Kern, Samuel Barber, Marvin Hamlisch, Chen Li, George Walker, Ned Rorem and David Del Tredici.

Among the foreign musical luminaries who license through ASCAP are Paul McCartney, Coldplay, Radiohead, Natasha Bedingfield, Maurice Jarre, Bjork, Andrew Lloyd Webber, Sergei Prokofieff, Pierre Boulez, Tim Price, U2, Carl Orff and Arthur Honegger.

To list the numerous awards, medals and honors received by ASCAP members would fill pages. Examples of recent winners include (in parentheses): GRAMMY AWARDS (Alicia Keys, Coldplay, Robert Plant, Rob Thomas, Jennifer Hudson, Justin Timberlake, U2, Madonna, Foo Fighters, Tony Bennett), COUNTRY MUSIC AWARDS (Garth Brooks, Alan Jackson, Emmylou Harris, Brad Paisley, Kenny Chesney), AMERICAN MUSIC AWARDS (Enrique Iglesias, Luther Vandross, \*N Sync, Lenny Kravitz, Trick Pony, Nelly), BILLBOARD MUSIC AWARDS (John Mellencamp, The Beatles, Jill Scott, Shaggy, Jaime O'Neal, Godsmack, DMX), MTV MUSIC VIDEO AWARDS (No Doubt, Mary J. Blige, Kate Perry, OneRepublic, Justin Timberlake, Maroon 5), SOUL TRAIN AWARDS (Dr. Dre, Usher, Missy Elliott, Alicia Keys, The Isley Brothers, Musiq Soulchild) and DOVE AWARDS (Natalie Grant, Jaci Velasquez, Avalon). ASCAP members have been awarded the esteemed PULITZER PRIZE (Henry Brant, John Corigliano, Duke Ellington, Melinda Wagner, Wynton Marsalis, Jonathan

Larsen, George T. Walker, Morton Gould, Wayne Peterson) and RHYTHM & BLUES FOUNDATION PIONEER AWARD (Louis Jordan, Stevie Wonder, Betty Wright).

Many of the ASCAP music legends have been inducted in music Halls of Fame, including THE ROCK AND ROLL HALL OF FAME (Stevie Wonder, Smokey Robinson, The Doors, Jimi Hendrix Experience, The Grateful Dead, Led Zeppelin, Billy Joel, Nat “King” Cole, Tom Petty, Ramones), SONGWRITER HALL OF FAME (Randy Newman, Ashford & Simpson, Diane Warren, Paul Williams, Stevie Wonder, James Taylor, Bruce Springsteen, Alan & Marilyn Bergman) and COUNTRY MUSIC HALL OF FAME (Jimmy Rodgers, Johnny Cash, Charlie Pride).

In addition, ASCAP’s members include many great film and television composers. Alf Clausen, Mark Snow, Marco Beltrami, Dan Foliart, Bruce Broughton, Rick Marotta, Sean Callery, Jeff Cardoni, John Keane, Walter Murphy, Ron Jones, David Vanacore, Russ Landau, Mark Williams and Jeff Lippencott are just a few of the television writers. Notable ASCAP film composers include Elmer Bernstein, John Debney, Alan Silvestri, Hans Zimmer, James Horner, Howard Shore, James Newton Howard, Mark Isham, John Powell, Michael Giacchino, Elliott Goldenthal, John Powell, Carter Burwell and Michael Giacchino.

Notable film and television awards received in the recent past by ASCAP members include ACADEMY AWARDS (Dario Marianelli (*Atonement*), Jan A. P. Kaczmarek (*Finding Neverland*), Howard Shore (*Fellowship of the Ring; Return of the King*), Randy Newman (*Monsters, Inc.*), Tan Dun (*Crouching Tiger, Hidden Dragon*), John Corigliano (*The Red Violin*), Stephen Schwartz (*The Prince of Egypt*), James Horner (*Titanic*), Gabriel Yared (*The English Patient*) and Andrew Lloyd Webber and Tim Rice

(*Evita*) and EMMY AWARDS (Trevor Morris (*The Tudors*), James Dooley (*Pushing Daisies*), Sean Callery (*24*), Russ Landau (*Pirate Master*), Mark Watters (*Movies Rock*), Bruce Broughton (*Warm Springs*), Adrian Johnston (*Shackleton*), Jay Chattaway (*Star Trek: Voyager*), James Newton Howard (*Gideon's Crossing*), Seth MacFarlane (*Family Guy*), Arturo Sandoval (*For Love or Country: The Arturo Sandoval Story*), John Debney (*The Cape*), Mark Isham (*EZ Streets*) and Alf Clausen (*The Simpsons*)).

Some of the world's most beloved and renowned songs are in ASCAP's repertory, including *Happy Birthday to You* (Mildred K. Hill and Patty Hill), *Moon River* (Henry Mancini and Johnny Mercer), *Over the Rainbow* (Harold Arlen and E.Y. "Yip" Harburg), *Rhapsody in Blue* (George Gershwin), *Unchained Melody* (Alex North and Hy Zaret), and *Santa Claus is Coming to Town* (J. Fred Coots and Haven Gillespie).

# SETTLING PARTIES

SP EXHIBIT 25  
TAB 1 (MC 04-05 EX. 1)

(MUSIC CLAIMANTS)

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

-----X  
UNITED STATES OF AMERICA, :  
 :  
 Plaintiff, :  
 : Civil Action  
 v. : No. 13-95 (WCC)  
 :  
 AMERICAN SOCIETY OF COMPOSERS, :  
 AUTHORS AND PUBLISHERS, et al., :  
 :  
 Defendants. :  
 : INTERIM FEE ORDER  
-----X ON CONSENT  
 :  
 In the Matter of the Application :  
 of POST-NEWSWEEK STATIONS, INC., :  
 et al., :  
 :  
 Applicants, :  
 :  
 For Licenses for Their Television :  
 Broadcasting Stations. :  
-----X

Post-Newsweek Stations, Inc., et al. ("Applicants")  
having applied to the American Society of Composers, Authors and  
Publishers ("ASCAP") for licenses for the right of public perfor-  
mance of the musical compositions in ASCAP's repertory on local  
television stations owned by Applicants pursuant to Section IX(A)  
of the Amended Final Judgment herein; and ASCAP having applied to  
this Court to fix interim license fees in accordance with Section  
IX(B) of the Judgment; it is

ORDERED:

1. ASCAP shall issue interim licenses to the Applicants identified on the List of Applicants annexed to this Order (and to such additional Applicants as may be added to the list hereafter) for the period commencing April 1, 1998 and continuing until further order of this Court. The interim licenses shall be upon the same terms as are set forth in the blanket and per program license agreements in effect between such Applicants and ASCAP prior to April 1, 1998 and annexed as Exhibits "A" and "B" to this Court's Order entered in United States v. ASCAP, In re Application of Buffalo Broadcasting Co., Inc., et al. on August 25, 1995 ("the prior licenses"); as modified by the subsequent letter agreement between ASCAP and the Television Music License Committee, except that:

a. (i) For the period April 1, 1998 through March 31, 1999, industry-wide blanket license Fees for all commercial local television stations licensed under the prior licenses shall be \$98,100,000, each local television station's blanket license fees for such period to be determined in accordance with the provisions of the license fee allocation formula attached as Exhibit "B" to the prior licenses; and (ii) should the interim license period continue beyond March 31, 1999, and if the parties

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cannot agree on interim fees for the period beginning April 1, 1999, either ASCAP or Applicants may apply to this Court to fix interim fees for such period;

b. During the interim license period, any Applicant may elect to change its license status, as provided in Paragraph 12 of the prior ASCAP Local Station Blanket Television License Agreement and Paragraph 14 of the prior ASCAP Local Station Per Program Television License Agreement, up to twice during any twelve-month period beginning April 1, 1998; and

c. For audits conducted by ASCAP for the interim license period pursuant to Paragraph 7 of the prior ASCAP Local Station Per Program Television License Agreement, finance charges shall be computed in accordance with the provisions of Paragraph 7.D.(2) of that Agreement.

2. Entry of this Order shall constitute an offer by ASCAP of interim licenses to each Applicant on the terms and conditions contained in the agreements referred to in Paragraph 1 of this Order. Payment of interim license fees by an Applicant shall constitute an Applicant's acceptance of an interim license. Nothing in this Order shall limit ASCAP's right to terminate an Applicant's interim license, pursuant to Paragraph 7 of the prior ASCAP Local Station Blanket Television License Agreement and



Paragraph 9 of the prior ASCAP Local Station Per Program Television License Agreement for breach or default in any payment, accounting or substantive reporting obligations required by the terms of the prior licenses; and upon any such breach or default, ASCAP may seek dismissal of the Applicant's application by the Court, upon thirty days' notice to the Applicant.

3. Nothing in this Order shall limit either ASCAP's or any Applicant's respective termination rights under the prior licenses.

4. At the conclusion of this proceeding, the interim fees paid hereunder shall be adjusted retroactively to give effect to the final license fees fixed by the Court, or agreed to by the parties, for the licenses issued to the Applicants.

5. This Order shall not be considered or construed to constitute any expression of opinion by the Court with respect to the contentions of the respective parties and shall in no way influence or affect any determination herein, after trial, as to the nature or extent of the licenses to be granted herein or as to what constitutes reasonable license fees.

6. In directing the aforesaid payments, the Court has not weighed the arguments and contentions of any party as to the nature or extent of the licenses to be granted herein or as to

what should constitute reasonable license fees herein. This Order is without prejudice to any position which any party has taken or may seek to take in the future.

7. Any party may apply to this Court, on ten day's notice, to modify or to vacate this Order.

Dated: New York, New York

~~April~~ 1998

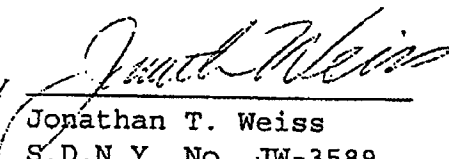
*May 1*

  
United States Magistrate Judge


We consent to the entry  
of the foregoing:

WEIL, GOTSHAL & MANGES LLP

By

  
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Attorneys for ASCAP

FCC Licensee	Call Letters	City	STATE
GRAPEVINE OF AUSTIN LIC SUB LLC	KAAL-TV 6	Austin	MN.
RIVER CITY BROADCASTING L.P.	KABB-TV 29	San Antonio	TX
ABC HOLDING CO. INC.	KABC-TV 7	Los Angeles	CA
SMOS BROADCASTING CORPORATION	KAIT-TV 8	Jonesboro	AR
THE CHRONICLE PUBLISHING CO.	KAKE-TV 10	Wichita	KS
MC ALISTER TELEVISION	KAMC-TV 28	Lubbock	TX
Broadcast Development Corp.	KAME-TV 21	Reno	NV
CANNAN COMMUNICATIONS, INC.	KAMR-TV 4	Amarillo	TX
APPLE VALLEY TELEVISION, INC.	KAPP-TV 35	Yakima	WA
COMBINED COMMUNICATIONS CORP.	KARE-TV 11	Minneapolis	MN.
KARK TV, INC.	KARK-TV 4	Little Rock	AR
THOMAS B. COOKERLY, RECEIVER	KATN-TV 2	Fairbanks	AK
FISHER BROADCASTING INC.	KATU-TV 2	Portland	OR
KATV, LLC	KATV-TV 7	Little Rock	AR
BENEDEK BROADCASTING CORP.	KAUZ-TV 6	Wichita Falls	TX
KAYU-TV PARTNERS LTD.	KAYU-TV 28	Spokane	WA
WEST WIND COMM. LLC	KBAK-TV 29	Bakersfield	CA
UTV OF SAN FRANCISCO, INC.	KBHK-TV 44	San Francisco	CA
RJR COMMUNICATIONS, INC.	KBJR-TV 6	Superior	WI
TEXAS TELECASTING, INCORPORATED	KBMT-TV 12	Beaumont	TX
FORUM PUBLISHING CO.	KBMY-TV 17	Bismarck	ND
Paxson Phoenix License, Inc.	KBPX-TV 13	Flagstaff	AZ
SPARTAN COMMUNICATIONS, INC.	KBSD-TV 6	Ensign	KS
SPARTAN COMMUNICATIONS, INC.	KBSH-TV 7	Hays	KS
SPARTAN COMMUNICATIONS, INC.	KBSL-TV 10	Goodland	KS
BLACKSTAR COMMUNICATIONS, INC.	KBSP-TV 22	Salem	OR
BRAZOS BROADCASTING CO.	KBTX-TV 3	Bryan	TX
CITADEL COMMUNICATIONS CO., LTD.	KCAU-TV 9	Sioux City	IA
HOLSUM, INC.	KCBD-TV 11	Lubbock	TX
CBS, INC.	KCBS-TV 2	Los Angeles	CA
KCCI TELEVISION, INC.	KCCI-TV 8	Des Moines	IA
CHANNEL 6, INC.	KCEN-TV 6	Temple	TX
SON BROADCASTING, INC.	KCHF-TV 11	Santa Fe	NM
YOUNG BROADCASTING OF RAPID CITY, I	KCLO-TV 15	Rapid City	SD
GROUP W/CBS TELEVISION STATIONS	KCNC-TV 4	Denver	CO
KCOP TELEVISION, INC.	KCOP-TV 13	Los Angeles	CA
BENEDEK BROADCASTING CORP.	KCOY-TV 12	Santa Maria	CA
GOCOM Communications, L.L.C.	KCPM-TV 24	Chico	CA
KELLY BROADCASTING CO.	KCPQ-TV 13	Tacoma	WA
KELLY BROADCASTING CO.	KCRA-TV 3	Sacramento	CA
THE CEDAR RAPIDS TELEVISION CO.	KCRG-TV 9	Cedar Rapids	IA
MEREDITH BROADCASTING CO.	KCTV-TV 5	Kansas City	MO
FOX TELEVISION STATIONS, INC.	KDAF-TV 33	Dallas	TX
FOX TELEVISION STATIONS, INC.	KDFW-TV 4	Dallas	TX

FCC Licensee	Call Letters	City	STATE
WESTINGHOUSE ELECTRIC CORP.	KDKA-TV 2	Pittsburgh	PA
YOUNG BROADCASTING OF SIOUX FALLS,	KDLO-TV 3	Florence	SD
RIVER CITY TELEVISION PARTNERS,	KDNL-TV 30	St. Louis	MO
GOLDEN ORANGE	KDOC-TV 56	Anaheim	CA
AMERICAN TV INC.	KDOR-TV 17	Bartlesville	OK
SODA MOUNTAIN BROADCASTING, INC.	KDRV-TV 12	Medford	OR
KDSM-TV, INC.	KDSM-TV 17	Des Moines	IA
CHANNEL 13 OF ST. LOUIS	KDTX-TV 58	Dallas	TX
DUHAMEL BROADCASTING ENTERPRISES	KDUH-TV 4	Scottsbluff	NE
FOX TELEVISION STATIONS, INC.	KDVR-TV 31	Denver	CO
EAGLE COMMUNICATIONS, INC.	KECI-TV 13	Missoula	MT
YOUNG BROADCASTING OF SIOUX FALLS,	KELO-TV 11	Sioux Falls	SD
RETLAW BROADCASTING LLC	KEPR-TV 19	Pasco	WA
MC GRAW HILL BROADCASTING	KERO-TV 23	Bakersfield	CA
MAX TELEVISION OF TYLER L.P.	KETK-TV 56	Jacksonville	TX
KEVN, INC.	KEVN-TV 7	Rapid City	SD
UNITED COMMUNICATIONS CORP.	KEYC-TV 12	Mankato	MN
KBVO, INC.	KEYE-TV 42	Austin	TX
CHAMBERS COMMUNICATIONS CORP.	KEZI-TV 9	Eugene	OR
Montecito Broadcasting Corp.	KFBT-TV 33	Las Vegas	NV
PANHANDLE TELECASTING CO.,	KFDA-TV 10	Amarillo	TX
FREEDOM-TV SUB INC.	KFDM-TV 6	Beaumont	TX
Nexstar Brdcstg Wichita Falls LP	KFDX-TV 3	Wichita Falls	TX
MIDWEST TELEVISION INC.	KFMB-TV 8	San Diego	CA
WXOMEDIA CORP.	KFNB-TV 20	Casper	WY
NEW YORK TIMES BROADCASTING	KFOR-TV 4	Oklahoma City	OK
KCIK-TV, INC.	KFOX-TV 14	El Paso	TX
THE TIMES SOUTHWEST	KFSM-TV 5	Fort Smith	AR
CAPITAL CITIES/ABC, INC.	KFSN-TV 30	Fresno	CA
Raycom - US, Inc.	KFVS-TV 12	Cape Girardeau	MO
HIC Broadcast, Inc.	KFWD-TV 52	Fort Worth	TX
DUBUQUE T.V. LIMITED PARTNERSHIP	KFXB-TV 40	Dubuque	IA
WARWICK COMMUNICATIONS, INC.	KFXK-TV 51	Longview	TX
MEYER BROADCASTING COMPANY	KFYR-TV 5	Bismarck	ND
GUY GANNETT PUBLISHING CO.	KGAN-TV 2	Cedar Rapids	IA
DRAPER COMMUNICATIONS, INC.	KGBT-TV 4	Harlingen	TX
KPWR-TV, INC.	KGET-TV 17	Bakersfield	CA
LEE ENTERPRISES, INC.	KGMB-TV 9	Honolulu	HI
CENTURY DEVELOPMENT CORPORATION	KGNS-TV 8	Laredo	TX
KGO TELEVISION, INC.	KGO-TV 7	San Francisco	CA
LEE ENTERPRISES, INC.	KGUN-TV 9	Tucson	AZ
BENEDEK BROADCASTING CORP.	KGWC-TV 14	Casper	WY
BENEDEK BROADCASTING CORP.	KGWN-TV 5	Cheyenne	WY
KHBS Hearst-Argyle Television Inc.	KHBS-TV 40	Fort Smith	AR

FCC Licensee	Call Letters	City	STATE
PAPPAS TELECASTING OF CENTRAL NE. SUNBELT TV, INC.	KHGI-TV 13	Kearney	NE
KHBS Hearst-Argyle Television Inc.	KHIZ-TV 64	Barstow	CA
FREDERICK KING COMMUNICATIONS INC.	KHOG-TV 29	Fayetteville	AR
HOUSTON TELEVISION, INC.	KHON-TV 2	Honolulu	HI
KHQ, INCORPORATED	KHOU-TV 11	Houston	TX
GOLDEN EMPIRE BROADCASTING CO. KICU, INC.	KHQ-TV 6	Spokane	WA
RETLAW ENTERPRISES, INC.	KHSL-TV 12	Chico	CA
POLLACK/BELZ COMMUNICATIONS	KICU-TV 36	San Jose	CA
THE POST COMPANY	KIDK-TV 3	Idaho Falls	ID
SOUTH TEXAS TELECASTING	KIEM-TV 3	Eureka	CA
RETLAW BROADCASTING LLC	KIFI-TV 8	Idaho Falls	ID
THOMAS B. COOKERLY, RECEIVER	KIII-TV 3	Corpus Christi	TX
SPARTAN BROADCASTING COMPANY	KIMA-TV 29	Yakima	WA
KING BROADCASTING CO.	KIMO-TV 13	Anchorage	AK
HARRON-SMITH TELEVISION	KIMT-TV 3	Mason City	IA
THIRD AVENUE TELEVISION INC.	KING-TV 5	Seattle	WA
KITV Hearst-Argyle Television Inc.	KION-TV 46	Monterey	CA
SAWTOOTH COMMUNICATIONS, INC.	KIRO-TV 7	Seattle	WA
PIKES PEAK BROADCASTING COMPANY	KITV-TV 4	Honolulu	HI
RETLAW BROADCASTING LLC	KIVI-TV 6	Nampa	ID
SCRIPPS-HOWARD BROADCASTING CO.	KJCT-TV 8	Grand Junction	CO
THOMAS B. COOKERLY, RECEIVER	KJEO-TV 47	Fresno	CA
ACKERLEY COMMUNICATIONS GROUP, KLAS, INC., A NEVADA CORP.	KJRH-TV 2	Tulsa	OK
POLLACK/BELZ COMMUNICATIONS	KJUD-TV 8	Juneau	AK
Entravision Holdings, LLC	KKTV-TV 11	Colo. Springs	CO
RETLAW BROADCASTING LLC	KLAS-TV 8	Las Vegas	NV
LAKELAND GROUP TELEVISION, INC.	KLAX-TV 31	Alexandria	LA
CLEAR CHANNEL TELEVISION, INC.	KLDO-TV 27	Laredo	TX
JEWELL TELEVISION CORPORATION	KLEW-TV 3	Lewiston	ID
PARAMOUNT STATIONS GROUP INC	KLGT-TV 23	Minneapolis	MN
LEE ENTERPRISES, INC.	KLRT-TV 16	Little Rock	AR
KMBC HEARST-ARGYLE TELEVISION, INC.	KLST-TV 8	San Angelo	TX
MAINE RADIO & TELEVISION CO.	KMAX-TV 31	Sacramento	CA
MC GRAW HILL BROADCASTING	KMAZ-TV 48	Las Cruces	NM
GOCOM Communications, L.L.C.	KMBC-TV 9	Kansas City	MO
DESERT EMPIRE TELEVISION CORP.	KMEG-TV 14	Sioux City	IA
BENEDEK BROADCASTING CORP.	KMGH-TV 7	Denver	CO
PRIME TIME CHRISTIAN	KMID-TV 2	Midland	TX
Multimedia, Inc.	KMIR-TV 36	Palm Springs	CA
UNITED TELEVISION, INC.	KMIZ-TV 17	Columbia	MO
MEYER BROADCASTING COMPANY	KMLM-TV 42	Odessa	TX
	KMOH-TV 6	Kingman	AZ
	KMOL-TV 4	San Antonio	TX
	KMOT-TV 10	Minot	ND

FCC Licensee	Call Letters	City	STATE
KMOV-TV, INC.	KMOV-TV 4	St. Louis	MO
PAPPAS TELECASTING INCORPORATED	KMPH-TV 58	Visalia	CA
UNITED TELEVISION, INC.	KMSP-TV 9	Minneapolis	MN
VIRG License Co., LLC	KMTR-TV 16	Eugene	OR
LOE ENTERPRISES, INC.	KMTV-TV 3	Omaha	NE
Catamount Broadcasting Twin Falls L	KMVT-TV 11	Twin Falls	ID
NORTHWEST BROADCASTING INC.	KMVU-TV 26	Medford	OR
ALL AMERICAN TV INC.	KNAT-TV 23	Albuquerque	NM
Multimedia, Inc.	KNAZ-TV 2	Flagstaff	AZ
NBC SUBSIDIARY (KNBC-TV), INC.	KNBC-TV 4	Los Angeles	CA
KNDO/KNDU LICENSE SUBSIDIARY, INC.	KNDO-TV 23	Yakima	WA
KNDO/KNDU LICENSE SUBSIDIARY, INC.	KNDU-TV 25	Richland	WA
NEW LIFE EVANGELISTIC CENTER,	KNLJ-TV 25	Jefferson City	MO
NOE ENTERPRISES, INC.	KNOE-TV 8	Monroe	LA
GREATER NEBRASKA TELEVISION INC	KNOP-TV 2	North Platte	NE
NATIONAL BROADCASTING CO.	KNSD-TV 39	San Diego	CA
KNTV INC.	KNTV-TV 11	San Jose	CA
54 BROADCASTING INC.	KNVA-TV 54	Austin	TX
SCRIPPS-HOWARD BROADCASTING CO.	KNXV-TV 15	Phoenix	AZ
SANGRE DE CRISTO	KOAA-TV 5	Pueblo	CO
SAGA QUAD STATES COMMUNICATIONS,	KOAM-TV 7	Pittsburg	KS
PULITZER BROADCASTING COMPANY	KOAT-TV 7	Albuquerque	NM
CALIFORNIA-OREGON	KOBI-TV 5	Medford	OR
SCI, Inc.	KOCB-TV 34	Oklahoma City	OK
Ohio-Oklahoma Hearst-Argyle Televis	KOCO-TV 5	Oklahoma City	OK
GRAPEVINE OF JOPLIN LICENSE SUB LLC	KODE-TV 12	Joplin	MO
PACIFIC FM INC.	KOFY-TV 20	San Francisco	CA
KOIN-TV, INC.	KOIN-TV 6	Portland	OR
SULLIVAN BROADCASTING LICENSE HOLDE	KOKH-TV 25	Oklahoma City	OK
CLEAR CHANNEL TELEVISION, INC.	KOKI-TV 23	Tulsa	OK
ELCOM OF ARIZONA, INC.	KOLD-TV 13	Tucson	AZ
KOLN/KGIN License Inc	KOLN-TV 10	Lincoln	NE
STEPHENS GROUP, INC.	KOLO-TV 8	Reno	NV
INDEPENDENT BROADCASTING CO.	KOLR-TV 10	Springfield	MO
FISHER BROADCASTING INC.	KOMO-TV 4	Seattle	WA
BENEDEK LICENSE CORP.	KOSA-TV 7	Odessa	TX
DUHAMEL BROADCASTING ENTERPRISES	KOTA-TV 3	Rapid City	SD
CALIFORNIA-OREGON	KOTI-TV 2	Klamath Falls	OR
KOTV, INC.	KOTV-TV 6	Tulsa	OK
SINCLAIR BROADCAST GROUP, INC	KOVR-TV 13	Stockton	CA
KPAX COMMUNICATIONS, INC.	KPAX-TV 8	Missoula	MT
TRINITY BROADCASTING NETWORK, INC	KPAZ-TV 21	Phoenix	AZ
MEREDITH CORPORATION	KPHO-TV 5	Phoenix	AZ
SOUTH WEST OREGON TV BROADCASTING	KPIC-TV 4	Roseburg	OR

FCC Licensee	Call Letters	City	STATE
GROUP W TELEVISION, INC.	KPIX-TV 5	San Francisco	CA
COSMOS BROADCASTING CORPORATION	KPLC-TV 7	Lake Charles	LA
YOUNG BROADCASTING OF SIOUX FALLS,	KPLO-TV 6	Reliance	SD
PLAR COMMUNICATIONS INC.	KPLR-TV 11	St. Louis	MO
KPNX BROADCASTING COMPANY	KPNX-TV 12	Mesa	AZ
J.D.G. TELEVISION, INC.	KPOM-TV 24	Fort Smith	AR
PAPPAS TELECASTING	KPTM-TV 42	Omaha	NE
OREGON TELEVISION, INC.	KPTV-TV 12	Portland	OR
Oregon Trail Broadcasting	KPVI-TV 6	Pocatello	ID
PAXSON COMMUNICATIONS OF	KPXB-TV 49	Conroe	TX
PAXSON KANSAS CITY LICENSE INC.	KPXE-TV 50	Kansas City	KS
Paxson Minneapolis License, Inc.	KPXM-TV 41	Elk River	MN
PAXSON COMMUNICATIONS OF LOS	KPXN-TV 30	San Bernardino	CA
CHRONICLE PUBLISHING CO.	KQCA-TV 58	Stockton	CA
MEYER BROADCASTING COMPANY	KQCD-TV 7	Dickinson	ND
ABILENE RADIO AND TELEVISION CO.	KRBC-TV 9	Abilene	TX
PIKES PEAK BROADCASTING COMPANY	KRDO-TV 13	Colo. Springs	CO
KING BROADCASTING CO.	KREM-TV 2	Spokane	WA
PAPPAS STATIONS PARTNERSHIP	KREN-TV 27	Reno	NV
W. RUSSELL WITHERS, JR.	KREX-TV 5	Grand Junction	CO
MOBILE VIDEO TAPES, INC.	KRGV-TV 5	Weslaco	TX
GULF COAST BROADCASTING COMPANY	KRIS-TV 6	Corpus Christi	TX
FOX TELEVISION STATIONS, INC.	KRIV-TV 26	Houston	TX
THE CHRONICLE PUBLISHING CO.	KRON-TV 4	San Francisco	CA
JOHN E. FIELD	KROZ-TV 36	Roseburg	OR
PRIME TIME CHRISTIAN	KRPV-TV 27	Roswell	NM
NEW MEXICO BROADCASTING COMPANY	KRQE-TV 13	Albuquerque	NM
SINCLAIR BROADCAST GROUP, INC	KRRT-TV 35	Kerrville	TX
KRTV COMMUNICATIONS, INC.	KRTV-TV 3	Great Falls	MT
CLEAR CHANNEL TELEVISION, INC.	KSAS-TV 24	Wichita	KS
POST-NEWSWEEK STATIONS,	KSAT-TV 12	San Antonio	TX
KSAZ LICENSE INC.	KSAZ-TV 10	Phoenix	AZ
LOCKE SUPPLY CO.	KSBI-TV 52	Oklahoma City	OK
SunRise Broadcasting Corp.	KSBW-TV 8	Salinas	CA
MULTIMEDIA KSDK, INC.	KSDK-TV 5	St. Louis	MO
KSEE LICENSE, INC.	KSEE-TV 24	Fresno	CA
ELCOM OF SOUTH DAKOTA, INC.	KSFY-TV 13	Sioux Falls	SD
SCRIPPS-HOWARD BROADCASTING CO.	KSHB-TV 41	Kansas City	MO
ELCOM OF LOUISIANA, INC.	KSLA-TV 12	Shreveport	LA
BONNEVILLE HOLDING CO.	KSL-TV 5	Salt Lake City	UT
SINCLAIR COMMUNICATIONS, INC.	KSMO-TV 62	Kansas City	MO
WICHITA LICENSE SUBSIDIARY CORP.	KSNC-TV 2	Great Bend	KS
Nexstar Broadcasting Of Joplin LP	KSNF-TV 16	Joplin	MO
WICHITA LICENSE SUBSIDIARY CORP.	KSNG-TV 11	Garden City	KS

FCC Licensee	Call Letters	City	STATE
WICHITA LICENSE SUBSIDIARY CORP.	KSNK-TV 8	McCook	NE
WICHITA LICENSE SUBSIDIARY CORP.	KSNW-TV 3	Wichita	KS
GOCOM Communications, L.L.C.	KSPR-TV 33	Springfield	MO
BBARD BROADCASTING INC.	KSTP-TV 5	St. Paul	MN
FOX TELEVISION STATIONS, INC.	KSTU-TV 13	Salt Lake City	UT
Viacom Broadcasting Of Seattle Inc.	KSTW-TV 11	Seattle-Tacoma	WA
GTBC License Subsidiary-KSVI Inc.	KSVI-TV 6	Billings	MT
KTTY INC.	KSWB-TV 69	San Diego	CA
KSWO TELEVISION COMPANY, INC.	KSWO-TV 7	Lawton	OK
Eclipse Media, LLC DbA KSWT-TV	KSWT-TV 13	Yuma	AZ
ALL AMERICAN TV INC.	KTAJ-TV 16	St. Joseph	MO
KTBC ARGYLE TELEVISION INC.	KTBC-TV 7	Austin	TX
WEST WIND COMM. LLC	KTBN-TV 40	Santa Ana	CA
WOODS TELEVISION COMPANY, LLC.	KTBO-TV 14	Oklahoma City	OK
KTBS, INC.	KTBS-TV 3	Shreveport	LA
NBC STATIONS MANAGEMENT, INC.	KTBW-TV 20	Tacoma	WA
KTEN TELEVISION LIMITED	KTEN-TV 10	Ada	OK
MGA BROADCASTING CO.	KTFO-TV 41	Tulsa	OK
CONTINENTAL TELEVISION	KTGF-TV 16	Great Falls	MT
ARKANSAS TELEVISION COMPANY	KTHV-TV 11	Little Rock	AR
NORTHEAST KANSAS	KTKA-TV 49	Topeka	KS
KTLA, INC.	KTLA-TV 5	Los Angeles	CA
KTRK TELEVISION, INC.	KTRK-TV 13	Houston	TX
IDAHO INDEPENDENT	KTRV-TV 12	Nampa	ID
LINCOLN BROADCASTING COMPANY	KTSF-TV 26	San Francisco	CA
COMCORP OF EL PASO INC.	KTSM-TV 9	El Paso	TX
KTTC TELEVISION, INC.	KTTC-TV 10	Rochester	MN
MOUNTAIN STATES BROADCASTING	KTTU-TV 18	Tucson	AZ
FOX TELEVISION STATIONS, INC.	KTTV-TV 11	Los Angeles	CA
KTUL, LLC	KTUL-TV 8	Tulsa	OK
CHANNEL 2 BROADCASTING COMPANY	KTUU-TV 2	Anchorage	AK
NORTHERN TELEVISION, INC.	KTVA-TV 11	Anchorage	AK
KING BROADCASTING CO.	KTVB-TV 7	Boise	ID
NORTHERN TELEVISION, INC.	KTVF-TV 11	Fairbanks	AK
Beartooth Communications Company	KTVH-TV 12	Helena	MT
KTVI ARGYLE TELEVISION, INC.	KTVI-TV 2	St. Louis	MO
SARKES TARZIAN, INC.	KTVN-TV 2	Reno	NV
KTVO LICENSE SUBSIDIARY, INC.	KTVO-TV 3	Kirksville	MO
KTVQ COMMUNICATIONS, INC.	KTVQ-TV 2	Billings	MT
GAYLORD BROADCASTING COMPANY	KTVT-TV 11	Fort Worth	TX
KTVU, INC.	KTVU-TV 2	Oakland	CA
Grapevine Of Wyoming License Sub LL	KTWO-TV 2	Casper	WY
PARAMOUNT STATIONS GROUP OF HOUSTON	KTXH-TV 20	Houston	TX
CHANNEL 40 LICENSEE INC.	KTXL-TV 40	Sacramento	CA



FCC Licensee	Call Letters	City	STATE
USTV OF WASHINGTON STATE, INC.	KTZZ-TV 22	Seattle	WA
PACIFIC TELESTATIONS, INC.	KUAM-TV 8	Agana	GU
KULR, L.L.C.	KULR-TV 8	Billings	MT
MEYER BROADCASTING COMPANY	KUMV-TV 8	Williston	ND
SII LAIR BROADCAST GROUP, INC	KUPN-TV 21	Las Vegas	NV
COMBINED COMMUNICATIONS CORP.	KUSA-TV 9	Denver	CO
KUSK, Inc., Debtor-in-Possession	KUSK-TV 7	Prescott	AZ
UNITED TELEVISION, INC.	KUTP-TV 45	Phoenix	AZ
KUTV Associates	KUTV-TV 2	Salt Lake City	UT
RETLAW BROADCASTING LLC	KVAL-TV 13	Eugene	OR
NPG OF TEXAS L.P.	KVIA-TV 7	El Paso	TX
MARSH MEDIA, INC.	KVII-TV 7	Amarillo	TX
MILLER BROADCASTING COMPANY	KVIQ-TV 6	Eureka	CA
KVOA COMMUNICATIONS INC.	KVOA-TV 4	Tucson	AZ
AGAPE CHURCH INC.	KVTN-TV 25	Pine Bluff	AR
KVUE TV INC.	KVUE-TV 24	Austin	TX
KVVU BROADCASTING CORPORATION	KVVU-TV 5	Henderson	NV
THE SPARTAN RADIOCASTING CO.	KWCH-TV 12	Hutchinson	KS
MIDESSA TELEVISION CO.	KWES-TV 9	Odessa	TX
WGN OF COLORADO, INC.	KWGN-TV 2	Denver	CO
Young Bcstg Of Davenport, Inc.	KWQC-TV 6	Davenport	IA
KELLY INTERNATIONAL LICENSING, L.L.	KWTV-TV 9	Oklahoma City	OK
KWTX BROADCASTING COMPANY	KWTV-TV 10	Waco	TX
Raycom - US, Inc.	KWWL-TV 7	Waterloo	IA
LIN TELEVISION OF TEXAS, L.P.	KXAN-TV 36	Austin	TX
Station Venture Operations, LP	KXAS-TV 5	Fort Worth	TX
GLENDIVE BROADCASTING CORP.	KXGN-TV 5	Glendive	MT
NORTH AMERICAN	KXJB-TV 4	Valley City	ND
KXLF COMMUNICATIONS, INC.	KXLF-TV 4	Butte	MT
SPOKANE TELEVISION, INC.	KXLY-TV 4	Spokane	WA
REITEN TELEVISION, INC.	KXMB-TV 12	Bismarck	ND
KXRM LIMITED PARTNERSHIP	KXRM-TV 21	Colo. Springs	CO
FALLS BROADCASTING COMPANY	KXTF-TV 35	Twin Falls	ID
GREAT WESTERN	KXTV-TV 10	Sacramento	CA
Centex Television LP	KXXV-TV 25	Waco	TX
YUMA BROADCASTING, CO.	KYMA-TV 11	Yuma	AZ
PUBLIC INTEREST BROADCAST	KYOU-TV 15	Ottumwa	IA
KY 3, INC.	KYTV-TV 3	Springfield	MO
WESTINGHOUSE ELECTRIC CORP.	KYW-TV 3	Philadelphia	PA
ROCKET CITY TELEVISION, INC.	WAAY-TV 31	Huntsville	AL
AMERICAN BROADCASTING COMPANIES,	WABC-TV 7	New York	NY
MISSISSIPPI TELECASTING CO., INC.	WABG-TV 6	Greenwood	MS
COMMUNITY BROADCASTING SERVICE	WABI-TV 5	Bangor	ME

FCC Licensee

BOSTON UNIVERSITY COMMUNICATIONS  
 ELCOM OF SOUTH CAROLINA, INC.  
 ACE TV, INC.  
 P^YCOM / U.S. , INC.  
 H^ycom - US, Inc.  
 GILLETT COMMUNICATIONS OF  
 WAGM-TV, INC.  
 ALABAMA TELECASTERS INC.  
 SF BROADCASTING OF MOBILE, INC.  
 WALB Licensee Corp.  
 WAND TELEVISION, INC.  
 Indiana Broadcasting, LLC  
 SCHOCKLEY COMMUNICATIONS CORP.  
 PEGASUS BROADCASTING  
 WAPT Hearst-Argyle Television Inc.  
 FTS ATLANTA , INC.  
 Advent V Capital Co., LP  
 COSMOS BROADCASTING CORPORATION  
 WAVY Broadcasting, LLC  
 CLEAR CHANNEL TELEVISION, INC.  
 INDIANA BROADCASTING PARTNERS  
 WBAL HEARST-ARGYLE TELEVISION, INC.  
 JACKSON TELECASTERS, INC.  
 CBS, INC.  
 JASAS, CORP.  
 CHESAPEAKE TELEVISION, INC.  
 Pappas Tele Of Lex,a Cal Ltd Prtnsh  
 MULTIMEDIA WBIR, INC.  
 THUNDER BAY BROADCASTING CORP.  
 BENEDEK BROADCASTING CORP.  
 GATEWAY COMMUNICATIONS, INC.  
 WBNS-TV, INC.  
 WINSTON BROADCASTING NETWORK,  
 DRAPER COMMUNICATIONS, INC.  
 WBOY-TV, INC.  
 FOX TELEVISION STATIONS, INC.  
 LOUISIANA TELEVISION  
 DE SOTO BROADCASTING, INC.  
 JEFFERSON PILOT  
 SPARTAN BROADCASTING COMPANY  
 WESTINGHOUSE ELECTRIC CORP.  
 NBC STATIONS MANAGEMENT, INC.  
 MT. MANSFIELD TELEVISION, INC.  
 MEDIA GENERAL BROADCASTING INC.

Call Letters	City	STATE
WABU-TV 68	Boston	MA
WACH-TV 57	Columbia	SC
WACY-TV 32	Appleton	WI
WAFB-TV 9	Baton Rouge	LA
WAFF-TV 48	Huntsville	AL
WAGA-TV 5	Atlanta	GA
WAGM-TV 8	Presque Isle	ME
WAKA-TV 8	Selma	AL
WALA-TV 10	Mobile	AL
WALB-TV 10	Albany	GA
WAND-TV 17	Decatur	IL
WANE-TV 15	Fort Wayne	IN
WAOW-TV 9	Wausau	WI
WAPA-TV 4	San Juan	PR
WAPT-TV 16	Jackson	MS
WATL-TV 36	Atlanta	GA
WATM-TV 23	Altoona	PA
WAVE-TV 3	Louisville	KY
WAVY-TV 10	Portsmouth	VA
WAWS-TV 30	Jacksonville	FL
WBAK-TV 38	Terre Haute	IN
WBAL-TV 11	Baltimore	MD
WBBJ-TV 7	Jackson	TN
WBBM-TV 2	Chicago	IL
WBDC-TV 50	Washington	DC
WBFF-TV 45	Baltimore	MD
WBFX-TV 20	Lexington	NC
WBIR-TV 10	Knoxville	TN
WBKB-TV 11	Alpena	MI
WBKO-TV 13	Bowling Green	KY
WBNG-TV 12	Binghamton	NY
WBNS-TV 10	Columbus	OH
WBNX-TV 55	Akron	OH
WBOC-TV 16	Salisbury	MD
WBOY-TV 12	Clarksburg	WV
WBRC-TV 6	Birmingham	AL
WBRZ-TV 2	Baton Rouge	LA
WBSV-TV 62	Venice	FL
WBTW-TV 3	Charlotte	NC
WBTW-TV 13	Florence	SC
WBZ-TV 4	Boston	MA
WCAU-TV 10	Philadelphia	PA
WCAX-TV 3	Burlington	VT
WCBD-TV 2	Charleston	SC

FCC Licensee	Call Letters	City	STATE
CBS, INC.	WCBS-TV 2	New York	NY
WCCB-TV, INC.	WCCB-TV 18	Charlotte	NC
CBS, INC.	WCCO-TV 4	Minneapolis	MN
BRM PARTNERS, L.P.	WCGV-TV 24	Milwaukee	WI
SINCLAIR BROADCAST GROUP, INC	WCHS-TV 8	Charleston	WV
MIDWEST TELEVISION INC.	WCIA-TV 3	Champaign	IL
WCIV, LLC	WCIV-TV 4	Charleston	SC
DIVERSIFIED BROADCASTING INC.	WCJB-TV 20	Gainesville	FL
CHRISTIAN TELEVISION CORP.	WCLF-TV 22	Clearwater	FL
TRINITY BROADCASTING OF INDIANA	WCLJ-TV 42	Bloomington	IN
OUTLET BROADCASTING, INC.	WGMH-TV 4	Columbus	OH
JOURNAL BROADCASTING OF	WCNC-TV 36	Charlotte	NC
WOODS COMMUNICATIONS CORPORATION	WCOV-TV 20	Montgomery	AL
SCRIPPS-HOWARD BROADCASTING CO.	WCPO-TV 9	Cincinnati	OH
WCSC, INC.	WCSC-TV 5	Charleston	SC
Pacific & Southern Co., Inc.	WCSH-TV 6	Portland	ME
EASTERN NORTH CAROLINA	WCTI-TV 12	New Bern	NC
WCTV Licensee Corp.	WCTV-TV 6	Tallahassee	FL
WCVB HEARST-ARGYLE TELEVISION, INC.	WCVB-TV 5	Boston	MA
WPTT, INC.	WCWB-TV 22	Pittsburgh	PA
APPALACHIAN BROADCASTING	WCYB-TV 5	Bristol	VA
NEW WORLD COMMUNICATIONS OF	WDAF-TV 4	Kansas City	MO
WDAM LICENSE SUBSIDIARY, INC.	WDAM-TV 7	Laurel	MS
FORUM COMMUNICATIONS CO.	WDAY-TV 6	Fargo	ND
FORUM COMMUNICATIONS CO.	WDAZ-TV 8	Devils Lake	ND
PEGASUS BROADCAST TELEVISION,	WDBD-TV 40	Jackson	MS
WDBJ TELEVISION, INC.	WDBJ-TV 7	Roanoke	VA
TVX OF WASHINGTON, INC.	WDCA-TV 20	Washington	DC
WOODS TELEVISION COMPANY, LLC.	WDFX-TV 34	Ozark	AL
POST-NEWSWEEK STATIONS,	WDIV-TV 4	Detroit	MI
WEST WIND COMM. LLC	WDLI-TV 17	Canton	OH
PEGASUS BROADCAST INC.	WDSI-TV 61	Chattanooga	TN
WDTN HEARST-ARGYLE TELEVISION, INC.	WDTN-TV 2	Dayton	OH
W. RUSSELL WITHERS, JR.	WDTV-TV 5	Weston	WV
WXON, INC.	WDWB-TV 20	Detroit	MI
CHANNEL 39, INC.	WDZL-TV 39	Miami	FL
SINCLAIR BROADCAST GROUP, INC	WEAR-TV 3	Pensacola	FL
WEAU License Inc.	WEAU-TV 13	Eau Claire	WI
ELCOM OF WILMINGTON, INC.	WECT-TV 6	Wilmington	NC
GRANITE BROADCASTING CORP.	WEEK-TV 25	Peoria	IL
GILMORE ENTERPRISES CORP.	WEHT-TV 25	Evansville	IN
WESH TELEVISION, INC.	WESH-TV 2	Daytona Beach	FL
SMITH TELEVISION OF	WETM-TV 18	Elmira	NY
Grant Media Inc.	WEUX-TV 48	Chippewa Falls	WI

FCC Licensee	Call Letters	City	STATE
WEVV INC.	WEVV-TV 44	Evansville	IN
SCRIPPS-HOWARD BROADCASTING CO.	WEWS-TV 5	Cleveland	OH
WFAA TV INC.	WFAA-TV 8	Dallas	TX
SMICLAIR BROADCAST GROUP, INC	WFBC-TV 40	Anderson	SC
GTBC License Subsidiary-WFFT Inc.	WFFT-TV 55	Fort Wayne	IN
CHRISTIAN TEL. OF PALM	WFGC-TV 61	Palm Beach	FL
DECATUR FOURSQUARE BCSTG., INC.	WFHL-TV 23	Decatur	IL
COSMOS BROADCASTING CORPORATION	WFIE-TV 14	Evansville	IN
MEDIA GENERAL BROADCASTING INC.	WFLA-TV 8	Tampa	FL
FOX TELEVISION STATIONS, INC.	WFLD-TV 32	Chicago	IL
MALRITE COMMUNICATIONS GROUP INC.	WFLX-TV 29	West Palm Beach	FL
WFMJ TELEVISION, INC.	WFMJ-TV 21	Youngstown	OH
WFMY TELEVISION CORPORATION	WFMY-TV 2	Greensboro	NC
GROUP W/ CBS, INC.	WFOR-TV 4	Miami	FL
CBS, INC.	WFRV-TV 5	Green Bay	WI
MEREDITH CORPORATION	WFSB-TV 3	Hartford	CT
CLEAR CHANNEL TELEVISION, INC.	WFTC-TV 29	Minneapolis	MN
TAMPA BAY TELEVISION, INC.	WFTS-TV 28	Tampa	FL
WFTV, INC.	WFTV-TV 9	Orlando	FL
WABASH VALLEY BROADCASTING	WFTX-TV 36	Cape Coral	FL
GOCOM Communications, L.L.C.	WFXI-TV 8	Morehead City	NC
CLARION BROADCASTING CORP.	WFXL-TV 31	Albany	GA
BOSTON CELTICS COMMUNICATIONS,	WFXT-TV 25	Boston	MA
PULITZER BROADCASTING COMPANY	WGAL-TV 8	Lancaster	PA
DP & K, Inc.	WGBA-TV 26	Green Bay	WI
GLOBAL COMMUNICATIONS, INC.	WGBC-TV 30	Meridian	MS
QUINCY BROADCASTING COMPANY	WGEM-TV 10	Quincy	IL
GUY GANNETT PUBLISHING CO.	WGGB-TV 40	Springfield	MA
CAROLINA CHRISTIAN	WGGG-TV 16	Greenville	SC
WGHP LICENSE INC.	WGHP-TV 8	High Point	NC
GRK PRODUCTIONS JOINT VENTURE	WGKI-TV 33	Cadillac	MI
Communications Corporation of Ameri	WGMB-TV 44	Baton Rouge	LA
GUY GANNETT PUBLISHING CO.	WGME-TV 13	Portland	ME
GOOD NEWS TELEVISION	WGNM-TV 64	Macon	GA
WGNO INC.	WGNO-TV 26	New Orleans	LA
WGN CONTINENTAL BROADCASTING CO	WGN-TV 9	Chicago	IL
WGNX, INC.	WGNX-TV 46	Atlanta	GA
Paxson Greensboro License Inc.	WGPX-TV 16	Burlington	NC
Combined Communic.Corp.of Oklahoma,	WGRZ-TV 2	Buffalo	NY
JME Media, Inc.	WGSE-TV 43	Myrtle Beach	SC
SCANLAN COMMUNICATIONS, INC.	WGTU-TV 29	Traverse City	MI
BRUNSON COMMUNICATIONS INC.	WGTW-TV 48	Burlington	NJ
KUTV Associates	WGXA-TV 24	Macon	GA
GTBC License Subsidiary-WHAG Inc.	WHAG-TV 25	Hagerstown	MD

FCC Licensee

JOURNAL BROADCASTING  
CORONET COMMUNICATIONS COMPANY  
CHRISTIAN TELEVISION CORP.  
NEW ENGLAND TELEVISION  
BBARD BROADCASTING INC.  
TRINITY BCSTG. OF FLORIDA, INC.  
MIAMI VALLEY BROADCASTING CORP.  
SOUTHERN OHIO TELEVISION SYSTEM,  
MEDIA GENERAL BROADCASTING INC.  
NEW YORK TIMES BROADCASTING  
Media General Broadcasting of Montg  
BENEDEK LICENSE CORP.  
WHO-TV, A DIV. OF THE NY TIMES COMP  
Roberts Brdcasting Of Hartford, LLC  
WEST WIND COMM. LLC  
CHRISTIAN TELEVISION  
BENEDEK BROADCASTING CORP.  
GUY GANNET COMMUNICATIONS  
GUY GANNETT PUBLISHING CO.  
SJL OF PENNSYLVANIA, INC.  
BENEDEK LICENSE CORP.  
FORT MYERS BROADCASTING COMPANY  
TELEVISION WISCONSIN, INC.  
LWWI BROADCASTING, INC.  
WISN HEARST-ARGYLE TELEVISION, INC.  
COSMOS BROADCASTING CORPORATION  
GNG CORP.  
WITN Licensee Corp.  
US bROADCAST GROUP L.L.C.  
WIXT-TV, INC.  
STC BROADCASTING INC.  
CHANNEL 68 BROADCASTING CORP.  
NATIONAL BROADCASTING CO.  
PEGASUS BROADCASTING  
NEW WORLD COMMUNICATIONS OF  
LEWIS BROADCASTING CORP.  
NEXSTAR BROADCASTING OF ERIE LP  
Gray Florida Holdings  
WJLA, INC.  
FLINT LICENSE SUBSIDIARY CORP.  
CHANNEL 44, LTD.  
MEDIA GENERAL BROADCASTING INC.  
MEDIA GENERAL BROADCASTING INC.  
GNG CORP.

Call Letters	City	STATE
WHAS-TV 11	Louisville	KY
WHBF-TV 4	Rock Island	IL
WHBR-TV 33	Pensacola	FL
WHDH-TV 7	Boston	MA
WHEC-TV 10	Rochester	NY
WHFT-TV 45	Miami	FL
WHIO-TV 7	Dayton	OH
WHIZ-TV 18	Zanesville	OH
WHLT-TV 22	Hattiesburg	MS
WHNT-TV 19	Huntsville	AL
WHOA-TV 32	Montgomery	AL
WHOI-TV 19	Peoria	IL
WHO-TV 13	Des Moines	IA
WHPX-TV 26	New London	CT
WHSB-TV 63	Monroe	GA
WHTN-TV 39	Murfreesboro	TN
WIBW-TV 13	Topeka	KS
WICD-TV 15	Champaign	IL
WICS-TV 20	Springfield	IL
WICU-TV 12	Erie	PA
WILX-TV 10	Onondaga	MI
WINK-TV 11	Fort Myers	FL
WISC-TV 3	Madison	WI
WISH-TV 8	Indianapolis	IN
WISN-TV 12	Milwaukee	WI
WIS-TV 10	Columbia	SC
WITI-TV 6	Milwaukee	WI
WITN-TV 7	New Bern	NC
WIVT-TV 34	Binghamton	NY
WIXT-TV 9	Syracuse	NY
WJAC-TV 6	Johnstown	PA
WJAL-TV 68	Hagerstown	MD
WJAR-TV 10	Providence	RI
WJBF-TV 6	Augusta	GA
WJBK-TV 2	Detroit	MI
WJCL-TV 22	Savannah	GA
WJET-TV 24	Erie	PA
WJHG-TV 7	Panama City	FL
WJLA-TV 7	Washington	DC
WJRT-TV 12	Flint	MI
WJTC-TV 44	Pensacola	FL
WJTV-TV 12	Jackson	MS
WJWB-TV 17	Jacksonville	FL
WJW-TV 8	Cleveland	OH

FCC Licensee	Call Letters	City	STATE
POST-NEWSWEEK STATIONS, WESTINGHOUSE ELECTRIC CORP. WJZY-TV, INC.	WJXT-TV 4	Jacksonville	FL
PARAMOUNT STATIONS GROUP INC NBN BROADCASTING CORP.	WJZ-TV 13	Baltimore	MD
YOUNG BROADCASTING OF LA CROSSE QUEEN CITY BROADCASTING, INC. Press Communications, LLC	WJZY-TV 46	Belmont	NC
MAX TELEVISION CO.	WKBD-TV 50	Southfield	MI
DELTA BROADCASTING, INC. CORP. FOR GENERAL TRADE	WKBN-TV 27	Youngstown	OH
TRINITY BROADCASTING OF INDIANA Shockley Communications Corp.	WKBT-TV 8	La Crosse	WI
HOLSTON VALLEY BROADCASTING CORP. JACOR COMMUNICATIONS, INC.	WKBW-TV 7	Buffalo	NY
WKRK-TV, INC.	WKCF-TV 18	Clermont	FL
YOUNG BROADCASTING INC. SMITH TELEVISION OF NEW YORK INC.	WKEF-TV 22	Dayton	OH
WKYC HOLDINGS INC. Gray Kentucky Television, Inc.	WKFT-TV 40	Fayetteville	NC
Grant Media Inc.	WKJG-TV 33	Fort Wayne	IN
MAINE BROADCASTING COMPANY	WKOI-TV 43	Richmond	IN
WLFI-TV INC.	WKOW-TV 27	Madison	WI
WLFL LICENSEE, INC	WKPT-TV 19	Kingsport	TN
ESTRELLA BRILLANTE LIMITED	WKRC-TV 12	Cincinnati	OH
LIMA COMMUNICATIONS CORPORATION	WKRK-TV 5	Mobile	AL
PULITZER BROADCASTING. CO.	WKRN-TV 2	Nashville	TN
FREEDOM WLNE-TV, INC.	WKTU-TV 2	Utica	NY
YOUNG BROADCASTING, INC.	WKYC-TV 3	Cleveland	OH
SINCLAIR BROADCAST GROUP, INC	WKYT-TV 27	Lexington	KY
COSMOS BROADCASTING CORPORATION	WLAX-TV 25	La Crosse	WI
WLS TELEVISION, INC.	WLBZ-TV 2	Bangor	ME
LEWIS BROADCASTING CORP.	WLFI-TV 18	Lafayette	IN
LEWIS BROADCASTING CORP.	WLFL-TV 22	Raleigh	NC
WLUC LICENSE SUBSIDIARY, INC.	WLII-TV 11	Caguas	PR
SF BROADCASTING OF GREEN BAY, WLVI, INC.	WLIO-TV 35	Lima	OH
Ohio-Oklahoma Hearst-Argyle Televis	WLKY-TV 32	Louisville	KY
GATEWAY COMMUNICATIONS, INC.	WLNE-TV 6	New Bedford	MA
NBC SUBSIDIARY (WMAQ-TV), INC.	WLNS-TV 6	Lansing	MI
SCRIPPS-HOWARD BROADCASTING CO.	WLOS-TV 13	Ashville	NC
MULTIMEDIA WMAZ, INC.	WLOX-TV 13	Biloxi	MS
THE SPARTAN RADIOCASTING CO.	WLS-TV 7	Chicago	IL
MIDWEST TELEVISION INC.	WLTX-TV 19	Columbia	SC
	WLTZ-TV 38	Columbus	GA
	WLUC-TV 6	Marquette	MI
	WLUK-TV 11	Green Bay	WI
	WLVI-TV 56	Cambridge	MA
	WLWT-TV 5	Cincinnati	OH
	WLYH-TV 15	Lancaster	PA
	WMAQ-TV 5	Chicago	IL
	WMAR-TV 2	Baltimore	MD
	WMAZ-TV 13	Macon	GA
	WMBB-TV 13	Panama City	FL
	WMBD-TV 31	Peoria	IL

FCC Licensee	Call Letters	City	STATE
ALL AMERICAN TV INC.	WMCF-TV 45	Montgomery	AL
DELMARVA BROADCAST SERVICE	WMDT-TV 47	Salisbury	MD
MID-STATE TV, INC.	WMFD-TV 68	Mansfield	OH
MORRIS NETWORK, INC.	WMGT-TV 41	Macon	GA
SULLIVAN BROADCASTING LICENSE HOLDE	WMSN-TV 47	Madison	WI
BENEDEK LICENSE CORP.	WMTV-TV 15	Madison	WI
HARRON COMMUNICATIONS CORP.	WMTW-TV 8	Poland Spring	ME
NATIONAL BROADCASTING CO.	WNBC-TV 4	New York	NY
MICHIANA TELECASTING CORP.	WNDU-TV 16	South Bend	IN
IMS BROADCASTING LLC	WNDY-TV 23	Marion	IN
MEREDITH CORPORATION	WNEM-TV 5	Bay City	MI
THE NEW YORK TIMES COMPANY	WNEP-TV 16	Scranton	PA
HERITAGE MEDIA CORP.	WNNE-TV 31	Hartford	VT
WNUV-TV	WNUV-TV 54	Baltimore	MD
MALRITE COMMUNICATIONS GROUP INC.	WNWO-TV 24	Toledo	OH
WNYT-TV, A DIV. OF HUBBARD BROADCASTS	WNYT-TV 13	Albany	NY
FOX TELEVISION STATIONS, INC.	WNYW-TV 5	New York	NY
SAH Acquisition Corporation II	WOAC-TV 67	Canton	OH
MEREDITH CORPORATION	WOFL-TV 35	Orlando	FL
WABASH VALLEY BROADCASTING CORP.	WOGX-TV 51	Ocala	FL
MALRITE COMMUNICATIONS GROUP INC.	WOIO-TV 19	Shaker Heights	OH
CAPITAL COMMUNICATIONS, CORP.	WOI-TV 5	Ames	IA
WOKR PARTNERS	WOKR-TV 13	Rochester	NY
WESTERN BROADCASTING	WOLE-TV 12	Aguadilla	PR
WOLF LICENSE CORP.	WOLF-TV 38	Scranton	PA
COLUMBIA TELECASTING INC.	WOLO-TV 25	Columbia	SC
LCH COMMUNICATIONS dba WOOD TV	WOOD-TV 8	Grand Rapids	MI
TELECINCO, INC.	WORA-TV 5	Mayaguez	PR
LCH Communications dba WOTV 41	WOTV-TV 41	Battle Creek	MI
GATEWAY COMMUNICATIONS, INC.	WOWK-TV 13	Huntington	WV
CHRONICLE PUBLISHING CO.	WOWT-TV 6	Omaha	NE
HEARST CORPORATION	WPBF-TV 25	Tequesta	FL
CORNERSTONE TELEVISION INC.	WPCB-TV 40	Greensburg	PA
GRAND STRAND COMMUNICATIONS	WPDE-TV 15	Florence	SC
PHOTO ELECTRONICS CORPORATION	WPEC-TV 12	West Palm Beach	FL
WPGH, INC.	WPGH-TV 53	Pittsburgh	PA
WICKS BROADCAST GROUP L.P.	WPGX-TV 28	Panama City	FL
WPHL-TV, INC.	WPHL-TV 17	Philadelphia	PA
WPIX, INC.	WPIX-TV 11	New York	NY
POST-NEWSWEEK STATIONS,	WPLG-TV 10	Miami	FL
CLEAR CHANNEL TELEVISION, INC.	WPMI-TV 15	Mobile	AL
CHANNEL 53, INC.	WPMT-TV 43	York	PA
PAXSON PHILADELPHIA LICENSE, INC.	WPPX-TV 61	Wilmington	DE
Clear Channel Television License In	WPRI-TV 12	Providence	RI

FCC Licensee	Call Letters	City	STATE
PADUCAH NEWSPAPERS INC.	WPSD-TV 6	Paducah	KY
SCRIPPS-HOWARD BROADCASTING CO.	WPTV-TV 5	West Palm Beach	FL
CLEAR CHANNEL TELEVISION, INC.	WPTY-TV 24	Memphis	TN
HERITAGE MEDIA CORP.	WPTZ-TV 5	North Pole	NY
HOSPITAL CITIES/ABC, INC.	WPVI-TV 6	Philadelphia	PA
PAXSON COMMUNICATIONS OF	WPXA-TV 14	Rome	GA
PAXSON COMMUNICATIONS OF	WPXB-TV 60	Merrimack	NH
Paxson Communications Corp.	WPXH-TV 44	Gadsden	AL
WPXI, INC.	WPXI-TV 11	Pittsburgh	PA
PINE MOUNTAIN CHRISTIAN	WPXK-TV 54	Jellico	TN
Paxson Roanoke License Inc	WPXR-TV 38	Roanoke	VA
PORTLAND BCSTG. INC.	WPXT-TV 51	Portland	ME
Paxson Washington License Inc.	WPXW-TV 66	Manassas	VA
THE NEW YORK TIMES COMPANY	WQAD-TV 8	Moline	IL
SCHOCKLEY COMMUNICATIONS CORP.	WQOW-TV 18	Eau Claire	WI
PETRACOM, INC.	WQRF-TV 39	Rockford	IL
CAPITOL BROADCASTING COMPANY, INC	WRAL-TV 5	Raleigh	NC
SPARTAN COMMUNICATIONS, INC.	WRBL-TV 3	Columbus	GA
SARKES TARZIAN, INC.	WRCB-TV 3	Chattanooga	TN
NBC SUBSIDIARY (WRC-TV), INC.	WRC-TV 4	Washington	DC
THE NEW YORK TIMES COMPANY	WREG-TV 3	Memphis	TN
DAYTON TELECASTING INC.	WRGT-TV 45	Dayton	OH
SPRINGFIELD INDEPENDENT	WRSP-TV 55	Springfield	IL
MC GRAW HILL BROADCASTING	WRTV-TV 6	Indianapolis	IN
WEST COAST CHRISTIAN TELEVISION	WRXY-TV 49	Tice	FL
MEDIA GENERAL BROADCASTING INC.	WSAV-TV 3	Savannah	GA
BENEDEK BROADCASTING CORP.	WSAW-TV 7	Wausau	WI
VIACOM INTERNATIONAL INC.	WSBK-TV 38	Boston	MA
WSBT, INC.	WSBT-TV 22	South Bend	IN
NEW GEORGIA TELEVISION CO.	WSB-TV 2	Atlanta	GA
NORTHSTAR TELEVISION GROUP, INC.	WSEE-TV 35	Erie	PA
WSET, INCORPORATED	WSET-TV 13	Lynchburg	VA
COSMOS BROADCASTING CORPORATION	WSFA-TV 12	Montgomery	AL
CHRISTIAN TELEVISION OF OHIO, INC	WSFJ-TV 51	Newark	OH
WILMINGTON TELECASTERS, INC.	WSFX-TV 26	Wilmington	NC
WSIL-TV INC.	WSIL-TV 3	Harrisburg	IL
WSJV TELEVISION, INC.	WSJV-TV 28	Elkhart	IN
MEDIA GENERAL BROADCASTING INC.	WSLS-TV 10	Roanoke	VA
MEREDITH CORPORATION	WSMV-TV 4	Nashville	TN
WSOC TELEVISION INC.	WSOC-TV 9	Charlotte	NC
SPARTAN BROADCASTING COMPANY	WSPA-TV 7	Spartanburg	SC
SIETE GRANDE TELEVISION, INC.	WSTE-TV 7	Ponce	PR
WSTM LICENSE SUBSIDIARY, INC.	WSTM-TV 3	Syracuse	NY
SUNBEAM TELEVISION CORPORATION	WSVN-TV 7	Miami	FL



FCC Licensee	Call Letters	City	STATE
PAPPAS TELECASTING OF OPELIKA	WSWS-TV 66	Opeilka	AL
Journal Broadcast Corporation	WSYM-TV 47	Lansing	MI
ENCORE COMMUNICATIONS,	WSYT-TV 68	Syracuse	NY
RIVER CITY LICENSE PARTNERSHIP II	WSYX-TV 6	Columbus	OH
AE HEARST-ARGYLE TELEVISION, INC.	WTAE-TV 4	Pittsburgh	PA
GATEWAY COMMUNICATIONS, INC.	WTAJ-TV 10	Altoona	PA
FLINT LICENSE SUBSIDIARY CORP.	WTBY-TV 54	Poughkeepsie	NY
HILTON HEAD TELEVISION, INC.	WTGS-TV 28	Hardeeville	SC
WABASH VALLEY BROADCASTING CORP.	WTHI-TV 10	Terre Haute	IN
VIDEOINDIANA, INC.	WTHR-TV 13	Indianapolis	IN
CHANNEL 61 LICENSE CORP.	WTIC-TV 61	Hartford	CT
ALL AMERICAN TV INC.	WTJP-TV 60	Gadsden	AL
BELIEVER'S BROADCASTING CORP.	WTJR-TV 16	Quincy	IL
TELEVISION 12	WTLV-TV 12	Jacksonville	FL
AMERICAN CHRISTIAN	WTLW-TV 44	Lima	OH
Journal Broadcast Corporation	WTMJ-TV 4	Milwaukee	WI
LWWI BROADCASTING, INC.	WTNH-TV 8	New Haven	CT
ELCOM OF TENNESSEE, INC.	WTNZ-TV 43	Knoxville	TN
Raycom - US, Inc.	WTOC-TV 11	Savannah	GA
PARAMOUNT STATIONS GROUP-TAMPA	WTOG-TV 44	St. Petersburg	FL
COSMOS BROADCASTING CORPORATION	WTOL-TV 11	Toledo	OH
Pacific & Southern Co., Inc.	WTSP-TV 10	St. Petersburg	FL
WTTE CHANNEL 28, INC.	WTTE-TV 28	Columbus	OH
FOX TELEVISION STATIONS, INC.	WTTG-TV 5	Washington	DC
WTTO LICENSEE, INC.	WTTO-TV 21	Birmingham	AL
RIVER CITY BROADCASTING L.P.	WTTV-TV 4	Bloomington	IN
FREEDOM-TV SUB INC.	WTVC-TV 9	Chattanooga	TN
CAPITAL CITIES/ABC, INC.	WTVD-TV 11	Durham	NC
READING BROADCASTING, INC.	WTVF-TV 51	Reading	PA
LANDMARK TELEVISION OF	WTVF-TV 5	Nashville	TN
MEREDITH CORPORATION	WTVH-TV 5	Syracuse	NY
NBC SUBSIDIARY (WTVJ-TV), INC.	WTVJ-TV 6	Miami	FL
Raycom - US, Inc.	WTVM-TV 9	Columbus	GA
YOUNG BROADCASTING, INC.	WTVO-TV 17	Rockford	IL
Ellis Communications	WTVR-TV 6	Richmond	VA
WTVT-TV INC.	WTVT-TV 13	Tampa	FL
MAX TELEVISION OF NORFOLK, L.P.	WTVZ-TV 33	Norfolk	VA
TVX OF PHILADELPHIA, INC.	WTFX-TV 29	Philadelphia	PA
COUNTERPOINT COMMUNICATIONS, INC.	WTFX-TV 20	Waterbury	CT
ACT III BROADCASTING, INC.	WUHF-TV 31	Rochester	NY
JASAS, CORP.	WUNI-TV 27	Worcester	MA
VSC COMMUNICATIONS INC.	WUPA-TV 69	Atlanta	GA
TV-65 Broadcasting, L.C.	WUPV-TV 65	Ashland	VA
ELCOM OF OHIO	WUPW-TV 36	Toledo	OH

FCC Licensee	Call Letters	City	STATE
THE DETROIT NEWS, INC.	WUSA-TV 9	Washington	DC
ACT III BROADCASTING OF	WUTV-TV 29	Buffalo	NY
WEST VIRGINIA TELECASTING, INC.	WVAH-TV 11	Charleston	WV
WVEC TELEVISION, INC	WVEC-TV 13	Hampton	VA
IGHT BCG OF BATON ROUGE INC.	WVLA-TV 33	Baton Rouge	LA
US bROADCAST GROUP L.L.C.	WVNY-TV 22	Burlington	VT
BIRMINGHAM BROADCASTING (WVTM-TV),	WVTM-TV 13	Birmingham	AL
SF BROADCASTING OF NEW ORLEANS,	WVUE-TV 8	New Orleans	LA
WVVA TELEVISION, INCORPORATED	WVVA-TV 6	Bluefield	WV
JEFFERSON PILOT BROADCASTING	WWBT-TV 12	Richmond	VA
USA Broadcast Group	WWCP-TV 8	Johnstown	PA
BENEDEK LICENSE CORP.	WWLP-TV 22	Springfield	MA
WWL-TV, INC.	WWL-TV 4	New Orleans	LA
ATLANTIC MEDIA GROUP	WWMB-TV 21	Florence	SC
GRANITE BROADCASTING CORP.	WWMT-TV 3	Kalamazoo	MI
WATERTOWN/CARTHAGE	WWNY-TV 7	Carthage	NY
WWOR-TV, INC.	WWOR-TV 9	Secaucus	NJ
Smith Bcg. Group Of Watertown, L.P.	WWTI-TV 50	Watertown	NY
ALL AMERICAN TV INC.	WWTO-TV 35	LaSalle	IL
HERITAGE BROADCASTING COMPANY OF	WWTW-TV 9	Cadillac	MI
WWWB-TV Co.	WWWB-TV 32	Tampa	FL
COMBINED COMMUNICATIONS CORP.	WXIA-TV 11	Atlanta	GA
PULITZER BROADCASTING COMPANY	WXII-TV 12	Winston-Salem	NC
59 LICENSEE, INC.	WXIN-TV 59	Indianapolis	IN
MALRITE COMMUNICATIONS GROUP INC.	WXIX-TV 19	Newport	KY
TV 17 UNLIMITED, INC.	WXMI-TV 17	Grand Rapids	MI
SCHOCKLEY COMMUNICATIONS CORP.	WXOW-TV 19	La Crosse	WI
HERITAGE BROADCASTING	WXXA-TV 23	Albany	NY
SCRIPPS-HOWARD BROADCASTING CO.	WXYZ-TV 7	Detroit	MI
Gocom License Corp.	WYDO-TV 14	Greenville	NC
PULITZER BROADCASTING COMPANY	WYFF-TV 4	Greenville	SC
Gray Kentucky Television, Inc.	WYMT-TV 57	Hazard	KY
REEL BROADCASTING COMPANY, INC.	WZTV-TV 17	Nashville	TN
MONTCLAIR COMMUNICATIONS	WZVN-TV 26	Naples-Fort Myers	FL
Combined Communic.Corp.of Oklahoma,	WZZM-TV 13	Grand Rapids	MI

# SETTLING PARTIES

SP EXHIBIT 25  
TAB 2 (MC 04-05 EX. 2)

(MUSIC CLAIMANTS)

## LOCAL STATION BLANKET TELEVISION LICENSE

AGREEMENT made between AMERICAN SOCIETY OF COMPOSERS, AUTHORS AND PUBLISHERS ("SOCIETY") and \_\_\_\_\_ ("LICENSEE") as follows:

### 1. Term and Scope of License

A. SOCIETY grants to LICENSEE and LICENSEE accepts for a period commencing as of April 1, 1998 and ending December 31, 2009, a license to perform publicly all musical works heretofore copyrighted, composed or written by the members of SOCIETY and now or hereafter during the term hereof in the repertory of SOCIETY, or hereafter during the term hereof copyrighted, composed or written by such members of SOCIETY, or of which SOCIETY shall have the right to license such performing rights:

(1) by Television Broadcasting in the United States, and its territories, commonwealth and possessions, as part of LICENSEE's Non-Network Television Programs and Non-Network Announcements from television station \_\_\_\_\_ ("STATION") located at \_\_\_\_\_; and

(2) transmitted or caused to be transmitted either directly or indirectly over the Internet in and as part of a STATION Web Site only in connection with:

- (a) the simultaneous retransmission of any of STATION's Locally-Produced Television Programs;
- (b) the retransmission of all or a portion of any of STATION's Locally-Produced Television Programs that aired during the term of this Agreement; and
- (c) content broadcast, transmitted or retransmitted on any Web Site or portion thereof used primarily to promote STATION and/or the exhibition of any Program.

B. Notwithstanding the foregoing, the license granted herein shall not include transmissions described in Subparagraphs 1.A.(2)(a) and 1.A.(2)(b) above where such transmissions contain Programs which are nationally or regionally aired regularly scheduled series Programs (e.g., Live with Regis and Kelly, George Michael Sports, and Major League Baseball). In the event that STATION airs Locally-Produced Television Programs, and such Programs also appear on one or more additional stations (which Programs for purposes of this Agreement would not be considered Locally-Produced Television Programs for the additional station(s)), only the STATION may retransmit music in SOCIETY's repertory contained in such Programs in the manner described in Subparagraphs 1.A.(2)(a) and 1.A.(2)(b) above, while the additional station(s) may not.

C. The license granted herein does not cover transmissions on a STATION Web Site of music in SOCIETY's repertory where members of the public are charged a fee by STATION for the right to access such transmissions. Such transmissions shall be subject to appropriate separate licensing. Notwithstanding the foregoing, the fact that STATION may charge members of the public for access to discrete areas of a STATION Web Site other than those areas containing performances licensed hereunder shall not limit the scope of coverage of this license.

D. (1) This license does not extend to or include the public performance by Television Broadcasting or otherwise of any rendition or performance of (a) any opera, operetta, musical comedy, play or like production, as such, in whole or in part, or (b) any composition from any opera, operetta, musical comedy, play or like production (whether or not such opera, operetta, musical comedy, play or like production was presented on the stage or in motion picture form) in a manner which recreates the performance of such composition with substantially such distinctive scenery or costume as was used in the presentation of such opera, operetta, musical comedy, play or like production (whether or not such opera, operetta, musical comedy, play or like production was presented on the stage or in motion picture form); provided, however, that the rights granted to LICENSEE under this Agreement shall be deemed to include a grant of the right to make non-dramatic performances of compositions licensed hereunder by the Television Broadcasting of a motion picture containing such compositions if the rights in such motion picture other than those licensed under this Agreement have been obtained from the parties in interest.

(2) Nothing herein contained shall be deemed to license the public performance by Television Broadcasting of dramatic performances. Any performance of a separate musical composition which is not a dramatic performance, as defined herein, shall be deemed to be a non-dramatic performance. For purposes of this Agreement, a dramatic performance shall mean a performance of a musical composition as part of a television Program in which there is a definite plot depicted by action and where the performance of the musical composition is woven into and carries forward the plot and its accompanying action. The use of dialogue to establish a mere Program format or the use of any non-dramatic device merely to introduce a performance of a composition shall not be deemed to make such performance dramatic. For purposes of this Agreement, performances of compositions in music videos shall be construed as non-dramatic performances.

E. The performances licensed hereunder may originate at STATION or at any other place whether or not such other place is licensed to perform publicly the compositions licensed hereunder, regardless of the manner, means, or method of such origination; but nothing herein contained shall be deemed to grant a license to such place itself (or to the parties responsible for the performance therein) for the public performance in such place of any such compositions.

F. Except as expressly herein otherwise provided, nothing herein contained shall be construed as authorizing LICENSEE to grant to others any right to reproduce or perform publicly by any means, method or process whatsoever, any of the musical compositions licensed hereunder or as authorizing any receiver of any television broadcast to perform publicly or reproduce the same, by any means, method or process whatsoever.

G. The license granted herein shall include, on an experimental basis, for no additional fee to SOCIETY, the right to engage in such non-dramatic public performances of musical works in SOCIETY's repertoire as may result from LICENSEE's free, over-the-air digital transmissions occurring within STATION's existing geographic market(s) over FCC-assigned channels.

H. This Agreement expressly incorporates, and SOCIETY and LICENSEE agree to be bound by, the provisions of the letter agreement, dated November 16, 2004, between SOCIETY and TELEVISION MUSIC LICENSE COMMITTEE ("COMMITTEE"), a copy of which is attached hereto as Exhibit A.

## 2. Definitions

For purposes of this Agreement only:

A. "Affiliated Station" means any Television Broadcasting station in the United States and its territories that regularly broadcasts Programs transmitted by a television network licensed by SOCIETY during the term hereof.

B. "Announcement" means any commercial, promotional, or public service announcement (exclusive of program-length "infomercials" of greater duration than 120 seconds), or any producer's or distributor's logo.

C. "ASCAP Consent Decree" means the Second Amended Final Judgment, or any successor decree, in United States v. ASCAP, S.D.N.Y. 41-1395 (WCC).

D. "COMMITTEE" means the Television Music License Committee, an unincorporated membership association organized under the laws of the State of New York, which is duly authorized to represent local television stations in music licensing matters.

E. "LMA OPERATOR" means any person, firm or corporation not under the same or substantially the same ownership, management or control as LICENSEE with whom LICENSEE has entered into a Local Marketing Agreement.

F. "Local Marketing Agreement" means any arrangement between LICENSEE and an LMA OPERATOR that:

- (1) authorizes the resale by an LMA OPERATOR of the use of the Television Broadcasting facilities of STATION;
- (2) permits an LMA OPERATOR to provide Programs for all or substantially all of the time STATION is on the air; and
- (3) provides for the sale by an LMA OPERATOR of all or substantially all Announcements broadcast on STATION.

G. "Locally-Produced Television Program" means any Non-Network Television Program produced by, or expressly for, LICENSEE.

H. "Network Announcement" means any Announcement transmitted by a television network licensed by SOCIETY at the time such Announcement is broadcast on the network, and broadcast simultaneously or by so-called "delayed" or "repeat" broadcasts (sometimes known as "rebroadcasts") over two or more Affiliated Stations of that network.

I. "Network Television Program" means any Program, transmitted by a television network licensed by SOCIETY at the time such Program is broadcast on the network, identified as a Program of the network, and broadcast simultaneously or by so-called "delayed" or "repeat" broadcasts (sometimes known as "rebroadcasts") over two or more Affiliated Stations of that network.

J. "Non-Network Announcement" means any Announcement broadcast by STATION other than a Network Announcement.

K. "Non-Network Television Program" means any Program broadcast by STATION other than a Network Television Program.

L. "Program" means all material (visual or otherwise) broadcast by STATION other than Announcements.

M. "STATION Web Site" shall mean the Web Site operated by or for STATION as the STATION's Web Site and shall include any Web Site that is shared between two or more stations in the same market, or two or more stations with a common owner.

N. "Syndicated Television Program" means: (i) any Non-Network Television Program supplied to LICENSEE and other television stations by a producer, distributor or television network not licensed by SOCIETY; or (ii) any other Program that is not a Locally-Produced Television Program.

O. "Television Broadcasting" shall mean free, unscrambled, point-to-multipoint over-the-air local analog or digital broadcasting by means of television.

P. "Web Site" shall mean an Internet computer service comprising a series of interrelated web pages registered with a domain name registration service that STATION transmits or causes to be transmitted either directly or indirectly to persons who receive the service over the Internet by means of a personal computer or by means of another device capable of receiving Internet transmissions.

## 3. Right to Restrict

A. The members of SOCIETY shall have the right, at any time and from time to time, in good faith, to restrict the Television Broadcasting of compositions from musical comedies, operas, operettas and motion pictures, or any other composition being excessively broadcast, only for the purpose of preventing harmful effect upon such musical comedies, operas, operettas, motion pictures or compositions, in respect of other interests under the copyrights thereof; provided, however, that the maximum number of compositions which may be at any time thus restricted shall not exceed 750 and moreover that limited licenses will be granted upon application to SOCIETY entirely free of additional charge as to restricted compositions, if and when the copyright owners thereof are unable to show reasonable hazards to their major interests likely to result from such Television Broadcasting; and provided further that such right to

restrict any such composition shall not be exercised for the purpose of permitting the fixing or regulating of fees for the recording or transcribing of such composition; and provided further that in no case shall any charges, "free plugs," or other consideration be required in respect of any permission granted to perform a restricted composition; and provided further that in no event shall any composition, after the initial television broadcast thereof, be restricted for the purpose of confining further television broadcasts thereof to a particular artist, station, network or Program.

B. SOCIETY reserves the further right, at any time and from time to time, in good faith, to restrict the Television Broadcasting of any compositions, over and above the number specified in Subparagraph 3.A., only as to which any suit has been brought or threatened on a claim that such composition infringes a composition not contained in the repertory of SOCIETY or on a claim by a non-member of SOCIETY or by a member not listed in any current list of SOCIETY's members, as the same may be augmented from time to time, that SOCIETY does not have the right to license the public performance of such composition by Television Broadcasting.

C. Nothing in Subparagraphs 3.A. and 3.B. shall relieve SOCIETY of its obligation to indemnify LICENSEE, as reflected in Paragraph 8. below, with respect to the performances of any compositions in SOCIETY's repertory, the performance of which SOCIETY has restricted, prior to such time as LICENSEE receives notice from SOCIETY of any such restriction.

#### 4. Music Use Information

A. Subject to the provisions of Subparagraphs 4.B. and 4.C. below, LICENSEE agrees to furnish to SOCIETY upon request during the term of this Agreement a list of all musical compositions broadcast from or through STATION on LICENSEE's Non-Network Television Programs, showing the title of each composition and the composer and author thereof, provided that LICENSEE shall not be obligated under this Paragraph 4. to furnish such a list covering a period of more than seven (7) consecutive days or periods aggregating more than four (4) weeks during any one calendar year. For purposes of this Paragraph 4., music cue sheets containing the aforesaid information shall be deemed to constitute such a list.

B. With respect to Syndicated Television Programs broadcast from or through STATION, LICENSEE shall be deemed to have complied with its obligations under Subparagraph 4.A. if LICENSEE identifies the Program by its title, including episode title and/or number, the name of the producer where available, and the copyright notice contained therein where available. If SOCIETY does not have a music cue sheet for such Program, and LICENSEE does have such a cue sheet, LICENSEE shall provide a copy of such music cue sheet to SOCIETY at SOCIETY's request.

C. SOCIETY shall make requests pursuant to Subparagraph 4.A. only where reasonably necessary for its purposes and, except where the information is necessary with respect to SOCIETY's survey of past performances, shall give LICENSEE notice of any request under subparagraph 4.A. at least one (1) month prior to the commencement of the period covered by said request. The provisions of Subparagraph 4.B. shall not limit LICENSEE's obligation to cooperate with SOCIETY in connection with any claim or demand for action referred to in Paragraph 8 of this Agreement.

#### 5. Payments

A. In consideration of the license herein granted, LICENSEE agrees to pay to SOCIETY for each calendar month during the term of this Agreement a fee that is equal to:

(1) one-thirteenth (1/13) of LICENSEE's blanket license fee covering the thirteen (13) month period from December 1, 2004 through December 31, 2005, as calculated pursuant to the methodology determined by COMMITTEE and set forth in Exhibit B hereto.

(2) one-twelfth (1/12) of LICENSEE's blanket license fee covering each subsequent twelve (12) month period during the term of this Agreement, as calculated pursuant to the methodology determined by COMMITTEE and set forth in Exhibit B hereto.

B. In no case shall LICENSEE's monthly blanket license fee be less than \$45.

C. For all periods following execution of this Agreement, payments attributable to a given month shall be due no later than the first day of each succeeding month. If any such blanket license fee payment due under the terms of this Paragraph 5. is not received by SOCIETY by the twentieth (20th) day of the month in which such payment was due, LICENSEE shall pay to SOCIETY a late-payment charge of one percent (1%) per month (simple interest) calculated from the date such payment was due. The payment provisions of this Paragraph 5 shall not apply in circumstances in which LICENSEE is unable to submit a payment within the specified time period due to "force majeure" (e.g., earthquake, hurricane, fire, flood; terrorist activities).

#### 6. Local Marketing Agreement

A. If LICENSEE is, or becomes, a party to a Local Marketing Agreement, LICENSEE and the LMA OPERATOR shall execute a letter to SOCIETY, in the form attached as Exhibit C and made a part of this Agreement, requesting amendment of this License Agreement to add the LMA OPERATOR as a party. When such a letter has been fully executed by LICENSEE, the LMA OPERATOR and SOCIETY, this Agreement shall be deemed amended accordingly.

B. In the event LICENSEE is a party to a Local Marketing Agreement, and a dispute arises between SOCIETY and either the LMA OPERATOR or LICENSEE as to whether LICENSEE or the LMA OPERATOR is responsible for the performance of any of the obligations arising under this Agreement, SOCIETY shall be entitled to receive, upon request, a copy of the portion of such agreement as sets forth the respective obligations of LICENSEE and the LMA OPERATOR regarding the payment of fees, accountings, record-keeping and administrative responsibilities, or, if LICENSEE so elects, a copy of the entire Local Marketing Agreement.

## 7. Breach or Default

Upon LICENSEE's breach or default of any payment, accounting or substantive reporting obligations required under the terms of this Agreement, SOCIETY may give LICENSEE thirty (30) days' notice in writing to cure such breach or default, and in the event that such breach or default has not been cured within thirty (30) days of said notice, SOCIETY may then terminate this license.

## 8. Indemnity Clause

SOCIETY agrees to indemnify, save and hold harmless, and to defend LICENSEE, its sponsors and their advertising agencies, and its and their officers, employees, and artists, and each of them, from and against any claims, demands, or suits that may be made or brought against them or any of them with respect to the performances under this Agreement of any compositions in SOCIETY's repertory that are written or copyrighted by members of SOCIETY. LICENSEE agrees to give SOCIETY immediate notice of any such claim, demand, or suit and agrees immediately to deliver to SOCIETY all papers pertaining thereto. SOCIETY shall have full charge of the defense of any such claim, demand, or suit and LICENSEE shall cooperate fully with SOCIETY in such defense. LICENSEE, however, shall have the right to engage counsel of its own at its own expense who may participate in the defense of any such action. SOCIETY agrees, at the request of LICENSEE, to cooperate with and assist LICENSEE, its advertisers and their advertising agencies and its and their officers, employees, and artists in the defense of any action or proceeding brought against them or any of them with respect to the performance of any musical compositions contained in SOCIETY's repertory, but not copyrighted or written by members of SOCIETY. This Paragraph 8. shall not apply to performances of any works that have been designated as restricted under Paragraph 3. of this Agreement.

## 9. Rights of Termination

A. In the event of the termination or suspension of the governmental licenses covering STATION or any substantial alteration or variation of the terms and conditions thereof, or any major interference with the operations of STATION due to governmental measures or restrictions, LICENSEE shall have the right to terminate this Agreement upon seven (7) days' notice. Upon termination, this Agreement shall no longer remain in effect and the parties shall be relieved of all obligations arising hereunder from the date of termination.

B. In the event of:

(1) any major interference with the operations of SOCIETY in the state, territory, dependency, possession or political subdivision in which STATION is located, by reason of any law of such state, territory, dependency, possession or political subdivision; or

(2) any substantial increase in the cost to SOCIETY of operating in such state, territory, dependency, possession or political subdivision, by reason of any law of such state, territory, dependency, possession or political subdivision, which is applicable to the licensing of performing rights.

SOCIETY shall have the right, upon notice to COMMITTEE and upon a showing that the matters referred to in Subparagraphs 9.B.(1) and 9.B.(2) above affect the licensing of performing rights under this Agreement, to apply to the judge with supervisory authority over the ASCAP Consent Decree for whatever relief SOCIETY deems appropriate.

## 10. Successors and Assigns

This Agreement shall inure to the benefit of and shall be binding upon the parties hereto and their respective successors and assigns, but no assignment shall relieve the parties hereto of their respective obligations hereunder as to performances broadcast, acts done and obligations incurred prior to the effective date of the assignment.

## 11. Notices

Any notice filed under this Agreement shall be in written form or in a form mutually agreed upon by SOCIETY and COMMITTEE and shall be sent to LICENSEE (or a designated agent of LICENSEE). All notices required or permitted to be given by either of the parties to the other hereunder shall be duly and properly given if: (a) mailed to the other party by registered or certified United States mail; (b) sent by generally recognized same-day or overnight delivery service; (c) mailed by first class United States mail; or (d) sent by electronic transmission (i.e., electronic mail, facsimile or similar transmission), provided that the electronic transmission is followed by a hard copy and receipt of the notice is acknowledged.

## 12. Per Program License

The "Local Station Per Program Television License," coterminous with this License, is being offered to LICENSEE simultaneously with this Agreement. During the term of this Agreement, LICENSEE may switch from a per program to a blanket license, or from a blanket to a per program license, as of the first day of a month, prospectively on thirty (30) days' written notice to SOCIETY. LICENSEE may so elect to change its license status up to twice in any given twelve (12) month period during the term of this License.

## 13. Without Prejudice

The parties are entering into this Agreement without prejudice to any arguments or positions they may assert in any future rate proceeding concerning what constitutes reasonable blanket and per program license fees and terms for the local television industry or, in SOCIETY's case, as to any other licensee.

14. Applicable Law

This Agreement shall be governed by and construed in accordance with the laws of the State of New York applicable to contracts made and to be performed entirely within such State.

IN WITNESS WHEREOF, this Agreement has been duly executed by SOCIETY and LICENSEE this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, as of the day of \_\_\_\_\_ 20\_\_\_\_.

\_\_\_\_\_  
LICENSEE

AMERICAN SOCIETY OF COMPOSERS,  
AUTHORS AND PUBLISHERS

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_



## EXHIBIT A

November 16, 2004

Mr. John LoFrumento  
American Society of Composers, Authors and Publishers  
One Lincoln Plaza  
New York, NY 10023

Re: ASCAP - Local Television Station  
Blanket and Per Program Licenses

Dear John:

This letter sets forth the agreement reached between the American Society of Composers, Authors and Publishers ("ASCAP") and the Television Music License Committee (the "Committee") with regard to: (i) settlement of U.S. v. ASCAP: Application of Post-Newsweek Stations, Inc., et al., Civ. 41-1395 (S.D.N.Y.); and (ii) fees and terms under the ASCAP - Local Television Station Blanket and Per Program License Agreements covering the period April 1, 1998 through December 31, 2009 (collectively the "Licenses"). This letter agreement is expressly incorporated in Subparagraph 1.H. of the Licenses, and is binding upon the parties hereto and upon the signatories to the Licenses.

The parties agree as follows:

1. The interim agreement between the parties shall remain in effect through November 30, 2004. All interim fees payable for the period April 1, 1998 through November 30, 2004 shall be final.
2. Industry-wide Blanket License fees for all commercial local television stations licensed under the Licenses by ASCAP shall equal:
  - December 1, 2004 - December 31, 2005 -- \$92,083,333 (or \$85 million on an annualized basis);
  - January 1, 2006 - December 31, 2006 -- \$85 million adjusted by the lesser of the change in the Consumer Price Index ("CPI") or three percent (3%) (the "2006 Blanket Amount");
  - January 1, 2007 - December 31, 2007 -- the 2006 Blanket Amount adjusted by the lesser of the change in the CPI or three percent (3%) (the "2007 Blanket Amount");
  - January 1, 2008 - December 31, 2008 -- the 2007 Blanket Amount adjusted by the lesser of the change in the CPI or three percent (3%) (the "2008 Blanket Amount");
  - January 1, 2009 - December 31, 2009 -- the 2008 Blanket Amount adjusted by the lesser of the change in the CPI or three percent (3%) (the "2009 Blanket Amount").
3. Each local television station's Blanket License fees shall be determined in accordance with the provisions of the license fee allocation formula determined by the Committee and attached as Exhibit B to the Blanket License and Exhibit B to the Per Program License.
4. Each year during the term of the Licenses, ASCAP shall provide to the Committee a list of current ASCAP-licensed local television stations. The list of licensees shall be delivered to the Committee, in electronic form, on or before September 15 of each year during the term. For each licensee, ASCAP shall provide the following information: (i) current station call letters; (ii) designated market area ("DMA"); (iii) state; (iv) FCC identification number; (v) ASCAP account number; (vi) channel position; (vii) station owner; (viii) network affiliation (if any); and

(ix) previous call letters (if any) if contained in any database within ASCAP's control. For each newly-licensed station appearing on the list, ASCAP shall also provide: (i) signed status; (ii) date license was signed; (iii) date of first payment; and (iv) effective date of license. Any licensee added to the list between September 16 of any given year and September 15 of the following year will be included in the allocation formula the following year. In the interim, such stations will be billed at the minimum fee for their respective DMAs. ASCAP shall clearly identify in each list any licensees added to or deleted from the previous list. Without limiting ASCAP's right to terminate the Licenses pursuant to Paragraph 9 or the Per Program License and Paragraph 7 of the Blanket License, ASCAP may not delete a station from the list of licensees for failure to make payments under this agreement absent a court order.

5. In addition to the list of ASCAP-licensed stations described in Paragraph 4 above, ASCAP shall provide to the Committee no less frequently than once per quarter, in electronic form, a list of current per program licensees identified by call letters, DMA, and per program license effective date.

6. In each of the years 2005, 2007 and 2009, within sixty (60) days of receipt of a written request from the Committee, ASCAP shall provide to the Committee, in electronic form, cue sheets for a statistically significant and representative sample of programs, as selected by an independent third party chosen by the Committee, for use solely in connection with the Committee's study of music use by the local television industry. The Committee may use the results of any such music use study in connection with any negotiation, arbitration, or litigation with ASCAP, BMI, SESAC, or any other performing rights organization, or for any other reasonable purpose; provided, however, that the Committee shall not otherwise publicly disclose the results of any such study without ASCAP's prior approval.

7. In the event the Committee and BMI reach a final agreement which, taken as a whole, is materially different from the Committee - ASCAP agreement, either party shall have the right, by no later than September 1, 2007, to commence good faith negotiations concerning what, if any, adjustments to their agreement are appropriate for the period commencing January 1, 2008 through the remainder of the term of the Licenses. The parties shall submit to Magistrate Judge Dolinger (or if such a reference is not possible, to the judge with supervisory authority over the ASCAP Consent Decree) all disputes concerning whether there is such a material difference between the provisions of the parties' agreement and the provisions of any final Committee - BMI agreement. If the parties agree, or the Court determines, that there is such a material difference between the Committee - ASCAP and Committee - BMI agreements, and no new agreement has been reached by the parties as a result of their good faith negotiations, either party shall have the right to opt out of the remaining term of the Licenses effective January 1, 2008. In the event either party elects under this paragraph to opt out of the Licenses effective January 1, 2008, stations shall continue to pay interim fees to ASCAP pursuant to the terms of this agreement, subject to retroactive adjustment once final blanket and per program license fees are established by agreement of the parties or determination by the ASCAP rate court.

8. If neither party has opted out of the Licenses effective January 1, 2008 pursuant to the provisions of Paragraph 7 above, either ASCAP or the Committee shall have the right, by no later than November 1, 2008 to opt out of the remaining term of the Licenses effective January 1, 2009. The parties have not reached any understanding as to the interim fees payable effective January 1, 2009 in the event either party opts out of the agreement pursuant to this paragraph.

9. At least once every six months, ASCAP and the Committee (or its designated representative) shall meet in good faith to resolve any outstanding billing, payment, or reporting disputes between ASCAP and any Licensee. Any good faith dispute that is not resolved during such meetings may be submitted to arbitration as provided in Paragraph 10 below.

10. If ASCAP and the Committee (or its designated representative) are unable to resolve one or more good faith disputes pursuant to Paragraph 9 above, and, in the judgment of ASCAP and/or the Committee, such outstanding disputes affect a significant number of Licensees and/or involve a substantial dollar amount, such outstanding disputes shall be finally determined and resolved by a neutral arbitrator. The arbitrator shall be selected jointly by ASCAP and the Committee and appointed for a four (4) year period commencing on January 1, 2006; provided, however, that either party shall have the right to request the appointment of a new arbitrator upon written notice to the other party on or before October 1, 2007. Any such new arbitrator shall be selected jointly by ASCAP and the

Committee and appointed for the period January 1, 2008 to December 31, 2009. If the parties are unable to agree upon an arbitrator by December 1, 2005, or December 1, 2007 (if applicable), selection of an arbitrator shall be conducted pursuant to the rules of the American Arbitration Association. If an arbitrator is unable to fulfill his or her term for any reason, the parties shall, within a reasonable time period, jointly select a new arbitrator to complete the term. If either ASCAP or the Committee submits one or more outstanding good faith disputes to arbitration pursuant to this paragraph, it shall so notify the arbitrator and the opposing party. Each party shall have thirty (30) days from the date of such notice to submit a statement of claim, and any supporting documentation, to the arbitrator and to the other party setting forth the party's positions regarding the dispute(s) at issue in the arbitration; provided, however, that the deadline for submission of a statement of claim may be extended up to thirty (30) days at the discretion of the arbitrator upon a showing of good cause by either party. The statements of claim shall not exceed ten double-spaced pages in length (exclusive of any supporting documentation). The arbitrator shall have thirty (30) days from his or her receipt of the statements of claim to issue a written decision adopting one of the two positions put forth by the parties with respect to each disputed issue under arbitration, and to determine a just division of costs between the parties as the arbitrator may deem appropriate. The arbitrator's decision shall be final. The arbitrator shall not have authority to award punitive damages, attorneys' fees or expenses to either party. In no event shall either party submit to arbitration any good faith dispute that the parties have not yet attempted to resolve themselves pursuant to Paragraph 9 above.

11. If, during the term of the Licenses, any dispute arises between ASCAP and any licensee concerning the interpretation of any of the provisions of this letter agreement or the Licenses which, in the judgment of ASCAP and/or the Committee, has or may have industry-wide impact, ASCAP and the Committee shall first endeavor to resolve such dispute, failing which either party may refer the matter to Magistrate Judge Michael H. Dolinger for determination (or, if such a reference is not possible, to the judge with supervisory authority over the ASCAP Consent Decree). In the event of such a reference, either party, as a preliminary matter, shall be entitled to assert that the dispute between them is not properly dealt with under the terms of this provision.

12. If, during the term of the Licenses, ASCAP elects to license an entity agreed or determined to be a broadcast television "network" previously unlicensed by ASCAP, whose network programs are carried by local television stations licensed by ASCAP, such as Fox, appropriate adjustments shall be made to the license fees payable by local television station licensees consistent with the Opinions and Orders of Judge William Conner dated January 3, 1995 and January 27, 1995 in U.S. v. ASCAP: Application of Fox Broadcasting Company and Fox Television Stations, Inc. ASCAP and the Committee shall confer and attempt to reach agreement concerning the amount of any such fee adjustments and such agreement shall be binding on all licensees. If ASCAP and the Committee shall fail to agree on such fee adjustments, either party may refer the matter to Magistrate Judge Michael H. Dolinger for determination (or, if such a reference is not possible, to the judge with supervisory authority over the ASCAP Consent Decree).

13. The Committee shall treat as confidential any station's financial or other proprietary information or documents provided to it by ASCAP pursuant to the Local Television Station Per Program License Agreement ("Confidential Information"). The Committee shall limit access to Confidential Information to the Committee's staff, representatives and counsel, and shall not disclose Confidential Information to any third party or to any Committee member, other than a Committee member who is employed by the station or station group that provided Confidential Information to ASCAP.

14. ASCAP and the Committee are entering into this agreement without prejudice to any arguments or positions they may assert in any future rate proceeding concerning what constitutes reasonable blanket and per program license fees and terms for the local television industry or, in ASCAP's case, as to any other licensee.

Please indicate your agreement to the above by signing on the line provided below.

Very truly yours,

s/ Charles Sennet  
Charles Sennet  
Chairman  
Television Music License Committee

s/ John A. LoFrumento  
John A. LoFrumento  
Chief Executive Officer  
American Society of Composers  
Authors and Publishers

## EXHIBIT B

### Television Music License Committee Methodology for ASCAP License Fee Allocation for the Period From December 1, 2004 through December 31, 2009

The Industry-wide Blanket License fees for all commercial local television stations licensed under the ASCAP-Local Television Station Blanket License Agreements covering the period December 1, 2004 through December 31, 2009 (the "licensed television stations"), shall be allocated among the licensed television stations as follows (subject to revision pursuant to the provisions of Paragraph 8 below):

#### STEP 1: Allocation of Industry-Wide Fee Among DMA Markets

For the period December 1, 2004 through December 31, 2005, and for each of the years 2006, 2007, 2008 and 2009 ("Contract Periods"), each Nielsen DMA television market is to be assigned its gross allocable share of the Industry-wide Blanket License fee (as set forth in Paragraph 2 of the November 16, 2004 letter agreement between the Television Music License Committee and ASCAP) in proportion to its percentage of the total number of weighted Qualified Viewing Households throughout the U.S. in an average quarter-hour during nine sweeps months over the course of the previous three years.

1. The number of Qualified Viewing Households will be computed for each licensed television station based upon average quarter hour household viewing data, Sunday through Saturday, 9 a.m. through midnight, compiled by Nielsen during nine sweeps months over the previous three years<sup>1</sup>. The Qualified Viewing Households attributable to each DMA market shall be calculated by multiplying the average quarter hour viewing households for all licensed stations in the market by 420 (the number of quarter hours between 9 a.m. and midnight in one week).

2. For each of the Contract Periods, the number of Market Qualified Viewing Households in each of the roughly 210 DMA markets as measured by Nielsen<sup>2</sup> is to be "weighted" as follows:

DMA Markets 1 - 10	Multiply by 1.21
DMA Markets 11 - 25	Multiply by 1.05
DMA Markets 26 - 50	Multiply by 0.92
DMA Markets 51 - 75	Multiply by 0.85
DMA Markets 76 - 100	Multiply by 0.85
DMA Markets 101 - 125	Multiply by 0.80
DMA Markets 126 plus	Multiply by 0.75

The purpose of the weighting is to reflect, within broad parameters, that a household in a smaller market does not represent the same value as a household in a larger market.

3. For each Contract Period, each market is to be assigned its share of the industry's overall blanket license fee by the following procedure: The Market Qualified Viewing Households in the DMA market will be multiplied by the weight set forth in Paragraph 2 above for that DMA market to determine the weighted number of Market Qualified Viewing Households for the DMA market. Thus, for example, the top ten markets in terms of three-year households average will receive a 1.21 multiple. Each market's weighted Market Qualified Viewing Households number is to be

<sup>1</sup> Qualified Viewing Households for the Contract Period December 1, 2004 through December 31, 2005 will be based upon data compiled by Nielsen for the nine November, February and May sweeps months between the period November 2001 and May 2004; for each subsequent year, Qualifying Viewing Households will be based upon data compiled by Nielsen for the nine November, February and May sweeps months prior to July 1 of the year preceding the Contract Period.

<sup>2</sup> The number of Market Qualified Viewing Households in Puerto Rico shall be determined based upon data provided by Media Fax, or some other comparable provider of household audience information. The number of Market Qualified Viewing Households in the Virgin Islands and Guam (or in any other market or territory in which household audience information is unavailable) shall be determined by calculating the number of television households in the U.S. as a percentage of the total U.S. population; multiplying that percentage by the population of the market for which audience information is unavailable to derive the number of television households in the market; and multiplying the resulting number by a fraction the numerator of which is the number of licensed stations in the market and the denominator of which is the total number of stations in the market. For purposes of assigning an allocable share of the industry-wide blanket license fee to television markets in the Virgin Islands, Guam and Puerto Rico, the number of Market Qualified Viewing Households in each of these markets is to be given the same weight as the Nielsen DMA that most closely approximates the number of Market Qualified Viewing Households in these markets.

divided by the total U.S. weighted market Qualified Viewing Households to derive a percentage of U.S. weighted Market Qualified Viewing Households for each market. This weighted percentage is then applied to the industry-wide blanket license fee. Thus, if the weighted percentage of total U.S. Market Qualified Viewing Households for DMA market "x" is one percent, DMA market x's share of the industry-wide \$92,083,333 fee for the December 1, 2004 through the December 31, 2005 Contract Period would be  $\$92,083,333 \times 1\%$ , or \$920,833.33.

#### STEP 2: Allocation of Blanket License Fees to Stations Within Each Market

4. Each station's percentage share of the DMA market blanket license fee shall be calculated as follows: Station Qualified Viewing Households for stations affiliated with networks licensed by ASCAP (currently the ABC, CBS, NBC and Univision television networks) shall be calculated by multiplying the station's average quarter hour viewing households by 420 (the number of quarter hours between 9 a.m. and midnight in one week); and subtracting one hundred percent (100%) of the station's average prime-time DMA viewing households (which equals the station's average prime-time DMA quarter hour households times 88 (the number of quarter hour units in prime time in one week)).<sup>3</sup> Station Qualified Viewing Households for stations not affiliated with networks licensed by ASCAP shall be calculated by multiplying the station's average quarter hour viewing households by 420. A station's percentage share of the DMA market blanket fee shall be calculated by dividing its Station Qualified Viewing Households number by the total Station Qualified Viewing Households for all stations in that DMA market and multiplying the resulting percentage by the DMA market blanket license fee (reduced by the amount of any minimum fees assigned to stations in the market pursuant to paragraph 5 below).<sup>4</sup>

5. Stations whose ratings are not reported by Nielsen during the relevant period shall be assigned a minimum blanket license fee equal to the greater of 0.25 percent of the allocable blanket license fee for its market or an annual blanket license fee of \$540 (or \$45 per month for partial years) ("Minimum Blanket License Fee"). The fees assigned to a DMA market pursuant to Step 1 above shall be reduced by the amount of any Minimum Blanket License Fees assigned to stations in that DMA market, and the balance of that DMA market's share of the industry-wide fee shall be allocated among the remaining licensed stations in that DMA market based on the methodology set forth in Step 2 hereof. If, by way of example, the blanket license fee allocated to market "k" is \$300,000, and there are operating in market "k" two stations whose ratings are not reported by Nielsen, each of those stations would be assigned a blanket fee of \$750 ( $\$300,000 \times .0025$ ). The remaining stations in market "k" would pay their appropriate percentages, not of \$300,000, but of \$298,500.

6. If, during a given Contract Period, ASCAP enters into a license agreement with a television station that was not previously licensed (a "New Television Station"), such station shall pay the minimum monthly fee of forty-five dollars (\$45.00) for the remainder of the Contract Period following the effective date of its license agreement. The fees payable by all stations in the New Television Station's market in the following Contract Period shall be reallocated in the manner set forth above without any increase in the total fee amount otherwise allocable to the relevant market.

7. Once a station's allocated fee has been calculated for a given Contract Period, there shall be no further adjustment to that station's fee for the duration of that Contract Period; provided however that if the station was assigned in error a blanket license fee that was higher or lower than it should have been assigned pursuant to the methodology set forth above, such over-allocation or under-allocation amount shall be factored into the fees allocated to the station for the subsequent Contract Period.

8. If during the term of the ASCAP-Local Television Station Blanket and Per Program Licenses the Committee determines that there is good cause to revise the allocation methodology set forth above in any manner, the Committee may refer the matter to Magistrate Judge Michael H. Dolinger (or if such reference is not possible, to the judge with supervisory authority over the ASCAP consent decree) to request approval of any proposed revisions to this methodology. The Committee shall make such a request at a public hearing (written notice of which will be provided to ASCAP and to all licensed television stations no less than thirty days in advance of the hearing) at which all interested parties will be given the opportunity to be heard in support of, or in opposition to, the proposed revisions. Any decision by the Court approving or denying the proposed revisions shall be final and shall not be subject to appeal.

<sup>3</sup> For example, on the East Coast, prime-time occupies Monday – Saturday 8:00 – 11 p.m. and Sunday 7:00 – 11:00 p.m.

<sup>4</sup> The fees for each of the licensed stations in the Virgin Islands and Guam shall equal the amount of the industry-wide fee assigned to the market divided by the total number of licensed television stations in that market.

EXHIBIT C

LOCAL MARKETING AGREEMENT AMENDMENT LETTER

Dear ASCAP:

1. \_\_\_\_\_ ("LICENSEE") has entered into a Local Marketing Agreement with \_\_\_\_\_ ("LMA OPERATOR") for television station \_\_\_\_\_ for the period \_\_\_\_\_ through \_\_\_\_\_.

2. LICENSEE and LMA OPERATOR wish to add LMA OPERATOR as a party to the Local Television Station License Agreement in effect between LICENSEE and ASCAP ("the License"), and LMA OPERATOR shall assume all of the rights and obligations of LICENSEE as set forth in the License for the full period of the Local Marketing Agreement referred to in Paragraph 1 above.

3. LICENSEE/LMA OPERATOR (circle one) shall be responsible for the payment of any fees owing to ASCAP pursuant to the License.

4. LICENSEE/LMA OPERATOR (circle one) shall be responsible for the submission to ASCAP of any reports, tapes or other information pursuant to the License.

5. LICENSEE and LMA OPERATOR jointly designate the following single address for billing and other regular correspondence, and the following single address for any notices in accordance with the License:

Billing Address: \_\_\_\_\_ Notice Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Please indicate your consent to the amendment of the License Agreement in accordance with this letter by countersigning the letter in the space provided below and returning a copy to us.

Very truly yours,

LICENSEE

Dated: \_\_\_\_\_ By: \_\_\_\_\_

Title: \_\_\_\_\_

LMA OPERATOR

Dated: \_\_\_\_\_ By: \_\_\_\_\_

Title: \_\_\_\_\_

The undersigned, American Society of Composers, Authors and Publishers, hereby consents and agrees to the amendment of the above mentioned License Agreement.

AMERICAN SOCIETY OF COMPOSERS,  
AUTHORS AND PUBLISHERS

Dated: \_\_\_\_\_ By: \_\_\_\_\_

Title: \_\_\_\_\_

# SETTLING PARTIES

SP EXHIBIT 25  
TAB 3 (MC 04-05 EX. 3)

(MUSIC CLAIMANTS)



PRODUCED BY WARNER BROS. TELEVISION  
 TELEVISED OVER THE CW NETWORK  
 WEDNESDAY 9:00 PM - 10:00 PM  
 AIRDATE: FEBRUARY 26, 2008

PRODUCTION #3T6809

\*REVISED: 04/24/08

ONE TREE HILL  
 "TONIGHT YOU'RE ONLY HERE TO..." (Prod. #3T6809)

<u>NO</u>	<u>SELECTION</u>	<u>COMPOSER</u>	<u>PUBLISHER</u>	<u>HOW USED</u>	<u>TIME</u>
0M1S	WON'T LET YOU GO	SARAH THIELE	RED CARD MUSIC DIVISION OF MAR-TUNE, INC. (ASCAP) (100%)	BKG. VOC.	1:11
0M2S	IT'S ONLY LIFE	KATE VOEGELE JAMES MCGORMAN	COMMUNIKATE MUSIC (ASCAP) (50%) MCG MELODIES (ASCAP) (50%)	VIS. VOC.	1:00
0M3	MORE THAN YOU KNOW	JOHN NORDSTROM	WARNER-OLIVE MUSIC, LLC (ASCAP)	BKG. INST.	1:46
0M4	THINKING ABOUT KEITH	JOHN NORDSTROM	WARNER-OLIVE MUSIC, LLC (ASCAP)	BKG. INST.	:41
0M5S	PONY	ERIN MCCARLEY JAMIE KENNEY	KING GORF MUSIC (ASCAP) FRAGGLE MUSIC (BMI)	BKG. VOC.	1:52
*0M6S	DIRTY SOUTH HUSTLA	CALVIN K. SAMUEL ROSHMOND PATTEN MARC FERRARI *JOSH KESSLER	RED ENGINE MUSIC (ASCAP)	BKG. VOC.	:14
0M7	YOUR. HOUSE.	JOHN NORDSTROM	WARNER-OLIVE MUSIC, LLC (ASCAP)	BKG. INST.	:35
0M8S	BRING IT ON	LENNY KRAVITZ	MISS BESSIE MUSIC (ASCAP) (100%)	BKG. VOC.	:34
0M9S	FAKEY FAKE	AARON LEO ESPINOZA ARIANA CHLOE MURRAY	SONGS MUSIC PUBLISHING LLC (ASCAP) (100%) O/B/O RAM ISLAND SONGS (ASCAP) PUT IT (ASCAP), WHORETICULTURE MUSIC (ASCAP)	BKG. VOC.	1:40
1M1	LOCKED IN THE LIBRARY	JOHN NORDSTROM	WARNER-OLIVE MUSIC, LLC (ASCAP)	BKG. INST.	:12
1M2S	MERRY-GO-ROUND BROKE DOWN	CLIFF FRIEND DAVE FRANKLIN	WB MUSIC CORP. (ASCAP) (100%)	BKG. INST.	:06
1M3	YOU DON'T KNOW	JOHN NORDSTROM	WARNER-OLIVE MUSIC, LLC (ASCAP)	BKG. INST.	1:12
2M1S	SO LONG	BRANDY JOHNSON	DRIFT MUSIC (BMI)	BKG. VOC.	1:48
2M2S	HOME	HOLLY CONLAN	CLOVERBIRD MUSIC (ASCAP)	BKG. VOC.	2:01
3M1	YOUR PRECIOUS	JOHN NORDSTROM	WARNER-OLIVE MUSIC, LLC (ASCAP)	BKG. INST.	:51
3M2	PIZZA BOY	JOHN NORDSTROM	WARNER-OLIVE MUSIC, LLC (ASCAP)	BKG. INST.	:21
3M3S	NEVER EVEN TOLD ME HER NAME	CHRISTOPHER WALL DAVID JORDAN TOM PRITCHARD JAMES MADDOCK	WB MUSIC CORP O/B/O WARNER/CHAPPELL MUSIC PUBLISHING LTD. (ASCAP) (100%)	BKG. VOC.	1:28
3M4	FIND THE STORY	JOHN NORDSTROM	WARNER-OLIVE MUSIC, LLC (ASCAP)	BKG. INST.	:20

**ONE TREE HILL**  
**"TONIGHT YOU'RE ONLY HERE TO..." (Prod. #3T6809)**

<u>NO</u>	<u>SELECTION</u>	<u>COMPOSER</u>	<u>PUBLISHER</u>	<u>HOW USED</u>	<u>TIME</u>
3M5S	THE NEW KID REVIVAL	MARC BIANCHI	BABY SHARK MUSIC (BMI) (100%)	BKG. VOC.	1:08
3M6	THEY GET CONFUSED	JOHN NORDSTROM	WARNER-OLIVE MUSIC, LLC (ASCAP)	BKG. INST.	:38
4M1	SNOW DAY	JOHN NORDSTROM	WARNER-OLIVE MUSIC, LLC (ASCAP)	BKG. INST.	:32
4M2S	WISH YOU WERE	KATE VOEGELE	COMMUNIKATE MUSIC (ASCAP) 100%	VIS. INST.	:06
4M2S	WISH YOU WERE	KATE VOEGELE	COMMUNIKATE MUSIC (ASCAP) 100%	VIS. VOC.	:05
4M2S	WISH YOU WERE	KATE VOEGELE	COMMUNIKATE MUSIC (ASCAP) 100%	VIS. VOC.	:08
4M2S	WISH YOU WERE	KATE VOEGELE	COMMUNIKATE MUSIC (ASCAP) 100%	VIS. VOC.	:07
4M2S	WISH YOU WERE	KATE VOEGELE	COMMUNIKATE MUSIC (ASCAP) 100%	VIS. VOC.	:10
4M3	THE OTHER PEYTON	JOHN NORDSTROM	WARNER-OLIVE MUSIC, LLC (ASCAP)	BKG. INST.	:56
4M4S	WISH YOU WERE	KATE VOEGELE	COMMUNIKATE MUSIC (ASCAP) (100%)	VIS. VOC.	1:47
5M1S	THERE'S A REASON	AUGUSTE BONDY CLARE FELICE IAN FELICE	AUGUSTE BONDY PUBLISHING DESIGNEE (ASCAP) CLARE FELICE PUBLISHING DESIGNEE (ASCAP) IAN FELICE PUBLISHING DESIGNEE (ASCAP)	BKG. VOC.	4:17
5M1S2	WISH YOU WERE	KATE VOEGELE	COMMUNIKATE MUSIC (ASCAP) (100%)	VIS. VOC.	:06
5M2S	BROKEN	JASON WADE	JASON WADE MUSIC (BMI)	BKG. VOC.	4:01
5M3	END CREDITS	JOHN NORDSTROM	WARNER-OLIVE MUSIC, LLC (ASCAP)	BKG. INST. / END TITLE	:20
5M4	TOLLIN/ROBBINS LOGO	MARK SNOW	SNOWTUNES (ASCAP)	LOGO	:03
5M5	AS TIME GOES BY	HERMAN HUPFELD	WARNER BROS., INC. (ASCAP) (WORLD EXCLUDING THE BRT's) CARLIN MUSIC PUBL. CANADA, INC. (SOCAN) O/B/O REDWOOD MUSIC LTD. (PRS) (100% BRT's)	LOGO	:03

# SETTLING PARTIES

SP EXHIBIT 25  
TAB 4 (MC 04-05 EX. 4)

(MUSIC CLAIMANTS)

**MC 04-05 Ex. 4**

**DVD PLAY LIST – LOCAL TELEVISION PERFORMANCE CLIPS**

<b>Clip</b>	<b>Program</b>	<b>Station</b>	<b>Date</b>	<b>Usage</b>
1	Fresh Prince of Bel-Air	WPIX	01/09/04	Opening Theme (“Theme”)
2	American Idol	WNYW	03/23/05	Feature
3	Walk on the Moon	WGN	03/27/05	Background (“BG”)
4	NFL Football (NFC Championship Game)	WNYW	01/23/05	Theme
5	Clifford’s Puppy Days (PBS)	WGBH	02/10/05	Theme
6	One Tree Hill	WPIX	04/12/05	Theme
7	WWOR News	WWOR	07/14/04	Feature
8	Believers Voice	WWOR	05/21/04	Theme
9	Jeopardy	WABC	12/02/05	BG
10	FOX MLB Baseball (ALCS Game 2)	WNYW	10/13/04	Theme
11	Ellen DeGeneres	WNBC	11/14/05	Vocal BG (“V-BG”)
12	Singsation (locally produced)	WGN	05/22/05	Feature
13	Steve Harvey	WWOR	07/14/04	Feature
14	Good Day NY	WNYW	07/09/04	Theme
15	PBS Soundstage – Motown	WNET	07/01/05	Feature
16	Everwood	WPIX	10/18/04	V-BG
17	NFL Football (NFC Championship Game)	WNYW	01/23/05	BG
18	White Christmas	WWOR	12/10/05	Feature
19	Super Bowl (Half-Time Show)	WNYW	02/06/05	Feature
20	The Simpsons	WNYW	04/29/04	V-BG

Before the  
COPYRIGHT ROYALTY JUDGES  
Washington, D.C.

**In the Matter of**

**Distribution of the 2004 and 2005  
Cable Royalty Funds**

**Docket No. 2007-3 CRB CD 2004-2005**

**WRITTEN TESTIMONY  
OF  
MICHAEL O'NEILL**

## **I. INTRODUCTION AND QUALIFICATIONS**

1. My name is Michael O'Neill and I am Senior Vice President, Licensing, of Broadcast Music, Inc. ("BMI"). BMI is one of the world's leading music performing rights licensing organizations ("PRO"). BMI, together with the American Society of Composers, Authors and Publishers ("ASCAP") and SESAC, Inc. ("SESAC"), the three U.S. PROs, make up the Phase I claimant group known as the Music Claimants. The Music Claimants together represent the combined public performing rights of over 725,000 songwriters and music publishers and over 20 million musical works. Each of the three U.S. PROs has entered into reciprocal licensing agreements with dozens of foreign performing rights societies throughout the world, pursuant to which the Music Claimants also represent the owners of virtually all of the rest of the world's copyrighted music in Section 111 cable distribution proceedings.

2. In my capacity as Senior Vice President, Licensing, at BMI, I oversee all aspects of BMI's music performing rights licensing for Media Licensing (broadcast and cable) and General Licensing (live and recorded performances at business and other establishments), but not New Media users (e.g. Internet, Mobile). I am familiar with BMI's broadcast and cable music licensing practices and I am personally involved with BMI's decisions concerning reasonable blanket license fees charged to those industries for their respective performances of music in the BMI repertoire. I have been directly involved in negotiations of fee proposals and I have testified in rate court proceedings to support fees quoted by BMI.

3. In conducting negotiations for BMI, my job is to identify the characteristics of different types of music-using industries, including their sources of revenue and their music uses. BMI proposes blanket license rates we believe are reasonable based on those characteristics for each different category of licensee. Under BMI's consent decree, BMI

may not discriminate in rates charged to similarly situated customers in each category.

Therefore, BMI is careful to consider all relevant aspects of a business before negotiating rates.

This process can involve looking at benchmark license agreements from one category of user and adjusting them for new or different users, as appropriate. In the process, I have become familiar with decisions of the BMI or ASCAP rate court about rate-setting, as these decisions may be instructive about reasonable rates and terms for BMI licenses.

4. I have held my current position at BMI since 2006 and I have been with BMI for 14 years, beginning as a Director of Media Licensing in 1995. Prior to BMI, I worked at CBS Television Network for eight years, first in financial planning analysis and later in affiliate relations. I received an undergraduate degree in 1984 from Montclair State University in Montclair, New Jersey, with a focus on business administration, and I received an MBA degree in marketing and finance from Rutgers University in 1988.

5. Based on my background and my longstanding licensing experience at BMI and general familiarity with the operations of both ASCAP and SESAC, I have detailed knowledge about their licensing rates, and the various uses of music in broadcast television programming, including music in programs carried by cable operators on distant signals.

6. The Music Claimants collectively license the public performance rights of millions of copyrighted musical compositions, including virtually all of the copyrighted music that is used in television programming, ranging from background music (when the musical work underscores the focus in a program) to feature (when the musical work is the focus of the audience's attention, such as on *American Idol*) to theme music (the signature music identifying the show). Music is an essential element of television programming that runs through all program types. Virtually every professionally produced television program employs copyrighted

music licensed by the Music Claimants. Attached as Appendix A is a summary describing some of BMI's award winning affiliates.

7. Each of the three PROs serves as a clearinghouse for distribution of royalties to its writer and publisher members or affiliates. These royalties come from license fees paid by the users of copyrighted music for marketplace or compulsory licenses to use the Music Claimants' repertoires. Millions of non-dramatic public performances of copyrighted music occur each day in the United States (as opposed to "dramatic" performances that one might see on theatrical stages throughout the country). Music users licensed by the PROs include television and radio stations (both commercial and noncommercial), broadcast and cable networks and cable system operators, hotels, nightclubs, restaurants, colleges and universities, concert halls and many others. The Music Claimants ensure that the vast quantity of public performances of their respective affiliates and members' music are properly licensed and that the writers and publishers are fairly compensated for these uses of their property.<sup>1</sup>

8. The Music Claimants offer blanket licenses to music users, both large and small. These users obtain from each of BMI, ASCAP and SESAC the unlimited right to perform publicly any or all of the copyrighted musical compositions in their respective repertoires, along with the repertoires of works from each of their foreign affiliates, through a single license with each performing rights organization. For an annual fee, the blanket license provides the music user permission to use as much or as little music in the PRO's repertoire as it wishes. In so doing, they are able to greatly limit transactional licensing costs, and are indemnified by the PRO for infringements.

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<sup>1</sup> BMI and ASCAP operate on a not-profit-making basis. All royalties collected by BMI and ASCAP for public performance of music in each catalog, less expenses and reasonable reserves, are distributed to its songwriter, composer and publisher members and affiliates. SESAC operates as a private for-profit corporation.



## **II. PURPOSE AND SUMMARY OF TESTIMONY**

9. The primary purpose of my testimony on behalf of the Music Claimants is to provide the Copyright Royalty Judges with information regarding the Music Claimants' licensing of local television broadcast stations and cable system operators.<sup>2</sup> In particular, in licensing the public performance of our respective members' works in all programming broadcast on local television stations (other than the Big 3 network (ABC, CBS and NBC) programming), BMI and the other PROs negotiate with an industry committee of local television broadcasters known as the Television Music License Committee (the "TMLC"). Similarly, in entering into license agreements with cable systems for their locally originated content, BMI negotiates directly with the cable operators through an industry committee of cable operators formed by the National Cable Television Association ("NCTA"). I describe such negotiations below.

10. Moreover, based on my experience conducting such negotiations on behalf of BMI, I am familiar with the differences among the various marketplaces for music performance rights and the various industry users of music. Specifically, I am familiar with the local broadcast market and the distant signal market relevant to this proceeding. As I describe below, those markets have several critical differences.

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<sup>2</sup> The Music Claimants are part of the group of Settling Parties who have entered into a settlement regarding the distribution and allocation among themselves of their collective share of the 2004-05 distant signal cable royalties. As part of this joint claim, the Music Claimants are introducing evidence of the value of Music's share of the 2004-05 funds in order to provide the Judges with a value for Music's share of the Basic, 3.75% and Syndex Funds.

### **III. PRO BLANKET LICENSE FEE AGREEMENTS**

#### **A. THE PROS' AGREEMENTS WITH LOCAL TV STATIONS**

11. As I indicated above, BMI engages in periodic negotiations for industry-wide blanket and per program license fees with the TMLC. BMI's negotiations with the TMLC resulted in a blanket license agreement for an \$85 million industry-wide blanket license fee in 2004. This fee is allocated among all English language commercial stations in all markets. A copy of BMI's Local Television Blanket License agreement in effect in 2004 is presented as MC 04-05 Ex. 5. That same fee is currently interim for 2005 while the parties' negotiations for final fees continue. If the parties do not reach final agreement, the BMI rate court will be available to set reasonable final blanket license fees and terms. For its part, ASCAP agreed with the TMLC on blanket license fees of \$97 million in 2004 and \$85 million in 2005, while SESAC's blanket license fees were \$13.5 million in 2004 and \$16 million in 2005. Thus, in the aggregate, these license fees represent the negotiated marketplace rights fee for blanket license access to the combined repertoires of the Music Claimants for programming (other than Big 3 network programming) on local television stations. For each PRO, the blanket license fee is allocated among the local stations according to an allocation formula.

12. Not every station chooses to pay their allocated portion of the blanket fee and instead may opt for local station "per program" licenses offered by both BMI and ASCAP. This form of license permits a station to obtain a credit against its PRO license fee for local programs which contain no music in the repertoire of that PRO or in which all of the PRO's music is directly licensed by the station, or by the program producer. The per program license price is calculated by applying a complex formula. Under the BMI per program license, for example, a station is allocated an overall BMI "starting fee" that is considerably higher than its

allocated blanket fee. The station ultimately pays BMI a fee each month pursuant to a formula which reduces the starting fees to account for the revenues of local programs where the station chooses to directly license all of the BMI musical works in the program directly from the BMI music publisher (this is known in the music industry as a "direct license"). Stations opting for the per program license who enter into such direct licenses can pay BMI less than their otherwise allocable BMI blanket license, in part, because they are paying other license fees for a portion of their music directly to the music publisher. Based on my experience, per program licenses create certain administrative burdens on the stations opting for them, including entering into multiple individual transactions with the relevant musical work copyright owner.

13. BMI's net license fees each year are the combination of fees received from blanket and per program license stations, but obviously do not include the revenue paid directly to BMI's members pursuant to direct licenses. The same is true for ASCAP. Thus, the actual music license fees paid by local stations to the PROs understate the total music license fees paid by the broadcast stations.

14. As I note above, the local television licenses entered into between the TMLC and the PROs do not cover public performances of music in the Big 3 network programming. Rather, the PROs license the three major television networks, ABC, NBC and CBS, separately to cover the music performed in the Big 3 network television programming carried on each of those networks' affiliated stations' local television stations.

**B. THE PROS' AGREEMENTS WITH CABLE SYSTEM OPERATORS**

15. BMI and ASCAP also enter into blanket license agreements with cable systems operators. Again, these are separately negotiated by BMI and ASCAP with a music licensing committee created for this purpose by the NCTA.

16. BMI's blanket license agreement with cable multiple system operators in effect in 2004 and 2005 is presented as MC 04-05 Ex. 6. The blanket license fee for 2004 and 2005 was 8.3 cents per subscriber per year. The license covers music in public, educational and governmental channels ("PEG Channels") and leased access channels. It also covers BMI music in any locally inserted advertisements in cable network programming. The programming covered by this agreement contains limited incidental uses of music in advertising and music in non-revenue generating PEG channels and leased access channels. It does not cover carriage by the cable systems of cable network programming; the cable networks have their own licenses with the PROs.

17. Despite the limited incidental uses covered, BMI's NCTA negotiated blanket license agreement covered approximately 60 million subscribers and produced fees of approximately \$5 million in 2004. I can estimate therefore that the three PROs' fees for this extremely limited universe of programming amounted to in excess of \$10 million in 2004. I note that by comparison, at 5.0% of the 2004-05 cable royalty funds, the Music Claimants would receive far less money (less than \$8 million) from the cable operators for all of the music in thousands of highly valuable syndicated programs and sports programming carried on hundreds of distant television stations.

#### **IV. THE CHARACTERISTICS OF THE DISTANT SIGNAL MARKETPLACE**

##### **A. PRIOR AWARDS TO MUSIC**

18. The Music Claimants have participated in every cable royalty distribution proceeding (including joining in global settlements or Music-only settlements) since the first Section 111 Phase I proceeding concerning the 1978 cable royalties. The Music Claimants' share as determined by litigated proceedings and public settlements over the past 25 years has established a strong track record that firmly recognizes the value of music to distant signal television programming.<sup>3</sup>

19. In the first distribution proceeding under section 111, the Copyright Royalty Tribunal ("CRT") awarded the Music Claimants 4.5% of the 1978 cable royalties. In the most recent litigated distribution proceeding before the Copyright Arbitration Royalty Panel and the Librarian of Congress, the 1998-99 Phase I Cable Proceeding, the Librarian awarded the Music Claimants 4% of the Cable Funds.<sup>4</sup> In that proceeding, the CARP considered evidence that Music's award may be determined by calculating music rights licensing fees paid by the entire television broadcast industry as a percentage of total broadcast rights (for programs and music) paid by the industry. However, the evidence presented in that proceeding failed to make any adjustment for the unique characteristics of the distant signal marketplace, which characteristics I set forth below.

20. First, the programming of the big three television networks (NBC, ABC and CBS) is not compensable under Section 111, and is covered by separate licenses with those

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<sup>3</sup> I understand that a minuscule portion of the overall cable funds have been attributed to the carriage of distant radio stations, and all of that value, save for the amount awarded to NPR for its non-music programming, has been awarded each year to the Music Claimants for the copyrighted music on radio.

<sup>4</sup> Distribution of 1998 and 1999 Cable Royalty Funds, 69 Fed. Reg. 3603, 3619-20 (Jan. 26, 2004)(Docket No. 2001-8 CARP CD 98-99).

networks, so it is appropriate to exclude consideration of the music fees and other rights fees from those networks. The size of the local television industry (1,300 licensees) also is more comparable to the thousands of cable systems carrying distant signals, so licensing cable systems would be more comparable to the costs that are incurred by PROs when they license the local stations, as opposed to the costs of three nationwide network licenses.

21. Second, it is reasonable to use blanket license fees agreed to by the local stations with the PROs as the benchmark, rather than net license fees paid to PROs, because the savings accruing to local stations under per program licenses for obtaining direct licenses of musical works come mainly from programs they create (*e.g.* local news) and cable systems carrying distant signals would not be similarly situated. In contrast, net license fee payments to BMI and ASCAP are not a good proxy for distant signal blanket license fees, for a number of reasons. First and foremost, the Section 111 compulsory license is a blanket license, and therefore the PROs' blanket fees are the analogous benchmark fees. Second, using local television stations per program fees (or overall PRO collections from the entire industry) would understate payment made for music by not accounting for the substantial payments that may be made directly to BMI and ASCAP affiliated publishers and composers. Moreover, the savings result largely from clearance of music in programs that the local stations create and own themselves (*e.g.* local news), and based on my experience, I do not believe cable operators would likely enter into similar direct licensing transactions given the fact that distant signal programming is so voluminous and transaction costs would be high.

22. Third, in the distant signal market, different types of stations – *e.g.*, network affiliate, and independent – are carried as distant signals to different degrees, and certain

stations are carried to more subscribers than others. For example, non-network independent stations are more widely carried as a distant signal than any other category of station.

23. Fourth, I understand that cable systems are subject to a variety of legal restrictions on their ability to import duplicative programming. These are the syndicated exclusivity rules, the network non-duplication rules and the sports program blackout rules. As a result, unlike the case of local television broadcasters, who routinely obtain and pay for exclusive rights to syndicated and sports programming within their markets, cable operators would be prevented from doing so even in the absence of the cable compulsory license. Thus, the payments made by the local stations for the rights to exclusive broadcast overstate relative to their music license fees what would be paid by the cable system operators for the rights to nonexclusive broadcasts in the distant market.

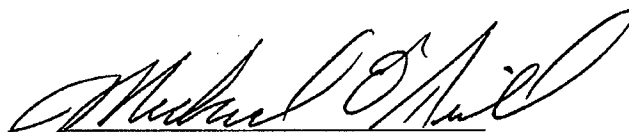
## V. CONCLUSION

24. For the reasons set forth in the Statement of William Zarakas, I believe that the appropriate share of cable royalty funds for Music in this proceeding is 5.2% of the total 2004 royalties in each of the Basic, 3.75% and Syndex funds and 4.6% of these funds for 2005. Thank you for this opportunity to present information regarding the Music Claimants and Settling Parties' share of the cable royalty funds at issue in this proceeding.

*Declaration*

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge, information, and belief.

Dated: June 1, 2009  
New York, NY

A handwritten signature in cursive script, appearing to read "Michael O'Neill", written over a horizontal line.

Michael O'Neill  
Senior Vice President, Licensing  
Broadcast Music, Inc.



**APPENDIX A**

**WRITTEN TESTIMONY  
OF  
MICHAEL O'NEILL**

## APPENDIX A

### HIGHLIGHTS OF BMI'S AFFILIATES AND CATALOG

BMI represents some of the greatest names in music, including Hank Williams, Louis Jordan, Willie Dixon, Jerry Lee Lewis, Doc Pomus, John Kander & Fred Ebb, Sheldon Harnick & Jerry Bock, Jerry Goldsmith, John Williams and Mike Post. BMI's affiliated writers create well-known songs in every genre of music. In addition to the great songwriters mentioned above, the following is a sampling of BMI's affiliated writers in several genres:

**POP and ROCK:** Red Hot Chili Peppers, Sheryl Crow, John Lennon, Maroon 5, Christina Aguilera, Elvis Presley, Nirvana, Paul Simon, Britney Spears, Bee Gees, Three Doors Down, Van Morrison, Carlos Santana, Creed, Phish, Gloria Estefan, Crosby, Stills & Nash, Barry Manilow, The Beach Boys, Kid Rock and Black Crowes.

**R&B and HIP-HOP:** Kanye West, Eminem, Janet Jackson, Mariah Carey, Babyface, Aretha Franklin, James Brown, Toni Braxton, Ray Charles, Lil Wayne, Otis Redding, Vanessa Williams, Ja Rule, Chuck Berry and Nore.

**COUNTRY:** Vince Gill, Shania Twain, Toby Keith, Dolly Parton, Willie Nelson, Alabama, Carrie Underwood, Merle Haggard, Alison Krauss, Loretta Lynn, Dixie Chicks, Brooks & Dunn, Lonestar, Tim McGraw, Faith Hill, Taylor Swift, Martina McBride and George Jones.

**JAZZ:** Miles Davis, Dave Brubeck, Joshua Redman, Antonio Carlos Jobim, Kevin Eubanks, Norah Jones, Kenny G, John Coltrane, Thelonious Monk, Charlie Parker, Lionel Hampton, Pat Metheny, Al Jarreau, Chick Corea, Charlie Mingus, Keith Jarrett, and Herbie Hancock.

**SYMPHONIC and CONCERT:** Milton Babbitt, Aaron Jay Kernis, Michael Torke, John Adams, Charles Ives, Gunther Schuller, William Bolcom, Joan Tower, John Harbison, William Shuman, Steve Reich, Elliot Carter, Ellen Taaffe Zwilich, Tobias Picker, Alan Hovhaness and Carlos Surinach.

The notable foreign writers who license through BMI include: Elton John, Sting, Juanes, Shakira, Giacomo Puccini, Riz Ortolani, Tim Rice, Eric Clapton and Maurice Ravel.

BMI's writers have received numerous awards, medals and honors and it would take many, many pages to list them all. Examples of recent winners (in parentheses): GRAMMY

AWARDS (Alison Krauss, Lil Wayne, Adele, Eagles, Kanye West, B.B. King, Carrie Underwood, Juanes, Bela Fleck, Amy Winehouse, Herbie Hancock, Duffy, Radiohead, Al Green, Los Tigres del Norte, John Legend); COUNTRY MUSIC ASSOCIATION AWARDS (Alison Krauss, Brooks & Dunn, Rascal Flatts, Keith Urban, Carrie Underwood, Sugarland, Tim McGraw, Jamey Johnson); MTV MUSIC VIDEO AWARDS (Britney Spears, Gnarls Barkley, Lil Wayne, Chris Brown, Black Eyed Peas, Red Hot Chili Peppers); SOUL TRAIN AWARDS (Jamie Foxx, Black Eyed Peas, Gnarls Barkley, Mariah Carey, John Legend, R Kelly, Kanye West); and DOVE AWARDS (Steven Curtis Chapman, Casting Crowns, Blind Boys of Alabama, Toby Mac, Kirk Franklin). Several of BMI's affiliated composers have won the esteemed PULITZER PRIZE (Aaron Jay Kernis, Gunther Schuller, Roger Sessions, Bernard Rands, Steve Reich, Ellen Taaffe Zwilich, Steven Stucky, John Harbison, Yehudi Wyner).

In addition, many of BMI's legendary songwriters have been inducted in music Halls of Fame, including THE ROCK AND ROLL HALL OF FAME (Paul Simon, John Lennon, Woody Guthrie, Aretha Franklin, Chuck Berry, Elvis Presley, Pete Seeger, Ruth Brown, Etta James, Tina Turner, The Beach Boys, Jerry Lee Lewis, REM Kenny Gamble & Leon Huff, Joni Mitchell); SONGWRITERS HALL OF FAME (Willie Nelson, Dolly Parton, Eric Clapton, Gloria Estefan, Brian Wilson, James Brown, Barry Manilow, Sting, Michael Jackson, Carol King, David Crosby, Stephen Stills, Graham Nash); COUNTRY MUSIC HALL OF FAME (Buck Owens, Merle Haggard, Willie Nelson, Loretta Lynn, Kitty Wells, Minnie Pearl, Chet Atkins, Roy Clark, Barbara Mandrell, and Hank Williams) and GOSPEL MUSIC HALL OF FAME (Larnelle Harris, The Statler Brothers, Thomas A. Dorsey, The Winans, Dolly Parton, Sandi Patty, Elvis Presley, the Oak Ridge Boys and Al Green)

Moreover, BMI represents many of the leading film and television composers. On the television side, BMI's writers include Mike Post, Earle Hagen and Snuffy Walden, BMI film composers include John Williams, Gustavo Santaolalla, Jerry Goldsmith, Alan Menken, Thomas Newman and Lalo Schifrin.

BMI's film and television composers have received numerous awards for their work. Most notably, recent ACADEMY AWARD winners include A.R. Rahman (PRS) for *Slumdog Millionaire* and Gustavo Santaolalla for *Brokeback Mountain* and *Babel*, in addition to previous winners such as John Williams, Elton John, Tim Rice and Alan Menken.

Recent EMMY AWARD winners include Yoav Goren for THE XX OLYMPIC WINTER GAMES: THE STORIES OF TORINO; Lenny Williams, for NATURE: CHRISTMAS IN YELLOWSTONE; George Fenton (PRS) for PLANET EARTH: POLE TO POLE; Katreese Barnes for "Dick in a Box" from SATURDAY NIGHT LIVE; William Ross for Outstanding Music Direction for the 79th ANNUAL ACADEMY AWARDS, on ABC; Edward Shearmur for MASTERS OF HORROR; Chris Biondo and Harry Leonard Williams for NATIONL GEOGRAPHIC EXPLORER – DEADLY LOVE; Greg O'Connor and Jim Wise for *A Wonderfully Normal Day* from MADTV; Bradley Hatfield for *Sunshine* from THE YOUNG AND THE RESTLESS; Danny Elfman for DESPERATE HOUSEWIVES; Jerry Pilato, A.J. Gundell, Gary Kuo, Dominic Messinger and Kim Oler for ALL MY CHILDREN; and Aaron Zigman and Alex Brown for *Sim Shalom* from CROWN HEIGHTS.

# SETTLING PARTIES

SP EXHIBIT 26  
TAB 5 (MC 04-05 EX. 5)

(MUSIC CLAIMANTS)



Local Television Station
Music Performance Blanket License

AGREEMENT, made at New York, N.Y. on \_\_\_\_\_, 20\_\_\_\_, between BROADCAST MUSIC, INC., a corporation organized under the laws of the State of New York (BMI) with principal offices at 320 West 57th Street, New York, N.Y. 10019, and

(Legal Name of Licensee)

- Please Check Appropriate Box And Complete
A corporation organized under the laws of
A limited liability company organized under the laws of
A partnership composed of
An individual residing at

(LICENSEE) with offices located at

City State Zip Telephone No.

and operating the television broadcasting station located at

City State Zip Telephone No.

and presently designated by the call letters (Station) (the "Agreement").

IT IS HEREBY AGREED AS FOLLOWS:

1. TERM. The term of this Agreement shall be the period beginning and ending December 31, 2004, unless earlier terminated as hereinafter provided.

2. DEFINITIONS. As used in this Agreement, the following terms shall have the following respective meanings:

(a) "Affiliated Station" shall mean any free, over-the-air television broadcasting station licensed by the FCC which is located in the United States, its commonwealth, possessions and territories, that regularly broadcasts Programs transmitted by a television network licensed by BMI during the term hereof.

(b) "Announcement" shall mean any commercial, promotional, or public service announcement (exclusive of program length "infomercials" of greater duration than 120 seconds), or any producer's or distributor's logo.

(c) "BMI Consent Decree" shall mean the consent decree entered in United States v. BMI, 64 Civ. 3787 (LLS) (S.D.N.Y.); as amended.

(d) "COMMITTEE" shall mean the Television Music License Committee, an unincorporated membership association organized under the laws of the State of New York, which is duly authorized to represent local television stations in music licensing matters.

(e) "LMA Operator" shall mean any person, firm or corporation not under the same or substantially the same ownership, management or control as LICENSEE with whom LICENSEE has entered into a Local Marketing Agreement.

(f) "Local Marketing Agreement" shall mean any arrangement between LICENSEE and an LMA Operator that:
(1) authorizes the resale by an LMA Operator of the use of the television broadcasting facilities of Station;
(2) permits an LMA Operator to provide Programs for all or substantially all of the time Station is on the air; and
(3) provides for the sale by an LMA Operator of all or substantially all Announcements broadcast on Station.

(g) "Network Announcement" shall mean any Announcement transmitted by a television network licensed by BMI as a network at the time such Announcement is broadcast on the network, and broadcast simultaneously or by so-called "delayed" or "repeat" broadcasts (sometimes known as "rebroadcasts") over two or more Affiliated Stations of a network licensed by BMI.

(h) "Network Television Program" shall mean any Program, transmitted by a television network licensed by BMI as a network at the time such Program is broadcast on the network, identified as a Program of the network, and broadcast simultaneously or by so-called "delayed" or "repeat" broadcasts (sometimes known as "rebroadcasts") over two or more Affiliated Stations of a network licensed by BMI.

(i) "Non-Network Announcement" shall mean any Announcement broadcast by Station other than a Network Announcement.

(j) "Non-Network Television Program" shall mean any Program broadcast by Station other than a Network Television Program.

(k) "Program" shall mean all material (visual or otherwise) broadcast by Station other than Announcements.

(l) "Station" shall mean and be restricted to the FCC-licensed commercial television broadcasting station whose ownership and call letters are indicated above.

(m) "Station Web Site" shall mean the Web Site operated by or for Station as the Station's Web Site.

(n) "Syndicated Television Program" shall mean any Non-Network Television Program supplied to LICENSEE and other television stations by a producer or a distributor, or by a television network which is not licensed by BMI.

(o) "Television Broadcasting" shall mean free, unscrambled, point-to-multipoint over-the-air local broadcasting by means of television.

(p) "Web Site" shall mean an Internet computer service comprising a series of interrelated web pages registered with a domain name registration service that Station transmits or causes to be transmitted either directly or indirectly to persons who receive the service over the Internet by means of a personal computer or by means of another device capable of receiving Internet transmissions. Station's current Web Site URL is [http://\\_\\_\\_\\_\\_](http://_____)

### 3. GRANT OF RIGHTS.

(a) BMI hereby grants to LICENSEE, for the term hereof, a non-exclusive license to perform publicly all musical works the right to grant public performing right licenses of which BMI may during the term hereof control:

(i) by Television Broadcasting in the United States, and its territories, commonwealth and possessions, as part of LICENSEE's Non-Network Television Programs and Non-Network Announcements from Station; and

(ii) in and as part of a single Station Web Site transmitted or caused to be transmitted either directly or indirectly over the Internet but only in connection with:

(A) the simultaneous retransmission of the Station's locally produced and aired programming;

(B) the retransmission of all or a portion of Station's local newscasts and local news based public affairs programming that aired during the Term of this Agreement; and

(C) other transmissions the primary purpose of which are to promote viewership of Station and its television programming; *provided, however,* that: (1) no single performance licensed under this subsection (C) may exceed thirty (30) seconds in duration; and (2) the total duration of all performances of BMI-repertoire works under this subsection (C) available at any single time for listening on Station's Web Site may not exceed fifteen (15) minutes in duration.

(b) Notwithstanding the foregoing, the license granted herein shall not include transmissions described in subparagraphs 3(a)(ii)(A) and 3(a)(ii)(B) above where such transmissions contain programming which is nationally or regionally aired regularly scheduled series programming (e.g., Regis and Kelly, George Michael's Sports Machine, and Major League Baseball). In the event that Station airs locally-produced programming, and such programming also appears on one or more additional stations (which programming for purposes of this Agreement would not be considered locally produced and aired programming for the additional station(s)), only the Station may retransmit BMI music contained in such programming in the manner described in subparagraphs 3(a)(ii)(A) and 3(a)(ii)(B) above, while the additional station(s) may not.

(c) The license granted herein does not cover transmissions on Station's Web Site of BMI music where members of the public are charged a fee for the right to access such transmissions. Such transmissions shall be subject to appropriate separate licensing. Notwithstanding the foregoing, the fact that a Station may charge members of the public for access to discrete areas of the Station's Web Site other than those areas containing the performances licensed hereunder shall not limit the scope of this license.

(d) With respect to any portion of the Term prior to January 1, 2002, the Web Site license granted under Paragraph 3(a)(ii) shall be limited to those transmissions of BMI music as described in Paragraph 3(a)(ii)(C) above.

(e) For the rights granted in Paragraph 3(a)(ii) only, the territory shall mean the United States, its commonwealth, territories and possessions and the territories represented by non-U.S. performing right licensing organizations posted as Exhibit C in the licensing section of the BMI web site located at <http://www.bmi.com>. Such list may be amended by BMI at any time and without notice. Notwithstanding the foregoing, the territorial scope of the grant of rights in Paragraph 3(a)(ii) with respect to any musical works which are affiliated with BMI through a non-U.S. performing right licensing organization not listed on Exhibit C is limited to public performances in the U.S. Territory.

(f) The performances licensed hereunder may originate at any place whether or not such place is licensed to publicly perform the musical works licensed hereunder, and regardless of the manner, means or method of such origination, but nothing herein shall be deemed to grant a license to such place itself (or to the parties responsible for such performances) for the public performances in such place of any such works.

(g) The license granted herein shall not include dramatic rights, the right to perform dramatico-musical works in whole or in substantial part, the right to present individual works in a dramatic setting or the right to use the music licensed hereunder in any other context which may constitute an exercise of the "grand rights" therein. It is nonetheless expressly understood that nothing contained in this Paragraph shall be construed so as to limit the ability of LICENSEE to perform, by Television Broadcasting, any works contained in Syndicated Television Programs, motion pictures initially produced for theatrical exhibition or music videos which LICENSEE would otherwise have the right to perform under this Agreement.

(h) BMI will, upon specific reasonable written request made by LICENSEE, indicate whether one or more specified musical works listed by LICENSEE are licensed by BMI. LICENSEE shall provide the title and the writer/composer of each musical composition requested to be identified.

(i) Except as expressly herein otherwise provided, nothing herein contained shall be construed as authorizing LICENSEE to grant to others any right to reproduce, retransmit or publicly perform by any means, method or process whatsoever, any of the musical works licensed hereunder or as authorizing any receiver of any television broadcast to publicly perform or reproduce the same by any means, method or process whatsoever.

(j) The license granted herein shall not include the right to adapt the musical works licensed hereunder or to make any other versions thereof.

(k) The license granted herein shall include on a non-precedential, experimental basis the right to engage in such non-dramatic public performances of musical works in BMI's repertoire as may result from Station's free, over-the-air broadcasts of BMI music within its existing geographic market(s) over FCC assigned frequencies, by means of a digital television signal. It is understood that the right to perform works in the BMI repertoire by means of a digital television signal is being included in this Agreement because digital television is a new technology and such grant of rights reflects the experimental character of such broadcasts. Station shall provide BMI, in electronic form, annual reports concerning LICENSEE's digital television signal, using the form attached hereto as Exhibit D. The form shall be filed during the month of October of each of the years 2002, 2003 and 2004.

#### 4. LICENSE FEE/STATEMENTS.

This Agreement expressly incorporates, and LICENSEE agrees to be bound by, the terms of the letter agreement between BMI and COMMITTEE attached hereto as Exhibit A.

(a) BROADCAST TELEVISION PAYMENTS FOR 2002, 2003 AND 2004. LICENSEE shall pay to BMI for each month during the calendar years 2002, 2003 and 2004, a fee equal to one twelfth (1/12) of LICENSEE's allocated share of the annual industry-wide BMI blanket license fee of \$85 million, as allocated according to the methodology prescribed in Schedule I to Exhibit A. Such fee shall be payable no later than the first calendar day of the month succeeding the month to which the fee is attributable. In no case shall LICENSEE's monthly fee be less than \$45.00.

(b) BROADCAST TELEVISION PAYMENTS FOR APRIL 1, 1999 THROUGH DECEMBER 31, 2001. LICENSEE agrees to pay BMI, in addition to the interim license fees that were heretofore payable by LICENSEE to BMI in respect of the period from April 1, 1999, through and including December 31, 2001, under the Interim BMI Local Television Station Music Performance Blanket or Per Program License for Station, such amounts and at such times as are provided for in Paragraph 2 of Exhibit A concerning the Settlement Fee.

(c) WEB SITE PAYMENTS FOR 2002, 2003 and 2004. LICENSEE shall pay to BMI for each month during the calendar years 2002, 2003, and 2004, a fee equal to one twelfth (1/12) of LICENSEE's allocated share of the BMI annual Internet fee as set forth in Exhibit A and as determined by the COMMITTEE. Such fee shall be payable to BMI no later than the first calendar day of the month succeeding the month to which the fee is attributable.

(d) If any payment due hereunder is not received by BMI in the twenty (20) days following the date on which such payment is due, BMI may collect a late-payment charge of one percent (1%) per month (simple interest) calculated from the date such payment was due.

#### 5. MUSIC PERFORMANCE REPORTS.

(a) BROADCAST TELEVISION REPORTS. LICENSEE, upon written request from BMI made on notice of not less than four (4) weeks specifying the period to be covered, agrees to furnish (on forms to be supplied by BMI and/or available on BMI's web site) reports of LICENSEE's performances by Station of all musical works, indicating



the works performed by title and composer or by such other convenient method as may be designated by BMI. In no event shall such reports be furnished for more than one (1) week of each year of the term. It is expressly understood that, with respect to any Syndicated Television Programs, LICENSEE's obligation to report music data to BMI under this Paragraph shall be limited to providing BMI with the title and episode name or number of such Syndicated Television Program(s); if no cue sheet is available, LICENSEE shall cooperate with BMI in attempting to obtain such cue sheets and/or in providing BMI with access to a tape or recording of the Syndicated Television Program involved. In addition to these reports, LICENSEE shall provide a list of its Non-Network Announcements for the week (e.g., traffic reports); LICENSEE may redact any revenue or financial information from this list, provided that the list includes the name of the commercial, the dates and number of times it was broadcast and the ISCI code number for the commercial.

(b) WEB SITE REPORTS. LICENSEE shall notify BMI in writing, using the form attached hereto as Exhibit B, reasonably promptly after beginning to stream its over-the-air broadcast television signal or to distribute a Web Site licensed pursuant to this Agreement. Thereafter, upon written request from BMI made on notice of not less than four (4) weeks specifying the period of time to be covered, LICENSEE shall provide to BMI, in electronic form, a music use report for a period specified by BMI not to exceed one month for each calendar year during the Term of the Agreement using the form attached hereto as Exhibit C. BMI reserves the right to request from LICENSEE information sufficient to identify the title(s) of any Program(s) promoted on individually retrievable archived promotional announcements on the Web Site as part of such reports.

6. INDEMNIFICATION. BMI agrees to indemnify, save and hold harmless and to defend LICENSEE, its advertisers and their advertising agencies, and its and their officers, employees and artists, and each of them, from and against all claims, demands and suits that may be made or brought against them or any of them with respect to performance under this Agreement of any works in the BMI repertoire that are licensed hereunder; provided, however, that such indemnity shall be limited to those claims, demands and suits that are made or brought within the United States, its territories, commonwealth and possessions, and provided further that this indemnity shall not apply to broadcasts of any musical work performed by LICENSEE which is not contained in the BMI repertoire at the time of performance by Station or which is the subject of a written notice of withdrawal in accordance with Paragraph 7 hereof. LICENSEE agrees to give BMI immediate notice of any such claim, demand or suit and agrees to deliver immediately all papers pertaining thereto. BMI shall have full charge of the defense of any such claim, demand or suit, and LICENSEE shall cooperate fully with BMI therein. LICENSEE, however, shall have the right to engage counsel of its own at its own expense who may participate in the defense of any such action. The provisions of this Paragraph shall survive termination of this Agreement; but solely with respect to performances broadcast by Station during the term of this Agreement.

7. WITHDRAWAL OF WORKS. BMI reserves the right upon written notice to LICENSEE to withdraw from the license granted hereunder any musical work as to which any legal action has been instituted or a claim made that BMI does not have the right to license the performing right in such work or that such work infringes another work. BMI shall notify LICENSEE as promptly as reasonably possible of any such withdrawal and shall attempt to determine and advise LICENSEE at the time of such notice of any Syndicated Television Program in which any such withdrawn work may be contained.

8. ASSIGNMENT. This license shall be non-assignable except to the person, firm or corporation acquiring the Federal Communications Commission license of Station, and upon assignment to the acquiring person, firm or corporation and upon the acceptance by BMI in form approved by BMI of the application of LICENSEE hereunder, LICENSEE shall be relieved of future liability under this Agreement as long as all statements have been submitted by LICENSEE and all fees due BMI under this Agreement have been paid to BMI. Nothing herein is intended to limit the new owner's entitlement to a license pursuant to Article XIV of the BMI Consent Decree.

#### 9. ARBITRATION.

(a) With the specific exception of disputes which may be within the jurisdiction of the United States district court having jurisdiction under the BMI Consent Decree, all disputes of any kind, nature or description arising in connection with the terms and conditions of this Agreement shall be submitted to the American Arbitration Association in New York, New York for arbitration under its then prevailing rules, the arbitrator(s) to be selected as follows: Each of the parties shall, by written notice to the other, have the right to appoint one arbitrator. If, within ten days following the giving of such notice by one party, the other shall not, by written notice, appoint another arbitrator, the first arbitrator shall be the sole arbitrator. If two arbitrators are so appointed they shall appoint a third arbitrator. If ten days elapse after the appointment of the second arbitrator and the two arbitrators are unable to agree upon the third arbitrator, then either party may, in writing, request the American Arbitration Association to appoint the third arbitrator. The award made in the arbitration shall be binding and conclusive on the parties and judgment may be, but need not be, entered thereon in any court having jurisdiction. Such award shall include the fixing of the reasonable costs, expenses and attorneys' fees of arbitration, which shall be borne by the unsuccessful party, subject to the provisions of subparagraph (b) below.

(b) If, during the term of the Agreement, any dispute arises between BMI and LICENSEE concerning the interpretation of any of the provisions of this Agreement, the resolution of which, in the judgment of BMI or COMMITTEE, either jointly or severally, has or may have industry-wide impact, BMI and COMMITTEE shall first endeavor to resolve such dispute, failing which either party may refer the matter to arbitration (unless the parties agree on some alternative mechanism for dispute resolution); and LICENSEE agrees to be bound by the results of all of such arbitrations involving BMI and COMMITTEE. In the event of such a reference, each party shall bear its own costs, expenses and attorneys'

fees. In the event of such a reference, either party, as a preliminary matter, shall be entitled to assert that the dispute between them is not properly dealt with under the terms of this subparagraph.

10. **TERMINATION BY LICENSEE.** LICENSEE shall have the right to terminate this Agreement, upon ten (10) business days' notice to BMI, in the event of: (a) the termination or suspension of the governmental licenses covering LICENSEE, or any substantial alteration or variation of the terms and conditions thereof; or (b) the suspension of operations by Station for a substantial period of time.

11. **BREACH OR DEFAULT.** Upon LICENSEE's breach or default of any payment, accounting or substantive reporting obligation required under the terms of this Agreement, BMI may give LICENSEE thirty (30) days' notice in writing to cure such breach or default. In the event that such breach or default has not been cured within thirty (30) days of said notice, BMI may then terminate this Agreement.

12. **NOTICE.** Any notice of termination given hereunder shall be given by registered or certified mail or delivery service for which there is proof of delivery to, and receipt by, the addressee. Any other notice required or permitted to be given under this Agreement shall be in writing and shall be deemed duly given when sent by ordinary first-class U.S. mail to the party for whom it is intended, at its office address hereinabove stated, or any other address which either party hereto may from time to time designate for such purpose, and when notice is so mailed, it shall be deemed given upon the mailing thereof. Any notice sent to BMI shall be to the attention of S.V.P. Media Licensing Department. Any notice sent to LICENSEE shall be to the attention of the person signing this Agreement on behalf of LICENSEE or such other person as LICENSEE may advise BMI.

13. **PER PROGRAM LICENSE.** LICENSEE acknowledges that the BMI Local Television Station Per Program License for the term commencing January 1, 2002 and ending December 31, 2004 (the "Per Program License") has been offered to LICENSEE simultaneously with this Agreement and LICENSEE is hereby electing this Agreement instead thereof. During the term of this Agreement, provided that LICENSEE is not more than ninety (90) days in arrears in payments due hereunder, LICENSEE may hereafter elect to switch from this Agreement to the Per Program License as of the first day of a calendar month, prospectively on thirty (30) days' prior written notice to BMI (an "Election"). By making an Election, LICENSEE agrees to be bound by all the terms of the agreement elected. Thereafter LICENSEE may switch back to the Blanket License as provided for in the Per Program License. An Election to change between this Agreement and the Local Television Station Per Program License may be made by LICENSEE not more than twice in any calendar year 2002, 2003 or 2004.

14. **INTERFERENCE IN OPERATIONS.** In the event that any law hereafter enacted of the state, or political subdivision thereof, in which LICENSEE is located shall result in major interference with the operations of BMI in that state or political subdivision, or in a substantial increase of the cost to BMI of operating within that state or political subdivision, BMI shall have the right, upon notice to COMMITTEE and upon a showing that the matters referred to affect the licensing of performing rights under this Agreement, to apply to the judge with supervisory authority over the BMI Consent Decree for whatever relief BMI deems appropriate, including termination of this Agreement.

15. **LOCAL MARKETING AGREEMENT.**

(a) If LICENSEE is, or becomes, a party to a Local Marketing Agreement, LICENSEE and the LMA Operator shall execute a letter to BMI, in the form attached as Exhibit E and made a part of this Agreement, requesting amendment of this Agreement to add the LMA Operator as a party. When such a letter has been fully executed by LICENSEE, the LMA Operator and BMI, this Agreement shall be deemed amended accordingly.

(b) BMI shall be entitled to receive, upon request, a copy of the entire Local Marketing Agreement or, if LICENSEE so elects, a copy of the portion of the agreement which sets forth the respective obligations of LICENSEE and the LMA Operator regarding the payment of BMI fees, accountings, record keeping and administrative responsibilities. An officer of LICENSEE shall certify that it is a true and correct copy of the agreement.

16. **CONFIDENTIALITY.**

(a) BMI shall treat as confidential, and shall not disclose to any third party (other than its employees, directors and officers, in their capacity as such, on a need-to-know basis, and other than as set forth in subparagraph (b) below), any financial or other proprietary documents or information provided to BMI by LICENSEE in connection with this Agreement.

(b) BMI is hereby authorized to provide to COMMITTEE such of LICENSEE's financial or other proprietary documents or information, provided to BMI pursuant to this Agreement, as COMMITTEE may request in connection with its representation of the local television industry in future negotiations with BMI, future rate court proceedings, litigation or disputes over the implementation or interpretation of this Agreement, unless LICENSEE notifies BMI in writing to the contrary. As reflected in Exhibit A hereto, COMMITTEE has agreed to treat as confidential any financial or other proprietary documents or information provided to it by BMI pursuant to this Paragraph.

17. **WITHOUT PREJUDICE.** The parties are entering into this Agreement without prejudice to any arguments or positions they may assert in any future rate proceeding concerning what constitutes reasonable blanket and per program license fees and terms for the local television industry, or, in BMI's case, as to any other licensee. The information that LICENSEE has agreed to provide under Paragraph 5 (b) shall not prejudice any position either party may take in any future negotiation, proceeding or litigation as to the relevance or necessity of such information in licensing musical

performances over the Internet.

18. **RESERVATION OF RIGHTS.** The license granted in Paragraph 3(a)(ii) is experimental in nature. BMI and LICENSEE recognize that the license granted therein covers certain transmissions originating from and/or received in certain territories outside of the United States, its commonwealth, possessions and territories pursuant to experimental agreements with certain non-U.S. performing rights licensing organizations around the world, and is broader in geographical scope than BMI's previous licenses. Notwithstanding, BMI is offering the license in Paragraph 3(a)(ii) on an experimental and non-prejudicial basis for the purpose of evaluating such international licensing initiatives. Accordingly, the removal during the Term of any or all of the territories listed on Exhibit C in the licensing section of the BMI web site located at <http://www.bmi.com> from the scope of coverage provided for in Paragraph 3(a)(ii) shall have no impact on the fees due hereunder. The Parties hereby expressly reserve their right to re-evaluate the appropriateness of the fees and terms herein with respect to all transmissions licensed under Paragraph 3(a)(ii), including, but not limited to, the reasonable value of a license that covers transmissions beyond the United States, its commonwealth, possessions and territories, for periods following the Term.

19. **MISCELLANEOUS.** This Agreement, and all Exhibits hereto, constitutes the entire understanding between the parties and cannot be waived or added to or modified orally, and no waiver, addition or modification shall be valid unless in writing and signed by the parties. This Agreement, its validity, construction and effect shall be governed by the laws of the State of New York. The fact that any provisions herein are found to be void or unenforceable by a court of competent jurisdiction shall in no way affect the validity or enforceability of any other provisions.

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement the day and date hereinbefore set forth.

BROADCAST MUSIC, INC.

By:

[Signature Line]

(Signature)

[Print Name Line]

(Print Name of Signer)

[Title Line]

(Title of Signer)

[Licensee Legal Name Line]

LICENSEE (Legal Name)

By:

[Signature Line]

(Signature)

[Print Name Line]

(Print Name of Signer)

[Title Line]

(Title of Signer)

TELEVISION MUSIC  LICENSE COMMITTEE

**EXHIBIT A**

May 17, 2002

Broadcast Music, Inc.  
320 West 57<sup>th</sup> Street  
New York, N.Y. 10019

Attention: Mr. John Shaker

Re: BMI – Local Television Station Blanket and Per Program Licenses

Dear Mr. Shaker:

This letter sets forth the agreement reached between Broadcast Music, Inc. ("BMI") and the Television Music License Committee (the "COMMITTEE") concerning certain additional terms of the BMI – Local Television Station Blanket and Per Program License Agreements covering the periods April 1, 1999 through December 31, 2004 (herein "Blanket Licenses" and "Per Program Licenses", and collectively referred to as "Licenses"). This letter agreement is expressly incorporated in paragraph 4 of the Blanket and Per Program Licenses, respectively, and is binding upon the parties hereto and upon the signatories to the Licenses and their successors and assigns.

The parties agree as follows:

1. For the years 2002, 2003 and 2004, domestic commercial television stations that were licensed by BMI in 2001 pursuant to interim licenses agreed to between BMI and the COMMITTEE ("Existing Television Stations") shall pay license fees to BMI as follows:

(a) Existing Television Stations entering into the Blanket License with BMI; or switching thereto; shall each pay BMI each year their allocated share of the annual industry-wide BMI blanket license fee of \$85 million, at such times and in such manner as provided therein for such years (or portions thereof) that they have elected to be bound by a Blanket License. The methodology for the allocation of blanket license fees among Existing Television Stations for each of those calendar years is set forth in Schedule I hereto.

(b) Existing Television Stations entering into Per Program Licenses with BMI, or switching thereto, shall each pay BMI such fees, and at such times and in such manner, as are provided therein. Per Program License Fees for Existing Television Stations shall be computed based upon each station's Monthly Base License Fee. For each calendar year 2002, 2003 and 2004, each Existing Television Station's Monthly Base License Fee shall be equal to one-twelfth of its share of the annual industry-wide BMI per program license fee of \$98.1 million, subject to subparagraph (c) hereof.

(c) In the event that during the term of the Licenses, the COMMITTEE negotiates with the American Society of Composers, Authors and Publishers ("ASCAP") an annual industry-wide per program license fee, or the ASCAP rate court establishes an annual industry-wide per program license fee for ASCAP in a proceeding no longer subject to appeal, different from \$98.1 million, then the parties agree that the ASCAP amount will be substituted for the \$98.1 million figure in paragraph (b) prospectively from the effective date of such ASCAP fee change for any period remaining in the term of the Licenses; provided, however, that substitution of the base fee shall only occur if the material non-fee terms and conditions of the ASCAP per program license are similar to the terms and conditions of the BMI Per Program License.

(d) Each Existing Television Station shall pay to BMI its allocated share of the annual industry-wide BMI Internet blanket license fee of \$558,333.33 in each of the years 2002, 2003 and 2004. An Existing Television Station's allocated share of the industry-wide BMI Internet blanket license fee shall be calculated by multiplying \$558,333.33 times a factor representing the percentage of the industry-wide BMI blanket license fee that is allocated to the station in a given year pursuant to Schedule I to this letter agreement. For example, a station with an annual blanket license fee of \$850,000 (or 1% of the industry-wide blanket license fee for the year 2003) shall be allocated 1% of the industry-wide BMI Internet blanket license fee (or \$5,583.33).

2. For the period from April 1, 1999, through December 31, 2001 (the "Settlement Period"), BMI and the COMMITTEE agree that Existing Television Stations shall pay to BMI their allocated share of the industry-wide lump-sum settlement fee of \$12 million (the "Settlement Fee"), which payments will represent, when combined with the interim fees payable to BMI under the interim BMI Blanket and Per Program Licenses agreed to by BMI and the COMMITTEE for that period, the final license fees payable for the Settlement Period. The COMMITTEE shall allocate the Settlement Fee among the Existing Television Stations, and shall provide BMI prior to February 15, 2002 with a schedule that details the amounts to be billed to each station. The stations' shares of the Settlement Fee shall be billed in equal monthly installments over a 36 month period commencing January 1, 2002, separately from the stations' monthly payments as calculated pursuant to Paragraph 1(a) above and Schedule I to this letter agreement.

3. Subject to Paragraph 7 below, if for any part of the term of this letter agreement, BMI enters into a License with a television station that is not an Existing Television Station (a "New Television Station"), the New Television Station shall pay BMI license fees, whether under the Blanket License or the Per Program License, as the case may be, as follows:

(a) if the New Television Station was previously licensed by the FCC and operating as a broadcast television station for more than twelve (12) months prior to entering into a License with BMI, then the fees payable by all stations in the New Television Station's local market as of the effective date of the New Television Station's license agreement shall be reallocated under Schedule I hereto as if such station were an Existing Television Station and without any increase in the total fee amount otherwise allocable to the relevant local television market. The New Television Station and all other licensees in its local market shall thereafter be obligated to pay such re-allocated fees; or

(b) if the New Television Station was not previously licensed by the FCC and operating as a broadcast television station for more than twelve (12) months prior to entering into a License with BMI, such station shall pay the minimum monthly fee of forty-five dollars (\$45.00) for the remainder of the calendar year following the effective date of its license agreement. Thereafter, the fees payable by all stations in the New Television Station's local market shall be reallocated under Schedule I hereto as if such station were an Existing Television Station and without any increase in the total fee amount otherwise allocable to the relevant local television market. The New Television Station and all other licensees in its local market shall thereafter be obligated to pay such re-allocated fees.

(c) BMI shall be obligated to notify licensees in writing as to any adjustment in their fees resulting from the reallocation procedures set forth in Paragraphs 3(a) and (b) within ten (10) days of the determination of such reallocated fees. In the event an Existing Television Station's fees are reduced as a result of any such reallocation, BMI shall credit such licensee's account for the amount of any such excess fees which have already been paid by such licensee as of the effective date of reallocation, or, if such licensee so elects, BMI shall, within thirty (30) days of receiving notification of such election, refund to licensee the amount of any such excess fees.

4. If, during the term of this Agreement, BMI licenses any entity agreed or determined to be a broadcast television "network" previously unlicensed by BMI (such as FOX, UPN, or The WB), whose network programs are carried by local television stations licensed by BMI pursuant to the Licenses, the industry-wide amounts set forth in Paragraph 1 above pertaining to the periods of such third party license agreements shall be adjusted downward in an appropriate amount. BMI shall have the ultimate responsibility for re-allocating industry-wide blanket license fees to reflect any such reduction, following consultation with the COMMITTEE. BMI and the COMMITTEE will confer and attempt to reach agreement concerning the appropriate amount of any such fee adjustments and such agreement shall be binding on all licensees. If BMI and the COMMITTEE shall fail to agree on such fee adjustments, either party may refer the matter to the federal judge with supervisory authority over the BMI Consent Decree for determination.

5. BMI shall provide to the COMMITTEE or its designated representative for verification, by no later than forty-five (45) days before its scheduled dissemination to licensees, a copy of each list of Syndicated Television Programs prepared pursuant to Paragraph 6(c) of the Per Program License. The COMMITTEE shall notify BMI of any suggested revisions or corrections to this list no later than three weeks from the date it was received.

6. If, for any part of the term hereof, a station previously licensed by BMI under a separate agreement changes its format and elects to be licensed pursuant to a License, such station's blanket and per program license fee allocations shall be determined pursuant to the methodology set forth in Schedule I as though it were an Existing Television Station, except that: (a) such station's allocated blanket or per program license fee shall be in addition to the industry-wide blanket or per program license fees set forth in Paragraph 2 above; and (b) blanket or per program license fees allocated

to other stations in the same market shall be determined as if such station were not licensed pursuant to a License, and thus shall remain unchanged.

7. The COMMITTEE shall treat as confidential any financial or other proprietary information or documents provided to it by BMI pursuant to the Local Television Station Per Program License Agreement ("Confidential Information"). The COMMITTEE shall limit access to Confidential Information to the COMMITTEE's staff, representatives and counsel, and shall not disclose Confidential Information to any third party or to any COMMITTEE member, other than a COMMITTEE member who is employed by the station group which provided Confidential Information to BMI.

8. BMI and the COMMITTEE are entering into this Agreement without prejudice to any arguments or positions they may assert in any future rate proceeding concerning what constitutes reasonable blanket and per program license fees and terms for the local television industry or, in BMI's case, as to any licensee.

Please indicate your agreement to the above by signing on the line provided below.

Very truly yours,

s/ Chuck Sennet

Co-Chair

Television Music License Committee

s/ Catherine Nierle

Co-Chair

Television Music License Committee

AGREED TO:

s/ John Shaker

Senior Vice President/Licensing

Broadcast Music, Inc.

**Television Music License Committee**  
**Methodology for Industry-Wide BMI License Fee Allocation for the Period**  
**From January 1, 2002 through December 31, 2004**

**STEP 1: Allocation of Industry-Wide Fee Among DMA Markets**

In a given year, each television market is to be assigned its allocable share of the \$85 million industry-wide blanket license fee based on a weighted, three-year average percentage of the total U.S. television households it represents.<sup>1</sup>

1. For each of the years 2002 through 2004 ("Contract Years"), the number of TV households in each of the roughly 210 DMA markets as measured by Nielsen<sup>2</sup> is to be "weighted" as follows:

Markets 1 - 10	Multiply by 1.19
Markets 11 - 25	Multiply by 1.05
Markets 26 - 50	Multiply by 0.92
Markets 51 - 75	Multiply by 0.85
Markets 76 - 100	Multiply by 0.85
Markets 101 - 125	Multiply by 0.85
Markets 126 plus	Multiply by 0.80

The purpose of the weighting is to reflect, within broad parameters, that a household in the 150th market does not represent the same value as a household in the New York market.

2. For each Contract Year, each market is to be assigned its share of the industry's overall \$85 Million blanket license fee by the following procedure: Each market's three-year households average (based on the three prior years) will be computed. The multiples set forth in Paragraph 1 above will next be applied to these market rankings resulting from computation of the three-year averages to produce a weighted average households figure for each market. Thus, for example, the top ten markets in terms of three-year households average will receive a 1.19 multiple. Each market's weighted average households figure is to be divided by the total U.S. average weighted households to derive a percentage of U.S. weighted TV households for each market. This weighted percentage is then applied to the industry-wide blanket license fee. Thus, if the weighted percentage of total U.S. TV households for market "x" is one percent, market x's share of the Contract Year 2002 industry-wide blanket license fee would be \$85 Million x 1%, or \$85,000.

**STEP 2: Allocation of Blanket License Fees to Stations Within Each Market<sup>3</sup>**

A series of computations will be undertaken to apportion a given market's allocated blanket license fee in relation to each station in that market's viewing households (with an allowance for a portion of the prime-time audience reached by network-affiliated stations).<sup>4</sup>

1. For Contract Year 2002, the process will begin with Nielsen's Market Ratings Reports for the "sweeps" months assigned for these purposes to each of 1999, 2000 and 2001. Within each market, each station's average DMA quarter-hour viewing households, Sunday through Saturday, 9 a.m. through midnight, is to be computed for each of the sweeps months for each of 1999, 2000 and 2001. The same methodology is to be utilized for Contract Year 2003 (employing comparable Nielsen viewership data for the three years 2000, 2001 and 2002) and Contract Year 2004 (employing comparable Nielsen viewership data for the three years 2001, 2002 and 2003).<sup>5</sup>

2. To make allowance for the fact that a portion of a network affiliate's 9 a.m. to midnight schedule constitutes BMI licensed network programming, the following computations, which lead to each station's "qualifying" viewing households, are to be made for each sweeps month:

1. In addition, in a given year, each television market is to be assigned its allocable share of the industry-wide base per program license fee (as set forth in paragraphs 1(b) and (c) of Exhibit A to the BMI Local Television Station Music Performance Blanket and Per Program Licenses) pursuant to the methodology described in this Step 1.
2. The number of television households in television markets located in: Alaska and Hawaii shall be determined based upon data collected by Nielsen; Virgin Islands and Guam shall be determined based upon data collected by the United States Census; and Puerto Rico shall be determined based upon data collected by Media Fax. For purposes of assigning an allocable share of the industry-wide blanket license fee to television markets in Alaska, Hawaii, Virgin Islands, Guam and Puerto Rico, the number of television households in each of these markets is to be given the same weight as the Nielsen DMA that most closely approximates the number of television households in these markets.
3. The computations described in this Step 2 will also be used to apportion a given market's allocated base per program license fee among the stations within that market.
4. Network-affiliated stations are defined as those affiliated with the ABC, CBS, and NBC television networks and those affiliated with, but not owned by, the Univision Television Network.
5. For purposes of these calculations, the sweeps months for a given year comprise the November sweeps period of the prior year, and the February and May Sweeps period of that year. For example, the designated sweeps months for 2000 are November 1999 and February and May 2000.

(a) multiply each station's average DMA quarter-hour viewing households by 420 (the number of quarter-hour units between 9 a.m. and midnight in one week). For independent stations, the result of this computation constitutes those stations' qualifying viewing households.

(b) with respect to the allocation of fees for network-affiliated stations, arrive at "qualifying" viewing households by subtracting from the totals generated by step (a) 100 percent of a prime-time viewing households figure, which figure (prior to application of the 100 percent factor) is calculated by taking a station's average DMA quarter-hour households in prime-time, and multiplying this figure by 88 (the number of quarter-hour units in prime-time in one week.<sup>6</sup>)

3. The nine separate months of DMA viewing households data thus derived for each independent and affiliated station in a market are next aggregated as to each station to arrive at its total qualifying viewing households. This is done for each station in the market. The qualifying viewing households data for all stations in the market are then aggregated to get a base for the entire market. Each station's percentage share of the allocated market blanket license fee (derived through the process described in Step 1, above) is computed by dividing its qualifying viewing households number by the base qualifying viewing households number for that market.

4. A station's blanket license fee is computed by applying the resulting percentage applicable to that station to the market blanket license fee.

5. In those markets having stations which receive no rating in the Nielsen reports and which are not separately licensed by BMI, the following methodology will be employed. Each such station will be assigned a blanket license fee equal to 0.25 percent of the allocable blanket license fee for that market or \$540 annually, whichever is higher. The remaining stations will be allocated blanket license fees based on the methodology set forth in Step 2 hereof, except that the allocable blanket license fee for the market for purposes of those computations shall be reduced by the amount payable by those stations in the market not listed by Nielsen. If, by way of example, the blanket license fee allocated to market "K" is \$300,000, and there are operating in market "K" two stations not listed by Nielsen, each of those stations would be assigned a blanket fee of \$750 ( $\$300,000 \times .0025$ ). The remaining stations in market "K" would pay their appropriate percentages, not of \$300,000, but of \$298,500.

6. The minimum blanket license fee for a given station shall be the greater of 0.25 percent of the allocable blanket license fee for its market or an annual blanket license fee of \$540 (or \$45 per month for partial years) ("Minimum Blanket License Fee").

7. If, during a given Contract Year, BMI enters into a license agreement with a television station that was not previously licensed (a "New Television Station"), the New Television Station shall be assigned blanket license fees as follows:

(a) if the New Television Station was previously licensed by the FCC and operating as a broadcast television station for more than twelve (12) months prior to entering into a license with BMI, then the fees payable by all stations in the New Television Station's market as of the effective date of the New Television Station's license agreement shall be reallocated pursuant to paragraphs 1 - 6 above without any increase in the total fee amount otherwise allocable to the relevant market; or

(b) if the New Television Station was not previously licensed by the FCC and operating as a broadcast television station for more than twelve (12) months prior to entering into a license with BMI, such station shall pay the minimum monthly fee of forty-five dollars (\$45.00) for the remainder of the Contract Year following the effective date of its license agreement. The fees payable by all stations in the New Television Station's market in the following Calendar Year shall be reallocated under paragraphs 1 - 6 above without any increase in the total fee amount otherwise allocable to the relevant market.

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6. E.g., on the East Coast, prime-time occupies Monday-Saturday 8:00-11:00 p.m. and Sunday 7:00-11:00 p.m.





Broadcast Music, Inc.  
320 West 57<sup>th</sup> Street  
New York, NY 10019  
ATTN: BMI Local TV Web Site Licensing

Re: Launch of Local TV Station Web Site

To Whom It May Concern:

Please be advised that, on \_\_\_\_\_ (day, month), \_\_\_\_\_ (year), local television station \_\_\_\_\_ (call letters) began distributing a web site known as \_\_\_\_\_ and located at the Uniform Resource Locator (URL) http:// \_\_\_\_\_ pursuant to the 1999-2004 BMI Local Television Music Performance Agreement.

<b>WEB SITE REPORT CONTACT:</b>
NAME: _____
TITLE: _____
EMAIL: _____
TELEPHONE: _____

Sincerely,

\_\_\_\_\_  
(Signature)

Print Name: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_



# LOCAL TV STATION WEB SITE MUSIC USE REPORT

Music use report for the period from \_\_\_\_\_ through \_\_\_\_\_  
Month/Day, Year Month/Day, Year

Legal Name: _____
Call Letters: _____
Address: _____
_____
URL: _____

### WEB SITE TRAFFIC INFORMATION:

Total number of page impressions on the web site during the period:

Total number of streamed transmissions during the period:

**LIVE STREAMING:** the simultaneous transmission of station's locally produced and aired programming (see Paragraph 3(a)(ii)(A) of the Agreement):

Please check here if the TV Station Web Site engaged in the simultaneous retransmission of locally produced and aired programming during the period. Please identify such programming below (e.g., if all, write 'all'; if local newscasts only, write 'local newscasts'; if other programming, write the title(s) of such other programming).

\_\_\_\_\_  
\_\_\_\_\_

**ARCHIVED STREAMING:** the transmission of station's local newscasts and/or local news based public affairs programming (see Paragraph 3(a)(ii)(B) of the Agreement):

Please check here if the TV Station Web Site engaged in the retransmission of local newscasts and/or local news based public affairs programming during the period. Please identify such programming below.

- Local Newscasts
- Local News Based Public Affairs Programming

**PROMOTIONAL CLIPS TO PROMOTE VIEWERSHIP OF STATION AND ITS TELEVISION PROGRAMMING** (see Paragraph 3(a)(ii)(C) of the Agreement):

Please check here if the TV Station Web Site contained individually retrievable, archived promotional announcements to promote viewership of station and its television programming during the period.

Please check the appropriate box(es) to indicate the type(s) of programming:

- Syndicated Programs
- Network Programs
- Local Programming

I hereby certify on this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ that the above is true and correct.

By: \_\_\_\_\_

(SIGNATURE)

\_\_\_\_\_  
(PRINT NAME OF SIGNER)

\_\_\_\_\_  
(TITLE OF SIGNER)





**DIGITAL SIGNAL QUESTIONNAIRE**

*This questionnaire should be filled out and e-mailed to BMI during the month of October 2002, 2003 and 2004.*

Legal Name of Licensee: _____
Analog Signal Call Letters: _____
Station's Address: _____
City: _____ State: _____

1. Is the station currently broadcasting a digital signal?

- Yes
- No (Skip all remaining questions)

2. What are the call letters of your digital signal? \_\_\_\_\_-DT

3. What are the current weekly hours of on-air operation of your digital signal? \_\_\_\_\_

4. Does your digital signal programming consist completely of simulcasts of your analog signal programming?

- Yes (Skip the last question)
- No

5. If your digital signal programming differs from your analog signal programming, or if you have multicast programming in your digital signal, please identify all non-simulcast programming broadcast in your digital signal, including broadcast dates and times. (Please add additional sheets as necessary.)

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**EXHIBIT E**

**Local Marketing Agreement Amendment to Local  
Television Station Music Performance License Agreement**

WHEREAS, \_\_\_\_\_ ("LICENSEE") has entered into a Local Marketing Agreement ("LMA") with \_\_\_\_\_ ("LMA OPERATOR") for the television station \_\_\_\_\_ (the "STATION") for the period \_\_\_\_\_ through \_\_\_\_\_; it is hereby agreed to as follows:

- 1. LICENSEE and LMA OPERATOR add LMA OPERATOR as a party to the BMI Local Television Blanket [Per Program] License Agreement, including all extensions, schedules and exhibits thereto, in effect between LICENSEE and BMI ("the License"), and LMA OPERATOR shall assume, with LICENSEE, all of the rights and obligations of LICENSEE set forth in the License for the full period of the LMA with respect to the STATION.
- 2. LICENSEE/LMA OPERATOR (circle one) shall be responsible in the first instance for the payment of any fees owing to BMI and for the submission to BMI of any reports or other information pursuant to the License for the full period of the LMA with respect to the STATION.
- 3. LICENSEE remains fully liable for all its obligations under the License. Even if the LMA OPERATOR is responsible in the first instance for the payment of fees and submissions of reports or other information to BMI as set forth in Paragraph 2 above, if LMA OPERATOR defaults in any way on those obligations, LICENSEE remains responsible for fulfilling those obligations.
- 4. LICENSEE and LMA OPERATOR jointly designate the following single address for billing, and other regular correspondence, and the following single address for any notices in accordance with the License.

Billing Address: _____	Notice Address: _____
_____	_____
_____	_____

5. In the event that the LMA between LICENSEE and LMA OPERATOR terminates, both LICENSEE and LMA OPERATOR shall notify BMI of the termination within 30 days, and submit all required statements, reports and payments through the date of said termination. In the event that both LICENSEE and LMA OPERATOR fail to notify BMI of the termination of the LMA, then both LICENSEE and LMA OPERATOR shall remain obligated under this agreement for all statements, reports and payments.

Dated:    
*LICENSEE*

By:   
Title:

Dated:    
*LMA OPERATOR*

By:   
Title:

Broadcast Music, Inc. hereby consents and agrees to the amendment of the above-mentioned License Agreement.

**BROADCAST MUSIC, INC.**

Dated:  By:   
Title:



**BMI<sup>®</sup>**

**NEW YORK • NASHVILLE • LOS ANGELES • ATLANTA • MIAMI • PUERTO RICO • LONDON**

# SETTLING PARTIES

SP EXHIBIT 26  
TAB 6 (MC 04-05 EX. 6)

(MUSIC CLAIMANTS)

**LOCALLY ORIGINATED CABLE PROGRAMMING  
BLANKET LICENSE AGREEMENT**

AGREEMENT dated as of \_\_\_\_\_ between BROADCAST MUSIC, INC. ("BMI")  
and \_\_\_\_\_ CABLE TELEVISION SYSTEM ("Licensee"), as follows:

**I. DEFINITIONS**

**A. "Locally Originated Programming"**

"Locally Originated Programming" as used in this Agreement shall mean programming locally produced, inserted locally or through an interconnect (an association of two or more cable systems for the purpose of distributing advertising or programming simultaneously) or otherwise originated by, for, or on any of Licensee's Distribution Systems, as defined in section I(B), including, without limitation, (i) programming on locally-originated channels, including advertising and promotional materials thereon; (ii) programming on public, educational and governmental ("PEG") access channels; (iii) public service announcements; (iv) programming on leased access channels; and (v) advertising and promotional materials inserted locally or through an interconnect by or on behalf of Licensee into national, regional or local cable programming services. "Locally Originated Programming" shall also include statewide, regional and local news and/or sports programming predominantly created by the cable operator and predominantly distributed to its own subscribers within the ADI or DMA in which the Distribution System is located or an extension thereof where such extension is fiber or through an interconnection. For the avoidance of doubt, such programming shall not include regional sports networks such as MSG or Fox Sports.

**B. "Licensee's Distribution Systems"**

As used in this Agreement, "Licensee's Distribution Systems" shall mean each and every Distribution System which is authorized to transmit any Locally Originated Programming supplied by Licensee as set forth in Exhibit A.

**C. "Subscriber"**

"Subscriber" as used in this Agreement shall mean each location to which Licensee provides Locally Originated Programming. Subscribers shall include each

occupied dwelling (whether in a single family dwelling or a multi-unit building), bar, restaurant, hotel or motel room, and other residential or commercial location at which Locally Originated Programming is received through a Distribution System. For purposes of calculating the license fees owed under this Agreement in the year 2003 and following, as provided in Section V herein, the number of Subscribers for each year shall be the average of the number of subscribers as of December 31 of the prior year and December 31 of the year for which the interim fee is being calculated. If a Distribution System was acquired or transferred within a calendar year, the number of Subscribers shall mean the average of the number of Subscribers as of the date of acquisition/transfer and the number of subscribers as of (1) December 31 of the current year for an acquisition or (2) December 31 of the prior year for a transfer.

**D. "Dramatic Performance"/"Non-Dramatic Performance"**

(1) "Dramatic Performance" as used in this Agreement shall mean a performance of a musical composition in Locally Originated Programming in which there is a definite plot depicted by action and where the performance of the musical composition is woven into and carries forward the plot and its accompanying action, including, but not limited to, any opera, operetta, musical comedy, play or like production, as such, in whole or in part, or the performance of any composition from any opera, operetta, musical comedy, play or like production in a manner which recreates the performance of such composition with substantially such distinctive scenery or costume as was used in the presentation of such opera, operetta, musical comedy, play or like production (whether or not such opera, operetta, musical comedy, play or like production was presented on the stage or in motion picture form). The use of dialogue to establish a mere program format or the use of any non-dramatic device merely to introduce a performance of a composition shall not be deemed to make such performance dramatic.

(2) "Non-Dramatic Performance" as used in this Agreement shall mean any performance of a separate musical composition which is not a dramatic performance as defined herein.

(3) The definitions of the terms "Dramatic Performance" and "Non-Dramatic Performance" contained in this paragraph are for purposes of this Agreement only and for the term hereof, and shall not be binding upon or prejudicial to any position



taken by either of the parties subsequent to the expiration of this Agreement, or used or cited for any purpose other than as contained herein.

**E. "License Period"**

As used in this Agreement, "License Period" means the period January 1, 1997 through December 31, 2006.

**F. "United States"**

As used in this Agreement, the "United States" shall be deemed to include the United States of America - its commonwealths, territories, trust territories, dependencies, and possessions during the term hereof, including but not limited to Guam, Puerto Rico, and the United States Virgin Islands.

**G. "Year"**

As used in this Agreement, "Year" shall mean a calendar year.

**II. LICENSE**

BMI grants to Licensee and Licensee accepts, for the License Period, a non-exclusive license to perform in and as part of Locally Originated Programming over each of Licensee's Distribution Systems within the United States, nondramatic public performances of musical compositions now or hereafter during the term hereof in the BMI repertory, or as to which BMI has or shall have the right to grant such license during the term hereof.

**III. LIMITATIONS**

**A. "Foreign Distribution"**

Nothing herein contained shall be deemed to grant to Licensee the right to perform publicly the compositions licensed hereunder outside of the United States, it being understood that with respect to such foreign performances, such Licensee must obtain licenses from the owners of the performing rights in the compositions or the relevant performing rights society in the country in which such foreign performances are transmitted or received.

**B. "Dramatic Performances"**

This license does not extend to or include dramatic performances of compositions in the BMI repertory; provided, however, that the rights granted to Licensee under this license shall be deemed to include a grant of the right to make nondramatic public performances of compositions licensed hereunder by the transmission of a motion picture containing such compositions if the rights in such motion picture other than those licensed under this license have been obtained from the parties in interest. Nothing herein contained shall be deemed to license the public performance by television broadcasting or otherwise of dramatic performances.

**C. "Scope"**

Except as herein expressly provided, nothing herein contained shall be construed as authorizing Licensee to grant to others any right to reproduce or perform publicly, by any means, method or process whatsoever, any of the musical compositions licensed hereunder or as authorizing any Subscriber of any Licensee, including bars, restaurants and other commercial establishments that may be Subscribers, to further transmit or reproduce the same, by any means, method or process whatsoever, provided, however, that Licensee shall not be responsible for the monitoring, reporting, or preventing of unauthorized public performances of BMI music by any unrelated third party.

**D. "Right to Restrict"**

BMI shall have the right, at any time and from time to time, in good faith, to restrict the transmission of compositions from musical comedies, operas, operettas and motion pictures, or any other composition being excessively broadcast, only for the purpose of preventing harmful effect upon such musical comedies, operas, operettas, motion pictures or compositions, in respect of other interests under the copyrights thereof; provided, however, that the maximum number of compositions which may be at any time thus restricted shall not exceed 750 and that limited licenses will be granted upon application to BMI entirely free of additional charge as to restricted compositions, if and when the copyright owners thereof are unable to show reasonable hazards to their major interests likely to result from such transmission; and provided further that such right to restrict any such composition shall not be exercised for the purpose of permitting the fixing or regulating of fees for the recording or transcribing of such composition; and provided further that in no case shall any charges, "free plugs," or other consideration be required in

respect of any permission granted to perform a restricted composition; and provided further that in no event shall any composition, after the initial transmission thereof, be restricted for the purpose of confining further television broadcasts thereof to a particular artist, station, network or program.

BMI reserves the further right, at any time and from time to time, in good faith, to restrict the transmission of any compositions, over and above the number specified in this paragraph, as to which any suit has been brought or threatened on a claim that such composition infringes a composition not contained in the BMI repertory or on a claim that BMI does not have the right to license the public performance of such composition by television broadcasting.

#### IV. FEES

In consideration for the license granted herein, Licensee agrees to pay to BMI for each year of the License Period hereof a license fee as follows:

1997 - \$0.083 per subscriber  
1998 - \$0.083 per subscriber  
1999 - \$0.083 per subscriber  
2000 - \$0.083 per subscriber  
2001 - \$0.083 per subscriber  
2002 - \$0.083 per subscriber  
2003 - \$0.083 per subscriber  
2004 - \$0.083 per subscriber  
2005 - \$0.083 per subscriber  
2006 - \$0.083 per subscriber

Licensee will use good faith efforts to perform its reporting and payment obligations on a consolidated corporate entity basis to facilitate, where reasonably practicable, a single fee report (in the form appended as Exhibit B hereto), and payment for all Distribution Systems as listed on Exhibit A (the Licensee's Distribution Systems), setting forth on such consolidated report the Subscribers and fees for each individual

Distribution System. Licensee represents that all its Distribution Systems transmitting Locally Originated Programming containing BMI Music for any part of the License Period are listed on Exhibit A to this Agreement, and acknowledge that any Distribution System not listed hereunder is not licensed hereby, provided, however, that no Licensee need submit reports or payments for years for which fees have already been paid to BMI. Licensee may add to Exhibit A any other Distribution System it wishes to be licensed under this Agreement, at any time during the term of the Agreement.

## **V. LICENSE FEE PAYMENTS**

### **A. January 1, 1997 – December 31, 2002 Catch –Up Fees**

The parties acknowledge that under a prior agreement, for the period January 1, 1997 through December 31, 2002 Licensee was required to pay license fees at the annual rate of \$0.08 per subscriber. To the extent such payments were already made, for the period January 1, 1997 through December 31, 2002 Licensee shall only be required to pay "catch-up" fees of \$0.003 per subscriber per year reflecting the difference between the previous \$0.08 per subscriber per year rate and the current \$0.083 per subscriber per year rate, as outlined on Exhibit C attached hereto. Otherwise, the entire payment for such period shall be due. Payment for this period shall be made on or before April 21, 2003.

### **B. January 1, 2003 – December 31, 2006 License Fees**

For the period January 1, 2003 through December 31, 2006, license fee payments shall be due annually on March 15, each payment encompassing the previous calendar year. License fees shall be calculated with reference to the number of Subscribers as provided in Section 1(C) herein.

## **VI. AUDIT**

BMI shall have the right, during customary business hours and not more than once each year of the License Period, on notice in writing of not less than twenty business days, to conduct an audit to verify Licensee's Subscriber counts as listed on its fee reports, whether there is use of BMI music, and the identity of Licensee's Distribution Systems. The

final audit under this provision shall occur within two years after the end of the License Period. In any given year, audits of multiple systems of Licensee shall be limited to no more than 20% or 1 system, whichever is the greater, of the total number of Distribution Systems other than any listed on Exhibit A. BMI may audit such systems for every year of the License Period. In the event such audits reveal in a given year a net under-reporting of Subscribers of greater than 2% of the total number of Subscribers covered by such audits or inaccuracy as to whether a Distribution Systems distributed Locally Originated Programming containing BMI Music during any part of the License Period, BMI shall have the right to audit the Subscriber count of additional systems for any 3 years of the License Period. If any audit reveals an underpayment by Licensee, BMI shall notify Licensee in writing within 120 days of the audit, and BMI's failure to so notify Licensee shall constitute a waiver of any claim based on such audit. All information coming to BMI's attention as a result of any such examination shall be held completely and entirely confidential and shall not be used by BMI other than in connection with the administration and enforcement of this Agreement. Notwithstanding the foregoing, if Licensee provides to BMI copies of the appropriate sections of its Statements of Account for any Distribution System as filed with the United States Copyright Office pursuant to 37 CFR § 201.17 (1999 ed.) demonstrating that the number of subscribers used for the calculation of the license fees provided hereunder with respect to any year is not less than the average of subscribers reported on the Statements of Account filed in the United States Copyright Office for such year including the most recent Statement of Account of the previous year and calculated in accordance with Section 1(c) of this Agreement, then BMI shall not audit such subscriber counts; provided, however, that Licensee shall notify BMI in writing of any amended or corrected Statements of Account filed by Licensee for such Distribution System for such year. Nothing in this Section shall be deemed to limit Licensee's obligation to make true, accurate and complete fee reports as provided in this Agreement or BMI's right to payment of the license fees otherwise due under this Agreement.

## **VII. LATE PAYMENT CHARGE**

BMI may impose a late payment charge of 1.5% per month from the

date payment was due on any undisputed amount that is received by BMI more than 15 days after the due date, provided that such due date occurs on or after April 21, 2003.

## **VIII. DELIVERY OF MATERIALS**

### **"Cue Sheets"**

Licensee, as a matter of course, shall cause cue sheets to be created with respect to all Locally Originated Programming during the term of this Agreement for distribution on Licensee's Distribution Systems. Such cue sheets shall contain, where reasonably available, information identifying the title, writer, composer, publisher, nature and type of use, manner of performance, duration of performance and performing rights society affiliation of all entitled parties of all music compositions in the Locally Originated Programming during the term of this Agreement. Such cue sheets shall be delivered to BMI electronically using software provided at no charge or approved by BMI. Licensee shall also request cue sheets from licensors and outside producers with respect to all programming produced by others and distributed as Locally Originated Programming on the Licensee's Distribution System and shall furnish those cue sheets to BMI.

## **IX. INDEMNIFICATION, REPRESENTATIONS AND WARRANTIES**

### **A. "Indemnification"**

BMI agrees to indemnify, save and hold harmless and defend Licensee, its parents, subsidiaries, successors, assigns, and agents, sponsors, advertising agencies, and its and their officers, employees, and artists, from and against any claims, demands or suits that may be made or brought against them or any of them with respect to the nondramatic public performances licensed under this Agreement of any compositions in BMI's repertory which are written or copyrighted by affiliates of BMI or as to which BMI has or shall have rights to grant performance licenses during the term hereof.

### **B. "Notice and Cooperative Defense of Claims"**

Licensee agrees to give BMI prompt notice of any claim, demand or suit of the type specified in subparagraph A above, and agrees promptly to deliver to BMI all papers pertaining thereto. BMI at its own expense shall have full charge of the defense of any such claim, demand or suit, and Licensee shall cooperate fully with BMI in such

defense. Licensee, however, shall have the right to engage counsel of its own, at its own expense, who may participate in the defense of any such action and with whom counsel for BMI shall cooperate.

**C. "Representations"**

Each of the parties represents and warrants that it has taken all necessary action and has secured the consents of all persons necessary to authorize the execution of this Agreement and performance of all its obligations hereunder. Each party represents that the person executing this Agreement on its behalf is duly authorized to do so, and that this Agreement is and shall be during its term a binding obligation of the party on whose behalf it is executed. Each party represents to the other that the execution and performance of this Agreement is not barred, prohibited or impaired by any existing law, rule, regulation, court or administrative order or decree, contract or agreement to which it is now a party, or by which it is bound.

**X. BREACH AND DEFAULT**

Upon any breach or default by Licensee of the terms herein contained, including without limitation, failure to make timely payments under Section V hereof, BMI shall give Licensee thirty (30) days' notice in writing to cure such breach or default. In the event that any such breach or default has not been cured within said thirty (30) days, BMI may then promptly terminate this Agreement by giving notice of such termination to Licensee, in writing.

**XI. NOTICES**

All notices, statements and other documents required to be given hereunder shall be mailed or delivered to the parties at the following addresses, or such other individuals or addresses as the parties may by written notice designate:

If to BMI:

BMI  
320 West 57<sup>th</sup> Street  
New York, N.Y. 10019

Attention: Senior Vice President, Licensing

Copy to:

General Counsel  
BMI  
320 West 57<sup>th</sup> Street  
New York, New York 10019

If to Licensee:

[Address]  
Attention:

Copy to:

National Cable Television Association  
1724 Massachusetts Avenue, N.W.  
Washington, D.C. 20036

Attention: Daniel L. Brenner, Esq.

## **XII. MOST FAVORED NATIONS**

In the event Licensee, at any time during the term hereof, shall, for the licensing of nondramatic public performances of musical compositions as part of Locally Originated Programming over Licensee's Distribution Systems within the United States, pay fees to ASCAP or any performing rights society in excess of fees set forth in Section IV hereof, Licensee agrees to pay fees at such rates to BMI for the balance of the term hereof.

## **XIII. ARBITRATION**

All disputes of any kind, nature or description arising in connection with the terms and conditions of this Agreement, and not cognizable under Article XIV of the consent decree entered in United States v. Broadcast Music, Inc. shall be submitted to the American Arbitration Association in New York, New York for arbitration under its then prevailing rules, the arbitrator(s) to be selected as follows: Each of the parties shall, by written notice to the other, have the right to appoint one



arbitrator. If, within twenty (20) days following the giving of such notice by one party, the other shall not, by written notice, appoint another arbitrator, the first arbitrator shall be the sole arbitrator. If two arbitrators are so appointed, they shall appoint a third arbitrator. If twenty (20) days elapse after the appointment of the second arbitrator and the two arbitrators are unable to agree upon the third arbitrator, then either party may request the American Arbitration Association to appoint the third arbitrator. The award made in the arbitration shall be binding and conclusive on the parties and judgment may be, but need not be, entered in any court having jurisdiction. Such award shall include the fixing of the costs, expenses and attorneys' fees of arbitration, which shall be borne by the unsuccessful party.

#### **XIV. SUCCESSORS AND ASSIGNS**

This Agreement shall inure to the benefit of and shall be binding upon the parties hereto and their respective successors and assigns, but no assignment shall relieve the parties hereto of their respective obligations hereunder provided that Licensee will only be responsible for payment obligations accrued as of and through the effective date of any such assignment. If a Distribution System listed on Exhibit A was purchased by Licensee during the Term, Licensee shall only be responsible for license fees accruing after the effective date of such purchase if such Distribution System was licensed by BMI for prior periods during the License Period. Otherwise, Licensee shall be responsible for license fees for such Distribution System throughout the License Period.

If Licensee sells or otherwise transfers a controlling share of its stock or other ownership interest in one or more Distribution Systems, Licensee will delete such Distribution System(s) from Exhibit A and will be relieved of all liability hereunder with respect to such Distribution System(s) from the date of closing going forward. Licensee shall provide BMI with the name and address of the acquiring party within thirty (30) days of the effective date of such transfer. Licensee agrees to provide BMI with a final payment concerning such Distribution System(s) of any fees accrued as of the days of such sale or transfer, payable at the next scheduled fee payment date in accordance with Section IV of this Agreement. Computation of Licensee's fee payment obligation with respect to Subscribers will be prorated and based on the number of Subscribers of such Distribution System(s) as of the date of such sale or transfer.

**XV. WITHOUT PREJUDICE TO SUBSEQUENT PERIODS**

BMI and Licensee agree that the terms of this Agreement shall be without prejudice to any position either party may take in any negotiation or proceeding for determination of reasonable fees for blanket or per program licenses for Locally Originated Programming distributed by Licensee for any period subsequent to the License Period.

**XVI. EXECUTION**

This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument.

**XVII. ENTIRE AGREEMENT**

This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes the previous agreement between BMI and Licensee for the License Period covered hereunder. This Agreement may not be amended, modified, or terminated except by a written instrument signed by both of the parties.

**XVIII. APPLICABLE LAW**

Licensee and BMI agree that this Agreement shall be governed by and construed in accordance with the laws of the State of New York pertaining to contracts made and fully prepared therein.

BROADCAST MUSIC, INC.

\_\_\_\_\_ By: \_\_\_\_\_  
Date

[Licensee]

\_\_\_\_\_ By: \_\_\_\_\_  
Date

[Summary of Exhibits]

Exhibit A

Cable System  
City, State  
Principal Operating Area  
Number of Subscribers

Exhibit B

Fee Report

Exhibit C

Catch-up Fee Report





Before the  
COPYRIGHT ROYALTY JUDGES  
Washington, D.C.

**In the Matter of**

**Distribution of the 2004 and 2005  
Cable Royalty Funds**

**Docket No. 2007-3 CRB CD 2004-2005**

**TESTIMONY  
OF  
WILLIAM P. ZARAKAS**

## **I. INTRODUCTION AND QUALIFICATIONS**

1. My name is William P. Zarakas. I am a Principal with The Brattle Group, an economic consulting firm. I joined The Brattle Group in 2002. Since that time, my work has primarily involved economic, financial and regulatory-related analysis, pertaining to the communications and media industries. Specifically, and among many other matters, I have had significant involvement in: cost, rate and pricing analyses; valuation of communications related businesses and assets; the modeling of economic feasibilities and financial business cases; analyses of demand and revenue projections; and the economic impacts of legislative and regulatory initiatives. I have analyzed business models and performed financial feasibility analyses concerning the build-out of cable television systems and the economics of the addition of incremental products and services by cable system operators. I have also provided testimony before the Federal Communications Commission (FCC) concerning the economics of cable system operations with regard to its consideration of a petition for forbearance from Sections 251(c)(3) and 251(d)(1) of the Communications Act. Additionally, I have performed economic and financial analyses on behalf of media companies, including analysis concerning the feasibility of interactive television offerings. I have performed these analyses on behalf of companies and regulatory agencies in the United States and in other parts of the world.
  
2. Before joining The Brattle Group, I held several other positions where I was involved in economic, financial and regulatory analysis. From 1997 through 2001, I was a Senior Vice President with PHB Hagler Bailly, an economics consulting firm, and a Member of the Management Team with its successor company, PA Consulting. Prior to that, I held various positions with Theodore Barry and Associates (TB&A) from 1988 through 1997, starting as an Associate and then becoming a Managing Associate, Director and ultimately Managing Director and a member of TB&A's Board of Directors. Prior to these consulting positions, I was employed as an Economist with the New York Power Authority and as a Consultant with Ebasco Business Consulting Company, where I was involved in economic, financial and rate analyses concerning utilities and telecommunications companies.

3. I have instructed seminars on economic and regulatory issues for regulatory agencies and published white papers and articles in periodicals and journals involving issues in communications economics and regulation. I hold a Master of Arts degree in Economics from New York University and a Bachelor of Arts degree with a major in Economics from the State University of New York. A copy of my curriculum vitae is attached as Appendix A.
4. I have previously been qualified as an expert in many cases before state regulatory commissions in matters concerning cost, rate and economic and financial analyses. I have also been qualified as an expert in matters concerning economic and financial analysis before the FCC, the American Arbitration Association, and multiple state and federal courts.
5. My work on this report has been performed with the assistance of my colleagues and staff at The Brattle Group. I am being compensated at the rate of \$470 per hour, and my colleagues are being compensated at their standard rates. A list of the materials that I relied on in connection with this report is attached as Appendix B.

## **II. SCOPE AND STRUCTURE OF THIS REPORT**

6. I have been retained to submit this report on behalf of the American Society of Composers, Authors and Publishers ("ASCAP"), Broadcast Music, Inc. ("BMI") and SESAC, Inc. ("SESAC") (collectively, the "Music Claimants"), which are the performing rights organizations ("PROs") that license the non-dramatic public performances in the United States of nearly all copyrighted musical compositions and distribute performance license royalties to their songwriter, composer and music publisher members and affiliates. Specifically, I have been asked to determine the appropriate Music Claimants share of the compulsory license royalties paid by cable system operators for the retransmission of local broadcast over-the-air programming in the distant signal market pursuant to Section 111 of the Copyright Act for the years 2004 and 2005.
7. I summarize my conclusions in Section III of this report. I provide an overview of the background I considered in determining the distribution percentage to the Music Claimants



in Section IV. I explain the methodology and data sources I used in calculating such percentage in Section V. My calculation of the Music Claimants' distribution percentage is set forth in Section VI.<sup>1</sup>

### III. SUMMARY OF CONCLUSION

8. In prior Section 111 cable royalty fund distribution proceedings, the "relative market value" to cable system operators of the various programming retransmitted in the distant market was the primary factor in determining the distribution of royalties among the various copyright owner claimant groups. In the last litigated Section 111 proceeding (concerning the distribution of the 1998-99 cable royalties), with respect to music – an element that runs throughout television programming – the Copyright Arbitration Royalty Panel ("CARP") considered, as a major factor in determining the Music Claimants' award, evidence of the relative value of music through a ratio of total music license fees to the sum of (a) such music license fees and (b) the total payments made by the stations and networks in the over-the-air broadcast market for the rights to broadcast the programs aired on such stations (so-called "broadcast rights payments"). Throughout this report, I refer to such a ratio as a "music ratio." I set forth the equation for a music ratio below:

$$\text{music ratio} = \frac{\text{Music License Fees}}{\text{Music License Fees} + \text{Broadcast Rights Payments}}$$

9. Conceptually, I find a music ratio approach to be a reasonable method to calculate the value of music relative to the value of the programming of the other copyright owner claimant groups. I nevertheless determined that the manner in which the CARP calculated the music ratio (referred to herein as the "Unadjusted Music Ratio") and the data used for such a calculation required certain modifications and clarifications in order to capture comprehensively and accurately the values to be used to calculate the music ratio for distant signals. Accordingly, I calculated adjusted music ratios for each different category

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<sup>1</sup> I understand that the Music Claimants are part of the group of Settling Parties who have entered into a settlement regarding the distribution and allocation among themselves of their collective share of the 2004-05 distant signal cable royalties. As part of this joint claim, the Music Claimants are introducing evidence of the value of Music's share of the 2004-05 funds in order to provide the Judges with a value for Music Claimants' share of the Basic, 3.75% and Syndex Funds.

of television stations in the over-the-air broadcast market, such as independent stations or network affiliates. I refer to each such adjusted music ratio as a "Music Ratio." I further found that these Music Ratios required weighting to reflect the relative importance of the various stations carried by cable system operators in the distant signal market at issue in this proceeding.

10. Using the weighted Music Ratios (as more fully described in Sections V and VI below), I calculated the relative value of music to be 5.2% in 2004 and 4.6% in 2005. In fact, as I explain below, these values are conservative for a number of reasons, including that they fail to account for the fact that content retransmitted in the distant signal market is on a non-exclusive basis and thus the broadcast rights payments paid in the local over-the-air market – which are typically for the right to exclusive broadcasts within that market – overstate the relative broadcast rights payments that would be paid in the distant signal market. Accordingly, I find 5.2% and 4.6% to be the proper percentages of the 2004 and 2005 funds, respectively, to be distributed to the Music Claimants.

#### **IV. BACKGROUND**

##### *Music Claimants*

11. The Music Claimants represent over 725,000 U.S. songwriters, composers, and music publishers, as well as many thousands more from around the world through reciprocal agreements with foreign PROs. On their behalf, the Music Claimants license the right to perform publicly the musical compositions in their repertoires, collect license fees for such performances and distribute the fees to their members and affiliates. Music Claimants' members and affiliates grant to the PROs the non-exclusive right to license their works; thus, music users may also obtain performance licenses directly from individual writers or publishers.

##### *Broadcast Television Stations and Networks*

12. Among the many licensees of Music Claimants are commercial over-the-air broadcast

television stations, which publicly perform music in their programming – whether movies, episodic shows, talk shows, sports or other programming genres.<sup>2</sup> There are two major categories of television stations. First, there are stations that are affiliated with broadcast television networks, referred to as “network affiliates.” Network affiliates receive a portion of their programming from the network (the “network programming”) and either locally produce the remainder of their programming (“locally produced programming,” such as, a local news program) or obtain movies, syndicated programming or sports programming from third parties. The broadcast television networks include the large national networks – ABC, CBS, and NBC (known as the “Big 3 networks”) – and the Fox network. They also include several smaller networks (such as UPN and The WB) as well as specialized and/or foreign language networks (such as the Home Shopping Network and/or Univision and Telemundo).<sup>3</sup> I refer to the Fox network and these other smaller/specialized/foreign networks as the “non-Big 3 networks.” The second category of stations are television stations that produce their own programming and acquire syndicated shows, movies and sports programming. These are referred to as “independent” stations.

13. There were approximately 1,372 commercial television stations operating in the U.S. in 2004 and 1,371 commercial stations operating in 2005.<sup>4</sup> Table 1 provides a summary of the number of television stations in terms of the categories discussed above. The table sets forth the number of television stations operating in 2004 and 2005 that were associated with the Big 3 networks (ABC, CBS and NBC) and the non-Big 3 networks (Fox, UPN, The WB and other networks). It also sets forth the number of independent television stations operating in 2004 and 2005.

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<sup>2</sup> The Music Claimants also license noncommercial television stations. However, as set forth in more detail below, I will focus my analysis on commercial television stations.

<sup>3</sup> During 2004 and 2005 UPN and The WB were separate non-Big 3 Networks. In 2006 UPN and The WB “merged” to become a new non-Big 3 Network, The CW. The CW is a joint venture between CBS Corporation, the former owners of United Paramount Network (UPN), and Warner Bros., former majority owner of The WB (Warner Brothers) Television Network.

<sup>4</sup> Based on data on high power commercial television stations from M Street, a subscription-based data service that tracks television station licenses and affiliations, provided to me by BMI.

**Table 1**  
**Commercial Broadcast Television Station Count**

	2004	2005
<b>Big-3 Networks</b>		
ABC Affiliates	220	221
CBS Affiliates	219	219
NBC Affiliates	224	221
<b>Non Big-3 Networks</b>		
FOX Affiliates	188	191
UPN Affiliates	91	90
WB Affiliates	85	90
Other	251	251
Independents	94	88
<b>Total</b>	<b>1,372</b>	<b>1,371</b>

Source: M-Street data (as provided by BMI)

14. Television stations must receive permission to transmit third-party-owned programming. In exchange for such permission, broadcasters make “broadcast rights payments.” Independent stations, network affiliates and the broadcast networks must also obtain public performance licenses to cover the performances of musical compositions contained throughout all of their programming.

*Music Licenses*

15. To that end, I understand that the Music Claimants, for a fee (as described below), grant licenses that cover the music in broadcast television programming as follows. The Music Claimants grant licenses to the Big 3 networks and to Univision to cover the music in the network programming broadcasts by the network affiliates.<sup>5</sup> In addition, the Music Claimants grant “local television licenses” – negotiated on an industry-wide basis for a fee that is allocated station-by-station – to cover all programming (network and local) on the non-Big 3 network affiliates, all programming on independent stations and all non-network programming broadcast by Big 3 network affiliates (*i.e.*, locally produced programming and acquired syndicated programs, movies and sports programming).

16. The Music Claimants individually offer two primary types of licenses to stations. The first type is the “blanket license,” which grants a television station, for an allocated portion of an industry-wide blanket flat fee, the unlimited right to perform publicly any or all of the millions of copyrighted musical compositions in the individual Music Claimants’ respective repertoires.
17. The second type of license is a “per program license” (in fact, a type of “blanket” license in that it also allows the licensee to use any of the works in a PRO’s repertoire). Under a per program license, a television station pays a fee only for the specific programs that include music from the PRO’s repertoire. For example, under the BMI per program license, a station is allocated an overall BMI “starting fee” that is higher than its allocated blanket fee. The station ultimately pays BMI a fee each month for each program that contains BMI works using a fee formula that reduces the amount to account for any performance licenses that the station obtains directly from an individual writer or publisher (so-called direct or source licenses).

#### *Cable System Operators*

18. Operators of cable television systems (“cable system operators”) transmit a variety of programming to customers on a subscription basis. Cable system operators typically provide several types of programming: programming from cable networks such as MTV; premium and/or on-demand programming such as HBO; locally originated programming (*i.e.*, programming produced by the cable system operator); retransmitted broadcast television programming from the local market; and, relevant here, retransmitted broadcast television programming from a distant market (often referred to as distant signal programming). With respect to cable network, premium and locally-originated programming, the cable networks and cable system operators negotiate directly with the Music Claimants to obtain licenses to cover the public performance of music contained in such programming.

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<sup>5</sup> The license for Univision covers network programming as well as local programming on the television stations that are owned by Univision.

19. I understand that, with respect to the use of music in retransmitted broadcast television programming, cable system operators need not obtain licenses directly from the copyright owners for music performances or the right to broadcast the programming on the stations that are retransmitted. Rather, Section 111 of the Copyright Act covers the treatment of secondary transmissions by cable systems and grants cable system operators a “compulsory license” to retransmit the programming from over-the-air television broadcast stations, including into the distant market. In exchange for this compulsory right, cable system operators pay royalties on a semi-annual basis to the U.S. Copyright Office into three funds – the Basic Fund, the 3.75% Fund and the Syndex Fund – for future distribution to the claimant copyright owners. Such royalties are payable for retransmission of broadcast signals to the cable operator’s subscribers in the distant markets pursuant to Section 111. Moreover, cable systems do not pay royalties for the distant carriage of Big 3 network programming. Thus, the Big 3 network programming is not compensable in the subject proceeding. The non-Big 3 network programming, however, is compensable in this proceeding.

*Distribution of the Cable Royalty Funds*

20. The funds paid by cable system operators pursuant to Section 111 are distributed among copyright owners, who traditionally align themselves into claimant groups based on commonality of the type of programming provided. Claimant groups include the suppliers of: movies and syndicated television programming (“Program Suppliers”); sports programming (“Joint Sports Claimants”); commercial broadcast programming (“Commercial Television Claimants” or “National Association of Broadcasters” (“NAB”)); religious broadcast programming (“Devotional Claimants”); public television broadcast programming (“Public Television Claimants” or “PBS”); and Canadian broadcast programming (“Canadian Claimants”). Music Claimants supply the music that is included as an element in all of the above types of programming.
21. I understand that Congress did not provide criteria for how the royalties should be divided among the various copyright claimants. Thus, in considering how best to determine the appropriate percentage of the funds to be distributed to the Music Claimants for the years

2004 and 2005 that are the subject of this proceeding, I reviewed the prior determinations of the bodies previously charged with making such distributions, namely the Copyright Royalty Tribunal (the "CRT") and the CARPs.

22. In the 1978 Cable Royalty Distribution Determination, the CRT considered a range of factors in making its distribution determinations. The primary factors were: the harm that retransmission of distant signals may have on copyright owners; the benefits that may be derived from retransmission by cable system operators; and the marketplace value of the retransmitted works. Secondary factors were the quality of the retransmitted work and time-related considerations.<sup>6</sup> Over time, however, the CRTs and then the CARPs began to discount, or hold altogether meaningless, factors other than the relative market value of the retransmitted works. Thus, in the 1998-99 Distribution Proceeding, the CARP held that its "primary objective [was] to 'simulate [relative] market valuation' as if no compulsory license existed."<sup>7</sup>
23. In assessing the relative market value, the CARP considered studies that addressed the relative values of the various types of retransmitted programming based on surveys and program viewing. Specifically, the CARP considered studies by Nielsen and Bortz.<sup>8</sup> The Nielsen study, proffered by the Program Suppliers, used data supplied by Nielsen Media Research, which measures television viewing. The Bortz study, proffered by the Joint Sports Claimants, surveyed cable operators regarding the value that they ascribed to various categories of programming. The CARP found that the Bortz study provided meaningful indications of the relative values of sports, movies and other types of programming, but was not relevant for music because music is a program element rather than a program type.<sup>9</sup>

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<sup>6</sup> 1978 Cable Royalty Distribution Proceeding, Docket No. CRT 79-1, *Notice of Final Determination*, 45 Fed. Reg. 63026, 63035-37 (September 23, 1980), [hereinafter, the "1978 CRT Determination"].

<sup>7</sup> In the matter of Distribution of 1998 and 1999 Cable Royalty Funds, Docket No. 2001-8 CARP CD 98-99, *Report of the Copyright Arbitration Royalty Panel To The Librarian of Congress* (October 21, 2003), [hereinafter, "CARP Report"], Section II.B-C; see Distribution of 1998 and 1999 Cable Royalty Funds, Librarian of Congress, *Final Order*, 69 Fed. Reg. 3606, 3608 (January 26, 2004) (affirming CARP decision), *aff'd*, *Program Suppliers v. Librarian of Congress*, 409 F.3d 395, 401-02 (D.C. Cir. 2005).

<sup>8</sup> CARP Report, Section III.A-C.

<sup>9</sup> CARP Report, Section III.A.2.g.

24. The CARP relied upon an alternate methodology to assess the relative market value of music. Specifically, as mentioned above, the CARP considered, as a “floor” for the ultimate distribution percentage set, the relative value of music based on the ratio of music license fees to the total music license and broadcast rights expenses incurred by television broadcasters in the over-the-air broadcast market (hereinafter the “Unadjusted Music Ratio”).<sup>10</sup> Although the CARP recognized that the market for distant signal programming by cable system operators is different from the market for programming in the over-the-air broadcast market, “in the absence of better measures,” the CARP found that “the broadcast television ratio of music expenses to the total broadcast rights expenses is at least one reasonable measure of Music’s relative value . . . .”<sup>11</sup>
25. Specifically, in calculating the Unadjusted Music Ratio for the 1998 and 1999 cable royalty funds distribution, the CARP looked to music license fee data and broadcast rights payment data derived from the U.S. Census Bureau report entitled the Annual Survey of Communication Services: 1998.<sup>12</sup> According to this Census Bureau report, broadcast rights payments made by taxable over-the-air television stations and networks, including the Big 3 networks, were \$9.571 billion.<sup>13</sup> Music license fees paid by taxable over-the-air television stations and networks, including the Big 3 networks, were \$228 million. Thus, the Unadjusted Music Ratio – the ratio of music license fees paid annually to the sum of annual music license fees plus annual broadcast rights payments – was approximately 2.33%. The CARP concluded that this Unadjusted Music Ratio was “worthy of some weight in determining the relative weight of Music,” but also found that the inclusion of expenditures made by the Big 3 networks may artificially decrease the Unadjusted Music

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<sup>10</sup> In the 1998-99 distribution proceeding, data concerning a music ratio was first admitted into evidence during the rebuttal phase by the Joint Sports Claimants, and, accordingly, the CARP had only limited and incomplete data. See CARP Report, Section III.F.3.

<sup>11</sup> CARP Report, Section III.F.3.

<sup>12</sup> U.S. Census Bureau, Current Business Reports, BC/98, *Annual Survey of Communications Services: 1998*, U.S. Government Printing Office, Washington, DC 1999. As the name of the report indicates, this report is a survey, and results are based on a sample of the industry covered; it is not a census of the entire broadcast television industry. Specifically, the report is based on sample of 2,000 employer establishments from the population of roughly 40,000 employer establishments categorized as providing telephone communication, radio and television broadcasting, cable television and other communication services (SIC 48). The overall sampling rate is therefore 5%.

<sup>13</sup> The 1998 Annual Survey of Communication Services breaks television broadcast services (SIC 4833) into “taxable firms” and “taxable and tax-exempt firm.” I use the expenditures indicated for taxable firms here.



Ratio to a level below where it would have been if the Big 3 networks had been excluded, as they should have been. Ultimately, the CARP set the relative value of music at 4.0%.<sup>14</sup>

## V. METHODOLOGY AND DATA SOURCES

26. Conceptually, the music ratio approach used by the CARP in the 1998-99 distribution proceeding is a reasonable method to approximate the value of music in the local over-the-air broadcast market relative to the value of the works of the other copyright holders because music license fees and broadcast rights payments are negotiated among copyright holders and television stations for transmission in the local over-the-air broadcast market. That is, the dollars paid by local broadcast television stations for music license fees is a measure of the value that these stations placed upon access to music included in their programming. Likewise, the dollars paid by broadcast television stations for broadcast rights is a measure of the value for other programming types. The Music Claimants advanced a similar approach in the 1978 distribution proceeding. At that time, ASCAP and SESAC proposed that the marketplace was “what cable operators would pay if there was no compulsory license” and that the comparison should be between “the amount television broadcasters pay for music performing rights and . . . the amounts they pay for performing rights in other copyrighted materials” weighted by “the extent of distant signal carriage.”<sup>15</sup> Accordingly, I adopt the music ratio concept, but make several important adjustments for the cable distant signal market in order to calculate a Weighted Music Ratio that determines the 2004 and 2005 cable royalty funds to be distributed to the Music Claimants.
27. First, as I explain below, I determined that the local television blanket license fees payable to the Music Claimants is the appropriate value for the numerator of the Music Ratio. Blanket license fees on an aggregate industry level are established, through a negotiated process, by each of the PROs. These aggregate industry blanket license fees are then allocated among the various local television stations by the Television Music License

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These numbers agree with the dollar amounts used in the CARP Report, Sections III.F.3.a and III.F.4.

<sup>14</sup> CARP Report, Sections III.F.3-4.

<sup>15</sup> 1978 CRT Determination, 45 Fed. Reg. 63026, 63030, 63040.

Committee ("TMLC").<sup>16</sup> I summed the blanket license fees for the various stations within a television station category in order to determine the blanket license fees for each station category; this allowed me separately to calculate Music Ratios for each category of station. These ratios could then be weighted as needed to account for differences in the subscribership attributable to these station categories in the distant signal market.

28. Second, I determined that, in calculating the denominator of the Music Ratio as the sum of the music license fees and the broadcast rights payments for that category, it is appropriate to use a value for broadcast rights payments that excludes any expenditures made for the rights to broadcast network programming of the Big 3 networks, because such network programming is not compensable in this proceeding. As I explain below, deriving the total broadcast rights payments for a Music Ratio required me to consider three components: (a) the broadcast rights payments made by local television stations for non-network programming; (b) an estimate of the broadcast rights payments for non-Big 3 network programming; and (c) an estimate of the value of the broadcast rights for programs produced by the local television stations themselves (*i.e.*, locally produced programming). Again, I allocated the broadcast rights payments according to television station categories to enable me to later weight the Music Ratios for each category to account for the differences between the over-the-air broadcast market and the distant signal market.
29. Finally, I calculated weights so that I could apply them to the Music Ratios for each television station category so that the ratios would reflect accurately the mix of programming on stations transmitted in the distant signal market as opposed to the programming on stations aired in the local broadcast market. To that end, I examined data derived from the statements of account filed by the cable system operators with the Copyright Office, which contain information on the number of cable system subscribers that receive signals retransmitted from a distant market (called "distant subscribers"). I then used this information to assign lower or greater weight to Music Ratios for particular television station categories depending on whether they had lower or higher cable system subscribership. I then summed the weighted Music Ratios for all of the television station

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<sup>16</sup> The TMLC is an industry committee which represents local television stations in negotiations for industry-wide music performance rights.

categories to obtain the Weighted Music Ratio, which is the appropriate relative value of music in the distant signal market.

30. In order to execute the above methodology and to calculate the Weighted Music Ratio, I required comprehensive and reliable data concerning music license fees and broadcast rights payments for local television stations and for the non-Big 3 television networks, as well as the data used to calculate the distant signal weights. I set forth in more detail below the data sources upon which I relied.

**A. MUSIC LICENSE FEES**

31. I identified two data sources that provide information concerning music license fees for 2004 and 2005: (a) music blanket local television license fee data provided by the PROs; and (b) actual music license fee expenditures made by the broadcast stations.<sup>17</sup>
32. In my view, blanket music license fees are appropriate to use in the numerator of a Music Ratio for this proceeding for a number of reasons. First, blanket license fees represent market-based prices. Namely, the Music Claimants negotiated with the local television stations in the marketplace to establish the 2004 and 2005 blanket license fees for the right to perform publicly all music in the Music Claimants' repertoires. Thus, negotiated blanket license fees provide strong evidence of the market value of the music licenses to the local broadcast stations.
33. Second, blanket music license fees are the only available measures of total market based prices. Expenditures on music license fees by the broadcast stations to the PROs, which are included in the Television Financial Report published annually by NAB and Broadcast

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<sup>17</sup> Individual data points for music license and broadcast rights payments are no longer available from the U.S. Census Bureau. After 1998, the U.S. Census Bureau combined the Annual Survey of Communication Services with the Transportation Annual Survey into a single report called that the Service Annual Survey. The Census Bureau also changed its coverage from the SIC system to the North American Industry Classification System (NAICS) and used NAICS 51312 (television broadcasting) for broadcast television services. The Service Annual Survey provides less detail than did the Annual Survey of Communication Services. Notably, the Service Annual Survey provides an aggregate number for the sum of music license fees and broadcast rights payments, instead of individual numbers for the two components as was the case in the Annual Survey of Communication Services. The Service Annual Survey also aggregates data for taxable and tax-exempt firms into a single number for all firms. It also continues to include expenditures made by the Big 3 Networks on music license fees and broadcast rights payments.

Cable Financial Management Association (the "NAB Survey"),<sup>18</sup> or contained in the records of the PROs themselves, provide only a partial account of actual expenditures made by television stations on such fees. These "actual" payments, by definition, understate the total amount of music license fees paid by television stations because they do not include payments for direct licenses with composers and music publishers. Payments made to individual composers by television stations and/or networks are private transactions; information concerning the prices paid is generally not publicly available. Therefore, it is not possible to calculate accurately and reliably the total actual expenditures on music license fees in 2004 and 2005. In contrast, the negotiated, annual PRO blanket license fee, applicable to all local television stations, is an accurate and reliable measure of the market price of music licenses in the local over-the-air broadcast market.

34. As I introduced earlier, annual blanket license fees are determined by each PRO for the local television industry in aggregate. This industry includes stations that are affiliated with the Big-3 network affiliates (with respect to non-network programming),<sup>19</sup> stations affiliated with the non-Big 3 network affiliates (with respect to local and network programming) and independent stations (for all of their programming). The local television industry, through its industry committee – the TMLC – agreed to blanket PRO licenses that totaled \$195.5 million in 2004 and \$186 million in 2005.<sup>20</sup> See Written Direct Testimony of Michael O’Neill, Section III.A and MC 04-05 Exs. 2, 5. Also relevant to this proceeding are the blanket license fees agreed to by (and paid by) the Univision network, which cover network programming as well as local programming on the stations owned by Univision.<sup>21</sup> The blanket license fees agreed to by the local television industry and

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<sup>18</sup> The NAB reports music license fees paid to PROs based on a survey of television stations. As stated above in footnote 17, by 2004 the U.S. Census Bureau no longer reported actual expenditures on music license fees by the television broadcasters as it did in the 1998 Annual Survey of Communication Services.

<sup>19</sup> The Big 3 networks pay a separate music license fee to cover their network programming.

<sup>20</sup> The break down for blanket licenses for local commercial television stations are: for ASCAP, \$97 million for 2004 and \$85 million for 2005; for BMI, \$85 million for both 2004 and 2005; and for SESAC, \$13.5 million for 2004 and \$16 million for 2005.

<sup>21</sup> Television stations that are affiliated with the non-Big 3 networks pay music license fees for station and network programming, except for stations owned by the Univision network. The Univision network pays a blanket license fee covering all the programming of the stations that the network owns. The blanket license fees paid by Univision (\$5.31 million in 2004 and \$5.72 million in 2005) are included as part of the Other network category in Table 2.

Univision total \$200.8 million for 2004 and \$191.7 million for 2005. Table 2 summarizes the blanket license fees that were allocated by the TMLC to the stations by category for 2004 and 2005.<sup>22</sup>

**Table 2**  
**2004 and 2005 Blanket Music License Fees – Numerator**

	Blanket Music License Fees (\$Millions)	
	2004	2005
Big-3 Networks		
ABC Affiliates	\$37.71	\$34.40
CBS Affiliates	\$37.87	\$36.24
NBC Affiliates	\$38.82	\$36.32
Non Big-3 Networks		
FOX Affiliates	\$34.56	\$34.09
UPN Affiliates	\$13.88	\$11.86
WB Affiliates	\$17.24	\$16.85
Other*	\$14.51	\$15.16
Independents	\$6.22	\$6.81
Total	\$200.8	\$191.7

\*Off-air and small stations are included in the "Other" category

Sources: ASCAP, BMI, SESAC

<sup>22</sup> The TMLC allocates the aggregate blanket license fee among stations in accordance with a methodology it devised to produce each station's annual blanket license fee. For example, in the case of BMI's Local Television Station Music Performance Blanket License, the industry wide blanket music license fee is allocated among television markets based on the three-year average of US television households in that market. The top-25 markets are over-weighted to reflect that a household in a big city has more value than a household in a small town. The portion of the blanket music license fee allocated to a particular market is further allocated among stations in that market based on viewership in 30-minute increments during the hours of 9am to 12pm during the "sweeps" month for the three previous years. The viewership information is taken from Nielsen's Market Ratings Reports. Viewership of a network affiliate during primetime hours is removed from the affiliate's total viewership because the networks pay a separate license for music used during network programming. Stations with no Nielsen rating are given a minimum blanket license fee. To conduct my analysis above, I obtained the actual allocations applicable to the stations licensed by each PRO and then assigned each station's allocated fee to the categories identified in Table 2. I note that BMI's allocation was done pursuant to its Local Television Station Music Performance Blanket License, while ASCAP's allocation was done for the period from January 2004 through November 2005 pursuant to the Interim Fee Order on Consent date May 1, 1998 (MC 04-05 Ex. 1) and from December 2004 through December 2005 pursuant to the Local Station Blanket Television License finalized November 14, 2004 (MC 04-05 Ex. 2).

## **B. BROADCAST RIGHTS PAYMENTS**

35. As noted above, total broadcast rights payments, excluding those for the Big 3 network programming, constitute a portion of the denominator of the Music Ratio for each category of television station. I surveyed the sources of data concerning broadcast rights payments for the over-the-air broadcast market. I located public information concerning local television stations broadcast rights payments for non-network programming only. Second, because I could not find publicly available information on the broadcast rights payments for non-Big 3 network programming, I identified data concerning programming expenses for the non-Big 3 networks. Third, to be comprehensive and accurate in calculating broadcast rights payments, I also estimated the broadcast expenses that would be paid to the local stations for programs they produce themselves (*i.e.*, the broadcast value of locally produced programming).

### **1. Broadcast Rights Payments Made By Local Television Stations**

36. The Television Financial Report (the NAB Survey) provides data on the average expenditures made by a television station on broadcast rights payments based on a survey of television stations.<sup>23</sup> Calculating the total expenditures made by television stations on broadcast rights for 2004 and 2005 requires that this average is multiplied by the number of commercial television stations operating in those years for which such payments would be representative. This, in turn, required that I match the average expenditures on local broadcast rights payments by category of television stations included in the NAB Survey with station counts by categories. I reviewed the television stations that made up the total included in Table 1 (1,372 stations in 2004 and 1,371 stations in 2005) and found that several of these stations were very small and, thus, likely not included in the NAB

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<sup>23</sup> NAB and Broadcast Cable Financial Management Association, 2006 Television Financial Report. The 2006 NAB Survey provides revenue and expense data for the year 2005. The data included in the 2005 NAB Survey was based on 63.1% response rate (690 facilities, representing 797 television stations returned usable questionnaires out of a universe of 1,263 stations contacted). This is different than the U.S. Census Bureau's Annual Survey of Communication Services (1998) and the Service Annual Survey (1998 – 2005) which are based on samples of stations and networks in the television broadcasting industry.

Survey.<sup>24</sup> I excluded these stations from calculation of the Music Ratios. The total station count that I include in my analysis are 1,187 for 2004 and 1,192 for 2005.

37. I next multiplied the average broadcast rights payments per station by the number of stations in each category. I present this calculation of broadcast rights payments, by category of television station, in Table 3 below. In doing so, I use amortized broadcast rights payments in this calculation because it includes the value of booked barter arrangements; it also provides for a more conservative calculation of the Music Ratio because it results in a larger denominator than would use of the cash approach.<sup>25</sup> My results are set forth below.

**Table 3**  
**Total Station Broadcast Rights Payments**

		Average Station Broadcast Rights Payments		Number of Stations		Station Broadcast Rights Payments	
		2004	2005	2004	2005	2004	2005
		[a]	[b]	[c]	[d]	[e]	[f]
[1]	All	\$1,698,272	\$1,702,840	1,187	1,192	\$2,015,848,864	\$2,029,785,280
[2]	ABC Affiliates	\$2,100,520	\$2,290,689	195	195	\$409,601,400	\$446,684,355
[3]	CBS Affiliates	\$1,222,075	\$1,151,584	193	193	\$235,860,475	\$222,255,712
[4]	NBC Affiliates	\$1,128,155	\$1,170,914	195	194	\$219,990,225	\$227,157,316
[5]	FOX Affiliates	\$1,519,649	\$1,161,136	165	166	\$250,742,085	\$192,748,576
[6]	UPN Affiliates	\$2,094,220	\$2,749,883	80	79	\$167,537,600	\$217,240,757
[7]	WB Affiliates	\$5,900,565	\$5,633,831	81	83	\$477,945,765	\$467,607,973
[8]	Independents	\$2,178,891	\$2,521,584	57	58	\$124,196,787	\$146,251,872
[9]	Other	\$588,120	\$490,351	221	224	\$129,974,527	\$109,838,719

Sources:

[1-8]: [a]: NAB, 2005 *Television Financial Report*

[b]: NAB, 2006 *Television Financial Report*

[c], [d]: M Street data (provided by BMI)

[e] = [a] x [c]

[f] = [b] x [d]

[9]: [a] = [e]/[c]

[b] = [f]/[d]

[c], [d]: [1] - sum([2] thru [8])

[e],[f] = [1] - sum([2] thru [8])

<sup>24</sup> These stations were either considered "unlicensable" by the PROs or paid low monthly music license fees. These stations also had a 0% or very low viewer share.

<sup>25</sup> Amortized broadcast rights in this case refers to the accounting of payments under an accrual method and also includes the value of booked barter arrangements. Bartered programming is the booked advertising revenue in exchange for syndicated programming. Broadcast rights payments were also reported on a cash basis, which reflects the actual dollar amounts paid for broadcast rights. Cash payments were slightly less than

**2. Estimate of Broadcast Rights Payments For  
Non-Big 3 Network Programming**

38. The above figures – in particular, the total amount of broadcast rights payments in 2004 and 2005 – understate the broadcast rights payments to be included in the calculation of the Music Ratio because: (1) they exclude the broadcast rights payments that were made for non-Big 3 network programming in those years; and (2) they exclude the local stations’ broadcast expenses for their locally produced programming (which I discuss in subsection (3) below).
39. I did not initially include broadcast rights payments for non-Big 3 network programming because such payments are not reported in the NAB Survey (which includes only broadcast expenditure data associated with non-network programming) and I was unable to locate any other publicly available source for such data. I did, however, locate publicly reported data on the “programming expenses” for network programming for 2004 and 2005 from SNL Kagan, a subscription-based service that provides information on the communications and media industries.<sup>26</sup> A summary of the programming expenses for the non-Big 3 networks (Fox, UPN, The WB and Others) is set forth in Table 4.

**Table 4  
Non-Big 3 Network Programming Expenses  
(\$000s)**

Network	2004	2005
Fox	\$1,998,284	\$2,255,330
UPN	\$210,977	\$219,417
WB	\$543,061	\$531,832
Others	\$501,867	\$543,703
<b>Total Non-Big 3</b>	<b>\$3,254,189</b>	<b>\$3,550,282</b>

Source: SNL Kagan

40. Broadcast rights payments are defined as part of the broader category of programming expenses, and thus by accounting definition the non-Big 3 network programming

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amortized broadcast rights; in 2004, cash payments were approximately \$1.65 million per station on average and such payments were \$1.66 million per station on average in 2005.

<sup>26</sup> Data on programming expenses and other information concerning the communications and media industry are accessible through SNL Kagan’s data bases.



expenditures reported by SNL Kagan are greater than the expenditures associated with broadcast rights payments alone. The elements of programming expenses reported by SNL Kagan include categories of expenses (for example, the “direct cost....of distributing content and services”) that could not be considered broadcast rights and do not reflect the market value of the relevant programming. The NAB Survey indicated that broadcast rights payments were approximately 74% and 73% of programming expenses in 2004 and 2005, respectively, for television stations on average. I was unable to find a basis for applying such a percentage to programming expenses for networks or for calculating the percentage of network programming expenses attributable to broadcast rights payments for network programming. Accordingly, in the absence of such information, I include all of the programming expenses for the non-Big 3 networks in the calculation of broadcast rights payments, even though this approach, by definition, overstates broadcast rights payments for non-Big 3 network programming.

### **3. Estimate of Value of Broadcast Rights for Locally Produced Programs**

41. To calculate accurately the total effective broadcast rights payments applicable to each station category for purposes of the Music Ratio, I must estimate the value of the broadcast rights in locally produced programming to cable system operators. Such programming – such as local news and locally produced public affairs shows – is produced by the local commercial television stations themselves and is broadcast in the over-the-air market. These stations incur expenses in producing and airing this programming but do not typically sell the broadcast rights or otherwise measure the equivalent value of such rights. The value of these broadcast rights would likely differ from the underlying cost involved in producing the programming. A local station which produces its own programming obtains ownership rights to that programming; these ownership rights are more valuable than the limited rights a station obtains when it acquires broadcast rights.
42. In order to estimate the value of broadcast rights in such programming, I relied on the CARP’s previous determination of the various claimants’ shares in its distribution of the Basic Fund in the 1998 and 1999 cable royalty distribution proceeding. This allowed me to calculate (as set forth below) the overall relative value assigned by the CARP to locally

produced programming (using the Commercial TV Claimants share in 1998 and 1999 as a proxy) compared to the combined local commercial television station non-network programming and non-Big 3 network programming (using the combined Joint Sports Claimants, Program Suppliers, and Devotional Claimants shares in 1998 and 1999 as a proxy). Once I had this measure of the overall relative value of locally produced programming to these other types of programming according to the CARP, I could then assign this same overall relative value from the 1998 and 1999 proceeding to the relative value in this proceeding of broadcast rights in locally produced programming compared to broadcast rights payments in these other types of programming. The percentage shares determined by the CARP in the 1998 and 1999 proceeding are summarized in Table 5 below.

**Table 5**  
**Summary of CARP Determination of Relative Values**  
**By Claimant Group (1998 and 1999 Cable Royalty Distribution Case)**

	Basic Funds		
	1998	1999	Average
[1] Devotional	1.19375%	1.19375%	1.19375%
[2] Program suppliers	37.80114%	36.00037%	36.90076%
[3] Joint Sports	35.78076%	37.62758%	36.70417%
[4] Commercial TV (NAB)	13.96836%	13.77736%	13.87286%
[5] Public Television	5.49125%	5.49125%	5.49125%
[6] Music	4.00000%	4.00000%	4.00000%
[7] Canadians	1.76476%	1.90971%	1.83724%
[8] Total	100.0%	100.0%	100.0%

Source: In the matter of Distribution of 1998 and 1999 Cable Royalty Funds, Docket No. 2001-8 CARP CD 98-99, Report of the Copyright Arbitration Royalty Panel To The Librarian of Congress (October 21, 2003), Section VI. A and B.

43. The CARP made percentage awards to the seven groups of claimants. As set forth in Table 5, Joint Sports Claimants, Program Suppliers and Devotional Claimants accounted for approximately 75% of the CARP's distributions for both 1998 and 1999, and Commercial Television Claimants accounted for nearly 14% of these distributions. These four claimants thus accounted for approximately 89% of the distributions of the Basic Fund in 1998 and 1999. The other three claimant groups – Public Television, Music and Canadian Claimants – only accounted for the remaining 11% in 1998 and 1999. In the calculation set

below, Commercial Television Claimants' 14% share is designated as the value "L" and was used as a proxy for the relative value of locally produced programming at issue in 1998 and 1999, while the Joint Sports Claimants, Program Suppliers, and Devotional Claimants combined 75% share is designated "S + P + D" below and was used as a proxy for the relative value of combined local commercial television station non-network programming and non-Big 3 network programming. Applying the CARP's shares of the distribution in the 1998 and 1999 proceeding, this gives an overall relative value of locally produced programming to these other types of programming,  $L / (S + P + D)$ , of approximately 14% divided by 75%, or approximately 0.185.

44. In the two subsections above thus far, I have calculated the dollar value of broadcast rights payments in local commercial television station non-network programming and non-Big 3 network programming. These payments were made to the Program Suppliers, Joint Sports Claimants, and Devotional Claimants for the rights to exhibit sports, movies and syndicated and religious programs. I can use the relative values established by the CARP, which I described above, to solve for the aggregate dollar value of the broadcast rights associated with programming provided by the Program Suppliers, Joint Sports Claimants, Devotional Claimants and the Commercial Television Claimants. Expressed algebraically,

$$X = S + P + D + L$$

where:

S is the relative value of programming provided by the Joint Sports Claimants;

P is the relative value of programming provided by the Program Suppliers;

D is the relative value of programming provided by the Devotional Claimants;

L is the relative value of local programming, or programming provided by the Commercial Television Claimants; and,

X is the sum of the relative values associated with S, P, D and L.

This phrase can also be expressed as:

$$X = Y (S + P + D)$$

where Y is a factor that accounts for the absence of data providing a relative value for

locally produced programming in this proceeding.

Combining these two equations, allows me to define Y in terms of X. Specifically,

$$Y = X / (S + P + D).$$

Alternatively,

$$Y = (S + P + D + L) / (S + P + D) = 1 + L / (S + P + D).$$

45. The value of broadcast rights for locally produced programming in this proceeding can be estimated by finding the factor Y associated with the percentage shares awarded by the CARP in its 1998 and 1999 distribution for the Joint Sports Claimants, Program Suppliers, Devotional Claimants and the Commercial Television Claimants and then multiplying that factor Y by the broadcast rights payments in 2004 and 2005 for programming represented by the Program Suppliers, Joint Sports Claimants, and Devotional Claimants in this proceeding. I summarize the calculation of this factor in Table 6 below. Row [3] in the table, the sum of the percentages awarded by the CARP for the Joint Sports Claimants, Program Suppliers, Devotional Claimants and the Commercial Television Claimants, is divided by Row [1], the sum of the percentages awarded by the CARP for the Joint Sports Claimants, Program Suppliers and Devotional Claimants only, to arrive at the factors set forth in Row [4].

**Table 6**  
**Calculation of Broadcast Rights Payment**  
**To Account For Value Of Local Programming**

	Basic Funds		
	1998	1999	Average
[1] Program Suppliers + Sports + Devotional	74.77565%	74.82170%	74.79868%
[2] Local Programming	13.96836%	13.77736%	13.87286%
[3] Program Suppliers + Sports + Devotional + Local Programming	88.74401%	88.59906%	88.67154%
[4] Factor	1.187	1.184	1.185

Sources:

- [1] Table 5, [1] thru [3]
- [2] Table 5, [4]
- [3] = [1] + [2]
- [4] = [3] / [1]

46. As set forth in Table 6, the broadcast rights payments that were paid to Program Suppliers, Joint Sports Claimants, and Devotional Claimants in the Music Ratio analysis should be multiplied by a factor of approximately 1.185 in order to account for the estimated value of the broadcast rights for locally produced programming.

**4. Total Estimated Broadcast Rights Payments**

47. As set forth in Table 7, I multiplied the factor Y by the broadcast rights payments for local commercial television station non-network programming and non-Big 3 network programming, as calculated in the previous two sub-sections, to form a complete estimate of broadcast rights payments applicable to the Music Ratio. Thus, the last two columns of Table 7 provide, for each category of television station, a sum of (a) the broadcast rights payments made by the local stations for non-network programming, (b) the estimated broadcast rights payments for non-Big 3 network programming, and (c) the estimated value of broadcast rights for locally produced programming. In total, the estimated value of broadcast rights payments were approximately \$6.2 billion in 2004 and \$6.6 billion in 2005.

**Table 7**  
**Total Station and Non-Big 3 Network Broadcast Rights Payments**

	Station Broadcast Rights Payments		Network Programming Expenses		Total Broadcast Rights Payments and Equivalents		Total Broadcast Rights Payments and Equivalents Including Value Local Station Programming	
	(\$Millions)		(\$Millions)		(\$Millions)		(\$Millions)	
	2004	2005	2004	2005	2004	2005	2004	2005
	[a]	[b]	[c]	[d]	[e]	[f]	[g]	[h]
[1] ABC Affiliates	\$409.6	\$446.7	-	-	\$409.6	\$446.7	\$485.4	\$529.3
[2] CBS Affiliates	\$235.9	\$222.3	-	-	\$235.9	\$222.3	\$279.5	\$263.4
[3] NBC Affiliates	\$220.0	\$227.2	-	-	\$220.0	\$227.2	\$260.7	\$269.2
[4] FOX Affiliates	\$250.7	\$192.7	\$1,998.3	\$2,255.3	\$2,249.0	\$2,448.0	\$2,665.1	\$2,900.9
[5] UPN Affiliates	\$167.5	\$217.2	\$211.0	\$219.4	\$378.5	\$436.6	\$448.5	\$517.4
[6] WB Affiliates	\$477.9	\$467.6	\$543.1	\$531.8	\$1,021.0	\$999.4	\$1,209.9	\$1,184.3
[7] Independents	\$124.2	\$146.3	-	-	\$124.2	\$146.3	\$147.2	\$173.4
[8] Other	\$130.0	\$109.8	\$501.9	\$543.7	\$631.9	\$653.5	\$748.8	\$774.4
[9] Total	\$2,015.8	\$2,029.8	\$3,254.3	\$3,550.2	\$5,270.1	\$5,580.0	\$6,245.1	\$6,612.3

Sources:

- [a],[b]: Table 3
- [c],[d]: Table 4
- [e] = [a] + [c]
- [f] = [b] + [d]
- [g] = [e] \* 1.185 (see Table 6)
- [h] = [f] \* 1.185 (see Table 6)

48. I note that the broadcast rights payments for categories of television stations set forth in Table 7 above likely overstate the broadcast rights payments that would be made in the distant signal market for two reasons. First, in the local broadcast market, stations and networks pay premiums for the rights to broadcast programs on an exclusive basis. This exclusivity is important and of high value to purchasers of broadcast rights; in fact, the rules governing syndicated exclusivity have been subject to contentious dispute. These premiums likely would not be paid in the distant market where content is retransmitted over many cable systems on a non-exclusive basis. Second, as I explained above, in the absence of more precise public information on non-Big 3 network programming broadcast rights payments, I used programming expenses, which by definition overstates the relevant broadcast rights payments. Moreover, because I also used these non-Big 3 programming expenses to estimate the value of the broadcast rights of locally produced programming, that value is also overstated in the total broadcast rights payments set forth in Table 7.

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49. In sum, using the music license payments and broadcast rights payments for each category of television station set forth in Table 2 and Table 7 above, I calculated the denominator of the Music Ratio by category of television station and in total. The results of those calculations are set forth in Table 8 below.

**Table 8**  
**Calculation of Denominators**

	Blanket Music License Fees		Total Broadcast Rights Payments and Equivalents Including Value Local Station Programming		Denominator	
	(\$Millions)		(\$Millions)			
	2004	2005	2004	2005	2004	2005
	[a]	[b]	[c]	[d]	[e]	[f]
ABC Affiliates	\$37.71	\$34.40	\$485.4	\$529.3	\$523.1	\$563.7
CBS Affiliates	\$37.87	\$36.24	\$279.5	\$263.4	\$317.4	\$299.6
NBC Affiliates	\$38.82	\$36.32	\$260.7	\$269.2	\$299.5	\$305.5
FOX Affiliates	\$34.56	\$34.09	\$2,665.1	\$2,900.9	\$2,699.7	\$2,935.0
UPN Affiliates	\$13.88	\$11.86	\$448.5	\$517.4	\$462.4	\$529.3
WB Affiliates	\$17.24	\$16.85	\$1,209.9	\$1,184.3	\$1,227.1	\$1,201.2
Independents	\$6.22	\$6.81	\$147.2	\$173.4	\$153.4	\$180.2
Other	\$14.02	\$14.74	\$748.8	\$774.4	\$762.8	\$789.1
<b>Total</b>	<b>\$200.3</b>	<b>\$191.3</b>	<b>\$6,245.1</b>	<b>\$6,612.3</b>	<b>\$6,445.4</b>	<b>\$6,803.6</b>

Sources:

[a],[b]: Table 2, excludes license fees assigned to stations that went off-air and/or were designated as "Small."

[c],[d]: Table 7

[e] = [a] + [c]

[f] = [b] + [d]

**C. THE DISTANT SIGNAL MARKET**

50. As I explain above, the market for retransmitted distant signals by cable system operators differs from the local broadcast television market in terms of the mix of programming transmitted. The local over-the-air market is broadcast to anyone with a television set within range of transmission; that is, anyone within that range is a "receiver" of over-the-air television signals. On the other hand, the market for distant signals on a cable system is dependent upon both the portfolio of signals a cable system operator elects to retransmit and upon the subscription choices made by the cable system operator's

customers. Thus, the mix of programming in the retransmitted distant signal market differs from the programming in the over-the-air broadcast market. This, in turn, indicates that the relative value of music in the retransmitted distant signal market differs from such relative value in the local over-the-air broadcast market.

51. Accordingly, while the relative value of music in the local over-the-air television market may be determined by calculating the Music Ratio at an aggregate level using the available local market data (in other words, total music license fees for all stations divided by total music license fees and broadcast rights payments), the relative value of music in the distant signal market should take into account differences in the programming mix between the local and distant signal markets.
52. In order to account for such differences in my calculation of the relative value of music, I determined weights for the various television station categories based on the number subscribers of those cable system operators that carry the stations in each category, so that I ultimately could apply such weights to my calculation of the Music Ratios for each category.
53. I calculated the distant signal market weights as follows. Information concerning the distant signal subscribership is available from the U.S. Copyright Office. Each cable system is responsible for providing information to the Licensing Division of the U.S. Copyright Office in Statements of Account that are filed twice each calendar year. This information includes the call sign of the retransmitted distant signal, the call sign's channel, the call sign's city and state, the number of subscribers that receive each signal, and, among other data, "Distant subscriber half years" which are instances that subscribers ("distant subscribers") are reported by cable system operators to receive a distant signal.<sup>27</sup> These data are the basis for the calculation of the royalty payments that the subject cable systems will pay to the U.S. Copyright Office. Data regarding distant signals for 2004 and 2005 were compiled into databases and reports by Cable Data Corporation (CDC). These CDC reports have been used in prior proceedings before the CRT and CARP.

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<sup>27</sup> As a rule of thumb, distant subscriber half years can be divided by two to roughly estimate the number of subscriber instances in a given year. This assumes that the number of subscriber instances did not materially change from one half-year period to another.



54. I reviewed the distant signal call signs and station designations as reported by CDC based on their compilation of Statement of Account data for “Form 3” cable systems for 2004 and 2005.<sup>28</sup> I cross-referenced the network affiliation or independent station designations that CDC assigned to television stations against the network affiliations or independent station designations that I summarized in Table 1 to ensure that weights that I developed appropriately matched the Music Ratios that were calculated for the various categories of television stations.<sup>29</sup> Table 9 summarizes the number of “distant subscribers,” measured in distant subscriber half-years, associated with each category of television stations.

**Table 9**  
**Summary of Distant Subscribers By Television Station Category**

Television Station Category	2004		2005	
	Distant Subscriber Half-Years		Distant Subscriber Half-Years	
ABC	8,141,852	5.7%	6,744,600	4.8%
CBS	7,914,150	5.5%	6,817,416	4.9%
NBC	8,964,753	6.3%	7,589,335	5.5%
Fox	4,949,395	3.5%	4,029,832	2.9%
UPN	6,350,844	4.4%	5,668,399	4.1%
WB	7,375,399	5.2%	6,494,740	4.7%
Independent	72,339,054	50.5%	73,974,180	53.2%
Other	3,011,078	2.1%	2,577,819	1.9%
Canadian/Mexican	5,394,931	3.8%	5,880,695	4.2%
Educational	17,165,891	12.0%	17,035,527	12.2%
Low Power	1,180,716	0.8%	1,441,923	1.0%
Small	411,747	0.3%	902,011	0.6%
<b>Total</b>	<b>143,199,810</b>	<b>100%</b>	<b>139,156,477</b>	<b>100%</b>

Source: CDC and M-Street (as provided by BMI)

55. Table 9 demonstrates that in 2004 approximately 18% of distant subscriber half years were associated with the Big 3 networks and 15% of such subscribers were associated with the

<sup>28</sup> Form SA1-2 is the “short form” for use by cable systems with semiannual gross receipts for secondary transmission that is less than \$527,600. Form SA3, known as Form 3, is the “long form” for use by cable systems with semiannual gross receipts for secondary transmission that is more than \$527,600. CDC estimates that Form 3 cable systems are responsible for roughly 95% of the payments into the pool of royalty funds. Also, Form 1 and 2 cable systems are not required to distinguish between local and distant signals.

<sup>29</sup> As discussed earlier, I excluded several “small” television stations that would not be included in the NAB Survey, in the calculation of broadcast rights payments. I identified these same small stations in the CDC data and segregated the associated distant signals into a category called “small” in Table 9.

non-Big 3 networks, including the “other” category covering smaller and sometimes more specialized non-Big 3 networks. Independent stations had the highest incidence of distant signal subscribership, 51%.<sup>30</sup> These categories together accounted for approximately 83% of distant subscriber half-years in 2004. In 2005, 15% of distant subscriber half years were associated with the Big 3 networks, 14% of such subscribers were associated with the non-Big 3 networks, and 53% of subscribers were associated with independent stations, meaning these categories again accounted for approximately 82% of distant subscriber half-years in 2005. Table 9 also shows that, in both 2004 and 2005, approximately 12% of distant signal half years were associated with educational stations, roughly 4% of signals were associated with broadcasts originating in Canada and/or Mexico and approximately 1% of distant signal half years were associated with low power stations.

56. I calculated weights for each of the categories of television stations discussed in subsections A and B above (ABC, CBS, NBC, FOX, UPN, The WB, Other, and Independent). I therefore did not include the distant signal subscribership attributable to educational television stations, the Canadian/Mexican stations and low power television stations in calculating these weights. This approach ensures that the weights applied are consistent with the television station categories; it is also consistent with the CARP’s calculation of the Unadjusted Music Ratio in the 1998 and 1999 cable royalty funds distribution proceeding. In that proceeding, the CARP considered an Unadjusted Music Ratio based on data for taxable (*i.e.*, commercial) U.S.-based firms included in the U.S. Census Bureau’s Annual Survey of Communication Services, which excluded educational television stations and Canadian/Mexican stations. I excluded distant signal subscribership attributable to low power television (less than 1% of total distant signal subscribers in 2004) because these stations were not included in the station counts shown in Table 1. Also, the 2004 and 2005 NAB Surveys do not include data on educational, non-U.S. and specialized (low power) television stations.

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<sup>30</sup> A majority of total distant signal half years for both 2004 and 2005 are associated with WGN. WGN transmits two types of signals: one for its local market in Chicago (WGN-TV, channel 9, in Chicago, Illinois) and one designed for distant carriage (WGN America, formerly known as Superstation WGN). In 2004 and 2005, WGN was affiliated with WB in its local broadcasts. However, WGN America’s transmissions did not (and do not) include programming from WB because the network was (and is) available in most markets around the country. Therefore, I include distant signals for WGN in the independent station category.

57. Therefore, I included the distant subscriber half years for U.S.-based full power commercial television stations only in developing the weights for the Music Ratio analysis. As discussed above and indicated in Table 9, these distant subscriber half years accounted for roughly 83% and 82% of total distant subscriber half years reported by cable system operators in their 2004 and 2005 Statement of Account filings, respectively. The weights are then calculated for each television station category (ABC, CBS, NBC, FOX, UPN, The WB, Other, and Independent) by dividing that category's distant subscriber half years by the total distant subscriber half years among these categories. I summarize the calculation of the weights to be applied in the ratio analysis in Table 10 below.

**Table 10**  
**Determination of Weights**

Television Station Category	2004		2005	
	Distant Subs (H-Y)	Weight	Distant Subs (H-Y)	Weight
ABC	8,141,852	6.8%	6,744,600	5.9%
CBS	7,914,150	6.6%	6,817,416	6.0%
NBC	8,964,753	7.5%	7,589,335	6.7%
Fox	4,949,395	4.2%	4,029,832	3.5%
UPN	6,350,844	5.3%	5,668,399	5.0%
WB	7,375,399	6.2%	6,494,740	5.7%
Independent	72,339,054	60.8%	73,974,180	64.9%
Other	3,011,078	2.5%	2,577,819	2.3%
<b>Total</b>	<b>119,046,525</b>	<b>100%</b>	<b>113,896,321</b>	<b>100%</b>

Source: Table 9

## VI. CALCULATION OF WEIGHTED-MUSIC RATIO

58. Using the data and weights derived above, I next calculated the Weighted Music Ratio to be used as an indicator of the relative value of music in the distant signal market. This calculation involved three steps. First, I calculated the un-weighted Music Ratios for each of the television categories in the local over-the-air broadcast television market. Second, I weighted these un-weighted Music Ratios for each category of television station by the distant subscriber instance weights set forth in Table 10 above. Third, I calculated the resulting Weighted Music Ratio.

59. Table 11 sets forth the calculation of the un-weighted Music Ratios for each category of television station. Each un-weighted Music Ratio is simply the Numerator (blanket music license fees) divided by the Denominator (blanket license fees plus broadcast rights payments) for that category using the data from Tables 2 and 8, which is restated in Table 11.

**Table 11**  
**Calculation of Un-Weighted Ratios**

	Numerator		Denominator		Ratio	
	Blanket Music License		Sum: MLF + BRP			
	(\$Millions)		(\$Millions)			
	2004	2005	2004	2005	2004	2005
ABC Affiliates	\$37.7	\$34.4	\$523.1	\$563.7	7.2%	6.1%
CBS Affiliates	\$37.9	\$36.2	\$317.4	\$299.6	11.9%	12.1%
NBC Affiliates	\$38.8	\$36.3	\$299.5	\$305.5	13.0%	11.9%
FOX Affiliates	\$34.6	\$34.1	\$2,699.7	\$2,935.0	1.3%	1.2%
UPN Affiliates	\$13.9	\$11.9	\$462.4	\$529.3	3.0%	2.2%
WB Affiliates	\$17.2	\$16.9	\$1,227.1	\$1,201.2	1.4%	1.4%
Independents	\$6.2	\$6.8	\$153.4	\$180.2	4.1%	3.8%
Other	\$14.0	\$14.7	\$762.8	\$789.1	1.8%	1.9%
<b>Total</b>	<b>\$200.3</b>	<b>\$191.3</b>	<b>\$6,445.4</b>	<b>\$6,803.6</b>	<b>3.1%</b>	<b>2.8%</b>

Sources: Table 8

60. As demonstrated in Table 11, the un-weighted aggregate Music Ratio for all station categories was approximately 3.1% in 2004 and 2.8% in 2005. Table 12 below sets forth the calculation of the weighted Music Ratios in each station category for 2004 and 2005. The un-weighted Music Ratios (taken from Table 11 above) are multiplied by their weights (taken from Table 10 above) to arrive at the weighted Music Ratios in each station category. Table 12 also sets forth the calculation of the Weighted Music Ratio, which is the relative market value of music in the distant signal market. This Weighted Music Ratio is simply the sum of the weighted Music Ratios over all station categories; in other words, the sums of the third and sixth data columns of Table 12 determine the Weighted Music Ratios for 2004 and 2005, respectively.

**Table 12**  
**Calculation of Weighted Ratio**

	2004			2005		
	Unweighted Ratio	Weight	Weighted Ratio	Unweighted Ratio	Weight	Weighted Ratio
ABC Affiliates	7.2%	6.8%	0.50%	6.1%	5.9%	0.36%
CBS Affiliates	11.9%	6.6%	0.80%	12.1%	6.0%	0.73%
NBC Affiliates	13.0%	7.5%	1.00%	11.9%	6.7%	0.80%
FOX Affiliates	1.3%	4.2%	0.10%	1.2%	3.5%	0.04%
UPN Affiliates	3.0%	5.3%	0.20%	2.2%	5.0%	0.11%
WB Affiliates	1.4%	6.2%	0.10%	1.4%	5.7%	0.08%
Independents	4.1%	60.8%	2.50%	3.8%	64.9%	2.47%
Other	1.8%	2.5%	0.00%	1.9%	2.3%	0.04%
<b>Weighted Ratio/Total</b>	<b>3.1%</b>	<b>100%</b>	<b>5.2%</b>	<b>2.8%</b>	<b>100%</b>	<b>4.6%</b>

Source: Tables 10 & 11

61. As demonstrated in Table 12, the Weighted Music Ratio was 5.2% in 2004 and 4.6% in 2005. Accordingly, I have determined that the relative market value of music in the distant signal market was 5.2% in 2004 and 4.6% in 2005.

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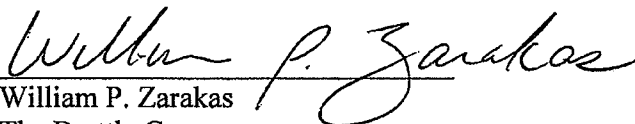
62. In sum, for the foregoing reasons, I find that the Weighted Music Ratios I calculated above – 5.2% in 2004 and 4.6% in 2005 – determine the relative market value of music in the distant signal market. As I previously explained, these values are conservative for a number of reasons, including that they overstate the broadcast rights payments that would be paid in the distant signal market because (1) they fail to account for the fact that content retransmitted in the distant signal market is on a non-exclusive basis and thus overstated by broadcast rights payments in the local over-the-air market, which are for the right to exclusive broadcasts, and (2) they use programming expenses, rather than broadcast rights payments, for non-Big 3 network programming. Thus, I respectfully submit that the Copyright Royalty Judges should use the 5.2% and 4.6% Weighted Music Ratios as Music Claimants share of the cable royalty distribution for 2004 and 2005, respectively, in the subject proceeding.

**Attorney-Client Privileged Work Product**

*Declaration*

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Dated: June 1, 2009  
Cambridge, MA

  
\_\_\_\_\_  
William P. Zarakas  
The Brattle Group

**APPENDIX A**

**WRITTEN TESTIMONY  
OF  
WILLIAM P. ZARAKAS**

## APPENDIX A

### **WILLIAM P. ZARAKAS** **Principal**

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William P. Zarakas is an economist with expertise in a range of areas of applied economic and financial analyses, spanning comprehensive financial modeling; discounted cash flow analysis; valuation and damage analysis; market and demand analysis, cost and pricing analysis and business case and feasibility analyses. Mr. Zarakas has provided testimony and expert reports used in courts of law, arbitration panels and in regulatory proceedings, and has authored expert reports submitted to the U.S. Securities and Exchange Commission. He has also led special investigations on behalf of corporate boards of directors and has led audits of management practices and operational and financial performance on behalf of regulatory commissions. Mr. Zarakas is also experienced in managing economic and financial analyses in support of commercial litigation involving multiple experts.

Mr. Zarakas has applied economic and financial analyses to several industries, notably to the telecommunications and media industries in which he has developed considerable sector-specific expertise. He heads Brattle's practice in Telecommunications and has extensive experience in analyzing business models for the communications and media sectors, the valuation of wireless spectrum and modeling the economic impacts of policy and regulatory proposals and initiatives. Mr. Zarakas has worked on a range of issues concerning the fixed line (wireline), terrestrial and satellite wireless, video and internet sectors.

Prior to joining The Brattle Group, Mr. Zarakas was a Member of PA Consulting's Management Group and was a Senior Vice President at PHB Hagler Bailly. Prior to his tenure with PHB Hagler Bailly, Mr. Zarakas was a Managing Director with Theodore Barry & Associates (TB&A) and a member of TB&A's Board of Directors. Mr. Zarakas was also an Economist for the New York Power Authority and a Consultant for Ebasco Business Consulting Company.

Mr. Zarakas received his M.A. in Economics from New York University and his B.A. in Economics from the State University of New York.

### **Economic Consulting Experience**

#### Rate, Cost, Pricing and Regulatory Analyses

- **Cost and Rate Analyses:** Conducted analyses of cost and rates based on cost-of-service and incremental pricing principals for communications services products on behalf of telecommunications and broadband companies in the United States, Europe and Asia.



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**Principal**

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- **Financial and Pricing Analyses:** Conducted comprehensive financial analysis for a broadband communications provider in the U.S. market. Analysis included developing projections of demand, price elasticities, revenue and capital and operating costs. Analysis to determine cash requirements and pricing points.
- **Financial and Pricing Analyses:** Performed financial modeling analysis of media markets in Europe. Scope of work included projection of market size, composition and pricing for premium programming.
- **Cost and Rate Analysis:** Expert Witness in multiple U.S. state regulatory proceedings concerning analysis of rates for unbundled network elements (UNEs), undertaken in fulfillment of requirements associated with the Telecommunications Act of 1996, using the Total Element Long Run Incremental Cost (TELRIC) methodology.
- **Cost and Rate Analysis:** Expert Witness in the determination of the rates for pole attachments under the FCC's Cable Rate and Telecom Rate Formulas as applied to electric utility distribution assets. Scope of work included development of utility-specific data in place of FCC rebuttable presumptions.
- **Transfer Pricing:** Performed comprehensive studies of affiliate transactions and cost allocations between a holding company and its operating subsidiaries through a service company arrangement on behalf of telecommunications carriers and electric and gas utilities.
- **Transfer Pricing:** Directed and led comprehensive analysis of affiliate relationships, cost allocations and transfer pricing, performed on behalf of an RBOC. Scope included all regulated and unregulated affiliates as well as corporate support functions. Scope of work included service, cost and information transfers, organizational and management controls and the allocation of common and corporate costs provided by affiliates to the regulated operating companies. Scope also included assessing the effectiveness and accuracy of the company's cost allocation processes. Report was filed before several state regulatory commissions and the Federal Communications Commission.
- **Performance Analysis:** Directed analysis of wholesale access performance measurement systems performed on behalf of SBC (now AT&T). Project scope included analysis of the statistical validity of performance measures agreed upon by SBC and regulators as part of approval of SBC's provision of long distance services (as part of proceedings

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concerning Section 271 of the Telecommunications Act of 1996) or are the outcome of negotiations among various parties regarding proposed mergers. Work focused on detailed statistical testing of performance measures to determine whether measures reflected RBOC performance and supported regulatory goals of increased consumer welfare in local exchange markets.

- **Regulatory Frameworks:** Directed and led multiple engagements on behalf of telecommunications carriers, utilities and regulatory commissions concerning the analysis of changes in regulatory frameworks.
  - ! On behalf of a RBOC, performed a theoretical and quantitative analysis of the impact of adoption of earnings-based and price-based incentive rate plans upon retail prices and service quality
  - ! Directed and led study of the impact of alternative regulatory frameworks on ILEC deployment of advanced telecommunications services, performed on behalf of a state regulatory commission. Scope of work included empirical analysis of changes in ILEC planning, service deployment and service pricing. Work involved detailed review of ILEC network and service plans, and modeling of status quo and alternative ILEC strategies.
- **Productivity Analysis:** Directed, led and authored expert report concerning the level productivity offset that should be applied in setting telephone rates on behalf of the New York State Department of Public Service. Scope of work determining total factor productivity (TFP) based on empirical analysis and consideration of projected performance improvement and re-engineering initiatives. Work included detailed analysis of efficiency improvement initiatives in network deployment, operations, customer service and marketing.
- **Regulatory Analysis:** Directed and led study concerning universal service and provider-of-last-resort options which could be applied to U.S. telecommunications industry, performed on behalf of an RBOC. Scope of work included development of support options and quantification of funding from multiple classes of telecommunications providers. Report was filed in response to a Notice of Proposed Rulemaking (NOPR) by the Federal Communications Commission.

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- **Flow-Through Analysis:** Performed analysis of access pricing options on behalf of an RBOC. Scope of work also included the analysis of “flow-through” of RBOC access rate reductions through inter-exchange carriers, ultimately to end-use consumer and business customers. Study included analysis of calling patterns, discount plans and surveys of end-use customers in multiple geographies. Conclusions were used in several state regulatory proceedings concerning intra-state access pricing.

Valuations and Commercial Damages

- **Commercial Litigation:** Provided expert testimony concerning the estimate of commercial damages stemming from an alleged breach of contract associated with relocating infrastructure assets. Public Service Company of New Mexico vs. Smith Bagley, Inc. and Lite Wave Communications LLC In The United States District Court For The District of New Mexico. March 2007.
- **Commercial Litigation:** Developed expert testimony concerning damages associated with cable breaks and disruption of wholesale transport services. Analysis involved estimating lost profits and determining replacement cost of temporarily lost capacity. MCI WorldCom Network Services, Inc. v. MasTec, Inc. before the United States District Court Southern District of Florida, Case No. 01-2059-CIV-GOLD. May 2002.
- **Commercial Litigation:** Developed expert report concerning damages associated with alleged breach of contract concerning gaming licenses in Asian casino markets. Analysis involved estimating projected cash flows under current and but-for scenarios.
- **International Arbitration:** Authored expert report concerning the impact of an alleged breach of contract on lost profits in a 23 country business operation. Performed detailed financial modeling to determine revenues, net income and net present value using risk adjusted discount rates for a satellite service provider. Report entitled: “Analysis of Potential Lost Profits Associated With The Alleged Breach of Contract Between Orbcomm and Orbcomm Asia Limited.”
- **Arbitration:** Directed analysis concerning determination of distribution of copyright royalty fees among content providers. Dispute concerns proceeds of copyright fees from cable and satellite television operators.

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- Spectrum Valuation: Directed, authored reports, and/or provided expert testimony in cases involving valuations of wireless spectrum valuation. Cases involved determining market comparable values and performing discounted cash flow (DCF) and econometric-based analyses.
  - ! Analyzed spectrum values in the 2.3 and 2.5 GHz bands for the U.S. market.
  - ! Analyzed value of Advanced Wireless Services (AWS; 1.7 / 2.1 GHz) band for the U.S. market.
  - ! Analyzed value of unpaired 2.1 GHz spectrum for the U.S. market.
  - ! Analyzed value of 2.3 GHz (WCS) 3.5 GHz (FWA) spectrum in Canadian market.
  - ! Authored report concerning market comparable analysis of U.S. PCS market.
  - ! Conducted valuations of spectrum portfolios on behalf of capital management companies.
  - ! Conducted valuations of spectrum portfolios underlying loan covenants on behalf of financial institutions.
  - ! Provided expert testimony concerning potential value of wireless spectrum in the 700 MHz band.
  - ! Authored expert report estimating value of Mobile Satellite Service (MSS) spectrum.
  - ! Analyzed value of Specialized Mobile Radio (SMR) and Private Land Mobile Radio Services (PLMRS) spectrum on behalf of utility operating companies in the U.S. market.
  - ! Analyzed value of narrowband PCS and IVDS spectrum portfolio.
  - ! Directed, led analysis and authored report concerning valuations of wireless spectrum in the Middle East-North African (MENA) region for an international wireless operator.

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- ! Directed, led analysis and authored report concerning impact of additional wireless operators on spectrum values for the telecommunications regulator in the Kingdom of Jordan.
- **Asset Valuation:** Directed and led multiple valuation analyses of telecommunications assets and businesses. Projects included valuations of infrastructure assets in multiple markets worldwide. Projects required comprehensive discounted cash flow and net present value analyses, as well as regression and statistical analyses of comparable market transactions. Projects resulted in valuations used in support of negotiations and/or in commercial litigation.

Financial and Business Analyses

- **Economic Impact Analysis:** Directed analysis and authored report regarding the effects of changes in regulatory fees and taxes on mobile prices, penetration and the macro economies of 22 countries in the Middle East and Africa. Study, conducted on behalf of a major mobile operator, involved detailed analysis of the relationships between marginal cost and prices, market structure and concentration, and empirical relationships concerning mobile penetration and GDP.
- **Business Plan Analysis:** Developed comprehensive model of broadcast and cable television markets for a European television network. Scope of analysis included expansion of product offerings to include inter-active television.
- **Demand Analysis:** Directed analysis and modeling of multiple projects involving the estimation and projection of segmented customer demand.
  - ! Analyzed U.S. subscriber market for video services.
  - ! Analyzed subscriber demand for communications services in the United States, Europe, Asia and the Middle East.
  - ! Led comprehensive analysis of current and projected market shares and competition in the consumer and business markets for network devices. Scope of work included geographic and customer segmentation; modeling included estimation of revenue and margins by segment.

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- **Consumer Welfare Analysis:** Directed multiple analyses of impact of changes in market structure upon consumers.
  - ! Performed empirical analysis on panel of approximately 50 countries to demonstrate the effect of changes in levels of competition on prices, investment and other areas of consumer welfare for the global mobile telecommunication industry.
  - ! Directed analysis and authored white paper on empirical analysis concerning the impact of changing the price of wholesale access and levels of investment in the U.S. telecommunications market. Results reported in white paper entitled: "Structural Simulation of Facility Sharing: Unbundling Policies and Investment Strategy in Local Exchange Markets."
- **Business Case Analysis:** Directed and led multiple projects concerning the financial feasibility of entering new lines of business.
  - ! Led feasibility study concerning development of publishing business for a major communications company. Work required comprehensive financial modeling.
  - ! Performed comprehensive financial analysis for an infrastructure support company. Scope of work included market and competitive analyses, projections of market shares, cash flow modeling and pricing analysis.
  - ! Performed comprehensive business case analysis of entry into the broadband market (including voice, internet access and video services) on behalf of a major U.S. electric utility. Scope of work included technology assessment and detailed financial modeling. Work included customer and geographic segmentation, pricing scenarios and elasticity analysis.
  - ! Led comprehensive financial analysis concerning the deployment of a broadband communications network for an Asian electric utility. Related work included assessing transfer pricing methodologies regarding the use of utility assets, resources and easements by the broadband affiliate.
  - ! Directed and led analysis of business diversification for multiple electric utilities. Business opportunities analyzed included dark fiber construction and third party

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use of utility poles, towers and conduit. Scope of analysis included financial modeling and transfer pricing.

Forensic Analysis

- **Forensic Analysis and Special Investigation:** Directed consulting team and authored report for the forensic analysis of the economics, financial reporting and accounting associated with allegation of accounting and financial improprieties by Global Crossing. Worked on behalf of the Special Committee on Accounting Matters composed of a subset of (and reporting to) the Board of Directors of Global Crossing Ltd. Analysis involved determination of basis for revenue recognition for concurrent (i.e., "swap") transactions. Analysis included in report by the Special Committee entitled "The Concurrent Exchange of Fiber Optic Capacity and Services Between Global Crossing and its Carrier Customers." January 2003.
- **Forensic Analysis and Securities Litigation:** Directed consulting team and led technical analysis concerning accounting and financial disclosure on behalf of the defendant in a class action against corporate officers, directors, controlling shareholders and the company's outside auditors alleging violations of the Securities Act of 1993 and the Securities Exchange Act of 1934. Scope of case involved accounting and disclosure treatment of complex leases.
- **Special Investigations and Audits:** Directed project teams, led technical analysis and authored reports in multiple special investigations and audits of management, operations and finance and accounting on behalf of regulatory utility commissions. Special investigations and audits involved allegations of improper cross subsidization and/or transfer pricing practices by regulated utilities (telecommunications, electric and/or natural gas) and their effect on rates charged to consumers. Special investigations and audits were conducted for regulatory commissions in Alabama, Kentucky, Maryland, New York and Pennsylvania.

**TESTIMONY**

Declaration of William P. Zarakas In The Circuit Court of Fairfax County, Virginia In The Matter of Sharon Dougherty, Plaintiff Vs. Thomas J. Dougherty, Defendant Case No. CL 2007-008757. October 2008.

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Expert report co-authored with Kevin Neels in *erinMedia, LLC vs. Nielsen Media Research, Inc.* In the United States District Court For The Middle District of Florida Tampa Division. June 18, 2007.

Expert report provided in *Public Service Company of New Mexico vs. Smith Bagley, Inc. and Lite Wave Communications LLC* In The United States District Court For The District of New Mexico. March 2007.

Expert report entitled "Comparative Market Value Analysis of Upper 700 MHz Public Safety Spectrum" in FCC WT Docket no. 96-86 (In the Matter of *The Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010*). June 2006.

Expert report entitled "Analysis of Potential Lost Profits Associated With The Alleged Breach of Contract Between Orbcomm and Orbcomm Asia Limited" before the American Arbitration Association. May 2006.

Direct testimony before the Federal Communications Commission in the matter of *Petition of ACS of Anchorage, Inc. Pursuant to Section 10 of the Communications Act of 1934, as amended, for Forbearance from Sections 251(c)(3) and 251(d)(1) In the Anchorage LEC Study Area, WC Docket No. 05-281*, January 9, 2006.

Expert report co-authored with Dorothy Robyn Before the U.S. House of Representatives Committee on Energy and Commerce and the U.S. Senate Committee on Commerce, Science and Transportation regarding the value of wireless spectrum in the 700 MHz band. Letters, May 18, 2005.

Direct and rebuttal testimony before the Federal Communications Commission in the matter of *Virginia Cable Telecommunications Association v. Virginia Electric and Power Company, d/b/a Dominion Virginia Power and Dominion North Carolina Power*, PA No. 01-005, December 21, 2001.

Expert report Before the U.S. Securities and Exchange Commission included in Form U-1 Application/ Declaration Under The Public Utility Holding Company Act of 1935 in the combination of Energy East Corporation with RGS Energy Group, Inc. (June 20, 2001) in Exhibit J-1, entitled "Analysis Of The Economic Impact Of A Divestiture Of The Gas Operations Of Rochester Gas And Electric Corporation," May 15, 2001.

Expert report Before the U.S. Securities and Exchange Commission included in Form U-1 Application/ Declaration Under The Public Utility Holding Company Act of 1935 in the acquisition by Sierra Pacific Resources of Portland General Electric Company, 2000 in Exhibit H-1, entitled "Analysis Of The Economic Impact Of A Divestiture Of The Gas Operations Of Sierra Pacific Resources," January 31, 2000.



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Before the U.S. Securities and Exchange Commission included in Form U-1 Application/Declaration Under The Public Utility Holding Company Act of 1935 in the combination of Energy East Corporation with CMP Group, Inc. and with CTG Resources, Inc. in Exhibit J-1, entitled "Analysis Of The Economic Impact Of A Divestiture Of The Gas Operations Of Energy East," October 29, 1999.

Before the Supreme Court of the State of New York, County of Niagara, Supplemental Affidavit in *Village of Bergen, et al. vs. Power Authority of the State of New York*, February 1999.

Rebuttal Panel Testimony of William P. Zarakas and D. Daonne Caldwell before the North Carolina Utilities Commission, Docket No. P-100, SUB 133D, Filed March 9, 1998; *In Re: Proceeding to Determine Permanent Pricing for Unbundled Network Elements*.

Direct Panel Testimony of William P. Zarakas and D. Daonne Caldwell before the North Carolina Utilities Commission, Docket No. P-100, SUB 133D, Filed December 15, 1997; *In Re: Proceeding to Determine Permanent Pricing for Unbundled Network Elements*.

Rebuttal Panel Testimony of William P. Zarakas and D. Daonne Caldwell before the South Carolina Public Service Commission, Docket No. 97-374-C, Filed November 25, 1997; *In Re: Proceeding to Review BellSouth Telecommunications, Inc.'s Cost Studies for Unbundled Network Elements*.

Direct Panel Testimony of William P. Zarakas and D. Daonne Caldwell before the Florida Public Service Commission, Docket Nos. 960757-TP/960833-TP/960846-TP/960916-TP/971140-TP, Filed November 13, 1997; *In Re: Petition of AT&T, MCI, and MFS for Arbitration with BellSouth Concerning Interconnection, Rates, Terms and Conditions of a Proposed Agreement*.

Direct Panel Testimony of William P. Zarakas and D. Daonne Caldwell before the South Carolina Public Service Commission, Docket No. 97-374-C, Filed November 3, 1997; *In Re: Proceeding to Review BellSouth Telecommunications, Inc.'s Cost Studies for Unbundled Network Elements*.

Rebuttal Panel Testimony of William P. Zarakas and D. Daonne Caldwell before the Tennessee Regulatory Authority, Docket No. 97-01262, Filed October 17, 1997; *In Re: Contested Cost Proceeding to Establish Final Cost Based Rates for Interconnection and Unbundled Network Elements*.

Direct Panel Testimony of William P. Zarakas and D. Daonne Caldwell before the Tennessee Regulatory Authority, Docket No. 97-01262, Filed October 10, 1997; *In Re: Contested Cost Proceeding to Establish Final Cost Based Rates for Interconnection and Unbundled Network Elements*.

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Rebuttal Panel Testimony of William P. Zarakas and D. Daonne Caldwell before the Alabama Public Service Commission, Docket No. 26029, Filed September 12, 1997; *In Re: Generic Proceeding: Consideration of TELRIC Studies.*

Rebuttal Panel Testimony of William P. Zarakas and D. Daonne Caldwell before the Georgia Public Service Commission, Docket No. 7061-U, Filed September 8, 1997; *In Re: Review of Cost Studies, Methodologies and Cost-Based Rates for Interconnection and Unbundling of BellSouth Telecommunications Services.*

Rebuttal Panel Testimony of William P. Zarakas and D. Daonne Caldwell before the Louisiana Public Service Commission, Docket Nos. U-22022/22093, Filed September 5, 1997; *In Re: Review of Consideration of BellSouth Telecommunications, Inc.'s TSLRIC and LRIC Cost Studies to Determine Cost of Interconnection Services and Unbundled Network Components, to Establish Reasonable, Non-Discriminatory, Cost-Based Tariff Rates.*

Direct Panel Testimony of William P. Zarakas and D. Daonne Caldwell before the Alabama Public Service Commission, Docket No. 26029, Filed August 29, 1997; *In Re: Generic Proceeding: Consideration of TELRIC Studies.*

Direct Panel Testimony of William P. Zarakas and D. Daonne Caldwell before the Louisiana Public Service Commission, Docket Nos. U-22022/22093, Filed July 11, 1997; *In Re: Review of Consideration of BellSouth Telecommunications, Inc.'s TSLRIC and LRIC Cost Studies to Determine Cost of Interconnection Services and Unbundled Network Components, to Establish Reasonable, Non-Discriminatory, Cost-Based Tariff Rates.*

Direct Panel Testimony of William P. Zarakas and D. Daonne Caldwell before the Georgia Public Service Commission, Docket No. 7061-U, Filed April 30, 1997; *In Re: Review of Cost Studies, Methodologies and Cost-Based Rates for Interconnection and Unbundling of BellSouth Telecommunications Services.*

Direct and rebuttal testimony Before the Virginia State Corporation Commission on behalf of United Telephone - Southeast, Inc. and Centel Corporation, May 1994.

Direct and rebuttal testimony Before the Tennessee Public Service Commission on behalf of United Telephone - Southeast, Inc., Docket No. 93-04818, January 28, 1994.

Direct and rebuttal testimony Before the Florida Public Service Commission on behalf of Southern Bell Telephone & Telegraph Company, Docket No. 920260-TL, December 10, 1993.

Direct and rebuttal testimony Before the Tennessee Public Service Commission on behalf of South Central Bell, Docket Nos. 92-13527 and 93-00311, March 22 and March 29, 1993.

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**PUBLIC REPORTS**

Management Audit of GTE, performed on behalf of the Kentucky Public Service Commission, January 1997.

Analysis of Cost Allocation Methodology, performed on behalf of BellSouth Telecommunications in the matter of Allocation of Costs Associated with Local Exchange Carrier Provision of Video Programming Services before the Federal Communications Commission, FCC CC No. 96-112, May 31, 1996.

Stratified Management Audit of GTE, performed on behalf of the Pennsylvania Public Service Commission, 1995.

Potential Performance Gains Study of New York Telephone Company, performed on behalf of the New York Public Service Commission, August 1992; and, New York Telephone Company Potential Performance Gains Study - Track II: Reengineering Analysis, March 1994.

Analysis of Proposed Use of Estimated Fair Market Value, performed on behalf of BellSouth Telecommunications before the Federal Communications Commission, FCC CC No. 93-251, January 10, 1994.

Incentive Regulation Review of South Central Bell, performed on behalf of the Kentucky Public Service Commission, October 1990.

**PAPERS AND PRESENTATIONS**

"Structural Simulation of Facility Sharing: Unbundling Policies and Investment Strategy in Local Exchange Markets," White Paper, July 2005 (with Glenn A. Woroch, Lisa V. Wood, Daniel L. McFadden, Nauman Ilias, and Paul C. Liu).

"Betting Against The Odds? Why broadband over power lines (BPL) can't stand alone as a high-speed Internet offering." *Public Utilities Fortnightly*, April 2005, pp. 41-45 (with Kenneth J. Martinian).

"The Impact of the Number of Mobile Operators on Consumer Benefit," White Paper, March 2005 (with Kenneth J. Martinian and Carlos Lapuerta).

"Wholesale Pricing and Local Exchange Competition", *Info*, Volume 6, Number 5, 2004, pp. 318-325 (with Lisa V. Wood and David E. M. Sappington).

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“Regulatory Performance Measurement Plans and the Development of Competitive Local Exchange Telecommunications Markets”, Working Paper, November 2003 (with David E. M. Sappington, Lisa V. Wood and Glenn A. Woroch).

**APPENDIX B**

**WRITTEN TESTIMONY  
OF  
WILLIAM P. ZARAKAS**

**APPENDIX B**

**LIST OF DOCUMENTS AND DATA RELIED UPON**

Document/Data	Format
In the matter of Distribution of 1998 and 1999 Cable Royalty Funds, Docket No. 2001-8 CARP CD 98-99, Report of the Copyright Arbitration Royalty Panel To The Librarian of Congress (October 21, 2003)	Report
In the matter of Amendment of Parts 73 and 76 of the Commission's Rules relating to program exclusivity in the cable and broadcast industries, GEN Docket No. 87-24 Federal Communications Commission 3 FCC Rcd 5299, July 15, 1988 Released; Adopted May 18, 1988	Report
1978 Cable Royalty Distribution Proceeding, Docket No. CRT 79-1, Notice of Final Determination, 45 Fed. Reg. 63026, 63035-37 (September 23, 1980)	Report
U.S. Census Bureau, Current Business Reports, BC/98, Annual Survey of Communications Services: 1998, U.S. Government Printing Office, Washington, DC 1999	Report
U.S. Census Bureau, Current Business Reports, Service Annual Surveys, 1999-2007	Reports
Background Information on Annual Survey of Communication Services from <a href="http://www.census.gov/econ/www/se0900.html">http://www.census.gov/econ/www/se0900.html</a>	U.S. Government website
Survey Instrument, U.S. Census Bureau Service Annual Survey, 2005	Survey Questionnaire
National Association of Broadcasters and Broadcast Cable Financial Management Association, Television Financial Report, 2004	Report
National Association of Broadcasters and Broadcast Cable Financial Management Association, Television Financial Report, 2005	Report
Survey Instrument, NAB Television Financial Survey, 2009	Survey Questionnaire
NAB Survey and sample methodology	E-mail
BMI Local Television Station Music Performance Blanket License	License Form
BMI Local Television Station Music Performance Per Program License	License Form
ASCAP Local Station Blanket Television License	License Form
ASCAP Local Station Per Program Television License	License Form
SESAC Local Station Blanket Television License Form	License Form
SESAC Local Station Per Program Television License Form	License Form
Cable Data Corporation (CDC) distant signal data, bi-yearly 2004 and 2005	Excel Workbook
Cable Data Corporation (CDC) Summary Pages For Form 3 (Three), Accounting Periods 2004-1, 2004-2, 2005-1 and 2005-2	Summary Reports
SNL Kagan, television network programming expenses	Data
BMI - Blanket Music License Fees by television station, monthly 2004 and 2005	Data

ASCAP - Blanket Music License Fees by television station, monthly 2004 and 2005	Data
SESAC - Blanket Music License Fees by television station, monthly 2004 and 2005	Data
BMI - Total Music License Fees received, 2004 and 2005	Data
ASCAP - Total Music License Fees received, 2004 and 2005	Data
Television station call sign and affiliation data, M Street data (provided by BMI), television station websites and research	Data

Number of Interviews	Cable System	Prime City	County Coverage	State	County FIP'S Code	Distant Signal Call Letters	City of Origin	State of Origin	Network Affiliate	PBS	Canadian
33	COX COMMUNICATION LAS VEGAS	LAS VEGAS	CLARK	NV	32-003	WGN	Chicago	Illinois			
19	COXCOM INC	PHOENIX	MARICOPA	AZ	4-013	WGN	Chicago	Illinois			
17	TEXAS & KANSAS CITY CABLE PAR	HOUSTON	BRAZORIA	TX	48-039	WGN	Chicago	Illinois			
			CHAMBERS	TX	48-071						
			FORT BEND	TX	48-157						
			GALVESTON	TX	48-167						
			HARRIS	TX	48-201						
			LIBERTY	TX	48-291						
			MONTGOMERY	TX	48-339						
17	COMCAST OF GEORGIA INC	ATLANTA	BAKER	GA	13-007	WGN	Chicago	Illinois			
			CHEROKEE	GA	13-057						
			CLAYTON	GA	13-063						
			COBB	GA	13-067						
			COWETA	GA	13-077						
			DE KALB	GA	13-089						
			DOUGLAS	GA	13-097						
			FAYETTE	GA	13-113						
			FULTON	GA	13-121						
			GWINNETT	GA	13-135						
			HENRY	GA	13-151						
			JEFFERSON	GA	13-163						
			RABUN	GA	13-241						
			ROCKDALE	GA	13-247						
16	COMCAST OF COLORADO IX LLC	ARAPAHOE CO	ADAMS	CO	8-001	WGN	Chicago	Illinois			
			ARAPAHOE	CO	8-005						
			BOULDER	CO	8-013						
			CLEAR CREEK	CO	8-019						
			DENVER	CO	8-031						
			DOUGLAS	CO	8-035						
			ELBERT	CO	8-039						
			JEFFERSON	CO	8-059						
			PROWERS	CO	8-099						
			WELD	CO	8-123						
17	COXCOM INC	TUCSON	PIMA(EAST)	AZ	4-018	WGN	Chicago	Illinois			
16	COMCAST OF ARIZONA INC	TUCSON	PIMA(EAST)	AZ	4-018	WGN	Chicago	Illinois			
16	WEST BOCA ACQUISITION LP	PALM BEACH CO	DADE	FL	12-025	WAMI	Hollywood	Florida			
			PALM BEACH(SOUTH)	FL	12-100	WBZL	Miami	Florida			
						WGN	Chicago	Illinois			
						WLRN	Miami	Florida			X
17	TIME WARNER ENTERTAINMENT CO	APPLETON	BROWN	WI	55-009	WGN	Chicago	Illinois			
			CALUMET	WI	55-015	WISN	Milwaukee	Wisconsin	X		
			COCONTO	WI	55-083	WTMJ	Milwaukee	Wisconsin	X		
			OUTAGAMIE	WI	55-087	WVTV	Milwaukee	Wisconsin			
			WINNEBAGO	WI	55-139						
16	SERVICE ELECTRIC CABLE TV INC	ALLENTOWN	BERKS	PA	42-011	WNBC	New York	New York	X		
			BUCKS	PA	42-017	WNYW	New York	New York			
			HUNTERDON	NJ	34-019	WPHL	Philadelphia	Pennsylvania			
			LEHIGH	PA	42-077	WPXI	New York	New York			
			NORTHAMPTON	PA	42-095	WPSG	Philadelphia	Pennsylvania			
			WARREN	NJ	34-041	WTFX	Philadelphia	Pennsylvania			
						WWOR	New York	New York			
16	BRESNAN COMMUNICATIONS CO	MARQUETTE	ALGER	MI	26-003	CBMT	Montreal	Quebec			X
			BARAGA	MI	26-013	WBKP	Calumet	Michigan	X		
			DELTA	MI	26-041	WFOX	Cadillac	Michigan			
			DICKINSON	MI	26-043	WGN	Chicago	Illinois			
			FLORENCE	MI	55-037	WJMN	Escanaba	Michigan	X		
			GOGEBIC	MI	26-053	WLUC	Green Bay	Wisconsin			
			HOUGHTON	MI	26-061	WMOF	Marquette	Michigan			
			IOSCO	MI	26-068	WNMJ	Marquette	Michigan			X
			KEWEENAW	MI	26-083	WPNE	Green Bay	Wisconsin			X
			LENAWEE	MI	26-091						
			MARQUETTE	MI	26-103						
			MENOMINEE	MI	26-109						
			OSCEOLA	MI	26-133						
			SCHOOLCRAFT	MI	26-153						
17	COMCAST OF CA/OH/PA/UT/WA INC	PITTSBURGH	ALLEGHENY	PA	42-003	WGN	Chicago	Illinois			
			BEAVER	PA	42-007						
			BERKS	PA	42-011						
			BRADFORD	PA	42-015						
			CHESTER	PA	42-029						
			CLINTON	PA	42-035						
			FAYETTE	PA	42-051						
			GREENE	PA	42-059						
			INDIANA	PA	42-063						
			LACKAWANNA	PA	42-069						
			LANCASTER	PA	42-071						
			SOMERSET	PA	42-111						
			TIOGA	PA	42-117						
			UNION	PA	42-119						
			WASHINGTON	PA	42-125						
			WESTMORELAND	PA	42-128						
16	TIME WARNER ENT/ADV-NEWHSE GP	PACIFIC BEACH	SAN DIEGO	CA	6-073	KTLA	Los Angeles	California			
						WGN	Chicago	Illinois			
17	COMCAST OF GREATER FLGA INC	POMPANO	BROWARD	FL	12-011	WGN	Chicago	Illinois			
			DADE	FL	12-025						
16	CENTURY COLORADO SPRINGS PARTI	COLORADO SPRINGS	EL PASO	CO	8-041	KCNC	Denver	Colorado	X		
						KUSA	Denver	Colorado	X		
						KWGN	Denver	Colorado			
						WGN	Chicago	Illinois			
17	COXCOM INC	FAIRFAX CO	FAIRFAX	VA	51-059	WGN	Chicago	Illinois			
			FALLS CHURCH	VA	51-610						



Number of Interviews	Cable System	Prime City	County Coverage	State	County FIPS Code	Distant Signal Call Letters	City of Origin	State of Origin	Network Affiliate	PBS	Canadian		
16	ADELPHIA CABLEVISION ASSOC	W PALM BEACH	PALM BEACH(NORTH) PALM BEACH(SOUTH)	FL	12-098 12-100	WGN WLTW	Chicago Miami	Illinois Florida					
17	MARCUS CABLE PARTNERS LLC	FOND DU LAC	BROWN CALLUMET DODGE DOOR FLORENCE FOND DU LAC GREEN GREEN LAKE KEWAUNEE MANITOWOC PIERCE SAINT CROIX WASHINGTON WINNEBAGO	WI	55-009 55-015 55-027 55-029 55-037 55-039 55-045 55-047 55-081 55-071 55-093 55-109 55-131 55-139	WACY WBAY WCGV WQJZ WGBA WGN WISN WITI WVWB WMLW WMVS WMTV WPNE WTMJ WVTV	Appleton Green Bay Milwaukee Milwaukee Green Bay Chicago Milwaukee Milwaukee Suring Milwaukee Milwaukee Green Bay Milwaukee Green Bay Milwaukee Milwaukee	Wisconsin Wisconsin Wisconsin Wisconsin Wisconsin Illinois Wisconsin Wisconsin Wisconsin Wisconsin Wisconsin Wisconsin Wisconsin Wisconsin Wisconsin Wisconsin Wisconsin		X X X X X X X X X X X X X X X			
16	TIME WARNER CABLE	AMBERLY VILLAGE	ADAMS BROWN BUTLER CLARK CLERMONT CLINTON DEARBORN HAMILTON HIGHLAND PIKE SENECA WARREN	OH	39-001 39-015 39-017 39-023 39-025 39-027 18-029 39-081 39-071 39-131 39-147 39-165	WBOC WGN WPTO WPTO WPTO WPTO WPTO WPTO WPTO WPTO WPTO WPTO	Cincinnati Chicago Oxford Oxford Oxford Oxford Oxford Oxford Oxford Oxford Oxford Oxford	Ohio Illinois Ohio Ohio Ohio Ohio Ohio Ohio Ohio Ohio Ohio Ohio					X
17	COMCAST OF GARDEN STATE LP	AUDUBON	BURLINGTON CAMDEN CUMBERLAND GLOUCESTER UNION	NJ	34-005 34-007 34-011 34-015 34-039	WPSG WPSG WPSG WPSG WPSG	Philadelphia Philadelphia Philadelphia Philadelphia Philadelphia	Pennsylvania Pennsylvania Pennsylvania Pennsylvania Pennsylvania					
16	TIME WARNER ENTERTAINMENT CO	KETTERING	CLARK GREENE MONTGOMERY WARREN	OH	39-023 39-057 39-113 39-185	WCET WGN WKOL WPTO WXIX	Cincinnati Chicago Richmond Oxford Cincinnati	Ohio Illinois Indiana Ohio Ohio			X X X X		
17	KCCP TRUST	KANSAS CITY	CASS CLAY JACKSON JOHNSON LEAVENWORTH PLATTE ROLLS	MO	29-037 29-047 29-095 20-091 20-103 29-185 29-173	WGN WGN WGN WGN WGN WGN WGN	Chicago Chicago Chicago Chicago Chicago Chicago Chicago	Illinois Illinois Illinois Illinois Illinois Illinois Illinois					
16	CHARTER COMMUNICATIONS VI	BECKLEY	FAYETTE GILES GREENBRIER MERCER MONROE RALEIGH SUMMERS WYOMING	WV	54-019 51-071 54-025 54-055 54-063 54-081 54-089 54-109	WCHS WDBJ WDRL WGN WVAH WVAH WVAH WVAH	Charleston Roanoke Roanoke Chicago Charleston Charleston Charleston Charleston	West Virginia Virginia Virginia Illinois West Virginia West Virginia West Virginia West Virginia			X X X X X X X X		
17	TIME WARNER CABLE OF SE WI	MILWAUKEE	MILWAUKEE WAUKESHA	WI	55-079 55-133	WGN WHA	Chicago Madison	Illinois Wisconsin				X	
16	BRIGHTHOUSE NETWORKS	HILLSBOROUGH CO	HILLSBOROUGH PASCO	FL	12-057 12-101	WGN WGN	Chicago Chicago	Illinois Illinois					
33	CHARTER COMM PROPERTIES LLC	SAN LUIS OBISPO	MARIPOSA SAN LUIS OBISPO	CA	8-043 8-079	KCAL KCBS KCET KCOP KTLA	Los Angeles Los Angeles Santa Barbara Los Angeles Los Angeles	California California California California California	X	X			
16	MARCUS CABLE PARTNERS LLC	JANESVILLE	BURNETT DANE DE KALB GREEN GREEN LAKE JEFFERSON JOHNSON KENOSHA MCHENRY ROCK TAEWELL WALWORTH WAUKESHA WINNEBAGO	WI	55-013 55-025 17-037 55-045 55-047 55-055 17-087 55-059 17-111 55-105 17-179 55-127 55-133 17-201	WBUW WQJZ WFLD WGN WHA WIFR WISC WISN WITI WKOW WLS WMAQ WMLW WMSN WMTV WMTV WRF WREX WVTV WVTV WVTV	Janesville Milwaukee Chicago Chicago Chicago Madison Freeport Madison Milwaukee Milwaukee Madison Chicago Chicago Milwaukee Madison Madison Madison Madison Milwaukee Milwaukee Rockford Rockford Milwaukee Chicago Rockford Milwaukee	Wisconsin Wisconsin Illinois Illinois Wisconsin Illinois Wisconsin Wisconsin Wisconsin Wisconsin Wisconsin Illinois Illinois Wisconsin Wisconsin Wisconsin Wisconsin Wisconsin Wisconsin Wisconsin Illinois Illinois Illinois Illinois Illinois Wisconsin		X X	X X		
16	ADELPHIA COMMUNICATIONS OF CA	CLEVELAND HEIGHTS	CARROLL CUYAHOGA GEAUGA LAKE LORAIN LUCAS MEDINA NOBLE PAULDING SUMMIT TUSCARAWAS	OH	39-019 39-035 39-055 39-085 39-093 39-095 39-103 39-121 39-125 39-153 39-157	WGN WGN WGN WGN WGN WGN WGN WGN WGN WGN WGN WGN	Chicago Chicago Chicago Chicago Chicago Chicago Chicago Chicago Chicago Chicago Chicago Chicago	Illinois Illinois Illinois Illinois Illinois Illinois Illinois Illinois Illinois Illinois Illinois Illinois					

Number of Interview	Cable System	Prime City	County Coverage	State	County FIPS Code	Distant Signal Call Letters	City of Origin	State of Origin	Network Affiliates	PBS	Canadian
17	COMCAST OF OREGON II INC	PORTLAND	CLACKAMAS	OR	41-005	WGN	Chicago	Illinois			
			MULTNOMAH	OR	41-051						
			WASHINGTON	OR	41-067						
16	BRIGHTHOUSE NETWORKS	ORMOND BEACH	FLAGLER	FL	12-035	WGN	Chicago	Illinois			
			VOLUSIA	FL	12-127						
17	CHARTER COMMUNICATIONS VII	GOODRICH	GENESEE	MI	26-049	WAQP	Saginaw	Michigan			
			GRAND TRAVERSE	MI	26-055	WDIV	Detroit	Michigan	X		
			LAPEER	MI	26-087	WDWB	Detroit	Michigan			
			LENAWEE	MI	26-091	WGN	Chicago	Illinois			
			MANISTEE	MI	26-101	WJBK	Detroit	Michigan			
			OAKLAND	MI	26-125	WJRT	Flint	Michigan	X		
			SAINT CLAIR	MI	26-147	WKAR	East Lansing	Michigan		X	
			SANILAC	MI	26-151	WKBD	Detroit	Michigan			
			SHIAWASSEE	MI	26-155	WNEM	Bay City	Michigan	X		
			TUSCOLA	MI	26-157	WPXD	Ann Arbor	Michigan			
									WSMH	Flint	Michigan
						WTVS	Detroit	Michigan		X	
						WWJ	Detroit	Michigan	X		
						WXYZ	Detroit	Michigan	X		
16	YORK CABLE TELEVISION INC	YORK	ADAMS	PA	42-001	WGN	Chicago	Illinois			
			FRANKLIN	PA	42-055	WPHL	Philadelphia	Pennsylvania			
			HUNTINGDON	PA	42-061						
			LANCASTER	PA	42-071						
			YORK	PA	42-133						
17	SERVICE ELECTRIC CBV INC	HAZLETON	CARBON	PA	42-025	KYW	Philadelphia	Pennsylvania	X		
			LUZERNE	PA	42-079	WLYH	Lancaster	Pennsylvania			
						WPIX	New York	New York			
						WPVI	Philadelphia	Pennsylvania	X		
						WWOR	New York	New York			
16	COMCAST CABLE COMM LLC	BEACHWOOD	OCEAN	NJ	34-029	KYW	Philadelphia	Pennsylvania	X		
						WCAU	Philadelphia	Pennsylvania	X		
						WHYY	Wilmington	Delaware			X
						WNET	New York City	New York/New Jersey			X
						WPHL	Philadelphia	Pennsylvania			
						WPSG	Philadelphia	Pennsylvania			
						WTFX	Philadelphia	Pennsylvania			
16	COMCAST CBV OF GA/SC INC	N CHARLESTON	BERKELEY	SC	45-015	WGN	Chicago	Illinois			
			CHARLESTON	SC	45-019						
			DORCHESTER	SC	45-035						
17	COMCAST OF SOUTHEAST PENNSYLV	CHAMBERSBURG	CUMBERLAND	PA	42-041	WBDC	Washington	District of Columbia			
			FRANKLIN	PA	42-055	WBDC	Washington	District of Columbia			
						WHAG	Hagerstown	Maryland	X		
						WHP	Harrisburg	Pennsylvania	X		
						WHTM	Harrisburg	Pennsylvania	X		
						WJAL	Hagerstown	Maryland			
						WJLA	Washington	District of Columbia	X		
						WLYH	Lancaster	Pennsylvania			
						WPMT	York	Pennsylvania			
						WRC	Washington	District of Columbia	X		
						WTTG	Washington	District of Columbia			
						WUSA	Washington	District of Columbia	X		
						WWPX	Martinsburg	West Virginia			
16	COXCOM INC	OKLAHOMA CITY	CANADIAN	OK	40-017	WGN	Chicago	Illinois			
			CLEVELAND	OK	40-027						
			LOGAN	OK	40-083						
			OKLAHOMA	OK	40-109						
17	AVALON CABLE OF MICHIGAN LLC	ALLENDALE TWP	ALLEGAN	MI	26-005	WBAY	Green Bay	Wisconsin	X		
			ALPENA	MI	26-007	WCMJ	Mt. Pleasant	Michigan		X	
			IONIA	MI	26-067	WFOK	Cadillac	Michigan			
			KALAMAZOO	MI	26-077	WFRV	Green Bay	Wisconsin	X		
			KENT	MI	26-081	WGN	Chicago	Illinois			
			LENAWEE	MI	26-091	WGVJ	Grand Rapids	Michigan			X
			MASON	MI	26-105	WLUK	Green Bay	Wisconsin			
			MECOSTA	MI	26-107	WOOD	Grand Rapids	Michigan	X		
			MONTCALM	MI	26-117	WOTV	Battle Creek	Michigan	X		
			MUSKEGON	MI	26-121	WSYM	Lansing	Michigan			
			NEWAYGO	MI	26-123	WTLJ	Muskegon	Michigan			
			OCEANA	MI	26-127	WVTV	Milwaukee	Wisconsin			
			OTTAWA	MI	26-139	WWMT	Kalamazoo	Michigan	X		
			SAINT CLAIR	MI	26-147	WWTV	Cadillac	Michigan	X		
			SHIAWASSEE	MI	26-155	WXSP	Grand Rapids	Michigan			
						WZPX	Battle Creek	Michigan			
16	CHARTER COMM ENTERTAIN II LLC	LA COUNTY	LOS ANGELES	CA	6-037	WGN	Chicago	Illinois			
16	TIME WARNER ENT/ADV-NEWHSE GP	SANTA CLARITA	LOS ANGELES	CA	6-037	WGN	Chicago	Illinois			
16	COXCOM INC	RANCHO-PALOS VERDES	LOS ANGELES	CA	6-037	WGN	Chicago	Illinois			
17	RCN TELECOM SERVICES INC	LEHIGH CO	LEHIGH	PA	42-077	WNBC	New York	New York	X		
			NORTHAMPTON	PA	42-095	WNYW	New York	New York			
						WPX	New York	New York			
						WWOR	New York	New York			

Number of Interview	Cable System	Prime City	County Coverage	State	County FIPS Code	Distant Signal Call Letters	City of Origin	State of Origin	Network Affiliate	PBS	Canadian
16	SCRANTON CABLEVISION INC	SCRANTON	BERKS	PA	42-011	WGN	Chicago	Illinois			
			BUCKS	PA	42-017	WPSG	Philadelphia	Pennsylvania			
			LACKAWANNA	PA	42-068						
			LUZERNE	PA	42-079						
			TIOGA	PA	42-117						
			WYOMING	PA	42-131						
17	COMCAST OF THE SOUTH INC	SOUTHFIELD	MACOMB	MI	26-099	WGN	Chicago	Illinois			
			OAKLAND	MI	26-125						
			WAYNE	MI	26-163						
16	MEDIACOM DELAWARE LLC	MILLSBORO	SUSSEX	DE	10-005	WJZ	Baltimore	Maryland	X		
			WICOMICO	MD	24-045	WTFX	Philadelphia	Pennsylvania			
			WORCESTER	MD	24-047						
16	COX COMM CENTRAL II INC	BATON ROUGE	EAST BATON ROUGE	LA	22-033	WGN	Chicago	Illinois			
17	FRONTIERVISION OPERATING	PT CLINTON	ERIE	OH	39-043	CBET	Windsor	Ontario			X
			OTTAWA	OH	39-123	WBGU	Bowling Green	Ohio		X	
			SANDUSKY	OH	39-143	WGN	Chicago	Illinois			
						WJW	Cleveland	Ohio			
						WKBD	Detroit	Michigan			
						WUAB	Lorain	Ohio			
16	COMCAST OF MA/VA INC	RICHMOND	GOOCHLAND	VA	51-075	WGN	Chicago	Illinois			
			HANOVER	VA	51-085						
			HENRICO	VA	51-087						
			RICHMOND CITY	VA	51-760						
17	COMCAST OF CA/CO LLC	FT COLLINS	LARIMER	CO	8-069	WGN	Chicago	Illinois			
17	CENTURY HUNTINGTON COMPANY	MORGANTOWN	HARRISON	WV	54-033	KDKA	Pittsburgh	Pennsylvania	X		
			MARION	WV	54-049	WGN	Chicago	Illinois			
			MONONGALIA	WV	54-061	WPCB	Greensburg	Pennsylvania			
			TAYLOR	WV	54-091	WPGH	Pittsburgh	Pennsylvania			
						WPXI	Pittsburgh	Pennsylvania	X		
						WCED	Pittsburgh	Pennsylvania		X	
						WTAE	Pittsburgh	Pennsylvania	X		
16	KBL CABLESYSTEMS OF THE SW INC	ORANGE	ORANGE(NORTH)	CA	6-259	WGN	Chicago	Illinois			
17	COMCAST OF MICHIGAN LLC	LANSING	CLINTON	MI	26-037	WGN	Chicago	Illinois			
			EATON	MI	26-045	WKBD	Detroit	Michigan			
			INGHAM	MI	26-065	WTVS	Detroit	Michigan		X	
16	TEXAS CABLE PARTNERS LP	CORPUS CHRISTI	BEE	TX	48-025	WGN	Chicago	Illinois			
			DUVAL	TX	48-131						
			JIM WELLS	TX	48-249						
			NUJECES	TX	48-355						
			SAN PATRICIO	TX	48-409						
			TARRANT	TX	48-439						
17	ARMSTRONG UTILITIES INC	BUTLER	BUTLER	PA	42-019	WGN	Chicago	Illinois			
			DELAWARE	PA	42-045						
16	COMCAST OF CONTRA COSTA INC	PINOLE	ALAMEDA(WEST)	CA	6-202	KCRA	Sacramento	California	X		
			CONTRA COSTA(WEST)	CA	6-012						
17	TIME WARNER ENT/ADV-NEWHSE GP	LINCOLN	LANCASTER	NE	31-109	WGN	Chicago	Illinois			
16	COX COMMUNICATIONS INC	WARNER ROBINS	BIBB	GA	13-021	WGCL	Atlanta	Georgia	X		
			HOUSTON	GA	13-153	WGN	Chicago	Illinois			
			PEACH	GA	13-225	WSB	Atlanta	Georgia	X		
						WXIA	Atlanta	Georgia	X		
17	COX COMMUNICATIONS KANSAS LLC	TOPEKA	JEFFERSON	KS	20-087	KSHB	Kansas City	Missouri	X		
			SHAWNEE	KS	20-177	WGN	Chicago	Illinois			
16	TIME WARNER ENT/ADV-NEWHSE GP	MYRTLE BEACH	HORRY	SC	45-051	WGN	Chicago	Illinois			
						WIS	Columbia	South Carolina	X		
16	TCA CABLE PARTNERS	SPRINGDALE	BENTON	AR	5-007	WGN	Chicago	Illinois			
			WASHINGTON	AR	5-143						
17	CENTURY VENTURE/TIME WARNER	WAUWATOSA	MILWAUKEE	WI	55-079	WGN	Chicago	Illinois			
			OZAUKEE	WI	55-089	WHA	Madison	Wisconsin		X	
			WASHINGTON	WI	55-131						
			WAUKESHA	WI	55-133						
16	MEDIACOM SOUTHEAST LLC	GULF BREEZE	ESCAMBIA	AL	1-053	WBPG	Gulf Shores	Alabama			
			ESCAMBIA	FL	12-033	WEIQ	Mobile	Alabama		X	
			SANTA ROSA	FL	12-113	WGN	Chicago	Illinois			
						WSFA	Montgomery	Alabama	X		
						WSRE	Pensacola	Florida		X	
17	CHARTER COMMUNICATIONS VII	KLAMATH FALLS	KLAMATH	OR	41-035	WGN	Chicago	Illinois			
16	CHARTER COMMUNICATIONS VI	COMSTOCK TWP	KALAMAZOO	MI	26-077	WGN	Chicago	Illinois			
						WTTW	Chicago	Illinois		X	

Number of Interviews	Cable System	Prime City	County Coverage	State	County FIPS Code	Distant Signal Call Letters	City of Origin	State of Origin	Network Affiliate	PBS	Canadian
17	ARMSTRONG COMMUNICATIONS INC	MEADVILLE	CRAWFORD	PA	42-039	KDKA	Pittsburgh	Pennsylvania	X		
						WEWS	Cleveland	Ohio	X		
						WUAB	Lorain	Ohio			
16	COMCAST OF ALABAMA INC	HUNTSVILLE	MADISON	AL	1-089	WBRC	Birmingham	Alabama			
						WGN	Chicago	Illinois			
						WIAT	Birmingham	Alabama	X		
						WVTM	Birmingham	Alabama	X		
17	COXCOM INC	ROANOKE	ROANOKE ROANOKE CITY	VA	51-161 51-770	WGN	Chicago	Illinois			
16	COMCAST CABLE COMM INC	WILDWOOD	CAPE MAY	NJ	34-009	WHYY	Wilmington	Delaware		X	
						WPIX	New York	New York			
16	TIME WARNER ENT/ADV-NEWHSE GP	WINSTON-SALEM	DAVIE FORSYTH STOKES	NC	37-059 37-067 37-169	WGN	Chicago	Illinois			
17	COMCAST OF THE SOUTH INC	WESTLAND	WAYNE	MI	26-163	WGN	Chicago	Illinois			
16	MEDIACOM SOUTHEAST LLC	EDENTON	BERTIE CAMDEN CHOWAN CURRITUCK HERTFORD NORTHAMPTON PERQUIMANS	NC	37-015 37-029 37-041 37-053 37-091 37-131 37-143	WCTI WGN WGNT WHRO WITN WNCT WPXV WSKY WTVZ WVBT WYDO	New Bern Chicago Portsmouth Hampton Washington Greenville Norfolk Manteo Norfolk Virginia Beach Greenville	North Carolina Illinois Virginia Virginia North Carolina North Carolina Virginia North Carolina Virginia Virginia North Carolina	X     X X		
17	FRONTIERVISION OPERATING	SEBAGO	CUMBERLAND OXFORD YORK *	ME	23-005 23-017 23-031	WENH WGN WSBK	Durham Chicago Boston	New Hampshire Illinois Massachusetts		X	
16	BRESNAN COMMUNICATIONS CO	AUSTIN	MOWER	MN	27-099	KTCA WFTC WGN	Redwood Falls Minneapolis Chicago	Minnesota Minnesota Illinois		X	
17	INSIGHT MIDWEST LP	KOKOMO	CASS HOWARD MIAMI TIPTON	IN	18-017 18-067 18-103 18-159	WGN WIPB	Chicago Muncie	Illinois Indiana		X	
16	COMCAST OF WASHINGTON IV INC	ABERDEEN	GRAYS HARBOR KING	WA	53-027 53-033	CBUT KBTC KCTS KPTV KWDK	Vancouver Tacoma Seattle Portland Tacoma	British Columbia Washington Washington Oregon Washington			X
									X		
										X	
16	RIFKIN ACQUISITION PARTNERS	COOKEVILLE	PUTNAM WHITE	TN	47-141 47-185	WGN	Chicago	Illinois			
17	COMCAST OF CA/CT/MI	BATTLE CREEK	CALHOUN	MI	26-025	WGN	Chicago	Illinois			
16	TIME WARNER ENTERTAINMENT CO	LIMA	ALLEN ASHTABULA AUGLAIZE PUTNAM	OH	39-003 39-007 39-011 39-137	WBNS WHIO WTVG	Columbus Dayton Toledo	Ohio Ohio Ohio	X X X		

Number of Interviews	Cable System	Prime City	County Coverage	State	County FIPS Code	Distant Signal Call Letters	City of Origin	State of Origin	Network Affiliate	PBS	Canadian
17	CITY OF COVINGTON	COVINGTON	NEWTON	GA	13-217	WGN	Chicago	Illinois			
17	CHARTER COMMUNICATIONS LLC	ANGIER	CHATHAM HARNETT JOHNSTON LEE MOORE SAMPSON	NC	37-037 37-085 37-101 37-105 37-125 37-163	WGN	Chicago	Illinois			
16	TCA CABLE PARTNERS	GREENVILLE	WASHINGTON	MS	28-151	KATV WGN	Little Rock Chicago	Arkansas Illinois	X		
17	TIME WARNER ENT/ADV-NEWHSE GP	LEXINGTON	DAVIDSON	NC	37-057	WGN	Chicago	Illinois			
16	COX SOUTHWEST HOLDINGS LP	SAN ANGELO	TOM GREEN	TX	48-451	KERA WFAA	Wichita Falls Dallas	Texas Texas		X	
16	BEE LINE INC	MILLINOCKET	PENOBSCOT	ME	23-019	CBMT WSBK	Montreal Boston	Quebec Massachusetts			X
17	JAMES CABLE PARTNERS LP	NEW TAZEWELL	CLAIBORNE	TN	47-025	WGN	Chicago	Illinois			
16	WARRICK CABLEVISION INC	NEWBURGH	WARRICK	IN	18-173	WGN	Chicago	Illinois			
17	CHARTER COMMUNICATIONS VII	BUXTON	DARE	NC	37-055	WCTI WNCT	New Bern Greenville	North Carolina North Carolina	X X		
16	CHARTER COMM PROPERTIES LLC	DASHER	ECROLS LOWNDES	GA GA	13-101 13-185	WCLP WGN	Chatsworth Chicago	Georgia Illinois		X	
17	CHARTER COMMUNICATIONS LLC	SOUTHSIDE	ETOWAH	AL	1-055	WGN	Chicago	Illinois			

2003  
Cable Customer  
Programming Questionnaire

System Name: \_\_\_\_\_  
City/state: \_\_\_\_\_  
Subscribers: \_\_\_\_\_  
Respondent's Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Telephone Number: \_\_\_\_\_  
Date Interviewed: \_\_\_\_\_

Good morning / afternoon. My name is \_\_\_\_\_ and I'm calling from \_\_\_\_\_. We are conducting a short national survey among randomly selected cable TV customers regarding the programming they watch. This survey will take no more than 10-12 minutes of your time. May we talk now? [IF NOT, SCHEDULE A TIME FOR CALL BACK.]

First, I have to ask:

1. Do you have cable TV in your home?  
IF YES, PROCEED TO QUESTION 2.  
IF NO, THANK AND TERMINATE.
  
2. Did you have cable TV in your home last year (2003)?  
IF YES, PROCEED TO NEXT QUESTION.  
IF NO, THANK AND TERMINATE.
  
3. Are you the person responsible for paying the cable TV bill in your home?  
  
IF YES, PROCEED TO QUESTION 4.  
IF NO, ... Could I please speak with the person responsible for paying the cable TV bill in your home? REPEAT INTRODUCTION AND Q.3

INTERVIEWER: Industry data indicate that during 2003 your cable television system carried the following broadcast stations from other cities:

INSERT DISTANT SIGNAL  
CALL LETTERS, CITY  
AND AFFILIATION

<u>Call Letters</u>	<u>Can</u>	<u>Affiliation</u>	<u>City</u>

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Last year, these stations carried certain types of programs such as:

Movies: this means any type of movie you get on these stations I mentioned, such as comedy, or drama, or mystery, or other types of movies

Live professional and college team sports: such as hockey, football, basketball and baseball, plus college sports

Syndicated shows, series and specials: such programs as sitcoms, like *Seinfeld*, or *Friends*, or dramas such as *NYPD Blue* or *CSI*, or Christmas specials, or wildlife specials

News and public affairs programs: this could be a news program or local talk show about politics or community issues in another city that you get on your cable system

PBS and all other programming broadcast by noncommercial station: such as movies on PBS or concerts, also includes types of shows they put on the air when they are trying to raise money.

Devotional and religious programming: This is ministers, televangelists, or priests that are on the air

All programming broadcast by Canadian station

Other (SPECIFY)

4. I'm going to read you some types of programs carried by these stations from other cities last year. As I read each program please give it a number from 1 to 10 with 1 meaning these types of programs are not popular at all in our home to 10 meaning these types of programs are very popular in our home.

<u>Random Sequence</u>	<u>Genre</u>	<u>RECORD 1 TO 10</u>
( )	Movies	_____
( )	Live professional and college team sports	_____
( )	Syndicated shows, series and specials	_____
( )	News and public affairs programs	_____

- ( ) PBS and all other programming broadcast by noncommercial station \_\_\_\_\_
- ( ) Devotional / religious programming \_\_\_\_\_
- ( ) All programming broadcast by Canadian station \_\_\_\_\_
- Other (SPECIFY BELOW) \_\_\_\_\_

**Value Concept**

When you pay your cable bill, a certain portion of the bill goes to pay your cable company for receiving these stations I mentioned earlier that are part of your monthly cable TV package. For purposes of this survey, let's assume that \$1 of your monthly cable bill goes to pay for these stations that carry distant signals to your home. Now, I would like you to divide this hypothetical \$1 according to how valuable you feel each type of programming was to you in your home in 2003. Think of this as dividing the \$1 according to how much you feel each type of show was worth to you in 2003.

I'll read all the program types that were broadcast by these stations to give you a chance to think about them; please write the categories down as I am reading them. (READ PROGRAM TYPES IN ORDER OF RANDOM SEQUENCE NUMBER.) Assume you had ONE DOLLAR to spend in order to get these types of programs that were broadcast in 2003 on the stations I listed. As I read each choice, please jot down your estimates, and make sure they add to ONE DOLLAR.

5. What percentage, if any, of ONE DOLLAR would you spend on (READ FIRST PROGRAM TYPE)? What percentage, if any, would you spend on (READ NEXT PROGRAM TYPE)? COMPLETE LIST IN THIS MANNER.

Random  
Sequence

Value

- ( ) Movies broadcast during 2003 by the U.S. commercial stations I listed.....
- ( ) Syndicated shows, series and specials broadcast during 2003 by the U.S. commercial stations I listed.....
- ( ) News and public affairs programs broadcast during 2003 only by commercial stations that I listed .....
- ( ) News and public affairs programs broadcast during 2003 only by that station.....



- ( ) PBS and all other programming broadcast during 2003  
by PBS station .....
- ( ) Devotional and religious programming broadcast during 2003  
by the U.S. commercial stations I listed.....
- ( ) All programming broadcast during 2003 by Canadian  
station .....

TOTAL.....

FRACTIONS OF DOLLAR (e.g. 10 CENTS, 15 CENTS, etc. MUST ADD TO ONE DOLLAR; PROMPT RESPONDENTS IF THEY DO NOT.

6. Now I'm going to read back the categories and your estimates. (REREAD CATEGORIES AND RESPONSES IN RANDOM SEQUENCE IN ORDER TO ALLOW RESPONDNET TO REVIEW THE ESTIMATES.)

Are there any changes you would like to make? (RECORD ANY CHANGES BY CROSSING OUT ORIGINAL RESPONSE AND WRITING IN REVISED RESPONSE NEXT TO IT. AMOUNTS MUST STILL ADD TO \$1.00; PROMPT RESPONDENTS IF THEY DO NOT.)

Our interview is over. Thank you for your time today.

Number of Interviews	Cable System	Prime City	County Coverage	State	County FIPS Code	Distant Signal Call Letters	City of Origin	State of Origin	Network Affiliate	PBS	Canadian
16	EAST ARKANSAS VIDEO INC	FORREST CITY	CROSS	AR	5-037	KAIT	JONESBORO	Arkansas	X		
			LEE	AR	5-077	KARK	LITTLE ROCK	Arkansas	X		
			SAINT FRANCIS	AR	5-123	KATV	LITTLE ROCK	Arkansas	X		
						KTEJ	JONESBORO	Arkansas		X	
						KTHV	LITTLE ROCK	Arkansas	X		
						KVTJ	JONESBORO	Arkansas			
						WGN	CHICAGO	Illinois			
16	TCA CABLE PARTNERS	RUSSELLVILLE	POPE	AR	5-115	WGN	CHICAGO	Illinois			
			YELL	AR	5-149						
23	COXCOM INC	PHOENIX	MARICOPA	AZ	4-013	WGN	CHICAGO	Illinois			
16	COMCAST OF ARIZONA INC	TUCSON	PIMA(EAST)	AZ	4-018	WGN	CHICAGO	Illinois			
16	COMCAST OF CYPRESS INC	CYPRESS	LOS ANGELES	CA	6-037	WGN	CHICAGO	Illinois			
			ORANGE(NORTH)	CA	6-259						
16	COMCAST OF S CENTRAL LA LLC	LOS ANGELES	LOS ANGELES	CA	6-037	WGN	CHICAGO	Illinois			
16	TIME WARNER ENT/ADV-NEWHSE GP	PACIFIC BEACH	SAN DIEGO	CA	6-073	KTLA	LOS ANGELES	California			
						WGN	CHICAGO	Illinois			
16	COMCAST OF SACRAMENTO I LLC	SACRAMENTO	SACRAMENTO	CA	6-067	KTNC	CONCORD	California			
28	COMCAST OF CALIFORNIA III INC	SAN FRANCISCO	CONTRA COSTA(WEST)	CA	6-012	WGN	CHICAGO	Illinois			
			CONTRA COSTA	CA	6-013						
			CONTRA COSTA(EAST)	CA	6-014						
			SAN FRANCISCO	CA	6-075						
			SAN MATEO	CA	6-081						
			SANTA CLARA *	CA	6-085						
			ALAMEDA(EAST)	CA	6-201						
			ALAMEDA(WEST)	CA	6-202						
			SANTA CLARA(WEST)	CA	6-286						
16	ADELPHIA CALIFORNIA	SOUTHGATE	LOS ANGELES	CA	6-037	WGN	CHICAGO	Illinois			
16	CHARTER COMM PROPERTIES LLC	WOODLAND	YOLO	CA	6-113	KOED	SAN FRANCISCO	California		X	
			SOLANO(EAST)	CA	6-295	KTVU	OAKLAND	California			
16	COMCAST OF COLORADO IX LLC	ARAPAHOE CO	ADAMS	CO	8-001	WGN	CHICAGO	Illinois			
			ARAPAHOE	CO	8-005						
			BOULDER	CO	8-013						
			CLEAR CREEK	CO	8-019						
			DENVER	CO	8-031						
			DOUGLAS	CO	8-035						
			ELBERT	CO	8-039						
			JEFFERSON	CO	8-059						
			PROWERS	CO	8-099						
			WELD	CO	8-123						
16	BRESNAN COMMUNICATIONS LLC	GRAND JUNCTION	MESA	CO	8-077	KCNC	DENVER	Colorado	X		

Number of Interviews	Cable System	Prime City	County Coverage	State	County FIPS Code	Distant Signal Call Letters	City of Origin	State of Origin	Network Affiliate	PBS	Canadian
28	BRIGHT HOUSE NETWORKS LLC	HILLSBOROUGH CO	CITRUS	FL	12-017	WEDU	TAMPA	Florida		X	
			HARDEE	FL	12-049	WGN	CHICAGO	Illinois			
			HERNANDO	FL	12-053	WINK	FT MYERS	Florida	X		
			HILLSBOROUGH	FL	12-057	WNBC	NEW YORK	New York	X		
			LEVY	FL	12-075	WUFT	GAINESVILLE	Florida		X	
			MANATEE	FL	12-081						
			PASCO	FL	12-101						
			PINELLAS	FL	12-103						
			POLK	FL	12-105						
16	COMCAST OF GREATER FL/GA INC	JACKSONVILLE BEACH	BAKER	FL	12-003	WGN	CHICAGO	Illinois			
			BRADFORD	FL	12-007						
			CLAY	FL	12-019						
			DUVAL	FL	12-031						
			NASSAU	FL	12-089						
			SAINT JOHNS	FL	12-109						
16	COMCAST SCH HOLDINGS INC	LEESBURG	LAKE	FL	12-069	WGN	CHICAGO	Illinois			
			MARION	FL	12-083						
			VOLUSIA	FL	12-127						
16	COMCAST OF SOUTH FL II INC	N MIAMI	BROWARD	FL	12-011	WGN	CHICAGO	Illinois			
			DADE	FL	12-025						
			MONROE	FL	12-087						
			SEMINOLE	FL	12-117						
20	BRIGHT HOUSE NETWORKS LLC	ORLANDO	BREVARD	FL	12-009	WCEU	NEW SMYRNA BEACH	Florida		X	
			FLAGLER	FL	12-035	WGN	CHICAGO	Illinois			
			LAKE	FL	12-069						
			MARION	FL	12-083						
			MARTIN	FL	12-085						
			ORANGE	FL	12-095						
			OSCEOLA	FL	12-097						
			SEMINOLE	FL	12-117						
			SUMTER	FL	12-119						
			VOLUSIA	FL	12-127						
16	WEST BOCA ACQUISITION LP	PALM BEACH CO	DADE	FL	12-025	WAMI	HOLLYWOOD	Florida			
			PALM BEACH(SOUTH)	FL	12-100	WBZL	MIAMI	Florida			
						WGN	CHICAGO	Illinois			
						WLRN	MIAMI	Florida		X	
16	COMCAST OF GREATER FL/GA INC	POMPANO	BROWARD	FL	12-011	WGN	CHICAGO	Illinois			
			DADE	FL	12-025						
16	COMCAST OF TALLAHASSEE INC	TALLAHASSEE	GADSDEN	FL	12-039	WGN	CHICAGO	Illinois			
			LEON	FL	12-073						
16	NATIONAL CABLE ACQUISITION	WELLINGTON	PALM BEACH(NORTH)	FL	12-098	WBZL	MIAMI	Florida			
			PALM BEACH(SOUTH)	FL	12-100	WGN	CHICAGO	Illinois			

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20	COMCAST OF GEORGIA INC	ATLANTA	BAKER	GA	13-007	WGN	CHICAGO	Illinois			
			CHEROKEE	GA	13-057						
			CLAYTON	GA	13-063						
			COBB	GA	13-067						
			COWETA	GA	13-077						
			DE KALB	GA	13-089						
			DOUGLAS	GA	13-097						
			FAYETTE	GA	13-113						
			FULTON	GA	13-121						
			GWINNETT	GA	13-135						
			HENRY	GA	13-151						
			JEFFERSON	GA	13-163						
			NEWTON	GA	13-217						
			RABUN	GA	13-241						
			ROCKDALE	GA	13-247						
			SPALDING	GA	13-255						
			WALTON	GA	13-297						
16	MCC IOWA LLC	CEDAR RAPIDS	LINN	IA	19-113	WGN	CHICAGO	Illinois			
16	MCC IOWA LLC	MOLINE	ROCK ISLAND	IL	17-161	WGN	CHICAGO	Illinois			
			SCOTT	IA	19-163						
16	COMCAST OF INDIANAPOLIS LP	HENDRICKS CO	HANCOCK	IN	18-059	WGN	CHICAGO	Illinois			
			HENDRICKS	IN	18-063						
			MARION	IN	18-097						
			MORGAN	IN	18-109						
			SHELBY	IN	18-145						
16	COMCAST OF MT/INKY/UT INC	LOGANSPOUT	CASS	IN	18-017	WFWA	FT WAYNE	Indiana		X	
			MIAMI	IN	18-103	WFYI	INDIANAPOLIS	Indiana		X	
			WABASH	IN	18-169	WGN	CHICAGO	Illinois			
						WLFJ	LAFAYETTE	Indiana	X		
						WNDU	SOUTH BEND	Indiana	X		
						WPTA	FT WAYNE	Indiana	X		
						WRTV	INDIANAPOLIS	Indiana	X		
16	COMCAST OF MUNCIE	MUNCIE	DELAWARE	IN	18-035	WGN	CHICAGO	Illinois			
			RANDOLPH	IN	18-135						
16	COX COMMUNICATIONS KANSAS LLC	WICHITA	BUTLER	KS	20-015	WGN	CHICAGO	Illinois			
			COWLEY	KS	20-035						
			HARVEY	KS	20-079						
			RENO	KS	20-155						
			SEDGWICK	KS	20-173						
			SUMNER	KS	20-191						
16	FRANKFORT ELECTRIC & WATER	FRANKFORT	FRANKLIN	KY	21-073	WFTE	SALEM	Indiana			
16	RIFKIN ACQUISITION PARTNERS	MAYFIELD	CALLOWAY	KY	21-035	WBBJ	JACKSON	Tennessee	X		
			GRAVES	KY	21-083	WGN	CHICAGO	Illinois			
			MARSHALL	KY	21-157	WKRN	NASHVILLE	Tennessee	X		
						WNPT	NASHVILLE	Tennessee		X	
						WSMV	NASHVILLE	Tennessee	X		
						WTVF	NASHVILLE	Tennessee	X		
16	CHARTER COMM ENTERTAINME I LLC	CHICOPEE	HAMPDEN	MA	25-013	WSBK	BOSTON	Massachusetts			
			HAMPSHIRE	MA	25-015						
16	COMCAST OF MASSACHUSETTS I	REHOBOTH	BRISTOL	MA	25-005	WBPX	BOSTON	Massachusetts			
						WFXT	BOSTON	Massachusetts			
						WUNI	WORCESTER	Massachusetts			

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16	COMCAST CBV OF POTOMAC LLC	ROCKVILLE	MONTGOMERY PRINCE GEORGE'S	MD	24-031 24-033	WGN	CHICAGO	Illinois			
16	COMCAST OF FLINT INC	BURTON CITY	GENESEEE OAKLAND	MI	26-049 26-125	CBET WGN	WINDSOR CHICAGO	Ontario Illinois			X
16	COMCAST OF DETROIT GP	DETROIT	WAYNE	MI	26-163	WGN	CHICAGO	Illinois			
16	BRIGHT HOUSE NETWORKS LLC	LIVONIA	OAKLAND WAYNE	MI	26-125 26-163	WGN	CHICAGO	Illinois			
16	COMCAST OF MINN/WISCONSIN	BROOKLYN PARK	HENNEPIN WRIGHT PIERCE SAINT CROIX	MN	27-053 27-171 55-093 55-109	WGN	CHICAGO	Illinois			
16	MARCUS CABLE PARTNERS LP	ROSEMOUNT	DAKOTA RICE	MN	27-037 27-131	WGN	CHICAGO	Illinois			
16	COMCAST OF ST PAUL INC	ST PAUL	DAKOTA RAMSEY	MN	27-037 27-123	WGN	CHICAGO	Illinois			
16	CHARTER COMM ENTERTAINME I LLC	BELLA VILLA	CLINTON MADISON MONROE SAINT CLAIR FRANKLIN JEFFERSON SAINT CHARLES SAINT FRANCOIS SAINT LOUIS WRIGHT SAINT LOUIS CITY	IL	17-027 17-119 17-133 17-163 29-071 29-099 29-183 29-187 29-189 29-229 29-510	WGN	CHICAGO	Illinois			
16	CHARTER COMMUNICATIONS VII	CAPE GIRARDEAU	COOK CAPE GIRARDEAU MISSISSIPPI NEW MADRID SCOTT	MO	27-031 29-031 29-133 29-143 29-201	WGN WQWQ- WSIU	CHICAGO PADUCAH CARBONDALE	Illinois Kentucky Illinois		X	
16	KCCP TRUST	KANSAS CITY	JOHNSON LEAVENWORTH MONTGOMERY WYANDOTTE CASS CLAY JACKSON PLATTE RALLS	KS	20-091 20-103 20-125 20-203 29-037 29-047 29-095 29-165 29-173	WGN	CHICAGO	Illinois			
16	CABLE ONE INC	COLUMBUS	LOWNDES MONROE	MS	28-087 28-095	WGN	CHICAGO	Illinois			
16	TIME WARNER ENTERTAINMENT CO	JACKSON	HINDS MADISON RANKIN	MS	28-049 28-089 28-121	WGN	CHICAGO	Illinois			
16	TIME WARNER ENT/ADV-NEWHSE GP	CHARLOTTE	ANSON CABARRUS CLEVELAND GASTON MECKLENBURG MONTGOMERY	NC	37-007 37-025 37-045 37-071 37-119 37-123	WGGS WGN WIS WRAL WUNG	GREENVILLE CHICAGO COLUMBIA RALEIGH CONCORD	South Carolina Illinois South Carolina North Carolina North Carolina		X X	X

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			RICHMOND	NC	37-153						
			ROWAN	NC	37-159						
			STANLY	NC	37-167						
			UNION	NC	37-179						
16	CHARTER COMMUNICATIONS VII	KILL DEVIL HILLS	CURRITUCK	NC	37-053	WITN	WASHINGTON	North Carolina	X		
			DARE	NC	37-055	WNCT	GREENVILLE	North Carolina	X		
16	TIME WARNER ENT/ADV-NEWHSE GP	RALEIGH	CHATHAM	NC	37-037	WGN	CHICAGO	Illinois			
			DURHAM	NC	37-063						
			FRANKLIN	NC	37-069						
			GRANVILLE	NC	37-077						
			JOHNSTON	NC	37-101						
			ORANGE	NC	37-135						
			PITT	NC	37-147						
			VANCE	NC	37-181						
			WAKE	NC	37-183						
			WARREN	NC	37-185						
			WAYNE	NC	37-191						
			WILSON	NC	37-195						
16	METROCAST CBV OF NH LLC	LACONIA	BELKNAP	NH	33-001	WBZ	BOSTON	Massachusetts	X		
			CARROLL	NH	33-003	WCSH	PORTLAND	Maine	X		
			GRAFTON	NH	33-009	WCVB	BOSTON	Massachusetts	X		
			MERRIMACK	NH	33-013	WFXT	BOSTON	Massachusetts			
			ROCKINGHAM	NH	33-015	WGBH	BOSTON	Massachusetts		X	
			STRAFFORD	NH	33-017	WGME	PORTLAND	Maine	X		
						WHDH	BOSTON	Massachusetts	X		
						WHSB	MARLBOROUGH	Massachusetts			
						WLVI	CAMBRIDGE	Massachusetts			
						WMTW	POLAND SPRING	Maine	X		
						WNDS	DERRY	New Hampshire			
						WNEU	MERRIMACK	New Hampshire			
						WSBK	BOSTON	Massachusetts			
16	COMCAST OF GARDEN STATE LP	AUDUBON	BURLINGTON	NJ	34-005	WGN	CHICAGO	Illinois			
			CAMDEN	NJ	34-007	WPSG	PHILADELPHIA	Pennsylvania			
			CUMBERLAND	NJ	34-011						
			GLOUCESTER	NJ	34-015						
			UNION	NJ	34-039						

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16	COMCAST CABLE COMM LLC	BEACHWOOD	OCEAN	NJ	34-029	KYW	PHILADELPHIA	Pennsylvania	X				
						WCAU	PHILADELPHIA	Pennsylvania	X				
						WHYY	WILMINGTON	Delaware		X			
						WMCN	ATLANTIC CITY	New Jersey					
						WNET	NEW YORK CITY/NEWARK	New York/New Jersey			X		
						WPHL	PHILADELPHIA	Pennsylvania					
						WPSG	PHILADELPHIA	Pennsylvania					
					WTFX	PHILADELPHIA	Pennsylvania						
16	CABLEVISION OF MONMOUTH INC	FREEHOLD	MONMOUTH	NJ	34-025	WCAU	PHILADELPHIA	Pennsylvania	X				
			OCEAN	NJ	34-029	WLIW	GARDEN CITY	New York		X			
			SOMERSET	NJ	34-035	WPHL	PHILADELPHIA	Pennsylvania					
						WPVI	PHILADELPHIA	Pennsylvania	X				
						WTFX	PHILADELPHIA	Pennsylvania					
						WYBE	PHILADELPHIA	Pennsylvania			X		
16	COMCAST CABLE COMM LLC	UNION	ESSEX	NJ	34-013	WGN	CHICAGO	Illinois					
			HUDSON	NJ	34-017								
			MIDDLESEX	NJ	34-023								
			UNION	NJ	34-039								
16	COX COMMUNICATION LAS VEGAS	LAS VEGAS	CLARK	NV	32-003	WGN	CHICAGO	Illinois					
16	TIME WARNER ENT/ADV-NEWHSE GP	ALBANY	ALBANY	NY	36-001	WCAX	BURLINGTON	Vermont	X				
			COLUMBIA	NY	36-021	WCFE	PLATTSBURGH	New York		X			
			ESSEX	NY	36-031	WETK	BURLINGTON	Vermont		X			
			FULTON	NY	36-035	WEWB	SCHENECTADY	New York					
			MONTGOMERY	NY	36-057	WFFF	BURLINGTON	Vermont					
			RENSSELAER	NY	36-083	WMHT	SCHENECTADY	New York			X		
			SARATOGA	NY	36-091	WNYA	PITTSFIELD	Massachusetts					
			SCHENECTADY	NY	36-093	WNYT	ALBANY	New York	X				
			SCHOHARIE	NY	36-095	WPTZ	NORTH POLE	New York	X				
			WARREN	NY	36-113	WVNY	BURLINGTON	Vermont	X				
			WASHINGTON	NY	36-115	WXXA	ALBANY	New York					
								WYPX	AMSTERDAM	New York			
													X
			16	TIME WARNER ENT/ADV-NEWHSE GP	DEWITT	CAYUGA	NY	36-011	CBMT	MONTREAL	Quebec		
CLINTON	NY	36-019				CJOH	OTTAWA	Ontario			X		
CORTLAND	NY	36-023				CKWS	KINGSTON	Ontario			X		
FRANKLIN	NY	36-033				W28BC	MASSENA	New York					
HERKIMER	NY	36-043				WBNG	BINGHAMTON	New York	X				
JEFFERSON	NY	36-045				WCFE	PLATTSBURGH	New York			X		
LEWIS	NY	36-049				WCNY	SYRACUSE	New York			X		
MADISON	NY	36-053				WENY	ELMIRA	New York	X				
ONEIDA(EAST)	NY	36-064				WFXV	UTICA	New York					
ONEIDA(WEST)	NY	36-066				WGN	CHICAGO	Illinois					
ONONDAGA	NY	36-067				WICZ	BINGHAMTON	New York					
OSWEGO	NY	36-075				WIVT	BINGHAMTON	New York	X				
SAINT LAWRENCE	NY	36-089				WKTV	UTICA	New York	X				
TOMPKINS	NY	36-109				WNYS	SYRACUSE	New York					
								WPBS	WATERTOWN	New York			X
								WPIX	NEW YORK	New York			
								WSKG	BINGHAMTON	New York			X
								WSPX	SYRACUSE	New York			
								WSTM	SYRACUSE	New York	X		
								WSYT	SYRACUSE	New York			
					WTVH	SYRACUSE	New York	X					
					WUTR	UTICA	New York	X					
					WWNY	CARTHAGE	New York	X					

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16	TIME WARNER NY CABLE INC	NEWBURGH	DUTCHESS	NY	36-027	WABC	NEW YORK	New York	X			
			GREENE	NY	36-039	WBNG	BINGHAMTON	New York	X			
			SULLIVAN	NY	36-105	WBRE	WILKES-BARRE	Pennsylvania	X			
			ULSTER	NY	36-111	WCBS	NEW YORK	New York	X			
						WMBC	NEWTON	New Jersey				
						WMHT	SCHENECTADY	New York		X		
						WNBC	NEW YORK	New York		X		
						WNEP	SCRANTON	Pennsylvania		X		
						WNET	NEW YORK CITY/NEWARK	New York/New Jersey			X	
						WNYT	ALBANY	New York		X		
						WNYW	NEW YORK	New York				
						WPIX	NEW YORK	New York				
						WPXN	NEW YORK	New York				
						WRGB	SCHENECTADY	New York		X		
						WRNN	KINGSTON	New York				
						WVIA	SCRANTON	Pennsylvania			X	
						WWOR	SECAUCUS	New York/New Jersey				
			WXTV	PATERSON	New Jersey							
			WYOU	SCRANTON	Pennsylvania			X				
16	TIME WARNER ENTERTAINMENT CO	ONEONTA	ALLEGANY	NY	36-003	W31BP	BURLINGTON	New York				
			BROOME	NY	36-007	WBGH-	BINGHAMTON	New York	X			
			CHEMUNG	NY	36-015	WCNY	SYRACUSE	New York		X		
			CHENANGO	NY	36-017	WENY	ELMIRA	New York	X			
			DELAWARE	NY	36-025	WETM	ELMIRA	New York	X			
			OTSEGO	NY	36-077	WFXV	UTICA	New York				
			SCHUYLER	NY	36-097	WGN	CHICAGO	Illinois				
			STELUBEN	NY	36-101	WGRZ	BUFFALO	New York	X			
			TIOGA	NY	36-107	WHAM	ROCHESTER	New York	X			
			YATES	NY	36-123	WHEC	ROCHESTER	New York	X			
			BRADFORD	PA	42-015	WICZ	BINGHAMTON	New York				
			POTTER	PA	42-105	WISF-	ONEONTA	New York				
			SUSQUEHANNA	PA	42-115	WIVB	BUFFALO	New York	X			
			TIOGA	PA	42-117	WIXT	SYRACUSE	New York	X			
						WNED	BUFFALO	New York		X		
						WNYO	BUFFALO	New York				
						WPSX	CLEARFIELD	Pennsylvania		X		
						WROC	ROCHESTER	New York	X			
						WSKG	BINGHAMTON	New York		X		
						WTTX-	ELMIRA	New York				
			WUHF	ROCHESTER	New York							
			WUTR	UTICA	New York	X						
			WUTV	BUFFALO	New York							
			WVIA	SCRANTON	Pennsylvania		X					
			WXXI	ROCHESTER	New York		X					
			WYOU	SCRANTON	Pennsylvania	X						
16	TIME WARNER CABLE	ROCHESTER	ERIE	NY	36-029	WBGJ-	ROCHESTER	New York				
			GENESEE	NY	36-037	WCNY	SYRACUSE	New York		X		
			LIVINGSTON	NY	36-051	WGN	CHICAGO	Illinois				
			MONROE	NY	36-055	WHAM	ROCHESTER	New York	X			
			NIAGARA	NY	36-063	WHEC	ROCHESTER	New York	X			
			ONTARIO	NY	36-069	WNED	BUFFALO	New York		X		
			ORLEANS	NY	36-073	WROC	ROCHESTER	New York	X			
			SENECA	NY	36-099	WUHF	ROCHESTER	New York				
			WAYNE	NY	36-117	WXXI	ROCHESTER	New York		X		
			WYOMING	NY	36-121							



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16	TIME WARNER ENTERTAINMENT CO	AKRON	ASHLAND	OH	39-005	WCMH	COLUMBUS	Ohio	X			
			CARROLL	OH	39-019	WDLI	CANTON	Ohio				
			COLUMBIANA	OH	39-029	WEAO	AKRON	Ohio			X	
			HOLMES	OH	39-075	WGGN	SANDUSKY	Ohio				
			HURON	OH	39-077	WGN	CHICAGO	Illinois				
			MAHONING	OH	39-099	WGTE	TOLEDO	Ohio				X
			MEDINA	OH	39-103	WJW	CLEVELAND	Ohio				
			PORTAGE	OH	39-133	WNWO	TOLEDO	Ohio		X		
			RICHLAND	OH	39-139	WPGH	PITTSBURGH	Pennsylvania				
			STARK	OH	39-151	WQLN	ERIE	Pennsylvania				X
			SUMMIT	OH	39-153	WSYX	COLUMBUS	Ohio		X		
			TRUMBULL	OH	39-155	WTVG	TOLEDO	Ohio		X		
			TUSCARAWAS	OH	39-157	WUAB	LORAIN	Ohio				
			WAYNE	OH	39-169	WVIZ	CLEVELAND	Ohio				X
			ERIE	PA	42-049							
			MERCER	PA	42-085							
WARREN	PA	42-123										
16	WIDEPENWEST CLEVELAND LLC	BEREA	CLERMONT	OH	39-025	WGN	CHICAGO	Illinois				
			CUYAHOGA	OH	39-035							
16	ADELPHIA CLEVELAND LLC	CLEVELAND HEIGHTS	CARROLL	OH	39-019	WGN	CHICAGO	Illinois				
			CUYAHOGA	OH	39-035							
			GEAUGA	OH	39-055							
			LAKE	OH	39-085							
			LORAIN	OH	39-093							
			LUCAS	OH	39-095							
			MEDINA	OH	39-103							
			MEIGS	OH	39-105							
			NOBLE	OH	39-121							
			PAULDING	OH	39-125							
			SUMMIT	OH	39-153							
			TUSCARAWAS	OH	39-157							
			16	TIME WARNER ENTERTAINMENT CO	COLUMBUS	ATHENS	OH	39-009	WBNS	COLUMBUS	Ohio	X
CHAMPAIGN	OH	39-021				WEWS	CLEVELAND	Ohio	X			
COSHOCTON	OH	39-031				WGN	CHICAGO	Illinois				
CRAWFORD	OH	39-033				WJW	CLEVELAND	Ohio				
DELAWARE	OH	39-041				WLIO	LIMA	Ohio		X		
FAIRFIELD	OH	39-045				WSFJ	NEWARK	Ohio				
FRANKLIN	OH	39-049				WSYX	COLUMBUS	Ohio		X		
HARDIN	OH	39-065				WTLW	LIMA	Ohio				
KNOX	OH	39-083				WUAB	LORAIN	Ohio				
LICKING	OH	39-089				WWHO	CHILLICOTHE	Ohio				
LOGAN	OH	39-091										
MADISON	OH	39-097										
MARION	OH	39-101										
MORROW	OH	39-117										
MUSKINGUM	OH	39-119										
PERRY	OH	39-127										
PICKAWAY	OH	39-129										
UNION	OH	39-159										
WYANDOT	OH	39-175										
16	FRONTIERVISION OPERATING	DELLROY	CARROLL	OH	39-019	WCMH	COLUMBUS	Ohio	X			
			HOLMES	OH	39-075	WGN	CHICAGO	Illinois				
			STARK	OH	39-151	WNEO	ALLIANCE	Ohio			X	
			TUSCARAWAS	OH	39-157	WOUB	ATHENS	Ohio			X	
			WAYNE	OH	39-169	WTOV	STEBENVILLE	Ohio		X		
						WTRF	WHEELING	West Virginia	X			

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16	CHARTER COMMUNICATIONS VII	LINCOLN CITY	LINCOLN	OR	41-041	WGN	CHICAGO	Illinois			
			TILLAMOOK	OR	41-057						
16	COMCAST OF OREGON II INC	PORTLAND	CLACKAMAS	OR	41-005	WGN	CHICAGO	Illinois			
			MULTNOMAH	OR	41-051						
			WASHINGTON	OR	41-067						
16	ATLANTIC BROADBAND LLC	ALTOONA	BLAIR	PA	42-013	KDKA	PITTSBURGH	Pennsylvania	X		
			CENTRE	PA	42-027	WPIX	NEW YORK	New York			
			LACKAWANNA	PA	42-069	WTAE	PITTSBURGH	Pennsylvania	X		
16	COMCAST OF SOUTHEAST PENNSYLV	ASTON	DELAWARE	PA	42-045	WGN	CHICAGO	Illinois			
16	RIGPAL COMMUNICATIONS INC	BETHEL PARK BORO	ALLEGHENY	PA	42-003	WGN	CHICAGO	Illinois			
			BERKS	PA	42-011						
			FAYETTE	PA	42-051						
			INDIANA	PA	42-063						
			WASHINGTON	PA	42-125						
			WESTMORELAND	PA	42-129						
16	COMCAST OF SOUTHEAST PENNSYLV	COATESVILLE	CHESTER	PA	42-029	WFMZ	ALLENTOWN	Pennsylvania			
						WGAL	LANCASTER	Pennsylvania	X		
						WLVY	ALLENTOWN	Pennsylvania		X	
						WYBE	PHILADELPHIA	Pennsylvania		X	
16	COMCAST CABLE COMM LLC	LANCASTER	LANCASTER	PA	42-071	WBAL	BALTIMORE	Maryland	X		
			YORK	PA	42-133	WGN	CHICAGO	Illinois			
						WMAR	BALTIMORE	Maryland	X		
						WPSG	PHILADELPHIA	Pennsylvania			
						WTFX	PHILADELPHIA	Pennsylvania			
						WWSI	ATLANTIC CITY	New Jersey			
16	COMCAST OF CA/OH/PA/UT/WA INC	PITTSBURGH	ALLEGHENY	PA	42-003	WGN	CHICAGO	Illinois			
			BEAVER	PA	42-007						
			FAYETTE	PA	42-051						
			WASHINGTON	PA	42-125						
			WESTMORELAND	PA	42-129						
16	COMCAST OF SOUTHEAST PENNSYLV	WARRINGTON	BUCKS	PA	42-017	WNET	NEW YORK CITY/NEWARK	New York/New Jersey		X	
			MONTGOMERY	PA	42-091	WPIX	NEW YORK	New York			
16	CENTURY LYKENS CABLE CORP	WILLIAMSTOWN BORO	DAUPHIN	PA	42-043	WGN	CHICAGO	Illinois			
			SCHUYLKILL	PA	42-107	WPHL	PHILADELPHIA	Pennsylvania			
16	TIME WARNER ENT/ADV-NEWHSE GP	COLUMBIA	CALHOUN	SC	45-017	WECT	WILMINGTON	North Carolina	X		
			CHARLESTON	SC	45-019	WGN	CHICAGO	Illinois			
			CLARENDON	SC	45-027	WIS	COLUMBIA	South Carolina	X		
			DARLINGTON	SC	45-031	WPDE	FLORENCE	South Carolina	X		
			DORCHESTER	SC	45-035						
			FLORENCE	SC	45-041						
			GEORGETOWN	SC	45-043						
			HORRY	SC	45-051						
			KERSHAW	SC	45-055						
			LEE	SC	45-061						
			LEXINGTON	SC	45-063						
			NEWBERRY	SC	45-071						
			ORANGEBURG	SC	45-075						
			RICHLAND	SC	45-079						
			SUMTER	SC	45-085						
			WILLIAMSBURG	SC	45-089						

Number of Interviews	Cable System	Prime City	County Coverage	State	County FIPS Code	Distant Signal Call Letters	City of Origin	State of Origin	Network Affiliate	PBS	Canadian
16	COMCAST CBV OF GA/SC INC	N CHARLESTON	BERKELEY CHARLESTON DORCHESTER	SC SC SC	45-015 45-019 45-035	WGN	CHICAGO	Illinois			
16	BLACK HILL FIBERCOM	RAPID CITY	BUTTE LAWRENCE MEADE PENNINGTON	SD SD SD SD	46-019 46-081 46-093 46-103	KBHE KCPO- KWBH- WGN	RAPID CITY SIOUX FALLS RAPID CITY CHICAGO	South Dakota South Dakota South Dakota Illinois		X	
16	TEXAS & KANSAS CITY CABLE PAR	EL PASO	DONA ANA EL PASO	NM TX	35-013 48-141	KRWG KTLA	LAS CRUCES LOS ANGELES	New Mexico California		X	
25	TEXAS & KANSAS CITY CABLE PAR	HOUSTON	BRAZORIA CHAMBERS FORT BEND GALVESTON HARRIS LIBERTY MONTGOMERY	TX TX TX TX TX TX TX	48-039 48-071 48-157 48-167 48-201 48-291 48-339	WGN	CHICAGO	Illinois			
16	COX SOUTHWEST HOLDINGS LP	MT PLEASANT	TITUS	TX	48-449	KCEB KERA KLTV KXAS KYTX WFAA	LONGVIEW DALLAS TYLER FT WORTH NACOGDOCHES DALLAS	Texas Texas Texas Texas Texas Texas		X	
16	COX SOUTHWEST HOLDINGS LP	TYLER	SMITH	TX	48-423	KERA KXTX WFAA	DALLAS DALLAS DALLAS	Texas Texas Texas		X	
16	COMCAST OF VIRGINIA INC	ALEXANDRIA	ALEXANDRIA	VA	51-510	WGN	CHICAGO	Illinois			
16	COXCOM INC	FAIRFAX CO	FAIRFAX FALLS CHURCH	VA VA	51-059 51-610	WGN	CHICAGO	Illinois			
16	COXCOM INC	HAMPTON	HAMPTON CITY	VA	51-650	WGN	CHICAGO	Illinois			
16	CHELSEA COMMUNICATIONS	HARRISONBURG	ROCKINGHAM SHENANDOAH HARRISONBURG	VA VA VA	51-165 51-171 51-660	WDCA WRC WRIC WUSA WWBT	WASHINGTON WASHINGTON RICHMOND-PETERSBURG WASHINGTON RICHMOND	District of Columbia District of Columbia Virginia District of Columbia Virginia	X X X X X		
16	COMCAST OF MA/VA INC	RICHMOND	GOOCHLAND HANOVER HENRICO RICHMOND CITY	VA VA VA VA	51-075 51-085 51-087 51-760	WGN	CHICAGO	Illinois			
16	COXCOM INC	VIRGINIA BEACH	CURRITUCK CHESAPEAKE CITY NORFOLK CITY PORTSMOUTH CITY VIRGINIA BEACH CITY	NC VA VA VA VA	37-053 51-550 51-710 51-740 51-810	WGN	CHICAGO	Illinois			
16	BRESNAN COMMUNICATIONS INC LLC	MADISON	DANE DODGE JEFFERSON	WI WI WI	55-025 55-027 55-055	WGN	CHICAGO	Illinois			
16	COMCAST OF WISCONSIN INC	MANITOWAC RAPIDS	MANITOWOC	WI	55-071	WGN	CHICAGO	Illinois			
16	TIME WARNER CABLE OF SE WI	MILWAUKEE	BURNETT	WI	55-013	WBAY	GREEN BAY	Wisconsin	X		

Number of Interview	Cable System	Prime City	County Coverage	State	County FIPS Code	Distant Signal Call Letters	City of Origin	State of Origin	Network Affiliate	PBS	Canadian
			DODGE	WI	55-027	WBBM	CHICAGO	Illinois	X		
			JEFFERSON	WI	55-055	WCGV	MILWAUKEE	Wisconsin			
			KENOSHA	WI	55-059	WDJT	MILWAUKEE	Wisconsin	X		
			LINCOLN	WI	55-069	WFLD	CHICAGO	Illinois			
			MANITOWOC	WI	55-071	WFRV	GREEN BAY	Wisconsin	X		
			MILWAUKEE	WI	55-079	WGBA	GREEN BAY	Wisconsin	X		
			OZAUKEE	WI	55-089	WGN	CHICAGO	Illinois			
			PIERCE	WI	55-093	WISN	MILWAUKEE	Wisconsin	X		
			RACINE	WI	55-101	WITI	MILWAUKEE	Wisconsin			
			SHEBOYGAN	WI	55-117	WJJA	RACINE	Wisconsin			
			WALWORTH	WI	55-127	WLS	CHICAGO	Illinois	X		
			WASHINGTON	WI	55-131	WLUK	GREEN BAY	Wisconsin			
			WAUKESHA	WI	55-133	WMAQ	CHICAGO	Illinois	X		
						WMVS	MILWAUKEE	Wisconsin		X	
						WMVT	MILWAUKEE	Wisconsin		X	
						WPNE	GREEN BAY	Wisconsin		X	
						WPXE	KENOSHA	Wisconsin			
						WTMJ	MILWAUKEE	Wisconsin	X		
						WTTW	CHICAGO	Illinois		X	
						WVCY	MILWAUKEE	Wisconsin			
						WVTV	MILWAUKEE	Wisconsin			
16	MARCUS COMMUNICATIONS INC	ONALASKA	CASS	MN	27-021	KMSP	MINNEAPOLIS	Minnesota			
			WINONA	MN	27-169	KQEG-	LA CRESCENT	Minnesota			
			ADAMS	WI	55-001	KSTP	ST PAUL	Minnesota	X		
			BUFFALO	WI	55-011	KTCA	ST PAUL	Minnesota		X	
			JACKSON	WI	55-053	WCCO	MINNEAPOLIS	Minnesota	X		
			LA CROSSE	WI	55-063	WFTC	MINNEAPOLIS	Minnesota			
			MILWAUKEE	WI	55-079	WGN	CHICAGO	Illinois			
			MONROE	WI	55-081	WHLA	LA CROSSE	Wisconsin		X	
			SAINT CROIX	WI	55-109	WLAX	LA CROSSE	Wisconsin			
			WALWORTH	WI	55-127	WXOW	LA CROSSE	Wisconsin	X		
16	CHARTER COMMUNICATIONS VI	BECKLEY	GILES	VA	51-071	WCHS	CHARLESTON	West Virginia	X		
			FAYETTE	WV	54-019	WDBJ	ROANOKE	Virginia	X		
			GREENBRIER	WV	54-025	WDRL	DANVILLE	Virginia			
			MERCER	WV	54-055	WGN	CHICAGO	Illinois			
			MONROE	WV	54-063	WSLS	ROANOKE	Virginia	X		
			RALEIGH	WV	54-081	WVAH	CHARLESTON	West Virginia			
			SUMMERS	WV	54-089						
			WYOMING	WV	54-109						

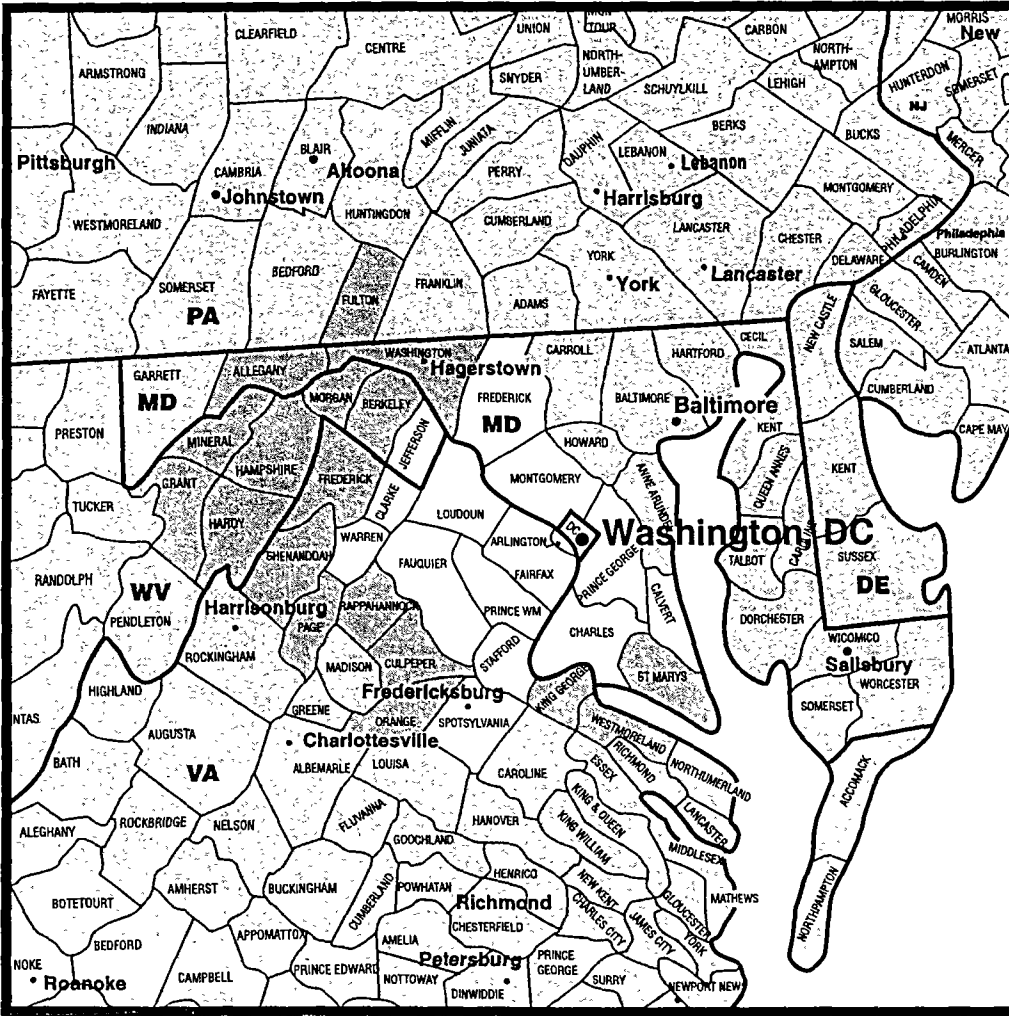
Washington, DC (Hagerstown, MD)  
Local People Meter Service  
December 2005



Nielsen  
Media Research



# Washington, DC (Hagerstown, MD)



## MARKET TYPE

DMA TV Ratings Estimates

## MAP LEGEND

• City Location

— State Line

□ Metro Area

Washington, DC  
(Hagerstown, MD)

Local DMA

Washington, DC  
(Hagerstown, MD)

For NSI County Lists See Table 5

## THE NSI® TECHNIQUE

### INTRODUCTION

NSI techniques and procedures used in compiling the audience estimates in this Viewers in Profile® (VIP®) are described in the Local Reference Supplement. The user should refer to the Supplement for information regarding sample plan, data reported and additional detail on other related topics including those treated briefly below.

The use of mathematical terms to express the audience estimates therein should not be regarded as a representation by Nielsen Media Research that they are exact to the precise mathematical values stated.

### I THIS NSI ANALYSIS PROVIDES THE FOLLOWING AUDIENCE ESTIMATES:

- WEEKLY CUMULATIVE AUDIENCES (NET Reach) - By Daypart**
- DMA Households:** the total number of different TV households reached one or more quarter-hours for the average week and for the 4 weeks of the current measurement period.
- DMA Total Households:** Weekly cumulative audience reported in thousands of households is for the average week for reports in measurement periods exclusive to Local People Meter service.
- Station Total Households:** Weekly cumulative audience reported in thousands of households is for the average week of the all-market measurement period (Nov., Feb., or May) as well as July.
- AVERAGE QUARTER-HOUR AUDIENCES - By Daypart and/or By Quarter-Hour or Half-Hour**
- HUT (Households-Using-Television):** television households in the Metro/DMA that are tuning any station as a percentage of Metro/DMA are TV households.
- PUT (Persons-Using-Television):** persons in television households in the DMA that are viewing any station as a percentage of persons in DMA television households
- Metro/DMA Area Rating:** television households in the Metro/DMA Area tuned to a specific station as a percentage of the Metro/DMA Area TV households. DMA ratings are also shown for selected persons categories.
- Metro/DMA Area Share:** television households in the Metro/DMA Area tuned to a specific station as a percentage of the Metro/DMA Area TV households with a set turned on.
- DMA In-Market Share:** an estimate of the DMA household 4-week share of viewing received by a local commercial station in comparison to the other local commercial stations in the market. This estimate is only reported in the Daypart Section.
- Trend Guide Data:** \* DMA HUT and Shares are provided for the a) Daypart and Time Period Sections where data are based on the same Daypart/Time Period for the indicated measurement periods (see column headings) and b) Program Audience Averages Section where data are recomputed based on the "normal" program time period in the current VIP for the indicated measurement periods (see column headings). Trend Guide data herein are derived from the published production Viewers in Profile® data.
- \*Users are reminded that Trend Guide data are subject to variations due to several factors, such as

sampling error and seasonal variations in television viewing. These factors, as well as other considerations outlined in the Local Reference Supplement, should be recognized in using and comparing data from several measurement periods.

- DMA Total Audience:** total TV households reached, projected to the total universe estimate in the DMA. DMA Total Audience is reported in measurement periods exclusive to Local People Meter service.
  - Station Total Audience:** total U.S. TV households reached.
  - Percent Distribution of Station Total Households:** When Station Total Households are reportable in the Home market they are also shown distributed on a percentage basis between the Home Metro area, the Home DMA and up to three selected adjacent DMAs. Where applicable, ratings are also shown for the adjacent DMAs. These data are reported for all dayparts during all-market measurement periods only.
  - Audience Composition:** in numbers of persons viewing and their distribution by the demographic categories shown, reported in terms of DMA Ratings and/or Projected Total Persons reached.
  - Time Period Section:** Audience estimates are shown (a) as full-cycle averages for the dates shown on the cover and (b) as program time period estimates excluding preemptions. Exclusions due to special events of other unusual circumstances, if any, are listed in the Special Notes Section on page 4. Such "pure" program audience estimates are reported for local sources only.
  - Adjacent Quarter-Hour (1/2 hour) Averages:** The average of data for the current quarter-hour and the previous quarter-hour, reported for each time period break. Shown are DMA household ratings plus Station Totals for households and selected demographic categories.
  - DMA Weekly Ratings:** DMA household audiences reported for each week of the measurement on a program average time period basis.
  - Program Audience Average Section:** A retabulation of the program audiences (excluding preemptions where applicable). For a description of the rules and procedures for averaging audience data for this section, see the Local Reference Supplement.
  - Persons Share Section:** Persons in the DMA tuned to a specific station as a percentage of the DMA Persons-Using-Television (PUT) for this measurement period and three prior periods.
  - TV Households and Persons Trend Section:** Households Using Television (HUT) and Persons Using Television (PUT) are trended for all-market measurement periods for this period and four prior years. Rating and Share data are summarized for local commercial stations.
- To avoid the implication that the reported averages represent normal operating conditions at all times, a section on "Operating Notes" is included showing dates and times of unusual operating conditions as reported by the stations.

### II. AREAS MEASURED

**Metro Area:** the Metro Area is the Metropolitan Statistical Area (MSA) as defined by the Office of (Continued on Inside Back Cover)

Washington, DC (Hagerstown, MD)  
Average Day Sample Characteristics and Fault Rate Report  
For Report Period 12/01/05 through 12/28/05

	Installed Sample Size	Fault Rate	Intab Sample Size	Unwtd Intab Pct	Wtd Intab Pct	UE
<b>Total Persons 2+</b>	1528	16.2	1280			
<b>Child</b>						
C 2-5	94	27.7	68	5.3	5.7	5.7
C 6-11	140	17.1	116	9.0	8.6	8.6
<b>Female</b>						
F 12-17	64	17.2	53	4.1	4.2	4.2
F 18-24	62	19.4	50	3.9	4.4	4.4
F 25-34	115	21.7	90	7.0	7.2	7.2
F 35-49	196	13.3	170	13.3	12.8	12.8
F 50-54	67	14.9	57	4.5	3.9	3.9
F 55-64	95	9.5	86	6.7	5.9	5.9
F 65+	76	10.5	68	5.3	5.9	5.9
<b>Male</b>						
M 12-17	65	21.5	51	4.0	4.4	4.4
M 18-24	66	16.7	55	4.3	4.5	4.5
M 25-34	111	17.1	92	7.2	6.9	6.9
M 35-49	179	14.0	154	12.0	12.0	12.0
M 50-54	56	16.1	47	3.6	3.6	3.6
M 55-64	71	14.1	61	4.8	5.5	5.5
M 65+	70	10.0	63	5.0	4.4	4.4
<b>Household</b>	599	10.9	534			
<b>Cable</b>						
No Cable	198	11.6	175	32.7	30.1	30.2
Cable	400	10.2	359	67.3	69.9	69.8
No ADS	461	10.0	415	77.7	79.7	79.7
ADS	137	13.1	119	22.3	20.3	20.3
<b>Household Size</b>						
1	148	8.8	135	25.3	25.5	25.5
2	192	9.4	174	32.5	31.2	31.2
3-4	194	10.8	173	32.4	32.3	32.3
5+	65	20.0	52	9.8	11.1	11.1
<b>Presence of Non Adults</b>						
None <18	387	8.5	354	66.2	63.9	63.8
Only <12	121	15.7	102	19.2	18.9	19.0
Any 12-17	91	14.3	78	14.6	17.1	17.2
<b>Race</b>						
Black	150	12.0	132	24.8	23.5	23.4
Non-Black	448	10.3	402	75.2	76.5	76.6
Asian	31	9.7	28	5.3	6.5	6.5
Non-Asian	568	10.9	506	94.7	93.5	93.5
<b>Origin</b>						
Hispanic	41	14.6	35	6.5	6.6	6.6
Non-Hispanic	558	10.6	499	93.5	93.4	93.4
<b>Age of Head</b>						
<35	134	16.4	112	21.0	20.5	20.4
35-54	279	9.3	253	47.3	45.6	45.6
55+	186	9.1	169	31.7	33.9	34.0
<b>Geography Weighting Controls</b>						
DIS OF COL	66	10.6	59	11.0	10.4	10.4
MONTGOMERY	90	11.1	80	15.1	15.3	15.3
ARLINGTON	42	9.5	38	7.1	6.5	6.5
FAIRFAX	98	9.2	89	16.6	16.9	16.9
PRINCE GEORGE	77	10.4	69	12.9	13.5	13.5
PRINCE WM	34	5.9	32	6.0	6.2	6.2
County Group (1)	45	11.1	40	7.5	7.6	7.6
County Group (2)	59	8.5	54	10.2	10.4	10.4

County Group (3)	48	14.6	41	7.7	7.1	7.1
County Group (4)	39	15.4	33	6.1	6.2	6.2

County Group 1 = CALVERT, CHARLES, SPOTSYLVANIA, STAFFORD  
 County Group 2 = FREDERICK, CLARKE, FAUQUIER, LOUDOUN, WARREN, JEFFERSON  
 County Group 3 = ALLEGANY, WASHINGTON, FULTON, BERKELEY, GRANT, HAMPSHIRE, HARDY, MINERAL, MORGAN  
 County Group 4 = ST MARYS, CULPEPER, FREDERICK, KING GEORGE, ORANGE, PAGE, RAPPAHANNOCK, SHENANDOAH, WESTMORELAND

Note: Counts may not add to totals due to rounding.

**Persons Fault Rate** is the percentage of the average day installed sample that did not pass set and persons edits.  
**Household Fault Rate** is the percentage of the average day installed sample that did not pass set edits.  
**Unweighted Intab Percent** is the percentage of intab Total Persons 2+ or Households with a designated characteristic, before weighting has been applied.  
**Weighted Intab Percent** is the percentage of intab Total Persons 2+ or Households with a designated characteristic, after weighting has been applied.  
**UE** is the universe percentage of Total Persons 2+ or Households with a designated characteristic.

#### Set and Persons Faulting

Nielsen examines the tuning information collected from each household daily to evaluate its accuracy and completeness. Persons viewing is also evaluated. First, the tuning information is assigned to one of five categories: a) Identified tuning -- tuning where source is identified. b) Unidentified tuning -- tuning where source is unidentified. c) Missing data -- tuning status is unknown. d) Inconsistent data -- inconsistency exists between information collected from the meter and internal database records. e) Unmetered equipment -- new equipment not yet metered. If the level of occurrence of items 'b' and 'c' as a percentage of item 'a' exceeds a specified threshold, the household is not included in the tabulation of household ratings. If there are any occurrences of 'd' and 'e', the household is not included in the tabulation of household ratings. Once the households passing the above criteria are established, the persons viewing information is evaluated.

Persons viewing is assigned to 3 categories: a) Identified audience -- viewing household members or visitors are identified. b) Unidentified audience -- viewing household members or visitors are not identified. c) Inconsistent data -- inconsistencies occur between viewing information collected from the meter and internal database records. If the level of occurrences of 'b' as a percentage of 'a' exceeds a specified threshold, then the household is not included in the tabulation of persons ratings. If there are any occurrences of item 'c', the household is not included in the tabulation of persons ratings.

#### Area Probability Sample Recruitment -- Alternate Household Cooperation

In the event that all reasonable effort fails to secure the cooperation of a Basic household, the Statistical Research Department specifies an Alternate housing unit to be recruited. In Area Probability (AP) samples, all available Alternate specifications are released for recruitment in the order presented by the Statistical Research Department. An AP sample Alternate household must match the Basic Household with respect to presence of children and ability to receive cable channels. If the presence of children and/or cable/ADS subscription cannot be ascertained for the Basic household, it is ascribed by the Statistical Research Department. Ascription of the Basic's status is performed independently for cable and children, by comparing a random number to the estimated ZIP code penetration of homes with cable (or Census block group penetration of homes with children). Ascription for cable and/or children typically occurs for approximately 6.7% of all Basics for the Washington DC market.

#### Household and Persons Weighting

Household and Persons weighting is used to compensate for differences between the distribution of the intab sample and that of the universe estimates. For a more detailed description of the household weighting process, please refer to Section IX. Sample Weighting, C.1 Weighting Procedures -- Household Weights, in the Local Reference Supplement. A description of the demographic weighting process for Local People Meter sample can be found in Section IX. Sample Weighting, C.2 Weighting Procedures -- Persons Weights, in the Local Reference Supplement.

#### Technically Difficult Homes

For the period April 2005 through September 2005, in the Washington DC NSI market, 30 unique specs had a household that was determined to be Technically Difficult, of which 14 specs had a basic that was determined to be Technically Difficult. During this sampling period, 207 specs were installed, of which 77 were basic.



.....  
\*  
\* SPECIAL NOTICE - SHARE TREND DATA  
\*  
\* The user is advised that Share Trend data reported in all sections\*  
\* of this analysis for measurements prior to July 2005 represent \*  
\* viewing estimates from the Washington, DC Set Meter / Diary \*  
\* service. Share Trend data reported for all measurements effective\*  
\* July 2005 represent viewing estimates from the Washington, DC \*  
\* Local People Meter service. \*  
\*  
\* Please contact your Nielsen Media Research Representative for \*  
\* additional details. \*  
\*  
\*.....

SPECIAL NOTICE

The metered household sample for this DMA is an area probability sample of housing units, with annual updates of new construction. The sample housing units are based on 1990 and 2000 census data, with full conversion to 2000 census data in progress.

For additional details, please see the Local Reference Supplement or contact your Nielsen Media Research representative

SPECIAL NOTICE

As part of its continuing Quality Improvement plan for Local People Meter samples, Nielsen Media Research continually refines recruitment procedures, including incentive structures, for newly recruited and installed households in the NSI Local People Meter panels. The objective of these refinements is to further improve cooperation and sample representation.

Please contact your Nielsen Media Research Representative for additional details

SPECIAL NOTICE

The users of this analysis are advised that, effective December 26, 2005, Nielsen Media Research implemented DVR measurement (i.e. timeshifted viewing) in Local People Meter markets. The Printed rating book and accompanying electronic data files for this analysis are based on 'Live Only' audience estimates for the data of December 1 thru 25, 2005. The data of December 26 thru 28, 2005 is based on 'Live Plus'

Please see the Client Communication dated December 22, 2005 (Update on Nielsen's Timeshifting Measurement Plan for Local People Meter Markets), also available on the NSI client web site, or contact your Nielsen Media Research representative for additional details

MARKET DATA

WASHINGTON, DC (HAGERSTOWN, MD)  
DMA RANK # 8

DECEMBER 1 - DECEMBER 28, 2005

TABLE 1 - UNIVERSE ESTIMATES - JAN. 2006

AREA	TOTAL HOUSEHOLDS	TV HOUSEHOLDS	TV HOUSEHOLDS BY COUNTY SIZE †			
			A	B	C	D
METRO	1,980,600	1,951,420				
DMA	2,288,800	2,252,550	2,063,760		110,800	77,990
%		100	92		5	3
NSI	2,288,800	2,252,550	2,063,760		110,800	77,990
%		100	92		5	3

TOTAL HOUSEHOLDS are estimates produced by Market Statistics, a division of Claritas, Inc., and are copyrighted by them. They are the base against which television penetration estimates have been applied.

TELEVISION OWNERSHIP PERCENTS are Nielsen Media Research estimates based on combining historical projections from the 1960 and 1970 Censuses with estimates from the NSI telephone interviews from a number of all market measurement periods.

HOUSEHOLDS ARE OCCUPIED HOUSING UNITS. The household universe estimates shown in Table 1 are estimates of year-round households, i.e., housing units occupied year round. Seasonal housing units which are occupied only during certain seasons of the year are not included in the Household Universe Estimates. Thus, the number of households during the survey period may differ from the estimate in Table 1.

† See Local Reference Supplement for definition of county size L† Less than 1%

TABLE 2 - PENETRATION ESTIMATES

AREA	PERCENT OF TV HOUSEHOLDS						
	BLACK %	HISPANIC %	MULTI-SET %	VCR %	CABLE TV %	ADS %	CABLE PLUS %
METRO	26.1	7.4	78	89	72		
DMA	23.4	6.6	78	89	70	20	90
WASHINGTON	54.7	7.5	NA	NA	NA	NA	NA
HAGERSTOWN	8.9	1.3	NA	NA	NA	NA	NA

Multi-set estimates are based on the metered sample. Multi-set, Cable TV, VCR, ADS and Cable Plus estimates are based on the latest available data. Black and Hispanic estimates are as of January 1, 2006. Cable Plus is defined as the presence of Cable and/or Alternate Delivery System (ADS). See Local Reference Supplement for detail.

TABLE 3 - SAMPLE SIZES: HOUSEHOLDS

AREA	METER SAMPLE IN-TAB AVG.	DIARY SAMPLE					
		INITIALLY DESIGNATED HOUSEHOLDS			IN-TAB DIARY HOUSEHOLDS		
		LISTED	UNLISTED	TOTAL	LISTED	UNLISTED	TOTAL
METRO	461						Data not applicable
DMA(INCL METRO)	534						
NON-DMA	—						
NSI(INCL DMA)	534						

For sample selection procedures in Area Probability markets, see Local Reference Supplement Addendum for Local People Meter.

TABLE 4 - TELEVISION STATIONS

CITY OF ORIGIN	STATION	CHANNEL	AFFILIATION
WASHINGTON	*WBDC	50	WB
WASHINGTON	*WDCB	20	UPN
WASHINGTON	*WETA	26	PBS
ARLINGTON	WFDC (L)	14	TF
HAGERSTOWN	WHAG (L)	25	NBC
WASHINGTON	WHUT (L)	32	FBS
WASHINGTON	*WJLA	7	ABC
WASHINGTON	*WMDO	47	UNI
FALLS CHURCH	WVVC (L)	58	IND
MANASSAS	*WPXW+ (L)	68	FAX
MARTINSBURG	*WPX (L)	60	SATELLITE OF WPXW
WASHINGTON	*WRC	4	NBC
WASHINGTON	*WTTG	5	FOX
WASHINGTON	*WUSA	9	CBS
HAGERSTOWN	*WVPC (L)	31	PBS
FREDERICK	WVPC (L)	62	SATELLITE OF WWPB
OAKLAND	WGPT (L)	36	SATELLITE OF WWPB
CABLE	AEN (D)		
CABLE	ANC (D)		
CABLE	APL (D)		
CABLE	BET (D)		
CABLE	BRVO (D)		
CABLE	CHD (D)		
CABLE	CHT (D)		
CABLE	CHN (D)		
CABLE	CRT (D)		
CABLE	CSNM (D)		
CABLE	DHLT (D)		
CABLE	DSC (D)		
CABLE	ENT (D)		
CABLE	ESPN (D)		
CABLE	ESK (D)		
CABLE	FAM (D)		
CABLE	FOOD (D)		
CABLE	FX (D)		
CABLE	FXXC (D)		
CABLE	HALL (D)		
CABLE	HBOM (D)		
CABLE	HGTV (D)		
CABLE	HIS (D)		
CABLE	HLN (D)		
CABLE	LIF (D)		
SPRINGFIELD	LNCH (D)		
CABLE	MNBC (D)		
CABLE	MTV (D)		
CABLE	NAN (D)		
CABLE	NICK (D)		
CABLE	SFT (D)		
CABLE	SPK (D)		
CABLE	TBSC (D)		
CABLE	TDM (D)		
CABLE	TLC (D)		
CABLE	TNT (D)		
CABLE	TOON (D)		
CABLE	TRAV (D)		
CABLE	TVGC (D)		
CABLE	TVL (D)		
CABLE	TWC (D)		
CABLE	USA (D)		
CABLE	VHT (D)		
ANNAPOLIS	*WMPT (D)	22	PBS

(L) THIS LOCAL STATION IS REPORTABLE IN THE DAYPART SECTION ONLY  
(D) THIS OUTSIDE STATION IS REPORTABLE IN THE DAYPART SECTION ONLY

IN ADDITION TO THE REPORTABLE STATIONS SHOWN ABOVE THE FOLLOWING STATIONS ORIGINATE IN OR ARE ASSIGNED FOR REPORTING PURPOSES TO THIS MARKET BUT DID NOT MEET THE MINIMUM REPORTING STANDARDS (SEE REPORTING STANDARDS, INSIDE BACK COVER)

HAGERSTOWN	WJAL	68	IND
GOLDVEIN	WVVT	53	IND

WMDO IS LPTV STATION WMDO-CA

\* = Nielsen Media Research client

Network affiliation as shown herein is based on information supplied by the networks for use in Nielsen Television Index (NTI). For additional details, see the Local Reference Supplement.

TABLE 5 - TV HOUSEHOLDS BY SAMPLING AREA

COUNTY & STATE	EST. TV	CABLE TV	CNTY
	HHLDS	HHLDS %	
	JAN. 2006	NOV 2005	SIZE†
MD DIS OF COL DC	233,560	73	A
D ALLEGANY MD	28,460	83	C
MD CALVERT MD	30,720	76	A
MD CHARLES MD	49,540	72	A
MD FREDERICK MD	80,780	77	A
MD MONTGOMERY MD	343,860	78	A
MD PRINCE GEORGE MD	303,620	67	C
D ST MARYS MD	24,720	60	A
D WASHINGTON MD	53,330	80	A
D FULTON PA	5,890	33	D
MD ARLINGTON VA	148,180	80	A
MD CLARKE VA	5,870	35	A
D CULPEPER VA	14,870	44	A
MD FAIRFAX VA	380,120	73	A
MD FAUQUIER VA	23,320	38	A
D FREDERICK VA	38,930	62	C
D KING GEORGE VA	7,380	40	A
MD LOUDOUN VA	92,860	50	A
D ORANGE VA	11,840	42	D
D PAGE VA	9,700	37	D
MD PRINCE WM VA	139,200	73	A
D RAPPAHANNOCK VA	2,680	19	D
D SHENANDOAH VA	16,120	40	A
MD SPOTSYLVANIA VA	50,830	73	A
MD STAFFORD VA	39,480	78	A
MD WARREN VA	13,080	67	A
D WESTMORELAND VA	6,700	47	D
D BERKELEY WV	36,780	65	D
D GRANT WV	4,750	16	D
D HAMPSHIRE WV	6,600	32	D
D HARDY WV	5,470	25	D
MD JEFFERSON WV	19,010	63	A
D MINERAL WV	10,590	61	C
D MORGAN WV	6,440	33	D
METRO TOTAL	1,951,420	72	
DMA TOTAL	2,252,550	70	

TABLE 6 - SAMPLE SIZES: PERSONS IN-TAB SAMPLE CHARACTERISTICS BY REPORTED BREAKS

	(1)	(2)	(3)	(4)	(5)
	AVG. DAY	WEIGHTING		PER-	TOTAL U.S.
	IN-TAB	EFFECT ON	UNIV.	SONS/	PERSONS/
	SAMPLE	STANDARD	EST.	100 TV	100 TV
	SIZE	ERROR	(000)	HHLDS	HHLDS
DESIGNATED MARKET AREA					
TOTAL TV HOUSEHOLDS	534	1.01	2253		
TOTAL PERSONS (2+)	1280	1.02	5742	255	254
TOTAL PERSONS (18+)	992	1.02	4429	197	195
TOTAL PERSONS (12-24)	208	1.02	1008	45	49
TOTAL PERSONS (12-34)	390	1.02	1817	81	83
TOTAL PERSONS (18-34)	286	1.02	1324	59	60
TOTAL PERSONS (18-49)	810	1.02	2753	122	118
TOTAL PERSONS (21-49)	583	1.02	2535	113	108
TOTAL PERSONS (25-54)	810	1.02	2870	119	110
TOTAL PERSONS (35+)	708	1.02	3105	138	135
TOTAL PERSONS (35-64)	575	1.02	2513	112	103
TOTAL PERSONS (50+)	382	1.02	1676	74	77
WOMEN: TOTAL (18+)	521	1.02	2305	102	101
12-24	103	1.02	493	22	24
18-34	139	1.02	666	30	30
18-49	310	1.02	1403	62	60
21-49	288	1.02	1297	58	54
25-49	260	1.01	1151	51	47
25-54	317	1.02	1376	61	56
25-64	403	1.02	1716	76	70
50+	211	1.02	902	40	41
WORKING WOMEN #	315	1.01	1232	55	47
MEN: TOTAL (18+)	472	1.02	2124	94	94
18-34	147	1.02	658	29	30
18-49	300	1.02	1350	60	58
21-49	280	1.02	1238	55	52
25-49	246	1.01	1088	48	45
25-54	293	1.01	1294	57	67
25-64	354	1.02	1607	71	67
TEENS: TOTAL (12-17)	104	1.01	493	22	23
GIRLS	53	1.01	241	11	11
CHILDREN: TOTAL (2-11)	183	1.01	821	36	36
6-11	116	1.01	496	22	22
METRO AREA					
TOTAL TV HOUSEHOLDS	461	1.01	1951		
DMA TV HOUSEHOLDS BY WEEK					
1	526	1.01			
2	530	1.01			
3	535	1.01			
4	548	1.01			
DMA GROUP QUARTERS RESIDENTS *					
TOTAL			121		
COLLEGE DORMITORY (18-24)			34		
* GENERALLY EXCLUDED FROM PERSONS PROJECTIONS.					
SEE LOCAL REFERENCE SUPPLEMENT					

# 30 or more hours per week.

Initially, approximately 52% of the predesignated Washington DMA basic people meter sample households are recruited and installed

TABLE 7 - MINIMUM REPORTING STANDARDS & RELATED

See Local Reference Supplement Addendum for Local People Meter Reporting Standards Reference section Minimum Reporting Standards

M = Metro County; D = Designated Market Area County (for definition, see Section II)  
† See Local Reference Supplement for explanation of County Size

MARKET DATA (CONT'D)

TABLE 8 - STANDARD ERROR INFORMATION

Procedures for deriving standard error estimates are available in the NSI Local People Meter Standard Error Report.

TABLE 9 - MEASUREMENT SCHEDULE

MEASMT	DATES	NO. OF MKTS.	MEASMT	DATES	NO. OF MKTS.
†*OCT, 2005	9/29-10/26	25	†*APR., 2006	4/6-4/26	LPM ONLY
†*NOV, 2005	11/3-11/30	ALL	†*MAY, 2006	4/27-5/24	ALL
†*DEC, 2005	12/1-12/28	LPM ONLY	†*JUN., 2006	6/1-6/28	LPM ONLY
†*JAN, 2006	1/5-2/1	18	†*JUL, 2006	6/29-7/26	ALL DMA
†*FEB, 2006	2/2-3/1	ALL	†*AUG., 2006	7/27-8/23	LPM ONLY
†*MAR, 2006	3/2-3/29	9	†*SEP., 2006	8/24-9/20	LPM ONLY

\* Indicates analysis for this market.

† Indicates week-by-week ratings for this market.

TABLE 10 - FOOTNOTES

LT	Less than the lowest reported percent.
NOR	"Normal" average P A data See Local Reference Supplement
NA	Data Not Available.
NR	Station Not Reportable.
OFF	All quarter-hours of time period for this week were Off-Air.
Δ	First or second quarter-hour excluded from average; Off-Air.
√	Indicates week(s) of telecast in markets where no weekly ratings are reported
*	Totals include only stations reportable in this market (including satellites/affiliates, if any) HUT/PUT in the Metro/DMA includes all viewing to reportable and non-reportable stations.
**	See Quarter-Hour/Half-Hour detail.
↑	(P A) Program starts earlier than printed time. (See Program Index).
↓	(P A) Program starts later than printed time. (See Program Index)
<	Data Withheld. In-tab sample size in area measured is below minimum standard for publication See Table 7 and Section III
<<	Below Minimum Audience Standards
--	Special Event deleted
#	Multi-Week Average including Other Programming or technical difficulties
X	Previous measurement programming same as current measurement
+	Audience Estimates shown for parent station plus satellites/affiliates.
±	Programming carried by satellites/affiliates is known to differ from programming of a parent station, including satellite Off-Air periods
→	Start time for cross-reference to P A section

TABLE 11 - STATION OPERATING NOTES

For the measurement period covered by this analysis, the following station operation 'interruptions' were reported by stations originating in this market. Please consult the stations for further details.

Minimum Number of Minutes for Inclusion: Two cumulative minutes or more within a quarter-hour or two continuous minutes or more spanning two quarter-hours

Type of Interruption	
A Off the air	G Satellite station(s) difficulty*
B Programming can only be viewed via cable*	H Cable system(s) difficulty*
C Loss of or corrupted video*	I Translator(s) difficulty (No Retting)
D Loss of or corrupted audio*	J Direct Broadcast Satellite difficulty
E Power reduced by 50% or more*	K Other - See notes*
F Loss of program feed*	

\*Station has the option to exclude affected telecast(s) from the averages as defined in the Local Reference Supplement

STATION	DAY	DATE	TIME SPAN	TYPE-INTER
WPXW	MON	12/12/05	01:05AM-02:45AM	A
WPXW	THU	12/15/05	05:57AM-06 17AM	E
WUSA	SAT	12/24/05	01:00PM-01:30PM	F

MARKET DATA (CONT'D)

TABLE 12 - SAMPLE PERFORMANCE INDICATOR

	Basics	Alternates	Total
HH'S In-Tab (providing both usable set tuning & persons data)	240	276	516
HH'S Failing Set Edits Only	31	34	65
HH'S Failing People Edits	10	8	18
HH'S Online	281	318	599
HH'S Suspended (NG > 60 DAYS)			0
HH'S Waiting For Two Good Days			6
Specifications Issued Not Yet Installed			119
Dormant Sample Points			44
Total Specifications Issued to Field			767
Uninstallable Sample Points			5
Total Sample Points			772
People Meter Sample Performance Indicator*			33.2%
Average Eligible Alternate Installed			6.2
Median Eligible Alternate Installed			4.0

\* The Sample Performance Indicator is equal to (unrounded basics in-tab) divided by (unrounded, total sample points minus dormant and uninstalleable specifications).

Note: Counts may not add to the totals due to rounding.

TABLE 13 - DMA DIARY IMPUTATION

Table not applicable in this market

WHAT MRC ACCREDITATION MEANS

The Nielsen Station Index and Metered Market Services have been accredited by the Media Rating Council since 1965. To merit continued MRC accreditation Nielsen Media Research, Inc. (1) adheres to the Council's Minimum Standards for Media Research, (2) supplies full information to the MRC or its auditors regarding all details of its operations, (3) conducts its measurement services substantially in accordance with representations to the subscribers and the Council and (4) submits to and pays the cost of thorough on-going audits of the Nielsen Station Index and Metered Market operations by CPA firms engaged by the MRC. In addition to sizable annual audit charges, Nielsen Media Research, Inc. provides office and file space for MRC auditors as well as considerable staff and computer time involved in various aspects of these inspections.

Further information about the MRC's accreditation and auditing procedures can be obtained from Executive Director, Media Rating Council, 370 Lexington Avenue-Suite 902, New York, NY 10017.

George Ives  
Executive Director  
Media Rating Council

TABLE 14 - DMA CABLE ADVERTISING INFORMATION

Local Cable Interconnects & MSO Clusters:

Interconnect/ MSO Cluster Name	Interconnect/ MSO Cluster DMA U.E.	% of Wired Cable DMA HH U.E.	% of Total DMA HH U.E.
COMCAST SPOTLIGHT-WASH DC	1,439,960	91.5%	63.9%
TOTAL DMA CABLE HH UNIVERSE ESTIMATE	1,572,990	100%	69.8%

Information has been gathered from the cable systems and interconnects whenever possible. MSO clusters and interconnects are assigned to a primary DMA. Only MSO clusters and interconnects assigned to this DMA and meeting a 15% minimum DMA TV HH threshold are listed above. Universe Estimates are based on the prior 8 sweeps of a diary sample, where the headends used are based on current interconnect to headend definitions. The estimates are drawn to a DMA line basis and calculated using the Cable TV HH Universe Estimate. Total universe estimates for an interconnect or MSO cluster may exceed what is reported above for the DMA. A "cluster" is defined as a group of an MSO's systems consolidated within a DMA for the purpose of selling advertising. A cluster can include systems owned and operated by another cable operator but represented for ad sales by the dominant MSO in the cluster. It is possible that a headend could be part of multiple interconnects or clusters in a market resulting in percentages that exceed 100%.

SPECIAL NOTES

TO OUR CLIENTS:

WE CALL YOUR ATTENTION TO THE 'PERMISSIBLE USES' OUTLINED ON THE INSIDE BACK COVER OF THIS VIEWERS IN PROFILE ANALYSIS. ANY UNAUTHORIZED USE OF THIS ANALYSIS OR USE OF ITS CONTENTS BY A NON-CLIENT IS A COPYRIGHT VIOLATION WHICH MAY, UNDER FEDERAL COPYRIGHT LAW, SUBJECT THE VIOLATOR TO CRIMINAL PENALTIES OF IMPRISONMENT FOR ONE YEAR AND A \$10,000 FINE AND CIVIL DAMAGES OF \$50,000. WE ASK YOUR COOPERATION IN PROTECTING YOUR INVESTMENT IN THE LEGITIMATE USE OF THESE DATA. THANK YOU.

SPECIAL NOTICE

DATA REPORTED FOR A SPECIFIC CABLE NETWORK OR OTHER INDIVIDUAL LOCAL VIEWING SOURCES MAY REFLECT TUNING AND/OR VIEWING ACROSS ALL HARDWIRED CABLE SYSTEMS AND/OR ALTERNATIVE DELIVERY SOURCES, INCLUDING SATELLITE (DBS/DSS, C-BAND OR KU-BAND) OR WIRELESS CABLE (SMATV & MMDS), WHICH COULD CARRY THAT SPECIFIC CABLE NETWORK OR OUT-OF-MARKET BROADCAST NETWORK FEED.

THE USER OF THESE REPORTED RATINGS DATA CONTAINED IN THIS ANALYSIS IS REMINDED THAT THE DATA, AS REPORTED, THEREFORE MAY NOT REPRESENT TUNING AND/OR VIEWING TO ANY ONE LOCAL CABLE SYSTEM(S) OR INTERCONNECTS(S) AND MAY INCLUDE TUNING AND/OR VIEWING VIA SATELLITE OR OTHER ALTERNATIVE DELIVERY SYSTEM TO SPECIFIC CABLE NETWORKS AND/OR OUT-OF-MARKET BROADCAST NETWORK FEEDS. IN ADDITION, TO THE EXTENT THAT REPORTED VIEWING INCLUDES HOUSEHOLDS VIEWING VIA SATELLITE (DBS/DSS, C-BAND OR KU-BAND), THOSE HOUSEHOLDS MAY NOT RECEIVE THE SAME LOCAL COMMERCIAL CONTENT AS HOUSEHOLDS WHICH VIEW THE SAME PROGRAMMING VIA CABLE SYSTEMS OR OVER THE AIR.

In this analysis, the audiences for Public Broadcast stations WWPB-TV, WFPT-TV, and WGPT-TV are summed together for reporting purposes. When the sum total viewing to the three stations meets minimum reporting standards their data are shown as WWPB+ WGPT-TV is reported separately in the Pittsburgh analysis. Audience data for the individual stations are available via Special Analysis. Contact your NSI representative.

COMBINED FACILITIES IN THIS ANALYSIS

WPXW-TV, Channel 66, Manassas, VA and its Total satellite WWPX-TV, Channel 60, Martinsburg, WV are reported herein as WPXW+.

Users are reminded that the combination line DMA viewing estimates are for the parent and satellite station(s) from within the DMA. Where the program carried by satellite station(s) is known to differ from the programming of the parent station, such instances are identified by a not equal symbol at the end of the reported program name in the Time Period, Program Audience Averages and Program Ind sections. For a complete description of NSI policies covering estimates for combined station facilities, please see the NSI Reference Supplement.

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* . . . . .
*
* SPECIAL NOTICE - SHARE TREND DATA
*
* The user is advised that Share Trend data reported in all sections
* of this analysis for measurements prior to July 2005 represent
* viewing estimates from the Washington, DC Set Meter / Diary
* service. Share Trend data reported for all measurements effective
* July 2005 represent viewing estimates from the Washington, DC
* Local People Meter service.
*
* Please contact your Nielsen Media Research Representative for
* additional details.
*
* . . . . .

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SPECIAL NOTICE

The metered household sample for this DMA is an area probability sample of housing units, with annual updates of new construction. The sample housing units are based on 1990 and 2000 census data, with full conversion to 2000 census data in progress.

For additional details, please see the Local Reference Supplement or contact your Nielsen Media Research representative.

SPECIAL NOTICE

As part of its continuing Quality Improvement plan for Local People Meter samples, Nielsen Media Research continually refines recruitment procedures, including incentive structures, for newly recruited and installed households in the NSI Local People Meter panels. The objective of these refinements is to further improve cooperation and sample representation.

Please contact your Nielsen Media Research Representative for additional details.

SPECIAL NOTICE

The users of this analysis are advised that, effective December 26, 2005, Nielsen Media Research implemented DVR measurement (i.e. timeshifted viewing) in Local People Meter markets. The Printed rating book and accompanying electronic data files for this analysis are based on 'Live Only' audience estimates for the data of December 1 thru 25, 2005. The data of December 26 thru 28, 2005 is based on 'Live Plus'.

Please see the Client Communication dated December 22, 2005 (Update on Nielsen's Timeshifting Measurement Plan for Local People Meter Markets), also available on the NSI client web site, or contact your Nielsen Media Research representative for additional details.

PROGRAM AVERAGES

Main data table with columns for METRO HH, STATION, DAY, PROGRAM, DMA HOUSEHOLD, PERSONS, WOMEN, MEN, TNS, CHILD. Includes program listings for WBDC, WUCA, WETA, WJLA, WMDO, WRC, WTTG, and WUSA.

See Program Index for complete details of program start time, duration and weeks of telecast.





Management and Budget to county line basis to include counties having over 50% of their population in the Metro Area. In the absence of an established Metro Area, or where in Nielsen Media Research's judgment a Metro Area may not represent the TV market(s) served by a group of TV stations, a group of counties may be substituted to serve this purpose. Such an area is titled **Central Area** and is so delineated on the market map. For text purposes, the terms Metro and Central are interchangeable.

- A. Designated Market Area (DMA) county assignments are made as follows:**  
In general, for an NSI market to qualify for, or retain, a DMA, all counties combined in the Metro/Central Area(s) must meet either of the following conditions: (1) the commercial stations assigned to the NSI market must achieve the largest share of the 7 AM to 1 AM average quarter-hour household audience in the Metro/Central area, or (2) one commercial station in the Metro/Central area must achieve a larger share of the 7 AM to 1 AM average quarter-hour household audience than any commercial station outside the market. In the absence of a Metro/Central area, the home county(s) of the commercial station(s) in the NSI market will be treated as a Metro/Central area.
- B. All other counties including Metro/Central counties not qualifying under "A" above, will remain in the current DMA if the commercial stations in that market achieve the largest average quarter-hour audience share, 7 AM to 1 AM.**
- C. Each county (or sub-county) is assigned to one and only one DMA.**
- D. County assignments are reviewed and updated annually each spring based on information from the four previous sweeps periods.**

**NSI Area:** comprises the Metro Area (if any) and additional sampling areas targeted typically to include, per Nielsen Media Research estimates, approximately 95% of the average quarter-hour U.S. audiences to stations reportable and assigned as local to the NSI market. In general, NSI Area assessments are made each spring, based on information accumulated to date. Based on these assessments, NSI Areas are either verified or modified for subsequent measurements. In this manner, NSI is able to reflect audience changes, which may have resulted from changes in antenna, channel, power, programming and the like.

**Station Total Area:** during the three all-market measurement periods, plus the July measurement period, station total audiences are based on viewing data obtained from both within and outside a station's NSI Area regardless of location within the continental U.S. Although the sampling areas specified for a market's NSI Area typically account for virtually 95% or more of the average quarter-hour audience to a station, viewing outside the NSI Area is also added to each station's total audience. See the Local Reference Supplement for the procedure used to obtain station total audience for other measurement periods.

A more complete discussion of areas measured will be found in the Local Reference Supplement.

### III. SAMPLING METHODS

Local People Meter households are used to provide in-home tuning and viewing to television programs. Some of the selected households will also be used for the national NTI service. Households that are assigned to both the NSI and NTI samples are referred to as "combo" households.

For additional details see the Local Reference Supplement.

### IV. MEASUREMENT METHODS

Each TV set is associated with a Nielsen People Meter that consists of an on-set unit and a remote control unit. Each member of the household is assigned buttons (one on the set-top unit and a corresponding one on the remote control) that he/she can use to enter viewing status. Demographic information is collected from visitors to the metered household who view TV.

The name, age, and gender of each household member, as well as other demographic information on the household, is collected by periodic personal interviews conducted by Nielsen Media Research. The name of each household member is indicated above his/her People Meter button assigned by the Field Representative.

For additional information on the measurement technique, see the Local Reference Supplement.

### V. REPORTING STANDARDS

**Station Reportability:** In order to be reportable, a station originating in and/or assigned as "local" to the DMA of this market must deliver a DMA household come audience in the Sunday-Saturday 7AM to 1AM daypart, equal to or greater than 9.5% to be reported in all sections of this analysis. If the DMA household come audience is at least 2.5% but less than 9.5%, the station is reportable in the Daypart Section and the Daypart portion of the Persons Shares Section only.

Stations originating outside the local DMA are reported:

(a) In only the Daypart Section and Daypart portion of the Persons Shares Section if they achieve a Sunday-Saturday, 7AM to 1AM DMA household come audience of at least 9.5% but less than 49.5%.

(b) In the Daypart, Time Period, and Persons Shares Sections if they achieve a Sunday-Saturday 7AM-1AM DMA household come audience greater than or equal to 49.5%.

Cable program sources originating outside the local DMA are reported in the Daypart Section and Daypart portion of the Persons Shares Section if they achieve a Sunday-Saturday 7AM-1AM DMA household come audience of at least 9.5%.

**Households:** The minimum standards for DMA household ratings (before rounding) are shown in the Minimum Reporting Standards section of the Local Reference Supplement.

The symbol << is used to indicate levels below minimum audience reporting standards and to avoid the connotation of zero audiences. Station Total households estimates are reported for those periods of time in which the DMA rating for the station meets minimum reporting standards. All data should be used in recognition of the related sampling error. Section VI provides additional comment on the sampling and non-sampling errors. Tabulations from the viewing records yield "zero audiences" for some audience composition categories. Such "blanks" should not be interpreted as connotation of zero audience levels in the universe.

### VI. STATISTICAL INTERPRETATIONS AND RELATED

#### A. STANDARD ERRORS:

Since the audience estimates in this VIP are obtained from a sample, they may differ from estimates based on a complete census of TV households in the same sampling frame and using the same methodology. The audience estimates are also subject to non-sampling variability. See item B. Standard error is a measure of sampling variability for a probability sample. The achieved sample is not a perfect probability sample primarily because some households do not cooperate. Procedures for deriving standard error estimates for Local People Meter samples are available in the NSI Local People Meter Standard Error Report.

To meet the various needs of users, it is necessary to provide audience estimates for small units, such as small age/gender categories, small geographic areas and for one, two or three week periods. Even though such estimates may be subject to large relative errors, providing such estimates enables the user to combine them in various ways such that the composite estimate may have smaller relative errors.

Even estimates with large relative errors can be useful if only very large differences are of concern. Not providing such information would result in withholding information that might be useful by itself or in combination with additional information.

The standard error estimates published in the NSI Local People Meter Standard Error Report describe the limitation of the audience estimates as clearly as possible without burdening every user with vast detail.

The responsibility for the use of information based on samples, including judging the magnitude of errors and recognizing situations where differences are of no statistical significance, lies with the user of such information.

#### B. REMINDERS:

##### General

Data in this VIP are also subject to qualifications other than the statistical tolerances arising from the use of sampling. For example, the accuracy of these data may be affected by: (1) the quality of sampling materials and sampling techniques that yield the sample design; (2) the inability to secure cooperation from all households in the predesignated sample or the failure of the cooperating household to provide usable data, sometimes referred to as non-response error; (3) accuracy in the reporting of a) viewing and/or b) the characteristics of the household or individual, sometimes referred to as a response error; (4) techniques that permit inspection and rejection of faulty information from the sample, quality of data processing, inspection of final tabulations, and similar production techniques illustrative of and sometimes categorized as administrative accuracy safeguards. Therefore, non-sampling errors cannot be warranted to be absent.

### VII. PERMISSIBLE USES OF THIS ANALYSIS

EACH CLIENT IS LEGALLY OBLIGATED - BY CONTRACT - NOT TO LEND THIS ANALYSIS OR COPY ANY SUBSTANTIAL PORTION THEREOF OR OTHERWISE DIVULGE THE CONTENTS, EXCEPT AS SUMMARIZED BELOW. This analysis is furnished pursuant to Client's employment of Nielsen Media Research to secure these data for the Client's confidential use and is furnished on the basis of Client's representation that it has a continuing legitimate business interest in the subject matter herein and on Client's agreement that the divulgence of the contents will be limited as follows:

#### Advertiser Clients:

- To Client's own organization - including sales representatives.
- To Client's own Advertising Agencies, active or prospective, provided that the data will not be used for time-buying purposes or otherwise except only for serving the Client.
- To Stations contracting for this service.
- To Program Producers and Artists serving or negotiating with Client's organization.

#### Advertising Agency Clients:

- To Client's own organization.
- To Client's clients and prospective clients excluding stations who are non-clients to this service.
- To Program Producers and Artists serving or negotiating with Client's organization.
- In connection with time-buying, to stations contracting for this service.

#### Station Clients, Station Representative, Producers and Other Clients:

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DECEMBER 2005							
S	M	T	W	T	F	S	
27	28	29	30	1	2	3	WK 1
4	5	6	7	8	9	10	WK 2
11	12	13	14	15	16	17	WK 3
18	19	20	21	22	23	24	WK 4
25	26	27	28	29	30	31	

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FINAL 2004 MPAА Sample

SP Exhibit 38

Station Code	Call Letters	Channel	State/Prov.	City Name	Period 1 Subscribers	Period 2 Subscribers	Average Subscribers	Weight
5066	WGN	9	IL,	CHICAGO	34,257,201	36,463,402	35,360,302	1.000
5014	WPIX	11	NY,	NEW YORK	1,627,910	1,500,304	1,564,107	1.000
5612	CBUT	2	BC,	VANCOUVER	982,317	997,431	989,874	1.000
5040	KTLA	5	CA,	LOS ANGELES	562,773	532,487	547,630	1.000
5013	WNBC	4	NY,	NEW YORK	532,392	537,054	534,723	1.000
5766	WPHL	17	PA,	PHILADELPHIA	458,975	520,781	489,878	1.000
5680	WNET	13	NY,	NYC-NEWARK	417,429	491,496	454,463	1.000
5926	WUAB	43	OH,	LORAIN	441,644	438,118	439,881	1.000
5016	WWOR	9	NJ,	SECAUCUS	417,306	416,431	416,869	1.000
6945	KTNC	42	CA,	CONCORD	410,983	380,482	395,733	1.000
5883	WGBX	44	MA,	BOSTON	388,692	384,185	386,439	1.000
6813	WPSG	57	PA,	PHILADELPHIA	346,984	413,236	380,110	1.000
5857	WHA	21	WI,	MADISON	361,933	358,808	360,371	1.000
5276	CBET	9	ON,	WINDSOR	349,388	366,884	358,136	1.000
5839	WSEE	35	PA,	ERIE	352,937	350,073	351,505	1.000
5900	WSBK	38	MA,	BOSTON	390,097	303,875	346,986	1.000
5558	CKSH	9	QU,	SHERBROOKE	360,332	325,690	343,011	1.000
5906	WKBD	50	MI,	DETROIT	323,571	341,332	332,452	1.000
5201	WKRN	2	TN,	NASHVILLE	330,345	323,367	326,856	1.000
5759	WTFX	29	PA,	PHILADELPHIA	266,329	338,387	302,358	1.000
5623	KERA	13	TX,	DALLAS	320,853	278,049	299,451	1.000
5761	KCET	28	CA,	LOS ANGELES	288,354	262,849	275,602	1.000
5345	WTTW	11	IL,	CHICAGO	270,631	246,087	258,359	1.000
5314	WGBH	2	MA,	BOSTON	261,654	242,458	252,056	1.000
5025	KGO	7	CA,	SAN FRANCISCO	251,159	244,127	247,643	1.000
5894	WXIX	19	OH,	CINCINNATI	237,724	239,050	238,387	1.000
5921	WLIW	21	NY,	GARDEN CITY	222,194	234,337	228,266	1.000
5023	KCAL	9	CA,	LOS ANGELES	227,479	225,434	226,457	1.000
5165	WIS	10	SC,	COLUMBIA	265,317	170,648	217,983	1.000
5310	KCTS	9	WA,	SEATTLE	215,638	212,047	213,843	1.000
5950	WPTO	14	OH,	OXFORD	208,215	203,653	205,934	1.000
5062	WFAA	8	TX,	DALLAS	202,811	193,092	197,952	1.000
5769	WVTV	18	WI,	MILWAUKEE	194,453	194,919	194,686	1.000
5019	WCAU	10	PA,	PHILADELPHIA	156,019	220,701	188,360	1.000
5167	WHYY	12	DE,	WILMINGTON	156,642	219,397	188,020	1.000
5043	WJZ	13	MD,	BALTIMORE	188,593	184,730	186,662	1.000
5611	CBMT	6	QU,	MONTREAL	182,240	186,512	184,376	1.000
5610	CBLT	5	ON,	TORONTO	187,807	179,447	183,627	1.000
5633	CFTO	9	ON,	TORONTO	187,807	179,447	183,627	1.000
5027	KCOP	13	CA,	LOS ANGELES	184,140	181,577	182,859	1.000
5102	WSB	2	GA,	ATLANTA	173,969	182,378	178,174	1.000
5010	WNYW	5	NY,	NEW YORK	177,183	168,016	172,600	1.000
5342	KCRA	3	CA,	SACRAMENTO	149,227	180,960	165,094	1.000
5018	KYW	3	PA,	PHILADELPHIA	130,555	198,251	164,403	1.000
5440	KTVU	2	CA,	OAKLAND	162,909	160,339	161,624	1.000
5153	KUHT	8	TX,	HOUSTON	162,588	159,102	160,845	1.000

### FINAL 2004 MPAA Sample

5051	WBNS	10	OH,	COLUMBUS	150,379	165,529	157,954	1.000
5017	WPVI	6	PA,	PHILADELPHIA	176,274	138,153	157,214	1.000
5114	WDIV	4	MI,	DETROIT	158,321	155,790	157,056	1.000
5856	WCET	48	OH,	CINCINNATI	150,376	157,891	154,134	1.000
5364	WPBT	2	FL,	MIAMI	172,891	108,255	140,573	7.254
5867	WTVS	56	MI,	DETROIT	123,260	121,965	122,613	7.254
5419	KTCA	2	MN,	ST PAUL	68,097	142,905	105,501	7.254
5118	KWGN	2	CO,	DENVER	97,687	98,421	98,054	7.254
5875	KBWB	20	CA,	SAN FRANCISCO	88,014	88,076	88,045	7.254
5871	WIAT	42	AL,	BIRMINGHAM	85,998	84,185	85,092	7.254
5021	KABC	7	CA,	LOS ANGELES	79,784	78,914	79,349	7.254
5427	KRMA	6	CO,	DENVER	58,655	90,273	74,464	7.254
5133	WALA	10	AL,	MOBILE	70,624	71,532	71,078	7.254
5460	KTWU	11	KS,	TOPEKA	62,948	66,190	64,569	7.254
6724	WKMJ	68	KY,	LOUISVILLE	62,111	59,893	61,002	7.254
7014	KBNT	17	CA,	SAN DIEGO	58,934	57,664	58,299	7.254
5417	WWL	4	LA,	NEW ORLEANS	57,937	53,861	55,899	7.254
5215	WNCT	9	NC,	GREENVILLE	53,965	52,386	53,176	7.254
5050	WBBM	2	IL,	CHICAGO	50,949	50,903	50,926	7.254
5127	WTAJ	10	PA,	ALTOONA	48,654	49,210	48,932	7.254
5841	WQLN	54	PA,	ERIE	13,769	81,749	47,759	7.254
6252	WBNX	55	OH,	AKRON	44,102	43,919	44,011	7.254
6378	WDJT	58	WI,	MILWAUKEE	42,871	42,389	42,630	7.254
5034	KPRC	2	TX,	HOUSTON	41,604	41,673	41,639	7.254
4689	WDTA	53	GA,	FAYETTEVILLE	40,250	40,223	40,237	7.254
6736	WMPB	67	MD,	BALTIMORE	38,150	37,128	37,639	7.254
5377	WKNO	10	TN,	MEMPHIS	37,015	35,178	36,097	7.254
5332	WTVY	4	AL,	DOTHAN	33,856	36,354	35,105	7.254
5410	KETV	7	NE,	OMAHA	32,297	34,929	33,613	7.254
5421	WFSB	3	CT,	HARTFORD	35,243	30,099	32,671	7.254
6086	WCEU	15	FL,	NEW SMYRNA BEACH	29,514	33,287	31,401	7.254
5057	WQAD	8	IL,	MOLINE	26,916	34,296	30,606	7.254
5378	WISC	3	WI,	MADISON	31,714	27,402	29,558	7.254
6064	KOAB	3	OR,	BEND	28,229	29,264	28,747	7.254
5718	WWLP	22	MA,	SPRINGFIELD	29,726	26,292	28,009	7.254
5330	WFRV	5	WI,	GREEN BAY	27,400	26,095	26,748	7.254
5483	KBYU	11	UT,	PROVO	27,951	24,189	26,070	7.254
6815	KNXV	15	AZ,	PHOENIX	27,427	22,947	25,187	7.254
5687	CJOH	13	ON,	OTTAWA	18,349	30,993	24,671	7.254
7314	WFTE	58	IN,	SALEM	17,554	28,450	23,002	7.254
5734	WHP	21	PA,	HARRISBURG	22,095	22,201	22,148	7.254
7175	WAPK	30	TN,	KINGSPORT	20,889	22,356	21,623	7.254
5885	WPBA	30	GA,	ATLANTA	21,236	20,804	21,020	7.254
6967	WZMY	50	NH,	DERRY	31,249	8,703	19,976	7.254
5959	WAAY	31	AL,	HUNTSVILLE	16,642	21,835	19,239	7.254
6276	KETK	56	TX,	JACKSONVILLE	18,481	18,682	18,582	7.254
6850	WPXD	31	MI,	ANN ARBOR	17,889	18,098	17,994	7.254
5072	WICU	12	PA,	ERIE	29,233	5,391	17,312	7.254
6758	WGVU	35	MI,	GRAND RAPIDS	17,632	15,225	16,429	7.254

### FINAL 2004 MPAA Sample

5782	WCVE	23	VA,	RICHMOND	15,995	15,664	15,830	7.254
6752	WKAR	23	MI,	EAST LANSING	15,806	15,191	15,499	7.254
6775	KSIN	27	IA,	SIOUX CITY	12,034	18,096	15,065	7.254
5178	WREX	13	IL,	ROCKFORD	25,247	4,403	14,825	7.254
6849	KTXA	21	TX,	FT WORTH	14,907	13,678	14,293	7.254
5264	WTHI	10	IN,	TERRE HAUTE	13,928	13,347	13,638	7.254
5566	WPXL	49	LA,	NEW ORLEANS	13,032	12,559	12,796	7.254
5765	WCCB	18	NC,	CHARLOTTE	11,262	13,675	12,469	7.254
5372	WLUC	6	MI,	MARQUETTE	12,023	11,790	11,907	7.254
5938	WPTY	24	TN,	MEMPHIS	13,014	10,280	11,647	7.254
5255	WALB	10	GA,	ALBANY	12,606	10,128	11,367	7.254
7335	KSTC	45	MN,	MINNEAPOLIS	8,213	13,948	11,081	7.254
6913	KMWB	23	MN,	MINNEAPOLIS	8,976	12,415	10,696	7.254
5703	WIVT	34	NY,	BINGHAMTON	10,743	10,000	10,372	7.254
5719	WHRO	15	VA,	HAMPTON	10,471	9,917	10,194	7.254
5068	WHAS	11	KY,	LOUISVILLE	17,816	1,802	9,809	7.254
6715	WEKW	52	NH,	KEENE	18,888	0	9,444	7.254
6792	KTEJ	19	AR,	JONESBORO	9,842	8,552	9,197	7.254
5931	WMGT	41	GA,	MACON	8,850	9,076	8,963	7.254
6269	KTFT	38	ID,	TWIN FALLS	8,783	8,794	8,789	7.254
7024	WTCE	21	FL,	FT PIERCE	369	16,440	8,405	7.254
6893	KTVD	20	CO,	DENVER	9,191	7,393	8,292	7.254
5738	WOTV	41	MI,	BATTLE CREEK	7,492	8,268	7,880	7.254
5297	KAKE	10	KS,	WICHITA	7,522	7,896	7,709	7.254
6755	WNJS	23	NJ,	CAMDEN	7,100	7,795	7,448	7.254
5935	WUNJ	39	NC,	WILMINGTON	7,416	6,800	7,108	7.254
5426	KVII	7	TX,	AMARILLO	7,042	6,564	6,803	7.254
5406	KTVI	2	MO,	ST LOUIS	6,910	6,224	6,567	7.254
5175	KOMU	8	MO,	COLUMBIA	6,430	6,349	6,390	7.254
7405	WNYO	49	NY,	BUFFALO	0	12,425	6,213	7.254
6828	WSFJ	51	OH,	NEWARK	5,989	5,781	5,885	7.254
5723	WJWB	17	FL,	JACKSONVILLE	224	11,221	5,723	7.254
6151	KFXK	51	TX,	LONGVIEW	5,196	5,823	5,510	7.254
5121	KTBC	7	TX,	AUSTIN	5,582	5,194	5,388	7.254
5928	WGTU	29	MI,	TRAVERSE CITY	5,264	5,140	5,202	7.254
5772	KBAK	29	CA,	BAKERSFIELD	110	9,936	5,023	7.254
5012	WCBS	2	NY,	NEW YORK	4,185	5,557	4,871	7.254
5939	KVUE	24	TX,	AUSTIN	4,635	4,451	4,543	7.254
5640	KBMT	12	TX,	BEAUMONT	4,306	4,421	4,364	7.254
8728	WNYA	51	MA,	PITTSFIELD	3,685	4,981	4,333	7.254
5625	KSFY	13	SD,	SIOUX FALLS	0	8,422	4,211	7.254
6256	KUTP	45	AZ,	PHOENIX	5,112	2,955	4,034	7.254
5434	KTNV	13	NV,	LAS VEGAS	4,069	3,939	4,004	7.254
5245	WHO	13	IA,	DES MOINES	0	7,739	3,870	7.254
5579	WPXV	49	VA,	NORFOLK	4,073	3,167	3,620	7.254
6835	KGWC	14	WY,	CASPER	0	7,005	3,503	7.254
6891	WGXA	24	GA,	MACON	3,396	3,458	3,427	7.254
5425	WILL	12	IL,	CHAMPAIGN-URBANA	5,082	1,603	3,343	7.254
6078	WNDY	23	IN,	MARION	6,530	0	3,265	7.254

FINAL 2004 MPAA Sample

5812	WFMZ	69	PA,	ALLENTOWN	3,110	3,091	3,101	7.254
6865	KSTS	48	CA,	SAN JOSE	3,138	2,692	2,915	7.254
6240	WUPW	36	OH,	TOLEDO	2,807	2,785	2,796	7.254
5930	KHBS	40	AR,	FT SMITH	2,741	2,673	2,707	7.254
5266	WGRZ	2	NY,	BUFFALO	1,891	3,324	2,608	7.254
5280	WMTW	8	ME,	POLAND SPRING	2,786	2,026	2,406	7.254
6922	KPXM	41	MN,	ST CLOUD	760	3,684	2,222	7.254
6904	WXXA	23	NY,	ALBANY	2,195	2,068	2,132	7.254
5512	KBHE	9	SD,	RAPID CITY	2,116	1,969	2,043	7.254
5164	WBKB	11	MI,	ALPENA	2,163	1,687	1,925	7.254
5194	KAAL	6	MN,	AUSTIN	426	3,172	1,799	7.254
6973	WQPT	24	IL,	MOLINE	1,750	1,736	1,743	7.254
5288	KODE	12	MO,	JOPLIN	1,564	1,609	1,587	7.254
6702	KDSD	16	SD,	ABERDEEN	1,484	1,491	1,488	7.254
6741	WSBN	47	VA,	NORTON	2,834	0	1,417	7.254
7239	WGTW	48	NJ,	BURLINGTON	1,360	1,326	1,343	7.254
7131	WJYS	62	IN,	HAMMOND	1,265	1,259	1,262	7.254
5381	KXII	12	TX,	SHERMAN	2,395	0	1,198	7.254
5989	KMEX	34	CA,	LOS ANGELES	2,135	0	1,068	7.254
5333	KLFY	10	LA,	LAFAYETTE	924	1,029	977	7.254
5192	KHQA	7	MO,	HANNIBAL	0	1,798	899	7.254
6862	KLTL	18	LA,	LAKE CHARLES	1,536	66	801	7.254
5833	WICD	15	IL,	CHAMPAIGN	767	775	771	7.254
7511	WVBG	25	NY,	GREENWICH	1,448	0	724	7.254
6588	KCSD	23	SD,	SIoux FALLS	0	1,269	635	7.254
7121	KSBI	52	OK,	OKLAHOMA CITY	604	587	596	7.254
6848	WGBA	26	WI,	GREEN BAY	540	534	537	7.254
6839	WKOH	31	KY,	OWENSBORO	492	462	477	7.254
6498	KWWF	22	IA,	WATERLOO	0	844	422	7.254
8351	KWBT	19	OK,	MUSKOGEE	405	383	394	7.254
7261	WTCN	16	FL,	PALM BEACH	369	329	349	7.254
5602	KVLY	11	ND,	FARGO	352	269	311	7.254
4849	WMAK	7	TN,	KNOXVILLE	0	491	246	7.254
6337	WFLI	53	TN,	CLEVELAND	156	165	161	7.254
7017	WLAJ	53	MI,	LANSING	128	108	118	7.254
5287	KPLC	7	LA,	LAKE CHARLES	0	66	33	7.254

Station Code	Call Letters	Call Letters 2005*	Channel	State/Prov.	City Name	Period 1 Subscribers	Period 2 Subscribers	Average Subscribers	Weight
5066	WGN		9	IL,	CHICAGO	36,763,927	36,221,595	36,492,761	1.000
5014	WPIX		11	NY,	NEW YORK	1,466,124	1,196,873	1,331,499	1.000
5612	CBUT		2	BC,	VANCOUVER	1,006,000	1,001,573	1,003,787	1.000
5926	WUAB		43	OH,	LORAIN	613,138	619,883	616,511	1.000
5040	KTLA		5	CA,	LOS ANGELES	573,307	567,316	570,312	1.000
5558	CKSH		9	QU,	SHERBROOKE	565,821	542,631	554,226	1.000
5921	WLIW		21	NY,	GARDEN CITY	495,560	548,462	522,011	1.000
5013	WNBC		4	NY,	NEW YORK	532,216	356,968	444,592	1.000
5766	WPHL		17	PA,	PHILADELPHIA	453,285	417,712	435,499	1.000
5680	WNET		13	NY,	NYC-NEWARK	430,621	416,245	423,433	1.000
5276	CBET		9	ON,	WINDSOR	420,478	422,631	421,555	1.000
6945	KTNC		42	CA,	CONCORD	379,409	394,654	387,032	1.000
5016	WWOR		9	NJ,	SECAUCUS	406,650	358,246	382,448	1.000
5883	WGBX		44	MA,	BOSTON	382,344	374,727	378,536	1.000
5906	WKBD		50	MI,	DETROIT	368,897	359,779	364,338	1.000
6813	WPSG		57	PA,	PHILADELPHIA	342,162	324,841	333,502	1.000
5900	WSBK		38	MA,	BOSTON	341,050	310,596	325,823	1.000
5345	WTTW		11	IL,	CHICAGO	263,623	267,787	265,705	1.000
5759	WTFX		29	PA,	PHILADELPHIA	270,072	259,774	264,923	1.000
5623	KERA		13	TX,	DALLAS	277,718	242,575	260,147	1.000
5761	KCET		28	CA,	LOS ANGELES	265,263	253,641	259,452	1.000
5025	KGO		7	CA,	SAN FRANCISCO	235,711	258,188	246,950	1.000
5165	WIS		10	SC,	COLUMBIA	229,639	243,492	236,566	1.000
5839	WSEE		35	PA,	ERIE	339,705	123,249	231,477	1.000
5023	KCAL		9	CA,	LOS ANGELES	225,816	225,556	225,686	1.000
5310	KCTS		9	WA,	SEATTLE	205,642	208,455	207,049	1.000
5633	CFTO		9	ON,	TORONTO	230,536	180,863	205,700	1.000
5894	WXIX		19	KY,	NEWPORT	210,893	195,450	203,172	1.000
5611	CBMT		6	QU,	MONTREAL	207,299	196,887	202,093	1.000
5610	CBLT		5	ON,	TORONTO	226,067	176,721	201,394	1.000
5062	WFAA		8	TX,	DALLAS	193,299	181,063	187,181	1.000
5043	WJZ		13	MD,	BALTIMORE	186,280	181,431	183,856	1.000
5051	WBNS		10	OH,	COLUMBUS	179,931	175,094	177,513	1.000
5342	KCRA		3	CA,	SACRAMENTO	177,198	175,037	176,118	1.000
5102	WSB		2	GA,	ATLANTA	186,540	158,862	172,701	1.000
5950	WPTO		14	OH,	OXFORD	196,681	140,538	168,610	1.000
5314	WGBH		2	MA,	BOSTON	177,960	152,341	165,151	1.000
5201	WKRN		2	TN,	NASHVILLE	200,416	122,812	161,614	1.000
5027	KCOP		13	CA,	LOS ANGELES	161,095	161,721	161,408	1.000
5153	KUHT		8	TX,	HOUSTON	164,859	157,122	160,991	1.000
6842	WFUM		28	MI,	FLINT	153,218	158,425	155,822	1.000
5019	WCAU		10	PA,	PHILADELPHIA	156,829	154,433	155,631	1.000
5740	KOCE		50	CA,	HUNTINGTON BEACH	155,622	146,525	151,074	1.000
6253	WRNN		62	NY,	KINGSTON	390	287,683	144,037	1.000
5114	WDIV		4	MI,	DETROIT	153,410	133,449	143,430	1.000
5835	KICU		36	CA,	SAN JOSE	130,187	155,330	142,759	1.000
5769	WVTV		18	WI,	MILWAUKEE	142,207	141,445	141,826	1.000
5364	WPBT		2	FL,	MIAMI	128,031	153,983	141,007	1.000
5017	WPVI		6	PA,	PHILADELPHIA	139,844	138,839	139,342	1.000
5295	WISN		12	WI,	MILWAUKEE	138,222	137,571	137,897	1.000
5018	KYW		3	PA,	PHILADELPHIA	127,216	124,679	125,948	7.708
5117	WXIA		11	GA,	ATLANTA	120,639	113,764	117,202	7.708
5015	WABC		7	NY,	NEW YORK	175,457	34,531	104,994	7.708
5367	WWBT		12	VA,	RICHMOND	100,542	82,005	91,274	7.708
5695	CHLT		7	QU,	SHERBROOKE	85,493	81,262	83,378	7.708

5479	WPSU	WPSX	3	PA,	CLEARFIELD	80,375	82,743	81,559	7.708
5098	WUSA		9	DC,	WASHINGTON	84,407	65,633	75,020	7.708
5092	WMAQ		5	IL,	CHICAGO	66,577	66,518	66,548	7.708
5786	WYTV		33	OH,	YOUNGSTOWN	70,116	51,371	60,744	7.708
6692	WPCW	WNPA	19	PA,	JEANNETTE	67,952	48,537	58,245	7.708
5234	KCNC		4	CO,	DENVER	71,577	40,328	55,953	7.708
5787	WCNY		24	NY,	SYRACUSE	57,277	48,928	53,103	7.708
5684	WNPT		8	TN,	NASHVILLE	60,798	41,992	51,395	7.708
5299	KTRK		13	TX,	HOUSTON	48,957	48,996	48,977	7.708
6179	WMEC		22	IL,	MACOMB	7,548	87,486	47,517	7.708
5107	WCCO		4	MN,	MINNEAPOLIS	52,532	40,526	46,529	7.708
5037	KSDK		5	MO,	ST LOUIS	57,897	31,226	44,562	7.708
5757	WLVT		39	PA,	ALLENTOWN	42,657	42,695	42,676	7.708
5859	WOSU		34	OH,	COLUMBUS	41,090	40,178	40,634	7.708
7008	WBGT		40	NY,	ROCHESTER	38,227	38,136	38,182	7.708
5348	WDBJ		7	VA,	ROANOKE	37,315	36,425	36,870	7.708
6808	WPCB		40	PA,	GREENSBURG	42,661	29,281	35,971	7.708
5979	WPGH		53	PA,	PITTSBURGH	37,285	31,300	34,293	7.708
6736	WMPB		67	MD,	BALTIMORE	34,723	29,782	32,253	7.708
5099	WOWT		6	NE,	OMAHA	35,142	27,549	31,346	7.708
5717	WPMT		43	PA,	YORK	46,002	14,033	30,018	7.708
5265	WCHS		8	WV,	CHARLESTON	30,573	26,855	28,714	7.708
5281	WCAX		3	VT,	BURLINGTON	27,648	27,185	27,417	7.708
5063	WRTV		6	IN,	INDIANAPOLIS	28,300	25,018	26,659	7.708
5152	KEYT		3	CA,	SANTA BARBARA	26,328	25,924	26,126	7.708
5483	KBYU		11	UT,	PROVO	27,089	22,866	24,978	7.708
5718	WWLP		22	MA,	SPRINGFIELD	26,086	21,294	23,690	7.708
5855	KTEH		54	CA,	SAN JOSE	19,207	26,780	22,994	7.708
5404	WPSD		6	KY,	PADUCAH	22,532	22,365	22,449	7.708
6252	WBNX		55	OH,	AKRON	43,627	0	21,814	7.708
5110	WTTV		4	IN,	BLOOMINGTON	21,015	21,694	21,355	7.708
5466	WCTI		12	NC,	NEW BERN	23,820	17,153	20,487	7.708
5848	WANE		15	IN,	FT WAYNE	23,833	15,123	19,478	7.708
6763	KRWG		22	NM,	LAS CRUCES	20,710	16,629	18,670	7.708
5168	KGTV		10	CA,	SAN DIEGO	18,121	18,702	18,412	7.708
6769	KLCS		58	CA,	LOS ANGELES	34,939	0	17,470	7.708
5804	KUVS		19	CA,	MODESTO	24,488	9,016	16,752	7.708
5067	WROC		8	NY,	ROCHESTER	16,742	16,162	16,452	7.708
6008	WFQX		33	MI,	CADILLAC	15,782	15,008	15,395	7.708
5727	WLIO		35	OH,	LIMA	23,121	6,162	14,642	7.708
6238	WTGS		28	SC,	HARDEEVILLE	14,139	14,006	14,073	7.708
6752	WKAR		23	MI,	EAST LANSING	15,362	12,050	13,706	7.708
5372	WLUC		6	MI,	MARQUETTE	14,816	11,116	12,966	7.708
5876	WHAM		13	NY,	ROCHESTER	13,737	11,813	12,775	7.708
6354	WPXA		14	GA,	ROME	4,761	20,017	12,389	7.708
7590	WFRZ	WBVF	61	AL,	MONTGOMERY	12,328	11,644	11,986	7.708
5279	WBBJ		7	TN,	JACKSON	15,678	7,177	11,428	7.708
5681	WZZM		13	MI,	GRAND RAPIDS	11,048	11,053	11,051	7.708
5959	WAAY		31	AL,	HUNTSVILLE	19,783	1,693	10,738	7.708
5708	WEEK		25	IL,	PEORIA	7,268	13,283	10,276	7.708
5877	WJCL		22	GA,	SAVANNAH	10,126	10,089	10,108	7.708
6728	WKSO		29	KY,	SOMERSET	10,646	9,282	9,964	7.708
5940	WMYD	WDWB	20	MI,	DETROIT	18,606	499	9,553	7.708
5097	WOI		5	IA,	AMES	13,066	5,467	9,267	7.708
5349	WOWK		13	WV,	HUNTINGTON	10,427	7,294	8,861	7.708
5045	WAGA		5	GA,	ATLANTA	17,185	138	8,662	7.708
6294	WMSN		47	WI,	MADISON	8,464	8,520	8,492	7.708
5493	WVUE		8	LA,	NEW ORLEANS	11,809	4,745	8,277	7.708



9830	WMQF	19	MI,	MARQUETTE	8,039	7,941	7,990	7.708
5178	WREX	13	IL,	ROCKFORD	4,461	10,817	7,639	7.708
6940	WINM	63	IN,	ANGOLA	14,925	0	7,463	7.708
5389	KVIA	7	TX,	EL PASO	7,827	6,619	7,223	7.708
6981	WUXP	30	TN,	NASHVILLE	8,406	5,401	6,904	7.708
5401	WSOC	9	NC,	CHARLOTTE	6,804	6,667	6,736	7.708
5931	WMGT	41	GA,	MACON	9,302	3,648	6,475	7.708
6941	WTSF	61	KY,	ASHLAND	7,514	4,825	6,170	7.708
7374	WZPX	43	MI,	BATTLE CREEK	5,975	5,958	5,967	7.708
5567	KBLN	30	OR,	GRANTS PASS	5,618	5,557	5,588	7.708
6433	WNTZ	48	MS,	NATCHEZ	4,331	6,493	5,412	7.708
5928	WGTV	29	MI,	TRAVERSE CITY	5,234	5,115	5,175	7.708
8858	KSCB	21	SD,	SIOUX FALLS	5,875	3,839	4,857	7.708
5081	WOOD	8	MI,	GRAND RAPIDS	5,981	3,467	4,724	7.708
6850	WPXD	31	MI,	ANN ARBOR	5,699	3,525	4,612	7.708
5263	WISH	8	IN,	INDIANAPOLIS	6,648	2,326	4,487	7.708
5831	KMEG	14	IA,	SIOUX CITY	8,636	0	4,318	7.708
5913	WUTR	20	NY,	UTICA	4,154	4,164	4,159	7.708
5861	KSNF	16	MO,	JOPLIN	8,119	0	4,060	7.708
5285	KOVR	13	CA,	STOCKTON	3,874	3,750	3,812	7.708
5204	KCRG	9	IA,	CEDAR RAPIDS	6,226	1,186	3,706	7.708
4692	WTTX	30	NY,	ELMIRA	3,557	3,516	3,537	7.708
7702	KDCK	21	KS,	DODGE CITY	6,684	0	3,342	7.708
7578	WYCN	13	NH,	NASHUA	0	6,166	3,083	7.708
8923	WLFV	68	VA,	GRUNDY	2,970	2,935	2,953	7.708
7367	WVNS	59	WV,	LEWISBURG	2,845	2,783	2,814	7.708
5192	KHQA	7	MO,	HANNIBAL	3,479	2,005	2,742	7.708
5886	WCIU	26	IL,	CHICAGO	1,815	3,558	2,687	7.708
7298	KNWS	51	TX,	KATY	5,067	0	2,534	7.708
5622	KDLT	46	SD,	SIOUX FALLS	3,802	1,131	2,467	7.708
5884	WCJB	20	FL,	GAINESVILLE	2,208	2,180	2,194	7.708
5316	WUNC	4	NC,	CHAPEL HILL	4,236	0	2,118	7.708
7315	CIIL	6	ON,	TORONTO	0	4,142	2,071	7.708
6316	WUNP	36	NC,	ROANOKE RAPIDS	3,968	0	1,984	7.708
5363	KGNS	8	TX,	LAREDO	3,765	0	1,883	7.708
7794	KAKW	31	TX,	AUSTIN	3,561	0	1,781	7.708
5068	WHAS	11	KY,	LOUISVILLE	1,754	1,672	1,713	7.708
6802	WTXL	27	FL,	TALLAHASSEE	3,280	0	1,640	7.708
6035	WRAY	30	NC,	WILSON	1,744	1,387	1,566	7.708
7599	KLKN	8	NE,	LINCOLN	2,907	0	1,454	7.708
6882	WFLA	22	NC,	RALEIGH	1,438	1,387	1,413	7.708
5529	WNIN	9	IN,	EVANSVILLE	2,565	166	1,366	7.708
6994	WBUI	23	IL,	DECATUR	1,068	1,510	1,289	7.708
7418	KKRA	24	SD,	RAPID CITY	2,435	0	1,218	7.708
6975	KSMO	62	MO,	KANSAS CITY	2,321	0	1,161	7.708
5070	WTVH	5	NY,	SYRACUSE	1,042	1,069	1,056	7.708
6902	KAVU	25	TX,	VICTORIA	2,026	0	1,013	7.708
7075	KTMO	36	TX,	AMARILLO	1,853	0	927	7.708
5833	WICD	15	IL,	CHAMPAIGN	635	1,080	858	7.708
6338	WJZY	46	NC,	BELMONT	795	787	791	7.708
6304	WTJP	60	AL,	GADSDEN	1,084	436	760	7.708
5321	WTVT	13	FL,	TAMPA	693	731	712	7.708
7460	WRJM	67	AL,	TROY	748	530	639	7.708
6844	KAUT	43	OK,	OKLAHOMA CITY	570	595	583	7.708
5554	WAKA	8	AL	SELMA	538	530	534	7.708
5825	WGNO	26	LA,	NEW ORLEANS	551	433	492	7.708
6585	KOCM	46	OK,	NORMAN	457	432	445	7.708
5240	WJHG	8	FL,	PANAMA CITY	797	0	399	7.708

7345	KLWY		27	WY,	CHEYENNE	396	391	394	7.708
6156	WMYA	WBSC	40	SC,	ANDERSON	599	0	300	7.708
6700	WKBS		47	PA,	ALTOONA	278	279	279	7.708
5723	WCWJ	WJWB	17	FL,	JACKSONVILLE	243	238	241	7.708
5897	WLED		49	NH,	LITTLETON	445	0	223	7.708
5434	KTNV		13	NV,	LAS VEGAS	179	28	104	7.708
6265	WPPX		61	DE,	WILMINGTON	89	79	84	7.708
5248	WINK		11	FL,	FT MYERS	55	49	52	7.708
6188	WOIO		19	OH,	SHAKER HEIGHTS	3	3	3	7.708

**\*Note: Call Letters per Bob Westphal**

2000; FCC 2002b; National Cable 2002). Thus advertisers have a nearly overwhelming number of outlets by which to reach audiences.

These raw numbers do not, however, provide an accurate picture of the level of competition in the audience marketplace. Like all markets for goods and services, the audience market is differentiated according to geographic markets and product markets. From a geographic standpoint, some media organizations (such as broadcast and cable networks) provide advertisers with access to a nationwide audience. Other media organizations, such as an individual radio station or metropolitan newspaper, generally provide access to a much more local audience. Reflecting this market segmentation, Arbitron has organized its radio audience measurement reports according to 286 distinct radio markets within the United States. Similarly, Nielsen Media Research has delineated 210 distinct television markets within the United States. Local television or radio stations do not often compete for the same advertising dollars as the broadcast and cable networks. Thus it is important to recognize that the audience market is not only national (and increasingly global) but that smaller, geographically defined local audience markets number in the hundreds.

Markets are defined not only geographically but also in terms of product characteristics. From an advertiser's standpoint one media outlet's audience is not necessarily a reasonable substitute for another media outlet's audience. Advertisers seek specific characteristics in the audiences that they try to reach: age, gender, income, and a host of other distinguishing factors (see chapter 4). Thus for most advertisers the audience for the Nickelodeon cable network (which targets children) is not likely to be an acceptable substitute for the audience for NBC's *Friends* (which targets young adults).

Media organizations differ in the extent to which their viability depends upon the sale of audiences to advertisers. In many instances they supplement revenue from the sale of audiences to advertisers with revenue from the sale of content to audiences. The revenue breakdowns for each major advertiser-supported medium appear in table 1.1. As the table shows, free over-the-air broadcast radio and television derive basically all their revenue from the sale of audiences to advertisers. In contrast, cable television systems rely heavily upon subscriber fees. Subscriber fees account for roughly 85 percent of cable systems' revenues, with advertising revenues comprising only about 15 percent. Cable networks, on the other hand, derive, on average, 60 percent of their revenue from the sale of audiences to advertisers and

40 percent from the sale of their content to cable and direct broadcast satellite systems. Consumer and trade magazines operate under quite different economic models.<sup>1</sup> Consumer magazines operate at a roughly 50–50 split between the sale of audiences and the sale of content. Trade magazines, on the other hand, derive roughly 90 percent of their revenues from the sale of audiences to advertisers. Newspapers receive roughly 70 percent of their revenues from the sale of audiences to advertisers and 30 percent from the sale of their content. In most cases the price that consumers pay for a daily newspaper does not even cover the costs of the paper and ink. These data provide an indication of how different media have taken different strategic paths in navigating the dual-product marketplace that characterizes the media industries.

TABLE 1.1 Revenue Breakdowns for Advertiser-Supported Media

MEDIUM	REVENUE SOURCE	
	AUDIENCE SALES	CONTENT SALES
Broadcast television	100%	0%
Cable television systems	15	85
Cable television networks	60	40
Broadcast radio	100	0
Newspapers	70	30
Consumer magazines	50	50
Trade magazines	90	10
Internet sites	Varies	Varies

Sources: National Cable 2002; Compaine and Gomery 2000; Veronis, Suhler, and Associates 2001.

Within each component of the media industry, many individual media outlets fall under the broad umbrella ownership of a few large, diversified media corporations (Bagdikian 1997; Compaine and Gomery 2000). Most of the largest media firms have expanded their reach across a variety of media technologies, suggesting that they realize certain economies by providing advertisers with access to audiences across a range of media types.<sup>2</sup> Although the issue of the growth of media conglomerates is largely beyond

Howard J. Blumenthal  
Oliver R. Goodenough

# This Business of<sup>TM</sup>

# TELEVISION

The Standard Guide to  
the Television Industry

3rd edition

The Third Edition of *This Business* has been completely revised.

As in previous editions, *This Business* provides a comprehensive, authoritative look at every aspect of the television industry, including the related business of production, programming, market research, distribution, advertising, and legal. All of this information is presented in the context of relevant law, so that the reader can understand the industry with a useful combination of legal and regulatory background.

In recognition of the many changes in the industry, this third edition begins with several important new chapters, including a look at the way programs are distributed, a look at distribution systems (cable, satellite, and advertising revenues), a look at the major players in the industry, and a look at the new and important media brand.

Still, the essence of television is the individual program. As in previous editions, the chapters are devoted to the production and production of successful programs. In an environment of rapid technological change, new ways of producing programs (for example, webcasting) and distributing them (via the Internet and hand-held devices) are changing the entire industry.

And, finally, we tour the industry in the ways in which television is produced in France, Japan, and a dozen other countries. As television becomes a global student, wannabee professor, and industry professional, it is important to understand the business world and the changes contained in these chapters.

The world of television has changed since our own prior edition, and you own no edition that does not contain the knowledge that is contained in this place in the office of

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As in previous editions, this book provides a complete look at every aspect of the industry, including the regulation, program distribution, program production, and advertising. All of this information is in the text of relevant chapters, with a useful cross-regulatory background.

In recognition of the changes in the industry, this third edition begins with a look at the major programs and distribution systems. It also covers advertising on the major platforms, including the significant media brands.

Still, the essential information on individual programs, production, and production costs from comedies to dramas, in an era of technological change, is provided in programs (for example, the term) and distribution and handling, and the seriousness of the changing the industry.

And, finally, we look at the ways in which the industry is changing in France, Japan, and elsewhere. As television becomes a student, a wannabe professor, and an industry, we understand the business and the production contained within.

The world of television is changing, and you own no other book that provides the knowledge and insight into the place in the industry.

592 pages, 6" x 9" format, Appendix and Index

households, but upon the number of households actually watching television while that program is on the air.

To calculate the audience share, one must know the total number of viewing households, or the *HUT (homes/households using television) level*. During prime time, for example, HUT levels are frequently over 50 percent. For many years, the number of television households has hovered just over 100 million, so the industry more or less drops the "percent" and simply considers the HUT level to be 50. With roughly 110 million television households now in the U.S., HUT level of 50 would equal 55 million households.

If the HUT level at 8:00 P.M. on a Thursday is 50 and a program achieves a 20 share, then 20 percent of the 55 million households, or 11 million households, are watching the program. It is also possible to compute in reverse. During the week of November 29 to December 5, 2004, NBC's *Law & Order* was the number 15 show in the U.S. with a 15 share and a gross audience of just over 11 million households. Given this information, it's easy enough to compute the HUT level: if 15 percent equals 11 million households, then the HUT level for *Law & Order's* time slot (Wednesday 10:00 P.M.–11:00 P.M.) would be just over 73. By comparison, during the same week, CBS's *Everybody Loves Raymond* scored an 18 share with 13.5 million households; during that time period (Monday 9:00 P.M.–9:30 P.M.), the HUT level was 75, so each share point is worth slightly more in terms of gross viewership.

Why does any of this matter? In fact, share points are not used to calculate the cost of advertising. Instead, they provide television programmers with the audience measurement statistics necessary to make decisions about scheduling.

## AUDIENCE RATINGS

A program's *rating* is the percentage of *total television households* in the sample area whose sets were tuned to that program. Unlike audience share, which compares one program's appeal to viewers with others in the time slot, audience ratings compare all programs in a more or less equal-handed manner. The presumption, which is reasonable, goes like this: If a program is likely to draw a large audience, then the programmer will be smart enough to place it in an appropriate slot. Reruns of *The Brady Bunch*, for example, draw a far smaller audience than new episodes of *CSI: Miami*.

The *Law & Order* episode mentioned above achieved a 10.2 rating—in raw numbers, 10.2 percent of the 110 million U.S. television households, or 11 million households. *Everybody Loves Raymond's* rating was a 12.3, worth about 13.5 million households.

## Demographics

The rating itself provides the national advertiser with only partial information. For

many (if not most) but also "When terms of geographic networks, most the occasional cable network—Lifetime, for example,

## Rating Points

When a media consider rating women compression viewers in the audience for women, and of be associated with specifically for would be represented

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many (if not most) products, the question is not only “How many households?” but also “Who are they?” More specifically, the “who” question is answered in terms of geographic distribution, age, and income level. On NBC, CBS, and ABC networks, most prime-time programs appeal equally to men and to women (with the occasional exception, such as a figure skating competition, which attracts more female viewers). But the demographic mix for a particular cable program—or cable network—is often heavy skewed toward one particular demographic group. Lifetime, for example, attracts a predominantly female audience.

### Rating Points and GRPs

When a media buyer compares possible buys in prime-time television, he or she considers rating points based upon specific demographic groups. For example, women comprise approximately 60 million of the 180 million available television viewers in the U.S. (110 million households x 2.2 people per household). If the audience for a particular program was comprised of an equal number of men, women, and children, and its national rating was a 15, then 5 rating points would be associated with women. If the product being advertised was a hair color formula specifically for women, then the only viewers who mattered to that advertiser would be represented by those 5 rating points.

For an advertiser with a national budget, a single commercial would hardly be effective. In television advertising, a commercial must be seen many times in order for a viewer to take notice, and more times in order for him or her to take action. Rather than buying just one commercial worth 5 rating points, the advertiser would more likely buy 500 rating points associated with the target audience. To put this another way, the media buyer is purchasing 500 gross rating points, or a GRP of 500.

How much should the media buyer pay for those points? Should the price per point be the same for each commercial placement? When a program is successful, its cost per spot is typically high, and when a program's audience is smaller, the cost per spot is typically lower. During the 2004 season of *Law & Order*, the price per 30-second spot was about \$225,000. Given its 10.2 rating, the cost per rating point was \$22,000. By comparison, the 30-second spots on *Everybody Loves Raymond* went for \$315,000; divide by its 12.3 rating, and the cost per ratings point was nearly \$26,000. The costs per spot and per rating point are generally lower during the daytime hours, as well as on many cable networks. With 500 GRPs to buy, this \$10 million negotiation would likely level out at about \$20,000 per point, in part because of the number of points purchased, and probably because some lower-priced shows would be negotiated into the mix.

Reach and frequency are the key to successful media buying. *Reach* captures the concept of a message finding its way to an appropriate audience. *Frequency* is the number of times that each household within the target is likely to see the

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most common scenario, as the networks tend to avoid annoying their best cus-  
tomers), or (2) the over-performance becomes a negotiating chip, to be employed  
as needed, or, most often in today's more aggressive business environment, (3)  
the network commits to a specific number of GRPs for the season, and when the  
commitment is satisfied, the remaining commercial time is sold to other adver-  
tisers. This places enormous pressure on programming departments and pro-  
ducers, since higher ratings immediately translate into additional rating points,  
and with enough rating points, commitments can be more rapidly satisfied,  
allowing more inventory units to be sold.

A client with a \$10 million network prime-time budget might assign \$3 mil-  
lion to \$4 million to each network. The average cost of a spot works out to about  
\$125,000, so the client's budget would probably buy 80 prime time spots. A spot  
on a top-rated show costs roughly \$300,000 to \$400,000; a spot on a lower-rated  
show with comparatively weak performance, about \$75,000.

For the networks, the upfront market provides an opportunity to sell the  
majority of its available inventory in a highly competitive environment. The ben-  
efit of the upfront buy is that the revenue is booked; the downsides are the 15  
percent discount offered and the need to make good on programs that did not  
perform as hoped or planned. For the client, the upfront buy assures the best  
possible commercial positions, and saves money, but the prospect of make-goods  
can put the client in the position of having commercials run on the wrong shows.

It is not unusual for a major network to sell as much as 80 percent of its  
inventory during the upfront season. Overall, the upfront market is worth about  
\$8 billion. The major networks take in about \$1 billion to \$2 billion each.

### Daytime, News, and Sports

In fact, the upfront concept has worked so well for prime time that it has been  
expanded into daytime and network news and extended to include cable adver-  
tising. (Cable's 2003 upfront sales were worth \$6 billion. The syndication upfront  
market is worth about \$2 billion.)

Compared with the cost of prime time, advertising on daytime is inexpensive.  
The CPM for women under 50 years of age during daytime (about \$5, on  
average) is roughly 25 percent of the CPM for the same group during prime time  
(about \$20). Daytime television still delivers a relatively "pure" audience of  
women under 50. While maintaining traditional ties with household, food, and  
other longtime daypart advertisers, networks have been wooing new types of  
sponsors (e.g., automotive companies) into daytime, with only limited success.

The upfront buying season for network news also takes place during the  
summer. Most advertisers buy time on the news because it is the best way to  
reach the 25-54 and 55-plus groups.

The key concept for sports programs, from the perspective of large national  
advertisers, is exclusivity. Spots in major national events are sold on an exclusive



## CHAPTER 25

# RELIGIOUS TELEVISION

### HISTORY AND EVOLUTION OF RELIGIOUS TELEVISION

Approximately one in ten commercially licensed television stations in the U.S. is a full-time religious broadcaster. Several of the largest U.S. cable networks are religious television services. Although the economic model and mission differ from traditional television, religious television is a vital part of the landscape in the U.S. and in many other parts of the world. And it is growing.

Televised religion has its roots in traveling shows, typically held in tents and hosted by evangelists (the tradition of tent shows continues to this day). In 1923, the first "radio church" was formed; there was no physical building, only a microphone, a transmitter, and listeners. Still, the religious broadcasters saw the medium as a gift from God to spread The Word of God. And so, an easy alliance came into existence with broadcasters selling airtime to religious organizations. Religious programming has managed to reach a huge audience: *The Lutheran Hour*, for example, reached 700 million listeners worldwide in the 1940s. Host Walter Maier was world-famous—the Billy Graham of his day. There were many others, some locally famous, some nationally known. Some were involved in scandals related to misappropriation of funds, even in those early days.

For most of broadcast history, networks (first on radio, then on television) sometimes allowed religious broadcasters to buy airtime, and sometimes prohibited such purchases. Until the 1960s, the broadcast networks maintained a certain number of hours on their weekly schedules for noncommercial programming; this "sustaining" time was provided free to various organizations, including religious broadcasters. But by and large, broadcasters have not provided free airtime to religious ventures.

Although the image of a television preacher is a common one, religious television also encompasses talk shows, music programs, children's programs, and the occasional dramatic program. In today's television environment, most religious programming appears on the paid programming portion of local stations and cable networks, on dedicated broadcast or cable networks (such as TBN), and on their satellite equivalents. CBS broadcast *For Our Times* until 1988, but religious programming is almost never found on broadcast network television today.

It's interesting to see how meaningful religious television has become in many households and much of the world. It provides a fan base and a program fare.

### TELEVISION

A television network has many purposes. It is seen through many different lenses. It may or may not be a platform for preachers, and it may or may not be on television.

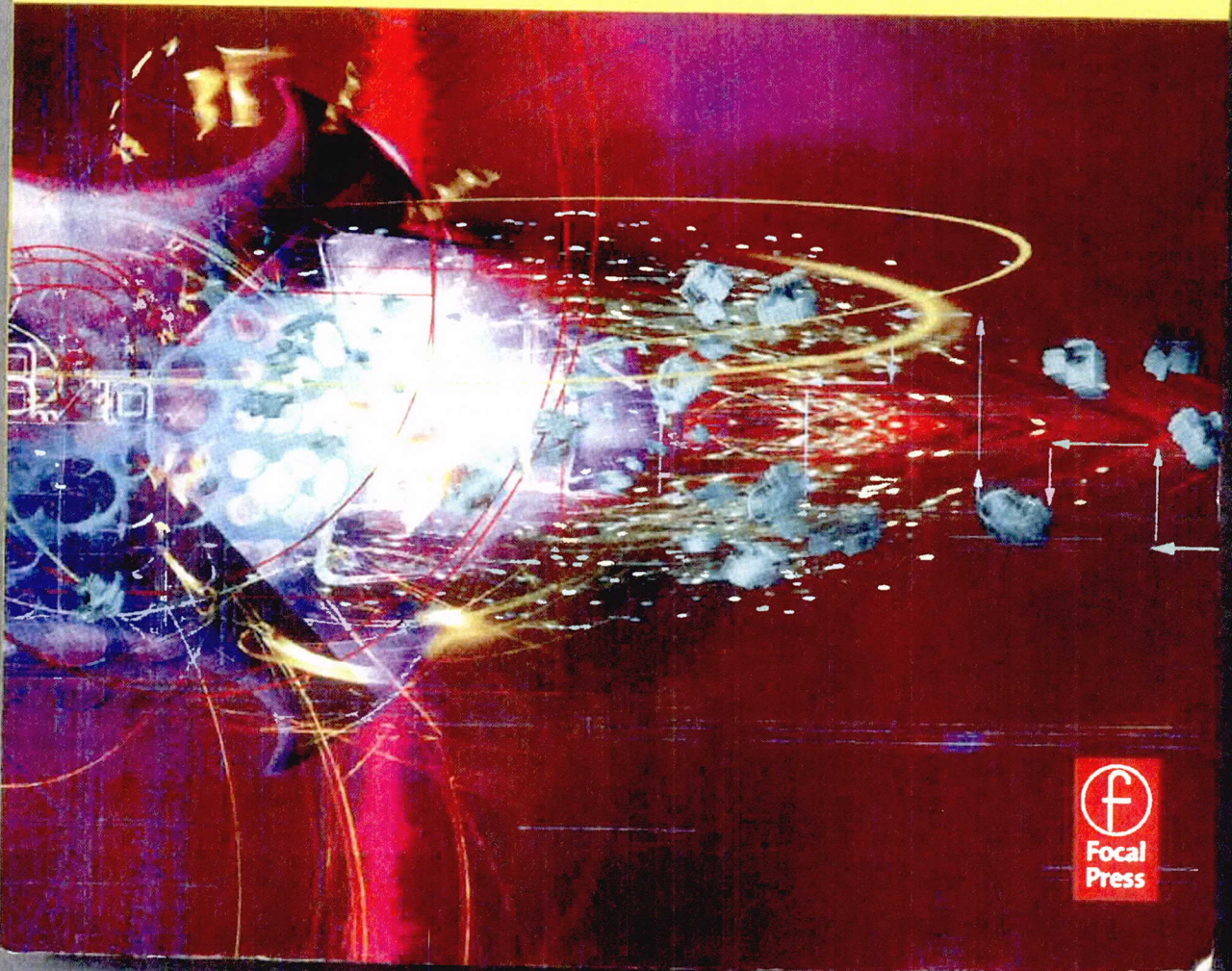
A minister may exchange for this regard. But there is no free lunch. Revenues are generated through broadcast; in some cases, through subscription. What are the production costs? Television studios are expensive to run so that they might also attract time program. They draw the line as in several cases. They limit abuses. Accountability is a must.

A substantial purchase of airtime is a direct-response network programming. The entity, typically a church, should be held in the case of the misuse of the Word of God.

Peter K. Pringle | Michael F. Starr

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the market, the age of the program, and the time period during which it will be broadcast. The negotiating skills of the person representing the station also may be influential. In the case of feature films, market size, competition, and the age of the films are taken into account, as well as the success they achieved during their showing in movie theaters or on a network.

The dramatic increase in the cost of syndicated product, combined with the emergence and growth of barter programming (discussed below), have led to an important change in the program manager's traditional role in syndicated program purchasing. Today, because of the increased emphasis on the bottom line, the programmer is likely to be only one of several key station personnel involved in purchasing decisions. Others include the general manager, sales manager, and business manager. In many stations, the general manager has primary responsibility, while the program manager merely administers decisions.

In determining what to buy and how much to pay, the station should give particular attention to the ratings potential and projected revenues of syndicated programs. Their appeal may be ascertained by studying their performance in other markets, particularly those with a similar population makeup. Nielsen's *Report on Syndicated Programs* provides detailed information on the size and demographic composition of the audiences for syndicated programs in all markets, in different dayparts, and against different program competition. Clues to the appeal of off-network programs may be gleaned from their performance in the market when they aired on a network.

Calculating revenue potential requires consideration of (1) spot inventory, or the number of 30-second spots available in each program; (2) the average selling price in the daypart in which the program will be broadcast; and (3) the selling level, that is, the percentage of spots likely to be sold. Multiplying the selling price by the number of spots available produces the *gross revenue*. The gross is reduced by 15 percent to allow for commissions paid by the station to account executives, reps, and advertising agencies, producing the *net*. That figure is reduced further by the projected selling level (most stations use 80 percent) to give what is known as the *net net*.

Assume that a network-affiliated station is contemplating the purchase of a half-hour, off-network series. Six commercial minutes are available and the average selling price in the daypart for a 30-second spot is \$400. The calculation would be as follows:

Selling price	\$400
30-second commercials	× 12
Gross	\$4,800
Net revenue level (after commission)	× .85
Net	\$4,080
Selling level	× .80
Net net	\$3,264

The projected revenue of \$3,264 for each episode applies only to the first year. Projections for subsequent years will take into account possible changes in the spot rate. For example, rates in the daypart may increase to keep pace with inflation. A decrease might result if the program were moved to a less costly daypart.

Having calculated the net net revenue potential of each episode over the life of the contract, the station must then consider how much it can afford to pay per episode. The actual price will be determined through negotiations between the syndicator and the station.<sup>11</sup>

When the contract is signed, the station usually makes a down payment and pays the balance in installments. As noted in Chapter 2, "Financial Management," costs are assigned according to an amortization schedule for accounting purposes. The station may select the *straight line* method, which means that an equal value is placed on each broadcast of each episode. Alternatively, it may opt for *accelerated amortization* or the *declining value* method, which assumes that the value of each episode decreases with each broadcast. Accordingly, the station assigns to each broadcast a declining percentage of total cost. A program with six runs may be expensed as follows: run 1—40 percent; 2—30 percent; 3—15 percent; 4—10 percent; 5—5 percent; 6—0 percent.

It is becoming increasingly difficult for stations to buy attractive syndicated programs for cash. Some are available only through *barter*.

In a barter transaction, the syndicator provides the program at no cost but, in return, retains for sale some of the commercial inventory. In a 30-minute program, for example, two minutes may be retained, leaving four minutes for sale by the station. More common is the *cash + barter* arrangement, whereby the station pays a fee for the program and also surrenders time to the syndicator.

At its inception, barter was viewed as a means whereby stations could control soaring program costs. Syndicators emphasized that the value of the commercial time surrendered would represent a much lower cost to the station than if the program were bought on a straight cash basis. Furthermore, the small amount of inventory retained by the syndicator probably would hurt profits, since 10 to 15 percent of commercial time generally remains unsold.

Barter does permit stations to obtain competitive product without putting out large amounts of cash, and to exchange time that might not be used for lower overall program costs. However, it has become such a dominant force that stations that would be willing to pay cash do not have that option. In addition, program costs have continued to escalate and stations have been left with less inventory to recoup their programming investment. Furthermore, barter now places stations in direct competition with syndicators for the sale of time to national advertisers in the same program.

**Local Production** The focus of local production is on local newscasts and public affairs programs, chiefly face-to-face interviews. Other local productions may include magazine, music video, exercise, sports, and children's programs, and occasional documentaries.

**Early Morning (6:00 A.M. to 9:00 A.M.)** Many affiliates start the daypart with local news and/or news-magazine programs, and most join the networks at 7:00 A.M. for their respective news magazines. Children and teenagers are not being served. Locally produced children's programs, syndicated cartoons, and off-network sitcoms or drama-adventure series offer alternatives for part or all of the period.

**Morning (9:00 A.M. to Noon)** Homemakers are a principal target in this daypart. During the first two hours, the networks are not providing programs. Options include local or syndicated talk, discussion, or magazine programs oriented toward women, and game shows. Off-network situation comedies starring children or with slapstick elements may bring children as well as adults to the set. ABC and CBS return at 11:00 A.M. and most affiliates clear network programming through the end of the period. Syndicated talk is the choice of many NBC affiliates.

**Afternoon (Noon to 4:00 P.M.)** Between noon and 12:30, many affiliates opt for local news or a news magazine, both of which provide an opportunity to promote later newscasts. Syndicated entertainment, such as quiz or game shows and situation comedies, is an alternative. From 12:30 P.M. (CBS) or 1:00 P.M. (ABC and NBC), affiliates generally carry the network soap opera block. It runs until 4:00 P.M. on ABC and CBS. NBC affiliates have an opportunity to counter-program starting at 3:00 P.M. The alternatives include syndicated talk with strong appeal to women, or cartoons and situation comedies with teenage and child appeal to target returning schoolchildren and teenagers.

**Early Fringe (4:00 P.M. to 6:00 P.M.)** This is the start of the longest period for which an affiliate has programming responsibility. At the same time, it offers a station the opportunity to generate significant advertising revenues and build the adult audience for its local news.

The growth in audience size and diversity allows stations to engage successfully in counter-programming. Thirty-minute and one-hour off-network and first-run syndicated content fit easily into the period, and many stations have discovered that audiences respond well to blocks of programs of the same genre.

Placement of local news is a major strategic factor. Airing it at 5:00 P.M. or 5:30 P.M. rules out the possibility of back-to-back hour-long programs. However, a succession of two or three off-network situation comedies with increasingly older appeal can bring youngsters to the set first, followed by teenagers and adults. An hour-long syndicated talk program attracts the adult demographics desired for news at 5:00 P.M. Movies may be considered by stations that do not air local news until 6:00 P.M., but their appeal varies. They also pose some scheduling problems because of their varying lengths. Made-for-television movies are consistent in length, but have proven less appealing than feature films.

**Early Evening (6:00 P.M. to 7:00 P.M.)** The length of the local newscast and the periods selected both for local and network news influence the schedule in this daypart. The 30-minute network newscast may be preceded or followed by a 30-minute local newscast. An hour-long local news program may be followed by network news in the first half hour of prime access, or a 90-minute news block may start with 30 minutes of local news, followed by network news, and a final 30 minutes of local news. In most major markets, longer news blocks are common.

**Prime Access (7:00 P.M. to 8:00 P.M.)** The Prime-Time Access Rule restricting what could be shown by some network affiliates formerly influenced program choices in this daypart. With the rule's termination in 1996, stations in all markets are free to air whatever they please. Most stations have filled the time slot with syndicated programs. Quiz and game shows, as well as off-network situation comedies, have proved very strong in this period. News magazine programs enable stations to inherit adults from the preceding newscasts.

**Network Prime Time (8:00 P.M. to 11:00 P.M.)** Most affiliates carry network programming during this entire daypart. If a network program is not competitive, or if most of the network's schedule on a given night is failing poorly, the station may consider preempting and substituting its own programming. Syndicated entertainment programs can fill a 30- or 60-minute period, while movies may produce the desired audience for periods of 90 minutes or two hours.

**Late Fringe (11:00 P.M. to 11:35 P.M.)** Affiliated stations usually air their late local news in this time slot.

**Late Night (11:35 P.M. to 2:05 A.M.)** NBC provides affiliates with programming for the entire period, and CBS programs all but 30 minutes. ABC fills only the 11:35 P.M. to 1:05 A.M. slot. Options for CBS and ABC affiliates include off-network situation comedies and, for ABC affiliates, syndicated talk or entertainment-based programs and off-network dramatic series.

**Overnight (2:05 A.M. to 6:00 A.M.)** Affiliates that remain on the air usually carry news fed by the network during part or all of the period.

Weekend scheduling is influenced by network sports programming, which varies from season to season. On Saturday afternoons, the station may have to program a period of two or more hours. Syndicated entertainment and feature films are among the most popular options. Many stations air a 30-minute local newscast at 6:00 P.M. and follow network news with a one-hour or two 30-minute syndicated entertainment programs from 7:00 to 8:00 P.M. Local late news follows network prime time on many affiliated stations. ABC and CBS affiliates do not receive network programming during late night and

often run movies, syndicated talk, off-network drama series, or situation comedies in the time periods.

Many affiliates carry religion, public affairs, or children's programs on Sunday mornings before joining the network for news-magazine and news-interview broadcasts. Depending on the season, the station may have to schedule afternoon programs before or after network sport. Again, syndicated entertainment and feature films are common choices, with local and network news between 6:00 and 7:00 P.M. After network prime time, most affiliates air a 30-minute local newscast. Movies, syndicated entertainment, and religion are among the alternatives for the late-night period.

## PROGRAMMING THE INDEPENDENT STATION

Programming an independent television station is a most challenging job. The challenge is less difficult for stations affiliated with Fox, The WB, and UPN, which receive varying amounts of programming from their networks. However, programmers still are left with many hours to fill each day, and independents cannot rely to the same degree as competing affiliates on network programs to encourage the flow of viewers into locally scheduled time periods, thus enhancing not only audience size but also the value of time the station sells to advertisers.

By definition, the true independent does not have access to programs on any permanent network, many of which attract large audiences to the affiliates with which it competes. It does not benefit from network promotion and publicity, which draw viewers to the affiliates. Unlike the affiliate, the true independent must provide all the programs it airs, a task that has been aggravated by the increased competition for attractive off-network syndicated programs and by their growing cost.

The independent does not enjoy the comparatively high rates that affiliates can charge advertisers for time in and around network programs. Further, the independent often has to contend with a negative attitude on the part of time buyers.

The challenge is difficult but not impossible. In large measure, independents' achievements have been based on the wisdom of their program selection, the imagination of their promotion efforts and, above all, on the effectiveness of their program scheduling.

For the most part, the programming weapons of independents have been movies, syndicated talk, off-network entertainment programs—especially situation comedies and action-drama series—syndicated or local children's programs, and live sports. Many independent, also carry specials and, occasionally, programs rejected by affiliates.

Network promotion has aided Fox affiliates in positioning themselves, while station promotion has enabled true independents to benefit from their image as a source of alternative programming or as the station to watch for movies or sports. However, positioning the independent is becoming more difficult with the increase in both alternative and specialized program offerings on cable and DBS.



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## COST-PER-1000 HOMES REACHED TRENDS FOR NETWORK AND SPOT TV 30-SECOND UNITS 1955-2005

	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000	2005 <sup>3</sup>
<b>Major Network TV (ABC/CBS/NBC)</b>											
Daytime	\$0.55	\$0.65	\$0.75	\$0.85	\$1.00	\$2.00	\$3.10	\$2.35	\$3.00	\$4.50	\$5.05
Early News	NA	NA	1.40	1.55	1.65	3.20	5.45	6.15	6.25	6.65	8.39
Prime Evening <sup>1</sup>	1.50	1.70	1.95	2.20	2.55	4.80	8.25	8.76	9.50	13.25	19.93
Late Evening	NA	NA	2.05	1.95	2.00	3.40	5.60	6.35	7.25	11.25	16.69
Sports <sup>2</sup>	NA	NA	3.00	2.95	2.60	4.50	7.30	8.75	9.85	14.00	16.19
<b>Spot TV<sup>4</sup></b>											
Daytime	NA	NA	2.00	2.40	2.65	2.75	3.30	4.25	4.35	5.65	5.67
Early Evening	NA	NA	1.25	1.65	1.75	2.80	4.05	4.85	5.45	7.45	6.67
Prime <sup>1</sup>	NA	NA	2.30	2.60	3.65	6.75	10.00	12.00	12.75	16.25	22.00
Late News	NA	NA	1.60	1.85	2.50	4.75	7.25	8.50	10.25	13.15	15.49
Late Evening	NA	NA	1.50	1.80	2.35	3.85	5.35	6.50	6.75	9.15	9.67

NA Insufficient data.

<sup>1</sup>Includes Fox after 1995

<sup>2</sup>All telecast average.

<sup>3</sup>Top 100 markets.

<sup>4</sup>Major network affiliates

<sup>5</sup>Data are for the 2004-05 upfront for network buys

Source: Media Dynamics, Inc. for all data prior to 2005 and for 2005 Network, Sports and Spot TV. 2005 Network data are from SQUAD's Netcast service.

TV Ad Clutter Trends Continued

## PROPORTION OF ON-AIR TIME OCCUPIED BY NON-PROGRAM MATTER FOR ON-AIR, SYNDICATION AND CABLE NETWORKS BY DAYPART

2004

	COMM'L'S. <sup>1</sup>	NON-PROGRAM CONTENT <sup>2</sup>
<b>ON-AIR TV NETS.</b>		
M-F Early AM	27%	30%
M-F Day	28	35
M-F Early News	25	29
Prime	20	28
Late Fringe	26	31
<b>SYNDICATION</b>		
M-F Day	22	30
Prime Access	25	34
Fringe Eve.	25	29
<b>CABLE NETS.</b>		
Early AM	20	26
Day	20	25
Early Fringe	19	26
Prime	21	27
Late Fringe	21	27

<sup>1</sup>Network plus local<sup>2</sup>Including commercials, PSAs, promotional plugs, etc.

□ Source: Media Dynamics, Inc.

## 2004-05 SEASON CPM ESTIMATES

30-Second Units

HOMES	ADULTS				MEN				WOMEN				
	18+	18-34	18-49	25-54	18+	18-34	18-49	25-54	18+	18-34	18-49	25-54	
<b>ABC/CBS/NBC</b>													
Early AM	\$8.30	\$6.77	\$32.04	\$15.69	\$13.54	\$17.79	\$88.70	\$41.27	\$36.66	\$11.50	\$51.03	\$25.58	\$21.92
Daytime	5.05	4.58	13.93	8.57	9.17					6.13	18.03	11.60	12.74
Early News	8.39	5.29	31.67	13.96	13.13	12.71	67.72	1.67	31.97	9.74	61.01	25.96	23.88
Prime	19.93	13.38	40.08	24.63	24.51	28.20	91.35	53.90	17.96	22.64	72.03	40.39	44.08
Late Fringe	15.69	12.16	31.90	18.86	21.16	27.03	64.79	39.83	48.61	23.65	59.52	34.27	36.69
<b>Syndication</b>													
Daytime	4.01	3.47	12.15	7.07	7.42					4.91	21.07	10.24	10.59
Early Fringe	9.32	7.01	24.47	12.90	14.79	14.07	57.95	26.49	25.69	10.53	37.02	20.15	19.91
Prime	14.92	10.50	36.53	17.71	19.15	24.19	79.26	43.65	44.27	21.92	76.00	38.74	38.92
Late Fringe	9.44	8.25	20.58	11.02	13.38	19.33	35.55	24.94	32.51	13.97	29.59	20.04	23.87
<b>Cable</b>													
Daytime Mass	2.03	2.79	6.42	2.72	3.36	4.26	15.51	5.40	8.29	2.73	11.93	6.20	6.36
Early Fringe Mass	4.92	4.98	18.43	7.73	9.33	11.33	30.79	17.51	19.80	8.99	23.24	13.91	17.41
Prime Youth Target	13.12		34.03	17.90			65.91	35.61			65.91	29.35	
Prime Mass	6.65	5.25	22.21	10.39	10.44	11.08	45.21	21.07	20.55	10.79	45.61	21.98	21.52
Prime Upscale	13.13	9.24	60.61	24.25	21.59	17.57	97.27	40.67	35.08	21.28	146.02	59.76	53.08
Late Fringe Mass	5.09	4.05	13.54	6.25	6.37	7.99	25.87	12.61	12.73	7.99	27.95	13.31	13.42
Weekend Mass	4.11	3.62	12.03	6.27	6.78	7.68	25.19	13.50	13.67	5.76	20.45	11.13	10.90
<b>Spot</b>													
Day	5.67	5.48	20.47	10.92	10.91					7.37	26.94	15.00	11.11
Early Fringe	6.71	5.81	23.01	12.80	12.05	14.88	57.41	29.85	31.35	9.14	36.94	19.79	18.44
Prime <sup>1</sup>	22.00	15.01	55.46	27.83	28.36	32.98	111.30	55.84	55.94	26.02	98.71	53.06	47.84
Late News <sup>1</sup>	15.49	11.11	46.68	19.80	18.84	24.05	86.54	10.82	40.75	19.14	77.21	38.23	32.71
Late Fringe	9.67	7.49	24.34	12.84	12.97	16.42	50.54	25.72	27.27	13.12	41.06	23.77	21.39

<sup>1</sup>Includes Fox for 18-34 and 18-49 target CPMs.

Includes Prime Access.

ABC/CBS/NBC stations only.

<sup>2</sup>Source: Media Dynamics Inc. for all network, syndication and cable data. "Homes" data are from SQUAD's Netcost service (2004-05 upfront).

Cable Reach Levels Much Bigger Than Realized *Continued*

## WEEKLY REACH OF ON-AIR AND CABLE REGULARLY SCHEDULED PROGRAMS BY DAYPART

	ALL ADULTS	SEX		AGE			H.H. INCOME			
		MEN	WOMEN	18-34	35-54	55+	\$30-	\$50-	\$75K+	
							\$30K	49.9K		
<b>ABC/CBS/NBC</b>										
Any Early Morning Show	35.3	31.0	39.4	27.9	35.7	43.1	37.6	31.4	33.9	35.1
Any Daytime Show	33.4	24.1	42.1	34.9	29.9	36.8	46.7	35.8	29.2	22.3
Any Early Evening Newscast	47.5	47.3	47.6	33.8	46.7	63.2	48.8	45.5	47.0	48.1
Any Primetime Show	89.3	87.3	91.0	90.3	89.4	87.9	89.7	89.6	90.3	87.9
Any Late Evening Show	39.1	43.7	34.8	45.3	37.0	35.1	38.0	38.8	40.8	39.1
Any Sunday Morning Interview/Talk Show	15.1	15.9	14.3	8.5	13.5	24.7	14.8	13.5	14.7	16.9
Any ABC/CBS/NBC Show— Any Daypart	94.2	93.1	95.3	94.1	93.7	95.0	94.3	94.5	95.0	93.3
<b>FOX</b>										
MADtv (Fox)	9.6	11.2	8.2	17.1	9.0	2.3	12.7	10.6	9.3	6.3
Any Primetime Show	64.2	66.0	62.6	74.6	64.0	53.1	68.2	67.3	64.9	57.7
Any Show—Any Daypart	64.6	66.4	63.1	75.1	64.4	53.4	68.5	67.6	65.2	58.3
<b>UPN</b>										
Any Primetime Show	28.0	31.8	24.6	35.5	29.2	18.2	37.8	30.5	25.6	18.8
<b>WB</b>										
Any Primetime Show	36.6	32.4	40.4	47.0	35.5	26.6	45.2	40.2	36.2	26.0
<b>CABLE</b>										
Any Cable Channel	84.3	85.2	83.5	85.5	84.6	82.6	78.1	84.5	85.4	89.2
Any Cable Show	79.1	80.6	77.8	81.7	78.6	77.0	75.4	79.2	80.3	81.7

Source: Next Generation Research, LLC, Advertising Reach Index, 2003



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*What Kinds Of Product Ads Are Of Most Interest To TV Sports Viewers? Continued*

## DEMOGRAPHIC PROFILE OF ADULTS WHO ARE VERY FREQUENT VIEWERS BY SPORT VIEWED

April 2003

	SEX		AGE 18-34	H.H. INCOME		PROF./ MGR.	BLACK
	MEN	WOMEN		\$55K+	\$75K+		
Arena Football	67%	33%	40%	27%	17%	21%	5%
Automobile Racing	61	39	37	23	21	21	5
Bowling	56	44	20	46	16	18	26
College Basketball	68	32	33	29	33	31	23
College Football	69	31	31	33	34	31	17
Maj. League Baseball	61	39	29	34	30	28	11
Pro Basketball	62	38	36	27	25	27	35
Pro Football	64	36	31	30	31	29	12
Pro Golf	62	38	14	54	40	29	12
Pro Hockey	68	32	40	18	34	32	4
Pro Tennis	53	47	20	43	31	28	38
Pro Wrestling	71	29	55	11	13	15	23
<b>Total Adult Pop.</b>	<b>48</b>	<b>52</b>	<b>32</b>	<b>28</b>	<b>29</b>	<b>28</b>	<b>12</b>

Source: Next Generation Research, LLC, Advertising Receptivity Index, 2003.

*Continued* →

## ADULT VIEWER PROFILE OF SELECTED DAYTIME PROGRAMS<sup>1</sup>

	WOMEN	AGE			H.H. INCOME			BLACK	HISPANIC
		18 24	35 44	65 +	\$75K +	\$30- 39K	< \$10K		
<b>Early AM</b>									
Early Show (C)	55%	10%	18%	25%	22%	14%	12%	17%	11%
Good Morning America (A)	66	8	19	22	29	11	7	15	12
Today (N)	60	10	21	18	34	12	5	11	8
<b>Daytime Serials</b>									
All My Children (A)	78	13	20	20	19	12	12	26	10
As The World Turns (C)	80	15	16	32	18	11	14	25	5
Bold & The Beautiful (C)	74	12	17	30	20	12	11	23	7
Days of Our Lives (N)	76	16	19	16	17	16	13	17	9
General Hospital (A)	79	15	21	15	23	13	11	18	11
Guiding Light (C)	78	15	15	30	17	13	14	25	7
One Life To Live (A)	79	15	19	16	18	13	14	27	8
Passions (N)	76	24	20	12	12	15	17	24	12
Young & The Restless (C)	74	12	17	26	17	13	12	26	8
<b>Day Game Shows</b>									
Price Is Right (C)	58	12	14	37	14	13	13	17	8
<b>Syndicated Talk Shows</b>									
Dr. Phil	73	8	17	26	23	12	7	7	7
Ellen DeGeneres	74	12	23	13	31	9	5	6	6
Jerry Springer	45	22	23	9	13	14	18	33	15
Live! With Regis & Kelly	66	9	17	30	28	14	5	10	6
Oprah Winfrey	78	9	18	24	27	10	7	15	8
Ricki	68	24	25	5	12	15	21	47	14
<b>Syndicated Court Shows</b>									
Divorce Court	61	11	20	22	10	17	17	45	8
Judge Judy	59	7	17	27	16	14	12	23	7
Judge Mathis	58	13	17	19	15	14	13	47	7
People's Court	61	8	19	27	11	14	12	22	11
<i>U.S. Adult Pop.</i>	<i>52</i>	<i>13</i>	<i>21</i>	<i>16</i>	<i>31</i>	<i>11</i>	<i>6</i>	<i>11</i>	<i>12</i>

A-ABC, C-CBS, N-NBC.

<sup>1</sup>Average telecast

<sup>1</sup>Source: MRI, spring 2001.



## AVERAGE ¼ HOUR RATING AND AUDIENCE COMPOSITION FOR NATIONALLY-AIRED MAJOR ON-AIR NETWORK TV SPORTS

	TV H.H. RTG.	VIEWERS PER 100 HOMES				
		CHILD. 2-11	TEENS 12-17	MEN 18+	WOMEN 18+	TOTAL
<b>Bowling</b>	2-4	9	6	58	63	136
<b>Baseball</b>						
Reg. Season	2-4	9	7	71	43	130
Playoffs	5-10	10	8	76	51	145
World Series	10-16	11	9	80	60	160
<b>College Basketball</b>						
Reg. Season	2-4	8	9	76	40	133
Tournaments	6-18	12	13	83	42	150
<b>College Football</b>						
Saturday PM	3-5	8	7	78	41	134
Bowls	5-9	10	9	84	53	156
<b>Pro-Basketball</b>						
NBA—Reg. Season	3-6	10	12	75	40	137
NBA—Playoffs	5-8	12	15	85	45	157
Championship Series	10-11	11	16	87	47	161
<b>Pro-Football</b>						
Sunday PM	8-14	12	10	83	41	145
Monday Night	11-14	8	11	86	44	149
Playoffs	14-20	15	10	88	46	159
Super Bowl	35-45	18	14	96	64	192
<b>Golf</b>	2-3	5	5	71	53	134
<b>Hockey</b>	2-3	11	12	72	38	131
<b>Horse Racing</b>	3-7	4	3	62	67	136
<b>Multi-Sports Shows (Anthologies)</b>	1-2	11	7	48	55	121
<b>Tennis</b>	2-3	10	8	50	57	125

Source: Media Dynamics, Inc.

## AVERAGE TELECAST ADULT VIEWER PROFILE OF SELECTED SYNDICATED SERIES

	SEX		AGE			H.H. INCOME			RACE		
	MEN	WOMEN	18-24	25-34	35-64	\$75,000 +	\$30,000-39,999	< \$10,000	WHITE	BLACK	HISPANIC
<b>Talk Shows</b>											
Ellen DeGeneres	26%	74%	12%	23%	13%	31%	9%	5%	88%	6%	6%
Jerry Springer	55	45	21	23	9	13	14	18	52	33	15
Live! With Regis & Kelly	44	66	9	17	30	28	14	5	86	10	6
Montel Williams Show	32	68	14	19	20	13	12	14	73	19	10
Oprah	22	78	9	18	24	27	10	7	78	15	8
Ricki	32	68	24	25	5	12	15	22	36	47	14
<b>Sitcoms</b>											
Drew Carey	58	42	19	27	7	21	11	10	78	10	12
Everybody Loves Raymond	42	58	9	20	23	29	12	6	85	6	9
Frasier	45	55	12	17	18	27	13	8	80	14	8
Friends	42	58	19	21	8	33	10	6	84	5	11
Home Improvement	53	47	16	24	12	21	11	8	82	7	10
The Hughleys	45	55	19	26	5	17	15	17	25	62	12
Seinfeld	60	40	14	24	9	38	10	4	83	6	11
<b>Game Shows</b>											
Hollywood Squares	41	59	8	12	40	15	17	8	81	12	8
Jeopardy	47	56	7	13	37	25	15	6	84	11	5
Wheel Of Fortune	40	60	8	12	39	19	14	8	81	12	6
<b>Mag. Shows</b>											
Access Hollywood	34	67	17	21	8	30	12	8	62	17	17
Entertainment Tonight	44	66	8	18	17	34	10	6	79	13	9
Extra	34	66	17	18	10	24	11	6	59	12	25
Inside Edition	39	61	11	22	18	20	14	7	68	25	7
<b>Action/Adventure</b>											
Cops	59	41	14	22	12	17	14	10	78	13	10
Star Trek Voyager	59	41	13	28	11	25	15	10	70	20	10
<b>Court Shows</b>											
Divorce Court	39	61	11	20	22	10	17	17	46	45	8
Judge Judy	41	59	7	17	27	16	14	12	71	23	7
Judge Mathis	42	58	13	18	19	15	14	14	48	47	7
People's Court	39	61	8	19	27	11	14	12	67	22	11
<b>Total Adult Pop.</b>	<b>48</b>	<b>52</b>	<b>13</b>	<b>21</b>	<b>16</b>	<b>31</b>	<b>11</b>	<b>6</b>	<b>78</b>	<b>11</b>	<b>12</b>

Note: Percentages may not add to 100 due to rounding.

Source: MRI, spring 2004

## COST-PER-1000 PROJECTIONS FOR FIVE MEDIA

2004

	AD UNIT	MEN	WOMEN
<b>TV</b>			
Early AM (Major Nets.)	:30	\$19.15	\$12.05
Daytime (Major Nets.)	:30	—	5.95
Early News (Major Nets.)	:30	14.25	11.15
Primetime (Major Nets.)	:30	29.95	23.20
Primetime (Cable) <sup>1</sup>	:30	10.85	10.55
Late Fringe (Major Nets.)	:30	29.75	25.65
<b>Radio</b>			
Network	:30	10.85	9.05
Spot	:30	11.95	11.55
<b>Magazines</b>			
Men's Interest	P4C	13.40	—
Newsweeklies	P4C	11.76	—
Mass Dual Audience	P4C	8.65	5.79
Women's Fashion	P4C	—	11.91
Women's Service	P4C	—	5.68
<b>Newspapers<sup>2</sup></b>			
Dailies	1/3 P B&W	25.65	24.25
<b>Out-Of-Home</b>	30 Sheet	5.40	5.65

<sup>1</sup>General audience cable channels.

<sup>2</sup>Top 100 markets.

Source: Media Dynamics, Inc.

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## À LA CARTE AND “FAMILY TIERS” AS A RESPONSE TO A MARKET DEFECT IN THE MULTICHANNEL VIDEO PROGRAMMING MARKET

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### I. INTRODUCTION

Many policymakers, both Republican and Democrat, have recently expressed concern over the content of video programming and, in particular, the practice of multichannel video programming distributors (“MVPDs”) such as cable and satellite video providers to “bundle” a large number and variety of channels together into a “take-it-or-leave-it” package. It is common for MVPDs to make certain “must-have” programming (like CNN, ESPN, Nickelodeon, or The Discovery Channel) available only to those consumers in an “expanded basic” bundle that also includes other channels like MTV and SpikeTV that might contain content some subscribers may find objectionable.

Federal Communications Commission (“FCC” or “Commission”) Chairman Kevin J. Martin has discussed this issue publicly and has repeatedly asked the MVPD industry to develop solutions that would give American households additional choice and control over the cable programming networks that they receive.<sup>1</sup> On February 6, 2006, the FCC Media Bureau

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<sup>1</sup> S. COMM. ON COMMERCE, SCI., & TRANSP., 109TH CONG., OPEN FORUM ON DECENCY 9–12 (Comm. Print 2006) [hereinafter OPEN FORUM ON DECENCY] (statement of Kevin J.

issued a report that found several potential benefits to “à la carte” (channel-by-channel) provision of cable programming, from “combating rising MVPD rates and lowering consumer bills” and “offer[ing] consumers the ability to pay only for the programming that they value.”<sup>2</sup> The Media Bureau report followed testimony by Chairman Martin before the Senate Commerce Committee in which he discussed his frustration with increasingly indecent programming and the unavailability of “family tiers” of programming that exclude potentially offensive material.

Members of Congress have also begun to take action. On June 7, 2006, Senator John McCain introduced the Consumers Having Options in Cable Entertainment (“CHOICE”) Act.<sup>3</sup> In introducing the legislation, Senator McCain said that despite calls for more programming package choices, cable companies “have continued to give consumers all the ‘choice’ of a North Korean election ballot.”<sup>4</sup> As discussed below, the CHOICE Act incorporates a carrot/stick approach to the issue, in an attempt to induce cable firms and programmers to offer channels on an à la carte basis to consumers.<sup>5</sup> In 2005, Senator Ron Wyden took a different approach, proposing a bill that would require all cable providers offer a family-tier of at least fifteen channels.<sup>6</sup>

Many consumers and some commentators have supported these initiatives.<sup>7</sup> But these initiatives have also come under attack, often on the ideo-

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Martin, Chairman, Fed. Commc’ns Comm’n). Some cable and satellite MVPDs have begun to offer some form of family tier. Some of these, however, require consumers to subscribe to a basic tier of programming in order to benefit from a family package. Comcast, <http://www.comcast.com/Localization/Localize.aspx?Referer=/shop/buyflow/default.aspx> (enter “1600 Pennsylvania Avenue” and “20001” in the address and zip code boxes; select “Washington, DC” and follow “Thanks! On you go” hyperlink; follow “See All Features” hyperlink under “Family Tiers” heading) (demonstrating the White House could not subscribe to a Comcast Family Tier without also subscribing to a basic programming tier).

<sup>2</sup> *In re À La Carte and Themed Programming and Pricing Options for Programming Distribution on Cable Television and Direct Broadcast Satellite Systems, Further Report on the Packaging and Sale of Video Programming Services to the Public*, MB Docket No. 04-207, ¶ 111 (Feb. 9, 2006) [hereinafter *2006 À La Carte Report*]. À la carte programming allows consumers to subscribe to individual channels of their choosing.

<sup>3</sup> Consumers Having Options in Cable Entertainment Act, S. 3457, 109th Cong. (2006); see also John McCain & Kevin J. Martin, *John McCain: Make Cable Go À La Carte*, L.A. TIMES, May 25, 2006, at B11.

<sup>4</sup> 152 CONG. REC. S5600 (daily ed. June 7, 2006) (statement of Sen. John McCain).

<sup>5</sup> See generally Consumers Having Options in Cable Entertainment Act, S. 3457, 109th Cong. (2006)

<sup>6</sup> Kid Friendly TV Programming Act of 2005, S. 946, 109th Cong. § 3 (2005).

<sup>7</sup> See, e.g., Cesar. V. Conda, *Cable, à La Carte?*, NAT’L REV. ONLINE, Jan. 12, 2006, <http://www.nationalreview.com> (select “Search” tab; select “National Review Online” hyperlink; enter “cable, a la carte” in the keyword box; select “NRO articles” in the “Sections” drop-down menu; select “Search” and then select “Cable, a la Carte?” hyperlink to view article by Cesar v. Conda) (“Conservatives of all stripes should commend FCC chairman Martin for using the enlightening power of the Bully Pulpit”); Press Release, Con-

logical ground that a government requirement that an MVPD offer a “family tier” or “à la carte” programming is an unwise and dangerous interference with free market principles.<sup>8</sup> The general thread of these criticisms is that cable companies are simply offering consumers the services that they want, so if consumers continue to purchase these bundles of programming, it is not the government’s role to intervene in those decisions.<sup>9</sup> One commentator has even argued that in a competitive market, “self-interest (the need to retain customers) will compel competitive firms to select the pricing strategy that their customers prefer.”<sup>10</sup>

This article describes a set of circumstances in which a market defect will lead to the bundling of objectionable with desirable content—even in competitive video distribution markets.<sup>11</sup> This approach is practical and not philosophical. The purpose is to present an economic model illustrating the circumstances or conditions in which a multichannel video programming provider might decide that it is more profitable to deliver particular channels of video programming to households in a “forced bundle” that does not give consumers the option to exclude objectionable programming from the bundle. The analysis uncovers one set of conditions that makes these “forced bundles” resistant to changes in market structure, in that forced bundles appear in both monopolist and competitive structures. It finds that the practice of forced bundling may persist even in fully competitive video markets. The analysis shows that simplistic arguments that cable companies are simply using “the pricing strategy that their customers” prefer is fundamentally flawed. These findings instead suggest that investigations by both academics and government into the causes and consequences of “forced bundling” may be legitimate, since this model shows that con-

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cerned Women for America, CWA Endorses McCain’s Cable Choice Bill (June 7, 2006), available at <http://www.cwfa.org/articledisplay.asp?id=10908&department=MEDIA&categoryid=misc>.

<sup>8</sup> See, e.g., Adam Thierer, *Moral and Philosophical Aspects of the Debate over A La Carte Regulation* (The Progress and Freedom Foundation, Progress Snapshot, Release 1.23, Dec. 2005), available at <http://www.pff.org/issues-pubs/ps/ps1.23alacarte.pdf> (last visited Nov. 12, 2006) (“[Y]ou have no ‘right’ call [sic] upon government to upend an industry’s private business arrangements”). Thierer also called Sen. Wyden’s bill “government nannyism for cable TV.” Adam Thierer, “Kid-Friendly” Tiering Mandates: *More Government Nannyism for Cable TV* (The Progress and Freedom Foundation, Progress Snapshot, Release 1.2, May 2005), available at <http://www.pff.org/issues-pubs/ps/ps1.2familyfriendly-tiering.pdf>.

<sup>9</sup> See *infra* Part IV.A-E and accompanying footnotes.

<sup>10</sup> Steven S. Wildman, A Case for A La Carte and “Increased Choice”? An Economic Assessment of the FCC’s Further Report 20 (Mar. 9, 2006) (unpublished manuscript), available at <http://www.ncta.com/DocumentBinary.asp?id=203> at 20 (scroll to bottom of web page and select the hyperlink “Wildman Paper o31506.pdf”) (last visited Nov. 12, 2006).

<sup>11</sup> “Objectionable” content refers to content from which the consumer derives a negative utility.

sumer welfare is unambiguously improved with the elimination of forced bundles.

Section II presents a brief background on the issue of à la carte and forced bundling in the purchase of video programming. Section III contains a simple economic model in which a third party (e.g., advertisers and programmers) compensates the cable provider for bundling certain undesirable channels with desirable ones. The presence of this third party does not, in and of itself, create a “market failure,” but it does interfere with the ability of consumers to communicate their bundling preferences to MVPDs and have those preferences fully realized. Rather than a “market failure,” this effect could more appropriately be called a “*market defect*”—but whatever one calls it, it is certainly a failure from the consumer’s point of view.<sup>12</sup> The influence of the third party is not alleviated by changes in market structure, as forced bundling is shown to be resistant to competitive entry. Since the transaction costs of organizing a coalition of consumers to pay for the exclusion of objectionable content are likely to be prohibitively high, an argument for the government to act as an agent is not unreasonable. Section IV outlines some potential policy responses, recognizing that any effort to resolve this problem with government intervention requires the policymaker to invest in fully understanding the sources and nature of bundling, so that any rules can be precisely targeted.

## II. BACKGROUND

Most consumers who purchase cable services purchase an “expanded basic” tier of channels,<sup>13</sup> which is usually priced at a fixed monthly cost.<sup>14</sup> Many of the most popular cable programming services are found on this expanded basic tier—programs as diverse as “The Iron Chef,”<sup>15</sup> “MythBusters,”<sup>16</sup> and “Poirot.”<sup>17</sup> But the expanded basic tier also contains

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<sup>12</sup> The complete social welfare consequences of these practices are beyond the scope of our analysis. See generally Avinash Dixit & Victor Norman, *Advertising and Welfare*, 9 BELL J. ECON. 1 (1978) (examining the relationship of private profitability and consumer tastes in several market settings).

<sup>13</sup> See Leslie Cauley, *How We Pay for Cable May Be About to Change*, USA TODAY, Mar. 1, 2006, [http://www.usatoday.com/tech/news/2006-03-01-ala-carte-cable\\_x.htm](http://www.usatoday.com/tech/news/2006-03-01-ala-carte-cable_x.htm) (discussing tradition cable packages and payment schemes); Family Choice Act of 2006, H.R. 5919, 109th Cong. § 2(1) (2006) (“88 percent [of cable consumers] subscribe to [an] expanded basic service.”).

<sup>14</sup> See *id.*

<sup>15</sup> “The Iron Chef” is a Food Network program in which several chefs compete in a cooking competition against the reigning champion. See Iron Chef, [http://www.foodnetwork.com/food/show\\_ic](http://www.foodnetwork.com/food/show_ic) (last visited Nov. 12, 2006).

<sup>16</sup> “Mythbusters” is a Discovery Channel program where special effects experts test the veracity of myths by reconstructing them in controlled experiments. See Discovery Channel, Mythbusters Fan Site, <http://dsc.discovery.com/fansites/mythbusters/mythbusters.html> (last visited Nov. 12, 2006).

programming that some families—particularly parents of school-aged children—might prefer not to have available.

For example, a recent show on MTV entitled “I’m on Steroids” documented one man’s attempt to get on the cover of a fitness magazine by taking steroids “under the supervision of professionals.”<sup>18</sup> Another MTV show, called “Homewrecker,” showed how to “Make Your Very Own Torture Room.”<sup>19</sup> SpikeTV sported an animated show called “Stripperella,” which starred Pamela Anderson as the voice of Erotica Jones, “a stripper by night and superhero Stripperella by even later at night.”<sup>20</sup>

While no one forces consumers to watch programming they do not prefer, many have argued that the ready and easy availability of this type of programming to children creates important social problems and costs. Despite these opportunities, the fact remains that a family that wishes to have access to CNN, ESPN, or The Discovery Channel, in the overwhelming majority of cases, must also accept access to MTV and SpikeTV as part of the bundle.

In addition to this impact on families, bundling of video programming presents other complicated issues. FCC economists Keith Brown and Peter J. Alexander have presented a conceptual analysis of programming network bundling, and they found that bundling can be a method in which a firm with market power can capture monopoly rents from consumers, but that certain types of bundling also can be an efficient response by the MVPD to competition.<sup>21</sup> Brown and Alexander also note that “bundling may be used as a tool that incumbents use to foreclose entry.”<sup>22</sup>

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<sup>17</sup> “Poirot” is a British television series documenting the investigations of Agatha Christie’s fictional detective Hercule Poirot. See Poirot Television Show, TV.com, <http://www.tv.com/poirot/show/3573/summary.html> (last visited Nov. 12, 2006). The program is broadcast internationally and has appeared in the United States on the Arts & Entertainment Network (A&E). *Id.*

<sup>18</sup> MTV.com, True Life: I’m on Steroids, <http://www.mtv.com/ontv/dyn/truelife/episodes.jhtml> (select “Episode Guide” hyperlink and then select “Episode 27”) (last visited Nov. 12, 2006). The True Life program series presents short documentaries about the lives of young adults, ranging from following a person through a diet to documenting a soldier’s return from Iraq. *Id.*

<sup>19</sup> MTV.com, Homewrecker, <http://www.mtv.com/ontv/dyn/truelife/series.jhtml#ontv/dyn/homewrecker/series.jhtml> (last visited Nov. 12, 2006). In each episode, the host of the series helps one roommate creatively “trash” his or her cohabitant’s personal space. *Id.* (follow “Read More” hyperlink).

<sup>20</sup> See SpikeTV.com, Stripperella, <http://www.spiketv.com/#/shows/index.jhtml> (select “Shows” hyperlink; select “Vintage” hyperlink; and follow “Striperella” hyperlink) (last visited Nov. 12, 2006); Internet Movie Database, *Stripperella*, <http://www.imdb.com/title/tt0369171/> (last visited Sept. 21, 2006).

<sup>21</sup> Keith Brown & Peter J. Alexander, *Bundling in Cable Television: A Pedagogical Note With a Policy Option*, 6 INT’L J. MEDIA MGMT. 162, 162 (2004).

<sup>22</sup> *Id.* at 165.



Defenders of the industry's "forced bundling" of program networks admit that there is a form of cross-subsidy involved in this practice.<sup>23</sup> A 2004 FCC Media Bureau report largely supported the cable industry's position and stated that bundling of channels requires consumers to "cross-subsidize each others' viewing habits, allowing new and diverse programming to survive in the marketplace."<sup>24</sup> Critics of forced bundling decry these cross-subsidies, but there is at least some consensus on the point that cross-subsidization motivates the practice of bundling video programming networks.

Perhaps the most perplexing thing about à la carte programming is that so little of it exists. Brown and Alexander note that a policy of mixing bundles and à la carte pricing could "allow[] the monopolist to price the bundle very high, to capture the consumers with a high total valuation of all the channels, and still capture some consumers with a very high valuation of particular channels."<sup>25</sup> A multi-tier strategy is essentially a form of price discrimination,<sup>26</sup> so it would seem logical that a menu of programming options that involve multiple combinations of a "family tier," along with an "adult contemporary tier" or "scatological content tier," would, if properly implemented, generate higher profits for a firm. Yet this does not happen except in certain circumstances (notably, sports, movies, and Playboy/Spice, none of which contain channels generally available on the expanded basic tier level).

With digital cable services, there does not seem to be a significant technological reason as to why making a multitude of à la carte and tiers is not possible. Digital capability offers the ability to offer more à la carte programming, through pay-per-view or video-on-demand services, more cost-effectively than it might have been before.<sup>27</sup> In the days of analog cable service (which have yet to pass completely), high equipment or software costs to exclude particular channels from the bundle might have justified the sale of programming in large bundles. Analog cable systems often used filters and traps to block certain channels, but it was notoriously easy for consumers to circumvent those devices. But, even in the days of analog

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<sup>23</sup> See Thomas Hazlett, et al., *Debate: Cable TV Rates: Has Deregulation Failed?*, Manhattan Institute for Policy Research, Center for the Digital Economy (Nov. 21, 2003) (transcript available at <http://www.manhattan-institute.org/html/cde11-21-03.htm>).

<sup>24</sup> *In re À La Carte and Themed Programming and Pricing Options for Programming Distribution on Cable Television and Direct Broadcast Satellite Systems*, *Report on the Packaging and Sale of Video Programming Services to the Public*, MB Docket No. 04-207, at 5 (Nov. 18, 2004) [hereinafter *2004 À La Carte Report*]. However, the Media Bureau's 2006 report on the topic noted that "the cross-subsidization that the [2004] Report portrays as a valuable feature of bundling can actually be harmful to consumers and society." *2006 À La Carte Report*, *supra* note 2, ¶ 38 (citations omitted).

<sup>25</sup> Brown & Alexander, *supra* note 21, at 165.

<sup>26</sup> *Id.* at 162.

<sup>27</sup> Burt Helm, *Cable a la Carte: Choice v. Cost?*, *BUS. WK.*, Dec. 7, 2005, [http://www.businessweek.com/technology/content/dec2005/tc20051207\\_647629.htm](http://www.businessweek.com/technology/content/dec2005/tc20051207_647629.htm).

cable, some programming was still sold on an à la carte basis, such as HBO. In a digital cable environment, however, the argument that it is difficult as a hardware, software, or enforcement matter to offer channels solely on an à la carte basis is weak. The 2006 FCC Media Bureau Report notes “a substantial share” of the costs of deploying à la carte is accounted for by digital transmission, a conversion that “is occurring independently of any à la carte options.”<sup>28</sup> The technology for complete à la carte for digital cable subscribers is now clearly possible.<sup>29</sup> Given the potential profit opportunities that might await cable operators from selling programming à la carte, the fact that video services are not generally sold in this way today must have a different explanation.

The following section outlines an economic model to help explain why a cable firm would create bundles combining undesirable with desirable programming. This model shows that the presence of advertising revenues or some other off-setting factor, like programming distribution transaction costs, plays a significant role in setting the size of the expanded basic tier. Stated another way, MVPDs do not create their tiers of programming solely by reference to what consumers want to watch (or not watch)—an MVPD establishes tiers in order to maximize profits. Those profits include advertising revenues and programming licensing considerations, which, in essence, require that popular programming networks be bundled with new and niche channels.<sup>30</sup> As a witness for the Dish Network, one of the nation’s largest MVPDs, David J. Moskowitz testified before the Senate Committee on Commerce, Science and Transportation:

We’ve also considered offering a family tier, but are currently prevented from doing so by our existing contracts with programmers. . . . [L]arge content providers require the bundling of multiple core popular programming networks, only some of which would be considered family friendly. Again, in these circumstances, the programming vendors will not sell the family friendly channel or will only offer it at an uneconomic price, unless we agree to accept several of the vendors’ other channels and place these other networks in the same programming tier.<sup>31</sup>

<sup>28</sup> 2006 *À La Carte Report*, *supra* note 2, ¶¶ 60-61. The National Cable and Telecommunications Association reports that there are 32.9 million digital cable subscribers as of June 2006, roughly half of the 65.5 million cable households in the country. Nat’l Cable & Telecomm. Ass’n, Statistics, NCTA.com, <http://www.ncta.com/ContentView.aspx?contentId=54> (last visited Nov. 13, 2006).

<sup>29</sup> See Eric Hellweg, *Watching Channel Zero*, *TECH. REV.*, Aug. 5, 2004, [http://www.technologyreview.com/read\\_article.aspx?id=13719](http://www.technologyreview.com/read_article.aspx?id=13719).

<sup>30</sup> See *infra* note 34 and accompanying text.

<sup>31</sup> OPEN FORUM ON DECENCY, *supra* note 1, at 34-35 (statement of David J. Moskowitz, Executive Vice President/General Counsel, EchoStar). Senator McCain has discussed the efforts of a cable system in Sun City, Arizona to drop expensive music channels like MTV from the subscriptions of its senior citizens subscribers, “but the owners of the music video channels have forbid [cable systems] to do so without serious repercussions. So the residents of Sun City continue to subsidize the cost of these channels for viewers around the country.” 152 CONG. REC. S5600 (daily ed. June 7, 2006) (statement of Senator John McCain).

The intervention of third parties with market power in the exchange between the MVPD and the consumer can create a type of market defect that results in consumers purchasing programming that they would prefer not to receive. The "market defect" is that the forced purchase of undesirable programming will occur in both monopolistic and competitive settings in the retail distribution market, and that consumers are unable to influence bundling decisions (in either of these competitive extremes). Thus, even if a market performs well by traditional measures, consumer surplus might be reduced by the "forced bundling" of offensive programming with desirable programming.

### III. MODEL

This economic model tries to explain the reasons why a MVPD would choose to sell programming to consumers only in "bundles" that contain programming that the consumer may not wish to purchase. The model shows that the presence of a third party, such as an advertiser or a video programming vendor (like Disney or Viacom), will result in programming carriage and bundling decisions that will be sub-optimal to particular consumers. Moreover, the analysis finds that this sub-optimal outcome occurs both in monopoly and competitive/contestable market conditions. As a result, one cannot simply posit that a "competitive" MVPD market will alleviate this problem.

To make this model simple, it assumes only two consumers (1 and 2) and two channels (A and B). Consumers value these products at  $V_{ij}$  (the value of channel  $j$  to customer  $i$ ). The value  $V_{ij}$  can be negative—this means that the consumer does not like the channel and would consider himself to be better off if the channel were not piped into his home. The costs of delivering a channel to a household are given by the cost function  $C(a, b)$  where  $a$  and  $b$  count the number of subscribers who get each channel. For example,  $C(2, 1)$  implies the seller sells 2 units of channel A and 1 unit of channel B. Table 1 summarizes potential combinations of output and illustrative values of cost. Both scale and scope economies are present.

*Table 1: Potential Costs with Illustrative Values*

$C(1,0) = 5$	$C(1,2) = 10$
$C(0,1) = 6$	$C(2,0) = 8$
$C(1,1) = 8$	$C(0,2) = 9$
$C(2,1) = 9$	$C(2,2) = 11$

The following conditions have been imposed on the models. First, the values from the channels are additive, so that  $V_A + V_B = V_{AB}$  (ignoring the consumer subscript). In other words, the values of the channels are inde-

pendent. Second, costs do not vary depending on the identity of the customer.

#### A. Example 1: When À La Carte Should Happen

It is easy to construct an example in which the cable firm would offer channels on an *à la carte* basis to the two customers. If customer values Network A at 10 ( $VA = 10$ ) and values Network B at -1 ( $VB = -1$ ), then the value of a bundle of Networks A and B to the consumer is 9 ( $VAB = 9$ ). Using the costs from Table 1, the cable company would generate a profit of only 1 by selling a bundle of A and B to the consumer ( $C(1, 1) = 8$ ). An *à la carte* offering, however, actually increases the value of the cable firm's goods to this consumer (to 10) and reduces cable firm's cost to 5 [ $C(1, 0) = 5$ ]. Thus, in this situation, *à la carte* pricing is more profitable than a forced bundle.

Importantly, the cost figures in Table 1 include a "discount" to the seller for offering both channels ( $8 < 5 + 6$ ). Thus, even if each channel is more costly if purchased alone (or, there is some cost to exclude a channel), *à la carte* pricing is profitable. This is always true when the value of a channel is negative and the cost of the channel is positive.<sup>32</sup>

Example 1 shows two simple but important conditions that are critical for *à la carte* pricing to happen: the potential value from *à la carte* availability to the consumer must be *higher* than the value of a larger bundled product, or the cable firm's costs must be *lower* if its services were sold on an *à la carte* basis. These two factors are independent of one another. If a consumer truly despised Network B so that  $VB = -11$ , then the cable firm's costs need not change at all for it to recognize the value of *à la carte* pricing. In this case, if an A/B bundle is created, then the consumer does not purchase the product because he assigns a negative value to the bundle. Even if the cable operator's costs from providing *à la carte* services for Network A (say,  $C(1,0) = 9$ ) is higher than the cost of providing the A/B bundle ( $C(1,1)$ ), then it might still find it profitable to make this option available to this consumer.

#### B. The Presence of a Third Party

Video services are not bought and sold as described in Example 1. Importantly, third parties (notably, advertisers and programmers) are part of the MVPD industry's profit calculations and cannot be ignored. Indeed, as noted above, one of the nation's largest MVPDs, the Dish Network, has publicly stated that the practices of programmers and advertisers may be most responsible for the failure of consumers to obtain *à la carte* program-

<sup>32</sup> If the value exceeds the cost, then bundling is profitable.

ming.<sup>33</sup> The presence of a third party is important because it affects the revenues and profits of a cable firm that offers a menu of products.<sup>34</sup> A third-party advertiser pays the cable or satellite firm according to viewers and/or subscribers, while a third-party programmer charges the cable or satellite firm according to subscribers.

For the following examples, let us assume that this third party (say, an advertiser) pays the multichannel video provider some amount  $SA \geq 0$  for each subscriber that receives Network A, and  $SB \geq 0$  for each subscriber that receives Network B.<sup>35</sup> This *payment-per-eyeball* approach is generally consistent with the nature of transactions in the advertising industry.<sup>36</sup> While this focus is on the role of the advertiser in these examples, the same could be said for programming vendors that wish to sell a portfolio of cable programming networks to an MVPD. Several MVPDs have alleged that programming vendors "tie" the sales of all of their networks together that require that all networks be purchased and placed on the same tier, or that these vendors offer channels on an à la carte basis but only at higher prices.<sup>37</sup> In this sense, an MVPD that wishes to offer multiple tiers or à la carte channels will face higher costs.<sup>38</sup> That situation leads to similar decisions as to a situation in which an MVPD would receive lower advertising revenues if it offered more tiers or à la carte programming.

### C. Example 2: Forced Purchase of Undesirable Channels Under Monopoly

Example 1 describes the situation in which the MVPD, in the absence of a third party, would be better off with à la carte pricing. In Example 1, bundling reduces the maximum price the seller can charge for a bundle and eliminating the channel reduces costs. As a result, the MVPD will not require the consumer to purchase Networks A and B in a bundle.

Now enters a third party that is willing to pay the MVPD if the consumer receives Network B (the network the consumer does not like) or the third party will increase the costs of the MVPD for carrying Network A if it does not distribute Network B on the same tier. As a result, the consumer's willingness to pay ( $V$ ) is not the only revenue issue for the MVPD. Whether or not to force the bundle on the consumer or offer à la carte pric-

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<sup>33</sup> See *supra* note 31 and accompanying text.

<sup>34</sup> An advertiser pays a cable or satellite MVPD according to numbers of viewers and/or subscribers. Likewise, a programmer charges a cable or satellite MVPD for the programming according to the number of subscribers. This is known as the "payment-per-eyeball" approach. See generally JIM SURMANEK, *MEDIA PLANNING: A PRACTICAL GUIDE* (3rd ed. 1996).

<sup>35</sup> The value of the advertisements,  $S$ , is a function of the viewership of the channel.

<sup>36</sup> See generally SURMANEK, *supra* note 34.

<sup>37</sup> See *infra* note 42 and accompanying text.

<sup>38</sup> See *id.*

ing depends on which option offers the greatest profits. These profits are affected by a third party.

The relevant condition for forced bundling can be derived as follows. Say Consumer 1 likes Network A ( $V_{A1} > 0$ ) and Network B ( $V_{B1} > 0$ ), but Consumer 2 dislikes Network B ( $V_{B2} > 0$ ,  $V_{B2} < 0$ ). If so, the cable company has two relevant options: (1) it can force a bundle on both consumers or (2) it can offer only a bundle to Consumer 1 and à la carte pricing to Consumer 2 (a "mixed bundle").<sup>39</sup>

Which strategy is more profitable? To see, let:

$P_{AB}'$  = bundle price in a forced bundle;  
 $P_{AB}^*$  = bundle price in a mixed bundle; and  
 $P_A^*$  = channel A price in mixed bundle.

The profit of the seller with a forced bundle is:

$$\pi_F = 2P_{AB}' - C(2,2) + 2S_A + 2S_B, \quad (1)$$

and with the mixed bundle is:

$$\pi_M = P_{AB}^* + P_A^* - C(2,1) + 2S_A + S_B. \quad (2)$$

The difference in the profits is:

$$\pi_F - \pi_M = (2P_{AB}' - P_{AB}^* - P_A^*) - [C(2,2) - C(2,1)] + S_B. \quad (3)$$

To clean up a little, let  $C(2,2) - C(2,1) = IC_b$ , which is the incremental cost of one more channel B. The monopolist forces the bundle on both Consumers 1 and 2 if:

$$(2P_{AB}' - P_{AB}^* - P_A^*) - IC_b + S_B > 0. \quad (4)$$

Since Consumer 2 has a negative value for channel B, presumably we have  $(2P_{AB}' - P_{AB}^* - P_A^*) \leq 0$ . If we accept this to be true, then  $(2P_{AB}' - P_{AB}^* - P_A^*) = 0$  is as large as this expression can be. So, a necessary condition for forced bundling is  $SB > IC_b$ ; that is, the extra dollars from the third-party source (advertising) exceeds the incremental cost of providing the channel to Consumer 2. The larger the distaste of channel B by Consumer 2, the larger  $SB$  must be to force the bundle. But if  $SB$  is

<sup>39</sup> William J. Adams and Janet L. Yellen, *Commodity Bundling and the Burden of Monopoly*, 90 Q. J. ECON. 475 (1976). These are "relevant" options in that other options are less profitable.

large enough, the bundle will be required even if Consumer 2 has a strong distaste for Network B.

Example 2 reveals an important concept: *if an MVPD receives revenues (SB) from another source, like an advertiser, it may bundle programming to consumers that the consumer would prefer not to view.* In this sense, bundling of channels on an “expanded basic” tier is similar to unsightly billboard advertising—drivers and neighbors may dislike a billboard intensely but may not necessarily have a “say” as to the content or presence of the billboard, which is worked out between the property owner and the firm paying for the ad. Proponents of forced bundles admit that this practice occurs—they extol this “cross-subsidization” in which consumers pay for and receive programming they do not want as part of a bundle in order that other consumers can see that programming.<sup>40</sup>

It is important to understand that *SB* need not be additional revenue to a cable operator—it could represent lower costs (perhaps usefully thought of as a rebate on the price of programming). Consider the situation in which a cable operator is negotiating with a large programmer that produces a number of cable programming networks (like ABC/Disney or Time Warner). The programmer may offer all of its networks in a “take it or leave it” package that requires that all affiliated programming networks be packaged as part of the expanded basic tier. A programmer also may structure the pricing of its channels so that placing only a few networks in the expanded basic tier but not the others would be prohibitively expensive for the cable operator. Packages including “must have” channels like network broadcast affiliates and ESPN exacerbate this practice. It has been alleged that the current broadcast-cable retransmission consent rules encourage and facilitate these arrangements, which has led to the proliferation of networks affiliated with the major broadcast networks like ABC Family and MSNBC.<sup>41</sup> In these examples, *SB* would represent the *avoided additional cost* that a cable operator would incur if it did not place Network B in the expanded basic tier. If that cost includes the inability to carry a local broadcast affiliate of ABC or NBC, then *SB* would be relatively high and lead to a number of cases of forced bundling.

#### D. Example 3: Forced Purchase of Undesirable Channels Under Competition

It might be simple to assert that increasing the number of MVPDs would result in programming tiers more tailored to individual consumer tastes—and that if such tailoring of preferences does not occur and large “ex-

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<sup>40</sup> See *supra* notes 31–33 and accompanying text.

<sup>41</sup> See 47 U.S.C. § 325(b) (2000) (prohibiting the retransmission of a signal without the consent of the originating station); 47 C.F.R. §76.64 (2005).

panded basic" bundles proliferate in a competitive environment, then government should not worry about that result. But that argument fails to consider that some market defects persist even in competitive markets. A closer examination shows that the presence of third-party advertisers and programmers directly interfere with the MVPD-subscriber relationship, and this interference is independent of market structure.

With large scale and scope economies, which have been assumed, competition is costly and, therefore, less likely. Nevertheless, this model can evaluate the effects of competition on bundling by using contestable market theory.<sup>42</sup> In essence, contestable market theory suggests markets render results consistent with competition even if a monopolist serves the market. Or, contestable market theory assumes that because of the threat of competitive entry, firms will price so that they reap zero monopoly profit.

With zero profits, a firm selling a bundle in a contestable market would price the bundle accordingly:

$$2P_{AB}^* - C(2,2) + 2S_A + 2S_B = 0, \quad (5)$$

so:

$$2(P_{AB}^* + S_A + S_B) = C(2,2).^{43} \quad (6)$$

Now let us consider the question of a firm that seeks to enter the market and it is considering various pricing schemes, including à la carte. If the entrant sells Customer 1 a bundle of Networks A and B, then its profits are:

$$P_{AB} + S_A + S_B - C(1,1) < 0. \quad (7)$$

The firm will not make money if the entrant tries to sell Customer 1 the bundle of Network A and B.

If the entrant tries to serve Customer 1 the bundle of Networks A and B, its profits will be:

$$P_{AB}^* + P_A + 2S_A + S_B - C(2,1) < 0. \quad (8)$$

Unfortunately for the entrant, this strategy is unprofitable as well. Example 2 shows that the incumbent will force a bundle of Networks A and B if:

$$2P_{AB}^* - C(2,2) + 2S_A + 2S_B \geq P_{AB}^* + P_A - C(2,1) + 2S_A + 2S_B. \quad (9)$$

<sup>42</sup> See generally WILLIAM J. BAUMOL, ET AL., CONTESTABLE MARKETS AND THE THEORY OF INDUSTRY STRUCTURE (1982), for an explanation of contestable markets theory.

<sup>43</sup> Without price discrimination,  $C(2,2)/2$  is equal to average incremental cost.



Yet we know that the left-hand side of Eq. (9) is zero by Eq. (5)—that is, the incumbent has set its prices so that it is earning no super-competitive profits. As a result, Eq. (8) must be negative, so entry is unprofitable.

So, in a contestable market setting, an incumbent will be able to maintain a forced bundle against a competitive entrant. Competition at the local MVPD distribution level alone, under certain conditions, may not protect consumers from bundles of undesirable and desirable programming.

#### E. Impact of Bundling on Welfare

Under some conditions, an MVPD might require a consumer to purchase programming networks he or she does not desire in order to obtain access to programming networks he or she wants. This practice of “forced bundling” in the expanded basic tier can occur if blocking that channel increases the MVPD’s costs or if the presence of a third party (such as an advertiser or programmer) increases the revenues of a MVPD for these forced bundles.

The social welfare effects in the video programming industry are difficult to determine for a number of reasons. First, the market that produces the prices  $S$  has not been formally modeled in this article. As part of this analysis, one must consider that the benefits to the advertiser of the customer contact (equal to at least  $S$ ) and any effects on consumer welfare from the purchase of advertised products.<sup>44</sup> Also, there may be direct costs experienced by the seller caused by providing the advertisement, and these costs offset the benefits to the advertiser in a welfare calculation.

What is clear, however, is that *consumer welfare* unambiguously rises if the consumer can avoid purchasing undesirable channels as part of a bundle. The interest of Chairman Martin and other policymakers regarding family tiers and à la carte solutions could be seen simply as evidence that the interests and welfare of consumers are being articulated by policymakers.

#### F. Practical Issues

This theoretical framework has revealed that forced consumption of undesirable channels may be resistant to competition. Thus, even a well functioning market may fail to satisfy reasonable consumer demands (*i.e.*, not buying programming they find offensive), because third-party advertisers and programming vendors affect the carriage and tiering choices that

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<sup>44</sup> The value, positive or negative, of the actual advertisement (not the product advertised and potentially purchased) is included in  $V$ . In other words, if advertising has negative value, then  $V$  will lessen the more that advertising content appears on the channel.

MVPDs make, and transactions costs effectively prevent consumers from participating in these decision.

This result is much like findings of economic theory that the relative quality of services provided between monopoly and competition is ambiguous.<sup>45</sup> In essence, a monopolist has an incentive to increase demand through quality improvements as do firms with rivals, and in some cases the incentive for quality is greater for monopoly. It is also similar to the inability of economic theory to provide compelling theoretical evidence that competitive firms are more efficient than monopoly firms.<sup>46</sup>

In practice, however, we often observe that competition lowers prices, raises quality, and increases firm efficiency.<sup>47</sup> The failure of theory to produce these results in an unambiguous fashion is a shortcoming of theory, not of experience. So, while it is quite possible that competition may help resolve or mitigate instances of “forced bundling,” the risk (and reasons) that it might not should be thoroughly investigated.

#### IV. POLICY APPROACHES

The preceding analysis shows that policymakers cannot simply make face-value assertions that consumers “always have the option of declining” to purchase cable programming,<sup>48</sup> or that if the market is sufficiently competitive, MVPDs will offer consumers bundles and tiers “in the form they want them.”<sup>49</sup> Instead, the analysis shows (a) that there is the potential for a market defect that may result in the distribution of programming to consumers that consumers would not otherwise choose to purchase except for forced bundling and (b) that consumers are effectively unable to do anything about it.

In particular, this model shows that in certain circumstances, a variety of factors may work in a manner that makes desirable video programming (like CNN and ESPN) available only through an “expanded basic” tier that

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<sup>45</sup> See generally Michael Mussa & Sherwin Rosen, *Monopoly and Product Quality*, 18 J. ECON. THEORY 301 (1978); David de Meza, *Product Diversity Under Monopoly: Two High Quality Results*, 49:2 BULL. ECON. RES. 169 (1997); LAWRENCE ABBOTT, *QUALITY AND COMPETITION: AN ESSAY IN ECONOMIC THEORY* (1995).

<sup>46</sup> Hal R. Varian, *Entry and Cost Reduction*, Feb. 18, 1994 (unpublished manuscript, available at <http://www.sims.berkeley.edu/~hal/Papers/entry.pdf>).

<sup>47</sup> U.S. GEN. ACCOUNTING OFFICE, *TELECOMMUNICATIONS: WIRE-BASED COMPETITION BENEFITED CONSUMERS IN SELECTED MARKETS 4* (2004). See also T. Randolph Beard, et al., *Fragmented Duopoly: A Conceptual and Empirical Investigation*, 78 J. BUS. 2377 (2005); for a discussion of the effects of wireline distribution network competition on cable television market prices, demand, and quality.

<sup>48</sup> 2004 *A La Carte Report*, *supra* note 24, at 85.

<sup>49</sup> *In re A La Carte and Themed Tier Programming and Pricing Options for Programming Distribution on Cable Television and Direct Broadcast Satellite Systems*, *Comments of the Progress and Freedom Foundation*, MB Docket No. 04-207, at 2 (July 15, 2004) (accessible via FCC Electronic Comment Filing System).

also contains cable programming networks that a number of consumers prefer not to receive, let alone pay for. This circumstance can be the result of a number of conditions, such as an inability of consumers to contract with upstream content providers or other third-party interventions. It can also be caused by public policies that reinforce the ability of a video programming vendor to require that all of its affiliated video networks be placed on the same tier, without regard to whether certain of those networks may or may not be family friendly.

Because forced bundling can be the result of market defects or of public policy, it is legitimate for concerned policymakers to examine potential public policy responses. However, any public policy response should be targeted at the root causes or conditions that might lead to inordinate forced bundling. To the extent that policymakers believe intervention is required, a number of potential strategies can be utilized that are directed at the real source of forced bundling. This section discusses potential approaches for policymakers, some of which have been proposed, others not, and assesses whether those approaches address the root causes or conditions of forced bundling. It should be noted that addressing the root causes may involve strategies that do not simply mandate “family tiers” and à la carte programming. Other alternatives may exist, though they are merely thoughts at this point, and we have not conducted any meaningful cost/benefit analysis of any the proposals. Nevertheless, we believe it is worthwhile to initiate the discussion of some potential solutions.

#### A. Subscriber-Selected Tiers

FCC economists Keith Brown and Peter J. Alexander note that the practice of bundling channels holds the promise of being efficiency-enhancing yet also harmful to consumers.<sup>50</sup> To resolve this ambiguity, Brown and Alexander outline one potential solution that might advance consumer welfare:

Allow the cable operators to sell bundled packages of channel space to consumers at a given price, and then allow consumers to choose which channels they put on that space. For example, cable operators could sell a package of 25 channels for \$30 and for package of 50 channels for \$55, but consumers would then choose what those 25 or 50 channels would be.<sup>51</sup>

The 2006 FCC Media Bureau report called this proposal “subscriber-selected tiers” and noted that two Canadian cable operators, Videotron and Rogers Cable, already offer this type of pricing to consumers.<sup>52</sup>

Implementing this approach would, of course, involve some complexity as cable programming networks charge different prices to MVPDs for dis-

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<sup>50</sup> Brown & Alexander, *supra* note 21, at 165.

<sup>51</sup> *Id.*

<sup>52</sup> 2006 *À La Carte Report*, *supra* note 2, ¶¶ 99–101.

tribution. Implementation might require the renegotiation of programming delivery contracts; but then again, that would be the point. As a result, third parties like advertisers and programming vendors would not be able to insist that particular networks be sold on particular tiers, at least not exclusively.<sup>53</sup>

The attractiveness of this approach lies in the fact that it would permit an MVPD to recover fixed costs, but in a way in which consumers select (and pay for) the channels most valuable to them. Indeed, the pricing strategy would permit the MVPD to engage in efficiency-enhancing price discrimination in a more targeted way than one-size-fits-all "expanded basic" bundles.<sup>54</sup> As Brown and Alexander note, consumers "would self-select in such a way so that the final equilibrium would be identical to the price discrimination bundling equilibrium."<sup>55</sup>

At the same time, Brown and Alexander note that this option might reduce consumer welfare and total economic welfare if the MVPD had sufficient market power.<sup>56</sup> As a result, this option might best be undertaken in conjunction with other steps to promote competition and entry into the industry, such as cable franchise reform.

#### B. Regulatory Mandate: The Kid-Friendly TV Programming Act

In 2005, Senator Ron Wyden introduced S. 946, the Kid-Friendly TV Programming Act.<sup>57</sup> Senator Wyden's approach would require all MVPDs to offer a family-friendly tier that includes at least fifteen channels, with a risk of fines for a failure to comply.

A command approach like S. 946 might have some appeal in its simplicity,<sup>58</sup> but this proposal simply does not address the root causes we discuss above. The market defect we focus on is not the transaction between the MVPD and the subscriber, but the fact that third parties, such as advertisers and programmers, are involved in the wealth-maximizing bundling decisions of the MVPD. An MVPD makes decisions about what channels to put on a tier not only by reference to what its subscribers prefer but also the revenue opportunities afforded to it by advertisers and programming vendors.<sup>59</sup>

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<sup>53</sup> See *id.* ¶¶ 101, 103.

<sup>54</sup> See Brown & Alexander, *supra* note 21, at 165.

<sup>55</sup> *Id.*

<sup>56</sup> *Id.*

<sup>57</sup> Kid-Friendly TV Programming Act of 2005, S. 946, 109th Cong. (2005).

<sup>58</sup> One might consider a requirement for a "family tier" of programming akin to a local zoning regulation that instructs bars in residential neighborhoods to turn their music down after a certain time, or a law that limits the sale of tobacco or adult magazines within a certain distance of a school.

<sup>59</sup> See discussion *supra* Part III.B.

The proposal also raises the question as to how to define what is a “child-friendly tier.” S. 946 proposes to incorporate section 641(d) into the Communications Act of 1934, which defines “child-friendly tier” as “a group of channels that do not carry programming, advertisements, or public service announcements that would be considered inappropriate for children due to obscene, indecent, profane, sexual, or gratuitous and excessively violent content.”<sup>60</sup> Because that definition is incorporated in to the Communications Act, the FCC would have the authority to interpret that definition and promulgate rules.<sup>61</sup>

This approach might, in fact, make the problem worse because it might strengthen the bargaining power that programming vendors have over MVPDs. Suppose that the only reasonably profitable means of offering a “child-friendly tier” is to include Nickelodeon and Noggin (both owned by Viacom)<sup>62</sup> into that tier. Faced with a regulatory mandate to provide a tier of at least fifteen channels, the MVPD may need to provide even further concessions to Viacom (which also owns SpikeTV and MTV)<sup>63</sup> with regard to tier placement of other, potentially-objectionable networks. Simply mandating a family tier of a particular size is like treating a symptom and not the disease; the welfare-reducing problem presented by forced bundling would remain for other consumers.

### C. Carrot and Stick: Senator McCain’s “CHOICE Act”

Senator McCain’s CHOICE Act<sup>64</sup> takes a novel approach to the issue by conditioning pro-competitive and pro-entry reforms, such as national franchising<sup>65</sup> and a cut in the franchise fee,<sup>66</sup> to the availability of à la carte programming. The CHOICE Act would offer a streamlined national cable franchise,<sup>67</sup> and lower franchise fee obligations and other incentives to any “video service provider” that offers video programming to subscribers on an à la carte basis.<sup>68</sup> The proposal would not prohibit the creation of bun-

<sup>60</sup> S.946 § 3.

<sup>61</sup> See 47 U.S.C. §§ 151, 155 (2002).

<sup>62</sup> Viacom.com, Welcome to Viacom: Cable Television, <http://www.viacom.com/cable.jhtml> (last visited Nov. 12, 2006) (listing Nickelodeon and Noggin as a Viacom brand names).

<sup>63</sup> *Id.* (listing SpikeTV and MTV as a Viacom brand names).

<sup>64</sup> Consumers Having Options in Cable Entertainment Act, S. 3457, 109th Cong. (2006).

<sup>65</sup> S. 3457 § 3 (eliminating the requirement that video service providers obtain state or local video franchises).

<sup>66</sup> *Id.* at § 3(b)(1)(A)(ii) (limiting the fee that local governments can charge eligible video services).

<sup>67</sup> See S. 3457 § 3.

<sup>68</sup> See *id.* The CHOICE Act also requires video service providers with an ownership interest in video programming networks not to prohibit other video providers from offering those affiliated channels on an à la carte basis. S. 3457 § 4. According to the FCC, “five of

dles of tiers, just that channels also be made available on an à la carte basis. In exchange, MVPDs are offered significant “carrots” in exchange for offering services on an à la carte basis.

Senator McCain’s CHOICE Act also contains an important “stick” for programmers. Many broadcast licensees and broadcast networks also have an interest in cable programming networks.<sup>69</sup> Current federal rules give these broadcasters the exclusive right to prohibit a cable operator from duplicating a network broadcast by transmitting a signal from another station in the broadcaster’s community.<sup>70</sup> In essence, the FCC’s non-duplication rule gives Disney, which owns the ABC network in addition to ESPN, SoapNet and other cable channels, the ability to force a cable company to carry its cable networks on a particular tier, or the cable risks not being able to transmit ABC network programming. There is evidence that broadcasters have used this right in this manner.<sup>71</sup> The CHOICE Act would terminate these non-duplication exclusivity rights for broadcasters unless the broadcaster permits video service providers to sell those channels on an à la carte basis.<sup>72</sup>

The carrot and stick approach of the CHOICE Act attempts to address the root causes we identify in a novel way. Importantly, unlike Senator Wyden’s approach, the proposal does not simply look at the issue by reference to mandating that cable operators make family tiers available.<sup>73</sup> Instead, Senator McCain’s proposal recognizes that a market defect exists, that public policy (such as the non-duplication rule) might exacerbate that defect, and attempts to resolve it by creating countervailing incentives (such as national franchising).<sup>74</sup> Every piece of incentive legislation,

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the top seven cable companies (i.e., Comcast, Time Warner, Cox, Cablevision and Advance/Newhouse) have ownership interests in satellite-delivered national programming networks.” *In re Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Twelfth Annual Report*, 21 F.C.C.R. 2503, ¶ 159 (Feb. 10, 2006) [hereinafter *Twelfth Annual Report*].

<sup>69</sup> See *id.* ¶ 162.

<sup>70</sup> See 47 U.S.C. §325 (2000); 47 C.F.R. §76.64 (2005).

<sup>71</sup> See, e.g., *In re A La Carte and Themed Tier Programming and Pricing Options for Programming Distribution on Cable Television and Direct Broadcast Satellite Systems*, Discovery Communications, Inc., *Ex Parte Notice*, MB Docket No. 04-207 (Oct. 19, 2004) (accessible via FCC Electronic Comment Filing System) (arguing that retransmission consent policies result in forced carriage of cable programming networks affiliated with broadcast networks that displace services that subscribers would prefer); *In re A La Carte and Themed Tier Programming and Pricing Options for Programming Distribution on Cable Television and Direct Broadcast Satellite Systems, Reply Comments of Turner Broadcasting System, Inc.*, MB Docket No. 04-207, at 17 (Aug. 13, 2004) (accessible via FCC Electronic Comment Filing System) (internal citations omitted).

<sup>72</sup> Consumers Having Options in Cable Entertainment Act, S. 3457, 109th Cong. § 4(a) (2006).

<sup>73</sup> Compare S. 3457 with Kid Friendly TV Programming Act of 2005, S. 946, 109th Cong. (2005).

<sup>74</sup> See S. 3457 § 3 (A)(1)(a).

though, has the drawback that the incentive offered might be too little to induce appropriate behavior, or that regulators might mishandle any such incentive and develop loopholes that will render them meaningless.

#### D. Revenge of the "Clickers"

One reason that this market defect is unresolved is because it may be difficult for individual consumers to express their strong preferences directly to advertisers and cable companies. Advertisers certainly do not wish to pay to advertise on networks that a consumer does not watch, but advertisers are not concerned with a parent's objections to particular programming as long as their kids watch it and buy the advertised products.<sup>75</sup> Because information is imprecise, advertisers will, almost by definition, pay the cable operator or programming network some fee to deliver a programming network to a subscriber—even if that subscriber (or a parent of a viewer) finds the content on that network offensive. Also, even a small probability that a consumer's attention is captured by a channel that is generally objectionable renders some value to advertisements.

Placed in terms of the model,  $S$  is made larger because of inefficiencies in the advertising market. As we describe above, if  $SB$  (the revenue from a third-party advertiser that a cable firm receives by including Network B on its expanded basic tier) is large enough, the cable operator will force a bundle that includes Network B even if that consumer dislikes Network B ( $VB < 0$ ). The consumer is less satisfied with the product he or she receives, but still subscribes as long as the value of the other programming on the expanded basic tier ( $VA$ ) is large enough.<sup>76</sup>

The problem could be overcome if all of the consumers that find Network B objectionable could somehow organize and compensate the cable operator for blocking Network B. But organizing such a diffuse constituency is likely to be so costly that success will be unlikely. When transactions costs of organizing a constituency are high, some people feel that the government should rightfully act as a representative, thereby overcoming transaction costs. A mandated "family tier" or à la carte availability could be seen as a governmental effort to overcome these transactions costs, as their availability would give consumers the opportunity to opt-out of programming they deem objectionable. In doing so, that decision will communicate to cable operators, programmers, and advertisers that this portion of the market is not interested in viewing particular content. Reducing transactions costs in this manner is one reason why government exists.

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<sup>75</sup> Advertisers, of course, do not generally care if consumers like or dislike the channel; advertisers only care if the channel is watched. And stated simply, what parents would like their children to watch and what their children actually watch are two different things.

<sup>76</sup> See discussion *supra* Part III.C.

### E. Anti-Tying Policies

A more aggressive policy might simply forbid the “tying” of the distribution and carriage of one programming network to an agreement to carry another programming network on the same tier. While there is a vigorous debate over whether mandated family tiers and à la carte options are a sensible solution, a host of MVPDs and certain programming interests alike believe that the actions of large programming vendors results in expanded basic tiers that essentially encourage the proliferation of forced bundles of cable programming networks. This approach would be similar to the non-duplication (“stick”) component of Senator McCain’s CHOICE Act but on a larger scale, as it would cover all cable video programming networks, even those that are not affiliated with a broadcast network.

Unlike mandated à la carte, intervention in the wholesale market for MVPD programming may only need to be incremental to cause vast improvement. Government may not need to prohibit all forms of tying—policy may only need to prohibit tying that stipulates that the “tied” network be placed on the expanded basic tier in order for the MVPD to avail itself of a bundled price. Such a rule would permit MVPDs to create a variety of programming tiers that might result in placing, for example, ABC Family on a “family tier” and ABC’s SoapNet on an “adult tier,” rather than have pricing essentially force the MVPD to place both on the “expanded basic” tier. This approach might also involve changes to the retransmission consent rules,<sup>77</sup> which might facilitate and even reward programming vendors who engage in this practice.

## V. CONCLUSION

Policymakers have expressed increasing concern that the “expanded basic” tiers of cable and satellite MVPDs often include programming that may be unsuitable to families with children. This discussion has prompted a number of proposals for solving this issue in the last year, several of which have attracted a particularly virulent firestorm of criticism from the cable industry.

Notably absent from this debate has been a practical, analytical analysis as to what market conditions would cause the proliferation of “expanded basic” cable programming tiers that effectively force consumers to allow into their households video content to which they object. In this article, we take a practical—and not ideological—approach to this issue. The proliferation of “expanded basic” tiers may be the result of a market defect caused by the operation of the upstream video programming and advertising markets. In short, the content, size, and price of expanded basic tiers is

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<sup>77</sup> See 47 U.S.C. § 325 (2000); 47 C.F.R. §76.64 (2005).



*not* solely the result of MVPDs providing to consumers programming that consumers demand. As a result, American families are often faced with the unpleasant reality that in order to obtain access to programming they may desire (like CNN or Nickelodeon), they may be required to subscribe to programming that they do not want their children to see (like MTV or SpikeTV).

This article explores the circumstances in which this form of market defect might impede that optimal mix or selection of programming choices to parents by multichannel video providers. "Family tier" or "à la carte" requirements might be a valid public policy response to a failure of the market to increase consumer welfare by providing adequate choices. Forced bundling might occur even in competitive markets, which means that policymakers cannot simply turn a blind eye to the issue by assuming that "bundling does not force consumers to pay for programming they do not want."<sup>78</sup>

Finally, it is important to note that the potential market defect we identify here simply means that firms operating pursuant to market forces and profit motives may take actions that are not socially optimal. This article does not mean to imply that these firms are "up to no good." Nevertheless, it is the responsibility of policymakers to understand situations in which the market acting alone may not be adequate to promote the interests of consumers, and to intervene accordingly.

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<sup>78</sup> 2004 *À La Carte Report*, *supra* note 24, at 23.

Statement of Michael Topper

CTV 2004-2005 Direct Case

**Before the  
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Washington, D.C.**

	)	
<b>In the Matter of</b>	)	
	)	<b>Docket No. 2007-3 CRB CD 2004-2005</b>
<b>Distribution of the</b>	)	
<b>2004 and 2005</b>	)	
<b>Cable Royalty Funds</b>	)	
	)	

**REBUTTAL TESTIMONY  
OF MICHAEL D. TOPPER**

**I. Qualifications**

I am Vice President and Head of the Antitrust & Competition Practice at Cornerstone Research. I have been a faculty member in the Department of Economics at the College of William & Mary, and a lecturer in the Department of Economics at Stanford University. While at William & Mary and Stanford, I taught courses in microeconomics, econometrics, and antitrust economics. I have a Ph.D. and M.A. in Economics from Stanford University. I also received a B.S. in Systems Engineering from the University of Virginia and an M.S. in Engineering Economic Systems from Stanford University.

Prior to getting my doctorate in economics, I worked as an engineering economist at Bell Laboratories and Bell Communications Research. In my fifteen years at Cornerstone Research, my consulting work has focused on the application of microeconomics, econometrics, and quantitative analysis to litigation and regulatory matters. I have worked on numerous consulting projects including antitrust, merger review, spectrum policy, intellectual property, breach of contract, and securities issues, many of which have involved the analysis of quantitative data.

My CV is attached as Appendix 1.

**II. Task**

I have been asked by counsel for the Commercial Television Claimants ("CTV") Group to investigate potential errors in the Nielsen viewing data produced by Mr. Paul Lindstrom as backup to his Direct Testimony dated June 1, 2009 (the MPAA Special Study).

My analysis is based on the Nielsen viewing datasets produced by Mr. Lindstrom. I supplemented the datasets produced by Mr. Lindstrom with programming data provided by Tribune Media Service's TVData company that was used in the preparation of data presented in the Direct Testimony of Dr. Richard Ducey and Dr. Joel Waldfogel. A complete list of the files relied upon is attached in Appendix 2.

In my testimony, I will describe the nature of a series of data errors and methodological errors found to be present in the calculation of household-level weighted viewing minutes as reported in Exhibits PL-3 and PL-5 to Mr. Lindstrom's June 1, 2009 Direct Testimony, as later corrected by Program Suppliers. I will then address the relative size of distant viewing compared to total viewing.

Note that I do not claim to make an accurate measure of the viewing minutes attributable to the different claimant groups. Due to the structure of the datasets produced by Mr. Lindstrom and the apparent errors that have turned up in my review of Mr. Lindstrom's analysis and backup, it is not possible to use Mr. Lindstrom's produced data to compute a revised set of viewing minute shares of the different claimant groups that I can attest is correct. Instead, I explain the nature of several errors I was able to identify.

### **III. Analysis of the Underlying Viewing Data**

As a preliminary investigation of the MPAA Special Study, I supervised my team at Cornerstone Research in analyzing the data to identify the most-viewed programs in the MPAA Special Study, based on program titles taken from TVData. It was necessary to use titles from TVData because the data produced by Mr. Lindstrom do not include program titles. In order to match observations from the Nielsen viewing data with TVData program titles, this analysis had to be restricted to viewing that occurs on the 84 randomly selected days in 2004-2005 for which Dr. Ducey performed program categorization in connection with his testimony ("the TVData sample dates"). The results of this preliminary analysis identified several problems, which I investigated further.

#### **A. Errors in Viewing Study**

Because the produced Nielsen viewing data do not include program titles, it was not possible for me to directly confirm that the categorization methodology underlying Mr. Lindstrom's exhibits is correct. I did, however, have program title and date and time information for the TVData sample dates. Based on my review and analysis of Mr. Lindstrom's underlying viewing data,<sup>1</sup> I identify several of the most apparent problems with Mr. Lindstrom's viewing minutes study below. Given the data errors that I did find, it is likely that there were additional errors in Mr. Lindstrom's classification of programs into the various claimant categories.

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<sup>1</sup> The backup to Mr. Lindstrom's June 1, 2009 Direct Testimony included annual datasets recording household viewing of distant signals, "MPAA04 ANNUAL VWG.txt" and "MPAA05 ANNUAL VWG.txt".

Appendix 3 is a copy of the first page of what was introduced in this proceeding as SP Exhibit 42. It lists the top 25 programs on WGNA for which viewing was included in the Nielsen viewing data produced by Mr. Lindstrom, ranked by the number of minutes attributed to them across 2004 and 2005 on the 84 days for which TVData program title information was available. The asterisks represent the titles of programs for which the program aired only on WGNA and not on WGN. I understand that Mr. Lindstrom agrees that these programs should have been eliminated from the viewing data as part of the "Syndex processing" step of his analysis. In addition, my investigation determined that there were several date ranges for which no Syndex processing appears to have been performed.

Appendix 4 is a copy of the second page of what was introduced in this proceeding as SP Exhibit 42. It lists the top 25 programs across all stations in the Nielsen viewing data, ranked by the number of minutes attributed to them across 2004 and 2005 on the TVData sample dates. This analysis disclosed several more kinds of errors in the MPAA Special Study.

First, a number of program titles are recognizable programs distributed by the ABC, CBS, and NBC networks. I understand that such network programs are not compensable in this proceeding and that any viewing of them should also have been eliminated from the MPAA Special Study.

Second, I saw that several highly viewed programs bore the simple title "news," and were treated in the MPAA Special Study as syndicated programs. On further investigation, I found that the most highly viewed of these programs were for three network-affiliated stations in Rochester, New York, and that the heaviest viewing occurred in a number of households whose location was identified in the "household county" files<sup>2</sup> as "ROCHESTR CITY, NY." Because there is no county named "ROCHESTR CITY," I assumed they were actually located in Monroe County, which contains the city of Rochester, NY. As such, viewing of Rochester, New York stations by households in "ROCHESTR CITY, NY" represented local viewing rather than distant signal viewing and should have been eliminated from the MPAA Special Study.

Appendix 5 is a copy of what was introduced in this proceeding as SP Exhibit 43. It contains the same analysis as in SP Exhibit 42, except that it includes all the stations for which viewing was included in the viewing data provided to us and ranks programs separately for 2004 and 2005 by the number of minutes attributed to them on the TVData sample days. I observe that the inclusion of the Rochester households' local viewing and the inclusion of viewing to network programs occurred only with respect to the 2005 data.

While I could not do a complete analysis of program categorization errors in the MPAA Special Study because I lacked the program title information for days outside the 84 days for which we had TVData program title information, I investigated the categorization of two readily categorizable programs: WGN News at Noon and WGN News at Nine. I found that on a

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<sup>2</sup> 2004 MPAA HHLDS W-COUNTY.xls and 2005 MPAA HHLDS W-COUNTY.xls.

number of weekdays, the viewing recorded to the program airing at noon or nine p.m. on WGNA was categorized in the MPAA Special Study as Syndicated rather than as Local. There was no apparent pattern as to which days were categorized correctly and which were not. Based on my review of program categorizations in the data provided to us, I believe that numerous other such categorization errors are likely to be reflected in the MPAA Special Study.

I also investigated the difference between 2004 and 2005 in the total number of viewing minutes reported in Mr. Lindstrom's exhibits PL-3 and PL-5. The Nielsen viewing data relied upon in the MPAA Special Study includes only a sample of the non-top-50 distant signals. In order to make his sample comparable to the total viewing minutes on all distant signals, Mr. Lindstrom "weights up" the non-top-50 sampled stations according to their sampling probability. However, he did not control for station type in selecting, or weighting, his non-top-50 sample stations and as a result samples over 40% more educational stations in 2004 than in 2005. It appears that this is one of the principal reasons why the educational viewing reported in PL-3 and PL-5 declines so much between 2004 and 2005.<sup>3</sup>

Although I cannot make a complete and accurate measure of the viewing minute shares, the issues outlined above suggest that the values reported in PL-3 and PL-5 are subject to significant errors.

#### **B. *Absolute and Relative Time Spent Viewing Distant Signals***

It is possible to estimate the average viewing of distant signals in these data by dividing the total household-level viewing minutes reported in PL-3 and PL-5 by the approximate number of households sampled in the MPAA Special Study.<sup>4</sup> Doing this calculation yields an average of 2.18 and 3.24 minutes of household daily viewing of distant signal programming in 2004 and 2005, respectively.<sup>5</sup> Note that the average for 2005 is larger than 2004 in part because my calculation does not account for the fact that the number of sampled households is increasing over time.<sup>6</sup> In addition, use of the numbers reported in PL-3 and PL-5 overstates the amount of distant signal viewing because of the issues described above.

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<sup>3</sup> In 2004 there were 31 non-top-50 educational stations while in 2005 there were 18 non-top-50 educational stations. The number of top-50 educational stations was 13 and was the same in both years.

<sup>4</sup> Dr. Hoynoski reports that the Nielsen sample includes "approximately 7000 multichannel [cable] households" (Written Direct Testimony of Dr. Hoynoski dated June 1, 2009, p. 14).

<sup>5</sup> These numbers are calculated as total distant signal viewing divided by the number of households and days in the sample. For 2004, the calculation is  $2.18 = 5,576,385 / (366 \times 7,000)$ . For 2005, the calculation is  $3.24 = 8,266,954 / (365 \times 7,000)$ . (Note that 2004 is a leap year and therefore has 366 days.)

<sup>6</sup> I was not provided with the actual monthly sample size, only the number of households viewing distant signals. As a result, I could not calculate the relevant yearly sample sizes for 2004 and 2005. Note that Dr. Hoynoski reports that the total number of multichannel and broadcast households in the Nielsen sample increases from

As a point of comparison, Nielsen reports that the average household watched 491 minutes of programming daily in the 2004–2005 television season.<sup>7</sup> This implies that the viewing of distant signal programming measured in the MPA Special Study makes up only 0.66% of the total viewing by sample households in 2004 – 2005.<sup>8</sup>

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5,054 in January of 2004 to 8,395 in December of 2005 (Written Direct Testimony of Dr. Hoynoski dated June 1, 2009, p. 14).

<sup>7</sup> “During the 2004–05 TV season (which started September 20, 2004 and just ended September 18, 2005), the average household in the U.S. tuned into television an average of 8 hours and 11 minutes per day” (PRNewswire, “Nielsen Reports Americans Watch TV at Record Levels,” Sept. 28, 2005).

<sup>8</sup> 2.18 and 3.24 are 0.44 and 0.66 percent of 491, respectively. Note that these values are likely conservative, as cable households have generally higher levels of television viewing than the typical household. In addition, the total compensable distant signal weighted viewing minutes reported in PL-3 and PL-5 represent just 0.0000584% of all viewing minutes in all Cable TV Households in 2004-2005 (calculation: sum of total compensable distant signal weighted viewing minutes reported in PL-3 and PL-5 (5,576,385 + 8,266,954 = 13,843,339) divided by total viewing minutes in all Cable TV Households (average 491 minutes per day per household times 731 days in 2004-05 times approximately 66 million cable households) equals 0.00000584). The FCC reports that “[t]he number of basic cable subscribers declined slightly, falling from 66.1 million in June 2004 to 65.4 million in June 2005” (Federal Communication Commission’s 12<sup>th</sup> Annual Report on MVPD Competition, “In the Matter of Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming”, MB Docket No. 05-255, ¶10)

Before the  
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Distribution of the )  
2004 and 2005 )  
Cable Royalty Funds )  
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Docket No. 2007-3 CRB CD 2004-2005

**DECLARATION**

I, Michael D. Topper, declare under penalty of perjury that the Rebuttal Testimony of Michael D. Topper presented in the 2004-2005 Cable Copyright Royalty Distribution Proceeding is true and correct.



Michael D. Topper

Dated: 12/11/2009

# **APPENDIX 1**

Rebuttal Testimony of Michael D. Topper

Curriculum Vitae



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**ACADEMIC BACKGROUND**

- 1991 **Stanford University** Stanford, California  
*Ph.D., Economics, 1991; M.A., Economics, 1989*  
Specialized in labor economics, public finance, industrial organization and econometrics.
- 1982 **Stanford University** Stanford, California  
*M.S., Engineering-Economic Systems*
- 1981 **University of Virginia** Charlottesville, Virginia  
*B.S., Systems Engineering, with Highest Distinction*  
Member, Tau Beta Pi

**PROFESSIONAL EXPERIENCE**

- 1994 – Present **Cornerstone Research, Inc.** Menlo Park, California  
*Vice President (Partner)*  
*Head, Antitrust & Competition Practice*  
Manage and conduct economic analysis for complex business litigation, regulatory and public policy matters, with specialization in antitrust, intellectual property, class certification and breach of contract.  
Industry expertise includes telecommunications, media, Internet, information technology, energy, transportation, and financial services.  
Expertise includes econometrics, analysis of large datasets and consumer survey design and analysis.  
Services to clients include expert testimony, identifying experts, clarifying economic and financial issues, identifying and analyzing data, supporting experts in the preparation of expert reports and testimony, and analyzing opposing expert reports and testimony.
- 1993 – 2003 **Stanford University** Stanford, California  
*Lecturer in Economics*  
Taught courses in microeconomics and antitrust policy for the Department of Economics.
- 1991 – 1994 **College of William and Mary** Williamsburg, Virginia  
*Assistant Professor of Economics*  
Conducted academic research on the economics of education and training programs. Developed new courses in labor and development economics. Helped launch the new graduate program in public policy. Taught core courses in economics and statistics. Supervised graduate and undergraduate students.

**PROFESSIONAL EXPERIENCE (CONT.)**

- Summer 1986 **Rand Corporation** Santa Monica, California  
*Summer Research Intern, Telecommunications Policy Group*  
Developed models for estimating the demand for telecommunications services.
- Summer 1985 **International Institute for Applied Systems Analysis (IIASA)** Vienna, Austria  
*Summer Research Intern, Systems Modeling Group*  
Programming and analysis for dynamic simulation models.
- 1981 – 1984 **Bell Laboratories/Bell Communications Research** Holmdel, New Jersey  
*Systems Engineer*  
Conducted cost/benefit, technical feasibility and economic cost analyses for advanced switching services based on caller ID.

**PUBLICATIONS**

- “3G Standards Policy: Government Shouldn’t Intervene in Debate,” *Wireless Week*, December 21, 1998.
- “Student Loans, Debt Burdens, and Choice of Major,” *New Directions for Higher Education*, 85, pp. 115–124, 1994.
- “The Impact of the Demographic Transition on Government Spending,” with John Shoven and David Wise, In David Wise, ed., *Economics of Aging*, University of Chicago Press, 1994.
- “The Cost of Capital in Canada, the U.S. and Japan,” with John Shoven, In John Shoven and John Whalley, eds. *Canada-U.S. Tax Policy Issues*, University of Chicago Press, 1992.

**WORKING PAPERS**

- “An Antitrust Analysis of the Case for Wireless Network Neutrality,” with Gregory L. Rosston, *Stanford Institute for Economic Policy Research Discussion Paper 08-040*, July 2009.
- “Economic White Paper on National Third Generation Wireless Standards,” with Joseph Farrell, *Mimeo*, November, 1998.

**CONFERENCE PARTICIPATION, PANEL PARTICIPATION AND INVITED TALKS**

- “Modernization of Antitrust Law,” Stanford University Conference, May 29–30, 2008, Panelist/Discussant.
- “Third Generation Wireless Standards Policy,” Presentations in Washington D.C., December 1998.
- “Higher Education and the American Worker,” Christopher Wren Society, Williamsburg, VA, April 1993.
- “The Impact of the Demographic Transition on Government Spending on Individuals,” with John Shoven and David Wise, NBER Conference on the Economics of Aging, July 1992.

**CONFERENCE PARTICIPATION, PANEL PARTICIPATION AND INVITED TALKS (CONT.)**

“Ethnic Differences in Schooling Attainment in Malaysia—A Difference in Differences Approach,”  
Paper presented at Southeast Asian Educators Workshop, Stanford University, July 1991.

“The Cost of Capital in Canada, the U.S. and Japan,” with John Shoven, NBER Conference on  
Canada–U.S. Tax Comparisons, July 1990.

**EXPERT TESTIMONY**

*Federal Communications Commission, Mobile Wireless Competition Notice of Inquiry, WT Docket  
No. 09-66. Filed declaration on behalf of client Verizon Wireless.*

**FELLOWSHIP AND AWARDS**

Center for Economic Policy Research, Stanford University  
*Visiting Scholar, 1993–1994*

Department of Economics, Stanford University  
*Distinguished Teaching Award, 1989*

Rand Corporation  
*Graduate Student Summer Fellowship, 1986*

International Institute for Applied Systems Analysis  
*American Academy of Sciences Young Scientists' Summer Program Fellowship, 1985*

Bell Laboratories  
*Graduate Fellowship, 1981–1982*

## **APPENDIX 2**

Rebuttal Testimony of Michael D. Topper

Files Relied Upon

## **Appendix 2**

### **List of Files Relied Upon**

#### **TVData**

(Originally Produced by Dr. Richard Ducey as backup to his Written Direct Testimony)

Schedule, Program, and Channel datasets.

sample dates.csv

#### **Nielsen Viewing Data**

(Received from Program Suppliers)

MPAA04 ANNUAL.txt (2004 viewing data)

MPAA05 ANNUAL.txt (2005 viewing data)

PS\_13152-PS\_13156.xls (Station data for 180 sampled stations in 2004)

PS\_13453-PS\_13457.xls (Station data for 180 sampled stations in 2005)

PS\_13988-PS\_14014.xls (Station data for all 2004 stations)

PS\_13962-PS\_13987.xls (Station data for all 2005 stations)

PS\_12800-PS\_12976.xls (local county file for 2004)

PS\_12977-PS\_13151.xls (local county file for 2004)

PS\_13157-PS\_13261.xls (local county file for 2005)

2004 MPAA HHLDS W-COUNTY.xls (2004 household location file)

2005 MPAA HHLDS W-COUNTY.xls (2005 household location file)

#### **Documents**

Exhibits PL-3 and PL-5 (corrected) from the Written Direct Testimony of Mr. Paul Lindstrom dated June 1, 2009 and July 30, 2009, respectively.

Written Direct Testimony of Dr. Bruce Hoynoski dated June 1, 2009.

Federal Communication Commission's 12th Annual Report on MVPD Competition, "In the Matter of Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming", MB Docket No. 05-255.

PRNewswire, "Nielsen Reports Americans Watch TV at Record Levels," Sept. 28, 2005.

## **APPENDIX 3**

Rebuttal Testimony of Michael D. Topper

SP Exhibit 42, First Page

## Top 25 Programs on WGNA by Weighted Viewing Minutes

Source: MPAA04 Annual; MPAA 05 Annual; TVData

No.	TVData Program Title	Total Weighted Viewing Minutes
1	MLB Baseball	72,377
2	WGN News at Nine	31,522
3	Will & Grace	26,750
4	Matlock	22,972
5	Home Improvement	18,290
6	WGN News at Noon	15,709
7	The Fresh Prince of Bel-Air	8,938
8	America's Funniest Home Videos *	8,677
9	The Cosby Show	7,660
10	Magnum, P.I. *	6,680
11	Becker *	6,630
12	Street Smarts	6,524
13	In the Heat of the Night *	4,876
14	Andromeda	4,669
15	Mutant X	4,373
16	Rockford Files *	4,065
17	Sex and the City	3,811
18	MLB Preseason Baseball	3,775
19	The Beverly Hillbillies *	3,646
20	Soul Train	3,326
21	Father of the Bride	3,091
22	Maximum Exposure	2,995
23	Da Vinci's Inquest *	2,929
24	Paid Program	2,876
25	The Shawshank Redemption	2,835
<b>Top 25 Total</b>		<b>279,996</b>

\* All viewing occurs at times identified as syndex substitutions.

## **APPENDIX 4**

Rebuttal Testimony of Michael D. Topper

SP Exhibit 42, Second Page



## Top 25 Programs by Weighted Viewing Minutes (Excluding Non-Commercial Stations)

Source: MPAA04 Annual; MPAA 05 Annual; TVData

No.	TVData Program Title	Total Weighted Viewing Minutes
1	MLB Baseball	80,893
2	Good Morning America	35,243
3	Will & Grace	32,048
4	WGN News at Nine	31,522
5	Matlock	22,972
6	NFL Football	22,649
7	Home Improvement	19,689
8	Paid Program	18,126
9	Maury	17,269
10	News [WROC]	16,926
11	General Hospital	16,830
12	Oprah Winfrey	16,275
13	WGN News at Noon	15,709
14	That '70s Show	15,449
15	CBS Evening News	15,238
16	The People's Court	14,638
17	Guiding Light	14,099
18	ABC World News Tonight	12,789
19	Judge Mathis	12,103
20	The Tony Danza Show	11,867
21	News [WHAM]	11,839
22	Everybody Loves Raymond	11,708
23	Becker	11,376
24	Judge Judy	11,200
25	The Fresh Prince of Bel-Air	10,235
<b>Top 25 Total</b>		<b>498,694</b>

## **APPENDIX 5**

Rebuttal Testimony of Michael D. Topper

SP Exhibit 43

## Top 25 Programs by Weighted Viewing Minutes and Year (Excluding Non-Commercial Stations)

Source: MPAA04 Annual; MPAA 05 Annual; TVData

No.	2004		2005	
	TVData Program Title	Total Weighted Viewing Minutes	TVData Program Title	Total Weighted Viewing Minutes
1	MLB Baseball	52,213	Good Morning America	34,694
2	Will & Grace	18,477	MLB Baseball	28,681
3	WGN News at Nine	13,575	NFL Football	19,451
4	The Fresh Prince of Bel-Air	9,806	WGN News at Nine	17,947
5	Oprah Winfrey	9,573	News [WROC]	16,926
6	Home Improvement	9,316	General Hospital	16,664
7	Matlock	9,277	CBS Evening News	13,985
8	Judge Judy	8,125	Matlock	13,695
9	WGN News at Noon	6,351	Will & Grace	13,571
10	Live With Regis and Kelly	6,201	That '70s Show	13,013
11	Maury	5,993	ABC World News Tonight	12,759
12	Paid Program	5,609	Paid Program	12,517
13	The Cosby Show	5,607	The People's Court	12,301
14	Becker	4,394	News [WHAM]	11,839
15	Everybody Loves Raymond	3,798	The Tony Danza Show	11,680
16	Friends	3,508	Guiding Light	11,612
17	Jerry Springer	3,442	Maury	11,276
18	NFL Football	3,198	Home Improvement	10,373
19	The Early Show	3,196	Judge Mathis	9,986
20	Father of the Bride	3,177	Malcolm in the Middle	9,743
21	Wheel of Fortune	3,108	Montel Williams	9,549
22	NBA Basketball	2,962	WGN News at Noon	9,358
23	The Shawshank Redemption	2,947	The Price Is Right	9,008
24	Mutant X	2,900	Dr. Phil	8,775
25	Andromeda	2,873	Judge Hatchett	8,644
<b>Top 25 Total</b>		<b>199,625</b>	<b>Top 25 Total</b>	<b>348,046</b>

**Before the  
COPYRIGHT ROYALTY JUDGES  
Washington, D.C.**

	)	
<b>In the Matter of</b>	)	
	)	
<b>Distribution of the</b>	)	<b>Docket No. 2007-3 CRB CD 2004-2005</b>
<b>2004 and 2005</b>	)	
<b>Cable Royalty Funds</b>	)	
	)	

**REBUTTAL TESTIMONY  
OF GREG STONE**

**I. BACKGROUND**

My name is Greg Stone. I am the owner and CEO of Greg Stone Media Consulting, serving the communications industry in the areas of programming, sales, research and other areas of operational importance. I have had over 35 years of major market television management experience with Cox Television, one of the most well-known companies in the industry.

I have extensive experience with television advertising sales. I worked in the area of television advertising sales from 1970 to 1980 as East Coast Area Vice-President for TeleRep, a TV rep firm that sells spot advertising on television stations to national advertisers through their advertising agencies. From 1980-1982, I was Director of Sales for WSOC-TV, Charlotte, NC, where I supervised all local and national advertising sales. I continued to supervise all advertising sales from 1982-1990 as the Vice-President and General Manager of WSOC-TV and then as Vice-President and General Manager of WSB-TV, Atlanta. At WSOC and WSB, I also worked with the programming departments to negotiate for and purchase programming from syndicators for the station.

**II. SCOPE OF REPORT**

I was asked by the Commercial Television Claimants Group to review the testimony of George S. Ford and provide information about how the broadcast programming and advertising markets, which he refers to in his testimony, operate in the real world.

### **III. HOW BROADCAST STATIONS SELL ADVERTISING**

Television stations sell advertising time based primarily on ratings provided by Nielsen Media Research ("Nielsen"). Nielsen provides very specific ratings data by program and daypart for the local market, or "DMA." Broadcasters use ratings (the percentage of the total TV Households in the DMA who watched a program) and share (the percentage of Homes Using Television who viewed a program at the particular time) numbers to sell advertising. National and local advertisers buy spot time on stations based on the audience within the station's DMA, using these metrics.

### **IV. DR. FORD'S HYPOTHETICAL MARKET**

Footnote 10 of Dr. Ford's written testimony "assumes there is a hypothetical broadcaster in the distant market that airs the same mix of programming as is found on the 2004-05 distant signals." Based on my experience and knowledge of the broadcast television marketplace, this new "hypothetical" station would, in the real world, look nothing like the full power station that is actually being brought in from a distant market. Dr. Ford agreed that his hypothetical station would cover only the cable community with its over-the-air signal. The real world equivalent of such a geographically limited station is a Low Power TV ("LPTV") station.

LPTV stations are subject to a number of limitations that make them different from the full-power stations Dr. Ford used in his analysis, including the following:

- LPTV by definition does not broadcast at full power, and thus has inherent technical limitations preventing it from providing over-the-air coverage of TV Households within the DMA comparable to that provided by the full-power stations.
- Limited coverage means lower audience potential, lower advertising rates and thus lower appeal for syndicators to sell programming to the LPTV station.
- Without attractive programming and broad signal coverage, ratings for programs shown on LPTV are low or non-existent. Unless viewing to a station occurs in more than a particular number of different TV Households in the market during a day or week, Nielsen does not even report the ratings or shares in its printed ratings book for the DMA. Many LPTV stations, with limited household coverage to begin with, would have difficulty meeting even a low threshold for inclusion in the Nielsen data.
- Without ratings numbers to sell, significant revenues cannot be generated and program purchase options are limited, especially as compared with the full-power stations in the same DMA.

There are few, if any, historical records regarding advertising sales for the LPTV segment of the industry. And there really can be no CPM (Cost Per Thousand) structure for LPTV stations where there is no audience upon which to base CPM cost calculations. Based on my

observations and industry experience, the lack of significant market-wide audience potential and the resulting limitation on revenue production has precluded LPTV stations from effectively competing for exclusive rights to mainstream programming.

These limitations can be seen in the same example Dr. Ford discussed during his testimony in response to questions from counsel for the Commercial Television Claimants. An LPTV station is licensed to Mountain Home, Arkansas, one of the cable communities where KATV, the ABC affiliate in Little Rock, Arkansas, was carried as a distant signal. I understand that Mr. Fritz described the many station-produced news programs and University of Arkansas sports telecasts that were carried on KATV to distant cable subscribers in Mountain Home. But most LPTV stations would not have those kinds of programs, for some of the reasons I explained above. The website for KO7XL, a low power station in Mountain Home, provides a current schedule with a very different program mix, much of it series that are decades old and not the kinds of programs that KATV or other full-power stations would likely be bidding for.<sup>1</sup> This example confirms my view that in the real world, Dr. Ford's hypothetical station, if limited like an LPTV station to serving only the cable community, would not be at all comparable in terms of its advertising revenues or programming to the distant signals that were carried as distant signals during 2004-2005.

In the real world, a cable system or LPTV station would not be able, as Dr. Ford suggests, to outbid a full power over-the-air station for top syndicated programming. Besides the fact that the cable system or LPTV station does not have the same base of potential advertising revenues to rely on in the bidding, syndicators generally embed advertising in their programs, which they themselves sell to national advertisers (called barter syndication). Based on my experience, syndicators take potential revenues from the sale of such embedded advertising into account in selecting a distribution partner. Selecting a cable system or LPTV station for distribution would limit a program's audience potential because neither cable nor LPTV stations cover the entire market, and full power over-the-air stations are able to generate higher barter revenues as well as higher program license fees to syndicators because of their market dominance.

## **V. OTHER ERRORS**

There are several other areas of Dr. Ford's testimony that are inconsistent with the real world of television advertising sales.

- He stated that he believed that stations do not sell local spots in network primetime programming. I have been either selling time on or managing TV stations for over 40 years, and in my professional experience, major broadcast networks have **always** provided advertising inventory during the primetime network schedule to their affiliates for spot sales. Indeed, on page 52 of the 2005 TV Dimensions Report (I understand that excerpts of TV Dimensions were admitted as an exhibit at the hearing), which Dr. Ford relied on in his written testimony, a CPM value is reported for sales of "spot TV primetime" by "major network affiliates."

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<sup>1</sup> See Appendix 1.

- Dr. Ford also stated that stations do not air their own programs in primetime. In fact, the majority of FOX affiliates, covering nearly 90% of the country, aired station-produced weeknight newscasts at 9PM or 10PM in 2005. Superstation WGN also aired a 9PM newscast, which was received during primetime hours in the Central and Eastern time zones.

Many other stations preempt primetime network programs to run locally produced specials. At the station I ran in Atlanta, WSB-TV, we aired 10-12 locally produced primetime specials each year.

- It has historically been true that for local news programs, CPMs are generally higher than entertainment program CPMs. In my experience, the media buying community has tended to place a higher value on news due to its local, live, community orientation. Once again, page 64 of the 2005 TV Dimensions Report confirms this reality, showing CPMs for spot advertising sales in the "late news" daypart that are higher than the CPMs for dayparts featuring syndicated programs, across all demographic groups.

Before the  
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In the Matter of )  
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Distribution of the )  
2004 and 2005 )  
Cable Royalty Funds )  
\_\_\_\_\_)

Docket No. 2007-3 CRB CD 2004-2005

**DECLARATION**

I, Greg Stone, declare under penalty of perjury that the Testimony of Greg Stone presented in the 2004-2005 Cable Copyright Royalty Distribution Proceeding is true and correct.

  
\_\_\_\_\_  
Greg Stone

Dated: 12/11/2009



# **APPENDIX 1**

Rebuttal Testimony of Greg Stone

K07XL December 2009 Television Schedule



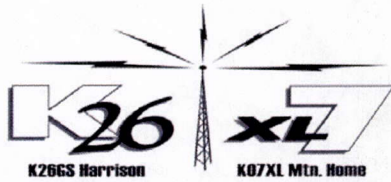
# K07XL PROGRAM SCHEDULE

December 2009

revised 11/30/2009

**PROGRAM CHANGE**  
Preemptions below grid

Network Programming								
MyFamily TV	FamilyNet	(RTN) Retro Television Network			Independent Affiliations		Local Interest Programming	
CST	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.	CST
5:00 AM	Wretched with Todd Friel <small>(r/f 4am on Mon &amp; 3:00am Tues - Fri)</small>					Fishin' Hawg Country	It is Written	5:00 AM
5:30 AM	Cisco Kid					Spiritual Outdoors	Black Beauty	5:30 AM
6:00 AM	Daniel Boone					Gerbert (e/i)	Harry & The Hendersons	6:00 AM
6:30 AM						Jay jay the Jet Plane (e/i)	FN Lewis	6:30 AM
7:00 AM	726 Mountain Home	Hometown News <small>(rerun from day before)</small>					726 Harrison	7:00 AM
7:30 AM		The Court Show	Healthy Ambitions	The Sports Dungeon	Healthy Ambitions	The Court Show		7:30 AM
8:00 AM	Daytime					The Secret World of Benjamin Bear	*In Touch w/ Dr Charles Stanley	8:00 AM
8:30 AM						Where on Earth is Carmen Sandiego		8:30 AM
9:00 AM	Doug Kaufman Know the Cause					The Real Winning Edge	Fountain of Truth <small>with Brother Brett Hickey</small>	9:00 AM
9:30 AM						Wild America	PowerPoint *	9:30 AM
10:00 AM	Your Health* with Dr. Richard and Cindy Becker					726 Mountain Home	Laredo	10:00 AM
10:30 AM								10:30 AM
11:00 AM	The Bold Ones					Judie Byrd's Kitchen	First United Methodist Church	11:00 AM
11:30 AM						Wretched with Todd Friel <small>(r/f 2:00am)</small>		11:30 AM
12:00 PM	Airwolf					The Rifleman	The Rifleman	12:00 PM
12:30 PM						Robin Hood	Robin Hood	12:30 PM
1:00 PM	Kojak					The Court Show	726 Mountain Home	1:00 PM
1:30 PM						The Sports Dungeon		1:30 PM
2:00 PM	The Bold Ones <small>(RTN West)</small>					Ozarks Have You Got Talent?	The Matrix News Network	2:00 PM
2:30 PM								2:30 PM
3:00 PM	Rockford Files					The Bold Ones	726 Harrison	3:00 PM
3:30 PM							3:30 PM	
4:00 PM	Adam-12					RTN Mystery Theater:	Ozarks Have You Got Talent?	4:00 PM
4:30 PM							Dragnet	4:30 PM
5:00 PM	Magnum P.I. <small>(RTN West)</small>					Dragnet	BNC 'LIVE' <small>(r/f 11 am)</small>	5:00 PM
5:30 PM								5:30 PM



# K07XL PROGRAM SCHEDULE

December 2009

revised 11/30/2009

**PROGRAM CHANGE**

Preemptions below grid



Network Programming														
MyFamily TV	FamilyNet	(RTN) Retro Television Network			Independent Affiliations		Local Interest Programming							
CST	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.	CST						
6:00 PM	Words of Hope	Wretched with Todd Friel <small>(r/f 3:00am)</small>				726 Harrison	726 Mountain Home	6:00 PM						
6:30 PM	Hometown News							6:30 PM						
7:00 PM	726 Mountain Home	Deal TV	Healthy Ambitions The Court Show	726 Mountain Home	Ozarks Have You Got Talent?	Buck Rogers	Black Sheep Squadron	7:00 PM						
7:30 PM								7:30 PM						
8:00 PM	The Incredible Hulk <small>(RTV West)</small>	Ozarks Have You Got Talent?	The Incredible Hulk <small>(RTV West)</small>	I Spy	Magnum P.I. <small>(r/f 2:00 p.m)</small>	Battlestar Galactica	Airwolf <small>(RTN West)</small>	8:00 PM						
8:30 PM								8:30 PM						
9:00 PM	Knight Rider <small>(RTN West)</small>	Daniel Boone <small>(r/f 9:00 a.m RTV West)</small>	DealTV <small>(rerun from Tuesday)</small>	Daniel Boone <small>(r/f 6:00 a.m)</small>	Knight Rider <small>(RTN West)</small>	The Matrix News Network	Deal TV <small>(rerun from Tuesday)</small>	9:00 PM						
9:30 PM								9:30 PM						
10:00 PM	Hometown News <small>(rerun from 6:30)</small>						Daniel Boone <small>(r/f 1:00pm)</small>	Daniel Boone <small>(r/f 2:00pm)</small>	10:00 PM					
10:30 PM	Healthy Ambitions	The Court Show	Healthy Ambitions	The Sports Dungeon	The Court Show			10:30 PM						
11:00 PM								11:00 PM						
11:30 PM	A-Team <small>(r/f 7pm)</small>	The Matrix New Network	A-Team <small>(r/f 7pm)</small>	Magnum P.I. <small>(r/f 2:00 p.m)</small>	I Spy <small>(RTN West)</small>	726 Mountain Home	Delvecchio	11:30 PM						
12:00 AM	Emergency <small>(RTN West)</small>						Midnight Monster Hop <small>(RTN West)</small>	Cisco Kid	12:00 AM					
12:30 AM								Fun	12:30 AM					
1:00 AM	My Family TV Late Night Movie								1:00 AM					
1:30 AM												My Family TV Late Night Movie	1:30 AM	
2:00 AM														2:00 AM
2:30 AM												Off Beat Cinema <small>(RTN West)</small>		2:30 AM
3:00 AM	Doug Kaufman Know the Cause				The Matrix News Network		Know the Cause	3:00 AM						
3:30 AM									3:30 AM					
4:00 AM	Your Health* with Dr. Richard and Cindy Becker						Tech Head	Wretched	4:00 AM					
4:30 AM							On Solid Rock	Wretched	4:30 AM					

## Program Changes: (All Times Central)

December 20th 2009

5:00am - 5:30am - Eckankar Center of Mtn. Home

**Before the  
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Washington, D.C.**

	)	
In the Matter of	)	
	)	Docket No. 2007-3 CRB CD 2004-2005
Distribution of the	)	
2004 and 2005 Cable Royalty Funds	)	
	)	

**STIPULATION REGARDING UNDISPUTED FACTS BETWEEN PROGRAM  
SUPPLIERS AND SETTling PARTIES**

This Stipulation is made this 25th day of January 2010, by and among the Joint Sports Claimants (“JSC”), Commercial Television Claimants, Public Television Claimants and Music Claimants (collectively, the “Settling Parties”) and the Program Suppliers (the Settling Parties and Program Suppliers collectively, the “Parties”).

**RECITALS**

WHEREAS, JSC, as part of the Settling Parties’ Rebuttal Statement, presented the Written Direct Testimony of Daniel Derian, Vice President of Research and Strategic Planning for Major League Baseball, and Marc Schacher, the former Senior Vice President of Programming for Tribune Broadcasting;

WHEREAS, JSC provided Program Suppliers and other parties during discovery documents underlying factual assertions made by Messrs. Derian and Schacher in their written testimony concerning the programming on Station WGN-TV (Chicago, Illinois) during the years 1998-99 and 2004-05; and

WHEREAS, JSC have agreed to withdraw the testimony of Messrs. Derian and Schacher in return for the Parties entering into a stipulation as to certain undisputed facts;

NOW, THEREFORE, in consideration of the foregoing, and in order to facilitate an efficient and complete presentation of the facts for the Copyright Royalty Judges, the Parties hereby stipulate and agree that the following facts are undisputed for purposes of this proceeding and may be relied upon by the Copyright Royalty Judges in their final determination in this proceeding:

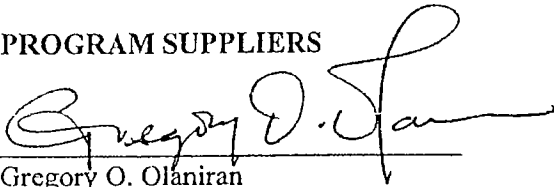
1. Measured by time, approximately 48% of the programming on WGN in 1998-99 was televised full signal, *i.e.*, transmitted simultaneously over both the Chicago signal and the satellite signal of WGN. By the same measure, approximately 33% of the programming on WGN in 2004-05 was televised full signal.
2. In 1998-99, WGN televised full-signal approximately 60,000 minutes of games involving the Chicago Cubs, Chicago White Sox, and Chicago Bulls. In 2004-05, WGN televised full-signal approximately 41,000 minutes of games involving those same teams. In 1998-99, WGN televised full signal approximately 504,000 minutes of programming. In 2004-05, WGN televised full-signal approximately 352,000 minutes of programming.
3. Telecasts of Cubs, White Sox and Bulls games accounted for approximately 12% of WGN's full signal program time in both 1998-99 and 2004-05.
4. In 2004 and 2005, WGN televised a greater number of MLB and NBA games (combined) than any other broadcast television station in the country.
5. There were approximately 556 movies telecast full signal on WGN in 1998-99. The comparable number in 2004-05 was 252.
6. WGN did not televise full signal, in either 2004 or 2005, any of the following programs: *Lethal Weapon 3*, *Independence Day*, *Seinfeld*, *Star Trek: Enterprise*, *American Idol*, *Jeopardy!*, *The Oprah Winfrey Show*, NFL Professional Football, NHL Professional Hockey, NCAA college football and basketball, and NASCAR.
7. During 2004-05, WGN televised the following series at full signal on a daily or weekly basis, typically in the following time periods:

<i>Will &amp; Grace</i>	5:30 PM (daily)
<i>Street Smarts</i>	12:30 AM (daily)
<i>Home Improvement</i>	3:00 AM (daily)
<i>Matlock</i>	3:30 AM (daily)
<i>Beastmaster</i>	11:00 AM (weekend)
<i>Soul Train</i>	12:00 PM (weekend)

<i>The Fresh Prince of Bel-Air</i>	12:00 PM (weekend)
<i>Mutant X</i>	3:30 PM (weekend)
<i>Andromeda</i>	4:30 PM (weekend)
<i>Maximum Exposure</i>	1:30 AM (weekend)

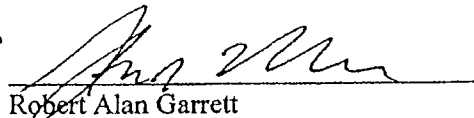
8. The pre-game and post-game shows televised by WGN in 2004-05 were produced by WGN and aired only on WGN and not on any other broadcast station.

**PROGRAM SUPPLIERS**



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Lucy Holmes Plovnick  
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golaniran@stinson.com

**JOINT SPORTS CLAIMANTS**



Robert Alan Garrett  
James L. Cooper  
Stephen K. Marsh  
Marco Palmieri

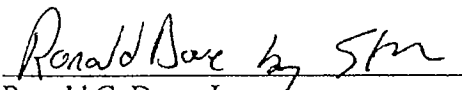
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**PUBLIC TELEVISION CLAIMANTS**

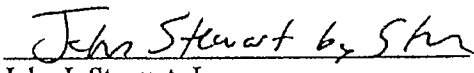
**COMMERCIAL TELEVISION  
CLAIMANTS**

**PUBLIC BROADCASTING SERVICE**

**NATIONAL ASSOCIATION OF  
BROADCASTERS**



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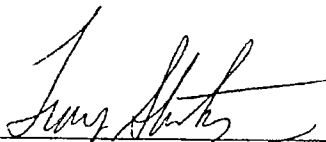
**CERTIFICATE OF SERVICE**  
**Docket. No. 2007-3 CRB CD 2004-2005**

I hereby certify that a copy of the foregoing Motion of the Settling Parties and Program Suppliers to Adopt Joint Stipulation before 5:00 p.m. to the following parties:

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\_\_\_\_\_  
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Before the  
**COPYRIGHT ROYALTY JUDGES**  
Washington, D.C.

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**In the Matter of** )  
) )  
**Docket No. 2007-3 CRB CD 2004-2005**  
**Distribution of the** )  
**2004 and 2005** )  
**Cable Royalty Funds** )  


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**REBUTTAL TESTIMONY**  
**OF GREGORY S. CRAWFORD**

I am Gregory S. Crawford, Professor of Economics at the University of Warwick in the United Kingdom. I received a PhD in economics from Stanford University in 1998. I was an assistant professor at Duke University and an assistant and later associate professor at the University of Arizona. In 2007-08, I served as Chief Economist at the Federal Communications Commission (FCC), an independent federal regulatory agency charged with regulating a number of media and communications industries, including the broadcast and cable television industries. I reported directly to the Chairman of the FCC and advised him and his staff on a number of topics in these industries, including mergers, spectrum auction design, media ownership, network neutrality, and bundling. After my service at the FCC, I joined the Department of Economics at the University of Warwick as a full professor. I am Director of Research for the economics department.

I conduct research on topics in both industrial organization and law and economics. Most of my research has analyzed the cable and satellite television industries. Particularly relevant for this proceeding, I have published extensively at the intersection of these fields, evaluating conditions of demand and supply within the cable television industry and the consequences of regulation on economic outcomes in cable markets as well as measuring the incentives for and consequences of bundling in the industry.<sup>1</sup> When the National Bureau of Economic Research (NBER)

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<sup>1</sup> "The Impact of the 1992 Cable Act on Household Demand and Welfare," *RAND Journal of Economics*, v31n3 (Autumn 2000), 422-449; "Monopoly Quality Degradation and Regulation in Cable Television," (with Matthew Shum), *Journal of Law and Economics*, v50n1 (February 2007), 181-209; "Bundling, Product Choice, and

commissioned a volume analyzing the consequences of economic regulation across a number of American industries, I was asked to write the chapter on cable television.<sup>2</sup> I have published numerous academic articles in such outlets as *Econometrica*, the *RAND Journal of Economics*, and the *Journal of Law and Economics*. My CV is attached as Appendix 1.

I have been asked by counsel for the Commercial Television Claimants to evaluate the analytical approach reflected in the direct case testimony of Dr. George R. Ford in light of the economic principles that affect the cable television industry. In doing so below, I first explain the economic principles that determine the relative value of the various channels of program content carried by cable television systems, of which the carriage of distant broadcast signals is a special case. I then review and offer my opinions on the expert report submitted by Dr. Ford, including his suggested reliance on the studies also presented on behalf of the Program Supplier claimants by Dr. Arthur Gruen in this proceeding.<sup>3</sup>

## I. CABLE ECONOMICS

### A. Distant Signal Basics

Distant signals are broadcast television signals that a cable operator has elected to carry under the compulsory license scheme set forth in Section 111 of the Copyright Act. I understand that the Copyright Act requires cable systems to pay royalty fees in order to carry distant signals and that the amounts of these fees generally depend on the gross receipts the system earns from subscription fees for service tiers that include any television stations as well as the number and type of distant signals it chooses to carry. The royalty fees are distributed to copyright owners for the retransmission of their works on the distant signals that cable operators chose to carry.

I understand that the relevant criterion for allocating cable copyright royalties to copyright owners that has been established by previous proceedings in this matter is that of "relative

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Efficiency: Should Cable Television Networks Be Offered A La Carte?," (with Joseph Cullen), *Information Economics and Policy*, v19n3-4 (October 2007), 379-404; "The Discriminatory Incentives to Bundle: The Case of Cable Television," *Quantitative Marketing and Economics*, v6n1 (March 2008), 41-78.

<sup>2</sup> The NBER is a private, nonprofit research organization dedicated to studying the science and empirics of economics. It is the largest economics research organization in the United States. The chapter is titled, "Cable Regulation in the Satellite Era," Chapter 5 in Rose, N., ed., "Economic Regulation and Its Reform: What Have We Learned?" forthcoming, University of Chicago Press.

<sup>3</sup> Neither of these reports submitted on behalf of the Program Supplier claimants addresses the relative market value of music, a program element, in the distant signal market. Accordingly, my rebuttal testimony is focused on the program category claimants and does not address a determination of the Music Claimants' share.

marketplace value.”<sup>4</sup> Of course, because of the compulsory license fees set by the Copyright Act, there is no explicit market for distant broadcast signals. As a result, previous proceedings in this matter have concluded that “the Panel’s primary objective is to ‘simulate [relative] market valuation’ as if no compulsory license existed.”<sup>5</sup>

A proper economic analysis of the relative market value of the various content categories on distant signals in the absence of a compulsory license must be grounded in an understanding of the economic forces determining outcomes in the cable television industry. In this section of my report, I describe the economic forces generating the supply of and demand for distant broadcast signals. I also describe the implications of this analysis for determining the relative value of alternative program types currently carried on distant broadcast signals.

## **B. Distant Signal Importation under the Compulsory License Scheme**

I understand that stations carried as distant signals are generally not available in the system’s local market and that frequently they are imported from relatively nearby markets.<sup>6</sup> Because distant signals are broadcast television signals carried by a cable system, their carriage combines elements of program selection for both broadcast stations and cable systems. In the language of supply and demand, the economic forces governing broadcast station programming decisions determine distant signal supply and the economic forces governing cable system channel selection determine distant signal demand. I discuss each in turn.

### **1. Broadcast Station Programming Choice (Distant Signal Supply)**

In television markets, commercial broadcast stations select programming to maximize the net advertising revenue they can receive from the audiences they can attract to that programming. Using the same example that Dr. Ford was asked to consider in his testimony, KATV, the ABC affiliate in Little Rock, Arkansas, like other commercial broadcast television stations, selects its programming to maximize the net advertising revenue it can earn by selling audiences in the Little Rock market to advertisers.

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<sup>4</sup> “Only one distribution criterion appears to have stood the ‘test of time’ and has served as the principal basis for allocating cable copyright royalties – ‘relative marketplace value’”, Copyright Arbitration Royalty Panel (“CARP”) 1998/99 Report at 9; “The 1990-92 Panel ... concluded that ‘market value’ is the only logical and legal touchstone,” CARP 1998/99 Report at 10.

<sup>5</sup> 1998/99 CARP Report at 10 (citing prior CARP, Librarian, and Court decisions).

<sup>6</sup> I understand that evidence regarding these general patterns has previously been introduced in this proceeding, including the Statement of Richard V. Ducey, at 7-8 (93% of non-superstation distant signal carriage within 150 miles), Testimony of Jerald N. Fritz (distant carriage of his company’s stations in adjacent, generally smaller markets), and Statement of Joel Waldfogel, at 5 (the smaller the market, the fewer the local stations and the more the distant signals the cable system carries).

As further described below, some broadcast stations end up being carried on distant cable television systems. One might reasonably ask, “How does this affect their programming decisions?” The answer is that it doesn’t. I understand that the viewing of distant broadcast signals is miniscule, both in absolute terms and relative to local viewing of local broadcast signals,<sup>7</sup> and distant signal audiences would therefore have little or no advertising value. I further understand that broadcast industry witnesses have explained in this proceeding that stations do not and, as a practical matter, could not sell audiences in distant markets to advertisers.<sup>8</sup> Thus, there is no additional advertising revenue that might change the value calculus for a broadcaster’s local market programming decisions as a result of distant carriage.<sup>9</sup>

While the specific programming choices made by different TV stations differ due to differences in tastes for programming and audiences across markets, the economic principles underlying these decisions are the same. The result is a set of programming lineups for each of the roughly 1,600 U.S. broadcast television stations. Excluding those stations already available in a cable system’s local market, the aggregate of all the stations’ respective programming decisions determine the supply of distant broadcast signal content.

## 2. Cable System Channel Carriage (Distant Signal Demand)

In general, the decisions facing cable systems are more complicated than those facing broadcast stations, for at least three reasons. First, as multi-channel distributors, cable systems must choose many channels to carry, among a wide variety of alternatives. Second, they sell these channels, with few exceptions, to subscribing households in bundles. Finally, and most significantly for my analysis here, cable systems, unlike broadcast stations, can also earn revenue from fees paid by their subscribers for the bundles of channels they offer. In fact, cable systems rely either predominantly or exclusively on subscriber revenue rather than advertising revenue, depending on the type of channel.<sup>10</sup>

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<sup>7</sup> I understand that another witness in this proceeding, Dr. Michael Topper, will be presenting an analysis that shows that the viewing to distant signals measured in the MPAA Special Study previously introduced by Program Suppliers in this proceeding represented less than one-half of one percent of all television viewing done in just the cable households where distant signals were viewed at all.

<sup>8</sup> I have reviewed the testimony of Commercial Television Claimants witnesses Dr. Ducey and Mr. Fritz in this regard.

<sup>9</sup> Even if distant cable carriage could somehow have some influence on broadcast station program choices, that influence would presumably already have had its effect, given that stations have been carried as distant signals for decades.

<sup>10</sup> For many cable networks, which offer “local avails” to cable systems that carry the network, cable operators may earn some incremental revenue through local advertising sales in addition to their principal subscription revenues. But for a number of other channels they choose to carry in their basic video service bundles, including distant signals, local television stations, cable networks such as CSPAN, the Sundance Channel, Turner Classic

Carriage decisions are actually simpler in the case of distant signal importation, because cable operators may not insert their own ads in distant signals and therefore cannot benefit from *any* advertising revenue from the signal. The primary goal of cable systems regarding distant signals is therefore to select broadcast signals that maximize their profits from household subscriptions. They do so by selecting the channels that appeal to households in their market. As part of the selection process, they compare the incremental revenue from carrying a channel to the incremental cost from carrying it.<sup>11</sup> The incremental revenue arises from their ability to charge a higher price to existing subscribers for a bundle including that channel, to attract new subscribers to the bundle, or to avoid a loss of subscribers to the bundle. The incremental cost depends principally on the license fee for the signal determined by the rules specified in the Copyright Act.<sup>12</sup>

While the specific choices made by different cable systems differ due to differences in their assessment of the relative tastes for programming among their subscribers and potential subscribers, the economic principles underlying these decisions are the same. The result is a set of chosen distant broadcast signals for each of the roughly 8,000 U.S. cable systems. These decisions reflect the demand for distant broadcast signals.

### 3. Advertiser versus Pay-Support

As indicated above, a primary difference between programming decisions made by broadcasters and those made by cable systems is the source of revenue on which they rely. While broadcast stations rely exclusively on advertising revenue, cable systems rely either predominantly or exclusively on subscriber revenue. This difference has important implications for the different kinds of content shown on each platform and thus the relative market value of content which is at the heart of this proceeding.

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Movies, and some start-up networks, cable operators receive no local advertising revenues at all. Overall, 85% of cable operators' revenues from their basic video channel offerings are from subscription fees rather than advertising sales (Napoli, P., Audience Economics, Columbia University Press (2003) at 17, Table 1.1).

<sup>11</sup> This is a simplification of the system's true decision, but appropriate for the purpose of this proceeding. In practice, cable systems offer multiple services, including Internet access, a menu of bundles of cable channels (typically called Basic/Expanded Basic/Digital Basic/etc.), multiplexed (bundles of) premium channels, video-on-demand, etc. Each of these varies in the amount of physical capacity required to provide the service. In effect, systems try to equate the incremental profit from each unit of capacity across services.

<sup>12</sup> A primary difference between a cable system's carriage decision for any other cable channel as opposed to a distant signal may come from differences in the cost of carriage. By contrast with the statutory royalty fee for a distant signal, the incremental cost of carrying a typical cable channel is the per-subscriber affiliate fee payable to the channel in return for the right to carry it. These are determined in bilateral negotiations between channels (or families of channels, e.g., Disney) and cable systems (or families of systems, e.g., Comcast). More popular networks are able to negotiate for higher fees, with ESPN the highest (among advertising-supported networks) at roughly \$2.60 per subscriber per month in 2005. For purposes of my analysis, I have ignored the cable system's costs of physical acquisition of the channels.

Content distributed on broadcast stations is selected to maximize advertising revenues in the original local market where it is broadcast. Because advertising revenues generally increase with the size of the audience that watches a program, broadcast stations select content to appeal to as broad an audience as possible. By contrast, content distributed as distant broadcast signals on cable systems is selected to maximize subscription revenue. Reliance on subscriber payments means that the perceived *intensity* of subscribers' tastes rather than just the quantity of their viewing will influence the content that is shown. For example, content that gives \$5 in value to one fifth of a market's households could generate twice as much revenue for a cable system than content that gives \$1 in value to one half of a market's households, even if the latter audience were two and a half times the size of the former. This fundamental difference between program content choices motivated by advertising revenues and those motivated by pay-support in TV markets is recognized in a long line of research in media economics.<sup>13</sup>

The important implication of this well-known principle is that, with regard to distant signal carriage by cable television systems, **viewing is not value**; subscriber payments to cable systems communicate value.<sup>14</sup> In the sections that follow, I describe the factors that influence the value a cable system obtains from distant broadcast signals. This, in turn, provides further insights into the relative market value of the various content categories being considered in this proceeding.

### C. Factors Influencing Cable Carriage Decisions

Much of my academic research in the economics of cable television markets analyzes the incentives cable systems have to bundle program services, including the implications those incentives have for their carriage decisions. As the carriage of distant broadcast signals is just a special case of the more general channel choice problem, the results of this research are directly relevant here.

In a study published in *Information Economics and Policy* in 2007, Joseph Cullen and I simulated outcomes in an "average" cable television market to investigate the relative effects on cable operators and subscribers of the practice of selling channels in bundles. We concluded that

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<sup>13</sup> Spence, A. And B. Owen, "Television Programming, Monopolistic Competition, and Welfare," *Quarterly Journal of Economics*, v91 (1977), 103-126, Chapter 4 in Owen, B. and S. Wildman, *Video Economics*, Harvard University Press (1992), Anderson, S. and S. Coate, "Market Provision of Broadcasting: A Welfare Analysis," *Review of Economic Studies*, v72 (October 2005), at 960-61.

<sup>14</sup> For cable channels in which the cable operator sells no advertising, such as a distant signal, the relative amounts of subscriber viewing have no direct relation to the relative intensity of subscriber preferences, or subscriber willingness to pay. For example, a consumer may be willing to pay much more to watch 3 hours of his favorite football team than to watch 20 hours of old movies. For cable channels for which cable operators can earn both subscription fees and advertising revenue, there is a trade-off between these objectives, and the content selected reflects a mix of the incentives to attract both advertiser and subscriber payments.

“two key factors determine the consequences of bundling on profit and welfare: the difference between marginal cost and mean WTP [Willingness-to-Pay] for [channels] and [negative] correlation in that WTP for [channels].”<sup>15</sup> The first factor, the difference between willingness-to-pay and costs, is somewhat intuitive. The average willingness-to-pay for a channel is just its “average demand,” that is, the average amount households would be willing to spend in order to have access to the channel. This first factor thus simply says that systems are more likely to carry channels for which the average demand is greater compared to the cost they have to pay for such channels. That is, a cable system facing two channels with a cost of \$0.10 per subscriber per month will carry the one for which consumers in its market are willing to spend an average of \$0.30 per subscriber per month before the one for which they are willing to spend \$0.20 per subscriber per month.

The second factor, negative correlation, is more subtle. Negative correlation in this context refers to a situation in which an individual having higher than average tastes for one channel will tend to have lower than average tastes for another. In such settings, it is common to find some individuals preferring one channel over another, while others have the opposite preferences.<sup>16</sup>

Negative correlation is critically important to cable system profitability because the great majority of cable channels (and all distant broadcast signals) are offered *in bundles*. Bundling effectively allows cable systems to charge different prices to different households for the same channel, *despite* charging the same overall price for the bundle. This “discriminatory” pricing effect increases – and the profit from adopting it generally increases – as the negative correlation in tastes for bundle components increases.

A simple example, adapted from testimony presented in a previous proceeding by Dr. Steven Wildman, nicely demonstrates this effect. The following chart reports the willingness to pay for each of two channels – news and weather – of two different types of subscribers in a cable market. In this example, a Type 1 subscriber would be willing to pay \$4 for a news channel and \$7 for a weather channel, while a Type 2 subscriber would be willing to pay \$7 for a news channel and \$4 for a weather channel.

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<sup>15</sup> “Bundling, Product Choice, and Efficiency: Should Cable Television Networks Be Offered A La Carte?,” (with Joseph Cullen), *Information Economics and Policy*, v19n3-4 (October 2007), at 388.

<sup>16</sup> For example, MTV (Music Television) targets its programming to appeal to young adults and Lifetime targets its programming to appeal to adult women. As a result, it would not be surprising if young adults had higher than average tastes for MTV and lower than average tastes for Lifetime, while their mothers had the opposite preferences. That is, there is negative correlation in tastes for MTV and Lifetime across these consumers.



Programming	Type 1 Subscribers	Type 2 Subscribers
News	4	7
Weather	7	4

I suppose for simplicity that there were equal numbers of each subscriber type, and that the cable system paid no affiliate fees (costs) for either channel.

If a cable system were to offer each channel separately, it would charge a price of \$4 per channel, sell both a news channel and a weather channel to each type of subscriber, and earn \$8 per subscriber. But if, instead, the system were to offer a single bundle of both networks, it would charge a price of \$11 for the bundle, sell the bundle to each subscriber, and earn \$11 per subscriber, a 38% increase in profit. Bundling is profitable, in this example, because it lets the cable system implicitly charge the Type 1 subscribers \$4 for news and \$7 for weather and vice versa for Type 2 subscribers. Higher profits can be extracted by the cable operator because the two types of subscribers have relative program preferences (i.e., which program is preferred more than the other) that are opposite. In other words, preferences for news and weather are negatively correlated across these consumers.

A direct consequence of this property is that cable systems have an important incentive to add channels to a bundle for which consumer tastes are negatively correlated with the existing channels in the bundle. The reason can be shown with Dr. Wildman's full example. Reported in the following chart is the willingness to pay for the same two channels plus a new channel – sports – for the same two subscriber types.

Programming	Type 1 Subscribers	Type 2 Subscribers
Sports	14	8
News	4	7
Weather	7	4

Continue to assume an equal number of subscribers of each type and zero affiliate fees. Assume further that the cable system already offered the sports channel (as might be expected in this

hypothetical given each subscriber type's relatively high valuation for it ) and is now deciding to add just one of the two available alternative channels (news or weather).

It would appear at first that as long as there are equal numbers of each consumer type, there would be nothing much to distinguish the news and weather channels. In particular, they have the same average willingness-to-pay of \$5.50 and the same cost (assumed zero). Notice the difference in profit, however, from offering each in a bundle with sports. A bundle of sports and news allows the system to charge a price of \$15, sell the bundle to both types, and earn \$15 per subscriber.<sup>17</sup> A bundle of sports and weather, on the other hand, allows the system to charge a price of only \$12 and earn \$12 per subscriber. Because of the negative correlation between household tastes for sports and news in this hypothetical example, adding the news channel is 25% more profitable to the system.

This basic economic principle about maximizing profits through bundling is both recognized in the academic literature and, in the cable television marketplace, confirmed through my own research.<sup>18</sup> Indeed, the bundling of cable television channels is frequently used as *the* canonical example of the profitability of such "discriminatory" bundling in textbooks in Industrial Organization.<sup>19</sup>

#### **D. Which Distant Signals?**

One can use the insights from this research to predict which distant signals cable systems are most likely to carry as well as what types of content on these signals will have the greatest value. The royalty cost to a cable system of any two distant signals with the same DSE is the same. The first condition, demand less costs, therefore says that cable systems are likely to carry distant signals for which there is the greatest average demand. If people in adjacent markets are more likely to have similar interests than people in very widely separated markets, this may explain at

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<sup>17</sup> A Type 1 Subscriber will pay \$18 for a sports-news bundle (\$14 + \$4) but a Type 2 Subscriber will pay only \$15 (\$7 + \$8). To entice both subscribers to purchase the bundle, the cable system will charge the lower amount, \$15, and make total revenues of \$30. With the sports-weather bundle, a Type 1 subscriber will pay \$21 but a Type 2 subscriber will pay only \$12. Again the cable system will prefer to charge the lower amount, \$12, but total revenues in this case would be only \$24.

<sup>18</sup> Adams, J. and J. Yellen, "Commodity Bundling and the Burden of Monopoly," *The Quarterly Journal of Economics*, v90n3 (1976), 475-498, Bakos, Y. and E. Brynjolfsson, "Bundling information goods: Pricing, profits, and efficiency," *Management Science*, v45n2 (1999), 1613-1630, Crawford, G. and J. Cullen, "Bundling, Product Choice, and Efficiency: Should Cable Television Networks Be Offered A La Carte?," *Information Economics and Policy*, v19n3-4 (October 2007), 379-404, Crawford, G., "The Discriminatory Incentives to Bundle in the Cable Television Industry," *Quantitative Marketing and Economics*, v6n1 (March 2008), 41-78.

<sup>19</sup> See, e.g., Carlton, D. and J. Perloff, *Modern Industrial Organization*, 4<sup>th</sup> International Edition, Addison-Wesley (2005), Example 10.4, p.325.

least in part why the majority of distant signals are imported from nearby television markets.<sup>20</sup> It cannot, however, suggest which kinds of content are most likely to be chosen.

The second condition, negative correlation, can. In a recent article published in *Quantitative Marketing and Economics*, I tested the implications of “discriminatory” bundling in cable television markets and measured the effects of negative correlation on bundle demand and profit.<sup>21</sup> My analysis demonstrated that programming that appeals to niche tastes (“Special-Interest Networks”) is more likely to generate tastes that negatively co-vary with tastes for the bundle than programming that appeals to broad tastes (“General-Interest Networks”).<sup>22</sup> In particular, I allocated the top-15 cable networks according to their programming format and found that special-interest networks are more likely to have a significantly negative “elasticity effect” (i.e. are more likely to negatively co-vary with other networks in the bundle).<sup>23</sup> The implication of this result for distant signal carriage is that when a cable system compares two distant signals with equal average demand, it will likely prefer the one appealing to niche tastes.

How does this provide guidance for measuring the relative value of distant signal content? It suggests that content that is markedly *different* from the other content already offered by the cable system is likely to have relatively greater economic value to the cable operator than content that is similar. My research shows generally that programming akin to those I understand are included within the Commercial Television Claimants, Joint Sports Claimants, and Public Television Claimants categories are more likely to be considered niche programming, therefore more likely to be negatively correlated with other content in cable system bundles, and thus more profitable to cable systems than programs akin to those included within the Program Suppliers category.<sup>24</sup>

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<sup>20</sup> It may be expected as well that the costs of physical acquisition and transport increase somewhat with distance, but the array of broadcast stations within a 150-mile radius of the cable system may be assumed to entail similar such costs.

<sup>21</sup> “The Discriminatory Incentives to Bundle: The Case of Cable Television,” *Quantitative Marketing and Economics*, v6n1 (March 2008), 41-78.

<sup>22</sup> *Id.* at 57, 63, 69.

<sup>23</sup> The General-Interest networks were WTBS, USA, TNT, Family, Nashville, and A&E, and the Special-Interest networks were Discovery, ESPN, CSPAN, Lifetime, CNN, Weather, QVC, Learning, and MTV. See *Id.* at 54, Table 2.

<sup>24</sup> Corroborative evidence of these effects is plentiful. For example, the special-interest networks for which I found evidence of negative correlation in Crawford (2008) included a sports network (ESPN), a news network (CNN), and a public-affairs network (CSPAN). Similarly, the FCC found in its most recent Report on Competition in the Video Marketplace that of 101 regional cable channels offered in the U.S., 43 are sports networks and 51 are news networks (Federal Communications Commission (2009), “Thirteenth Annual Assessment on the Status of Competition in the Market for the Delivery of Video Programming (2006 Report),” available at <http://www.fcc.gov/mb/csrptpg.html>, at 10, 108-110.

There is an unusual implication of negative correlation and cable system value that is worth emphasizing here. Niche programming is the type of content most likely to involve negative correlation of subscriber preferences and thus to be of greater value to cable systems. It also, by definition, appeals to a smaller audience than does general-interest programming. Thus, in subscriber-supported settings like that characterizing the distant-signal marketplace, and in clear contrast to advertising-supported markets, it is quite possible that *less viewing is correlated with greater value*.<sup>25</sup>

## II. THE FORD REPORT

The Ford report claims to estimate the relative market value of compensable programming by calculating the relative value such programming would purportedly have to a broadcast station selling access to the audiences that watch such programming in the local advertising market.<sup>26</sup> He does so by evaluating the typical audience demographics of alternative content types, determining an average price for those audience demographics in the broadcast advertising market, and, based on what he takes as the relative viewing shares of the various content types and on certain adjustments he makes for various program categories, calculating a purported relative value of the various program categories in the broadcast program marketplace.

The focus of my comments is on the conceptual framework put forward by Dr. Ford, not with the details of the implementation of his analysis. There is a fundamental flaw in the conceptual framework he proposes: he focuses his analysis exclusively on the audience (advertising revenue) market, and not at all on the cable (subscription fee) market. This is a surprising, and glaring, omission.

### A. Basic Economic Principles

First, as described above, the *only* mechanism by which distant signal importation can currently generate revenue is through payments to cable systems for subscriptions to bundles that include those signals. Even for non-broadcast cable networks, which present a different, partially advertising-based model, the great majority of cable system revenues come from subscriber fees

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<sup>25</sup> It is difficult to be definitive as there are two effects at work: a mean effect (what I call the average demand) and a correlation effect. Niche programming has less viewing, which suggests but does not imply a lower average demand. If it does have lower average demand, then one must balance that against the positive profit effect of any negative correlation.

<sup>26</sup> "In essence, the simulated scenario of market value assumes there is a hypothetical broadcaster in the distant market that airs the same mix of programming as found on the 2004-05 distant signals," Ford Report, fn 10.

rather than advertising revenues.<sup>27</sup> It seems unsupportable, therefore, for Dr. Ford to base his analysis on an assumption that in the hypothetical marketplace, the content provided on such signals would *only* be supported through payments from advertisers.

Indeed, later in his own report, Dr. Ford concludes that a hybrid approach combining his preferred approach and that presented in the Gruen subscriber survey would be plausible because it “would acknowledge dual sources of value for distantly transmitted programming – advertising and subscribers.”<sup>28</sup>

As discussed above, it is a matter of long-settled economic principles, confirmed by my own empirical research and that of others, that the incentives and outcomes in the broadcast television programming market and the cable subscription-based market are fundamentally different. Given that Dr. Ford fails to apply or even discuss the economic principles that actually drive demand in the cable system marketplace, it is my opinion that his analysis cannot be relied upon to provide any useful information regarding the relative value of distant signal programming.

#### **B. Dr. Ford’s Hypothetical Market**

Dr. Ford does not provide a detailed analysis to justify his assumption that the same content currently being offered to households on cable systems via a distant broadcast signal would instead be offered by a broadcast station or locally originated cable channel in the distant cable system’s market. Undertaking such an analysis, which I briefly describe below, I conclude that his assumption is unfounded: in the absence of a compulsory license, content currently distributed via cable carriage of a distant broadcast signal will likely continue to be distributed via a distant broadcast signal. The only effect of the absence of a compulsory license would be that cable systems would likely negotiate with broadcast stations over what they would pay instead of paying statutorily-specified fees. There would likely be no change in the program content on those distant signals or in the relative values of those programs from the perspective of the cable operator.

In the absence of a compulsory license, new distribution rights would have to be negotiated for the carriage of content currently distributed on distant broadcast signals. There might also be scope for the inclusion of locally inserted ads within this distant-signal content. I consider each of these changes in turn.

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<sup>27</sup> Non-broadcast cable networks are nationally distributed program channels that are offered to multichannel video providers who in turn offer them to subscribers. Examples include ESPN, CNN, USA Network, and A&E.

<sup>28</sup> Ford Report at 50.

### 1. The Structure of the Hypothetical Transaction.

In the absence of a compulsory license, cable systems in distant markets (*e.g.*, the Mountain Home cable system in the Springfield, Missouri, DMA) would need to negotiate with copyright holders of the content carried on a distant broadcast signal (*e.g.*, KATV, the Little Rock ABC affiliate carried by the Mountain Home system). How might these new transactions be organized?

First, there would likely be some intermediary, *i.e.*, a *channel*, that would negotiate on behalf of the copyright holders. Cable systems are in the business of choosing channels, not negotiating rights with individual programmers. They are unlikely to have the skills for or interest in beginning to do so.

But what channel? Would it be a new low power broadcast station serving the cable system's local market, as Dr. Ford assumes (*i.e.*, a broadcast station operating in the Springfield DMA in this example)? Would it be an incipient cable network? Or would it be the current broadcast station in the distant market that holds the distribution rights in that market (*i.e.*, KATV in Little Rock)?

In my opinion, the market would continue to be organized as it is now, with broadcast stations in distant markets acting as intermediaries on behalf of content providers in negotiations with cable systems outside their local market. A principal reason for my opinion is simple: if there were value to content providers now being carried on distant signals (*e.g.*, the owner of a Program Suppliers program on KATV) of selling that content in a cable system's local market (*e.g.*, to a local broadcast station or a local origination cable channel in Mountain Home), *they would already be doing so now.*

Taking the example further, if "Razorback Football with Houston Nutt" could garner enough viewers in the Springfield DMA, wouldn't one of the numerous broadcast stations now serving Springfield license that program? The fact that they don't suggests there isn't enough demand *by advertisers* for access to the audiences in the Springfield DMA that would watch that program. Might there instead be sufficient demand *by subscribers* for that (and related) programming to justify carrying it in parts of the Springfield DMA? In fact, some residents of Northern Arkansas who reside in the Springfield DMA may very likely have such tastes.<sup>29</sup> Programming supported by subscription fees (and distributed through cable systems) can exploit the intensity of tastes for a small segment of the population.

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<sup>29</sup> "Arkansas state residents who reside in out-of-state DMAs are frequently rabid University of Arkansas Razorback fans and have intense interest in viewing any programming about the teams," Fritz testimony, p.4.

How might such content get to the cable system? Would it be distributed by a new cable channel entrant or, as now, via the distant broadcast signal (KATV in Little Rock)? It seems clear it would continue to be distributed by KATV. Creating a new cable channel with the same content as KATV would merely duplicate its costs without providing any additional benefit.

## 2. The Role of Advertising.

Turning to the second point, is it possible that distant signals might earn advertising revenue in the absence of a compulsory license that forbids the substitution of ads in distant signal retransmissions? I think not, for three reasons. First, as described above, I understand that the viewing of distant broadcast signals is miniscule and would therefore have little or no value in terms of potential advertising revenue. Second, I understand that Nielsen does not report ratings data for distant broadcast stations (e.g., KATV) within a local DMA (e.g., Springfield, MO) unless such ratings reach certain reporting thresholds. In short, without Springfield ratings, KATV would have nothing to sell in Springfield. Finally, I understand that local (DMA-level) audiences are sold in a well-functioning market within each DMA. I understand that advertisers generally budget and make their buys based on the main broadcast stations within a DMA, and would therefore place their purchases intended for the Springfield DMA with Springfield stations that can offer broad coverage in that DMA rather than spending more with KATV for the scattered KATV viewing audiences in the Springfield DMA, even if those audiences did show up in Nielsen's Springfield reports.<sup>30</sup>

Based on these reasons, I conclude that, in the absence of the compulsory license, content currently distributed on distant broadcast signals would likely continue to be distributed on distant broadcast signals. Instead of earning a share of copyright royalties under the compulsory license, content providers would likely negotiate with a distant broadcast station (e.g., KATV) for a share of any distant signal revenue that it could negotiate with any cable systems (e.g., Mountain Home) wanting to carry it.

### **C. Dr. Ford's "Hybrid Approach"**

Dr. Ford also discusses the subscriber survey evidence that was presented in this proceeding by Dr. Gruen. He describes the survey as presenting "evidence of actual subscriber valuations" and

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<sup>30</sup> Of course, even if some advertising revenues associated with distant signal programs were somehow to become available to the cable operator in the absence of the compulsory license, the relative value of such programs to the cable operator would never be determined exclusively by advertising revenues, as Dr. Ford assumes for his analysis. The lion's share of the value of the programming would likely continue to be a consequence of its ability to attract and keep cable subscribers.

that it “arguably attempts to measure market value in the subscription market.”<sup>31</sup> Dr. Ford then suggests that an alternative approach to measuring relative market value would be to average the share numbers resulting from his advertising-based approach and the cable subscriber survey.<sup>32</sup>

Besides the fundamental flaws in Dr. Ford’s own approach, there are also fundamental shortcomings in the cable subscriber survey as a measure of the relative value of distant signal programming categories. First, the survey fails to establish respondents’ familiarity with or whether they place any value on distant signal programming at all. Even though subscriber willingness-to-pay *would* be more relevant than purported advertising revenues in assessing relative value in the cable market, Dr. Gruen’s survey instrument *does not provide a measure of willingness-to-pay*. Suppose someone didn’t value any of the programming types offered on a distant signal; indeed suppose she had never seen the signal and was completely unaware of what it carried. Then what relevant information could she possibly provide when asked how she would allocate \$10 among the various programming types?<sup>33</sup> Relative values only have meaning if they are multiplied by a meaningful total.

The Gruen survey also fails to incorporate any measurement of subscriber tastes for *other* program services, including local stations and cable networks, which precludes the possibility of measuring the effects of correlation in household tastes for channels. As described above, cable systems find it profitable to add channels for which household tastes are negatively correlated with tastes for the existing channels in a bundle. Without such information, a critical component of measuring the relative economic value of programs to cable operators is missing.<sup>34</sup>

## CONCLUSION

The basic economic principles that govern marketplace behavior in the subscription-supported cable industry are clear and well-known. Any determination of relative market value of distant signal program categories should be made with these principles in mind.

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<sup>31</sup> Ford Report at 46, 49.

<sup>32</sup> *Id.* at 49-50.

<sup>33</sup> This issue is not presented in a survey of responsible cable system business officials, because it may appropriately be assumed that if their system carries a distant signal, it has already been identified as having some value to the cable operator.

<sup>34</sup> This difficulty is also not present for a survey of cable operators, who aggregate the demand of all the households in their service area in assessing the relative value of distant signal programs in making their own programming decisions.



Dr. Ford's fundamental assumption that content in a world without a compulsory license would be compiled and distributed by a low-power broadcaster local to the cable system is unfounded. Furthermore, his approach of purporting to measure the relative value of distant signal content by reference solely to advertising revenue in the broadcast market is unfounded and misleading given the economic incentives faced by cable operators and the fact that distant signal content is likely to continue to be supported exclusively by subscriber fees, not advertising revenues.

The types of programming chosen by cable operators to attract subscription revenue are fundamentally different from those chosen to attract advertising revenue. Programming targeting special-interest ("niche") tastes is often more profitable to cable systems, because including it in a bundle is more likely to attract and keep new and existing subscribers than programming targeting general-interest tastes.

For these reasons, Dr. Ford's conceptual framework is fundamentally flawed, from the perspectives of both economic theory and market reality. The Copyright Royalty Board should not use Dr. Ford's findings as a basis for allocating royalties from the copyright pool.

Before the  
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\_\_\_\_\_) )  
In the Matter of ) )  
 ) )  
Distribution of the ) Docket No. 2007-3 CRB CD 2004-2005  
2004 and 2005 ) )  
Cable Royalty Funds ) )  
\_\_\_\_\_) )

**DECLARATION**

I, Gregory S. Crawford, declare under penalty of perjury that the Statement of Gregory S. Crawford presented in the 2004-2005 Cable Copyright Royalty Distribution Proceeding is true and correct.

  
\_\_\_\_\_  
Gregory S. Crawford

Dated: 11 December 2009

# **APPENDIX 1**

Rebuttal Testimony of Gregory Crawford

Curriculum Vitae

# Gregory S. Crawford

## Business Address

Department of Economics  
University of Warwick  
Coventry CV4 7AL, UK  
Email: [crawford@warwick.ac.uk](mailto:crawford@warwick.ac.uk)  
Phone: +44 (0)2476 523470

## Home Address

Brookfield House  
2 Beauchamp Hill  
Leamington Spa  
CV32 5NP, UK

## Employment

Professor, Department of Economics, University of Warwick, September 2008-present  
Chief Economist, Federal Communications Commission (FCC), 2007-2008  
Assistant Professor, Department of Economics, University of Arizona, 2002-2008  
Visiting Professor, European School of Management and Technology, Berlin, Summer 2007  
Assistant Professor, Department of Economics, Duke University, 1997-2002  
Visiting Professor, Fuqua School of Business, Duke University, 2000-2001  
Lecturer, Department of Economics, Duke University, 1996-1997

## Education

Ph.D. in Economics, Stanford University, Stanford, CA, 1998  
B.A., Economics with Honors, University of Pennsylvania, Philadelphia, PA, 1991

## Publications

"Cable Regulation in the Satellite Era," Chapter 5 in Rose, N., ed, "Economic Regulation and Its Reform: What Have We Learned?", forthcoming, University of Chicago Press.

"Economics at the FCC: 2007-2008," (with Evan Kwerel and Jonathan Levy), *Review of Industrial Organization*, v33n3 (November 2008), 187-210.

"The Discriminatory Incentives to Bundle: The Case of Cable Television," *Quantitative Marketing and Economics*, v6n1 (March 2008), 41-78.

- Winner, 2009 Dick Wittink Prize for the best paper published in the *QME*

"Bidding Asymmetries in Multi-Unit Auctions: Implications of Bid Function Equilibria in the British Spot Market for Electricity, (with Joseph Crespo and Helen Tauchen), *International Journal of Industrial Organization*, v25n6 (December 2007), 1233-1268.

"Bundling, Product Choice, and Efficiency: Should Cable Television Networks Be Offered A La Carte?," (with Joseph Cullen), *Information Economics and Policy*, v19n3-4 (October 2007), 379-404.

"Monopoly Quality Degradation and Regulation in Cable Television," (with Matthew Shum), *Journal of Law and Economics*, v50n1 (February 2007), 181-209.

"Uncertainty and Learning in Pharmaceutical Demand," (with Matthew Shum), *Econometrica*, v73n4 (July 2005), 1137-1174.

“Recent Advances in Structural Econometric Modeling: Dynamics, Product Positioning, and Entry,” (with J.-P. Dube, K. Sudhir, A. Ching, M. Draganska, J. Fox, W. Hartmann, G. Hitsch, B. Viard, M. Villas-Boas, and N. Vilcassim), *Marketing Letters*, v16n2 (July 2005).

“The Impact of the 1992 Cable Act on Household Demand and Welfare,” *RAND Journal of Economics*, v31n3 (Autumn 2000), 422-449.

### **Reports**

“Television Station Ownership Structure and the Quantity and Quality of TV Programming,” (Commissioned Research Study for the Federal Communications Commission), July 2007.

### **Articles Under Review**

“The Welfare Effects of Bundling in Multi-channel Television Markets,” (with Ali Yurukoglu), University of Warwick, May 2009, under revision for re-submission to the *American Economic Review*.

### **Working Papers**

“The Empirical Consequences of Advertising Content in the Hungarian Mobile Phone Market,” (with Jozsef Molnar), University of Arizona, March, 2008.

“Estimating Price Elasticities in Differentiated Product Demand Models with Endogenous Characteristics,” (with Dan Akerberg), mimeo, University of Arizona, March 2007.

“The Welfare Effects of Endogenous Quality Choice: The Case of Cable Television,” (with Matthew Shum), mimeo, University of Arizona, March, 2006

“A Virtual Stakes Approach to Measuring Competition in Product Markets,” (with R. Michael Black, Shihua Lu, and Hal White), mimeo, University of Arizona, May 2004.

### **Work In Progress**

“Robust Instrumental Variables,” (with Dan Akerberg), mimeo, UCLA, March 2007.

“An Empirical Analysis of Manufacturer-Retailer Interaction: What Determines Wholesale Prices?” (with Zsolt Macskasi), May 2006.

“Storability, Competition, and Sales: Do Firms Cut Prices to Steal Demand from Rivals or Themselves?,” (with James J. Anton), April 2005.

“A Dynamic Model of Quality Competition in Subscription Television Markets,”

(with Alex Shcherbakov), March 2007.

“The Impact of Ratings and Word-of-Mouth on DVD Rentals: An Analysis of the Netflix Data,” (with Ivan Maryanchyk), February 2007.

## Grants

“The Empirical Consequences of Advertising Content” (with Jozsef Molnar), Hungarian Competition Commission, 10,000,000 Hungarian Forint (~\$50,000), 2007-2008

## Teaching and Service

Undergraduate Business Strategy, 2009-2010  
MBA Strategy, 2006-2007.  
Graduate (2<sup>nd</sup>-year Ph.D.) Industrial Organization, 1996-2005.  
Graduate (1<sup>st</sup>-year Ph.D.) Econometrics, 1998-1999.  
Undergraduate Econometrics, 1998-2004, 2009-2010.  
Introductory Microeconomics, 1996-1998.  
The Economics and Statistics of Sports, 1999

Recruiting Committee, 1997-2002 (Duke University), 2003-2004,  
2005-2007 (University of Arizona)

## Advising and Placement

Jed Brewer, Tim Davies, Lucas Rosnau, Volodymyr Bilotkac, Kivanc Kirgiz,  
Yong Cai, Joseph Crespo, Lan Liang, Peter Rankin, Andrew Biehl, Mark Burkey  
Joseph Cullen

## Professional Activities

Associate Editor, *International Journal of Industrial Organization*, October 2005 - present.

Editorial Board, *Information Economics and Policy*, December 2007 - present.

Referee for *Econometrica*, *American Economic Review*, *Review of Economics Studies*,  
*RAND Journal of Economics*, *Review of Economics and Statistics*,  
*Quantitative Marketing and Economics*, *National Science Foundation*,  
*International Journal of Industrial Organization*, *Journal of Industrial Economics*,  
*Journal of Applied Econometrics*, *Information Economics and Policy*,  
*Management Science*, *Southern Economic Journal*

2010 Presentations (planned): LBS (1/10), Oxford (3/10), UCL (4/10)

2009 Presentations (inc. planned): ESMT, Berlin (5/09), CEPR IO, Mannheim (5/09),  
University of Leuven (9/09), University of Toulouse (Econometrics Workshop and  
Competition Policy Workshop), (11/09)

2008 Presentations: UK Competition Commission (1/08), Oxford University (1/08),  
University of Warwick (1/08), University of Virginia (3/08), Industrial

Organization Society (5/08), NBER Summer Institute, IO Group (6/08),  
6th Workshop in Media Economics, Zurich (10/08), Network of Industrial Economics,  
London (12/08)

2007 Presentations: University of Pennsylvania (Wharton, 3/07), ESMT (Berlin, 4/07),  
Northwestern University (5/07), Bates White Antitrust/Merger Conference (6/07),  
University of Wisconsin, Madison (10/07), Duke University (Fuqua, 11/07)

2006 Presentations: AEA Meetings, Boston (1/06), Columbia (3/06), University of  
Chicago Marketing (3/06), Bates White Antitrust/Merger Conference (6/06),  
EARIE Amsterdam (8/06)

2005 Presentations: NBER Conferences on Regulation (2/05, 6/05), Econometric  
Society World Congress, London (8/05)

2004 Presentations: Stanford University (3/04), CEPR "The Role of Competition  
in the New Economy", Greece (5/04), Invitational Choice Conference  
(6/04), FCC Symposium on 'A La Carte' MVPD Pricing (7/04)

Conference Organization: Triangle Applied Micro Conference, April  
2000, Triangle Applied Micro Conference, May 1999 (co-organizer)

**Last updated:** November 2009

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**In the Matter of** )

**Distribution of the** )  
**2004 and 2005** )  
**Cable Royalty Funds** )

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**Docket No. 2007-3 CRB CD 2004-2005**

**REBUTTAL TESTIMONY  
OF JEFFERY S. BERMAN**

I am submitting this testimony in response to the testimony of Dr. Arthur Gruen, who presented the Program Suppliers' constant sum surveys of cable subscribers, and Professor Alan Rubin, who assisted Dr. Gruen in designing the surveys (hereinafter "Gruen Surveys"). According to Dr. Gruen, these surveys "directly measure [] how cable subscribers value the programs delivered on distant signals" their cable systems carried during the years 2004 and 2005. Gruen Written Direct Testimony of Arthur C. Gruen, Ph.D. at 5 (hereinafter "Gruen W.D.T."). For the reasons discussed below, I do not believe that the Gruen Surveys provide a reliable assessment of the relative value that cable subscribers attached to the programming they received from distant signals.

**I. Qualifications**

I am a Senior Partner and Executive Vice President of C&R Research, a 100-employee full service custom market research firm located in Chicago, Illinois. While C&R conducts research for many of the largest and most well known brands in the



United States, spanning a wide variety of industries, I have focused my efforts on surveying the cable television industry. Among the cable industry clients for whom C&R has conducted market research, including surveys of cable subscribers, are Multiple System Operators (MSOs), such as:

- AT&T Broadband/TCI
- Bresnan
- Brighthouse
- Cablevision
- Cablevision Industries
- Colony
- Comcast
- Cox
- Media One/Continental
- Primestar
- Rifkin
- Suddenlink
- Time Warner
- United Cable

We also have conducted market research, including surveys, for cable networks, such as

- ABC Cable Networks
- A&E,
- BBC America
- Cartoon Network
- Discovery Channel
- Disney Channel
- DMX Music
- ESPN.
- Food Network
- MTV Networks
- Nickelodeon
- Showtime Networks
- Turner Entertainment Sports
- TVGuide/Prevue Networks

I joined C&R in 1985 and since then I have been in charge of all research that C&R conducts concerning the cable television and other entertainment industries. Prior

to joining C&R, I was director of marketing research at Cox Cable Communications, which at the time was one of the nation's top 10 largest MSOs. During my career in cable television market research, I have been involved personally with hundreds of surveys of cable subscribers. My experience has included the overall study design, the design of survey questionnaires, the formulation of the sampling plan, the monitoring of data collection, the tabulation and analysis of the data, and the reporting of findings and recommendations based upon the data collected.

I received an MBA from the University of Chicago and a bachelor's degree in marketing from the University of Illinois -- Chicago. I am active in the Cable Television and Marketing Society, an association that manages cooperative marketing initiatives for cable companies, content providers and others who supply products and services to the cable industry. I have also served on the Board of Directors for CTAM's Chicago chapter. A copy of my biographical information is attached as Appendix A.

## **II. Introduction and Summary**

I believe the Gruen Surveys are flawed in several important respects and that market researchers with cable industry experience would not rely upon the results of those surveys. I base that opinion on my 25-years of professional experience as a market researcher involved with the design, execution and analysis of cable subscriber and other surveys. My opinion, however, also has empirical support.

Under my supervision, C&R conducted a pilot study during ~~November~~ <sup>October</sup> 2009 in which we surveyed 110 cable subscribers from seven cable systems located throughout the United States, each of which carried WGN as its only distant signal in 2008 ("Pilot

Study”). We asked these subscribers the same questions that the Gruen Surveys had asked, except that our questions sought program category valuations for 2008 (rather than 2004 and 2005). We then asked certain follow-up questions relating to the concerns we had (and have) with the Gruen Surveys. The results of the Pilot Study, as discussed below, are consistent with my opinion that the Gruen Surveys are flawed and unreliable.<sup>1</sup>

### **III. Discussion**

The purpose of the Gruen Surveys was to determine the relative value that cable subscribers placed on the different categories of distant signal non-network programming they received in 2004 and 2005. The Surveys employed a common and well-accepted market research technique known as constant sum. The Surveys asked each of the respondents (approximately 1500 randomly-chosen cable subscribers per year) to allocate a \$10 bill for specified distant signals among different programming categories on those signals. The Surveys also asked demographic questions and questions about the popularity of the different categories of programming on the specified distant signals.<sup>2</sup>

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<sup>1</sup>We do not believe the the final results from the Pilot Study can be extrapolated to the larger universe of cable subscribers due to the small size of the sample frame (110 respondents from 7 systems, all carrying WGN as the only distant signal). The Pilot Study was designed to test the Gruen Surveys to see whether changes would be necessary in order to make the results reliable. The use of pilot studies is routine in the industry in order to explore concerns such as the wording of a survey or whether the right group is being targeted.

The methodology used to conduct the Pilot Study here is described in Appendix B, along with the results from the study. A copy of the survey questionnaire is described in Appendix C.

<sup>2</sup> For the sake of convenience, I have attached a copy of the 2005 Gruen Survey as Appendix D.

The responses purported to show that subscribers attached the following relative values to the different program categories on distant signals<sup>3</sup> -

**Table 3**  
**Normalized Distant Signal Relative Values (Percent)**

Category	2004	2005
<b>Program Suppliers</b>		
Series	21.18	20.76
Movies and Specials	20.04	19.29
Non-Team Sports	7.68	6.57
<b>Program Supplier Total</b>	<b>48.90</b>	<b>46.62</b>
News and Community Events	15.51	19.51
Devotional Programs	7.38	8.19
Live Team Sports	17.82	17.10
PBS†	9.62	6.82
Canadian‡	0.77	1.77
<b>Total*</b>	<b>100.00</b>	<b>100.01</b>

†In 2005, this is the average of values that range from 6.49 to 7.16

‡In 2005, this is the average of values that range from 1.44 to 2.10

\*May not equal 100.00 percent due to rounding.

There are five principal problems with the Gruen Surveys:

- Program examples were inaccurate and misleading.
- Unqualified respondents were allowed to complete the survey.
- Gender was not recorded.
- It was not clear whether the values given should be those of the respondent or of the respondent's household.
- It was not clear whether the values given should be based on current programming or programming from a year ago.

#### A. Program Examples

The Gruen Surveys identified the distant signal(s) that each respondent's cable system carried during the year in question and the program categories on those signals for which relative valuations were sought. For certain of the program categories, the Gruen

<sup>3</sup> Gruen W.D.T. at 23

Surveys also provided “examples” of specific programs included within each category. The identity of the distant signal(s) and the program category definitions (along with the examples) appeared three times in the survey -- as part of the (1) “Descriptive Information;” (2) the popularity question; and (3) the constant sum question. Gruen W.D.T at 31-38, 41-43.

For example, as to the category entitled “Series Programs,” the surveys stated (three times) that:

SERIES PROGRAMS: This category includes sitcoms such as *Seinfeld*, dramas such as *Star Trek: Enterprise*, reality shows such as *American Idol*, game shows such as *Jeopardy*, and talk shows such as the *Oprah Winfrey Show* shown only on [the distant station].

Gruen W.D.T. at 33, 35, and 41. If the only station carried by the respondent’s cable system was WGN-TV (as was the case for about 47% of the respondents to the 2004 Gruen Survey and 52% from the 2005 Survey), the constant sum question read in part:

SERIES PROGRAMS: This category includes sitcoms such as *Seinfeld*, dramas such as *Star Trek: Enterprise*, reality shows such as *American Idol*, game shows such as *Jeopardy*, and talk shows such as the *Oprah Winfrey Show* shown only on WGN.

Of the TEN Dollars, what is the value to you, if any, of all series programs shown on this station for this category?

Gruen W.D.T. at 41.

This language suggests, or at least could be reasonably interpreted by a respondent to mean, that *Seinfeld*, *Star Trek: Enterprise*, *American Idol*, *Jeopardy* and the *Oprah Winfrey Show* were in fact shown on WGN despite the fact that these programs were not carried on WGN in either 2004 or 2005. The obvious danger is that the wording could encourage respondents to associate these series programs with WGN and to place a value

on programs not actually carried by that station. I believe the use of such examples for Series Programs (and indeed for all categories) was inappropriate and biased the results of the Gruen Surveys.

Our Pilot Study confirms this conclusion. That study provided the respondents with virtually the same program examples as did the Gruen Surveys (in the (1) “Descriptive Information;” (2) the popularity question; and (3) the constant sum question). After asking the constant sum and other question as worded in the Gruen Surveys, we asked our respondents to identify the programs they watched on WGN, the only distant signal carried by their cable systems. Nearly half of the respondents identified programs that were not broadcast by WGN, and virtually all of those responses listed one or more program examples described in the survey. *See Appendix C* (survey questionnaire listing program examples). Programs that the subscribers said they watched on WGN included *Seinfeld*, *Oprah*, *American Idol*, *Jeopardy*, and *NASCAR*, none of which WGN televised during the year in question. All of these programs, however, may have been available from sources other than distant signals. Consequently, the values provided by respondents to the Gruen Surveys (and our Pilot Study) likely incorporated programming televised by stations or cable networks other than distant signals.

Program Suppliers’ witness Dr. Rubin stated that the Gruen Surveys were designed so that subscribers would respond “only about the non-network distant signal programming being transmitted.”<sup>4</sup> However, the use of program examples actually

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<sup>4</sup> Rubin W.D.T. at 10.

thwarted this goal and affirmatively caused respondents to focus on programs carried outside of this universe.<sup>5</sup> It is a fundamental principle of survey research that questions should be framed in a clear, precise, and non-leading manner. The questions in the Gruen Surveys, insofar as they provided examples of programming that were not broadcast by the distant signals the respondents actually received, did not meet this objective.

#### **B. Respondent Qualifications**

I agree with Dr. Rubin that “effective survey research requires survey respondents to be knowledgeable so that they are able to answer the questions being asked.”<sup>6</sup> This too is a basic tenet of survey research. The Gruen Surveys, however, failed this test. They did not determine whether the persons responding to the survey questions were in fact knowledgeable about the programming for which they were supposed to provide values. Therefore, some of the responses obtained were from unqualified respondents -- *i.e.*, those who were not actually aware of the programming shown on the signals at issue and therefore incapable of providing an informed value for the programming they broadcast.

The only qualifications for a person to have been eligible to participate in the Gruen Surveys was that the person be the head or co-head of household and a subscriber to one of the designated cable systems in the sample. As Dr. Gruen acknowledged during the hearing, a cable subscriber, who typically has 100 or more channels on his or her cable system, will on average watch only 12-15 channels.<sup>7</sup> Consequently, one cannot be

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<sup>5</sup> Before conducting the subscriber surveys at issue here, Gruen conducted a Field Test and Pilot Study, but it does not appear that anyone attempted to test the impact of using these examples prior to administering the Gruen Surveys.

<sup>6</sup> Testimony of Alan Rubin at 4 (hereinafter “Rubin W.D.T.”).

<sup>7</sup> Gruen Oral Testimony, Tr. 1889-90.

certain which, if *any*, person who responded to the Gruen Surveys was actually familiar with the programming shown on those distant signals. Dr. Gruen acknowledged this point.<sup>8</sup>

In our Pilot Study, we asked respondents whether they had watched during the previous year WGN (the only distant signal on their systems). Over 10% said they did not watch or did not know whether they had watched WGN; and an additional 20% said that they rarely watched WGN:

Frequently	32.7%
Occasionally	36.4%
Rarely	20.0%
Never	8.2%
Don't know	2.7%

Even those who said they had watched WGN may have been improperly influenced by the program examples. Specifically, the use of the examples may have caused the Respondents to believe that they had watched those programs on WGN even though many of those programs were not actually shown on that channel. The improper use of examples, which is discussed above, almost certainly tainted the responses of those who claimed to have watched the signal during the preceding year.

### C. Gender Data

The Gruen Surveys asked several demographic questions. For instance, the survey respondents were asked to provide their:

<sup>8</sup> Gruen Oral Testimony, Tr. 1885-86.



- Age
- Marital status
- Number of children (and for one year, the gender of the children)
- Household Income
- Education level

However, the Gruen Surveys omitted what is a standard demographic question -- gender.

I do not recall ever having conducted a subscriber survey without obtaining gender data.

Typically, respondents in phone studies tend to skew older and more female than the general population. The Gruen Surveys did not vary from this tendency with respect to age. The 50+ age group accounted for 52.6% of all respondents in the 2004 Survey and 55.2% in the 2005 Survey (combined average of 53.9%) -- compared to 39.71% of the cable universe during the same years. Because they collected age data, Gruen was able to show that the older subscribers valued PS programming less than younger subscribers. On the other hand, we do not know whether females were oversampled by Gruen because gender was not recorded. Similarly, we do not know whether males and females gave different programming valuations in the Gruen Surveys.

Our Pilot Study also yielded the expected oversampling of older and female respondents, as approximately 61% were 55+ years old and 56% were female. In 2004-05, women comprised approximately 52% of the cable universe and those 55 and older represented only 30.64%. We see no difference by age in terms of the evaluations of Series and Live Team Sports. However, even with the small sample size, we see a significant difference by gender. Women valued Series significantly higher than they did Live Team Sports, while males valued Team Sports higher than they did Series.

Pilot Study -- Value By Gender		
Programming Categories	Males	Females
News & Community Events	\$1.51	\$1.38
Series	\$1.50	\$2.73
Devotional Programming	\$0.84	\$1.14
Movies & Specials	\$2.01	\$2.09
Live Team Sports	\$2.91	\$1.58
Non-Team Sports	\$0.81	\$0.81

A previous tribunal in a copyright royalty distribution proceeding expressed reservations about another subscriber survey where there was a similar gender imbalance (59% female, 41% male) and a similar disparity in gender valuations.<sup>9</sup>

#### D. Personal vs. Household Valuations

Gruen testified that his Surveys sought to determine valuations of the entire household rather than that of the individual respondents.<sup>10</sup> While this is the correct approach, the Gruen Surveys were not designed appropriately to achieve that objective.

The instructions to the constant sum valuation question proceed as follows:

- The instructions first say that “[w]e are now going to ask you a few questions on how *you* value the program categories shown [on the distant stations at issue].”<sup>11</sup> (emphasis added) The first instruction, then, suggests that the value will be that of the respondent.
- The instructions later ask the person to divide a hypothetical ten dollar payment “according to how valuable you feel each program category was in *your own home*.”<sup>12</sup> (emphasis added). This instruction seems to be targeted at household value.

<sup>9</sup> 1983 Cable Royalty Distribution Proceeding 51 Fed. Reg. 12792, 12799, 12810 (Apr. 15, 1986).

<sup>10</sup> Oral Testimony of Arthur Gruen, Tr. at 1868-69.

<sup>11</sup> Gruen W.D.T. at 40.

<sup>12</sup> *Id.*

- But when the ultimate valuation question is asked again, the survey asks respondents “what is the value to *you*” of the various program categories.<sup>13</sup> (emphasis added). This seems to be focused again on the value assessments of the respondent.

The shifting terminology in the Gruen Surveys’ constant sum question was likely to produce confusion about whose valuations the respondent (in a multi-person household) should provide -- the respondent’s valuation or the valuations of the entire household.<sup>14</sup> Such confusion was shown to exist in our Pilot Study. After asking the constant sum and other questions, we asked respondents whether the value they provided was their own or that of their household. We found that more than one out of five respondents in multi-person households provided their personal valuations rather than valuations of the entire household.

Pilot Study -- Valuations of Respondents in Multi-Person Households	
Value for Respondent Only	22.0%
Value for Household	78.0%

Therefore, we cannot say that the Gruen Survey results reflect household valuations, as was the intent.

#### **E. Valuation Period**

Similarly, the Gruen Surveys do not provide clear instructions about the time period being valued. In the constant sum question, the respondents are told to “assume that TEN DOLLARS of your bill *last year* represented how much you paid for the program

<sup>13</sup> *Id.* at 41.

<sup>14</sup> The number of multi-person households in the Gruen Surveys was approximately 76% in 2004 and 73% in 2005.

categories on these stations that we have been discussing so far.” It goes on to say, “Now, I would like you to divide this hypothetical TEN DOLLARS according to how valuable you feel each programming category *was* in your own home.” Here it is clear that the respondents were being asked to evaluate programming that was carried on distant signals *last year*. However, when the ultimate valuation question is asked, the survey asks “...what *is* the value to you...?”

The pilot study suggests that, in fact, there was confusion in the Gruen Surveys. Our respondents were asked what time period they were thinking about when answering this question. Only 17% said they were thinking about programs shown last year, while 12% said they were thinking about the current year and 67% were not thinking about any particular time period.

Pilot Study -- Time Period for Which Programming Values Were Given	
Currently On	11.8%
From a year ago	17.3%
Not thinking about a time frame	67.3%
Don't know	3.6%

The desired intent, in this case obtaining valuations of programming shown a year ago, was not met.

## APPENDIX A

### Jeffery S. Berman

Jeffery S. Berman received his undergraduate degree from The University of Illinois in Chicago in 1967 and his MBA from the University of Chicago in 1970.

Mr. Berman started his business career in 1970 at The Quaker Oats Company, where he worked in the market research department until he left the company in 1973.

In 1973, Mr. Berman joined The Coca-Cola Company, where he held various positions in marketing research, ultimately rising to the position of Associate Brand Director for Brand Coca-Cola.

In 1982, Mr. Berman joined Cox Communications, where he worked in the market research department for 3 years.

In 1985, Mr. Berman joined C&R Research, where he remains employed. C&R is a full service custom market research firm. Mr. Berman started there as a Vice President and is currently a Senior Partner and Executive Vice President. While C&R conducts research for many of the largest and most well known brands in the United States, spanning a wide variety of industries, Mr. Berman has focused his efforts on serving corporations in the cable television industry.

## APPENDIX B

### DISTANT SIGNAL PILOT METHODOLOGY

For the pilot study, we kept the core survey the same as the 2004-2005 surveys (with the exception of updating the examples of programs in each category to be more current since those programs may no longer be carried). To understand how respondents were thinking when they answered the core survey, as well as their engagement with the distant signal, we added some follow-up questions. These questions covered:

- The time period respondents were thinking about (current vs. last year)
- Who respondents were thinking about (themselves vs. their family)
- How often respondents watched the distant signal last year (and what they watched)
- The importance of the distant signal in respondents deciding to continue their cable subscription

We also recorded respondents' gender to see if there were any differences in the value of programming categories by gender (since gender was not recorded in the 2004-2005 surveys).

We purchased Random Digit Dialing (RDD) sample from Survey Sampling International (SSI), as well as wireless phone sample, given the proportion of households that do not have a landline phone (estimated at about 20%, but higher among younger consumers).

Between October 15<sup>th</sup> and October 23<sup>rd</sup>, 2009, we conducted 110\* interviews (88 with RDD sample and 22 with wireless sample) across seven different systems. All of the systems selected were ones that had been sampled in the Gruen Surveys and which were located in different regions of the United States. Interviews were conducted by Universal Survey Center.

The final number of completes for each system is as follows:

- Cox Communications, Inc. (Oklahoma City, Oklahoma): 16
- Cox Communications, Inc. (Phoenix, Arizona): 15
- Bright House Networks (Dade, Florida): 16
- Comcast of CA/OH/PA/UT/WA, Inc. (Pittsburgh, Pennsylvania): 17
- Comcast CBV of GA SC, Inc. (Hinesville, Georgia): 15
- Charter Communications, LLC (Los Angeles, California): 15
- Comcast of the South, Inc. (Ann Arbor, Michigan): 16

The interview length ended up being approximately 18 minutes, and the incidence of finding qualified respondents for the RDD sample was 35%, while it was 27% for the wireless sample. Qualified respondents were adults who subscribed to cable TV service in their home in 2008 from the primary cable provider in their area. Over half of the numbers we dialed were "no answers" or answering machines (it took over 200 dialings of the RDD sample to get just one complete; it took over 450 dialings to get one complete with the wireless sample).

*\*Note: With a sample size of 110, the margin of error is +/- 9.34 percentage points. Therefore, with this limited sample size, results cannot be projected to the entire cable TV subscriber universe.*

**DISTANT SIGNAL PILOT RESULTS\***

\*Note: With a sample size of 110, the margin of error is +/- 9.34 percentage points. Therefore, with this limited sample size, results cannot be projected to the entire cable TV subscriber universe.

<b>Popularity of News and Community Events</b>	
Very popular	19.1%
Somewhat popular	31.8%
Not popular	47.3%
Don't know/refused	1.8%

<b>Popularity of Series</b>	
Very popular	38.2%
Somewhat popular	36.4%
Not popular	22.7%
Don't know/refused	2.7%

<b>Popularity of Devotional Programs</b>	
Very popular	10.9%
Somewhat popular	20.9%
Not popular	67.3%
Don't know/refused	0.9%

<b>Popularity of Movies and Specials</b>	
Very popular	30.0%
Somewhat popular	40.0%
Not popular	29.1%
Don't know/refused	0.9%

<b>Popularity of Live Team Sports</b>	
Very popular	40.0%
Somewhat popular	28.2%
Not popular	30.9%
Don't know/refused	0.9%

<b>Popularity of Non-Team Sports</b>	
Very popular	13.6%
Somewhat popular	23.6%
Not popular	61.8%
Don't know/refused	0.9%



<b>Average Value of Categories (out of \$10)</b>	
News and Community Events	\$1.43
Series	\$2.20
Devotional Programs	\$1.01
Movies and Specials	\$2.05
Live Team Sports	\$2.16
Non-Team Sports	\$0.81

<b>Time Period Respondents Were Thinking About When Answering Valuation Question</b>	
Programming that's currently on	11.8%
Programming that was on in 2008	17.3%
Not thinking about a particular time frame	67.3%
Don't know/don't remember	3.6%

<b>Whom Respondents Were Thinking About When Answering Valuation Question</b>	
Value for respondent only	36.4%
Value for household	60.9%
Only person in household (not read)	1.8%
Don't know/don't remember	0.9%

<b>Frequency of Watching Distant Signal in 2008</b>	
Frequently	32.7%
Occasionally	36.4%
Rarely	20.0%
Never	8.2%
Don't know	2.7%

<b>Importance of Distant Signal in Decision to Subscribe or Continue Subscribing to Cable TV Provider</b>	
Extremely important	6.4%
Very important	30.0%
Not very important	31.8%
Not at all important	31.8%

<b>Demographic Profile</b>	
<u>Marital Status</u>	
Single	46.7
Married	53.3
<u>Age</u>	
18-24	4.6
25-34	17.6
40-49	15.7
50-54	8.3
55-64	19.4
65+	34.3
<i>Average Age</i>	54.2
<u>Spouse's Age</u>	
18-24	0.0
25-34	16.1
40-49	8.9
50-54	14.3
55-64	25.0
65+	35.7
<i>Average Age</i>	57.1
<u>Kids in Household</u>	
<i>Has Kids (Net)</i>	39.4
Under 2	4.6
2-5	6.4
6-11	11.9
12-17	11.9
18+	22.0
<u>Household Income</u>	
Under \$20,000	17.8
\$20,000 - \$39,999	30.0
\$40,000 - \$59,999	21.1
\$60,000 - \$79,999	10.0
\$80,000 - \$99,999	10.0
\$100,000+	11.1
<i>Average Income</i>	\$50,980

<b>Demographic Profile (Cont'd)</b>	
<u>Education</u>	
Grade School	0.0
Some High School	9.3
High School Graduate	23.1
Some College or Technical School	30.6
College Graduate	25.9
Some Graduate School	4.6
Graduate Degree	6.5
<u>Spouse's Education</u>	
Grade School	0.0
Some High School	5.3
High School Graduate	22.8
Some College or Technical School	33.3
College Graduate	22.8
Some Graduate School	0.0
Graduate Degree	15.8
<u>Gender</u>	
Male	43.6
Female	56.4

## Q8 Open Ended Responses

Resp ID	Response
00004	team sports and news, movies
00005	sitcoms and series, sports
00007	news, dr phil, movies, sports
00009	wrestling, nba, basketball, the newscast, jeopardy, american idol, seinfeld
00011	home video, news, hillbillies, cheers, the heat of the night, gennie
00013	oprah
00021	The Nascar, Not very much we hardley ever watched it.
00022	The Oprah Winfrey Show
00024	football, sports, game shows
00029	i cant think of any off the top of my head, the movie, some news, nascar
00030	sports- football, soccer, and hockey, matlock, in the heat of the night
00031	sports, sitcoms and movies
00032	American Idol and Seinfeld. The live NFL football.Movies.
00033	joel osteen, a block of comedies that come on, old time comedies. i think thats it on wgn they have good movies and they have good sitcoms
00036	the news and series programming
00037	movies, hockey, games
00048	seinfeld, oprah, joel osteen, movies, news
00051	mainly gospel programming, also the sports and the game shows
00052	sports, football news
00059	movies, comedy series, and game shows
00064	the oprah winfrey show, seinfeld, jeopardy, movies
00070	only movies, sometimes rasing
00072	seinfeld, news
00080	sports, oprah
00082	news, sports
00083	oprah shows, montal shows
00092	nascar live team sports, occasional movie
00094	sitcoms, movies
00099	seinfeld, jeporday, lethal weapon 3, american idol, nascar
00106	so you think you can dance, idol
00111	seventh heaven, chier backer, sports, basball, touched by an angel sitcoms
00112	nascar, the movies, smallvilee, a few of the others lethal weapon, star wars
00114	series i know, movies ,just not the ones you listed, i'd have to look,at my paper, don't want oprah, watch the movies that come on, we don't watch science fiction
00115	live team sports, sitcoms and oprah, news
00117	nfl, baserball, soccer, nfl football, ophrah winfrey, american idol and the movies, the news, seinfeld
00118	movies
00119	team sports, basketball, the cubs, the nfl, the news every once in a while
00121	movies and sporting events, news and local
00122	the movies, series and sports
00123	local news, very little . sometimes jeopardy
00126	the ophrah winfrey, american idol, the news

## Q8 Open Ended Responses

00130	some of the movies, joel oistein oprah winfrey, jeopardy, american idol, independance day, rush hour, lethal weapon, in general any family movies
00131	sporting events, american idol, some movies
00133	the biggest thing is sports, they have alot of rewrite shows that i get a kick out of
00136	whatever is on-american idol, a lot of sports
00138	oprah winfrey, star wars and the movies
00142	sports, oprah
00143	seinfeld, wrestling
00147	reruns sitcoms, or whatever was being shown in sports category, and sunday devotional category anf reruns - we go through the guide, sometimes we catch a rerun, sports or devotional category
00148	professional baseball, my girlfriend watches alot of movies and a few games of chicago cubs baseball and ncaa basketball, nascar and oprah winfrey, sitcoms - will and grace and seinfeld
00159	nascar, any sports, football
00161	american idol, oprah, football, baseball, joel osteen, seinfeld, all the college football, nba basketball
00168	american idol, oprah, seinfeld
00170	joel osteen, 700 club, the gospel hour, the nascar
00174	football programs-series like seinfeld-occasionally the devotional programs
00176	the upper south, sports events, football games
00177	seinfeld, i occasionally watch the talk shows, news and community events, and occasionally the movies, occasionally the sports, baseball football and basketball
00179	the devotional programs and of couse the tv and charlie may, or the old comedy shows, and some movies, and some talk shows, im not a fan of oprah winfrey
00183	American Idol, Games Shows, a few sitcoms, religious occassionally, and movies quite frequently
00186	american idol, different football, sports and baseball
00188	the series, the news for sure, the series, and some of the movies.
00191	science shows, history and science
00193	news, the feature stories
00195	seinfeld, baseball and 9'clock news
00196	movies
00202	oprah, seinfeld, and basketball and football, news shows
00203	oprah winfrey show, the news
00237	seinfeld, movies
00245	sports,
00265	wrestleing, nascar
00283	mostly sports, news
00289	oprah, american ido, sitcoms, and reality shows
00311	oprah, nba basketball, car racing
00312	oprah
80012	oprah

## Q8 Open Ended Responses

80019	everything except for the news. Down from Wrestling to the devotional , movies and series and live team sports.NHL and lots of baseball
80021	baseball, seinfeld, 2 1/2 men - maybe not on that station - mostly watch local channels
80025	news,jerry springer
80027	seinfeld, a lot of sitcoms, malcolm in the middle? not sure if it was on that channel - seinfeld
80044	nascar seinfeld tons of movies /baseball football/jeopardy/ current news
80057	sports, just football
80062	comedy central
80063	Cubs & the White Sox
80064	smallville, sports
80066	Any football game, Regular movies, and news
80067	sports, news
80079	the news, local news
80081	in the heat of thenight
80084	joel osteen

## APPENDIX C

C&R Research  
500 North Michigan  
Chicago, IL 60611  
(312) 828-9200  
10/13/09 – FINAL

### Distant Signal Research Questionnaire – Pilot Study

#### Sample Specifications

- Ages 18+
- Head of household
- Subscribed to cable TV service last year (2008) from primary system in county

#### Quotas

Quotas will be defined by FIPS code (see excel sheet).

#### **RECORD THE FOLLOWING INFORMATION**

System Name (BASED ON FIPS CODE)  
City (BASED ON FIPS CODE)  
State (BASED ON FIPS CODE)  
Telephone Number (FROM SAMPLE)  
Date Interviewed

#### **(ASK TO SPEAK TO ONE OF THE ADULTS IN THE HOUSEHOLD)**

Good morning/afternoon/evening. My name is \_\_\_\_\_, and I'm calling from Creative & Response Research, a national market research firm. We are conducting a brief national survey among randomly selected cable TV subscribers regarding television programs. This survey will take about 20 minutes of your time. We are offering a cash payment of \$25 to those who complete the survey. May we talk now? (SCHEDULE TIME FOR CALL-BACK IF NOT CURRENTLY AVAILABLE)

S1. First, are you the head or co-head of the household? (DO NOT READ LIST, ACCEPT ONE RESPONSE)

Yes ..... 1

No ..... 2 (ASK: Could I please speak with that person? AND REPEAT INTRODUCTION AND S1; IF NOT AVAILABLE, SCHEDULE TIME FOR CALL-BACK)

S2. Did you have cable TV in your home in 2008? (DO NOT READ LIST, ACCEPT ONE RESPONSE)

Yes ..... 1

No ..... 2 (THANK AND TERMINATE)

S3. Is there another head or co-head of the household? (DO NOT READ LIST, ACCEPT ONE RESPONSE)

Yes ..... 1 (ASK Q.S4)

No ..... 2 (SKIP TO Q.S5a)

#17939

S4. Between you and the other co-head of the household, is your birthday the (NEXT/LAST)? (RANDOMIZE BETWEEN ASKING NEXT & LAST IN PROGRAM) (DO NOT READ LIST, ACCEPT ONE RESPONSE)

Yes ..... 1 (ASK Q.S5a)

No ..... 2 (ASK: Could I please speak to the other co-head of the household? AND REPEAT INTRODUCTION, SKIPPING TO Q.S5a AFTER INTRO; IF NOT AVAILABLE, SCHEDULE TIME FOR CALL-BACK)

S5a. What cable system did you subscribe to last year? (DO NOT READ LIST, ACCEPT ONE RESPONSE)

Armstrong	Frankfort Plant Board
Atlantic Broadband	Insight Communications
Bee Line Cable	Knology
Bresnan	MCC Iowa
Bright House	Mediacom
Cable One	Metrocast
Cablevision	RCN
Charter	Service Electric Cable
Comcast	Time Warner
Covington Cable	Voom (TERMINATE)
Cox	Wide Open West (WOW)
DirecTV (TERMINATE)	Other (Specify) (ASK Q.S5b)
Dish Network (TERMINATE)	Don't know (ASK Q.S5b)
East Arkansas Video	

(VERIFY THAT CABLE SYSTEM SERVES RESPONDENT'S CITY/COUNTY (BASED ON EXCEL SPREADSHEET COLUMNS A):

- IF CABLE SYSTEM DOES SERVE RESPONDENT'S LOCATION, SKIP TO LOGIC BEFORE Q.S6a
- IF RESPONDENT'S ANSWER IS A CABLE SYSTEM THAT DOES NOT SERVE THAT LOCATION, ASK Q.S5b

S5b. Is (INSERT CABLE SYSTEM FROM EXCEL SPREADSHEET COLUMN A) your cable company? (DO NOT READ LIST, ACCEPT ONE RESPONSE)

Yes ..... 1 (CONTINUE TO DIRECTIVE BEFORE Q.S6a)

No ..... 2 (THANK AND TERMINATE)

Don't know ... 3 (THANK AND TERMINATE)

Refused ..... 4 (THANK AND TERMINATE)

ASK Q.S6a & Q.S6b IF RESPONDENT IS FROM CELL PHONE SAMPLE, ELSE SKIP TO 'DESCRIPTIVE INFORMATION'

S6a. In what state do you primarily live? (DO NOT READ LIST; ACCEPT ONE RESPONSE)

\_\_\_\_\_

S6b. In what county do you primarily live? (DO NOT READ LIST; ACCEPT ONE RESPONSE)

\_\_\_\_\_

CONFIRM THAT STATE AND COUNTY ARE IN CORRECT SYSTEM FOOTPRINT. IF NOT, THANK & TERMINATE.

**DESCRIPTIVE INFORMATION**

(FOR INTRO AND DESCRIPTIONS, INSERT DISTANT SIGNAL STATION CALL LETTER(S) (FROM COLUMN F) AND CITY/STATE OF ORIGIN (FROM COLUMNS G & H) OF EXCEL SPREADSHEET)

We are interested in program categories on television stations that come from other cities. I am now going to ask questions about categories of programs on (INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY, STATE OF ORIGIN).

The questions I will ask apply only to these stations from these cities.

These television stations I just mentioned carry certain categories of programs. I'm going to read a brief description of these program categories and then ask you a few questions.

**(READ PROGRAM CATEGORIES AND DEFINITIONS TO RESPONDENTS)**

- A. **NEWS AND COMMUNITY EVENTS:** These include news and community events shown only on (INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN).
- B. **SERIES:** These include sitcoms, dramas, children's shows, talk shows, game shows, and other series shown only on (INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN).  
Examples include *Seinfeld*, *Smallville*, *American Idol*, *Jeopardy*, and the *Oprah Winfrey Show*.
- C. **DEVOTIONAL PROGRAMS:** These include shows with religious themes shown only on (INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN).  
Examples include *Old Time Gospel Hour*, *700 Club*, and *Joel Osteen Ministry*.
- D. **MOVIES AND SPECIALS:** These include feature films, Movies of the Week, and specials shown only on (INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN).  
Examples include movies such as *Star Wars*, *Independence Day*, and *Lethal Weapon 3*.
- E. **LIVE TEAM SPORTS:** These include live play-by-play coverage of Major League Baseball, NBA professional basketball, NFL professional football, NHL professional hockey, NCAA college football and basketball, and Major League Soccer shown only on (INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN).
- F. **NON-TEAM SPORTS:** These include professional wrestling, NASCAR auto racing, and pre- and post-game shows surrounding live team sports broadcasts shown only on (INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN).

**(READ 'PBS PROGRAMS' ONLY IF CABLE SYSTEM CARRIES A PBS STATION ('X' IN COLUMN N OF EXCEL SPREADSHEET)**

- G. **PBS PROGRAMS:** These include programs shown only on (INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN). (DO NOT INCLUDE ANY NON-PBS STATIONS (WITHOUT AN X IN COLUMN N))  
Examples include *Antiques Roadshow*, *NewsHour*, and *Sesame Street*.

**(READ 'PROGRAMS ON CANADIAN STATIONS' ONLY IF CABLE SYSTEM CARRIES A CANADIAN STATION ('X' IN COLUMN O OF EXCEL SPREADSHEET)**

- H. **PROGRAMS ON CANADIAN STATIONS:** These include programs shown only on (INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN). (DO NOT INCLUDE ANY NON-CANADIAN STATIONS (WITHOUT AN X IN COLUMN O). SKIP IF THERE ARE NO CANADIAN STATIONS ON LIST.)  
Examples include *The Border*, *The National*, and *Bo on the Go*.



Q1. Now I'm going to ask you about the popularity of each type of program last year IN YOUR OWN HOME. Here I am still referring only to **(INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN)**. As I read each program category and a brief definition, tell me if it was VERY POPULAR, SOMEWHAT POPULAR, or NOT POPULAR in your own home last year.

When you respond, please do so on the basis of ALL the shows that are included in that particular program category.

**(ROTATE THE ORDER OF A-H)**

Let's start with: **(INSERT FIRST CATEGORY; ASK QUESTION FOR EACH CATEGORY, 1 AT A TIME)**

- a. **NEWS AND COMMUNITY EVENTS:** Remember, this category includes news and community events shown only on **(INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN)**.
- b. **SERIES:** Remember, this category includes sitcoms such as *Seinfeld*, dramas such as *Smallville*, reality shows such as *American Idol*, game shows such as *Jeopardy*, and talk shows such as the *Oprah Winfrey Show* shown only on **(INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN)**.
- c. **DEVOTIONAL PROGRAMS:** Remember, this category includes shows with religious themes such as *Old Time Gospel Hour*, the *700 Club*, and *Joel Osteen Ministry* shown only on **(INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN)**.
- d. **MOVIES AND SPECIALS:** Remember, this category includes movies such as *Star Wars*, *Independence Day*, and *Lethal Weapon 3* shown only on **(INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN)**.
- e. **LIVE TEAM SPORTS:** Remember, this category includes live play-by-play coverage of Major League Baseball, NBA professional basketball, NFL professional football, NHL professional hockey, NCAA college football and basketball, and Major League Soccer shown only on **(INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN)**.
- f. **NON-TEAM SPORTS:** Remember, this category includes professional wrestling, NASCAR auto racing, and pre- and post-game shows surrounding live team sports broadcasts shown only on **(INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN)**.
- g. **(ASK ABOUT 'PBS PROGRAMS' ONLY IF CABLE SYSTEM CARRIES A PBS STATION ('X' IN COLUMN N OF EXCEL SPREADSHEET) PBS PROGRAMS:** Remember, this category includes PBS programs such as *Antiques Roadshow*, *NewsHour*, and *Sesame Street* shown only on **(INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN)**. **(DO NOT INCLUDE ANY NON-PBS STATIONS (WITHOUT AN X IN COLUMN N))**
- h. **(READ 'PROGRAMS ON CANADIAN STATIONS' ONLY IF CABLE SYSTEM CARRIES A CANADIAN STATION ('X' IN COLUMN O OF EXCEL SPREADSHEET) PROGRAMS ON CANADIAN STATIONS:** These include programs such as *The Border*, *The National*, and *Bo on the Go* shown only on **(INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN)**. **(DO NOT INCLUDE ANY NON-CANADIAN STATIONS (WITHOUT AN X IN COLUMN O))**

Please tell me if **(INSERT CATEGORY)** as a whole are VERY POPULAR, SOMEWHAT POPULAR, or NOT POPULAR in your own home. **(DO NOT READ LIST, ACCEPT ONE RESPONSE FOR EACH)**

- Very popular .....1
- Somewhat popular .....2
- Not popular .....3
- Don't know/refused ....4

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Q2a. Are there any other categories of programs shown only on (INSERT DISTANT SIGNAL STATION CALL LETTER(S)) that are VERY POPULAR OR SOMEWHAT POPULAR in your home? ALLOW UP TO 5 ANSWERS


(DNR) No other categories .....98  
(DNR) Don't know .....99

ASK Q.2b FOR EACH CATEGORY MENTIONED AT Q.2a. IF NO CATEGORIES MENTIONED, SKIP TO 'PROGRAM VALUE' INTRO BEFORE Q.3

Q2b. Please tell me if (INSERT CATEGORY FROM Q.2a) as a whole are VERY POPULAR or SOMEWHAT POPULAR in your own home. (DO NOT READ LIST, ACCEPT ONE RESPONSE FOR EACH)

Very popular.....1  
Somewhat popular .....2

**PROGRAM VALUE**

We are now going to ask you a few questions on how you value the program categories shown on these same stations. (INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN).

When you pay your cable bill, a certain portion of the payment is for the program categories on the stations I mentioned earlier. Let's assume that TEN DOLLARS of your bill last year represented how much you paid for the program categories on these stations that we have been discussing so far.

Now, I would like you to divide this hypothetical TEN DOLLARS according to how valuable you feel each program category was in your own home. You can divide the TEN DOLLARS any way you wish.

**READ THE FOLLOWING PARAGRAPH ONLY IF THE CABLE SYSTEM CARRIES A NETWORK AFFILIATE (DENOTED BY 'X' IN COLUMN M OF THE EXCEL SPREADSHEET):**

For purposes of this survey, we are not interested in network shows on the ABC, CBS, and NBC television networks. In considering how to divide the TEN DOLLARS among the program categories, please consider the value of all the non-network programs in that category.

In considering how to divide the TEN DOLLARS among the program categories, please consider the value of ALL the programs in that category.

I'll read all the categories broadcast by these stations to give you a chance to think about them. Please write the categories down as I am reading them.

Remember, you can divide the TEN DOLLARS any way you wish -- you can give any value between ZERO DOLLARS and TEN DOLLARS, INCLUDING PORTIONS OF DOLLARS, to a program category. But keep in mind the total value you give to all the categories has to add up to TEN DOLLARS.

SHOW ALL CATEGORIES AND THEIR RESPONSES ON ONE SCREEN; READ Q.3 IN SAME ORDER AS IN Q.1.

Q3. To begin...

- a. **NEWS AND COMMUNITY EVENTS:** This category includes news and community events shown only on (INSERT DISTANT SIGNAL STATION CALL LETTER(S)) from INSERT CITY OR CITIES OF ORIGIN).
- b. **SERIES PROGRAMS:** This category includes sitcoms such as *Seinfeld*, dramas such as *Smallville*, reality shows such as *American Idol*, game shows such as *Jeopardy*, and talk shows such as the *Oprah Winfrey Show* shown only on (INSERT DISTANT SIGNAL STATION CALL LETTER(S)) from INSERT CITY OR CITIES OF ORIGIN).
- c. **DEVOTIONAL PROGRAMS:** This category includes shows with religious themes such as *Old Time Gospel Hour*, the *700 Club*, and *Joel Osteen Ministry* shown only on (INSERT DISTANT SIGNAL STATION CALL LETTER(S)) from INSERT CITY OR CITIES OF ORIGIN).
- d. **MOVIES AND SPECIALS:** This category includes movies such as *Star Wars*, *Independence Day*, and *Lethal Weapon 3* shown only on (INSERT DISTANT SIGNAL STATION CALL LETTER(S)) from INSERT CITY OR CITIES OF ORIGIN).
- e. **LIVE TEAM SPORTS:** This category includes live play-by-play coverage of Major League Baseball, NBA professional basketball, NFL professional football, NHL professional hockey, NCAA college football and basketball, and Major League Soccer shown only on (INSERT DISTANT SIGNAL STATION CALL LETTER(S)) from INSERT CITY OR CITIES OF ORIGIN).
- f. **NON-TEAM SPORTS:** This category includes professional wrestling, NASCAR auto racing, and pre- and post-game shows surrounding live team sports broadcasts shown only on (INSERT DISTANT SIGNAL STATION CALL LETTER(S)) from INSERT CITY OR CITIES OF ORIGIN).
- g. **(ASK ABOUT 'PBS PROGRAMS' ONLY IF CABLE SYSTEM CARRIES A PBS STATION ('X' IN COLUMN N OF EXCEL SPREADSHEET) PBS PROGRAMS:** This category includes PBS programs such as *Antiques Roadshow*, *NewsHour*, and *Sesame Street* shown only on (INSERT DISTANT SIGNAL STATION CALL LETTER(S)) from INSERT CITY OR CITIES OF ORIGIN). (DO NOT INCLUDE ANY NON-PBS STATIONS (WITHOUT AN X IN COLUMN N))
- h. **(READ 'PROGRAMS ON CANADIAN STATIONS' ONLY IF CABLE SYSTEM CARRIES A CANADIAN STATION ('X' IN COLUMN O OF EXCEL SPREADSHEET) PROGRAMS ON CANADIAN STATIONS:** This category includes programs such as *The Border*, *The National*, and *Bo on the Go* shown only on (INSERT DISTANT SIGNAL STATION CALL LETTER(S)) from INSERT CITY OR CITIES OF ORIGIN). (DO NOT INCLUDE ANY NON-CANADIAN STATIONS(WITHOUT AN X IN COLUMN O))

(ASK QUESTION FOR EACH CATEGORY AFTER READING DESCRIPTION. IN QUESTION TEXT, DO NOT INCLUDE 'SHOWN ON THIS STATION FOR THIS CATEGORY' WHEN ASKING Q.3h.)

Of the TEN Dollars, what is the value to you, if any, of all (INSERT CATEGORY) shown on this station for this category?

\$ \_\_\_\_\_

ASK Q.3i IF OTHER CATEGORIES MENTIONED AT Q.2a, ELSE SKIP TO Q.4

- i. You also said that (INSERT EACH CATEGORY ONE AT A TIME FROM Q.2a) was very or somewhat popular in your own home. Remember, we are still interested in the value of programs shown only on (INSERT DISTANT SIGNAL STATION CALL LETTER(S)) from INSERT CITY OR CITIES OF ORIGIN).

(ASK QUESTION FOR EACH CATEGORY FROM Q.2a)

Of the TEN Dollars, what is the value to you, if any, of all (INSERT CATEGORY) programs shown on these same stations?

\$ \_\_\_\_\_

(VALUES GIVEN FOR Q.3a-i (e.g. \$2, \$1.50, ETC. MUST ADD TO TEN DOLLARS); PROMPT RESPONDENTS IF THEY DO NOT)

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Q4. Now I'm going to read back the program categories and your estimates. You gave me a value of (INSERT VALUE) for the (INSERT CATEGORY). (READ THROUGH ENTIRE LIST OF CATEGORIES AND THEIR VALUES FROM Q.3 IN THE SAME ORDER AS Q.3 WAS ASKED.

Are there any changes you would like to make?

Yes ..... 1  
No ..... 2

(IF Q.4 = YES, MAKE CHANGES TO APPROPRIATE VALUES, ENSURING THAT REVISED RESPONSES STILL ADD TO TEN DOLLARS; PROMPT RESPONDENTS IF THEY DO NOT.)

**FOLLOW-UP**

Thank you for your help with this survey so far. Now, I have just a few more questions about the topics in the survey that we have just talked about.

Q5. Earlier, I asked how you would divide ten dollars among different program categories, such as news and community events, series, and live team sports. When you allocated dollars to each of these categories, were you thinking about the categories in terms of...? (READ LIST AND ACCEPT ONE RESPONSE)

The programming that's currently on (INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN) ..... 1  
The programming that was on (INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN) in 2008..... 2  
Or, were you not thinking about a particular time frame ..... 3  
(DNR) Don't know/don't remember ..... 4

Q6. When you allocated dollars to each of the different program categories, were you thinking about...? (READ LIST AND ACCEPT ONE RESPONSE)

The value of the categories to YOU ..... 1  
Or, the value of the categories to YOUR HOUSEHOLD ..... 2  
(DNR) Only person in the household ..... 3  
(DNR) Don't know/don't remember ..... 4

(FOR Q.7, INSERT DISTANT SIGNAL STATION CALL LETTER(S) FROM CITY OR CITIES OF ORIGIN, FROM COLUMNS F & G OF EXCEL SPREADSHEET)

Q7. Thinking about LAST YEAR, that is, 2008, please tell me how often your household watched (INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN). (RANDOMIZE LIST; ACCEPT ONE RESPONSE FOR EACH)

(FOR EACH CHANNEL, ASK: IN 2008, did your household watch (INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN) frequently, occasionally, rarely, or never?)

	Frequently	Occasionally	Rarely	Never	(DNR) Don't Know
	4	3	2	1	99
a. DISTANT SIGNAL STATION					
b. PLACE HOLDER FOR 2 <sup>ND</sup> DISTANT SIGNAL STATION					
c. PLACE HOLDER FOR 3 <sup>RD</sup> DISTANT SIGNAL STATION					

ASK Q.8 FOR EACH STATION WHERE Q.7 = RARELY, OCCASIONALLY, OR FREQUENTLY. IF NO STATIONS TO ASK ABOUT, SKIP TO Q.9

Q8. What programming, if any, did your household watch on (INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN)? (RECORD VERBATIM RESPONSE; PROBE: "What else did your household watch on (INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN)?")

Don't know/can't recall ..... 99 (DO NOT ALLOW WITH OPEN END RESPONSE)

Q9. How important was getting (INSERT DISTANT SIGNAL STATION CALL LETTER(S) from INSERT CITY OR CITIES OF ORIGIN) in your decision to subscribe or continue subscribing to your cable TV provider? Was it...? (READ LIST AND ACCEPT ONE RESPONSE)

- Extremely important ..... 1
- Very important ..... 2
- Not very important ..... 3
- Not at all important ..... 4

**CLASSIFICATION**

We have just a few more questions for classification purposes only.

D1. What is your current marital status? Are you currently single or married? (DO NOT READ LIST; ACCEPT ONE RESPONSE)

- Single ..... 1
- Married ..... 2
- Refused ..... 3

D2a. What is your current age? Is it...? (READ LIST AND ACCEPT ONE RESPONSE)

- 18-24 ..... 1
- 25-39 ..... 2
- 40-49 ..... 3
- 50-54 ..... 4
- 55-64 ..... 5
- 65+ ..... 6
- Refused ..... 7

ASK Q.D2b IF Q.D1 = MARRIED, ELSE SKIP TO Q.D3a

D2b. What is your spouse's current age? Is it...? (READ LIST AND ACCEPT ONE RESPONSE)

- 18-24 ..... 1
- 25-39 ..... 2
- 40-49 ..... 3
- 50-54 ..... 4
- 55-64 ..... 5
- 65+ ..... 6
- Refused ..... 7

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D3a. Do you have children living with you in your household? (DO NOT READ LIST; ACCEPT ONE RESPONSE)

- Yes ..... 1
- No ..... 2
- Refused ..... 3

ASK Q.D3b IF Q.D3a = YES, ELSE SKIP TO Q.D4

D3b. How many? And, what are their ages? RECORD NUMBER OF CHILDREN IN EACH AGE CATEGORY BELOW; FOR EACH AGE GROUP, ASK "What is/are the gender(s) of your child(ren) who is/are (INSERT AGE GROUP)?"

	Total Number	Total Male	Total Female
Under 2			
2-5			
6-11			
12-17			
18+			

D4. What is your total annual household income before taxes? Is it...? (READ LIST AND ACCEPT ONE RESPONSE)

- Under \$20,000 ..... 1
- \$20,000-\$39,999 ..... 2
- \$40,000-\$59,999 ..... 3
- \$60,000-\$79,999 ..... 4
- \$80,000-\$99,999 ..... 5
- \$100,000+ ..... 6
- Refused ..... 7

D5a. What is your highest level of education? (READ LIST AND ACCEPT ONE RESPONSE)

- Grade school ..... 1
- Some high school ..... 2
- High school graduate ..... 3
- Some college or technical school ..... 4
- College graduate ..... 5
- Some graduate school ..... 6
- Graduate degree ..... 7
- Refused ..... 8

ASK Q.D5b IF Q.D1 = MARRIED, ELSE SKIP TO Q.D6

D5b. What is your spouse's highest level of education? (READ LIST AND ACCEPT ONE RESPONSE)

- Grade school ..... 1
- Some high school ..... 2
- High school graduate ..... 3
- Some college or technical school ..... 4
- College graduate ..... 5
- Some graduate school ..... 6
- Graduate degree ..... 7
- Refused ..... 8

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D6. Record Gender (**DO NOT ASK**)

Male..... 1  
Female ..... 2

**CONCLUSION**

This concludes our interview. Thank you very much for your time today.  
**(RECORD RESPONDENT NAME AND ADDRESS TO MAIL \$25 GIFT)**

APPENDIX D

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Appendix D

2005 Cable Subscriber Questionnaire

System Name: \_\_\_\_\_  
City/state: \_\_\_\_\_  
Respondent's Name: \_\_\_\_\_  
Telephone Number: \_\_\_\_\_  
Date Interviewed: \_\_\_\_\_

**INTRODUCTION**

Good morning / afternoon / evening. My name is \_\_\_\_\_ and I'm calling from \_\_\_\_\_. We are conducting a brief national survey among randomly selected cable TV subscribers regarding television programs. This survey will take about 20 minutes of your time. We are offering a cash payment of \$25 to those who complete the survey. May we talk now? [IF NOT, SCHEDULE A TIME FOR CALL BACK.]

First, are you the head or co-head of the household?

IF YES, PROCEED TO QUESTION 1.

IF NO, ... Could I please speak with that person? REPEAT INTRODUCTION AND Q.1 [IF PERSON IS NOT AVAILABLE, ARRANGE FOR CALL BACK OR TERMINATE]

1. Did you have cable TV in your home in 2005?

IF YES, PROCEED TO QUESTION 2A.

IF NO, THANK AND TERMINATE.

2A. Is there another head or co-head of the household?

IF YES, PROCEED TO QUESTION 2B.

IF NO, PROCEED TO QUESTION 3A.

2B. Between you and the other co-head of the household, is your birthday the [NEXT/LAST] [ALTERNATE BETWEEN THE TWO]

IF YES, PROCEED TO QUESTION 3A.

IF NO, ... Could I please speak with the other co-head of the household?

REPEAT INTRODUCTION, BUT SKIP QUESTIONS 1 AND 2 AND JUMP

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TO QUESTION 3A. [IF PERSON IS NOT AVAILABLE, ARRANGE FOR CALLBACK]

3A. What cable system did you subscribe to last year?

RECORD RESPONSE \_\_\_\_\_

VERIFY THAT CABLE SYSTEM SERVES RESPONDENT'S CITY/COUNTY (AS PER EXCEL SPREADSHEET COLUMNS B THROUGH D):

--IF CABLE SYSTEM DOES SERVE RESPONDENT'S LOCATION, PROCEED TO 'DESCRIPTIVE INFORMATION' ON FOLLOWING PAGE.

--IF RESPONDENT'S ANSWER IS A CABLE SYSTEM THAT DOES NOT SERVE THAT LOCATION --PROCEED TO Q.3B

3B. Is [INSERT CABLE SYSTEM FROM EXCEL SPREADSHEET COLUMN B] your cable company?

--IF YES, PROCEED TO 'DESCRIPTIVE INFORMATION' BELOW

--IF NO, THANK AND TERMINATE

--IF DON'T KNOW THANK AND TERMINATE

--IF REFUSE TO ANSWER THANK AND TERMINATE

--IF RESPONDENT ANSWERS DIRECTV, ECHOSTAR (DISH), OR VOOM, THANK AND TERMINATE.

**DESCRIPTIVE INFORMATION: READ TO ALL RESPONDENTS**

We are interested in program categories on television stations that come from other cities. I am now going to ask questions about categories of programs on [INSERT DISTANT SIGNAL STATION CALL LETTER(S) from CITY OF ORIGIN, STATE FROM COLUMNS G, H & I OF EXCEL SPREADSHEET].

The questions I will ask apply *only to these stations from these cities.*

These television stations I just mentioned carry certain categories of programs. I'm going to read a brief description of these program categories and then ask you a few questions.

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READ PROGRAM CATEGORIES AND DEFINITIONS TO RESPONDENTS.

**PROGRAM CATEGORIES:**

**NEWS AND COMMUNITY EVENTS:** These include news and community events shown *only* on [INSERT DISTANT SIGNAL STATION CALL LETTER(S) from CITY OR CITIES FROM COLUMNS D AND E of excel spreadsheet].

**SERIES:** These include sitcoms, dramas, children's shows, talk shows, game shows, and other series shown *only* on [INSERT DISTANT SIGNAL STATION CALL LETTER (S) from CITY OR CITIES FROM COLUMNS G AND H of Excel spreadsheet].

Examples include *Seinfeld*, *Star Trek: Enterprise*, *American Idol*, *Jeopardy*, and the *Oprah Winfrey Show*.

**DEVOTIONAL PROGRAMS:** These include shows with religious themes shown *only* on [INSERT DISTANT SIGNAL STATION CALL LETTER(S) from CITY OR CITIES FROM COLUMNS G AND H of Excel spreadsheet].

Examples include *Old Time Gospel Hour*, *700 Club*, and *Joel Osteen Ministry*.

**MOVIES AND SPECIALS:** These include feature films, Movies of the Week, and specials shown *only* on [INSERT DISTANT SIGNAL STATION CALL LETTER(S) from CITY OR CITIES FROM COLUMNS G AND H of Excel spreadsheet].

Examples include movies such as *Star Wars*, *Independence Day*, and *Lethal Weapon 3*.

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**LIVE TEAM SPORTS:** These include live play-by-play coverage of Major League Baseball, NBA professional basketball, NFL professional football, NHL professional hockey, NCAA college football and basketball, and Major League Soccer shown *only* on [INSERT DISTANT SIGNAL STATION CALL LETTER(S) from CITY OR CITIES FROM COLUMNS G AND H of Excel spreadsheet].

**NON-TEAM SPORTS:** These include professional wrestling, NASCAR auto racing, and pre- and post-game shows surrounding live team sports broadcasts shown *only* on [INSERT DISTANT SIGNAL STATION CALL LETTER(S) from CITY OR CITIES FROM COLUMNS G AND H of Excel spreadsheet].

**INTERVIEWER: READ FOLLOWING PROGRAM CATEGORY ONLY IF  
Cable system carries a PBS station ('X' in column K of Excel spreadsheet)**

**PBS PROGRAMS:** These include programs shown *only* on [INSERT DISTANT SIGNAL STATION CALL LETTER(S) from CITY OR CITIES FROM COLUMNS G AND H of Excel spreadsheet].

Examples include *Masterpiece Theatre*, *NewsHour with Jim Lehrer*, and *Sesame Street*.

**INTERVIEWER: READ FOLLOWING PROGRAM CATEGORY ONLY IF  
Cable system carries a Canadian station ('X' in column L of Excel spreadsheet)**

**PROGRAMS ON CANADIAN STATIONS** These include programs shown *only* on [STATION(s)] from [CITY(IES)]. INSERT CANADIAN STATION DISTANT SIGNAL CALL LETTER(S) AND CITY(IES) FROM LIST. DO NOT INCLUDE ANY NON-CANADIAN STATIONS. SKIP IF THERE ARE NO CANADIAN STATIONS ON LIST.

Examples include *Back of the House*, *Canada Now*, and *Magic School Bus*.

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Now I'm going to ask you about the popularity of each type of program last year IN YOUR OWN HOME. Here I am still referring *only* to [INSERT DISTANT SIGNAL STATION CALL LETTER(S) from CITY OR CITIES FROM COLUMNS G AND H of Excel spreadsheet]. As I read each program category and a brief definition, tell me if it was VERY POPULAR, SOMEWHAT POPULAR, or, NOT POPULAR in your own home last year.

When you respond, please do so on the basis of ALL the shows that are included in that particular program category.

Let's start with: [ROTATE 4A- 4H].

**H. NEWS AND COMMUNITY EVENTS:** Remember, this category includes news and community events shown *only* on [INSERT DISTANT SIGNAL STATION CALL LETTER(S) from CITY OR CITIES FROM COLUMNS G AND H of Excel spreadsheet].

Please tell me if news and community events as a whole are VERY POPULAR, SOMEWHAT POPULAR, or NOT POPULAR in your own home.

INTERVIEWER: RECORD RESPONSE WHERE:

- 1 = VERY POPULAR
- 2 = SOMEWHAT POPULAR
- 3 = NOT POPULAR
- or
- 4 = Don't Know /Refused

**I. SERIES:** Remember, this category includes sitcoms such as *Seinfeld*, dramas such as *Star Trek: Enterprise*, reality shows such as *American Idol*, game shows such as *Jeopardy*, and talk shows such as the *Oprah Winfrey Show* shown *only* on [INSERT DISTANT SIGNAL STATION CALL LETTER(S) from CITY OR CITIES FROM COLUMNS G AND H of Excel spreadsheet].

Please tell me if series as a whole are VERY POPULAR, SOMEWHAT POPULAR, or NOT POPULAR in your own home.

INTERVIEWER: RECORD RESPONSE WHERE:

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- 1 = VERY POPULAR
- 2 = SOMEWHAT POPULAR
- 3 = NOT POPULAR
- or
- 4 = Don't Know /Refused

**J. DEVOTIONAL PROGRAMS:** Remember, this category includes shows with religious themes such as *Old Time Gospel Hour*, the *700 Club*, and *Joel Osteen Ministry* shown *only* on [INSERT DISTANT SIGNAL STATION CALL LETTER(S) from CITY OR CITIES FROM COLUMNS G AND H of Excel spreadsheet].

Please tell me if devotional programs as a whole are VERY POPULAR, SOMEWHAT POPULAR, or NOT POPULAR in your own home.

INTERVIEWER: RECORD RESPONSE WHERE:

- 1 = VERY POPULAR
- 2 = SOMEWHAT POPULAR
- 3 = NOT POPULAR
- or
- 4 = Don't Know /Refused

**K. MOVIES AND SPECIALS:** Remember, this category includes movies such as *Star Wars*, *Independence Day*, and *Lethal Weapon 3* shown *only* on [INSERT DISTANT SIGNAL STATION CALL LETTER(S) from CITY OR CITIES FROM COLUMNS G AND H of Excel spreadsheet].

Please tell me if movies and specials as a whole are VERY POPULAR, SOMEWHAT POPULAR, or NOT POPULAR in your own home.

INTERVIEWER: RECORD RESPONSE WHERE:

- 1 = VERY POPULAR
- 2 = SOMEWHAT POPULAR
- 3 = NOT POPULAR
- or

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4 = Don't Know /Refused

**L. LIVE TEAM SPORTS: Remember, this category includes live play-by-play coverage of Major League Baseball, NBA professional basketball, NFL professional football, NHL professional hockey, NCAA college football and basketball, and Major League Soccer shown *only* on [INSERT DISTANT SIGNAL STATION CALL LETTER(S) from CITY OR CITIES FROM COLUMNS G AND H of Excel spreadsheet].**

Please tell me if live team sports as a whole are VERY POPULAR, SOMEWHAT POPULAR, or NOT POPULAR in your own home.

INTERVIEWER: RECORD RESPONSE WHERE:

1 = VERY POPULAR  
2 = SOMEWHAT POPULAR  
3 = NOT POPULAR  
or  
4 = Don't Know /Refused

**M. NON-TEAM SPORTS: Remember, this category includes professional wrestling, NASCAR auto racing, and pre- and post-game shows surrounding live team sports broadcasts shown *only* on [INSERT DISTANT SIGNAL STATION CALL LETTER(S) from CITY OR CITIES FROM COLUMNS G AND H of Excel spreadsheet].**

Please tell me if non-team sports as a whole are VERY POPULAR, SOMEWHAT POPULAR, or NOT POPULAR in your own home.

INTERVIEWER: RECORD RESPONSE WHERE:

1 = VERY POPULAR  
2 = SOMEWHAT POPULAR  
3 = NOT POPULAR  
or  
4 = Don't Know /Refused

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INTERVIEWER: ASK FOLLOWING QUESTION ONLY IF Cable system carries a PBS station ('X' in column K of Excel spreadsheet)

**N. PBS PROGRAMS. Remember, this category includes PBS programs such as *Masterpiece Theatre*, *NewsHour with Jim Lehrer*, and *Sesame Street* shown only on [INSERT ONLY PBS DISTANT SIGNAL STATION CALL LETTER(S)] (denoted by 'X' in column K) from CITY OR CITIES FROM COLUMNS G AND H of Excel spreadsheet. DO NOT INCLUDE NON-PBS STATIONS.]**

Please tell me if PBS programs as a whole are VERY POPULAR, SOMEWHAT POPULAR, or NOT POPULAR in your own home.

INTERVIEWER: RECORD RESPONSE WHERE:

- 1 = VERY POPULAR
- 2 = SOMEWHAT POPULAR
- 3 = NOT POPULAR
- or
- 4 = Don't Know /Refused

INTERVIEWER: ASK FOLLOWING QUESTION ONLY IF Cable system carries a Canadian station ('X' in column L of Excel spreadsheet)

**H. PROGRAMS ON CANADIAN STATIONS. These include programs such as *Back of the House*, *Canada Now*, and *Magic School Bus* shown only on \_\_\_\_\_ [STATION(S) FROM \_\_\_\_\_ [CITY(IES).] [INSERT ONLY CANADIAN STATION CALL LETTERS (DENOTED BY 'X' IN COLUMN L) AND CITY(IES) FROM COLUMNS G AND H of Excel spreadsheet. DO NOT INCLUDE NON-CANADIAN STATIONS.]**

Please tell me if programs on Canadian stations as a whole are VERY POPULAR, SOMEWHAT POPULAR, or NOT POPULAR in your own home.

**INTERVIEWER: PROCEED TO QUESTION 5**

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Are there any other categories of programs shown only on [INSERT DISTANT SIGNAL STATION CALL LETTER(S) from COLUMN D of Excel spreadsheet] that are VERY POPULAR OR SOMEWHAT POPULAR in your home?

If YES, please indicate which categories. (Limit of 5)

If NO or DON'T KNOW – PROCEED TO 'Program Value' SECTION ON FOLLOWING PAGE.

INTERVIEWER: RECORD ALL RESPONSES. ADD LINES IF NEEDED.

Category	Very Popular	Somewhat Popular
a. _____	_____	_____
b. _____	_____	_____
c. _____	_____	_____
d. _____	_____	_____

Please tell me if \_\_\_\_\_ [INSERT CATEGORY FROM LIST a THROUGH d, etc. ABOVE] as a whole are VERY POPULAR or SOMEWHAT POPULAR in your own home.

INTERVIEWER: RECORD RESPONSE WHERE:

- 1 = VERY POPULAR
- 2 = SOMEWHAT POPULAR

INTERVIEWER: REPEAT AS NEEDED FOR EACH ITEM LISTED ABOVE

AFTER RECORDING RESPONSES, PROCEED TO 'Program Value' BELOW.



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**Program Value**

We are now going to ask you a few questions on how you value the program categories shown on these same stations [INSERT DISTANT SIGNAL STATION CALL LETTER(S) from CITY OR CITIES FROM COLUMNS G AND H of Excel spreadsheet].

When you pay your cable bill, a certain portion of the payment is for the program categories on the stations I mentioned earlier. Let's assume that TEN DOLLARS of your bill last year represented how much you paid for the program categories on these stations that we have been discussing so far.

Now, I would like you to divide this hypothetical TEN DOLLARS according to how valuable you feel each program category was in your own home. You can divide the TEN DOLLARS any way you wish.

**PROGRAMMING INSTRUCTIONS: INSERT THE FOLLOWING PARAGRAPH ONLY IF THE CABLE SYSTEM CARRIES A NETWORK AFFILIATE (DENOTED BY 'X' IN COLUMN J OF THE EXCEL SPREADSHEET):**

For purposes of this survey, we are not interested in network shows on the ABC, CBS, and NBC television networks. In considering how to divide the TEN DOLLARS among the program categories, please consider the value of all the non-network programs in that category.

In considering how to divide the TEN DOLLARS among the program categories, please consider the value of ALL the programs in that category.

I'll read all the categories broadcast by these stations to give you a chance to think about them. Please write the categories down as I am reading them.

Remember, you can divide the TEN DOLLARS any way you wish -- you can give any value between ZERO DOLLARS and TEN DOLLARS, INCLUDING PORTIONS OF DOLLARS, to a program category. But keep in mind the total value you give to all the categories has to add up to TEN DOLLARS.

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READ IN SAME ORDER AS IN QUESTION 4.

To begin...

**B. NEWS AND COMMUNITY EVENTS:** This category includes news and community events shown *only* on [INSERT DISTANT SIGNAL STATION CALL LETTER(S) from CITY OR CITIES FROM COLUMNS G AND H of Excel spreadsheet].

Of the TEN DOLLARS, what is the value to you, if any, of all the news and community events programs shown on this station for this category?

\$ \_\_\_\_\_

**F. SERIES PROGRAMS:** This category includes sitcoms such as *Seinfeld*, dramas such as *Star Trek: Enterprise*, reality shows such as *American Idol*, game shows such as *Jeopardy*, and talk shows such as the *Oprah Winfrey Show* shown *only* on [INSERT DISTANT SIGNAL STATION CALL LETTER(S) from CITY OR CITIES FROM COLUMNS G AND H of Excel spreadsheet].

Of the TEN Dollars, what is the value to you, if any, of all series programs shown on this station for this category?

\$ \_\_\_\_\_

**G. DEVOTIONAL PROGRAMS:** This category includes shows with religious themes such as *Old Time Gospel Hour*, the *700 Club*, and *Joel Osteen Ministry* shown *only* on [INSERT DISTANT SIGNAL STATION CALL LETTER(S) from CITY OR CITIES FROM COLUMNS G AND H of Excel spreadsheet].

Of the TEN Dollars, what is the value to you, if any, of all devotional programs shown on this station for this category?

\$ \_\_\_\_\_

**H. MOVIES AND SPECIALS:** This category includes movies such as *Star Wars*, *Independence Day*, and *Lethal Weapon 3* shown *only* on [INSERT DISTANT SIGNAL STATION CALL LETTER(S) from CITY OR CITIES FROM COLUMNS G AND H of Excel spreadsheet].

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Of the TEN Dollars, what is the value to you, if any, of all movies and specials shown on this station for this category?

\$ \_\_\_\_\_

**I. LIVE TEAM SPORTS:** This category includes live play-by-play coverage of Major League Baseball, NBA professional basketball, NFL professional football, NHL professional hockey, NCAA college football and basketball, and Major League Soccer shown *only* on [INSERT DISTANT SIGNAL STATION CALL LETTER(S) from CITY OR CITIES FROM COLUMNS G AND H of Excel spreadsheet].

Of the TEN Dollars, what is the value to you, if any, of all live team sports shown on this station for this category?

\$ \_\_\_\_\_

**F. NON-TEAM SPORTS:** This category includes professional wrestling, NASCAR auto racing, and pre- and post-game shows surrounding live team sports broadcasts shown *only* [INSERT DISTANT SIGNAL STATION CALL LETTER(S) from CITY OR CITIES FROM COLUMNS G AND H of Excel spreadsheet].

Of the TEN Dollars, what is the value to you, if any, of all non-team sports shown on this station for this category?

\$ \_\_\_\_\_

INTERVIEWER: ASK FOLLOWING QUESTION ONLY IF Cable system carries a PBS station ('X' in column K of Excel spreadsheet)

**G. PBS PROGRAMS.** This category includes PBS programs such as *Masterpiece Theatre*, *NewsHour with Jim Lehrer*, and *Sesame Street* shown *only* on [INSERT ONLY PBS DISTANT SIGNAL STATION CALL LETTER(S) (DENOTED BY 'X' IN COLUMN K of Excel spreadsheet) from CITY OR CITIES FROM COLUMNS G AND H of Excel spreadsheet]. DO NOT INCLUDE NON-PBS STATIONS.

Of the TEN Dollars, what is the value to you, if any, of all PBS programs shown on this station for this category?

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\$ \_\_\_\_\_

INTERVIEWER: ASK FOLLOWING QUESTION ONLY IF Cable system carries a Canadian station ('X' in column L of Excel spreadsheet)

**H. PROGRAMS ON CANADIAN STATIONS.** This category includes programs such as *Back of the House*, *Canada Now*, and *Magic School Bus* shown only on \_\_\_\_\_ [STATION(S) FROM \_\_\_\_\_ [CITY(IES). INSERT ONLY CANADIAN STATION CALL LETTERS (DENOTED BY 'X' IN COLUMN L of Excel spreadsheet) AND CITY(IES) FROM COLUMNS G AND H of Excel spreadsheet. DO NOT INCLUDE NON-CANADIAN STATIONS.

Of the TEN Dollars, what is the value to you, if any, of all programs on Canadian stations?

\$ \_\_\_\_\_

SUBTOTAL: Q.6A through Q.6H: \$ \_\_\_\_\_

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I. INTERVIEWER: ASK ONLY IF RESPONDENT LISTED OTHER PROGRAM CATEGORIES IN QUESTION 5. OTHERWISE SKIP TO Q.7

You also said that [Read each response to q.5, separately] \_\_\_\_\_ was [very or somewhat popular in your own home. Remember, we are still interested in the value of programs shown *only* on [INSERT DISTANT SIGNAL STATION CALL LETTER(S) FROM CITY OR CITIES FROM COLUMNS G AND H of Excel spreadsheet].

Read Responses from Q.5:

Program Category	Very Popular	Somewhat Popular	Value (\$)
a. _____	_____	_____	_____
b. _____	_____	_____	_____
c. _____	_____	_____	_____
d. _____	_____	_____	_____
e. _____	_____	_____	_____
Total Value Q.6I (add lines a through end, above)			\$ _____

Of the TEN Dollars, what is the value to you, if any, of all \_\_\_\_\_ [INSERT PROGRAM CATEGORIES LISTED IN QUESTION 5 – ASK VALUES SEPARATELY FOR EACH ANSWER GIVEN IN Q.5, RECORD VALUE ABOVE] programs shown on these same stations? (ADD VALUES RECORDED ABOVE, IF ANY, AND RECORD ABOVE)

INTERVIEWER: REPEAT AS NECESSARY FOR EACH PROGRAM CATEGORY LISTED IN QUESTION 5.

**INTERVIEWER NOTE:** VALUES GIVEN (e.g. \$2, \$1.50, ETC. MUST ADD TO TEN DOLLARS); PROMPT RESPONDENTS IF THEY DO NOT.

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13. Now I'm going to read back the program categories and your estimates. YOU GAVE A VALUE OF \_\_\_\_\_ FOR THE (RE-READ QUESTIONS 6A - 6I WITH RESPONSES IN SAME RANDOM SEQUENCE IN ORDER TO ALLOW RESPONDENT TO REVIEW THE ESTIMATES.)

Are there any changes you would like to make? (RECORD ANY CHANGES BY CROSSING OUT ORIGINAL RESPONSE AND WRITING IN REVISED RESPONSE NEXT TO IT. AMOUNTS MUST STILL ADD TO TEN DOLLARS; PROMPT RESPONDENTS IF THEY DO NOT.)

**Classification**

We have just a few more questions for classification purposes only.

14. What is your current marital status? Are you currently single or married? (CHECK RESPONSE)

- d. Single \_\_\_\_\_
- e. Married \_\_\_\_\_
- f. Refused \_\_\_\_\_

15. What is your current age? Is it... (READ ALTERNATIVES AND CHECK RESPONSE.)

	Your Age	Your Spouse's Age (IF MARRIED)
a. 18-24	_____	_____
b. 25-39	_____	_____
c. 40-49	_____	_____
d. 50-54	_____	_____
e. 55-64	_____	_____
f. 65+	_____	_____
g. Refused	_____	_____

16. Do you have children living with you in your household?

IF YES, PROCEED TO 11A AND 11B; IF NO, SKIP TO QUESTION 12

- c. How many?
- d. What are their ages? (MULTIPLE RESPONSES PERMITTED)

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	Number	Male	Female
Under 2	_____	_____	_____
2-5	_____	_____	_____
6-11	_____	_____	_____
12-17	_____	_____	_____
18+	_____	_____	_____

17. What is your total annual household income before taxes? Is it.... (READ ALTERNATIVES AND CHECK RESPONSE.)

- h. Under \$20,000 \_\_\_\_\_
- i. \$20,000-\$39,999 \_\_\_\_\_
- j. \$40,000-\$59,999 \_\_\_\_\_
- k. \$60,000-\$79,999 \_\_\_\_\_
- l. \$80,000-\$99,999 \_\_\_\_\_
- m. \$100,000+ \_\_\_\_\_
- n. Refused \_\_\_\_\_

18. What is your highest level of education?

- |                                     | Self  | Spouse (IF MARRIED) |
|-------------------------------------|-------|---------------------|
| a. Grade school                     | _____ | _____               |
| b. Some high school                 | _____ | _____               |
| c. High school graduate             | _____ | _____               |
| d. Some college or technical school | _____ | _____               |
| e. College graduate                 | _____ | _____               |
| f. Some graduate school             | _____ | _____               |
| g. Graduate degree                  | _____ | _____               |
| h. Refused                          | _____ | _____               |

**Conclusion**

This concludes our interview. Thank you very much for your time today.

INTERVIEWER: RECORD NAME AND ADDRESS TO MAIL \$25 GIFT.

Wilkofsky Gruen Associates Inc.

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	Number	Male	Female
Under 2	_____	_____	_____
2-5	_____	_____	_____
6-11	_____	_____	_____
12-17	_____	_____	_____
18+	_____	_____	_____

17. What is your total annual household income before taxes? Is it.... (READ ALTERNATIVES AND CHECK RESPONSE.)

- h. Under \$20,000 \_\_\_\_\_
- i. \$20,000-\$39,999 \_\_\_\_\_
- j. \$40,000-\$59,999 \_\_\_\_\_
- k. \$60,000-\$79,999 \_\_\_\_\_
- l. \$80,000-\$99,999 \_\_\_\_\_
- m. \$100,000+ \_\_\_\_\_
- n. Refused \_\_\_\_\_

18. What is your highest level of education?

	Self	Spouse (IF MARRIED)
a. Grade school	_____	_____
b. Some high school	_____	_____
c. High school graduate	_____	_____
d. Some college or technical school	_____	_____
e. College graduate	_____	_____
f. Some graduate school	_____	_____
g. Graduate degree	_____	_____
h. Refused	_____	_____

**Conclusion**

This concludes our interview. Thank you very much for your time today.

INTERVIEWER: RECORD NAME AND ADDRESS TO MAIL \$25 GIFT.



I declare under penalty of perjury that the foregoing is true and correct.

Executed on: December 11, 2009

Jeffery Berman

A handwritten signature in black ink, appearing to read "Jeffery Berman", written over a horizontal line.

**Before the  
COPYRIGHT ROYALTY JUDGES  
Washington, D.C.**

\_\_\_\_\_)  
**In the Matter of** )  
 )  
**Distribution of the** ) **Docket No. 2007-3 CRB CD 2004-2005**  
**2004 and 2005** )  
**Cable Royalty Funds** )  
\_\_\_\_\_)

**REBUTTAL TESTIMONY OF  
DR. GREGORY M. DUNCAN**

**December 11, 2009**

**REBUTTAL TESTIMONY  
OF DR. GREGORY M. DUNCAN**

My name is Gregory M. Duncan. I am submitting this rebuttal testimony on behalf of the Joint Sports Claimants. My testimony concerns the constant sum surveys of cable subscribers that Dr. Arthur Gruen sponsored on behalf of the Program Suppliers ("Gruen Surveys"). These surveys purport to show how cable subscribers valued the different types of programming on out-of-market (distant) television signals that their cable systems carried during the years 2004 and 2005. I submitted written testimony in an earlier phase of these proceedings concerning the 2004 and 2005 constant sum cable operator surveys conducted by Bortz Media.

The *Reference Manual on Scientific Evidence*, published by the Federal Judicial Center, provides guidance on the criteria that federal judges should apply in evaluating survey research.<sup>1</sup> I have been asked to assess the Gruen Surveys in light of those criteria. For the reasons discussed below, I believe that the Gruen Surveys fail to satisfy several of the *Reference Manual's* key requirements. Therefore, in my opinion, the Gruen Surveys are not reliable and should not be accorded any weight in assessing the relative valuations that cable subscribers accord to the different types of programming on distant signals.

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<sup>1</sup> See Shari Seidman Diamond, "Reference Guide on Survey Research," *Reference Manual on Scientific Evidence*, pp. 229-276 (2d ed. 2000) ("*Reference Manual*").

## I. QUALIFICATIONS

My curriculum vita is included as Attachment A. I received a Ph.D. in Economics and an M.A. in Statistics from the University of California in Berkeley and a B.A. in Economics from the University of Washington. I am a Principal at *The Brattle Group*, a firm that provides consulting services in economics, finance, business transactions and regulation to corporations, law firms, and governments around the world. I also teach econometrics and microeconomic theory at the University of California, Berkeley.

Prior to joining *The Brattle Group*, I was a Managing Director at Huron Consulting Group, a Director at Deloitte Financial Advisory Services (Deloitte FAS), and a Senior Vice President at National Economic Research Associates (NERA) where I was also a managing board member, co-head of the Auctions practice, which I founded, and head of the Communications Strategy and Advice practice. Prior to NERA, I was Senior Staff Scientist for GTE (now Verizon) Labs, where I directed economics, applied mathematics, statistics and marketing research projects. While there I conducted numerous market research surveys to elicit customers' willingness to pay and relative valuations of new or modified services. Additionally, I was called upon to oversee the conduct of surveys performed by outside vendors. Prior to that, I was a tenured Full Professor of Economics and of Statistics at Washington State University, as well as a founding member of the Statistics Department. I have also taught at Northwestern University, Boston University and the University of Southern California.

My fields of expertise include statistics including survey and sampling methods, valuation, and industrial organization (*i.e.*, the application of economics to market and firm structure). I have published in leading academic journals in the economics

profession, including *Econometrica*, *The Journal of Econometrics*, *The International Economic Review*, and *Information Economics and Policy*. I was also a member of the founding editorial board of the *Journal of Econometric Theory*.

I have provided oral and written testimony on a variety of telecommunications, labor, and transportation issues before numerous state public utility commissions and legislatures, the Interstate Commerce Commission, and the Federal Communications Commission. I have also provided testimony on antitrust and labor cases in state and federal courts, many of which required the use, explication, or critique of sample survey methods.

## II. DISCUSSION

### A. The Relevant Population

As discussed in the *Reference Manual*, “One of the first steps in designing a survey or in deciding whether an existing survey is relevant is to identify the target population (or universe).”<sup>2</sup> The *Reference Manual* proceeds to define the survey’s target population as consisting of “all elements (*i.e.*, objects, individuals, or other social units) whose characteristics or perceptions the survey is intended to represent.”<sup>3</sup> Generally speaking, if the population that is surveyed is not the one whose perceptions the survey is intended to represent, then the survey itself is irrelevant.<sup>4</sup>

In my opinion, the Gruen Surveys do not meet the relevant population criterion because they do not target the population whose views are required to address the research question at issue. My understanding is that the Copyright Royalty Judges (“CRJs”), like

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<sup>2</sup> *Reference Manual* at p. 239.

<sup>3</sup> *Reference Manual* at p. 239.

<sup>4</sup> See *e.g.*, *Reference Manual* at p. 241 and at footnote 44.

the Copyright Arbitration Royalty Panel and the Copyright Royalty Tribunal before them, seek to allocate royalties among the various claimants according to the relative market valuations of the different content in the claimant categories. This allocation procedure is intended to be consistent with the outcome of a hypothetical negotiation between cable operators and content providers in a free marketplace absent compulsory licensing. Because *cable operators*, not individual *cable subscribers*, purchase programming content for their systems, the market valuations relevant to this proceeding are those of cable operators, not those of their subscribers.

Accordingly, in order to measure the relative value of copyrighted programming on distant signals appropriately, a survey should focus on the relative value assessments of cable operators, not subscribers. The Gruen Surveys, however, attempt to assess cable subscribers' valuations of program categories on distant signals. Even if the Gruen Surveys had been able to capture these valuations accurately, the cable subscribers' views are only one factor that affects cable operators' relative valuations for the programming carried on distant signals.

Other economic forces that play an important role in determining the relative amounts that cable operators would pay for the different categories of programming on distant signals include: (1) the amount and type of local programming available; (2) market penetration by the satellite carriers and others with whom the cable operators compete; (3) monthly subscription fees and their relationship to the value of all programming categories; and (4) network costs, which may differ dramatically across operators. The network costs include local fees, bandwidth limitations, maintenance expense,

depreciation, and so on. While cable operators' relative valuations can be expected to reflect these additional factors that would be relevant for individual bargaining between content providers and cable operators, there is no economic reason to believe that these factors will be similarly reflected in surveys of subscriber valuations.

### **B. Qualification of Survey Respondents**

Even if the relevant relative valuations of programming carried on distant signals were deemed to be those of subscribers (as opposed to cable operators), the Gruen Surveys fail to prequalify respondents as required in a well-executed survey. The *Reference Manual* states that: "In a carefully executed survey, each potential respondent is questioned or measured on the attributes that determine his or her eligibility to participate in the survey."<sup>5</sup> Given that the Gruen Surveys seek to elicit subscriber valuations of programming types carried on distant signals, a key qualification criterion for respondents is their familiarity with the distant signal programming they were asked to evaluate.<sup>6</sup>

The Gruen Surveys, however, made no attempt to determine whether respondents:

- a. Had any familiarity with the programming
- b. Had watched any of that programming (frequently or ever)
- c. Placed any value on any of that programming in terms of their reasons for subscribing to cable
- d. Actually received any of that programming

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<sup>5</sup> *Reference Manual* at p. 247.

<sup>6</sup> This issue is also discussed in the Rebuttal Testimony of Jeffrey S. Berman (Berman Report) at p. 8.

By failing to exclude respondents in these categories, the Gruen Surveys virtually ensure that some proportion of their respondents will not be qualified to provide meaningful answers to the questions posed. The inclusion of guesses and conjectures among carefully considered and knowledgeable answers necessarily renders the results meaningless.

### C. Phrasing of Key Constant Sum Question

The Gruen Surveys also do not phrase questions with sufficient clarity and precision. As noted in the *Reference Manual*, “clear and precise” phrasing of survey questions is an important (and obvious) criterion for a well-executed survey.<sup>7</sup> As discussed in the *Reference Manual*, “When unclear questions are included in a survey, they may threaten the validity of the survey by systematically distorting responses if respondents are misled in a particular direction, or by inflating random error if respondents guess because they do not understand the question. If the crucial question is sufficiently ambiguous or unclear, it may be the basis for rejecting the survey.”<sup>8</sup> Below, I discuss three key problems with the phrasing of questions in the Gruen Surveys.

First, the Gruen Surveys’ use of program examples (such as *Seinfeld*, *Star Trek Enterprise*, *et al.*) in each category creates an anchoring effect, potentially biasing individuals’ responses. This is because examples of shows can focus individuals’ attention away from the full set of programming in the category. Moreover, because significant numbers of respondents may not remember whether they have watched a particular show or programming type on a distant signal, a local signal, or some other source, their responses will be difficult to interpret. In particular, respondents may report

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<sup>7</sup> *Reference Manual* at p. 248.

<sup>8</sup> *Reference Manual* at p. 248.



their relative preferences among program types rather than their relative preferences among the programming types actually carried on distant signals.<sup>9</sup>

Second, the Gruen Surveys do not clearly define the time period to which valuations should relate. In particular, it is unclear as to whether surveys conducted in 2005 reflected the respondents' valuations of programming carried in 2004 (the relevant year), 2005 or at some other time. Likewise, it is unclear as to whether surveys conducted in 2005 reflected the respondents' valuations of programming carried in 2005, 2006 or at some other time.<sup>10</sup>

Third, in the constant sum valuation question, respondents were first asked for their personal value, then the household value, and finally for their personal value of the programs. Hence, it is not clear whose valuation is reflected in the survey responses.<sup>11</sup>

#### **D. Collection of Demographic Data**

As discussed in the *Reference Manual*, a well-executed survey will collect demographic data, which can be used to determine whether the characteristics of individuals or entities in the survey approximate the characteristics of the target population. In particular, the *Reference Manual* states that: "The survey report should contain a description of the target population, a description of the survey population actually sampled, a discussion of the difference between the two populations, and an evaluation of the likely consequences

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<sup>9</sup> This issue is also addressed in the Berman Report at pp. 6-7.

<sup>10</sup> This issue is also addressed in the Berman Report at p. 13.

<sup>11</sup> This issue is also addressed in the Berman Report at p. 11.

of that difference.”<sup>12</sup> However, the Gruen Surveys do not collect sufficient demographic data to meet this standard.

Most significantly, the Gruen Surveys fail to record the gender of the respondent.<sup>13</sup> I cannot think of one consumer sentiment or willingness to pay survey I participated in, oversaw or was aware of, that did not record the gender of the respondent. One consequence of not recording gender is that one cannot check whether the sample obtained matched the cable universe population in general. If the relative valuations of men and women differ, then the sample valuations would need to be adjusted to correctly reflect the population valuations. However, without information on the fractions of men and women in the sample, one cannot check how representative the sample is of the population, nor can one perform the straightforward and well-known adjustments to correct for the problem.<sup>14</sup>

#### **E. Non-Response Bias**

In addition to the issues discussed above, the Gruen Surveys fail to ensure that the level of non-response produces no significant bias in the survey results. The *Reference Manual* explains why the level of non-response can present an issue for the interpretation of survey results, noting that: “Even when a sample is drawn randomly from a complete list of elements in the target population, responses or measures may be obtained on only part of the selected sample. If this lack of response were distributed randomly, valid

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<sup>12</sup> *Reference Manual* at p. 240.

<sup>13</sup> This issue is also addressed in the Berman Report at p. 10.

<sup>14</sup> See for example, Leslie Kish (1965), *Survey Sampling*, New York: Wiley.

inferences about the population could be drawn from the characteristics of the available elements in the sample. The difficulty is that nonresponse often is not random...<sup>15</sup>

For cases in which non-response is not random, the results of the survey will be biased. For example, the *Reference Manual* notes that persons who are single typically have three times the "not at home" rate in U.S. Census Bureau surveys as do family members.<sup>16</sup> If such a survey were used to determine the attitudes of the general population with no further adjustments, the results would be biased and therefore unreliable.

In order to determine whether non-response bias is an issue, it is necessary to collect accurate information on survey response rates. The standard statistical definition of a survey response rate is ratio of: (1) respondents who completed the survey to (2) the number of persons who were initially contacted about participating in the survey. In contrast, Program Suppliers appear to have defined survey response rate in a non-standard manner, computing it as the percentage of subscribers who agreed to participate in the survey.<sup>17</sup> It is apparent that the Program Suppliers' reported response rate, which I will refer to as a cooperation rate, did not incorporate those who initially refused to participate, because that number alone appears to far exceed the number of people who ultimately participated in the survey.

With no standard response rate calculation and an inadequate explanation of the cooperation rate computation, it can only be said that the standard response rate is almost certainly far less than the cooperation rate. This potentially reduced response rate casts

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<sup>15</sup> *Reference Manual* at p. 245.


<sup>16</sup> *Reference Manual* at p. 245.

<sup>17</sup> Testimony of Arthur C. Gruen, Ph.D. at pp. 8-9.

further doubt on the Gruen Surveys' results. Moreover, the absence of useful response rate data makes it impossible to determine whether the sample for the subscriber survey is representative of the target population.



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**Dr. Gregory M. Duncan** provides consulting in economics, network industries, statistics, simulation methods, financial economics, intellectual property, labor, and marketing research. He has directed projects and/or testified in matters in telecommunications, consumer class actions, energy, antitrust, intellectual property, and financial markets, and provided expert testimony in state and federal courts, and before arbitration panels, numerous state public utility commissions and legislatures, the Interstate Commerce Commission, and the Federal Communications Commission.

Dr. Duncan advises clients on auction mechanisms, firm valuation and bankruptcy, damages issues, international trade, royalty computation and division, and the market effects of mergers. Within the telecommunications industry, he designed the price cap mechanisms for the incumbent in several states, supported the removal of dominant firm status as the markets became competitive, and provided analysis of TELRIC pricing of inputs. He has recently provided testimony on the proper treatment of universal service fund distributions in a dispute with the IRS. He has also provided testimony in a number of class actions.

In addition to his extensive litigation expertise, Dr. Duncan has worked on regulatory design and auctions in the energy industry. He led a team in designing basic service generation auctions, and acted as the expert on a weatherization controversy between the U.S. Government Accountability Office (GAO) and a regulatory agency. He has also performed load forecasting in Canada and in the U.S., and analyzed cost of remote monitoring for a large utility. He actively advises a variety of utilities on pricing and bundling of services.

Prior to joining *The Brattle Group*, Dr. Duncan was a managing director at Huron and a senior vice president at NERA, where he founded the firm's Auctions practice and led the Telecommunication Strategy and Advice practice. Before becoming a consultant, he was a staff scientist and principal member of the Technical Staff at Verizon (GTE) Laboratories, Inc., and a full professor, with tenure, in both economics and in statistics. He currently still teaches econometrics and microeconomic theory at the University of California and has previously taught at Northwestern University, Washington State University, Boston University, Duke University, and the University of Southern California.

## AREAS OF EXPERTISE

- ◆ *Antitrust/Competition*
- ◆ *Commercial Damages*
- ◆ *Environmental Litigation and Regulation*
- ◆ *Forensic Economics*
- ◆ *Intellectual Property*
- ◆ *Product Liability*
- ◆ *Risk Management*
- ◆ *Securities*
- ◆ *Telecommunications and Media*
- ◆ *Transportation*
- ◆ *Valuation*

## EDUCATION AND CERTIFICATION

- ◆ University of California, Berkeley; Ph.D., Economics
- ◆ University of California, Berkeley; M.A., Statistics
- ◆ University of Washington, B.A., Economics and English

## PROFESSIONAL ASSOCIATIONS

- ◆ American Bar Association, Associate Member, Antitrust Section
- ◆ American Economic Association
- ◆ American Statistical Association
- ◆ California Public Utility Counsel
- ◆ Econometric Society
- ◆ Institute of Mathematical Statistics

## COURSES TAUGHT (SINCE 2002)

- ◆ Sampling Design and Analysis of Finite Populations (Deloitte Training 2006-2007 )
- ◆ Advanced Intellectual Property (Deloitte Training 2006-2007)
- ◆ Basics of Intellectual Property (Deloitte Training 2006-2007)
- ◆ Advanced Econometrics (Deloitte)
- ◆ Applied Econometrics (Graduate course, University of California, Berkeley, 2007)
- ◆ Honors Econometrics (Undergraduate course, University of California, Berkeley, 2002-present)
- ◆ Introductory Econometrics (Undergraduate course, University of California, Berkeley, 2002-present)
- ◆ Intermediate Microeconomics (Undergraduate course, University of California, Berkeley, 2008)

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**COURSES TAUGHT (BEFORE 2002)**

- ◆ Graduate and Undergraduate Econometrics
- ◆ Financial Economics
- ◆ Money, Banking, and the Structure of the Banking Industry
- ◆ Graduate and Undergraduate Microeconomic Theory
- ◆ Mathematical Economics
- ◆ Industrial Organization and The Structure of Network Industries
- ◆ Non-market theories of economic decision-making
- ◆ Linear Models (Statistics)
- ◆ Non-parametric Statistics (Statistics)
- ◆ Survey and Sampling Methods(Statistics-Psychology-Marketing)
- ◆ Linear Algebra (Mathematics)
- ◆ Optimization in Abstract Vector Spaces (Mathematics-Graduate)
- ◆ Labor Economics
- ◆ Undergraduate Macroeconomics



## EXPERIENCE

### *Representative Engagements*

- ◆ Economic expert in various royalty and license fee negotiations.
- ◆ Damages expert in class action involving for-profit colleges and alleged misrepresentation of the value of a degree. (deposed, settled)
- ◆ Expert in dispute against agency over appropriate disclosures and damages. (deposed, settled)
- ◆ Expert in Lanham Act case where allegation is that incomplete service disclosure caused market share and profit loss to competitors. (settled)
- ◆ Expert in dispute over value of advertised attribute that allegedly was absent from a product. Class certification and damages.
- ◆ Witness for ATT in tax dispute with IRS over tax treatment of universal service funds. (Deposed, trial set)
- ◆ Provided damages estimates for setting reserves for a company that had lost a shareholder class action. Model predicted the number of damaged shares and the probability that the share owners would self identify and prove damages.
- ◆ Witness for ATT in the Handset Locking Class Action. Damages witness. (deposed, case pending)
- ◆ Witness for ATT in the Early Termination fee Class Actions. Class certification witness. (report filed)
- ◆ For underwriters of IPO, analyzed and validated software product for simultaneously optimizing millions of retirement portfolios
- ◆ Developed and critiqued large computer cost and revenue models used in access pricing and helped develop access pricing rules for large a railroad.
- ◆ Developed models of loan pricing and offerings for large banks.
- ◆ Developed real time pricing models and provided models for investment bankers to determine likely prices for the assets when auctioned for large electric companies.
- ◆ Developed financial models supporting proposed divestiture of generation assets for large electric companies. Models were required in determining optimal pricing going forward to estimate cash flows.
- ◆ Developed Incremental Cost models for energy companies.
- ◆ Developed price cap mechanisms for German Utility Consortium.
- ◆ Developed integrated intermodal choice of transport to terminals for a barge company.
- ◆ Member of National Academy of Sciences Workshop on Trucking Deregulation, which led to the deregulation of the U.S. trucking industry.

- ◆ Directed Transportation related Ph.D. dissertations on: optimal barge unloading and optimal port management, optimal grain terminal management, and empty back haul problem in trucking and effect on prices.
- ◆ Critiqued the Uniform Rail Costing System for the Interstate Commerce Commission.

### *Large Communications Companies*

- ◆ Developed methods to determine license fees, royalties, and valuing patents. Involved determining optimal pricing strategies and estimating revenues under different licensing and royalty scenarios.
- ◆ Created model for examining pricing decisions and product offerings. Used simulated annealing optimization to sort through combinations of product offerings to find optimal set. Determined optimal prices for initial offerings.
- ◆ Developed price and offering optimization models used to streamline offerings reduce wasteful cannibalization and maximize revenue.
- ◆ Responsible for survey research design, implementation, and analysis to determine price elasticities and service offering sensitivities for input into large scale optimization model.
- ◆ Developed model determining costs and initial prices of new wireless network.
- ◆ Designed model for estimating costs of installed network and expansions. Required optimization of network design. Used neural networks and genetic algorithms.
- ◆ Developed an econometric based simulation model that demonstrated provision of roaming to competitors was uneconomic at the terms and conditions proposed.

### *Large Scale Financial Modeling*

- ◆ Using statistical methods, developed tools to detect money laundering and developed a large scale loan loss model for a large bank.
- ◆ Retained to perform Federal Reserve required review of computer models material to bottom line for two large banks.
- ◆ Developed and refined models to predict required reserves for future claims for large insurance companies.
- ◆ Reviewed and developed revisions to large scale demand forecasting systems for large electric companies.
- ◆ Developed models to identify fraud using neural networks, models to identify credit risk, and simulation methods for Operations Research, Marketing Research, and engineering for large communications companies.
- ◆ Led a group of two dozen or so Mathematicians, Statisticians, Operations Researchers, Economists, and Marketing researchers at a large industrial laboratory.

- ◆ Developed statistical methods for identifying possible backdating of executive options and performed lost profits calculations where determining the pricing that would have occurred but for the alleged act was at the core for a number of firms.

### *Auctions*

- ◆ Participated in various U.S., European, and Asian PCS, 3G, and energy Auctions. Responsibilities included team formation, analysis oversight, valuation, and competitive analysis. For client companies, participated in developing bidding strategy, developing valuations, staffing war rooms, providing software and training for bidders. For governmental agencies helped in designing auction and developing rules.

### *Marketing Research and Survey Design*

- ◆ Adaptive conjoint studies for CentraNet Services (1990-1994)
- ◆ Conjoint studies for Inter and IntraLATA toll pricing (Annually beginning in 1991, in 32 states over 3 years)
- ◆ Rank ordered conjoint studies for toll presubscription pricing and product design (1996)
- ◆ Rank ordered conjoint studies for cellphone design (1994)
- ◆ Attitudinal service quality and consumer satisfaction surveys (annual 1987-1994)
- ◆ Analysis and critique of GTE-TeleGo survey results (1993)
- ◆ Adaptive conjoint to estimate value of PCS spectrum auction properties (1992-1996)
- ◆ Designed time and motion survey to determine time spent in porting numbers in cellphone customer support centers (2006)
- ◆ Designed stratified survey to determine errors in audits of insurance policies (2006)
- ◆ Adaptive hyperbolic survey to determine willingness to pay for clean water (2006)
- ◆ Designed stratified survey to determine counts of documents to be examined before destruction to guarantee 99% or more met criteria for destruction
- ◆ In Re: Cellphone Termination Fee Cases (2008) testimony on flaws in plaintiffs survey design (2007)
- ◆ Courses in survey design taught:
  - Survey Design (Washington State University Department of Statistics)
  - Survey Methods (Deloitte CPE course for Senior Managers and above)
  - Discrete Choice and Conjoint Methods in Applied Econometrics (University of California, Berkeley)

- 
- ◆ Research using survey methods or developing survey methodology:
    - “Specification and Estimation in the Mixed Continuous Discrete Dependent Variable Model in Classical Production Theory,” *Econometrica* (1980), 48, No. 4, pp. 839-852.
    - “Wage Determination in the Union and Non union Sectors: A Simultaneous Equations Approach,” with D. Leigh, *Industrial and Labor Relations Review* (1980), 34, No. 1, pp. 24-34.
    - “A Semiparametric Censored Regression Estimator,” *Journal of Econometrics* (1986), 32, No. 1, pp. 5-34.
    - “Editor’s Introduction,” *Journal of Econometrics*, 32, 1986.
    - “The Endogeneity of Union Status: An Empirical Test, with D. Leigh,” *Journal of Labor Economics* (1985), 3, No. 3, pp. 385-401.
    - “Evaluation of an Alcohol Abuse Prevention Program: Correcting for Self Selection,” with T.K. Greenfield, *Resources in Education* (1985) (ERIC #ED253807).
  - ◆ Thesis and Dissertations Directed:
    - Andrew Gill (Econometrics/Labor)
    - Mark Thoma (Econometrics/Macro)
    - Scott Farrow (IO/Resources/Econometrics)
    - Victor Tremblay (IO)
    - Carol Tremblay (Labor)
    - Cathleen Lueue (Labor/Econometrics)
    - Wesley Wilson (IO)
    - Robert Tichy (Statistics)

**TESTIMONY EXPERIENCE (NON-CONFIDENTIAL)**

*Antitrust, Valuation, Intellectual Property, Market Structure and Damages*

In a consumer class action, Dr. Duncan is providing testimony based on survey research on the willingness to pay for certain product attributes.

In Re: Cellphone Termination Fee Cases, Dr. Duncan is providing testimony on behalf of ATT Wireless and Cingular, the legacy companies that now form ATT Mobility. Issues include class certification and damages. Testimony by deposition on class certification, trials pending.

In FTC v. Alternatel et al. on behalf of defendants, Dr. Duncan filed testimony and was deposed on the matter of whether defendants had misled calling card purchasers as to the value of the cards and as to the amount of damages card holders may have suffered. (Rebuttal report and deposition.)

In the matter of the arbitration between: Adrienne Travis and Sue Stacy, et al. v. Rhodes Colleges, Inc. et al. class action alleging nationally accredited colleges misrepresented value of degree relative to degrees from regionally accredited colleges. Rebuttal report.

In Re: AT&T v USA US District Court, Western District of Texas, on behalf ATT Dr. Duncan has filed testimony on the \$1b dispute between the IRS and ATT over whether distributions from the Universal Service Fund are nonshareholder contributions to capital or ordinary income. Expert report, rebuttal, and deposition, trial set.

On behalf of a major telecommunications company, Dr. Duncan provided testimony on the appropriate compensation for rights of way that the company used to run fiber optic cable through a major U.S. city on abandoned rail roadbed. Rebuttal report and deposition.

For large natural gas pipeline, developed arguments and methods for determining the right of way fees as well as the fair market value of Native American land crossed by pipelines.

Sacramento Metropolitan Cable Television Commission. "Municipal Provision of Broadband: Fallacies in the Consultant Report and Lessons Learned in the Telecommunications Meltdown." Testimony (not under oath) on behalf of SBC November 2002.

American Arbitration Association on behalf of Leap Wireless International, Inc. In the matter of MCG PCS, Inc., MCG PCS Licensee Corporation, Inc. Dr. Michael C. Gelfand and Leap Wireless International, Inc. "Expert Report on Behalf of Leap Wireless International, Inc.," October 25, 2001. "Rebuttal of MCG's Expert Reports," November 19, 2001. Direct Testimony, February 4, 2002. (Issue was fair market value of spectrum.)

United States District Court for the District of Delaware on behalf of Broadcom Corporation. Intel Corporation v. Broadcom Corporation, October 2001.

California Public Utilities Commission (Application No. A.01-02-012) on behalf of Verizon California. "In the Matter of the Application of Verizon California Inc. (U 1002 C), a Corporation, for Authority to

Re-Categorize Inside Wire Maintenance Plans and Billable Repair Service from Category II to Category III Service Offerings." Rebuttal Testimony, July 27, 2001.

United States' Bankruptcy Court for the District of Arizona on behalf of New World Coffee. Einstein's Chapter 11 bankruptcy proceeding pursuant to Section 363 of the Bankruptcy Code (In re: Einstein/Noah Bagel Corp., Case No. 00-44447-EFC-CGC). "Expert Report prepared for New World Coffee – Manhattan Bagel, Inc.," May 30, 2001.

U.S. District Court of the Southern District of New York (No. 93 Civ. 3707) on behalf of NCA. National Communications Association, Inc. v. AT&T Corp. Analysis of Damages, October 1999. Deposition, November 18-19, 1999.

U.S. District Court, Southern District of New York (No. 95 Civ. 1398) on behalf of World Wide Communications, World Wide Communications, Inc. v. AT&T Corp., Analysis of Damages, 1999.

U.S. District Court, Western District of Washington, Electric Lightwave, Inc. v. U S WEST, Inc., Preliminary, Supplemental Reports on Damage Claims, Testimony by Deposition and at Arbitration, 1998.

Federal Trade Commission. Econometrics consultant for the FTC on the FTC Cereals Antitrust case (1978-1980)

*Labor, Labor Class Certification*

United States District Court for the Eastern District of Virginia, Alexandria Division (Civil Action No. 00-1631-A) on behalf of Broadwing Communications, Inc. "Douglas Pasko v. Broadwing Communications, Inc." Affidavit, January 19, 2001 and Testimony on May 8, 2001. (issue: lost wages due to alleged constructive termination) Testimony by deposition.

United States District Court for the Eastern District of Virginia, Alexandria Division (Civil Action No. 00-1605-A) on behalf of Broadwing Communications, Inc. "Jeffrey H. Swinton v. Broadwing Communications, Inc." Affidavit, December 27, 2000.

California Public Utilities Commission PBOP California. Rebuttal Testimony, 1993.

Washington State Senate Ways and Means Committee. "The Relationship Between Washington State Employment and State Economic Policy." 1986.

*Price Cap, Rate of Return, and Performance Based Regulation*

North Carolina Utilities Commission (Docket No. P-19, SUB 277) on behalf of Verizon South Inc. "Application of Verizon South Inc. for, and Election of, Price Regulation." Testimony, October, 2004. Rebuttal March 2005.

Public Service Commission of Wisconsin (Docket No. 1-AC-193) on behalf of Verizon North and Wisconsin Bell (SBC) in Wisconsin. "Rulemaking to Revise Wisconsin Administrative Code Chapter

PSC 163, Telecommunications Utility Price Regulation, Regarding the Productivity Offset Factor." Affidavit, January 12, 2003.

North Carolina Utilities Commission (Docket No. P-19, SUB 277) on behalf of Verizon South Inc. "Application of Verizon South Inc. for, and Election of, Price Regulation." Testimony, July 16, 2002. Rebuttal November 2002.

Wisconsin State Senate Committee on Health, Utilities, Veterans & Military Affairs on behalf of Verizon North. "In Opposition to Clearinghouse Rule 00-155 Relating to Wisconsin Administrative Code Chapter PSC 163." Testimony, November 7, 2001. (Did the Public Service Commission of Wisconsin Correctly determine of Productivity Offset in Price Cap Regulation as require by statute.)

Public Service Commission of Wisconsin (Docket No. 1-AC-193) on behalf of Verizon North in Wisconsin. "Rulemaking to Revise Wisconsin Administrative Code Chapter PSC 163, Telecommunications Utility Price Regulation, Regarding the Productivity Offset Factor." Affidavit, December 12, 2000.

Federal Communications Commission (CC Docket No. 94-1, 96-262) on behalf of GTE. "In the Matter of Price Cap Performance Review for Local Exchange Carriers, Access Charge Reform." Affidavit, January 24, 2000.

Federal Communications Commission on behalf of GTE "The Productivity Factor in the LEC Price Cap Formula Should Reflect Achievable Productivity Gains." Affidavit, February 14, 1997.

California Public Utilities Commission (A.92-05-002) on behalf of GTE. California NRF Review, 1995.

### *Performance Measures & Incentives*

New Jersey Board of Public Utilities (Docket Nos. TX95120631, TO96070519, TO98010035, TO98060343 & TX98010010). "In Support of the Brief of Bell Atlantic-New Jersey in Support of Its Performance Incentive Plan." Affidavit, July 24, 2000.

Federal Communications Commission (Docket No. 99-295) on behalf of Bell Atlantic-New York. "Application by Bell Atlantic-New York, et al. For Authorization to Provide In-Region InterLATA Services in New York." Declaration, November 8, 1999.

New York Public Service Commission (Case Nos. 97-C-0271, 99-C-0949) on behalf of Bell Atlantic-New York. "Bell Atlantic-New York's Petition For Approval of the Amended Performance Assurance Plan and Amended Change Control Assurance Plan." Affidavit, October 8, 1999.

Pennsylvania Public Utilities Commission (Docket No. P-00991643) on behalf of Bell Atlantic-Pennsylvania, Inc. "Joint Petition of Nextlink Pennsylvania, Inc., et al. for an Order Establishing a Formal Investigation of Performance Standards, Remedies and Operations Support Systems Testing for Bell Atlantic-Pennsylvania, Inc." Direct Testimony, June 8, 1999. Rebuttal Testimony, June 14, 1999.

*Cost Modeling (Including ROE, ROI issues)*

California Public Utilities Commission (R.93-04-003; I.93-04-002) on behalf of GTE. "Review of GTE California Collocation Model." Testimony, December 18, 1998.

Federal Communications Commission (Docket Nos. 96-45, 97-160) on behalf of GTE. "In the Matter of Federal-State Joint Board on Universal Service Forward-Looking Mechanism for High Cost Support for Non-Rural Local Exchange Carriers." Affidavit, December 1998.

Missouri Public Utilities Commission (Case No. TO-98-329) on behalf of GTE Midwest Inc. "In the Matter of an Investigation Into Various Issues Related to the Missouri Universal Service Fund. An Analysis of the HAI Model Release 5.0a." Affidavit, September 21, 1998. Rebuttal Testimony, September 25, 1998.

Washington Utilities and Transportation Commission (Docket No. UT-980311a) on behalf of GTE Northwest Inc. "In the Matter of Determining Cost for Universal Service." Response Testimony filed August 3, 1998. Rebuttal Testimony, August 24, 1998.

Texas Public Utility Commission (Docket No. 18515) on behalf of GTE Southwest, Inc. "Compliance Proceeding for Implementation of the Texas High Cost Universal Service Plan. In Connection With the Hatfield Model 5.0 (a)." Rebuttal Testimony, February 27, 1998, July 15-16, 1998. Second Supplemental Direct Testimony, July 1, 1998.

Nebraska Public Service Commission on behalf of GTE Midwest Inc. "Analysis of the Hatfield Model, Version 5.0A." Direct Testimony filed April 8, 1998.

Idaho Public Utilities Commission (Case No. GNR-T-97-22) on behalf of GTE Northwest, Inc. "In the Matter of the Investigation to Determine an Appropriate Cost Model Using Forward-Looking Economic Costs For Calculating the Costs of Basic Telecommunications Services in Idaho. Analysis of the Hatfield Model, version 5.0a." Rebuttal Testimony, March 2, 1998.

Texas Public Utilities Commission (Docket No. 18515) on behalf of GTE Southwest Inc. "In the Matter of Compliance Proceedings for Implementation of the Texas High Cost Universal Service Plan." Rebuttal Testimony, February 27, 1998.

Minnesota Public Utilities Commission (Docket No. P-999/M-97-909) on behalf of Contel of Minnesota, Inc. d/b/a GTE Minnesota. "Analysis of the Hatfield Model, Version 5.0." Rebuttal and Supplemental Testimony, January 23, 1998.

Minnesota Public Utilities Commission (Docket No. P-999/M-97-909) on behalf of Contel of Minnesota, Inc. d/b/a GTE Minnesota. "Analysis of the Hatfield Model version 4.0." Rebuttal Testimony, November 24, 1997.

New Mexico State Corporation Commission (Docket Nos. 96-310-TC; 97-334-TC) on behalf of GTE Southwest Inc., New Mexico Operations. "Analysis of the Hatfield Model Release 4.0." Rebuttal Testimony, November 1997.



Rebuttal Testimony on behalf of GTE Hawaiian Telephone Inc. (Docket No. 7702), "Economic and Algorithmic Errors in the "Updated" Hatfield Model Release 3.1." August 28, 1997.

Direct Testimony on behalf of GTE California Inc. "Economic and Algorithmic Errors in the "Updated" Hatfield Model Release 3.1." July 1, 1997.

Washington Utilities and Transportation Commission (Docket No. UT-960369, UT-960370, UT-960371) on behalf of GTE. "In the Matter of the Pricing Proceeding for Interconnection, Unbundled Elements, Transport and Termination, and Resale (Hatfield Model)." Direct Testimony, March 27, 1997. Rebuttal Testimony, April 25, 1997. Supplemental Testimony, June 12, 1997.

New Mexico State Corporation Commission (Docket No. 97-35-TC) on behalf of GTE Southwest Inc. "In the Matter of the Interconnection Contract Negotiations Between AT&T Communications of the Mountain States, Inc., and GTE Southwest Inc Pursuant to 47 U.S.C. Section 252 of the Telecommunications Act of 1996." Direct Testimony, March 31, 1997.

Public Utility Commission of Texas (Docket No. 16476) on behalf of GTE "Southwest Inc. Petition of American Communications Services, Inc. et al., For Arbitration of Unresolved Interconnection Issues with GTE Southwest Inc. and Contel of Texas, Inc. Pursuant to the Federal Telecommunications Act of 1996. In the Matter of Sprint Communications Company L.P.'s Petition For Arbitration of Interconnection Rates, Terms, Conditions and Related Agreements with GTE Southwest Inc. and Contel of Texas, Inc." Direct Testimony filed November 12, 1996.

Oregon Public Utility Commission on behalf of GTE Northwest Inc. "In the Matter of the Petition of AT&T Communications of the Pacific Northwest, Inc. For Arbitration of Interconnection Rates, Terms and Conditions with GTE Northwest Inc., Pursuant to 47 U.S.C. Sec. 252(B) of the Telecommunications Act of 1996. Economic Evaluation of Version 2.2 of the Hatfield Model." October 3, 1996. Supplemental Testimony, October 8, 1996.

Washington State Utilities and Transportation Commission (Docket No. UT-960338, UT-960348, UT-960307) on behalf of GTE Northwest Inc. "An Economic Evaluation of the Hatfield Cost Model Version 2.2." October 1996.

Nebraska Public Service Commission (Docket No. C-1400) on behalf of GTE. "In the Matter of the Interconnection Contract Negotiations Between AT&T Communications of the Midwest, Inc. and GTE Midwest U.S.C. section 252. Economic Evaluation of Version 2.2 of the Hatfield model." Affidavit, September 9, 1996.

California Public Utilities Commission on behalf of GTE. "Rulemaking on the Commission's Own Motion to Govern Open Access to Bottleneck Services and Establish a Framework for Network Architecture Development of Dominant Carrier Networks. Investigation on the Commission's Own Motion into Open Access and Network Architecture Development of Dominant Carrier Networks. An Economic Evaluation of the Hatfield Cost Model Version 2.2.2." 1996.

Interstate Commerce Commission. "A Critique of the Uniform Rail Costing System." 1982.

*Pricing (Including ROE, ROI Issues)*

Public Utility Commission of the State of Idaho (Case No. GTE-T-97-3, ATT-T-97-1) on behalf of GTE Northwest Inc. "In the Matter of AT&T Communications of the Mountain States, Inc. Petition For Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 of the Rates, Terms and Conditions of Interconnection with GTE Northwest Inc. Economic and Algorithmic Errors in the Hatfield Model Release 3.1." Rebuttal Testimony, May 5, 1997.

California Public Utilities Commission (R.93-04-003/I.93-04-002) on behalf of GTE. "Rulemaking on the Commission's Own Motion to Govern Open Access to Bottleneck Services and Establish a Framework for Network Architecture Development of Dominant Carrier Networks. Investigation on the Commission's Own Motion into Open Access and Network Architecture Development of Dominant Carrier Networks." NRF I.95-05-047. Analysis of Benchmark Cost Model; Development of GTE Cost Model and Position on Pricing." Testimony and supporting studies, 1996.

Florida Public Service Commission (PSC 950984-TP) on behalf of GTE. "Petitions by AT&T Communications of the Southern States, Inc., et al. for Arbitration of Certain Terms and Conditions of a Proposed Agreement with GTE Florida Incorporated Concerning Interconnection and Resale Under the Telecommunications Act of 1996 (Interconnection and Unbundling). An Economic Evaluation of the Hatfield Cost Model Version 2.2.2." 1996.

Texas Public Utility Commission (Docket Nos. 16300, 16355) on behalf of GTE Southwest Inc. "Petition of AT&T Communications of the Southwest, Inc for Compulsory Arbitration to Establish an Interconnection Agreement Between AT&T and GTE Southwest, Inc. and Contel of Texas Inc. Petition of MCI Telecommunications Corporation For Arbitration with GTE Southwest Inc. and Contel of Texas Inc." Direct Testimony, October 14, 1996.

California Public Utilities Commission (R.95-04-043, I.95-04-044) on behalf of GTE. "Order Initiating Rulemaking on the Commission's Own Motion Into Competition For Local Exchange Service. Order Instituting Investigation on the Commission's Own Motion Into Competition For Local Exchange Service." Deposition, December 13, 1995.

*Demand Modeling*

Kentucky Supreme Court on behalf of GTE. Stay of Kentucky Public Utilities Commission 1+, Local Competition Order. Estimate of irreparable damages. March 1995.

Florida Public Service Commission on behalf of GTE. 1+ Presubscription Hearings, 1995.

Florida Public Service Commission on behalf of GTE. Stay of Florida Public Utilities Commission 1+ Local Competition Order. Refiled, August 1995.

Michigan Public Utilities Commission on behalf of GTE. Stay of Michigan Public Utilities Commission 1+, Local Competition Order. July 1995.

Florida Public Service Commission on behalf of GTE. Stay of Florida Public Utilities Commission 1+, Local Competition Order. February 1995.

Florida Public Service Commission on behalf of GTE. 1+ Presubscription Hearings. Development of Position, Testimony and Supporting Studies, 1994.

California Public Utilities Commission IRD (I.87-11-033) on behalf of GTE. Direct and Rebuttal Testimony on Elasticities, 1990.

*Statistical*

California Tax Equalization Board on behalf of GTE. "Alleged Undercollection of 911 Tax." (Provided alternative estimate of losses in state revenues (damages ) due to error in GTE billing system) 1995.

Sampling and estimation methodology for time and motion study of the additional time to services new customers who are keeping their old numbers as opposed to new customers who are assigned new numbers. Using treatment effect models, showed that the firm indeed had improved service during the period ordered. 2007.

For a large company, developed statistical model of market pricing that showed that the executives had not engaged in price-gouging as alleged. 2007.

*Additional IP and Royalty Experience*

Dr. Duncan has also testified or participated in a number of royalty and intellectual property arbitrations and negotiations.

**SPEAKING ENGAGEMENTS**

"Early Termination Fees as Risk Management Tools," Advanced Workshop in Regulation and Competition 28<sup>th</sup> Annual Western Conference, Monterey, CA, 2009.

"Estimating the Value of and Willingness to Pay for Clean Water," Advanced Workshop in Regulation and Competition 27<sup>th</sup> Annual Western Conference, Monterey, CA, 2008.

"Defeating Class Certification," Alston-Byrd/Deloitte CLE Meeting on Class Certification Issues for Inside Counsel, New York, NY, 2007.

"Transmission Utilities and Rights of Way Pricing Policy on Tribal Trust Lands," Advanced Workshop in Regulation and Competition 26<sup>th</sup> Annual Eastern Conference, Skytop, Pennsylvania, 2007.

"Infeasibility of Business Plans Based on Unbundling," Advanced Workshop in Regulation and Competition 18<sup>th</sup> Annual Western Conference, Monterey, California, 2007.

"The Economics of Municipal Entry into Broadband," Advanced Workshop in Regulation and Competition 17<sup>th</sup> Annual Western Conference, San Diego, California, 2004.

"The Telecommunications Meltdown: Causes, Consequences and Cautions Going Forward," Advanced Workshop in Regulation and Competition 16<sup>th</sup> Annual Western Conference, San Diego, California, 2003.

"Valuation of Previously Auctioned Properties: A Hedonic Approach to Valuing Radio Spectrum," Advanced Workshop in Regulation and Competition 15<sup>th</sup> Annual Western Conference San Diego, California, 2002.

"Early Due Diligence: Economic Considerations Cautions and Warnings," Law Seminars International's Municipal Broadband Conference in San Francisco, CA, September 9, 2002.

"Disposing of Telecommunications Assets: Why, Who, and How," Law Seminars International's Fifth Annual Conference on Telecommunications Infrastructure in Seattle, WA, August 15, 2002.

"Broadband Competition: Practical Realities, Trends," presented at the VIII Meeting of the Telecommunications Industry, IESE Business School, Madrid, Spain, May 29, 2002.

"Cross Platform Competition: Practical Realities, Trends," Law Seminars International's Seventh Annual Telecommunications Conference in Seattle, WA, April 5, 2002.

"Performance Parity Incentives for Competitive Local Telecommunications Markets," Advanced Workshop in Regulation and Competition 13<sup>th</sup> Annual Western Conference, Monterey, California, 2000.

"Divestitures: The Pressure to Become Leaner and More Focused," Law Seminars International's Sixth Annual Telecommunications Conference in Seattle, WA, April 12, 2001.

"Defining the Increment: Consequences of the Iowa Utilities Board v. Federal Communications Commission, July 2000 Decision," National Association of Regulatory Utility Commissioners 112th Annual Convention, San Diego, CA, November 11, 2000.

"The Economics of Online Marketing: The Importance of Getting on the Net and Getting There First," Law Seminars International's Intellectual Property Rights and Marketing Online Conference, Minneapolis, MN, July 20-21, 2000.

"Mergers and Acquisitions in a Regulatory Market: What Does Regulation Mean for Telecommunications Mergers and Acquisitions?" Infocom Forum, Lisbon, Portugal, June 19, 2000.

"Viability of Niche Players: Will Economies of Scale and Scope Determine Survival," presented at Law Seminars International's Fifth Annual Telecommunications Conference, Seattle, WA, April 13, 2000.

## PUBLICATIONS

"The Effect of Illegal Dumping on Residential Home Prices: A New Hedonic Approach to Measuring Asset Risk," *Journal of Risk and Uncertainty* (forthcoming 2007 pending revision) with Jeffery Morris.

"The Structure of the Telecommunications Industry: The Role of Regulation in the Meltdown and Preventing a Recurrence", Chapter 16, in *The Handbook of International Regulation*, Michael Crew et al. Editor. Edward Elgar, 2006.

"IntraLATA Toll Demand Modeling: A Dynamic Analysis of Revenue and Usage Data," *Information Economics and Policy* 6 (1994): 163-178.

"The Use and Misuse of Econometricians," "Marginal Cost Techniques for Telephone Services," William Pollard, Editor, National Regulatory Research Institute (1991).

"The Effect of Probabilistic Demand Structures on The Structure of Cost Functions," *Journal of Risk and Uncertainty* (1990), 3, 3, pp. 211-220. (Simulation based model)

"Telecommunications Cost Functions II: Panel Data and Heterogeneous Technological Change," with R. Tobin, in S. Bhattacharya and S. Brubaker, Editors, *Telecommunications Costing in a Dynamic Environment* (1989).

"Telecommunications Cost Functions I: Capacity, Random Demand and Technological Change," with R. Tobin, in H. Trebing, Editor, *New Regulatory Concepts: Issues and Controversies* (1988), Michigan State University Press.

"A Simplified Approach to M Estimation with Application to Two Stage Estimators," *Journal of Econometrics* (1987), 34, pp. 373-389.

"Review of Newbold and Bos Stochastic Parameter Regression," *Journal of Marketing Research* (1986).

"Review of Feldman, Multiple Regression in Practice," *Journal of Marketing Research* (1986).

"A Semiparametric Censored Regression Estimator," *Journal of Econometrics* (1986), 32, No. 1, pp. 5-34.

"Editor's Introduction," *Journal of Econometrics* 32, 1986.

"The Endogeneity of Union Status: An Empirical Test, with D. Leigh," *Journal of Labor Economics* (1985), 3, No. 3, pp. 385-401.

"Evaluation of an Alcohol Abuse Prevention Program: Correcting for Self Selection," with T.K. Greenfield, *Resources in Education* (1985) (ERIC #ED253807).

"Impact of International Trade Shocks on Wage Adjustments in Canada: A Comment," in Peter Chinloy and Ernst W. Stromsdorfer, Editors, *Adjustments in Labor Markets: An International Comparison*, Academic Press (1985).

"Econometric Evaluation of New Technology with an Application to Integrated Pest Management," with D. Hall, *American Journal of Agricultural Economics* (1984), 66, No. 5.

"Comments on Manski's Adaptive Estimation of Nonlinear Regression Models," *Econometric Reviews* (1984).

"Sample Selectivity as a Proxy Variable Problem: On the Use and Misuse of Gaussian Selectivity Corrections," *Research in Labor Economics* (1983), 6, supplement 2, pp. 333-345.

"Estimation and Inference in Heteroscedastic Systems of Equations," *International Economic Review* (1983), 24, No. 3, pp. 559-566.

"Comment on Koenker's Robust Methods of Econometrics," *Econometric Reviews* (1982), 1, No. 2, pp. 257-262.

"Specification and Estimation in the Mixed Continuous Discrete Dependent Variable Model in Classical Production Theory," *Econometrica* (1980), 48, No. 4, pp. 839-852.

"Wage Determination in the Union and Non union Sectors: A Simultaneous Equations Approach," with D. Leigh, *Industrial and Labor Relations Review* (1980), 34, No. 1, pp. 24-34.

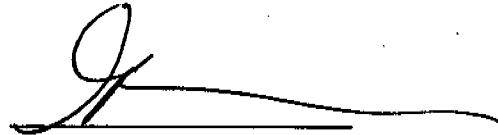
"Data Sets That Exceed Computer Limits: Efficient Estimation and a Test of the Normal Approximation," *Journal of Econometrics* (1980), 14, pp. 257-264.

"Empirical Studies of Returns to Scale of the Regulated Trucking Sector," in R. Braeutigam and R. Baesemann, Editors, *Motor Carrier Economic Regulation*, National Academy of Sciences (1978).



I declare under penalty of perjury that the foregoing is true and correct.

Executed on: 12/11/2009

A handwritten signature in black ink, consisting of a stylized 'G' followed by a horizontal line that extends to the right.

Gregory M. Duncan



**Before the  
COPYRIGHT ROYALTY JUDGES  
Washington, D.C.**

\_\_\_\_\_  
**In the Matter of** )  
 )  
**Distribution of the** )  
**2004 and 2005** )  
**Cable Royalty Funds** )  
\_\_\_\_\_ )

**Docket No. 2007-3 CRB CD 2004-2005**

**REBUTTAL TESTIMONY OF  
EDWIN S. DESSER**

**December 11, 2009**

**REBUTTAL TESTIMONY OF  
EDWIN S. DESSER**

1. I am submitting this testimony to the Copyright Royalty Judges on behalf of the Joint Sports Claimants (JSC). My testimony is in response to testimony provided by Dr. George S. Ford in connection with the 2004-2005 Cable Royalty Distribution Proceedings.

**Qualifications**

2. I am the founder and President of Desser Sports Media, Inc (DSM). My curriculum vitae is attached as Appendix A. DSM specializes in consulting for the sports media community. Since 2005, DSM has provided numerous valuation analyses of media rights, and participated in the negotiation of billions of dollars in media rights agreements. Clients include major league teams, leagues, federations and associations, as well as distributors, start-up, and technology companies. DSM has created business plans for new networks, assessed the ability of sports programming to drive adoption of new technology platforms, valued cable networks, advised potential purchasers of networks and teams, and has provided litigation/arbitration support.

3. Prior to starting DSM, I spent 23 years in senior management positions in the Commissioner's Office at the National Basketball Association in New York City. Positions included President, NBA Television & New Media Ventures, EVP, Strategic Planning and Business Development, VP/General Manager, NBA Entertainment, Inc., and Director of Broadcasting & Executive Producer. I was primarily responsible for the valuation and negotiation of the league's media rights agreement with various cable and

broadcast networks, including TNT, as well as arrangements with most major cable MSOs and all satellite operators (DirecTV, PrimeStar and Echostar).

#### Discussion

4. I understand that the purpose of these proceedings is to determine the distribution of compulsory licensing royalties that have been paid by cable operators for the right to distribute non-network programming via distant signals during the 2004-2005 time-period.

5. I have reviewed the Testimony of Dr. George S. Ford in which he describes a model he created to estimate the relative value of the compensable programming carried on distant signals. I have also reviewed the Rebuttal Testimony of James Trautman in which, among other things, he shows how Ford's model would apply to the programming actually carried by the cable network TNT. Trautman shows how, if Ford's model were applied to TNT, it would have very significantly underestimated the relative value of the sports programming on TNT in contrast to the other types of programming TNT purchased. Indeed, Trautman reports that contrary to the 7 to 8 percent of value Ford's approach would attribute to JSC programming on TNT, the actual cost of that programming was at least 45 to 46 percent of TNT's total programming cost. See Trautman Rebuttal Testimony at 6-7.

6. That JSC programming might have a low share of the overall program time on TNT or of the relative amount of time households spend viewing all the TNT programming -- but nonetheless represent a very high relative cost compared to other TNT programming -- is consistent with my experience in the sports media business. Indeed, I was responsible for negotiating the NBA's contract in effect at that time with

TNT. I know from personal experience that applying Ford's model to TNT would show, as Trautman illustrates, that Ford's model significantly underestimates the relative value of sports programming in the real world.

7. Ford's model is based on a measure of relative advertising cost that he has created for this proceeding. While advertising is certainly a part of the economics of cable programming, it represents only a minority of the revenue picture and therefore of potential programming expenditures. Cable systems generate the bulk of their revenue through subscriptions -- something for which Dr. Ford's model does not account.

8. In addition, Ford's model does not account for other types of value attributable to sports programming in my experience. These additional "elements of value" include promotional value, halo effect/prestige, packaging, audience flow, risk, differentiation, driving distribution, and the unique differentiated characteristics of sports programming, among others. This is why sports are often a "loss leader" for a network.

9. Sports are highly promotable. Sports leagues and teams are well known, much beloved brands, and "household names," which have been built over generations. The names and logo are instantly recognizable, and thereby efficient to use to promote tune-in and association, because they stand out and grab attention.

10. There is considerable prestige that comes from a sports association. This is sometimes known as the "halo effect." It is experienced by networks, sponsors, and distributors. Sports fans' affection for their sports can rub off on those who are associated. This branding is an important element of the value of sports television, and is ignored in the Ford analysis.

11. Even though the Ford analysis purports to measure a program's advertising value, it fails to account for the fact that sports programming is frequently used by networks and distributors as a "hook" to help to sell packages of advertising in multiple programs. Networks might package commercial time in a sports event, with advertising in adjacent programming, and other programming on the network or cable system. Even if the allocated portion of the package price of the sports programming is higher than the entertainment programming or news programming that might be in the package, this does not account for the fact that absent the sports element, that particular spot or series of spots in the entertainment programming might not have sold at all, or might have to be sold for a lower price if not included in such a package. Thus, the true financial value of sports advertising is typically understated.

12. Sports is often used by programmers as a schedule "tent pole" to attract viewers, and then to cycle them into other programs that are either promoted in the sports event, or which preceded or follow it. In this way, value created by the presence of the sports programming is reflected in the sales of other programming.

13. Like most other businesses, risk is an element of the TV programming business equation. Many shows are developed, yet most fail. A handful survive, and fewer still become hits. Sports is different. Even though a particular team's success ebbs and flows over time, sports TV programming overall is remarkably consistent and predictable in performance. As a result, there is less risk associated with sports than many other forms of entertainment programming. This track record for success enhances its relative value compared with alternative programming, even though this fact is not reflected in the Ford model.

14. One of the biggest sports programming value stores is in the leverage key sports programming networks can exert in support of the carriage of new non-sports programming networks. Major entertainment companies that control the distribution of key sports programming networks are able to leverage the affiliation negotiation of the sports network into the new or improved carriage of a sister or unrelated, co-owned cable network. This process obscures the true value of the sports network and its programming, concealing it as the creation of new or increased enterprise value for the alternate network.

15. Sports packages are also used to drive penetration of programming networks. The Fox Television Network was launched harnessing the NFL Sunday afternoon package. The NFL and NBA were used to successfully launch TNT, widely considered one of the most successful network launches in cable TV history. Superstation penetration was driven by the presence of the MLB Atlanta Braves and NBA Hawks games on WTBS and the Chicago Cubs, White Sox and Bulls on WGN.

16. Finally, some sports packages are able to influence the selection of particular multi-video providers by consumers, utterly unrelated to any advertising that might be contained. The NFL's Sunday Ticket package, long a fixture on DIRECTV has aided the growth of this platform against cable. The same is true of the NCAA's Mega March Madness package. The cable industry was recently outbid by DIRECTV for the NASCAR multi-car camera package in order to further improve its competitive position. Each of these are examples of the unique power and value of sports programming in the cable industry, completely ignored by the Ford analysis.

17. Unlike entertainment, which is often exhibited in multiple windows over an extended period, often all at the same time (e.g., syndicated and off-network episodes all run while first run episodes air on broadcast networks), sports is typically shown on an exclusive basis. A particular game or feed is only seen on one channel, typically on a live basis, and then never again. While it is true that some games are shown on dual networks (e.g., regionally and nationally) and are also sometimes repeated, the vast majority of games are exclusive to one network and air only once. This makes each one that much more compelling.

18. Because it is compelling and topical, sports is typically consumed live, and not TIVO'ed, or downloaded to be seen later. In contrast, entertainment programming is not only available on a first run basis, but then also in re-runs, syndication, cable network runs, and via web site streaming, iTunes downloads, and DVDs. Because such programming is often viewed on a delayed or recorded basis, subscribers can "fast forward" through the commercials without stopping to watch the ads. Ford's analysis in no way addresses this growing phenomenon which disproportionately affects the programming offered by the Program Suppliers.

19. Sports is often viewed in groups, such as in bars, restaurants, airports, college dorms, health clubs, typically unmeasured by Nielsen, and therefore not truly reflected in the Ford analysis.

#### **Conclusion**

As shown in the data offered by Trautman, Ford's analysis does not provide a reliable means of estimating the relative value of sports programming vis-à-vis other types of programming, and that conclusion is particularly true for syndicated

programming that falls within the claim of the Program Suppliers. My testimony is intended to identify those factors that help explain why that is the case.



## APPENDIX A

### ED DESSER

Ed Desser is President of Desser Sports Media, Inc., a consulting firm serving the strategic media business needs of the sports television industry. The company was founded in 2005, following Mr. Desser's more than 30-year career in sports media and radio and television. Its clients include the National Basketball Association, Detroit Pistons, Los Angeles Lakers, Anschutz Entertainment Group (AEG), Houston Astros & Rockets, Minnesota Timberwolves, Atlanta Hawks & Thrashers, Tampa Bay Lightning, Washington Nationals, Dallas Mavericks, Phoenix Suns, San Antonio Spurs, United Football League, Sacramento Kings and Monarchs, Miami Heat, LA Clippers, Portland Trailblazers, Maple Leaf Sports & Entertainment (Maple Leafs, Raptors, and Toronto FC), McKinsey & Co., Milwaukee Bucks, Oklahoma City Thunder, Qualcomm/Media Flo, Utah Jazz, DIRECTV, Chivas USA, the Professional Rodeo Cowboys Association, and the California Interscholastic Federation.

Mr. Desser's was educated at the University of California, Los Angeles, where he earned a Bachelors' of Arts in Economics. He also earned a Masters of Business Administration degree in Marketing from the University of Southern California.

Mr. Desser's professional career began in Southern California, serving in a variety of functions for several local broadcast stations. In 1977, he became Executive Producer of the Los Angeles Lakers Radio Network, and in 1978, was hired by California Sports, Inc, owner of the Los Angeles Lakers, Kings, and Forum where he became it's Director of Broadcasting and Executive Producer. He was responsible for broadcast operations, scheduling, production, transmission, and negotiating its media relationships.

In 1982, Mr. Desser relocated to New York, beginning a 23-year run with the National Basketball Association Commissioner's Office. He first became the NBA's Director of Broadcasting and Executive Producer. Responsibilities included national network contract administration, scheduling, negotiations, policy planning, and development of production and arena standards.

In 1984, he added the responsibilities of VP/General Manager, NBA Entertainment, Inc. the league's TV production and distribution arm. NBAE produces a number of programs for national and international distribution including ABC's NBA Inside Stuff, NBA Action, NBA Match-up, and Vintage NBA. NBAE also produces the nightly highlights and news programming for NBA TV and NBA.com.

In 1987, Mr. Desser was also named VP/Television for NBA International. This division was responsible for growing the distribution of NBA programming to more than 9000 hours in 200 countries worldwide, and production of world feeds of NBA and other major international sports events.

In 1990, the NBA began its quest to develop new media opportunities, naming Mr. Desser President of NBA Television and New Media Ventures, later renamed NBA New Media and Strategic Initiatives. Over the ensuing decade, he spearheaded the exploration and business development for the league of a variety of new technologies ranging from High definition TV (first used for the NBA All Star Game in 1991), Direct Broadcast Satellite (1994), the Internet and NBA.com (1995), NBA TV, (1999), and Satellite Radio (2002). Many of these projects established the framework utilized by most major North American sports leagues, including the NBA's agreements with MVPD's to distribute "out of market" game telecasts (NBA League Pass).

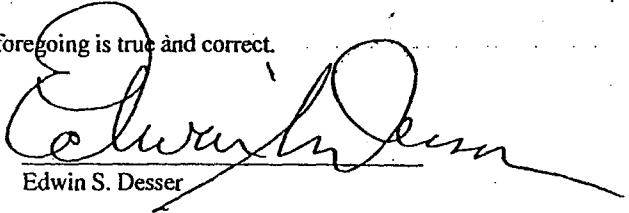
During this period of dramatic technological growth, Mr. Desser was also instrumental in the negotiation of the NBA's landmark national television agreements with NBC, Turner Broadcasting, ABC, and ESPN, which resulted in revenue growth of more than 12 fold, and substantially increased coverage and distribution. He established NBA TV, the first network devoted to a major US sports league, including handling affiliation negotiations with all major MVPDs. He led the NBA's annual business planning process, and was a staff member of the NBA Board of Governor's Planning Committee.

During his NBA career, Mr. Desser also assisted many teams negotiate their local rights agreements. When he returned to California, after the NBA, he formed Desser Sports Media, Inc. in order to continue providing this service, to a vast array of clients across the sports industry. Key projects have included creation of business plans for new regional TV networks, valuation and negotiations of key media agreements, strategic planning, and the balancing of new media with traditional distribution platforms in order to generate maximum current and future revenues. The existence of Comcast Sports Net West, Comcast Sports Net Northwest, and Fox Sports Oklahoma Regional Sports Networks are direct results of this work.

Today, Mr. Desser resides in Santa Monica, California with his wife, Eydie Eisen Desser.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on: 12/11/09

  
Edwin S. Desser

Before the  
COPYRIGHT ROYALTY JUDGES  
Washington, D.C.

In the Matter of	)	
	)	
	)	Docket No. 2007-3 CRB CD 2004-2005
Distribution of the	)	
2004 and 2005	)	
Cable Royalty Funds	)	
	)	

**DECLARATION OF JAMES TRAUTMAN**

1. My name is James Trautman. I am employed as the Managing Director of Bortz Media & Sports Group. In this proceeding, I have offered direct testimony, both written and oral, on behalf of the Joint Sports Claimants.

2. The purpose of this Declaration is to respond to requests made by the Copyright Royalty Judges during my direct oral testimony to provide data reflecting the average number of distant signal stations carried by the respondent systems that participated in the Bortz Survey in 2004 and 2005.

3. During my oral testimony during the direct hearings, the following colloquy occurred, beginning on page 202:

JUDGE WISNIEWSKI: Mr. Troutman [sic], looking at your Question 2-A, which simply asks the number of distant signal stations carried by the system or list them --

THE WITNESS: Yes. It's -- it's -- that's correct.

JUDGE WISNIEWSKI: -- can you tell me the average number of distant signal stations carried by the respondent systems in 2004?

THE WITNESS: I don't have that precise information, no.

JUDGE WISNIEWSKI: Would you supply

that to us, please?

THE WITNESS: Sure.

JUDGE WISNIEWSKI: Could you do the same for 2005?

THE WITNESS: Yes.

JUDGE WISNIEWSKI: Would you also give us the variance around that average in each case?

THE WITNESS: In terms of the number of signals?

JUDGE WISNIEWSKI: Yes.

THE WITNESS: Yes.

JUDGE WISNIEWSKI: Thank you.  
Let me take you to --

THE WITNESS: Could I ask a clarifying question?

JUDGE WISNIEWSKI: Sure.

THE WITNESS: Because of the stratified sampling approach, I believe that I should provide you actually either with two pieces of information or with whichever one you believe would be more useful.

I can provide you with the -- the simple breakout of the average number of signals based on the respondent pool, all 162, 171 respondents; or I can -- and I can also provide you with the -- the average number of distant signals after applying the weighting that's used to weight the royalty.

JUDGE WISNIEWSKI: Both would be useful. Both would be useful.

THE WITNESS: Okay.

JUDGE WISNIEWSKI: Thank you.

4. In response to Judge Wisniewski's request, I calculated the distant signal carriage patterns, including the average number of distant signals and the variance in each case, reflected in the Bortz survey respondent pool in 2004 and 2005. The results of those calculations are summarized below.<sup>1</sup>

**Table 1<sup>2</sup>**  
**Distant Signal Carriage Patterns in the 2004 Bortz Survey**

Strata	Average Number of Distant Signals	Median Number of Distant Signals	Variance	Standard Deviation
1	2.00	1.00	1.83	1.35
2	3.31	2.00	10.10	3.18
3	3.99	2.00	12.04	3.47
4	4.30	2.00	26.75	5.17
Total Sample	3.42	2.00	11.55	3.40
Universe Projection (Weighted Average)	2.69	NA	NA	NA

<sup>1</sup> Note that the averages are significantly higher than medians, reflecting the fact that a subset of systems carries a very large number of distant signals (e.g., 10 or more).

<sup>2</sup> "Variance" is a measure of the dispersion in values for a particular variable and is the basis for calculating standard deviation. In this case, the "variable" is the number of distant signals. Variance is calculated by squaring the differences between the values of data and the mean and then computing their average. The "standard deviation" of a data set is simply the square root of the variance.

Variance and standard deviation both measure the dispersion of the distribution of values about the mean. However, the physical unit of the variance is the square of the physical unit of the data. Alternatively, the standard deviation is measured by the same physical unit as the original data. Accordingly, variance is not typically reported because it is expressed as the square of the variable it is measuring and therefore is difficult to evaluate while the standard deviation is more commonly reported because it is expressed in the same terms as the variable it is evaluating.

**Table 2**  
Distant Signal Carriage Patterns in the 2005 Bortz Survey

Strata	Average Number of Distant Signals	Median Number of Distant Signals	Variance	Standard Deviation
1	2.93	2.00	4.89	2.21
2	3.49	2.00	8.94	2.99
3	4.96	3.00	26.57	5.15
4	4.86	1.50	43.36	6.58
Total Sample	4.26	3.00	21.26	4.61
Universe Projection (Weighted Average)	3.45	NA	NA	NA

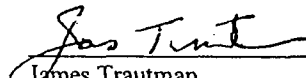
5. To further assist the Copyright Royalty Judges, below is a table showing the number of distant signals carried by respondents to the Bortz Survey.

**Table 3**  
Distant Signals Carried by Bortz Respondents

Number of Distant Signals	2004		2005	
	Respondents	% of Respondents	Respondents	% of Respondents
1	64	39.5%	59	34.5%
2	34	21.0%	23	13.5%
3	11	6.8%	18	10.5%
4	9	5.6%	15	8.8%
5	12	7.4%	13	7.6%
6 to 9	21	13.0%	28	16.4%
10 or more	<u>11</u>	<u>6.8%</u>	<u>15</u>	<u>8.8%</u>
Total	162	100.0%	171	100.0%

I declare under penalty of perjury that the foregoing is true and correct.

Executed on: December 11, 2009

  
\_\_\_\_\_  
James Trautman



**Before the  
COPYRIGHT ROYALTY JUDGES  
Washington, D.C.**

---

**In the Matter of** )  
 )  
**Distribution of the** )  
**2004 and 2005** )  
**Cable Royalty Funds** )  

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 )

**Docket No. 2007-3 CRB CD 2004-2005**

**REBUTTAL TESTIMONY  
OF JAMES TRAUTMAN**

**December 11, 2009**

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**REBUTTAL TESTIMONY  
OF JAMES TRAUTMAN**

1. I am submitting this testimony on behalf of the Joint Sports Claimants (JSC) in response to testimony provided on behalf of the Program Suppliers (PS) by Dr. George Ford, Howard Homonoff and John Mansell.

**I. Qualifications**

2. I have previously submitted written testimony in these proceedings, including my curriculum vitae. I am Managing Director of Bortz Media & Sports Group, Inc. In this capacity, I provide business planning, market research, and related analytical services to both cable programming networks and cable system operators. I have been retained to evaluate and/or assist more than 50 programming networks, and have been retained on multiple occasions by all of the three largest cable MSOs as well as the leading cable industry associations. I was qualified as “an expert in market research, including survey research and valuation in the cable, broadcast and television programming industry.”<sup>1</sup>

3. In addition, I have advised both networks and owners of programming with respect to the negotiation of agreements with distributors, and have directly participated in such negotiations. Based on this experience, I have substantial knowledge of the factors that programming networks consider in valuing the programming that they acquire and in negotiating

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<sup>1</sup> Tr. 53-54.

license fee agreements with cable operators. Similarly, I am aware of the factors that cable operators consider when choosing which networks to carry.

## II. Ford Analysis

4. Dr. Ford sought to estimate the relative marketplace values of distant signal programming categories by “assign[ing] a dollar value to viewership using price data from the advertising market.”<sup>2</sup> In brief, Dr. Ford estimated these shares by multiplying (a) the share of distant signal viewing minutes attributable to each of the distant signal programming categories, as estimated in a Program Supplier study that relies upon data from the A.C. Nielsen Company (see Testimony of Paul Lindstrom) and (b) the relative advertising prices (i.e., cost per thousand or CPM figures) from data reflective of local broadcast advertising, which he also estimates based on various assumptions.<sup>3</sup>

5. Dr. Ford focuses his analysis on estimating local broadcast market advertising sales as a proxy for broadcast market program purchase prices. I have applied Dr. Ford’s analysis, as a test of its validity, to the cable network markets. I limit the analysis to a comparison of cable network programming that most resembles the programming covered by just two categories in this proceeding – Joint Sports and Program Suppliers. I first determine the relative amounts that cable networks would *supposedly* have paid to telecast JSC and Program Supplier programming in 2004-05 -- and then compared those amounts to the amounts that the

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<sup>2</sup> Ford Written Direct Testimony (PS. Ex. 11) at 8.

<sup>3</sup> Ford Written Direct Testimony (PS Ex. 11) at 39.

cable networks *actually* paid to telecast that programming (using largely the same sources of information upon which the witnesses for Program Suppliers have relied). I conclude that Dr. Ford's methodology yields estimated relative values that are inconsistent with the actual relative market values of JSC programming and Program Suppliers' programming on cable networks in 2004 and 2005. As discussed below, Dr. Ford's methodology would significantly have understated the actual relative marketplace value of JSC programming on cable networks in 2004-05, and significantly overstated the actual relative marketplace value of Program Suppliers programming on cable networks in those years.

**a. TBS**

6. Of all the cable networks, TBS may provide the best example of what would happen in the hypothetical marketplace that Dr. Ford attempted to replicate. TBS was the most widely carried distant signal until 1998, when it converted to a cable network and was no longer subject to compulsory licensing. As a result of the TBS conversion, cable operators were required to negotiate in the marketplace directly with TBS in order to carry the copyrighted programming on TBS that previously had been carried pursuant to compulsory licensing. TBS also was required to negotiate in the marketplace with copyright owners in order to provide that programming to cable operators pursuant to negotiated deals rather than compulsory licensing.

7. TBS televised 78 games of the Atlanta Braves in 2004 and 72 games in 2005 pursuant to an agreement that it had negotiated with Major League Baseball. According to Howard Homonoff, another Program Suppliers' witness, virtually all of the other programming

on TBS in 2004 and 2005 consisted of programming that would be classified as programming comparable to that within the Program Suppliers' claim.<sup>4</sup>

8. The viewing-based formula developed by Dr. Ford suggests that TBS should have spent approximately 4.25% of its 2004 programming budget (and 3.51% of its 2005 programming budget) for the rights to televise the Atlanta Braves. *See* Appendix A, Table A-2. In fact, however, TBS spent at least 24.08% of its 2004 programming budget (and 24.65% of its 2005 programming budget) for the rights to televise the Atlanta Braves. *See* Appendix A, Table A-1. The relative dollar amounts that TBS spent on the Braves programming (versus the programming comparable to that within the Program Suppliers' claim) were substantially in excess of the relative amounts of time that such programming was broadcast by TBS, *i.e.*, 2.67% in 2004 and 2.47% in 2005. *See* Appendix A, Table A-2. The relative dollar amounts that TBS spent on the Braves programming (versus the programming comparable to that within the Program Suppliers' claim) also were substantially in excess of the relative amounts of time that cable and DBS subscribers spent viewing these different programming categories, *i.e.*, 2.6% in 2004 and 2.42% in 2005. *See* Appendix A, Table A-2. This comparative analysis is summarized in Table 1 and Figure 1 below.

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<sup>4</sup> Homonoff Written Direct Testimony (PS Ex. 7) at HBH-5 & HBH-6.

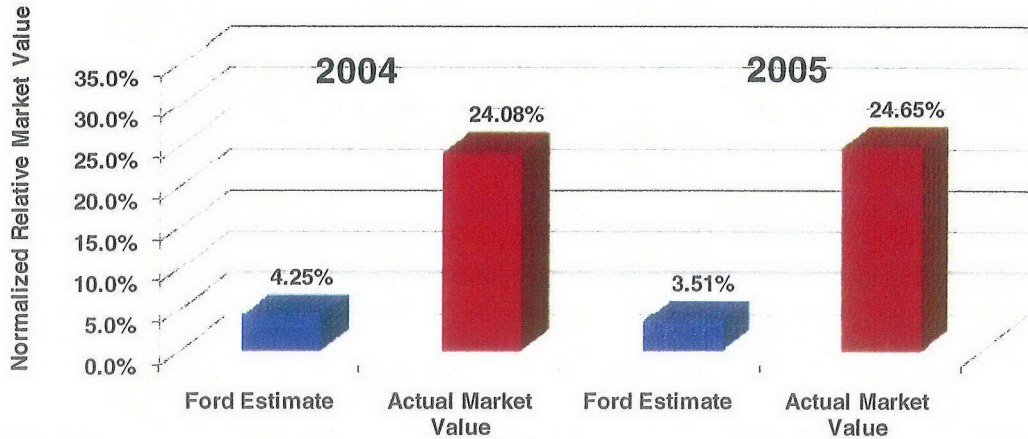
**Table 1. MLB on TBS Valuation Comparison**

	Share of Time (%)	Share of Viewing (%)	Estimated Share of Market Value: Ford Analysis (%)	Actual Share of Market Value (%)
<b>2004</b>				
JSC (Braves)*	2.67%	2.60%	4.25%	24.08%
Program Suppliers/ Other	<u>97.33%</u>	<u>97.40%</u>	<u>95.75%</u>	<u>75.92%</u>
Total	100.00%	100.00%	100.00%	100.00%
<b>2005</b>				
JSC (Braves)*	2.47%	2.42%	3.51%	24.65%
Program Suppliers/ Other	<u>97.53%</u>	<u>97.58%</u>	<u>96.49%</u>	<u>75.35%</u>
Total	100.00%	100.00%	100.00%	100.00%

\* Actual prices for JSC programming exclude production costs and therefore should be viewed as conservative.

Sources: Testimony of George S. Ford; Testimony of Howard Homonoff; SNL Kagan, *Cable Program Investor*, April 17, 2007; SNL Kagan, *Media Sports Business*, various issues; and Major League Baseball.

**Figure 1. JSC on TBS Relative Value Comparison, 2004-05**



Sources: Testimony of George S. Ford; Testimony of Howard Homonoff; SNL Kagan, *Cable Program Investor*, April 17, 2007, and *Media Sports Business*, various issues; and Major League Baseball

9. It should be noted that the actual amounts that TBS spent to acquire all its programming in 2004 and 2005 are not publicly available. For these amounts, I have relied upon data published by SNL Kagan, which is the same source upon which Howard Homonoff and John Mansell relied in their testimony on behalf of the Program Suppliers. I could not find any estimate by SNL Kagan of the amount that TBS paid to MLB for the 2004 and 2005 rights to televise the Braves' games. For that amount I relied upon the actual contract between MLB and TBS.

**b. TNT**

10. The cable network TNT also provides a good example of the potential outcome of marketplace negotiations for distant signal programming in that it offers a combination of JSC and Program Suppliers' programming for which actual market prices can be directly compared. In 2004 and 2005, TNT exhibited NBA games that accounted for between two and three percent of the cable network's total programming hours and roughly five percent of the network's total viewing time. See Appendix B, Table B-2. Dr. Ford's methodology suggests that TNT would have allocated 8.6% of its 2004 programming budget (and 7.0% of its 2005 programming budget) for the rights to this NBA programming. However, TNT actually committed nearly one-half of its total programming budget to the NBA in these two years. See Appendix B, Table B-1. This comparison is reflected in Table 2 and Figure 2 below:



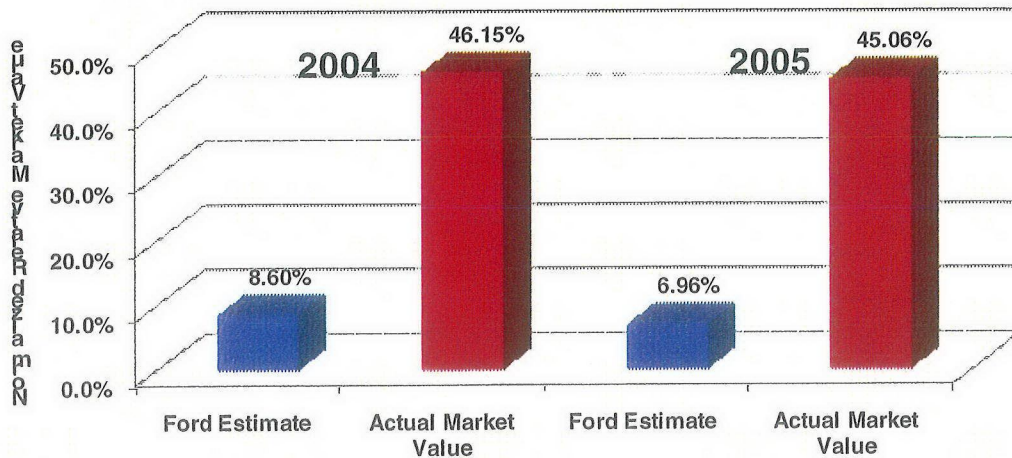
**Table 2. NBA on TNT Valuation Comparison**

	Share of Time (%)	Share of Viewing (%)	Estimated Share of Market Value: Ford Analysis (%)	Actual Share of Market Value (%)
<b>2004</b>				
JSC (NBA)*	2.74%	5.37%	8.60%	46.15%
Program Suppliers/ Other	<u>97.26%</u>	<u>94.63%</u>	<u>91.40%</u>	<u>53.85%</u>
Total	100.00%	100.00%	100.00%	100.00%
<b>2005</b>				
JSC (NBA)*	2.80%	4.86%	6.96%	45.06%
Program Suppliers	<u>97.20%</u>	<u>95.14%</u>	<u>93.04%</u>	<u>54.94%</u>
Total	100.00%	100.00%	100.00%	100.00%

\* Actual prices for JSC programming exclude production costs and therefore should be viewed as conservative.

Sources: Testimony of George S. Ford; Testimony of Howard Homonoff; SNL Kagan, *Cable Program Investor*, April 17, 2007; SNL Kagan, *Media Sports Business*, various issues; and National Basketball Association.

**Figure 2. JSC on TNT Relative Value Comparison, 2004-05**



Sources: Testimony of George S. Ford; Testimony of Howard Homonoff; SNL Kagan, *Cable Program Investor*, April 17, 2007; SNL Kagan, *Media Sports Business*, various issues; and National Basketball Association.

**c. Top 25 Cable Networks**

11. I also have applied Dr. Ford's methodology to the top 25 cable networks that Program Suppliers' witness Howard Homonoff analyzed.<sup>5</sup>

12. MLB, NBA, NFL and NHL programming accounted for 0.7% of the total programming hours on his top 25 cable networks in 2004 and 0.6% of the total programming hours in 2005. See Appendix C, Table C-2. Relying upon SNL Kagan data, I have determined that that MLB, NBA, NFL and NHL programming accounted for 1.7% of the 2004 (and 1.4% of the 2005) total time that cable and satellite households spent viewing the programming on the Top 25 cable networks. See Appendix C, Table C-2. Also relying upon SNL Kagan data (and information for TBS supplied by Major League Baseball), I have determined that the top 25 cable networks spent approximately 20% of their 2004 programming budget (and 17% of their 2005 programming budget) in order to obtain the rights to MLB, NBA, NFL and NHL programming. In contrast, the Ford formula suggests that the comparable amounts would be 2.8% and 2.1%. See Appendix C, Table C-1. This comparative analysis is set forth in Table 3 and Figure 3.<sup>6</sup>

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<sup>5</sup> Homonoff Written Direct Testimony (PS Ex. 7) at 18-21, HBH-5 and HBH-6.

<sup>6</sup> Mr. Homonoff's "Top 25" networks do not include regional sports networks (RSNs) that collectively reach a very high percentage of cable subscribers and would certainly be considered among the "Top 25" cable networks carried by any individual cable system. SNL Kagan reported that Fox Sports Net, which represents a collection of several RSNs owned by the same company, had programming expenditures of nearly \$2.4 billion in 2004-05, second only to ESPN and over \$1 billion more than any other cable network (SNL Kagan, *Cable Program Investor*, April 17, 2007). Most of these expenditures were used to acquire and/or produce JSC programming. Therefore, by excluding RSNs, the ratios presented in Table 3 and Figure 3 understate the true value of JSC programming in the cable network marketplace. See Appendix D, Table D-1 for details on the reach and license fees associated with RSNs.

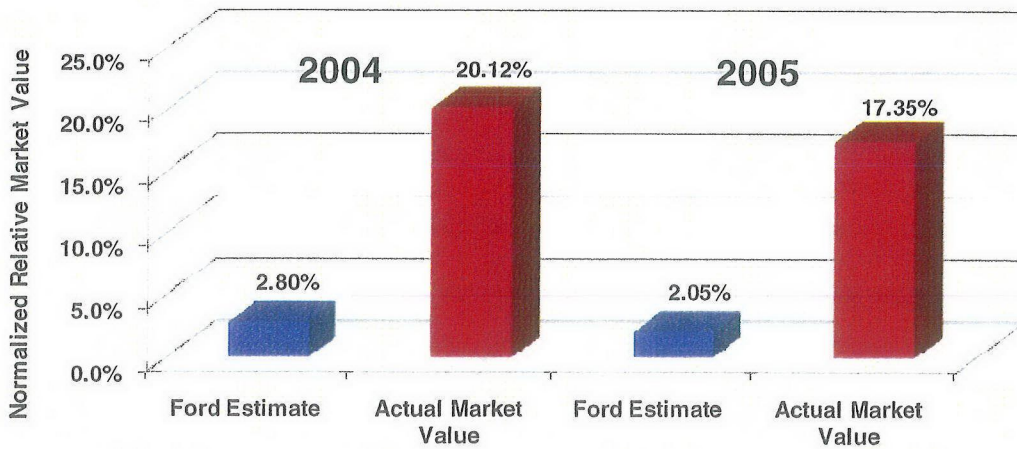
**Table 3. JSC on Top 25 Valuation Comparison**

	Share of Time (%)	Share of Viewing (%)	Estimated Share of Market Value: Ford Analysis (%)	Actual Share of Market Value (%)
<b>2004</b>				
JSC (MLB, NBA, NFL, NHL)*	0.72%	1.71%	2.80%	20.12%
Program Suppliers/ Other	<u>99.28%</u>	<u>98.29%</u>	<u>97.20%</u>	<u>79.88%</u>
Total	100.00%	100.00%	100.00%	100.00%
<b>2005</b>				
JSC (MLB, NBA, NFL, NHL)*	0.55%	1.41%	2.05%	17.35%
Program Suppliers/ Other	<u>99.45%</u>	<u>98.59%</u>	<u>97.95%</u>	<u>82.65%</u>
Total	100.00%	100.00%	100.00%	100.00%

\* Actual prices for JSC programming exclude production costs and therefore should be viewed as conservative.

Sources: Testimony of George S. Ford; Testimony of Howard Homonoff; SNL Kagan, *Cable Program Investor*, April 17, 2007; SNL Kagan, *Media Sports Business*, various issues; Major League Baseball, National Basketball Association and National Football League.

**Figure 3. JSC on Top 25 Relative Value Comparison, 2004-05**



Sources: Testimony of George S. Ford; Testimony of Howard Homonoff; SNL Kagan, *Cable Program Investor*, April 17, 2007; SNL Kagan, *Media Sports Business*, various issues; Major League Baseball; National Basketball Association and National Football League.

### **III. Homonoff Analysis**

13. Howard Homonoff concluded that “the relative program value seen in the cable network marketplace is a very helpful guidepost for a hypothetical relative program value in the broadcast distant signal marketplace.”<sup>7</sup> I agree that cable network data can provide useful information about the cable distant signal marketplace, but the cable operator surveys I presented earlier in this proceeding are the most relevant and direct measure of relative value of distant signal programs. Moreover, an examination of the cable network marketplace does not support Mr. Homonoff’s suggestion that the Program Suppliers’ programming on distant signals in 2004 and 2005 was substantially more valuable than the JSC programming on distant signals during those years.

#### **a. Time-Based Analysis**

14. Mr. Homonoff attempted to show that relative value in the distant signal marketplace by comparing the amount of time that Program Suppliers’ programming occupied on the top 25 most widely carried cable networks in 2004-05 (approximately 89-90%) with the amount of time occupied by other programming on those networks in 2004-05, including “Sports” programming.<sup>8</sup> However, the data presented in Tables 1 through 3 above demonstrate that the relative amount of time occupied by programming does not equate to the relative marketplace value of that programming.

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<sup>7</sup> Homonoff Written Direct Testimony (P.S. Ex. 7) at 14.

<sup>8</sup> Homonoff Written Direct Testimony (P.S. Ex. 7) at 18-21, HBH-5 and HBH-6.

15. Furthermore, as shown in Appendix C, the top 25 cable networks examined by Mr. Homonoff spent: (1) approximately \$400,000 per hour for each hour of the JSC programming that they televised in 2004 and 2005; and (2) \$32,000 per hour for each hour of the Program Suppliers' programming that they televised in 2004 and 2005.<sup>9</sup> In other words, each hour of that JSC programming on the top 25 cable networks cost approximately twelve times more on average than each hour of Program Suppliers' programming on those networks. Applying these same per-hour valuations to the relative amounts of JSC and Program Suppliers' programming on distant signals during 2004-05 leads to the conclusion that these two categories had approximately the same value -- notwithstanding that Program Suppliers programming occupied substantially more telecast time than did JSC programming. This comparative analysis is reflected in Table 4 and Figure 4 below.

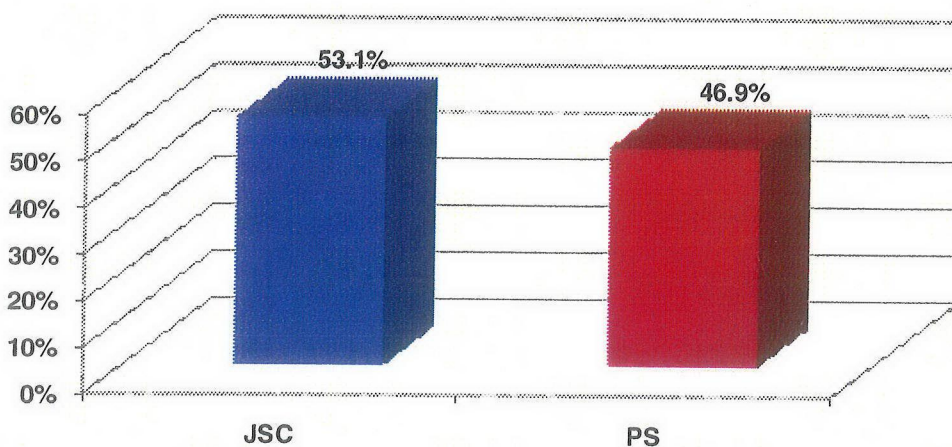
**Table 4. Comparison of Distant Signal Relative Market Value: 2004-05  
(Expenditures Per Programming Hour Method)**

	2004-05	
	JSC	PS
1. Percent of Distant Signal Programming Hours	4.6%	50.1%
2. Cable Network Expenditures Per Programming Hour	\$396,703	\$32,153
3. Time-Adjusted Expenditures (1*2)	\$18,248	\$16,109
4. Share of Relative Value	53.1%	46.9%

Sources: Appendix C, Table C-5; and SP Exhibit 16.

<sup>9</sup> See Appendix C, Table C-5. I believe that the value per hour for JSC programming is understated in that production costs were not accounted for, and rights fees for NCAA and MLS programming were not publicly available. In addition, the PS value per hour is overstated in that total non-JSC expenditures were "credited" to PS for purposes of this analysis.

**Figure 4. Share of Relative Value: 2004-05  
(Expenditures Per Programming Hour Method)**



Sources: Appendix C, Table C-5; and SP Exhibit 16.

**b. Viewing-Based Analysis**

16. As shown in Appendix C, the top 25 cable networks that Mr. Homonoff analyzed spent nearly \$2.9 billion in 2004 and 2005 to acquire the rights to televise JSC (MLB, NBA, NFL and NHL) programming; those license fees amounted to \$0.77 for each hour (or \$0.013 per each minute) that households spent viewing the JSC programming on the top 25 cable networks. In contrast, the top 25 cable networks spent approximately \$12.6 billion in 2004 and 2005 to acquire the rights to televise Program Suppliers' programming; those license fees amounted to approximately \$0.056 for each hour (or \$0.001 per each minute) that households spent viewing the Program Suppliers programming on the top 25 cable networks.<sup>10</sup> In other words, each

<sup>10</sup> As noted in Footnote 7, the Program Suppliers total is overstated (and the JSC total understated) in this analysis.

viewing minute of JSC programming on Mr. Homonoff's top 25 cable networks cost on average 13 times more than each viewing minute of Program Suppliers' programming on those networks in 2004 and 2005.

17. Applying these same per-viewing minute valuations to the viewing minutes attributed to JSC and Program Suppliers' programming on distant signals in 2004 and 2005 leads to the conclusion that the JSC programming on distant signals in 2004-05 had approximately the same value as the Program Suppliers programming on distant signals during those years -- notwithstanding that cable subscribers spent substantially more time viewing Program Suppliers programming than JSC programming on distant signals (according to the viewing study presented by Program Suppliers' witness Paul Lindstrom<sup>11</sup>). This comparative analysis is reflected in Table 5 and Figure 5 below.

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<sup>11</sup> Program Suppliers witnesses have acknowledged that the viewing percentages presented by Mr. Lindstrom cannot be used as a measure of relative value of distant signal programming. (Ford Written Direct Testimony (PS Ex. 11) at 7-8). Nonetheless, I use the Lindstrom numbers here in order to demonstrate how the Program Suppliers witnesses' analytical approach and data together produce counterintuitive results.

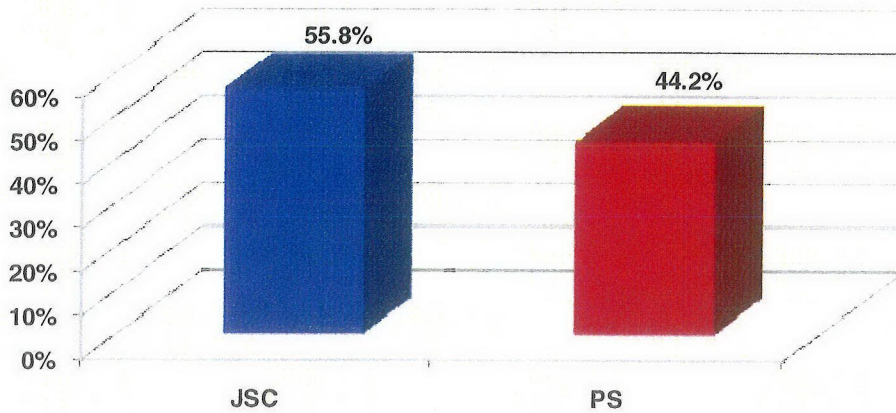
**Table 5. Comparison of Distant Signal Relative Market Value: 2004-05  
(Expenditures Per Viewing Minute Method)**

	2004-05	
	JSC	PS
1. Number of Distant Signal Viewing Minutes	838,907	8,633,838
2. Cable Network Expenditures Per Viewing Minute	\$0.013	\$0.001
3. Projected Distant Signal Market Value (1*2)	\$10,906	\$8,634
4. Share of Relative Value	55.8%	44.2%

\*Note that the number of viewing minutes reflected in the Testimony of Mr. Lindstrom is attributable to only a small sample of households in each year. As such, the number of viewing minutes (and resulting estimated programming values) would be far larger if applied to viewing minutes across all households. For example, the number of PS viewing minutes on the Top 25 cable networks in 2005 was approximately 7 trillion, compared with less than 6 million in Mr. Lindstrom's Nielsen sample.

Sources: Appendix C, Table C-5; and Testimony of Paul Lindstrom at PL-3.

**Figure 5: Share of Relative Value: 2004-05  
(Expenditures Per Viewing Minute Method)**



Sources: Appendix C, Table C-5; and Testimony of Paul Lindstrom at PL-3.



#### IV. Mansell Analysis

##### a. Other Sports Programming

18. Mr. Mansell noted that there are sports in addition to those represented by the JSC members.<sup>12</sup> Mr. Mansell, however did not show whether or to what extent any of these other sports (with the exception of NASCAR, discussed below) appeared on any distant signals during the years 2004-05. Mr. Homonoff testified concerning the non-JSC sports on cable networks but did not provide any information concerning non-JSC sports on distant signals.<sup>13</sup> Two points should be noted in response.

27. *First*, WGN was the most widely carried distant signal in 2004-05.<sup>14</sup> In 2004-05 WGN televised more than 100 games of the Chicago Cubs, White Sox and Bulls -- more JSC sports than any other distant signal.<sup>15</sup>

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<sup>12</sup> Mansell Written Direct Testimony (PS Ex. 6) at 3.

<sup>13</sup> Homonoff Written Direct Testimony (PS Ex. 7) at 16.

<sup>14</sup> In 2004-05, nearly half of the Form 3 cable systems that carried a distant commercial signal carried WGN as their only distant signal, while approximately 70% of all Form 3 cable systems carried WGN as one of their distant signals. Source: Cable Data Corporation.

<sup>15</sup> 2004 and 2005 were especially compelling years for the sports teams shown on WGN. During that time, the Cubs, White Sox and Bulls all were in their league playoffs or in contention for the playoffs and the White Sox won the World Series in 2005.

28. *Second*, according to CDC, at least 90 percent of the Form 3 cable systems that carried a distant commercial signal in 2004 and 2005, carried as a distant signal one or more stations that broadcast MLB, NBA, NFL, or NHL events.

29. As to Mr. Mansell's testimony concerning NASCAR programming,<sup>16</sup> three points should be noted.

30. *First*, in 2004 and 2005 more than three-quarters of NASCAR events were distributed on broadcast and cable networks that were not subject to the Section 111 compulsory license.<sup>17</sup> The remaining NASCAR events in those years (a total of 18 in both 2004 and 2005) were distributed by FOX broadcast signals which were carried pursuant to the Section 111 cable compulsory license.

31. *Second*, based upon data provided by CDC, in 2004 and 2005, FOX broadcast signals were carried as distant signals by approximately 15-16 percent of the Form 3 cable systems that carried distant signals.

32. *Third*, in 2004-05 FOX broadcast the following JSC events in addition to NASCAR:

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<sup>16</sup> Mansell Written Direct Testimony (PS Ex. 6) at 33-34.

<sup>17</sup> Mansell Written Direct Testimony (PS Ex. 6) at 34.

**Table 6. JSC Events Carried by FOX: 2004-05**

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NFL:

- Preseason
- Regular Season NFC Package (Sunday afternoon games)
- NFC Wild Card Playoffs
- NFC Divisional Playoffs
- NFC Championship
- Super Bowl (2005)

MLB:

- Regular Season Saturday Game of the Week
- MLB All Star Game
- National League Division Series (2004)
- American League Division Series (2004)
- National League Championship Series
- American League Championship Series
- World Series

SBC Cotton Bowl

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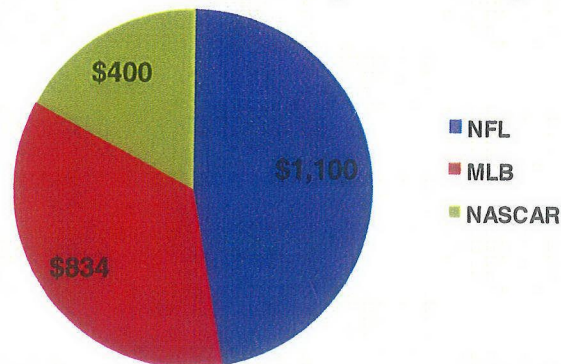
33. Finally, as shown in Table 7 and Figure 6, FOX spent nearly \$2 billion for its 2004-05 MLB and NFL telecast rights, or \$1.56 billion more than it spent for its NASCAR telecast rights in those years.

**Table 7. FOX Sports Rights Fees: 2004-05  
(Millions)**

	2004	2005
NFL	\$550	\$550
MLB	417	417
NASCAR	<u>200</u>	<u>200</u>
Total	\$1,167	\$1,167

Source: Kagan Research, Media Sports Business, various issues.

**Figure 6. FOX Sports Rights Fees: 2004-05 (millions)**



Source: Kagan Research, Media Sports Business, various issues.

**b. Regional Sports Networks**

34. I agree with Mr. Mansell that there were more telecasts of JSC events on regional sports networks (“RSNs”) in 2004-05 than in 1998-99 and 1990-92 and that RSNs substantially increased their reach during this period. However, I believe that the growth in popularity of RSNs helps corroborate the high relative value of distant signal JSC programming compared to the Program Suppliers’ programming on distant signals, as reflected in the above analyses.

35. *First*, as Table D-1 in Appendix D shows, the average license fee charged for RSNs is very high in comparison with other cable networks (i.e., typically second only to ESPN). The ability of RSNs to command these high fees is based principally on the strong regional appeal of the JSC sports shown on these networks.

36. *Second*, Table D-1 in Appendix D also summarizes the geographic areas served by regional sports networks (RSNs). The distant signal carriage of the U.S. stations that feature JSC sports (other than WGN) occurs primarily in the same states reflected in these RSN coverage areas. See Table D-2. Since the RSN coverage areas are defined based on territorial considerations for individual sports franchises and the perceived regional appeal of those franchises, it is therefore reasonable to conclude that the JSC sports on distant signals hold a similarly strong regional appeal.

APPENDIX A

**Table A-1. Actual MLB on TBS Share of Market Value**

	Actual Market Price (Mil.)*	Actual Market Value %
<b>2004</b>		
JSC (Braves) (1)	\$85.5	24.08%
Program Suppliers/ Other (2)	<u>\$269.6</u>	<u>75.92%</u>
Total (3)	\$355.1	100.00%
<b>2005</b>		
JSC (Braves) (1)	\$89.7	24.65%
Program Suppliers/ Other (2)	<u>\$274.2</u>	<u>75.35%</u>
Total (3)	\$363.9	100.00%

\*Actual prices for JSC programming exclude production costs and therefore should be viewed as conservative.

(1) Major League Baseball.

(2) Total Expenditures less JSC Expenditures. Note that a small percentage of these expenditures could potentially be attributable to other categories of programming.

(3) SNL Kagan, *Cable Program Investor*, April 17, 2007.

**Table A-2. Estimated MLB on TBS Share of Market Value (Ford Estimation Methodology)**

	Telecast Hours (1)	Share of Time (2)	HHVH (000s) (3)	Share of Viewing (4)	Relative CPM (5)	Relative Market Value % (6)	Normal- ization Factor (7)	Normalized Relative Market Value % (8)
<b>2004</b>								
JSC (Braves)	234	2.67%	174,096	2.60%	2.39	6.23%	1.46	<b>4.25%</b>
Program Suppliers/ Other*	<u>8,526</u>	<u>97.33%</u>	<u>6,509,784</u>	<u>97.40%</u>	1.44	<u>140.25%</u>	1.46	<u>95.75%</u>
Total	8,760	100.00%	6,683,880	100.00%		146.47%		100.00%
<b>2005</b>								
JSC (Braves)	216	2.47%	167,184	2.42%	2.05	4.97%	1.42	<b>3.51%</b>
Program Supplier/ Other*	<u>8,544</u>	<u>97.53%</u>	<u>6,731,316</u>	<u>97.58%</u>	1.40	<u>136.61%</u>	1.42	<u>96.49%</u>
Total	8,760	100.00%	6,898,500	100.00%		141.58%		100.00%

\*Based on Homonoff's testimony, non-JSC programming on TBS is almost exclusively attributable to Program Suppliers.

(1) Major League Baseball (number of telecasts at 3 hours per telecast); SNL Kagan, *Economics of Basic Cable Networks*, 13th Edition.

(2) Percentage distribution of Telecast Hours.

(3) See Table G-4. Household Viewing Hours, calculated as Telecast Hours x Avg. HH Delivered (000s).

(4) Percentage distribution of HHVH.

(5) Ford Testimony at 39.

(6) Share of Viewing x Relative CPM.

(7) Factor required to reduce total relative market value percentage to 100%.

(8) Relative Market Value %/ Normalization Factor.

APPENDIX B

Table B-1. Actual NBA on TNT Share of Market Value

	Actual Market Price (Mil.)*	Actual Market Value %
<b>2004</b>		
JSC(NBA) (1)	\$298.7	46.15%
Program Suppliers/ Other (2)	<u>\$348.5</u>	<u>53.85%</u>
Total (3)	\$647.2	100.00%
<b>2005</b>		
JSC(NBA) (1)	\$307.7	45.06%
Program Suppliers (2)	<u>\$375.1</u>	<u>54.94%</u>
Total (3)	\$682.8	100.00%

\* Actual prices for JSC programming exclude production costs and therefore should be viewed as conservative.

(1) Kagan World Media, *Media Sports Business*, February 20, 2002.

(2) Total Expenditures less JSC Expenditures. Note that a small percentage of these expenditures could potentially be attributable to other categories of programming.

(3) SNL Kagan, *Cable Program Investor*, April 17, 2007.



**Table B-2. Estimated NBA on TNT Share of Market Value (Ford Estimation Methodology)**

	Telecast Hours (1)	Share of Hours (2)	HHVH (000s) (3)	Relative Share of Viewership (4)	Relative Price of Viewership (5)	Relative Market Value % (6)	Normal- ization Factor (7)	Normalized Relative Market Value (8)
<b>2004</b>								
JSC (NBA)	240	2.74%	492,895	5.37%	2.39	12.83%	1.49	<b>8.60%</b>
Program Suppliers/ Other*	<u>8,520</u>	<u>97.26%</u>	<u>8,690,213</u>	<u>94.63%</u>	1.44	<u>136.27%</u>	1.49	<u>91.40%</u>
Total	8,760	100.00%	9,183,108	100.00%		149.10%		100.00%
<b>2005</b>								
JSC (NBA)	245	2.80%	459,958	4.86%	2.05	9.96%	1.43	<b>6.96%</b>
Program Suppliers	<u>8,515</u>	<u>97.20%</u>	<u>9,007,850</u>	<u>95.14%</u>	1.40	<u>133.20%</u>	1.43	<u>93.04%</u>
Total	8,760	100.00%	9,467,808	100.00%		143.16%		100.00%

\* Based on Hornonoff's testimony, non-JSC programming on TNT is almost exclusively attributable to Program Suppliers.

(1) National Basketball Association (number of telecasts at 2.5 hours per telecast); SNL Kagan, *Economics of Basic Cable Networks*, 13th Edition.

(2) Percentage distribution of Telecast Hours.

(3) See Table C-4. Household Viewing Hours, calculated as Telecast Hours x Avg. HH Delivered (000s).

(4) Percentage distribution of HHVH.

(5) Ford Testimony at 39.

(6) Share of Viewing x Relative CPM.

(7) Factor required to reduce total relative market value percentage to 100%.

(8) Relative Market Value % / Normalization Factor.

APPENDIX C

Table C-1. Actual JSC on Top 25 Share of Market Value

	Actual Market Price (Mil.)*	Actual Market Value %
<b>2004</b>		
JSC (MLB, NBA, NFL, NHL) (1)	\$1,472.4	20.12%
Program Suppliers/ Other (2)	<u>\$5,844.2</u>	<u>79.88%</u>
Total (3)	\$7,316.6	100.00%
<b>2005</b>		
JSC (MLB, NBA, NFL, NHL) (1)	\$1,415.6	17.35%
Program Suppliers/ Other (2)	<u>\$6,741.3</u>	<u>82.65%</u>
Total (3)	\$8,156.9	100.00%

\* Actual prices for JSC programming exclude production costs and therefore should be viewed as conservative.

(1) See Table C-3. Major League Baseball; and SNL Kagan, *Media Sports Business*, various issues.

(2) See Table C-3. Total Expenditures less JSC Expenditures. Note that a small percentage of these expenditures could potentially be attributable to other categories of programming.

(3) See Table C-3. SNL Kagan, *Cable Program Investor*, April 17, 2007.

**Table C-2. Top 25 Cable Networks Valuation Comparison**

	Telecast Hours (1)	Share of Hours (2)	HHVH (000s) (3)	Share of Viewership (4)	Relative CPM (5)	Relative Market Value % (6)	Normal- ization Factor (7)	Normalized Relative Market Value (8)
<b>2004</b>								
JSC (MLB, NBA, NFL, NHL)	1,578	0.72%	2,025,882	1.71%	2.39	4.08%	1.46	<b>2.80%</b>
Program Suppliers/ Other	<u>217,422</u>	<u>99.28%</u>	<u>116,730,810</u>	<u>98.29%</u>	1.44	<u>141.54%</u>	1.46	<u>97.20%</u>
Total	219,000	100.00%	118,756,692	100.00%		145.62%		100.00%
<b>2005</b>								
JSC (MLB, NBA, NFL, NHL)	1,210	0.55%	1,744,159	1.41%	2.05	2.89%	1.41	<b>2.05%</b>
Program Suppliers/ Other	<u>217,790</u>	<u>99.45%</u>	<u>121,979,453</u>	<u>98.59%</u>	1.40	<u>138.03%</u>	1.41	<u>97.95%</u>
Total	219,000	100.00%	123,723,612	100.00%		140.92%		100.00%

(1) Major League Baseball and National Football League (number of telecasts at 3 hours per telecast); National Basketball Association and National Hockey League (number of telecasts at 2.5 hours per telecast); SNL Kagan, *Media Sports Business*, various issues; SNL Kagan, *Economics of Basic Cable Networks*, 13th Edition.

(2) Percentage distribution of Telecast Hours.

(3) See Table C-4. Household Viewing Hours, calculated as Telecast Hours x Avg. HH Delivered (000s).

(4) Percentage distribution of HHVH.

(5) Ford Testimony at 39. All Other category based on Ford relative CPM for Program Suppliers.

(6) Share of Viewing x Relative CPM.

(7) Factor required to reduce total relative market value percentage to 100%.

(8) Relative Market Value %/Normalization Factor.

**Table C-3. Top 25 Cable Network Programming Expenditures  
2004-2005 (in Millions)**

	2004	2005	Two Year Total
<b>JSC Programming: (1)</b>			
ESP/ESPN2:			
NFL	\$600.0	\$600.0	\$1,200.0
NBA	200.0	200.0	400.0
MLB	200.0	200.0	400.0
NHL	70.0	0.0	70.0
MLS*	NA	NA	NA
NCAA Football/Basketball*	NA	NA	NA
NCAA Other	18.2	18.2	36.4
TNT:			
NBA	298.7	307.7	606.4
TBS:			
MLB	85.5	89.7	175.2
NCAA Football*	NA	NA	NA
<b>JSC TOTAL**</b>	<b>\$1,472.4</b>	<b>\$1,415.6</b>	<b>\$2,888.0</b>
<b>Top 25 Cable Networks Excluding JSC Programming: (2)</b>			
	\$143.6	\$145.6	\$289.2
ESPN (excluding JSC Exp.)	1,210.5	1,648.2	2,858.7
CNN/HN	261.8	268.3	530.1
TNT (excluding JSC Exp.)	348.5	375.1	723.6
USA	453.5	476.2	929.7
Nickelodeon/Nick At Nite	199.8	224.8	424.6
TBS (excluding JSC exp.)	269.6	274.2	543.8
A&E	222.0	256.0	478.0
C-SPAN	26.3	29.3	55.6
Lifetime Television	316.1	322.4	638.5
Spike TV	205.3	231.0	436.3
The Weather Channel	112.5	119.5	232.0
TLC	118.9	121.7	240.6
ESPN2 (excluding JSC exp.)	256.7	285.0	541.7
ABC Family Channel	171.7	202.7	374.4
MTV	335.3	363.8	699.1
HGTV	137.7	148.7	286.4
History	157.5	173.3	330.8
Cartoon Network	107.1	114.0	221.1
CNBC	103.5	121.1	224.6
VH-1	155.0	180.5	335.5
FOX News	184.4	221.3	405.7
Comedy Central	185.7	197.3	383.0
Animal Planet	50.7	NA	50.7
AMC	110.5	NA	110.5
Food Network	NA	124.7	124.7
FX	NA	116.6	116.6
<b>NON-JSC TOTAL</b>	<b>\$5,844.2</b>	<b>\$6,741.3</b>	<b>\$12,585.5</b>
<b>TOTAL TOP 25 EXPENDITURES</b>	<b>\$7,316.6</b>	<b>\$8,156.9</b>	<b>\$15,473.5</b>
<b>PERCENT OF TOP 25 EXPENDITURES (3)</b>			
JSC	20.12%	17.35%	18.66%
PS/OTHER	79.88%	82.65%	81.34%

\*Data on rights fees paid for this programming was not publicly available.

\*\*Excludes production costs associated with JSC telecasts.

(1) SNL Kagan, *Media Sports Business*, various issues; and Major League Baseball (for MLB on TBS only).

(2) Total Expenditures are from SNL Kagan, *Cable Program Investor*, April 17, 2007, less JSC amounts associated with each network.

(3) Proportion of JSC and PS/Other Expenditures to Total Expenditures.

Table C-4. Top 25 Cable Network Viewing Hours  
2004-2005 (in Millions)

	2004			2005			HHVH (000) 2004-05				
	Total Hours (1)	Avg. HH Del. (000) (2)	Total HHVH (000) (3)	Total Hours (1)	Avg. HH Del. (000) (2)	Total HHVH (000) (3)					
<b>JSC Programming:</b>											
ESPN/ESPN2:											
NFL	69	6,451.1	445,125	60	6,272.1	376,323	821,448				
NBA:	225	1,540.8	346,870	213	1,355.0	287,945	634,615				
MLB:											
ESPN	287	1,164.7	334,278	329	1,101.6	362,410	696,698				
ESPN2	198	522.3	103,422	147	814.6	90,339	193,761				
NHL											
ESPN	125	557.8	69,724	NA	NA	NA	69,724				
ESPN2	200	298.4	59,672	NA	NA	NA	59,672				
MLS**	NA	NA	NA	NA	NA	NA	NA				
NCAA Football/Basketball**	NA	NA	NA	NA	NA	NA	NA				
NCAA Other**	NA	NA	NA	NA	NA	NA	NA				
TNT:											
NBA	240	2,053.7	492,895	245	1,877.4	459,958	952,853				
TBS:											
MLB	234	744.0	174,096	216	774.0	167,184	341,280				
NCAA Football**	NA	NA	NA	NA	NA	NA	NA				
<b>JSC TOTAL</b>	<b>1,578</b>		<b>2,025,882</b>	<b>1,210</b>		<b>1,744,163</b>	<b>3,770,041</b>				
<b>Top 25 Cable Networks Excluding JSC Programming:</b>											
			PS Hours (4)	PS HHVH (4)		PS Hours (4)	PS HHVH (4)				
Discovery Channel	8,760	463.3	4,058,508	8,585	3,977,338	8,760	459.0	4,020,840	8,437	3,900,215	8,079,348
ESPN (excluding JSC)	8,054	583.6	4,700,559	8,054	4,700,559	8,159	577.0	4,707,618	8,159	4,707,618	9,408,177
CNN/WN	8,760	417.8	3,659,928	4,117	1,720,166	8,760	452.3	3,982,148	5,344	2,416,910	7,622,076
TNT (excluding JSC)	8,520	1,020.0	8,690,213	8,520	8,690,213	8,515	1,057.9	9,007,850	8,515	9,007,850	17,698,063
USA	8,760	757.8	6,638,328	8,760	6,638,328	8,760	680.8	5,963,808	8,672	5,904,170	12,802,136
Nickelodeon/Nick At Nite	8,760	1,470.1	12,878,076	8,760	12,878,076	8,760	1,519.4	13,309,944	8,760	13,309,944	26,188,020
TBS (excluding JSC)	8,526	763.5	6,509,784	8,441	6,444,686	8,544	787.8	6,731,316	8,459	6,664,003	13,241,100
A&E	8,760	522.3	4,575,348	8,672	4,628,595	8,760	601.5	4,393,140	8,672	4,349,209	8,968,498
C-SPAN	8,760	NA	NA	NA	NA	8,760	NA	NA	NA	NA	NA
Lifetime Television	8,760	873.8	7,654,488	8,585	7,501,398	8,760	893.0	7,822,680	8,672	7,744,453	15,477,168
Spike TV	8,760	408.8	3,589,848	8,760	3,589,848	8,760	545.3	4,778,828	8,672	4,729,060	8,366,676
The Weather Channel	8,760	292.8	2,564,328	701	205,194	8,760	290.3	2,543,028	1,051	305,163	5,107,956
TLC	8,760	465.5	4,077,780	8,672	4,037,002	8,760	348.3	3,051,108	8,410	2,929,064	7,128,888
ESPN2 (excluding JSC)	8,382	218.4	1,826,302	8,382	1,826,302	8,613	229.2	1,974,393	8,613	1,974,393	3,800,695
ABC Family Channel	8,760	498.3	4,365,108	8,410	4,190,504	8,760	523.8	4,598,488	8,585	4,496,716	8,953,596
MTV	8,760	503.0	4,406,280	8,760	4,406,280	8,760	567.8	4,973,928	8,760	4,973,928	9,980,208
HGTV	8,760	442.5	3,876,300	8,672	3,837,537	8,760	460.0	4,029,600	8,672	3,989,304	7,905,900
History	8,760	501.3	4,391,388	8,672	4,347,474	8,760	506.5	4,426,940	8,585	4,348,201	8,828,328
Cartoon Network	8,760	990.5	8,676,780	8,760	8,676,780	8,760	1,026.8	8,994,768	8,760	8,994,768	17,671,548
CNBC	8,760	129.8	1,137,048	7,884	1,023,343	8,760	132.0	1,156,320	8,147	1,076,378	2,293,368
VH-1	8,760	245.0	2,146,200	8,497	2,081,814	8,760	296.0	2,592,960	8,760	2,592,960	4,739,160
FOX News	8,760	762.5	6,591,600	8,570	4,943,825	8,760	805.5	7,056,180	6,482	5,221,573	13,648,080
Comedy Central	8,760	403.8	3,537,288	8,672	3,501,915	8,760	431.3	3,778,188	8,672	3,740,406	7,315,476
Animal Planet	8,760	301.5	2,641,140	8,760	2,641,140	NA	NA	NA	NA	NA	2,641,140
AMC	8,760	403.8	3,537,288	8,497	3,431,169	NA	NA	NA	NA	NA	3,537,288
Food Network	NA	NA	NA	NA	NA	8,760	428.0	3,749,280	8,672	3,711,787	3,749,280
FX Network	NA	NA	NA	NA	NA	8,760	497.5	4,358,100	8,585	4,270,938	4,358,100
<b>NON-JSC TOTAL</b>	<b>217,422</b>		<b>116,730,810</b>	<b>191,144</b>	<b>109,820,587</b>	<b>217,791</b>		<b>121,879,453</b>	<b>193,177</b>	<b>115,358,013</b>	<b>238,710,263</b>
<b>TOTAL TOP 25 VIEWING HOURS</b>	<b>219,000</b>		<b>118,756,692</b>			<b>219,000</b>		<b>123,723,612</b>			<b>242,480,304</b>
<b>PERCENT OF TOP 25 VIEWING HOURS</b>											
JSC			1.71%					1.41%			1.55%
PS					92.48%					93.24%	92.86%

\*Based on full season results (i.e., 2003-04 applied to 2004 for NBA and NHL, and 2004-05 applied to 2005).

\*\*Data on rights fees paid for this programming was not publicly available.

(1) JSC telecasts from: SNL Kagan, Media Sports Business, various issues; MLB; NBA; and NFL. Total Hours is number of telecasts x 2.5 hours (NBA, NHL) or 3 hours (MLB, NFL) per telecast. Top 25 network hours based on 24 hours per day, less JSC hours.

(2) JSC Data: SNL Kagan, Media Sports Business, various issues; and Major League Baseball. Top 25 Data: SNL Kagan, Economics of Basic Cable Networks, 13th Edition, after removing JSC.

(3) Household Viewing Hours, calculated as Total Hours x Avg. HH Delivered (000s).

(4) Allocated based on programming hours distribution in Testimony of Howard B. Homonoff at BH-5 and BH-6.

Table C-5. Cable Network Programming Expenditure Ratios: 2004-05

	2004		2005		TOTAL	
	JSC	PS	JSC	PS	JSC	PS
Top 25 Expenditures (Mil.) (1)	\$1,472.4	\$5,844.2	\$1,415.6	\$6,741.3	\$2,888.0	\$12,585.5
Top 25 Programming Hours (2)	3,900	197,080	3,380	194,350	7,280	391,430
Top 25 Viewing Hours (000s) (3)	2,025,882	109,820,587	1,744,159	115,358,013	3,770,041	225,178,600
Expenditures Per Programming Hour (4)	\$377,538	\$29,654	\$418,817	\$34,686	\$396,703	\$32,153
Expenditures Per Viewing Hour (5)	\$0.727	\$0.053	\$0.812	\$0.058	\$0.766	\$0.056
Expenditures Per Viewing Minute (6)	\$0.012	\$0.001	\$0.014	\$0.001	\$0.013	\$0.001

(1) See Table C-3. JSC Expenditures include only MLB, NBA, NFL and NHL, and excludes production costs. PS Expenditures reflect all non-JSC expenditures.

(2) Homonoff Testimony at HBH-5 and HBH-6.

(3) See Table C-4.

(4) Top 25 Expenditures divided by Top 25 Programming Hours.

(5) Top 25 Expenditures divided by Top 25 Viewing Hours.

(6) Expenditures Per Viewing Hour divided by 60.

## APPENDIX D

Table D-1. FSN Coverage Areas and Average License Fees per Unduplicated Subscriber, 2004 and 2005

Market/Region	Overlapping FSNs	2004			2005		
		Monthly Per Sub Fee	Un-duplicated Subscribers	Revenue (Millions)	Monthly Per Sub Fee	Un-duplicated Subscribers	Revenue (Millions)
NY Area (NY, NJ, CT, portions of PA)	YES, MSGN, FSNY, Empire	\$5.05	8,179	\$495,560	\$5.21	8,715	\$544,569
Chicago Area (IL, portions of IA, IN, WI)	FSChicago, Comcast Chicago, ChicagoLand	\$2.34	3,607	\$101,267	\$2.27	4,763	\$129,902
New England Region (MA, CT, RI, ME, NH, VT, portions of NY)	FSNew England, NESN	\$2.79	3,800	\$127,372	\$3.09	3,950	\$146,430
Southern CA (Southern CA, NV, HI)	FSWest, FSWest 2, Cox San Diego	\$3.22	5,775	\$223,426	\$3.23	7,155	\$276,932
Bay Area (Northern CA, portions of NV, OR)	FSBay Area, CSN West	\$1.50	3,812	\$68,787	\$2.08	3,705	\$92,268
Southeast Region (FL, GA, TN, NC, SC, MS, AL, KY)	Sunspots, FSSouth, FSFL, Comcast SSE, Turner South, C-SET	\$1.71	16,736	\$344,166	\$1.94	17,340	\$404,170
Southwest Region (TX, OK, LA, AR, portions of NM)	FSSW, Cox NO	\$1.69	8,100	\$163,829	\$1.80	8,034	\$173,487
Rocky Mountain Region (CO, UT, MT, WY, portions of NM)	FSRM, Altitude	\$1.92	2,800	\$64,392	\$1.93	2,834	\$65,528
Midwest Region (MO, IN, KS, NE, portions of IA, OK, IL)	FSMW, Fbyals TV	\$1.52	4,166	\$76,022	\$1.60	4,334	\$83,250
Ohio (OH, portions of WV)	FSOhio	\$1.55	4,773	\$88,080	\$1.67	5,021	\$98,136
Michigan (MI, portions of OH, IN)	FSDetroit	\$1.75	3,600	\$73,668	\$1.82	3,181	\$68,589
Northwest Region (WA, OR, ID, AK, portions of MT, CA)	FSNorthwest	\$1.77	2,409	\$50,859	\$1.85	3,482	\$76,390
Pittsburgh Area (PA, portions of OH, WV)	FSRttsburgh	\$1.45	2,350	\$40,533	\$1.50	3,030	\$53,460
Arizona (AZ, portions of NM, CA, TX)	FSArizona	\$1.50	1,800	\$31,500	\$1.65	2,300	\$43,200
Minnesota (MN, ND, SD, portions of WI, IA)	FSNorth-Minnesota	\$1.85	1,662	\$36,497	\$1.93	1,681	\$38,712
Wisconsin (WI)	FSNorth-Wisconsin	\$1.60	1,360	\$25,901	\$1.60	1,500	\$29,268
Mid-Atlantic Region (VA, MD, DE, DC, portions of PA)	Comcast Mid-Atlantic	\$1.90	4,499	\$102,235	\$1.95	4,700	\$107,640
Philadelphia Area (PA, NJ, DE)	Comcast Philadelphia	\$1.88	2,945	\$65,932	\$1.94	2,983	\$69,002
	<b>Total/ Weighted Average</b>	<b>\$2.21</b>	<b>82,373</b>	<b>\$2,180,026</b>	<b>\$2.35</b>	<b>88,708</b>	<b>\$2,500,933</b>

Source: Kagan Research, *Media Sports Business*, various issues.

**Table D-2. Geographic Distribution for the Most Widely Carried U.S. Distant Signals with JSC Sports, 2004-05**

Station	Station Rank*		JSC Sports	States of Distant Signal Carriage
	2004	2005		
WGN	1	1	MLB, NBA	44 States, DC, PR, VI
WPIX	2	2	MLB	CT, FL, ME, NJ, NV, NY, OH, PA, PR, TX, VI, VT, WY
WUAB	3	3	NBA	OH, PA
KTLA	5	4	NBA	AZ, CA, NM, NV, TX
WWOR	10	5	MLB	CT, NY, PA
WKBD	14	9	MLB, NBA	MI, OH
WPSG	9	10	MLB, NBA, NHL	MD, NJ, PA
WSBK	20	11	MLB	MA, ME, NH, NY, VT
KCAL	25	16	MLB, NBA, NHL	CA
WJZ	31	19	MLB	DE, MD, PA, VA, WV
KCOP	33	23	MLB	CA
KTVU	35	26	MLB	CA
KICU	42	28	MLB	CA

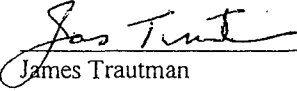
\*Among U.S. commercial stations; ranked by subscriber instances.

Source: Cable Data Corporation.



I declare under penalty of perjury that the foregoing is true and correct.

Executed on: December 11, 2009

  
\_\_\_\_\_  
James Trautman

SYS-ID	ACCT-PERIOD	RECEIPTS	CAN-FG-MIN	CAN-BASE	CAN-FG-MAX	base-min	max-base		
MEB350	20041	561,497	8,448	7,916	8,905	(532)	989	-6.72%	12.50%
				8702 (can feesgen should have been)					
				system underpaid - total roy should have been 9,790 they paid 8,905					
MES100	20041	957,278	8,371	7,322	9,152	(1,049)	1,830	-14.33%	24.99%
				8527 (can feesgen should have been)					
				system underpaid - total roy should have been 10659, they paid 9,152					



SYS-ID	ACCT-PERIOD	RECEIPTS	CAN-FG-MIN	CAN-BASE	CAN-FG-MAX
MAG100	20041	1,904,591	18,208	18,208	18,208
MAG100	20042	2,060,315	19,696	19,696	19,697
MAL500	20041	3,987,591	38,121	38,121	38,121
MAL500	20042	4,348,765	41,574	41,574	41,574
MAM350	20041	1,140,997	10,908	10,908	10,908
MAM350	20042	1,242,987	11,883	11,883	11,883
MEA400	20041	4,867,134	75,264	76,336	77,193
MEA400	20042	4,468,562	69,206	70,132	70,871
MEB050	20041	2,756,479	17,366	21,859	26,352
MEB050	20042	3,134,747	19,749	24,859	29,968
MEB350	20042	594,664	5,200	5,298	5,685
MEB550	20041	1,196,052	11,434	11,434	11,434
MEB550	20042	1,203,330	11,504	11,504	11,504
MEM100	20042	390,917	6,587	8,628	11,125
MEM400	20041	630,307	3,971	4,999	6,026
MEP280	20041	1,929,430	18,445	18,445	18,445
MEP280	20042	1,815,335	17,354	17,354	17,355
MER200	20041	578,342	7,287	8,544	9,173
MER200	20042	628,380	9,966	9,966	9,966
MES200	20041	849,689	5,479	6,645	8,123
MES200	20042	859,110	7,513	7,652	8,213
MEW400	20041	1,249,363	10,277	10,784	11,944
MIA360	20041	803,516	5,062	6,226	7,682
MIA360	20042	793,799	5,001	6,162	7,589
MIB825	20041	6,589,780	41,516	52,257	62,998
MIB825	20042	6,480,232	40,825	51,388	61,951
MIE100	20041	2,039,814	12,851	14,897	19,501
MIE100	20042	2,057,219	12,960	15,024	19,667
MIE550	20041	2,171,136	11,654	14,885	20,756
MIE550	20042	2,182,076	11,716	14,959	20,861
MII700	20041	716,652	2,603	4,562	6,851
MII700	20042	691,214	2,511	4,401	6,608
MIM250	20041	1,011,898	6,167	7,705	9,674
MIM250	20042	997,442	6,079	7,595	9,536
MNG500	20041	469,642	2,959	3,639	4,490
MNG500	20042	521,730	3,287	4,043	4,988
MNV600	20041	1,047,477	6,599	8,197	10,014
MNV600	20042	962,846	6,066	7,533	9,205
MTK200	20041	1,583,370	13,847	14,105	15,137
MTK200	20042	1,543,759	13,500	13,752	14,758
NDG550	20041	2,369,006	14,925	18,786	22,648
NDG550	20042	2,370,415	14,934	18,798	22,661
NHM300	20041	3,815,778	36,479	36,479	36,479
NHM300	20042	4,160,964	39,779	39,779	39,779
NHN100	20041	2,645,289	25,289	25,289	25,289
NHN100	20042	2,830,813	27,063	27,063	27,063
NHP600	20041	1,957,772	14,242	16,120	18,716
NHP600	20042	2,125,545	15,387	17,457	20,320
NHR200	20041	1,724,493	16,149	16,233	16,486
NHR200	20042	1,738,255	16,273	16,359	16,618
NYC210	20041	780,454	8,566	8,566	8,565
NYC210	20042	1,456,086	15,033	15,033	15,033
NYD300	20041	4,781,841	41,200	44,968	48,857
NYD500	20041	1,615,618	10,178	12,812	15,445

SYS-ID	ACCT-PERIOD	RECEIPTS	CAN-FG-MIN	CAN-BASE	CAN-FG-MAX
NYI200	20041	685,055	6,503	6,512	6,549
NYI200	20042	660,957	6,274	6,283	6,319
NYL050	20041	9,759,570	154,788	154,788	154,787
NYL050	20042	9,656,449	153,152	153,152	153,151
NYL150	20041	184,742	2,328	2,698	2,930
NYL150	20042	191,495	2,413	2,796	3,037
NYM320	20042	771,897	7,870	8,613	9,388
NYP300	20041	1,464,917	10,878	13,408	15,653
NYP300	20042	1,345,832	11,508	13,899	15,896
NYR700	20041	1,860,651	11,722	14,726	17,788
NYR700	20042	1,880,547	11,847	14,834	17,978
NYU400	20041	2,763,670	26,421	26,421	26,421
NYU400	20042	2,893,726	27,664	27,664	27,664
NYW210	20041	100,613	962	962	962
OHB340	20041	447,595	1,357	2,926	4,279
OHB340	20042	451,185	1,368	2,712	4,313
OHB620	20041	710,528	4,476	5,635	6,793
OHB620	20042	702,264	4,424	5,569	6,714
OHF400	20041	3,845,474	24,370	29,234	36,763
OHF400	20042	3,795,589	24,054	28,856	36,286
OHP680	20041	334,299	2,106	2,591	3,196
OHP680	20042	406,734	2,562	3,152	3,888
OHT250	20041	744,680	4,691	5,562	7,119
OHT250	20042	732,659	4,616	5,473	7,004
OHT350	20041	10,055,622	65,978	78,973	96,132
OHT350	20042	9,882,622	64,867	76,520	94,478
OHW325	20041	634,384	3,997	5,031	6,065
OHW325	20042	638,591	4,023	5,065	6,105
VTB600	20041	4,201,068	53,686	61,859	65,801
VTB600	20042	4,235,147	51,332	60,661	66,294
VTM300	20041	753,383	7,202	7,202	7,202
VTM300	20042	903,930	13,419	13,419	13,419
VTS500	20041	1,287,119	16,218	18,800	20,414
VTS500	20042	1,286,854	16,214	18,796	20,410
WAA100	20041	1,176,631	7,413	8,808	11,249
WAA100	20042	905,097	5,702	6,775	8,653
WAC030	20041	494,043	4,723	4,723	4,723
WAC030	20042	1,552,017	14,837	14,837	14,837
WAD700	20041	1,260,129	12,047	12,047	12,047
WAD700	20042	1,257,894	12,025	12,025	12,025
WAM450	20041	414,234	2,610	3,150	3,960
WAO050	20041	484,056	4,628	4,628	4,628
WAO050	20042	381,695	3,649	3,649	3,649
WAO200	20042	639,687	5,594	5,698	6,115
WAS050	20041	71,993,333	688,256	688,256	688,256
WAS050	20042	67,639,582	646,634	646,634	646,634
WAS075	20041	3,627,330	34,677	34,677	34,677
WAS075	20042	3,593,455	34,353	34,353	34,353
WAS375	20041	576,768	5,514	5,514	5,514
WAT165	20041	1,446,137	13,825	13,825	13,825
WAT165	20042	1,482,969	14,177	14,177	14,177
			3,253,644	3,418,469	3,610,509
			95.18%		105.62%



SYS-ID	ACCT-PERIOD	RECEIPTS	CAN-FG-MIN	CAN-BASE	CAN-FG-MAX
MAG100	20041	1,904,591	18,208	18,208	18,208
MAG100	20042	2,060,315	19,696	19,696	19,697
MAL500	20041	3,987,591	38,121	38,121	38,121
MAL500	20042	4,348,765	41,574	41,574	41,574
MAM350	20041	1,140,997	10,908	10,908	10,908
MAM350	20042	1,242,987	11,883	11,883	11,883
MEA400	20041	4,867,134	75,264	76,336	77,193
MEA400	20042	4,468,562	69,206	70,132	70,871
MEB050	20041	2,756,479	17,366	21,859	26,352
MEB050	20042	3,134,747	19,749	24,859	29,968
MEB350	20041	561,497	8,448	7,916	8,905
MEB350	20042	594,664	5,200	5,298	5,685
MEB550	20041	1,196,052	11,434	11,434	11,434
MEB550	20042	1,203,330	11,504	11,504	11,504
MEM100	20042	390,917	6,587	8,628	11,125
MEM400	20041	630,307	3,971	4,999	6,026
MEP280	20041	1,929,430	18,445	18,445	18,445
MEP280	20042	1,815,335	17,354	17,354	17,355
MER200	20041	578,342	7,287	8,544	9,173
MER200	20042	628,380	9,966	9,966	9,966
MES100	20041	957,278	8,371	7,322	9,152
MES200	20041	849,689	5,479	6,645	8,123
MES200	20042	859,110	7,513	7,652	8,213
MEW400	20041	1,249,363	10,277	10,784	11,944
MIA360	20041	803,516	5,062	6,226	7,682
MIA360	20042	793,799	5,001	6,162	7,589
MIB825	20041	6,589,780	41,516	52,257	62,998
MIB825	20042	6,480,232	40,825	51,388	61,951
MIE100	20041	2,039,814	12,851	14,897	19,501
MIE100	20042	2,057,219	12,960	15,024	19,667
MIE550	20041	2,171,136	11,654	14,885	20,756
MIE550	20042	2,182,076	11,716	14,959	20,861
MII700	20041	716,652	2,603	4,562	6,851
MII700	20042	691,214	2,511	4,401	6,608
MIM250	20041	1,011,898	6,167	7,705	9,674
MIM250	20042	997,442	6,079	7,595	9,536
MNG500	20041	469,642	2,959	3,639	4,490
MNG500	20042	521,730	3,287	4,043	4,988
MNV600	20041	1,047,477	6,599	8,197	10,014
MNV600	20042	962,846	6,066	7,533	9,205
MTK200	20041	1,583,370	13,847	14,105	15,137
MTK200	20042	1,543,759	13,500	13,752	14,758
NDG550	20041	2,369,006	14,925	18,786	22,648
NDG550	20042	2,370,415	14,934	18,798	22,661
NHM300	20041	3,815,778	36,479	36,479	36,479
NHM300	20042	4,160,964	39,779	39,779	39,779
NHN100	20041	2,645,289	25,289	25,289	25,289
NHN100	20042	2,830,813	27,063	27,063	27,063
NHP600	20041	1,957,772	14,242	16,120	18,716
NHP600	20042	2,125,545	15,387	17,457	20,320
NHR200	20041	1,724,493	16,149	16,233	16,486
NHR200	20042	1,738,255	16,273	16,359	16,618
NYC210	20041	780,454	8,566	8,566	8,565
NYC210	20042	1,456,086	15,033	15,033	15,033

SYS-ID	ACCT-PERIOD	RECEIPTS	CAN-FG-MIN	CAN-BASE	CAN-FG-MAX
NYD300	20041	4,781,841	41,200	44,968	48,857
NYD500	20041	1,615,618	10,178	12,812	15,445
NYI200	20041	685,055	6,503	6,512	6,549
NYI200	20042	660,957	6,274	6,283	6,319
NYL050	20041	9,759,570	154,788	154,788	154,787
NYL050	20042	9,656,449	153,152	153,152	153,151
NYL150	20041	184,742	2,328	2,698	2,930
NYL150	20042	191,495	2,413	2,796	3,037
NYM320	20042	771,897	7,870	8,613	9,388
NYP300	20041	1,464,917	10,878	13,408	15,653
NYP300	20042	1,345,832	11,508	13,899	15,896
NYR700	20041	1,860,651	11,722	14,726	17,788
NYR700	20042	1,880,547	11,847	14,834	17,978
NYU400	20041	2,763,670	26,421	26,421	26,421
NYU400	20042	2,893,726	27,664	27,664	27,664
NYW210	20041	100,613	962	962	962
OHB340	20041	447,595	1,357	2,926	4,279
OHB340	20042	451,185	1,368	2,712	4,313
OHB620	20041	710,528	4,476	5,635	6,793
OHB620	20042	702,264	4,424	5,569	6,714
OHF400	20041	3,845,474	24,370	29,234	36,763
OHF400	20042	3,795,589	24,054	28,856	36,286
OHP680	20041	334,299	2,106	2,591	3,196
OHP680	20042	406,734	2,562	3,152	3,888
OHT250	20041	744,680	4,691	5,562	7,119
OHT250	20042	732,659	4,616	5,473	7,004
OHT350	20041	10,055,622	65,978	78,973	96,132
OHT350	20042	9,882,622	64,867	76,520	94,478
OHW325	20041	634,384	3,997	5,031	6,065
OHW325	20042	638,591	4,023	5,065	6,105
VTB600	20041	4,201,068	53,686	61,859	65,801
VTB600	20042	4,235,147	51,332	60,661	66,294
VTM300	20041	753,383	7,202	7,202	7,202
VTM300	20042	903,930	13,419	13,419	13,419
VTS500	20041	1,287,119	16,218	18,800	20,414
VTS500	20042	1,286,854	16,214	18,796	20,410
WAA100	20041	1,176,631	7,413	8,808	11,249
WAA100	20042	905,097	5,702	6,775	8,653
WAC030	20041	494,043	4,723	4,723	4,723
WAC030	20042	1,552,017	14,837	14,837	14,837
WAD700	20041	1,260,129	12,047	12,047	12,047
WAD700	20042	1,257,894	12,025	12,025	12,025
WAM450	20041	414,234	2,610	3,150	3,960
WAO050	20041	484,056	4,628	4,628	4,628
WAO050	20042	381,695	3,649	3,649	3,649
WAO200	20042	639,687	5,594	5,698	6,115
WAS050	20041	71,993,333	688,256	688,256	688,256
WAS050	20042	67,639,582	646,634	646,634	646,634
WAS075	20041	3,627,330	34,677	34,677	34,677
WAS075	20042	3,593,455	34,353	34,353	34,353
WAS375	20041	576,768	5,514	5,514	5,514
WAT165	20041	1,446,137	13,825	13,825	13,825
WAT165	20042	1,482,969	14,177	14,177	14,177



SYS-ID	ACCT-PERIOD	RECEIPTS	CAN-FG-MIN	CAN-BASE	CAN-FG-MAX
			3,270,463	3,433,707	3,628,566
			95.25%		105.67%

SYS-ID	ACCT-PERIOD	RECEIPTS	CAN-FG-MIN	CAN-BASE	CAN-FG-MAX	base-min	max-base		
NDJ200	20051	409,637	2,581	1,958	3,916	(623)	1,958	-31.80%	100.01%
MEW400	20052	1,474,117	12,390	17,421	14,933	5,031	(2,488)	28.88%	-14.28%

haven't researched these exceptions yet



SYS-ID	ACCT-PERIOD	RECEIPTS	CAN-FG-MIN	CAN-BASE	CAN-FG-MAX
MAA200	20051	680,660	6,507	6,507	6,507
MAA200	20052	739,320	7,489	7,489	7,489
MAG100	20051	1,905,975	18,221	18,221	18,221
MAG100	20052	1,887,912	19,125	19,125	19,125
MAL500	20051	5,675,489	54,258	54,258	54,258
MAL500	20052	5,724,662	57,991	57,991	57,991
MAM350	20051	10,290,278	98,375	98,375	98,375
MAM350	20052	10,421,533	105,570	105,570	105,570
MEA400	20051	4,607,627	71,470	72,364	73,077
MEA400	20052	4,996,660	82,359	83,268	83,994
MEB050	20051	3,525,919	22,213	27,961	33,708
MEB050	20052	3,870,038	25,852	32,528	39,203
MEB550	20051	1,189,150	11,368	11,368	11,368
MEB550	20052	1,205,622	12,213	12,213	12,213
MEM100	20051	405,673	6,836	8,952	11,545
MEP280	20051	1,749,663	16,726	16,726	16,727
MEP280	20052	1,333,831	13,512	13,512	13,512
MEP500	20051	3,375,903	32,273	32,273	32,274
MEP500	20052	1,987,203	16,496	18,053	20,130
MER200	20051	643,031	10,198	10,198	10,198
MER200	20052	648,212	10,896	10,896	10,896
MES200	20052	900,134	8,342	8,498	9,118
MES200	20051	858,402	5,540	6,714	8,206
MEW400	20052	1,474,117	12,390	17,421	14,933
MIA360	20051	747,569	4,710	5,792	7,147
MIA360	20052	737,816	4,929	6,071	7,474
MIB825	20051	6,575,312	41,424	52,142	62,860
MIB825	20052	6,527,615	43,604	54,865	66,125
MIE100	20051	1,970,928	12,417	14,559	18,842
MIE100	20052	2,182,775	14,581	17,091	22,112
MIE550	20051	5,266,028	31,752	39,525	50,343
MIE550	20052	5,035,978	32,197	40,076	51,014
MII700	20051	692,224	3,794	4,755	6,618
MII700	20052	664,237	3,868	4,840	6,729
MIM250	20051	362,511	2,284	2,657	3,466
MIM250	20052	354,570	2,369	2,755	3,592
MIR240	20051	1,294,274	5,650	9,014	12,373
MIR240	20052	1,277,575	5,892	8,684	12,942
MNG500	20051	495,427	3,121	3,839	4,736
MNV600	20051	917,651	5,781	7,181	8,773
MNV600	20052	931,032	8,987	9,106	9,431
MTK200	20051	1,561,017	12,379	13,227	14,923
MTK200	20052	1,819,708	15,295	16,341	18,434
NDG550	20052	2,458,185	16,421	20,661	24,901
NDG550	20051	2,389,897	15,056	18,952	22,847
NDJ200	20051	409,637	2,581	1,958	3,916
NHM300	20051	3,904,346	37,326	37,326	37,326
NHM300	20052	3,943,509	39,948	39,948	39,948
NHN100	20051	2,530,327	24,190	24,190	24,190
NHN100	20052	2,536,331	25,693	25,693	25,693
NHP600	20051	6,222,064	53,966	56,082	59,483
NHP600	20052	6,323,180	58,139	60,408	64,054
NHR200	20051	1,785,496	16,721	16,808	17,069
NHR200	20052	1,846,011	18,309	18,407	18,700

SYS-ID	ACCT-PERIOD	RECEIPTS	CAN-FG-MIN	CAN-BASE	CAN-FG-MAX
NYD300	20051	5,129,021	44,619	48,331	52,567
NYD300	20052	5,075,808	46,904	50,767	55,172
NYL050	20051	13,067,748	162,382	162,382	162,382
NYL050	20052	11,088,060	186,390	186,390	186,390
NYL150	20051	201,951	2,545	2,950	3,203
NYP300	20051	1,412,417	12,078	14,588	16,682
NYP300	20052	1,398,485	12,705	15,336	17,530
NYU400	20051	2,788,220	26,434	26,529	26,655
NYU400	20052	2,920,051	29,491	29,509	29,580
OHF400	20051	3,535,853	22,276	26,800	33,803
OHF400	20052	3,423,049	22,866	27,499	34,675
OHT350	20051	9,878,907	64,877	76,488	94,442
OHT350	20052	9,676,773	67,466	79,420	98,026
OHW325	20051	626,133	3,945	4,965	5,986
OHW325	20052	747,325	4,992	6,282	7,570
VTB600	20051	4,413,936	55,169	64,084	69,138
VTB600	20052	4,538,636	58,205	67,158	71,864
VTM300	20051	776,345	7,422	7,422	7,422
VTM300	20052	791,330	8,016	8,016	8,016
VTS500	20051	1,297,374	16,347	20,076	20,576
VTS500	20052	1,232,394	16,465	19,130	20,717
WAA100	20051	958,042	6,036	7,171	9,159
WAA100	20052	934,929	6,245	7,418	9,471
WAC030	20051	1,555,306	14,869	14,869	14,869
WAC030	20052	1,581,489	16,020	16,020	16,020
WAD700	20051	1,239,204	11,847	11,847	11,847
WAD700	20052	1,226,513	12,425	12,425	12,425
WAO050	20051	449,786	4,300	4,300	4,300
WAO200	20051	625,768	5,472	5,574	5,982
WAS050	20051	68,967,743	659,332	659,332	659,332
WAS050	20052	68,069,507	689,544	689,544	689,544
WAS075	20051	3,608,660	34,499	34,499	34,499
WAS075	20052	3,574,771	36,212	36,212	36,212
WAT165	20051	1,540,761	14,730	14,730	14,730
WAT165	20052	1,641,443	16,628	16,628	16,628
			3,689,354	3,858,125	4,052,114
			95.63%		105.03%



SYS-ID	ACCT-PERIOD	RECEIPTS	CAN-FG-MIN	CAN-BASE	CAN-FG-MAX
MAA200	20051	680,660	6,507	6,507	6,507
MAA200	20052	739,320	7,489	7,489	7,489
MAG100	20051	1,905,975	18,221	18,221	18,221
MAG100	20052	1,887,912	19,125	19,125	19,125
MAL500	20051	5,675,489	54,258	54,258	54,258
MAL500	20052	5,724,662	57,991	57,991	57,991
MAM350	20051	10,290,278	98,375	98,375	98,375
MAM350	20052	10,421,533	105,570	105,570	105,570
MEA400	20051	4,607,627	71,470	72,364	73,077
MEA400	20052	4,996,660	82,359	83,268	83,994
MEB050	20051	3,525,919	22,213	27,961	33,708
MEB050	20052	3,870,038	25,852	32,528	39,203
MEB550	20051	1,189,150	11,368	11,368	11,368
MEB550	20052	1,205,622	12,213	12,213	12,213
MEM100	20051	405,673	6,836	8,952	11,545
MEP280	20051	1,749,663	16,726	16,726	16,727
MEP280	20052	1,333,831	13,512	13,512	13,512
MEP500	20051	3,375,903	32,273	32,273	32,274
MEP500	20052	1,987,203	16,496	18,053	20,130
MER200	20051	643,031	10,198	10,198	10,198
MER200	20052	648,212	10,896	10,896	10,896
MES200	20052	900,134	8,342	8,498	9,118
MES200	20051	858,402	5,540	6,714	8,206
MIA360	20051	747,569	4,710	5,792	7,147
MIA360	20052	737,816	4,929	6,071	7,474
MIB825	20051	6,575,312	41,424	52,142	62,860
MIB825	20052	6,527,615	43,604	54,865	66,125
MIE100	20051	1,970,928	12,417	14,559	18,842
MIE100	20052	2,182,775	14,581	17,091	22,112
MIE550	20051	5,266,028	31,752	39,525	50,343
MIE550	20052	5,035,978	32,197	40,076	51,014
MII700	20051	692,224	3,794	4,755	6,618
MII700	20052	664,237	3,868	4,840	6,729
MIM250	20051	362,511	2,284	2,657	3,466
MIM250	20052	354,570	2,369	2,755	3,592
MIR240	20051	1,294,274	5,650	9,014	12,373
MIR240	20052	1,277,575	5,892	8,684	12,942
MNG500	20051	495,427	3,121	3,839	4,736
MNV600	20051	917,651	5,781	7,181	8,773
MNV600	20052	931,032	8,987	9,106	9,431
MTK200	20051	1,561,017	12,379	13,227	14,923
MTK200	20052	1,819,708	15,295	16,341	18,434
NDG550	20052	2,458,185	16,421	20,661	24,901
NDG550	20051	2,389,897	15,056	18,952	22,847
NHM300	20051	3,904,346	37,326	37,326	37,326
NHM300	20052	3,943,509	39,948	39,948	39,948
NHN100	20051	2,530,327	24,190	24,190	24,190
NHN100	20052	2,536,331	25,693	25,693	25,693
NHP600	20051	6,222,064	53,966	56,082	59,483
NHP600	20052	6,323,180	58,139	60,408	64,054
NHR200	20051	1,785,496	16,721	16,808	17,069
NHR200	20052	1,846,011	18,309	18,407	18,700
NYD300	20051	5,129,021	44,619	48,331	52,567
NYD300	20052	5,075,808	46,904	50,767	55,172

SYS-ID	ACCT-PERIOD	RECEIPTS	CAN-FG-MIN	CAN-BASE	CAN-FG-MAX
NYL050	20051	13,067,748	162,382	162,382	162,382
NYL050	20052	11,088,060	186,390	186,390	186,390
NYL150	20051	201,951	2,545	2,950	3,203
NYP300	20051	1,412,417	12,078	14,588	16,682
NYP300	20052	1,398,485	12,705	15,336	17,530
NYU400	20051	2,788,220	26,434	26,529	26,655
NYU400	20052	2,920,051	29,491	29,509	29,580
OHF400	20051	3,535,853	22,276	26,800	33,803
OHF400	20052	3,423,049	22,866	27,499	34,675
OHT350	20051	9,878,907	64,877	76,488	94,442
OHT350	20052	9,676,773	67,466	79,420	98,026
OHW325	20051	626,133	3,945	4,965	5,986
OHW325	20052	747,325	4,992	6,282	7,570
VTB600	20051	4,413,936	55,169	64,084	69,138
VTB600	20052	4,538,636	58,205	67,158	71,864
VTM300	20051	776,345	7,422	7,422	7,422
VTM300	20052	791,330	8,016	8,016	8,016
VTS500	20051	1,297,374	16,347	20,076	20,576
VTS500	20052	1,232,394	16,465	19,130	20,717
WAA100	20051	958,042	6,036	7,171	9,159
WAA100	20052	934,929	6,245	7,418	9,471
WAC030	20051	1,555,306	14,869	14,869	14,869
WAC030	20052	1,581,489	16,020	16,020	16,020
WAD700	20051	1,239,204	11,847	11,847	11,847
WAD700	20052	1,226,513	12,425	12,425	12,425
WAO050	20051	449,786	4,300	4,300	4,300
WAO200	20051	625,768	5,472	5,574	5,982
WAS050	20051	68,967,743	659,332	659,332	659,332
WAS050	20052	68,069,507	689,544	689,544	689,544
WAS075	20051	3,608,660	34,499	34,499	34,499
WAS075	20052	3,574,771	36,212	36,212	36,212
WAT165	20051	1,540,761	14,730	14,730	14,730
WAT165	20052	1,641,443	16,628	16,628	16,628
			3,674,384	3,838,746	4,033,266
			95.72%		105.07%



# Service Annual Survey 2007

Issued March 2008

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# Introduction

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The U.S. Census Bureau conducts the *Service Annual Survey (SAS)* to provide national estimates of annual revenues and expenses of establishments classified in select service sectors. (See the **Coverage** section below for more information on the industries included in the 2007 Service Annual Survey.)

We develop the estimates in this report using data from a probability sample and administrative data. Survey questionnaires are mailed to a probability sample that is regularly updated and periodically re-selected from a universe of firms located in the United States and having paid employees. The sample includes firms of all sizes and covers both taxable firms and firms exempt from Federal income taxes. Firms without paid employees (nonemployers) are included in the estimates through administrative data provided by other Federal agencies and through imputation.

## Coverage

The estimates contained in this report are summarized by industry classification based on the *2002 North American Industry Classification System (NAICS)*. The NAICS groups establishments into industries based on the activities in which they are primarily engaged. This system, developed jointly by the statistical agencies of Canada, Mexico, and the United States, allows for comparisons of business activity across North America.

Estimates in this report are presented for select industries in the following NAICS sectors and sub-sectors:

<b>NAICS Sector</b>	<b>Title</b>
48-49	Transportation and Warehousing
51	Information
523	Securities, Commodity Contracts, and Other Financial Investments and Related Activities
532	Rental and Leasing Services
54	Professional, Scientific, and Technical Services
56	Administrative and Support and Waste Management and Remediation Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
81	Other Services (except Public Administration)

Detailed information about NAICS can be found on the U.S. Census Bureau's website at <http://www.census.gov/epcd/www/naics.html>.

## CHANGES FROM THE 2006 PUBLICATION

- The Health Care and Social Assistance sector, table 8.9 - Estimated Revenue for Employer Firms by Source now includes estimates for two years: 2006 and 2007. Year-to-year trends are now provided between 2006 and 2007. However, the data shown for some industries may not be comparable to previously published estimates (i.e. 2005 and earlier) because of definitional differences.
- Additional detailed expenses were added to the 2007 Service Annual Survey. The 2007 expenses may not be comparable to previously published estimates. Detailed expense tables will be released at a later date following the standard release of all other tables for the Service Annual Survey.

## Dollar Values

All dollar values presented in this report are expressed in current dollars; that is, the estimates are not adjusted to a constant dollar series. Consequently, when comparing estimates to prior years, users also should consider price level changes.

## Confidentiality

Title 13 of the United States Code authorizes the Census Bureau to conduct censuses and surveys. Section 9 of the same Title requires that any information collected from the public under the authority of Title 13 be maintained as confidential. Section 214 of Title 13 and Sections 3559 and 3571 of Title 18 of the United States Code provide for the imposition of penalties of up to five years in prison and up to \$250,000 in fines for wrongful disclosure of confidential census information. In accordance with Title 13, no estimates are published that would disclose the operations of an individual firm.

The Census Bureau's internal Disclosure Review Board sets the confidentiality rules for all data releases. A checklist approach is used to ensure that all potential risks to the confidentiality of the data are considered and addressed.

**Disclosure Limitation**

A disclosure of data occurs when an individual can use published statistical information to identify either an individual or firm that has provided information under a pledge of confidentiality. Disclosure limitation is the process used to protect the confidentiality of the survey data provided by an individual or firm. Using disclosure limitation procedures, the Census Bureau modifies or removes the characteristics that put confidential information at risk for disclosure. Although it may appear that a table shows information about a specific individual or business, the Census Bureau has taken steps to disguise or suppress the original data while making sure the results are still useful. The techniques used by the Census Bureau to

protect confidentiality in tabulations vary, depending on the type of data.

**Unpublished Estimates**

Some unpublished estimates can be derived directly from this report by subtracting published estimates from their respective totals. However, the figures obtained by such subtraction are subject to poor response rates, high sampling variability, or other factors that result in their failure to meet Census Bureau standards for publication.

Individuals who use Service Annual Survey estimates to create new estimates should cite the Census Bureau as the source of only the original estimates.

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## Chapter 1. Selected Service Industries

**Table 1.1. Selected Service Industries - Estimated Revenue for Employer and Nonemployer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
	<b>Total for selected service industries .....</b>	<b>6,433,269</b>	<b>6,074,675</b>	<b>5,666,791</b>	<b>5,273,151</b>	<b>5.9</b>	<b>7.2</b>	<b>7.5</b>
484	Truck transportation .....	276,044	268,524	249,829	223,348	2.8	7.5	11.9
492	Couriers and messengers .....	78,840	75,621	70,611	65,684	4.3	7.1	7.5
493	Warehousing and storage .....	22,243	21,209	19,510	18,246	4.9	8.7	6.9
51	Information .....	1,126,388	1,068,204	1,013,418	964,552	5.4	5.4	5.1
511	Publishing industries (except Internet) .....	300,271	285,304	272,113	258,618	5.2	4.8	5.2
512	Motion picture and sound recording industries .....	104,811	100,912	96,041	90,524	3.9	5.1	6.1
515	Broadcasting (except Internet) .....	97,377	93,763	88,300	84,072	3.9	6.2	5.0
516	Internet publishing and broadcasting .....	16,226	13,456	10,877	9,090	20.6	23.7	19.7
517	Telecommunications .....	492,250	464,643	447,529	430,698	5.9	3.8	3.9
518	Internet service providers, web search portals, and data processing services .....	105,664	101,085	90,015	83,770	4.5	12.3	7.5
519	Other information services .....	9,789	9,041	8,543	7,780	8.3	5.8	9.8
5231	Securities and commodity contracts intermediation and brokerage .....	317,694	340,687	284,118	254,737	-6.7	19.9	11.5
532	Rental and leasing services .....	131,080	125,894	115,106	108,964	4.1	9.4	5.6
54	Professional, scientific, and technical services (except notaries) .....	1,409,625	1,289,193	1,195,866	1,099,966	9.3	7.8	8.7
56	Administrative and support and waste management and remediation services .....	644,341	609,672	570,802	523,540	5.7	6.8	9.0
561	Administrative and support services .....	571,635	539,552	506,242	463,651	5.9	6.6	9.2
562	Waste management and remediation services .....	72,706	70,120	64,560	59,889	3.7	8.6	7.8
62	Health care and social assistance .....	1,721,209	1,611,265	1,528,705	1,427,450	6.8	5.4	7.1
621	Ambulatory health care services .....	734,902	687,490	648,851	604,368	6.9	6.0	7.4
622	Hospitals .....	687,135	644,904	611,522	569,463	6.5	5.5	7.4
623	Nursing and residential care facilities .....	162,228	151,813	147,575	140,002	6.9	2.9	5.4
624	Social assistance .....	136,944	127,058	120,757	113,617	7.8	5.2	6.3
71	Arts, entertainment, and recreation .....	216,238	205,165	190,264	181,006	5.4	7.8	5.1
711	Performing arts, spectator sports, and related industries .....	94,662	90,098	82,975	79,432	5.1	8.6	4.5
712	Museums, historical sites, and similar institutions .....	13,078	12,055	10,347	9,768	8.5	16.5	5.9
713	Amusement, gambling, and recreation industries .....	108,498	103,012	96,942	91,806	5.3	6.3	5.6
81	Other services (except public administration, religious, labor, and political organizations, and private households) .....	489,567	459,241	428,562	405,658	6.6	7.2	5.6
811	Repair and maintenance .....	170,934	165,547	159,948	153,405	3.3	3.5	4.3
812	Personal and laundry services .....	136,578	131,022	126,022	118,339	4.2	4.0	6.5
813	Religious, grantmaking, civic, professional, and similar organizations (except religious, labor, and political organizations) .....	182,054	162,671	142,590	133,913	11.9	14.1	6.5

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

Appendix A, Table A-1.1 provides estimated measures of sampling variability.



**Table 1.2. Selected Service Industries - Estimated Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
	<b>Total for selected service industries .....</b>	<b>6,013,903</b>	<b>5,677,830</b>	<b>5,290,544</b>	<b>4,923,815</b>	<b>5.9</b>	<b>7.3</b>	<b>7.4</b>
484	Truck transportation .....	228,907	221,871	206,512	185,945	3.2	7.4	11.1
492	Couriers and messengers .....	74,704	71,627	66,908	62,246	4.3	7.1	7.5
493	Warehousing and storage .....	21,687	20,680	18,965	17,751	4.9	9.0	6.8
51	Information .....	1,114,883	1,057,430	1,003,262	955,083	5.4	5.4	5.0
511	Publishing industries (except Internet) .....	297,709	282,880	269,715	256,301	5.2	4.9	5.2
512	Motion picture and sound recording industries .....	102,166	98,392	93,655	88,269	3.8	5.1	6.1
515	Broadcasting (except Internet) .....	96,728	93,134	87,694	83,466	3.9	6.2	5.1
516	Internet publishing and broadcasting .....	15,480	12,862	10,391	8,695	20.4	23.8	19.5
517	Telecommunications .....	490,761	463,253	446,220	429,430	5.9	3.8	3.9
518	Internet service providers, web search portals, and data processing services .....	104,050	99,546	88,598	82,491	4.5	12.4	7.4
519	Other information services .....	7,989	7,363	6,989	6,431	8.5	5.4	8.7
5231	Securities and commodity contracts intermediation and brokerage .....	312,790	335,703	279,101	250,080	-6.8	20.3	11.6
532	Rental and leasing services .....	123,041	118,507	108,612	102,863	3.8	9.1	5.6
54	Professional, scientific, and technical services (except notaries) .....	1,276,569	1,164,956	1,077,289	989,370	9.6	8.1	8.9
56	Administrative and support and waste management and remediation services .....	594,820	563,729	527,647	484,309	5.5	6.8	8.9
561	Administrative and support services .....	523,610	495,034	464,451	425,667	5.8	6.6	9.1
562	Waste management and remediation services .....	71,211	68,695	63,196	58,643	3.7	8.7	7.8
62	Health care and social assistance .....	1,664,547	1,558,756	1,478,399	1,379,569	6.8	5.4	7.2
621	Ambulatory health care services .....	692,854	647,920	610,806	568,293	6.9	6.1	7.5
622	Hospitals .....	687,135	644,904	611,522	569,463	6.5	5.5	7.4
623	Nursing and residential care facilities .....	160,037	149,785	145,578	138,068	6.8	2.9	5.4
624	Social assistance .....	124,521	116,147	110,493	103,745	7.2	5.1	6.5
71	Arts, entertainment, and recreation .....	191,005	180,383	166,561	158,557	5.9	8.3	5.0
711	Performing arts, spectator sports, and related industries .....	75,853	71,365	65,235	62,796	6.3	9.4	3.9
712	Museums, historical sites, and similar institutions .....	12,978	11,967	10,256	9,688	8.4	16.7	5.9
713	Amusement, gambling, and recreation industries .....	102,174	97,051	91,070	86,073	5.3	6.6	5.8
81	Other services (except public administration, religious, labor, and political organizations, and private households) .....	410,950	384,188	357,288	338,042	7.0	7.5	5.7
811	Repair and maintenance .....	142,611	138,271	133,483	127,939	3.1	3.6	4.3
812	Personal and laundry services .....	86,285	83,246	81,213	76,189	3.7	2.5	6.6
813	Religious, grantmaking, civic, professional, and similar organizations (except religious, labor, and political organizations) .....	182,054	162,671	142,590	133,913	11.9	14.1	6.5

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

Appendix A, Table A-1.2 provides estimated measures of sampling variability.

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## Chapter 2. Transportation and Warehousing

**Table 2.1. Truck Transportation (NAICS 484), Couriers and Messengers (NAICS 492), and Warehousing and Storage (NAICS 493) - Estimated Revenue for Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	2003	2002	2001	2000	1999
	<b>Selected transportation and warehousing industries<sup>1</sup> ...</b>	<b>325,298</b>	<b>314,178</b>	<b>292,385</b>	<b>265,942</b>	<b>245,766</b>	<b>238,931</b>	<b>236,599</b>	<b>237,812</b>	<b>221,484</b>
484	Truck transportation .....	228,907	221,871	206,512	185,945	168,486	164,218	162,871	165,421	155,871
4841	General freight trucking .....	152,550	148,939	139,133	124,970	113,345	110,239	107,316	108,051	100,329
48411	General freight trucking, local .....	25,906	25,369	22,467	20,112	18,625	17,353	16,988	17,254	16,251
48412	General freight trucking, long-distance .....	126,644	123,570	116,666	104,858	94,720	92,886	90,328	90,797	84,078
484121	General freight trucking, long-distance, truckload .....	92,678	89,804	84,647	75,854	68,381	65,031	62,176	61,562	57,501
484122	General freight trucking, long-distance, less than truckload .....	33,966	33,766	32,019	29,004	26,339	27,855	28,152	29,235	26,577
4842	Specialized freight trucking .....	76,357	72,932	67,379	60,975	55,141	53,979	55,555	57,370	55,542
48421	Used household and office goods moving .....	15,127	15,491	15,135	13,891	12,838	12,638	13,301	14,484	13,623
48422	Specialized freight (except used goods) trucking, local ...	32,976	31,058	28,018	25,263	22,865	22,383	21,936	21,912	20,836
48423	Specialized freight (except used goods) trucking, long-distance .....	28,254	26,383	24,226	21,821	19,438	18,958	20,318	20,974	21,083
492	Couriers and messengers .....	74,704	71,627	66,908	62,246	59,825	58,165	58,484	57,776	51,880
4921	Couriers .....	70,983	68,136	63,497	58,797	56,492	54,821	55,022	54,114	48,409
4922	Local messengers and local delivery .....	3,721	3,491	3,411	3,449	3,333	3,344	3,462	3,662	3,471
493	Warehousing and storage .....	21,687	20,680	18,965	17,751	17,455	16,548	15,244	14,615	13,733
4931	Warehousing and storage .....	21,687	20,680	18,965	17,751	17,455	16,548	15,244	14,615	13,733
49311	General warehousing and storage .....	13,653	13,011	11,656	10,930	11,174	10,505	9,512	8,967	8,440
49312	Refrigerated warehousing and storage .....	3,235	3,068	3,018	3,167	2,945	2,908	2,743	2,859	2,820
49313	Farm product warehousing and storage .....	836	767	772	691	748	763	825	776	770
49319	Other warehousing and storage .....	3,963	3,834	3,519	2,963	2,588	2,372	2,164	2,013	1,703

<sup>1</sup>Excludes NAICS 481 (Air transportation), NAICS 483 (Water transportation), NAICS 485 (Transit and ground passenger transportation), NAICS 486 (Pipeline transportation), NAICS 487 (Scenic and sightseeing transportation), NAICS 488 (Support activities for transportation), and NAICS 491 (Postal service).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-2.1 provides estimated measures of sampling variability.

**Table 2.2. Truck Transportation (NAICS 484), Couriers and Messengers (NAICS 492), and Warehousing and Storage (NAICS 493) - Estimated Year-to-Year Percent Change in Revenue for Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007/2006	2006/2005	2005/2004	2004/2003	2003/2002	2002/2001	2001/2000	2000/1999
	<b>Selected transportation and warehousing industries <sup>1</sup> .....</b>	<b>3.5</b>	<b>7.5</b>	<b>9.9</b>	<b>8.2</b>	<b>2.9</b>	<b>1.0</b>	<b>-0.5</b>	<b>7.4</b>
484	Truck transportation .....	3.2	7.4	11.1	10.4	2.6	0.8	-1.5	6.1
4841	General freight trucking .....	2.4	7.0	11.3	10.3	2.8	2.7	-0.7	7.7
48411	General freight trucking, local .....	2.1	12.9	11.7	8.0	7.3	2.1	-1.5	6.2
48412	General freight trucking, long-distance .....	2.5	5.9	11.3	10.7	2.0	2.8	-0.5	8.0
484121	General freight trucking, long-distance, truckload .....	3.2	6.1	11.6	10.9	5.2	4.6	1.0	7.1
484122	General freight trucking, long-distance, less than truckload .....	0.6	5.5	10.4	10.1	-5.4	-1.1	-3.7	10.0
4842	Specialized freight trucking .....	4.7	8.2	10.5	10.6	2.2	-2.8	-3.2	3.3
48421	Used household and office goods moving .....	-2.3	2.4	9.0	8.2	1.6	-5.0	-8.2	6.3
48422	Specialized freight (except used goods) trucking, local .....	6.2	10.9	10.9	10.5	2.2	2.0	0.1	5.2
48423	Specialized freight (except used goods) trucking, long-distance .....	7.1	8.9	11.0	12.3	2.5	-6.7	-3.1	-0.5
492	Couriers and messengers .....	4.3	7.1	7.5	4.0	2.9	-0.5	1.2	11.4
4921	Couriers .....	4.2	7.3	8.0	4.1	3.0	-0.4	1.7	11.8
4922	Local messengers and local delivery .....	6.6	2.3	-1.1	3.5	-0.3	-3.4	-5.5	5.5
493	Warehousing and storage .....	4.9	9.0	6.8	1.7	5.5	8.6	4.3	6.4
4931	Warehousing and storage .....	4.9	9.0	6.8	1.7	5.5	8.6	4.3	6.4
49311	General warehousing and storage .....	4.9	11.6	6.6	-2.2	6.4	10.4	6.1	6.2
49312	Refrigerated warehousing and storage .....	5.4	1.7	-4.7	7.5	1.3	6.0	-4.1	1.4
49313	Farm product warehousing and storage .....	9.0	-0.6	11.7	-7.6	-2.0	-7.5	6.3	0.8
49319	Other warehousing and storage .....	3.4	9.0	18.8	14.5	9.1	9.6	7.5	18.2

<sup>1</sup>Excludes NAICS 481 (Air transportation), NAICS 483 (Water transportation), NAICS 485 (Transit and ground passenger transportation), NAICS 486 (Pipeline transportation), NAICS 487 (Scenic and sightseeing transportation), NAICS 488 (Support activities for transportation), and NAICS 491 (Postal service).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-2.1 provides estimated measures of sampling variability.

**Table 2.3. Truck Transportation (NAICS 484) - Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004
<b>OPERATING REVENUE</b>				
<b>Total .....</b>	<b>228,907</b>	<b>221,871</b>	<b>206,512</b>	<b>185,945</b>
Motor carrier .....	213,622	207,121	193,298	174,397
Local trucking .....	72,635	69,165	63,741	57,110
Long-distance trucking .....	140,987	137,956	129,557	117,287
Other operating revenue (truck transportation) .....	15,285	14,750	13,214	11,548

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-2.2 provides estimated measures of sampling variability.

**Table 2.4. Truck Transportation (NAICS 484) - Estimated Year-to-Year Percent Change in Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007/2006	2006/2005	2005/2004
<b>OPERATING REVENUE</b>			
<b>Total .....</b>	<b>3.2</b>	<b>7.4</b>	<b>11.1</b>
Motor carrier .....	3.1	7.2	10.8
Local trucking .....	5.0	8.5	11.6
Long-distance trucking .....	2.2	6.5	10.5
Other operating revenue (truck transportation) .....	3.6	11.6	14.4

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-2.2 provides estimated measures of sampling variability.

**Table 2.5. Truck Transportation (NAICS 484) - Estimated Revenue by Size of Shipments, Commodities Handled, and Origin and Destination of Shipments for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004
<b>Total motor carrier revenue</b> .....	<b>213,622</b>	<b>207,121</b>	<b>193,298</b>	<b>174,397</b>
<b>SIZE OF SHIPMENTS</b>				
Less-than-truckload .....	52,691	51,303	42,596	40,721
Truckload .....	160,931	155,818	150,702	133,676
<b>COMMODITIES HANDLED</b>				
Agricultural and fish products .....	18,924	18,496	17,389	15,721
Grains, alcohol, and tobacco products .....	10,175	9,137	7,101	6,354
Stone, nonmetallic minerals, and metallic ores .....	15,732	15,384	13,395	11,854
Coal and petroleum products .....	8,303	7,550	7,036	6,330
Pharmaceutical and chemical products .....	12,038	10,943	10,382	9,650
Wood products, textiles, and leathers .....	18,775	17,666	17,386	16,553
Base metal and machinery .....	18,533	18,072	16,289	15,182
Electronic, motorized vehicles, and precision instruments .....	15,333	15,945	15,119	13,863
Used household and office goods .....	12,907	12,326	11,807	10,548
New furniture and miscellaneous manufactured products .....	20,781	22,251	22,090	19,727
Other goods .....	62,121	59,351	55,304	48,615
<b>HAZARDOUS MATERIALS</b>				
Hazardous materials .....	14,965	S	16,284	15,096
<b>ORIGIN AND DESTINATION OF SHIPMENTS</b>				
U.S. to U.S. ....	205,023	198,781	185,906	168,323
U.S. to Canada .....	1,997	1,834	1,561	1,391
U.S. to Mexico .....	1,662	1,697	1,604	1,278
Canada to U.S. ....	1,226	1,335	1,328	1,119
Mexico to U.S. ....	2,100	1,817	1,371	1,025
All other destinations .....	1,614	1,657	1,528	1,261

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-2.3 provides estimated measures of sampling variability.

**Table 2.6. Truck Transportation (NAICS 484) - Estimated Year-to-Year Percent Change in Revenue by Size of Shipments, Commodities Handled, and Origin and Destination of Shipments for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007/2006	2006/2005	2005/2004
<b>Total motor carrier revenue</b> .....	<b>3.1</b>	<b>7.2</b>	<b>10.8</b>
<b>SIZE OF SHIPMENTS</b>			
Less-than-truckload .....	2.7	20.4	4.6
Truckload .....	3.3	3.4	12.7
<b>COMMODITIES HANDLED</b>			
Agricultural and fish products .....	2.3	6.4	10.6
Grains, alcohol, and tobacco products .....	11.4	28.7	11.8
Stone, nonmetallic minerals, and metallic ores .....	2.3	14.8	13.0
Coal and petroleum products .....	10.0	7.3	11.2
Pharmaceutical and chemical products .....	10.0	5.4	7.6
Wood products, textiles, and leathers .....	6.3	1.6	5.0
Base metal and machinery .....	2.6	10.9	7.3
Electronic, motorized vehicles, and precision instruments .....	-3.8	5.5	9.1
Used household and office goods .....	4.7	4.4	11.9
New furniture and miscellaneous manufactured products .....	-6.6	0.7	12.0
Other goods .....	4.7	7.3	13.8
<b>HAZARDOUS MATERIALS</b>			
Hazardous materials .....	S	S	7.9
<b>ORIGIN AND DESTINATION OF SHIPMENTS</b>			
U.S. to U.S. ....	3.1	6.9	10.4
U.S. to Canada .....	8.9	17.5	12.2
U.S. to Mexico .....	-2.1	5.8	25.5
Canada to U.S. ....	-8.2	0.5	18.7
Mexico to U.S. ....	15.6	32.5	33.8
All other destinations .....	-2.6	8.4	21.2

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at [www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html). Appendix A, Table A-2.3 provides estimated measures of sampling variability.



**Table 2.7. Truck Transportation (NAICS 484) - Estimated Inventories of Revenue Generating Equipment by Type of Carrier for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Units are published in thousands; consequently, results may not be additive]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>TRUCKS</b>							
Owned and/or leased with drivers.....	227	221	197	193	2.7	12.2	2.1
Leased without drivers.....	29	27	25	24	7.4	8.0	4.2
<b>Total.....</b>	<b>256</b>	<b>248</b>	<b>222</b>	<b>217</b>	<b>3.2</b>	<b>11.7</b>	<b>2.3</b>
<b>TRUCK-TRACTORS</b>							
Owned and/or leased with drivers.....	771	748	743	721	3.1	0.7	3.1
Leased without drivers.....	156	150	137	129	4.0	9.5	6.2
<b>Total.....</b>	<b>927</b>	<b>898</b>	<b>881</b>	<b>850</b>	<b>3.2</b>	<b>1.9</b>	<b>3.6</b>
<b>TRAILERS</b>							
Owned and/or leased with drivers.....	1,657	1,631	1,603	1,544	1.6	1.7	3.8
Leased without drivers.....	360	347	355	338	3.7	-2.3	5.0
<b>Total.....</b>	<b>2,018</b>	<b>1,978</b>	<b>1,958</b>	<b>1,882</b>	<b>2.0</b>	<b>1.0</b>	<b>4.0</b>

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-2.4 provides estimated measures of sampling variability.

**Table 2.8. Truck Transportation (NAICS 484) - Estimated Number of Truck Miles Traveled by Trucks Operated by Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Truck miles estimates are published in millions; consequently, results may not be additive]

Kind of business	2007	2006	2005	2004
<b>Total distance traveled in highway miles .....</b>	<b>93,512</b>	<b>92,654</b>	<b>91,220</b>	<b>86,991</b>
Miles traveled by loaded or partially loaded vehicles .....	75,718	74,687	73,702	70,667
Miles traveled by empty vehicles .....	17,794	17,966	17,518	16,324

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-2.5 provides estimated measures of sampling variability.

**Table 2.9. Truck Transportation (NAICS 484) - Estimated Year-to-Year Percent Change in the Number of Truck Miles Traveled by Trucks Operated by Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	2007/2006	2006/2005	2005/2004
<b>Total distance traveled in highway miles .....</b>	<b>0.9</b>	<b>1.6</b>	<b>4.9</b>
Miles traveled by loaded or partially loaded vehicles .....	1.4	1.3	4.3
Miles traveled by empty vehicles .....	-1.0	2.6	7.3

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-2.5 provides estimated measures of sampling variability.

**Table 2.10. Truck Transportation (NAICS 484), Couriers and Messengers (NAICS 492), and Warehousing and Storage (NAICS 493) - Estimated Total Expenses for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
	<b>Selected transportation and warehousing industries <sup>1</sup> .....</b>	<b>303,284</b>	<b>287,742</b>	<b>268,578</b>	<b>245,750</b>	<b>5.4</b>	<b>7.1</b>	<b>9.3</b>
484	Truck transportation .....	208,501	201,103	188,036	169,727	3.7	6.9	10.8
4841	General freight trucking .....	142,651	138,081	127,883	115,029	3.3	8.0	11.2
48411	General freight trucking, local .....	24,497	23,265	20,566	18,479	5.3	13.1	11.3
48412	General freight trucking, long-distance .....	118,154	114,816	107,317	96,550	2.9	7.0	11.2
484121	General freight trucking, long-distance, truckload .....	86,234	83,179	78,312	69,966	3.7	6.2	11.9
484122	General freight trucking, long-distance, less than truckload .....	31,920	31,638	29,005	26,584	0.9	9.1	9.1
4842	Specialized freight trucking .....	65,851	63,022	60,153	54,699	4.5	4.8	10.0
48421	Used household and office goods moving .....	14,094	14,261	13,734	12,705	-1.2	3.8	8.1
48422	Specialized freight (except used goods) trucking, local .....	27,234	25,554	23,197	21,018	6.6	10.2	10.4
48423	Specialized freight (except used goods) trucking, long-distance .....	24,523	23,207	23,222	20,976	5.7	-0.1	10.7
492	Couriers and messengers .....	75,721	68,587	63,961	60,418	10.4	7.2	5.9
4921	Couriers .....	72,481	65,599	61,069	57,457	10.5	7.4	6.3
4922	Local messengers and local delivery .....	3,240	2,988	2,892	2,961	8.4	3.3	-2.3
493	Warehousing and storage .....	19,062	18,052	16,581	15,605	5.6	8.9	6.3
4931	Warehousing and storage .....	19,062	18,052	16,581	15,605	5.6	8.9	6.3
49311	General warehousing and storage .....	12,224	11,462	10,208	9,620	6.6	12.3	6.1
49312	Refrigerated warehousing and storage .....	2,911	2,724	2,772	2,935	6.9	-1.7	-5.6
49313	Farm product warehousing and storage .....	495	488	541	498	1.4	-9.8	8.6
49319	Other warehousing and storage .....	3,431	3,378	3,060	2,552	1.6	10.4	19.9

<sup>1</sup>Excludes NAICS 481 (Air transportation), NAICS 483 (Water transportation), NAICS 485 (Transit and ground passenger transportation), NAICS 486 (Pipeline transportation), NAICS 487 (Scenic and sightseeing transportation), NAICS 488 (Support activities for transportation), and NAICS 491 (Postal service).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-2.6 provides estimated measures of sampling variability.

**Table 2.11. Truck Transportation (NAICS 484), Couriers and Messengers (NAICS 492), and Warehousing and Storage (NAICS 493) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>TRUCK TRANSPORTATION (NAICS 484)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>208,501</b>	<b>201,103</b>	<b>188,036</b>	<b>169,727</b>	<b>3.7</b>	<b>6.9</b>	<b>10.8</b>
Personnel costs.....	71,806	69,702	67,025	62,827	3.0	4.0	6.7
Gross annual payroll.....	56,064	53,989	52,415	49,094	3.8	3.0	6.8
Employer's cost for fringe benefits.....	13,266	12,976	12,360	11,736	2.2	5.0	5.3
Health insurance.....	4,749	NA	NA	NA	NA	NA	NA
Pension plans.....	1,168	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	490	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	677	NA	NA	NA	NA	NA	NA
Other.....	7,350	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	2,477	2,736	2,250	1,997	-9.5	21.6	12.7
Expensed materials, parts and supplies (not for resale).....	6,319	6,140	5,836	5,271	2.9	5.2	10.7
Expensed equipment.....	459	688	577	511	-33.3	19.2	12.9
Expensed purchase of other materials, parts, and supplies.....	5,860	5,451	5,259	4,760	7.5	3.7	10.5
Expensed purchased services.....	86,145	82,847	75,678	65,019	4.0	9.5	16.4
Purchased freight transportation.....	37,260	37,437	35,669	31,647	-0.5	5.0	12.7
Expensed purchases of software.....	214	208	210	195	2.9	-1.0	7.7
Purchased fuels for transportation equipment.....	31,771	28,685	24,667	19,047	10.8	16.3	29.5
Purchased electricity and fuels (except motor fuels).....	750	818	662	598	-8.3	23.6	10.7
Purchased electricity.....	517	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	233	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	8,739	8,916	8,294	7,881	-2.0	7.5	5.2
Lease and rental payments for machinery, equipment, and other tangible items.....	6,046	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	2,693	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	6,823	6,181	5,594	5,097	10.4	10.5	9.8
Purchased repairs and maintenance to machinery and equipment.....	647	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	459	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to transportation equipment.....	5,716	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	588	603	582	554	-2.5	3.6	5.1
Other operating expenses.....	44,231	42,415	39,497	36,611	4.3	7.4	7.9
Cost of insurance.....	7,250	7,213	6,682	6,332	0.5	7.9	5.5
Depreciation and amortization charges.....	9,613	9,469	8,446	8,080	1.5	12.1	4.5
Governmental taxes and license fees.....	3,790	3,890	3,797	3,514	-2.6	2.4	8.1
All other operating expenses.....	23,579	21,843	20,572	18,684	7.9	6.2	10.1
Data processing and other purchased computer services.....	173	NA	NA	NA	NA	NA	NA
Purchased communication services.....	1,090	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	152	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	1,327	NA	NA	NA	NA	NA	NA
All other operating expenses.....	20,837	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 2.11. Truck Transportation (NAICS 484), Couriers and Messengers (NAICS 492), and Warehousing and Storage (NAICS 493) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>COURIERS AND MESSENGERS (NAICS 492)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>75,721</b>	<b>68,587</b>	<b>63,961</b>	<b>60,418</b>	<b>10.4</b>	<b>7.2</b>	<b>5.9</b>
Personnel costs.....	35,785	30,984	29,743	29,369	15.5	4.2	1.3
Gross annual payroll.....	21,471	20,842	20,191	20,048	3.0	3.2	0.7
Employer's cost for fringe benefits.....	S	8,915	8,546	8,439	S	4.3	1.3
Health insurance.....	3,137	NA	NA	NA	NA	NA	NA
Pension plans.....	6,294	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	D	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	D	NA	NA	NA	NA	NA	NA
Other.....	3,695	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	1,188	1,227	1,006	882	-3.2	22.0	14.1
Expensed materials, parts and supplies (not for resale).....	13,081	11,438	10,138	8,925	14.4	12.8	13.6
Expensed equipment.....	D	D	D	D	D	D	D
Expensed purchase of other materials, parts, and supplies.....	D	D	D	D	D	D	D
Expensed purchased services.....	6,933	6,682	6,181	5,878	3.8	8.1	5.2
Expensed purchases of software.....	112	115	95	94	-2.6	21.1	1.1
Purchased electricity and fuels (except motor fuels).....	S	1,352	1,314	1,228	S	2.9	7.0
Purchased electricity.....	S	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	72	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	2,614	2,580	2,219	2,088	1.3	16.3	6.3
Lease and rental payments for machinery, equipment, and other tangible items.....	1,462	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	1,152	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	2,388	2,180	2,089	2,003	9.5	4.4	4.3
Purchased repairs and maintenance to machinery and equipment.....	2,271	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	116	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	450	456	465	465	-1.3	-1.9	Z
Other operating expenses.....	19,922	19,483	17,899	16,245	2.3	8.8	10.2
Depreciation and amortization charges.....	3,436	3,278	3,188	3,171	4.8	2.8	0.5
Governmental taxes and license fees.....	434	317	319	330	36.9	-0.6	-3.3
All other operating expenses.....	16,052	15,888	14,393	12,745	1.0	10.4	12.9
Data processing and other purchased computer services.....	9	NA	NA	NA	NA	NA	NA
Purchased communication services.....	339	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	14	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	831	NA	NA	NA	NA	NA	NA
All other operating expenses.....	14,860	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 2.11. Truck Transportation (NAICS 484), Couriers and Messengers (NAICS 492), and Warehousing and Storage (NAICS 493) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>WAREHOUSING AND STORAGE (NAICS 493)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>19,062</b>	<b>18,052</b>	<b>16,581</b>	<b>15,605</b>	<b>5.6</b>	<b>8.9</b>	<b>6.3</b>
Personnel costs.....	7,189	6,869	6,216	5,890	4.7	10.5	5.5
Gross annual payroll.....	5,233	5,061	4,594	4,375	3.4	10.2	5.0
Employer's cost for fringe benefits.....	1,297	1,197	1,055	995	8.4	13.5	6.0
Health insurance.....	526	NA	NA	NA	NA	NA	NA
Pension plans.....	291	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	39	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	253	NA	NA	NA	NA	NA	NA
Other.....	480	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	660	611	567	520	8.0	7.8	9.0
Expensed materials, parts and supplies (not for resale).....	717	737	677	631	-2.7	8.9	7.3
Expensed equipment.....	78	S	84	S	S	S	S
Expensed purchase of other materials, parts, and supplies.....	639	623	593	560	2.6	5.1	5.9
Expensed purchased services.....	2,855	2,583	2,434	2,207	10.5	6.1	10.3
Expensed purchases of software.....	67	76	65	63	-11.8	16.9	3.2
Purchased electricity and fuels (except motor fuels).....	537	493	458	418	8.9	7.6	9.6
Purchased electricity.....	443	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	95	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	1,531	1,323	1,192	1,106	15.7	11.0	7.8
Lease and rental payments for machinery, equipment, and other tangible items.....	212	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	1,318	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	S	552	S	S	S	S	S
Purchased repairs and maintenance to machinery and equipment.....	S	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	133	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	142	139	134	131	2.2	3.7	2.3
Other operating expenses.....	8,300	7,863	7,253	6,877	5.6	8.4	5.5
Depreciation and amortization charges.....	844	754	737	693	11.9	2.3	6.3
Governmental taxes and license fees.....	303	301	263	257	0.7	14.4	2.3
All other operating expenses.....	7,153	6,808	6,254	5,928	5.1	8.9	5.5
Data processing and other purchased computer services.....	36	NA	NA	NA	NA	NA	NA
Purchased communication services.....	105	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	49	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	213	NA	NA	NA	NA	NA	NA
All other operating expenses.....	6,751	NA	NA	NA	NA	NA	NA

NA Not available. Z Absolute value is less than 0.05. D Estimate in table is withheld to avoid disclosing data of individual companies; data are included in higher level totals. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-2.7 provides estimated measures of sampling variability.

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# Chapter 3. Information Sector



**Table 3.0.1. Information Sector (NAICS 51) – Estimated Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
<b>51</b>	<b>Information .....</b>	<b>1,114,883</b>	<b>1,057,430</b>	<b>1,003,262</b>	<b>955,083</b>	<b>5.4</b>	<b>5.4</b>	<b>5.0</b>
511	Publishing industries (except Internet) .....	297,709	282,880	269,715	256,301	5.2	4.9	5.2
5111	Newspaper, periodical, book, and directory publishers .....	154,005	150,623	148,381	144,040	2.2	1.5	3.0
51111	Newspaper publishers .....	48,274	49,601	49,958	48,366	-2.7	-0.7	3.3
51112	Periodical publishers .....	49,292	46,948	44,315	42,290	5.0	5.9	4.8
51113	Book publishers .....	29,296	28,237	27,904	27,904	3.8	1.2	Z
51114	Directory and mailing list publishers .....	19,890	18,915	19,413	18,040	5.2	-2.6	7.6
51119	Other publishers .....	7,253	6,922	6,791	7,440	4.8	1.9	-8.7
511191	Greeting card publishers .....	4,799	4,631	4,553	5,075	3.6	1.7	-10.3
511199	All other publishers .....	2,454	2,291	2,238	2,365	7.1	2.4	-5.4
5112	Software publishers .....	143,704	132,257	121,334	112,261	8.7	9.0	8.1
512	Motion picture and sound recording industries .....	102,166	98,392	93,655	88,269	3.8	5.1	6.1
5121	Motion picture and video industries .....	82,066	77,576	74,789	71,774	5.8	3.7	4.2
5121x	Motion picture and video production and distribution <sup>1</sup> .....	65,922	61,847	59,760	56,605	6.6	3.5	5.6
51213	Motion picture and video exhibition .....	11,341	11,194	10,789	11,180	1.3	3.8	-3.5
512131	Motion picture theaters (except drive-ins) .....	11,123	10,983	10,669	11,069	1.3	2.9	-3.6
512132	Drive-in motion picture theaters .....	S	S	120	111	S	S	8.1
51219	Postproduction services and other motion picture and video industries .....	4,803	4,535	4,240	3,989	5.9	7.0	6.3
512191	Teleproduction and other postproduction services .....	3,822	3,624	3,379	3,193	5.5	7.3	5.8
512199	Other motion picture and video industries .....	981	911	861	796	7.7	5.8	8.2
5122	Sound recording industries .....	20,100	20,816	18,866	16,495	-3.4	10.3	14.4
51221	Record production .....	350	285	410	352	22.8	-30.5	16.5
51222	Integrated record production and distribution .....	13,591	14,405	12,856	11,021	-5.7	12.0	16.7
51223	Music publishers .....	4,432	4,544	4,260	3,885	-2.5	6.7	9.7
51224	Sound recording studios .....	998	928	766	724	7.5	21.1	5.8
51229	Other sound recording industries .....	729	654	574	513	11.5	13.9	11.9
515	Broadcasting (except Internet) .....	96,728	93,134	87,694	83,466	3.9	6.2	5.1
5151	Radio and television broadcasting .....	55,858	55,153	52,308	52,093	1.3	5.4	0.4
51511	Radio broadcasting .....	18,850	18,181	17,059	16,494	3.7	6.6	3.4
515111	Radio networks .....	5,226	4,474	3,347	2,677	16.8	33.7	25.0
515112	Radio stations .....	13,624	13,707	13,712	13,817	-0.6	Z	-0.8
51512	Television broadcasting .....	37,008	36,972	35,249	35,599	0.1	4.9	-1.0
5152	Cable and other subscription programming .....	40,870	37,981	35,386	31,373	7.6	7.3	12.8
516	Internet publishing and broadcasting .....	15,480	12,862	10,391	8,695	20.4	23.8	19.5
517	Telecommunications .....	490,761	463,253	446,220	429,430	5.9	3.8	3.9
5171	Wired telecommunications carriers .....	192,779	195,092	206,622	211,176	-1.2	-5.6	-2.2
5172	Wireless telecommunications carriers (except satellite) .....	174,085	158,577	140,025	127,602	9.8	13.2	9.7
517211	Paging .....	1,557	1,874	1,990	1,909	-16.9	-5.8	4.2
517212	Cellular and other wireless telecommunications .....	172,528	156,703	138,035	125,693	10.1	13.5	9.8
5173	Telecommunications resellers .....	13,606	12,224	11,228	9,849	11.3	8.9	14.0
5174	Satellite telecommunications .....	7,393	6,667	5,808	6,030	10.9	14.8	-3.7
5175	Cable and other program distribution .....	100,849	88,788	80,492	73,317	13.6	10.3	9.8

See footnotes at end of table.

**Table 3.0.1. Information Sector (NAICS 51) – Estimated Revenue for Employer Firms: 2004 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
5179	Other telecommunications .....	2,049	1,905	2,045	1,456	7.6	-6.8	40.5
518	Internet service providers, web search portals, and data processing services .....	104,050	99,546	88,598	82,491	4.5	12.4	7.4
5181	Internet service providers and web search portals .....	31,168	28,749	25,969	25,161	8.4	10.7	3.2
518111	Internet service providers .....	19,086	19,092	18,977	20,201	Z	0.6	-6.1
518112	Web search portals .....	12,082	9,657	6,992	4,960	25.1	38.1	41.0
5182	Data processing, hosting, and related services .....	72,882	70,797	62,629	57,330	2.9	13.0	9.2
519	Other information services .....	7,989	7,363	6,989	6,431	8.5	5.4	8.7
51911	News syndicates .....	2,418	2,209	2,098	1,972	9.5	5.3	6.4
51912	Libraries and archives .....	2,288	2,077	1,967	1,879	10.2	5.6	4.7
51919	All other information services .....	3,283	3,077	2,924	2,580	6.7	5.2	13.3

Z Absolute value is less than 0.05. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Includes NAICS 51211 (Motion picture and video production) and NAICS 51212 (Motion picture and video distribution).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.0.1 provides estimated measures of sampling variability.

**Table 3.0.2. Information Sector (NAICS 51) – Estimated Export Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
<b>51</b>	<b>Information .....</b>	<b>49,669</b>	<b>43,570</b>	<b>42,728</b>	<b>40,252</b>	<b>14.0</b>	<b>2.0</b>	<b>6.2</b>
511	Publishing industries (except Internet) .....	24,741	21,070	19,483	18,198	17.4	8.1	7.1
5111	Newspaper, periodical, book, and directory publishers .....	S	5,369	4,780	4,339	S	12.3	10.2
51111	Newspaper publishers .....	58	58	61	63	Z	-4.9	-3.2
51112	Periodical publishers .....	S	4,176	3,706	3,312	S	12.7	11.9
51113	Book publishers .....	749	690	614	627	8.6	12.4	-2.1
51114	Directory and mailing list publishers .....	374	327	304	243	14.4	7.6	25.1
51119	Other publishers .....	135	118	95	94	14.4	24.2	1.1
511191	Greeting card publishers .....	43	38	44	43	13.2	-13.6	2.3
511199	All other publishers .....	92	80	51	51	15.0	56.9	Z
5112	Software publishers .....	18,801	15,701	14,703	13,859	19.7	6.8	6.1
512	Motion picture and sound recording industries .....	14,773	13,702	13,746	13,499	7.8	-0.3	1.8
5121	Motion picture and video industries .....	14,635	13,561	13,606	13,355	7.9	-0.3	1.9
5121x	Motion picture and video production and distribution <sup>1</sup> .....	14,489	13,421	13,478	13,258	8.0	-0.4	1.7
51213	Motion picture and video exhibition .....	X	X	X	X	X	X	X
512131	Motion picture theaters (except drive-ins) .....	X	X	X	X	X	X	X
512132	Drive-in motion picture theaters .....	X	X	X	X	X	X	X
51219	Postproduction services and other motion picture and video industries .....	146	140	128	97	4.3	9.4	32.0
512191	Teleproduction and other postproduction services .....	33	24	20	19	37.5	20.0	5.3
512199	Other motion picture and video industries .....	113	116	108	78	-2.6	7.4	38.5
5122	Sound recording industries .....	138	141	140	144	-2.1	0.7	-2.8
51221	Record production .....	S	S	S	S	S	S	S
51222	Integrated record production and distribution .....	65	S	68	73	S	S	-6.8
51223	Music publishers .....	64	63	63	64	1.6	Z	-1.6
51224	Sound recording studios .....	2	4	3	S	-50.0	33.3	S
51229	Other sound recording industries .....	S	S	S	S	S	S	S
515	Broadcasting (except Internet) .....	383	249	291	223	53.8	-14.4	30.5
5151	Radio and television broadcasting .....	37	S	S	S	S	S	S
51511	Radio broadcasting .....	S	18	S	S	S	S	S
515111	Radio networks .....	S	16	S	S	S	S	S
515112	Radio stations .....	S	S	ZZ	ZZ	S	S	NA
51512	Television broadcasting .....	S	S	S	S	S	S	S
5152	Cable and other subscription programming .....	346	219	279	213	58.0	-21.5	31.0
516	Internet publishing and broadcasting .....	196	122	85	138	60.7	43.5	-38.4
517	Telecommunications .....	3,250	S	4,583	4,735	S	S	-3.2
5171	Wired telecommunications carriers .....	1,195	S	2,709	3,080	S	S	-12.0
5172	Wireless telecommunications carriers (except satellite) .....	532	S	502	404	S	S	24.3
517211	Paging .....	S	S	S	S	S	S	S
517212	Cellular and other wireless telecommunications .....	521	408	492	394	27.7	-17.1	24.9
5173	Telecommunications resellers .....	147	S	162	134	S	S	20.9
5174	Satellite telecommunications .....	D	S	D	S	D	D	D
5175	Cable and other program distribution .....	D	207	D	140	D	D	D

See footnotes at end of table.

**Table 3.0.2. Information Sector (NAICS 51) – Estimated Export Revenue for Employer Firms: 2004 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
5179	Other telecommunications .....	115	108	S	S	6.5	S	S
518	Internet service providers, web search portals, and data processing services .....	S	4,515	3,561	2,652	S	26.8	34.3
5181	Internet service providers and web search portals .....	S	2,405	1,595	902	S	50.8	76.8
518111	Internet service providers .....	D	D	D	S	D	D	D
518112	Web search portals .....	D	D	D	725	D	D	D
5182	Data processing, hosting, and related services .....	2,151	2,110	S	S	1.9	S	S
519	Other information services .....	743	1,075	979	807	-30.9	9.8	21.3
51911	News syndicates .....	240	238	244	225	0.8	-2.5	8.4
51912	Libraries and archives .....	14	15	14	14	-6.7	7.1	Z
51919	All other information services .....	S	S	721	S	S	S	S

NA Not available. Z Absolute value is less than 0.05. ZZ Absolute value is less than 0.5. X Not applicable. D Estimate in table is withheld to avoid disclosing data of individual companies; data are included in higher level totals. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Includes NAICS 51211 (Motion picture and video production) and NAICS 51212 (Motion picture and video distribution).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.0.2 provides estimated measures of sampling variability.

**Table 3.1.1. Newspaper Publishers (NAICS 51111) – Estimated Sources of Revenue and Inventories for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>48,274</b>	<b>49,601</b>	<b>49,958</b>	<b>48,366</b>	<b>-2.7</b>	<b>-0.7</b>	<b>3.3</b>
<b>Sources of Revenue</b>							
General newspapers .....	40,083	41,564	42,080	40,810	-3.6	-1.2	3.1
Subscriptions and sales .....	8,918	9,276	9,207	8,884	-3.9	0.7	3.6
Advertising space .....	31,165	32,289	32,873	31,926	-3.5	-1.8	3.0
Specialized newspapers .....	2,574	2,637	2,524	2,439	-2.4	4.5	3.5
Subscriptions and sales .....	S	S	S	S	S	S	S
Advertising space .....	2,202	2,294	2,242	2,149	-4.0	2.3	4.3
Other operating revenue .....	5,617	5,400	5,354	5,117	4.0	0.9	4.6
Printing services .....	1,240	1,326	1,404	1,310	-6.5	-5.6	7.2
Distribution services .....	1,911	2,022	2,094	2,024	-5.5	-3.4	3.5
All other operating revenue .....	2,466	2,052	1,856	1,783	20.2	10.6	4.1
<b>Breakdown of Revenue by Media Type</b>							
Print newspapers .....	40,638	42,118	42,468	41,319	-3.5	-0.8	2.8
Online newspapers .....	1,728	1,450	1,537	1,308	19.2	-5.7	17.5
Other media newspapers .....	291	633	600	621	-54.0	5.5	-3.4
<b>Breakdown of Revenue by Advertising Revenue</b>							
Classified advertising .....	10,483	11,386	11,731	11,127	-7.9	-2.9	5.4
All other advertising .....	22,885	23,196	23,384	22,948	-1.3	-0.8	1.9
<b>Inventories at End of Year</b>							
<b>Total .....</b>	<b>653</b>	<b>705</b>	<b>701</b>	<b>D</b>	<b>-7.4</b>	<b>0.6</b>	<b>D</b>
Finished goods .....	42	38	32	S	10.5	18.8	S
Work-in-process .....	S	S	S	D	S	S	D
Materials, supplies, fuel, etc. ....	610	666	668	624	-8.4	-0.3	7.1

D Estimate in table is withheld to avoid disclosing data of individual companies; data are included in higher level totals. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.1.1 provides estimated measures of sampling variability.

**Table 3.1.2. Periodical Publishers (NAICS 51112) – Estimated Sources of Revenue and Inventories for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>49,292</b>	<b>46,948</b>	<b>44,315</b>	<b>42,290</b>	<b>5.0</b>	<b>5.9</b>	<b>4.8</b>
<b>Sources of Revenue</b>							
General interest periodicals .....	25,062	24,025	22,451	21,420	4.3	7.0	4.8
Subscriptions and sales .....	8,211	7,856	7,497	7,467	4.5	4.8	0.4
Advertising space .....	16,851	16,168	14,954	13,952	4.2	8.1	7.2
Professional and academic periodicals .....	7,882	7,083	7,009	6,878	11.3	1.1	1.9
Subscriptions and sales .....	4,343	3,985	3,924	3,785	9.0	1.6	3.7
Advertising space .....	3,540	3,098	3,085	3,093	14.3	0.4	-0.3
Other periodicals .....	3,823	4,247	4,176	3,819	-10.0	1.7	9.3
Subscriptions and sales .....	1,870	2,111	2,081	1,933	-11.4	1.4	7.7
Advertising space .....	S	2,136	2,095	1,886	S	2.0	11.1
Other operating revenue .....	12,524	11,593	10,679	10,173	8.0	8.6	5.0
Printing services for others .....	808	858	896	887	-5.8	-4.2	1.0
Licensing of rights to content .....	333	377	298	237	-11.7	26.5	25.7
All other operating revenue .....	11,384	10,358	9,485	9,049	9.9	9.2	4.8
<b>Breakdown of Revenue by Media Type</b>							
Print periodicals .....	32,684	32,042	31,113	29,886	2.0	3.1	4.1
Online periodicals .....	3,271	2,765	2,063	1,848	18.3	34.0	11.6
Other media periodicals .....	813	548	460	382	48.4	19.1	20.4
<b>Inventories at End of Year</b>							
<b>Total .....</b>	<b>1,651</b>	<b>1,593</b>	<b>1,555</b>	<b>1,502</b>	<b>3.6</b>	<b>2.4</b>	<b>3.5</b>
Finished goods .....	1,096	1,058	1,003	987	3.6	5.5	1.6
Work-in-process .....	138	119	111	116	16.0	7.2	-4.3
Materials, supplies, fuel, etc. ....	417	417	441	398	Z	-5.4	10.8

Z Absolute value is less than 0.05. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.1.2 provides estimated measures of sampling variability.

**Table 3.1.3. Book Publishers (NAICS 51113) – Estimated Sources of Revenue and Inventories for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>29,296</b>	<b>28,237</b>	<b>27,904</b>	<b>27,904</b>	<b>3.8</b>	<b>1.2</b>	<b>Z</b>
<b>Sources of Revenue</b>							
Books .....	24,891	24,600	24,330	24,475	1.2	1.1	-0.6
Textbooks .....	10,450	10,408	10,038	9,554	0.4	3.7	5.1
Children's books .....	3,249	3,104	3,082	3,117	4.7	0.7	-1.1
General reference books .....	972	1,331	1,415	1,848	-27.0	-5.9	-23.4
Professional, technical, and scholarly books .....	3,044	3,335	3,261	2,745	-8.7	2.3	18.8
Adult trade books .....	7,176	6,421	6,535	7,210	11.8	-1.7	-9.4
All other operating revenue .....	4,405	3,637	3,574	3,429	21.1	1.8	4.2
<b>Breakdown of Revenue by Media Type</b>							
Print books .....	23,501	23,163	23,013	23,241	1.5	0.7	-1.0
Online books .....	585	705	654	620	-17.0	7.8	5.5
Other media books .....	805	731	664	614	10.1	10.1	8.1
<b>Inventories at End of Year</b>							
<b>Total</b> .....	<b>4,617</b>	<b>4,375</b>	<b>4,562</b>	<b>4,480</b>	<b>5.5</b>	<b>-4.1</b>	<b>1.8</b>
Finished goods .....	4,016	3,693	3,817	3,773	8.7	-3.2	1.2
Work-in-process .....	410	513	575	532	-20.1	-10.8	8.1
Materials, supplies, fuel, etc. ....	190	169	170	175	12.4	-0.6	-2.9

Z Absolute value is less than 0.05.

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.1.3 provides estimated measures of sampling variability.

**Table 3.1.4. Directory and Mailing List Publishers (NAICS 51114) – Estimated Sources of Revenue and Inventories for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>19,890</b>	<b>18,915</b>	<b>19,413</b>	<b>18,040</b>	<b>5.2</b>	<b>-2.6</b>	<b>7.6</b>
<b>Sources of Revenue</b>							
Directories .....	13,790	13,660	13,873	13,195	1.0	-1.5	5.1
Subscriptions and sales .....	329	358	365	340	-8.1	-1.9	7.4
Advertising space .....	13,461	13,301	13,509	12,855	1.2	-1.5	5.1
Databases, and other collections of information .....	3,828	3,174	3,337	2,894	20.6	-4.9	15.3
Subscriptions and sales .....	2,853	2,550	2,684	2,323	11.9	-5.0	15.5
Advertising space .....	975	624	653	572	56.3	-4.4	14.2
Other operating revenue .....	2,272	2,082	2,203	1,951	9.1	-5.5	12.9
Rental or sale of mailing lists .....	731	557	583	495	31.2	-4.5	17.8
All other operating revenue .....	S	1,525	1,620	1,456	S	-5.9	11.3
<b>Breakdown of Revenue by Media Type</b>							
Print directories, databases, and other collections of information .....	13,380	13,483	13,685	13,127	-0.8	-1.5	4.3
Online directories, databases, and other collections of information .....	3,586	3,038	3,243	2,540	18.0	-6.3	27.7
Other media directories, databases, and other collections of information .....	652	313	282	423	108.3	11.0	-33.3
<b>Inventories at End of Year</b>							
<b>Total</b> .....	<b>214</b>	<b>209</b>	<b>263</b>	<b>388</b>	<b>2.4</b>	<b>-20.5</b>	<b>-32.2</b>
Finished goods .....	134	132	177	157	1.5	-25.4	12.7
Work-in-process .....	37	S	37	29	S	S	27.6
Materials, supplies, fuel, etc. ....	43	43	S	202	Z	S	S

Z Absolute value is less than 0.05. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.1.4 provides estimated measures of sampling variability.



**Table 3.1.5. Greeting Card Publishers (NAICS 511191) – Estimated Sources of Revenue and Inventories for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>4,799</b>	<b>4,631</b>	<b>4,553</b>	<b>5,075</b>	<b>3.6</b>	<b>1.7</b>	<b>-10.3</b>
<b>Sources of Revenue</b>							
Greeting cards .....	3,168	2,886	2,923	3,604	9.8	-1.3	-18.9
All other operating revenue <sup>1</sup> .....	1,631	1,744	1,630	1,471	-6.5	7.0	10.8
<b>Inventories at End of Year</b>							
<b>Total .....</b>	<b>599</b>	<b>502</b>	<b>512</b>	<b>S</b>	<b>19.3</b>	<b>-2.0</b>	<b>S</b>
Finished goods .....	469	371	378	406	26.4	-1.9	-6.9
Work-in-process .....	32	38	45	S	-15.8	-15.6	S
Materials, supplies, fuel, etc. ....	98	92	89	S	6.5	3.4	S

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Includes calendar publishing, map and atlas publishing, pattern publishing, other miscellaneous publishing, contract printing, sale of licensing of rights to content, sale of advertising space, rental or sale of mailing lists, and publishing services for others.

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.1.5 provides estimated measures of sampling variability.

**Table 3.1.6. Software Publishers (NAICS 5112) – Estimated Sources of Revenue and Inventories for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>143,704</b>	<b>132,257</b>	<b>121,334</b>	<b>112,261</b>	<b>8.7</b>	<b>9.0</b>	<b>8.1</b>
System software publishing .....	51,668	46,507	44,367	40,845	11.1	4.8	8.6
Operating systems software .....	18,714	16,282	16,460	16,553	14.9	-1.1	-0.6
Network software .....	14,599	13,533	12,618	9,982	7.9	7.3	26.4
Database management software .....	9,836	8,693	7,204	6,778	13.1	20.7	6.3
Development tools and programming languages software .....	3,148	3,227	3,366	3,483	-2.4	-4.1	-3.4
Other systems software .....	5,371	4,772	4,719	4,048	12.6	1.1	16.6
Application software publishing .....	49,621	46,856	44,466	41,316	5.9	5.4	7.6
General business productivity and home use applications .....	22,889	21,219	21,710	19,430	7.9	-2.3	11.7
Cross-industry application software .....	13,174	13,423	11,701	11,626	-1.9	14.7	0.6
Vertical market application software .....	7,987	7,165	6,981	6,590	11.5	2.6	5.9
Utilities application software .....	1,409	1,441	1,184	1,034	-2.2	21.7	14.5
Other application software .....	4,162	3,608	2,891	2,635	15.4	24.8	9.7
Other services .....	42,415	38,894	32,501	30,101	9.1	19.7	8.0
Custom application design and development .....	5,496	6,159	4,962	4,433	-10.8	24.1	11.9
Information technology technical consulting services .....	5,180	4,489	4,590	4,193	15.4	-2.2	9.5
Application service provisioning .....	S	S	S	784	S	S	S
Resale of computer hardware and software .....	4,207	3,275	2,253	2,620	28.5	45.4	-14.0
Information technology related training services .....	2,690	1,749	1,527	1,465	53.8	14.5	4.2
All other operating revenue .....	22,481	S	S	16,605	S	S	S
<b>Breakdown of Revenue by Software Sales Type</b>							
System software .....	51,668	46,507	44,367	40,845	11.1	4.8	8.6
Personal computer software .....	18,280	15,221	15,071	14,444	20.1	1.0	4.3
Enterprise or network software .....	18,587	18,315	16,520	14,333	1.5	10.9	15.3
Mainframe computer software .....	10,200	9,737	9,138	9,111	4.8	6.6	0.3
Other system software .....	4,601	3,234	3,638	2,957	42.3	-11.1	23.0
Application software .....	49,621	46,856	44,466	41,316	5.9	5.4	7.6
Personal computer software .....	22,086	S	22,299	19,609	S	S	13.7
Enterprise or network software .....	19,133	17,099	15,209	14,258	11.9	12.4	6.7
Mainframe computer software .....	2,756	2,685	2,737	2,648	2.6	-1.9	3.4
Other application software .....	5,646	5,382	4,221	4,801	4.9	27.5	-12.1
<b>Inventories at End of Year</b>							
<b>Total .....</b>	<b>2,754</b>	<b>2,335</b>	<b>S</b>	<b>S</b>	<b>17.9</b>	<b>S</b>	<b>S</b>
Finished goods .....	S	1,535	S	S	S	S	S
Work-in-process .....	153	145	S	S	5.5	S	S
Materials, supplies, fuel, etc .....	691	654	S	S	5.7	S	S

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.1.6 provides estimated measures of sampling variability.

**Table 3.2.1. Motion Picture and Sound Recording Industries (NAICS 512) – Estimated Revenue and Inventories for Employer Firms: 2004 Through 2007**

Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>MOTION PICTURE AND SOUND RECORDING INDUSTRIES (NAICS 512)</b>							
<b>Operating revenue</b>							
<b>Total .....</b>	<b>102,166</b>	<b>98,392</b>	<b>93,655</b>	<b>88,269</b>	<b>3.8</b>	<b>5.1</b>	<b>6.1</b>
<b>Inventories at End of Year</b>							
<b>Total .....</b>	<b>22,941</b>	<b>25,343</b>	<b>23,506</b>	<b>23,230</b>	<b>-9.5</b>	<b>7.8</b>	<b>1.2</b>
Finished goods .....	18,323	19,699	17,618	17,509	-7.0	11.8	0.6
Work-in-process .....	4,364	5,364	5,639	5,501	-18.6	-4.9	2.5
Materials, supplies, fuel, etc. ....	256	279	248	221	-8.2	12.5	12.2
<b>MOTION PICTURE AND VIDEO INDUSTRIES (NAICS 5121)</b>							
<b>Operating revenue</b>							
<b>Total .....</b>	<b>82,066</b>	<b>77,576</b>	<b>74,789</b>	<b>71,774</b>	<b>5.8</b>	<b>3.7</b>	<b>4.2</b>
<b>Inventories at End of Year</b>							
<b>Total .....</b>	<b>22,303</b>	<b>24,728</b>	<b>22,926</b>	<b>22,727</b>	<b>-9.8</b>	<b>7.9</b>	<b>0.9</b>
Finished goods .....	17,855	19,186	17,128	17,078	-6.9	12.0	0.3
Work-in-process .....	4,247	5,339	5,624	5,489	-20.5	-5.1	2.5
Materials, supplies, fuel, etc. ....	201	202	173	162	-0.5	16.8	6.8
<b>SOUND RECORDING INDUSTRIES (NAICS 5122)</b>							
<b>Operating revenue</b>							
<b>Total .....</b>	<b>20,100</b>	<b>20,816</b>	<b>18,866</b>	<b>16,495</b>	<b>-3.4</b>	<b>10.3</b>	<b>14.4</b>
<b>Inventories at End of Year</b>							
<b>Total .....</b>	<b>638</b>	<b>615</b>	<b>580</b>	<b>503</b>	<b>3.7</b>	<b>6.0</b>	<b>15.3</b>
Finished goods .....	467	513	490	431	-9.0	4.7	13.7
Work-in-process .....	S	S	15	13	S	S	15.4
Materials, supplies, fuel, etc. ....	55	77	75	59	-28.6	2.7	27.1

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.2.1 provides estimated measures of sampling variability.

**Table 3.2.2. Motion Picture and Video Production and Distribution (NAICS 5121X) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>65,922</b>	<b>61,847</b>	<b>59,760</b>	<b>56,605</b>	<b>6.6</b>	<b>3.5</b>	<b>5.6</b>
<b>Sources of Revenue</b>							
Domestic licensing of rights to motion picture films .....	15,505	16,241	16,244	14,884	-4.5	Z	9.1
Domestic licensing of rights to television programs .....	10,421	9,479	9,348	10,526	9.9	1.4	-11.2
International licensing of rights to motion picture films .....	8,733	8,525	6,862	5,446	2.4	24.2	26.0
International licensing of rights to television programs .....	3,581	3,514	2,948	2,673	1.9	19.2	10.3
Audiovisual works speculatively produced for outright sale .....	S	S	S	S	S	S	S
Contract production of audiovisual works .....	4,570	4,725	4,376	4,446	-3.3	8.0	-1.6
Domestic licensing of rights to others to distribute audiovisual works .....	2,500	S	2,220	2,606	S	S	-14.8
International licensing of rights to others to distribute audiovisual works .....	S	S	1,001	900	S	S	11.2
Sale of audiovisual works for the wholesale, retail, and rental markets .....	8,910	7,251	7,853	6,309	22.9	-7.7	24.5
Other production services .....	6,195	4,769	5,046	4,908	29.9	-5.5	2.8
Merchandise licensing .....	415	407	355	493	2.0	14.6	-28.0
All other operating revenue .....	3,758	3,401	3,201	3,113	10.5	6.2	2.8

Z. Absolute value is less than 0.05. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.2.2 provides estimated measures of sampling variability.

**Table 3.2.3. Motion Picture and Video Exhibition (NAICS 51213) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>11,341</b>	<b>11,194</b>	<b>10,789</b>	<b>11,180</b>	<b>1.3</b>	<b>3.8</b>	<b>-3.5</b>
<b>Sources of Revenue</b>							
Feature film exhibition revenue .....	7,524	7,355	7,178	7,522	2.3	2.5	-4.6
Admissions to domestic feature films .....	7,470	7,312	6,996	7,358	2.2	4.5	-4.9
Admissions to foreign feature films .....	55	S	182	165	S	S	10.3
Other revenue .....	3,816	3,839	3,611	3,657	-0.6	6.3	-1.3
Food and beverage sales .....	3,313	3,225	3,049	3,124	2.7	5.8	-2.4
Rental of retail space .....	S	S	S	S	S	S	S
Advertising services .....	217	260	217	222	-16.5	19.8	-2.3
Coin-operated games and rides .....	44	52	41	43	-15.4	26.8	-4.7
All other operating revenue .....	173	226	236	220	-23.5	-4.2	7.3

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.2.3 provides estimated measures of sampling variability.

**Table 3.2.4. Postproduction Services and Other Motion Picture and Video Industries (NAICS 51219) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>4,803</b>	<b>4,535</b>	<b>4,240</b>	<b>3,989</b>	<b>5.9</b>	<b>7.0</b>	<b>6.3</b>
<b>Sources of Revenue</b>							
Audiovisual postproduction services .....	2,845	2,750	2,650	2,525	3.5	3.8	5.0
Motion picture film laboratory services .....	704	686	605	576	2.6	13.4	5.0
Duplication and copying services .....	395	392	376	373	0.8	4.3	0.8
All other operating revenue .....	859	706	608	514	21.7	16.1	18.3

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

Appendix A, Table A-3.2.4 provides estimated measures of sampling variability.

**Table 3.2.5. Integrated Record Production and Distribution (NAICS 51222) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>13,591</b>	<b>14,405</b>	<b>12,856</b>	<b>11,021</b>	<b>-5.7</b>	<b>12.0</b>	<b>16.7</b>
<b>Sources of Revenue</b>							
Licensing revenue .....	1,883	2,048	S	S	-8.1	S	S
Licensing of rights to use musical compositions .....	S	1,410	S	S	S	S	S
Licensing of rights to use musical recordings .....	626	638	S	S	-1.9	S	S
Other operating revenue .....	11,708	12,358	S	9,957	-5.3	S	S
Sales of recordings .....	11,281	S	S	9,806	S	S	S
All other operating revenue .....	427	258	S	S	65.5	S	S

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.2.5 provides estimated measures of sampling variability.

**Table 3.2.6. Music Publishers (NAICS 51223) - Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>4,432</b>	<b>4,544</b>	<b>4,260</b>	<b>3,885</b>	<b>-2.5</b>	<b>6.7</b>	<b>9.7</b>
<b>Sources of Revenue</b>							
Licensing revenue .....	S	2,417	2,316	2,085	S	4.4	11.1
Licensing of rights to use musical compositions .....	S	2,372	2,259	2,025	S	5.0	11.6
Licensing of rights to use musical recordings .....	S	S	S	60	S	S	S
Other operating revenue .....	1,948	2,127	1,943	1,800	-8.4	9.5	7.9
Administration of copyrights for others.....	103	S	97	87	S	S	11.5
Sales of recordings .....	26	29	28	50	-10.3	3.6	-44.0
Print music.....	1,684	1,894	1,748	1,591	-11.1	8.4	9.9
All other operating revenue .....	135	99	71	72	36.4	39.4	-1.4

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.2.6 provides estimated measures of sampling variability.



**Table 3.2.7. Sound Recording Studios (NAICS 51224) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>998</b>	<b>928</b>	<b>766</b>	<b>724</b>	<b>7.5</b>	<b>21.1</b>	<b>5.8</b>
<b>Sources of Revenue</b>							
Studio recording .....	631	592	529	504	6.6	11.9	5.0
Sound recording studio rental and leasing .....	39	38	36	37	2.6	5.6	-2.7
All other operating revenue .....	S	S	201	183	S	S	9.8

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.2.7 provides estimated measures of sampling variability.

**Table 3.3.1. Radio Networks (NAICS 515111) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>5,226</b>	<b>4,474</b>	<b>3,347</b>	<b>2,677</b>	<b>16.8</b>	<b>33.7</b>	<b>25.0</b>
<b>Sources of Revenue</b>							
Air time .....	1,271	1,238	1,187	1,469	2.7	4.3	-19.2
National/regional air time .....	648	649	639	940	-0.2	1.6	-32.0
Local air time .....	623	589	548	529	5.8	7.5	3.6
Other operating revenue .....	3,955	3,236	2,160	1,208	22.2	49.8	78.8
Network compensation .....	324	141	122	209	129.8	15.6	-41.6
Public and non-commercial programming services .....	455	429	375	304	6.1	14.4	23.4
All other operating revenue .....	3,177	2,666	1,663	695	19.2	60.3	139.3

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.3.1 provides estimated measures of sampling variability.

**Table 3.3.2. Radio Stations (NAICS 515112) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>13,624</b>	<b>13,707</b>	<b>13,712</b>	<b>13,817</b>	<b>-0.6</b>	<b>Z</b>	<b>-0.8</b>
<b>Sources of Revenue</b>							
Air time .....	11,924	12,064	12,084	12,268	-1.2	-0.2	-1.5
National/regional air time .....	2,885	2,876	2,683	2,714	0.3	7.2	-1.1
Local air time .....	9,039	9,187	9,401	9,554	-1.6	-2.3	-1.6
Other operating revenue .....	1,700	1,644	1,627	1,549	3.4	1.0	5.0
Network compensation .....	252	244	223	224	3.3	9.4	-0.4
Public and non-commercial programming services .....	S	S	S	S	S	S	S
All other operating revenue .....	905	910	835	803	-0.5	9.0	4.0

Z Absolute value is less than 0.05. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.3.2 provides estimated measures of sampling variability.

**Table 3.3.3. Television Broadcasting (NAICS 51512) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>37,008</b>	<b>36,972</b>	<b>35,249</b>	<b>35,599</b>	<b>0.1</b>	<b>4.9</b>	<b>-1.0</b>
<b>Sources of Revenue</b>							
Air time .....	29,798	29,971	29,106	29,469	-0.6	3.0	-1.2
National/regional air time .....	18,224	18,443	18,233	18,445	-1.2	1.2	-1.1
Local air time .....	11,574	11,528	10,873	11,024	0.4	6.0	-1.4
Other operating revenue .....	7,211	7,001	6,143	6,130	3.0	14.0	0.2
Network compensation .....	1,524	1,574	1,659	1,713	-3.2	-5.1	-3.2
Public and non-commercial programming services .....	2,066	2,118	1,767	1,819	-2.5	19.9	-2.9
All other operating revenue .....	3,620	3,309	2,717	2,598	9.4	21.8	4.6

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.3.3 provides estimated measures of sampling variability.

**Table 3.3.4. Cable and Other Subscription Programming (NAICS 5152) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>40,870</b>	<b>37,981</b>	<b>35,386</b>	<b>31,373</b>	<b>7.6</b>	<b>7.3</b>	<b>12.8</b>
<b>Sources of Revenue</b>							
Licensing of rights to broadcast speciality programming protected							
by copyright .....	20,644	18,989	17,704	16,323	8.7	7.3	8.5
Air time .....	16,653	15,588	14,921	13,129	6.8	4.5	13.6
All other operating revenue .....	3,573	3,404	2,761	1,921	5.0	23.3	43.7

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.3.4 provides estimated measures of sampling variability.

**Table 3.3.5. Internet Publishing and Broadcasting (NAICS 516) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>15,480</b>	<b>12,862</b>	<b>10,391</b>	<b>8,695</b>	<b>20.4</b>	<b>23.8</b>	<b>19.5</b>
<b>Sources of Revenue</b>							
Publishing and broadcasting of content on the Internet .....	8,478	7,109	6,068	5,278	19.3	17.2	15.0
Online advertising space .....	3,642	2,879	1,976	1,607	26.5	45.7	23.0
Licensing of rights to use intellectual property .....	556	527	433	401	5.5	21.7	8.0
All other operating revenue .....	2,804	2,347	1,912	1,410	19.5	22.8	35.6
<b>Breakdown of Revenue by Type of Customer</b>							
Government .....	S	S	S	446	S	S	S
Business firms and not-for-profit organizations .....	10,307	8,810	7,315	6,310	17.0	20.4	15.9
Household consumers and individual users .....	4,461	3,392	2,479	1,939	31.5	36.8	27.8

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.3.5 provides estimated measures of sampling variability.

**Table 3.3.6. Wired Telecommunications Carriers (NAICS 5171) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>192,779</b>	<b>195,092</b>	<b>206,622</b>	<b>211,176</b>	<b>-1.2</b>	<b>-5.6</b>	<b>-2.2</b>
<b>Sources of Revenue</b>							
Fixed services .....	90,675	89,905	94,422	101,627	0.9	-4.8	-7.1
Fixed local .....	58,516	57,699	58,928	61,316	1.4	-2.1	-3.9
Fixed long-distance .....	30,498	31,297	33,802	38,420	-2.6	-7.4	-12.0
Fixed all distance (no distinction between local or long distance) .....	1,661	S	1,692	1,891	S	S	-10.5
Other telecommunications services .....	88,833	89,629	96,295	94,609	-0.9	-6.9	1.8
Carrier services .....	27,410	31,387	37,423	37,656	-12.7	-16.1	-0.6
Private network services .....	23,472	23,279	26,678	26,144	0.8	-12.7	2.0
Subscriber line charges .....	6,043	7,692	8,204	8,520	-21.4	-6.2	-3.7
Internet access services .....	18,609	15,350	14,374	12,616	21.2	6.8	13.9
Internet telephony .....	1,855	1,663	938	798	11.5	77.3	17.5
Telecommunication network installation services .....	6,314	5,948	S	S	6.2	S	S
Reselling services for telecommunications equipment, retail .....	3,350	3,364	3,560	3,878	-0.4	-5.5	-8.2
Rental of telecommunications equipment .....	982	S	251	291	S	S	-13.7
Repair and maintenance services for telecommunications equipment .....	797	740	802	851	7.7	-7.7	-5.8
All other operating revenue .....	13,272	15,558	15,905	14,941	-14.7	-2.2	6.5

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.3.6 provides estimated measures of sampling variability.

**Table 3.3.7. Wired Telecommunications Carriers (NAICS 5171) – Estimated Breakdown of Revenue by Type of Customer: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>192,779</b>	<b>195,092</b>	<b>206,622</b>	<b>211,176</b>	<b>-1.2</b>	<b>-5.6</b>	<b>-2.2</b>
<b>Breakdown of Revenue by Type of Customer</b>							
Fixed local telephony .....	58,516	57,327	58,928	61,316	2.1	-2.7	-3.9
Government .....	1,193	1,972	1,748	1,898	-39.5	12.8	-7.9
Business firms and not-for-profit organizations .....	24,080	19,326	22,559	23,834	24.6	-14.3	-5.3
Household consumers and individual users .....	33,243	36,030	34,622	35,584	-7.7	4.1	-2.7
Fixed long-distance telephony .....	30,498	31,252	33,802	38,420	-2.4	-7.5	-12.0
Government .....	S	S	713	854	S	S	-16.5
Business firms and not-for-profit organizations .....	18,626	17,868	18,732	18,629	4.2	-4.6	0.6
Household consumers and individual users .....	10,223	11,338	14,357	18,937	-9.8	-21.0	-24.2
Subscriber line charges .....	6,043	7,692	8,204	8,520	-21.4	-6.2	-3.7
Government .....	S	S	S	S	S	S	S
Business firms and not-for-profit organizations .....	1,671	2,445	2,672	2,695	-31.7	-8.5	-0.9
Household consumers and individual users .....	4,294	5,160	5,452	5,744	-16.8	-5.4	-5.1
Fixed long-distance telephony .....	30,498	31,252	33,802	38,420	-2.4	-7.5	-12.0
Intrastate .....	11,821	9,674	12,923	11,990	22.2	-25.1	7.8
Interstate .....	13,091	16,459	15,766	20,958	-20.5	4.4	-24.8
International .....	5,586	5,119	5,113	5,472	9.1	0.1	-6.6

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.3.7 provides estimated measures of sampling variability.



**Table 3.3.8. Paging (NAICS 517211) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>1,557</b>	<b>1,874</b>	<b>1,990</b>	<b>1,909</b>	<b>-16.9</b>	<b>-5.8</b>	<b>4.2</b>
<b>Sources of Revenue</b>							
Messaging (paging) services .....	1,252	1,469	1,584	1,472	-14.8	-7.3	7.6
All other operating revenue .....	305	405	406	437	-24.7	-0.2	-7.1

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

Appendix A, Table A-3.3.8 provides estimated measures of sampling variability.

**Table 3.3.9. Cellular and Other Wireless Telecommunications (NAICS 517212) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>172,528</b>	<b>156,703</b>	<b>138,035</b>	<b>125,693</b>	<b>10.1</b>	<b>13.5</b>	<b>9.8</b>
<b>Sources of Revenue</b>							
Mobile services .....	133,912	124,645	111,663	99,949	7.4	11.6	11.7
Mobile telephony .....	54,516	53,820	57,097	54,114	1.3	-5.7	5.5
Mobile long-distance .....	5,312	4,804	4,398	3,267	10.6	9.2	34.6
Mobile all distance .....	60,310	S	42,292	35,783	S	S	18.2
Other mobile services .....	S	S	7,875	6,785	S	S	16.1
Other telecommunications services .....	14,312	11,888	9,508	8,258	20.4	25.0	15.1
Internet access services .....	D	D	1,124	659	D	D	70.6
Installation services for telecommunication networks .....	181	146	S	S	24.0	S	S
Reselling services for telecommunications equipment, retail .....	9,382	8,585	7,377	6,980	9.3	16.4	5.7
Rental of telecommunications equipment .....	70	110	S	74	-36.4	S	S
Repair and maintenance services for telecommunications equipment .....	D	D	732	431	D	D	69.8
All other operating revenue .....	24,304	20,170	16,865	17,485	20.5	19.6	-3.5

D Estimate in table is withheld to avoid disclosing data of individual companies; data are included in higher level totals. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.3.9 provides estimated measures of sampling variability.

**Table 3.3.10. Telecommunications Resellers (NAICS 5173) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>13,606</b>	<b>12,224</b>	<b>11,228</b>	<b>9,849</b>	<b>11.3</b>	<b>8.9</b>	<b>14.0</b>
<b>Sources of Revenue</b>							
Fixed local .....	1,773	1,817	1,725	1,516	-2.4	5.3	13.8
Fixed long distance .....	S	2,058	2,265	2,168	S	-9.1	4.5
Mobile telephony .....	2,104	1,687	1,606	1,185	24.7	5.0	35.5
Carrier services .....	S	2,891	2,294	2,052	S	26.0	11.8
All other operating revenue .....	S	S	3,338	2,929	S	S	14.0

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.3.10 provides estimated measures of sampling variability.

**Table 3.3.11. Satellite Telecommunications (NAICS 5174) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>7,393</b>	<b>6,667</b>	<b>5,808</b>	<b>6,030</b>	<b>10.9</b>	<b>14.8</b>	<b>-3.7</b>
<b>Sources of Revenue</b>							
Carrier services .....	S	S	S	S	S	S	S
Private network services .....	S	2,874	2,636	2,629	S	9.0	0.3
All other operating revenue .....	3,351	2,736	2,153	2,392	22.5	27.1	-10.0

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.3.11 provides estimated measures of sampling variability.

**Table 3.3.12. Cable and Other Program Distribution (NAICS 5175) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>100,849</b>	<b>88,788</b>	<b>80,492</b>	<b>73,317</b>	<b>13.6</b>	<b>10.3</b>	<b>9.8</b>
<b>Sources of Revenue</b>							
Multichannel programming distribution services .....	61,561	56,080	52,158	48,336	9.8	7.5	7.9
Basic programming package .....	45,971	42,440	39,639	36,498	8.3	7.1	8.6
Premium programming package .....	11,859	10,489	9,816	9,312	13.1	6.9	5.4
Pay-per-view .....	3,731	3,151	2,703	2,525	18.4	16.6	7.0
Other revenue .....	39,288	32,708	28,334	24,982	20.1	15.4	13.4
Air time .....	4,671	4,565	4,144	3,933	2.3	10.2	5.4
Rental and reselling services for program distribution equipment .....	3,990	3,158	2,581	2,376	26.3	22.4	8.6
Installation services for connections to program distribution networks .....	954	735	668	621	29.8	10.0	7.6
Internet access services .....	16,501	13,778	11,651	9,924	19.8	18.3	17.4
Internet telephony .....	2,708	1,048	318	698	158.4	229.6	-54.4
Fixed local telephony .....	S	1,754	1,478	1,445	S	18.7	2.3
Fixed long-distance telephony .....	S	418	648	531	S	-35.5	22.0
All other operating revenue .....	8,164	7,251	6,846	5,454	12.6	5.9	25.5

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.3.12 provides estimated measures of sampling variability.

**Table 3.3.13. Cable and Other Program Distribution (NAICS 5175) – Estimated Cable System and Multichannel Video Distribution Revenue by Type of Customer for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>100,849</b>	<b>88,788</b>	<b>80,492</b>	<b>73,317</b>	<b>13.6</b>	<b>10.3</b>	<b>9.8</b>
<b>Breakdown of Revenue by Type of Customer</b>							
Government .....	526	471	503	472	11.7	-6.4	6.6
Business firms and not-for-profit organizations .....	8,647	6,913	6,632	5,520	25.1	4.2	20.1
Household consumers and individual users .....	91,676	81,404	73,357	67,324	12.6	11.0	9.0

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.3.13 provides estimated measures of sampling variability.

**Table 3.4.1. Internet Service Providers (NAICS 518111) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>19,086</b>	<b>19,092</b>	<b>18,977</b>	<b>20,201</b>	<b>Z</b>	<b>0.6</b>	<b>-6.1</b>
<b>Sources of Revenue</b>							
Internet access service .....	10,379	11,429	12,465	14,174	-9.2	-8.3	-12.1
Online advertising space .....	S	S	3,442	2,911	S	S	18.2
Internet backbone services .....	477	407	335	335	17.2	21.5	Z
Internet telephony .....	168	S	S	S	S	S	S
Web site hosting services .....	969	1,077	818	784	-10.0	31.7	4.3
Information technology design and development services .....	S	S	S	S	S	S	S
All other operating revenue .....	2,388	S	1,703	1,803	S	S	-5.5

Z Absolute value is less than 0.05. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.4.1 provides estimated measures of sampling variability.

**Table 3.4.2. Web Search Portals (NAICS 518112) - Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>12,082</b>	<b>9,657</b>	<b>6,992</b>	<b>4,960</b>	<b>25.1</b>	<b>38.1</b>	<b>41.0</b>
<b>Sources of Revenue</b>							
Online advertising space .....	8,702	6,558	4,815	3,407	32.7	36.2	41.3
Information search services on a contract or fee basis .....	S	2,149	D	S	S	D	D
Web site hosting services .....	S	74	D	S	S	D	D
All other operating revenue .....	S	876	S	S	S	S	S

D Estimate in table is withheld to avoid disclosing data of individual companies; data are included in higher level totals. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.4.2 provides estimated measures of sampling variability.



**Table 3.4.3. Data Processing, Hosting, and Related Services (NAICS 5182) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>72,882</b>	<b>70,797</b>	<b>62,629</b>	<b>57,330</b>	<b>2.9</b>	<b>13.0</b>	<b>9.2</b>
<b>Sources of Revenue</b>							
Data processing, IT infrastructure provisioning, and hosting services .....	37,249	37,428	31,875	29,239	-0.5	17.4	9.0
Business process management services .....	19,742	21,183	17,841	16,994	-6.8	18.7	5.0
Data management services .....	6,007	6,231	5,867	5,335	-3.6	6.2	10.0
Application service provisioning .....	6,672	6,063	4,933	4,242	10.0	22.9	16.3
Web site hosting services .....	S	2,745	2,514	2,053	S	9.2	22.5
Collocation services .....	S	S	S	S	S	S	S
Other operating revenue .....	35,633	33,368	30,753	28,091	6.8	8.5	9.5
IT design and development services .....	6,154	6,161	6,578	S	-0.1	-6.3	S
IT technical support services .....	1,450	1,495	1,458	S	-3.0	2.5	S
IT technical consulting services .....	1,927	1,553	1,247	1,299	24.1	24.5	-4.0
Information and document transformation services .....	3,563	3,431	3,212	2,825	3.8	6.8	13.7
Software publishing .....	2,358	2,061	1,872	1,387	14.4	10.1	35.0
Reselling services for computer hardware and software, retail .....	2,157	2,092	1,224	1,165	3.1	70.9	5.1
All other operating revenue .....	18,025	16,576	15,163	13,744	8.7	9.3	10.3

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.4.3 provides estimated measures of sampling variability.

**Table 3.5.1. News Syndicates and Libraries and Archives (NAICS 51911 and 51912) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>NEWS SYNDICATES (NAICS 51911)</b>							
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>2,418</b>	<b>2,209</b>	<b>2,098</b>	<b>1,972</b>	<b>9.5</b>	<b>5.3</b>	<b>6.4</b>
<b>Sources of Revenue</b>							
Licensing of rights to use syndicated media content .....	1,126	1,019	1,018	930	10.5	0.1	9.5
All other operating revenue .....	1,291	1,191	1,080	1,041	8.4	10.3	3.7
<b>LIBRARIES AND ARCHIVES (NAICS 51912)</b>							
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>2,288</b>	<b>2,077</b>	<b>1,967</b>	<b>1,879</b>	<b>10.2</b>	<b>5.6</b>	<b>4.7</b>
<b>Sources of Revenue</b>							
Contributions, gifts, and grants received .....	926	923	883	826	0.3	4.5	6.9
Investment and property income .....	166	131	101	135	26.7	29.7	-25.2
All other revenue .....	1,196	1,023	983	918	16.9	4.1	7.1

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.5.1 provides estimated measures of sampling variability.

**Table 3.5.2. All Other Information Services (NAICS 51919) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>3,283</b>	<b>3,077</b>	<b>2,924</b>	<b>2,580</b>	<b>6.7</b>	<b>5.2</b>	<b>13.3</b>
<b>Sources of Revenue</b>							
Information search and retrieval services .....	574	477	578	594	20.3	-17.5	-2.7
Information services .....	2,138	2,083	1,872	1,570	2.6	11.3	19.2
Media monitoring and analysis .....	D	D	156	166	D	D	-6.0
Advertising .....	D	D	S	S	D	D	S
All other operating revenue .....	243	248	231	204	-2.0	7.4	13.2

D Estimate in table is withheld to avoid disclosing data of individual companies; data are included in higher level totals. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.5.2 provides estimated measures of sampling variability.

**Table 3.6.1. Information Sector (NAICS 51) – Estimated Total Expenses for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
<b>51</b>	<b>Information .....</b>	<b>864,642</b>	<b>836,794</b>	<b>803,658</b>	<b>777,216</b>	<b>3.3</b>	<b>4.1</b>	<b>3.4</b>
511	Publishing industries (except Internet) .....	213,829	204,741	196,848	193,578	4.4	4.0	1.7
5111	Newspaper, periodical, book, and directory publishers .....	117,715	113,759	110,054	105,540	3.5	3.4	4.3
51111	Newspaper publishers .....	42,291	44,134	41,221	40,016	-4.2	7.1	3.0
51112	Periodical publishers .....	39,615	36,540	35,188	33,933	8.4	3.8	3.7
51113	Book publishers .....	16,954	16,053	16,997	15,989	5.6	-5.6	6.3
51114	Directory and mailing list publishers .....	14,135	12,443	12,222	11,184	13.6	1.8	9.3
51119	Other publishers .....	4,720	4,589	4,426	4,418	2.9	3.7	0.2
511191	Greeting card publishers .....	2,913	2,814	2,759	2,825	3.5	2.0	-2.3
511199	All other publishers .....	1,807	1,775	1,667	1,593	1.8	6.5	4.6
5112	Software publishers .....	96,114	90,982	86,794	88,038	5.6	4.8	-1.4
512	Motion picture and sound recording industries .....	75,885	74,257	72,576	68,632	2.2	2.3	5.7
5121	Motion picture and video industries .....	60,399	57,826	57,568	56,791	4.4	0.4	1.4
5121x	Motion picture and video production and distribution <sup>1</sup> .....	48,085	45,407	45,219	44,438	5.9	0.4	1.8
51213	Motion picture and video exhibition .....	8,208	8,454	8,501	8,633	-2.9	-0.6	-1.5
512131	Motion picture theaters (except drive-ins) .....	8,075	8,343	8,422	8,559	-3.2	-0.9	-1.6
512132	Drive-in motion picture theaters .....	S	S	79	S	S	S	S
51219	Postproduction services and other motion picture and video industries .....	4,106	3,965	3,848	3,720	3.6	3.0	3.4
512191	Teleproduction and other postproduction services .....	3,344	3,145	3,078	3,024	6.3	2.2	1.8
512199	Other motion picture and video industries .....	762	820	770	696	-7.1	6.5	10.6
5122	Sound recording industries .....	15,486	16,431	15,008	11,841	-5.8	9.5	26.7
51221	Record production .....	310	317	296	275	-2.2	7.1	7.6
51222	Integrated record production and distribution .....	S	12,150	10,993	8,127	S	10.5	35.3
51223	Music publishers .....	2,692	2,552	2,444	2,268	5.5	4.4	7.8
51224	Sound recording studios .....	879	772	672	634	13.9	14.9	6.0
51229	Other sound recording industries .....	685	640	603	537	7.0	6.1	12.3
515	Broadcasting (except Internet) .....	72,926	69,710	67,015	63,123	4.6	4.0	6.2
5151	Radio and television broadcasting .....	46,198	44,869	43,546	42,120	3.0	3.0	3.4
51511	Radio broadcasting .....	16,395	16,388	15,013	13,808	Z	9.2	8.7
515111	Radio networks .....	6,407	6,481	4,858	3,888	-1.1	33.4	24.9
515112	Radio stations .....	9,988	9,907	10,155	9,920	0.8	-2.4	2.4
51512	Television broadcasting .....	29,803	28,481	28,533	28,312	4.6	-0.2	0.8
5152	Cable and other subscription programming .....	26,728	24,841	23,469	21,003	7.6	5.8	11.7
516	Internet publishing and broadcasting .....	13,784	11,272	9,084	7,056	22.3	24.1	28.7
517	Telecommunications .....	397,903	391,733	380,731	369,447	1.6	2.9	3.1
5171	Wired telecommunications carriers .....	158,626	168,750	176,407	187,800	-6.0	-4.3	-6.1
5172	Wireless telecommunications carriers (except satellite) .....	137,818	135,043	122,543	105,306	2.1	10.2	16.4
517211	Paging .....	1,221	1,528	1,750	1,560	-20.1	-12.7	12.2
517212	Cellular and other wireless telecommunications .....	136,597	133,515	120,793	103,746	2.3	10.5	16.4
5173	Telecommunications resellers .....	7,414	6,839	6,832	5,979	8.4	0.1	14.3
5174	Satellite telecommunications .....	5,756	5,093	4,447	4,329	13.0	14.5	2.7
5175	Cable and other program distribution .....	86,481	74,536	69,030	64,865	16.0	8.0	6.4

See footnotes at end of table.

**Table 3.6.1. Information Sector (NAICS 51) – Estimated Total Expenses for Employer Firms: 2004 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
5179	Other telecommunications .....	1,808	1,472	1,472	1,168	22.8	Z	26.0
518	Internet service providers, web search portals, and data processing services .....	84,120	79,290	71,943	70,152	6.1	10.2	2.6
5181	Internet service providers and web search portals .....	19,709	19,229	17,497	18,705	2.5	9.9	-6.5
518111	Internet service providers .....	13,607	14,318	14,253	16,251	-5.0	0.5	-12.3
518112	Web search portals .....	6,102	4,911	3,244	2,454	24.3	51.4	32.2
5182	Data processing, hosting, and related services .....	64,411	60,061	54,446	51,447	7.2	10.3	5.8
519	Other information services .....	6,195	5,791	5,461	5,228	7.0	6.0	4.5
51911	News syndicates .....	1,911	1,880	1,836	1,877	1.6	2.4	-2.2
51912	Libraries and archives .....	1,969	1,788	1,720	1,614	10.1	4.0	6.6
51919	All other information services .....	2,315	2,123	1,905	1,737	9.0	11.4	9.7

Z Absolute value is less than 0.05. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Includes NAICS 51211 (Motion picture and video production) and NAICS 51212 (Motion picture and video distribution).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.6.1 provides estimated measures of sampling variability.

**Table 3.6.2. Newspaper Publishers (NAICS 51111), Periodical Publishers (NAICS 51112), Book Publishers (NAICS 51113), Directory and Mailing List Publishers (NAICS 51114), Greeting Card Publishers (NAICS 511191), Software Publishers (NAICS 5112) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>NEWSPAPER PUBLISHERS (NAICS 51111)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>42,291</b>	<b>44,134</b>	<b>41,221</b>	<b>40,016</b>	<b>-4.2</b>	<b>7.1</b>	<b>3.0</b>
Personnel costs.....	20,020	20,267	19,615	18,997	-1.2	3.3	3.3
Gross annual payroll.....	15,864	15,844	15,533	15,093	0.1	2.0	2.9
Employer's cost for fringe benefits.....	3,822	4,057	3,748	3,633	-5.8	8.2	3.2
Health insurance.....	1,620	NA	NA	NA	NA	NA	NA
Pension plans.....	870	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	538	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	332	NA	NA	NA	NA	NA	NA
Other.....	1,332	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	334	365	334	271	-8.5	9.3	23.2
Expensed materials, parts and supplies (not for resale).....	3,114	4,052	4,180	4,289	-23.1	-3.1	-2.5
Expensed equipment.....	83	87	84	94	-4.6	3.6	-10.6
Expensed purchase of other materials, parts, and supplies.....	3,031	3,965	4,096	4,194	-23.6	-3.2	-2.3
Expensed purchased services.....	3,968	4,213	3,892	3,571	-5.8	8.2	9.0
Expensed purchases of software.....	111	106	100	94	4.7	6.0	6.4
Purchased electricity and fuels (except motor fuels).....	388	412	378	336	-5.8	9.0	12.5
Purchased electricity.....	303	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	84	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	806	825	788	677	-2.3	4.7	16.4
Lease and rental payments for machinery, equipment, and other tangible items.....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	493	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	416	400	396	395	4.0	1.0	0.3
Purchased repairs and maintenance to machinery and equipment.....	267	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	149	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	679	731	737	684	-7.1	-0.8	7.7
Purchased printing services.....	1,569	1,738	1,493	1,385	-9.7	16.4	7.8
Other operating expenses.....	15,189	15,603	13,534	13,159	-2.7	15.3	2.8
Depreciation and amortization charges.....	2,366	2,155	1,971	1,935	9.8	9.3	1.9
Governmental taxes and license fees.....	373	427	389	377	-12.6	9.8	3.2
All other operating expenses.....	12,450	13,022	11,174	10,846	-4.4	16.5	3.0
Data processing and other purchased computer services.....	220	NA	NA	NA	NA	NA	NA
Purchased communication services.....	235	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	50	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	814	NA	NA	NA	NA	NA	NA
All other operating expenses.....	11,131	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.2. Newspaper Publishers (NAICS 51111), Periodical Publishers (NAICS 51112), Book Publishers (NAICS 51113), Directory and Mailing List Publishers (NAICS 51114), Greeting Card Publishers (NAICS 511191), Software Publishers (NAICS 5112) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>PERIODICAL PUBLISHERS (NAICS 51112)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>39,615</b>	<b>36,540</b>	<b>35,188</b>	<b>33,933</b>	<b>8.4</b>	<b>3.8</b>	<b>3.7</b>
Personnel costs.....	15,576	14,661	13,729	13,043	6.2	6.8	5.3
Gross annual payroll.....	12,437	11,841	11,035	10,546	5.0	7.3	4.6
Employer's cost for fringe benefits.....	2,671	2,388	2,247	2,071	11.9	6.3	8.5
Health insurance.....	1,030	NA	NA	NA	NA	NA	NA
Pension plans.....	575	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	322	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	253	NA	NA	NA	NA	NA	NA
Other.....	1,065	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	468	432	447	427	8.3	-3.4	4.7
Expensed materials, parts and supplies (not for resale).....	1,227	1,269	1,332	1,336	-3.3	-4.7	-0.3
Expensed equipment.....	129	150	127	138	-14.0	18.1	-8.0
Expensed purchase of other materials, parts, and supplies.....	1,097	1,118	1,205	1,198	-1.9	-7.2	0.6
Expensed purchased services.....	7,724	7,579	6,826	6,563	1.9	11.0	4.0
Expensed purchases of software.....	153	165	159	213	-7.3	3.8	-25.4
Purchased electricity and fuels (except motor fuels).....	146	137	126	110	6.6	8.7	14.5
Purchased electricity.....	134	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	12	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	1,185	1,107	1,107	1,010	7.0	Z	9.6
Lease and rental payments for machinery, equipment, and other tangible items.....	270	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	914	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	300	230	218	203	30.4	5.5	7.4
Purchased repairs and maintenance to machinery and equipment.....	186	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	114	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	1,825	1,884	1,735	1,664	-3.1	8.6	4.3
Purchased printing services.....	4,115	4,055	3,481	3,363	1.5	16.5	3.5
Other operating expenses.....	15,089	13,031	13,300	12,991	15.8	-2.0	2.4
Depreciation and amortization charges.....	1,629	1,606	1,644	1,697	1.4	-2.3	-3.1
Governmental taxes and license fees.....	180	143	136	135	25.9	5.1	0.7
All other operating expenses.....	13,280	11,282	11,520	11,159	17.7	-2.1	3.2
Data processing and other purchased computer services.....	170	NA	NA	NA	NA	NA	NA
Purchased communication services.....	188	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	46	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	1,177	NA	NA	NA	NA	NA	NA
All other operating expenses.....	11,699	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.2. Newspaper Publishers (NAICS 51111), Periodical Publishers (NAICS 51112), Book Publishers (NAICS 51113), Directory and Mailing List Publishers (NAICS 51114), Greeting Card Publishers (NAICS 511191), Software Publishers (NAICS 5112) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>BOOK PUBLISHERS (NAICS 51113)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>16,954</b>	<b>16,053</b>	<b>16,997</b>	<b>15,989</b>	<b>5.6</b>	<b>-5.6</b>	<b>6.3</b>
Personnel costs.....	6,796	6,760	6,933	6,635	0.5	-2.5	4.5
Gross annual payroll.....	5,345	5,426	5,601	5,302	-1.5	-3.1	5.6
Employer's cost for fringe benefits.....	1,168	1,080	1,118	1,124	8.1	-3.4	-0.5
Health insurance.....	457	NA	NA	NA	NA	NA	NA
Pension plans.....	274	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	98	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	177	NA	NA	NA	NA	NA	NA
Other.....	437	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	283	254	S	S	11.4	S	S
Expensed materials, parts and supplies (not for resale).....	425	467	483	556	-9.0	-3.3	-13.1
Expensed equipment.....	233	228	215	237	2.2	6.0	-9.3
Expensed purchase of other materials, parts, and supplies.....	192	239	268	S	-19.7	-10.8	S
Expensed purchased services.....	3,434	3,093	3,215	2,989	11.0	-3.8	7.6
Expensed purchases of software.....	S	111	S	S	S	S	S
Purchased electricity and fuels (except motor fuels).....	69	65	62	65	6.2	4.8	-4.6
Purchased electricity.....	60	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	9	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	595	523	539	565	13.8	-3.0	-4.6
Lease and rental payments for machinery, equipment, and other tangible items.....	113	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	482	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	100	97	109	108	3.1	-11.0	0.9
Purchased repairs and maintenance to machinery and equipment.....	55	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	45	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	973	914	923	912	6.5	-1.0	1.2
Purchased printing services.....	1,611	1,384	1,474	1,230	16.4	-6.1	19.8
Other operating expenses.....	6,299	5,733	6,367	5,809	9.9	-10.0	9.6
Depreciation and amortization charges.....	1,155	1,126	970	891	2.6	16.1	8.9
Governmental taxes and license fees.....	73	72	79	82	1.4	-8.9	-3.7
All other operating expenses.....	5,071	4,534	5,317	4,835	11.8	-14.7	10.0
Data processing and other purchased computer services.....	75	NA	NA	NA	NA	NA	NA
Purchased communication services.....	126	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	21	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	477	NA	NA	NA	NA	NA	NA
All other operating expenses.....	4,372	NA	NA	NA	NA	NA	NA

See footnotes at end of table.



**Table 3.6.2. Newspaper Publishers (NAICS 51111), Periodical Publishers (NAICS 51112), Book Publishers (NAICS 51113), Directory and Mailing List Publishers (NAICS 51114), Greeting Card Publishers (NAICS 511191), Software Publishers (NAICS 5112) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>DIRECTORY AND MAILING LIST PUBLISHERS (NAICS 51114)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>14,135</b>	<b>12,443</b>	<b>12,222</b>	<b>11,184</b>	<b>13.6</b>	<b>1.8</b>	<b>9.3</b>
Personnel costs.....	5,261	5,311	5,129	4,523	-0.9	3.5	13.4
Gross annual payroll.....	4,116	4,201	4,102	3,595	-2.0	2.4	14.1
Employer's cost for fringe benefits.....	957	938	838	693	2.0	11.9	20.9
Health insurance.....	471	NA	NA	NA	NA	NA	NA
Pension plans.....	222	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	118	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	104	NA	NA	NA	NA	NA	NA
Other.....	263	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	188	172	189	236	9.3	-9.0	-19.9
Expensed materials, parts and supplies (not for resale).....	1,050	859	745	620	22.2	15.3	20.2
Expensed equipment.....	30	27	29	25	11.1	-6.9	16.0
Expensed purchase of other materials, parts, and supplies.....	1,020	832	716	595	22.6	16.2	20.3
Expensed purchased services.....	2,048	1,973	1,719	1,585	3.8	14.8	8.5
Expensed purchases of software.....	66	55	48	45	20.0	14.6	6.7
Purchased electricity and fuels (except motor fuels).....	21	22	19	18	-4.5	15.8	5.6
Purchased electricity.....	18	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	3	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	312	265	268	313	17.7	-1.1	-14.4
Lease and rental payments for machinery, equipment, and other tangible items.....	16	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	296	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	43	42	48	45	2.4	-12.5	6.7
Purchased repairs and maintenance to machinery and equipment.....	23	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	20	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	623	516	465	448	20.7	11.0	3.8
Purchased printing services.....	983	1,073	870	715	-8.4	23.3	21.7
Other operating expenses.....	5,777	4,299	4,630	4,456	34.4	-7.1	3.9
Depreciation and amortization charges.....	1,577	744	648	627	112.0	14.8	3.3
Governmental taxes and license fees.....	44	46	59	75	-4.3	-22.0	-21.3
All other operating expenses.....	4,156	3,509	3,923	3,754	18.4	-10.6	4.5
Data processing and other purchased computer services.....	55	NA	NA	NA	NA	NA	NA
Purchased communication services.....	60	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	3	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	312	NA	NA	NA	NA	NA	NA
All other operating expenses.....	3,726	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.2. Newspaper Publishers (NAICS 51111), Periodical Publishers (NAICS 51112), Book Publishers (NAICS 51113), Directory and Mailing List Publishers (NAICS 51114), Greeting Card Publishers (NAICS 511191), Software Publishers (NAICS 5112) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>GREETING CARD PUBLISHERS (NAICS 511191)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>2,913</b>	<b>2,814</b>	<b>2,759</b>	<b>2,825</b>	<b>3.5</b>	<b>2.0</b>	<b>-2.3</b>
Personnel costs.....	1,074	1,054	995	982	1.9	5.9	1.3
Gross annual payroll.....	895	886	826	802	1.0	7.3	3.0
Employer's cost for fringe benefits.....	145	136	139	147	6.6	-2.2	-5.4
Health insurance.....	59	NA	NA	NA	NA	NA	NA
Pension plans.....	28	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	2	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	27	NA	NA	NA	NA	NA	NA
Other.....	58	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	33	32	30	33	3.1	6.7	-9.1
Expensed materials, parts and supplies (not for resale).....	127	116	113	114	9.5	2.7	-0.9
Expensed equipment.....	D	28	26	27	D	7.7	-3.7
Expensed purchase of other materials, parts, and supplies.....	D	88	87	87	D	1.1	Z
Expensed purchased services.....	334	325	307	335	2.8	5.9	-8.4
Expensed purchases of software.....	14	10	10	10	40.0	Z	Z
Purchased electricity and fuels (except motor fuels).....	32	33	32	33	-3.0	3.1	-3.0
Purchased electricity.....	29	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	3	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	49	48	47	49	2.1	2.1	-4.1
Lease and rental payments for machinery, equipment, and other tangible items.....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	41	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	17	18	16	16	-5.6	12.5	Z
Purchased repairs and maintenance to machinery and equipment.....	15	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	2	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	185	175	165	186	5.7	6.1	-11.3
Purchased printing services.....	37	42	37	42	-11.9	13.5	-11.9
Other operating expenses.....	1,377	1,319	1,343	1,394	4.4	-1.8	-3.7
Depreciation and amortization charges.....	112	104	96	86	7.7	8.3	11.6
Governmental taxes and license fees.....	19	19	18	18	Z	5.6	Z
All other operating expenses.....	1,246	1,196	1,229	1,289	4.2	-2.7	-4.7
Data processing and other purchased computer services.....	11	NA	NA	NA	NA	NA	NA
Purchased communication services.....	36	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	2	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	160	NA	NA	NA	NA	NA	NA
All other operating expenses.....	1,037	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.2. Newspaper Publishers (NAICS 5111), Periodical Publishers (NAICS 5112), Book Publishers (NAICS 5113), Directory and Mailing List Publishers (NAICS 5114), Greeting Card Publishers (NAICS 51191), Software Publishers (NAICS 5112) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>SOFTWARE PUBLISHERS (NAICS 5112)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>96,114</b>	<b>90,982</b>	<b>86,794</b>	<b>88,038</b>	<b>5.6</b>	<b>4.8</b>	<b>-1.4</b>
Personnel costs.....	56,685	52,162	49,555	49,535	8.7	5.3	Z
Gross annual payroll.....	44,997	41,982	40,532	41,430	7.2	3.6	-2.2
Employer's cost for fringe benefits.....	8,670	7,362	6,541	5,990	17.8	12.6	9.2
Health insurance.....	3,054	NA	NA	NA	NA	NA	NA
Pension plans.....	2,937	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	1,908	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	1,029	NA	NA	NA	NA	NA	NA
Other.....	2,678	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	3,018	2,818	2,482	2,115	7.1	13.5	17.4
Expensed materials, parts and supplies (not for resale).....	1,899	2,037	1,754	1,779	-6.8	16.1	-1.4
Expensed equipment.....	659	684	791	677	-3.7	-13.5	16.8
Expensed purchase of other materials, parts, and supplies.....	1,240	1,353	963	1,102	-8.4	40.5	-12.6
Expensed purchased services.....	11,311	10,947	10,560	10,038	3.3	3.7	5.2
Expensed purchases of software.....	1,185	1,350	S	S	-12.2	S	S
Purchased electricity and fuels (except motor fuels).....	290	311	257	230	-6.8	21.0	11.7
Purchased electricity.....	282	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	7	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	2,185	2,184	2,391	2,615	Z	-8.7	-8.6
Lease and rental payments for machinery, equipment, and other tangible items.....	370	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	1,815	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	742	488	445	393	52.0	9.7	13.2
Purchased repairs and maintenance to machinery and equipment.....	556	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	186	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	6,703	6,380	6,073	5,277	5.1	5.1	15.1
Purchased software reproduction.....	S	S	S	S	S	S	S
Other operating expenses.....	26,219	25,836	24,924	26,685	1.5	3.7	-6.6
Depreciation and amortization charges.....	4,484	4,221	4,384	4,176	6.2	-3.7	5.0
Governmental taxes and license fees.....	364	379	350	300	-4.0	8.3	16.7
All other operating expenses.....	21,371	S	20,190	22,209	S	S	-9.1
Data processing and other purchased computer services.....	615	NA	NA	NA	NA	NA	NA
Purchased communication services.....	829	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	30	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	3,621	NA	NA	NA	NA	NA	NA
All other operating expenses.....	16,276	NA	NA	NA	NA	NA	NA

NA Not available. Z Absolute value is less than 0.05. D Estimate in table is withheld to avoid disclosing data of individual companies; data are included in higher level totals. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

Appendix A, Table A-3.6.2 provides estimated measures of sampling variability.

**Table 3.6.3. Motion Picture and Video Production and Distribution (NAICS 5121X), Motion Picture and Video Exhibition (NAICS 51213), Postproduction Services and Other Motion Picture and Video Industries (NAICS 51219), Integrated Record Production and Distribution Services (NAICS 51222), Music Publishers (NAICS 51223), Sound Recording Studios (NAICS 51224) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>MOTION PICTURE AND VIDEO PRODUCTION AND DISTRIBUTION (NAICS 5121X)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>48,085</b>	<b>45,407</b>	<b>45,219</b>	<b>44,438</b>	<b>5.9</b>	<b>0.4</b>	<b>1.8</b>
Personnel costs.....	13,081	12,875	12,500	10,962	1.6	3.0	14.0
Gross annual payroll.....	11,450	11,408	11,079	9,680	0.4	3.0	14.5
Employer's cost for fringe benefits.....	999	923	907	850	8.2	1.8	6.7
Health insurance.....	311	NA	NA	NA	NA	NA	NA
Pension plans.....	313	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	180	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	134	NA	NA	NA	NA	NA	NA
Other.....	375	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	633	544	514	433	16.4	5.8	18.7
Expensed materials, parts and supplies (not for resale).....	701	740	704	684	-5.3	5.1	2.9
Expensed equipment.....	153	120	105	82	27.5	14.3	28.0
Expensed purchase of other materials, parts, and supplies.....	548	620	599	601	-11.6	3.5	-0.3
Expensed purchased services.....	6,290	6,418	6,163	6,296	-2.0	4.1	-2.1
Expensed purchases of software.....	68	53	76	52	28.3	-30.3	46.2
Purchased electricity and fuels (except motor fuels).....	67	66	59	64	1.5	11.9	-7.8
Purchased electricity.....	61	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	7	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	1,262	1,420	1,296	1,246	-11.1	9.6	4.0
Lease and rental payments for machinery, equipment, and other tangible items.....	117	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	1,145	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	155	185	185	193	-16.2	Z	-4.1
Purchased repairs and maintenance to machinery and equipment.....	76	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	79	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	4,738	4,693	4,546	4,740	1.0	3.2	-4.1
Other operating expenses.....	28,012	25,374	25,852	26,496	10.4	Z	-2.4
Depreciation and amortization charges.....	2,497	2,319	2,123	2,892	7.7	9.2	-26.6
Governmental taxes and license fees.....	1,273	1,146	1,133	1,064	11.1	1.1	6.5
All other operating expenses.....	24,242	21,908	22,596	22,540	10.7	-3.0	0.2
Data processing and other purchased computer services.....	53	NA	NA	NA	NA	NA	NA
Purchased communication services.....	129	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	24	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	1,170	NA	NA	NA	NA	NA	NA
All other operating expenses.....	22,866	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.3. Motion Picture and Video Production and Distribution (NAICS 5121X), Motion Picture and Video Exhibition (NAICS 51213), Postproduction Services and Other Motion Picture and Video Industries (NAICS 51219), Integrated Record Production and Distribution Services (NAICS 51222), Music Publishers (NAICS 51223), Sound Recording Studios (NAICS 51224) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

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Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>MOTION PICTURE AND VIDEO EXHIBITION (NAICS 51213)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>8,208</b>	<b>8,454</b>	<b>8,501</b>	<b>8,633</b>	<b>-2.9</b>	<b>-0.6</b>	<b>-1.5</b>
Personnel costs.....	1,696	1,752	1,663	1,697	-3.2	5.4	-2.0
Gross annual payroll.....	1,496	1,583	1,461	1,495	-5.5	8.4	-2.3
Employer's cost for fringe benefits.....	158	137	163	162	15.3	-16.0	0.6
Health insurance.....	51	NA	NA	NA	NA	NA	NA
Pension plans.....	23	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	S	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	S	NA	NA	NA	NA	NA	NA
Other.....	85	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	42	31	39	40	35.5	-20.5	-2.5
Expensed materials, parts and supplies (not for resale).....	161	185	177	191	-13.0	4.5	-7.3
Expensed equipment.....	20	26	17	S	-23.1	52.9	S
Expensed purchase of other materials, parts, and supplies.....	141	160	161	158	-11.9	-0.6	1.9
Expensed purchased services.....	2,167	2,240	2,057	1,971	-3.3	8.9	4.4
Expensed purchases of software.....	7	7	4	4	Z	75.0	Z
Purchased electricity and fuels (except motor fuels).....	253	380	314	299	-33.4	21.0	5.0
Purchased electricity.....	225	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	29	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	1,512	1,435	1,310	1,248	5.4	9.5	5.0
Lease and rental payments for machinery, equipment, and other tangible items.....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	1,462	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	253	246	228	223	2.8	7.9	2.2
Purchased repairs and maintenance to machinery and equipment.....	77	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	176	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	141	172	201	197	-18.0	-14.4	2.0
Other operating expenses.....	4,185	4,276	4,603	4,773	-2.1	-7.1	-3.6
Depreciation and amortization charges.....	870	884	860	826	-1.6	2.8	4.1
Governmental taxes and license fees.....	347	256	227	220	35.5	12.8	3.2
All other operating expenses.....	2,967	3,137	3,516	3,728	-5.4	-10.8	-5.7
Data processing and other purchased computer services.....	15	NA	NA	NA	NA	NA	NA
Purchased communication services.....	31	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	34	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	87	NA	NA	NA	NA	NA	NA
All other operating expenses.....	2,800	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.3. Motion Picture and Video Production and Distribution (NAICS 5121X), Motion Picture and Video Exhibition (NAICS 51213), Postproduction Services and Other Motion Picture and Video Industries (NAICS 51219), Integrated Record Production and Distribution Services (NAICS 51222), Music Publishers (NAICS 51223), Sound Recording Studios (NAICS 51224) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>POSTPRODUCTION SERVICES AND OTHER MOTION PICTURE AND VIDEO INDUSTRIES (NAICS 51219)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>4,106</b>	<b>3,965</b>	<b>3,848</b>	<b>3,720</b>	<b>3.6</b>	<b>3.0</b>	<b>3.4</b>
Personnel costs.....	2,195	2,127	2,048	2,074	3.2	3.9	-1.3
Gross annual payroll.....	1,815	1,742	1,673	1,664	4.2	4.1	0.5
Employer's cost for fringe benefits.....	300	313	299	332	-4.2	4.7	-9.9
Health insurance.....	156	NA	NA	NA	NA	NA	NA
Pension plans.....	56	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	32	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	23	NA	NA	NA	NA	NA	NA
Other.....	87	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	80	72	76	78	11.1	-5.3	-2.6
Expensed materials, parts and supplies (not for resale).....	456	445	405	381	2.5	9.9	6.3
Expensed equipment.....	35	35	33	37	Z	6.1	-10.8
Expensed purchase of other materials, parts, and supplies.....	421	410	372	343	2.7	10.2	8.5
Expensed purchased services.....	378	326	312	303	16.0	4.5	3.0
Expensed purchases of software.....	11	10	9	8	10.0	11.1	12.5
Purchased electricity and fuels (except motor fuels).....	49	43	37	35	14.0	16.2	5.7
Purchased electricity.....	45	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	241	206	192	182	17.0	7.3	5.5
Lease and rental payments for machinery, equipment, and other tangible items.....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	202	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	49	42	49	49	16.7	-14.3	Z
Purchased repairs and maintenance to machinery and equipment.....	33	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	16	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	28	25	24	29	12.0	4.2	-17.2
Other operating expenses.....	1,077	1,067	1,084	964	0.9	-1.6	12.4
Depreciation and amortization charges.....	270	242	278	277	11.6	-12.9	0.4
Governmental taxes and license fees.....	45	39	36	38	15.4	8.3	-5.3
All other operating expenses.....	763	786	770	649	-2.9	2.1	18.6
Data processing and other purchased computer services.....	6	NA	NA	NA	NA	NA	NA
Purchased communication services.....	25	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	5	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	112	NA	NA	NA	NA	NA	NA
All other operating expenses.....	615	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.3. Motion Picture and Video Production and Distribution (NAICS 5121X), Motion Picture and Video Exhibition (NAICS 51213), Postproduction Services and Other Motion Picture and Video Industries (NAICS 51219), Integrated Record Production and Distribution Services (NAICS 51222), Music Publishers (NAICS 51223), Sound Recording Studios (NAICS 51224) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>INTEGRATED RECORD PRODUCTION AND DISTRIBUTION SERVICES (NAICS 51222)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>\$</b>	<b>12,150</b>	<b>10,993</b>	<b>8,127</b>	<b>\$</b>	<b>10.5</b>	<b>35.3</b>
Personnel costs.....	2,498	2,748	2,332	1,747	-9.1	17.8	33.5
Gross annual payroll.....	2,151	2,372	1,995	1,501	-9.3	18.9	32.9
Employer's cost for fringe benefits.....	315	342	304	218	-7.9	12.5	39.4
Health insurance.....	46	NA	NA	NA	NA	NA	NA
Pension plans.....	92	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	D	NA	NA	NA	D	NA	NA
Defined contribution plans.....	D	NA	NA	NA	D	NA	NA
Other.....	177	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	32	35	32	28	-8.6	9.4	14.3
Expensed materials, parts and supplies (not for resale).....	109	121	129	98	-9.9	-6.2	31.6
Expensed equipment.....	24	24	26	19	Z	-7.7	36.8
Expensed purchase of other materials, parts, and supplies.....	84	S	104	79	S	S	31.6
Expensed purchased services.....	1,567	S	1,674	1,326	S	S	26.2
Expensed purchases of software.....	45	50	S	S	-10.0	S	S
Purchased electricity and fuels (except motor fuels).....	14	15	13	10	-6.7	15.4	30.0
Purchased electricity.....	8	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	6	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	234	S	257	197	S	S	30.5
Lease and rental payments for machinery, equipment, and other tangible items.....	17	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	217	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	58	S	40	33	S	S	21.2
Purchased repairs and maintenance to machinery and equipment.....	8	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	49	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	1,216	S	1,310	1,046	S	S	25.2
Other operating expenses.....	6,747	7,443	S	S	-9.4	S	S
Depreciation and amortization charges.....	580	641	S	S	-9.5	S	S
Governmental taxes and license fees.....	59	S	59	54	S	S	9.3
All other operating expenses.....	6,107	6,731	S	S	-9.3	S	S
Data processing and other purchased computer services.....	D	NA	NA	NA	D	NA	NA
Purchased communication services.....	D	NA	NA	NA	D	NA	NA
Water, sewer, refuse removal, and other utility payments.....	14	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	D	NA	NA	NA	D	NA	NA
All other operating expenses.....	2,191	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.3. Motion Picture and Video Production and Distribution (NAICS 5121X), Motion Picture and Video Exhibition (NAICS 51213), Postproduction Services and Other Motion Picture and Video Industries (NAICS 51219), Integrated Record Production and Distribution Services (NAICS 51222), Music Publishers (NAICS 51223), Sound Recording Studios (NAICS 51224) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>MUSIC PUBLISHERS (NAICS 51223)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>2,692</b>	<b>2,552</b>	<b>2,444</b>	<b>2,268</b>	<b>5.5</b>	<b>4.4</b>	<b>7.8</b>
Personnel costs.....	663	603	533	508	10.0	13.1	4.9
Gross annual payroll.....	545	524	459	439	4.0	14.2	4.6
Employer's cost for fringe benefits.....	75	73	66	61	2.7	10.6	8.2
Health insurance.....	23	NA	NA	NA	NA	NA	NA
Pension plans.....	S	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	S	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	S	NA	NA	NA	NA	NA	NA
Other.....	24	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	S	6	8	8	S	-25.0	Z
Expensed materials, parts and supplies (not for resale).....	23	28	S	S	-17.9	S	S
Expensed equipment.....	4	6	S	6	-33.3	S	S
Expensed purchase of other materials, parts, and supplies.....	19	22	S	S	-13.6	S	S
Expensed purchased services.....	344	376	S	S	-8.5	S	S
Expensed purchases of software.....	4	5	S	3	-20.0	S	S
Purchased electricity and fuels (except motor fuels).....	14	12	S	S	16.7	S	S
Purchased electricity.....	14	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	51	45	40	36	13.3	12.5	11.1
Lease and rental payments for machinery, equipment, and other tangible items.....	7	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	44	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	12	17	S	S	-29.4	S	S
Purchased repairs and maintenance to machinery and equipment.....	8	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	3	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	263	298	S	S	-11.7	S	S
Other operating expenses.....	1,662	1,544	S	S	7.6	S	S
Depreciation and amortization charges.....	S	100	S	S	S	S	S
Governmental taxes and license fees.....	17	17	S	S	Z	S	S
All other operating expenses.....	1,573	1,427	S	S	10.2	S	S
Data processing and other purchased computer services.....	3	NA	NA	NA	NA	NA	NA
Purchased communication services.....	10	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	1	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	69	NA	NA	NA	NA	NA	NA
All other operating expenses.....	1,489	NA	NA	NA	NA	NA	NA

See footnotes at end of table.



**Table 3.6.3. Motion Picture and Video Production and Distribution (NAICS 5121X), Motion Picture and Video Exhibition (NAICS 51213), Postproduction Services and Other Motion Picture and Video Industries (NAICS 51219), Integrated Record Production and Distribution Services (NAICS 51222), Music Publishers (NAICS 51223), Sound Recording Studios (NAICS 51224) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>SOUND RECORDING STUDIOS (NAICS 51224)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>879</b>	<b>772</b>	<b>672</b>	<b>634</b>	<b>13.9</b>	<b>14.9</b>	<b>6.0</b>
Personnel costs.....	375	337	297	282	11.3	13.5	5.3
Gross annual payroll.....	311	280	250	238	11.1	12.0	5.0
Employer's cost for fringe benefits.....	45	35	28	27	28.6	25.0	3.7
Health insurance.....	20	NA	NA	NA	NA	NA	NA
Pension plans.....	10	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	6	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	4	NA	NA	NA	NA	NA	NA
Other.....	15	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	18	22	20	17	-18.2	10.0	17.6
Expensed materials, parts and supplies (not for resale).....	69	59	48	49	16.9	22.9	-2.0
Expensed equipment.....	26	21	16	17	23.8	31.3	-5.9
Expensed purchase of other materials, parts, and supplies.....	S	37	32	32	S	15.6	Z
Expensed purchased services.....	131	117	105	99	12.0	11.4	6.1
Expensed purchases of software.....	5	S	S	4	S	S	S
Purchased electricity and fuels (except motor fuels).....	13	12	11	10	8.3	9.1	10.0
Purchased electricity.....	12	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	2	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	83	75	68	65	10.7	10.3	4.6
Lease and rental payments for machinery, equipment, and other tangible items.....	8	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	75	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	12	10	10	9	20.0	Z	11.1
Purchased repairs and maintenance to machinery and equipment.....	7	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	5	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	19	14	11	11	35.7	27.3	Z
Other operating expenses.....	304	259	222	204	17.4	16.7	8.8
Depreciation and amortization charges.....	42	42	40	38	Z	5.0	5.3
Governmental taxes and license fees.....	15	S	13	12	S	S	8.3
All other operating expenses.....	247	200	168	153	23.5	19.0	9.8
Data processing and other purchased computer services.....	S	NA	NA	NA	NA	NA	NA
Purchased communication services.....	13	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	2	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	56	NA	NA	NA	NA	NA	NA
All other operating expenses.....	163	NA	NA	NA	NA	NA	NA

NA Not available. Z Absolute value is less than 0.05. D Estimate in table is withheld to avoid disclosing data of individual companies; data are included in higher level totals. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.6.3 provides estimated measures of sampling variability.

**Table 3.6.4. Radio Networks (NAICS 515111), Radio Stations (NAICS 515112), Television Broadcasting (NAICS 51512), Cable and Other Subscription Programming (NAICS 5152), Internet Publishing and Broadcasting (NAICS 516) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>RADIO NETWORKS (NAICS 515111)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>6,407</b>	<b>6,481</b>	<b>4,858</b>	<b>3,888</b>	<b>-1.1</b>	<b>33.4</b>	<b>24.9</b>
Personnel costs.....	1,307	1,596	1,013	892	-18.1	57.6	13.6
Gross annual payroll.....	1,120	1,206	867	755	-7.1	39.1	14.8
Employer's cost for fringe benefits.....	164	242	104	94	-32.2	132.7	10.6
Health insurance.....	100	NA	NA	NA	NA	NA	NA
Pension plans.....	23	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	12	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	10	NA	NA	NA	NA	NA	NA
Other.....	41	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	S	148	42	44	S	252.4	-4.5
Expensed materials, parts and supplies (not for resale).....	28	32	35	149	-12.5	-8.6	-76.5
Expensed equipment.....	S	9	8	77	S	12.5	-89.6
Expensed purchase of other materials, parts, and supplies.....	17	23	27	72	-26.1	-14.8	-62.5
Expensed purchased services.....	S	537	602	775	S	-10.8	-22.3
Expensed purchases of software.....	26	18	20	12	44.4	-10.0	66.7
Purchased electricity and fuels (except motor fuels).....	24	22	13	11	9.1	69.2	18.2
Purchased electricity.....	22	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	1	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	129	82	65	89	57.3	26.2	-27.0
Lease and rental payments for machinery, equipment, and other tangible items.....	53	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	76	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	26	27	18	7	-3.7	50.0	157.1
Purchased repairs and maintenance to machinery and equipment.....	18	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	7	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	S	388	487	656	S	-20.3	-25.8
Other operating expenses.....	4,478	4,316	3,207	2,071	3.8	34.6	54.9
Depreciation and amortization charges.....	S	453	407	390	S	11.3	4.4
Governmental taxes and license fees.....	20	27	17	15	-25.9	58.8	13.3
Broadcast rights and music license fees.....	581	576	401	224	0.9	43.6	79.0
Network compensation fees (networks only).....	205	213	143	164	-3.8	49.0	-12.8
All other operating expenses.....	3,159	3,046	2,240	1,279	3.7	36.0	75.1
Data processing and other purchased computer services.....	15	NA	NA	NA	NA	NA	NA
Purchased communication services.....	41	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	3	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	104	NA	NA	NA	NA	NA	NA
All other operating expenses.....	2,997	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.4. Radio Networks (NAICS 515111), Radio Stations (NAICS 515112), Television Broadcasting (NAICS 51512), Cable and Other Subscription Programming (NAICS 5152), Internet Publishing and Broadcasting (NAICS 516) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>RADIO STATIONS (NAICS 515112)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>9,988</b>	<b>9,907</b>	<b>10,155</b>	<b>9,920</b>	<b>0.8</b>	<b>-2.4</b>	<b>2.4</b>
Personnel costs.....	5,326	5,092	5,120	5,002	4.6	-0.5	2.4
Gross annual payroll.....	4,502	4,368	4,408	4,353	3.1	-0.9	1.3
Employer's cost for fringe benefits.....	650	633	612	550	2.7	3.4	11.3
Health insurance.....	289	NA	NA	NA	NA	NA	NA
Pension plans.....	104	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	17	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	86	NA	NA	NA	NA	NA	NA
Other.....	257	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	174	90	100	99	93.3	-10.0	1.0
Expensed materials, parts and supplies (not for resale).....	107	117	123	111	-8.5	-4.9	10.8
Expensed equipment.....	35	37	41	35	-5.4	-9.8	17.1
Expensed purchase of other materials, parts, and supplies.....	72	80	82	76	-10.0	-2.4	7.9
Expensed purchased services.....	1,126	1,073	1,046	980	4.9	2.6	6.7
Expensed purchases of software.....	40	S	S	S	S	S	S
Purchased electricity and fuels (except motor fuels).....	148	163	144	131	-9.2	13.2	9.9
Purchased electricity.....	126	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	22	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	355	330	342	305	7.6	-3.5	12.1
Lease and rental payments for machinery, equipment, and other tangible items.....	28	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	327	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	91	79	85	82	15.2	-7.1	3.7
Purchased repairs and maintenance to machinery and equipment.....	50	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	41	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	492	447	429	416	10.1	4.2	3.1
Other operating expenses.....	3,429	3,626	3,867	3,827	-5.4	-6.2	1.0
Depreciation and amortization charges.....	461	487	491	566	-5.3	-0.8	-13.3
Governmental taxes and license fees.....	395	415	489	477	-4.8	-15.1	2.5
Broadcast rights and music license fees.....	768	711	587	568	8.0	21.1	3.3
Network compensation fees (networks only).....	S	S	S	S	S	S	S
All other operating expenses.....	1,755	1,967	2,219	2,132	-10.8	-11.4	4.1
Data processing and other purchased computer services.....	27	NA	NA	NA	NA	NA	NA
Purchased communication services.....	121	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	10	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	232	NA	NA	NA	NA	NA	NA
All other operating expenses.....	1,366	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.4. Radio Networks (NAICS 515111), Radio Stations (NAICS 515112), Television Broadcasting (NAICS 51512), Cable and Other Subscription Programming (NAICS 5152), Internet Publishing and Broadcasting (NAICS 516) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>TELEVISION BROADCASTING (NAICS 51512)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>29,803</b>	<b>28,481</b>	<b>28,533</b>	<b>28,312</b>	<b>4.6</b>	<b>-0.2</b>	<b>0.8</b>
Personnel costs.....	8,869	8,316	7,796	7,455	6.6	6.7	4.6
Gross annual payroll.....	7,371	7,044	6,646	6,360	4.6	6.0	4.5
Employer's cost for fringe benefits.....	1,337	1,153	1,049	1,002	16.0	9.9	4.7
Health insurance.....	602	NA	NA	NA	NA	NA	NA
Pension plans.....	303	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	156	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	147	NA	NA	NA	NA	NA	NA
Other.....	431	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	161	119	100	93	35.3	19.0	7.5
Expensed materials, parts and supplies (not for resale).....	207	228	241	241	-9.2	-5.4	Z
Expensed equipment.....	68	66	66	70	3.0	Z	-5.7
Expensed purchase of other materials, parts, and supplies.....	139	162	175	172	-14.2	-7.4	1.7
Expensed purchased services.....	2,028	1,873	1,889	1,820	8.3	-0.8	3.8
Expensed purchases of software.....	70	52	43	37	34.6	20.9	16.2
Purchased electricity and fuels (except motor fuels).....	331	285	255	258	16.1	11.8	-1.2
Purchased electricity.....	314	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	18	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	502	447	415	407	12.3	7.7	2.0
Lease and rental payments for machinery, equipment, and other tangible items.....	200	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	303	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	210	190	177	184	10.5	7.3	-3.8
Purchased repairs and maintenance to machinery and equipment.....	145	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	65	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	914	899	999	935	1.7	-10.0	6.8
Other operating expenses.....	18,699	18,064	18,607	18,796	3.5	-2.9	-1.0
Depreciation and amortization charges.....	1,675	1,543	1,526	1,568	8.6	1.1	-2.7
Governmental taxes and license fees.....	126	158	168	200	-20.3	-6.0	-16.0
Broadcast rights and music license fees.....	11,216	10,765	10,937	10,931	4.2	-1.6	0.1
Network compensation fees (networks only).....	463	518	668	642	-10.6	-22.5	4.0
All other operating expenses.....	5,220	5,080	5,308	5,456	2.8	-4.3	-2.7
Data processing and other purchased computer services.....	80	NA	NA	NA	NA	NA	NA
Purchased communication services.....	186	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	14	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	526	NA	NA	NA	NA	NA	NA
All other operating expenses.....	4,415	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.4. Radio Networks (NAICS 515111), Radio Stations (NAICS 515112), Television Broadcasting (NAICS 51512), Cable and Other Subscription Programming (NAICS 5152), Internet Publishing and Broadcasting (NAICS 516) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>CABLE AND OTHER SUBSCRIPTION PROGRAMMING (NAICS 5152)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>26,728</b>	<b>24,841</b>	<b>23,469</b>	<b>21,003</b>	<b>7.6</b>	<b>5.8</b>	<b>11.7</b>
Personnel costs.....	5,242	4,588	4,677	4,021	14.3	-1.9	16.3
Gross annual payroll.....	3,907	3,550	3,737	3,205	10.1	-5.0	16.6
Employer's cost for fringe benefits.....	824	627	619	539	31.4	1.3	14.8
Health insurance.....	266	NA	NA	NA	NA	NA	NA
Pension plans.....	161	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	77	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	84	NA	NA	NA	NA	NA	NA
Other.....	397	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	511	411	321	276	24.3	28.0	16.3
Expensed materials, parts and supplies (not for resale).....	405	305	265	255	32.8	15.1	3.9
Expensed equipment.....	63	48	53	58	31.3	-9.4	-8.6
Expensed purchase of other materials, parts, and supplies.....	342	256	212	197	33.6	20.8	7.6
Expensed purchased services.....	2,245	2,643	2,224	1,872	-15.1	18.8	18.8
Expensed purchases of software.....	50	52	43	36	-3.8	20.9	19.4
Purchased electricity and fuels (except motor fuels).....	50	50	48	49	Z	4.2	-2.0
Purchased electricity.....	42	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	9	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	335	457	515	432	-26.7	-11.3	19.2
Lease and rental payments for machinery, equipment, and other tangible items.....	135	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	200	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	84	93	97	S	-9.7	-4.1	S
Purchased repairs and maintenance to machinery and equipment.....	57	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	27	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	1,725	1,992	1,521	1,235	-13.4	31.0	23.2
Other operating expenses.....	18,835	17,305	16,303	14,856	8.8	6.1	9.7
Depreciation and amortization charges.....	2,714	2,591	S	S	4.7	S	S
Governmental taxes and license fees.....	77	103	133	120	-25.2	-22.6	10.8
Program and production costs.....	12,394	11,227	10,452	10,063	10.4	7.4	3.9
All other operating expenses.....	3,650	3,384	3,098	2,294	7.9	9.2	35.0
Data processing and other purchased computer services.....	275	NA	NA	NA	NA	NA	NA
Purchased communication services.....	90	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	2	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	308	NA	NA	NA	NA	NA	NA
All other operating expenses.....	2,975	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.4. Radio Networks (NAICS 515111), Radio Stations (NAICS 515112), Television Broadcasting (NAICS 51512), Cable and Other Subscription Programming (NAICS 5152), Internet Publishing and Broadcasting (NAICS 516) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>INTERNET PUBLISHING AND BROADCASTING (NAICS 516)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>13,784</b>	<b>11,272</b>	<b>9,084</b>	<b>7,056</b>	<b>22.3</b>	<b>24.1</b>	<b>28.7</b>
Personnel costs.....	5,732	4,901	3,936	3,087	17.0	24.5	27.5
Gross annual payroll.....	4,447	3,917	3,138	2,394	13.5	24.8	31.1
Employer's cost for fringe benefits.....	968	712	562	479	36.0	26.7	17.3
Health insurance.....	330	NA	NA	NA	NA	NA	NA
Pension plans.....	S	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	S	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	S	NA	NA	NA	NA	NA	NA
Other.....	527	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	S	272	236	214	S	15.3	10.3
Expensed materials, parts and supplies (not for resale).....	S	327	317	239	S	3.2	32.6
Expensed equipment.....	S	140	134	104	S	4.5	28.8
Expensed purchase of other materials, parts, and supplies.....	S	187	183	135	S	2.2	35.6
Expensed purchased services.....	2,472	2,000	1,547	1,218	23.6	29.3	27.0
Expensed purchases of software.....	S	275	194	78	S	41.8	148.7
Purchased electricity and fuels (except motor fuels).....	22	23	16	14	-4.3	43.8	14.3
Purchased electricity.....	21	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	455	383	344	281	18.8	11.3	22.4
Lease and rental payments for machinery, equipment, and other tangible items.....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	378	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	S	107	100	105	S	7.0	-4.8
Purchased repairs and maintenance to machinery and equipment.....	S	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	S	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	1,607	1,211	893	741	32.7	35.6	20.5
Other operating expenses.....	5,190	4,044	3,285	2,512	28.3	23.1	30.8
Depreciation and amortization charges.....	S	910	792	767	S	14.9	3.3
Governmental taxes and license fees.....	90	73	62	53	23.3	17.7	17.0
All other operating expenses.....	4,076	3,061	S	1,692	33.2	S	S
Data processing and other purchased computer services.....	487	NA	NA	NA	NA	NA	NA
Purchased communication services.....	S	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	S	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	746	NA	NA	NA	NA	NA	NA
All other operating expenses.....	S	NA	NA	NA	NA	NA	NA

NA Not available. Z Absolute value is less than 0.05. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.6.4 provides estimated measures of sampling variability.

**Table 3.6.5. Wired Telecommunications Carriers (NAICS 5171), Paging (NAICS 517211), Cellular and Other Wireless Telecommunications (NAICS 517212), Telecommunications Resellers (NAICS 5173), Satellite Telecommunications (NAICS 5174), Cable and Other Program Distribution (NAICS 5175) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>WIRED TELECOMMUNICATIONS CARRIERS (NAICS 5171)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>158,626</b>	<b>168,750</b>	<b>176,407</b>	<b>187,800</b>	<b>-6.0</b>	<b>-4.3</b>	<b>-6.1</b>
Personnel costs.....	55,286	60,084	59,534	60,871	-8.0	0.9	-2.2
Gross annual payroll.....	39,631	42,940	40,242	40,325	-7.7	6.7	-0.2
Employer's cost for fringe benefits.....	13,765	15,378	16,387	17,022	-10.5	-6.2	-3.7
Health insurance.....	9,001	NA	NA	NA	NA	NA	NA
Pension plans.....	1,977	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	1,005	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	972	NA	NA	NA	NA	NA	NA
Other.....	2,788	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	1,889	1,766	2,905	3,523	7.0	-39.2	-17.5
Expensed materials, parts and supplies (not for resale).....	6,834	6,407	6,291	6,365	6.7	1.8	-1.2
Expensed equipment.....	234	314	401	448	-25.5	-21.7	-10.5
Expensed purchase of other materials, parts, and supplies.....	6,601	6,093	S	5,917	8.3	S	S
Expensed purchased services.....	9,827	11,356	11,521	12,238	-13.5	-1.4	-5.9
Expensed purchases of software.....	1,076	1,604	1,546	1,601	-32.9	3.8	-3.4
Purchased electricity and fuels (except motor fuels).....	1,485	1,718	1,703	1,667	-13.6	0.9	2.2
Purchased electricity.....	1,394	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	92	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	3,349	3,760	3,815	3,990	-10.9	-1.4	-4.4
Lease and rental payments for machinery, equipment, and other tangible items.....	885	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	2,464	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	1,200	1,478	2,152	2,280	-18.8	-31.3	-5.6
Purchased repairs and maintenance to machinery and equipment.....	841	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	359	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	2,716	2,796	2,306	2,700	-2.9	21.2	-14.6
Other operating expenses.....	86,680	90,903	99,061	108,326	-4.6	-8.2	-8.6
Depreciation and amortization charges.....	34,718	35,621	35,608	38,398	-2.5	Z	-7.3
Governmental taxes and license fees.....	4,572	5,368	5,044	5,217	-14.8	6.4	-3.3
Access charges.....	20,275	23,686	31,494	33,456	-14.4	-24.8	-5.9
Universal service contributions (USC).....	2,535	2,857	4,249	3,356	-11.3	-32.8	26.6
All other operating expenses.....	24,580	23,371	22,665	27,898	5.2	3.1	-18.8
Data processing and other purchased computer services.....	1,138	NA	NA	NA	NA	NA	NA
Purchased communication services.....	435	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	131	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	9,210	NA	NA	NA	NA	NA	NA
All other operating expenses.....	13,666	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.5. Wired Telecommunications Carriers (NAICS 5171), Paging (NAICS 517211), Cellular and Other Wireless Telecommunications (NAICS 517212), Telecommunications Resellers (NAICS 5173), Satellite Telecommunications (NAICS 5174), Cable and Other Program Distribution (NAICS 5175) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>PAGING (NAICS 517211)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>1,221</b>	<b>1,528</b>	<b>1,750</b>	<b>1,560</b>	<b>-20.1</b>	<b>-12.7</b>	<b>12.2</b>
Personnel costs.....	427	460	568	498	-7.2	-19.0	14.1
Gross annual payroll.....	329	334	419	372	-1.5	-20.3	12.6
Employer's cost for fringe benefits.....	83	75	83	74	10.7	-9.6	12.2
Health insurance.....	38	NA	NA	NA	NA	NA	NA
Pension plans.....	12	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	ZZ	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	12	NA	NA	NA	NA	NA	NA
Other.....	33	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	S	51	66	51	S	-22.7	29.4
Expensed materials, parts and supplies (not for resale).....	55	S	107	104	S	S	2.9
Expensed equipment.....	S	S	8	9	S	S	-11.1
Expensed purchase of other materials, parts, and supplies.....	48	S	99	95	S	S	4.2
Expensed purchased services.....	298	288	334	280	3.5	-13.8	19.3
Expensed purchases of software.....	S	S	3	2	S	S	50.0
Purchased electricity and fuels (except motor fuels).....	14	15	14	13	-6.7	7.1	7.7
Purchased electricity.....	13	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	1	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	238	214	261	215	11.2	-18.0	21.4
Lease and rental payments for machinery, equipment, and other tangible items.....	4	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	234	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	21	33	42	36	-36.4	-21.4	16.7
Purchased repairs and maintenance to machinery and equipment.....	18	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	3	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	12	S	15	14	S	S	7.1
Other operating expenses.....	441	S	741	679	S	S	9.1
Depreciation and amortization charges.....	118	201	263	246	-41.3	-23.6	6.9
Governmental taxes and license fees.....	20	28	41	33	-28.6	-31.7	24.2
Access charges.....	26	96	106	98	-72.9	-9.4	8.2
All other operating expenses.....	278	S	331	302	S	S	9.6
Data processing and other purchased computer services.....	S	NA	NA	NA	NA	NA	NA
Purchased communication services.....	94	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	S	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	65	NA	NA	NA	NA	NA	NA
All other operating expenses.....	104	NA	NA	NA	NA	NA	NA

See footnotes at end of table.



**Table 3.6.5. Wired Telecommunications Carriers (NAICS 5171), Paging (NAICS 517211), Cellular and Other Wireless Telecommunications (NAICS 517212), Telecommunications Resellers (NAICS 5173), Satellite Telecommunications (NAICS 5174), Cable and Other Program Distribution (NAICS 5175) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>CELLULAR AND OTHER WIRELESS TELECOMMUNICATIONS</b>							
<b>(NAICS 517212)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>136,597</b>	<b>133,515</b>	<b>120,793</b>	<b>103,746</b>	<b>2.3</b>	<b>10.5</b>	<b>16.4</b>
Personnel costs.....	25,593	24,632	23,311	19,649	3.9	5.7	18.6
Gross annual payroll.....	18,040	17,910	16,801	14,230	0.7	6.6	18.1
Employer's cost for fringe benefits.....	5,192	4,107	3,663	3,637	26.4	12.1	0.7
Health insurance.....	2,332	NA	NA	NA	NA	NA	NA
Pension plans.....	1,894	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	1,626	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	269	NA	NA	NA	NA	NA	NA
Other.....	965	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	2,361	2,615	2,847	1,783	-9.7	-8.1	59.7
Expensed materials, parts and supplies (not for resale).....	13,777	12,001	10,058	9,826	14.8	19.3	2.4
Expensed equipment.....	D	822	757	886	D	8.6	-14.6
Expensed purchase of other materials, parts, and supplies.....	D	11,180	9,302	8,940	D	20.2	4.0
Expensed purchased services.....	18,774	17,341	16,481	15,615	8.3	5.2	5.5
Expensed purchases of software.....	1,355	1,210	1,095	916	12.0	10.5	19.5
Purchased electricity and fuels (except motor fuels).....	S	994	862	710	S	15.3	21.4
Purchased electricity.....	D	NA	NA	NA	D	NA	NA
Purchased fuels (except motor fuels).....	D	NA	NA	NA	D	NA	NA
Lease and rental payments.....	5,914	5,549	5,496	4,792	6.6	1.0	14.7
Lease and rental payments for machinery, equipment, and other tangible items.....	224	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	5,690	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	1,294	1,258	1,128	S	2.9	11.5	S
Purchased repairs and maintenance to machinery and equipment.....	1,173	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	121	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	9,304	8,331	7,900	7,823	11.7	5.5	1.0
Other operating expenses.....	78,454	79,540	70,942	58,656	-1.4	12.1	20.9
Depreciation and amortization charges.....	26,844	26,134	22,356	16,914	2.7	16.9	32.2
Governmental taxes and license fees.....	1,627	1,437	1,353	1,199	13.2	6.2	12.8
Access charges.....	5,578	5,527	6,231	5,529	0.9	-11.3	12.7
Universal service contributions (USC) and other similar charges.....	3,316	2,961	2,516	1,842	12.0	17.7	36.6
All other operating expenses.....	41,089	43,480	38,487	33,172	-5.5	13.0	16.0
Data processing and other purchased computer services.....	S	NA	NA	NA	NA	NA	NA
Purchased communication services.....	S	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	S	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	3,002	NA	NA	NA	NA	NA	NA
All other operating expenses.....	37,657	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.5. Wired Telecommunications Carriers (NAICS 5171), Paging (NAICS 517211), Cellular and Other Wireless Telecommunications (NAICS 517212), Telecommunications Resellers (NAICS 5173), Satellite Telecommunications (NAICS 5174), Cable and Other Program Distribution (NAICS 5175) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>TELECOMMUNICATIONS RESELLERS (NAICS 5173)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>7,414</b>	<b>6,839</b>	<b>6,832</b>	<b>5,979</b>	<b>8.4</b>	<b>0.1</b>	<b>14.3</b>
Personnel costs.....	1,806	1,688	1,665	1,489	7.0	1.4	11.8
Gross annual payroll.....	1,388	1,272	1,332	1,282	9.1	-4.5	3.9
Employer's cost for fringe benefits.....	196	173	179	149	13.3	-3.4	20.1
Health insurance.....	101	NA	NA	NA	NA	NA	NA
Pension plans.....	21	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	5	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	17	NA	NA	NA	NA	NA	NA
Other.....	74	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	S	S	S	57	S	S	S
Expensed materials, parts and supplies (not for resale).....	S	S	S	222	S	S	S
Expensed equipment.....	S	25	29	27	S	-13.8	7.4
Expensed purchase of other materials, parts, and supplies.....	S	S	S	196	S	S	S
Expensed purchased services.....	S	710	695	630	S	2.2	10.3
Expensed purchases of software.....	S	56	67	89	S	-16.4	-24.7
Purchased electricity and fuels (except motor fuels).....	S	30	S	S	S	S	S
Purchased electricity.....	S	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	S	181	178	162	S	1.7	9.9
Lease and rental payments for machinery, equipment, and other tangible items.....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	S	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	S	S	S	S	S	S	S
Purchased repairs and maintenance to machinery and equipment.....	S	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	S	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	396	358	327	269	10.6	9.5	21.6
Other operating expenses.....	4,142	4,009	4,061	3,638	3.3	-1.3	11.6
Depreciation and amortization charges.....	S	373	342	352	S	9.1	-2.8
Governmental taxes and license fees.....	78	91	89	78	-14.3	2.2	14.1
Access charges.....	1,534	1,702	1,625	1,318	-9.9	4.7	23.3
All other operating expenses.....	2,152	1,843	2,005	1,890	16.8	-8.1	6.1
Data processing and other purchased computer services.....	26	NA	NA	NA	NA	NA	NA
Purchased communication services.....	621	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	3	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	254	NA	NA	NA	NA	NA	NA
All other operating expenses.....	1,247	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.5. Wired Telecommunications Carriers (NAICS 5171), Paging (NAICS 517211), Cellular and Other Wireless Telecommunications (NAICS 517212), Telecommunications Resellers (NAICS 5173), Satellite Telecommunications (NAICS 5174), Cable and Other Program Distribution (NAICS 5175) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>SATELLITE TELECOMMUNICATIONS (NAICS 5174)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>5,756</b>	<b>5,093</b>	<b>4,447</b>	<b>4,329</b>	<b>13.0</b>	<b>14.5</b>	<b>2.7</b>
Personnel costs.....	1,627	1,442	1,272	1,262	12.8	13.4	0.8
Gross annual payroll.....	1,351	1,168	1,024	1,008	15.7	14.1	1.6
Employer's cost for fringe benefits.....	218	S	S	218	S	S	S
Health insurance.....	78	NA	NA	NA	NA	NA	NA
Pension plans.....	51	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	8	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	43	NA	NA	NA	NA	NA	NA
Other.....	89	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	S	S	55	36	S	S	52.8
Expensed materials, parts and supplies (not for resale).....	485	512	355	303	-5.3	44.2	17.2
Expensed equipment.....	24	19	S	17	26.3	S	S
Expensed purchase of other materials, parts, and supplies.....	461	493	339	286	-6.5	45.4	18.5
Expensed purchased services.....	363	S	298	298	S	S	Z
Expensed purchases of software.....	11	S	17	S	S	S	S
Purchased electricity and fuels (except motor fuels).....	24	17	S	S	41.2	S	S
Purchased electricity.....	21	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	238	S	165	173	S	S	-4.6
Lease and rental payments for machinery, equipment, and other tangible items.....	42	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	196	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	47	54	50	S	-13.0	8.0	S
Purchased repairs and maintenance to machinery and equipment.....	32	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	15	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	43	48	S	S	-10.4	S	S
Other operating expenses.....	3,281	S	S	2,466	S	S	S
Depreciation and amortization charges.....	818	755	S	S	8.3	S	S
Governmental taxes and license fees.....	34	31	30	S	9.7	3.3	S
Access charges.....	S	S	617	614	S	S	0.5
All other operating expenses.....	1,927	S	S	1,097	S	S	S
Data processing and other purchased computer services.....	18	NA	NA	NA	NA	NA	NA
Purchased communication services.....	155	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	3	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	465	NA	NA	NA	NA	NA	NA
All other operating expenses.....	1,286	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.5. Wired Telecommunications Carriers (NAICS 5171), Paging (NAICS 517211), Cellular and Other Wireless Telecommunications (NAICS 517212), Telecommunications Resellers (NAICS 5173), Satellite Telecommunications (NAICS 5174), Cable and Other Program Distribution (NAICS 5175) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>CABLE AND OTHER PROGRAM DISTRIBUTION (NAICS 5175)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>86,481</b>	<b>74,536</b>	<b>69,030</b>	<b>64,865</b>	<b>16.0</b>	<b>8.0</b>	<b>6.4</b>
Personnel costs.....	16,386	15,320	13,481	11,987	7.0	13.6	12.5
Gross annual payroll.....	12,148	11,730	10,223	8,760	3.6	14.7	16.7
Employer's cost for fringe benefits.....	3,052	2,608	2,405	2,375	17.0	8.4	1.3
Health insurance.....	1,388	NA	NA	NA	NA	NA	NA
Pension plans.....	579	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	230	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	349	NA	NA	NA	NA	NA	NA
Other.....	1,085	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	1,185	982	853	852	20.7	15.1	0.1
Expensed materials, parts and supplies (not for resale).....	625	700	599	505	-10.7	16.9	18.6
Expensed equipment.....	82	77	77	65	6.5	Z	18.5
Expensed purchase of other materials, parts, and supplies.....	542	624	523	440	-13.1	19.3	18.9
Expensed purchased services.....	5,318	4,564	4,250	3,992	16.5	7.4	6.5
Expensed purchases of software.....	270	218	242	212	23.9	-9.9	14.2
Purchased electricity and fuels (except motor fuels).....	589	619	545	531	-4.8	13.6	2.6
Purchased electricity.....	574	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	15	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	861	807	778	836	6.7	3.7	-6.9
Lease and rental payments for machinery, equipment, and other tangible items.....	134	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	727	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	1,005	798	790	787	25.9	1.0	0.4
Purchased repairs and maintenance to machinery and equipment.....	806	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	199	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	2,592	2,122	1,895	1,626	22.1	12.0	16.5
Other operating expenses.....	64,152	53,952	50,700	48,381	18.9	6.4	4.8
Depreciation and amortization charges.....	17,417	14,749	14,224	13,901	18.1	3.7	2.3
Governmental taxes and license fees.....	2,335	2,086	2,004	2,150	11.9	4.1	-6.8
Program and production costs.....	27,643	24,015	22,696	20,870	15.1	5.8	8.7
All other operating expenses.....	16,758	13,102	11,777	11,459	27.9	11.3	2.8
Data processing and other purchased computer services.....	354	NA	NA	NA	NA	NA	NA
Purchased communication services.....	501	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	88	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	833	NA	NA	NA	NA	NA	NA
All other operating expenses.....	14,982	NA	NA	NA	NA	NA	NA

NA Not available. Z Absolute value is less than 0.05. ZZ Absolute value is less than 0.5. D Estimate in table is withheld to avoid disclosing data of individual companies; data are included in higher level totals. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.6.5 provides estimated measures of sampling variability.

**Table 3.6.6. Internet Service Providers (NAICS 518111), Web Search Portals (NAICS 518112), Data Processing, Hosting, and Related Services (NAICS 5182), News Syndicates (NAICS 51911), Libraries and Archives (NAICS 51912), All Other Information Services (NAICS 51919) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>INTERNET SERVICE PROVIDERS (NAICS 518111)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>13,607</b>	<b>14,318</b>	<b>14,253</b>	<b>16,251</b>	<b>-5.0</b>	<b>0.5</b>	<b>-12.3</b>
Personnel costs.....	5,749	5,621	5,226	5,323	2.3	7.6	-1.8
Gross annual payroll.....	4,674	4,527	4,006	3,858	3.2	13.0	3.8
Employer's cost for fringe benefits.....	631	686	694	S	-8.0	-1.2	S
Health insurance.....	249	NA	NA	NA	NA	NA	NA
Pension plans.....	S	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	S	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	S	NA	NA	NA	NA	NA	NA
Other.....	281	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	443	407	526	S	8.8	-22.6	S
Expensed materials, parts and supplies (not for resale).....	S	S	S	S	S	S	S
Expensed equipment.....	73	89	86	S	-18.0	3.5	S
Expensed purchase of other materials, parts, and supplies.....	S	S	S	S	S	S	S
Expensed purchased services.....	1,588	2,474	3,181	S	-35.8	-22.2	S
Expensed purchases of software.....	68	66	59	49	3.0	11.9	20.4
Purchased electricity and fuels (except motor fuels).....	S	76	82	S	S	-7.3	S
Purchased electricity.....	S	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	340	431	465	462	-21.1	-7.3	0.6
Lease and rental payments for machinery, equipment, and other tangible items.....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	321	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	69	80	81	89	-13.8	-1.2	-9.0
Purchased repairs and maintenance to machinery and equipment.....	49	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	21	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	1,004	1,821	2,493	S	-44.9	-27.0	S
Other operating expenses.....	5,896	5,695	5,443	S	3.5	4.6	S
Depreciation and amortization charges.....	1,076	1,219	1,193	S	-11.7	2.2	S
Governmental taxes and license fees.....	52	S	81	S	S	S	S
All other operating expenses.....	4,767	4,421	4,168	S	7.8	6.1	S
Data processing and other purchased computer services.....	215	NA	NA	NA	NA	NA	NA
Purchased communication services.....	1,248	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	8	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	S	NA	NA	NA	NA	NA	NA
All other operating expenses.....	2,892	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.6. Internet Service Providers (NAICS 518111), Web Search Portals (NAICS 518112), Data Processing, Hosting, and Related Services (NAICS 5182), News Syndicates (NAICS 51911), Libraries and Archives (NAICS 51912), All Other Information Services (NAICS 51919) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>WEB SEARCH PORTALS (NAICS 518112)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>6,102</b>	<b>4,911</b>	<b>3,244</b>	<b>2,454</b>	<b>24.3</b>	<b>51.4</b>	<b>32.2</b>
Personnel costs.....	2,163	1,962	1,248	1,067	10.2	57.2	17.0
Gross annual payroll.....	1,594	1,151	790	636	38.5	45.7	24.2
Employer's cost for fringe benefits.....	342	614	338	341	-44.3	81.7	-0.9
Health insurance.....	117	NA	NA	NA	NA	NA	NA
Pension plans.....	61	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	1	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	60	NA	NA	NA	NA	NA	NA
Other.....	163	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	227	197	120	90	15.2	64.2	33.3
Expensed materials, parts and supplies (not for resale).....	107	64	62	41	67.2	3.2	51.2
Expensed equipment.....	88	33	47	31	166.7	-29.8	51.6
Expensed purchase of other materials, parts, and supplies.....	19	31	15	10	-38.7	106.7	50.0
Expensed purchased services.....	871	715	474	310	21.8	50.8	52.9
Expensed purchases of software.....	66	59	29	S	11.9	103.4	S
Purchased electricity and fuels (except motor fuels).....	10	15	9	S	-33.3	66.7	S
Purchased electricity.....	10	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	141	105	71	S	34.3	47.9	S
Lease and rental payments for machinery, equipment, and other tangible items.....	4	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	137	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	65	31	16	9	109.7	93.8	77.8
Purchased repairs and maintenance to machinery and equipment.....	56	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	9	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	S	504	349	216	S	44.4	61.6
Other operating expenses.....	2,961	2,169	S	S	36.5	S	S
Depreciation and amortization charges.....	404	378	S	S	6.9	S	S
Governmental taxes and license fees.....	29	23	22	19	26.1	4.5	15.8
All other operating expenses.....	2,527	1,768	S	S	42.9	S	S
Data processing and other purchased computer services.....	159	NA	NA	NA	NA	NA	NA
Purchased communication services.....	38	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	12	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	430	NA	NA	NA	NA	NA	NA
All other operating expenses.....	1,888	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.6. Internet Service Providers (NAICS 518111), Web Search Portals (NAICS 518112), Data Processing, Hosting, and Related Services (NAICS 5182), News Syndicates (NAICS 51911), Libraries and Archives (NAICS 51912), All Other Information Services (NAICS 51919) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

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Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>DATA PROCESSING, HOSTING, AND RELATED SERVICES (NAICS 5182)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>64,411</b>	<b>60,061</b>	<b>54,446</b>	<b>51,447</b>	<b>7.2</b>	<b>10.3</b>	<b>5.8</b>
Personnel costs.....	31,246	30,364	27,042	25,338	2.9	12.3	6.7
Gross annual payroll.....	24,524	23,461	21,046	19,665	4.5	11.5	7.0
Employer's cost for fringe benefits.....	4,043	3,955	3,705	3,584	2.2	6.7	3.4
Health insurance.....	1,971	NA	NA	NA	NA	NA	NA
Pension plans.....	535	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	93	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	441	NA	NA	NA	NA	NA	NA
Other.....	1,537	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	2,679	2,949	2,291	2,089	-9.2	28.7	9.7
Expensed materials, parts and supplies (not for resale).....	3,034	2,620	2,324	1,795	15.8	12.7	29.5
Expensed equipment.....	748	823	751	728	-9.1	9.6	3.2
Expensed purchase of other materials, parts, and supplies.....	2,286	1,797	1,573	1,068	27.2	14.2	47.3
Expensed purchased services.....	7,673	7,595	7,543	6,698	1.0	0.7	12.6
Expensed purchases of software.....	1,217	1,304	1,660	1,194	-6.7	-21.4	39.0
Purchased electricity and fuels (except motor fuels).....	641	546	454	432	17.4	20.3	5.1
Purchased electricity.....	S	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	16	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	2,891	3,101	2,960	2,807	-6.8	4.8	5.5
Lease and rental payments for machinery, equipment, and other tangible items.....	790	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	2,101	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	1,311	1,397	1,269	1,243	-6.2	10.1	2.1
Purchased repairs and maintenance to machinery and equipment.....	1,136	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	175	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	1,613	1,247	1,201	1,022	29.4	3.8	17.5
Other operating expenses.....	22,457	19,482	17,537	17,616	15.3	11.1	-0.4
Depreciation and amortization charges.....	4,266	4,054	3,795	3,751	5.2	6.8	1.2
Governmental taxes and license fees.....	405	388	381	319	4.4	1.8	19.4
All other operating expenses.....	17,786	15,040	13,361	13,545	18.3	12.6	-1.4
Data processing and other purchased computer services.....	1,643	NA	NA	NA	NA	NA	NA
Purchased communication services.....	1,342	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	70	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	2,983	NA	NA	NA	NA	NA	NA
All other operating expenses.....	11,749	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.6. Internet Service Providers (NAICS 518111), Web Search Portals (NAICS 518112), Data Processing, Hosting, and Related Services (NAICS 5182), News Syndicates (NAICS 51911), Libraries and Archives (NAICS 51912), All Other Information Services (NAICS 51919) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

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Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>NEWS SYNDICATES (NAICS 51911)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>1,911</b>	<b>1,880</b>	<b>1,836</b>	<b>1,877</b>	<b>1.6</b>	<b>2.4</b>	<b>-2.2</b>
Personnel costs.....	1,094	1,067	1,042	1,059	2.5	2.4	-1.6
Gross annual payroll.....	893	871	845	863	2.5	3.1	-2.1
Employer's cost for fringe benefits.....	193	189	189	188	2.1	Z	0.5
Health insurance.....	64	NA	NA	NA	NA	NA	NA
Pension plans.....	35	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	22	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	13	NA	NA	NA	NA	NA	NA
Other.....	94	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	9	8	8	9	12.5	Z	-11.1
Expensed materials, parts and supplies (not for resale).....	80	90	91	100	-11.1	-1.1	-9.0
Expensed equipment.....	67	79	81	89	-15.2	-2.5	-9.0
Expensed purchase of other materials, parts, and supplies.....	13	12	10	10	8.3	20.0	Z
Expensed purchased services.....	160	168	166	174	-4.8	1.2	-4.6
Expensed purchases of software.....	16	14	14	15	14.3	Z	-6.7
Purchased electricity and fuels (except motor fuels).....	5	8	9	9	-37.5	-11.1	Z
Purchased electricity.....	3	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	1	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	93	94	92	97	-1.1	2.2	-5.2
Lease and rental payments for machinery, equipment, and other tangible items.....	31	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	62	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	26	25	26	28	4.0	-3.8	-7.1
Purchased repairs and maintenance to machinery and equipment.....	19	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	7	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	20	26	26	25	-23.1	Z	4.0
Other operating expenses.....	577	555	536	544	4.0	3.5	-1.5
Depreciation and amortization charges.....	109	96	97	97	13.5	-1.0	Z
Governmental taxes and license fees.....	42	90	76	76	-53.3	18.4	Z
All other operating expenses.....	426	369	364	371	15.4	1.4	-1.9
Data processing and other purchased computer services.....	1	NA	NA	NA	NA	NA	NA
Purchased communication services.....	18	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	8	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	108	NA	NA	NA	NA	NA	NA
All other operating expenses.....	291	NA	NA	NA	NA	NA	NA

See footnotes at end of table.



**Table 3.6.6. Internet Service Providers (NAICS 518111), Web Search Portals (NAICS 518112), Data Processing, Hosting, and Related Services (NAICS 5182), News Syndicates (NAICS 51911), Libraries and Archives (NAICS 51912), All Other Information Services (NAICS 51919) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>LIBRARIES AND ARCHIVES (NAICS 51912)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>1,969</b>	<b>1,788</b>	<b>1,720</b>	<b>1,614</b>	<b>10.1</b>	<b>4.0</b>	<b>6.6</b>
Personnel costs.....	1,072	960	961	904	11.7	-0.1	6.3
Gross annual payroll.....	823	740	749	717	11.2	-1.2	4.5
Employer's cost for fringe benefits.....	240	208	199	176	15.4	4.5	13.1
Health insurance.....	102	NA	NA	NA	NA	NA	NA
Pension plans.....	61	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	47	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	14	NA	NA	NA	NA	NA	NA
Other.....	77	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	9	S	S	11	S	S	S
Expensed materials, parts and supplies (not for resale).....	194	159	137	137	22.0	16.1	Z
Expensed equipment.....	22	25	23	25	-12.0	8.7	-8.0
Expensed purchase of other materials, parts, and supplies.....	172	134	115	113	28.4	16.5	1.8
Expensed purchased services.....	246	213	200	189	15.5	6.5	5.8
Expensed purchases of software.....	16	18	18	18	-11.1	Z	Z
Purchased electricity and fuels (except motor fuels).....	43	46	40	37	-6.5	15.0	8.1
Purchased electricity.....	34	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	9	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	134	82	79	78	63.4	3.8	1.3
Lease and rental payments for machinery, equipment, and other tangible items.....	52	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	82	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	37	50	47	43	-26.0	6.4	9.3
Purchased repairs and maintenance to machinery and equipment.....	11	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	26	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	16	S	S	S	S	S	S
Other operating expenses.....	457	457	422	384	Z	8.3	9.9
Depreciation and amortization charges.....	79	70	68	67	12.9	2.9	1.5
Governmental taxes and license fees.....	4	S	S	S	S	S	S
All other operating expenses.....	373	379	348	310	-1.6	8.9	12.3
Data processing and other purchased computer services.....	22	NA	NA	NA	NA	NA	NA
Purchased communication services.....	21	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	2	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	67	NA	NA	NA	NA	NA	NA
All other operating expenses.....	261	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.6. Internet Service Providers (NAICS 518111), Web Search Portals (NAICS 518112), Data Processing, Hosting, and Related Services (NAICS 5182), News Syndicates (NAICS 51911), Libraries and Archives (NAICS 51912), All Other Information Services (NAICS 51919) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>ALL OTHER INFORMATION SERVICES (NAICS 51919)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>2,315</b>	<b>2,123</b>	<b>1,905</b>	<b>1,737</b>	<b>9.0</b>	<b>11.4</b>	<b>9.7</b>
Personnel costs.....	1,139	1,057	977	887	7.8	8.2	10.1
Gross annual payroll.....	922	842	776	699	9.5	8.5	11.0
Employer's cost for fringe benefits.....	194	194	179	173	Z	8.4	3.5
Health insurance.....	122	NA	NA	NA	NA	NA	NA
Pension plans.....	16	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	6	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	10	NA	NA	NA	NA	NA	NA
Other.....	55	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	24	21	21	16	14.3	Z	31.3
Expensed materials, parts and supplies (not for resale).....	22	29	32	36	-24.1	-9.4	-11.1
Expensed equipment.....	5	4	15	19	25.0	-73.3	-21.1
Expensed purchase of other materials, parts, and supplies.....	17	24	17	17	-29.2	41.2	Z
Expensed purchased services.....	364	301	297	241	20.9	1.3	23.2
Expensed purchases of software.....	S	8	11	11	S	-27.3	Z
Purchased electricity and fuels (except motor fuels).....	7	7	7	6	Z	Z	16.7
Purchased electricity.....	6	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	ZZ	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	76	75	94	89	1.3	-20.2	5.6
Lease and rental payments for machinery, equipment, and other tangible items.....	5	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	71	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	29	26	31	26	11.5	-16.1	19.2
Purchased repairs and maintenance to machinery and equipment.....	25	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	5	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	S	S	S	108	S	S	S
Other operating expenses.....	790	737	599	573	7.2	23.0	4.5
Depreciation and amortization charges.....	247	209	168	182	18.2	24.4	-7.7
Governmental taxes and license fees.....	78	19	6	7	310.5	216.7	-14.3
All other operating expenses.....	465	509	425	384	-8.6	19.8	10.7
Data processing and other purchased computer services.....	35	NA	NA	NA	NA	NA	NA
Purchased communication services.....	53	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	ZZ	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	99	NA	NA	NA	NA	NA	NA
All other operating expenses.....	277	NA	NA	NA	NA	NA	NA

NA Not available. Z Absolute value is less than 0.05. ZZ Absolute value is less than 0.5. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.6.6 provides estimated measures of sampling variability.

**Table 3.6.7. Publishing Industries (except Internet) (NAICS 511), Motion Picture and Sound Recording Industries (NAICS 512), Broadcasting (except Internet) (NAICS 515), Internet Publishing and Broadcasting (NAICS 516), Telecommunications (NAICS 517), Internet Service Providers, Web Search Portals, and Data Processing Services (NAICS 518), and Other Information Services (NAICS 519) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>PUBLISHING INDUSTRIES (EXCEPT INTERNET) (NAICS 511)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>213,829</b>	<b>204,741</b>	<b>196,848</b>	<b>193,578</b>	<b>4.4</b>	<b>4.0</b>	<b>1.7</b>
Personnel costs.....	106,119	100,910	96,622	94,332	5.2	4.4	2.4
Gross annual payroll.....	84,251	80,763	78,184	77,280	4.3	3.3	1.2
Employer's cost for fringe benefits.....	17,522	16,048	14,715	13,735	9.2	9.1	7.1
Health insurance.....	6,734	NA	NA	NA	NA	NA	NA
Pension plans.....	4,922	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	2,988	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	1,934	NA	NA	NA	NA	NA	NA
Other.....	5,866	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	4,346	4,099	3,722	3,317	6.0	10.1	12.2
Expensed materials, parts and supplies (not for resale).....	7,924	8,903	8,702	8,784	-11.0	2.3	-0.9
Expensed equipment.....	1,171	1,212	1,279	1,203	-3.4	-5.2	6.3
Expensed purchase of other materials, parts, and supplies.....	6,754	7,691	7,423	7,581	-12.2	3.6	-2.1
Expensed purchased services.....	29,123	28,456	26,821	25,360	2.3	6.1	5.8
Expensed purchases of software.....	1,622	1,803	1,546	S	-10.0	16.6	S
Purchased electricity and fuels (except motor fuels).....	958	993	885	802	-3.5	12.2	10.3
Purchased electricity.....	838	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	120	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	5,186	4,997	5,185	5,274	3.8	-3.6	-1.7
Lease and rental payments for machinery, equipment, and other tangible items.....	1,099	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	4,086	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	1,634	1,294	1,246	1,171	26.3	3.9	6.4
Purchased repairs and maintenance to machinery and equipment.....	1,115	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	519	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	11,060	10,693	10,165	9,235	3.4	5.2	10.1
Purchased printing services.....	8,458	8,442	7,515	6,900	0.2	12.3	8.9
Other operating expenses.....	70,663	66,473	64,702	65,101	6.3	2.7	-0.6
Depreciation and amortization charges.....	11,406	10,064	9,792	9,489	13.3	2.8	3.2
Governmental taxes and license fees.....	1,069	1,102	1,047	997	-3.0	5.3	5.0
All other operating expenses.....	58,189	55,307	53,863	54,615	5.2	2.7	-1.4
Data processing and other purchased computer services.....	1,155	NA	NA	NA	NA	NA	NA
Purchased communication services.....	1,484	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	152	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	6,592	NA	NA	NA	NA	NA	NA
All other operating expenses.....	48,806	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.7. Publishing Industries (except Internet) (NAICS 511), Motion Picture and Sound Recording Industries (NAICS 512), Broadcasting (except Internet) (NAICS 515), Internet Publishing and Broadcasting (NAICS 516), Telecommunications (NAICS 517), Internet Service Providers, Web Search Portals, and Data Processing Services (NAICS 518), and Other Information Services (NAICS 519) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>MOTION PICTURE AND SOUND RECORDING INDUSTRIES (NAICS 512)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>75,885</b>	<b>74,257</b>	<b>72,576</b>	<b>68,632</b>	<b>2.2</b>	<b>2.3</b>	<b>5.7</b>
Personnel costs.....	20,823	20,757	19,637	17,545	0.3	5.7	11.9
Gross annual payroll.....	18,038	18,159	17,122	15,231	-0.7	6.1	12.4
Employer's cost for fringe benefits.....	1,928	1,864	1,803	1,682	3.4	3.4	7.2
Health insurance.....	624	NA	NA	NA	NA	NA	NA
Pension plans.....	530	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	251	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	279	NA	NA	NA	NA	NA	NA
Other.....	774	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	857	734	712	632	16.8	3.1	12.7
Expensed materials, parts and supplies (not for resale).....	1,566	1,624	1,534	1,464	-3.6	5.9	4.8
Expensed equipment.....	276	259	230	220	6.6	12.6	4.5
Expensed purchase of other materials, parts, and supplies.....	1,290	1,365	1,304	1,244	-5.5	4.7	4.8
Expensed purchased services.....	10,972	11,427	10,734	10,375	-4.0	6.5	3.5
Expensed purchases of software.....	142	134	155	113	6.0	-13.5	37.2
Purchased electricity and fuels (except motor fuels).....	413	532	448	431	-22.4	18.8	3.9
Purchased electricity.....	366	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	47	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	3,415	3,503	3,195	3,002	-2.5	9.6	6.4
Lease and rental payments for machinery, equipment, and other tangible items.....	245	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	3,170	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	542	573	531	526	-5.4	7.9	1.0
Purchased repairs and maintenance to machinery and equipment.....	212	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	330	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	6,459	6,685	6,405	6,303	-3.4	4.4	1.6
Other operating expenses.....	42,523	40,447	40,670	39,247	5.1	-0.5	3.6
Depreciation and amortization charges.....	4,402	4,260	3,952	4,541	3.3	7.8	-13.0
Governmental taxes and license fees.....	1,762	1,559	1,501	1,418	13.0	3.9	5.9
All other operating expenses.....	36,359	34,628	35,217	33,288	5.0	-1.7	5.8
Data processing and other purchased computer services.....	783	NA	NA	NA	NA	NA	NA
Purchased communication services.....	1,018	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	82	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	4,025	NA	NA	NA	NA	NA	NA
All other operating expenses.....	30,452	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.7. Publishing Industries (except Internet) (NAICS 511), Motion Picture and Sound Recording Industries (NAICS 512), Broadcasting (except Internet) (NAICS 515), Internet Publishing and Broadcasting (NAICS 516), Telecommunications (NAICS 517), Internet Service Providers, Web Search Portals, and Data Processing Services (NAICS 518), and Other Information Services (NAICS 519) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

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Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>BROADCASTING (EXCEPT INTERNET) (NAICS 515)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>72,926</b>	<b>69,710</b>	<b>67,015</b>	<b>63,123</b>	<b>4.6</b>	<b>4.0</b>	<b>6.2</b>
Personnel costs.....	20,744	19,592	18,606	17,370	5.9	5.3	7.1
Gross annual payroll.....	16,900	16,169	15,658	14,673	4.5	3.3	6.7
Employer's cost for fringe benefits.....	2,975	2,655	2,384	2,184	12.1	11.4	9.2
Health insurance.....	1,258	NA	NA	NA	NA	NA	NA
Pension plans.....	590	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	262	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	328	NA	NA	NA	NA	NA	NA
Other.....	1,127	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	869	768	563	513	13.2	36.4	9.7
Expensed materials, parts and supplies (not for resale).....	747	682	664	757	9.5	2.7	-12.3
Expensed equipment.....	177	160	169	240	10.6	-5.3	-29.6
Expensed purchase of other materials, parts, and supplies.....	570	522	495	517	9.2	5.5	-4.3
Expensed purchased services.....	5,993	6,127	5,761	5,446	-2.2	6.4	5.8
Expensed purchases of software.....	187	177	152	130	5.6	16.4	16.9
Purchased electricity and fuels (except motor fuels).....	553	520	459	448	6.3	13.3	2.5
Purchased electricity.....	504	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	50	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	1,322	1,315	1,337	1,233	0.5	-1.6	8.4
Lease and rental payments for machinery, equipment, and other tangible items.....	416	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	907	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	411	389	377	392	5.7	3.2	-3.8
Purchased repairs and maintenance to machinery and equipment.....	270	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	140	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	3,520	3,725	3,436	3,243	-5.5	8.4	6.0
Other operating expenses.....	45,441	43,310	41,984	39,550	4.9	3.2	6.2
Depreciation and amortization charges.....	5,362	5,074	5,045	4,902	5.7	0.6	2.9
Governmental taxes and license fees.....	617	702	806	811	-12.1	-12.9	-0.6
Broadcast rights and music license fees.....	12,565	12,052	11,924	11,724	4.3	1.1	1.7
Network compensation fees (networks only).....	718	777	893	889	-7.6	-13.0	0.4
Program and production costs.....	12,394	11,227	10,452	10,063	10.4	7.4	3.9
All other operating expenses.....	13,784	13,478	12,865	11,161	2.3	4.8	15.3
Data processing and other purchased computer services.....	396	NA	NA	NA	NA	NA	NA
Purchased communication services.....	437	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	27	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	1,169	NA	NA	NA	NA	NA	NA
All other operating expenses.....	11,754	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.7. Publishing Industries (except Internet) (NAICS 511), Motion Picture and Sound Recording Industries (NAICS 512), Broadcasting (except Internet) (NAICS 515), Internet Publishing and Broadcasting (NAICS 516), Telecommunications (NAICS 517), Internet Service Providers, Web Search Portals, and Data Processing Services (NAICS 518), and Other Information Services (NAICS 519) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

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Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>INTERNET PUBLISHING AND BROADCASTING (NAICS 516)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>13,784</b>	<b>11,272</b>	<b>9,084</b>	<b>7,056</b>	<b>22.3</b>	<b>24.1</b>	<b>28.7</b>
Personnel costs.....	5,732	4,901	3,936	3,087	17.0	24.5	27.5
Gross annual payroll.....	4,447	3,917	3,138	2,394	13.5	24.8	31.1
Employer's cost for fringe benefits.....	968	712	562	479	36.0	26.7	17.3
Health insurance.....	330	NA	NA	NA	NA	NA	NA
Pension plans.....	S	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	S	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	S	NA	NA	NA	NA	NA	NA
Other.....	527	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	S	272	236	214	S	15.3	10.3
Expensed materials, parts and supplies (not for resale).....	S	327	317	239	S	3.2	32.6
Expensed equipment.....	S	140	134	104	S	4.5	28.8
Expensed purchase of other materials, parts, and supplies.....	S	187	183	135	S	2.2	35.6
Expensed purchased services.....	2,472	2,000	1,547	1,218	23.6	29.3	27.0
Expensed purchases of software.....	S	275	194	78	S	41.8	148.7
Purchased electricity and fuels (except motor fuels).....	22	23	16	14	-4.3	43.8	14.3
Purchased electricity.....	21	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	455	383	344	281	18.8	11.3	22.4
Lease and rental payments for machinery, equipment, and other tangible items.....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	378	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	S	107	100	105	S	7.0	-4.8
Purchased repairs and maintenance to machinery and equipment.....	S	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	S	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	1,607	1,211	893	741	32.7	35.6	20.5
Other operating expenses.....	5,190	4,044	3,285	2,512	28.3	23.1	30.8
Depreciation and amortization charges.....	S	910	792	767	S	14.9	3.3
Governmental taxes and license fees.....	90	73	62	53	23.3	17.7	17.0
All other operating expenses.....	4,076	3,061	S	1,692	33.2	S	S
Data processing and other purchased computer services.....	487	NA	NA	NA	NA	NA	NA
Purchased communication services.....	S	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	S	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	746	NA	NA	NA	NA	NA	NA
All other operating expenses.....	S	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.7. Publishing Industries (except Internet) (NAICS 511), Motion Picture and Sound Recording Industries (NAICS 512), Broadcasting (except Internet) (NAICS 515), Internet Publishing and Broadcasting (NAICS 516), Telecommunications (NAICS 517), Internet Service Providers, Web Search Portals, and Data Processing Services (NAICS 518), and Other Information Services (NAICS 519) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>TELECOMMUNICATIONS (NAICS 517)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>397,903</b>	<b>391,733</b>	<b>380,731</b>	<b>369,447</b>	<b>1.6</b>	<b>2.9</b>	<b>3.1</b>
Personnel costs.....	101,867	104,211	100,302	96,149	-2.2	3.9	4.3
Gross annual payroll.....	73,462	75,800	70,415	66,289	-3.1	7.6	6.2
Employer's cost for fringe benefits.....	22,642	22,647	22,985	23,540	Z	-1.5	-2.4
Health insurance.....	12,972	NA	NA	NA	NA	NA	NA
Pension plans.....	4,601	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	2,876	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	1,725	NA	NA	NA	NA	NA	NA
Other.....	5,070	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	5,763	5,764	6,902	6,320	Z	-16.5	9.2
Expensed materials, parts and supplies (not for resale).....	22,400	20,188	17,850	17,352	11.0	13.1	2.9
Expensed equipment.....	1,121	1,280	1,294	1,458	-12.4	-1.1	-11.2
Expensed purchase of other materials, parts, and supplies.....	21,278	18,908	16,556	15,894	12.5	14.2	4.2
Expensed purchased services.....	35,584	34,733	33,697	33,167	2.5	3.1	1.6
Expensed purchases of software.....	2,783	3,118	2,973	2,835	-10.7	4.9	4.9
Purchased electricity and fuels (except motor fuels).....	3,047	3,405	3,178	2,977	-10.5	7.1	6.8
Purchased electricity.....	2,648	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	10,952	10,789	10,764	10,233	1.5	0.2	5.2
Lease and rental payments for machinery, equipment, and other tangible items.....	1,338	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	9,613	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	3,721	3,729	4,286	4,636	-0.2	-13.0	-7.5
Purchased repairs and maintenance to machinery and equipment.....	2,996	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	725	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	15,082	13,691	12,497	12,485	10.2	9.6	0.1
Other operating expenses.....	238,053	232,600	228,881	222,780	2.3	1.6	2.7
Depreciation and amortization charges.....	80,697	78,136	73,814	70,846	3.3	5.9	4.2
Governmental taxes and license fees.....	8,687	9,065	8,579	8,722	-4.2	5.7	-1.6
Program and production costs.....	27,643	24,015	22,696	20,870	15.1	5.8	8.7
Access charges.....	28,109	31,692	40,097	41,034	-11.3	-21.0	-2.3
Universal service contributions (USC) and other similar charges.....	5,851	5,818	6,765	5,199	0.6	-14.0	30.1
All other operating expenses.....	87,066	83,874	76,931	76,109	3.8	9.0	1.1
Data processing and other purchased computer services.....	1,643	NA	NA	NA	NA	NA	NA
Purchased communication services.....	2,138	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	289	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	13,909	NA	NA	NA	NA	NA	NA
All other operating expenses.....	69,087	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 3.6.7. Publishing Industries (except Internet) (NAICS 511), Motion Picture and Sound Recording Industries (NAICS 512), Broadcasting (except Internet) (NAICS 515), Internet Publishing and Broadcasting (NAICS 516), Telecommunications (NAICS 517), Internet Service Providers, Web Search Portals, and Data Processing Services (NAICS 518), and Other Information Services (NAICS 519) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>INTERNET SERVICE PROVIDERS, WEB SEARCH PORTALS, AND DATA PROCESSING SERVICES (NAICS 518)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>84,120</b>	<b>79,290</b>	<b>71,943</b>	<b>70,152</b>	<b>6.1</b>	<b>10.2</b>	<b>2.6</b>
Personnel costs.....	39,158	37,948	33,516	31,728	3.2	13.2	5.6
Gross annual payroll.....	30,793	29,139	25,841	24,159	5.7	12.8	7.0
Employer's cost for fringe benefits.....	5,016	5,255	4,737	4,665	-4.5	10.9	1.5
Health insurance.....	2,338	NA	NA	NA	NA	NA	NA
Pension plans.....	697	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	123	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	574	NA	NA	NA	NA	NA	NA
Other.....	1,981	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	3,349	3,553	2,938	2,904	-5.7	20.9	1.2
Expensed materials, parts and supplies (not for resale).....	3,515	3,212	2,790	2,262	9.4	15.1	23.3
Expensed equipment.....	909	946	884	870	-3.9	7.0	1.6
Expensed purchase of other materials, parts, and supplies.....	2,606	2,266	1,906	1,392	15.0	18.9	36.9
Expensed purchased services.....	10,133	10,784	11,198	11,051	-6.0	-3.7	1.3
Expensed purchases of software.....	1,352	1,429	1,748	1,264	-5.4	-18.2	38.3
Purchased electricity and fuels (except motor fuels).....	757	638	544	S	18.7	17.3	S
Purchased electricity.....	737	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	20	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	3,372	3,638	3,496	3,325	-7.3	4.1	5.1
Lease and rental payments for machinery, equipment, and other tangible items.....	813	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	2,559	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	1,446	1,508	1,366	1,341	-4.1	10.4	1.9
Purchased repairs and maintenance to machinery and equipment.....	1,241	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	205	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	3,206	3,572	4,043	S	-10.2	-11.6	S
Other operating expenses.....	31,314	27,346	24,439	25,110	14.5	11.9	-2.7
Depreciation and amortization charges.....	5,747	5,651	5,227	5,357	1.7	8.1	-2.4
Governmental taxes and license fees.....	487	466	484	422	4.5	-3.7	14.7
All other operating expenses.....	25,080	21,229	18,728	19,332	18.1	13.4	-3.1
Data processing and other purchased computer services.....	2,016	NA	NA	NA	NA	NA	NA
Purchased communication services.....	2,628	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	89	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	3,818	NA	NA	NA	NA	NA	NA
All other operating expenses.....	16,529	NA	NA	NA	NA	NA	NA

See footnotes at end of table.



**Table 3.6.7. Publishing Industries (except Internet) (NAICS 511), Motion Picture and Sound Recording Industries (NAICS 512), Broadcasting (except Internet) (NAICS 515), Internet Publishing and Broadcasting (NAICS 516), Telecommunications (NAICS 517), Internet Service Providers, Web Search Portals, and Data Processing Services (NAICS 518), and Other Information Services (NAICS 519) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>OTHER INFORMATION SERVICES (NAICS 519)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>6,195</b>	<b>5,791</b>	<b>5,461</b>	<b>5,228</b>	<b>7.0</b>	<b>6.0</b>	<b>4.5</b>
Personnel costs.....	3,306	3,084	2,981	2,850	7.2	3.5	4.6
Gross annual payroll.....	2,638	2,452	2,371	2,278	7.6	3.4	4.1
Employer's cost for fringe benefits.....	627	591	568	536	6.1	4.0	6.0
Health insurance.....	288	NA	NA	NA	NA	NA	NA
Pension plans.....	112	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	75	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	37	NA	NA	NA	NA	NA	NA
Other.....	227	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	41	41	42	35	Z	-2.4	20.0
Expensed materials, parts and supplies (not for resale).....	296	278	260	273	6.5	6.9	-4.8
Expensed equipment.....	95	108	118	133	-12.0	-8.5	-11.3
Expensed purchase of other materials, parts, and supplies.....	201	170	142	140	18.2	19.7	1.4
Expensed purchased services.....	770	681	663	604	13.1	2.7	9.8
Expensed purchases of software.....	45	40	43	44	12.5	-7.0	-2.3
Purchased electricity and fuels (except motor fuels).....	54	60	56	52	-10.0	7.1	7.7
Purchased electricity.....	44	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	11	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	303	251	265	265	20.7	-5.3	Z
Lease and rental payments for machinery, equipment, and other tangible items.....	88	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	215	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	92	101	104	97	-8.9	-2.9	7.2
Purchased repairs and maintenance to machinery and equipment.....	54	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	38	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	S	S	S	146	S	S	S
Other operating expenses.....	1,823	1,749	1,558	1,501	4.2	12.3	3.8
Depreciation and amortization charges.....	435	375	332	346	16.0	13.0	-4.0
Governmental taxes and license fees.....	124	118	89	91	5.1	32.6	-2.2
All other operating expenses.....	1,264	1,257	1,137	1,064	0.6	10.6	6.9
Data processing and other purchased computer services.....	58	NA	NA	NA	NA	NA	NA
Purchased communication services.....	92	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	10	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	273	NA	NA	NA	NA	NA	NA
All other operating expenses.....	830	NA	NA	NA	NA	NA	NA

NA Not available. Z Absolute value is less than 0.05. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-3.6.7 provides estimated measures of sampling variability.

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## Chapter 4. Securities Intermediation and Related Services

**Table 4.1. Securities, Commodity Contracts, and Other Financial Investment Activities (NAICS 523) – Estimated Revenue for Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	2003	2002	2001	2000	1999
523x	Securities, commodity contracts, and other financial investment activities <sup>1</sup>	461,096	467,702	392,734	349,166	311,525	292,647	331,775	384,992	329,717
5231	Securities and commodity contracts intermediation and brokerage	312,790	335,703	279,101	250,080	225,299	212,237	248,132	296,045	251,154
52311	Investment banking and securities dealing	145,576	170,328	140,411	127,257	108,306	98,930	121,942	145,416	130,292
52312	Securities brokerage	156,109	156,549	131,053	115,626	110,689	107,199	120,048	144,631	115,033
52313	Commodity contracts dealing	5,335	4,704	4,385	3,858	3,329	3,044	3,037	2,945	2,772
52314	Commodity contracts brokerage	5,770	4,122	3,252	S	2,975	3,064	3,105	3,053	3,057
5239x	Other financial investment activities <sup>2</sup>	148,306	131,999	113,633	99,086	86,226	80,410	83,643	88,947	78,563
52392	Portfolio management	118,901	104,718	90,675	80,872	71,535	67,370	71,389	75,349	66,523
52393	Investment advice	29,405	27,281	22,958	18,214	14,691	13,040	12,254	13,598	12,040

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Includes NAICS 5231 (Securities and commodity contracts intermediation and brokerage) and NAICS 5239 (Other financial investment activities).

<sup>2</sup>Excludes NAICS 52391 (Miscellaneous intermediation) and NAICS 52399 (All other financial investment activities).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-4.1 provides estimated measures of sampling variability.

**Table 4.2. Securities, Commodity Contracts, and Other Financial Investment Activities (NAICS 523) – Estimated Year-to-Year Percent Change in Revenue for Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007/2006	2006/2005	2005/2004	2004/2003	2003/2002	2002/2001	2001/2000	2000/1999
523x	Securities, commodity contracts, and other financial investment activities <sup>1</sup> .....	-1.4	19.1	12.5	12.1	6.5	-11.8	-13.8	16.8
5231	Securities and commodity contracts intermediation and brokerage .....	-6.8	20.3	11.6	11.0	6.2	-14.5	-16.2	17.9
52311	Investment banking and securities dealing .....	-14.5	21.3	10.3	17.5	9.5	-18.9	-16.1	11.6
52312	Securities brokerage .....	-0.3	19.5	13.3	4.5	3.3	-10.7	-17.0	25.7
52313	Commodity contracts dealing .....	13.4	7.3	13.7	15.9	9.4	0.2	3.1	6.2
52314	Commodity contracts brokerage .....	40.0	26.8	S	S	-2.9	-1.3	1.7	-0.1
5239x	Other financial investment activities <sup>2</sup> .....	12.4	16.2	14.7	14.9	7.2	-3.9	-6.0	13.2
52392	Portfolio management .....	13.5	15.5	12.1	13.1	6.2	-5.6	-5.3	13.3
52393	Investment advice .....	7.8	18.8	26.0	24.0	12.7	6.4	-9.9	12.9

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Includes NAICS 5231 (Securities and commodity contracts intermediation and brokerage) and NAICS 5239 (Other financial investment activities).

<sup>2</sup>Excludes NAICS 52391 (Miscellaneous intermediation) and NAICS 52399 (All other financial investment activities).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-4.1 provides estimated measures of sampling variability.

**Table 4.3. Securities, Commodity Contracts, and Other Financial Investment Activities (NAICS 523) – Estimated Export Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
523x	Securities, commodity contracts, and other financial investment activities <sup>1</sup> .....	16,730	13,608	12,280	10,718	22.9	10.8	14.6
5231	Securities and commodity contracts intermediation and brokerage .....	7,079	6,235	5,998	5,774	13.5	4.0	3.9
52311	Investment banking and securities dealing .....	S	3,134	S	S	S	S	S
52312	Securities brokerage .....	2,695	2,331	2,030	1,908	15.6	14.8	6.4
52313	Commodity contracts dealing .....	385	687	1,222	2,106	-44.0	-43.8	-42.0
52314	Commodity contracts brokerage .....	S	83	95	80	S	-12.6	18.8
5239x	Other financial investment activities <sup>2</sup> .....	9,651	7,373	6,282	4,944	30.9	17.4	27.1
52392	Portfolio management .....	8,913	6,861	5,792	4,576	29.9	18.5	26.6
52393	Investment advice .....	738	512	490	368	44.1	4.5	33.2

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Includes NAICS 5231 (Securities and commodity contracts intermediation and brokerage) and NAICS 5239 (Other financial investment activities).

<sup>2</sup>Excludes NAICS 52391 (Miscellaneous intermediation) and NAICS 52399 (All other financial investment activities).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-4.2 provides estimated measures of sampling variability.

**Table 4.4. Securities, Commodity Contracts, and Other Financial Investment Activities (NAICS 523) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>INVESTMENT BANKING AND SECURITIES DEALING AND BROKERAGE (NAICS 5231Y)<sup>1</sup></b>							
<b>Operating Revenue</b>							
<b>Total .....</b>	301,685	326,877	271,464	242,883	-7.7	20.4	11.8
<b>Sources of Revenue</b>							
Securities origination products .....	32,702	31,672	28,801	25,492	3.3	10.0	13.0
Brokering and dealing products – debt instruments .....	34,387	43,838	35,158	33,906	-21.6	24.7	3.7
Brokering and dealing products – equities .....	40,104	38,574	35,824	38,432	4.0	7.7	-6.8
Brokering and dealing products – derivative contracts .....	16,159	13,242	12,516	S	22.0	5.8	S
Brokering and dealing investment company securities .....	13,930	12,938	11,236	11,936	7.7	15.1	-5.9
Repurchase agreements – net gains (losses) .....	-3,011	4,668	S	S	-164.5	S	S
Trading debt instruments on own account – net gains (losses) .....	-13,746	14,455	8,775	S	-195.1	64.7	S
Trading equities on own account – net gains (losses) .....	S	20,353	13,061	10,131	S	55.8	28.9
Trading derivative contracts on own account – net gains (losses) .....	13,447	4,832	S	4,963	178.3	S	S
Financial planning and investment management services for individuals .....	21,172	19,200	18,160	16,039	10.3	5.7	13.2
Financial planning and investment management services for businesses .....	14,061	12,618	11,727	11,182	11.4	7.6	4.9
Financial planning and investment management services for governments .....	1,133	S	S	S	S	S	S
All other operating revenue .....	127,855	109,234	78,767	68,910	17.0	38.7	14.3
<b>COMMODITY CONTRACTS DEALING AND BROKERAGE (NAICS 5231X)<sup>2</sup></b>							
<b>Operating Revenue</b>							
<b>Total .....</b>	11,105	8,826	7,637	7,197	25.8	15.6	6.1
<b>Sources of Revenue</b>							
Brokering and dealing products – derivative contracts .....	4,132	2,590	2,219	1,806	59.5	16.7	22.9
Brokering and dealing products – equities .....	717	S	S	S	S	S	S
Brokering and dealing foreign currency fees - wholesale .....	286	262	222	180	9.2	18.0	23.3
Brokering and dealing other financial instruments .....	858	729	628	S	17.7	16.1	S
Trading derivative contracts on own account – net gains (losses) .....	999	1,118	S	397	-10.6	S	S
Trading foreign currency on own account – net gains (losses) .....	249	103	87	130	141.7	18.4	-33.1
Management of financial market clearing products .....	389	413	528	549	-5.8	-21.8	-3.8
All other operating revenue .....	3,474	3,087	2,930	3,354	12.5	5.4	-12.6
<b>OTHER FINANCIAL INVESTMENT ACTIVITIES (NAICS 5239X)<sup>3</sup></b>							
<b>Operating Revenue</b>							
<b>Total .....</b>	148,306	131,999	113,633	99,086	12.4	16.2	14.7
<b>Sources of Revenue</b>							
Financial planning and investment management services for individuals .....	38,995	32,291	26,413	21,509	20.8	22.3	22.8
Financial planning and investment management services for businesses .....	59,044	51,038	44,529	36,679	15.7	14.6	21.4
Financial planning and investment management services for governments .....	2,372	2,177	2,083	1,836	9.0	4.5	13.5
Brokering and dealing products – equities .....	7,892	7,415	7,026	7,175	6.4	5.5	-2.1
Trust products .....	6,819	6,449	5,455	4,956	5.7	18.2	10.1
All other operating revenue .....	33,185	32,630	28,125	26,931	1.7	16.0	4.4

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Includes NAICS 52311 (Investment banking and securities dealing) and NAICS 52312 (Securities brokerage).

<sup>2</sup>Includes NAICS 52313 (Commodity contracts dealing) and NAICS 52314 (Commodity contracts brokerage).

<sup>3</sup>Excludes NAICS 52391 (Miscellaneous intermediation) and NAICS 52399 (All other financial investment activities).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-4.3 provides estimated measures of sampling variability.

**Table 4.5. Securities, Commodity Contracts, and Other Financial Investment Activities (NAICS 523) – Estimated Total Expenses for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
523x	Securities, commodity contracts, and other financial investment activities <sup>1</sup> .....	405,108	370,537	317,813	271,639	9.3	16.6	17.0
5231	Securities and commodity contracts intermediation and brokerage .....	304,401	284,160	238,620	200,032	7.1	19.1	19.3
52311	Investment banking and securities dealing .....	161,952	152,542	129,758	105,564	6.2	17.6	22.9
52312	Securities brokerage .....	134,856	125,964	104,526	90,185	7.1	20.5	15.9
52313	Commodity contracts dealing .....	3,084	2,392	1,839	1,512	28.9	30.1	21.6
52314	Commodity contracts brokerage .....	4,509	S	2,497	S	S	S	S
5239x	Other financial investment activities <sup>2</sup> .....	100,707	86,377	79,193	71,607	16.6	9.1	10.6
52392	Portfolio management .....	79,366	67,139	61,619	56,726	18.2	9.0	8.6
52393	Investment advice .....	21,341	19,238	17,574	14,881	10.9	9.5	18.1

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Includes NAICS 5231 (Securities and commodity contracts intermediation and brokerage) and NAICS 5239 (Other financial investment activities).

<sup>2</sup>Excludes NAICS 52391 (Miscellaneous intermediation) and NAICS 52399 (All other financial investment activities).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-4.4 provides estimated measures of sampling variability.

**Table 4.6. Securities, Commodity Contracts, and Other Financial Investment Activities (NAICS 523) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Expenses</b>							
<b>Total</b> .....	405,108	370,537	317,813	271,639	9.3	16.6	17.0
Personnel costs.....	162,059	156,187	138,858	127,821	3.8	12.5	8.6
Gross annual payroll.....	139,154	134,384	117,810	108,116	3.5	14.1	9.0
Employer's cost for fringe benefits.....	19,934	18,959	18,552	17,464	5.1	2.2	6.2
Health insurance.....	5,905	NA	NA	NA	NA	NA	NA
Pension plans.....	5,098	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	1,205	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	3,893	NA	NA	NA	NA	NA	NA
Other.....	8,931	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	2,971	2,844	2,496	2,242	4.5	13.9	11.3
Expensed materials, parts and supplies (not for resale).....	2,518	2,570	2,842	2,906	-2.0	-9.6	-2.2
Expensed equipment.....	1,161	1,233	1,512	1,580	-5.8	-18.5	-4.3
Expensed purchase of other materials, parts, and supplies.....	1,357	1,337	1,330	1,325	1.5	0.5	0.4
Expensed purchased services.....	19,929	19,165	18,251	17,352	4.0	5.0	5.2
Expensed purchases of software.....	3,089	2,919	2,678	2,336	5.8	9.0	14.6
Purchased electricity and fuels (except motor fuels).....	619	595	548	S	4.0	8.6	S
Purchased electricity.....	546	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	73	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	9,577	9,545	9,071	8,965	0.3	5.2	1.2
Lease and rental payments for machinery, equipment, and other tangible items.....	1,130	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	8,447	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	2,066	1,966	1,906	1,768	5.1	3.1	7.8
Purchased repairs and maintenance to machinery and equipment.....	1,102	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	964	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	4,578	4,139	4,049	3,796	10.6	2.2	6.7
Other operating expenses.....	220,602	192,615	157,860	123,560	14.5	22.0	27.8
Depreciation and amortization charges.....	7,687	6,675	5,970	5,862	15.2	11.8	1.8
Governmental taxes and license fees.....	2,391	2,241	2,171	2,113	6.7	3.2	2.7
Operating interest expense.....	104,305	88,330	60,700	37,476	18.1	45.5	62.0
All other operating expenses.....	106,220	95,369	89,018	78,109	11.4	7.1	14.0
Data processing and other purchased computer services.....	4,244	NA	NA	NA	NA	NA	NA
Purchased communication services.....	3,249	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	147	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	13,952	NA	NA	NA	NA	NA	NA
All other operating expenses.....	84,628	NA	NA	NA	NA	NA	NA

NA Not available. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-4.5 provides estimated measures of sampling variability.



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## Chapter 5. Rental and Leasing Services

**Table 5.1. Rental and Leasing Services (NAICS 532) – Estimated Revenue for Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	2003	2002	2001	2000	1999
532	Rental and leasing services .....	123,041	118,507	108,612	102,863	96,387	95,108	96,932	98,504	91,207
5321	Automotive equipment rental and leasing .....	48,063	46,872	43,737	41,126	37,007	35,779	36,035	37,231	34,821
53211	Passenger car rental and leasing .....	28,578	27,649	25,925	24,793	23,007	22,683	22,485	22,949	21,366
532111	Passenger car rental .....	23,021	22,633	21,298	20,428	18,650	18,621	18,607	18,971	17,517
532112	Passenger car leasing .....	5,557	5,016	4,627	4,365	4,357	4,062	3,878	3,978	3,849
53212	Truck, utility trailer, and RV (recreational vehicle) rental and leasing .....	19,485	19,223	17,812	16,333	14,000	13,096	13,550	14,282	13,455
5322	Consumer goods rental .....	23,844	23,245	22,747	23,412	21,923	20,701	20,760	20,159	19,399
53221	Consumer electronics and appliances rental .....	3,594	3,615	3,482	3,706	3,463	3,456	3,292	3,017	2,835
53222	Formal wear and costume rental .....	697	664	733	788	875	922	891	869	857
53223	Video tape and disc rental .....	10,069	9,844	9,507	10,604	10,053	9,364	9,584	9,569	9,303
53229	Other consumer goods rental .....	9,484	9,122	9,025	8,314	7,532	6,959	6,993	6,704	6,404
532291	Home health equipment rental .....	5,458	5,192	4,854	4,667	4,240	3,818	3,607	3,211	2,957
53229x	All other consumer goods rental <sup>1</sup> .....	4,026	3,930	4,171	3,647	3,292	3,141	3,386	3,493	3,447
5323	General rental centers .....	4,417	4,104	3,784	3,710	3,611	3,387	3,337	3,636	3,395
5324	Commercial and industrial machinery and equipment rental and leasing .....	46,717	44,286	38,344	34,615	33,846	35,241	36,800	37,478	33,592
53241	Construction, transportation, mining, and forestry machinery and equipment rental and leasing .....	24,712	23,768	20,538	17,991	18,388	18,414	18,631	18,016	15,234
53242	Office machinery and equipment rental and leasing .....	3,119	2,878	2,793	2,642	3,326	4,380	6,000	7,125	6,632
53249	Other commercial and industrial machinery and equipment rental and leasing .....	18,886	17,640	15,013	13,982	12,132	12,447	12,169	12,337	11,726

<sup>1</sup>Includes NAICS 532292 (Recreational goods rental) and NAICS 532299 (All other consumer goods rental).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-5.1 provides estimated measures of sampling variability.

**Table 5.2. Rental and Leasing Services (NAICS 532) – Estimated Year-to-Year Percent Change in Revenue for Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007/2006	2006/2005	2005/2004	2004/2003	2003/2002	2002/2001	2001/2000	2000/1999
532	Rental and leasing services .....	3.8	9.1	5.6	6.7	1.3	-1.9	-1.6	8.0
5321	Automotive equipment rental and leasing .....	2.5	7.2	6.3	11.1	3.4	-0.7	-3.2	6.9
53211	Passenger car rental and leasing .....	3.4	6.6	4.6	7.8	1.4	0.9	-2.0	7.4
532111	Passenger car rental .....	1.7	6.3	4.3	9.5	0.2	0.1	-1.9	8.3
532112	Passenger car leasing .....	10.8	8.4	6.0	0.2	7.3	4.7	-2.5	3.4
53212	Truck, utility trailer, and RV (recreational vehicle) rental and leasing .....	1.4	7.9	9.1	16.7	6.9	-3.4	-5.1	6.1
5322	Consumer goods rental .....	2.6	2.2	-2.8	6.8	5.9	-0.3	3.0	3.9
53221	Consumer electronics and appliances rental .....	-0.6	3.8	-6.0	7.0	0.2	5.0	9.1	6.4
53222	Formal wear and costume rental .....	5.0	-9.4	-7.0	-9.9	-5.1	3.5	2.5	1.4
53223	Video tape and disc rental .....	2.3	3.5	-10.3	5.5	7.4	-2.3	0.2	2.9
53229	Other consumer goods rental .....	4.0	1.1	8.6	10.4	8.2	-0.5	4.3	4.7
532291	Home health equipment rental .....	5.1	7.0	4.0	10.1	11.1	5.8	12.3	8.6
53229x	All other consumer goods rental <sup>1</sup> .....	2.4	-5.8	14.4	10.8	4.8	-7.2	-3.1	1.3
5323	General rental centers .....	7.6	8.5	2.0	2.7	6.6	1.5	-8.2	7.1
5324	Commercial and industrial machinery and equipment rental and leasing .....	5.5	15.5	10.8	2.3	-4.0	-4.2	-1.8	11.6
53241	Construction, transportation, mining, and forestry machinery and equipment rental and leasing .....	4.0	15.7	14.2	-2.2	-0.1	-1.2	3.4	18.3
53242	Office machinery and equipment rental and leasing ..	8.4	3.0	5.7	-20.6	-24.1	-27.0	-15.8	7.4
53249	Other commercial and industrial machinery and equipment rental and leasing .....	7.1	17.5	7.4	15.2	-2.5	2.3	-1.4	5.2

<sup>1</sup>Includes NAICS 532292 (Recreational goods rental) and NAICS 532299 (All other consumer goods rental).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-5.1 provides estimated measures of sampling variability.

**Table 5.3. Rental and Leasing Services (NAICS 532) – Estimated Export Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
532	Rental and leasing services .....	606	509	422	545	19.1	20.6	-22.6
5321	Automotive equipment rental and leasing .....	58	S	87	S	S	S	S
53211	Passenger car rental and leasing .....	D	34	S	S	D	S	S
532111	Passenger car rental .....	S	S	S	S	S	S	S
532112	Passenger car leasing .....	20	16	ZZ	ZZ	25.0	Z	Z
53212	Truck, utility trailer, and RV (recreational vehicle) rental and leasing .....	D	S	S	28	D	S	S
5322	Consumer goods rental .....	S	13	13	16	S	Z	-18.8
53221	Consumer electronics and appliances rental .....	S	S	S	S	S	S	S
53222	Formal wear and costume rental .....	S	ZZ	ZZ	ZZ	S	Z	Z
53223	Video tape and disc rental .....	S	5	5	S	S	Z	S
53229	Other consumer goods rental .....	S	7	7	10	S	Z	-30.0
532291	Home health equipment rental .....	S	7	7	10	S	Z	-30.0
53229x	All other consumer goods rental <sup>1</sup> .....	S	ZZ	ZZ	ZZ	S	Z	Z
5323	General rental centers .....	S	S	S	S	S	S	S
5324	Commercial and industrial machinery and equipment rental and leasing .....	533	398	S	457	33.9	S	S
53241	Construction, transportation, mining, and forestry machinery and equipment rental and leasing .....	419	316	S	S	32.6	S	S
53242	Office machinery and equipment rental and leasing .....	S	S	S	S	S	S	S
53249	Other commercial and industrial machinery and equipment rental and leasing .....	110	78	S	166	41.0	S	S

NA Not available. Z Absolute value is less than 0.05. ZZ Absolute value is less than 0.5. D Estimate in table is withheld to avoid disclosing data of individual companies; data are included in higher level totals. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Includes NAICS 532292 (Recreational goods rental) and NAICS 532299 (All other consumer goods rental).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-5.2 provides estimated measures of sampling variability.

**Table 5.4. Rental and Leasing Services (NAICS 532) – Estimated Total Expenses for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
532	Rental and leasing services .....	93,530	90,028	82,375	80,678	3.9	9.3	2.1
5321	Automotive equipment rental and leasing .....	41,117	39,638	36,729	34,898	3.7	7.9	5.2
53211	Passenger car rental and leasing .....	24,480	23,635	21,792	20,949	3.6	8.5	4.0
532111	Passenger car rental .....	20,542	20,069	18,427	17,750	2.4	8.9	3.8
532112	Passenger car leasing .....	3,938	3,566	3,365	3,199	10.4	6.0	5.2
53212	Truck, utility trailer, and RV (recreational vehicle) rental and leasing .....	16,637	16,003	14,937	13,949	4.0	7.1	7.1
5322	Consumer goods rental .....	17,595	16,814	16,179	16,857	4.6	3.9	-4.0
53221	Consumer electronics and appliances rental .....	2,911	2,894	3,031	3,394	0.6	-4.5	-10.7
53222	Formal wear and costume rental .....	530	541	585	630	-2.0	-7.5	-7.1
53223	Video tape and disc rental .....	7,429	6,911	6,588	7,395	7.5	4.9	-10.9
53229	Other consumer goods rental .....	6,725	6,468	5,974	5,438	4.0	8.3	9.9
532291	Home health equipment rental .....	3,525	3,300	3,068	2,856	6.8	7.6	7.4
53229x	All other consumer goods rental <sup>1</sup> .....	3,200	3,168	2,906	2,582	1.0	9.0	12.5
5323	General rental centers .....	3,599	3,305	3,069	3,125	8.9	7.7	-1.8
5324	Commercial and industrial machinery and equipment rental and leasing .....	31,219	30,271	26,399	25,799	3.1	14.7	2.3
53241	Construction, transportation, mining, and forestry machinery and equipment rental and leasing .....	16,243	15,577	13,942	14,024	4.3	11.7	-0.6
53242	Office machinery and equipment rental and leasing .....	1,130	1,086	1,073	1,026	4.1	1.2	4.6
53249	Other commercial and industrial machinery and equipment rental and leasing .....	13,846	13,607	11,384	10,749	1.8	19.5	5.9

<sup>1</sup>Includes NAICS 532292 (Recreational goods rental) and NAICS 532299 (All other consumer goods rental).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-5.3 provides estimated measures of sampling variability.

**Table 5.5. Rental and Leasing Services (NAICS 532) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>93,530</b>	<b>90,028</b>	<b>82,375</b>	<b>80,678</b>	<b>3.9</b>	<b>9.3</b>	<b>2.1</b>
Personnel costs.....	27,892	26,457	25,143	23,341	5.4	5.2	7.7
Gross annual payroll.....	23,373	22,274	21,160	19,598	4.9	5.3	8.0
Employer's cost for fringe benefits.....	3,960	3,584	3,437	3,258	10.5	4.3	5.5
Health insurance.....	1,413	NA	NA	NA	NA	NA	NA
Pension plans.....	516	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	167	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	349	NA	NA	NA	NA	NA	NA
Other.....	2,031	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	559	599	547	486	-6.7	9.5	12.6
Expensed materials, parts and supplies (not for resale).....	4,993	5,223	4,649	4,325	-4.4	12.3	7.5
Expensed equipment.....	S	579	563	512	S	2.8	10.0
Expensed purchase of other materials, parts, and supplies.....	4,389	4,644	4,086	3,814	-5.5	13.7	7.1
Expensed purchased services.....	13,493	12,637	11,584	11,882	6.8	9.1	-2.5
Expensed purchases of software.....	191	214	222	212	-10.7	-3.6	4.7
Purchased electricity and fuels (except motor fuels).....	742	746	631	698	-0.5	18.2	-9.6
Purchased electricity.....	460	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	282	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	7,648	6,636	5,991	6,167	15.3	10.8	-2.9
Lease and rental payments for machinery, equipment, and other tangible items.....	2,576	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	5,072	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	3,191	3,275	3,022	3,033	-2.6	8.4	-0.4
Purchased repairs and maintenance to machinery and equipment.....	2,246	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	S	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	1,721	1,767	1,717	1,772	-2.6	2.9	-3.1
Other operating expenses.....	47,152	45,712	40,999	41,130	3.2	11.5	-0.3
Depreciation and amortization charges.....	20,738	19,325	17,949	18,441	7.3	7.7	-2.7
Governmental taxes and license fees.....	1,744	1,489	1,486	1,439	17.1	0.2	3.3
All other operating expenses.....	24,670	24,897	21,564	21,250	-0.9	15.5	1.5
Data processing and other purchased computer services.....	206	NA	NA	NA	NA	NA	NA
Purchased communication services.....	586	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	136	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	1,232	NA	NA	NA	NA	NA	NA
All other operating expenses.....	S	NA	NA	NA	NA	NA	NA

NA Not available. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-5.4 provides estimated measures of sampling variability.

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## Chapter 6. Professional, Scientific, and Technical Services

**Table 6.1. Professional, Scientific, and Technical Services (NAICS 54) – Estimated Revenue for Taxable Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	2003	2002	2001	2000	1999
<b>54</b>	<b>Professional, scientific, and technical services<sup>1</sup></b> .....	<b>1,247,590</b>	<b>1,137,804</b>	<b>1,052,303</b>	<b>966,437</b>	NA	NA	NA	NA	NA
54*	Professional, scientific, and technical services <sup>2</sup> .....	1,217,741	1,110,444	1,027,187	943,076	879,725	846,056	838,374	803,527	727,800
5411	Legal services <sup>1</sup> .....	251,532	235,768	221,852	209,475	199,915	180,042	171,597	160,619	154,184
54111	Offices of lawyers .....	237,432	221,301	207,925	197,385	187,819	170,808	162,958	152,834	146,236
54119	Other legal services .....	14,100	14,467	13,927	12,090	12,096	9,234	8,639	7,785	7,948
5412	Accounting, tax preparation, bookkeeping, and payroll services .....	121,290	109,136	100,950	92,884	87,791	84,073	82,845	79,361	71,694
541211	Offices of certified public accountants .....	63,206	57,744	54,508	50,679	47,835	48,498	49,635	45,773	42,145
541213	Tax preparation services .....	6,686	5,977	5,416	4,944	4,468	4,129	3,765	3,347	3,074
541214	Payroll services .....	36,158	31,316	27,856	25,359	24,366	21,418	20,149	21,394	18,829
541219	Other accounting services .....	15,240	14,099	13,170	11,902	11,122	10,028	9,296	8,847	7,646
5413	Architectural, engineering, and related services .....	243,843	223,004	204,983	184,292	NA	NA	NA	NA	NA
5413*	Architectural, engineering, and related services <sup>3</sup> .....	238,476	217,965	200,408	180,073	160,917	158,266	157,488	150,269	133,942
54131	Architectural services .....	40,068	34,721	31,668	28,609	26,851	25,240	26,719	25,021	22,345
54132	Landscape architectural services .....	5,367	5,038	4,575	4,218	NA	NA	NA	NA	NA
54133	Engineering services .....	172,744	161,099	148,352	132,814	117,509	116,887	115,837	111,929	98,955
54138	Testing laboratories .....	14,096	11,185	10,380	9,908	8,849	8,771	7,865	7,128	6,930
5413x	Other related services <sup>4</sup> .....	11,568	10,960	10,008	8,742	7,708	7,368	7,067	6,191	5,712
5414	Specialized design services .....	25,851	23,542	21,556	19,617	18,090	17,076	17,776	17,889	16,156
54141	Interior design services .....	11,281	10,037	8,838	8,061	7,497	7,018	6,897	6,798	6,269
54143	Graphic design services .....	9,874	9,595	9,221	8,528	8,269	8,096	8,796	8,962	8,055
5414y	All other design services <sup>5</sup> .....	4,695	3,910	3,497	3,028	NA	NA	NA	NA	NA
5415	Computer systems design and related services .....	228,623	202,281	188,266	173,525	171,393	173,414	183,878	186,402	164,776
541511	Custom computer programming services .....	79,751	68,323	64,289	58,303	58,140	60,126	65,578	70,004	62,699
541512	Computer systems design services .....	101,211	91,908	84,995	77,042	76,992	78,335	80,787	82,763	72,360
541513	Computer facilities management services .....	26,694	23,934	22,748	23,422	22,518	22,279	25,435	21,816	20,260
541519	Other computer related services .....	20,967	18,116	16,234	14,758	13,743	12,674	12,078	11,819	9,457
5416	Management, scientific, and technical consulting services .....	165,248	149,767	137,364	121,709	108,783	105,452	99,511	90,129	81,646
54161	Management consulting services .....	137,119	125,546	115,877	102,452	92,129	90,914	86,024	78,250	71,239
54162	Environmental consulting services .....	12,022	10,416	9,094	8,748	7,902	6,933	6,213	5,578	5,029
54169	Other scientific and technical consulting services .....	16,107	13,805	12,393	10,509	8,752	7,605	7,274	6,301	5,378
5417	Scientific research and development services .....	75,171	68,607	60,169	54,272	48,142	45,983	41,568	35,587	30,783
54171	Research and development in the physical, engineering, and life sciences .....	72,427	66,183	57,679	51,994	46,104	44,089	39,870	34,029	29,345
54172	Research and development in the social sciences and humanities .....	2,744	2,424	2,490	2,278	2,038	1,894	1,698	1,558	1,438
5418	Advertising and related services .....	79,033	72,911	67,045	63,585	58,629	56,681	58,634	59,680	53,065
54181	Advertising agencies .....	30,824	27,976	25,482	24,551	22,396	21,104	21,268	21,584	18,241
54182	Public relations agencies .....	9,361	8,635	7,546	6,954	6,305	6,205	6,156	6,501	5,118
54183	Media buying agencies .....	1,714	1,704	1,478	1,405	1,063	1,150	1,025	1,036	873
54184	Media representatives .....	2,655	2,352	2,267	2,096	2,712	2,729	3,118	3,247	3,009
54185	Display advertising .....	7,368	6,611	6,181	5,440	4,925	4,617	4,509	4,752	4,419

See footnotes at end of table.



**Table 6.1. Professional, Scientific, and Technical Services (NAICS 54) – Estimated Revenue for Taxable Employer Firms: 1999 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	2003	2002	2001	2000	1999
54186	Direct mail advertising .....	12,255	12,371	12,190	11,570	10,648	10,544	10,739	10,351	9,914
5418y	All other advertising <sup>6</sup> .....	14,856	13,262	11,901	11,568	NA	NA	NA	NA	NA
5419	Other professional, scientific, and technical services .....	56,998	52,788	50,119	47,080	NA	NA	NA	NA	NA
5419*	Other professional, scientific, and technical services <sup>7</sup> .....	32,517	30,467	29,577	27,936	26,065	25,069	25,077	23,591	21,554
54191	Marketing research and public opinion polling .....	13,872	13,170	12,283	11,851	11,118	10,890	11,412	11,683	11,016
54192	Photographic services .....	7,615	7,342	7,268	6,984	6,758	6,538	6,760	6,613	6,415
541921	Photography studios, portrait .....	5,579	5,272	5,262	5,031	4,879	4,752	4,773	4,642	4,626
541922	Commercial photography .....	2,036	2,070	2,006	1,953	1,879	1,786	1,987	1,971	1,789
54193	Translation and interpretation services .....	1,393	1,166	1,121	1,093	968	876	850	810	750
54194	Veterinary services .....	24,481	22,321	20,541	19,144	NA	NA	NA	NA	NA
54199	All other professional, scientific, and technical services .....	9,637	8,789	8,905	8,008	7,221	6,765	6,055	4,485	3,373

NA Not available.

<sup>1</sup>Excludes NAICS 54112 (Offices of notaries).

<sup>2</sup>Excludes NAICS 54112 (Offices of notaries), NAICS 54132 (Landscape architectural services) and NAICS 54194 (Veterinary services).

<sup>3</sup>Excludes NAICS 54132 (Landscape architectural services).

<sup>4</sup>Includes NAICS 54134 (Drafting services), NAICS 54135 (Building inspection services), NAICS 54136 (Geophysical surveying and mapping services), and NAICS 54137 (Surveying and mapping (except geophysical) services).

<sup>5</sup>Includes NAICS 54142 (Industrial design services) and NAICS 54149 (Other specialized design services).

<sup>6</sup>Includes NAICS 54187 (Advertising material distribution services) and NAICS 54189 (Other services related to advertising).

<sup>7</sup>Excludes NAICS 54194 (Veterinary services).

Note: Estimates cover taxable firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-6.1 provides estimated measures of sampling variability.

**Table 6.2. Professional, Scientific, and Technical Services (NAICS 54) – Estimated Year-to-Year Percent Change in Revenue for Taxable Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007/2006	2006/2005	2005/2004	2004/2003	2003/2002	2002/2001	2001/2000	2000/1999
<b>54</b>	<b>Professional, scientific, and technical services<sup>1</sup></b> .....	<b>9.6</b>	<b>8.1</b>	<b>8.9</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
54*	Professional, scientific, and technical services <sup>2</sup> .....	9.7	8.1	8.9	7.2	4.0	0.9	4.3	10.4
5411	Legal services <sup>1</sup> .....	6.7	6.3	5.9	4.8	11.0	4.9	6.8	4.2
54111	Offices of lawyers .....	7.3	6.4	5.3	5.1	10.0	4.8	6.6	4.5
54119	Other legal services .....	-2.5	3.9	15.2	Z	31.0	6.9	11.0	-2.1
5412	Accounting, tax preparation, bookkeeping, and payroll services .....	11.1	8.1	8.7	5.8	4.4	1.5	4.4	10.7
541211	Offices of certified public accountants .....	9.5	5.9	7.6	5.9	-1.4	-2.3	8.4	8.6
541213	Tax preparation services .....	11.9	10.4	9.5	10.7	8.2	9.7	12.5	8.9
541214	Payroll services .....	15.5	12.4	9.8	4.1	13.8	6.3	-5.8	13.6
541219	Other accounting services .....	8.1	7.1	10.7	7.0	10.9	7.9	5.1	15.7
5413	Architectural, engineering, and related services .....	9.3	8.8	11.2	NA	NA	NA	NA	NA
5413*	Architectural, engineering, and related services <sup>3</sup> .....	9.4	8.8	11.3	11.9	1.7	0.5	4.8	12.2
54131	Architectural services .....	15.4	9.6	10.7	6.5	6.4	-5.5	6.8	12.0
54132	Landscape architectural services .....	6.5	10.1	8.5	NA	NA	NA	NA	NA
54133	Engineering services .....	7.2	8.6	11.7	13.0	0.5	0.9	3.5	13.1
54138	Testing laboratories .....	26.0	7.8	4.8	12.0	0.9	11.5	10.3	2.9
5413x	Other related services <sup>4</sup> .....	5.5	9.5	14.5	13.4	4.6	4.3	14.1	8.4
5414	Specialized design services .....	9.8	9.2	9.9	8.4	5.9	-3.9	-0.6	10.7
54141	Interior design services .....	12.4	13.6	9.6	7.5	6.8	1.8	1.5	8.4
54143	Graphic design services .....	2.9	4.1	8.1	3.1	2.1	-8.0	-1.9	11.3
5414y	All other design services <sup>5</sup> .....	20.1	11.8	15.5	NA	NA	NA	NA	NA
5415	Computer systems design and related services .....	13.0	7.4	8.5	1.2	-1.2	-5.7	-1.4	13.1
541511	Custom computer programming services .....	16.7	6.3	10.3	0.3	-3.3	-8.3	-6.3	11.7
541512	Computer systems design services .....	10.1	8.1	10.3	0.1	-1.7	-3.0	-2.4	14.4
541513	Computer facilities management services .....	11.5	5.2	-2.9	4.0	1.1	-12.4	16.6	7.7
541519	Other computer related services .....	15.7	11.6	10.0	7.4	8.4	4.9	2.2	25.0
5416	Management, scientific, and technical consulting services .....	10.3	9.0	12.9	11.9	3.2	6.0	10.4	10.4
54161	Management consulting services .....	9.2	8.3	13.1	11.2	1.3	5.7	9.9	9.8
54162	Environmental consulting services .....	15.4	14.5	4.0	10.7	14.0	11.6	11.4	10.9
54169	Other scientific and technical consulting services .....	16.7	11.4	17.9	20.1	15.1	4.6	15.4	17.2
5417	Scientific research and development services .....	9.6	14.0	10.9	12.7	4.7	10.6	16.8	15.6
54171	Research and development in the physical, engineering, and life sciences .....	9.4	14.7	10.9	12.8	4.6	10.6	17.2	16.0
54172	Research and development in the social sciences and humanities .....	13.2	-2.7	9.3	11.8	7.6	11.5	9.0	8.3
5418	Advertising and related services .....	8.4	8.7	5.4	8.5	3.4	-3.3	-1.8	12.5
54181	Advertising agencies .....	10.2	9.8	3.8	9.6	6.1	-0.8	-1.5	18.3
54182	Public relations agencies .....	8.4	14.4	8.5	10.3	1.6	0.8	-5.3	27.0
54183	Media buying agencies .....	0.6	15.3	5.2	32.2	-7.6	12.2	-1.1	18.7
54184	Media representatives .....	12.9	3.7	8.2	-22.7	-0.6	-12.5	-4.0	7.9
54185	Display advertising .....	11.5	7.0	13.6	10.5	6.7	2.4	-5.1	7.5

See footnotes at end of table.

**Table 6.2. Professional, Scientific, and Technical Services (NAICS 54) – Estimated Year-to-Year Percent Change in Revenue for Taxable Employer Firms: 1999 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007/2006	2006/2005	2005/2004	2004/2003	2003/2002	2002/2001	2001/2000	2000/1999
54186	Direct mail advertising .....	-0.9	1.5	5.4	8.7	1.0	-1.8	3.7	4.4
5418y	All other advertising <sup>6</sup> .....	12.0	11.4	2.9	NA	NA	NA	NA	NA
5419	Other professional, scientific, and technical services .....	8.0	5.3	6.5	NA	NA	NA	NA	NA
5419*	Other professional, scientific, and technical services <sup>7</sup> .....	6.7	3.0	5.9	7.2	4.0	Z	6.3	9.5
54191	Marketing research and public opinion polling .....	5.3	7.2	3.6	6.6	2.1	-4.6	-2.3	6.1
54192	Photographic services .....	3.7	1.0	4.1	3.3	3.4	-3.3	2.2	3.1
541921	Photography studios, portrait .....	5.8	0.2	4.6	3.1	2.7	-0.4	2.8	0.3
541922	Commercial photography .....	-1.6	3.2	2.7	3.9	5.2	-10.1	0.8	10.2
54193	Translation and interpretation services .....	19.5	4.0	2.6	12.9	10.5	3.1	4.9	8.0
54194	Veterinary services .....	9.7	8.7	7.3	NA	NA	NA	NA	NA
54199	All other professional, scientific, and technical services .....	9.6	-1.3	11.2	10.9	6.7	11.7	35.0	33.0

NA Not available. Z Absolute value is less than 0.05.

<sup>1</sup>Excludes NAICS 54112 (Offices of notaries).

<sup>2</sup>Excludes NAICS 54112 (Offices of notaries), NAICS 54132 (Landscape architectural services) and NAICS 54194 (Veterinary services).

<sup>3</sup>Excludes NAICS 54132 (Landscape architectural services).

<sup>4</sup>Includes NAICS 54134 (Drafting services), NAICS 54135 (Building inspection services), NAICS 54136 (Geophysical surveying and mapping services), and NAICS 54137 (Surveying and mapping (except geophysical) services).

<sup>5</sup>Includes NAICS 54142 (Industrial design services) and NAICS 54149 (Other specialized design services).

<sup>6</sup>Includes NAICS 54187 (Advertising material distribution services) and NAICS 54189 (Other services related to advertising).

<sup>7</sup>Excludes NAICS 54194 (Veterinary services).

Note: Estimates cover taxable firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/ev.html](http://www.census.gov/svsd/www/ev.html)>. Appendix A, Table A-6.1 provides estimated measures of sampling variability.

**Table 6.3. Professional, Scientific, and Technical Services (NAICS 54) – Estimated Revenue for Tax-Exempt Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	2003	2002	2001	2000	1999
<b>54</b>	<b>Professional, scientific, and technical services .....</b>	<b>28,979</b>	<b>27,152</b>	<b>24,986</b>	<b>22,933</b>	<b>20,996</b>	<b>20,554</b>	<b>19,138</b>	<b>18,770</b>	<b>17,596</b>
54111	Offices of lawyers .....	2,792	2,683	2,526	2,416	2,182	2,056	1,986	1,930	1,831
5417	Scientific research and development services .....	26,187	24,469	22,460	20,517	18,814	18,498	17,152	16,840	15,765
54171	Research and development in the physical, engineering, and life sciences .....	22,592	21,395	19,791	17,995	16,577	16,364	15,097	14,942	14,047
54172	Research and development in the social sciences and humanities .....	3,595	3,074	2,669	2,522	2,237	2,134	2,055	1,898	1,718

Note: Estimates cover tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-6.2 provides estimated measures of sampling variability.

**Table 6.4. Professional, Scientific, and Technical Services (NAICS 54) – Estimated Year-to-Year Percent Change in Revenue for Tax-Exempt Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007/2006	2006/2005	2005/2004	2004/2003	2003/2002	2002/2001	2001/2000	2000/1999
<b>54</b>	<b>Professional, scientific, and technical services .....</b>	<b>6.7</b>	<b>8.7</b>	<b>9.0</b>	<b>9.2</b>	<b>2.2</b>	<b>7.4</b>	<b>2.0</b>	<b>6.7</b>
54111	Offices of lawyers .....	4.1	6.2	4.6	10.7	6.1	3.5	2.9	5.4
5417	Scientific research and development services .....	7.0	8.9	9.5	9.1	1.7	7.8	1.9	6.8
54171	Research and development in the physical, engineering, and life sciences .....	5.6	8.1	10.0	8.6	1.3	8.4	1.0	6.4
54172	Research and development in the social sciences and humanities .....	16.9	15.2	5.8	12.7	4.8	3.8	8.3	10.5

Note: Estimates cover tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-6.2 provides estimated measures of sampling variability.

**Table 6.5. Professional, Scientific, and Technical Services (NAICS 54) – Estimated Export Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
<b>54</b>	<b>Professional, scientific, and technical services<sup>1</sup></b> .....	<b>30,045</b>	<b>25,894</b>	<b>24,591</b>	<b>20,400</b>	<b>16.0</b>	<b>5.3</b>	<b>20.5</b>
5411	Legal services <sup>1</sup> .....	3,735	3,075	3,124	2,793	21.5	-1.6	11.9
54111	Offices of lawyers .....	3,615	2,986	3,002	2,681	21.1	-0.5	12.0
54119	Other legal services .....	S	S	122	112	S	S	8.9
5412	Accounting, tax preparation, bookkeeping, and payroll services .....	376	S	S	S	S	S	S
541211	Offices of certified public accountants .....	371	S	S	S	S	S	S
541213	Tax preparation services .....	S	1	S	S	S	S	S
541214	Payroll services .....	S	5	6	5	S	-16.7	20.0
541219	Other accounting services .....	ZZ	ZZ	ZZ	ZZ	Z	Z	Z
5413	Architectural, engineering, and related services .....	6,717	6,342	6,497	4,838	5.9	-2.4	34.3
54131	Architectural services .....	1,331	715	527	402	86.2	35.7	31.1
54132	Landscape architectural services .....	100	87	S	59	14.9	S	S
54133	Engineering services .....	4,814	4,746	5,243	3,825	1.4	-9.5	37.1
54138	Testing laboratories .....	388	S	593	500	S	S	18.6
5413x	Other related services <sup>2</sup> .....	86	S	S	S	S	S	S
5414	Specialized design services .....	305	270	364	371	13.0	-25.8	-1.9
54141	Interior design services .....	S	80	64	56	S	25.0	14.3
54143	Graphic design services .....	33	34	139	121	-2.9	-75.5	14.9
5414y	All other design services <sup>3</sup> .....	136	157	162	194	-13.4	-3.1	-16.5
5415	Computer systems design and related services .....	8,266	6,886	5,720	4,535	20.0	20.4	26.1
541511	Custom computer programming services .....	4,951	3,928	S	S	26.0	S	S
541512	Computer systems design services .....	S	S	1,850	1,317	S	S	40.5
541513	Computer facilities management services .....	S	S	S	S	S	S	S
541519	Other computer related services .....	S	460	650	580	S	-29.2	12.1
5416	Management, scientific, and technical consulting services .....	5,201	3,937	4,250	3,686	32.1	-7.4	15.3
54161	Management consulting services .....	4,372	3,366	3,535	3,127	29.9	-4.8	13.0
54162	Environmental consulting services .....	76	11	S	S	590.9	S	S
54169	Other scientific and technical consulting services .....	753	S	S	S	S	S	S
5417	Scientific research and development services .....	4,342	4,166	3,657	3,305	4.2	13.9	10.7
54171	Research and development in the physical, engineering, and life sciences .....	4,219	4,043	3,562	3,209	4.4	13.5	11.0
54172	Research and development in the social sciences and humanities ...	123	124	95	96	-0.8	30.5	-1.0
5418	Advertising and related services .....	524	484	288	219	8.3	68.1	31.5
54181	Advertising agencies .....	85	S	S	19	S	S	S
54182	Public relations agencies .....	241	S	S	S	S	S	S
54183	Media buying agencies .....	S	S	S	S	S	S	S
54184	Media representatives .....	S	S	S	S	S	S	S
54185	Display advertising .....	S	S	S	ZZ	S	S	S
54186	Direct mail advertising .....	S	S	8	8	S	S	Z
5418y	All other advertising <sup>4</sup> .....	112	S	47	44	S	S	6.8

See footnotes at end of table.

**Table 6.5. Professional, Scientific, and Technical Services (NAICS 54) – Estimated Export Revenue for Employer Firms: 2004 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
5419	Other professional, scientific, and technical services .....	579	399	398	404	45.1	0.3	-1.5
54191	Marketing research and public opinion polling .....	323	176	134	150	83.5	31.3	-10.7
54192	Photographic services .....	43	S	30	S	S	S	S
541921	Photography studios, portrait .....	13	S	4	2	S	S	100.0
541922	Commercial photography .....	S	S	25	S	S	S	S
54193	Translation and interpretation services .....	60	22	20	15	172.7	10.0	33.3
54194	Veterinary services .....	S	2	3	4	S	-33.3	-25.0
54199	All other professional, scientific, and technical services .....	130	S	211	S	S	S	S

Z Absolute value is less than 0.05. ZZ Absolute value is less than 0.5. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Excludes NAICS 54112 (Offices of notaries).

<sup>2</sup>Includes NAICS 54134 (Drafting services), NAICS 54135 (Building inspection services), NAICS 54136 (Geophysical surveying and mapping services), and NAICS 54137 (Surveying and mapping (except geophysical) services).

<sup>3</sup>Includes NAICS 54142 (Industrial design services) and NAICS 54149 (Other specialized design services).

<sup>4</sup>Includes NAICS 54187 (Advertising material distribution services) and NAICS 54189 (Other services related to advertising).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-6.3 provides estimated measures of sampling variability.

**Table 6.6. Accounting, Tax Preparation, Bookkeeping, and Payroll Services (NAICS 5412) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>121,290</b>	<b>109,136</b>	<b>100,950</b>	<b>92,884</b>	<b>11.1</b>	<b>8.1</b>	<b>8.7</b>
<b>Sources of Revenue</b>							
Assurance and related services .....	26,594	24,745	23,015	20,550	7.5	7.5	12.0
Financial auditing services .....	20,467	18,517	17,046	15,056	10.5	8.6	13.2
Financial statement review .....	1,780	2,045	2,004	1,872	-13.0	2.0	7.1
Other assurance and financial auditing services .....	4,347	4,184	3,965	3,622	3.9	5.5	9.5
Bookkeeping, compilation, payroll, and taxation services .....	75,156	67,637	62,893	59,665	11.1	7.5	5.4
General accounting services .....	6,028	6,147	5,259	4,876	-1.9	16.9	7.9
Bookkeeping, compilation, billing, and collection services .....	7,792	6,177	6,280	6,175	26.1	-1.6	1.7
Payroll services .....	31,163	28,110	25,949	23,792	10.9	8.3	9.1
Taxation planning and consulting services .....	S	4,767	4,248	4,216	S	12.2	0.8
Taxation preparation and representation services for individuals and unincorporated businesses .....	14,369	13,380	12,670	12,312	7.4	5.6	2.9
Taxation preparation and representation services for corporate and other clients .....	10,141	9,056	8,486	8,294	12.0	6.7	2.3
Other related services .....	5,075	4,362	3,885	3,447	16.3	12.3	12.7
Computerized accounting system services .....	S	S	S	S	S	S	S
Management consulting services .....	4,238	3,492	2,965	2,742	21.4	17.8	8.1
All other operating revenue .....	S	12,392	11,158	9,222	S	11.1	21.0

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at [www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html). Appendix A, Table A-6.4 provides estimated measures of sampling variability.



**Table 6.7. Architectural Services (NAICS 54131) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>40,068</b>	<b>34,721</b>	<b>31,668</b>	<b>28,609</b>	<b>15.4</b>	<b>9.6</b>	<b>10.7</b>
<b>Sources of Revenue</b>							
Residential building projects .....	7,423	6,963	5,934	4,709	6.6	17.3	26.0
Single-family residential projects .....	3,854	3,200	2,765	2,506	20.4	15.7	10.3
Multi-family residential projects .....	3,569	3,763	3,169	2,203	-5.2	18.7	43.8
Non-residential building projects .....	28,127	23,587	21,401	19,683	19.2	10.2	8.7
Office building projects .....	5,204	4,188	3,755	3,261	24.3	11.5	15.1
Retail and restaurant building projects .....	4,047	3,591	3,238	2,745	12.7	10.9	18.0
Hotel and convention center building projects .....	1,820	1,467	1,033	833	24.1	42.0	24.0
Health care building projects .....	3,607	3,110	2,962	2,562	16.0	5.0	15.6
Entertainment and recreational building projects .....	1,683	1,426	1,398	1,445	18.0	2.0	-3.3
Educational building projects .....	6,384	5,698	5,212	5,365	12.0	9.3	-2.9
Industrial building projects .....	1,098	941	832	545	16.7	13.1	52.7
Transportation building projects .....	S	890	1,208	1,138	S	-26.3	6.2
Other nonresidential building projects .....	3,155	2,276	1,763	1,790	38.6	29.1	-1.5
Other services (performed independent of the architecture projects above) .....	2,792	2,357	2,802	2,769	18.5	-15.9	1.2
Historical restoration projects .....	S	S	259	403	S	S	-35.7
Architectural advisory services .....	363	259	316	300	40.2	-18.0	5.3
Landscape architectural services .....	301	S	208	S	S	S	S
Interior design services .....	1,798	1,595	2,019	1,865	12.7	-21.0	8.3
All other operating revenue .....	1,726	1,814	1,531	1,447	-4.9	18.5	5.8

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at [www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html). Appendix A, Table A-6.5 provides estimated measures of sampling variability.

**Table 6.8. Engineering Services (NAICS 54133) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>172,744</b>	<b>161,099</b>	<b>148,352</b>	<b>132,814</b>	<b>7.2</b>	<b>8.6</b>	<b>11.7</b>
<b>Sources of Revenue</b>							
Engineering Services .....	101,998	95,324	86,198	76,246	7.0	10.6	13.1
Residential engineering projects .....	5,660	6,211	5,241	4,991	-8.9	18.5	5.0
Commercial, public, and institutional engineering projects .....	13,551	11,554	11,068	10,535	17.3	4.4	5.1
Industrial and manufacturing engineering projects .....	16,529	13,211	12,101	10,897	25.1	9.2	11.0
Transportation infrastructure engineering projects .....	10,843	9,789	8,530	7,597	10.8	14.8	12.3
Municipal utility engineering projects .....	6,739	5,855	5,882	5,065	15.1	-0.5	16.1
Power generation and distribution engineering projects .....	10,186	8,831	S	S	15.3	S	S
Telecommunications and broadcasting engineering projects .....	1,822	S	S	S	S	S	S
Hazardous waste and industrial waste engineering projects .....	4,910	3,857	4,027	4,181	27.3	-4.2	-3.7
Other engineering projects .....	31,757	32,219	26,624	21,761	-1.4	21.0	22.3
Other services (performed independent of the engineering projects above) .....	19,084	16,223	13,448	12,335	17.6	20.6	9.0
Engineering advisory services .....	S	S	S	3,132	S	S	S
Construction services .....	12,821	10,105	6,916	6,473	26.9	46.1	6.8
Drafting services .....	S	962	S	S	S	S	S
Surveying and mapping services .....	1,991	2,033	2,172	1,780	-2.1	-6.4	22.0
All other operating revenue .....	S	S	48,706	44,233	S	S	10.1

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at [www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html). Appendix A, Table A-6.6 provides estimated measures of sampling variability.

**Table 6.9. Computer Systems Design and Related Services (NAICS 5415) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>228,623</b>	<b>202,281</b>	<b>188,266</b>	<b>173,525</b>	<b>13.0</b>	<b>7.4</b>	<b>8.5</b>
<b>Sources of Revenue</b>							
Information technology (IT) design and development .....	110,461	98,602	93,125	86,083	12.0	5.9	8.2
Custom application design and development .....	63,022	55,222	51,013	46,691	14.1	8.3	9.3
Computer systems design, development, and integration .....	38,513	35,714	34,953	33,222	7.8	2.2	5.2
Network design and development .....	8,926	7,666	7,160	S	16.4	7.1	S
Other services .....	87,270	78,236	74,416	69,348	11.5	5.1	7.3
IT infrastructure and network management .....	23,791	21,844	20,587	21,008	8.9	6.1	-2.0
IT technical support .....	25,055	22,565	22,740	20,217	11.0	-0.8	12.5
IT technical consulting .....	20,000	17,244	16,677	15,574	16.0	3.4	7.1
IT related training services .....	2,137	1,971	1,610	1,504	8.4	22.4	7.0
Hosting and IT infrastructure provisioning services .....	14,903	13,335	11,611	9,961	11.8	14.8	16.6
Rental and leasing of computer hardware .....	1,384	1,276	1,192	1,084	8.5	7.0	10.0
All other operating revenue .....	30,891	25,443	20,724	18,094	21.4	22.8	14.5

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at [www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html). Appendix A, Table A-6.7 provides estimated measures of sampling variability.

**Table 6.10. Management Consulting Services (NAICS 54161) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>137,119</b>	<b>125,546</b>	<b>115,877</b>	<b>102,452</b>	<b>9.2</b>	<b>8.3</b>	<b>13.1</b>
<b>Sources of Revenue</b>							
Management consulting services .....	107,702	99,844	90,261	80,188	7.9	10.6	12.6
Strategic management consulting, and consulting combined with implementation .....	31,536	30,106	26,134	23,976	4.7	15.2	9.0
Financial management consulting, and consulting combined with implementation .....	9,766	9,749	8,115	6,869	0.2	20.1	18.1
Marketing management consulting, and consulting combined with implementation .....	10,335	8,741	9,249	9,322	18.2	-5.5	-0.8
Human resources management consulting, and consulting combined with implementation .....	9,935	9,616	8,461	8,345	3.3	13.7	1.4
Operations and supply chain management consulting, and consulting combined with implementation .....	7,353	6,855	6,502	5,376	7.3	5.4	20.9
Actuarial consulting (except for employee pensions and other benefits) .....	1,587	1,546	1,612	1,487	2.7	-4.1	8.4
IT technical design, consulting, and development services .....	10,290	9,439	8,511	7,198	9.0	10.9	18.2
All other consulting revenue .....	26,901	23,791	21,677	17,616	13.1	9.8	23.1
All other operating revenue .....	29,417	25,702	25,616	22,263	14.5	0.3	15.1

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-6.8 provides estimated measures of sampling variability.

**Table 6.11. Environmental Consulting Services (NAICS 54162) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>12,022</b>	<b>10,416</b>	<b>9,094</b>	<b>8,748</b>	<b>15.4</b>	<b>14.5</b>	<b>4.0</b>
<b>Sources of Revenue</b>							
Environmental consulting services .....	9,190	7,647	6,677	6,278	20.2	14.5	6.4
Environmental assessment consulting, and consulting combined with implementation .....	2,713	1,854	1,583	1,489	46.3	17.1	6.3
Natural resource management consulting, and consulting combined with implementation .....	955	832	791	707	14.8	5.2	11.9
Waste management consulting, and consulting combined with implementation .....	594	569	472	437	4.4	20.6	8.0
Environmental policy development consulting, and consulting combined with implementation .....	367	317	328	325	15.8	-3.4	0.9
Environmental audits consulting, and consulting combined with implementation .....	662	538	527	544	23.0	2.1	-3.1
Site remediation planning consulting, and consulting combined with implementation .....	1,895	1,640	1,411	1,348	15.5	16.2	4.7
Evaluation of environmental studies consulting, and consulting combined with implementation .....	307	237	214	179	29.5	10.7	19.6
All other environmental consulting .....	1,698	1,660	1,352	1,251	2.3	22.8	8.1
All other operating revenue .....	S	2,770	2,417	2,470	S	14.6	-2.1

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at [www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html). Appendix A, Table A-6.9 provides estimated measures of sampling variability.

**Table 6.12. Scientific Research and Development Services (NAICS 5417) – Estimated Sources of Revenue for Taxable Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>75,171</b>	<b>68,607</b>	<b>60,169</b>	<b>54,272</b>	<b>9.6</b>	<b>14.0</b>	<b>10.9</b>
<b>Sources of Revenue</b>							
Basic and applied research in natural and exact sciences, except biological sciences .....	21,220	19,375	16,340	S	9.5	18.6	S
Basic and applied research in biotechnology .....	20,756	18,924	15,924	S	9.7	18.8	S
Basic and applied research in other natural and exact sciences, except biological sciences .....	S	451	S	S	S	S	S
Basic and applied research in engineering and technology .....	10,768	9,820	8,977	8,150	9.7	9.4	10.1
Basic and applied research in the biological and biomedical sciences .....	14,883	13,082	11,102	9,504	13.8	17.8	16.8
Basic and applied research in medical and health sciences .....	14,223	12,472	10,529	9,000	14.0	18.5	17.0
Basic and applied research in other biological sciences .....	660	610	573	504	8.2	6.5	13.7
Basic and applied research in the social sciences and humanities .....	1,365	S	1,304	S	S	S	S
Production services for development .....	S	2,513	2,404	2,230	S	4.5	7.8
Other operating revenue .....	24,241	S	20,043	18,754	S	S	6.9
Licensing of right to use intellectual property .....	3,603	3,191	2,722	2,356	12.9	17.2	15.5
Original works of intellectual property .....	S	S	S	D	S	S	D
All other operating revenue .....	20,539	S	17,320	D	S	S	D

D Estimate in table is withheld to avoid disclosing data of individual companies; data are included in higher level totals. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-6.10 provides estimated measures of sampling variability.

**Table 6.13. Scientific Research and Development Services (NAICS 5417) – Estimated Sources of Revenue for Tax-Exempt Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating and Non-operating Revenue</b>							
<b>Total .....</b>	<b>26,187</b>	<b>24,469</b>	<b>22,460</b>	<b>20,517</b>	<b>7.0</b>	<b>8.9</b>	<b>9.5</b>
<b>Sources of Revenue</b>							
Basic and applied research in natural and exact sciences,							
except biological sciences .....	1,405	1,143	1,148	1,115	22.9	-0.4	3.0
Basic and applied research in biotechnology .....	359	313	245	249	14.7	27.8	-1.6
Basic and applied research in other natural and exact sciences,							
except biological sciences .....	1,047	830	903	866	26.1	-8.1	4.3
Basic and applied research in engineering and technology .....	3,970	3,904	3,603	3,205	1.7	8.4	12.4
Basic and applied research in the biological and							
biomedical sciences .....	3,098	2,909	2,701	2,497	6.5	7.7	8.2
Basic and applied research in medical and health sciences .....	2,336	2,226	2,118	1,965	4.9	5.1	7.8
Basic and applied research in other biological sciences .....	762	683	584	532	11.6	17.0	9.8
Basic and applied research in the social sciences and humanities .....	1,047	964	958	929	8.6	0.6	3.1
Production services for development .....	S	212	208	193	S	1.9	7.8
Other operating revenue .....	3,730	3,460	3,138	2,956	7.8	10.3	6.2
Licensing of right to use intellectual property .....	S	S	S	159	S	S	S
Original works of intellectual property .....	S	33	S	S	S	S	S
All other operating revenue .....	3,503	3,207	2,930	2,768	9.2	9.5	5.9
Contributions, gifts, and grants received .....	8,773	8,153	7,627	7,249	7.6	6.9	5.2
Investment and property income .....	1,920	1,856	1,298	978	3.4	43.0	32.7
All other non-operating revenue .....	2,053	1,868	1,777	1,394	9.9	5.1	27.5

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-6.11 provides estimated measures of sampling variability.

**Table 6.14. Advertising Agencies (NAICS 54181) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>30,824</b>	<b>27,976</b>	<b>25,482</b>	<b>24,551</b>	<b>10.2</b>	<b>9.8</b>	<b>3.8</b>
<b>Sources of Revenue</b>							
Integrated advertising services .....	15,895	14,296	12,681	12,290	11.2	12.7	3.2
Advertising creative services (including graphic design services) .....	2,487	2,107	1,992	2,085	18.0	5.8	-4.5
Media buying .....	4,762	4,417	3,870	3,762	7.8	14.1	2.9
Full public relations services .....	319	S	303	389	S	S	-22.1
Sales promotion .....	1,814	1,575	1,406	1,121	15.2	12.0	25.4
Direct marketing .....	786	586	S	S	34.1	S	S
Marketing research .....	195	174	169	99	12.1	3.0	70.7
Other advertising services .....	2,640	2,475	2,574	2,512	6.7	-3.8	2.5
All other operating revenue .....	1,927	2,033	2,002	1,710	-5.2	1.5	17.1

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at [www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html). Appendix A, Table A-6.12 provides estimated measures of sampling variability.



**Table 6.15. Public Relations Agencies (NAICS 54182) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>9,361</b>	<b>8,635</b>	<b>7,546</b>	<b>6,954</b>	<b>8.4</b>	<b>14.4</b>	<b>8.5</b>
<b>Sources of Revenue</b>							
Full public relations services .....	5,732	5,312	4,760	4,501	7.9	11.6	5.8
Media relations .....	S	859	703	595	S	22.2	18.2
Crisis management .....	160	161	178	154	-0.6	-9.6	15.6
Lobbying .....	1,445	1,332	990	854	8.5	34.5	15.9
Event management .....	432	438	369	309	-1.4	18.7	19.4
Media monitoring and analysis .....	76	84	98	92	-9.5	-14.3	6.5
All other operating revenue .....	476	449	448	448	6.0	0.2	Z

Z Absolute value is less than 0.05. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-6.13 provides estimated measures of sampling variability.

**Table 6.16. Media Buying Agencies (NAICS 54183) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>1,714</b>	<b>1,704</b>	<b>1,478</b>	<b>1,405</b>	<b>0.6</b>	<b>15.3</b>	<b>5.2</b>
<b>Sources of Revenue</b>							
Media planning and/or buying services.....	1,689	1,676	1,451	1,376	0.8	15.5	5.5
All other operating revenue .....	S	S	S	S	S	S	S

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at [www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html). Appendix A, Table A-6.14 provides estimated measures of sampling variability.

**Table 6.17. Media Representatives (NAICS 54184) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>2,655</b>	<b>2,352</b>	<b>2,267</b>	<b>2,096</b>	<b>12.9</b>	<b>3.7</b>	<b>8.2</b>
<b>Sources of Revenue</b>							
Sales agent services.....	S	1,360	1,384	1,268	S	-1.7	9.1
All other operating revenue .....	S	S	S	S	S	S	S

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at [www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html). Appendix A, Table A-6.15 provides estimated measures of sampling variability.

**Table 6.18. Display Advertising (NAICS 54185) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>7,368</b>	<b>6,611</b>	<b>6,181</b>	<b>5,440</b>	<b>11.5</b>	<b>7.0</b>	<b>13.6</b>
<b>Sources of Revenue</b>							
Leased display advertising media space .....	5,731	5,241	4,984	4,461	9.3	5.2	11.7
Large format .....	3,779	3,381	3,242	2,896	11.8	4.3	11.9
Transit .....	788	731	685	625	7.8	6.7	9.6
Street furniture and other urban fixtures .....	1,005	995	930	831	1.0	7.0	11.9
Other leased display advertising .....	159	135	S	S	17.8	S	S
All other operating revenue .....	1,636	1,370	1,197	979	19.4	14.5	22.3

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at [www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html). Appendix A, Table A-6.16 provides estimated measures of sampling variability.

**Table 6.19. Direct Mail Advertising (NAICS 54186) – Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>12,255</b>	<b>12,371</b>	<b>12,190</b>	<b>11,570</b>	<b>-0.9</b>	<b>1.5</b>	<b>5.4</b>
<b>Sources of Revenue</b>							
Full direct mail services .....	6,213	6,160	6,312	5,901	0.9	-2.4	7.0
Concept development for a direct mail advertising campaign .....	240	238	214	206	0.8	11.2	3.9
Mail list creation and support services .....	398	421	428	376	-5.5	-1.6	13.8
Print services for direct mail advertising materials .....	1,472	1,504	1,288	1,162	-2.1	16.8	10.8
Letter shop services .....	1,678	1,603	1,748	1,669	4.7	-8.3	4.7
Fulfillment services .....	464	478	389	353	-2.9	22.9	10.2
Other direct mail advertising services .....	318	303	301	311	5.0	0.7	-3.2
All other operating revenue .....	1,473	1,666	1,510	1,591	-11.6	10.3	-5.1

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-6.17 provides estimated measures of sampling variability.

**Table 6.20. Professional, Scientific, and Technical Services (NAICS 54) – Estimated Total Expenses for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
<b>54</b>	<b>Professional, scientific, and technical services<sup>1</sup></b>	<b>1,011,197</b>	<b>919,181</b>	<b>857,914</b>	<b>784,728</b>	<b>10.0</b>	<b>7.1</b>	<b>9.3</b>
5411	Legal services <sup>1</sup>	179,159	170,889	161,699	153,467	4.8	5.7	5.4
54111	Offices of lawyers	168,530	159,721	151,339	144,275	5.5	5.5	4.9
54119	Other legal services	10,629	11,168	10,360	9,192	-4.8	7.8	12.7
5412	Accounting, tax preparation, bookkeeping, and payroll services	94,727	84,064	80,536	72,322	12.7	4.4	11.4
541211	Offices of certified public accountants	46,632	43,182	41,950	37,048	8.0	2.9	13.2
541213	Tax preparation services	5,368	4,899	4,338	3,918	9.6	12.9	10.7
541214	Payroll services	29,667	24,735	23,728	21,317	19.9	4.2	11.3
541219	Other accounting services	13,060	11,248	10,520	10,039	16.1	6.9	4.8
5413	Architectural, engineering, and related services	189,950	165,624	152,578	138,285	14.7	8.6	10.3
54131	Architectural services	33,196	29,025	25,102	22,786	14.4	15.6	10.2
54132	Landscape architectural services	4,352	4,106	3,711	3,442	6.0	10.6	7.8
54133	Engineering services	130,619	114,005	105,854	95,682	14.6	7.7	10.6
54138	Testing laboratories	12,135	10,048	9,613	9,095	20.8	4.5	5.7
5413x	Other related services <sup>2</sup>	9,648	8,439	8,298	7,280	14.3	1.7	14.0
5414	Specialized design services	16,689	15,426	14,695	13,569	8.2	5.0	8.3
54141	Interior design services	6,324	5,688	5,164	4,690	11.2	10.1	10.1
54143	Graphic design services	7,263	7,063	6,992	6,626	2.8	1.0	5.5
5414y	All other design services <sup>3</sup>	3,102	2,675	2,539	2,253	16.0	5.4	12.7
5415	Computer systems design and related services	190,932	171,092	158,159	145,514	11.6	8.2	8.7
541511	Custom computer programming services	73,373	64,404	59,234	53,911	13.9	8.7	9.9
541512	Computer systems design services	79,548	73,223	68,401	61,455	8.6	7.0	11.3
541513	Computer facilities management services	20,604	18,441	17,233	17,905	11.7	7.0	-3.8
541519	Other computer related services	17,407	15,024	13,291	12,243	15.9	13.0	8.6
5416	Management, scientific, and technical consulting services	137,465	123,410	114,384	99,905	11.4	7.9	14.5
54161	Management consulting services	114,738	104,354	97,347	84,947	10.0	7.2	14.6
54162	Environmental consulting services	9,902	8,389	7,518	7,131	18.0	11.6	5.4
54169	Other scientific and technical consulting services	12,825	10,667	9,519	7,827	20.2	12.1	21.6
5417	Scientific research and development services	101,346	94,464	84,826	77,152	7.3	11.4	9.9
54171	Research and development in the physical, engineering, and life sciences	95,675	89,254	79,933	72,634	7.2	11.7	10.0
54172	Research and development in the social sciences and humanities	5,671	5,210	4,893	4,518	8.8	6.5	8.3
5418	Advertising and related services	55,673	52,472	49,733	46,168	6.1	5.5	7.7
54181	Advertising agencies	22,946	21,107	19,883	18,440	8.7	6.2	7.8
54182	Public relations agencies	7,730	7,167	6,434	5,887	7.9	11.4	9.3
54183	Media buying agencies	618	612	596	558	1.0	2.7	6.8
54184	Media representatives	2,033	1,910	1,787	1,683	6.4	6.9	6.2
54185	Display advertising	5,062	5,027	4,723	4,285	0.7	6.4	10.2
54186	Direct mail advertising	9,263	9,225	9,571	8,891	0.4	-3.6	7.6
5418y	All other advertising <sup>4</sup>	8,021	7,424	6,739	6,424	8.0	10.2	4.9

See footnotes at end of table.

**Table 6.20. Professional, Scientific, and Technical Services (NAICS 54) – Estimated Total Expenses for Employer Firms: 2004 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
5419	Other professional, scientific, and technical services .....	45,254	41,743	41,308	38,345	8.4	1.1	7.7
54191	Marketing research and public opinion polling .....	11,218	10,526	10,006	9,084	6.6	5.2	10.1
54192	Photographic services .....	6,261	5,934	5,984	5,750	5.5	-0.8	4.1
541921	Photography studios, portrait .....	4,635	4,334	4,362	4,226	6.9	-0.6	3.2
541922	Commercial photography .....	1,626	1,600	1,622	1,524	1.6	-1.4	6.4
54193	Translation and interpretation services .....	1,077	927	955	864	16.2	-2.9	10.5
54194	Veterinary services .....	18,829	17,324	16,786	15,698	8.7	3.2	6.9
54199	All other professional, scientific, and technical services .....	7,868	7,032	7,578	6,949	11.9	-7.2	9.1

<sup>1</sup>Excludes NAICS 54112 (Offices of notaries).

<sup>2</sup>Includes NAICS 54134 (Drafting services), NAICS 54135 (Building inspection services), NAICS 54136 (Geophysical surveying and mapping services), and NAICS 54137 (Surveying and mapping (except geophysical) services).

<sup>3</sup>Includes NAICS 54142 (Industrial design services) and NAICS 54149 (Other specialized design services).

<sup>4</sup>Includes NAICS 54187 (Advertising material distribution services) and NAICS 54189 (Other services related to advertising).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-6.18 provides estimated measures of sampling variability.

**Table 6.21. Professional, Scientific, and Technical Services (NAICS 54) – Estimated Expenses for Tax-Exempt Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004
<b>54</b>	<b>Professional, scientific, and technical services .....</b>	<b>24,793</b>	<b>23,285</b>	<b>21,944</b>	<b>20,570</b>
54111	Offices of lawyers .....	2,550	2,533	2,391	2,341
5417	Scientific research and development services .....	22,243	20,752	19,552	18,229
54171	Research and development in the physical, engineering, and life sciences .....	19,082	17,972	17,031	15,847
54172	Research and development in the social sciences and humanities .....	3,161	2,780	2,521	2,382

Note: Estimates cover tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-6.19 provides estimated measures of sampling variability.



**Table 6.22. Professional, Scientific, and Technical Services (NAICS 54) – Estimated Year-to-Year Percent Change in Expenses for Tax-Exempt Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007/2006	2006/2005	2005/2004
<b>54</b>	<b>Professional, scientific, and technical services .....</b>	<b>6.5</b>	<b>6.1</b>	<b>6.7</b>
54111	Offices of lawyers .....	0.7	5.9	2.1
5417	Scientific research and development services .....	7.2	6.1	7.3
54171	Research and development in the physical, engineering, and life sciences .....	6.2	5.5	7.5
54172	Research and development in the social sciences and humanities .....	13.7	10.3	5.8

Note: Estimates cover tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-6.19 provides estimated measures of sampling variability.

**Table 6.23. Professional, Scientific, and Technical Services (NAICS 54) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>1,011,197</b>	<b>919,181</b>	<b>857,914</b>	<b>784,728</b>	<b>10.0</b>	<b>7.1</b>	<b>9.3</b>
Personnel costs.....	576,035	526,830	488,928	445,448	9.3	7.8	9.8
Gross annual payroll.....	459,201	423,372	394,183	360,303	8.5	7.4	9.4
Employer's cost for fringe benefits.....	85,561	72,387	65,778	59,958	18.2	10.0	9.7
Health insurance.....	30,206	NA	NA	NA	NA	NA	NA
Pension plans.....	18,275	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	5,394	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	12,881	NA	NA	NA	NA	NA	NA
Other.....	37,079	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	31,273	31,071	28,967	25,188	0.7	7.3	15.0
Expensed materials, parts and supplies (not for resale).....	44,862	43,201	42,268	38,734	3.8	2.2	9.1
Expensed equipment.....	8,904	9,531	8,612	7,940	-6.6	10.7	8.5
Expensed purchase of other materials, parts, and supplies.....	35,958	33,670	33,656	30,793	6.8	Z	9.3
Expensed purchased services.....	82,494	75,978	71,789	66,890	8.6	5.8	7.3
Expensed purchases of software.....	7,905	7,869	7,209	6,271	0.5	9.2	15.0
Purchased electricity and fuels (except motor fuels).....	4,220	4,354	4,188	3,735	-3.1	4.0	12.1
Purchased electricity.....	3,398	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	822	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	46,726	40,978	39,468	37,369	14.0	3.8	5.6
Lease and rental payments for machinery, equipment, and other tangible items.....	5,790	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	40,936	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	8,001	6,949	6,452	6,060	15.1	7.7	6.5
Purchased repairs and maintenance to machinery and equipment.....	4,885	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	3,117	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	15,641	15,829	14,470	13,455	-1.2	9.4	7.5
Other operating expenses.....	307,807	273,171	254,929	233,656	12.7	7.2	9.1
Depreciation and amortization charges.....	25,628	22,897	22,127	22,013	11.9	3.5	0.5
Governmental taxes and license fees.....	8,642	8,609	8,711	8,067	0.4	-1.2	8.0
All other operating expenses.....	273,537	241,665	224,091	203,576	13.2	7.8	10.1
Data processing and other purchased computer services.....	5,052	NA	NA	NA	NA	NA	NA
Purchased communication services.....	10,000	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	926	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	54,727	NA	NA	NA	NA	NA	NA
All other operating expenses.....	202,832	NA	NA	NA	NA	NA	NA

NA Not available. Z Absolute value is less than 0.05.

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-6.20 provides estimated measures of sampling variability.

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## Chapter 7. Administrative and Support and Waste Management and Remediation Services

**Table 7.1. Administrative and Support and Waste Management and Remediation Services (NAICS 56) – Estimated Revenue for Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	2003	2002	2001	2000
<b>56</b>	<b>Administrative and support and waste management and remediation services .....</b>	<b>594,820</b>	<b>563,729</b>	<b>527,647</b>	<b>484,309</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
56*	Administrative and support and waste management and remediation services <sup>1</sup> .....	543,258	515,862	482,838	443,926	414,988	397,408	390,683	396,499
561	Administrative and support services .....	523,610	495,034	464,451	425,667	NA	NA	NA	NA
561*	Administrative and support services <sup>1</sup> .....	472,047	447,167	419,642	385,283	360,434	346,099	339,028	345,302
56111	Office administrative services .....	49,776	47,156	43,073	38,014	34,556	32,081	29,523	26,288
56121	Facilities support services .....	17,444	15,655	14,028	12,520	12,158	12,957	12,878	13,211
5613	Employment services .....	178,667	171,019	159,144	145,717	133,833	128,662	129,471	144,242
56131	Employment placement agencies .....	7,589	7,154	6,772	6,513	5,874	5,940	5,355	4,985
56132	Temporary help services .....	93,740	90,169	85,023	77,660	69,910	68,190	68,658	79,622
56133	Professional employer organizations .....	77,338	73,696	67,349	61,544	58,049	54,532	55,458	59,635
5614	Business support services .....	55,250	54,353	50,948	48,166	46,111	43,981	43,983	41,203
56141	Document preparation services .....	2,931	2,834	2,631	2,483	2,500	2,419	2,121	1,920
56142	Telephone call centers .....	15,791	15,528	14,545	13,843	13,273	13,394	15,116	14,805
561421	Telephone answering services .....	2,039	1,849	1,907	1,783	1,897	2,109	2,323	2,135
561422	Telemarketing bureaus .....	13,752	13,679	12,638	12,060	11,376	11,285	12,793	12,670
56143	Business service centers .....	7,703	7,686	8,378	8,469	8,335	8,234	8,342	8,257
561431	Private mail centers .....	2,562	2,410	2,234	2,274	2,187	1,957	1,830	1,692
561439	Other business service centers (including copy shops) .....	5,141	5,276	6,144	6,195	6,148	6,277	6,512	6,565
56144	Collection agencies .....	12,142	11,600	11,479	10,860	9,830	8,852	8,092	7,300
56145	Credit bureaus .....	8,497	8,202	6,332	5,516	5,230	4,591	4,243	3,741
56149	Other business support services .....	8,186	8,503	7,583	6,995	6,943	6,491	6,069	5,180
561491	Repossession services .....	S	596	572	534	549	552	467	418
561492	Court reporting and stenotype services .....	2,013	2,023	1,847	1,792	1,715	1,638	1,407	1,250
561499	All other business support services .....	5,525	5,884	5,164	4,669	4,679	4,301	4,195	3,512
5615	Travel arrangement and reservation services .....	32,072	30,201	29,117	28,200	26,594	25,535	25,622	26,119
56151	Travel agencies .....	11,374	11,058	10,431	10,101	9,759	9,387	10,220	11,639
56152	Tour operators .....	3,962	3,534	3,621	3,515	3,212	3,190	3,266	3,564
56159	Other travel arrangement and reservation services .....	16,736	15,609	15,065	14,584	13,623	12,958	12,136	10,916
561591	Convention and visitors bureaus .....	1,600	1,408	1,313	1,256	1,227	1,128	1,124	1,020
561599	All other travel arrangement and reservation services .....	15,136	14,201	13,752	13,328	12,396	11,830	11,012	9,896
5616	Investigation and security services .....	39,977	37,610	37,081	33,723	32,325	31,375	28,549	27,594
56161	Investigation, guard, and armored car services .....	26,143	24,864	24,416	21,754	20,920	19,468	17,471	17,581
561611	Investigation services .....	4,054	3,536	3,668	3,345	3,090	2,586	2,413	2,350
561612	Security guards and patrol services .....	20,106	19,147	18,624	16,321	15,551	14,763	13,037	13,393
561613	Armored car services .....	1,983	2,181	2,124	2,088	2,279	2,119	2,021	1,838
56162	Security systems services .....	13,834	12,746	12,665	11,969	11,405	11,907	11,078	10,013
561621	Security systems services (except locksmiths) .....	11,937	10,961	11,083	10,488	9,987	10,592	9,765	8,683
561622	Locksmiths .....	1,897	1,785	1,582	1,481	1,418	1,315	1,313	1,330
5617	Services to buildings and dwellings .....	107,959	99,137	93,520	86,013	NA	NA	NA	NA
5617*	Services to buildings and dwellings <sup>1</sup> .....	56,394	51,268	48,712	45,628	43,697	40,144	38,168	35,790
56171	Exterminating and pest control services .....	8,789	8,535	8,144	7,673	7,206	6,597	6,067	5,723
56172	Janitorial services .....	36,546	32,830	31,766	30,288	29,303	27,009	26,220	24,593
56173	Landscaping services .....	51,564	47,869	44,807	40,384	NA	NA	NA	NA
56174	Carpet and upholstery cleaning services .....	3,856	3,596	3,386	2,964	2,808	2,719	2,541	2,463
56179	Other services to buildings and dwellings .....	7,203	6,307	5,416	4,703	4,380	3,819	3,340	3,011
5619	Other support services .....	42,467	39,905	37,539	33,315	31,160	31,364	30,834	30,855
56191	Packaging and labeling services .....	7,636	7,151	6,709	5,591	5,021	4,916	4,804	4,432
56192	Convention and trade show organizers .....	11,402	11,377	10,710	9,517	9,083	8,562	8,362	8,410
56199	All other support services .....	23,429	21,377	20,120	18,207	17,056	17,886	17,668	18,013

See footnotes at end of table.

**Table 7.1. Administrative and Support and Waste Management and Remediation Services (NAICS 56) – Estimated Revenue for Employer Firms: 1999 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	2003	2002	2001	2000
562	Waste management and remediation services .....	71,211	68,695	63,196	58,643	54,554	51,309	51,655	51,197
5621	Waste collection .....	38,484	37,483	33,998	32,430	30,272	28,206	28,649	28,820
562111	Solid waste collection .....	35,834	35,059	31,900	30,436	28,363	26,416	26,827	27,032
562112	Hazardous waste collection .....	1,990	1,834	1,614	1,565	1,445	1,325	1,308	1,249
562119	Other waste collection .....	660	590	484	429	464	465	514	539
5622	Waste treatment and disposal .....	13,308	13,280	12,543	11,398	11,173	10,834	11,290	11,025
562211	Hazardous waste treatment and disposal .....	4,427	4,037	3,730	3,264	3,351	3,642	3,270	3,155
562212	Solid waste landfill .....	6,692	6,704	6,439	6,168	5,802	5,272	5,841	5,965
562213	Solid waste combustors and incinerators .....	1,311	1,672	1,587	1,303	1,442	1,365	1,532	1,261
562219	Other nonhazardous waste treatment and disposal .....	878	867	787	663	578	555	647	644
5629	Remediation and other waste management services .....	19,419	17,932	16,655	14,815	13,109	12,269	11,716	11,352
56291	Remediation services .....	11,475	11,078	10,204	8,834	7,745	7,640	7,246	6,750
56292	Materials recovery facilities .....	3,351	2,754	2,714	2,633	2,222	1,800	1,546	1,593
56299	All other waste management services .....	4,593	4,100	3,737	3,348	3,142	2,829	2,924	3,009
562991	Septic tank and related services .....	2,760	2,563	2,372	2,132	2,049	1,973	2,055	2,197
562998	All other miscellaneous waste management services .....	1,833	1,537	1,365	1,216	1,093	856	869	812

NA Not available. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Excludes NAICS 56173 (Landscaping services).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-7.1 provides estimated measures of sampling variability.

**Table 7.2. Administrative and Support and Waste Management and Remediation Services (NAICS 56) – Estimated Year-to-Year Percent Change in Revenue for Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007/2006	2006/2005	2005/2004	2004/2003	2003/2002	2002/2001	2001/2000	2000/1999
<b>56</b>	<b>Administrative and support and waste management and remediation services</b>	<b>5.5</b>	<b>6.8</b>	<b>8.9</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
56*	Administrative and support and waste management and remediation services <sup>1</sup>	5.3	6.8	8.8	7.0	4.4	1.7	-1.5	9.2
561	Administrative and support services	5.8	6.6	9.1	NA	NA	NA	NA	NA
561*	Administrative and support services <sup>1</sup>	5.6	6.6	8.9	6.9	4.1	2.1	-1.8	10.2
56111	Office administrative services	5.6	9.5	13.3	10.0	7.7	8.7	12.3	17.9
56121	Facilities support services	11.4	11.6	12.0	3.0	-6.2	0.6	-2.5	15.1
5613	Employment services	4.5	7.5	9.2	8.9	4.0	-0.6	-10.2	9.9
56131	Employment placement agencies	6.1	5.6	4.0	10.9	-1.1	10.9	7.4	20.0
56132	Temporary help services	4.0	6.1	9.5	11.1	2.5	-0.7	-13.8	3.8
56133	Professional employer organizations	4.9	9.4	9.4	6.0	6.4	-1.7	-7.0	18.3
5614	Business support services	1.7	6.7	5.8	4.5	4.8	Z	6.7	10.0
56141	Document preparation services	3.4	7.7	6.0	-0.7	3.3	14.0	10.5	17.2
56142	Telephone call centers	1.7	6.8	5.1	4.3	-0.9	-11.4	2.1	9.0
561421	Telephone answering services	10.3	-3.0	7.0	-6.0	-10.1	-9.2	8.8	7.5
561422	Telemarketing bureaus	0.5	8.2	4.8	6.0	0.8	-11.8	1.0	9.3
56143	Business service centers	0.2	-8.3	-1.1	1.6	1.2	-1.3	1.0	6.7
561431	Private mail centers	6.3	7.9	-1.8	4.0	11.8	6.9	8.2	10.4
561439	Other business service centers (including copy shops)	-2.6	-14.1	-0.8	0.8	-2.1	-3.6	-0.8	5.9
56144	Collection agencies	4.7	1.1	5.7	10.5	11.0	9.4	10.8	13.7
56145	Credit bureaus	3.6	29.5	14.8	5.5	13.9	8.2	13.4	3.9
56149	Other business support services	-3.7	12.1	8.4	0.7	7.0	7.0	17.2	15.9
561491	Repossession services	S	4.2	7.1	-2.7	-0.5	18.2	11.7	-3.0
561492	Court reporting and stenotype services	-0.5	9.5	3.1	4.5	4.7	16.4	12.6	10.0
561499	All other business support services	-6.1	13.9	10.6	-0.2	8.8	2.5	19.4	21.0
5615	Travel arrangement and reservation services	6.2	3.7	3.3	6.0	4.1	-0.3	-1.9	5.0
56151	Travel agencies	2.9	6.0	3.3	3.5	4.0	-8.2	-12.2	0.9
56152	Tour operators	12.1	-2.4	3.0	9.4	0.7	-2.3	-8.4	-3.2
56159	Other travel arrangement and reservation services	7.2	3.6	3.3	7.1	5.1	6.8	11.2	13.1
561591	Convention and visitors bureaus	13.6	7.2	4.5	2.4	8.8	0.4	10.2	9.2
561599	All other travel arrangement and reservation services	6.6	3.3	3.2	7.5	4.8	7.4	11.3	13.5
5616	Investigation and security services	6.3	1.4	10.0	4.3	3.0	9.9	3.5	6.0
56161	Investigation, guard, and armored car services	5.1	1.8	12.2	4.0	7.5	11.4	-0.6	4.5
561611	Investigation services	14.6	-3.6	9.7	8.3	19.5	7.2	2.7	5.8
561612	Security guards and patrol services	5.0	2.8	14.1	5.0	5.3	13.2	-2.7	4.1
561613	Armored car services	-9.1	2.7	1.7	-8.4	7.6	4.8	10.0	5.9
56162	Security systems services	8.5	0.6	5.8	4.9	-4.2	7.5	10.6	8.8
561621	Security systems services (except locksmiths)	8.9	-1.1	5.7	5.0	-5.7	8.5	12.5	9.5
561622	Locksmiths	6.3	12.8	6.8	4.4	7.8	0.2	-1.3	4.5
5617	Services to buildings and dwellings	8.9	6.0	8.7	NA	NA	NA	NA	NA
5617*	Services to buildings and dwellings <sup>1</sup>	10.0	5.2	6.8	4.4	8.9	5.2	6.6	11.0
56171	Exterminating and pest control services	3.0	4.8	6.1	6.5	9.2	8.7	6.0	5.7
56172	Janitorial services	11.3	3.3	4.9	3.4	8.5	3.0	6.6	12.7
56173	Landscaping services	7.7	6.8	11.0	NA	NA	NA	NA	NA
56174	Carpet and upholstery cleaning services	7.2	6.2	14.2	5.6	3.3	7.0	3.2	8.0
56179	Other services to buildings and dwellings	14.2	16.5	15.2	7.4	14.7	14.3	10.9	10.5
5619	Other support services	6.4	6.3	12.7	6.9	-0.7	1.7	-0.1	11.2
56191	Packaging and labeling services	6.8	6.6	20.0	11.4	2.1	2.3	8.4	12.1
56192	Convention and trade show organizers	0.2	6.2	12.5	4.8	6.1	2.4	-0.6	20.6
56199	All other support services	9.6	6.2	10.5	6.7	-4.6	1.2	-1.9	7.1

See footnotes at end of table.

**Table 7.2. Administrative and Support and Waste Management and Remediation Services (NAICS 56) – Estimated Year-to-Year Percent Change in Revenue for Employer Firms: 1999 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007/2006	2006/2005	2005/2004	2004/2003	2003/2002	2002/2001	2001/2000	2000/1999
562	Waste management and remediation services .....	3.7	8.7	7.8	7.5	6.3	-0.7	0.9	3.2
5621	Waste collection .....	2.7	10.3	4.8	7.1	7.3	-1.5	-0.6	2.3
562111	Solid waste collection .....	2.2	9.9	4.8	7.3	7.4	-1.5	-0.8	2.5
562112	Hazardous waste collection .....	8.5	13.6	3.1	8.3	9.1	1.3	4.7	-1.4
562119	Other waste collection .....	11.9	21.9	12.8	-7.5	-0.2	-9.5	-4.6	3.5
5622	Waste treatment and disposal .....	0.2	5.9	10.0	2.0	3.1	-4.0	2.4	10.9
562211	Hazardous waste treatment and disposal .....	9.7	8.2	14.3	-2.6	-8.0	11.4	3.6	5.3
562212	Solid waste landfill .....	-0.2	4.1	4.4	6.3	10.1	-9.7	-2.1	17.0
562213	Solid waste combustors and incinerators .....	-21.6	5.4	21.8	-9.6	5.6	-10.9	21.5	6.8
562219	Other nonhazardous waste treatment and disposal .....	1.3	10.2	18.7	14.7	4.1	-14.2	0.5	-3.6
5629	Remediation and other waste management services .....	8.3	7.7	12.4	13.0	6.8	4.7	3.2	-1.5
56291	Remediation services .....	3.6	8.6	15.5	14.1	1.4	5.4	7.3	-0.8
56292	Materials recovery facilities .....	21.7	1.5	3.1	18.5	23.4	16.4	-3.0	-15.5
56299	All other waste management services .....	12.0	9.7	11.6	6.6	11.1	-3.2	-2.8	6.1
562991	Septic tank and related services .....	7.7	8.1	11.3	4.1	3.9	-4.0	-6.5	5.5
562998	All other miscellaneous waste management services .....	19.3	12.6	12.3	11.3	27.7	-1.5	7.0	7.7

NA Not available. Z Absolute value is less than 0.05. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Excludes NAICS 56173 (Landscaping services).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-7.1 provides estimated measures of sampling variability.

**Table 7.3. Administrative and Support and Waste Management and Remediation Services (NAICS 56) – Estimated Export Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
<b>56</b>	<b>Administrative and support and waste management and remediation services .....</b>	<b>2,767</b>	<b>2,928</b>	<b>3,046</b>	<b>2,579</b>	<b>-5.5</b>	<b>-3.9</b>	<b>18.1</b>
561	Administrative and support services .....	2,375	2,581	2,720	2,307	-8.0	-5.1	17.9
56111	Office administrative services .....	S	S	S	S	S	S	S
56121	Facilities support services .....	S	S	63	59	S	S	6.8
5613	Employment services .....	S	S	S	S	S	S	S
56131	Employment placement agencies .....	S	S	S	S	S	S	S
56132	Temporary help services .....	S	S	S	S	S	S	S
56133	Professional employer organizations .....	ZZ	ZZ	ZZ	ZZ	Z	Z	Z
5614	Business support services .....	S	S	S	S	S	S	S
56141	Document preparation services .....	S	S	S	S	S	S	S
56142	Telephone call centers .....	S	S	S	S	S	S	S
561421	Telephone answering services .....	ZZ	ZZ	ZZ	ZZ	Z	Z	Z
561422	Telemarketing bureaus .....	S	S	S	S	S	S	S
56143	Business service centers .....	S	S	S	S	S	S	S
561431	Private mail centers .....	S	S	S	S	S	S	S
561439	Other business service centers (including copy shops) .....	S	S	S	S	S	S	S
56144	Collection agencies .....	5	5	6	6	Z	-16.7	Z
56145	Credit bureaus .....	7	5	3	1	40.0	66.7	200.0
56149	Other business support services .....	1	S	S	S	S	S	S
561491	Repossession services .....	1	S	S	S	S	S	S
561492	Court reporting and stenotype services .....	ZZ	ZZ	ZZ	ZZ	Z	Z	Z
561499	All other business support services .....	S	S	S	1	S	S	S
5615	Travel arrangement and reservation services .....	1,292	1,352	1,459	1,273	-4.4	-7.3	14.6
56151	Travel agencies .....	350	357	343	276	-2.0	4.1	24.3
56152	Tour operators .....	124	92	104	124	34.8	-11.5	-16.1
56159	Other travel arrangement and reservation services .....	819	903	1,012	873	-9.3	-10.8	15.9
561591	Convention and visitors bureaus .....	ZZ	ZZ	1	1	Z	-100.0	Z
561599	All other travel arrangement and reservation services .....	819	902	1,011	872	-9.2	-10.8	15.9
5616	Investigation and security services .....	28	S	S	S	S	S	S
56161	Investigation, guard, and armored car services .....	S	S	S	S	S	S	S
561611	Investigation services .....	D	D	3	2	D	D	50.0
561612	Security guards and patrol services .....	2	S	S	S	S	S	S
561613	Armored car services .....	D	D	S	S	D	D	S
56162	Security systems services .....	S	S	S	4	S	S	S
561621	Security systems services (except locksmiths) .....	S	S	S	S	S	S	S
561622	Locksmiths .....	2	2	2	4	Z	Z	-50.0
5617	Services to buildings and dwellings .....	63	67	61	60	-6.0	9.8	1.7
56171	Exterminating and pest control services .....	ZZ	ZZ	ZZ	ZZ	Z	Z	Z
56172	Janitorial services .....	59	63	61	60	-6.3	3.3	1.7
56173	Landscaping services .....	S	S	ZZ	ZZ	S	S	Z
56174	Carpet and upholstery cleaning services .....	ZZ	ZZ	ZZ	S	Z	Z	S
56179	Other services to buildings and dwellings .....	ZZ	ZZ	ZZ	ZZ	Z	Z	Z
5619	Other support services .....	722	S	S	440	S	S	S
56191	Packaging and labeling services .....	S	S	S	S	S	S	S
56192	Convention and trade show organizers .....	41	44	S	S	-6.8	S	S
56199	All other support services .....	452	S	S	S	S	S	S
562	Waste management and remediation services .....	393	347	326	272	13.3	6.4	19.9
5621	Waste collection .....	11	D	28	24	D	D	16.7
562111	Solid waste collection .....	10	D	28	24	D	D	16.7
562112	Hazardous waste collection .....	ZZ	S	S	S	S	S	S

See footnotes at end of table.



**Table 7.3. Administrative and Support and Waste Management and Remediation Services (NAICS 56) – Estimated Export Revenue for Employer Firms: 2004 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
562119	Other waste collection .....	S	S	ZZ	ZZ	S	S	Z
5622	Waste treatment and disposal .....	52	D	35	30	D	D	16.7
562211	Hazardous waste treatment and disposal .....	43	31	32	30	38.7	-3.1	6.7
562212	Solid waste landfill .....	S	ZZ	ZZ	ZZ	S	Z	Z
562213	Solid waste combustors and incinerators .....	S	S	S	ZZ	S	S	S
562219	Other nonhazardous waste treatment and disposal .....	S	ZZ	ZZ	ZZ	S	Z	Z
5629	Remediation and other waste management services .....	329	284	263	217	15.8	8.0	21.2
56291	Remediation services .....	149	139	132	103	7.2	5.3	28.2
56292	Materials recovery facilities .....	181	144	131	114	25.7	9.9	14.9
56299	All other waste management services .....	S	ZZ	ZZ	ZZ	S	Z	Z
562991	Septic tank and related services .....	ZZ	ZZ	ZZ	ZZ	Z	Z	Z
562998	All other miscellaneous waste management services .....	ZZ	ZZ	ZZ	ZZ	Z	Z	Z

Z Absolute value is less than 0.05. ZZ Absolute value is less than 0.5. D Estimate in table is withheld to avoid disclosing data of individual companies; data are included in higher level totals. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see <http://www.census.gov/quality/S20-0-010-Data-Release.pdf>

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-7.2 provides estimated measures of sampling variability.

**Table 7.4. Employment Placement Agencies (NAICS 56131) - Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>7,589</b>	<b>7,154</b>	<b>6,772</b>	<b>6,513</b>	<b>6.1</b>	<b>5.6</b>	<b>4.0</b>
<b>Sources of Revenue</b>							
Placement of individuals as permanent employees .....	2,149	1,889	1,785	1,402	13.8	5.8	27.3
Placement of individuals as independent contractors .....	1,949	2,069	2,029	2,506	-5.8	2.0	-19.0
Temporary staffing services .....	1,964	1,812	1,647	1,463	8.4	10.0	12.6
Long-term staffing .....	S	397	S	S	S	S	S
Temporary staffing-to-permanent placement .....	334	307	315	273	8.8	-2.5	15.4
All other operating revenue .....	766	680	627	593	12.6	8.5	5.7

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-7.3 provides estimated measures of sampling variability.

**Table 7.5. Temporary Help Services (NAICS 56132) - Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>93,740</b>	<b>90,169</b>	<b>85,023</b>	<b>77,660</b>	<b>4.0</b>	<b>6.1</b>	<b>9.5</b>
<b>Sources of Revenue</b>							
Placement of individuals as permanent employees .....	3,210	2,680	S	S	19.8	S	S
Placement of individuals as independent contractors .....	7,051	6,547	6,332	5,888	7.7	3.4	7.5
Temporary staffing services .....	74,124	71,097	66,637	62,405	4.3	6.7	6.8
Long-term staffing .....	6,107	6,513	6,999	5,417	-6.2	-6.9	29.2
Temporary staffing-to-permanent placement .....	1,961	2,103	1,871	1,539	-6.8	12.4	21.6
All other operating revenue .....	1,288	1,228	1,046	895	4.9	17.4	16.9

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-7.4 provides estimated measures of sampling variability.

**Table 7.6. Professional Employer Organizations (NAICS 56133) - Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>77,338</b>	<b>73,696</b>	<b>67,349</b>	<b>61,544</b>	<b>4.9</b>	<b>9.4</b>	<b>9.4</b>
<b>Sources of Revenue</b>							
Co-employment with payroll, benefits, and human resource services .....	56,753	51,308	44,410	40,649	10.6	15.5	9.3
Payroll services .....	11,877	13,542	13,298	12,191	-12.3	1.8	9.1
Payroll and benefit services .....	7,624	7,916	8,888	7,816	-3.7	-10.9	13.7
Payroll and human resource services .....	S	S	S	S	S	S	S
All other operating revenue .....	708	664	518	477	6.6	28.2	8.6

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-7.5 provides estimated measures of sampling variability.

**Table 7.7. Travel Agencies and All Other Travel Arrangement and Reservation Services (NAICS 561510 and 561599) - Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>26,509</b>	<b>25,259</b>	<b>24,183</b>	<b>23,429</b>	<b>4.9</b>	<b>4.4</b>	<b>3.2</b>
<b>Sources of Revenue</b>							
Reservation services .....	15,320	14,782	14,660	14,274	3.6	0.8	2.7
Airline seats, domestic destinations .....	3,090	3,123	3,486	3,622	-1.1	-10.4	-3.8
Airline seats, international destinations .....	1,265	1,251	1,223	1,147	1.1	2.3	6.6
Cruises .....	1,562	1,450	1,323	1,229	7.7	9.6	7.6
Lodging .....	3,778	3,544	3,299	3,215	6.6	7.4	2.6
Event tickets .....	S	1,611	1,502	1,247	S	7.3	20.4
Computerized reservation systems .....	1,194	S	1,141	1,105	S	S	3.3
Packaged tours .....	2,136	1,953	2,021	2,054	9.4	-3.4	-1.6
Other reservation services .....	629	646	665	654	-2.6	-2.9	1.7
Other travel arrangement services .....	11,190	10,476	9,523	9,155	6.8	10.0	4.0
Trip planning .....	2,495	2,315	2,113	2,022	7.8	9.6	4.5
Automobile clubs and road and travel service .....	2,686	2,679	2,496	2,480	0.3	7.3	0.6
Other travel arrangement services revenue .....	319	305	333	325	4.6	-8.4	2.5
All other operating revenue .....	5,690	5,177	4,580	4,328	9.9	13.0	5.8
<b>Breakdown of Revenue by Type of Customer</b>							
Business .....	9,618	9,958	8,203	7,928	-3.4	21.4	3.5
Leisure .....	16,891	15,301	15,980	15,501	10.4	-4.2	3.1

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-7.6 provides estimated measures of sampling variability.

**Table 7.8. Tour Operators (NAICS 56152) - Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>3,962</b>	<b>3,534</b>	<b>3,621</b>	<b>3,515</b>	<b>12.1</b>	<b>-2.4</b>	<b>3.0</b>
<b>Sources of Revenue</b>							
Pre-packaged tours .....	2,410	2,200	2,372	2,296	9.5	-7.3	3.3
Domestic travel .....	1,308	1,252	1,310	1,270	4.5	-4.4	3.1
International travel .....	1,103	948	1,062	1,026	16.4	-10.7	3.5
Customized group tours .....	1,139	997	837	870	14.2	19.1	-3.8
Domestic travel .....	587	527	429	455	11.4	22.8	-5.7
International travel .....	552	469	408	415	17.7	15.0	-1.7
All other operating revenue .....	412	338	412	348	21.9	-18.0	18.4
<b>Breakdown of Revenue by Type of Customer</b>							
Business .....	754	729	863	847	3.4	-15.5	1.9
Leisure .....	3,208	2,805	2,758	2,665	14.4	1.7	3.5

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-7.7 provides estimated measures of sampling variability.

**Table 7.9. Waste Collection (NAICS 5621) - Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>38,484</b>	<b>37,483</b>	<b>33,998</b>	<b>32,430</b>	<b>2.7</b>	<b>10.3</b>	<b>4.8</b>
<b>Sources of Revenue</b>							
Nonhazardous waste management collection services .....	34,785	34,191	30,908	29,668	1.7	10.6	4.2
Residential nonhazardous waste and recyclable material collection services .....	10,894	10,744	9,430	9,110	1.4	13.9	3.5
Nonhazardous waste collection services .....	10,141	10,000	8,844	8,600	1.4	13.1	2.8
Nonhazardous recyclable collection services .....	753	744	586	510	1.2	27.0	14.9
Non-residential nonhazardous waste and recyclable material collection services .....	23,891	23,447	21,477	20,558	1.9	9.2	4.5
Nonhazardous waste collection services .....	17,527	17,765	16,229	15,896	-1.3	9.5	2.1
Nonhazardous recyclable collection services .....	1,183	918	938	955	28.9	-2.1	-1.8
Nonhazardous waste collection from construction and demolition sites .....	3,083	2,995	2,748	2,314	2.9	9.0	18.8
Operation of waste transfer facilities .....	2,098	1,769	1,562	1,392	18.6	13.3	12.2
Hazardous waste management collection services .....	617	565	553	483	9.2	2.2	14.5
Hazardous waste collection .....	266	233	262	260	14.2	-11.1	0.8
Hazardous waste transportation services .....	352	332	291	223	6.0	14.1	30.5
All other operating revenue .....	3,081	2,726	2,538	2,280	13.0	7.4	11.3

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-7.8 provides estimated measures of sampling variability.

**Table 7.10. Waste Treatment and Disposal (NAICS 5622) - Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>13,308</b>	<b>13,280</b>	<b>12,543</b>	<b>11,398</b>	<b>0.2</b>	<b>5.9</b>	<b>10.0</b>
<b>Sources of Revenue</b>							
Nonhazardous waste disposal services .....	8,567	8,939	8,363	7,909	-4.2	6.9	5.7
Nonhazardous waste landfill disposal services .....	6,395	6,608	6,116	5,892	-3.2	8.0	3.8
Nonhazardous waste incineration disposal services .....	1,359	1,640	1,561	1,401	-17.1	5.1	11.4
Other nonhazardous waste disposal services .....	813	691	686	617	17.7	0.7	11.2
Hazardous waste treatment and disposal services .....	3,073	2,878	2,877	2,495	6.8	Z	15.3
Hazardous waste treatment - biological infectious waste .....	655	583	540	470	12.3	8.0	14.9
Hazardous waste treatment - radioactive waste .....	639	686	650	487	-6.9	5.5	33.5
All other hazardous waste treatment .....	1,032	936	998	875	10.3	-6.2	14.1
Hazardous waste disposal services .....	544	471	465	443	15.5	1.3	5.0
Other hazardous waste treatment and disposal services .....	204	201	223	219	1.5	-9.9	1.8
All other operating revenue .....	1,668	1,463	1,303	993	14.0	12.3	31.2

Z Absolute value is less than 0.05.

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-7.9 provides estimated measures of sampling variability.



**Table 7.11. Remediation Services (NAICS 56291) - Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>11,475</b>	<b>11,078</b>	<b>10,204</b>	<b>8,834</b>	<b>3.6</b>	<b>8.6</b>	<b>15.5</b>
<b>Sources of Revenue</b>							
Remediation services .....	9,666	9,465	8,872	7,664	2.1	6.7	15.8
Site remediation services .....	5,905	5,701	5,509	4,747	3.6	3.5	16.1
Building remediation services - asbestos contamination .....	2,129	2,080	1,927	1,780	2.4	7.9	8.3
Building remediation services - other contaminations .....	423	450	381	354	-6.0	18.1	7.6
Environmental emergency response services .....	526	634	556	384	-17.0	14.0	44.8
Other remediation services .....	S	601	499	399	S	20.4	25.1
All other operating revenue .....	1,809	1,613	1,332	1,170	12.2	21.1	13.8

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-7.10 provides estimated measures of sampling variability.

**Table 7.12. Materials Recovery Facilities and All Other Waste Management Services (NAICS 56292 and 56299) - Estimated Sources of Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>7,944</b>	<b>6,854</b>	<b>6,450</b>	<b>5,981</b>	<b>15.9</b>	<b>6.3</b>	<b>7.8</b>
<b>Sources of Revenue</b>							
Nonhazardous waste and recyclable material consolidation, storage, and preparation services .....	1,708	1,401	1,397	1,305	21.9	0.3	7.0
Nonhazardous recyclable material recovery preparation services .....	1,460	1,275	1,276	1,196	14.5	-0.1	6.7
Operation of nonhazardous waste transfer facilities .....	S	126	121	109	S	4.1	11.0
Sale or brokerage of nonhazardous recyclable material .....	1,704	1,441	1,382	1,364	18.3	4.3	1.3
Other waste management services .....	2,993	2,840	2,612	2,316	5.4	8.7	12.8
Septic tank services .....	749	750	707	617	-0.1	6.1	14.6
Cleaning and maintenance for nonhazardous waste holding and drain facilities .....	1,173	1,165	1,083	1,004	0.7	7.6	7.9
Portable toilet rental services .....	1,072	926	823	696	15.8	12.5	18.2
All other operating revenue .....	1,538	1,171	1,059	995	31.3	10.6	6.4

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-7.11 provides estimated measures of sampling variability.

**Table 7.13. Administrative and Support and Waste Management and Remediation Services (NAICS 56) – Estimated Expenses for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
<b>56</b>	<b>Administrative and support and waste management and remediation services .....</b>	<b>508,770</b>	<b>484,150</b>	<b>454,370</b>	<b>418,601</b>	<b>5.1</b>	<b>6.6</b>	<b>8.5</b>
561	Administrative and support services .....	448,310	425,681	401,707	371,047	5.3	6.0	8.3
56111	Office administrative services .....	44,912	41,406	36,196	32,445	8.5	14.4	11.6
56121	Facilities support services .....	15,804	14,166	12,308	10,981	11.6	15.1	12.1
5613	Employment services .....	158,532	152,727	145,789	133,733	3.8	4.8	9.0
56131	Employment placement agencies .....	6,997	6,365	6,209	6,087	9.9	2.5	2.0
56132	Temporary help services .....	81,959	78,802	75,552	69,398	4.0	4.3	8.9
56133	Professional employer organizations .....	69,576	67,560	64,028	58,248	3.0	5.5	9.9
5614	Business support services .....	44,811	43,428	41,022	39,159	3.2	5.9	4.8
56141	Document preparation services .....	2,494	2,384	2,052	1,953	4.6	16.2	5.1
56142	Telephone call centers .....	12,561	11,962	12,475	11,912	5.0	-4.1	4.7
561421	Telephone answering services .....	1,795	1,624	1,658	1,590	10.5	-2.1	4.3
561422	Telemarketing bureaus .....	10,766	10,338	10,817	10,322	4.1	-4.4	4.8
56143	Business service centers .....	6,299	6,569	6,558	6,770	-4.1	0.2	-3.1
561431	Private mail centers .....	1,983	1,849	1,710	1,751	7.2	8.1	-2.3
561439	Other business service centers (including copy shops) .....	4,316	4,720	4,848	5,019	-8.6	-2.6	-3.4
56144	Collection agencies .....	10,165	9,661	9,192	8,808	5.2	5.1	4.4
56145	Credit bureaus .....	6,608	6,120	4,835	4,183	8.0	26.6	15.6
56149	Other business support services .....	6,684	6,732	5,910	5,533	-0.7	13.9	6.8
561491	Repossession services .....	490	455	437	431	7.7	4.1	1.4
561492	Court reporting and stenotype services .....	1,736	1,701	1,594	1,577	2.1	6.7	1.1
561499	All other business support services .....	4,458	4,576	3,879	3,525	-2.6	18.0	10.0
5615	Travel arrangement and reservation services .....	27,064	25,942	24,816	23,888	4.3	4.5	3.9
56151	Travel agencies .....	10,184	9,563	9,010	8,824	6.5	6.1	2.1
56152	Tour operators .....	3,176	2,879	3,042	2,993	10.3	-5.4	1.6
56159	Other travel arrangement and reservation services .....	13,704	13,500	12,764	12,071	1.5	5.8	5.7
561591	Convention and visitors bureaus .....	1,535	1,329	1,269	1,238	15.5	4.7	2.5
561599	All other travel arrangement and reservation services .....	12,169	12,171	11,495	10,833	Z	5.9	6.1
5616	Investigation and security services .....	34,882	32,361	31,971	29,056	7.8	1.2	10.0
56161	Investigation, guard, and armored car services .....	24,330	23,026	22,985	20,795	5.7	0.2	10.5
561611	Investigation services .....	3,384	3,009	3,184	3,142	12.5	-5.5	1.3
561612	Security guards and patrol services .....	19,310	17,992	17,858	15,749	7.3	0.8	13.4
561613	Armored car services .....	1,636	2,025	1,943	1,904	-19.2	4.2	2.0
56162	Security systems services .....	10,552	9,335	8,986	8,261	13.0	3.9	8.8
561621	Security systems services (except locksmiths) .....	9,195	8,078	7,839	7,220	13.8	3.0	8.6
561622	Locksmiths .....	1,357	1,257	1,147	1,041	8.0	9.6	10.2
5617	Services to buildings and dwellings .....	89,687	83,787	78,953	73,673	7.0	6.1	7.2
56171	Exterminating and pest control services .....	7,808	7,491	6,951	6,631	4.2	7.8	4.8
56172	Janitorial services .....	30,567	28,413	27,564	26,480	7.6	3.1	4.1
56173	Landscaping services .....	42,171	39,477	37,381	34,262	6.8	5.6	9.1
56174	Carpet and upholstery cleaning services .....	3,236	2,953	2,811	2,535	9.6	5.1	10.9
56179	Other services to buildings and dwellings .....	5,904	5,453	4,246	3,765	8.3	28.4	12.8
5619	Other support services .....	32,616	31,865	30,653	28,112	2.4	4.0	9.0
56191	Packaging and labeling services .....	4,620	4,268	4,109	3,541	8.2	3.9	16.0
56192	Convention and trade show organizers .....	8,690	8,597	8,428	7,598	1.1	2.0	10.9
56199	All other support services .....	19,306	19,000	18,116	16,973	1.6	4.9	6.7
562	Waste management and remediation services .....	60,459	58,469	52,663	47,552	3.4	11.0	10.7
5621	Waste collection .....	32,597	31,908	28,223	25,079	2.2	13.1	12.5
562111	Solid waste collection .....	30,232	29,745	26,319	23,251	1.6	13.0	13.2
562112	Hazardous waste collection .....	1,640	S	1,378	1,352	S	S	1.9

See footnotes at end of table.

**Table 7.13. Administrative and Support and Waste Management and Remediation Services (NAICS 56) – Estimated Expenses for Employer Firms: 2004 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
562119	Other waste collection .....	725	637	526	476	13.8	21.1	10.5
5622	Waste treatment and disposal .....	12,600	12,169	11,643	10,550	3.5	4.5	10.4
562211	Hazardous waste treatment and disposal .....	3,855	3,388	3,236	2,697	13.8	4.7	20.0
562212	Solid waste landfill .....	7,158	6,943	6,722	6,483	3.1	3.3	3.7
562213	Solid waste combustors and incinerators .....	875	1,082	1,007	793	-19.1	7.4	27.0
562219	Other nonhazardous waste treatment and disposal .....	712	756	678	577	-5.8	11.5	17.5
5629	Remediation and other waste management services .....	15,262	14,392	12,797	11,923	6.0	12.5	7.3
56291	Remediation services .....	9,736	9,569	8,290	7,828	1.7	15.4	5.9
56292	Materials recovery facilities .....	1,720	1,472	1,447	1,376	16.8	1.7	5.2
56299	All other waste management services .....	3,806	3,351	3,060	2,719	13.6	9.5	12.5
562991	Septic tank and related services .....	2,349	2,156	1,931	1,725	9.0	11.7	11.9
562998	All other miscellaneous waste management services .....	1,457	1,195	1,129	994	21.9	5.8	13.6

Z Absolute value is less than 0.05. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-7.12 provides estimated measures of sampling variability.

**Table 7.14. Administrative and Support and Waste Management and Remediation Services (NAICS 56) – Selected Expenses for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>ADMINISTRATIVE AND SUPPORT SERVICES (NAICS 561)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>448,310</b>	<b>425,681</b>	<b>401,707</b>	<b>371,047</b>	<b>5.3</b>	<b>6.0</b>	<b>8.3</b>
Personnel costs.....	297,809	283,463	267,354	245,875	5.1	6.0	8.7
Gross annual payroll.....	253,114	240,018	225,942	206,916	5.5	6.2	9.2
Employer's cost for fringe benefits.....	35,892	34,431	33,277	31,248	4.2	3.5	6.5
Health insurance.....	12,486	NA	NA	NA	NA	NA	NA
Pension plans.....	4,402	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	1,943	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	2,458	NA	NA	NA	NA	NA	NA
Other.....	19,004	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	8,803	9,014	8,135	7,711	-2.3	10.8	5.5
Expensed materials, parts and supplies (not for resale).....	25,362	25,883	24,380	22,054	-2.0	6.2	10.5
Expensed equipment.....	2,573	2,905	2,597	2,363	-11.4	11.9	9.9
Expensed purchase of other materials, parts, and supplies.....	22,789	22,978	21,782	19,692	-0.8	5.5	10.6
Expensed purchased services.....	26,294	25,312	22,481	20,648	3.9	12.6	8.9
Expensed purchases of software.....	1,538	1,808	1,469	1,335	-14.9	23.1	10.0
Purchased electricity and fuels (except motor fuels).....	2,224	2,200	1,696	1,505	1.1	29.7	12.7
Purchased electricity.....	1,342	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	882	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	10,917	10,004	9,100	8,628	9.1	9.9	5.5
Lease and rental payments for machinery, equipment, and other tangible items.....	2,421	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	8,495	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	4,237	3,964	3,492	3,104	6.9	13.5	12.5
Purchased repairs and maintenance to machinery and equipment.....	2,914	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	1,322	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	7,379	7,334	6,723	6,076	0.6	9.1	10.6
Other operating expenses.....	98,845	91,023	87,492	82,470	8.6	4.0	6.1
Depreciation and amortization charges.....	11,345	10,663	10,314	10,070	6.4	3.4	2.4
Governmental taxes and license fees.....	3,411	3,569	3,783	3,536	-4.4	-5.7	7.0
All other operating expenses.....	84,089	76,792	73,395	68,864	9.5	4.6	6.6
Data processing and other purchased computer services.....	2,020	NA	NA	NA	NA	NA	NA
Purchased communication services.....	4,268	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	556	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	8,943	NA	NA	NA	NA	NA	NA
All other operating expenses.....	68,301	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 7.14. Administrative and Support and Waste Management and Remediation Services (NAICS 56) – Selected Expenses for Employer Firms: 2004 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>WASTE MANAGEMENT AND REMEDIATION SERVICES (NAICS 562)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>60,459</b>	<b>58,469</b>	<b>52,663</b>	<b>47,552</b>	<b>3.4</b>	<b>11.0</b>	<b>10.7</b>
Personnel costs.....	19,809	18,811	17,904	17,102	5.3	5.1	4.7
Gross annual payroll.....	15,810	14,939	14,124	13,221	5.8	5.8	6.8
Employer's cost for fringe benefits.....	2,738	2,493	2,403	2,302	9.8	3.7	4.4
Health insurance.....	1,260	NA	NA	NA	NA	NA	NA
Pension plans.....	291	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	119	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	172	NA	NA	NA	NA	NA	NA
Other.....	1,188	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	1,261	1,378	1,377	1,579	-8.5	0.1	-12.8
Expensed materials, parts and supplies (not for resale).....	5,590	5,264	4,666	4,047	6.2	12.8	15.3
Expensed equipment.....	307	268	290	261	14.6	-7.6	11.1
Expensed purchase of other materials, parts, and supplies.....	5,283	4,996	4,376	3,786	5.7	14.2	15.6
Expensed purchased services.....	4,577	4,662	4,516	4,160	-1.8	3.2	8.6
Expensed purchases of software.....	32	32	27	25	Z	18.5	8.0
Purchased electricity and fuels (except motor fuels).....	580	557	461	422	4.1	20.8	9.2
Purchased electricity.....	290	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	290	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	1,583	1,508	1,326	1,188	5.0	13.7	11.6
Lease and rental payments for machinery, equipment, and other tangible items.....	896	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices....	687	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	2,123	2,320	2,448	2,256	-8.5	-5.2	8.5
Purchased repairs and maintenance to machinery and equipment.....	1,923	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	200	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	258	245	254	269	5.3	-3.5	-5.6
Other operating expenses.....	30,485	29,732	25,577	22,243	2.5	16.2	15.0
Depreciation and amortization charges.....	5,097	4,965	4,473	4,283	2.7	11.0	4.4
Governmental taxes and license fees.....	1,233	1,107	1,055	1,009	11.4	4.9	4.6
All other operating expenses.....	24,155	23,660	20,049	16,951	2.1	18.0	18.3
Data processing and other purchased computer services.....	32	NA	NA	NA	NA	NA	NA
Purchased communication services.....	237	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	625	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	1,782	NA	NA	NA	NA	NA	NA
All other operating expenses.....	21,480	NA	NA	NA	NA	NA	NA

NA Not available. Z Absolute value is less than 0.05.

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-7.13 provides estimated measures of sampling variability.

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# Chapter 8. Health Care and Social Assistance Services

**Table 8.1. Health Care and Social Assistance (NAICS 62)—Estimated Revenue for Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	2003	2002	2001	2000	1999
<b>62</b>	<b>Health care and social assistance .....</b>	<b>1,664,547</b>	<b>1,558,756</b>	<b>1,478,399</b>	<b>1,379,569</b>	<b>1,285,518</b>	<b>1,207,298</b>	<b>1,115,070</b>	<b>1,033,029</b>	<b>976,335</b>
621	Ambulatory health care services .....	692,854	647,920	610,806	568,293	526,328	488,619	453,719	419,402	394,322
6211	Offices of physicians .....	346,043	327,588	310,780	290,782	270,327	248,824	231,327	213,806	200,242
6212	Offices of dentists .....	93,645	87,930	83,636	78,871	73,372	71,103	65,846	60,931	56,559
6213	Offices of other health practitioners .....	50,380	46,971	45,095	42,930	39,676	37,128	34,812	32,037	30,494
62131	Offices of chiropractors .....	10,833	10,232	9,876	9,624	9,363	8,975	8,427	7,570	7,285
62132	Offices of optometrists .....	11,037	10,214	9,793	9,318	8,607	8,342	7,942	7,639	7,039
62133	Offices of mental health practitioners (except physicians) .....	4,567	4,291	4,066	3,854	3,774	3,486	3,766	3,516	3,298
62134	Offices of physical, occupational and speech therapists, and audiologists .....	16,052	14,817	14,195	13,396	11,805	10,685	9,452	8,486	8,528
62139	Offices of all other health practitioners .....	7,891	7,417	7,165	6,738	6,127	5,640	5,225	4,826	4,344
621391	Offices of podiatrists .....	3,913	3,758	3,703	3,556	3,403	3,110	2,839	2,574	2,369
621399	Offices of all other miscellaneous health practitioners .....	3,978	3,659	3,462	3,182	2,724	2,530	2,386	S	S
6214	Outpatient care centers .....	82,133	75,936	69,464	63,576	S	S	S	S	S
62141	Family planning centers .....	1,742	1,533	1,467	1,398	1,294	1,191	1,141	1,129	1,037
62142	Outpatient mental health and substance abuse centers .....	11,573	10,747	10,195	9,449	9,308	8,982	8,290	7,642	7,487
62149	Other outpatient care centers .....	68,818	63,656	57,802	52,729	S	S	S	S	S
621491	HMO medical centers .....	5,588	5,571	4,973	4,638	S	S	S	S	S
621492	Kidney dialysis centers .....	16,564	15,154	11,626	10,590	9,534	8,738	7,758	6,998	6,219
621493	Freestanding ambulatory surgical and emergency centers .....	14,541	12,736	11,928	10,692	9,525	8,450	7,422	6,446	5,771
621498	All other outpatient care centers .....	32,125	30,195	29,275	26,809	25,330	23,628	21,784	21,018	20,128
6215	Medical and diagnostic laboratories .....	38,558	37,224	34,690	32,413	30,529	28,409	26,902	23,450	20,635
621511	Medical laboratories .....	22,768	22,003	20,509	19,115	18,202	16,907	16,727	14,878	12,949
621512	Diagnostic imaging centers .....	15,790	15,221	14,181	13,298	12,327	11,502	10,175	8,572	7,686
6216	Home health care services .....	53,664	46,816	43,969	38,311	34,001	30,387	28,356	26,841	27,524
6219	Other ambulatory care services .....	28,431	25,455	23,172	21,410	19,352	17,948	16,332	15,565	14,744
62191	Ambulance services .....	10,071	9,376	8,748	8,029	7,084	6,524	5,625	5,303	5,144
62199	All other ambulatory health care services .....	18,360	16,079	14,424	13,381	12,268	11,424	10,707	10,262	9,600
622	Hospitals .....	687,135	644,904	611,522	569,463	529,202	500,112	455,262	423,889	406,717
6221	General medical and surgical hospitals .....	642,670	603,800	573,007	533,848	496,216	469,727	427,329	397,526	380,550
6222	Psychiatric and substance abuse hospitals .....	16,041	14,848	13,914	13,363	13,578	13,626	13,531	13,422	13,906
6223	Specialty (except psychiatric and substance abuse) hospitals .....	28,424	26,256	24,601	22,252	19,408	16,759	14,402	12,941	12,261

See footnotes at end of table.



**Table 8.1. Health Care and Social Assistance (NAICS 62)—Estimated Revenue for Employer Firms: 1999 Through 2007—Con.**  
 [Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	2003	2002	2001	2000	1999
623	Nursing and residential care facilities .....	160,037	149,785	145,578	138,068	132,995	127,114	120,462	112,706	106,260
6231	Nursing care facilities .....	90,677	85,270	83,515	79,961	77,438	74,117	70,790	67,238	64,535
6232	Residential mental retardation, mental health and substance abuse facilities .....	25,543	23,928	22,932	21,602	20,615	19,317	18,077	16,718	15,300
62321	Residential mental retardation facilities .....	17,709	16,416	15,607	14,703	14,091	13,280	12,417	11,570	10,708
62322	Residential mental health and substance abuse facilities .....	7,834	7,512	7,325	6,899	6,524	6,037	5,660	5,148	4,592
6233	Community care facilities for the elderly .....	34,676	31,878	30,612	28,333	26,984	26,099	24,447	22,104	20,157
623311	Continuing care retirement communities .....	20,121	18,282	17,609	16,344	15,429	14,862	14,038	12,948	12,062
623312	Homes for the elderly .....	14,555	13,596	13,003	11,989	11,555	11,237	10,409	9,156	8,095
6239	Other residential care facilities .....	9,141	8,709	8,519	8,172	7,958	7,581	7,148	6,646	6,268
624	Social assistance .....	124,521	116,147	110,493	103,745	96,993	91,453	85,627	77,032	69,036
6241	Individual and family services .....	61,558	56,994	52,806	50,177	47,084	44,645	41,928	37,311	33,198
62411	Child and youth services .....	11,292	10,763	10,367	9,755	9,666	8,926	8,510	7,517	6,722
62412	Services for the elderly and persons with disabilities .....	23,237	21,401	19,310	17,711	16,299	15,283	14,148	12,804	11,641
62419	Other individual and family services .....	27,029	24,830	23,129	22,711	21,119	20,436	19,270	16,990	14,835
6242	Community food and housing, and emergency and other relief services .....	18,579	18,881	18,935	16,593	15,000	14,006	13,317	12,281	11,148
62421	Community food services .....	4,161	3,906	3,784	3,505	3,326	3,107	3,008	2,835	2,535
62422	Community housing services .....	7,510	7,018	6,683	6,397	6,067	5,803	5,467	4,888	4,389
62423	Emergency and other relief services .....	6,908	7,957	8,468	6,691	5,607	5,096	4,842	4,558	4,224
6243	Vocational rehabilitation services .....	13,425	13,550	13,921	13,025	12,094	11,031	10,281	9,458	8,224
6244	Child day care services .....	30,959	26,722	24,831	23,950	22,815	21,771	20,101	17,982	16,466

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-8.1 provides estimated measures of sampling variability.

**Table 8.2. Health Care and Social Assistance (NAICS 62)—Estimated Year-to-Year Percent Change in Revenue for Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007/2006	2006/2005	2005/2004	2004/2003	2003/2002	2002/2001	2001/2000	2000/1999
<b>62</b>	<b>Health care and social assistance .....</b>	<b>6.8</b>	<b>5.4</b>	<b>7.2</b>	<b>7.3</b>	<b>6.5</b>	<b>8.3</b>	<b>7.9</b>	<b>5.8</b>
621	Ambulatory health care services .....	6.9	6.1	7.5	8.0	7.7	7.7	8.2	6.4
6211	Offices of physicians .....	5.6	5.4	6.9	7.6	8.6	7.6	8.2	6.8
6212	Offices of dentists .....	6.5	5.1	6.0	7.5	3.2	8.0	8.1	7.7
6213	Offices of other health practitioners .....	7.3	4.2	5.0	8.2	6.9	6.7	8.7	5.1
62131	Offices of chiropractors .....	5.9	3.6	2.6	2.8	4.3	6.5	11.3	3.9
62132	Offices of optometrists .....	8.1	4.3	5.1	8.3	3.2	5.0	4.0	8.5
62133	Offices of mental health practitioners (except physicians) .....	6.4	5.5	5.5	2.1	8.3	-7.4	7.1	6.6
62134	Offices of physical, occupational and speech therapists, and audiologists .....	8.3	4.4	6.0	13.5	10.5	13.0	11.4	-0.5
62139	Offices of all other health practitioners .....	6.4	3.5	6.3	10.0	8.6	7.9	8.3	11.1
621391	Offices of podiatrists .....	4.1	1.5	4.1	4.5	9.4	9.5	10.3	8.7
621399	Offices of all other miscellaneous health practitioners .....	8.7	5.7	8.8	16.8	7.7	6.0	S	S
6214	Outpatient care centers .....	8.2	9.3	9.3	S	S	S	S	S
62141	Family planning centers .....	13.6	4.5	4.9	8.0	8.6	4.4	1.1	8.9
62142	Outpatient mental health and substance abuse centers .....	7.7	5.4	7.9	1.5	3.6	8.3	8.5	2.1
62149	Other outpatient care centers .....	8.1	10.1	9.6	S	S	S	S	S
621491	HMO medical centers .....	0.3	12.0	7.2	S	S	S	S	S
621492	Kidney dialysis centers .....	9.3	30.3	9.8	11.1	9.1	12.6	10.9	12.5
621493	Freestanding ambulatory surgical and emergency centers .....	14.2	6.8	11.6	12.3	12.7	13.9	15.1	11.7
621498	All other outpatient care centers .....	6.4	3.1	9.2	5.8	7.2	8.5	3.6	4.4
6215	Medical and diagnostic laboratories .....	3.6	7.3	7.0	6.2	7.5	5.6	14.7	13.6
621511	Medical laboratories .....	3.5	7.3	7.3	5.0	7.7	1.1	12.4	14.9
621512	Diagnostic imaging centers .....	3.7	7.3	6.6	7.9	7.2	13.0	18.7	11.5
6216	Home health care services .....	14.6	6.5	14.8	12.7	11.9	7.2	5.6	-2.5
6219	Other ambulatory care services .....	11.7	9.9	8.2	10.6	7.8	9.9	4.9	5.6
62191	Ambulance services .....	7.4	7.2	9.0	13.3	8.6	16.0	6.1	3.1
62199	All other ambulatory health care services .....	14.2	11.5	7.8	9.1	7.4	6.7	4.3	6.9
622	Hospitals .....	6.5	5.5	7.4	7.6	5.8	9.9	7.4	4.2
6221	General medical and surgical hospitals .....	6.4	5.4	7.3	7.6	5.6	9.9	7.5	4.5
6222	Psychiatric and substance abuse hospitals .....	8.0	6.7	4.1	-1.6	-0.4	0.7	0.8	-3.5
6223	Specialty (except psychiatric and substance abuse) hospitals .....	8.3	6.7	10.6	14.7	15.8	16.4	11.3	5.5

See footnotes at end of table.

**Table 8.2. Health Care and Social Assistance (NAICS 62)—Estimated Year-to-Year Percent Change in Revenue for Employer Firms: 1999 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007/2006	2006/2005	2005/2004	2004/2003	2003/2002	2002/2001	2001/2000	2000/1999
623	Nursing and residential care facilities .....	6.8	2.9	5.4	3.8	4.6	5.5	6.9	6.1
6231	Nursing care facilities .....	6.3	2.1	4.4	3.3	4.5	4.7	5.3	4.2
6232	Residential mental retardation, mental health and substance abuse facilities .....	6.7	4.3	6.2	4.8	6.7	6.9	8.1	9.3
62321	Residential mental retardation facilities .....	7.9	5.2	6.1	4.3	6.1	7.0	7.3	8.1
62322	Residential mental health and substance abuse facilities .....	4.3	2.6	6.2	5.7	8.1	6.7	9.9	12.1
6233	Community care facilities for the elderly .....	8.8	4.1	8.0	5.0	3.4	6.8	10.6	9.7
623311	Continuing care retirement communities .....	10.1	3.8	7.7	5.9	3.8	5.9	8.4	7.3
623312	Homes for the elderly .....	7.1	4.6	8.5	3.8	2.8	8.0	13.7	13.1
6239	Other residential care facilities .....	5.0	2.2	4.2	2.7	5.0	6.1	7.6	6.0
624	Social assistance .....	7.2	5.1	6.5	7.0	6.1	6.8	11.2	11.6
6241	Individual and family services .....	8.0	7.9	5.2	6.6	5.5	6.5	12.4	12.4
62411	Child and youth services .....	4.9	3.8	6.3	0.9	8.3	4.9	13.2	11.8
62412	Services for the elderly and persons with disabilities .....	8.6	10.8	9.0	8.7	6.6	8.0	10.5	10.0
62419	Other individual and family services .....	8.9	7.4	1.8	7.5	3.3	6.1	13.4	14.5
6242	Community food and housing, and emergency and other relief services .....	-1.6	-0.3	14.1	10.6	7.1	5.2	8.4	10.2
62421	Community food services .....	6.5	3.2	8.0	5.4	7.0	3.3	6.1	11.8
62422	Community housing services .....	7.0	5.0	4.5	5.4	4.5	6.1	11.8	11.4
62423	Emergency and other relief services .....	-13.2	-6.0	26.6	19.3	10.0	5.2	6.2	7.9
6243	Vocational rehabilitation services .....	-0.9	-2.7	6.9	7.7	9.6	7.3	8.7	15.0
6244	Child day care services .....	15.9	7.6	3.7	5.0	4.8	8.3	11.8	9.2

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-8.1 provides estimated measures of sampling variability.

**Table 8.3. Health Care and Social Assistance (NAICS 62)—Estimated Revenue for Taxable Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	2003	2002	2001	2000	1999
<b>62</b>	<b>Health care and social assistance .....</b>	<b>835,940</b>	<b>776,259</b>	<b>730,440</b>	<b>681,156</b>	<b>634,652</b>	<b>589,368</b>	<b>544,334</b>	<b>500,932</b>	<b>470,243</b>
621	Ambulatory health care services .....	624,879	583,721	549,489	512,472	473,880	439,556	408,311	376,095	352,894
6211	Offices of physicians .....	346,043	327,588	310,780	290,782	270,327	248,824	231,327	213,806	200,242
6212	Offices of dentists .....	93,645	87,930	83,636	78,871	73,372	71,103	65,846	60,931	56,559
6213	Offices of other health practitioners .....	50,380	46,971	45,095	42,930	39,676	37,128	34,812	32,037	30,494
62131	Offices of chiropractors .....	10,833	10,232	9,876	9,624	9,363	8,975	8,427	7,570	7,285
62132	Offices of optometrists .....	11,037	10,214	9,793	9,318	8,607	8,342	7,942	7,639	7,039
62133	Offices of mental health practitioners (except physicians) .....	4,567	4,291	4,066	3,854	3,774	3,486	3,766	3,516	3,298
62134	Offices of physical, occupational and speech therapists, and audiologists .....	16,052	14,817	14,195	13,396	11,805	10,685	9,452	8,486	8,528
62139	Offices of all other health practitioners .....	7,891	7,417	7,165	6,738	6,127	5,640	5,225	4,826	4,344
621391	Offices of podiatrists .....	3,913	3,758	3,703	3,556	3,403	3,110	2,839	2,574	2,369
621399	Offices of all other miscellaneous health practitioners .....	3,978	3,659	3,462	3,182	2,724	2,530	2,386	S	S
6214	Outpatient care centers .....	40,677	36,414	31,487	29,195	S	S	S	S	S
62141	Family planning centers .....	597	473	457	457	412	339	333	337	269
62142	Outpatient mental health and substance abuse centers .....	2,733	2,327	2,183	1,894	1,813	1,713	1,580	1,373	1,462
62149	Other outpatient care centers .....	37,347	33,614	28,847	26,844	S	S	S	S	S
621491	HMO medical centers .....	S	S	S	S	S	S	S	S	S
621492	Kidney dialysis centers .....	15,507	14,153	10,674	9,647	8,640	7,872	6,881	6,250	5,492
621493	Freestanding ambulatory surgical and emergency centers .....	12,801	11,139	10,411	9,231	8,160	7,271	6,374	5,427	4,684
621498	All other outpatient care centers .....	8,089	7,418	6,873	7,131	S	S	6,059	5,721	5,283
6215	Medical and diagnostic laboratories .....	38,558	37,224	34,690	32,413	30,529	28,409	26,902	23,450	20,635
621511	Medical laboratories .....	22,768	22,003	20,509	19,115	18,202	16,907	16,727	14,878	12,949
621512	Diagnostic imaging centers .....	15,790	15,221	14,181	13,298	12,327	11,502	10,175	8,572	7,686
6216	Home health care services .....	37,714	31,873	29,736	25,477	22,050	19,518	18,120	16,879	17,759
6219	Other ambulatory care services .....	17,862	15,721	14,065	12,804	11,610	10,564	9,630	9,421	9,338
62191	Ambulance services .....	8,131	7,635	7,079	6,471	5,601	4,972	4,189	4,053	3,996
62199	All other ambulatory health care services .....	9,731	8,086	6,986	6,333	6,009	5,592	5,441	5,368	5,342
622	Hospitals .....	83,644	76,864	71,315	65,473	62,613	56,678	48,099	42,908	40,627
6221	General medical and surgical hospitals .....	68,110	62,967	58,568	54,275	53,127	48,821	41,301	36,926	34,997
6222	Psychiatric and substance abuse hospitals .....	3,215	2,646	2,317	2,002	2,290	2,410	2,412	2,189	2,177
6223	Specialty (except psychiatric and substance abuse) hospitals .....	12,319	11,251	10,430	9,196	7,196	5,447	4,386	3,793	3,453

See footnotes at end of table.

**Table 8.3. Health Care and Social Assistance (NAICS 62)—Estimated Revenue for Taxable Employer Firms: 1999 Through 2007 —**  
**Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	2003	2002	2001	2000	1999
623	Nursing and residential care facilities .....	95,295	88,428	85,294	80,827	77,485	74,165	70,329	66,245	62,496
6231	Nursing care facilities .....	67,881	63,057	61,240	58,738	56,549	54,225	51,907	49,816	47,839
6232	Residential mental retardation, mental health and substance abuse facilities .....	7,698	7,109	6,693	6,143	5,959	5,584	5,114	4,726	4,392
62321	Residential mental retardation facilities .....	5,345	4,981	4,638	4,298	4,234	3,935	3,581	3,297	3,057
62322	Residential mental health and substance abuse facilities .....	2,353	2,128	2,055	1,845	1,725	1,649	1,533	1,429	1,335
6233	Community care facilities for the elderly .....	18,220	16,964	16,070	14,822	13,878	13,341	12,328	10,812	9,431
623311	Continuing care retirement communities .....	6,662	6,039	5,677	5,212	4,764	4,477	4,087	3,576	3,195
623312	Homes for the elderly .....	11,558	10,925	10,393	9,610	9,114	8,864	8,241	7,236	6,236
6239	Other residential care facilities .....	1,496	1,298	1,291	1,124	1,099	1,015	980	891	834
624	Social assistance .....	32,122	27,246	24,342	22,384	20,674	18,969	17,595	15,684	14,226
6241	Individual and family services .....	10,252	8,766	7,395	6,295	5,544	5,038	4,470	3,824	3,290
62411	Child and youth services .....	1,270	1,146	947	799	789	722	687	634	561
62412	Services for the elderly and persons with disabilities .....	4,591	4,118	3,512	3,000	2,530	2,236	1,892	1,606	1,384
62419	Other individual and family services .....	4,391	3,502	2,936	2,496	2,225	2,080	1,891	1,584	1,345
6242	Community food and housing, and emergency and other relief services .....	S	S	S	S	84	82	58	46	39
62421	Community food services .....	39	33	29	21	S	S	S	S	S
62422	Community housing services .....	111	85	65	60	47	51	36	28	24
62423	Emergency and other relief services .....	S	S	S	S	S	S	S	S	S
6243	Vocational rehabilitation services .....	2,715	2,754	2,655	2,250	2,005	1,836	1,817	1,593	1,393
6244	Child day care services .....	18,977	15,580	14,170	13,738	13,041	12,013	11,250	10,221	9,504

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-8.2 provides estimated measures of sampling variability.

**Table 8.4. Health Care and Social Assistance (NAICS 62)—Estimated Year-to-Year Percent Change in Revenue for Taxable Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007/2006	2006/2005	2005/2004	2004/2003	2003/2002	2002/2001	2001/2000	2000/1999
<b>62</b>	<b>Health care and social assistance .....</b>	<b>7.7</b>	<b>6.3</b>	<b>7.2</b>	<b>7.3</b>	<b>7.7</b>	<b>8.3</b>	<b>8.7</b>	<b>6.5</b>
621	Ambulatory health care services .....	7.1	6.2	7.2	8.1	7.8	7.7	8.6	6.6
6211	Offices of physicians .....	5.6	5.4	6.9	7.6	8.6	7.6	8.2	6.8
6212	Offices of dentists .....	6.5	5.1	6.0	7.5	3.2	8.0	8.1	7.7
6213	Offices of other health practitioners .....	7.3	4.2	5.0	8.2	6.9	6.7	8.7	5.1
62131	Offices of chiropractors .....	5.9	3.6	2.6	2.8	4.3	6.5	11.3	3.9
62132	Offices of optometrists .....	8.1	4.3	5.1	8.3	3.2	5.0	4.0	8.5
62133	Offices of mental health practitioners (except physicians) .....	6.4	5.5	5.5	2.1	8.3	-7.4	7.1	6.6
62134	Offices of physical, occupational and speech therapists, and audiologists .....	8.3	4.4	6.0	13.5	10.5	13.0	11.4	-0.5
62139	Offices of all other health practitioners .....	6.4	3.5	6.3	10.0	8.6	7.9	8.3	11.1
621391	Offices of podiatrists .....	4.1	1.5	4.1	4.5	9.4	9.5	10.3	8.7
621399	Offices of all other miscellaneous health practitioners .....	8.7	5.7	8.8	16.8	7.7	6.0	S	S
6214	Outpatient care centers .....	11.7	15.6	7.9	S	S	S	S	S
62141	Family planning centers .....	26.2	3.5	Z	10.9	21.5	1.8	-1.2	25.3
62142	Outpatient mental health and substance abuse centers .....	17.4	6.6	15.3	4.5	5.8	8.4	15.1	-6.1
62149	Other outpatient care centers .....	11.1	16.5	7.5	S	S	S	S	S
621491	HMO medical centers .....	S	S	S	S	S	S	S	S
621492	Kidney dialysis centers .....	9.6	32.6	10.6	11.7	9.8	14.4	10.1	13.8
621493	Freestanding ambulatory surgical and emergency centers .....	14.9	7.0	12.8	13.1	12.2	14.1	17.4	15.9
621498	All other outpatient care centers .....	9.0	7.9	-3.6	S	S	S	5.9	8.3
6215	Medical and diagnostic laboratories .....	3.6	7.3	7.0	6.2	7.5	5.6	14.7	13.6
621511	Medical laboratories .....	3.5	7.3	7.3	5.0	7.7	1.1	12.4	14.9
621512	Diagnostic imaging centers .....	3.7	7.3	6.6	7.9	7.2	13.0	18.7	11.5
6216	Home health care services .....	18.3	7.2	16.7	15.5	13.0	7.7	7.4	-5.0
6219	Other ambulatory care services .....	13.6	11.8	9.8	10.3	9.9	9.7	2.2	0.9
62191	Ambulance services .....	6.5	7.9	9.4	15.5	12.7	18.7	3.4	1.4
62199	All other ambulatory health care services .....	20.3	15.7	10.3	5.4	7.5	2.8	1.4	0.5
622	Hospitals .....	8.8	7.8	8.9	4.6	10.5	17.8	12.1	5.6
6221	General medical and surgical hospitals .....	8.2	7.5	7.9	2.2	8.8	18.2	11.8	5.5
6222	Psychiatric and substance abuse hospitals .....	21.5	14.2	15.7	-12.6	-5.0	-0.1	10.2	0.6
6223	Specialty (except psychiatric and substance abuse) hospitals .....	9.5	7.9	13.4	27.8	32.1	24.2	15.6	9.8

See footnotes at end of table.

**Table 8.4. Health Care and Social Assistance (NAICS 62)—Estimated Year-to-Year Percent Change in Revenue for Taxable Employer Firms: 1999 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007/2006	2006/2005	2005/2004	2004/2003	2003/2002	2002/2001	2001/2000	2000/1999
623	Nursing and residential care facilities .....	7.8	3.7	5.5	4.3	4.5	5.5	6.2	6.0
6231	Nursing care facilities .....	7.7	3.0	4.3	3.9	4.3	4.5	4.2	4.1
6232	Residential mental retardation, mental health and substance abuse facilities .....	8.3	6.2	9.0	3.1	6.7	9.2	8.2	7.6
62321	Residential mental retardation facilities .....	7.3	7.4	7.9	1.5	7.6	9.9	8.6	7.9
62322	Residential mental health and substance abuse facilities .....	10.6	3.6	11.4	7.0	4.6	7.6	7.3	7.0
6233	Community care facilities for the elderly .....	7.4	5.6	8.4	6.8	4.0	8.2	14.0	14.6
623311	Continuing care retirement communities .....	10.3	6.4	8.9	9.4	6.4	9.5	14.3	11.9
623312	Homes for the elderly .....	5.8	5.1	8.1	5.4	2.8	7.6	13.9	16.0
6239	Other residential care facilities .....	15.3	0.5	14.9	2.3	8.3	3.6	10.0	6.8
624	Social assistance .....	17.9	11.9	8.7	8.3	9.0	7.8	12.2	10.2
6241	Individual and family services .....	17.0	18.5	17.5	13.5	10.0	12.7	16.9	16.2
62411	Child and youth services .....	10.8	21.0	18.5	1.3	9.3	5.1	8.4	13.0
62412	Services for the elderly and persons with disabilities .....	11.5	17.3	17.1	18.6	13.1	18.2	17.8	16.0
62419	Other individual and family services .....	25.4	19.3	17.6	12.2	7.0	10.0	19.4	17.8
6242	Community food and housing, and emergency and other relief services .....	S	S	S	S	2.4	41.4	26.1	17.9
62421	Community food services .....	18.2	13.8	38.1	S	S	S	S	S
62422	Community housing services .....	30.6	30.8	8.3	27.7	-7.8	41.7	28.6	16.7
62423	Emergency and other relief services .....	S	S	S	S	S	S	S	S
6243	Vocational rehabilitation services .....	-1.4	3.7	18.0	12.2	9.2	1.0	14.1	14.4
6244	Child day care services .....	21.8	10.0	3.1	5.3	8.6	6.8	10.1	7.5

Z Absolute value is less than 0.05. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-8.2 provides estimated measures of sampling variability.

**Table 8.5. Health Care and Social Assistance (NAICS 62)—Estimated Revenue for Tax-Exempt Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	2003	2002	2001	2000	1999
<b>62</b>	<b>Health care and social assistance .....</b>	<b>828,607</b>	<b>782,497</b>	<b>747,959</b>	<b>698,413</b>	<b>650,866</b>	<b>617,930</b>	<b>570,736</b>	<b>532,097</b>	<b>506,092</b>
621	Ambulatory health care services .....	67,975	64,199	61,317	55,821	52,448	49,063	45,408	43,307	41,428
6214	Outpatient care centers .....	41,456	39,522	37,977	34,381	S	S	S	S	S
62141	Family planning centers .....	1,145	1,060	1,010	941	882	852	808	792	768
62142	Outpatient mental health and substance abuse centers .....	8,840	8,420	8,012	7,555	7,495	7,269	6,710	6,269	6,025
62149	Other outpatient care centers .....	31,471	30,042	28,955	25,885	S	S	S	S	S
621491	HMO medical centers .....	4,638	4,667	4,084	3,803	S	S	S	S	S
621492	Kidney dialysis centers .....	1,057	1,001	952	943	894	866	877	748	727
621493	Freestanding ambulatory surgical and emergency centers ..	1,740	1,597	1,517	1,461	1,365	1,179	1,048	1,019	1,087
621498	All other outpatient care centers .....	24,036	22,777	22,402	19,678	18,810	17,459	15,725	15,297	14,845
6216	Home health care services .....	15,950	14,943	14,233	12,834	11,951	10,869	10,236	9,962	9,765
6219	Other ambulatory care services .....	10,569	9,734	9,107	8,606	7,742	7,384	6,702	6,144	5,406
62191	Ambulance services .....	1,940	1,741	1,669	1,558	1,483	1,552	1,436	1,250	1,148
62199	All other ambulatory health care services .....	8,629	7,993	7,438	7,048	6,259	5,832	5,266	4,894	4,258
622	Hospitals .....	603,491	568,040	540,207	503,990	466,589	443,434	407,163	380,981	366,090
6221	General medical and surgical hospitals .....	574,560	540,833	514,439	479,573	443,089	420,906	386,028	360,600	345,553
6222	Psychiatric and substance abuse hospitals .....	12,826	12,202	11,597	11,361	11,288	11,216	11,119	11,233	11,729
6223	Specialty (except psychiatric and substance abuse) hospitals ..	16,105	15,005	14,171	13,056	12,212	11,312	10,016	9,148	8,808
623	Nursing and residential care facilities .....	64,742	61,357	60,284	57,241	55,510	52,949	50,133	46,461	43,764
6231	Nursing care facilities .....	22,796	22,213	22,275	21,223	20,889	19,892	18,883	17,422	16,696
6232	Residential mental retardation, mental health and substance abuse facilities .....	17,845	16,819	16,239	15,459	14,656	13,733	12,963	11,992	10,908
62321	Residential mental retardation facilities .....	12,364	11,435	10,969	10,405	9,857	9,345	8,836	8,273	7,651
62322	Residential mental health and substance abuse facilities .....	5,481	5,384	5,270	5,054	4,799	4,388	4,127	3,719	3,257
6233	Community care facilities for the elderly .....	16,456	14,914	14,542	13,511	13,106	12,758	12,119	11,292	10,726
623311	Continuing care retirement communities .....	13,459	12,243	11,932	11,132	10,665	10,385	9,951	9,372	8,867
623312	Homes for the elderly .....	2,997	2,671	2,610	2,379	2,441	2,373	2,168	1,920	1,859
6239	Other residential care facilities .....	7,645	7,411	7,228	7,048	6,859	6,566	6,168	5,755	5,434

See footnotes at end of table.



**Table 8.5. Health Care and Social Assistance (NAICS 62)—Estimated Revenue for Tax-Exempt Employer Firms: 1999 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	2003	2002	2001	2000	1999
624	Social assistance .....	92,399	88,901	86,151	81,361	76,319	72,484	68,032	61,348	54,810
6241	Individual and family services .....	51,306	48,228	45,411	43,882	41,540	39,607	37,458	33,487	29,908
62411	Child and youth services .....	10,022	9,617	9,420	8,956	8,877	8,204	7,823	6,883	6,161
62412	Services for the elderly and persons with disabilities .....	18,646	17,283	15,798	14,711	13,769	13,047	12,256	11,198	10,257
62419	Other individual and family services .....	22,638	21,328	20,193	20,215	18,894	18,356	17,379	15,406	13,490
6242	Community food and housing, and emergency and other relief services .....	18,401	18,735	18,813	16,492	14,916	13,924	13,259	12,235	11,109
62421	Community food services .....	4,122	3,873	3,755	3,484	3,308	3,091	2,997	2,827	2,529
62422	Community housing services .....	7,399	6,933	6,618	6,337	6,020	5,752	5,431	4,860	4,365
62423	Emergency and other relief services .....	6,880	7,929	8,440	6,671	5,588	5,081	4,831	4,548	4,215
6243	Vocational rehabilitation services .....	10,710	10,796	11,266	10,775	10,089	9,195	8,464	7,865	6,831
6244	Child day care services .....	11,982	11,142	10,661	10,212	9,774	9,758	8,851	7,761	6,962

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-8.3 provides estimated measures of sampling variability.

**Table 8.6. Health Care and Social Assistance (NAICS 62)—Estimated Year-to-Year Percent Change in Revenue for Tax-Exempt Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007/2006	2006/2005	2005/2004	2004/2003	2003/2002	2002/2001	2001/2000	2000/1999
<b>62</b>	<b>Health care and social assistance .....</b>	<b>5.9</b>	<b>4.6</b>	<b>7.1</b>	<b>7.3</b>	<b>5.3</b>	<b>8.3</b>	<b>7.3</b>	<b>5.1</b>
621	Ambulatory health care services .....	5.9	4.7	9.8	6.4	6.9	8.0	4.9	4.5
6214	Outpatient care centers .....	4.9	4.1	10.5	S	S	S	S	S
62141	Family planning centers .....	8.0	5.0	7.3	6.7	3.5	5.4	2.0	3.1
62142	Outpatient mental health and substance abuse centers .....	5.0	5.1	6.0	0.8	3.1	8.3	7.0	4.0
62149	Other outpatient care centers .....	4.8	3.8	11.9	S	S	S	S	S
621491	HMO medical centers .....	-0.6	14.3	7.4	S	S	S	S	S
621492	Kidney dialysis centers .....	5.6	5.1	1.0	5.5	3.2	-1.3	17.2	2.9
621493	Freestanding ambulatory surgical and emergency centers .....	9.0	5.3	3.8	7.0	15.8	12.5	2.8	-6.3
621498	All other outpatient care centers .....	5.5	1.7	13.8	4.6	7.7	11.0	2.8	3.0
6216	Home health care services .....	6.7	5.0	10.9	7.4	10.0	6.2	2.8	2.0
6219	Other ambulatory care services .....	8.6	6.9	5.8	11.2	4.8	10.2	9.1	13.7
62191	Ambulance services .....	11.4	4.3	7.1	5.1	-4.4	8.1	14.9	8.9
62199	All other ambulatory health care services .....	8.0	7.5	5.5	12.6	7.3	10.7	7.6	14.9
622	Hospitals .....	6.2	5.2	7.2	8.0	5.2	8.9	6.9	4.1
6221	General medical and surgical hospitals .....	6.2	5.1	7.3	8.2	5.3	9.0	7.1	4.4
6222	Psychiatric and substance abuse hospitals .....	5.1	5.2	2.1	0.6	0.6	0.9	-1.0	-4.2
6223	Specialty (except psychiatric and substance abuse) hospitals .....	7.3	5.9	8.5	6.9	8.0	12.9	9.5	3.9
623	Nursing and residential care facilities .....	5.5	1.8	5.3	3.1	4.8	5.6	7.9	6.2
6231	Nursing care facilities .....	2.6	-0.3	5.0	1.6	5.0	5.3	8.4	4.3
6232	Residential mental retardation, mental health and substance abuse facilities .....	6.1	3.6	5.0	5.5	6.7	5.9	8.1	9.9
62321	Residential mental retardation facilities .....	8.1	4.2	5.4	5.6	5.5	5.8	6.8	8.1
62322	Residential mental health and substance abuse facilities .....	1.8	2.2	4.3	5.3	9.4	6.3	11.0	14.2
6233	Community care facilities for the elderly .....	10.3	2.6	7.6	3.1	2.7	5.3	7.3	5.3
623311	Continuing care retirement communities .....	9.9	2.6	7.2	4.4	2.7	4.4	6.2	5.7
623312	Homes for the elderly .....	12.2	2.3	9.7	-2.5	2.9	9.5	12.9	3.3
6239	Other residential care facilities .....	3.2	2.5	2.6	2.8	4.5	6.5	7.2	5.9

See footnotes at end of table.

**Table 8.6. Health Care and Social Assistance (NAICS 62)—Estimated Year-to-Year Percent Change in Revenue for Tax-Exempt Employer Firms: 1999 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007/2006	2006/2005	2005/2004	2004/2003	2003/2002	2002/2001	2001/2000	2000/1999
624	Social assistance .....	3.9	3.2	5.9	6.6	5.3	6.5	10.9	11.9
6241	Individual and family services .....	6.4	6.2	3.5	5.6	4.9	5.7	11.9	12.0
62411	Child and youth services .....	4.2	2.1	5.2	0.9	8.2	4.9	13.7	11.7
62412	Services for the elderly and persons with disabilities .....	7.9	9.4	7.4	6.8	5.5	6.5	9.4	9.2
62419	Other individual and family services .....	6.1	5.6	-0.1	7.0	2.9	5.6	12.8	14.2
6242	Community food and housing, and emergency and other relief services .....	-1.8	-0.4	14.1	10.6	7.1	5.0	8.4	10.1
62421	Community food services .....	6.4	3.1	7.8	5.3	7.0	3.1	6.0	11.8
62422	Community housing services .....	6.7	4.8	4.4	5.3	4.7	5.9	11.7	11.3
62423	Emergency and other relief services .....	-13.2	-6.1	26.5	19.4	10.0	5.2	6.2	7.9
6243	Vocational rehabilitation services .....	-0.8	-4.2	4.6	6.8	9.7	8.6	7.6	15.1
6244	Child day care services .....	7.5	4.5	4.4	4.5	0.2	10.2	14.0	11.5

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-8.3 provides estimated measures of sampling variability.

**Table 8.7. Health Care and Social Assistance (NAICS 62)—Estimated Expenses for Tax-Exempt Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
<b>62</b>	<b>Health care and social assistance .....</b>	<b>763,694</b>	<b>731,622</b>	<b>689,715</b>	<b>649,641</b>	<b>4.4</b>	<b>6.1</b>	<b>6.2</b>
621	Ambulatory health care services .....	62,525	59,423	55,950	52,559	5.2	6.2	6.5
6214	Outpatient care centers .....	37,610	36,173	34,694	32,493	4.0	4.3	6.8
62141	Family planning centers .....	1,067	1,015	956	893	5.1	6.2	7.1
62142	Outpatient mental health and substance abuse centers .....	8,475	8,250	7,816	7,332	2.7	5.6	6.6
62149	Other outpatient care centers .....	28,068	26,908	25,922	24,268	4.3	3.8	6.8
621491	HMO medical centers .....	4,418	4,212	3,801	3,428	4.9	10.8	10.9
621492	Kidney dialysis centers .....	952	922	902	878	3.3	2.2	2.7
621493	Freestanding ambulatory surgical and emergency centers .....	1,316	1,259	1,239	1,174	4.5	1.6	5.5
621498	All other outpatient care centers .....	21,382	20,515	19,980	18,788	4.2	2.7	6.3
6216	Home health care services .....	15,139	14,113	12,775	12,113	7.3	10.5	5.5
6219	Other ambulatory care services .....	9,776	9,137	8,481	7,953	7.0	7.7	6.6
62191	Ambulance services .....	1,799	1,644	1,513	1,420	9.4	8.7	6.5
62199	All other ambulatory health care services .....	7,977	7,493	6,968	6,533	6.5	7.5	6.7
622	Hospitals .....	554,787	530,597	497,033	466,361	4.6	6.8	6.6
6221	General medical and surgical hospitals .....	527,018	503,891	472,145	442,789	4.6	6.7	6.6
6222	Psychiatric and substance abuse hospitals .....	13,370	12,640	11,775	11,402	5.8	7.3	3.3
6223	Specialty (except psychiatric and substance abuse) hospitals .....	14,399	14,066	13,113	12,170	2.4	7.3	7.7
623	Nursing and residential care facilities .....	61,370	59,833	57,487	54,687	2.6	4.1	5.1
6231	Nursing care facilities .....	21,801	21,811	21,257	20,362	Z	2.6	4.4
6232	Residential mental retardation, mental health and substance abuse facilities .....	16,914	16,254	15,592	14,830	4.1	4.2	5.1
62321	Residential mental retardation facilities .....	11,777	11,038	10,472	9,916	6.7	5.4	5.6
62322	Residential mental health and substance abuse facilities .....	5,137	5,216	5,120	4,914	-1.5	1.9	4.2
6233	Community care facilities for the elderly .....	15,131	14,332	13,595	12,662	5.6	5.4	7.4
623311	Continuing care retirement communities .....	12,354	11,690	11,159	10,410	5.7	4.8	7.2
623312	Homes for the elderly .....	2,777	2,642	2,436	2,252	5.1	8.5	8.2
6239	Other residential care facilities .....	7,524	7,436	7,043	6,833	1.2	5.6	3.1

See footnotes at end of table.

**Table 8.7. Health Care and Social Assistance (NAICS 62)—Estimated Expenses for Tax-Exempt Employer Firms: 2004 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
624	Social assistance .....	85,012	81,769	79,245	76,034	4.0	3.2	4.2
6241	Individual and family services .....	46,571	44,409	42,094	41,218	4.9	5.5	2.1
62411	Child and youth services .....	9,435	9,096	8,801	8,448	3.7	3.4	4.2
62412	Services for the elderly and persons with disabilities .....	16,238	15,171	13,841	13,256	7.0	9.6	4.4
62419	Other individual and family services .....	20,898	20,142	19,452	19,514	3.8	3.5	-0.3
6242	Community food and housing, and emergency and other relief services .....	17,062	16,853	16,246	15,063	1.2	3.7	7.9
62421	Community food services .....	3,756	3,539	3,365	3,218	6.1	5.2	4.6
62422	Community housing services .....	6,699	6,309	6,024	5,676	6.2	4.7	6.1
62423	Emergency and other relief services .....	6,607	7,005	6,857	6,169	-5.7	2.2	11.2
6243	Vocational rehabilitation services .....	9,994	9,809	10,594	9,941	1.9	-7.4	6.6
6244	Child day care services .....	11,385	10,698	10,311	9,812	6.4	3.8	5.1

Z Absolute value is less than 0.05.

Note: Estimates cover tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-8.4 provides estimated measures of sampling variability.

**Table 8.8. Selected Health Care Services (NAICS 622 and 623)—Estimated Expenses for Taxable Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
622	Hospitals .....	71,070	64,667	60,245	56,535	9.9	7.3	6.6
6221	General medical and surgical hospitals .....	58,009	53,063	49,596	47,057	9.3	7.0	5.4
6222	Psychiatric and substance abuse hospitals .....	2,769	2,261	1,977	1,834	22.5	14.4	7.8
6223	Specialty (except psychiatric and substance abuse) hospitals .....	10,292	9,343	8,672	7,644	10.2	7.7	13.4
623	Nursing and residential care facilities .....	88,158	82,694	79,915	74,908	6.6	3.5	6.7
6231	Nursing care facilities .....	63,216	59,359	57,808	54,681	6.5	2.7	5.7
6232	Residential mental retardation, mental health and substance abuse facilities .....	7,065	6,581	6,171	5,698	7.4	6.6	8.3
62321	Residential mental retardation facilities .....	4,835	4,619	4,339	4,063	4.7	6.5	6.8
62322	Residential mental health and substance abuse facilities .....	2,230	1,962	1,832	1,635	13.7	7.1	12.0
6233	Community care facilities for the elderly .....	16,466	15,539	14,750	13,481	6.0	5.3	9.4
623311	Continuing care retirement communities .....	6,112	5,388	5,233	4,645	13.4	3.0	12.7
623312	Homes for the elderly .....	10,354	10,151	9,517	8,836	2.0	6.7	7.7
6239	Other residential care facilities .....	1,411	1,215	1,186	1,048	16.1	2.4	13.2

Note: Estimates cover taxable firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-8.5 provides estimated measures of sampling variability.

**Table 8.9. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Revenue for Employer Firms by Source: 2006 and 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006
<b>OFFICES OF PHYSICIANS (NAICS 6211)</b>		
<b>Patient Care Revenue</b>		
Medicare .....	74,032	70,730
Medicaid .....	18,321	16,944
Other government (Veterans, NIH, Indian Affairs, etc.) .....	4,687	4,350
Worker's compensation .....	7,219	7,036
Private insurance .....	173,245	164,895
Private health insurance .....	171,021	162,751
Property/Casualty and auto insurance .....	2,224	2,144
Patient (out-of-pocket) .....	35,333	33,467
All other patient care sources not elsewhere classified .....	19,162	17,830
<b>Non-Patient Care Revenue</b>		
All other sources .....	S	12,337
<b>OFFICES OF DENTISTS (NAICS 6212)</b>		
<b>Patient Care Revenue</b>		
Medicare .....	789	802
Medicaid .....	3,690	3,367
Other government (Veterans, NIH, Indian Affairs, etc.) .....	454	488
Worker's compensation .....	86	85
Private insurance .....	42,593	40,680
Private health insurance .....	42,474	40,510
Property/Casualty and auto insurance .....	S	S
Patient (out-of-pocket) .....	42,575	39,009
All other patient care sources not elsewhere classified .....	2,861	2,932
<b>Non-Patient Care Revenue</b>		
All other sources .....	S	567
<b>OFFICES OF OTHER HEALTH PRACTITIONERS (NAICS 6213)</b>		
<b>Patient Care Revenue</b>		
Medicare .....	6,285	6,001
Medicaid .....	2,170	2,105
Other government (Veterans, NIH, Indian Affairs, etc.) .....	1,970	1,710
Worker's compensation .....	2,441	2,340
Private insurance .....	19,434	18,280
Private health insurance .....	17,440	16,366
Property/Casualty and auto insurance .....	1,994	1,914
Patient (out-of-pocket) .....	12,335	11,433
All other patient care sources not elsewhere classified .....	4,282	3,712
<b>Non-Patient Care Revenue</b>		
All other sources .....	S	1,393

See footnotes at end of table.

**Table 8.9. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Revenue for Employer Firms by Source: 2006 and 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006
<b>OFFICES OF CHIROPRACTORS (NAICS 62131)</b>		
<b>Patient Care Revenue</b>		
Medicare .....	902	869
Medicaid .....	95	84
Other government (Veterans, NIH, Indian Affairs, etc.) .....	S	S
Worker's compensation .....	496	489
Private insurance .....	6,102	5,779
Private health insurance .....	4,600	4,356
Property/Casualty and auto insurance .....	1,502	1,423
Patient (out-of-pocket) .....	2,979	2,774
All other patient care sources not elsewhere classified .....	171	155
<b>Non-Patient Care Revenue</b>		
All other sources .....	S	65
<b>OFFICES OF OPTOMETRISTS (NAICS 62132)</b>		
<b>Patient Care Revenue</b>		
Medicare .....	940	899
Medicaid .....	441	444
Other government (Veterans, NIH, Indian Affairs, etc.) .....	50	44
Worker's compensation .....	15	12
Private insurance .....	3,658	3,336
Private health insurance .....	3,655	3,333
Property/Casualty and auto insurance .....	S	S
Patient (out-of-pocket) .....	5,570	5,121
All other patient care sources not elsewhere classified .....	S	318
<b>Non-Patient Care Revenue</b>		
All other sources .....	S	40
<b>OFFICES OF MENTAL HEALTH PRACTITIONERS (EXCEPT PHYSICIANS) (NAICS 62133)</b>		
<b>Patient Care Revenue</b>		
Medicare .....	220	219
Medicaid .....	669	632
Other government (Veterans, NIH, Indian Affairs, etc.) .....	804	708
Worker's compensation .....	64	70
Private insurance .....	1,237	1,206
Private health insurance .....	1,208	1,176
Property/Casualty and auto insurance .....	29	29
Patient (out-of-pocket) .....	1,111	1,034
All other patient care sources not elsewhere classified .....	152	129
<b>Non-Patient Care Revenue</b>		
All other sources .....	S	294

See footnotes at end of table.



**Table 8.9. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Revenue for Employer Firms by Source: 2006 and 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006
<b>OFFICES OF PHYSICAL, OCCUPATIONAL AND SPEECH THERAPISTS, AND AUDIOLOGISTS (NAICS 62134)</b>		
<b>Patient Care Revenue</b>		
Medicare .....	2,745	2,616
Medicaid .....	593	588
Other government (Veterans, NIH, Indian Affairs, etc.) .....	882	744
Worker's compensation .....	1,758	1,669
Private insurance .....	5,355	4,952
Private health insurance .....	4,972	4,576
Property/Casualty and auto insurance .....	383	376
Patient (out-of-pocket) .....	1,307	1,298
All other patient care sources not elsewhere classified .....	2,875	2,423
<b>Non-Patient Care Revenue</b>		
All other sources .....	S	527
<b>OFFICES OF PODIATRISTS (NAICS 621391)</b>		
<b>Patient Care Revenue</b>		
Medicare .....	1,101	1,050
Medicaid .....	144	136
Other government (Veterans, NIH, Indian Affairs, etc.) .....	36	31
Worker's compensation .....	48	45
Private insurance .....	2,036	1,992
Private health insurance .....	2,013	1,960
Property/Casualty and auto insurance .....	S	S
Patient (out-of-pocket) .....	444	407
All other patient care sources not elsewhere classified .....	76	76
<b>Non-Patient Care Revenue</b>		
All other sources .....	S	S
<b>OUTPATIENT CARE CENTERS (NAICS 6214)</b>		
<b>Patient Care Revenue</b>		
Medicare .....	16,024	14,518
Medicaid .....	10,981	10,790
Other government (Veterans, NIH, Indian Affairs, etc.) .....	4,608	4,111
Worker's compensation .....	S	1,672
Private insurance .....	23,772	21,889
Private health insurance .....	23,547	21,659
Property/Casualty and auto insurance .....	224	230
Patient (out-of-pocket) .....	5,042	4,676
All other patient care sources not elsewhere classified .....	8,662	8,327
<b>Non-Patient Care Revenue</b>		
All other sources .....	S	9,952

See footnotes at end of table.

**Table 8.9. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Revenue for Employer Firms by Source: 2006 and 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006
<b>OUTPATIENT MENTAL HEALTH AND SUBSTANCE ABUSE CENTERS (NAICS 62142)</b>		
<b>Patient Care Revenue</b>		
Medicare .....	355	343
Medicaid .....	4,098	4,001
Other government (Veterans, NIH, Indian Affairs, etc.) .....	2,460	2,178
Worker's compensation .....	S	9
Private insurance .....	983	886
Private health insurance .....	964	864
Property/Casualty and auto insurance .....	S	S
Patient (out-of-pocket) .....	749	681
All other patient care sources not elsewhere classified .....	1,092	1,003
<b>Non-Patient Care Revenue</b>		
All other sources .....	S	1,644
<b>OTHER OUTPATIENT CARE CENTERS (NAICS 62149)</b>		
<b>Patient Care Revenue</b>		
Medicare .....	15,653	14,158
Medicaid .....	6,676	6,587
Other government (Veterans, NIH, Indian Affairs, etc.) .....	2,001	1,784
Worker's compensation .....	S	1,663
Private insurance .....	22,507	20,791
Private health insurance .....	22,301	20,584
Property/Casualty and auto insurance .....	206	207
Patient (out-of-pocket) .....	3,734	3,489
All other patient care sources not elsewhere classified .....	7,533	7,297
<b>Non-Patient Care Revenue</b>		
All other sources .....	S	S
<b>KIDNEY DIALYSIS CENTERS (NAICS 621492)</b>		
<b>Patient Care Revenue</b>		
Medicare .....	9,107	8,251
Medicaid .....	863	782
Other government (Veterans, NIH, Indian Affairs, etc.) .....	196	179
Worker's compensation .....	S	S
Private insurance .....	5,532	5,159
Private health insurance .....	5,532	5,159
Property/Casualty and auto insurance .....	ZZ	S
Patient (out-of-pocket) .....	149	135
All other patient care sources not elsewhere classified .....	604	557
<b>Non-Patient Care Revenue</b>		
All other sources .....	S	91

See footnotes at end of table.

**Table 8.9. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Revenue for Employer Firms by Source: 2006 and 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006
<b>FREESTANDING AMBULATORY SURGICAL AND EMERGENCY CENTERS (NAICS 621493)</b>		
<b>Patient Care Revenue</b>		
Medicare .....	2,285	2,072
Medicaid .....	449	426
Other government (Veterans, NIH, Indian Affairs, etc.) .....	293	218
Worker's compensation .....	791	710
Private insurance .....	7,997	7,105
Private health insurance .....	7,895	6,998
Property/Casualty and auto insurance .....	S	107
Patient (out-of-pocket) .....	1,518	1,275
All other patient care sources not elsewhere classified .....	596	428
<b>Non-Patient Care Revenue</b>		
All other sources .....	S	502
<b>ALL OTHER OUTPATIENT CARE CENTERS (NAICS 621498)</b>		
<b>Patient Care Revenue</b>		
Medicare .....	3,699	3,280
Medicaid .....	S	S
Other government (Veterans, NIH, Indian Affairs, etc.) .....	1,512	S
Worker's compensation .....	S	936
Private insurance .....	8,259	7,914
Private health insurance .....	8,162	7,821
Property/Casualty and auto insurance .....	97	93
Patient (out-of-pocket) .....	S	1,878
All other patient care sources not elsewhere classified .....	S	2,763
<b>Non-Patient Care Revenue</b>		
All other sources .....	S	S
<b>MEDICAL AND DIAGNOSTIC LABORATORIES (NAICS 6215)</b>		
<b>Patient Care Revenue</b>		
Health practitioners .....	3,165	2,946
Hospitals .....	4,533	4,454
Outpatient care facilities .....	611	590
All other health care providers .....	1,091	1,069
Medicare .....	5,866	5,951
Medicaid .....	1,356	1,335
Other government (Veterans, NIH, Indian Affairs, etc.) .....	257	236
Worker's compensation .....	510	465
Private insurance .....	16,755	16,054
Private health insurance .....	16,465	15,785
Property/Casualty and auto insurance .....	290	269
Patient (out-of-pocket) .....	2,266	2,170
<b>Non-Patient Care Revenue</b>		
All other sources .....	S	1,954

See footnotes at end of table.

**Table 8.9. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Revenue for Employer Firms by Source: 2006 and 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006
<b>HOME HEALTH CARE SERVICES (NAICS 6216)</b>		
<b>Patient Care Revenue</b>		
Medicare .....	24,256	20,246
Medicaid .....	12,505	11,537
Other government (Veterans, NIH, Indian Affairs, etc.) .....	1,274	1,270
Worker's compensation .....	158	119
Private insurance .....	9,072	8,044
Private health insurance .....	8,872	7,863
Property/Casualty and auto insurance .....	S	181
Patient (out-of-pocket) .....	2,379	2,149
All other patient care sources not elsewhere classified .....	2,526	2,233
<b>Non-Patient Care Revenue</b>		
All other sources .....	S	1,218
<b>OTHER AMBULATORY CARE SERVICES (NAICS 6219)</b>		
<b>Patient Care Revenue</b>		
Medicare .....	3,638	3,472
Medicaid .....	S	S
Other government (Veterans, NIH, Indian Affairs, etc.) .....	397	409
Worker's compensation .....	414	381
Private insurance .....	6,936	6,144
Private health insurance .....	6,558	5,750
Property/Casualty and auto insurance .....	378	395
Patient (out-of-pocket) .....	1,790	1,567
All other patient care sources not elsewhere classified .....	7,561	6,991
<b>Non-Patient Care Revenue</b>		
All other sources .....	S	4,376
<b>HOSPITALS (NAICS 622)</b>		
<b>Patient Care Revenue</b>		
Medicare .....	177,200	174,855
Medicaid .....	69,408	66,770
Other government (Veterans, NIH, Indian Affairs, etc.) .....	34,139	33,991
Worker's compensation .....	6,658	6,706
Private insurance .....	286,764	265,579
Private health insurance .....	283,684	262,976
Property/Casualty and auto insurance .....	3,081	2,603
Patient (out-of-pocket) .....	31,251	32,374
All other patient care sources not elsewhere classified .....	22,412	23,992
<b>Non-Patient Care Revenue</b>		
All other sources .....	S	40,636

See footnotes at end of table.

**Table 8.9. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Revenue for Employer Firms by Source: 2006 and 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006
<b>NURSING AND RESIDENTIAL CARE FACILITIES (NAICS 623)</b>		
<b>Patient Care Revenue</b>		
Medicare .....	25,997	24,325
Medicaid .....	59,285	56,288
Other government (Veterans, NIH, Indian Affairs, etc.) .....	11,332	11,059
Worker's compensation .....	S	S
Private insurance .....	7,423	7,010
Private health insurance .....	7,158	6,758
Property/Casualty and auto insurance .....	S	S
Patient (out-of-pocket) .....	37,849	36,236
Payment from patients and their families .....	35,215	33,643
Patients' assigned Social Security benefits .....	2,634	2,593
All other patient care sources not elsewhere classified .....	6,518	5,525
<b>Non-Patient Care Revenue</b>		
All other sources .....	S	8,916
<b>NURSING CARE FACILITIES (NAICS 6231)</b>		
<b>Patient Care Revenue</b>		
Medicare .....	22,517	21,165
Medicaid .....	43,321	41,338
Other government (Veterans, NIH, Indian Affairs, etc.) .....	1,153	1,033
Worker's compensation .....	S	S
Private insurance .....	5,700	5,226
Private health insurance .....	5,540	5,087
Property/Casualty and auto insurance .....	S	S
Patient (out-of-pocket) .....	12,373	11,789
Payment from patients and their families .....	10,804	10,232
Patients' assigned Social Security benefits .....	1,569	1,557
All other patient care sources not elsewhere classified .....	2,324	1,994
<b>Non-Patient Care Revenue</b>		
All other sources .....	S	2,393
<b>RESIDENTIAL MENTAL RETARDATION, MENTAL HEALTH AND SUBSTANCE ABUSE FACILITIES (NAICS 6232)</b>		
<b>Patient Care Revenue</b>		
Medicare .....	1,040	1,000
Medicaid .....	10,825	9,996
Other government (Veterans, NIH, Indian Affairs, etc.) .....	6,135	5,900
Worker's compensation .....	27	27
Private insurance .....	683	698
Private health insurance .....	638	648
Property/Casualty and auto insurance .....	45	50
Patient (out-of-pocket) .....	1,936	2,113
Payment from patients and their families .....	1,217	1,399
Patients' assigned Social Security benefits .....	719	714
All other patient care sources not elsewhere classified .....	2,324	2,036
<b>Non-Patient Care Revenue</b>		
All other sources .....	S	2,158

See footnotes at end of table.

**Table 8.9. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Revenue for Employer Firms by Source: 2006 and 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006
<b>COMMUNITY CARE FACILITIES FOR THE ELDERLY (NAICS 6233)</b>		
<b>Patient Care Revenue</b>		
Medicare .....	2,157	1,875
Medicaid .....	3,654	3,537
Other government (Veterans, NIH, Indian Affairs, etc.) .....	375	330
Worker's compensation .....	S	S
Private insurance .....	906	911
Private health insurance .....	901	905
Property/Casualty and auto insurance .....	S	S
Patient (out-of-pocket) .....	23,070	21,861
Payment from patients and their families .....	22,813	21,617
Patients' assigned Social Security benefits .....	257	244
All other patient care sources not elsewhere classified .....	1,249	877
<b>Non-Patient Care Revenue</b>		
All other sources .....	S	2,425

ZZ Absolute value is less than 0.5. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at [www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html). Appendix A, Table A-8.6 provides estimated measures of sampling variability.

**Table 8.10. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Year-to-Year Percent Change in Revenue for Employer Firms by Source: 2006 and 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007/2006
<b>OFFICES OF PHYSICIANS (NAICS 6211)</b>	
<b>Patient Care Revenue</b>	
Medicare .....	4.7
Medicaid .....	8.1
Other government (Veterans, NIH, Indian Affairs, etc.) .....	7.7
Worker's compensation .....	2.6
Private insurance .....	5.1
Private health insurance .....	5.1
Property/Casualty and auto insurance .....	3.7
Patient (out-of-pocket) .....	5.6
All other patient care sources not elsewhere classified .....	7.5
<b>Non-Patient Care Revenue</b>	
All other sources .....	S
<b>OFFICES OF DENTISTS (NAICS 6212)</b>	
<b>Patient Care Revenue</b>	
Medicare .....	-1.6
Medicaid .....	9.6
Other government (Veterans, NIH, Indian Affairs, etc.) .....	-7.0
Worker's compensation .....	1.2
Private insurance .....	4.7
Private health insurance .....	4.8
Property/Casualty and auto insurance .....	S
Patient (out-of-pocket) .....	9.1
All other patient care sources not elsewhere classified .....	-2.4
<b>Non-Patient Care Revenue</b>	
All other sources .....	S
<b>OFFICES OF OTHER HEALTH PRACTITIONERS (NAICS 6213)</b>	
<b>Patient Care Revenue</b>	
Medicare .....	4.7
Medicaid .....	3.1
Other government (Veterans, NIH, Indian Affairs, etc.) .....	15.2
Worker's compensation .....	4.3
Private insurance .....	6.3
Private health insurance .....	6.6
Property/Casualty and auto insurance .....	4.2
Patient (out-of-pocket) .....	7.9
All other patient care sources not elsewhere classified .....	15.4
<b>Non-Patient Care Revenue</b>	
All other sources .....	S

See footnotes at end of table.

**Table 8.10. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Year-to-Year Percent Change in Revenue for Employer Firms by Source: 2006 and 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007/2006
<b>OFFICES OF CHIROPRACTORS (NAICS 62131)</b>	
<b>Patient Care Revenue</b>	
Medicare .....	3.8
Medicaid .....	13.1
Other government (Veterans, NIH, Indian Affairs, etc.) .....	S
Worker's compensation .....	1.4
Private insurance .....	5.6
Private health insurance .....	5.6
Property/Casualty and auto insurance .....	5.6
Patient (out-of-pocket) .....	7.4
All other patient care sources not elsewhere classified .....	10.3
<b>Non-Patient Care Revenue</b>	
All other sources .....	S
<b>OFFICES OF OPTOMETRISTS (NAICS 62132)</b>	
<b>Patient Care Revenue</b>	
Medicare .....	4.6
Medicaid .....	-0.7
Other government (Veterans, NIH, Indian Affairs, etc.) .....	13.6
Worker's compensation .....	25.0
Private insurance .....	9.7
Private health insurance .....	9.7
Property/Casualty and auto insurance .....	S
Patient (out-of-pocket) .....	8.8
All other patient care sources not elsewhere classified .....	S
<b>Non-Patient Care Revenue</b>	
All other sources .....	S
<b>OFFICES OF MENTAL HEALTH PRACTITIONERS (EXCEPT PHYSICIANS) (NAICS 62133)</b>	
<b>Patient Care Revenue</b>	
Medicare .....	0.5
Medicaid .....	5.9
Other government (Veterans, NIH, Indian Affairs, etc.) .....	13.6
Worker's compensation .....	-8.6
Private insurance .....	2.6
Private health insurance .....	2.7
Property/Casualty and auto insurance .....	Z
Patient (out-of-pocket) .....	7.4
All other patient care sources not elsewhere classified .....	17.8
<b>Non-Patient Care Revenue</b>	
All other sources .....	S

See footnotes at end of table.



**Table 8.10. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Year-to-Year Percent Change in Revenue for Employer Firms by Source: 2006 and 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007/2006
<b>OFFICES OF PHYSICAL, OCCUPATIONAL AND SPEECH THERAPISTS, AND AUDIOLOGISTS (NAICS 62134)</b>	
<b>Patient Care Revenue</b>	
Medicare .....	4.9
Medicaid .....	0.9
Other government (Veterans, NIH, Indian Affairs, etc.) .....	18.5
Worker's compensation .....	5.3
Private insurance .....	8.1
Private health insurance .....	8.7
Property/Casualty and auto insurance .....	1.9
Patient (out-of-pocket) .....	0.7
All other patient care sources not elsewhere classified .....	18.7
<b>Non-Patient Care Revenue</b>	
All other sources .....	S
<b>OFFICES OF PODIATRISTS (NAICS 621391)</b>	
<b>Patient Care Revenue</b>	
Medicare .....	4.9
Medicaid .....	5.9
Other government (Veterans, NIH, Indian Affairs, etc.) .....	16.1
Worker's compensation .....	6.7
Private insurance .....	2.2
Private health insurance .....	2.7
Property/Casualty and auto insurance .....	S
Patient (out-of-pocket) .....	9.1
All other patient care sources not elsewhere classified .....	Z
<b>Non-Patient Care Revenue</b>	
All other sources .....	S
<b>OUTPATIENT CARE CENTERS (NAICS 6214)</b>	
<b>Patient Care Revenue</b>	
Medicare .....	10.4
Medicaid .....	1.8
Other government (Veterans, NIH, Indian Affairs, etc.) .....	12.1
Worker's compensation .....	S
Private insurance .....	8.6
Private health insurance .....	8.7
Property/Casualty and auto insurance .....	-2.6
Patient (out-of-pocket) .....	7.8
All other patient care sources not elsewhere classified .....	4.0
<b>Non-Patient Care Revenue</b>	
All other sources .....	S

See footnotes at end of table.

**Table 8.10. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Year-to-Year Percent Change in Revenue for Employer Firms by Source: 2006 and 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007/2006
<b>OUTPATIENT MENTAL HEALTH AND SUBSTANCE ABUSE CENTERS (NAICS 62142)</b>	
<b>Patient Care Revenue</b>	
Medicare .....	3.5
Medicaid .....	2.4
Other government (Veterans, NIH, Indian Affairs, etc.) .....	12.9
Worker's compensation .....	S
Private insurance .....	10.9
Private health insurance .....	11.6
Property/Casualty and auto insurance .....	S
Patient (out-of-pocket) .....	10.0
All other patient care sources not elsewhere classified .....	8.9
<b>Non-Patient Care Revenue</b>	
All other sources .....	S
<b>OTHER OUTPATIENT CARE CENTERS (NAICS 62149)</b>	
<b>Patient Care Revenue</b>	
Medicare .....	10.6
Medicaid .....	1.4
Other government (Veterans, NIH, Indian Affairs, etc.) .....	12.2
Worker's compensation .....	S
Private insurance .....	8.3
Private health insurance .....	8.3
Property/Casualty and auto insurance .....	-0.5
Patient (out-of-pocket) .....	7.0
All other patient care sources not elsewhere classified .....	3.2
<b>Non-Patient Care Revenue</b>	
All other sources .....	S
<b>KIDNEY DIALYSIS CENTERS (NAICS 621492)</b>	
<b>Patient Care Revenue</b>	
Medicare .....	10.4
Medicaid .....	10.4
Other government (Veterans, NIH, Indian Affairs, etc.) .....	9.5
Worker's compensation .....	S
Private insurance .....	7.2
Private health insurance .....	7.2
Property/Casualty and auto insurance .....	S
Patient (out-of-pocket) .....	10.4
All other patient care sources not elsewhere classified .....	8.4
<b>Non-Patient Care Revenue</b>	
All other sources .....	S

See footnotes at end of table.

**Table 8.10. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Year-to-Year Percent Change in Revenue for Employer Firms by Source: 2006 and 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007/2006
<b>FREESTANDING AMBULATORY SURGICAL AND EMERGENCY CENTERS (NAICS 621493)</b>	
<b>Patient Care Revenue</b>	
Medicare .....	10.3
Medicaid .....	5.4
Other government (Veterans, NIH, Indian Affairs, etc.) .....	34.4
Worker's compensation .....	11.4
Private insurance .....	12.6
Private health insurance .....	12.8
Property/Casualty and auto insurance .....	S
Patient (out-of-pocket) .....	19.1
All other patient care sources not elsewhere classified .....	39.3
<b>Non-Patient Care Revenue</b>	
All other sources .....	S
<b>ALL OTHER OUTPATIENT CARE CENTERS (NAICS 621498)</b>	
<b>Patient Care Revenue</b>	
Medicare .....	12.8
Medicaid .....	S
Other government (Veterans, NIH, Indian Affairs, etc.) .....	S
Worker's compensation .....	S
Private insurance .....	4.4
Private health insurance .....	4.4
Property/Casualty and auto insurance .....	4.3
Patient (out-of-pocket) .....	S
All other patient care sources not elsewhere classified .....	S
<b>Non-Patient Care Revenue</b>	
All other sources .....	S
<b>MEDICAL AND DIAGNOSTIC LABORATORIES (NAICS 6215)</b>	
<b>Patient Care Revenue</b>	
Health practitioners .....	7.4
Hospitals .....	1.8
Outpatient care facilities .....	3.6
All other health care providers .....	2.1
Medicare .....	-1.4
Medicaid .....	1.6
Other government (Veterans, NIH, Indian Affairs, etc.) .....	8.9
Worker's compensation .....	9.7
Private insurance .....	4.4
Private health insurance .....	4.3
Property/Casualty and auto insurance .....	7.8
Patient (out-of-pocket) .....	4.4
<b>Non-Patient Care Revenue</b>	
All other sources .....	S

See footnotes at end of table.

**Table 8.10. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Year-to-Year Percent Change in Revenue for Employer Firms by Source: 2006 and 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007/2006
<b>HOME HEALTH CARE SERVICES (NAICS 6216)</b>	
<b>Patient Care Revenue</b>	
Medicare .....	19.8
Medicaid .....	8.4
Other government (Veterans, NIH, Indian Affairs, etc.) .....	0.3
Worker's compensation .....	32.8
Private insurance .....	12.8
Private health insurance .....	12.8
Property/Casualty and auto insurance .....	S
Patient (out-of-pocket) .....	10.7
All other patient care sources not elsewhere classified .....	13.1
<b>Non-Patient Care Revenue</b>	
All other sources .....	S
<b>OTHER AMBULATORY CARE SERVICES (NAICS 6219)</b>	
<b>Patient Care Revenue</b>	
Medicare .....	4.8
Medicaid .....	S
Other government (Veterans, NIH, Indian Affairs, etc.) .....	-2.9
Worker's compensation .....	8.7
Private insurance .....	12.9
Private health insurance .....	14.1
Property/Casualty and auto insurance .....	-4.3
Patient (out-of-pocket) .....	14.2
All other patient care sources not elsewhere classified .....	8.2
<b>Non-Patient Care Revenue</b>	
All other sources .....	S
<b>HOSPITALS (NAICS 622)</b>	
<b>Patient Care Revenue</b>	
Medicare .....	1.3
Medicaid .....	4.0
Other government (Veterans, NIH, Indian Affairs, etc.) .....	0.4
Worker's compensation .....	-0.7
Private insurance .....	8.0
Private health insurance .....	7.9
Property/Casualty and auto insurance .....	18.4
Patient (out-of-pocket) .....	-3.5
All other patient care sources not elsewhere classified .....	-6.6
<b>Non-Patient Care Revenue</b>	
All other sources .....	S

See footnotes at end of table.

**Table 8.10. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Year-to-Year Percent Change in Revenue for Employer Firms by Source: 2006 and 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007/2006
<b>NURSING AND RESIDENTIAL CARE FACILITIES (NAICS 623)</b>	
<b>Patient Care Revenue</b>	
Medicare .....	6.9
Medicaid .....	5.3
Other government (Veterans, NIH, Indian Affairs, etc.) .....	2.5
Worker's compensation .....	S
Private insurance .....	5.9
Private health insurance .....	5.9
Property/Casualty and auto insurance .....	S
Patient (out-of-pocket) .....	4.5
Payment from patients and their families .....	4.7
Patients' assigned Social Security benefits .....	1.6
All other patient care sources not elsewhere classified .....	18.0
<b>Non-Patient Care Revenue</b>	
All other sources .....	S
<b>NURSING CARE FACILITIES (NAICS 6231)</b>	
<b>Patient Care Revenue</b>	
Medicare .....	6.4
Medicaid .....	4.8
Other government (Veterans, NIH, Indian Affairs, etc.) .....	11.6
Worker's compensation .....	S
Private insurance .....	9.1
Private health insurance .....	8.9
Property/Casualty and auto insurance .....	S
Patient (out-of-pocket) .....	5.0
Payment from patients and their families .....	5.6
Patients' assigned Social Security benefits .....	0.8
All other patient care sources not elsewhere classified .....	16.5
<b>Non-Patient Care Revenue</b>	
All other sources .....	S
<b>RESIDENTIAL MENTAL RETARDATION, MENTAL HEALTH AND SUBSTANCE ABUSE FACILITIES (NAICS 6232)</b>	
<b>Patient Care Revenue</b>	
Medicare .....	4.0
Medicaid .....	8.3
Other government (Veterans, NIH, Indian Affairs, etc.) .....	4.0
Worker's compensation .....	Z
Private insurance .....	-2.1
Private health insurance .....	-1.5
Property/Casualty and auto insurance .....	-10.0
Patient (out-of-pocket) .....	-8.4
Payment from patients and their families .....	-13.0
Patients' assigned Social Security benefits .....	0.7
All other patient care sources not elsewhere classified .....	14.1
<b>Non-Patient Care Revenue</b>	
All other sources .....	S

See footnotes at end of table.

**Table 8.10. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Year-to-Year Percent Change in Revenue for Employer Firms by Source: 2006 and 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007/2006
<b>COMMUNITY CARE FACILITIES FOR THE ELDERLY (NAICS 6233)</b>	
<b>Patient Care Revenue</b>	
Medicare .....	15.0
Medicaid .....	3.3
Other government (Veterans, NIH, Indian Affairs, etc.) .....	13.6
Worker's compensation .....	S
Private insurance .....	-0.5
Private health insurance .....	-0.4
Property/Casualty and auto insurance .....	S
Patient (out-of-pocket) .....	5.5
Payment from patients and their families .....	5.5
Patients' assigned Social Security benefits .....	5.3
All other patient care sources not elsewhere classified .....	42.4
<b>Non-Patient Care Revenue</b>	
All other sources .....	S

Z Absolute value is less than 0.05. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-8.6 provides estimated measures of sampling variability.

**Table 8.11. Health Care and Social Assistance (NAICS 62)-Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>AMBULATORY HEALTH CARE SERVICES (NAICS 621)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	601,562	561,380	525,551	494,024	7.2	6.8	6.4
Personnel costs.....	350,943	325,946	305,995	288,395	7.7	6.5	6.1
Gross annual payroll.....	286,811	268,431	252,903	238,889	6.8	6.1	5.9
Employer's cost for fringe benefits.....	51,094	44,743	41,498	38,942	14.2	7.8	6.6
Health insurance.....	18,152	NA	NA	NA	NA	NA	NA
Pension plans.....	15,602	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	5,736	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	9,866	NA	NA	NA	NA	NA	NA
Other.....	17,340	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	13,038	12,772	11,594	10,565	2.1	10.2	9.7
Expensed materials, parts and supplies (not for resale).....	72,455	69,190	64,144	61,042	4.7	7.9	5.1
Medical supplies.....	55,860	52,250	47,339	43,071	6.9	10.4	9.9
Expensed equipment.....	4,580	4,421	4,251	3,862	3.6	4.0	10.1
Expensed purchase of other materials, parts, and supplies.....	12,014	12,519	12,554	14,110	-4.0	-0.3	-11.0
Expensed purchased services.....	59,589	56,243	51,118	47,596	5.9	10.0	7.4
Expensed purchases of software.....	1,830	1,805	1,533	1,380	1.4	17.7	11.1
Purchased electricity and fuels (except motor fuels).....	3,067	3,388	3,041	2,784	-9.5	11.4	9.2
Purchased electricity.....	2,557	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	510	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	29,824	27,397	24,551	22,594	8.9	11.6	8.7
Lease and rental payments for machinery, equipment, and other tangible items.....	4,671	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	25,153	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	5,777	5,133	4,600	4,442	12.5	11.6	3.6
Purchased repairs and maintenance to machinery and equipment.....	3,693	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	2,084	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	5,823	5,348	4,742	4,302	8.9	12.8	10.2
Professional liability insurance.....	13,267	13,172	12,651	12,094	0.7	4.1	4.6
Other operating expenses.....	118,574	110,000	104,294	96,990	7.8	5.5	7.5
Depreciation and amortization charges.....	12,856	12,227	11,709	11,515	5.1	4.4	1.7
Governmental taxes and license fees.....	6,255	6,278	6,432	5,913	-0.4	-2.4	8.8
All other operating expenses.....	99,463	91,495	86,154	79,562	8.7	6.2	8.3
Data processing and other purchased computer services.....	2,443	NA	NA	NA	NA	NA	NA
Purchased communication services.....	4,584	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	912	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	20,416	NA	NA	NA	NA	NA	NA
All other operating expenses.....	71,108	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 8.11. Health Care and Social Assistance (NAICS 62)-Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>OFFICES OF PHYSICIANS (NAICS 6211)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	304,957	287,814	270,408	254,719	6.0	6.4	6.2
Personnel costs.....	186,507	175,205	164,427	155,996	6.5	6.6	5.4
Gross annual payroll.....	153,539	145,432	136,584	130,106	5.6	6.5	5.0
Employer's cost for fringe benefits.....	27,125	24,092	22,417	20,986	12.6	7.5	6.8
Health insurance.....	9,108	NA	NA	NA	NA	NA	NA
Pension plans.....	10,415	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	3,864	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	6,551	NA	NA	NA	NA	NA	NA
Other.....	7,602	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	5,843	5,680	5,425	4,904	2.9	4.7	10.6
Expensed materials, parts and supplies (not for resale).....	33,430	31,511	29,190	27,104	6.1	8.0	7.7
Medical supplies.....	28,086	25,989	23,586	21,445	8.1	10.2	10.0
Expensed equipment.....	1,832	1,634	1,487	1,381	12.1	9.9	7.7
Expensed purchase of other materials, parts, and supplies.....	3,512	3,888	4,117	4,277	-9.7	-5.6	-3.7
Expensed purchased services.....	31,630	29,714	27,161	25,298	6.4	9.4	7.4
Expensed purchases of software.....	857	799	728	649	7.3	9.8	12.2
Purchased electricity and fuels (except motor fuels).....	1,044	1,091	1,011	973	-4.3	7.9	3.9
Purchased electricity.....	887	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	158	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	15,354	14,120	12,508	11,533	8.7	12.9	8.5
Lease and rental payments for machinery, equipment, and other tangible items.....	2,393	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	12,960	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	2,224	1,910	1,745	1,622	16.4	9.5	7.6
Purchased repairs and maintenance to machinery and equipment.....	1,485	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	739	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	2,137	1,979	1,755	1,553	8.0	12.8	13.0
Professional liability insurance.....	10,015	9,815	9,413	8,969	2.0	4.3	5.0
Other operating expenses.....	53,389	51,384	49,630	46,321	3.9	3.5	7.1
Depreciation and amortization charges.....	4,317	4,358	4,219	4,290	-0.9	3.3	-1.7
Governmental taxes and license fees.....	3,097	3,243	3,318	3,054	-4.5	-2.3	8.6
All other operating expenses.....	45,976	43,784	42,092	38,977	5.0	4.0	8.0
Data processing and other purchased computer services.....	1,517	NA	NA	NA	NA	NA	NA
Purchased communication services.....	2,037	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	276	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	10,838	NA	NA	NA	NA	NA	NA
All other operating expenses.....	31,307	NA	NA	NA	NA	NA	NA

See footnotes at end of table.



**Table 8.11. Health Care and Social Assistance (NAICS 62)-Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>OUTPATIENT CARE CENTERS (NAICS 6214)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	71,962	67,084	61,910	59,067	7.3	8.4	4.8
Personnel costs.....	37,861	35,343	32,852	30,919	7.1	7.6	6.3
Gross annual payroll.....	29,336	26,876	25,427	24,042	9.2	5.7	5.8
Employer's cost for fringe benefits.....	6,464	6,317	5,566	5,214	2.3	13.5	6.8
Health insurance.....	2,813	NA	NA	NA	NA	NA	NA
Pension plans.....	1,022	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	289	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	733	NA	NA	NA	NA	NA	NA
Other.....	2,629	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	2,061	2,150	1,859	1,663	-4.1	15.7	11.8
Expensed materials, parts and supplies (not for resale).....	11,797	11,075	10,002	10,747	6.5	10.7	-6.9
Medical supplies.....	8,856	8,044	6,924	5,881	10.1	16.2	17.7
Expensed equipment.....	314	314	274	259	Z	14.6	5.8
Expensed purchase of other materials, parts, and supplies.....	2,627	2,718	2,804	4,606	-3.3	-3.1	-39.1
Expensed purchased services.....	5,699	5,599	4,924	4,711	1.8	13.7	4.5
Expensed purchases of software.....	181	185	170	154	-2.2	8.8	10.4
Purchased electricity and fuels (except motor fuels).....	561	709	597	513	-20.9	18.8	16.4
Purchased electricity.....	467	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	95	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	2,985	2,736	2,303	2,031	9.1	18.8	13.4
Lease and rental payments for machinery, equipment, and other tangible items.....	466	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	2,519	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	711	729	638	821	-2.5	14.3	-22.3
Purchased repairs and maintenance to machinery and equipment.....	369	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	342	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	414	386	325	284	7.3	18.8	14.4
Professional liability insurance.....	846	853	891	909	-0.8	-4.3	-2.0
Other operating expenses.....	16,604	15,066	14,132	12,691	10.2	6.6	11.4
Depreciation and amortization charges.....	2,165	2,038	1,899	1,741	6.2	7.3	9.1
Governmental taxes and license fees.....	485	465	446	375	4.3	4.3	18.9
All other operating expenses.....	13,954	12,564	11,786	10,575	11.1	6.6	11.5
Data processing and other purchased computer services.....	182	NA	NA	NA	NA	NA	NA
Purchased communication services.....	443	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	256	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	2,184	NA	NA	NA	NA	NA	NA
All other operating expenses.....	10,888	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 8.11. Health Care and Social Assistance (NAICS 62)-Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>OUTPATIENT MENTAL HEALTH AND SUBSTANCE ABUSE CENTERS (NAICS 62142)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	10,930	10,365	9,791	9,076	5.5	5.9	7.9
Personnel costs.....	7,048	6,762	6,268	5,945	4.2	7.9	5.4
Gross annual payroll.....	5,445	5,215	4,873	4,609	4.4	7.0	5.7
Employer's cost for fringe benefits.....	1,239	1,167	1,077	1,039	6.2	8.4	3.7
Health insurance.....	586	NA	NA	NA	NA	NA	NA
Pension plans.....	191	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	66	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	125	NA	NA	NA	NA	NA	NA
Other.....	462	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	364	380	318	297	-4.2	19.5	7.1
Expensed materials, parts and supplies (not for resale).....	455	463	450	409	-1.7	2.9	10.0
Medical supplies.....	142	155	150	139	-8.4	3.3	7.9
Expensed equipment.....	54	60	58	51	-10.0	3.4	13.7
Expensed purchase of other materials, parts, and supplies.....	260	248	242	219	4.8	2.5	10.5
Expensed purchased services.....	831	788	725	674	5.5	8.7	7.6
Expensed purchases of software.....	20	22	22	20	-9.1	Z	10.0
Purchased electricity and fuels (except motor fuels).....	117	122	107	95	-4.1	14.0	12.6
Purchased electricity.....	90	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	27	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	403	369	335	312	9.2	10.1	7.4
Lease and rental payments for machinery, equipment, and other tangible items.....	35	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	368	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	122	113	107	102	8.0	5.6	4.9
Purchased repairs and maintenance to machinery and equipment.....	48	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	74	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	59	53	45	41	11.3	17.8	9.8
Professional liability insurance.....	110	109	109	104	0.9	Z	4.8
Other operating expenses.....	2,596	2,352	2,348	2,049	10.4	0.2	14.6
Depreciation and amortization charges.....	177	172	166	160	2.9	3.6	3.8
Governmental taxes and license fees.....	84	76	69	47	10.5	10.1	46.8
All other operating expenses.....	2,335	2,104	2,113	1,843	11.0	-0.4	14.7
Data processing and other purchased computer services.....	23	NA	NA	NA	NA	NA	NA
Purchased communication services.....	107	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	22	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	366	NA	NA	NA	NA	NA	NA
All other operating expenses.....	1,817	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 8.11. Health Care and Social Assistance (NAICS 62)-Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>KIDNEY DIALYSIS CENTERS (NAICS 621492)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	13,788	12,789	10,409	9,321	7.8	22.9	11.7
Personnel costs.....	5,323	5,000	4,424	4,176	6.5	13.0	5.9
Gross annual payroll.....	3,740	3,472	3,260	3,205	7.7	6.5	1.7
Employer's cost for fringe benefits.....	S	S	912	745	S	S	22.4
Health insurance.....	S	NA	NA	NA	NA	NA	NA
Pension plans.....	S	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	S	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	S	NA	NA	NA	NA	NA	NA
Other.....	S	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	289	267	252	226	8.2	6.0	11.5
Expensed materials, parts and supplies (not for resale).....	5,006	4,566	3,692	3,146	9.6	23.7	17.4
Medical supplies.....	S	D	D	D	D	D	D
Expensed equipment.....	18	16	16	13	12.5	Z	23.1
Expensed purchase of other materials, parts, and supplies.....	1,330	D	D	D	D	D	D
Expensed purchased services.....	S	S	1,020	837	S	S	21.9
Expensed purchases of software.....	20	21	19	18	-4.8	10.5	5.6
Purchased electricity and fuels (except motor fuels).....	S	S	183	146	S	S	25.3
Purchased electricity.....	S	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	S	S	644	536	S	S	20.1
Lease and rental payments for machinery, equipment, and other tangible items.....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	S	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	S	89	84	64	S	6.0	31.3
Purchased repairs and maintenance to machinery and equipment.....	S	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	S	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	S	S	S	22	S	S	S
Professional liability insurance.....	S	S	59	50	S	S	18.0
Other operating expenses.....	S	1,819	1,274	1,162	S	42.8	9.6
Depreciation and amortization charges.....	472	437	363	307	8.0	20.4	18.2
Governmental taxes and license fees.....	S	96	75	62	S	28.0	21.0
All other operating expenses.....	S	1,286	836	794	S	53.8	5.3
Data processing and other purchased computer services.....	S	NA	NA	NA	NA	NA	NA
Purchased communication services.....	S	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	S	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	S	NA	NA	NA	NA	NA	NA
All other operating expenses.....	S	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 8.11. Health Care and Social Assistance (NAICS 62)-Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>FREESTANDING AMBULATORY SURGICAL AND EMERGENCY CENTERS (NAICS 621493)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	11,828	10,056	9,095	8,138	17.6	10.6	11.8
Personnel costs.....	5,495	4,670	4,186	3,761	17.7	11.6	11.3
Gross annual payroll.....	4,521	3,753	3,442	3,077	20.5	9.0	11.9
Employer's cost for fringe benefits.....	739	651	563	547	13.5	15.6	2.9
Health insurance.....	306	NA	NA	NA	NA	NA	NA
Pension plans.....	169	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	50	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	119	NA	NA	NA	NA	NA	NA
Other.....	264	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	235	266	181	137	-11.7	47.0	32.1
Expensed materials, parts and supplies (not for resale).....	2,282	1,953	1,761	1,472	16.8	10.9	19.6
Medical supplies.....	2,034	1,736	1,571	1,275	17.2	10.5	23.2
Expensed equipment.....	79	74	52	59	6.8	42.3	-11.9
Expensed purchase of other materials, parts, and supplies.....	169	143	138	138	18.2	3.6	Z
Expensed purchased services.....	1,231	1,073	919	904	14.7	16.8	1.7
Expensed purchases of software.....	S	25	16	14	S	56.3	14.3
Purchased electricity and fuels (except motor fuels).....	88	82	69	58	7.3	18.8	19.0
Purchased electricity.....	77	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	11	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	670	541	453	400	23.8	19.4	13.3
Lease and rental payments for machinery, equipment, and other tangible items.....	97	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	573	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	166	157	129	117	5.7	21.7	10.3
Purchased repairs and maintenance to machinery and equipment.....	120	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	46	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	77	78	61	50	-1.3	27.9	22.0
Professional liability insurance.....	203	189	190	265	7.4	-0.5	-28.3
Other operating expenses.....	2,820	2,360	2,230	2,001	19.5	5.8	11.4
Depreciation and amortization charges.....	513	446	403	369	15.0	10.7	9.2
Governmental taxes and license fees.....	105	98	94	83	7.1	4.3	13.3
All other operating expenses.....	2,202	1,816	1,732	1,549	21.3	4.8	11.8
Data processing and other purchased computer services.....	34	NA	NA	NA	NA	NA	NA
Purchased communication services.....	39	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	35	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	548	NA	NA	NA	NA	NA	NA
All other operating expenses.....	1,546	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 8.11. Health Care and Social Assistance (NAICS 62)-Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>HOME HEALTH CARE SERVICES (NAICS 6216)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	47,343	41,580	37,442	33,937	13.9	11.1	10.3
Personnel costs.....	32,945	28,787	26,381	24,054	14.4	9.1	9.7
Gross annual payroll.....	26,387	22,968	21,308	19,214	14.9	7.8	10.9
Employer's cost for fringe benefits.....	4,345	3,800	3,540	3,455	14.3	7.3	2.5
Health insurance.....	1,570	NA	NA	NA	NA	NA	NA
Pension plans.....	395	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	139	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	256	NA	NA	NA	NA	NA	NA
Other.....	2,380	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	2,212	2,018	1,533	1,385	9.6	31.6	10.7
Expensed materials, parts and supplies (not for resale).....	3,499	3,219	3,179	2,891	8.7	1.3	10.0
Medical supplies.....	2,557	2,416	2,328	2,136	5.8	3.8	9.0
Expensed equipment.....	265	242	210	186	9.5	15.2	12.9
Expensed purchase of other materials, parts, and supplies.....	677	562	641	570	20.5	-12.3	12.5
Expensed purchased services.....	2,404	2,269	1,969	1,850	5.9	15.2	6.4
Expensed purchases of software.....	120	119	89	77	0.8	33.7	15.6
Purchased electricity and fuels (except motor fuels).....	200	208	184	176	-3.8	13.0	4.5
Purchased electricity.....	147	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	53	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	1,134	1,063	972	915	6.7	9.4	6.2
Lease and rental payments for machinery, equipment, and other tangible items.....	222	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	912	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	223	200	184	176	11.5	8.7	4.5
Purchased repairs and maintenance to machinery and equipment.....	122	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	101	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	359	302	261	240	18.9	15.7	8.8
Professional liability insurance.....	369	S	278	267	S	S	4.1
Other operating expenses.....	8,495	7,306	5,913	5,142	16.3	23.6	15.0
Depreciation and amortization charges.....	714	619	589	507	15.3	5.1	16.2
Governmental taxes and license fees.....	356	269	321	284	32.3	-16.2	13.0
All other operating expenses.....	7,424	6,418	5,004	4,351	15.7	28.3	15.0
Data processing and other purchased computer services.....	134	NA	NA	NA	NA	NA	NA
Purchased communication services.....	400	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	43	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	1,331	NA	NA	NA	NA	NA	NA
All other operating expenses.....	5,516	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 8.11. Health Care and Social Assistance (NAICS 62)-Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>HOSPITALS (NAICS 622)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	625,857	595,264	557,278	522,896	5.1	6.8	6.6
Personnel costs.....	329,635	312,195	290,532	274,808	5.6	7.5	5.7
Gross annual payroll.....	249,214	235,003	218,484	206,913	6.0	7.6	5.6
Employer's cost for fringe benefits.....	67,771	64,912	60,210	56,314	4.4	7.8	6.9
Health insurance.....	29,537	NA	NA	NA	NA	NA	NA
Pension plans.....	13,371	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	8,357	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	5,014	NA	NA	NA	NA	NA	NA
Other.....	24,863	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	12,650	12,280	11,838	11,582	3.0	3.7	2.2
Expensed materials, parts and supplies (not for resale).....	113,208	107,346	102,061	94,928	5.5	5.2	7.5
Medical supplies.....	95,625	90,410	85,564	78,678	5.8	5.7	8.8
Expensed equipment.....	2,607	2,431	2,269	2,159	7.2	7.1	5.1
Expensed purchase of other materials, parts, and supplies.....	14,976	14,505	14,229	14,091	3.2	1.9	1.0
Expensed purchased services.....	40,113	39,048	37,083	34,745	2.7	5.3	6.7
Expensed purchases of software.....	2,257	2,171	2,063	2,006	4.0	5.2	2.8
Purchased electricity and fuels (except motor fuels).....	7,870	8,031	7,187	6,464	-2.0	11.7	11.2
Purchased electricity.....	5,387	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	2,483	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	9,313	8,686	8,140	7,526	7.2	6.7	8.2
Lease and rental payments for machinery, equipment, and other tangible items.....	4,307	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	5,006	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	10,218	9,708	9,013	8,288	5.3	7.7	8.7
Purchased repairs and maintenance to machinery and equipment.....	7,182	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	3,037	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	2,084	2,010	1,901	1,730	3.7	5.7	9.9
Professional liability insurance.....	8,372	8,442	8,779	8,731	-0.8	-3.8	0.5
Other operating expenses.....	142,902	136,674	127,603	118,416	4.6	7.1	7.8
Depreciation and amortization charges.....	33,438	31,614	30,079	28,468	5.8	5.1	5.7
Governmental taxes and license fees.....	2,542	2,407	2,247	2,069	5.6	7.1	8.6
All other operating expenses.....	106,921	102,653	95,276	87,880	4.2	7.7	8.4
Data processing and other purchased computer services.....	3,265	NA	NA	NA	NA	NA	NA
Purchased communication services.....	1,776	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	1,558	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	26,230	NA	NA	NA	NA	NA	NA
All other operating expenses.....	74,093	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 8.11. Health Care and Social Assistance (NAICS 62)-Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>NURSING AND RESIDENTIAL CARE FACILITIES (NAICS 623)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	149,528	142,527	137,402	129,595	4.9	3.7	6.0
Personnel costs.....	88,744	83,582	81,429	77,873	6.2	2.6	4.6
Gross annual payroll.....	70,623	66,802	64,888	62,323	5.7	2.9	4.1
Employer's cost for fringe benefits.....	14,739	13,709	13,511	12,826	7.5	1.5	5.3
Health insurance.....	6,287	NA	NA	NA	NA	NA	NA
Pension plans.....	1,053	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	398	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	655	NA	NA	NA	NA	NA	NA
Other.....	7,398	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	3,381	3,071	3,030	2,724	10.1	1.4	11.2
Expensed materials, parts and supplies (not for resale).....	9,678	9,756	9,889	9,368	-0.8	-1.3	5.6
Medical supplies.....	4,877	4,429	4,430	4,160	10.1	Z	6.5
Expensed equipment.....	429	461	498	446	-6.9	-7.4	11.7
Expensed purchase of other materials, parts, and supplies.....	4,372	4,866	4,961	4,763	-10.2	-1.9	4.2
Expensed purchased services.....	15,547	14,678	13,867	12,781	5.9	5.8	8.5
Expensed purchases of software.....	135	151	144	134	-10.6	4.9	7.5
Purchased electricity and fuels (except motor fuels).....	3,307	3,444	3,268	2,929	-4.0	5.4	11.6
Purchased electricity.....	2,356	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	950	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	7,232	6,296	5,598	5,104	14.9	12.5	9.7
Lease and rental payments for machinery, equipment, and other tangible items.....	645	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	6,586	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	1,945	1,846	1,674	1,553	5.4	10.3	7.8
Purchased repairs and maintenance to machinery and equipment.....	645	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	1,299	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	715	680	695	643	5.1	-2.2	8.1
Professional liability insurance.....	2,214	2,260	2,487	2,419	-2.0	-9.1	2.8
Other operating expenses.....	35,557	34,513	32,217	29,571	3.0	7.1	8.9
Depreciation and amortization charges.....	5,738	5,345	5,269	4,997	7.4	1.4	5.4
Governmental taxes and license fees.....	2,873	2,786	2,897	2,486	3.1	-3.8	16.5
All other operating expenses.....	26,945	26,382	24,051	22,089	2.1	9.7	8.9
Data processing and other purchased computer services.....	291	NA	NA	NA	NA	NA	NA
Purchased communication services.....	715	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	914	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	5,187	NA	NA	NA	NA	NA	NA
All other operating expenses.....	19,838	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 8.11. Health Care and Social Assistance (NAICS 62)-Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>NURSING CARE FACILITIES (NAICS 623110)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	85,017	81,170	79,064	75,043	4.7	2.7	5.4
Personnel costs.....	50,801	47,668	47,089	45,513	6.6	1.2	3.5
Gross annual payroll.....	40,388	38,064	37,417	36,346	6.1	1.7	2.9
Employer's cost for fringe benefits.....	8,149	7,549	7,604	7,289	7.9	-0.7	4.3
Health insurance.....	3,242	NA	NA	NA	NA	NA	NA
Pension plans.....	432	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	174	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	258	NA	NA	NA	NA	NA	NA
Other.....	4,474	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	2,265	2,055	2,068	1,878	10.2	-0.6	10.1
Expensed materials, parts and supplies (not for resale).....	6,481	6,426	6,727	6,450	0.9	-4.5	4.3
Medical supplies.....	4,126	3,689	3,683	3,469	11.8	0.2	6.2
Expensed equipment.....	211	217	288	255	-2.8	-24.7	12.9
Expensed purchase of other materials, parts, and supplies.....	2,145	2,520	2,756	2,726	-14.9	-8.6	1.1
Expensed purchased services.....	7,983	7,659	7,305	6,828	4.2	4.8	7.0
Expensed purchases of software.....	64	77	74	70	-16.9	4.1	5.7
Purchased electricity and fuels (except motor fuels).....	1,561	1,688	1,641	1,469	-7.5	2.9	11.7
Purchased electricity.....	1,097	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	463	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	4,131	3,526	3,109	2,871	17.2	13.4	8.3
Lease and rental payments for machinery, equipment, and other tangible items.....	428	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	3,703	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	676	807	707	644	-16.2	14.1	9.8
Purchased repairs and maintenance to machinery and equipment.....	268	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	408	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	242	235	223	215	3.0	5.4	3.7
Professional liability insurance.....	1,310	1,326	1,551	1,561	-1.2	-14.5	-0.6
Other operating expenses.....	19,751	19,417	17,944	16,253	1.7	8.2	10.4
Depreciation and amortization charges.....	2,005	1,956	2,117	2,078	2.5	-7.6	1.9
Governmental taxes and license fees.....	1,904	1,844	1,982	1,662	3.3	-7.0	19.3
All other operating expenses.....	15,843	15,617	13,845	12,513	1.4	12.8	10.6
Data processing and other purchased computer services.....	155	NA	NA	NA	NA	NA	NA
Purchased communication services.....	297	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	450	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	3,254	NA	NA	NA	NA	NA	NA
All other operating expenses.....	11,687	NA	NA	NA	NA	NA	NA

See footnotes at end of table.



Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.

	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>SOCIAL ASSISTANCE (NAICS 624)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	113,585	107,161	103,041	97,865	6.0	4.0	5.3
Personnel costs.....	58,846	55,416	53,162	50,900	6.2	4.2	4.4
Gross annual payroll.....	48,208	45,165	43,317	41,359	6.7	4.3	4.7
Employer's cost for fringe benefits.....	9,174	8,729	8,382	8,242	5.1	4.1	1.7
Health insurance.....	3,877	NA	NA	NA	NA	NA	NA
Pension plans.....	1,131	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	448	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	683	NA	NA	NA	NA	NA	NA
Other.....	4,166	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	1,465	1,522	1,462	1,299	-3.7	4.1	12.5
Expensed materials, parts and supplies (not for resale).....	6,276	6,296	6,381	5,966	-0.3	-1.3	7.0
Medical supplies.....	X	X	X	X	X	X	X
Expensed equipment.....	678	697	670	638	-2.7	4.0	5.0
Expensed purchase of other materials, parts, and supplies.....	5,598	5,599	5,711	5,329	Z	-2.0	7.2
Expensed purchased services.....	8,423	8,067	7,536	7,071	4.4	7.0	6.6
Expensed purchases of software.....	189	221	209	179	-14.5	5.7	16.8
Purchased electricity and fuels (except motor fuels).....	1,263	1,384	1,226	1,136	-8.7	12.9	7.9
Purchased electricity.....	921	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	342	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	4,585	4,414	4,202	3,989	3.9	5.0	5.3
Lease and rental payments for machinery, equipment, and other tangible items.....	382	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	4,203	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	1,513	1,284	1,153	1,104	17.8	11.4	4.4
Purchased repairs and maintenance to machinery and equipment.....	539	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	975	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	872	765	745	663	14.0	2.7	12.4
Professional liability insurance.....	X	X	X	X	X	X	X
Other operating expenses.....	40,040	37,383	35,962	33,927	7.1	4.0	6.0
Depreciation and amortization charges.....	2,254	2,136	2,307	2,293	5.5	-7.4	0.6
Governmental taxes and license fees.....	816	685	733	641	19.1	-6.5	14.4
All other operating expenses.....	36,969	34,562	32,922	30,994	7.0	5.0	6.2
Data processing and other purchased computer services.....	238	NA	NA	NA	NA	NA	NA
Purchased communication services.....	862	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	357	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	4,149	NA	NA	NA	NA	NA	NA
All other operating expenses.....	31,364	NA	NA	NA	NA	NA	NA

NA Not available. Z Absolute value is less than 0.05. X Not applicable. D Estimate in table is withheld to avoid disclosing data of individual companies; data are included in higher level totals. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-8.7 provides estimated measures of sampling variability.

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## Chapter 9. Arts, Entertainment, and Recreation Services

**Table 9.1. Arts, Entertainment, and Recreation Services (NAICS 71) – Estimated Revenue for Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	2003	2002	2001	2000	1999
<b>71</b>	<b>Arts, entertainment, and recreation .....</b>	<b>191,005</b>	<b>180,383</b>	<b>166,561</b>	<b>158,557</b>	<b>149,360</b>	<b>141,902</b>	<b>133,880</b>	<b>127,394</b>	<b>119,868</b>
711	Performing arts, spectator sports, and related industries .....	75,853	71,365	65,235	62,796	60,367	58,285	54,151	51,149	47,935
7111	Performing arts companies .....	11,734	11,987	11,978	11,554	11,070	10,864	10,804	10,746	10,267
7112	Spectator sports .....	28,757	26,531	24,402	23,659	22,445	22,313	20,392	19,339	17,552
711211	Sports teams and clubs .....	17,418	15,742	14,067	14,115	13,257	13,025	11,461	10,739	9,261
711212	Racetracks .....	7,877	7,584	7,358	7,022	6,582	6,702	6,473	6,349	6,193
711219	Other spectator sports .....	3,462	3,205	2,977	2,522	2,606	2,586	2,458	2,251	2,098
7113	Promoters of performing arts, sports, and similar events ..	18,830	17,187	14,338	13,571	12,872	12,168	10,993	10,098	9,479
7114	Agents and managers for artists, athletes, entertainers, and other public figures .....	4,633	4,089	3,909	3,819	3,604	3,602	3,381	3,184	3,003
7115	Independent artists, writers, and performers .....	11,899	11,571	10,608	10,193	10,376	9,338	8,581	7,782	7,634
712	Museums, historical sites, and similar institutions .....	12,978	11,967	10,256	9,688	9,082	8,607	9,218	9,350	8,711
713	Amusement, gambling, and recreation industries .....	102,174	97,051	91,070	86,073	79,911	75,010	70,511	66,895	63,222
7131	Amusement parks and arcades .....	12,050	11,365	11,181	10,561	9,930	9,443	9,813	9,441	8,824
71311	Amusement and theme parks .....	10,746	9,963	9,882	9,344	8,737	8,174	8,637	8,245	7,596
71312	Amusement arcades .....	1,304	1,402	1,299	1,217	1,193	1,269	1,176	1,196	1,228
7132	Gambling industries .....	33,021	31,127	28,094	25,698	22,370	18,893	16,686	14,621	13,191
71321	Casinos (except casino hotels) .....	20,485	19,746	18,010	16,664	14,601	12,387	11,148	9,592	8,602
71329	Other gambling industries .....	12,536	11,381	10,084	9,034	7,769	6,506	5,538	5,029	4,589
7139	Other amusement and recreation industries .....	57,103	54,559	51,795	49,814	47,611	46,674	44,012	42,833	41,207
71391	Golf courses and country clubs .....	19,279	19,082	18,533	17,880	16,987	17,533	16,862	16,692	16,285
71392	Skiing facilities .....	2,414	2,234	2,049	1,980	1,839	1,801	1,635	1,551	1,429
71393	Marinas .....	4,187	4,018	3,663	3,393	3,382	3,352	3,389	3,379	3,153
71394	Fitness and recreational sports centers .....	19,507	18,519	17,620	16,839	16,130	14,987	13,542	12,543	11,777
71395	Bowling centers .....	3,738	3,347	3,427	3,505	3,293	3,075	2,882	2,762	2,736
71399	All other amusement and recreation industries .....	7,978	7,359	6,503	6,217	5,980	5,926	5,702	5,906	5,827

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

Appendix A, Table A-9.1 provides estimated measures of sampling variability.

**Table 9.2. Arts, Entertainment, and Recreation Services (NAICS 71) – Estimated Year-to-Year Percent Change in Revenue for Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007/2006	2006/2005	2005/2004	2004/2003	2003/2002	2002/2001	2001/2000	2000/1999
<b>71</b>	<b>Arts, entertainment, and recreation .....</b>	<b>5.9</b>	<b>8.3</b>	<b>5.0</b>	<b>6.2</b>	<b>5.3</b>	<b>6.0</b>	<b>5.1</b>	<b>6.3</b>
711	Performing arts, spectator sports, and related industries .....	6.3	9.4	3.9	4.0	3.6	7.6	5.9	6.7
7111	Performing arts companies .....	-2.1	0.1	3.7	4.4	1.9	0.6	0.5	4.7
7112	Spectator sports .....	8.4	8.7	3.1	5.4	0.6	9.4	5.4	10.2
711211	Sports teams and clubs .....	10.6	11.9	-0.3	6.5	1.8	13.6	6.7	16.0
711212	Racetracks .....	3.9	3.1	4.8	6.7	-1.8	3.5	2.0	2.5
711219	Other spectator sports .....	8.0	7.7	18.0	-3.2	0.8	5.2	9.2	7.3
7113	Promoters of performing arts, sports, and similar events .....	9.6	19.9	5.7	5.4	5.8	10.7	8.9	6.5
7114	Agents and managers for artists, athletes, entertainers, and other public figures .....	13.3	4.6	2.4	6.0	0.1	6.5	6.2	6.0
7115	Independent artists, writers, and performers .....	2.8	9.1	4.1	-1.8	11.1	8.8	10.3	1.9
712	Museums, historical sites, and similar institutions .....	8.4	16.7	5.9	6.7	5.5	-6.6	-1.4	7.3
713	Amusement, gambling, and recreation industries .....	5.3	6.6	5.8	7.7	6.5	6.4	5.4	5.8
7131	Amusement parks and arcades .....	6.0	1.6	5.9	6.4	5.2	-3.8	3.9	7.0
71311	Amusement and theme parks .....	7.9	0.8	5.8	6.9	6.9	-5.4	4.8	8.5
71312	Amusement arcades .....	-7.0	7.9	6.7	2.0	-6.0	7.9	-1.7	-2.6
7132	Gambling industries .....	6.1	10.8	9.3	14.9	18.4	13.2	14.1	10.8
71321	Casinos (except casino hotels) .....	3.7	9.6	8.1	14.1	17.9	11.1	16.2	11.5
71329	Other gambling industries .....	10.1	12.9	11.6	16.3	19.4	17.5	10.1	9.6
7139	Other amusement and recreation industries .....	4.7	5.3	4.0	4.6	2.0	6.0	2.8	3.9
71391	Golf courses and country clubs .....	1.0	3.0	3.7	5.3	-3.1	4.0	1.0	2.5
71392	Skiing facilities .....	8.1	9.0	3.5	7.7	2.1	10.2	5.4	8.5
71393	Marinas .....	4.2	9.7	8.0	0.3	0.9	-1.1	0.3	7.2
71394	Fitness and recreational sports centers .....	5.3	5.1	4.6	4.4	7.6	10.7	8.0	6.5
71395	Bowling centers .....	11.7	-2.3	-2.2	6.4	7.1	6.7	4.3	1.0
71399	All other amusement and recreation industries .....	8.4	13.2	4.6	4.0	0.9	3.9	-3.5	1.4

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

Appendix A, Table A-9.1 provides estimated measures of sampling variability.

**Table 9.3. Arts, Entertainment, and Recreation Services (NAICS 71) – Estimated Revenue for Taxable Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	2003	2002	2001	2000	1999
<b>71</b>	<b>Arts, entertainment, and recreation .....</b>	<b>156,037</b>	<b>146,042</b>	<b>134,839</b>	<b>128,374</b>	<b>120,709</b>	<b>113,934</b>	<b>105,858</b>	<b>100,114</b>	<b>94,180</b>
711	Performing arts, spectator sports, and related industries .....	66,577	61,479	55,670	53,662	51,686	49,496	45,479	42,960	40,385
7111	Performing arts companies .....	7,603	6,930	6,753	6,561	6,390	6,224	6,033	6,187	6,122
7112	Spectator sports .....	28,757	26,531	24,402	23,659	22,445	22,313	20,392	19,339	17,552
711211	Sports teams and clubs .....	17,418	15,742	14,067	14,115	13,257	13,025	11,461	10,739	9,261
711212	Racetracks .....	7,877	7,584	7,358	7,022	6,582	6,702	6,473	6,349	6,193
711219	Other spectator sports .....	3,462	3,205	2,977	2,522	2,606	2,586	2,458	2,251	2,098
7113	Promoters of performing arts, sports, and similar events ..	13,685	12,358	9,998	9,430	8,871	8,019	7,092	6,468	6,074
7114	Agents and managers for artists, athletes, entertainers, and other public figures .....	4,633	4,089	3,909	3,819	3,604	3,602	3,381	3,184	3,003
7115	Independent artists, writers, and performers .....	11,899	11,571	10,608	10,193	10,376	9,338	8,581	7,782	7,634
712	Museums, historical sites, and similar institutions .....	1,259	1,096	923	835	804	750	714	728	616
713	Amusement, gambling, and recreation industries .....	88,201	83,467	78,246	73,877	68,219	63,688	59,665	56,426	53,179
7131	Amusement parks and arcades .....	12,050	11,365	11,181	10,561	9,930	9,443	9,813	9,441	8,824
71311	Amusement and theme parks .....	10,746	9,963	9,882	9,344	8,737	8,174	8,637	8,245	7,596
71312	Amusement arcades .....	1,304	1,402	1,299	1,217	1,193	1,269	1,176	1,196	1,228
7132	Gambling industries .....	33,021	31,127	28,094	25,698	22,370	18,893	16,686	14,621	13,191
71321	Casinos (except casino hotels) .....	20,485	19,746	18,010	16,664	14,601	12,387	11,148	9,592	8,602
71329	Other gambling industries .....	12,536	11,381	10,084	9,034	7,769	6,506	5,538	5,029	4,589
7139	Other amusement and recreation industries .....	43,130	40,975	38,971	37,618	35,919	35,352	33,166	32,364	31,164
71391	Golf courses and country clubs .....	10,788	10,652	10,620	10,446	9,794	10,462	9,939	9,963	9,719
71392	Skiing facilities .....	2,414	2,234	2,049	1,980	1,839	1,801	1,635	1,551	1,429
71393	Marinas .....	4,187	4,018	3,663	3,393	3,382	3,352	3,389	3,379	3,153
71394	Fitness and recreational sports centers .....	15,463	14,624	13,858	13,179	12,706	11,713	10,498	9,616	9,058
71395	Bowling centers .....	3,738	3,347	3,427	3,505	3,293	3,075	2,882	2,762	2,736
71399	All other amusement and recreation industries .....	6,540	6,100	5,354	5,115	4,905	4,949	4,823	5,093	5,069

Note: Estimates cover taxable firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-9.2 provides estimated measures of sampling variability.

**Table 9.4. Arts, Entertainment, and Recreation Services (NAICS 71) – Estimated Year-to-Year Percent Change in Revenue for Taxable Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007/2006	2006/2005	2005/2004	2004/2003	2003/2002	2002/2001	2001/2000	2000/1999
<b>71</b>	<b>Arts, entertainment, and recreation .....</b>	<b>6.8</b>	<b>8.3</b>	<b>5.0</b>	<b>6.3</b>	<b>5.9</b>	<b>7.6</b>	<b>5.7</b>	<b>6.3</b>
711	Performing arts, spectator sports, and related industries .....	8.3	10.4	3.7	3.8	4.4	8.8	5.9	6.4
7111	Performing arts companies .....	9.7	2.6	2.9	2.7	2.7	3.2	-2.5	1.1
7112	Spectator sports .....	8.4	8.7	3.1	5.4	0.6	9.4	5.4	10.2
711211	Sports teams and clubs .....	10.6	11.9	-0.3	6.5	1.8	13.6	6.7	16.0
711212	Racetracks .....	3.9	3.1	4.8	6.7	-1.8	3.5	2.0	2.5
711219	Other spectator sports .....	8.0	7.7	18.0	-3.2	0.8	5.2	9.2	7.3
7113	Promoters of performing arts, sports, and similar events .....	10.7	23.6	6.0	6.3	10.6	13.1	9.6	6.5
7114	Agents and managers for artists, athletes, entertainers, and other public figures .....	13.3	4.6	2.4	6.0	0.1	6.5	6.2	6.0
7115	Independent artists, writers, and performers .....	2.8	9.1	4.1	-1.8	11.1	8.8	10.3	1.9
712	Museums, historical sites, and similar institutions .....	14.9	18.7	10.5	3.9	7.2	5.0	-1.9	18.2
713	Amusement, gambling, and recreation industries .....	5.7	6.7	5.9	8.3	7.1	6.7	5.7	6.1
7131	Amusement parks and arcades .....	6.0	1.6	5.9	6.4	5.2	-3.8	3.9	7.0
71311	Amusement and theme parks .....	7.9	0.8	5.8	6.9	6.9	-5.4	4.8	8.5
71312	Amusement arcades .....	-7.0	7.9	6.7	2.0	-6.0	7.9	-1.7	-2.6
7132	Gambling industries .....	6.1	10.8	9.3	14.9	18.4	13.2	14.1	10.8
71321	Casinos (except casino hotels) .....	3.7	9.6	8.1	14.1	17.9	11.1	16.2	11.5
71329	Other gambling industries .....	10.1	12.9	11.6	16.3	19.4	17.5	10.1	9.6
7139	Other amusement and recreation industries .....	5.3	5.1	3.6	4.7	1.6	6.6	2.5	3.9
71391	Golf courses and country clubs .....	1.3	0.3	1.7	6.7	-6.4	5.3	-0.2	2.5
71392	Skiing facilities .....	8.1	9.0	3.5	7.7	2.1	10.2	5.4	8.5
71393	Marinas .....	4.2	9.7	8.0	0.3	0.9	-1.1	0.3	7.2
71394	Fitness and recreational sports centers .....	5.7	5.5	5.2	3.7	8.5	11.6	9.2	6.2
71395	Bowling centers .....	11.7	-2.3	-2.2	6.4	7.1	6.7	4.3	1.0
71399	All other amusement and recreation industries .....	7.2	13.9	4.7	4.3	-0.9	2.6	-5.3	0.5

Note: Estimates cover taxable firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-9.2 provides estimated measures of sampling variability.

**Table 9.5. Arts, Entertainment, and Recreation Services (NAICS 71) – Estimated Revenue for Tax-Exempt Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	2003	2002	2001	2000	1999
<b>71</b>	<b>Arts, entertainment, and recreation .....</b>	<b>34,968</b>	<b>34,341</b>	<b>31,722</b>	<b>30,183</b>	<b>28,651</b>	<b>27,968</b>	<b>28,022</b>	<b>27,280</b>	<b>25,688</b>
711	Performing arts, spectator sports, and related industries .....	9,276	9,886	9,565	9,134	8,681	8,789	8,672	8,189	7,550
7111	Performing arts companies .....	4,131	5,057	5,225	4,993	4,680	4,640	4,771	4,559	4,145
7113	Promoters of performing arts, sports, and similar events ..	5,145	4,829	4,340	4,141	4,001	4,149	3,901	3,630	3,405
712	Museums, historical sites, and similar institutions .....	11,719	10,871	9,333	8,853	8,278	7,857	8,504	8,622	8,095
713	Amusement, gambling, and recreation industries .....	13,973	13,584	12,824	12,196	11,692	11,322	10,846	10,469	10,043
7139	Other amusement and recreation industries .....	13,973	13,584	12,824	12,196	11,692	11,322	10,846	10,469	10,043
71391	Golf courses and country clubs .....	8,491	8,430	7,913	7,434	7,193	7,071	6,923	6,729	6,566
71394	Fitness and recreational sports centers .....	4,044	3,895	3,762	3,660	3,424	3,274	3,044	2,927	2,719
71399	All other amusement and recreation industries .....	1,438	1,259	1,149	1,102	1,075	977	879	813	758

Note: Estimates cover tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-9.3 provides estimated measures of sampling variability.

**Table 9.6. Arts, Entertainment, and Recreation Services (NAICS 71) – Estimated Year-to-Year Percent Change in Revenue for Tax-Exempt Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007/2006	2006/2005	2005/2004	2004/2003	2003/2002	2002/2001	2001/2000	2000/1999
<b>71</b>	<b>Arts, entertainment, and recreation .....</b>	<b>1.8</b>	<b>8.3</b>	<b>5.1</b>	<b>5.3</b>	<b>2.4</b>	<b>-0.2</b>	<b>2.7</b>	<b>6.2</b>
711	Performing arts, spectator sports, and related industries .....	-6.2	3.4	4.7	5.2	-1.2	1.3	5.9	8.5
7111	Performing arts companies .....	-18.3	-3.2	4.6	6.7	0.9	-2.7	4.7	10.0
7113	Promoters of performing arts, sports, and similar events .....	6.5	11.3	4.8	3.5	-3.6	6.4	7.5	6.6
712	Museums, historical sites, and similar institutions .....	7.8	16.5	5.4	6.9	5.4	-7.6	-1.4	6.5
713	Amusement, gambling, and recreation industries .....	2.9	5.9	5.1	4.3	3.3	4.4	3.6	4.2
7139	Other amusement and recreation industries .....	2.9	5.9	5.1	4.3	3.3	4.4	3.6	4.2
71391	Golf courses and country clubs .....	0.7	6.5	6.4	3.4	1.7	2.1	2.9	2.5
71394	Fitness and recreational sports centers .....	3.8	3.5	2.8	6.9	4.6	7.6	4.0	7.6
71399	All other amusement and recreation industries .....	14.2	9.6	4.3	2.5	10.0	11.1	8.1	7.3

Note: Estimates cover tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-9.3 provides estimated measures of sampling variability.



**Table 9.7. Arts, Entertainment, and Recreation Services (NAICS 71) – Estimated Export Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
<b>71</b>	<b>Arts, entertainment, and recreation .....</b>	<b>122</b>	<b>126</b>	<b>136</b>	<b>130</b>	<b>-3.2</b>	<b>-7.4</b>	<b>4.6</b>
711	Performing arts, spectator sports, and related industries .....	122	126	135	130	-3.2	-6.7	3.8
7111	Performing arts companies .....	54	46	33	37	17.4	39.4	-10.8
7115	Independent artists, writers, and performers .....	68	80	101	93	-15.0	-20.8	8.6

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-9.4 provides estimated measures of sampling variability.

**Table 9.8. Selected Arts, Entertainment, and Recreation Services (NAICS 71) – Estimated Sources of Revenue for Taxable Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>PERFORMING ARTS COMPANIES (NAICS 7111)</b>							
<b>Total revenue</b> .....	<b>7,603</b>	<b>6,930</b>	<b>6,753</b>	<b>6,561</b>	<b>9.7</b>	<b>2.6</b>	<b>2.9</b>
Admissions revenue .....	5,015	4,665	4,966	4,663	7.5	-6.1	6.5
All other revenue .....	2,588	2,265	1,787	1,898	14.3	26.7	-5.8
<b>SPORTS TEAMS AND CLUBS (NAICS 711211)</b>							
<b>Total revenue</b> .....	<b>17,418</b>	<b>15,742</b>	<b>14,067</b>	<b>14,115</b>	<b>10.6</b>	<b>11.9</b>	<b>-0.3</b>
Admissions revenue .....	6,494	5,826	5,132	5,227	11.5	13.5	-1.8
All other revenue .....	10,924	9,916	8,935	8,888	10.2	11.0	0.5
<b>RACETRACKS (NAICS 711212)</b>							
<b>Total revenue</b> .....	<b>7,877</b>	<b>7,584</b>	<b>7,358</b>	<b>7,022</b>	<b>3.9</b>	<b>3.1</b>	<b>4.8</b>
Admissions revenue .....	1,310	1,140	1,116	1,098	14.9	2.2	1.6
All other revenue .....	6,567	6,444	6,242	5,924	1.9	3.2	5.4
<b>OTHER SPECTATOR SPORTS (NAICS 711219)</b>							
<b>Total revenue</b> .....	<b>3,462</b>	<b>3,205</b>	<b>2,977</b>	<b>2,522</b>	<b>8.0</b>	<b>7.7</b>	<b>18.0</b>
Admissions revenue .....	435	407	431	396	6.9	-5.6	8.8
All other revenue .....	3,027	2,798	2,546	2,126	8.2	9.9	19.8
<b>AMUSEMENT AND THEME PARKS (NAICS 71311)</b>							
<b>Total revenue</b> .....	<b>10,746</b>	<b>9,963</b>	<b>9,882</b>	<b>9,344</b>	<b>7.9</b>	<b>0.8</b>	<b>5.8</b>
Admissions revenue .....	6,148	5,692	5,514	5,216	8.0	3.2	5.7
All other revenue .....	4,598	4,271	4,368	4,128	7.7	-2.2	5.8

Note: Estimates cover taxable firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-9.5 provides estimated measures of sampling variability.

**Table 9.9. Arts, Entertainment, and Recreation Services (NAICS 71) – Estimated Total Expenses for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
<b>71</b>	<b>Arts, entertainment, and recreation .....</b>	<b>161,298</b>	<b>152,032</b>	<b>140,518</b>	<b>134,755</b>	<b>6.1</b>	<b>8.2</b>	<b>4.3</b>
711	Performing arts, spectator sports, and related industries .....	69,853	63,323	58,264	57,417	10.3	8.7	1.5
7111	Performing arts companies .....	11,718	10,858	10,523	10,222	7.9	3.2	2.9
7112	Spectator sports .....	27,790	25,836	23,943	24,059	7.6	7.9	-0.5
711211	Sports teams and clubs .....	18,807	17,869	15,773	15,905	5.2	13.3	-0.8
711212	Racetracks .....	5,718	5,042	5,313	5,639	13.4	-5.1	-5.8
711219	Other spectator sports .....	3,264	2,925	2,857	2,515	11.6	2.4	13.6
7113	Promoters of performing arts, sports, and similar events .....	15,240	14,425	12,361	11,686	5.6	16.7	5.8
7114	Agents and managers for artists, athletes, entertainers, and other public figures .....	3,516	3,097	2,995	3,197	13.5	3.4	-6.3
7115	Independent artists, writers, and performers .....	11,589	9,106	8,442	8,253	27.3	7.9	2.3
712	Museums, historical sites, and similar institutions .....	9,163	8,624	8,069	7,717	6.3	6.9	4.6
713	Amusement, gambling, and recreation industries .....	82,282	80,086	74,185	69,621	2.7	8.0	6.6
7131	Amusement parks and arcades .....	9,253	9,934	7,642	6,944	-6.9	30.0	10.1
71311	Amusement and theme parks .....	8,021	8,637	6,480	5,849	-7.1	33.3	10.8
71312	Amusement arcades .....	1,231	1,297	1,162	1,096	-5.1	11.6	6.0
7132	Gambling industries .....	23,281	22,162	20,118	18,338	5.0	10.2	9.7
71321	Casinos (except casino hotels) .....	13,473	13,441	12,646	11,613	0.2	6.3	8.9
71329	Other gambling industries .....	9,808	8,722	7,472	6,725	12.5	16.7	11.1
7139	Other amusement and recreation industries .....	49,748	47,990	46,425	44,338	3.7	3.4	4.7
71391	Golf courses and country clubs .....	18,227	18,175	17,650	16,757	0.3	3.0	5.3
71392	Skiing facilities .....	1,718	1,649	1,568	1,525	4.2	5.2	2.8
71393	Marinas .....	2,591	2,557	2,404	2,330	1.3	6.4	3.2
71394	Fitness and recreational sports centers .....	17,674	16,872	16,895	15,893	4.8	-0.1	6.3
71395	Bowling centers .....	3,043	2,747	2,593	2,637	10.8	5.9	-1.7
71399	All other amusement and recreation industries .....	6,494	5,991	5,315	5,197	8.4	12.7	2.3

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-9.6 provides estimated measures of sampling variability.

**Table 9.10. Arts, Entertainment, and Recreation Services (NAICS 71) – Estimated Expenses for Tax-Exempt Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004
<b>71</b>	<b>Arts, entertainment, and recreation .....</b>	<b>30,946</b>	<b>29,720</b>	<b>28,367</b>	<b>27,076</b>
711	Performing arts, spectator sports, and related industries .....	9,537	9,305	8,832	8,415
7111	Performing arts companies .....	5,212	5,022	4,898	4,653
7113	Promoters of performing arts, sports, and similar events .....	4,325	4,283	3,934	3,762
712	Museums, historical sites, and similar institutions .....	8,204	7,731	7,260	6,992
713	Amusement, gambling, and recreation industries .....	13,205	12,684	12,275	11,669
7139	Other amusement and recreation industries .....	13,205	12,684	12,275	11,669
71391	Golf courses and country clubs .....	8,166	7,883	7,732	7,336
71394	Fitness and recreational sports centers .....	3,765	3,694	3,576	3,414
71399	All other amusement and recreation industries .....	1,274	1,107	967	919

Note: Estimates cover tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-9.7 provides estimated measures of sampling variability.

**Table 9.11. Arts, Entertainment, and Recreation Services (NAICS 71) – Estimated Year-to-Year Percent Change in Expenses for Tax-Exempt Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007/2006	2006/2005	2005/2004
<b>71</b>	<b>Arts, entertainment, and recreation .....</b>	<b>4.1</b>	<b>4.8</b>	<b>4.8</b>
711	Performing arts, spectator sports, and related industries .....	2.5	5.4	5.0
7111	Performing arts companies .....	3.8	2.5	5.3
7113	Promoters of performing arts, sports, and similar events .....	1.0	8.9	4.6
712	Museums, historical sites, and similar institutions .....	6.1	6.5	3.8
713	Amusement, gambling, and recreation industries .....	4.1	3.3	5.2
7139	Other amusement and recreation industries .....	4.1	3.3	5.2
71391	Golf courses and country clubs .....	3.6	2.0	5.4
71394	Fitness and recreational sports centers .....	1.9	3.3	4.7
71399	All other amusement and recreation industries .....	15.1	14.5	5.2

Note: Estimates cover tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-9.7 provides estimated measures of sampling variability.

**Table 9.12. Performing Arts, Spectator Sports, and Related Industries (NAICS 711), Museums, Historical Sites, and Similar Institutions (NAICS 712), and Amusement, Gambling, and Recreation Industries (NAICS 713) - Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>PERFORMING ARTS, SPECTATOR SPORTS, AND RELATED INDUSTRIES (NAICS 711)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>69,853</b>	<b>63,323</b>	<b>58,264</b>	<b>57,417</b>	<b>10.3</b>	<b>8.7</b>	<b>1.5</b>
Personnel costs.....	32,822	31,014	27,427	27,165	5.8	13.1	1.0
Gross annual payroll.....	28,445	27,262	24,040	23,927	4.3	13.4	0.5
Employer's cost for fringe benefits.....	3,486	2,960	2,738	2,581	17.8	8.1	6.1
Health insurance.....	1,080	NA	NA	NA	NA	NA	NA
Pension plans.....	953	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	624	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	329	NA	NA	NA	NA	NA	NA
Other.....	1,453	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	891	793	650	657	12.4	22.0	-1.1
Expensed materials, parts and supplies (not for resale).....	1,853	1,736	1,640	1,571	6.7	5.9	4.4
Expensed equipment.....	208	201	204	193	3.5	-1.5	5.7
Expensed purchase of other materials, parts, and supplies.....	1,645	1,535	1,436	1,377	7.2	6.9	4.3
Expensed purchased services.....	5,898	5,416	5,478	5,267	8.9	-1.1	4.0
Expensed purchases of software.....	96	90	114	106	6.7	-21.1	7.5
Purchased electricity and fuels (except motor fuels).....	660	616	542	516	7.1	13.7	5.0
Purchased electricity.....	521	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	139	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	2,608	2,214	2,257	2,159	17.8	-1.9	4.5
Lease and rental payments for machinery, equipment, and other tangible items.....	707	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	1,901	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	554	599	S	S	-7.5	S	S
Purchased repairs and maintenance to machinery and equipment.....	285	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	269	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	1,981	1,897	1,770	1,714	4.4	7.2	3.3
Other operating expenses.....	29,282	25,156	23,719	23,415	16.4	6.1	1.3
Depreciation and amortization charges.....	2,937	2,631	2,624	2,661	11.6	0.3	-1.4
Governmental taxes and license fees.....	758	883	879	814	-14.2	0.5	8.0
All other operating expenses.....	25,587	21,642	20,216	19,940	18.2	7.1	1.4
Data processing and other purchased computer services.....	177	NA	NA	NA	NA	NA	NA
Purchased communication services.....	349	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	175	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	3,237	NA	NA	NA	NA	NA	NA
All other operating expenses.....	21,649	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 9.12. Performing Arts, Spectator Sports, and Related Industries (NAICS 711), Museums, Historical Sites, and Similar Institutions (NAICS 712), and Amusement, Gambling, and Recreation Industries (NAICS 713) - Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>MUSEUMS, HISTORICAL SITES, AND SIMILAR INSTITUTIONS (NAICS 712)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>9,163</b>	<b>8,624</b>	<b>8,069</b>	<b>7,717</b>	<b>6.3</b>	<b>6.9</b>	<b>4.6</b>
Personnel costs.....	4,175	3,963	3,721	3,519	5.3	6.5	5.7
Gross annual payroll.....	3,291	3,146	2,964	2,806	4.6	6.1	5.6
Employer's cost for fringe benefits.....	783	706	646	615	10.9	9.3	5.0
Health insurance.....	321	NA	NA	NA	NA	NA	NA
Pension plans.....	139	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	56	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	82	NA	NA	NA	NA	NA	NA
Other.....	323	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	101	110	111	98	-8.2	-0.9	13.3
Expensed materials, parts and supplies (not for resale).....	395	391	364	334	1.0	7.4	9.0
Expensed equipment.....	66	68	65	56	-2.9	4.6	16.1
Expensed purchase of other materials, parts, and supplies.....	329	322	298	278	2.2	8.1	7.2
Expensed purchased services.....	1,078	1,008	933	866	6.9	8.0	7.7
Expensed purchases of software.....	23	23	21	18	Z	9.5	16.7
Purchased electricity and fuels (except motor fuels).....	309	290	258	231	6.6	12.4	11.7
Purchased electricity.....	225	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	84	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	194	185	179	170	4.9	3.4	5.3
Lease and rental payments for machinery, equipment, and other tangible items.....	56	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	138	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	223	209	201	195	6.7	4.0	3.1
Purchased repairs and maintenance to machinery and equipment.....	77	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	146	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	329	301	274	252	9.3	9.9	8.7
Other operating expenses.....	3,515	3,262	3,051	2,998	7.8	6.9	1.8
Depreciation and amortization charges.....	776	734	711	688	5.7	3.2	3.3
Governmental taxes and license fees.....	40	40	44	50	Z	-9.1	-12.0
All other operating expenses.....	2,699	2,489	2,296	2,259	8.4	8.4	1.6
Data processing and other purchased computer services.....	27	NA	NA	NA	NA	NA	NA
Purchased communication services.....	52	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	46	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	478	NA	NA	NA	NA	NA	NA
All other operating expenses.....	2,095	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table 9.12. Performing Arts, Spectator Sports, and Related Industries (NAICS 711), Museums, Historical Sites, and Similar Institutions (NAICS 712), and Amusement, Gambling, and Recreation Industries (NAICS 713) - Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>AMUSEMENT, GAMBLING, AND RECREATION INDUSTRIES (NAICS 713)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>82,282</b>	<b>80,086</b>	<b>74,185</b>	<b>69,621</b>	<b>2.7</b>	<b>8.0</b>	<b>6.6</b>
Personnel costs.....	33,199	32,546	30,507	28,848	2.0	6.7	5.8
Gross annual payroll.....	27,404	26,735	25,324	23,942	2.5	5.6	5.8
Employer's cost for fringe benefits.....	5,245	5,229	4,640	4,443	0.3	12.7	4.4
Health insurance.....	2,390	NA	NA	NA	NA	NA	NA
Pension plans.....	587	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	215	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	372	NA	NA	NA	NA	NA	NA
Other.....	2,268	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	549	582	544	462	-5.7	7.0	17.7
Expensed materials, parts and supplies (not for resale).....	4,454	4,731	4,401	4,117	-5.9	7.5	6.9
Expensed equipment.....	397	434	477	444	-8.5	-9.0	7.4
Expensed purchase of other materials, parts, and supplies.....	4,057	4,297	3,924	3,672	-5.6	9.5	6.9
Expensed purchased services.....	12,773	11,637	10,487	9,840	9.8	11.0	6.6
Expensed purchases of software.....	161	189	140	136	-14.8	35.0	2.9
Purchased electricity and fuels (except motor fuels).....	2,617	2,598	2,288	2,085	0.7	13.5	9.7
Purchased electricity.....	2,028	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	589	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	5,395	4,423	4,020	3,787	22.0	10.0	6.2
Lease and rental payments for machinery, equipment, and other tangible items.....	959	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	4,436	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	1,720	1,770	1,620	1,494	-2.8	9.3	8.4
Purchased repairs and maintenance to machinery and equipment.....	972	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	748	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	2,879	2,657	2,418	2,338	8.4	9.9	3.4
Other operating expenses.....	31,857	31,173	28,789	26,816	2.2	8.3	7.4
Depreciation and amortization charges.....	7,215	7,024	6,606	6,260	2.7	6.3	5.5
Governmental taxes and license fees.....	4,555	4,660	4,012	3,922	-2.3	16.2	2.3
All other operating expenses.....	20,086	19,488	18,171	16,634	3.1	7.2	9.2
Data processing and other purchased computer services.....	224	NA	NA	NA	NA	NA	NA
Purchased communication services.....	460	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	593	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	1,532	NA	NA	NA	NA	NA	NA
All other operating expenses.....	17,276	NA	NA	NA	NA	NA	NA

NA Not available. Z Absolute value is less than 0.05. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: Estimates cover taxable and tax-exempt firms and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-9.8 provides estimated measures of sampling variability.



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## Chapter 10. Other Services

**Table 10.1. Other Services (Except Public Administration, Religious, Labor, and Political Organizations, and Private Households) (NAICS 81) – Estimated Revenue for Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	2003	2002	2001	2000	1999
<b>81</b>	<b>Other services (except public administration, religious, labor, and political organizations, and private households) .....</b>	410,950	384,188	357,288	338,042	NA	NA	NA	NA	NA
81*	Other services (except public administration, religious, labor, and political organizations, and private households) <sup>1</sup> .....	408,540	381,972	355,296	336,334	317,363	305,565	306,079	302,783	285,019
811	Repair and maintenance .....	142,611	138,271	133,483	127,939	123,164	118,307	117,733	112,719	107,279
8111	Automotive repair and maintenance .....	89,983	87,895	85,562	81,116	78,565	75,221	76,518	73,219	69,412
81111	Automotive mechanical and electrical repair and maintenance .....	46,606	45,226	43,941	42,154	40,445	38,383	39,925	37,879	36,077
811111	General automotive repair .....	39,698	38,347	37,179	35,547	33,778	31,748	33,045	30,988	29,068
811112	Automotive exhaust system repair .....	1,064	1,096	1,133	1,152	1,233	1,240	1,259	1,134	1,181
811113	Automotive transmission repair .....	3,074	3,044	2,924	2,730	2,674	2,689	2,834	2,773	2,718
811118	Other automotive mechanical and electrical repair and maintenance .....	2,770	2,739	2,705	2,725	2,760	2,706	2,787	2,984	3,110
81112	Automotive body, paint, interior, and glass repair .....	30,102	29,703	29,461	27,693	27,178	26,223	26,343	25,766	24,345
811121	Automotive body, paint, and interior repair and maintenance .....	26,584	26,017	25,781	24,283	23,531	22,440	22,409	22,018	20,483
811122	Automotive glass replacement shops .....	3,518	3,686	3,680	3,410	3,647	3,783	3,934	3,748	3,862
81119	Other automotive repair and maintenance .....	13,275	12,966	12,160	11,269	10,942	10,615	10,250	9,574	8,990
811191	Automotive oil change and lubrication shops .....	4,949	4,846	4,558	4,342	4,031	3,928	3,624	3,326	3,010
811192	Car washes .....	6,721	6,438	5,932	5,301	5,364	5,092	4,988	4,641	4,414
811198	All other automotive repair and maintenance .....	1,605	1,682	1,670	1,626	1,547	1,595	1,638	1,607	1,566
8112	Electronic and precision equipment repair and maintenance .....	18,044	18,139	17,568	16,514	15,103	14,983	14,860	14,419	14,149
811211	Consumer electronics repair and maintenance .....	1,888	1,827	1,708	1,687	1,457	1,484	1,509	1,538	1,414
811212	Computer and office machine repair and maintenance .....	7,230	7,031	6,986	6,530	6,003	6,380	6,643	6,592	6,781
811213	Communication equipment repair and maintenance .....	2,339	2,420	2,236	2,100	1,993	2,026	1,849	1,756	1,526
811219	Other electronic and precision equipment repair and maintenance .....	6,587	6,861	6,638	6,197	5,650	5,093	4,859	4,533	4,428
8113	Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance .....	23,741	22,353	20,948	21,231	20,735	19,485	17,865	16,687	15,531
8114	Personal and household goods repair and maintenance .....	10,843	9,884	9,405	9,078	8,761	8,618	8,490	8,394	8,187
81141	Home and garden equipment and appliance repair and maintenance .....	5,283	4,548	4,341	4,285	4,209	4,112	3,911	3,866	3,845
81142	Reupholstery and furniture repair .....	1,309	1,386	1,342	1,248	1,271	1,265	1,225	1,229	1,161
81143	Footwear and leather goods repair .....	220	209	197	189	181	187	186	190	198
81149	Other personal and household goods repair and maintenance .....	4,031	3,741	3,525	3,356	3,100	3,054	3,168	3,109	2,983
812	Personal and laundry services .....	86,285	83,246	81,213	76,189	NA	NA	NA	NA	NA
812*	Personal and laundry services <sup>1</sup> .....	83,875	81,030	79,223	74,482	72,053	70,734	69,106	67,140	63,359
8121	Personal care services .....	28,682	26,758	25,362	23,178	21,093	20,217	18,929	18,264	16,970
81211	Hair, nail, and skin care services .....	21,875	20,826	20,168	18,932	17,081	16,518	15,800	15,553	14,407
812111	Barber shops .....	582	538	526	522	499	506	474	479	467
812112	Beauty salons .....	19,167	18,516	18,073	17,191	15,448	15,113	14,581	14,445	13,416
812113	Nail salons .....	2,126	1,772	1,569	1,219	1,134	899	745	629	524
81219	Other personal care services .....	6,807	5,932	5,194	4,246	4,012	3,699	3,129	2,711	2,563
812191	Diet and weight reducing centers .....	2,686	2,471	2,282	1,652	1,911	1,688	1,389	1,194	1,251
812199	All other personal care services .....	4,121	3,461	2,912	2,594	2,101	2,011	1,740	1,517	1,312

See footnotes at end of table.

**Table 10.1. Other Services (Except Public Administration, Religious, Labor, and Political Organizations, and Private Households) (NAICS 81) – Estimated Revenue for Employer Firms: 1999 Through 2007 -Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	2003	2002	2001	2000	1999
8122	Death care services .....	14,744	15,311	15,731	15,080	15,334	14,280	14,202	13,707	13,782
81221	Funeral homes and funeral services .....	12,238	12,495	12,130	11,705	12,016	11,049	10,882	10,279	10,286
81222	Cemeteries and crematories .....	2,506	2,816	3,601	3,375	3,318	3,231	3,320	3,428	3,496
8123	Drycleaning and laundry services .....	22,579	22,278	21,194	20,040	19,545	20,444	20,484	19,950	19,124
81231	Coin-operated laundries and drycleaners .....	3,521	3,368	3,259	3,235	3,238	3,458	3,462	3,359	3,007
81232	Drycleaning and laundry services (except coin-operated) .....	8,882	8,547	7,928	7,581	7,282	7,762	7,819	7,846	7,623
81233	Linen and uniform supply .....	10,176	10,363	10,007	9,224	9,025	9,224	9,203	8,745	8,494
812331	Linen supply .....	3,494	3,479	3,561	3,240	3,051	3,087	3,130	2,989	2,805
812332	Industrial launderers .....	6,682	6,884	S	5,984	5,974	6,137	6,073	5,756	5,689
8129	Other personal services .....	20,280	18,898	18,927	17,892	NA	NA	NA	NA	NA
8129*	Other personal services <sup>1</sup> .....	17,870	16,683	16,936	16,184	16,081	15,793	15,491	15,219	13,483
81291	Pet care (except veterinary) services .....	2,410	2,215	1,990	1,708	NA	NA	NA	NA	NA
81292	Photofinishing .....	2,197	2,219	2,609	3,173	3,678	3,851	3,727	3,809	3,860
81293	Parking lots and garages .....	7,516	7,523	7,608	7,121	7,041	6,908	6,791	6,389	5,794
81299	All other personal services .....	8,157	6,941	6,719	5,890	5,362	5,034	4,973	5,021	3,829
813	Religious, grantmaking, civic, professional, and similar organizations (except religious, labor, and political organizations) .....	182,054	162,671	142,590	133,913	122,146	116,524	119,240	122,924	114,381
8132	Grantmaking and giving services .....	87,544	74,356	61,051	56,408	47,131	46,276	50,881	57,465	52,564
8133	Social advocacy organizations .....	16,998	15,359	13,908	13,424	13,358	12,059	11,225	10,852	10,144
8134	Civic and social organizations .....	19,498	18,606	17,180	16,694	15,951	14,679	14,098	13,703	12,839
8139	Business, professional, and other organizations (except labor and political organizations) .....	58,014	54,350	50,451	47,387	45,706	43,510	43,036	40,904	38,834

NA Not available. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Excludes NAICS 81291 (Pet care services).

Note: Estimates cover only taxable firms for NAICS 811 (Repair and maintenance) and NAICS 812 (Personal and laundry services), only tax-exempt firms for NAICS 813 (Religious, grantmaking, civic, professional, and similar organizations (except religious, labor, and political organizations)), and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-10.1 provides estimated measures of sampling variability.

**Table 10.2. Other Services (Except Public Administration, Religious, Labor, and Political Organizations, and Private Households) (NAICS 81) – Estimated Year-to-Year Percent Change in Revenue for Employer Firms: 1999 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007/2006	2006/2005	2005/2004	2004/2003	2003/2002	2002/2001	2001/2000	2000/1999
<b>81</b>	<b>Other services (except public administration, religious, labor, and political organizations, and private households) .....</b>	7.0	7.5	5.7	NA	NA	NA	NA	NA
81*	Other services (except public administration, religious, labor, and political organizations, and private households) <sup>1</sup> .....	7.0	7.5	5.6	6.0	3.9	-0.2	1.1	6.2
811	Repair and maintenance .....	3.1	3.6	4.3	3.9	4.1	0.5	4.4	5.1
8111	Automotive repair and maintenance .....	2.4	2.7	5.5	3.2	4.4	-1.7	4.5	5.5
81111	Automotive mechanical and electrical repair and maintenance .....	3.1	2.9	4.2	4.2	5.4	-3.9	5.4	5.0
811111	General automotive repair .....	3.5	3.1	4.6	5.2	6.4	-3.9	6.6	6.6
811112	Automotive exhaust system repair .....	-2.9	-3.3	-1.6	-6.6	-0.6	-1.5	11.0	-4.0
811113	Automotive transmission repair .....	1.0	4.1	7.1	2.1	-0.6	-5.1	2.2	2.0
811118	Other automotive mechanical and electrical repair and maintenance .....	1.1	1.3	-0.7	-1.3	2.0	-2.9	-6.6	-4.1
81112	Automotive body, paint, interior, and glass repair .....	1.3	0.8	6.4	1.9	3.6	-0.5	2.2	5.8
811121	Automotive body, paint, and interior repair and maintenance .....	2.2	0.9	6.2	3.2	4.9	0.1	1.8	7.5
811122	Automotive glass replacement shops .....	-4.6	0.2	7.9	-6.5	-3.6	-3.8	5.0	-3.0
81119	Other automotive repair and maintenance .....	2.4	6.6	7.9	3.0	3.1	3.6	7.1	6.5
811191	Automotive oil change and lubrication shops .....	2.1	6.3	5.0	7.7	2.6	8.4	9.0	10.5
811192	Car washes .....	4.4	8.5	11.9	-1.2	5.3	2.1	7.5	5.1
811198	All other automotive repair and maintenance .....	-4.6	0.7	2.7	5.1	-3.0	-2.6	1.9	2.6
8112	Electronic and precision equipment repair and maintenance .....	-0.5	3.3	6.4	9.3	0.8	0.8	3.1	1.9
811211	Consumer electronics repair and maintenance .....	3.3	7.0	1.2	15.8	-1.8	-1.7	-1.9	8.8
811212	Computer and office machine repair and maintenance .....	2.8	0.6	7.0	8.8	-5.9	-4.0	0.8	-2.8
811213	Communication equipment repair and maintenance .....	-3.3	8.2	6.5	5.4	-1.6	9.6	5.3	15.1
811219	Other electronic and precision equipment repair and maintenance .....	-4.0	3.4	7.1	9.7	10.9	4.8	7.2	2.4
8113	Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance .....	6.2	6.7	-1.3	2.4	6.4	9.1	7.1	7.4
8114	Personal and household goods repair and maintenance .....	9.7	5.1	3.6	3.6	1.7	1.5	1.1	2.5
81141	Home and garden equipment and appliance repair and maintenance .....	16.2	4.8	1.3	1.8	2.4	5.1	1.2	0.5
81142	Reupholstery and furniture repair .....	-5.6	3.3	7.5	-1.8	0.5	3.3	-0.3	5.9
81143	Footwear and leather goods repair .....	5.3	6.1	4.2	4.4	-3.2	0.5	-2.1	-4.0
81149	Other personal and household goods repair and maintenance .....	7.8	6.1	5.0	8.3	1.5	-3.6	1.9	4.2
812	Personal and laundry services .....	3.7	2.5	6.6	NA	NA	NA	NA	NA
812*	Personal and laundry services <sup>1</sup> .....	3.5	2.3	6.4	3.4	1.9	2.4	2.9	6.0
8121	Personal care services .....	7.2	5.5	9.4	9.9	4.3	6.8	3.6	7.6
81211	Hair, nail, and skin care services .....	5.0	3.3	6.5	10.8	3.4	4.5	1.6	8.0
812111	Barber shops .....	8.2	2.3	0.8	4.6	-1.4	6.8	-1.0	2.6
812112	Beauty salons .....	3.5	2.5	5.1	11.3	2.2	3.6	0.9	7.7
812113	Nail salons .....	20.0	12.9	28.7	7.5	26.1	20.7	18.4	20.0
81219	Other personal care services .....	14.8	14.2	22.3	5.8	8.5	18.2	15.4	5.8
812191	Diet and weight reducing centers .....	8.7	8.3	38.1	-13.6	13.2	21.5	16.3	-4.6
812199	All other personal care services .....	19.1	18.9	12.3	23.5	4.5	15.6	14.7	15.6

See footnotes at end of table.

**Table 10.2. Other Services (Except Public Administration, Religious, Labor, and Political Organizations, and Private Households) (NAICS 81) – Estimated Year-to-Year Percent Change in Revenue for Employer Firms: 1999 Through 2007 -Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007/2006	2006/2005	2005/2004	2004/2003	2003/2002	2002/2001	2001/2000	2000/1999
8122	Death care services .....	-3.7	-2.7	4.3	-1.7	7.4	0.5	3.6	-0.5
81221	Funeral homes and funeral services .....	-2.1	3.0	3.6	-2.6	8.8	1.5	5.9	-0.1
81222	Cemeteries and crematories .....	-11.0	-21.8	6.7	1.7	2.7	-2.7	-3.2	-1.9
8123	Drycleaning and laundry services .....	1.4	5.1	5.8	2.5	-4.4	-0.2	2.7	4.3
81231	Coin-operated laundries and drycleaners .....	4.5	3.3	0.7	-0.1	-6.4	-0.1	3.1	11.7
81232	Drycleaning and laundry services (except coin-operated) .....	3.9	7.8	4.6	4.1	-6.2	-0.7	-0.3	2.9
81233	Linen and uniform supply .....	-1.8	3.6	8.5	2.2	-2.2	0.2	5.2	3.0
812331	Linen supply .....	0.4	-2.3	9.9	6.2	-1.2	-1.4	4.7	6.6
812332	Industrial launderers .....	-2.9	S	S	0.2	-2.7	1.1	5.5	1.2
8129	Other personal services .....	7.3	-0.2	5.8	NA	NA	NA	NA	NA
8129*	Other personal services <sup>1</sup> .....	7.1	-1.5	4.6	0.6	1.8	1.9	1.8	12.9
81291	Pet care (except veterinary) services .....	8.8	11.3	16.5	NA	NA	NA	NA	NA
81292	Photofinishing .....	-1.0	-14.9	-17.8	-13.7	-4.5	3.3	-2.2	-1.3
81293	Parking lots and garages .....	-0.1	-1.1	6.8	1.1	1.9	1.7	6.3	10.3
81299	All other personal services .....	17.5	3.3	14.1	9.8	6.5	1.2	-1.0	31.1
813	Religious, grantmaking, civic, professional, and similar organizations (except religious, labor, and political organizations) .....	11.9	14.1	6.5	9.6	4.8	-2.3	-3.0	7.5
8132	Grantmaking and giving services .....	17.7	21.8	8.2	19.7	1.8	-9.1	-11.5	9.3
8133	Social advocacy organizations .....	10.7	10.4	3.6	0.5	10.8	7.4	3.4	7.0
8134	Civic and social organizations .....	4.8	8.3	2.9	4.7	8.7	4.1	2.9	6.7
8139	Business, professional, and other organizations (except labor and political organizations) .....	6.7	7.7	6.5	3.7	5.0	1.1	5.2	5.3

NA Not available. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Excludes NAICS 81291 (Pet care services).

Note: Estimates cover only taxable firms for NAICS 811 (Repair and maintenance) and NAICS 812 (Personal and laundry services), only tax-exempt firms for NAICS 813 (Religious, grantmaking, civic, professional, and similar organizations (except religious, labor, and political organizations)), and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-10.1 provides estimated measures of sampling variability.

**Table 10.3. Other Services (Except Public Administration, Religious, Labor, and Political Organizations, and Private Households) (NAICS 81) – Estimated Export Revenue for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
<b>81</b>	<b>Other services (except public administration, religious, labor, and political organizations, and private households) .....</b>	1,905	1,708	S	1,076	11.5	S	S
811	Repair and maintenance .....	1,905	1,708	S	1,076	11.5	S	S
8112	Electronic and precision equipment repair and maintenance .....	499	S	S	S	S	S	S
811211	Consumer electronics repair and maintenance .....	S	S	S	S	S	S	S
811212	Computer and office machine repair and maintenance .....	13	15	16	12	-13.3	-6.3	33.3
811213	Communication equipment repair and maintenance .....	183	S	S	S	S	S	S
811219	Other electronic and precision equipment repair and maintenance .....	S	266	252	206	S	5.6	22.3
8113	Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance .....	1,405	1,225	S	657	14.7	S	S
8114	Personal and household goods repair and maintenance .....	S	S	ZZ	ZZ	S	S	Z
81141	Home and garden equipment and appliance repair and maintenance .....	S	S	ZZ	ZZ	S	S	Z
81142	Reupholstery and furniture repair .....	ZZ	ZZ	ZZ	ZZ	Z	Z	Z
81143	Footwear and leather goods repair .....	ZZ	ZZ	ZZ	ZZ	Z	Z	Z
81149	Other personal and household goods repair and maintenance .....	ZZ	ZZ	ZZ	S	Z	Z	S

Z Absolute value is less than 0.05. ZZ Absolute value is less than 0.5. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). Unpublished estimates derived from this table by subtraction are subject to these same limitations and should not be attributed to the U.S. Census Bureau. For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: Estimates cover only taxable firms for NAICS 811 (Repair and maintenance) and NAICS 812 (Personal and laundry services), only tax-exempt firms for NAICS 813 (Religious, grantmaking, civic, professional, and similar organizations (except religious, labor, and political organizations)), and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-10.2 provides estimated measures of sampling variability.

**Table 10.4. Other Services (Except Public Administration, Religious, Labor, and Political Organizations, and Private Households) (NAICS 81) – Estimated Total Expenses for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
<b>81</b>	<b>Other services (except public administration, religious, labor, and political organizations, and private households) .....</b>	320,042	307,059	288,185	273,878	4.2	6.5	5.2
811	Repair and maintenance .....	107,277	105,189	101,542	96,768	2.0	3.6	4.9
8111	Automotive repair and maintenance .....	68,473	67,079	65,412	62,313	2.1	2.5	5.0
81111	Automotive mechanical and electrical repair and maintenance .....	33,825	33,145	32,035	30,960	2.1	3.5	3.5
811111	General automotive repair .....	28,493	27,669	26,560	25,532	3.0	4.2	4.0
811112	Automotive exhaust system repair .....	804	867	916	948	-7.3	-5.3	-3.4
811113	Automotive transmission repair .....	2,464	2,538	2,518	2,339	-2.9	0.8	7.7
811118	Other automotive mechanical and electrical repair and maintenance .....	2,064	2,071	2,041	2,142	-0.3	1.5	-4.7
81112	Automotive body, paint, interior, and glass repair .....	23,727	23,380	23,120	21,968	1.5	1.1	5.2
811121	Automotive body, paint, and interior repair and maintenance .....	20,981	20,444	20,233	19,191	2.6	1.0	5.4
811122	Automotive glass replacement shops .....	2,746	2,935	2,887	2,777	-6.4	1.7	4.0
81119	Other automotive repair and maintenance .....	10,921	10,554	10,257	9,384	3.5	2.9	9.3
811191	Automotive oil change and lubrication shops .....	4,002	3,841	3,774	3,460	4.2	1.8	9.1
811192	Car washes .....	5,809	5,588	5,323	4,797	4.0	5.0	11.0
811198	All other automotive repair and maintenance .....	1,110	1,125	1,160	1,128	-1.3	-3.0	2.8
8112	Electronic and precision equipment repair and maintenance .....	13,349	13,550	12,949	12,410	-1.5	4.6	4.3
811211	Consumer electronics repair and maintenance .....	1,401	1,359	1,287	1,436	3.1	5.6	-10.4
811212	Computer and office machine repair and maintenance .....	5,661	5,680	5,479	5,080	-0.3	3.7	7.9
811213	Communication equipment repair and maintenance .....	1,803	1,794	1,688	1,590	0.5	6.3	6.2
811219	Other electronic and precision equipment repair and maintenance .....	4,483	4,717	4,495	4,304	-5.0	4.9	4.4
8113	Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance .....	17,343	16,892	15,736	14,987	2.7	7.3	5.0
8114	Personal and household goods repair and maintenance .....	8,113	7,668	7,445	7,058	5.8	3.0	5.5
81141	Home and garden equipment and appliance repair and maintenance .....	4,225	3,712	3,583	3,396	13.8	3.6	5.5
81142	Reupholstery and furniture repair .....	990	1,076	1,081	1,002	-8.0	-0.5	7.9
81143	Footwear and leather goods repair .....	157	152	156	149	3.3	-2.6	4.7
81149	Other personal and household goods repair and maintenance .....	2,741	2,729	2,626	2,511	0.4	3.9	4.6
812	Personal and laundry services .....	71,259	70,734	70,261	66,423	0.7	0.7	5.8
8121	Personal care services .....	24,956	23,450	22,377	20,782	6.4	4.8	7.7
81211	Hair, nail, and skin care services .....	19,124	18,421	18,123	17,393	3.8	1.6	4.2
812111	Barber shops .....	506	446	436	434	13.5	2.3	0.5
812112	Beauty salons .....	16,877	16,562	16,357	15,443	1.9	1.3	5.9
812113	Nail salons .....	1,741	1,412	1,331	1,517	23.3	6.1	-12.3
81219	Other personal care services .....	5,832	5,030	4,253	3,389	15.9	18.3	25.5
812191	Diet and weight reducing centers .....	2,184	2,031	1,730	1,201	7.5	17.4	44.0
812199	All other personal care services .....	3,647	2,999	2,523	2,188	21.6	18.9	15.3
8122	Death care services .....	11,019	11,629	13,008	12,526	-5.2	-10.6	3.8
81221	Funeral homes and funeral services .....	8,853	9,306	10,010	9,632	-4.9	-7.0	3.9
81222	Cemeteries and crematories .....	2,166	2,323	2,998	2,894	-6.8	-22.5	3.6
8123	Drycleaning and laundry services .....	19,079	19,861	18,670	17,587	-3.9	6.4	6.2
81231	Coin-operated laundries and drycleaners .....	3,138	2,949	2,973	3,023	6.4	-0.8	-1.7
81232	Drycleaning and laundry services (except coin-operated) .....	7,942	7,795	7,185	7,047	1.9	8.5	2.0
81233	Linen and uniform supply .....	7,999	9,117	8,512	7,517	-12.3	7.1	13.2
812331	Linen supply .....	3,130	3,226	3,235	3,007	-3.0	-0.3	7.6
812332	Industrial launderers .....	4,870	5,891	5,278	4,510	-17.3	11.6	17.0

See footnotes at end of table.

**Table 10.4. Other Services (Except Public Administration, Religious, Labor, and Political Organizations, and Private Households) (NAICS 81) – Estimated Total Expenses for Employer Firms: 2004 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

NAICS code	Kind of business	2007	2006	2005	2004	Percent change		
						2007/2006	2006/2005	2005/2004
8129	Other personal services .....	16,205	15,793	16,205	15,528	2.6	-2.5	4.4
81291	Pet care (except veterinary) services .....	2,083	1,860	1,846	1,513	12.0	0.8	22.0
81292	Photofinishing .....	1,704	1,787	2,322	2,939	-4.6	-23.0	-21.0
81293	Parking lots and garages .....	6,650	7,022	7,290	7,021	-5.3	-3.7	3.8
81299	All other personal services .....	5,769	5,124	4,748	4,055	12.6	7.9	17.1
813	Religious, grantmaking, civic, professional, and similar organizations (except religious, labor, and political organizations) ..	141,506	131,136	116,382	110,687	7.9	12.7	5.1
8132	Grantmaking and giving services .....	56,563	51,886	44,569	42,123	9.0	16.4	5.8
8133	Social advocacy organizations .....	14,523	13,221	12,057	11,755	9.8	9.7	2.6
8134	Civic and social organizations .....	17,063	16,291	14,996	14,546	4.7	8.6	3.1
8139	Business, professional, and other organizations (except labor and political organizations) .....	53,357	49,738	44,760	42,262	7.3	11.1	5.9

Note: Estimates cover only taxable firms for NAICS 811 (Repair and maintenance) and NAICS 812 (Personal and laundry services), only tax-exempt firms for NAICS 813 (Religious, grantmaking, civic, professional, and similar organizations (except religious, labor, and political organizations)), and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-10.3 provides estimated measures of sampling variability.



**Table 10.5. Other Services (Except Public Administration, Religious, Labor, and Political Organizations, and Private Households) (NAICS 81) – Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses. Dollar volume estimates are published in millions of dollars; consequently, results may not be additive. Estimates have been adjusted using results of the 2002 Economic Census]

Kind of business	2007	2006	2005	2004	Percent change		
					2007/2006	2006/2005	2005/2004
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>320,042</b>	<b>307,059</b>	<b>288,185</b>	<b>273,878</b>	<b>4.2</b>	<b>6.5</b>	<b>5.2</b>
Personnel costs.....	120,373	114,280	110,330	105,330	5.3	3.6	4.7
Gross annual payroll.....	100,165	95,905	92,409	88,731	4.4	3.8	4.1
Employer's cost for fringe benefits.....	17,435	15,609	15,136	14,116	11.7	3.1	7.2
Health insurance.....	7,268	NA	NA	NA	NA	NA	NA
Pension plans.....	2,912	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	1,241	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	1,671	NA	NA	NA	NA	NA	NA
Other.....	7,255	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	2,774	2,766	2,785	2,482	0.3	-0.7	12.2
Expensed materials, parts and supplies (not for resale).....	34,326	35,419	34,068	32,464	-3.1	4.0	4.9
Expensed equipment.....	1,945	2,006	1,907	1,900	-3.0	5.2	0.4
Expensed purchase of other materials, parts, and supplies.....	32,380	33,413	32,160	30,564	-3.1	3.9	5.2
Expensed purchased services.....	35,519	35,065	32,452	30,377	1.3	8.1	6.8
Expensed purchases of software.....	877	918	958	915	-4.5	-4.2	4.7
Purchased electricity and fuels (except motor fuels).....	6,153	6,135	5,693	5,077	0.3	7.8	12.1
Purchased electricity.....	4,078	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	2,075	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	16,620	15,714	14,634	13,852	5.8	7.4	5.6
Lease and rental payments for machinery, equipment, and other tangible items.....	2,601	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	14,018	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	5,537	5,998	4,908	4,678	-7.7	22.2	4.9
Purchased repairs and maintenance to machinery and equipment.....	2,270	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	3,267	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	6,333	6,299	6,259	5,855	0.5	0.6	6.9
Other operating expenses.....	129,824	122,295	111,336	105,708	6.2	9.8	5.3
Contributions, gifts, and grants paid.....	41,139	37,507	31,887	30,239	9.7	17.6	5.4
Depreciation and amortization charges.....	8,786	8,760	9,026	9,076	0.3	-2.9	-0.6
Governmental taxes and license fees.....	4,699	4,726	4,566	4,277	-0.6	3.5	6.8
All other operating expenses.....	75,199	71,301	65,857	62,117	5.5	8.3	6.0
Data processing and other purchased computer services.....	1,194	NA	NA	NA	NA	NA	NA
Purchased communication services.....	2,457	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	2,275	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	9,119	NA	NA	NA	NA	NA	NA
All other operating expenses.....	60,155	NA	NA	NA	NA	NA	NA

NA Not available.

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: Estimates cover only taxable firms for NAICS 811 (Repair and maintenance) and NAICS 812 (Personal and laundry services), only tax-exempt firms for NAICS 813 (Religious, grantmaking, civic, professional, and similar organizations (except religious, labor, and political organizations)), and are not adjusted for price changes. The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>. Appendix A, Table A-10.4 provides estimated measures of sampling variability.

# Appendix A.

## Reliability of Estimates

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The published estimates may differ from the actual, but unknown, population values. For a particular estimate, statisticians define this difference as the total error of the estimate. When describing the accuracy of survey results, it is convenient to discuss total error as the sum of sampling error and nonsampling error. Sampling error is the error arising from the use of a sample, rather than a census, to estimate population values. Nonsampling error encompasses all other factors that contribute to the total error of a sample survey estimate. Further descriptions of sampling error and nonsampling error are provided in the following sections. Data users should take into account the estimates of sampling error and the potential effects of nonsampling error when using the published estimates.

### Sampling Error

Because the estimates are based on a sample, exact agreement with results that would be obtained from a complete enumeration of firms on the sampling frame using the same enumeration procedures is not expected. However, because each firm on the sampling frame has a known probability of being selected into the sample, it is possible to estimate the sampling variability of the survey estimates.

The particular sample used in this survey is one of a large number of samples of the same size that could have been selected using the same design. If all possible samples had been surveyed under the same conditions, an estimate of a population parameter of interest could have been obtained from each sample. For the parameter of interest, estimates derived from the different samples would, in general, differ from each other. Common measures of the variability among these estimates are the sampling variance, the standard error, and the coefficient of variation (CV). The sampling variance is defined as the squared difference, averaged over all possible samples of the same size and design, between the estimator and its average value. The standard error is the square root of the sampling variance. The CV expresses the standard error as a percentage of the estimate to which it refers. For example, an estimate of 200 units that has an estimated standard error of 10 units has an estimated CV of 5 percent. The sampling variance, standard error, and CV of an estimate can be estimated from the selected sample because the sample was selected using probability sampling. Note that measures of

sampling variability, such as the standard error and CV, are estimated from the sample and are also subject to sampling variability. (Technically, we should refer to the *estimated* standard error or the *estimated CV* of an estimator. However, for the sake of brevity we have omitted this detail.) It is important to note that the standard error and CV only measure sampling variability. They do not measure any systematic biases in the estimates.

We estimate variances for all types of published statistics (totals, ratios, and percent changes) using the method of random groups. To implement the random group method of variance estimation, we assign a random group number to each sampling unit at the time of sample selection. Then, for each tabulation level at which estimates are produced, we compute variance estimates using the assigned random group numbers. We use 16 random groups ( $G=16$ ) to estimate variances for the Service Annual Survey. For more information on the random group method of variance estimation, click [here](#).

The Census Bureau recommends that individuals using published estimates incorporate this information into their analyses, as sampling error could affect the conclusions drawn from these estimates.

The estimate from a particular sample and its associated standard error can be used to construct a confidence interval. A *confidence interval* is a range about a given estimator that has a specified probability of containing the average of the estimates for the parameter derived from all possible samples of the same size and design. Associated with each interval is a percentage of confidence, which is interpreted as follows. If, for each possible sample, an estimate of a population parameter and its approximate standard error were obtained and using a t-statistic with 15 ( $=G-1$ ) degrees of freedom, then:

For approximately 90 percent of the possible samples, the interval from 1.753 standard errors below to 1.753 standard errors above the estimate would include the average of the estimates derived from all possible samples of the same size and design.

To illustrate the computation of a confidence interval for an estimate of total revenue, assume that an estimate of total revenue is \$10,750 million and the CV for this estimate is

1.8 percent, or 0.018. First obtain the standard error of the estimate by multiplying the total revenue estimate by its CV. For this example, multiply \$10,750 million by 0.018. This yields a standard error of \$193.5 million. The upper and lower bounds of the 90-percent confidence interval are computed as \$10,750 million plus or minus 1.753 times \$193.5 million. Consequently, the 90-percent confidence interval is \$10,411 million to \$11,089 million. If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately 9 out of 10 (90 percent) of these intervals would contain the average of the estimates derived from all possible samples.

**Nonsampling Errors**

Nonsampling error encompasses all other factors, other than sampling error, that contribute to the total error of a sample survey estimate and may also occur in censuses. It is often helpful to think of nonsampling error as arising from deficiencies or mistakes in the survey process. Nonsampling errors are difficult to measure and can be attributed to many sources: the inclusion of erroneous units in the survey (overcoverage), the exclusion of eligible units from the survey (undercoverage), nonresponse, misreporting, mistakes in recording and coding responses, misinterpretation of questions, and other errors of collection, response, coverage, or processing. Although nonsampling error is not measured directly, the Census Bureau employs quality control procedures throughout the process to minimize this type of error.

A potential source of bias in the estimates is nonresponse. Nonresponse is defined as the inability to obtain all the

intended measurements or responses about all selected units. Two types of nonresponse are often distinguished. *Unit nonresponse* is used to describe the inability to obtain any of the substantive measurements about a sampled unit. In most cases of unit nonresponse, the questionnaire was never returned to the Census Bureau after several attempts to elicit a response. *Item nonresponse* occurs either when a question is unanswered or the response to the question fails computer or analyst edits.

For both unit and item nonresponse, a missing value is replaced by a predicted value obtained from an appropriate model for nonresponse. This procedure is called *imputation* and uses survey data and administrative data as input. Imputation rates for total revenue for employer firms at the published sector and sub-sector levels are as follows:

<b>NAICS Sector</b>	<b>Title</b>	<b>Imputation Rate</b>
48-49	Transportation and Warehousing	11.4
51	Information	8.4
523	Securities, Commodity Contracts, and Other Financial Investments and Related Activities	6.5
532	Rental and Leasing Services	11.6
54	Professional, Scientific, and Technical Services	14.1
56	Administrative and Support and Waste Management and Remediation Services	11.0
62	Health Care and Social Assistance	11.5
71	Arts, Entertainment, and Recreation	12.3
81	Other Services (except Public Administration)	9.7

### Variance Estimates for Total Estimates

Let

- $\hat{Y}_L^t$  = The estimated total for data item Y at tabulation level L, industry by tax status, for time period t computed from the entire sample
- $\hat{Y}_{L,g}^t$  = The estimated **replicate total** for data item Y at tabulation level L for time period t computed from the g<sup>th</sup> random group of noncertainty sampling units ( $w_i^t = 1$ ), where g=01, 02, ... 16, and the certainty sampling units ( $w_i^t = 1$ )
- $\hat{Y}_{L,00}^t$  = The weighted total for data item Y at tabulation level L for time period t computed from the certainty sampling units (where random group=00 and  $w_i^t = 1$ ); this term can be zero
- G = 16
- $i \in (L, g)$  denotes units assigned to random group g that possess characteristics of tabulation level L

Then, the g<sup>th</sup> replicate total for data item Y at tabulation level L for time period t is computed as

$$\hat{Y}_{L,g}^t = G \left( \sum_{i \in (L,g)} w_i^t y_i^t \right) + \hat{Y}_{L,00}^t$$

The sum in parentheses of the preceding formula is referred to as the random group total.

Then the estimated variance of  $\hat{Y}_L^t$  is computed as

$$v(\hat{Y}_L^t) = \frac{1}{G(G-1)} \sum_{g=1}^G (\hat{Y}_{L,g}^t - \hat{Y}_L^t)^2$$

### Variance Estimates for Ratio Estimates

Let

- $\hat{R}_L^t$  = the estimated ratio of interest at tabulation level L for time t computed from the entire sample
- $\hat{R}_{L,g}^t$  = the estimated replicate ratio of interest at tabulation level L for time period t computed from the g<sup>th</sup> random group of noncertainty sampling units ( $w_i^t = 1$ ), where g=01, 02, ... 16, and the certainty sampling units ( $w_i^t = 1$ )
- $$= \frac{\hat{Y}_{L,g}^t}{\hat{X}_{L,g}^t}$$

where L, g,  $\hat{X}_{L,g}^t$ , and  $\hat{Y}_{L,g}^t$  are defined as in the **variance estimates for total estimates** above.

Then the estimated variance of  $\hat{R}_L^t$  is computed as

$$v(\hat{R}_L^t) = \frac{1}{G(G-1)} \sum_{g=1}^G (\hat{R}_{L,g}^t - \hat{R}_L^t)^2$$

**Variance Estimates for Period-to-Period Percent Change Estimates**

Let the year-to-year percent change estimate,  $\hat{T}_L^t$ , be defined as

$$\begin{aligned} \hat{T}_L^t &= \left( \frac{\hat{Y}_L^{t_1} - \hat{Y}_L^{t_2}}{\hat{Y}_L^{t_2}} \right) * 100 \\ &= (\hat{R}_L^t - 1) * 100 \end{aligned}$$

Then the estimated variance of this estimate is computed as

$$\begin{aligned} v(\hat{T}_L^t) &= v[(\hat{R}_L^t - 1) * 100] \\ &= (100)^2 v(\hat{R}_L^t) \\ &= \frac{(100)^2}{G(G-1)} \sum_{g=1}^G (\hat{R}_{L,g}^t - \hat{R}_L^t)^2 \end{aligned}$$

**Variance Estimates for Percent Contribution of Component NAICS to Aggregate NAICS Estimates (E-Stats Report)**

Let the percent contribution of a component NAICS to aggregate NAICS estimate,  $\hat{P}_{L_1/L_2}^t$  be defined as

$$\begin{aligned} \hat{P}_{L_1/L_2}^t &= \frac{\hat{Y}_{L_1}^t}{\hat{Y}_{L_2}^t} \\ &= \hat{R}_{L_1/L_2}^t \end{aligned}$$

where  $L_1$  and  $L_2$  denote the component and aggregate NAICS codes, respectively.

Then the estimated variance of this estimate is computed as

$$\begin{aligned} v(\hat{P}_{L_1/L_2}^t) &= v(\hat{R}_{L_1/L_2}^t * 100) \\ &= (100)^2 v(\hat{R}_{L_1/L_2}^t) \\ &= \frac{(100)^2}{G(G-1)} \sum_{g=1}^G (\hat{R}_{L_1/L_2,g}^t - \hat{R}_{L_1/L_2}^t)^2 \end{aligned}$$

**Table A-1.1. Selected Service Industries – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer and Nonemployer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
	<b>Total for selected service industries .....</b>	<b>0.5</b>	<b>0.4</b>	<b>0.3</b>	<b>0.3</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>
484	Truck transportation .....	1.4	1.2	1.0	0.9	0.4	0.7	0.6
492	Couriers and messengers .....	1.2	1.1	1.1	1.4	0.4	0.5	0.7
493	Warehousing and storage .....	5.2	5.2	5.4	5.1	0.8	1.1	0.9
51	Information .....	0.7	0.6	0.4	0.3	0.3	0.4	0.3
511	Publishing industries (except Internet) .....	1.8	1.7	1.3	0.8	0.7	0.6	0.9
512	Motion picture and sound recording industries .....	1.8	1.8	1.8	1.2	0.8	0.7	0.8
515	Broadcasting (except Internet) .....	0.5	0.6	0.4	0.3	0.3	0.5	0.3
516	Internet publishing and broadcasting .....	4.8	3.6	2.7	1.4	2.2	3.3	3.4
517	Telecommunications .....	0.8	0.8	0.9	0.6	0.5	0.5	0.6
518	Internet service providers, web search portals, and data processing services .....	3.4	2.0	1.0	0.8	2.2	1.8	1.1
519	Other information services .....	3.1	2.5	1.7	1.6	1.1	1.5	0.9
5231	Securities and commodity contracts intermediation and brokerage .....	1.2	0.9	0.7	0.9	0.9	0.6	0.7
532	Rental and leasing services .....	1.5	1.5	1.2	1.2	0.6	0.6	0.6
54	Professional, scientific, and technical services (except notaries) .....	1.4	1.3	1.2	1.2	0.5	0.5	0.5
56	Administrative and support and waste management and remediation services .....	2.3	2.2	1.7	1.3	0.6	0.9	0.6
561	Administrative and support services .....	2.5	2.4	1.8	1.5	0.7	0.9	0.6
562	Waste management and remediation services .....	1.4	1.5	1.3	1.1	0.9	1.2	1.0
62	Health care and social assistance .....	0.8	0.6	0.4	0.4	0.4	0.3	0.2
621	Ambulatory health care services .....	1.0	1.0	0.7	0.7	0.3	0.5	0.5
622	Hospitals .....	1.5	1.2	0.8	0.8	0.7	0.7	0.3
623	Nursing and residential care facilities .....	2.0	1.7	1.1	0.9	0.8	0.9	0.6
624	Social assistance .....	1.7	1.6	1.3	1.2	0.5	0.7	0.5
71	Arts, entertainment, and recreation .....	1.2	1.1	1.1	0.9	0.5	0.6	0.6
711	Performing arts, spectator sports, and related industries .....	0.7	0.9	1.0	0.9	0.7	0.9	0.8
712	Museums, historical sites, and similar institutions .....	4.6	4.3	3.3	3.1	1.7	3.0	1.3
713	Amusement, gambling, and recreation industries .....	2.2	2.2	2.2	1.9	0.7	0.8	0.8
81	Other services (except public administration, religious, labor, and political organizations, and private households) .....	1.3	1.0	1.1	0.9	0.7	0.5	0.4
811	Repair and maintenance .....	2.1	2.0	2.0	1.8	0.7	0.9	0.7
812	Personal and laundry services .....	1.7	1.5	1.3	1.1	0.4	0.6	0.5
813	Religious, grantmaking, civic, professional, and similar organizations (except religious, labor, and political organizations) .....	2.3	1.5	1.4	1.3	1.8	0.9	0.9

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-1.2. Selected Service Industries – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
	<b>Total for selected service industries .....</b>	<b>0.5</b>	<b>0.5</b>	<b>0.4</b>	<b>0.3</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>
484	Truck transportation .....	1.7	1.4	1.2	1.1	0.4	0.9	0.7
492	Couriers and messengers .....	1.3	1.1	1.1	1.5	0.4	0.5	0.7
493	Warehousing and storage .....	5.3	5.3	5.5	5.3	0.8	1.1	0.9
51	Information .....	0.7	0.6	0.5	0.3	0.3	0.4	0.3
511	Publishing industries (except Internet) .....	1.8	1.8	1.3	0.8	0.7	0.6	0.9
512	Motion picture and sound recording industries .....	1.9	1.9	1.9	1.3	0.8	0.7	0.8
515	Broadcasting (except Internet) .....	0.5	0.6	0.4	0.3	0.3	0.5	0.3
516	Internet publishing and broadcasting .....	5.1	3.7	2.8	1.4	2.3	3.5	3.5
517	Telecommunications .....	0.8	0.8	0.9	0.6	0.5	0.5	0.6
518	Internet service providers, web search portals, and data processing services .....	3.4	2.0	1.1	0.8	2.2	1.8	1.1
519	Other information services .....	3.8	3.0	2.1	2.0	1.4	1.8	1.1
5231	Securities and commodity contracts intermediation and brokerage .....	1.2	0.9	0.7	0.9	0.9	0.6	0.7
532	Rental and leasing services .....	1.6	1.5	1.2	1.3	0.7	0.7	0.6
54	Professional, scientific, and technical services (except notaries) .....	1.5	1.5	1.3	1.4	0.5	0.6	0.5
56	Administrative and support and waste management and remediation services .....	2.5	2.4	1.8	1.5	0.7	1.0	0.7
561	Administrative and support services .....	2.7	2.6	2.0	1.6	0.8	1.0	0.7
562	Waste management and remediation services .....	1.4	1.5	1.4	1.1	0.9	1.2	1.0
62	Health care and social assistance .....	0.8	0.6	0.5	0.4	0.3	0.3	0.2
621	Ambulatory health care services .....	1.1	1.1	0.8	0.7	0.4	0.6	0.5
622	Hospitals .....	1.4	1.2	0.8	0.8	0.6	0.7	0.3
623	Nursing and residential care facilities .....	2.0	1.7	1.1	0.9	0.8	0.9	0.6
624	Social assistance .....	1.7	1.7	1.4	1.4	0.6	0.8	0.5
71	Arts, entertainment, and recreation .....	1.3	1.3	1.3	1.1	0.6	0.7	0.7
711	Performing arts, spectator sports, and related industries .....	0.8	1.1	1.3	1.2	0.8	1.2	1.0
712	Museums, historical sites, and similar institutions .....	4.6	4.3	3.3	3.1	1.8	3.0	1.3
713	Amusement, gambling, and recreation industries .....	2.3	2.3	2.3	2.0	0.8	0.8	0.8
81	Other services (except public administration, religious, labor, and political organizations, and private households) .....	1.5	1.2	1.3	1.1	0.9	0.5	0.5
811	Repair and maintenance .....	2.5	2.4	2.4	2.1	0.8	1.0	0.9
812	Personal and laundry services .....	2.7	2.3	1.9	1.7	0.6	0.9	0.8
813	Religious, grantmaking, civic, professional, and similar organizations (except religious, labor, and political organizations) .....	2.3	1.5	1.4	1.3	1.8	0.9	0.9

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-2.1. Truck Transportation (NAICS 484), Couriers and Messengers (NAICS 492), and Warehousing and Storage (NAICS 493) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
	<b>Selected transportation and warehousing industries <sup>1</sup> .....</b>	<b>1.4</b>	<b>1.3</b>	<b>1.1</b>	<b>1.0</b>	<b>0.3</b>	<b>0.6</b>	<b>0.5</b>
484	Truck transportation .....	1.7	1.4	1.2	1.1	0.4	0.9	0.7
4841	General freight trucking .....	1.5	1.2	1.3	1.0	0.6	1.0	1.0
48411	General freight trucking, local .....	2.6	2.8	2.8	2.0	0.9	1.7	1.6
48412	General freight trucking, long-distance .....	1.7	1.4	1.4	1.1	0.7	1.3	1.2
484121	General freight trucking, long-distance, truckload .....	2.5	2.1	1.8	1.5	1.0	1.9	1.3
484122	General freight trucking, long-distance, less than truckload .....	3.3	3.2	2.1	2.0	0.7	1.6	2.1
4842	Specialized freight trucking .....	3.0	2.6	2.6	2.4	0.9	1.3	1.2
48421	Used household and office goods moving .....	6.0	5.8	3.9	3.2	1.2	2.3	1.5
48422	Specialized freight (except used goods) trucking, local .....	5.3	4.8	4.3	4.0	1.8	2.8	2.5
48423	Specialized freight (except used goods) trucking, long-distance .....	4.4	4.1	4.1	3.5	1.6	2.4	2.6
492	Couriers and messengers .....	1.3	1.1	1.1	1.5	0.4	0.5	0.7
4921	Couriers .....	0.9	0.8	0.9	1.1	0.4	0.5	0.4
4922	Local messengers and local delivery .....	14.0	14.5	14.0	19.3	1.9	3.5	4.0
493	Warehousing and storage .....	5.3	5.3	5.5	5.3	0.8	1.1	0.9
4931	Warehousing and storage .....	5.3	5.3	5.5	5.3	0.8	1.1	0.9
49311	General warehousing and storage .....	8.7	8.6	8.8	8.4	1.0	1.9	1.3
49312	Refrigerated warehousing and storage .....	4.2	3.4	3.5	2.9	2.4	2.1	1.7
49313	Farm product warehousing and storage .....	7.3	6.1	6.6	4.7	1.9	1.4	2.9
49319	Other warehousing and storage .....	6.1	6.0	3.6	3.5	0.9	3.2	1.3

<sup>1</sup>Excludes NAICS 481 (Air transportation), NAICS 483 (Water transportation), NAICS 485 (Transit and ground passenger transportation), NAICS 486 (Pipeline transportation), NAICS 487 (Scenic and sightseeing transportation), NAICS 488 (Support activities for transportation), and NAICS 491 (Postal service).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.



**Table A-2.2. Truck Transportation (NAICS 484) – Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>OPERATING REVENUE</b>							
<b>Total .....</b>	<b>1.7</b>	<b>1.4</b>	<b>1.2</b>	<b>1.1</b>	<b>0.4</b>	<b>0.9</b>	<b>0.7</b>
Motor carrier .....	1.7	1.4	1.2	1.0	0.5	1.0	0.7
Local trucking .....	2.5	2.2	1.9	1.5	1.6	1.9	1.0
Long-distance trucking .....	1.9	1.5	1.6	1.4	0.9	1.3	0.9
Other operating revenue (truck transportation) .....	5.1	4.6	5.5	6.0	2.4	4.2	2.6

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-2.3. Truck Transportation (NAICS 484) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change by Size of Shipments, Commodities Handled, and Origin and Destination of Shipments for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Total motor carrier revenue</b> .....	1.7	1.4	1.2	1.0	0.5	1.0	0.7
<b>SIZE OF SHIPMENTS</b>							
Less-than-truckload .....	2.4	2.7	1.3	2.0	0.9	2.2	1.4
Truckload .....	2.0	1.8	1.4	1.3	0.6	1.2	0.7
<b>COMMODITIES HANDLED</b>							
Agricultural and fish products .....	7.0	6.6	5.6	5.6	2.7	3.9	1.7
Grains, alcohol, and tobacco products .....	11.2	12.2	10.4	10.6	4.8	7.5	1.4
Stone, nonmetallic minerals, and metallic ores .....	5.5	5.9	4.7	4.4	3.6	3.7	2.1
Coal and petroleum products .....	7.2	6.0	6.3	5.8	5.1	3.3	2.2
Pharmaceutical and chemical products .....	3.9	3.2	3.8	4.0	3.3	3.0	1.4
Wood products, textiles, and leathers .....	7.4	5.2	4.8	4.4	3.5	3.0	0.9
Base metal and machinery .....	6.5	6.0	7.7	7.0	2.8	3.6	1.3
Electronic, motorized vehicles, and precision instruments .....	7.4	7.4	5.5	4.9	2.5	3.4	1.5
Used household and office goods .....	6.3	5.9	5.5	5.1	3.8	3.3	2.1
New furniture and miscellaneous manufactured products .....	3.9	3.4	3.9	3.6	1.6	2.5	1.7
Other goods .....	4.0	3.7	3.7	3.4	1.4	2.6	1.2
<b>HAZARDOUS MATERIALS</b>							
Hazardous materials .....	4.3	S	4.2	4.2	S	S	2.5
<b>ORIGIN AND DESTINATION OF SHIPMENTS</b>							
U.S. to U.S. ....	1.7	1.4	1.2	1.1	0.4	1.0	0.7
U.S. to Canada .....	8.2	6.3	6.2	5.6	9.0	3.5	1.2
U.S. to Mexico .....	17.9	21.4	20.9	24.5	6.6	7.4	4.8
Canada to U.S. ....	9.5	9.0	7.3	6.7	4.5	3.2	1.4
Mexico to U.S. ....	28.8	26.5	23.0	25.7	8.2	11.3	12.0
All other destinations .....	5.9	7.5	9.0	10.7	8.6	10.1	3.2

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-2.4. Truck Transportation (NAICS 484) – Estimated Coefficients of Variation and Standard Error of Percent Change for Inventories of Revenue Generating Equipment for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>TRUCKS</b>							
Owned and/or leased with drivers.....	4.0	4.1	4.4	4.9	3.2	4.8	1.4
Leased without drivers.....	8.9	6.9	11.1	12.5	8.7	9.3	2.0
<b>Total.....</b>	<b>3.9</b>	<b>3.7</b>	<b>4.5</b>	<b>5.1</b>	<b>2.8</b>	<b>4.3</b>	<b>1.4</b>
<b>TRUCK-TRACTORS</b>							
Owned and/or leased with drivers.....	2.3	2.5	2.2	2.1	1.7	2.4	1.3
Leased without drivers.....	8.4	11.0	4.9	5.1	14.1	11.1	1.7
<b>Total.....</b>	<b>2.2</b>	<b>2.3</b>	<b>2.0</b>	<b>1.9</b>	<b>1.5</b>	<b>2.2</b>	<b>1.2</b>
<b>TRAILERS</b>							
Owned and/or leased with drivers.....	2.2	2.5	2.7	2.3	1.3	1.8	0.8
Leased without drivers.....	5.7	6.5	4.6	4.3	7.0	5.3	1.1
<b>Total.....</b>	<b>2.2</b>	<b>2.3</b>	<b>2.2</b>	<b>1.8</b>	<b>1.2</b>	<b>1.4</b>	<b>0.7</b>

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-2.5. Truck Transportation (NAICS 484) – Estimated Coefficients of Variation and Standard Error of Percent Change for Number of Truck Miles Traveled by Trucks Operated by Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Total distance traveled in highway miles .....</b>	<b>1.8</b>	<b>2.2</b>	<b>2.6</b>	<b>1.2</b>	<b>1.5</b>	<b>2.2</b>	<b>1.9</b>
Miles traveled by loaded or partially loaded vehicles .....	1.8	1.9	2.7	1.4	1.3	2.2	1.8
Miles traveled by empty vehicles .....	3.4	4.4	3.5	2.5	2.9	2.8	2.6

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-2.6. Truck Transportation (NAICS 484), Couriers and Messengers (NAICS 492), and Warehousing and Storage (NAICS 493) – Estimated Coefficients of Variation and Standard Error of Percent Change for Total Expenses for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
	<b>Selected transportation and warehousing industries <sup>1</sup> .....</b>	<b>1.3</b>	<b>1.2</b>	<b>1.3</b>	<b>1.2</b>	<b>0.4</b>	<b>0.8</b>	<b>0.5</b>
484	Truck transportation .....	1.7	1.3	1.5	1.4	0.6	1.1	0.7
4841	General freight trucking .....	1.6	1.2	1.2	1.1	0.9	1.1	1.2
48411	General freight trucking, local .....	2.5	2.6	3.0	2.2	1.0	1.4	1.4
48412	General freight trucking, long-distance .....	1.7	1.4	1.3	1.3	1.0	1.3	1.4
484121	General freight trucking, long-distance, truckload .....	2.5	2.2	1.8	1.6	1.4	1.8	1.7
484122	General freight trucking, long-distance, less than truckload .....	3.4	3.3	2.6	2.7	0.7	1.6	2.1
4842	Specialized freight trucking .....	2.9	2.6	3.9	3.2	1.2	2.4	1.2
48421	Used household and office goods moving .....	6.5	6.3	4.4	3.5	1.6	2.3	1.5
48422	Specialized freight (except used goods) trucking, local .....	5.0	4.6	4.3	4.2	2.5	3.5	2.2
48423	Specialized freight (except used goods) trucking, long-distance .....	3.9	3.6	6.9	4.9	1.6	3.6	2.5
492	Couriers and messengers .....	1.2	1.1	1.1	1.5	0.3	0.7	0.7
4921	Couriers .....	0.9	0.8	0.9	1.1	0.3	0.8	0.3
4922	Local messengers and local delivery .....	13.5	14.6	14.9	22.1	1.9	2.1	4.4
493	Warehousing and storage .....	5.9	5.8	6.0	5.5	1.0	1.3	0.9
4931	Warehousing and storage .....	5.9	5.8	6.0	5.5	1.0	1.3	0.9
49311	General warehousing and storage .....	9.0	8.9	9.4	8.7	1.4	1.9	1.2
49312	Refrigerated warehousing and storage .....	5.0	4.2	3.7	3.3	2.5	1.8	1.8
49313	Farm product warehousing and storage .....	7.0	5.4	6.3	5.8	2.0	3.5	2.1
49319	Other warehousing and storage .....	6.5	6.7	4.1	3.9	0.9	3.7	1.3

<sup>1</sup>Excludes NAICS 481 (Air transportation), NAICS 483 (Water transportation), NAICS 485 (Transit and ground passenger transportation), NAICS 486 (Pipeline transportation), NAICS 487 (Scenic and sightseeing transportation), NAICS 488 (Support activities for transportation), and NAICS 491 (Postal service).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-2.7. Truck Transportation (NAICS 484), Couriers and Messengers (NAICS 492), and Warehousing and Storage (NAICS 493) – Estimated Coefficients of Variation and Standard Error of Percent Change of Selected Expenses for Employer Firms: 2004**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>TRUCK TRANSPORTATION (NAICS 484)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>1.7</b>	<b>1.3</b>	<b>1.5</b>	<b>1.4</b>	<b>0.6</b>	<b>1.1</b>	<b>0.7</b>
Personnel costs.....	1.5	1.5	1.3	1.1	0.4	1.3	0.9
Gross annual payroll.....	1.3	1.4	1.6	1.3	0.5	1.5	0.9
Employer's cost for fringe benefits.....	2.1	2.2	1.8	1.8	1.2	1.1	0.9
Health insurance.....	2.2	NA	NA	NA	NA	NA	NA
Pension plans.....	3.8	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	4.4	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	4.9	NA	NA	NA	NA	NA	NA
Other.....	2.2	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	15.5	8.6	10.1	7.3	8.3	17.4	5.8
Expensed materials, parts and supplies (not for resale).....	6.7	2.9	3.1	2.6	4.9	3.5	1.3
Expensed equipment.....	7.4	10.1	6.9	7.5	7.2	12.6	4.2
Expensed purchase of other materials, parts, and supplies.....	7.1	3.2	3.1	2.5	5.4	3.5	1.4
Expensed purchased services.....	2.4	1.9	2.7	2.4	0.9	1.8	1.1
Purchased freight transportation.....	3.7	2.7	4.3	3.9	1.9	3.0	1.6
Expensed purchases of software.....	22.2	7.0	11.5	13.9	14.4	10.9	2.0
Purchased fuels for transportation equipment.....	1.9	1.9	1.1	1.5	1.4	1.8	1.6
Purchased electricity and fuels (except motor fuels).....	3.3	6.1	3.3	2.9	5.5	9.4	1.4
Purchased electricity.....	4.9	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	5.1	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	12.5	11.0	11.0	10.8	2.0	2.6	1.3
Lease and rental payments for machinery, equipment, and other tangible items.....	13.1	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	11.7	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	2.9	2.6	2.7	2.8	3.3	3.5	1.8
Purchased repairs and maintenance to machinery and equipment.....	3.8	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	5.1	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to transportation equipment.....	3.2	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	3.8	3.0	5.3	10.9	2.7	4.2	4.5
Other operating expenses.....	1.9	2.3	2.2	1.9	1.9	2.2	1.3
Cost of insurance.....	2.6	2.3	2.1	1.5	1.7	1.8	1.3
Depreciation and amortization charges.....	2.9	5.5	3.0	2.6	3.5	5.6	1.2
Governmental taxes and license fees.....	1.8	1.8	2.2	2.3	2.0	1.6	0.9
All other operating expenses.....	2.6	2.7	3.4	3.2	2.8	3.4	2.1
Data processing and other purchased computer services.....	3.9	NA	NA	NA	NA	NA	NA
Purchased communication services.....	2.6	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	4.4	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	5.0	NA	NA	NA	NA	NA	NA
All other operating expenses.....	2.7	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-2.7. Truck Transportation (NAICS 484), Couriers and Messengers (NAICS 492), and Warehousing and Storage (NAICS 493) – Estimated Coefficients of Variation and Standard Error of Percent Change of Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>COURIERS AND MESSENGERS (NAICS 492)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>1.2</b>	<b>1.1</b>	<b>1.1</b>	<b>1.5</b>	<b>0.3</b>	<b>0.7</b>	<b>0.7</b>
Personnel costs.....	1.2	1.1	0.9	1.1	0.4	1.1	0.3
Gross annual payroll.....	1.3	1.0	1.0	1.3	0.5	0.7	0.4
Employer's cost for fringe benefits.....	S	0.9	0.9	0.9	S	0.6	0.1
Health insurance.....	0.9	NA	NA	NA	NA	NA	NA
Pension plans.....	1.0	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	D	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	D	NA	NA	NA	NA	NA	NA
Other.....	1.0	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	20.7	18.4	8.7	8.2	2.4	27.0	1.6
Expensed materials, parts and supplies (not for resale).....	0.8	0.8	0.9	0.9	0.4	0.5	0.3
Expensed equipment.....	D	D	D	D	D	D	D
Expensed purchase of other materials, parts, and supplies.....	D	D	D	D	D	D	D
Expensed purchased services.....	1.1	1.3	1.2	1.2	0.9	1.0	0.2
Expensed purchases of software.....	12.4	13.2	1.8	1.4	1.0	17.7	0.8
Purchased electricity and fuels (except motor fuels).....	S	1.3	0.8	0.9	S	1.2	0.2
Purchased electricity.....	S	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	26.9	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	1.8	2.4	2.0	1.8	1.6	1.1	0.4
Lease and rental payments for machinery, equipment, and other tangible items.....	2.4	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	2.4	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	1.3	1.3	0.9	1.1	1.6	1.2	0.5
Purchased repairs and maintenance to machinery and equipment.....	1.4	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	2.3	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	1.4	1.0	1.4	1.6	0.7	0.9	0.6
Other operating expenses.....	2.4	2.4	2.4	4.1	0.6	0.8	1.9
Depreciation and amortization charges.....	1.0	0.8	1.0	1.1	0.4	0.5	0.2
Governmental taxes and license fees.....	2.7	2.0	4.4	5.0	3.4	3.3	0.8
All other operating expenses.....	2.9	2.8	2.9	5.1	0.7	1.0	2.3
Data processing and other purchased computer services.....	18.2	NA	NA	NA	NA	NA	NA
Purchased communication services.....	3.4	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	3.0	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	1.7	NA	NA	NA	NA	NA	NA
All other operating expenses.....	3.0	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-2.7. Truck Transportation (NAICS 484), Couriers and Messengers (NAICS 492), and Warehousing and Storage (NAICS 493) – Estimated Coefficients of Variation and Standard Error of Percent Change of Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>WAREHOUSING AND STORAGE (NAICS 493)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>5.9</b>	<b>5.8</b>	<b>6.0</b>	<b>5.5</b>	<b>1.0</b>	<b>1.3</b>	<b>0.9</b>
Personnel costs.....	5.9	6.0	5.8	4.9	1.1	1.1	1.4
Gross annual payroll.....	5.9	5.8	5.6	4.8	1.0	1.0	1.5
Employer's cost for fringe benefits.....	5.8	5.2	4.7	4.3	2.1	1.7	1.3
Health insurance.....	5.9	NA	NA	NA	NA	NA	NA
Pension plans.....	6.7	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	14.0	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	6.9	NA	NA	NA	NA	NA	NA
Other.....	6.0	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	12.0	15.9	17.2	13.2	4.7	5.4	3.7
Expensed materials, parts and supplies (not for resale).....	10.5	11.2	8.2	9.1	3.6	12.8	3.3
Expensed equipment.....	18.2	S	9.1	S	S	S	S
Expensed purchase of other materials, parts, and supplies.....	11.8	10.8	9.1	10.2	2.4	7.1	3.6
Expensed purchased services.....	7.3	7.1	7.7	7.2	2.7	1.6	1.1
Expensed purchases of software.....	6.7	9.0	8.7	8.5	3.0	8.2	1.5
Purchased electricity and fuels (except motor fuels).....	5.5	5.1	5.3	5.3	3.3	2.1	1.5
Purchased electricity.....	5.6	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	8.8	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	10.7	10.8	11.7	10.8	4.3	3.0	1.5
Lease and rental payments for machinery, equipment, and other tangible items.....	7.3	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	11.5	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	S	3.4	S	S	S	S	S
Purchased repairs and maintenance to machinery and equipment.....	S	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	8.2	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	8.5	8.7	11.9	10.7	1.6	2.8	1.9
Other operating expenses.....	6.5	6.3	7.0	6.8	1.6	1.7	1.2
Depreciation and amortization charges.....	5.0	4.6	7.5	8.2	2.6	3.3	1.4
Governmental taxes and license fees.....	7.0	6.3	9.1	9.0	3.8	4.6	1.6
All other operating expenses.....	7.0	6.7	7.3	7.0	1.6	1.8	1.4
Data processing and other purchased computer services.....	12.1	NA	NA	NA	NA	NA	NA
Purchased communication services.....	6.7	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	11.5	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	11.7	NA	NA	NA	NA	NA	NA
All other operating expenses.....	7.0	NA	NA	NA	NA	NA	NA

NA Not available. D Estimate in table is withheld to avoid disclosing data of individual companies. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.



**Table A-3.0.1. Information Sector (NAICS 51) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>51</b>	<b>Information .....</b>	<b>0.7</b>	<b>0.6</b>	<b>0.5</b>	<b>0.3</b>	<b>0.3</b>	<b>0.4</b>	<b>0.3</b>
511	Publishing industries (except Internet) .....	1.8	1.8	1.3	0.8	0.7	0.6	0.9
5111	Newspaper, periodical, book, and directory publishers .....	1.0	1.0	0.7	0.4	0.4	0.5	0.6
51111	Newspaper publishers .....	1.5	1.2	1.0	0.5	0.7	0.7	0.9
51112	Periodical publishers .....	2.3	2.5	1.8	0.9	0.7	1.4	1.4
51113	Book publishers .....	1.8	1.6	1.0	0.8	0.9	1.2	0.5
51114	Directory and mailing list publishers .....	1.3	1.1	0.9	0.5	0.8	0.7	1.0
51119	Other publishers .....	1.9	1.9	1.8	1.7	0.8	0.8	0.4
511191	Greeting card publishers .....	1.4	1.1	1.0	1.0	0.6	0.4	0.2
511199	All other publishers .....	5.5	5.5	5.2	5.0	2.2	2.5	1.3
5112	Software publishers .....	3.5	3.3	2.7	1.9	1.3	1.2	1.8
512	Motion picture and sound recording industries .....	1.9	1.9	1.9	1.3	0.8	0.7	0.8
5121	Motion picture and video industries .....	2.3	2.3	2.3	1.5	1.0	0.8	1.0
5121x	Motion picture and video production and distribution <sup>1</sup> .....	2.8	2.8	2.9	1.9	1.2	1.0	1.2
51213	Motion picture and video exhibition .....	2.9	2.6	2.2	1.9	1.1	1.8	1.1
512131	Motion picture theaters (except drive-ins) .....	3.0	2.5	2.2	1.9	1.1	1.4	1.1
512132	Drive-in motion picture theaters .....	S	S	16.4	15.7	S	S	2.2
51219	Postproduction services and other motion picture and video industries .....	4.0	3.0	2.7	1.9	2.2	2.6	2.2
512191	Teleproduction and other postproduction services .....	4.8	3.5	2.9	2.3	2.8	3.0	2.5
512199	Other motion picture and video industries .....	3.8	3.7	4.0	2.6	1.1	2.3	2.5
5122	Sound recording industries .....	0.8	0.8	0.6	0.5	0.3	0.4	0.5
51221	Record production .....	16.4	9.1	4.4	4.7	10.4	5.6	5.1
51222	Integrated record production and distribution .....	0.2	0.3	0.3	0.3	0.1	0.1	0.2
51223	Music publishers .....	2.4	2.5	2.4	1.5	1.1	0.8	1.6
51224	Sound recording studios .....	10.8	11.8	7.5	6.4	2.7	5.7	3.3
51229	Other sound recording industries .....	15.1	12.2	7.2	3.3	7.9	4.7	8.5
515	Broadcasting (except Internet) .....	0.5	0.6	0.4	0.3	0.3	0.5	0.3
5151	Radio and television broadcasting .....	0.9	0.9	0.6	0.4	0.5	0.7	0.4
51511	Radio broadcasting .....	2.1	2.1	1.4	1.3	0.6	1.4	0.8
515111	Radio networks .....	3.2	2.7	2.0	1.5	1.0	1.7	1.3
515112	Radio stations .....	2.4	2.5	1.7	1.5	0.8	1.6	0.9
51512	Television broadcasting .....	1.2	1.0	0.7	0.5	0.6	0.8	0.5
5152	Cable and other subscription programming .....	0.6	0.6	0.5	0.4	0.3	0.2	0.3
516	Internet publishing and broadcasting .....	5.1	3.7	2.8	1.4	2.3	3.5	3.5
517	Telecommunications .....	0.8	0.8	0.9	0.6	0.5	0.5	0.6
5171	Wired telecommunications carriers .....	1.6	0.9	0.9	1.0	1.1	0.5	0.4
5172	Wireless telecommunications carriers (except satellite) .....	1.5	1.4	1.5	0.4	0.6	1.2	1.5
517211	Paging .....	7.8	8.2	4.9	3.5	2.3	3.3	3.1
517212	Cellular and other wireless telecommunications .....	1.5	1.5	1.5	0.4	0.6	1.2	1.5
5173	Telecommunications resellers .....	13.9	14.1	10.5	6.3	2.1	2.6	4.3
5174	Satellite telecommunications .....	2.4	2.1	2.0	1.6	0.5	0.8	0.8
5175	Cable and other program distribution .....	1.1	1.1	1.2	1.0	0.4	0.7	0.4

See footnotes at end of table.

**Table A-3.0.1. Information Sector (NAICS 51) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
5179	Other telecommunications .....	12.2	11.5	11.6	12.2	0.9	0.6	2.4
518	Internet service providers, web search portals, and data processing services .....	3.4	2.0	1.1	0.8	2.2	1.8	1.1
5181	Internet service providers and web search portals .....	3.7	2.9	2.0	1.9	1.4	2.0	1.6
518111	Internet service providers .....	4.9	3.8	2.8	2.5	1.8	2.2	1.9
518112	Web search portals .....	5.5	4.6	2.6	2.8	1.5	3.2	1.0
5182	Data processing, hosting, and related services .....	4.5	3.1	1.8	1.3	2.7	2.6	1.4
519	Other information services .....	3.8	3.0	2.1	2.0	1.4	1.8	1.1
51911	News syndicates .....	4.1	3.6	2.9	2.5	0.9	2.0	1.0
51912	Libraries and archives .....	4.8	5.4	3.6	3.7	2.5	5.0	2.1
51919	All other information services .....	5.7	3.7	3.2	2.8	2.8	1.8	2.5

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Includes NAICS 51211 (Motion picture and video production) and NAICS 51212 (Motion picture and video distribution).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.0.2. Information Sector (NAICS 51) – Estimated Coefficients of Variation for Export Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>51</b>	<b>Information .....</b>	<b>2.5</b>	<b>1.8</b>	<b>1.9</b>	<b>1.8</b>	<b>1.4</b>	<b>0.9</b>	<b>0.8</b>
511	Publishing industries (except Internet) .....	2.6	2.3	2.8	2.6	0.8	1.3	0.9
5111	Newspaper, periodical, book, and directory publishers .....	S	2.2	2.5	2.2	S	0.8	0.6
51111	Newspaper publishers .....	2.4	2.4	2.3	1.8	0.2	0.3	0.7
51112	Periodical publishers .....	S	2.1	2.1	1.9	S	0.9	0.5
51113	Book publishers .....	7.6	9.8	9.7	7.7	3.7	8.8	2.6
51114	Directory and mailing list publishers .....	3.2	2.7	2.9	2.8	3.9	0.6	0.8
51119	Other publishers .....	5.1	5.7	6.9	6.3	2.0	2.1	1.1
511191	Greeting card publishers .....	2.0	1.0	1.0	1.0	1.8	0.1	0.1
511199	All other publishers .....	7.6	8.4	12.8	11.5	2.8	5.3	2.0
5112	Software publishers .....	3.4	3.1	3.5	3.3	1.1	1.6	1.1
512	Motion picture and sound recording industries .....	5.4	2.5	2.6	2.3	4.2	0.5	1.0
5121	Motion picture and video industries .....	5.5	2.5	2.6	2.3	4.3	0.5	1.1
5121x	Motion picture and video production and distribution <sup>1</sup> .....	5.5	2.5	2.6	2.4	4.3	0.5	1.1
51213	Motion picture and video exhibition .....	X	X	X	X	X	X	X
512131	Motion picture theaters (except drive-ins) .....	X	X	X	X	X	X	X
512132	Drive-in motion picture theaters .....	X	X	X	X	X	X	X
51219	Postproduction services and other motion picture and video industries .....	4.9	9.8	13.7	17.2	3.0	2.3	2.7
512191	Teleproduction and other postproduction services .....	3.8	3.8	3.7	3.9	0.9	0.7	0.5
512199	Other motion picture and video industries .....	6.4	11.8	16.2	21.5	3.1	2.6	4.0
5122	Sound recording industries .....	6.5	7.0	7.0	7.0	3.0	3.7	0.6
51221	Record production .....	S	S	S	S	S	S	S
51222	Integrated record production and distribution .....	7.7	S	0.3	0.3	S	S	0.1
51223	Music publishers .....	10.6	13.3	14.4	14.8	4.0	0.9	0.3
51224	Sound recording studios .....	14.1	7.8	9.6	S	4.7	14.7	S
51229	Other sound recording industries .....	S	S	S	S	S	S	S
515	Broadcasting (except Internet) .....	2.2	3.9	1.3	1.8	1.9	2.0	0.6
5151	Radio and television broadcasting .....	26.4	S	S	S	S	S	S
51511	Radio broadcasting .....	S	12.9	S	S	S	S	S
515111	Radio networks .....	S	3.6	S	S	S	S	S
515112	Radio stations .....	S	S	NA	NA	S	S	NA
51512	Television broadcasting .....	S	S	S	S	S	S	S
5152	Cable and other subscription programming .....	0.6	0.5	0.5	0.5	0.5	0.1	0.2
516	Internet publishing and broadcasting .....	12.7	11.6	12.9	7.5	18.2	16.4	4.0
517	Telecommunications .....	2.9	S	1.8	1.8	S	S	0.9
5171	Wired telecommunications carriers .....	3.3	S	2.9	2.9	S	S	0.1
5172	Wireless telecommunications carriers (except satellite) .....	17.9	S	12.3	14.5	S	S	8.4
517211	Paging .....	S	S	S	S	S	S	S
517212	Cellular and other wireless telecommunications .....	18.4	20.4	12.7	14.9	2.9	5.0	8.4
5173	Telecommunications resellers .....	29.1	S	24.3	29.9	S	S	48.4
5174	Satellite telecommunications .....	D	S	D	S	D	D	D
5175	Cable and other program distribution .....	D	2.2	D	1.3	D	D	D

See footnotes at end of table.

**Table A-3.0.2. Information Sector (NAICS 51) – Estimated Coefficients of Variation for Export Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
5179	Other telecommunications .....	12.2	12.6	S	S	1.2	S	S
518	Internet service providers, web search portals, and data processing services .....	S	8.1	12.2	12.2	S	6.4	3.1
5181	Internet service providers and web search portals .....	S	7.4	11.6	8.9	S	3.3	2.7
518111	Internet service providers .....	D	D	D	S	D	D	D
518112	Web search portals .....	D	D	D	2.5	D	D	D
5182	Data processing, hosting, and related services .....	17.7	15.2	S	S	3.2	S	S
519	Other information services .....	5.5	4.6	4.9	4.0	1.4	1.5	3.3
51911	News syndicates .....	8.6	8.1	9.0	9.8	2.8	1.7	0.9
51912	Libraries and archives .....	7.8	5.2	5.2	5.9	9.1	1.9	1.0
51919	All other information services .....	S	S	6.4	S	S	S	S

NA Not available. X Not applicable. D Estimate in table is withheld to avoid disclosing data of individual companies. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Includes NAICS 51211 (Motion picture and video production) and NAICS 51212 (Motion picture and video distribution).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.1.1. Newspaper Publishers (NAICS 51111) – Estimated Coefficients of Variation for Revenue and Inventories and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>1.5</b>	<b>1.2</b>	<b>1.0</b>	<b>0.5</b>	<b>0.7</b>	<b>0.7</b>	<b>0.9</b>
<b>Sources of Revenue</b>							
General newspapers .....	2.0	2.0	1.9	1.5	0.7	0.7	1.1
Subscriptions and sales .....	2.6	2.8	2.6	2.4	0.5	0.8	0.8
Advertising space .....	2.0	2.1	1.9	1.5	0.8	0.7	1.2
Specialized newspapers .....	19.0	18.1	17.9	18.8	7.5	3.9	1.3
Subscriptions and sales .....	S	S	S	S	S	S	S
Advertising space .....	19.3	18.1	17.0	17.9	7.4	2.1	1.2
Other operating revenue .....	4.6	4.9	5.0	4.6	1.6	1.6	1.4
Printing services .....	16.3	14.4	12.2	13.3	2.0	2.1	2.2
Distribution services .....	8.2	7.2	5.8	7.6	2.5	2.5	1.5
All other operating revenue .....	5.0	7.1	8.2	7.6	2.9	2.8	2.3
<b>Breakdown of Revenue by Media Type</b>							
Print newspapers .....	1.5	1.4	1.5	1.3	0.8	1.0	0.9
Online newspapers .....	3.5	3.8	22.2	27.1	2.2	8.7	2.4
Other media newspapers .....	3.5	7.1	2.3	2.8	2.0	7.7	1.0
<b>Breakdown of Revenue by Advertising Revenue</b>							
Classified advertising .....	2.1	2.3	1.8	1.4	1.0	1.0	0.9
All other advertising .....	2.3	2.0	1.4	1.6	1.0	1.0	1.0
<b>Inventories at End of Year</b>							
<b>Total</b> .....	<b>2.5</b>	<b>1.7</b>	<b>1.9</b>	<b>D</b>	<b>1.9</b>	<b>1.1</b>	<b>D</b>
Finished goods .....	8.4	10.8	6.2	S	3.8	13.0	S
Work-in-process .....	S	S	S	D	S	S	D
Materials, supplies, fuel, etc. ....	2.5	1.7	1.8	1.3	2.0	0.9	1.0

D Estimate in table is withheld to avoid disclosing data of individual companies. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.1.2. Periodical Publishers (NAICS 51112) – Estimated Coefficients of Variation for Revenue and Inventories and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>2.3</b>	<b>2.5</b>	<b>1.8</b>	<b>0.9</b>	<b>0.7</b>	<b>1.4</b>	<b>1.4</b>
<b>Sources of Revenue</b>							
General interest periodicals .....	3.8	4.0	3.0	2.0	2.0	1.8	2.4
Subscriptions and sales .....	3.9	4.0	3.7	4.2	1.4	2.1	2.1
Advertising space .....	5.0	5.2	4.2	3.5	2.6	2.0	2.8
Professional and academic periodicals .....	5.8	6.4	5.8	5.5	4.7	3.6	1.5
Subscriptions and sales .....	6.1	6.2	5.9	5.0	1.8	1.9	1.7
Advertising space .....	8.1	8.0	8.5	8.4	10.6	6.9	2.9
Other periodicals .....	11.7	12.3	11.3	11.3	5.5	2.7	4.6
Subscriptions and sales .....	9.2	7.3	6.3	6.2	1.3	1.0	0.6
Advertising space .....	S	21.0	19.7	20.0	S	5.2	12.7
Other operating revenue .....	3.2	2.6	2.5	3.2	1.7	1.6	1.2
Printing services for others .....	19.9	17.8	15.9	15.1	8.5	24.4	3.0
Licensing of rights to content .....	22.8	22.0	18.6	18.2	13.8	25.5	6.7
All other operating revenue .....	3.5	3.0	2.7	3.4	1.8	1.4	1.2
<b>Breakdown of Revenue by Media Type</b>							
Print periodicals .....	3.3	3.6	2.6	1.4	1.0	1.8	1.7
Online periodicals .....	9.7	8.2	6.8	6.4	8.2	2.1	1.1
Other media periodicals .....	9.1	23.4	18.0	17.4	18.5	15.7	6.0
<b>Inventories at End of Year</b>							
<b>Total .....</b>	<b>2.7</b>	<b>2.9</b>	<b>3.4</b>	<b>6.1</b>	<b>0.9</b>	<b>1.2</b>	<b>3.5</b>
Finished goods .....	2.8	2.8	2.8	7.9	0.8	1.4	4.2
Work-in-process .....	11.3	9.8	9.7	19.2	3.8	8.2	4.5
Materials, supplies, fuel, etc. ....	10.0	11.1	11.6	11.9	2.2	2.2	1.1

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.1.3. Book Publishers (NAICS 51113) – Estimated Coefficients of Variation for Revenue and Inventories and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>1.8</b>	<b>1.6</b>	<b>1.0</b>	<b>0.8</b>	<b>0.9</b>	<b>1.2</b>	<b>0.5</b>
<b>Sources of Revenue</b>							
Books .....	2.1	2.5	2.2	1.9	1.4	1.1	0.6
Textbooks .....	2.7	2.8	2.5	2.3	2.4	1.1	0.6
Children's books .....	6.5	5.8	4.8	4.3	3.2	1.0	0.6
General reference books .....	23.6	19.9	21.3	6.8	4.1	5.8	15.9
Professional, technical, and scholarly books .....	4.9	5.3	5.2	5.4	3.0	3.3	1.2
Adult trade books .....	5.2	5.4	4.8	5.4	1.7	3.4	2.1
All other operating revenue .....	10.6	12.5	10.9	8.9	6.0	3.7	2.1
<b>Breakdown of Revenue by Media Type</b>							
Print books .....	2.2	2.6	2.2	1.9	1.4	1.1	0.6
Online books .....	11.3	8.2	8.6	5.6	4.4	0.8	2.4
Other media books .....	10.0	7.2	8.6	3.7	3.6	2.4	7.8
<b>Inventories at End of Year</b>							
<b>Total</b> .....	<b>3.4</b>	<b>3.7</b>	<b>3.1</b>	<b>3.1</b>	<b>2.4</b>	<b>1.2</b>	<b>1.1</b>
Finished goods .....	2.2	3.2	2.5	2.6	2.8	1.3	1.2
Work-in-process .....	29.6	15.5	14.6	18.4	6.1	1.6	2.6
Materials, supplies, fuel, etc. ....	4.1	5.8	10.5	10.1	3.1	7.4	2.3

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.1.4. Directory and Mailing List Publishers (NAICS 51114) – Estimated Coefficients of Variation for Revenue and Inventories and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>1.3</b>	<b>1.1</b>	<b>0.9</b>	<b>0.5</b>	<b>0.8</b>	<b>0.7</b>	<b>1.0</b>
<b>Sources of Revenue</b>							
Directories .....	2.4	2.6	2.7	2.4	0.6	0.7	1.0
Subscriptions and sales .....	12.9	16.8	13.3	13.1	6.3	9.1	5.1
Advertising space .....	2.6	2.7	2.7	2.4	0.6	0.7	1.0
Databases, and other collections of information .....	5.0	5.3	4.1	4.7	2.8	1.3	1.2
Subscriptions and sales .....	6.7	6.7	5.2	6.0	3.4	1.6	1.5
Advertising space .....	3.5	4.8	4.7	4.5	1.8	0.5	0.8
Other operating revenue .....	14.5	17.2	15.6	16.8	6.2	2.1	3.3
Rental or sale of mailing lists .....	11.7	14.5	13.8	11.7	9.3	3.3	5.3
All other operating revenue .....	S	24.8	22.3	23.5	S	3.1	2.7
<b>Breakdown of Revenue by Media Type</b>							
Print directories, databases, and other collections of information .....	2.4	2.6	2.5	2.3	0.6	0.8	0.9
Online directories, databases, and other collections of information .....	3.2	3.3	2.8	3.3	1.4	1.1	1.7
Other media directories, databases, and other collections of information .....	6.1	14.7	9.5	5.5	14.3	13.6	2.5
<b>Inventories at End of Year</b>							
<b>Total</b> .....	<b>3.8</b>	<b>3.6</b>	<b>3.3</b>	<b>2.5</b>	<b>1.0</b>	<b>0.6</b>	<b>1.1</b>
Finished goods .....	3.9	3.3	2.9	2.8	1.5	0.5	1.0
Work-in-process .....	3.0	S	3.0	3.4	S	S	1.3
Materials, supplies, fuel, etc. ....	5.9	7.0	S	2.4	2.3	S	S

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.



**Table A-3.1.5. Greeting Card Publishers (NAICS 511191) – Estimated Coefficients of Variation for Revenue and Inventories and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>1.4</b>	<b>1.1</b>	<b>1.0</b>	<b>1.0</b>	<b>0.6</b>	<b>0.4</b>	<b>0.2</b>
<b>Sources of Revenue</b>							
Greeting cards .....	1.6	1.2	1.2	1.0	0.7	0.6	0.2
All other operating revenue <sup>1</sup> .....	1.4	1.1	1.2	1.2	0.5	0.1	0.1
<b>Inventories at End of Year</b>							
<b>Total</b> .....	<b>1.4</b>	<b>1.1</b>	<b>1.4</b>	<b>S</b>	<b>0.7</b>	<b>1.1</b>	<b>S</b>
Finished goods .....	1.4	1.0	1.7	1.7	0.8	1.5	Z
Work-in-process .....	1.3	1.1	1.1	S	0.5	0.2	S
Materials, supplies, fuel, etc. ....	1.9	2.1	2.1	S	0.6	0.1	S

Z Absolute value is less than 0.05. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Includes calendar publishing, map and atlas publishing, pattern publishing, other miscellaneous publishing, contract printing, sale of licensing of rights to content, sale of advertising space, rental or sale of mailing lists, and publishing services for others.

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.1.6. Software Publishers (NAICS 5112) – Estimated Coefficients of Variation for Revenue and Inventories and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>3.5</b>	<b>3.3</b>	<b>2.7</b>	<b>1.9</b>	<b>1.3</b>	<b>1.2</b>	<b>1.8</b>
System software publishing .....	3.7	4.5	3.4	3.1	1.2	1.7	0.9
Operating systems software .....	3.6	4.0	3.5	3.1	1.4	1.5	1.1
Network software .....	5.2	5.8	5.4	4.9	2.4	1.7	2.8
Database management software .....	10.4	9.6	7.2	6.6	3.2	4.7	2.0
Development tools and programming languages software .....	13.4	12.8	11.5	12.6	2.6	2.9	1.9
Other systems software .....	20.4	21.2	15.2	11.7	1.9	5.5	2.2
Application software publishing .....	6.9	6.2	5.4	4.3	2.0	2.1	4.7
General business productivity and home use applications .....	13.2	12.4	9.4	4.6	3.6	1.9	8.7
Cross-industry application software .....	8.8	7.8	9.0	9.0	4.6	1.9	1.2
Vertical market application software .....	15.2	15.2	15.7	15.4	4.2	11.1	2.3
Utilities application software .....	9.4	11.8	5.8	3.3	3.8	9.4	2.5
Other application software .....	24.3	20.4	18.5	16.8	8.2	21.9	2.7
Other services .....	5.4	4.6	3.9	3.1	2.0	2.6	1.8
Custom application design and development .....	9.2	8.7	8.7	8.1	4.4	8.5	2.3
Information technology technical consulting services .....	12.3	10.6	10.6	9.9	5.6	4.3	2.1
Application service provisioning .....	S	S	S	21.6	S	S	S
Resale of computer hardware and software .....	8.1	9.0	11.1	12.0	1.5	3.7	4.3
Information technology related training services .....	7.4	16.9	12.0	10.1	11.1	6.6	3.1
All other operating revenue .....	5.0	S	S	3.2	S	S	S
<b>Breakdown of Revenue by Software Sales Type</b>							
System software .....	3.7	4.5	3.4	3.1	1.2	1.7	0.9
Personal computer software .....	2.8	3.7	2.9	3.0	1.5	1.7	0.8
Enterprise or network software .....	6.5	7.7	6.2	5.2	3.9	4.6	1.9
Mainframe computer software .....	3.2	3.5	2.9	3.0	1.1	2.6	0.9
Other system software .....	24.0	16.0	8.0	8.6	30.5	6.0	1.2
Application software .....	6.9	6.2	5.4	4.3	2.0	2.1	4.7
Personal computer software .....	11.5	S	8.8	4.5	S	S	9.2
Enterprise or network software .....	6.6	7.2	7.4	7.7	3.3	6.8	1.4
Mainframe computer software .....	15.2	5.2	4.5	5.3	15.3	5.6	1.5
Other application software .....	17.1	15.4	13.7	11.1	6.3	12.5	2.4
<b>Inventories at End of Year</b>							
<b>Total</b> .....	<b>3.6</b>	<b>3.5</b>	<b>S</b>	<b>S</b>	<b>1.9</b>	<b>S</b>	<b>S</b>
Finished goods .....	S	4.5	S	S	S	S	S
Work-in-process .....	8.0	2.8	S	S	7.3	S	S
Materials, supplies, fuel, etc .....	3.0	3.3	S	S	2.0	S	S

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.2.1. Motion Picture and Sound Recording Industries (NAICS 512) – Estimated Coefficients of Variation for Revenue and Inventories and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>MOTION PICTURE AND SOUND RECORDING INDUSTRIES (NAICS 512)</b>							
<b>Operating revenue</b>							
<b>Total .....</b>	<b>1.9</b>	<b>1.9</b>	<b>1.9</b>	<b>1.3</b>	<b>0.8</b>	<b>0.7</b>	<b>0.8</b>
<b>Inventories at End of Year</b>							
<b>Total .....</b>	<b>4.7</b>	<b>4.8</b>	<b>4.9</b>	<b>3.1</b>	<b>1.1</b>	<b>1.6</b>	<b>2.4</b>
Finished goods .....	4.4	3.3	3.7	2.9	1.7	1.0	1.8
Work-in-process .....	6.6	12.7	12.6	9.1	3.5	4.3	5.9
Materials, supplies, fuel, etc. ....	6.8	7.0	2.0	2.3	5.0	7.7	2.0
<b>MOTION PICTURE AND VIDEO INDUSTRIES (NAICS 5121)</b>							
<b>Operating revenue</b>							
<b>Total .....</b>	<b>2.3</b>	<b>2.3</b>	<b>2.3</b>	<b>1.5</b>	<b>1.0</b>	<b>0.8</b>	<b>1.0</b>
<b>Inventories at End of Year</b>							
<b>Total .....</b>	<b>4.8</b>	<b>4.9</b>	<b>5.0</b>	<b>3.1</b>	<b>1.1</b>	<b>1.6</b>	<b>2.5</b>
Finished goods .....	4.5	3.4	3.8	2.9	1.7	1.0	1.8
Work-in-process .....	6.7	12.8	12.6	9.1	3.4	4.3	5.9
Materials, supplies, fuel, etc. ....	9.0	9.2	2.7	2.9	7.2	11.9	2.7
<b>SOUND RECORDING INDUSTRIES (NAICS 5122)</b>							
<b>Operating revenue</b>							
<b>Total .....</b>	<b>0.8</b>	<b>0.8</b>	<b>0.6</b>	<b>0.5</b>	<b>0.3</b>	<b>0.4</b>	<b>0.5</b>
<b>Inventories at End of Year</b>							
<b>Total .....</b>	<b>7.2</b>	<b>3.2</b>	<b>3.5</b>	<b>3.7</b>	<b>5.1</b>	<b>1.6</b>	<b>1.9</b>
Finished goods .....	5.3	3.6	4.1	4.4	2.9	1.2	2.0
Work-in-process .....	S	S	8.9	4.9	S	S	4.0
Materials, supplies, fuel, etc. ....	4.2	1.9	2.1	1.6	2.4	1.4	1.4

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.2.2. Motion Picture and Video Production and Distribution (NAICS 5121X) – Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>2.8</b>	<b>2.8</b>	<b>2.9</b>	<b>1.9</b>	<b>1.2</b>	<b>1.0</b>	<b>1.2</b>
<b>Sources of Revenue</b>							
Domestic licensing of rights to motion picture films .....	3.8	3.5	3.1	2.7	1.3	1.5	1.0
Domestic licensing of rights to television programs .....	3.3	3.2	3.6	3.0	1.4	1.4	0.9
International licensing of rights to motion picture films .....	5.0	4.0	3.0	3.0	2.0	2.2	0.5
International licensing of rights to television programs .....	4.7	3.6	3.8	3.2	4.1	2.7	1.3
Audiovisual works speculatively produced for outright sale .....	S	S	S	S	S	S	S
Contract production of audiovisual works .....	12.3	12.9	14.6	13.8	8.9	14.9	6.2
Domestic licensing of rights to others to distribute audiovisual works .....	9.4	S	9.0	11.6	S	S	4.3
International licensing of rights to others to distribute audiovisual works .....	S	S	17.3	15.1	S	S	4.2
Sale of audiovisual works for the wholesale, retail, and rental markets .....	3.0	3.3	3.3	3.6	2.6	1.0	1.7
Other production services .....	11.4	10.0	9.4	8.3	8.3	5.3	3.2
Merchandise licensing .....	4.9	4.9	7.7	14.1	1.0	3.2	3.2
All other operating revenue .....	9.9	9.4	7.7	5.9	9.2	11.1	4.8

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.2.3. Motion Picture Theaters (NAICS 51213) – Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>2.9</b>	<b>2.6</b>	<b>2.2</b>	<b>1.9</b>	<b>1.1</b>	<b>1.8</b>	<b>1.1</b>
<b>Sources of Revenue</b>							
Feature film exhibition revenue .....	2.8	2.7	2.3	1.9	1.1	1.9	1.1
Admissions to domestic feature films .....	2.9	2.7	2.3	2.1	1.1	1.9	1.1
Admissions to foreign feature films .....	27.8	S	14.1	16.0	S	S	2.1
Other revenue .....	3.2	2.7	2.3	2.1	1.2	1.7	1.3
Food and beverage sales .....	3.2	2.6	2.3	2.3	1.2	1.7	1.0
Rental of retail space .....	S	S	S	S	S	S	S
Advertising services .....	3.3	3.5	3.3	3.2	1.0	1.3	1.0
Coin-operated games and rides .....	7.2	5.2	4.1	3.6	1.6	3.2	0.8
All other operating revenue .....	9.4	11.0	6.4	6.6	3.2	6.2	1.0

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.2.4. Postproduction Services and Other Motion Picture and Video Industries (NAICS 51219) – Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>4.0</b>	<b>3.0</b>	<b>2.7</b>	<b>1.9</b>	<b>2.2</b>	<b>2.6</b>	<b>2.2</b>
<b>Sources of Revenue</b>							
Audiovisual postproduction services .....	6.7	5.0	4.3	3.2	2.7	3.8	2.7
Motion picture film laboratory services .....	3.1	3.7	4.1	3.9	1.8	3.3	0.6
Duplication and copying services .....	9.5	10.8	11.8	12.1	3.4	4.5	2.5
All other operating revenue .....	13.4	12.4	9.4	8.3	11.0	11.3	3.5

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.2.5. Integrated Record Production and Distribution (NAICS 51222) – Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>0.2</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.1</b>	<b>0.1</b>	<b>0.2</b>
<b>Sources of Revenue</b>							
Licensing revenue .....	0.4	0.3	S	S	0.4	S	S
Licensing of rights to use musical compositions .....	S	0.3	S	S	S	S	S
Licensing of rights to use musical recordings .....	1.2	0.2	S	S	1.3	S	S
Other operating revenue .....	0.2	0.3	S	0.3	0.1	S	S
Sales of recordings .....	0.2	S	S	0.3	S	S	S
All other operating revenue .....	4.4	8.1	S	S	3.9	S	S

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.2.6. Music Publishers (NAICS 51223) - Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	2.4	2.5	2.4	1.5	1.1	0.8	1.6
<b>Sources of Revenue</b>							
Licensing revenue .....	S	3.6	3.5	1.6	S	1.2	2.7
Licensing of rights to use musical compositions .....	S	3.7	3.6	1.9	S	1.3	2.7
Licensing of rights to use musical recordings .....	S	S	S	15.0	S	S	S
Other operating revenue .....	2.0	2.7	2.5	1.8	1.6	1.0	1.2
Administration of copyrights for others.....	25.7	S	24.6	23.3	S	S	38.5
Sales of recordings .....	21.6	15.9	21.7	20.9	13.6	10.0	12.2
Print music.....	2.6	2.4	2.4	2.4	0.6	0.2	0.1
All other operating revenue .....	15.4	16.3	15.3	11.0	10.9	18.3	9.4

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.



**Table A-3.2.7. Sound Recording Studios (NAICS 51224) – Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>10.8</b>	<b>11.8</b>	<b>7.5</b>	<b>6.4</b>	<b>2.7</b>	<b>5.7</b>	<b>3.3</b>
<b>Sources of Revenue</b>							
Studio recording .....	8.7	7.7	7.5	5.1	3.1	3.8	3.5
Sound recording studio rental and leasing .....	18.9	21.8	14.1	15.3	18.9	18.8	9.0
All other operating revenue .....	S	S	18.3	18.0	S	S	6.1

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.3.1. Radio Networks (NAICS 515111) – Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>3.2</b>	<b>2.7</b>	<b>2.0</b>	<b>1.5</b>	<b>1.0</b>	<b>1.7</b>	<b>1.3</b>
<b>Sources of Revenue</b>							
Air time .....	5.2	3.9	3.5	2.7	2.6	2.1	1.3
National/regional air time .....	5.5	4.5	4.5	3.2	3.2	3.1	1.2
Local air time .....	6.2	5.9	6.0	5.7	3.9	3.7	2.5
Other operating revenue .....	3.1	2.8	2.6	3.2	0.9	2.2	3.7
Network compensation .....	3.8	5.1	3.9	6.1	5.5	3.6	1.4
Public and non-commercial programming services .....	5.4	5.3	5.5	7.0	1.0	2.6	2.5
All other operating revenue .....	3.0	2.8	2.6	3.4	0.9	2.0	6.2

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.3.2. Radio Stations (NAICS 515112) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	2.4	2.5	1.7	1.5	0.8	1.6	0.9
<b>Sources of Revenue</b>							
Air time .....	3.2	3.1	2.7	2.3	1.0	1.4	1.1
National/regional air time .....	7.6	6.9	4.3	4.7	1.9	3.8	1.4
Local air time .....	2.9	2.9	2.8	2.5	1.1	1.1	1.1
Other operating revenue .....	14.8	13.6	12.5	12.1	2.4	5.4	1.4
Network compensation .....	16.5	13.7	3.0	2.9	1.7	11.9	0.7
Public and non-commercial programming services .....	S	S	S	S	S	S	S
All other operating revenue .....	10.6	9.3	11.5	11.1	3.4	6.7	1.8

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.3.3. Television Broadcasting (NAICS 51512) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>1.2</b>	<b>1.0</b>	<b>0.7</b>	<b>0.5</b>	<b>0.6</b>	<b>0.8</b>	<b>0.5</b>
<b>Sources of Revenue</b>							
Air time .....	1.9	1.8	1.5	1.5	0.6	1.0	0.5
National/regional air time .....	2.2	2.1	1.5	1.5	0.9	1.3	0.4
Local air time .....	2.4	2.6	2.3	1.8	1.2	0.9	1.1
Other operating revenue .....	5.7	5.5	5.4	5.7	0.9	2.2	0.9
Network compensation .....	2.8	2.8	7.0	6.4	1.4	3.5	2.2
Public and non-commercial programming services .....	15.9	13.8	17.1	17.5	1.5	6.7	0.9
All other operating revenue .....	5.6	6.5	6.8	7.3	1.3	2.2	1.2

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.3.4. Cable and Other Subscription Programming (NAICS 5152) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>0.6</b>	<b>0.6</b>	<b>0.5</b>	<b>0.4</b>	<b>0.3</b>	<b>0.2</b>	<b>0.3</b>
<b>Sources of Revenue</b>							
Licensing of rights to broadcast speciality programming protected by copyright .....	0.6	0.5	0.5	0.5	0.2	0.2	0.2
Air time .....	0.6	0.6	0.6	0.5	0.3	0.1	0.2
All other operating revenue .....	5.9	6.6	6.4	5.8	1.2	0.8	1.1

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.3.5. Internet Publishing and Broadcasting (NAICS 516) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	5.1	3.7	2.8	1.4	2.3	3.5	3.5
<b>Sources of Revenue</b>							
Publishing and broadcasting of content on the Internet .....	10.7	7.4	3.2	2.0	3.8	5.5	2.8
Online advertising space .....	6.7	5.7	4.6	4.1	2.7	7.2	3.4
Licensing of rights to use intellectual property .....	7.7	4.9	3.9	3.4	6.5	2.3	1.5
All other operating revenue .....	14.2	14.0	13.9	7.9	7.1	4.7	13.9
<b>Breakdown of Revenue by Type of Customer</b>							
Government .....	S	S	S	21.0	S	S	S
Business firms and not-for-profit organizations .....	4.7	3.4	2.6	2.9	2.5	2.4	1.5
Household consumers and individual users .....	19.3	16.0	12.4	4.2	5.3	7.8	10.1

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.3.6. Wired Telecommunications Carriers (NAICS 5171) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>1.6</b>	<b>0.9</b>	<b>0.9</b>	<b>1.0</b>	<b>1.1</b>	<b>0.5</b>	<b>0.4</b>
<b>Sources of Revenue</b>							
Fixed services .....	1.3	1.3	1.2	1.2	0.5	0.3	0.4
Fixed local .....	1.5	1.4	1.1	1.0	0.6	0.5	0.5
Fixed long-distance .....	2.3	1.9	1.9	2.0	0.7	0.5	0.3
Fixed all distance (no distinction between local or long distance) .....	2.9	S	2.8	2.8	S	S	0.1
Other telecommunications services .....	2.4	1.4	1.5	1.7	1.8	0.6	0.7
Carrier services .....	3.6	2.7	2.6	2.5	2.6	0.6	0.6
Private network services .....	2.6	2.3	2.7	3.1	2.1	0.7	1.1
Subscriber line charges .....	21.9	17.5	16.7	16.6	2.0	1.0	0.6
Internet access services .....	1.9	1.3	1.4	2.6	1.3	0.9	2.0
Internet telephony .....	4.2	4.5	8.0	12.1	0.3	4.2	2.6
Telecommunication network installation services .....	3.2	2.7	S	S	1.6	S	S
Reselling services for telecommunications equipment, retail .....	2.3	3.6	2.1	2.0	1.7	1.8	0.6
Rental of telecommunications equipment .....	7.1	S	28.4	26.4	S	S	1.4
Repair and maintenance services for telecommunications equipment .....	13.9	7.4	12.0	14.8	8.5	9.6	2.3
All other operating revenue .....	6.2	4.8	4.9	5.5	2.0	1.7	1.2

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.3.7. Wired Telecommunications Carriers (NAICS 5171) – Estimated Coefficients of Variation for Local, Long-Distance, and Network Access Revenue by Type of Customer and Type of Service and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>1.6</b>	<b>0.9</b>	<b>0.9</b>	<b>1.0</b>	<b>1.1</b>	<b>0.5</b>	<b>0.4</b>
<b>Breakdown of Revenue by Type of Customer</b>							
Fixed local telephony .....	1.5	1.4	1.1	1.0	0.6	0.5	0.5
Government .....	2.7	2.7	3.0	3.7	3.2	0.9	0.8
Business firms and not-for-profit organizations .....	2.8	3.7	3.1	3.2	1.8	0.7	0.6
Household consumers and individual users .....	3.0	2.7	2.6	2.5	0.4	0.6	0.4
Fixed long-distance telephony .....	2.3	1.9	1.9	2.0	0.7	0.5	0.3
Government .....	S	S	4.3	4.7	S	S	0.4
Business firms and not-for-profit organizations .....	2.2	1.8	1.9	2.0	1.0	0.2	0.5
Household consumers and individual users .....	3.3	2.9	2.7	2.8	0.7	0.9	0.4
Subscriber line charges .....	21.9	17.5	16.7	16.6	2.0	1.0	0.6
Government .....	S	S	S	S	S	S	S
Business firms and not-for-profit organizations .....	19.0	13.2	12.2	12.5	2.6	1.0	0.4
Household consumers and individual users .....	22.3	18.8	18.1	17.7	1.7	1.1	0.7
Fixed long-distance telephony .....	2.3	1.9	1.9	2.0	0.7	0.5	0.3
Intrastate .....	2.0	1.7	1.7	1.9	1.8	0.6	0.9
Interstate .....	2.5	2.2	2.2	2.3	0.5	0.5	0.3
International .....	2.8	2.7	2.7	2.7	0.3	0.3	0.3

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.



**Table A-3.3.8. Paging (NAICS 517211) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	7.8	8.2	4.9	3.5	2.3	3.3	3.1
<b>Sources of Revenue</b>							
Messaging (paging) services .....	9.9	10.6	6.4	5.7	3.5	5.6	2.3
All other operating revenue .....	15.5	12.4	10.6	13.0	10.2	15.7	6.6

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.3.9. Cellular and Other Wireless Telecommunications (NAICS 517212) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>	<b>0.4</b>	<b>0.6</b>	<b>1.2</b>	<b>1.5</b>
<b>Sources of Revenue</b>							
Mobile services .....	3.5	3.5	3.5	3.3	0.6	1.1	0.5
Mobile telephony .....	3.4	3.5	3.6	3.5	0.7	1.5	0.3
Mobile long-distance .....	4.4	7.3	6.3	7.2	4.6	4.6	1.3
Mobile all distance .....	3.7	S	3.6	3.5	S	S	0.2
Other mobile services .....	S	S	6.4	3.5	S	S	3.9
Other telecommunications services .....	3.7	2.6	3.2	3.9	2.1	2.9	2.4
Internet access services .....	D	D	3.7	3.6	D	D	1.9
Installation services for telecommunication networks .....	18.9	17.9	S	S	12.4	S	S
Reselling services for telecommunications equipment, retail .....	4.4	3.1	3.9	4.1	2.5	3.2	1.6
Rental of telecommunications equipment .....	2.7	27.2	S	4.8	15.5	S	S
Repair and maintenance services for telecommunications equipment .....	D	D	1.5	3.7	D	D	7.2
All other operating revenue .....	13.5	13.8	12.6	19.3	1.8	1.4	4.8

D Estimate in table is withheld to avoid disclosing data of individual companies. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.3.10. Telecommunications Resellers (NAICS 5173) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>13.9</b>	<b>14.1</b>	<b>10.5</b>	<b>6.3</b>	<b>2.1</b>	<b>2.6</b>	<b>4.3</b>
<b>Sources of Revenue</b>							
Fixed local .....	12.3	10.8	9.5	7.4	4.0	5.8	5.9
Fixed long distance .....	S	9.9	9.7	7.8	S	1.7	3.7
Mobile telephony .....	8.4	7.4	6.8	7.1	2.5	2.1	2.7
Carrier services .....	S	15.6	14.7	12.6	S	6.5	7.0
All other operating revenue .....	S	S	20.0	5.6	S	S	14.8

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.3.11. Satellite Telecommunications (NAICS 5174) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	2.4	2.1	2.0	1.6	0.5	0.8	0.8
<b>Sources of Revenue</b>							
Carrier services .....	S	S	S	S	S	S	S
Private network services .....	S	2.4	2.5	1.9	S	0.6	1.0
All other operating revenue .....	2.4	1.9	1.9	1.6	0.7	1.9	0.8

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.3.12. Cable and Other Program Distribution (NAICS 5175) – Estimated Coefficients of Variation for Cable System and Multichannel Video Distribution Revenue by Type of Customer and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>1.1</b>	<b>1.1</b>	<b>1.2</b>	<b>1.0</b>	<b>0.4</b>	<b>0.7</b>	<b>0.4</b>
<b>Sources of Revenue</b>							
Multichannel programming distribution services .....	0.9	1.1	1.1	1.1	0.4	0.3	0.1
Basic programming package .....	1.1	1.3	1.3	1.3	0.4	0.3	0.1
Premium programming package .....	0.9	1.0	1.0	1.1	0.3	0.3	0.1
Pay-per-view .....	0.9	1.0	1.2	1.2	0.4	0.5	0.1
Other revenue .....	1.8	1.5	2.5	1.7	0.6	1.8	1.0
Air time .....	0.8	0.9	0.9	0.9	0.3	0.3	0.1
Rental and reselling services for program distribution equipment .....	1.0	1.2	1.1	1.2	1.2	1.0	0.2
Installation services for connections to program distribution networks .....	2.1	2.1	1.0	1.1	1.6	1.9	0.3
Internet access services .....	1.5	1.6	1.6	1.6	0.3	0.5	0.2
Internet telephony .....	4.4	3.9	1.1	1.3	1.1	15.3	0.4
Fixed local telephony .....	S	7.5	9.6	10.1	S	1.4	0.5
Fixed long-distance telephony .....	S	11.3	8.1	5.8	S	1.3	1.7
All other operating revenue .....	7.2	5.4	10.0	6.9	1.5	4.1	2.7

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at [www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html).

**Table A-3.3.13. Cable and Other Program Distribution (NAICS 5175) – Estimated Cable System and Multichannel Video Distribution Revenue by Type of Customer and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>1.1</b>	<b>1.1</b>	<b>1.2</b>	<b>1.0</b>	<b>0.4</b>	<b>0.7</b>	<b>0.4</b>
<b>Breakdown of Revenue by Type of Customer</b>							
Government .....	15.4	14.1	26.3	27.0	2.3	5.3	1.8
Business firms and not-for-profit organizations .....	6.1	5.1	10.3	6.7	1.2	4.3	2.9
Household consumers and individual users .....	1.0	1.1	1.0	1.0	0.4	0.3	0.1

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.4.1. Internet Service Providers (NAICS 518111) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>4.9</b>	<b>3.8</b>	<b>2.8</b>	<b>2.5</b>	<b>1.8</b>	<b>2.2</b>	<b>1.9</b>
<b>Sources of Revenue</b>							
Internet access service .....	5.3	4.1	3.1	3.2	2.0	2.1	2.0
Online advertising space .....	S	S	4.3	4.3	S	S	1.1
Internet backbone services .....	14.9	17.5	18.4	22.4	4.0	11.6	4.8
Internet telephony .....	25.6	S	S	S	S	S	S
Web site hosting services .....	15.9	12.7	14.3	17.1	5.1	14.6	2.4
Information technology design and development services .....	S	S	S	S	S	S	S
All other operating revenue .....	21.1	S	22.6	18.9	S	S	4.9

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.4.2. Web Search Portals (NAICS 518112) - Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	5.5	4.6	2.6	2.8	1.5	3.2	1.0
<b>Sources of Revenue</b>							
Online advertising space .....	4.2	3.1	3.1	3.4	2.2	1.3	1.3
Information search services on a contract or fee basis .....	S	13.9	D	S	S	D	D
Web site hosting services .....	S	20.6	D	S	S	D	D
All other operating revenue .....	S	5.5	S	S	S	S	S

D Estimate in table is withheld to avoid disclosing data of individual companies. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.



**Table A-3.4.3. Data Processing, Hosting, and Related Services (NAICS 5182) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>4.5</b>	<b>3.1</b>	<b>1.8</b>	<b>1.3</b>	<b>2.7</b>	<b>2.6</b>	<b>1.4</b>
<b>Sources of Revenue</b>							
Data processing, IT infrastructure provisioning, and hosting services .....	8.9	6.8	3.8	2.8	3.8	4.9	2.1
Business process management services .....	8.0	7.8	5.4	4.5	4.7	4.1	2.8
Data management services .....	10.0	9.5	6.5	6.1	2.5	4.6	2.1
Application service provisioning .....	28.4	20.6	16.5	15.2	8.5	15.7	3.1
Web site hosting services .....	S	24.3	29.9	26.1	S	37.4	4.9
Collocation services .....	S	S	S	S	S	S	S
Other operating revenue .....	3.1	3.4	3.5	3.5	2.2	1.7	1.8
IT design and development services .....	5.0	4.3	4.1	S	2.7	1.7	S
IT technical support services .....	17.4	15.7	16.3	S	5.4	6.6	S
IT technical consulting services .....	11.3	9.6	11.6	15.2	8.2	5.7	5.2
Information and document transformation services .....	16.5	18.7	19.6	16.5	23.7	8.8	6.2
Software publishing .....	18.1	17.4	15.0	15.1	2.6	4.9	6.8
Reselling services for computer hardware and software, retail .....	26.9	20.3	23.4	19.3	3.7	14.5	4.6
All other operating revenue .....	6.5	7.0	6.7	7.5	2.0	2.9	2.8

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.5.1. News Syndicates and Libraries and Archives (NAICS 51911 and 51912) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>NEWS SYNDICATES (NAICS 51911)</b>							
<b>Operating Revenue</b>							
Total .....	4.1	3.6	2.9	2.5	0.9	2.0	1.0
<b>Sources of Revenue</b>							
Licensing of rights to use syndicated media content .....	5.5	5.4	4.5	4.2	0.7	1.7	0.9
All other operating revenue .....	4.0	3.5	3.2	3.2	1.3	2.3	1.3
<b>LIBRARIES AND ARCHIVES (NAICS 51912)</b>							
<b>Operating Revenue</b>							
Total .....	4.8	5.4	3.6	3.7	2.5	5.0	2.1
<b>Sources of Revenue</b>							
Contributions, gifts, and grants received .....	4.9	8.5	8.0	5.9	5.5	5.2	4.0
Investment and property income .....	8.6	11.3	9.9	9.2	4.0	5.9	2.0
All other revenue .....	7.0	8.8	7.4	8.3	10.2	8.1	1.8

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.5.2. All Other Information Services (NAICS 51919) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	5.7	3.7	3.2	2.8	2.8	1.8	2.5
<b>Sources of Revenue</b>							
Information search and retrieval services .....	28.3	20.6	13.0	6.7	6.1	4.8	5.8
Information services .....	6.5	5.7	6.1	4.8	1.6	1.8	3.1
Media monitoring and analysis .....	D	D	4.9	4.9	D	D	1.8
Advertising .....	D	D	S	S	D	D	S
All other operating revenue .....	18.0	20.0	22.1	22.4	6.0	7.3	10.4

D Estimate in table is withheld to avoid disclosing data of individual companies. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.6.1. Information Sector (NAICS 51) – Estimated Coefficients of Variation for Total Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>51</b>	<b>Information .....</b>	<b>0.6</b>	<b>0.7</b>	<b>0.4</b>	<b>0.5</b>	<b>0.5</b>	<b>0.6</b>	<b>0.3</b>
511	Publishing industries (except Internet) .....	1.6	1.7	1.3	1.2	0.8	0.9	0.6
5111	Newspaper, periodical, book, and directory publishers .....	1.2	1.1	0.8	0.5	0.8	0.5	0.6
51111	Newspaper publishers .....	1.2	1.1	1.0	1.0	0.9	0.8	1.1
51112	Periodical publishers .....	2.8	2.9	2.2	1.4	1.2	1.5	1.1
51113	Book publishers .....	3.2	2.7	2.1	2.2	1.3	1.4	0.6
51114	Directory and mailing list publishers .....	2.4	3.3	3.0	3.0	1.3	1.1	0.9
51119	Other publishers .....	2.0	2.3	1.9	1.8	0.9	1.3	0.7
511191	Greeting card publishers .....	1.7	1.1	1.2	1.2	0.9	0.6	0.3
511199	All other publishers .....	5.3	5.8	5.0	4.8	1.8	3.8	1.9
5112	Software publishers .....	3.4	3.5	2.8	2.6	1.2	1.7	1.1
512	Motion picture and sound recording industries .....	2.2	2.1	1.7	1.5	1.2	0.8	0.6
5121	Motion picture and video industries .....	2.7	2.6	2.2	1.8	1.6	1.0	0.7
5121x	Motion picture and video production and distribution <sup>1</sup> .....	3.2	3.0	2.7	2.2	1.9	1.1	1.0
51213	Motion picture and video exhibition .....	3.7	3.1	2.3	2.2	1.4	2.5	0.8
512131	Motion picture theaters (except drive-ins) .....	3.7	3.0	2.3	2.3	1.4	2.2	0.8
512132	Drive-in motion picture theaters .....	S	S	13.1	S	S	S	S
51219	Postproduction services and other motion picture and video industries .....	4.1	3.5	3.2	2.7	2.2	2.1	1.8
512191	Teleproduction and other postproduction services .....	4.6	3.9	3.7	2.9	2.7	2.4	2.2
512199	Other motion picture and video industries .....	5.6	5.5	5.5	4.2	1.0	2.4	2.9
5122	Sound recording industries .....	1.0	0.7	0.8	0.6	0.4	0.3	0.6
51221	Record production .....	15.3	13.9	5.5	5.5	6.3	8.9	6.2
51222	Integrated record production and distribution .....	S	0.4	0.3	0.3	S	0.1	0.2
51223	Music publishers .....	4.4	3.7	4.1	2.1	1.4	0.9	2.5
51224	Sound recording studios .....	10.2	10.5	9.3	7.3	4.3	4.1	3.1
51229	Other sound recording industries .....	14.2	9.2	5.9	3.4	8.7	3.5	8.7
515	Broadcasting (except Internet) .....	0.7	0.7	0.6	0.6	0.4	0.5	0.6
5151	Radio and television broadcasting .....	1.1	1.0	0.8	0.8	0.6	0.8	0.9
51511	Radio broadcasting .....	2.4	2.3	2.0	1.6	0.9	1.7	1.1
515111	Radio networks .....	3.0	2.7	2.3	1.9	0.9	1.1	0.8
515112	Radio stations .....	2.9	3.1	2.9	2.2	1.5	2.1	1.6
51512	Television broadcasting .....	1.4	0.8	0.8	1.1	1.0	0.5	1.1
5152	Cable and other subscription programming .....	1.1	1.1	0.8	0.8	0.3	0.3	0.3
516	Internet publishing and broadcasting .....	8.0	8.0	8.5	2.3	2.3	2.4	11.3
517	Telecommunications .....	0.9	1.2	0.8	0.9	1.1	0.8	0.3
5171	Wired telecommunications carriers .....	1.4	2.2	1.0	1.2	2.3	1.5	0.6
5172	Wireless telecommunications carriers (except satellite) .....	1.6	1.4	1.2	1.3	0.4	1.1	0.6
517211	Paging .....	8.4	7.6	5.7	5.1	1.8	1.9	2.0
517212	Cellular and other wireless telecommunications .....	1.7	1.5	1.2	1.3	0.4	1.1	0.6
5173	Telecommunications resellers .....	8.8	8.4	7.6	5.3	2.6	2.3	3.3
5174	Satellite telecommunications .....	2.2	2.2	2.0	1.7	1.0	0.9	0.7
5175	Cable and other program distribution .....	1.1	1.1	1.2	1.1	0.3	0.4	0.2

See footnotes at end of table.

**Table A-3.6.1. Information Sector (NAICS 51) – Estimated Coefficients of Variation for Total Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
5179	Other telecommunications .....	12.3	12.6	12.0	12.2	1.5	1.1	0.8
518	Internet service providers, web search portals, and data processing services .....	3.6	2.6	1.6	1.3	1.9	1.7	1.4
5181	Internet service providers and web search portals .....	5.8	4.2	3.0	2.3	2.3	3.1	1.8
518111	Internet service providers .....	7.1	4.7	3.5	2.8	3.2	3.3	1.9
518112	Web search portals .....	8.1	7.4	3.8	2.6	1.8	4.8	2.2
5182	Data processing, hosting, and related services .....	4.5	3.3	2.1	1.5	2.4	2.3	1.7
519	Other information services .....	3.8	3.3	2.6	2.6	1.3	1.3	1.3
51911	News syndicates .....	4.6	3.6	3.3	3.0	1.4	1.0	1.2
51912	Libraries and archives .....	5.4	6.0	4.0	5.0	2.1	3.1	1.8
51919	All other information services .....	7.0	4.8	3.5	3.3	2.8	2.1	2.7

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Includes NAICS 51211 (Motion picture and video production) and NAICS 51212 (Motion picture and video distribution).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.6.2. Newspaper Publishers (NAICS 5111), Periodical Publishers (NAICS 5112), Book Publishers (NAICS 5113), Directory and Mailing List Publishers (NAICS 5114), Greeting Card Publishers (NAICS 51191), Software Publishers (NAICS 5112) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>NEWSPAPER PUBLISHERS (NAICS 5111)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>1.2</b>	<b>1.1</b>	<b>1.0</b>	<b>1.0</b>	<b>0.9</b>	<b>0.8</b>	<b>1.1</b>
Personnel costs.....	2.0	1.8	1.7	1.4	0.9	0.6	0.6
Gross annual payroll.....	2.0	1.9	1.8	1.4	0.8	0.7	0.6
Employer's cost for fringe benefits.....	2.5	2.4	2.3	2.2	2.0	0.7	0.8
Health insurance.....	2.7	NA	NA	NA	NA	NA	NA
Pension plans.....	4.2	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	6.0	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	2.9	NA	NA	NA	NA	NA	NA
Other.....	2.7	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	4.8	6.0	2.7	5.6	2.7	6.0	4.3
Expensed materials, parts and supplies (not for resale).....	5.0	3.5	3.5	7.6	1.7	1.5	2.8
Expensed equipment.....	10.1	9.4	8.7	9.6	7.7	5.9	4.7
Expensed purchase of other materials, parts, and supplies.....	5.1	3.6	3.6	7.7	1.9	1.5	2.8
Expensed purchased services.....	4.3	3.7	3.7	4.0	2.0	2.7	1.5
Expensed purchases of software.....	6.9	8.7	8.8	7.8	11.3	4.2	4.8
Purchased electricity and fuels (except motor fuels).....	3.0	2.4	2.2	2.9	2.5	1.6	2.5
Purchased electricity.....	3.2	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	4.7	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	2.7	3.0	2.8	3.0	2.0	1.9	1.5
Lease and rental payments for machinery, equipment, and other tangible items.....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	4.1	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	3.4	4.4	4.3	5.0	3.8	1.7	1.1
Purchased repairs and maintenance to machinery and equipment.....	3.2	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	4.8	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	3.3	3.2	4.5	6.7	1.5	1.7	2.7
Purchased printing services.....	11.2	8.8	8.9	9.1	3.1	5.5	2.2
Other operating expenses.....	1.5	1.7	1.7	2.2	1.2	1.5	1.0
Depreciation and amortization charges.....	1.8	1.9	2.0	1.4	2.0	1.7	1.1
Governmental taxes and license fees.....	3.3	3.9	17.0	14.5	2.4	7.9	1.9
All other operating expenses.....	1.6	1.8	1.9	2.6	1.2	1.8	1.1
Data processing and other purchased computer services.....	16.0	NA	NA	NA	NA	NA	NA
Purchased communication services.....	2.5	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	10.0	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	2.1	NA	NA	NA	NA	NA	NA
All other operating expenses.....	1.8	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.2. Newspaper Publishers (NAICS 51111), Periodical Publishers (NAICS 51112), Book Publishers (NAICS 51113), Directory and Mailing List Publishers (NAICS 51114), Greeting Card Publishers (NAICS 511191), Software Publishers (NAICS 5112) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>PERIODICAL PUBLISHERS (NAICS 51112)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>2.8</b>	<b>2.9</b>	<b>2.2</b>	<b>1.4</b>	<b>1.2</b>	<b>1.5</b>	<b>1.1</b>
Personnel costs.....	3.0	2.8	2.3	1.9	0.9	1.6	0.9
Gross annual payroll.....	3.2	3.0	2.5	2.0	1.0	1.7	1.1
Employer's cost for fringe benefits.....	2.6	2.5	1.9	1.9	1.6	1.6	0.7
Health insurance.....	2.4	NA	NA	NA	NA	NA	NA
Pension plans.....	2.9	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	4.5	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	5.2	NA	NA	NA	NA	NA	NA
Other.....	3.6	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	4.3	5.9	5.1	8.8	4.3	4.0	2.8
Expensed materials, parts and supplies (not for resale).....	6.8	8.8	7.6	8.5	7.0	3.2	2.5
Expensed equipment.....	14.1	21.2	11.8	15.8	8.5	13.7	6.3
Expensed purchase of other materials, parts, and supplies.....	6.6	8.9	8.4	9.7	6.9	2.6	1.9
Expensed purchased services.....	5.0	5.2	4.4	3.4	2.7	3.5	2.1
Expensed purchases of software.....	16.4	14.5	6.0	5.0	2.1	8.3	2.4
Purchased electricity and fuels (except motor fuels).....	5.0	4.2	4.6	2.3	2.5	3.7	6.7
Purchased electricity.....	5.2	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	8.7	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	6.1	6.4	4.3	3.0	1.7	2.1	1.7
Lease and rental payments for machinery, equipment, and other tangible items.....	17.9	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	4.1	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	2.0	4.6	3.7	3.8	5.3	4.7	1.4
Purchased repairs and maintenance to machinery and equipment.....	1.9	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	2.7	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	8.1	7.9	6.2	4.2	2.5	2.0	1.9
Purchased printing services.....	5.4	6.4	5.4	5.3	3.9	7.0	3.0
Other operating expenses.....	3.7	3.7	2.7	1.8	2.5	1.8	1.1
Depreciation and amortization charges.....	3.3	3.8	1.8	1.8	1.4	3.1	0.7
Governmental taxes and license fees.....	5.8	9.0	9.6	7.9	4.7	5.6	3.0
All other operating expenses.....	4.1	3.9	2.9	2.0	2.8	2.0	1.3
Data processing and other purchased computer services.....	11.8	NA	NA	NA	NA	NA	NA
Purchased communication services.....	5.8	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	4.1	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	6.1	NA	NA	NA	NA	NA	NA
All other operating expenses.....	4.3	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.2. Newspaper Publishers (NAICS 5111), Periodical Publishers (NAICS 5112), Book Publishers (NAICS 5113), Directory and Mailing List Publishers (NAICS 5114), Greeting Card Publishers (NAICS 51191), Software Publishers (NAICS 5112) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>BOOK PUBLISHERS (NAICS 5113)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>3.2</b>	<b>2.7</b>	<b>2.1</b>	<b>2.2</b>	<b>1.3</b>	<b>1.4</b>	<b>0.6</b>
Personnel costs.....	2.7	1.9	1.6	1.7	1.1	1.0	0.6
Gross annual payroll.....	2.9	2.3	1.7	1.6	1.1	1.1	0.7
Employer's cost for fringe benefits.....	3.0	2.2	1.8	1.6	2.4	0.9	0.8
Health insurance.....	3.6	NA	NA	NA	NA	NA	NA
Pension plans.....	3.9	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	7.4	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	5.5	NA	NA	NA	NA	NA	NA
Other.....	3.4	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	14.3	21.5	S	S	15.9	S	S
Expensed materials, parts and supplies (not for resale).....	2.8	3.7	11.3	9.7	2.9	5.8	1.3
Expensed equipment.....	2.6	2.7	3.1	2.4	3.0	1.6	0.8
Expensed purchase of other materials, parts, and supplies.....	4.7	6.4	20.3	S	3.6	9.7	S
Expensed purchased services.....	7.1	5.8	4.3	4.2	3.6	1.9	1.1
Expensed purchases of software.....	S	3.2	S	S	S	S	S
Purchased electricity and fuels (except motor fuels).....	3.2	2.8	2.6	2.1	3.1	1.6	1.1
Purchased electricity.....	2.9	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	7.4	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	4.1	4.4	3.6	3.7	2.7	2.1	0.9
Lease and rental payments for machinery, equipment, and other tangible items.....	7.6	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	4.6	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	2.9	3.0	2.7	3.5	3.4	1.5	3.1
Purchased repairs and maintenance to machinery and equipment.....	3.7	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	2.6	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	2.9	3.6	3.8	3.9	3.4	4.0	1.0
Purchased printing services.....	14.1	12.0	8.2	8.7	8.2	3.8	1.9
Other operating expenses.....	3.8	4.0	2.8	3.0	2.0	2.7	0.9
Depreciation and amortization charges.....	3.2	3.6	3.6	2.8	2.8	1.8	2.9
Governmental taxes and license fees.....	7.3	6.5	7.1	5.6	2.7	3.6	2.2
All other operating expenses.....	4.3	4.6	3.0	3.2	2.6	3.0	0.9
Data processing and other purchased computer services.....	7.9	NA	NA	NA	NA	NA	NA
Purchased communication services.....	5.9	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	14.4	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	10.5	NA	NA	NA	NA	NA	NA
All other operating expenses.....	4.8	NA	NA	NA	NA	NA	NA

See footnotes at end of table.



**Table A-3.6.2. Newspaper Publishers (NAICS 5111), Periodical Publishers (NAICS 5112), Book Publishers (NAICS 5113), Directory and Mailing List Publishers (NAICS 5114), Greeting Card Publishers (NAICS 51191), Software Publishers (NAICS 5112) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>DIRECTORY AND MAILING LIST PUBLISHERS (NAICS 5114)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>2.4</b>	<b>3.3</b>	<b>3.0</b>	<b>3.0</b>	<b>1.3</b>	<b>1.1</b>	<b>0.9</b>
Personnel costs.....	4.9	5.5	5.6	5.7	1.0	0.9	0.7
Gross annual payroll.....	5.7	6.3	6.3	6.5	1.0	0.9	0.7
Employer's cost for fringe benefits.....	2.8	3.0	3.1	3.6	1.5	1.3	0.9
Health insurance.....	3.1	NA	NA	NA	NA	NA	NA
Pension plans.....	3.0	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	3.5	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	2.5	NA	NA	NA	NA	NA	NA
Other.....	2.5	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	4.4	4.7	4.2	2.3	2.5	1.9	2.3
Expensed materials, parts and supplies (not for resale).....	2.0	2.0	2.9	2.8	0.8	2.5	1.3
Expensed equipment.....	8.8	11.7	9.9	10.4	4.9	3.9	1.7
Expensed purchase of other materials, parts, and supplies.....	2.1	2.1	3.1	3.0	0.7	2.6	1.3
Expensed purchased services.....	7.6	7.1	5.3	5.2	2.8	2.3	2.6
Expensed purchases of software.....	11.5	17.4	15.4	13.3	8.3	22.2	3.5
Purchased electricity and fuels (except motor fuels).....	4.5	4.2	3.2	3.5	1.8	3.2	1.7
Purchased electricity.....	4.1	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	8.0	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	1.9	1.9	2.3	2.2	1.9	1.6	0.6
Lease and rental payments for machinery, equipment, and other tangible items.....	4.9	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	1.9	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	12.3	6.0	5.6	4.7	9.3	2.0	3.1
Purchased repairs and maintenance to machinery and equipment.....	21.3	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	10.4	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	21.6	25.3	20.6	21.0	3.9	2.8	0.8
Purchased printing services.....	NA	NA	NA	NA	NA	NA	NA
Other operating expenses.....	2.0	3.5	2.9	2.9	2.5	1.2	1.2
Depreciation and amortization charges.....	2.7	7.1	8.4	9.0	8.5	1.4	2.8
Governmental taxes and license fees.....	4.9	11.9	12.5	26.6	5.9	3.0	13.0
All other operating expenses.....	2.4	3.6	2.7	2.6	1.8	1.4	1.0
Data processing and other purchased computer services.....	12.7	NA	NA	NA	NA	NA	NA
Purchased communication services.....	2.4	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	4.7	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	2.0	NA	NA	NA	NA	NA	NA
All other operating expenses.....	2.5	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.2. Newspaper Publishers (NAICS 5111), Periodical Publishers (NAICS 5112), Book Publishers (NAICS 5113), Directory and Mailing List Publishers (NAICS 5114), Greeting Card Publishers (NAICS 51191), Software Publishers (NAICS 5112) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>GREETING CARD PUBLISHERS (NAICS 51191)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>1.7</b>	<b>1.1</b>	<b>1.2</b>	<b>1.2</b>	<b>0.9</b>	<b>0.6</b>	<b>0.3</b>
Personnel costs.....	1.6	1.2	1.3	1.2	0.7	0.4	0.2
Gross annual payroll.....	1.6	1.2	1.3	1.2	0.7	0.4	0.2
Employer's cost for fringe benefits.....	1.7	1.2	1.3	1.1	0.9	0.4	0.3
Health insurance.....	1.6	NA	NA	NA	NA	NA	NA
Pension plans.....	3.4	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	1.3	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	3.7	NA	NA	NA	NA	NA	NA
Other.....	1.8	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	3.5	2.2	2.5	1.9	1.7	1.0	0.6
Expensed materials, parts and supplies (not for resale).....	4.4	2.1	3.4	1.9	3.0	1.3	1.4
Expensed equipment.....	D	1.1	1.1	1.1	D	Z	0.2
Expensed purchase of other materials, parts, and supplies.....	D	2.6	4.3	2.3	D	1.5	1.7
Expensed purchased services.....	2.1	1.7	1.5	1.2	1.1	0.4	0.4
Expensed purchases of software.....	11.1	8.8	7.4	5.7	2.0	1.4	1.1
Purchased electricity and fuels (except motor fuels).....	1.5	1.0	1.2	1.1	0.9	0.4	0.2
Purchased electricity.....	1.3	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	5.3	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	7.1	4.0	4.1	3.2	2.8	0.7	1.3
Lease and rental payments for machinery, equipment, and other tangible items.....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	4.2	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	2.2	2.8	2.8	2.3	1.2	1.4	1.2
Purchased repairs and maintenance to machinery and equipment.....	1.5	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	16.4	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	1.4	1.4	1.3	1.2	1.3	0.3	0.2
Purchased printing services.....	6.7	6.1	5.4	3.5	0.7	1.6	1.3
Other operating expenses.....	1.8	1.0	1.3	1.4	1.1	0.9	0.3
Depreciation and amortization charges.....	1.9	1.7	1.6	1.1	1.2	0.7	0.7
Governmental taxes and license fees.....	1.7	1.4	1.3	1.2	1.1	0.9	0.3
All other operating expenses.....	1.8	1.0	1.3	1.5	1.2	1.0	0.3
Data processing and other purchased computer services.....	2.3	NA	NA	NA	NA	NA	NA
Purchased communication services.....	1.4	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	2.0	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	1.3	NA	NA	NA	NA	NA	NA
All other operating expenses.....	2.0	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.2. Newspaper Publishers (NAICS 5111), Periodical Publishers (NAICS 5112), Book Publishers (NAICS 5113), Directory and Mailing List Publishers (NAICS 5114), Greeting Card Publishers (NAICS 51191), Software Publishers (NAICS 5112) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>SOFTWARE PUBLISHERS (NAICS 5112)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>3.4</b>	<b>3.5</b>	<b>2.8</b>	<b>2.6</b>	<b>1.2</b>	<b>1.7</b>	<b>1.1</b>
Personnel costs.....	3.4	3.5	3.0	2.2	1.5	1.8	1.2
Gross annual payroll.....	3.6	3.8	3.1	2.2	1.3	1.8	1.2
Employer's cost for fringe benefits.....	3.3	3.0	3.0	2.5	2.0	2.3	1.4
Health insurance.....	3.3	NA	NA	NA	NA	NA	NA
Pension plans.....	3.2	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	2.8	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	4.6	NA	NA	NA	NA	NA	NA
Other.....	5.8	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	8.7	5.4	5.0	5.1	10.2	7.9	2.0
Expensed materials, parts and supplies (not for resale).....	5.0	9.1	8.3	7.9	4.5	5.2	2.7
Expensed equipment.....	7.3	7.3	15.4	13.8	2.0	6.5	4.0
Expensed purchase of other materials, parts, and supplies.....	6.1	12.6	7.1	9.0	6.3	15.2	2.8
Expensed purchased services.....	3.9	5.3	3.9	4.4	2.1	3.0	1.3
Expensed purchases of software.....	15.4	19.7	S	S	11.0	S	S
Purchased electricity and fuels (except motor fuels).....	2.3	3.8	3.0	3.5	3.0	5.4	1.9
Purchased electricity.....	2.2	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	16.0	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	4.9	4.7	3.5	3.3	3.6	3.0	1.8
Lease and rental payments for machinery, equipment, and other tangible items.....	4.1	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	5.7	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	3.9	4.0	3.6	3.8	4.1	3.1	1.3
Purchased repairs and maintenance to machinery and equipment.....	3.7	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	6.6	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	3.6	4.7	3.5	3.3	2.0	2.0	1.4
Purchased software reproduction.....	S	S	S	S	S	S	S
Other operating expenses.....	4.8	3.8	2.8	3.7	2.4	1.8	2.3
Depreciation and amortization charges.....	8.3	5.8	4.5	4.9	3.4	2.1	2.3
Governmental taxes and license fees.....	8.6	8.1	5.6	5.7	3.8	4.3	7.5
All other operating expenses.....	4.5	S	2.6	3.9	S	S	2.7
Data processing and other purchased computer services.....	5.9	NA	NA	NA	NA	NA	NA
Purchased communication services.....	8.0	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	6.8	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	7.0	NA	NA	NA	NA	NA	NA
All other operating expenses.....	4.9	NA	NA	NA	NA	NA	NA

NA Not available. Z Absolute value is less than 0.05. D Estimate in table is withheld to avoid disclosing data of individual companies. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.6.3. Motion Picture and Video Production and Distribution (NAICS 5121X), Motion Picture and Video Exhibition (NAICS 51213), Postproduction Services and Other Motion Picture and Video Industries (NAICS 51219), Integrated Record Production and Distribution Services (NAICS 51222), Music Publishers (NAICS 51223), Sound Recording Studios (NAICS 51224) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>MOTION PICTURE AND VIDEO PRODUCTION AND DISTRIBUTION (NAICS 5121X)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>3.2</b>	<b>3.0</b>	<b>2.7</b>	<b>2.2</b>	<b>1.9</b>	<b>1.1</b>	<b>1.0</b>
Personnel costs.....	5.4	4.1	4.4	3.7	3.6	1.5	2.5
Gross annual payroll.....	5.5	4.3	4.7	4.1	3.5	1.6	2.6
Employer's cost for fringe benefits.....	6.4	5.7	6.5	8.3	2.9	2.3	2.7
Health insurance.....	6.7	NA	NA	NA	NA	NA	NA
Pension plans.....	7.1	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	11.2	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	11.6	NA	NA	NA	NA	NA	NA
Other.....	13.6	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	28.0	28.5	25.0	23.7	18.5	18.6	18.4
Expensed materials, parts and supplies (not for resale).....	10.9	17.8	16.2	18.9	13.5	11.5	5.9
Expensed equipment.....	15.5	13.6	21.0	24.8	15.5	17.6	13.1
Expensed purchase of other materials, parts, and supplies.....	13.1	20.5	18.7	21.5	17.1	14.8	5.5
Expensed purchased services.....	2.4	2.5	2.5	2.3	0.9	1.0	0.5
Expensed purchases of software.....	6.7	3.8	2.8	3.7	8.5	2.2	3.7
Purchased electricity and fuels (except motor fuels).....	5.9	6.0	6.6	6.5	7.1	5.2	5.6
Purchased electricity.....	5.6	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	26.9	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	4.1	3.9	4.9	3.5	2.7	3.8	2.5
Lease and rental payments for machinery, equipment, and other tangible items.....	26.2	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	3.2	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	10.1	6.3	3.9	4.6	7.1	3.4	1.6
Purchased repairs and maintenance to machinery and equipment.....	21.3	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	6.5	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	2.3	2.4	2.1	2.1	0.7	0.7	0.4
Other operating expenses.....	3.2	3.2	2.4	2.4	2.1	1.8	1.1
Depreciation and amortization charges.....	15.6	18.5	10.7	10.1	3.0	17.5	3.1
Governmental taxes and license fees.....	3.3	2.7	3.3	3.1	3.2	1.6	1.1
All other operating expenses.....	2.7	2.4	2.5	2.8	2.2	1.3	1.2
Data processing and other purchased computer services.....	6.6	NA	NA	NA	NA	NA	NA
Purchased communication services.....	8.2	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	8.4	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	17.6	NA	NA	NA	NA	NA	NA
All other operating expenses.....	2.6	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.3. Motion Picture and Video Production and Distribution (NAICS 5121X), Motion Picture and Video Exhibition (NAICS 51213), Postproduction Services and Other Motion Picture and Video Industries (NAICS 51219), Integrated Record Production and Distribution Services (NAICS 51222), Music Publishers (NAICS 51223), Sound Recording Studios (NAICS 51224) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>MOTION PICTURE AND VIDEO EXHIBITION (NAICS 51213)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>3.7</b>	<b>3.1</b>	<b>2.3</b>	<b>2.2</b>	<b>1.4</b>	<b>2.5</b>	<b>0.8</b>
Personnel costs.....	3.9	3.6	3.4	2.9	1.1	3.3	1.5
Gross annual payroll.....	3.8	3.7	3.8	3.2	1.0	3.9	1.6
Employer's cost for fringe benefits.....	6.8	3.1	3.6	3.4	6.1	1.8	0.9
Health insurance.....	8.0	NA	NA	NA	NA	NA	NA
Pension plans.....	24.3	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	S	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	S	NA	NA	NA	NA	NA	NA
Other.....	5.8	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	6.2	8.8	3.8	5.4	3.1	5.6	1.6
Expensed materials, parts and supplies (not for resale).....	13.4	5.2	16.4	19.7	7.2	16.5	4.6
Expensed equipment.....	17.7	14.1	29.5	S	5.6	81.0	S
Expensed purchase of other materials, parts, and supplies.....	13.0	4.3	16.8	20.7	8.3	14.0	5.0
Expensed purchased services.....	4.2	3.0	2.7	2.8	2.3	2.5	0.7
Expensed purchases of software.....	11.7	4.1	8.3	8.0	14.9	8.5	1.3
Purchased electricity and fuels (except motor fuels).....	4.3	3.7	2.5	1.9	1.4	3.2	1.1
Purchased electricity.....	4.5	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	7.3	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	4.3	3.5	3.7	3.9	3.4	3.3	0.9
Lease and rental payments for machinery, equipment, and other tangible items.....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	4.0	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	4.0	4.4	2.4	3.2	3.9	3.6	1.3
Purchased repairs and maintenance to machinery and equipment.....	3.9	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	4.9	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	12.2	8.6	6.5	6.0	5.0	1.9	1.1
Other operating expenses.....	4.3	4.0	2.9	2.9	1.9	3.1	0.7
Depreciation and amortization charges.....	3.3	3.2	2.8	2.7	0.8	1.5	1.1
Governmental taxes and license fees.....	3.5	3.4	2.7	2.9	3.0	2.8	1.0
All other operating expenses.....	5.2	4.7	3.1	3.1	2.6	3.7	0.6
Data processing and other purchased computer services.....	3.6	NA	NA	NA	NA	NA	NA
Purchased communication services.....	5.2	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	9.3	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	7.8	NA	NA	NA	NA	NA	NA
All other operating expenses.....	5.3	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.3. Motion Picture and Video Production and Distribution (NAICS 5121X), Motion Picture and Video Exhibition (NAICS 51213), Postproduction Services and Other Motion Picture and Video Industries (NAICS 51219), Integrated Record Production and Distribution Services (NAICS 51222), Music Publishers (NAICS 51223), Sound Recording Studios (NAICS 51224) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>POSTPRODUCTION SERVICES AND OTHER MOTION PICTURE AND VIDEO INDUSTRIES (NAICS 51219)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>4.1</b>	<b>3.5</b>	<b>3.2</b>	<b>2.7</b>	<b>2.2</b>	<b>2.1</b>	<b>1.8</b>
Personnel costs.....	4.2	3.8	3.9	2.9	1.8	2.6	2.1
Gross annual payroll.....	4.1	4.0	4.0	3.2	2.2	2.7	1.9
Employer's cost for fringe benefits.....	4.3	2.6	2.8	4.1	2.3	2.0	2.0
Health insurance.....	3.6	NA	NA	NA	NA	NA	NA
Pension plans.....	6.8	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	8.1	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	9.4	NA	NA	NA	NA	NA	NA
Other.....	7.3	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	18.2	15.1	16.5	18.2	7.0	14.4	33.9
Expensed materials, parts and supplies (not for resale).....	5.2	6.7	6.4	6.2	3.9	3.5	2.5
Expensed equipment.....	15.6	9.0	10.9	18.2	14.8	13.6	10.5
Expensed purchase of other materials, parts, and supplies.....	5.1	7.2	6.7	6.2	3.9	3.0	1.7
Expensed purchased services.....	6.4	5.7	4.8	5.0	6.9	4.3	2.8
Expensed purchases of software.....	16.3	15.0	12.0	12.3	23.6	8.7	13.2
Purchased electricity and fuels (except motor fuels).....	3.8	5.2	3.7	4.5	4.4	4.4	2.8
Purchased electricity.....	3.9	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	7.8	7.5	7.0	7.6	11.1	5.2	3.5
Lease and rental payments for machinery, equipment, and other tangible items.....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	7.2	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	4.0	3.1	11.8	12.2	5.1	5.9	2.9
Purchased repairs and maintenance to machinery and equipment.....	3.3	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	8.6	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	7.5	4.8	7.2	9.4	6.4	3.8	4.2
Other operating expenses.....	8.7	7.8	6.5	3.5	5.3	3.7	4.4
Depreciation and amortization charges.....	3.8	3.4	2.5	4.3	3.5	2.0	2.5
Governmental taxes and license fees.....	15.9	21.8	13.9	13.2	15.7	30.2	3.0
All other operating expenses.....	11.0	9.8	8.7	4.2	6.5	5.1	7.5
Data processing and other purchased computer services.....	14.0	NA	NA	NA	NA	NA	NA
Purchased communication services.....	7.5	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	18.7	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	14.7	NA	NA	NA	NA	NA	NA
All other operating expenses.....	14.1	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.3. Motion Picture and Video Production and Distribution (NAICS 5121X), Motion Picture and Video Exhibition (NAICS 51213), Postproduction Services and Other Motion Picture and Video Industries (NAICS 51219), Integrated Record Production and Distribution Services (NAICS 51222), Music Publishers (NAICS 51223), Sound Recording Studios (NAICS 51224) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>INTEGRATED RECORD PRODUCTION AND DISTRIBUTION SERVICES (NAICS 51222)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>S</b>	<b>0.4</b>	<b>0.3</b>	<b>0.3</b>	<b>S</b>	<b>0.1</b>	<b>0.2</b>
Personnel costs.....	0.6	0.4	0.3	0.3	0.3	0.3	0.1
Gross annual payroll.....	0.7	0.4	0.3	0.3	0.3	0.3	0.1
Employer's cost for fringe benefits.....	0.3	0.4	0.3	0.3	0.2	0.2	0.1
Health insurance.....	1.5	NA	NA	NA	NA	NA	NA
Pension plans.....	0.3	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	D	NA	NA	NA	D	NA	NA
Defined contribution plans.....	D	NA	NA	NA	D	NA	NA
Other.....	0.4	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	7.1	1.4	0.3	0.3	6.9	1.5	Z
Expensed materials, parts and supplies (not for resale).....	4.8	1.8	4.0	0.4	4.5	2.0	5.4
Expensed equipment.....	4.6	4.0	0.6	1.7	5.1	3.0	1.2
Expensed purchase of other materials, parts, and supplies.....	4.9	S	5.0	0.3	S	S	6.6
Expensed purchased services.....	0.5	S	0.9	0.6	S	S	0.4
Expensed purchases of software.....	0.6	0.3	S	S	0.5	S	S
Purchased electricity and fuels (except motor fuels).....	0.7	0.4	0.4	0.3	0.7	0.1	0.3
Purchased electricity.....	1.3	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	0.3	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	1.6	S	0.4	0.3	S	S	0.4
Lease and rental payments for machinery, equipment, and other tangible items.....	2.9	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	1.5	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	0.3	S	1.9	0.3	S	S	2.4
Purchased repairs and maintenance to machinery and equipment.....	0.5	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	0.4	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	0.3	S	0.3	0.3	S	S	0.1
Other operating expenses.....	0.4	0.4	S	S	0.1	S	S
Depreciation and amortization charges.....	1.3	0.3	S	S	1.1	S	S
Governmental taxes and license fees.....	0.6	S	0.3	0.3	S	S	0.2
All other operating expenses.....	0.3	0.4	S	S	0.2	S	S
Data processing and other purchased computer services.....	D	NA	NA	NA	D	NA	NA
Purchased communication services.....	D	NA	NA	NA	D	NA	NA
Water, sewer, refuse removal, and other utility payments.....	0.2	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	D	NA	NA	NA	D	NA	NA
All other operating expenses.....	0.5	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.3. Motion Picture and Video Production and Distribution (NAICS 5121X), Motion Picture and Video Exhibition (NAICS 51213), Postproduction Services and Other Motion Picture and Video Industries (NAICS 51219), Integrated Record Production and Distribution Services (NAICS 51222), Music Publishers (NAICS 51223), Sound Recording Studios (NAICS 51224) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>MUSIC PUBLISHERS (NAICS 51223)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>4.4</b>	<b>3.7</b>	<b>4.1</b>	<b>2.1</b>	<b>1.4</b>	<b>0.9</b>	<b>2.5</b>
Personnel costs.....	3.4	2.3	2.5	2.0	2.0	1.7	2.2
Gross annual payroll.....	2.6	2.4	2.6	2.2	1.5	1.6	2.2
Employer's cost for fringe benefits.....	17.9	3.4	4.4	3.3	13.2	1.9	2.9
Health insurance.....	8.5	NA	NA	NA	NA	NA	NA
Pension plans.....	S	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	S	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	S	NA	NA	NA	NA	NA	NA
Other.....	2.6	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	S	11.2	25.9	24.4	S	7.9	4.7
Expensed materials, parts and supplies (not for resale).....	6.6	12.8	S	S	8.1	S	S
Expensed equipment.....	20.7	20.6	S	15.7	19.2	S	S
Expensed purchase of other materials, parts, and supplies.....	4.8	14.4	S	S	6.9	S	S
Expensed purchased services.....	2.2	2.0	S	S	0.9	S	S
Expensed purchases of software.....	12.4	18.9	S	9.8	7.6	S	S
Purchased electricity and fuels (except motor fuels).....	2.4	3.0	S	S	1.5	S	S
Purchased electricity.....	2.1	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	5.0	5.3	6.1	3.0	4.0	3.1	4.2
Lease and rental payments for machinery, equipment, and other tangible items.....	7.5	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	5.3	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	4.6	2.4	S	S	2.5	S	S
Purchased repairs and maintenance to machinery and equipment.....	4.0	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	7.1	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	2.5	2.4	S	S	0.7	S	S
Other operating expenses.....	5.9	5.5	S	S	1.6	S	S
Depreciation and amortization charges.....	S	2.7	S	S	S	S	S
Governmental taxes and license fees.....	4.7	5.8	S	S	4.7	S	S
All other operating expenses.....	6.1	5.9	S	S	1.7	S	S
Data processing and other purchased computer services.....	9.1	NA	NA	NA	NA	NA	NA
Purchased communication services.....	3.4	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	3.1	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	5.7	NA	NA	NA	NA	NA	NA
All other operating expenses.....	6.4	NA	NA	NA	NA	NA	NA

See footnotes at end of table.



**Table A-3.6.3. Motion Picture and Video Production and Distribution (NAICS 5121X), Motion Picture and Video Exhibition (NAICS 51213), Postproduction Services and Other Motion Picture and Video Industries (NAICS 51219), Integrated Record Production and Distribution Services (NAICS 51222), Music Publishers (NAICS 51223), Sound Recording Studios (NAICS 51224) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>SOUND RECORDING STUDIOS (NAICS 51224)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>10.2</b>	<b>10.5</b>	<b>9.3</b>	<b>7.3</b>	<b>4.3</b>	<b>4.1</b>	<b>3.1</b>
Personnel costs.....	9.2	10.1	9.3	8.6	3.2	4.2	2.6
Gross annual payroll.....	9.5	10.8	9.7	9.1	3.4	3.6	2.6
Employer's cost for fringe benefits.....	9.7	10.4	8.2	7.4	10.6	5.2	4.5
Health insurance.....	11.8	NA	NA	NA	NA	NA	NA
Pension plans.....	17.3	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	28.3	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	8.8	NA	NA	NA	NA	NA	NA
Other.....	9.0	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	15.4	21.9	22.7	15.1	25.7	23.1	10.6
Expensed materials, parts and supplies (not for resale).....	20.8	10.7	7.7	6.0	10.9	9.0	5.2
Expensed equipment.....	17.0	15.7	6.6	11.2	20.7	20.9	6.6
Expensed purchase of other materials, parts, and supplies.....	S	12.0	11.1	8.3	S	10.2	7.2
Expensed purchased services.....	9.5	9.6	10.1	8.5	6.0	4.5	4.2
Expensed purchases of software.....	24.6	S	S	23.7	S	S	S
Purchased electricity and fuels (except motor fuels).....	14.1	12.1	11.4	11.6	11.5	3.5	3.1
Purchased electricity.....	13.8	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	27.8	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	8.9	9.5	11.1	7.1	5.7	5.7	7.0
Lease and rental payments for machinery, equipment, and other tangible items.....	19.6	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	9.0	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	10.2	8.5	12.2	17.2	15.9	11.6	10.4
Purchased repairs and maintenance to machinery and equipment.....	12.5	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	10.8	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	19.5	17.5	14.8	18.3	37.2	11.1	10.2
Other operating expenses.....	12.3	14.8	10.8	8.0	9.6	6.4	4.4
Depreciation and amortization charges.....	14.1	15.5	17.1	10.1	8.5	7.9	10.4
Governmental taxes and license fees.....	16.1	S	9.8	8.1	S	S	4.8
All other operating expenses.....	12.9	16.3	10.9	9.2	11.9	6.9	5.4
Data processing and other purchased computer services.....	S	NA	NA	NA	NA	NA	NA
Purchased communication services.....	11.3	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	10.0	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	15.9	NA	NA	NA	NA	NA	NA
All other operating expenses.....	14.3	NA	NA	NA	NA	NA	NA

NA Not available. Z Absolute value is less than 0.05. D Estimate in table is withheld to avoid disclosing data of individual companies. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.6.4. Radio Networks (NAICS 515111), Radio Stations (NAICS 515112), Television Broadcasting (NAICS 51512), Cable and Other Subscription Programming (NAICS 5152), Internet Publishing and Broadcasting (NAICS 516) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>RADIO NETWORKS (NAICS 515111)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>3.0</b>	<b>2.7</b>	<b>2.3</b>	<b>1.9</b>	<b>0.9</b>	<b>1.1</b>	<b>0.8</b>
Personnel costs.....	3.7	3.3	3.4	3.1	1.3	2.7	1.2
Gross annual payroll.....	3.9	3.5	3.4	2.9	1.5	2.4	1.2
Employer's cost for fringe benefits.....	3.5	2.7	2.7	2.6	1.2	4.7	1.4
Health insurance.....	3.7	NA	NA	NA	NA	NA	NA
Pension plans.....	3.2	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	3.6	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	3.2	NA	NA	NA	NA	NA	NA
Other.....	4.8	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	S	4.4	11.3	19.9	S	13.9	3.3
Expensed materials, parts and supplies (not for resale).....	6.1	5.5	4.3	2.7	4.2	3.6	0.7
Expensed equipment.....	S	4.3	3.8	2.8	S	4.1	0.4
Expensed purchase of other materials, parts, and supplies.....	7.1	6.7	5.0	2.8	4.1	4.0	1.1
Expensed purchased services.....	S	2.8	2.2	2.2	S	1.6	0.4
Expensed purchases of software.....	4.9	3.1	3.1	4.2	3.8	1.1	3.9
Purchased electricity and fuels (except motor fuels).....	8.4	9.5	10.8	10.4	6.8	13.0	3.7
Purchased electricity.....	8.6	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	22.1	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	9.5	9.3	5.6	4.7	11.8	8.5	1.1
Lease and rental payments for machinery, equipment, and other tangible items.....	20.6	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	7.9	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	5.5	6.0	10.3	16.6	5.3	5.0	18.0
Purchased repairs and maintenance to machinery and equipment.....	5.5	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	6.2	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	S	2.3	2.4	2.3	S	0.9	0.3
Other operating expenses.....	3.0	2.7	2.4	2.0	1.0	0.8	1.4
Depreciation and amortization charges.....	S	2.7	2.6	2.6	S	1.2	1.1
Governmental taxes and license fees.....	5.0	4.2	4.9	5.4	1.8	4.9	1.4
Broadcast rights and music license fees.....	3.0	2.8	3.0	3.1	0.6	1.5	2.5
Network compensation fees (networks only).....	3.9	3.8	4.9	4.3	1.1	3.2	1.6
All other operating expenses.....	3.0	2.8	2.4	2.6	1.3	1.1	2.5
Data processing and other purchased computer services.....	3.4	NA	NA	NA	NA	NA	NA
Purchased communication services.....	4.3	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	11.8	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	3.3	NA	NA	NA	NA	NA	NA
All other operating expenses.....	3.0	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.4. Radio Networks (NAICS 515111), Radio Stations (NAICS 515112), Television Broadcasting (NAICS 51512), Cable and Other Subscription Programming (NAICS 5152), Internet Publishing and Broadcasting (NAICS 516) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>RADIO STATIONS (NAICS 515112)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>2.9</b>	<b>3.1</b>	<b>2.9</b>	<b>2.2</b>	<b>1.5</b>	<b>2.1</b>	<b>1.6</b>
Personnel costs.....	3.0	3.2	2.4	2.3	1.4	1.4	1.2
Gross annual payroll.....	3.0	3.2	2.4	2.5	1.3	1.3	1.3
Employer's cost for fringe benefits.....	3.5	3.9	3.0	2.5	2.6	2.2	2.4
Health insurance.....	4.3	NA	NA	NA	NA	NA	NA
Pension plans.....	4.4	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	3.1	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	5.1	NA	NA	NA	NA	NA	NA
Other.....	4.8	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	3.9	6.7	6.2	6.2	9.2	3.7	1.9
Expensed materials, parts and supplies (not for resale).....	8.4	4.6	5.0	3.8	5.6	3.8	3.2
Expensed equipment.....	10.0	9.2	10.6	7.4	10.4	6.6	4.3
Expensed purchase of other materials, parts, and supplies.....	11.1	4.4	3.5	3.6	6.0	3.7	3.1
Expensed purchased services.....	3.9	4.3	4.4	4.1	2.1	3.2	1.7
Expensed purchases of software.....	23.8	S	S	S	S	S	S
Purchased electricity and fuels (except motor fuels).....	8.1	8.5	7.4	6.5	3.7	3.7	2.0
Purchased electricity.....	9.3	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	7.0	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	3.9	4.3	6.5	4.3	2.4	4.5	2.7
Lease and rental payments for machinery, equipment, and other tangible items.....	10.2	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	3.9	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	6.9	7.3	8.0	5.4	7.5	6.7	4.0
Purchased repairs and maintenance to machinery and equipment.....	8.4	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	6.6	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	4.7	4.3	4.6	5.0	2.0	3.8	2.6
Other operating expenses.....	3.5	3.5	5.0	3.7	2.4	3.2	2.3
Depreciation and amortization charges.....	8.4	7.9	5.5	3.9	3.5	4.2	3.2
Governmental taxes and license fees.....	3.4	4.1	3.7	3.5	1.5	2.3	1.1
Broadcast rights and music license fees.....	4.5	4.4	3.7	3.7	5.4	5.6	1.4
Network compensation fees (networks only).....	S	S	S	S	S	S	S
All other operating expenses.....	4.8	3.9	6.2	4.0	3.3	4.6	2.7
Data processing and other purchased computer services.....	18.0	NA	NA	NA	NA	NA	NA
Purchased communication services.....	5.2	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	5.8	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	7.7	NA	NA	NA	NA	NA	NA
All other operating expenses.....	4.9	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.4. Radio Networks (NAICS 515111), Radio Stations (NAICS 515112), Television Broadcasting (NAICS 51512), Cable and Other Subscription Programming (NAICS 5152), Internet Publishing and Broadcasting (NAICS 516) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>TELEVISION BROADCASTING (NAICS 51512)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>1.4</b>	<b>0.8</b>	<b>0.8</b>	<b>1.1</b>	<b>1.0</b>	<b>0.5</b>	<b>1.1</b>
Personnel costs.....	1.9	1.4	1.2	1.2	1.2	0.6	0.9
Gross annual payroll.....	1.7	1.3	1.1	1.1	1.0	0.6	0.9
Employer's cost for fringe benefits.....	2.3	2.2	1.9	1.8	1.9	1.0	1.2
Health insurance.....	2.0	NA	NA	NA	NA	NA	NA
Pension plans.....	1.7	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	2.0	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	2.9	NA	NA	NA	NA	NA	NA
Other.....	4.1	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	19.1	15.5	14.1	14.8	34.4	17.1	2.2
Expensed materials, parts and supplies (not for resale).....	5.7	4.5	3.3	4.4	3.2	3.4	2.1
Expensed equipment.....	7.4	8.2	6.7	10.3	2.3	7.1	3.8
Expensed purchase of other materials, parts, and supplies.....	5.7	4.0	2.7	3.0	4.3	3.4	1.7
Expensed purchased services.....	4.4	4.6	3.0	3.0	3.3	1.8	1.4
Expensed purchases of software.....	7.2	7.0	7.6	7.7	6.7	5.4	2.9
Purchased electricity and fuels (except motor fuels).....	9.6	6.3	5.4	5.2	8.9	1.8	1.6
Purchased electricity.....	10.1	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	13.2	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	11.3	12.9	7.5	7.3	8.6	4.9	1.7
Lease and rental payments for machinery, equipment, and other tangible items.....	19.8	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	8.4	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	7.0	8.7	8.1	8.6	5.0	4.8	2.2
Purchased repairs and maintenance to machinery and equipment.....	4.9	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	12.6	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	2.0	1.5	2.4	2.1	1.2	1.4	1.5
Other operating expenses.....	1.3	0.9	0.9	1.4	1.3	0.7	1.2
Depreciation and amortization charges.....	5.1	2.4	2.8	2.4	3.7	2.0	1.5
Governmental taxes and license fees.....	4.4	4.2	3.4	3.2	3.1	1.3	1.4
Broadcast rights and music license fees.....	1.3	1.3	1.5	1.8	0.9	0.6	1.2
Network compensation fees (networks only).....	4.4	12.5	3.7	3.2	5.3	10.3	1.6
All other operating expenses.....	3.7	2.5	2.2	2.1	2.7	2.0	2.0
Data processing and other purchased computer services.....	8.7	NA	NA	NA	NA	NA	NA
Purchased communication services.....	4.9	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	8.7	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	5.5	NA	NA	NA	NA	NA	NA
All other operating expenses.....	3.8	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.4. Radio Networks (NAICS 515111), Radio Stations (NAICS 515112), Television Broadcasting (NAICS 51512), Cable and Other Subscription Programming (NAICS 5152), Internet Publishing and Broadcasting (NAICS 516) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>CABLE AND OTHER SUBSCRIPTION PROGRAMMING (NAICS 5152)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>1.1</b>	<b>1.1</b>	<b>0.8</b>	<b>0.8</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>
Personnel costs.....	1.4	1.5	0.9	0.5	0.5	0.7	0.7
Gross annual payroll.....	1.1	1.1	0.6	0.6	0.4	0.9	0.4
Employer's cost for fringe benefits.....	1.2	1.4	1.2	0.5	1.5	0.4	1.2
Health insurance.....	1.3	NA	NA	NA	NA	NA	NA
Pension plans.....	1.1	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	0.9	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	1.6	NA	NA	NA	NA	NA	NA
Other.....	1.2	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	6.0	7.7	10.3	6.5	2.3	1.9	2.5
Expensed materials, parts and supplies (not for resale).....	2.1	2.5	2.7	1.2	1.8	0.8	1.5
Expensed equipment.....	7.2	10.0	8.5	3.0	2.1	1.3	3.6
Expensed purchase of other materials, parts, and supplies.....	1.8	1.3	1.3	0.8	2.0	1.0	0.8
Expensed purchased services.....	0.8	0.8	0.5	0.5	0.6	0.7	0.6
Expensed purchases of software.....	0.9	1.1	0.8	0.4	0.5	0.5	1.3
Purchased electricity and fuels (except motor fuels).....	1.2	1.1	4.1	4.1	0.5	2.9	0.4
Purchased electricity.....	1.3	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	1.1	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	2.1	1.9	0.6	0.5	1.2	1.5	0.4
Lease and rental payments for machinery, equipment, and other tangible items.....	3.4	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	2.3	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	1.3	0.8	0.5	S	0.5	0.5	S
Purchased repairs and maintenance to machinery and equipment.....	1.5	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	0.9	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	0.7	0.8	0.5	0.7	0.6	0.8	1.0
Other operating expenses.....	1.2	1.2	0.9	0.9	0.3	0.3	0.2
Depreciation and amortization charges.....	0.6	0.6	S	S	0.3	S	S
Governmental taxes and license fees.....	1.0	0.8	0.8	0.8	0.6	0.2	0.2
Program and production costs.....	1.4	1.2	1.0	1.0	0.4	0.3	0.3
All other operating expenses.....	1.3	1.9	1.5	1.7	0.9	0.8	0.6
Data processing and other purchased computer services.....	1.3	NA	NA	NA	NA	NA	NA
Purchased communication services.....	1.6	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	4.7	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	1.4	NA	NA	NA	NA	NA	NA
All other operating expenses.....	1.3	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.4. Radio Networks (NAICS 515111), Radio Stations (NAICS 515112), Television Broadcasting (NAICS 51512), Cable and Other Subscription Programming (NAICS 5152), Internet Publishing and Broadcasting (NAICS 516) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>INTERNET PUBLISHING AND BROADCASTING (NAICS 516)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>8.0</b>	<b>8.0</b>	<b>8.5</b>	<b>2.3</b>	<b>2.3</b>	<b>2.4</b>	<b>11.3</b>
Personnel costs.....	5.2	4.6	4.5	2.6	0.8	1.6	5.8
Gross annual payroll.....	5.2	4.3	4.1	2.9	1.5	1.8	4.6
Employer's cost for fringe benefits.....	5.1	8.6	9.4	2.0	4.2	1.8	11.4
Health insurance.....	5.0	NA	NA	NA	NA	NA	NA
Pension plans.....	S	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	S	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	S	NA	NA	NA	NA	NA	NA
Other.....	4.3	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	S	9.4	9.0	6.1	S	5.5	10.2
Expensed materials, parts and supplies (not for resale).....	S	15.4	17.9	4.1	S	6.8	17.7
Expensed equipment.....	S	22.7	21.4	3.2	S	3.8	25.0
Expensed purchase of other materials, parts, and supplies.....	S	15.7	23.9	6.7	S	11.9	16.0
Expensed purchased services.....	12.3	10.9	8.3	4.0	4.2	8.9	10.3
Expensed purchases of software.....	S	4.0	6.3	13.0	S	6.2	28.8
Purchased electricity and fuels (except motor fuels).....	12.4	10.5	13.6	5.7	5.0	5.7	15.6
Purchased electricity.....	12.4	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	12.0	10.7	10.3	3.0	3.3	1.9	13.2
Lease and rental payments for machinery, equipment, and other tangible items.....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	12.0	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	S	4.9	4.2	2.8	S	2.2	4.3
Purchased repairs and maintenance to machinery and equipment.....	S	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	S	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	15.8	16.5	10.4	6.2	5.7	13.3	9.7
Other operating expenses.....	10.8	13.9	14.7	2.8	6.9	2.6	17.1
Depreciation and amortization charges.....	S	3.1	3.3	2.2	S	1.3	4.1
Governmental taxes and license fees.....	17.2	12.7	17.1	15.5	10.0	12.3	7.1
All other operating expenses.....	12.0	17.7	S	3.8	9.4	S	S
Data processing and other purchased computer services.....	13.0	NA	NA	NA	NA	NA	NA
Purchased communication services.....	S	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	S	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	11.9	NA	NA	NA	NA	NA	NA
All other operating expenses.....	S	NA	NA	NA	NA	NA	NA

NA Not available. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.6.5. Wired Telecommunications Carriers (NAICS 5171), Paging (NAICS 517211), Cellular and Other Wireless Telecommunications (NAICS 517212), Telecommunications Resellers (NAICS 5173), Satellite Telecommunications (NAICS 5174), Cable and Other Program Distribution (NAICS 5175) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>WIRED TELECOMMUNICATIONS CARRIERS (NAICS 5171)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>1.4</b>	<b>2.2</b>	<b>1.0</b>	<b>1.2</b>	<b>2.3</b>	<b>1.5</b>	<b>0.6</b>
Personnel costs.....	2.0	1.4	1.3	1.4	1.7	1.2	0.6
Gross annual payroll.....	1.7	1.4	1.2	1.4	1.8	1.3	0.8
Employer's cost for fringe benefits.....	2.9	2.1	2.0	1.9	1.3	1.0	0.4
Health insurance.....	2.8	NA	NA	NA	NA	NA	NA
Pension plans.....	5.7	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	9.3	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	6.3	NA	NA	NA	NA	NA	NA
Other.....	3.4	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	3.6	2.7	2.9	3.4	3.0	1.9	0.6
Expensed materials, parts and supplies (not for resale).....	2.7	2.4	3.4	4.4	1.5	1.9	1.4
Expensed equipment.....	21.7	20.7	17.1	18.9	9.0	8.1	1.9
Expensed purchase of other materials, parts, and supplies.....	2.6	2.4	S	4.6	1.3	S	S
Expensed purchased services.....	1.7	1.9	1.3	3.3	1.8	1.3	1.5
Expensed purchases of software.....	2.3	2.5	2.9	3.6	1.7	1.2	0.9
Purchased electricity and fuels (except motor fuels).....	2.3	1.4	1.8	2.9	1.4	0.9	1.3
Purchased electricity.....	2.1	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	10.0	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	1.2	4.0	2.6	5.6	2.5	2.0	2.2
Lease and rental payments for machinery, equipment, and other tangible items.....	3.8	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	1.7	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	8.1	8.4	3.2	5.1	4.5	3.4	2.3
Purchased repairs and maintenance to machinery and equipment.....	11.0	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	7.4	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	4.1	3.0	3.0	2.6	1.6	1.1	1.4
Other operating expenses.....	1.2	3.5	1.5	1.5	2.8	1.8	0.5
Depreciation and amortization charges.....	2.2	2.2	1.1	0.8	2.9	1.9	0.4
Governmental taxes and license fees.....	2.1	1.8	2.7	2.0	2.0	1.8	1.1
Access charges.....	3.8	11.1	5.2	4.9	3.7	3.2	0.6
Universal service contributions (USC).....	2.2	1.4	1.6	1.9	1.2	0.6	0.7
All other operating expenses.....	2.8	2.4	3.0	2.6	1.8	1.6	0.8
Data processing and other purchased computer services.....	4.4	NA	NA	NA	NA	NA	NA
Purchased communication services.....	18.0	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	4.7	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	2.4	NA	NA	NA	NA	NA	NA
All other operating expenses.....	4.4	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.5. Wired Telecommunications Carriers (NAICS 5171), Paging (NAICS 517211), Cellular and Other Wireless Telecommunications (NAICS 517212), Telecommunications Resellers (NAICS 5173), Satellite Telecommunications (NAICS 5174), Cable and Other Program Distribution (NAICS 5175) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>PAGING (NAICS 517211)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>8.4</b>	<b>7.6</b>	<b>5.7</b>	<b>5.1</b>	<b>1.8</b>	<b>1.9</b>	<b>2.0</b>
Personnel costs.....	13.9	11.4	7.6	7.4	2.2	2.9	3.4
Gross annual payroll.....	14.9	13.4	8.5	7.5	2.2	3.4	4.0
Employer's cost for fringe benefits.....	9.7	8.2	6.3	6.0	4.9	2.6	2.5
Health insurance.....	7.7	NA	NA	NA	NA	NA	NA
Pension plans.....	28.7	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	27.1	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	29.4	NA	NA	NA	NA	NA	NA
Other.....	6.6	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	S	7.1	12.8	18.0	S	4.4	5.1
Expensed materials, parts and supplies (not for resale).....	24.8	S	26.6	22.2	S	S	4.8
Expensed equipment.....	S	S	15.1	14.7	S	S	7.3
Expensed purchase of other materials, parts, and supplies.....	28.4	S	28.1	23.5	S	S	5.2
Expensed purchased services.....	5.4	5.4	5.0	5.8	3.0	1.4	1.9
Expensed purchases of software.....	S	S	12.9	19.1	S	S	6.6
Purchased electricity and fuels (except motor fuels).....	9.9	12.7	8.0	7.8	5.3	12.5	2.3
Purchased electricity.....	10.2	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	22.5	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	5.3	5.2	5.0	5.7	3.4	1.1	1.7
Lease and rental payments for machinery, equipment, and other tangible items.....	29.7	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	5.1	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	8.1	5.5	5.4	7.6	4.7	1.8	3.3
Purchased repairs and maintenance to machinery and equipment.....	7.9	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	12.7	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	20.4	S	14.7	11.2	S	S	7.9
Other operating expenses.....	10.5	S	5.5	5.2	S	S	1.9
Depreciation and amortization charges.....	12.8	14.4	6.4	6.0	1.8	5.4	2.1
Governmental taxes and license fees.....	8.2	6.6	4.8	5.4	6.7	2.5	2.1
Access charges.....	8.4	5.8	5.7	7.3	1.6	5.9	1.9
All other operating expenses.....	11.3	S	8.8	7.8	S	S	2.8
Data processing and other purchased computer services.....	S	NA	NA	NA	NA	NA	NA
Purchased communication services.....	12.5	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	S	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	5.5	NA	NA	NA	NA	NA	NA
All other operating expenses.....	13.9	NA	NA	NA	NA	NA	NA

See footnotes at end of table.



**Table A-3.6.5. Wired Telecommunications Carriers (NAICS 5171), Paging (NAICS 517211), Cellular and Other Wireless Telecommunications (NAICS 517212), Telecommunications Resellers (NAICS 5173), Satellite Telecommunications (NAICS 5174), Cable and Other Program Distribution (NAICS 5175) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>CELLULAR AND OTHER WIRELESS TELECOMMUNICATIONS</b>							
<b>(NAICS 517212)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>1.7</b>	<b>1.5</b>	<b>1.2</b>	<b>1.3</b>	<b>0.4</b>	<b>1.1</b>	<b>0.6</b>
Personnel costs.....	3.6	3.8	3.6	3.2	0.8	2.2	11.3
Gross annual payroll.....	5.1	5.3	5.1	3.2	1.0	2.7	13.7
Employer's cost for fringe benefits.....	1.6	1.6	1.2	3.3	1.0	1.4	6.0
Health insurance.....	4.3	NA	NA	NA	NA	NA	NA
Pension plans.....	2.4	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	3.7	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	9.0	NA	NA	NA	NA	NA	NA
Other.....	3.7	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	3.1	2.8	3.0	3.6	0.5	0.7	1.9
Expensed materials, parts and supplies (not for resale).....	3.2	3.0	3.0	2.2	0.7	1.0	1.1
Expensed equipment.....	D	19.0	14.9	14.3	D	3.4	5.9
Expensed purchase of other materials, parts, and supplies.....	D	3.1	3.1	3.4	D	0.9	0.4
Expensed purchased services.....	4.3	3.9	3.0	3.5	0.6	2.3	1.0
Expensed purchases of software.....	2.0	2.2	1.5	3.5	0.5	1.1	9.4
Purchased electricity and fuels (except motor fuels).....	S	2.1	2.2	3.5	S	1.4	3.0
Purchased electricity.....	D	NA	NA	NA	D	NA	NA
Purchased fuels (except motor fuels).....	D	NA	NA	NA	D	NA	NA
Lease and rental payments.....	3.7	3.7	3.6	3.6	1.0	1.2	0.4
Lease and rental payments for machinery, equipment, and other tangible items.....	8.7	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	3.7	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	6.3	4.7	5.5	S	2.2	1.9	S
Purchased repairs and maintenance to machinery and equipment.....	6.8	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	13.8	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	6.5	6.2	3.3	3.5	0.6	4.2	0.7
Other operating expenses.....	1.9	1.7	1.6	0.6	0.4	1.0	2.1
Depreciation and amortization charges.....	2.7	2.9	2.8	3.5	0.3	0.8	1.5
Governmental taxes and license fees.....	3.0	2.8	3.2	3.6	0.7	1.2	0.9
Access charges.....	4.2	4.6	4.6	4.6	1.1	2.6	0.5
Universal service contributions (USC) and other similar charges.....	3.5	3.5	3.5	3.5	0.2	0.5	0.3
All other operating expenses.....	1.5	1.2	0.8	3.1	0.7	1.1	3.1
Data processing and other purchased computer services.....	S	NA	NA	NA	NA	NA	NA
Purchased communication services.....	S	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	S	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	5.6	NA	NA	NA	NA	NA	NA
All other operating expenses.....	1.4	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.5. Wired Telecommunications Carriers (NAICS 5171), Paging (NAICS 517211), Cellular and Other Wireless Telecommunications (NAICS 517212), Telecommunications Resellers (NAICS 5173), Satellite Telecommunications (NAICS 5174), Cable and Other Program Distribution (NAICS 5175) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>TELECOMMUNICATIONS RESELLERS (NAICS 5173)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>8.8</b>	<b>8.4</b>	<b>7.6</b>	<b>5.3</b>	<b>2.6</b>	<b>2.3</b>	<b>3.3</b>
Personnel costs.....	11.0	9.8	10.1	7.2	2.5	4.6	4.8
Gross annual payroll.....	12.0	9.8	9.7	7.4	2.2	1.6	2.2
Employer's cost for fringe benefits.....	11.0	12.4	9.5	7.2	5.7	3.5	3.4
Health insurance.....	10.1	NA	NA	NA	NA	NA	NA
Pension plans.....	11.9	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	22.4	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	10.9	NA	NA	NA	NA	NA	NA
Other.....	13.4	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	S	S	S	19.9	S	S	S
Expensed materials, parts and supplies (not for resale).....	S	S	S	11.7	S	S	S
Expensed equipment.....	S	19.6	18.0	14.4	S	6.9	8.5
Expensed purchase of other materials, parts, and supplies.....	S	S	S	12.1	S	S	S
Expensed purchased services.....	S	11.5	12.3	7.4	S	3.1	5.4
Expensed purchases of software.....	S	14.7	18.9	26.8	S	8.5	7.6
Purchased electricity and fuels (except motor fuels).....	S	8.2	S	S	S	S	S
Purchased electricity.....	S	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	S	13.3	16.5	8.7	S	2.2	5.2
Lease and rental payments for machinery, equipment, and other tangible items.....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	S	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	S	S	S	S	S	S	S
Purchased repairs and maintenance to machinery and equipment.....	S	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	S	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	11.6	13.3	14.9	9.6	6.1	4.1	7.7
Other operating expenses.....	8.9	8.2	6.5	5.4	2.2	4.0	3.1
Depreciation and amortization charges.....	S	11.9	11.3	10.4	S	1.9	3.0
Governmental taxes and license fees.....	13.2	10.2	12.1	10.7	3.9	3.5	2.2
Access charges.....	10.5	10.1	9.8	8.0	3.6	5.3	5.7
All other operating expenses.....	9.2	10.1	6.8	5.4	6.2	6.3	3.0
Data processing and other purchased computer services.....	10.8	NA	NA	NA	NA	NA	NA
Purchased communication services.....	9.1	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	27.4	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	15.7	NA	NA	NA	NA	NA	NA
All other operating expenses.....	9.8	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.5. Wired Telecommunications Carriers (NAICS 5171), Paging (NAICS 517211), Cellular and Other Wireless Telecommunications (NAICS 517212), Telecommunications Resellers (NAICS 5173), Satellite Telecommunications (NAICS 5174), Cable and Other Program Distribution (NAICS 5175) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>SATELLITE TELECOMMUNICATIONS (NAICS 5174)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>2.2</b>	<b>2.2</b>	<b>2.0</b>	<b>1.7</b>	<b>1.0</b>	<b>0.9</b>	<b>0.7</b>
Personnel costs.....	2.2	2.2	3.4	2.3	0.8	2.0	1.2
Gross annual payroll.....	2.3	2.3	3.7	2.5	1.0	2.3	1.3
Employer's cost for fringe benefits.....	2.4	S	S	2.2	S	S	S
Health insurance.....	2.4	NA	NA	NA	NA	NA	NA
Pension plans.....	3.2	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	8.6	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	3.3	NA	NA	NA	NA	NA	NA
Other.....	2.3	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	S	S	7.6	5.5	S	S	2.3
Expensed materials, parts and supplies (not for resale).....	5.5	1.7	1.9	1.9	5.1	1.0	0.5
Expensed equipment.....	7.5	9.5	S	11.0	12.7	S	S
Expensed purchase of other materials, parts, and supplies.....	5.8	1.8	2.0	2.0	5.8	1.1	0.4
Expensed purchased services.....	2.5	S	2.0	1.8	S	S	0.8
Expensed purchases of software.....	3.9	S	3.5	S	S	S	S
Purchased electricity and fuels (except motor fuels).....	6.0	2.4	S	S	10.7	S	S
Purchased electricity.....	6.4	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	2.6	S	2.2	2.1	S	S	0.8
Lease and rental payments for machinery, equipment, and other tangible items.....	8.8	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	2.4	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	5.4	2.8	2.3	S	3.8	2.0	S
Purchased repairs and maintenance to machinery and equipment.....	5.5	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	6.0	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	3.8	2.3	S	S	2.0	S	S
Other operating expenses.....	2.6	S	S	1.9	S	S	S
Depreciation and amortization charges.....	2.2	2.0	S	S	1.1	S	S
Governmental taxes and license fees.....	6.5	4.1	6.4	S	2.6	2.8	S
Access charges.....	S	S	4.3	3.5	S	S	1.0
All other operating expenses.....	2.7	S	S	1.9	S	S	S
Data processing and other purchased computer services.....	6.3	NA	NA	NA	NA	NA	NA
Purchased communication services.....	25.0	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	3.2	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	2.3	NA	NA	NA	NA	NA	NA
All other operating expenses.....	2.6	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.5. Wired Telecommunications Carriers (NAICS 5171), Paging (NAICS 517211), Cellular and Other Wireless Telecommunications (NAICS 517212), Telecommunications Resellers (NAICS 5173), Satellite Telecommunications (NAICS 5174), Cable and Other Program Distribution (NAICS 5175) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>CABLE AND OTHER PROGRAM DISTRIBUTION (NAICS 5175)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>1.1</b>	<b>1.1</b>	<b>1.2</b>	<b>1.1</b>	<b>0.3</b>	<b>0.4</b>	<b>0.2</b>
Personnel costs.....	1.5	1.2	1.1	1.0	0.5	0.6	0.3
Gross annual payroll.....	1.6	1.2	1.1	1.0	0.6	0.7	0.4
Employer's cost for fringe benefits.....	1.2	1.3	1.2	1.1	0.6	0.4	0.3
Health insurance.....	1.0	NA	NA	NA	NA	NA	NA
Pension plans.....	1.1	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	2.2	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	1.3	NA	NA	NA	NA	NA	NA
Other.....	1.9	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	3.3	2.3	1.5	1.6	1.2	1.6	0.4
Expensed materials, parts and supplies (not for resale).....	7.4	7.3	6.7	6.8	2.5	4.8	1.1
Expensed equipment.....	16.2	10.7	12.4	6.7	5.7	1.9	4.5
Expensed purchase of other materials, parts, and supplies.....	8.4	8.2	7.8	8.0	2.6	5.4	0.7
Expensed purchased services.....	1.1	1.5	1.4	1.3	0.7	0.5	0.4
Expensed purchases of software.....	1.6	4.1	2.8	2.9	2.5	3.2	0.3
Purchased electricity and fuels (except motor fuels).....	2.0	1.8	1.9	2.0	0.6	0.3	0.5
Purchased electricity.....	2.1	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	1.8	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	2.6	3.3	2.8	2.1	0.9	0.8	0.8
Lease and rental payments for machinery, equipment, and other tangible items.....	1.9	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	3.0	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	1.3	2.3	2.6	2.1	2.3	1.1	0.6
Purchased repairs and maintenance to machinery and equipment.....	1.7	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	1.1	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	1.0	1.1	1.3	1.1	0.3	0.6	0.5
Other operating expenses.....	1.0	1.1	1.2	1.2	0.4	0.3	0.2
Depreciation and amortization charges.....	1.2	1.3	1.4	1.3	0.3	0.3	0.2
Governmental taxes and license fees.....	1.8	1.7	1.5	1.3	0.8	0.9	0.4
Program and production costs.....	1.3	1.4	1.4	1.4	0.3	0.4	0.1
All other operating expenses.....	1.1	1.5	1.9	2.0	1.1	1.0	0.7
Data processing and other purchased computer services.....	9.6	NA	NA	NA	NA	NA	NA
Purchased communication services.....	1.4	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	1.6	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	1.2	NA	NA	NA	NA	NA	NA
All other operating expenses.....	1.2	NA	NA	NA	NA	NA	NA

NA Not available. D Estimate in table is withheld to avoid disclosing data of individual companies. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.6.6. Internet Service Providers (NAICS 518111), Web Search Portals (NAICS 518112), Data Processing, Hosting, and Related Services (NAICS 5182), News Syndicates (NAICS 51911), Libraries and Archives (NAICS 51912), All Other Information Services (NAICS 51919) –Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>INTERNET SERVICE PROVIDERS (NAICS 518111)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>7.1</b>	<b>4.7</b>	<b>3.5</b>	<b>2.8</b>	<b>3.2</b>	<b>3.3</b>	<b>1.9</b>
Personnel costs.....	11.2	8.5	7.9	5.5	3.6	4.0	2.4
Gross annual payroll.....	11.6	8.9	9.0	6.8	3.7	4.7	2.9
Employer's cost for fringe benefits.....	15.4	11.7	8.4	S	5.9	4.0	S
Health insurance.....	15.4	NA	NA	NA	NA	NA	NA
Pension plans.....	S	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	S	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	S	NA	NA	NA	NA	NA	NA
Other.....	17.6	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	13.0	7.1	4.6	S	4.9	6.6	S
Expensed materials, parts and supplies (not for resale).....	S	S	S	S	S	S	S
Expensed equipment.....	7.6	7.8	6.4	S	4.8	4.2	S
Expensed purchase of other materials, parts, and supplies.....	S	S	S	S	S	S	S
Expensed purchased services.....	7.6	5.2	5.1	S	3.2	2.1	S
Expensed purchases of software.....	25.1	19.2	9.2	10.0	4.1	17.5	16.7
Purchased electricity and fuels (except motor fuels).....	S	23.3	17.6	S	S	3.9	S
Purchased electricity.....	S	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	20.2	16.1	21.9	18.9	11.2	7.2	8.6
Lease and rental payments for machinery, equipment, and other tangible items.....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	20.3	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	5.7	6.4	8.0	7.7	8.0	4.4	3.0
Purchased repairs and maintenance to machinery and equipment.....	6.4	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	6.6	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	9.8	5.4	4.8	S	3.3	1.8	S
Other operating expenses.....	6.5	4.5	3.6	S	4.2	3.7	S
Depreciation and amortization charges.....	8.5	7.9	6.5	S	2.3	4.0	S
Governmental taxes and license fees.....	18.7	S	13.7	S	S	S	S
All other operating expenses.....	7.7	5.7	3.8	S	4.9	4.4	S
Data processing and other purchased computer services.....	14.6	NA	NA	NA	NA	NA	NA
Purchased communication services.....	11.6	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	24.3	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	S	NA	NA	NA	NA	NA	NA
All other operating expenses.....	7.5	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.6. Internet Service Providers (NAICS 518111), Web Search Portals (NAICS 518112), Data Processing, Hosting, and Related Services (NAICS 5182), News Syndicates (NAICS 51911), Libraries and Archives (NAICS 51912), All Other Information Services (NAICS 51919) –Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>WEB SEARCH PORTALS (NAICS 518112)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>8.1</b>	<b>7.4</b>	<b>3.8</b>	<b>2.6</b>	<b>1.8</b>	<b>4.8</b>	<b>2.2</b>
Personnel costs.....	5.3	4.9	3.6	3.1	2.2	3.5	2.5
Gross annual payroll.....	6.1	6.5	4.2	3.9	3.6	4.5	3.7
Employer's cost for fringe benefits.....	3.6	3.3	3.3	2.8	1.4	2.7	1.0
Health insurance.....	5.0	NA	NA	NA	NA	NA	NA
Pension plans.....	1.7	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	1.7	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	1.7	NA	NA	NA	NA	NA	NA
Other.....	3.7	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	3.5	3.5	2.6	2.6	1.4	3.4	0.5
Expensed materials, parts and supplies (not for resale).....	3.6	4.7	3.1	3.1	4.6	2.8	1.7
Expensed equipment.....	3.7	6.3	2.9	2.8	9.7	2.8	1.5
Expensed purchase of other materials, parts, and supplies.....	6.1	5.2	4.3	6.5	1.8	8.5	4.0
Expensed purchased services.....	21.8	13.8	2.9	2.5	4.8	14.7	1.5
Expensed purchases of software.....	3.0	12.5	2.5	S	5.9	21.0	S
Purchased electricity and fuels (except motor fuels).....	4.8	3.7	2.3	S	2.3	3.2	S
Purchased electricity.....	3.6	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	5.6	4.4	4.4	S	6.6	3.9	S
Lease and rental payments for machinery, equipment, and other tangible items.....	12.1	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	5.6	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	2.1	3.0	2.9	3.8	2.5	3.1	3.5
Purchased repairs and maintenance to machinery and equipment.....	2.2	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	2.0	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	S	17.2	3.1	2.9	S	18.9	1.5
Other operating expenses.....	6.9	8.1	S	S	2.4	S	S
Depreciation and amortization charges.....	4.8	3.5	S	S	1.5	S	S
Governmental taxes and license fees.....	4.1	3.4	26.4	14.9	4.4	10.6	6.6
All other operating expenses.....	7.4	9.3	S	S	3.0	S	S
Data processing and other purchased computer services.....	9.5	NA	NA	NA	NA	NA	NA
Purchased communication services.....	7.2	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	1.7	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	10.3	NA	NA	NA	NA	NA	NA
All other operating expenses.....	8.1	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.6. Internet Service Providers (NAICS 518111), Web Search Portals (NAICS 518112), Data Processing, Hosting, and Related Services (NAICS 5182), News Syndicates (NAICS 51911), Libraries and Archives (NAICS 51912), All Other Information Services (NAICS 51919) –Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>DATA PROCESSING, HOSTING, AND RELATED SERVICES (NAICS 5182)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>4.5</b>	<b>3.3</b>	<b>2.1</b>	<b>1.5</b>	<b>2.4</b>	<b>2.3</b>	<b>1.7</b>
Personnel costs.....	5.5	3.3	2.4	2.1	3.6	2.1	1.4
Gross annual payroll.....	6.3	3.2	2.5	2.2	4.1	2.0	1.8
Employer's cost for fringe benefits.....	4.4	4.9	2.4	2.4	2.5	3.9	1.3
Health insurance.....	6.3	NA	NA	NA	NA	NA	NA
Pension plans.....	4.4	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	11.7	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	4.8	NA	NA	NA	NA	NA	NA
Other.....	5.1	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	6.3	5.8	5.8	4.5	6.1	4.1	1.6
Expensed materials, parts and supplies (not for resale).....	14.5	17.7	15.4	7.1	5.4	3.9	19.6
Expensed equipment.....	11.7	13.4	12.1	11.1	3.4	7.6	3.4
Expensed purchase of other materials, parts, and supplies.....	19.6	26.1	23.1	8.0	8.7	3.8	27.0
Expensed purchased services.....	6.0	5.0	3.5	2.6	3.0	3.3	2.1
Expensed purchases of software.....	4.5	6.8	9.4	11.3	3.0	4.1	2.4
Purchased electricity and fuels (except motor fuels).....	29.5	19.6	12.5	9.3	7.9	4.8	3.5
Purchased electricity.....	S	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	20.5	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	7.0	6.5	4.2	2.9	4.4	3.7	3.3
Lease and rental payments for machinery, equipment, and other tangible items.....	4.3	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	9.4	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	5.7	4.4	3.8	3.0	2.8	2.2	1.3
Purchased repairs and maintenance to machinery and equipment.....	5.9	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	5.7	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	6.2	4.5	9.8	7.5	4.7	5.3	3.0
Other operating expenses.....	4.7	4.6	2.7	2.8	3.7	4.5	2.0
Depreciation and amortization charges.....	9.6	6.8	4.1	3.7	3.6	3.1	2.5
Governmental taxes and license fees.....	12.4	8.2	8.5	6.9	10.0	8.1	4.5
All other operating expenses.....	4.7	5.4	3.1	3.5	4.6	5.5	2.5
Data processing and other purchased computer services.....	16.2	NA	NA	NA	NA	NA	NA
Purchased communication services.....	5.3	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	17.7	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	7.8	NA	NA	NA	NA	NA	NA
All other operating expenses.....	6.2	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.6. Internet Service Providers (NAICS 518111), Web Search Portals (NAICS 518112), Data Processing, Hosting, and Related Services (NAICS 5182), News Syndicates (NAICS 51911), Libraries and Archives (NAICS 51912), All Other Information Services (NAICS 51919) –Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>NEWS SYNDICATES (NAICS 51911)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>4.6</b>	<b>3.6</b>	<b>3.3</b>	<b>3.0</b>	<b>1.4</b>	<b>1.0</b>	<b>1.2</b>
Personnel costs.....	4.7	4.1	3.6	3.2	0.8	1.5	1.4
Gross annual payroll.....	5.5	4.5	3.8	3.2	1.0	1.8	1.5
Employer's cost for fringe benefits.....	3.6	3.5	3.4	3.7	1.3	0.6	0.9
Health insurance.....	3.5	NA	NA	NA	NA	NA	NA
Pension plans.....	4.1	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	4.6	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	4.8	NA	NA	NA	NA	NA	NA
Other.....	4.2	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	4.9	3.8	3.7	3.4	3.8	0.7	1.2
Expensed materials, parts and supplies (not for resale).....	5.7	4.1	3.8	3.6	2.5	0.8	0.6
Expensed equipment.....	4.8	4.1	4.0	3.9	1.4	1.3	0.6
Expensed purchase of other materials, parts, and supplies.....	20.1	22.4	13.0	11.7	10.2	9.0	1.4
Expensed purchased services.....	3.8	3.0	3.2	3.0	2.7	1.0	0.9
Expensed purchases of software.....	5.0	4.0	4.2	3.9	3.8	1.6	1.2
Purchased electricity and fuels (except motor fuels).....	3.5	3.3	3.5	3.5	0.8	0.7	0.6
Purchased electricity.....	3.9	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	4.2	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	3.9	3.6	3.6	3.5	1.6	1.4	1.0
Lease and rental payments for machinery, equipment, and other tangible items.....	4.2	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	4.7	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	4.6	4.1	4.0	4.0	1.8	0.6	0.5
Purchased repairs and maintenance to machinery and equipment.....	4.4	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	7.0	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	4.0	17.8	17.4	18.1	9.5	1.0	1.3
Other operating expenses.....	5.7	3.9	3.6	3.3	3.2	1.0	1.4
Depreciation and amortization charges.....	4.6	3.9	3.8	3.8	3.5	0.7	0.6
Governmental taxes and license fees.....	5.7	4.3	4.5	4.2	1.3	1.0	1.3
All other operating expenses.....	6.8	4.7	4.1	3.6	3.8	1.3	1.6
Data processing and other purchased computer services.....	6.4	NA	NA	NA	NA	NA	NA
Purchased communication services.....	6.4	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	4.3	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	4.9	NA	NA	NA	NA	NA	NA
All other operating expenses.....	8.4	NA	NA	NA	NA	NA	NA

See footnotes at end of table.



**Table A-3.6.6. Internet Service Providers (NAICS 518111), Web Search Portals (NAICS 518112), Data Processing, Hosting, and Related Services (NAICS 5182), News Syndicates (NAICS 51911), Libraries and Archives (NAICS 51912), All Other Information Services (NAICS 51919) –Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>LIBRARIES AND ARCHIVES (NAICS 51912)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>5.4</b>	<b>6.0</b>	<b>4.0</b>	<b>5.0</b>	<b>2.1</b>	<b>3.1</b>	<b>1.8</b>
Personnel costs.....	4.9	5.5	4.3	4.9	1.6	3.8	1.6
Gross annual payroll.....	4.8	5.5	4.6	5.3	1.5	4.2	1.5
Employer's cost for fringe benefits.....	5.6	5.3	5.4	6.0	3.4	3.2	2.3
Health insurance.....	5.4	NA	NA	NA	NA	NA	NA
Pension plans.....	7.7	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	9.5	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	9.2	NA	NA	NA	NA	NA	NA
Other.....	5.6	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	17.3	S	S	11.6	S	S	S
Expensed materials, parts and supplies (not for resale).....	6.9	7.9	7.4	7.3	6.0	7.9	2.2
Expensed equipment.....	14.1	11.0	7.6	9.4	8.1	12.6	4.3
Expensed purchase of other materials, parts, and supplies.....	6.6	8.1	8.0	7.8	8.1	8.0	1.8
Expensed purchased services.....	6.3	9.7	5.5	5.9	5.5	5.9	2.6
Expensed purchases of software.....	23.6	22.8	18.6	20.7	13.7	6.4	4.5
Purchased electricity and fuels (except motor fuels).....	8.2	10.7	8.8	9.3	4.5	5.2	1.8
Purchased electricity.....	8.6	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	10.8	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	6.6	7.0	5.7	6.5	5.7	4.6	3.0
Lease and rental payments for machinery, equipment, and other tangible items.....	7.2	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	7.7	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	9.8	23.7	8.2	8.8	10.7	21.8	7.4
Purchased repairs and maintenance to machinery and equipment.....	13.0	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	10.3	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	17.9	S	S	S	S	S	S
Other operating expenses.....	7.9	7.7	7.2	9.6	5.2	3.7	3.4
Depreciation and amortization charges.....	12.5	12.4	9.0	9.4	4.0	7.9	1.8
Governmental taxes and license fees.....	19.2	S	S	S	S	S	S
All other operating expenses.....	8.7	7.5	8.2	11.3	5.8	4.8	4.0
Data processing and other purchased computer services.....	28.9	NA	NA	NA	NA	NA	NA
Purchased communication services.....	6.5	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	11.7	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	9.1	NA	NA	NA	NA	NA	NA
All other operating expenses.....	11.5	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.6. Internet Service Providers (NAICS 518111), Web Search Portals (NAICS 518112), Data Processing, Hosting, and Related Services (NAICS 5182), News Syndicates (NAICS 51911), Libraries and Archives (NAICS 51912), All Other Information Services (NAICS 51919) –Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>ALL OTHER INFORMATION SERVICES (NAICS 51919)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>7.0</b>	<b>4.8</b>	<b>3.5</b>	<b>3.3</b>	<b>2.8</b>	<b>2.1</b>	<b>2.7</b>
Personnel costs.....	4.0	4.5	3.7	3.3	2.3	3.2	3.6
Gross annual payroll.....	4.5	5.1	4.0	3.3	2.3	4.1	4.5
Employer's cost for fringe benefits.....	3.0	3.7	3.8	3.9	3.1	3.1	1.0
Health insurance.....	3.6	NA	NA	NA	NA	NA	NA
Pension plans.....	7.9	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	23.1	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	4.1	NA	NA	NA	NA	NA	NA
Other.....	3.9	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	5.8	7.2	5.2	7.0	3.6	7.5	3.8
Expensed materials, parts and supplies (not for resale).....	13.6	9.7	9.7	9.7	8.9	6.0	3.6
Expensed equipment.....	18.3	20.2	9.1	4.7	13.8	2.7	5.0
Expensed purchase of other materials, parts, and supplies.....	16.2	9.8	14.8	17.1	8.9	13.0	3.1
Expensed purchased services.....	29.1	26.0	20.1	10.4	5.5	4.9	7.6
Expensed purchases of software.....	S	5.6	5.5	5.1	S	3.4	2.9
Purchased electricity and fuels (except motor fuels).....	5.3	7.1	4.8	4.1	6.1	4.9	2.1
Purchased electricity.....	5.3	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	7.6	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	4.2	4.7	4.7	4.7	4.4	3.4	1.4
Lease and rental payments for machinery, equipment, and other tangible items.....	4.0	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	4.4	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	4.8	7.3	4.9	4.9	6.1	5.3	2.2
Purchased repairs and maintenance to machinery and equipment.....	4.8	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	5.3	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	S	S	S	24.7	S	S	S
Other operating expenses.....	7.2	5.7	5.7	5.3	3.9	4.8	2.0
Depreciation and amortization charges.....	3.9	4.2	4.0	4.4	3.4	5.3	1.2
Governmental taxes and license fees.....	4.3	4.5	10.1	12.6	8.6	20.8	5.5
All other operating expenses.....	11.6	7.0	7.4	7.4	5.5	5.7	3.0
Data processing and other purchased computer services.....	5.8	NA	NA	NA	NA	NA	NA
Purchased communication services.....	13.3	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	7.1	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	5.6	NA	NA	NA	NA	NA	NA
All other operating expenses.....	17.3	NA	NA	NA	NA	NA	NA

NA Not available. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-3.6.7. Publishing Industries (except Internet) (NAICS 511), Motion Picture and Sound Recording Industries (NAICS 512), Broadcasting (except Internet) (NAICS 515), Internet Publishing and Broadcasting (NAICS 516), Telecommunications (NAICS 517), Internet Service Providers, Web Search Portals, and Data Processing Services (NAICS 518), and Other Information Services (NAICS 519) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>PUBLISHING INDUSTRIES (EXCEPT INTERNET) (NAICS 511)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>1.6</b>	<b>1.7</b>	<b>1.3</b>	<b>1.2</b>	<b>0.8</b>	<b>0.9</b>	<b>0.6</b>
Personnel costs.....	1.7	1.9	1.6	1.2	0.9	1.0	0.5
Gross annual payroll.....	1.8	2.1	1.7	1.3	0.8	1.1	0.6
Employer's cost for fringe benefits.....	1.5	1.5	1.4	1.3	1.3	1.0	0.6
Health insurance.....	1.4	NA	NA	NA	NA	NA	NA
Pension plans.....	2.1	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	2.2	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	2.6	NA	NA	NA	NA	NA	NA
Other.....	2.7	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	5.7	3.7	3.1	3.4	6.6	4.8	1.7
Expensed materials, parts and supplies (not for resale).....	2.6	2.9	2.3	3.8	2.0	1.1	1.9
Expensed equipment.....	4.2	4.7	9.5	7.9	2.1	5.1	3.3
Expensed purchase of other materials, parts, and supplies.....	2.8	3.0	2.1	4.3	2.2	2.1	1.9
Expensed purchased services.....	2.5	2.6	2.3	2.5	1.0	1.7	1.0
Expensed purchases of software.....	12.3	15.1	12.6	S	8.2	13.6	S
Purchased electricity and fuels (except motor fuels).....	1.4	1.6	1.6	1.8	1.6	2.0	1.4
Purchased electricity.....	1.3	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	3.5	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	2.7	2.9	2.1	1.9	1.7	1.6	1.0
Lease and rental payments for machinery, equipment, and other tangible items.....	5.5	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	2.7	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	2.3	2.1	1.6	2.1	1.5	1.2	0.8
Purchased repairs and maintenance to machinery and equipment.....	2.3	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	3.0	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	3.4	3.8	3.0	2.7	1.6	1.4	1.0
Purchased printing services.....	3.7	3.5	3.3	3.6	2.9	2.8	1.7
Other operating expenses.....	2.3	1.8	1.3	1.6	1.4	0.9	1.2
Depreciation and amortization charges.....	3.4	2.4	2.1	2.0	2.0	1.3	1.2
Governmental taxes and license fees.....	3.1	3.2	6.8	5.7	1.3	4.3	3.4
All other operating expenses.....	2.3	1.8	1.2	1.7	1.5	1.0	1.4
Data processing and other purchased computer services.....	4.2	NA	NA	NA	NA	NA	NA
Purchased communication services.....	4.4	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	4.3	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	4.0	NA	NA	NA	NA	NA	NA
All other operating expenses.....	2.4	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.7. Publishing Industries (except Internet) (NAICS 511), Motion Picture and Sound Recording Industries (NAICS 512), Broadcasting (except Internet) (NAICS 515), Internet Publishing and Broadcasting (NAICS 516), Telecommunications (NAICS 517), Internet Service Providers, Web Search Portals, and Data Processing Services (NAICS 518), and Other Information Services (NAICS 519) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>MOTION PICTURE AND SOUND RECORDING INDUSTRIES (NAICS 512)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>2.2</b>	<b>2.1</b>	<b>1.7</b>	<b>1.5</b>	<b>1.2</b>	<b>0.8</b>	<b>0.6</b>
Personnel costs.....	3.3	2.6	2.7	2.3	2.2	1.1	1.6
Gross annual payroll.....	3.4	2.7	3.0	2.6	2.3	1.2	1.7
Employer's cost for fringe benefits.....	3.5	2.7	3.3	4.1	1.8	1.4	1.6
Health insurance.....	3.2	NA	NA	NA	NA	NA	NA
Pension plans.....	4.5	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	7.8	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	7.2	NA	NA	NA	NA	NA	NA
Other.....	6.4	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	21.2	21.6	17.9	16.0	10.5	10.0	6.6
Expensed materials, parts and supplies (not for resale).....	5.2	7.4	7.7	9.6	6.1	6.1	2.7
Expensed equipment.....	8.0	6.0	9.4	10.9	7.5	6.6	5.0
Expensed purchase of other materials, parts, and supplies.....	6.0	8.7	8.8	10.5	7.5	7.7	2.5
Expensed purchased services.....	1.8	1.7	1.6	1.6	0.7	0.6	0.4
Expensed purchases of software.....	2.7	2.4	8.2	5.8	3.4	4.3	2.5
Purchased electricity and fuels (except motor fuels).....	3.0	3.1	2.1	1.8	1.4	2.2	1.0
Purchased electricity.....	3.2	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	5.1	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	2.5	2.2	2.4	2.1	1.6	1.5	1.3
Lease and rental payments for machinery, equipment, and other tangible items.....	14.3	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	2.6	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	3.8	2.7	1.9	2.4	3.4	2.1	1.0
Purchased repairs and maintenance to machinery and equipment.....	8.0	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	3.7	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	1.7	1.8	1.6	1.7	0.5	0.5	0.4
Other operating expenses.....	2.4	2.5	1.7	1.8	1.3	1.3	0.8
Depreciation and amortization charges.....	9.1	10.2	5.6	6.3	1.7	10.1	2.1
Governmental taxes and license fees.....	2.5	2.2	2.6	2.5	2.7	1.6	0.8
All other operating expenses.....	2.0	1.9	1.8	2.1	1.4	0.8	0.9
Data processing and other purchased computer services.....	1.0	NA	NA	NA	NA	NA	NA
Purchased communication services.....	1.1	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	4.4	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	5.0	NA	NA	NA	NA	NA	NA
All other operating expenses.....	2.2	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.7. Publishing Industries (except Internet) (NAICS 511), Motion Picture and Sound Recording Industries (NAICS 512), Broadcasting (except Internet) (NAICS 515), Internet Publishing and Broadcasting (NAICS 516), Telecommunications (NAICS 517), Internet Service Providers, Web Search Portals, and Data Processing Services (NAICS 518), and Other Information Services (NAICS 519) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>BROADCASTING (EXCEPT INTERNET) (NAICS 515)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>0.7</b>	<b>0.7</b>	<b>0.6</b>	<b>0.6</b>	<b>0.4</b>	<b>0.5</b>	<b>0.6</b>
Personnel costs.....	0.8	1.0	0.7	0.8	0.5	0.5	0.6
Gross annual payroll.....	0.9	1.0	0.7	0.8	0.5	0.5	0.6
Employer's cost for fringe benefits.....	1.0	1.5	1.2	0.8	1.1	0.8	0.9
Health insurance.....	1.1	NA	NA	NA	NA	NA	NA
Pension plans.....	1.4	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	1.3	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	2.1	NA	NA	NA	NA	NA	NA
Other.....	1.4	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	4.8	4.3	6.0	4.4	5.2	3.7	2.2
Expensed materials, parts and supplies (not for resale).....	2.2	1.9	1.8	1.5	1.8	1.5	1.3
Expensed equipment.....	4.2	5.2	4.3	3.6	3.3	4.2	2.1
Expensed purchase of other materials, parts, and supplies.....	2.4	1.2	1.2	1.0	2.0	0.9	1.0
Expensed purchased services.....	1.5	1.4	1.4	1.2	1.1	1.0	0.6
Expensed purchases of software.....	6.8	13.6	13.4	17.8	4.2	2.5	3.0
Purchased electricity and fuels (except motor fuels).....	6.1	4.4	4.1	3.8	4.8	1.7	1.3
Purchased electricity.....	6.7	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	5.4	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	4.3	4.1	2.5	2.3	2.8	2.9	1.2
Lease and rental payments for machinery, equipment, and other tangible items.....	10.7	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	2.7	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	3.9	4.2	4.0	4.6	3.0	2.0	1.5
Purchased repairs and maintenance to machinery and equipment.....	3.3	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	5.6	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	1.0	0.8	1.0	0.8	0.5	0.8	0.7
Other operating expenses.....	0.7	0.9	0.8	0.9	0.6	0.5	0.8
Depreciation and amortization charges.....	1.5	0.7	0.9	0.9	1.3	0.7	0.7
Governmental taxes and license fees.....	2.0	2.3	2.5	2.3	1.1	1.5	0.8
Broadcast rights and music license fees.....	1.3	1.3	1.4	1.7	0.9	0.6	1.1
Network compensation fees (networks only).....	3.9	9.1	6.3	6.2	4.3	8.4	1.3
Program and production costs.....	1.4	1.2	1.0	1.0	0.4	0.3	0.3
All other operating expenses.....	1.5	1.4	1.4	1.1	1.4	1.4	1.3
Data processing and other purchased computer services.....	2.0	NA	NA	NA	NA	NA	NA
Purchased communication services.....	2.1	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	4.6	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	3.1	NA	NA	NA	NA	NA	NA
All other operating expenses.....	1.6	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.7. Publishing Industries (except Internet) (NAICS 511), Motion Picture and Sound Recording Industries (NAICS 512), Broadcasting (except Internet) (NAICS 515), Internet Publishing and Broadcasting (NAICS 516), Telecommunications (NAICS 517), Internet Service Providers, Web Search Portals, and Data Processing Services (NAICS 518), and Other Information Services (NAICS 519) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>INTERNET PUBLISHING AND BROADCASTING (NAICS 516)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>8.0</b>	<b>8.0</b>	<b>8.5</b>	<b>2.3</b>	<b>2.3</b>	<b>2.4</b>	<b>11.3</b>
Personnel costs.....	5.2	4.6	4.5	2.6	0.8	1.6	5.8
Gross annual payroll.....	5.2	4.3	4.1	2.9	1.5	1.8	4.6
Employer's cost for fringe benefits.....	5.1	8.6	9.4	2.0	4.2	1.8	11.4
Health insurance.....	5.0	NA	NA	NA	NA	NA	NA
Pension plans.....	S	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	S	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	S	NA	NA	NA	NA	NA	NA
Other.....	4.3	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	S	9.4	9.0	6.1	S	5.5	10.2
Expensed materials, parts and supplies (not for resale).....	S	15.4	17.9	4.1	S	6.8	17.7
Expensed equipment.....	S	22.7	21.4	3.2	S	3.8	25.0
Expensed purchase of other materials, parts, and supplies.....	S	15.7	23.9	6.7	S	11.9	16.0
Expensed purchased services.....	12.3	10.9	8.3	4.0	4.2	8.9	10.3
Expensed purchases of software.....	S	4.0	6.3	13.0	S	6.2	28.8
Purchased electricity and fuels (except motor fuels).....	12.4	10.5	13.6	5.7	5.0	5.7	15.6
Purchased electricity.....	12.4	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	12.0	10.7	10.3	3.0	3.3	1.9	13.2
Lease and rental payments for machinery, equipment, and other tangible items.....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	12.0	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	S	4.9	4.2	2.8	S	2.2	4.3
Purchased repairs and maintenance to machinery and equipment.....	S	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	S	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	15.8	16.5	10.4	6.2	5.7	13.3	9.7
Other operating expenses.....	10.8	13.9	14.7	2.8	6.9	2.6	17.1
Depreciation and amortization charges.....	S	3.1	3.3	2.2	S	1.3	4.1
Governmental taxes and license fees.....	17.2	12.7	17.1	15.5	10.0	12.3	7.1
All other operating expenses.....	12.0	17.7	S	3.8	9.4	S	S
Data processing and other purchased computer services.....	13.0	NA	NA	NA	NA	NA	NA
Purchased communication services.....	S	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	S	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	11.9	NA	NA	NA	NA	NA	NA
All other operating expenses.....	S	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.7. Publishing Industries (except Internet) (NAICS 511), Motion Picture and Sound Recording Industries (NAICS 512), Broadcasting (except Internet) (NAICS 515), Internet Publishing and Broadcasting (NAICS 516), Telecommunications (NAICS 517), Internet Service Providers, Web Search Portals, and Data Processing Services (NAICS 518), and Other Information Services (NAICS 519) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>TELECOMMUNICATIONS (NAICS 517)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>0.9</b>	<b>1.2</b>	<b>0.8</b>	<b>0.9</b>	<b>1.1</b>	<b>0.8</b>	<b>0.3</b>
Personnel costs.....	1.1	1.0	0.9	1.3	1.0	1.0	1.6
Gross annual payroll.....	1.2	1.3	1.1	1.3	1.1	1.1	1.9
Employer's cost for fringe benefits.....	1.8	1.4	1.4	1.6	0.8	0.8	0.8
Health insurance.....	1.8	NA	NA	NA	NA	NA	NA
Pension plans.....	2.8	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	4.4	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	3.3	NA	NA	NA	NA	NA	NA
Other.....	2.2	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	1.9	1.4	1.4	2.5	1.3	1.3	1.6
Expensed materials, parts and supplies (not for resale).....	2.5	2.5	2.5	2.2	0.8	0.9	1.3
Expensed equipment.....	15.6	13.2	10.0	9.6	4.0	4.0	4.5
Expensed purchase of other materials, parts, and supplies.....	2.6	2.6	2.6	2.8	0.8	0.9	1.3
Expensed purchased services.....	2.5	2.3	1.8	2.4	0.9	1.3	0.9
Expensed purchases of software.....	1.3	1.2	1.7	3.0	1.1	0.9	2.2
Purchased electricity and fuels (except motor fuels).....	1.3	1.1	1.4	2.1	0.8	0.7	1.0
Purchased electricity.....	1.2	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	2.2	2.5	2.3	3.1	1.4	1.0	1.2
Lease and rental payments for machinery, equipment, and other tangible items.....	3.1	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	2.3	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	3.3	4.0	2.5	3.0	2.5	1.7	1.3
Purchased repairs and maintenance to machinery and equipment.....	4.1	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	4.2	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	4.5	4.2	2.4	2.5	0.6	2.7	0.7
Other operating expenses.....	0.9	1.6	1.0	0.8	1.3	0.9	0.6
Depreciation and amortization charges.....	1.5	1.7	1.3	1.2	1.5	1.0	0.3
Governmental taxes and license fees.....	1.2	1.2	1.8	1.4	1.3	1.1	0.6
Program and production costs.....	1.3	1.4	1.4	1.4	0.3	0.4	0.1
Access charges.....	3.2	8.5	4.3	4.1	3.1	2.7	0.6
Universal service contributions (USC) and other similar charges.....	2.5	2.2	2.0	2.1	0.6	0.7	0.5
All other operating expenses.....	1.0	0.8	0.8	1.4	0.5	0.8	1.2
Data processing and other purchased computer services.....	3.1	NA	NA	NA	NA	NA	NA
Purchased communication services.....	5.3	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	4.1	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	1.4	NA	NA	NA	NA	NA	NA
All other operating expenses.....	1.2	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-3.6.7. Publishing Industries (except Internet) (NAICS 511), Motion Picture and Sound Recording Industries (NAICS 512), Broadcasting (except Internet) (NAICS 515), Internet Publishing and Broadcasting (NAICS 516), Telecommunications (NAICS 517), Internet Service Providers, Web Search Portals, and Data Processing Services (NAICS 518), and Other Information Services (NAICS 519) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>INTERNET SERVICE PROVIDERS, WEB SEARCH PORTALS, AND DATA PROCESSING SERVICES (NAICS 518)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>3.6</b>	<b>2.6</b>	<b>1.6</b>	<b>1.3</b>	<b>1.9</b>	<b>1.7</b>	<b>1.4</b>
Personnel costs.....	4.4	2.7	2.2	2.1	3.0	1.6	1.1
Gross annual payroll.....	5.0	2.7	2.4	2.3	3.5	1.7	1.4
Employer's cost for fringe benefits.....	3.5	3.8	2.4	2.2	2.1	3.1	1.1
Health insurance.....	4.9	NA	NA	NA	NA	NA	NA
Pension plans.....	5.1	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	24.2	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	3.5	NA	NA	NA	NA	NA	NA
Other.....	4.3	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	5.0	5.2	4.5	3.6	4.8	3.1	1.7
Expensed materials, parts and supplies (not for resale).....	12.9	15.8	14.1	8.4	6.0	7.0	17.7
Expensed equipment.....	9.7	12.0	10.3	9.1	3.3	6.0	3.0
Expensed purchase of other materials, parts, and supplies.....	17.9	22.2	20.7	11.7	9.5	7.8	25.1
Expensed purchased services.....	5.5	4.4	2.5	2.6	2.0	2.8	1.5
Expensed purchases of software.....	4.1	6.2	9.1	10.6	2.9	4.1	2.1
Purchased electricity and fuels (except motor fuels).....	25.4	16.9	10.5	S	13.2	4.6	S
Purchased electricity.....	26.1	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	20.3	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	6.5	5.9	4.4	3.7	3.8	3.5	3.1
Lease and rental payments for machinery, equipment, and other tangible items.....	4.6	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	8.1	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	5.1	4.0	3.4	2.8	2.5	2.1	1.3
Purchased repairs and maintenance to machinery and equipment.....	5.5	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	4.8	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	8.4	4.2	3.4	S	3.8	3.4	S
Other operating expenses.....	3.8	3.5	1.9	2.1	2.9	3.0	1.6
Depreciation and amortization charges.....	7.5	5.5	3.3	3.1	2.7	2.5	1.5
Governmental taxes and license fees.....	10.6	7.0	6.6	5.6	9.3	7.0	4.4
All other operating expenses.....	3.6	4.0	1.9	2.5	3.6	4.0	2.0
Data processing and other purchased computer services.....	12.8	NA	NA	NA	NA	NA	NA
Purchased communication services.....	6.6	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	15.6	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	7.1	NA	NA	NA	NA	NA	NA
All other operating expenses.....	4.8	NA	NA	NA	NA	NA	NA

See footnotes at end of table.



**Table A-3.6.7. Publishing Industries (except Internet) (NAICS 511), Motion Picture and Sound Recording Industries (NAICS 512), Broadcasting (except Internet) (NAICS 515), Internet Publishing and Broadcasting (NAICS 516), Telecommunications (NAICS 517), Internet Service Providers, Web Search Portals, and Data Processing Services (NAICS 518), and Other Information Services (NAICS 519) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>OTHER INFORMATION SERVICES (NAICS 519)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>3.8</b>	<b>3.3</b>	<b>2.6</b>	<b>2.6</b>	<b>1.3</b>	<b>1.3</b>	<b>1.3</b>
Personnel costs.....	2.2	2.3	1.9	2.3	0.8	1.8	1.3
Gross annual payroll.....	2.3	2.4	2.1	2.4	0.9	2.2	1.6
Employer's cost for fringe benefits.....	2.5	2.2	2.7	2.9	1.8	1.7	0.9
Health insurance.....	2.6	NA	NA	NA	NA	NA	NA
Pension plans.....	4.3	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	5.9	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	4.0	NA	NA	NA	NA	NA	NA
Other.....	2.8	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	5.5	8.9	12.5	5.3	4.8	5.0	9.4
Expensed materials, parts and supplies (not for resale).....	4.9	4.7	5.0	4.7	3.1	4.1	1.3
Expensed equipment.....	4.4	3.6	3.7	3.4	2.5	2.8	1.4
Expensed purchase of other materials, parts, and supplies.....	6.2	6.9	7.3	7.3	6.3	7.2	1.4
Expensed purchased services.....	15.2	12.5	10.0	5.8	3.2	2.8	3.7
Expensed purchases of software.....	9.1	10.8	8.4	9.2	7.8	3.5	1.8
Purchased electricity and fuels (except motor fuels).....	6.6	8.2	6.4	6.8	3.0	3.8	1.3
Purchased electricity.....	6.8	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	9.2	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	3.1	2.7	2.0	2.3	2.3	2.0	0.9
Lease and rental payments for machinery, equipment, and other tangible items.....	4.6	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	3.1	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	4.4	12.3	4.1	4.5	5.9	9.5	2.9
Purchased repairs and maintenance to machinery and equipment.....	4.0	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	7.5	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	S	S	S	18.7	S	S	S
Other operating expenses.....	4.2	3.6	3.4	3.8	1.8	2.0	1.7
Depreciation and amortization charges.....	3.8	4.0	3.0	3.4	2.4	2.7	0.7
Governmental taxes and license fees.....	3.8	5.4	6.0	6.1	3.7	1.7	1.5
All other operating expenses.....	5.5	3.9	4.1	4.7	2.6	2.4	2.3
Data processing and other purchased computer services.....	11.7	NA	NA	NA	NA	NA	NA
Purchased communication services.....	7.4	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	3.6	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	4.0	NA	NA	NA	NA	NA	NA
All other operating expenses.....	7.1	NA	NA	NA	NA	NA	NA

NA Not available. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-4.1. Securities, Commodity Contracts, and Other Financial Investment Activities (NAICS 523) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
523x	Securities, commodity contracts, and other financial investment activities <sup>1</sup> .....	1.3	1.2	1.2	1.1	0.8	0.6	0.8
5231	Securities and commodity contracts intermediation and brokerage .....	1.2	0.9	0.7	0.9	0.9	0.6	0.7
52311	Investment banking and securities dealing .....	2.7	1.6	1.2	1.2	1.9	1.5	1.3
52312	Securities brokerage .....	1.5	1.4	1.2	1.3	0.5	0.7	0.6
52313	Commodity contracts dealing .....	7.7	9.8	5.3	4.9	2.5	5.6	4.3
52314	Commodity contracts brokerage .....	3.4	3.6	2.8	S	2.1	1.6	S
5239x	Other financial investment activities <sup>2</sup> .....	3.0	3.0	3.4	2.1	1.2	2.0	1.8
52392	Portfolio management .....	2.2	2.3	2.5	2.0	1.0	1.8	1.6
52393	Investment advice .....	13.6	12.2	13.8	9.1	5.8	5.8	4.0

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Includes NAICS 5231 (Securities and commodity contracts intermediation and brokerage) and NAICS 5239 (Other financial investment activities).

<sup>2</sup>Excludes NAICS 52391 (Miscellaneous intermediation) and NAICS 52399 (All other financial investment activities).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-4.2. Securities, Commodity Contracts, and Other Financial Investment Activities (NAICS 523) – Estimated Coefficients of Variation for Export Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
523x	Securities, commodity contracts, and other financial investment activities <sup>1</sup> .....	8.1	6.4	7.0	6.5	4.3	4.1	4.5
5231	Securities and commodity contracts intermediation and brokerage .....	16.6	9.7	14.1	12.0	4.5	4.0	1.9
52311	Investment banking and securities dealing .....	S	19.4	S	S	S	S	S
52312	Securities brokerage .....	8.1	8.0	11.1	10.0	4.9	3.8	0.9
52313	Commodity contracts dealing .....	5.2	3.6	3.4	3.4	1.4	0.9	0.4
52314	Commodity contracts brokerage .....	S	17.4	17.5	6.3	S	2.9	19.3
5239x	Other financial investment activities <sup>2</sup> .....	9.3	9.6	8.8	6.5	6.3	6.0	10.0
52392	Portfolio management .....	9.5	10.3	9.4	7.0	7.9	6.1	9.4
52393	Investment advice .....	17.6	21.8	23.6	15.6	4.7	6.7	20.8

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Includes NAICS 5231 (Securities and commodity contracts intermediation and brokerage) and NAICS 5239 (Other financial investment activities).

<sup>2</sup>Excludes NAICS 52391 (Miscellaneous intermediation) and NAICS 52399 (All other financial investment activities).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-4.3. Securities, Commodity Contracts, and Other Financial Investment Activities (NAICS 523) – Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>INVESTMENT BANKING AND SECURITIES DEALING AND BROKERAGE (NAICS 5231Y)<sup>1</sup></b>							
<b>Operating Revenue</b>							
Total .....	1.3	1.0	0.7	1.0	0.9	0.7	0.8
<b>Sources of Revenue</b>							
Securities origination products .....	1.4	1.7	1.6	1.8	1.2	1.6	0.8
Brokering and dealing products – debt instruments .....	1.7	1.6	1.8	1.7	0.3	0.6	1.3
Brokering and dealing products – equities .....	4.7	3.1	2.4	2.1	1.9	1.8	0.8
Brokering and dealing products – derivative contracts .....	3.7	2.3	1.9	S	2.2	0.9	S
Brokering and dealing investment company securities .....	5.1	5.3	5.2	4.1	2.3	1.5	1.3
Repurchase agreements – net gains (losses) .....	-18.3	2.1	S	S	12.6	S	S
Trading debt instruments on own account – net gains (losses) .....	-1.6	1.6	5.7	S	2.4	6.1	S
Trading equities on own account – net gains (losses) .....	S	9.0	2.5	2.8	S	8.7	0.8
Trading derivative contracts on own account – net gains (losses) .....	1.4	12.4	S	6.4	21.6	S	S
Financial planning and investment management services for individuals .....	2.2	1.7	1.9	1.8	1.7	1.6	1.0
Financial planning and investment management services for businesses .....	4.1	7.1	6.2	11.1	4.5	3.9	5.4
Financial planning and investment management services for governments .....	8.4	S	S	S	S	S	S
All other operating revenue .....	1.2	1.2	1.3	1.0	1.4	2.3	1.7
<b>COMMODITY CONTRACTS DEALING AND BROKERAGE (NAICS 5231X)<sup>2</sup></b>							
<b>Operating Revenue</b>							
Total .....	4.1	5.7	3.3	3.1	2.1	3.8	2.5
<b>Sources of Revenue</b>							
Brokering and dealing products – derivative contracts .....	7.6	10.4	14.3	11.5	2.8	2.8	1.8
Brokering and dealing products – equities .....	3.2	S	S	S	S	S	S
Brokering and dealing foreign currency fees - wholesale .....	21.0	22.2	27.7	2.9	2.2	3.9	35.3
Brokering and dealing other financial instruments .....	8.5	9.3	11.2	S	2.1	2.1	S
Trading derivative contracts on own account – net gains (losses) .....	8.8	11.6	S	27.7	9.3	S	S
Trading foreign currency on own account – net gains (losses) .....	6.9	11.3	8.4	5.1	74.8	11.2	3.7
Management of financial market clearing products .....	6.2	8.1	3.9	3.7	3.7	7.3	2.8
All other operating revenue .....	3.6	4.4	3.6	2.8	1.9	2.1	1.2
<b>OTHER FINANCIAL INVESTMENT ACTIVITIES (NAICS 5239X)<sup>3</sup></b>							
<b>Operating Revenue</b>							
Total .....	3.0	3.0	3.4	2.1	1.2	2.0	1.8
<b>Sources of Revenue</b>							
Financial planning and investment management services for individuals .....	4.7	2.8	2.8	2.7	4.4	2.7	1.4
Financial planning and investment management services for businesses .....	2.6	3.1	3.7	2.6	2.6	2.5	2.7
Financial planning and investment management services for governments .....	7.1	6.7	7.9	10.0	3.9	11.4	4.4
Brokering and dealing products – equities .....	2.9	3.1	3.5	2.9	1.8	3.2	1.2
Trust products .....	8.7	8.0	4.6	7.4	2.6	10.6	2.8
All other operating revenue .....	11.5	10.6	10.5	5.6	3.1	4.8	4.0

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Includes NAICS 52311 (Investment banking and securities dealing) and NAICS 52312 (Securities brokerage).

<sup>2</sup>Includes NAICS 52313 (Commodity contracts dealing) and NAICS 52314 (Commodity contracts brokerage).

<sup>3</sup>Excludes NAICS 52391 (Miscellaneous intermediation) and NAICS 52399 (All other financial investment activities).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-4.4. Securities, Commodity Contracts, and Other Financial Investment Activities (NAICS 523) – Estimated Coefficients of Variation for Estimated Total Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
523x	Securities, commodity contracts, and other financial investment activities <sup>1</sup> .....	1.3	1.2	1.2	1.1	0.8	0.8	0.7
5231	Securities and commodity contracts intermediation and brokerage .....	1.3	1.1	0.8	0.9	1.0	0.8	0.7
52311	Investment banking and securities dealing .....	2.4	1.7	1.3	1.3	1.8	1.4	1.1
52312	Securities brokerage .....	1.5	1.4	1.5	1.5	0.4	0.8	0.7
52313	Commodity contracts dealing .....	4.3	3.7	4.5	3.9	1.5	2.5	2.1
52314	Commodity contracts brokerage .....	3.5	S	3.0	S	S	S	S
5239x	Other financial investment activities <sup>2</sup> .....	3.5	3.3	3.6	2.3	0.9	2.2	2.2
52392	Portfolio management .....	2.1	1.8	3.4	2.3	1.1	2.5	2.2
52393	Investment advice .....	15.1	14.7	14.5	9.0	2.2	2.2	4.0

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Includes NAICS 5231 (Securities and commodity contracts intermediation and brokerage) and NAICS 5239 (Other financial investment activities).

<sup>2</sup>Excludes NAICS 52391 (Miscellaneous intermediation) and NAICS 52399 (All other financial investment activities).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-4.5. Securities, Commodity Contracts, and Other Financial Investment Activities (NAICS 523) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Expenses</b>							
<b>Total .....</b>	1.3	1.2	1.2	1.1	0.8	0.8	0.7
Personnel costs.....	1.5	1.3	1.3	1.2	0.7	0.7	0.6
Gross annual payroll.....	1.5	1.3	1.3	1.2	0.8	0.7	0.6
Employer's cost for fringe benefits.....	1.4	1.3	1.2	1.1	1.0	0.8	0.7
Health insurance.....	1.4	NA	NA	NA	NA	NA	NA
Pension plans.....	2.2	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	4.2	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	1.8	NA	NA	NA	NA	NA	NA
Other.....	1.4	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	3.5	7.3	3.2	2.9	3.7	5.6	1.0
Expensed materials, parts and supplies (not for resale).....	6.6	7.2	5.8	3.8	4.0	2.1	2.5
Expensed equipment.....	4.3	3.9	3.0	2.8	2.2	1.7	2.0
Expensed purchase of other materials, parts, and supplies.....	9.3	11.4	10.4	6.9	6.7	3.0	3.6
Expensed purchased services.....	1.9	1.4	1.8	1.3	0.7	0.9	0.8
Expensed purchases of software.....	2.4	2.0	1.9	1.8	1.5	1.7	1.3
Purchased electricity and fuels (except motor fuels).....	2.6	2.2	3.1	S	1.1	1.9	S
Purchased electricity.....	2.6	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	4.0	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	1.6	1.3	1.6	1.4	0.9	1.2	0.7
Lease and rental payments for machinery, equipment, and other tangible items.....	2.5	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	1.6	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	2.1	2.2	2.2	1.9	1.5	1.6	0.8
Purchased repairs and maintenance to machinery and equipment.....	3.1	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	1.5	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	4.3	3.6	4.0	2.8	1.5	1.4	1.4
Other operating expenses.....	1.9	1.6	1.6	1.3	1.4	1.2	1.1
Depreciation and amortization charges.....	3.6	3.6	3.7	2.7	1.2	1.5	1.6
Governmental taxes and license fees.....	4.3	4.5	4.5	2.7	4.3	4.5	2.5
Operating interest expense.....	1.6	1.3	1.7	0.9	0.8	2.8	2.4
All other operating expenses.....	3.0	2.5	2.4	1.6	2.2	1.8	1.2
Data processing and other purchased computer services.....	2.7	NA	NA	NA	NA	NA	NA
Purchased communication services.....	1.9	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	3.3	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	2.6	NA	NA	NA	NA	NA	NA
All other operating expenses.....	3.4	NA	NA	NA	NA	NA	NA

NA Not available. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-5.1. Rental and Leasing Services (NAICS 532) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
532	Rental and leasing services .....	1.6	1.5	1.2	1.3	0.7	0.7	0.6
5321	Automotive equipment rental and leasing .....	1.1	1.2	1.1	1.0	0.5	0.3	0.4
53211	Passenger car rental and leasing .....	1.6	1.7	1.4	1.2	0.6	0.6	0.4
532111	Passenger car rental .....	1.9	1.9	1.6	1.3	0.5	0.8	0.6
532112	Passenger car leasing .....	3.5	2.8	2.3	2.4	1.7	1.3	0.9
53212	Truck, utility trailer, and RV (recreational vehicle) rental and leasing .....	1.8	2.0	1.8	1.8	1.0	0.7	0.8
5322	Consumer goods rental .....	2.1	2.1	1.4	1.2	0.6	1.7	0.5
53221	Consumer electronics and appliances rental .....	6.2	5.9	5.9	4.8	1.5	1.4	2.5
53222	Formal wear and costume rental .....	9.5	8.2	8.4	6.3	3.9	12.4	4.5
53223	Video tape and disc rental .....	2.7	2.9	2.3	1.8	0.8	1.4	0.9
53229	Other consumer goods rental .....	4.4	4.0	2.0	1.6	1.6	3.8	1.0
532291	Home health equipment rental .....	3.6	3.0	2.1	1.3	0.8	1.3	1.2
53229x	All other consumer goods rental <sup>1</sup> .....	9.7	8.9	4.5	3.9	3.7	7.7	2.5
5323	General rental centers .....	2.9	2.7	2.0	2.1	1.3	2.2	1.2
5324	Commercial and industrial machinery and equipment rental and leasing .....	3.6	3.5	3.0	3.5	1.8	1.6	1.7
53241	Construction, transportation, mining, and forestry machinery and equipment rental and leasing .....	4.1	4.0	3.9	3.7	2.7	2.1	2.0
53242	Office machinery and equipment rental and leasing .....	7.9	7.9	7.8	7.6	1.1	1.3	1.6
53249	Other commercial and industrial machinery and equipment rental and leasing .....	7.0	7.0	5.9	6.3	1.9	2.6	3.1

<sup>1</sup>Includes NAICS 532292 (Recreational goods rental) and NAICS 532299 (All other consumer goods rental).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-5.2. Rental and Leasing Services (NAICS 532) – Estimated Coefficients of Variation for Export Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
532	Rental and leasing services .....	6.4	9.2	23.7	23.8	6.9	15.4	5.0
5321	Automotive equipment rental and leasing .....	10.1	S	29.8	S	S	S	S
53211	Passenger car rental and leasing .....	D	22.6	S	S	D	S	S
532111	Passenger car rental .....	S	S	S	S	S	S	S
532112	Passenger car leasing .....	2.9	3.0	ZZ	ZZ	1.7	Z	Z
53212	Truck, utility trailer, and RV (recreational vehicle) rental and leasing .....	D	S	S	12.2	D	S	S
5322	Consumer goods rental .....	S	6.8	6.7	5.3	S	1.3	1.0
53221	Consumer electronics and appliances rental .....	S	S	S	S	S	S	S
53222	Formal wear and costume rental .....	S	ZZ	ZZ	ZZ	Z	Z	Z
53223	Video tape and disc rental .....	S	14.2	14.0	S	S	1.3	S
53229	Other consumer goods rental .....	S	4.4	4.2	3.6	S	1.7	0.6
532291	Home health equipment rental .....	S	4.4	4.2	3.6	S	1.7	0.6
53229x	All other consumer goods rental <sup>1</sup> .....	S	ZZ	ZZ	ZZ	Z	Z	Z
5323	General rental centers .....	S	S	S	S	S	S	S
5324	Commercial and industrial machinery and equipment rental and leasing .....	7.6	9.7	S	28.3	7.1	S	S
53241	Construction, transportation, mining, and forestry machinery and equipment rental and leasing .....	8.1	13.0	S	S	11.4	S	S
53242	Office machinery and equipment rental and leasing .....	S	S	S	S	S	S	S
53249	Other commercial and industrial machinery and equipment rental and leasing .....	15.9	19.6	S	7.1	11.9	S	S

NA Not available. D Estimate in table is withheld to avoid disclosing data of individual companies. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Includes NAICS 532292 (Recreational goods rental) and NAICS 532299 (All other consumer goods rental).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.



**Table A-5.3. Rental and Leasing Services (NAICS 532) – Estimated Coefficients of Variation for Total Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
532	Rental and leasing services .....	1.6	1.7	1.2	1.4	0.6	1.0	0.9
5321	Automotive equipment rental and leasing .....	1.5	1.5	1.2	1.3	0.5	0.6	0.3
53211	Passenger car rental and leasing .....	1.7	1.8	1.5	1.4	0.5	0.9	0.3
532111	Passenger car rental .....	2.0	2.1	1.7	1.6	0.5	1.0	0.4
532112	Passenger car leasing .....	2.4	2.1	1.9	1.7	1.1	1.1	0.9
53212	Truck, utility trailer, and RV (recreational vehicle) rental and leasing .....	2.3	2.3	2.2	2.1	1.0	0.9	0.6
5322	Consumer goods rental .....	1.8	2.2	2.0	1.7	1.1	1.2	0.7
53221	Consumer electronics and appliances rental .....	5.6	5.7	6.1	5.6	1.7	2.2	2.3
53222	Formal wear and costume rental .....	10.8	9.5	8.9	7.2	3.7	11.4	4.0
53223	Video tape and disc rental .....	2.1	2.5	2.3	1.8	1.1	2.2	1.1
53229	Other consumer goods rental .....	4.9	4.7	3.8	3.5	2.3	2.1	1.1
532291	Home health equipment rental .....	4.3	3.1	2.2	1.1	1.7	1.4	1.5
53229x	All other consumer goods rental <sup>1</sup> .....	9.2	9.4	7.8	7.3	3.9	4.4	2.2
5323	General rental centers .....	2.7	2.4	2.5	2.7	1.4	1.9	1.0
5324	Commercial and industrial machinery and equipment rental and leasing .....	4.6	4.4	3.3	3.9	1.9	2.6	2.5
53241	Construction, transportation, mining, and forestry machinery and equipment rental and leasing .....	6.2	5.4	4.8	5.3	2.7	2.6	3.6
53242	Office machinery and equipment rental and leasing .....	8.2	7.7	8.6	7.9	1.4	1.9	2.6
53249	Other commercial and industrial machinery and equipment rental and leasing .....	7.0	7.6	5.2	5.5	2.0	4.3	3.1

<sup>1</sup>Includes NAICS 532292 (Recreational goods rental) and NAICS 532299 (All other consumer goods rental).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-5.4. Rental and Leasing Services (NAICS 532) – Estimated Coefficients of Variation for Estimated Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>1.6</b>	<b>1.7</b>	<b>1.2</b>	<b>1.4</b>	<b>0.6</b>	<b>1.0</b>	<b>0.9</b>
Personnel costs.....	2.0	1.8	1.5	1.6	0.7	0.5	0.6
Gross annual payroll.....	1.9	1.8	1.5	1.7	0.6	0.5	0.6
Employer's cost for fringe benefits.....	2.6	2.1	1.8	2.0	1.2	1.2	0.8
Health insurance.....	2.9	NA	NA	NA	NA	NA	NA
Pension plans.....	2.5	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	6.5	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	3.5	NA	NA	NA	NA	NA	NA
Other.....	3.1	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	8.1	6.9	4.5	5.5	4.2	7.0	4.5
Expensed materials, parts and supplies (not for resale).....	5.9	4.1	3.5	3.6	3.6	3.3	1.4
Expensed equipment.....	S	10.0	5.1	5.3	S	8.0	3.9
Expensed purchase of other materials, parts, and supplies.....	6.1	4.0	3.7	3.7	4.1	3.3	1.5
Expensed purchased services.....	2.0	1.6	1.3	1.6	1.0	1.2	1.6
Expensed purchases of software.....	5.0	3.0	5.1	2.4	4.0	3.2	2.6
Purchased electricity and fuels (except motor fuels).....	2.2	3.8	3.2	1.8	3.6	3.2	1.5
Purchased electricity.....	2.3	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	3.4	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	2.0	1.7	1.5	1.9	1.7	1.7	1.4
Lease and rental payments for machinery, equipment, and other tangible items.....	5.7	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	1.1	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	3.7	3.6	2.9	3.4	2.8	1.7	3.1
Purchased repairs and maintenance to machinery and equipment.....	5.2	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	S	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	1.4	2.8	1.5	1.3	1.9	2.4	1.1
Other operating expenses.....	1.4	1.9	1.5	1.6	0.8	1.3	1.3
Depreciation and amortization charges.....	1.8	1.7	1.5	2.2	1.0	1.1	1.5
Governmental taxes and license fees.....	1.8	2.6	1.6	1.5	2.8	2.5	0.9
All other operating expenses.....	1.6	2.5	2.0	1.7	1.2	1.9	1.1
Data processing and other purchased computer services.....	3.2	NA	NA	NA	NA	NA	NA
Purchased communication services.....	2.7	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	5.6	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	4.9	NA	NA	NA	NA	NA	NA
All other operating expenses.....	S	NA	NA	NA	NA	NA	NA

NA Not available. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-6.1. Professional, Scientific, and Technical Services (Except Notaries) (NAICS 54) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Taxable Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>54</b>	<b>Professional, scientific, and technical services<sup>1</sup></b> .....	<b>1.5</b>	<b>1.5</b>	<b>1.3</b>	<b>1.4</b>	<b>0.5</b>	<b>0.6</b>	<b>0.6</b>
54*	Professional, scientific, and technical services <sup>2</sup> .....	1.5	1.5	1.3	1.4	0.5	0.6	0.6
5411	Legal services <sup>1</sup> .....	2.1	2.0	2.0	2.5	0.7	1.2	0.7
54111	Offices of lawyers .....	2.1	1.9	1.8	2.5	0.7	1.3	0.8
54119	Other legal services .....	14.7	14.0	12.5	10.7	1.6	1.8	2.0
5412	Accounting, tax preparation, bookkeeping, and payroll services .....	2.5	2.6	2.2	1.2	1.4	2.0	2.1
541211	Offices of certified public accountants .....	3.7	3.7	2.9	2.5	1.2	1.8	1.3
541213	Tax preparation services .....	5.2	4.7	5.1	4.0	2.3	4.3	2.7
541214	Payroll services .....	7.0	6.2	5.2	3.6	4.0	5.1	5.6
541219	Other accounting services .....	7.3	6.8	6.1	3.8	4.8	4.5	4.6
5413	Architectural, engineering, and related services .....	3.7	3.6	3.3	3.5	2.1	2.2	2.6
5413*	Architectural, engineering, and related services <sup>3</sup> .....	3.7	3.6	3.3	3.5	2.1	2.2	2.6
54131	Architectural services .....	5.7	5.1	4.6	3.1	2.9	3.0	2.8
54132	Landscape architectural services .....	4.2	4.1	4.7	4.7	2.0	3.3	2.1
54133	Engineering services .....	5.0	4.6	4.4	4.4	2.7	2.8	3.9
54138	Testing laboratories .....	9.0	7.5	6.9	4.8	3.7	3.3	4.2
5413x	Other related services <sup>4</sup> .....	6.8	7.2	5.8	6.1	3.6	8.0	3.9
5414	Specialized design services .....	3.5	3.0	3.0	2.6	2.0	1.6	1.9
54141	Interior design services .....	5.4	6.2	6.8	5.5	2.7	2.5	2.7
54143	Graphic design services .....	5.2	5.1	4.6	4.7	2.6	3.3	2.8
5414y	All other design services <sup>5</sup> .....	13.2	11.5	10.4	8.9	3.3	4.1	4.1
5415	Computer systems design and related services .....	2.4	2.4	2.2	1.9	1.0	0.7	0.8
541511	Custom computer programming services .....	4.4	4.9	4.9	4.1	2.1	1.9	2.4
541512	Computer systems design services .....	3.8	3.5	2.7	2.7	1.0	1.6	1.2
541513	Computer facilities management services .....	4.0	3.6	3.1	2.9	1.3	1.4	0.7
541519	Other computer related services .....	11.5	9.1	7.3	5.8	4.2	3.3	2.9
5416	Management, scientific, and technical consulting services .....	4.4	4.2	3.6	3.1	1.2	1.2	1.4
54161	Management consulting services .....	4.7	4.4	4.1	3.3	1.5	1.4	1.6
54162	Environmental consulting services .....	7.8	7.0	5.5	4.8	2.2	2.4	2.6
54169	Other scientific and technical consulting services .....	10.2	8.0	6.8	6.5	3.3	7.5	4.6
5417	Scientific research and development services .....	4.1	4.2	4.4	4.9	1.2	1.4	1.4
54171	Research and development in the physical, engineering, and life sciences .....	4.3	4.4	4.6	5.1	1.2	1.4	1.5
54172	Research and development in the social sciences and humanities .....	11.0	8.2	7.0	6.2	5.6	2.2	1.2
5418	Advertising and related services .....	2.9	2.0	2.2	1.9	1.9	1.0	0.8
54181	Advertising agencies .....	5.5	4.6	3.3	2.5	3.3	2.2	2.4
54182	Public relations agencies .....	6.1	5.2	4.0	3.7	2.9	3.5	1.7
54183	Media buying agencies .....	21.8	21.9	22.8	22.9	3.4	2.5	1.8
54184	Media representatives .....	24.5	23.7	24.6	24.7	4.5	1.6	3.1
54185	Display advertising .....	6.1	4.1	3.2	2.0	3.0	1.4	2.6

See footnotes at end of table.

**Table A-6.1. Professional, Scientific, and Technical Services (Except Notaries) (NAICS 54) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Taxable Employer Firms: 2004 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
54186	Direct mail advertising .....	3.9	3.2	2.5	1.9	2.1	1.7	1.5
5418y	All other advertising <sup>6</sup> .....	6.8	5.1	4.3	5.1	2.3	3.5	2.7
5419	Other professional, scientific, and technical services .....	2.7	2.1	2.0	1.2	1.2	1.5	1.1
5419*	Other professional, scientific, and technical services <sup>7</sup> .....	4.1	3.7	3.3	2.0	2.0	1.4	2.0
54191	Marketing research and public opinion polling .....	5.8	5.7	4.7	3.1	1.7	2.0	3.7
54192	Photographic services .....	3.8	3.5	3.8	3.8	1.2	1.9	1.7
541921	Photography studios, portrait .....	5.3	5.3	5.7	5.3	1.3	2.2	2.1
541922	Commercial photography .....	5.5	5.7	5.4	4.1	3.0	4.9	3.1
54193	Translation and interpretation services .....	9.3	8.9	8.7	5.8	2.7	3.3	4.6
54194	Veterinary services .....	3.5	3.7	2.3	1.6	1.5	3.1	1.3
54199	All other professional, scientific, and technical services .....	6.0	5.3	3.9	3.0	6.1	3.6	3.1

<sup>1</sup>Excludes NAICS 54112 (Offices of notaries).

<sup>2</sup>Excludes NAICS 54112 (Offices of notaries), NAICS 54132 (Landscape architectural services) and NAICS 54194 (Veterinary services).

<sup>3</sup>Excludes NAICS 54132 (Landscape architectural services).

<sup>4</sup>Includes NAICS 54134 (Drafting services), NAICS 54135 (Building inspection services), NAICS 54136 (Geophysical surveying and mapping services), and NAICS 54137 (Surveying and mapping (except geophysical) services).

<sup>5</sup>Includes NAICS 54142 (Industrial design services) and NAICS 54149 (Other specialized design services).

<sup>6</sup>Includes NAICS 54187 (Advertising material distribution services) and NAICS 54189 (Other services related to advertising).

<sup>7</sup>Excludes NAICS 54194 (Veterinary services).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-6.2. Professional, Scientific, and Technical Services (Except Notaries) (NAICS 54) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Tax-Exempt Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>54</b>	<b>Professional, scientific, and technical services .....</b>	<b>3.8</b>	<b>3.6</b>	<b>3.3</b>	<b>3.1</b>	<b>0.8</b>	<b>2.3</b>	<b>1.0</b>
54111	Offices of lawyers .....	5.9	5.5	4.5	4.6	3.1	3.9	2.5
5417	Scientific research and development services .....	4.1	4.0	3.6	3.4	1.0	2.4	1.1
54171	Research and development in the physical, engineering, and life sciences .....	4.5	4.1	3.9	3.8	1.0	1.6	1.2
54172	Research and development in the social sciences and humanities .....	9.3	11.2	3.3	2.0	3.3	14.0	3.3

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-6.3. Professional, Scientific, and Technical Services (Except Notaries) (NAICS 54) – Estimated Coefficients of Variation for Export Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>54</b>	<b>Professional, scientific, and technical services<sup>1</sup></b> .....	<b>5.4</b>	<b>6.8</b>	<b>4.5</b>	<b>3.5</b>	<b>4.5</b>	<b>4.6</b>	<b>2.6</b>
5411	Legal services <sup>1</sup> .....	10.8	13.2	13.0	13.0	2.6	1.9	1.4
54111	Offices of lawyers .....	11.3	13.7	13.7	13.7	2.6	2.1	1.4
54119	Other legal services .....	S	S	14.4	15.3	S	S	5.3
5412	Accounting, tax preparation, bookkeeping, and payroll services .....	4.4	S	S	S	S	S	S
541211	Offices of certified public accountants .....	4.4	S	S	S	S	S	S
541213	Tax preparation services .....	S	29.8	S	S	S	S	S
541214	Payroll services .....	S	8.3	7.3	6.8	S	4.5	3.7
541219	Other accounting services .....	ZZ	ZZ	ZZ	ZZ	Z	Z	Z
5413	Architectural, engineering, and related services .....	14.5	17.8	13.3	10.0	12.1	9.8	7.5
54131	Architectural services .....	15.5	11.3	9.4	16.2	16.6	9.6	7.2
54132	Landscape architectural services .....	20.2	20.3	S	26.7	31.0	S	S
54133	Engineering services .....	17.4	24.2	16.5	12.0	16.9	11.3	9.1
54138	Testing laboratories .....	27.9	S	10.2	9.4	S	S	5.3
5413x	Other related services <sup>2</sup> .....	16.9	S	S	S	S	S	S
5414	Specialized design services .....	14.4	9.5	5.3	5.8	7.5	9.2	3.1
54141	Interior design services .....	S	19.0	11.7	14.4	S	35.2	4.5
54143	Graphic design services .....	18.2	14.2	3.9	4.5	39.7	3.4	1.4
5414y	All other design services <sup>3</sup> .....	12.8	10.5	10.1	10.5	9.4	16.6	4.8
5415	Computer systems design and related services .....	14.2	16.1	8.5	7.2	4.1	8.1	6.3
541511	Custom computer programming services .....	9.0	11.6	S	S	6.3	S	S
541512	Computer systems design services .....	S	S	20.7	14.0	S	S	12.5
541513	Computer facilities management services .....	S	S	S	S	S	S	S
541519	Other computer related services .....	S	12.8	23.5	26.6	S	8.3	4.6
5416	Management, scientific, and technical consulting services .....	9.6	9.1	7.5	7.1	5.5	4.1	3.0
54161	Management consulting services .....	11.5	11.0	8.8	7.7	6.1	4.3	3.3
54162	Environmental consulting services .....	5.4	18.3	S	S	90.0	S	S
54169	Other scientific and technical consulting services .....	12.7	S	S	S	S	S	S
5417	Scientific research and development services .....	7.9	8.2	7.2	6.5	3.2	6.3	3.4
54171	Research and development in the physical, engineering, and life sciences .....	8.2	8.6	7.5	6.8	3.3	6.5	3.5
54172	Research and development in the social sciences and humanities .....	10.5	12.4	12.4	11.1	4.1	5.4	1.9
5418	Advertising and related services .....	13.3	21.3	18.2	16.6	9.1	31.0	3.3
54181	Advertising agencies .....	4.4	S	S	5.5	S	S	S
54182	Public relations agencies .....	24.9	S	S	S	S	S	S
54183	Media buying agencies .....	S	S	S	S	S	S	S
54184	Media representatives .....	S	S	S	S	S	S	S
54185	Display advertising .....	S	S	S	ZZ	S	S	S
54186	Direct mail advertising .....	S	S	6.4	3.5	S	S	5.5
5418y	All other advertising <sup>4</sup> .....	12.7	S	10.2	8.8	S	S	2.9

See footnotes at end of table.

**Table A-6.3. Professional, Scientific, and Technical Services (Except Notaries) (NAICS 54) – Estimated Coefficients of Variation for Export Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
5419	Other professional, scientific, and technical services .....	9.2	14.3	13.5	19.3	16.5	7.1	7.0
54191	Marketing research and public opinion polling .....	13.6	23.3	22.0	21.6	46.4	27.7	6.6
54192	Photographic services .....	22.8	S	25.6	S	S	S	S
541921	Photography studios, portrait .....	21.1	S	6.7	9.1	S	S	10.6
541922	Commercial photography .....	S	S	29.6	S	S	S	S
54193	Translation and interpretation services .....	18.1	29.7	28.4	29.2	62.0	72.7	22.1
54194	Veterinary services .....	S	4.4	3.6	3.2	S	2.3	1.2
54199	All other professional, scientific, and technical services .....	21.9	S	24.4	S	S	S	S

Z Absolute value is less than 0.05. ZZ Absolute value is less than 0.5. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Excludes NAICS 54112 (Offices of notaries).

<sup>2</sup>Includes NAICS 54134 (Drafting services), NAICS 54135 (Building inspection services), NAICS 54136 (Geophysical surveying and mapping services), and NAICS 54137 (Surveying and mapping (except geophysical) services).

<sup>3</sup>Includes NAICS 54142 (Industrial design services) and NAICS 54149 (Other specialized design services).

<sup>4</sup>Includes NAICS 54187 (Advertising material distribution services) and NAICS 54189 (Other services related to advertising).

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**Table A-6.4. Accounting, Tax Preparation, Bookkeeping, and Payroll Services (NAICS 5412) – Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>2.5</b>	<b>2.6</b>	<b>2.2</b>	<b>1.2</b>	<b>1.4</b>	<b>2.0</b>	<b>2.1</b>
<b>Sources of Revenue</b>							
Assurance and related services .....	5.0	4.7	4.3	4.5	1.4	2.0	1.4
Financial auditing services .....	5.1	4.7	4.5	4.8	1.8	1.6	1.6
Financial statement review .....	11.0	13.5	13.1	13.6	6.0	9.9	2.0
Other assurance and financial auditing services .....	6.7	7.3	6.5	7.0	2.9	5.1	1.5
Bookkeeping, compilation, payroll, and taxation services .....	3.3	3.3	3.2	1.8	2.4	2.7	2.6
General accounting services .....	9.8	12.0	10.3	10.0	17.1	10.5	5.9
Bookkeeping, compilation, billing, and collection services .....	9.1	10.2	8.3	7.8	19.3	14.2	3.6
Payroll services .....	7.5	6.4	5.8	3.9	3.9	5.0	6.5
Taxation planning and consulting services .....	S	5.5	6.4	5.8	S	3.8	2.7
Taxation preparation and representation services for individuals and unincorporated businesses .....	3.3	4.6	4.0	3.8	3.8	4.0	1.6
Taxation preparation and representation services for corporate and other clients .....	5.8	6.1	6.1	5.6	4.3	4.6	1.7
Other related services .....	12.6	11.6	9.1	9.6	9.0	6.0	3.1
Computerized accounting system services .....	S	S	S	S	S	S	S
Management consulting services .....	9.9	8.3	8.6	10.1	8.1	13.7	3.5
All other operating revenue .....	S	7.4	7.5	8.1	S	12.7	4.4

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.



**Table A-6.5. Architectural Services (NAICS 54131) – Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>5.7</b>	<b>5.1</b>	<b>4.6</b>	<b>3.1</b>	<b>2.9</b>	<b>3.0</b>	<b>2.8</b>
<b>Sources of Revenue</b>							
Residential building projects .....	11.2	10.7	11.1	8.2	8.2	5.9	7.1
Single-family residential projects .....	14.0	14.0	12.0	12.6	53.3	15.3	8.7
Multi-family residential projects .....	15.5	17.4	19.5	15.7	11.3	12.4	14.1
Non-residential building projects .....	5.9	6.2	5.2	3.7	4.3	2.7	3.1
Office building projects .....	10.0	12.7	12.9	10.9	9.3	6.3	8.9
Retail and restaurant building projects .....	16.3	16.0	16.4	17.6	10.3	5.6	11.5
Hotel and convention center building projects .....	15.0	20.2	22.1	20.3	22.9	22.1	5.4
Health care building projects .....	9.8	9.5	11.5	9.8	7.5	5.7	4.3
Entertainment and recreational building projects .....	17.4	16.1	17.6	16.4	23.0	9.3	6.6
Educational building projects .....	10.8	12.0	7.9	8.9	8.0	6.0	6.0
Industrial building projects .....	27.0	25.9	17.7	13.2	19.0	37.5	58.1
Transportation building projects .....	S	17.0	17.8	18.4	S	12.6	5.9
Other nonresidential building projects .....	22.3	13.8	12.5	13.1	10.5	15.3	6.4
Other services (performed independent of the architecture projects above) .....	12.5	13.1	15.9	17.6	14.0	10.7	6.0
Historical restoration projects .....	S	S	27.0	26.6	S	S	8.4
Architectural advisory services .....	17.2	15.7	19.1	17.7	56.6	19.5	10.2
Landscape architectural services .....	26.2	S	29.2	S	S	S	S
Interior design services .....	14.0	16.3	21.1	25.4	24.1	13.1	5.8
All other operating revenue .....	21.1	14.5	13.1	15.5	12.4	14.3	3.9

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-6.6. Engineering Services (NAICS 54133) – Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>5.0</b>	<b>4.6</b>	<b>4.4</b>	<b>4.4</b>	<b>2.7</b>	<b>2.8</b>	<b>3.9</b>
<b>Sources of Revenue</b>							
Engineering Services .....	8.2	8.2	8.3	7.2	3.0	3.2	6.0
Residential engineering projects .....	21.1	21.8	22.1	23.2	14.9	17.0	5.7
Commercial, public, and institutional engineering projects .....	16.9	17.0	14.1	14.8	6.7	7.0	5.3
Industrial and manufacturing engineering projects .....	15.9	14.1	13.9	14.6	5.5	6.8	6.2
Transportation infrastructure engineering projects .....	18.6	17.2	22.1	21.4	4.6	10.4	2.1
Municipal utility engineering projects .....	18.9	21.8	16.2	22.8	7.8	10.9	8.0
Power generation and distribution engineering projects .....	14.3	16.0	S	S	6.2	S	S
Telecommunications and broadcasting engineering projects .....	26.6	S	S	S	S	S	S
Hazardous waste and industrial waste engineering projects .....	25.2	17.5	15.7	17.7	15.8	7.6	2.2
Other engineering projects .....	22.1	19.6	19.0	14.3	10.7	8.3	9.4
Other services (performed independent of the engineering projects above) .....	19.0	14.0	16.1	15.9	10.8	13.3	3.7
Engineering advisory services .....	S	S	S	29.3	S	S	S
Construction services .....	19.1	13.4	16.5	16.6	25.4	7.7	2.2
Drafting services .....	S	28.7	S	S	S	S	S
Surveying and mapping services .....	25.7	26.7	23.4	22.0	37.7	20.2	9.4
All other operating revenue .....	S	S	11.6	11.4	S	S	4.4

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at [www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html).

**Table A-6.7. Computer Systems Design and Related Services (NAICS 5415) – Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>2.4</b>	<b>2.4</b>	<b>2.2</b>	<b>1.9</b>	<b>1.0</b>	<b>0.7</b>	<b>0.8</b>
<b>Sources of Revenue</b>							
Information technology (IT) design and development .....	3.2	3.0	2.7	2.4	1.3	1.9	1.1
Custom application design and development .....	4.8	4.5	3.8	3.6	2.7	3.4	2.1
Computer systems design, development, and integration .....	4.2	4.1	3.1	2.6	2.9	1.9	1.3
Network design and development .....	7.3	6.4	5.3	S	4.3	4.5	S
Other services .....	2.9	3.1	2.3	2.0	2.1	1.5	1.1
IT infrastructure and network management .....	3.7	2.4	1.8	2.0	3.0	1.8	0.8
IT technical support .....	5.3	5.7	4.9	4.2	3.2	1.9	1.5
IT technical consulting .....	7.7	6.3	4.0	3.1	4.9	5.2	2.5
IT related training services .....	12.3	13.0	9.2	7.8	6.5	7.9	4.8
Hosting and IT infrastructure provisioning services .....	10.4	8.8	6.8	5.1	4.5	4.0	3.1
Rental and leasing of computer hardware .....	11.1	17.0	11.7	10.4	13.7	16.1	2.2
All other operating revenue .....	6.5	6.9	3.8	3.2	3.7	5.9	2.1

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-6.8. Management Consulting Services (NAICS 54161) - Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>4.7</b>	<b>4.4</b>	<b>4.1</b>	<b>3.3</b>	<b>1.5</b>	<b>1.4</b>	<b>1.6</b>
<b>Sources of Revenue</b>							
Management consulting services .....	5.9	5.4	4.7	3.6	2.0	1.7	1.9
Strategic management consulting, and consulting combined with implementation .....	8.1	7.5	5.7	5.2	2.8	3.9	1.7
Financial management consulting, and consulting combined with implementation .....	15.1	12.2	9.7	9.9	9.7	7.3	4.0
Marketing management consulting, and consulting combined with implementation .....	12.0	16.5	9.2	7.0	8.0	7.8	4.8
Human resources management consulting, and consulting combined with implementation .....	8.9	10.2	8.8	8.5	4.5	4.5	2.1
Operations and supply chain management consulting, and consulting combined with implementation .....	13.7	14.0	24.0	18.4	5.3	10.5	4.6
Actuarial consulting (except for employee pensions and other benefits) .....	27.4	26.1	21.3	19.8	5.4	2.6	3.1
IT technical design, consulting, and development services .....	9.1	7.6	8.2	8.3	4.3	4.0	1.8
All other consulting revenue .....	9.9	11.0	9.5	6.0	8.4	4.1	12.9
All other operating revenue .....	5.0	6.1	5.9	5.8	5.7	3.5	2.0

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-6.9. Environmental Consulting Services (NAICS 54162) - Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>7.8</b>	<b>7.0</b>	<b>5.5</b>	<b>4.8</b>	<b>2.2</b>	<b>2.4</b>	<b>2.6</b>
<b>Sources of Revenue</b>							
Environmental consulting services .....	8.8	8.0	7.5	6.9	3.4	2.8	2.4
Environmental assessment consulting, and consulting combined with implementation .....	10.1	10.9	13.9	12.6	14.8	12.9	3.3
Natural resource management consulting, and consulting combined with implementation .....	24.4	20.6	19.4	17.7	18.2	16.5	8.6
Waste management consulting, and consulting combined with implementation .....	20.0	17.0	14.7	16.6	34.7	14.8	5.5
Environmental policy development consulting, and consulting combined with implementation .....	20.0	21.2	18.4	17.2	29.8	4.6	3.5
Environmental audits consulting, and consulting combined with implementation .....	10.2	11.4	12.7	13.4	15.3	9.2	6.0
Site remediation planning consulting, and consulting combined with implementation .....	11.9	10.1	9.0	8.8	13.1	6.5	3.9
Evaluation of environmental studies consulting, and consulting combined with implementation .....	29.1	21.0	22.7	18.1	31.7	15.4	25.3
All other environmental consulting .....	15.0	14.6	17.9	15.7	11.4	12.0	3.9
All other operating revenue .....	S	9.9	7.9	6.2	S	7.5	5.8

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-6.10. Scientific Research and Development Services (NAICS 5417) - Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Taxable Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>4.1</b>	<b>4.2</b>	<b>4.4</b>	<b>4.9</b>	<b>1.2</b>	<b>1.4</b>	<b>1.4</b>
<b>Sources of Revenue</b>							
Basic and applied research in natural and exact sciences, except biological sciences .....	4.2	3.3	3.9	S	2.4	2.9	S
Basic and applied research in biotechnology .....	4.4	3.4	4.1	S	2.4	3.0	S
Basic and applied research in other natural and exact sciences, except biological sciences .....	S	28.9	S	S	S	S	S
Basic and applied research in engineering and technology .....	7.3	6.5	6.3	7.4	2.6	2.4	2.1
Basic and applied research in the biological and biomedical sciences .....	7.5	9.2	6.7	6.0	2.2	4.1	1.8
Basic and applied research in medical and health sciences .....	7.9	9.7	7.1	6.4	2.5	4.2	1.9
Basic and applied research in other biological sciences .....	11.9	13.5	13.3	13.8	4.0	7.5	2.2
Basic and applied research in the social sciences and humanities .....	11.8	S	8.3	S	S	S	S
Production services for development .....	S	12.3	12.8	8.9	S	4.1	5.3
Other operating revenue .....	5.6	S	5.3	5.4	S	S	1.9
Licensing of right to use intellectual property .....	18.2	14.3	14.1	11.9	4.2	6.2	5.5
Original works of intellectual property .....	S	S	S	D	S	S	D
All other operating revenue .....	5.1	S	5.2	D	S	S	D

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-6.11. Scientific Research and Development Services (NAICS 5417) - Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Tax-Exempt Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating and Non-operating Revenue</b>							
<b>Total</b> .....	4.1	4.0	3.6	3.4	1.0	2.4	1.1
<b>Sources of Revenue</b>							
Basic and applied research in natural and exact sciences, except biological sciences .....	4.6	4.3	3.3	3.3	2.1	1.6	0.5
Basic and applied research in biotechnology .....	10.8	8.8	7.2	5.2	2.0	1.9	2.0
Basic and applied research in other natural and exact sciences, except biological sciences .....	4.8	4.8	4.0	3.9	2.7	1.3	0.2
Basic and applied research in engineering and technology .....	6.0	5.8	5.8	6.3	1.1	2.2	0.9
Basic and applied research in the biological and biomedical sciences .....	10.8	11.2	12.3	11.9	4.7	6.1	1.9
Basic and applied research in medical and health sciences .....	13.8	14.3	15.8	15.2	5.8	8.8	2.2
Basic and applied research in other biological sciences .....	12.8	9.9	7.1	6.4	7.4	4.9	1.0
Basic and applied research in the social sciences and humanities .....	9.8	10.1	10.6	13.3	6.0	6.4	2.8
Production services for development .....	S	27.7	24.7	26.2	S	4.6	7.4
Other operating revenue .....	18.3	18.6	20.3	20.7	2.9	9.4	4.1
Licensing of right to use intellectual property .....	S	S	S	26.7	S	S	S
Original works of intellectual property .....	S	27.1	S	D	S	S	D
All other operating revenue .....	19.5	20.2	21.8	22.2	3.2	10.2	5.0
Contributions, gifts, and grants received .....	7.5	8.2	7.1	7.0	2.8	5.4	3.8
Investment and property income .....	12.0	11.4	9.8	11.3	0.9	3.4	3.3
All other non-operating revenue .....	13.5	7.8	18.1	6.8	5.6	7.7	32.3

D Estimate in table is withheld to avoid disclosing data of individual companies; data are included in higher level totals. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-6.12. Advertising Agencies (NAICS 54181) - Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>5.5</b>	<b>4.6</b>	<b>3.3</b>	<b>2.5</b>	<b>3.3</b>	<b>2.2</b>	<b>2.4</b>
<b>Sources of Revenue</b>							
Integrated advertising services .....	7.2	5.9	6.9	7.4	3.4	6.5	2.6
Advertising creative services (including graphic design services) .....	20.1	15.7	19.2	17.0	9.5	18.4	3.5
Media buying .....	11.9	14.2	9.9	15.6	7.3	8.6	5.9
Full public relations services .....	21.9	S	29.4	14.2	S	S	8.1
Sales promotion .....	21.3	21.0	17.7	18.5	4.7	4.4	1.6
Direct marketing .....	27.1	28.8	S	S	17.1	S	S
Marketing research .....	12.4	14.4	15.3	12.0	13.9	10.9	17.3
Other advertising services .....	17.4	15.6	15.4	19.0	2.7	24.4	3.4
All other operating revenue .....	23.4	23.1	23.2	23.7	9.8	12.9	37.1

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.



**Table A-6.13. Public Relations Agencies (NAICS 54182) - Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>6.1</b>	<b>5.2</b>	<b>4.0</b>	<b>3.7</b>	<b>2.9</b>	<b>3.5</b>	<b>1.7</b>
<b>Sources of Revenue</b>							
Full public relations services .....	4.8	5.6	3.8	3.4	2.8	3.8	1.7
Media relations .....	S	24.2	17.7	15.6	S	20.7	5.8
Crisis management .....	27.3	26.6	27.2	23.2	7.2	12.1	3.4
Lobbying .....	19.4	18.2	16.5	17.5	5.3	17.3	6.7
Event management .....	29.6	20.0	12.3	11.5	7.3	11.8	9.6
Media monitoring and analysis .....	17.7	11.9	10.1	11.7	7.7	10.8	6.1
All other operating revenue .....	19.9	20.8	15.6	15.4	8.8	8.9	3.4

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-6.14. Media Buying Agencies (NAICS 54183) - Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	21.8	21.9	22.8	22.9	3.4	2.5	1.8
<b>Sources of Revenue</b>							
Media planning and/or buying services.....	21.9	21.9	22.7	22.9	3.4	2.8	1.8
All other operating revenue .....	S	S	S	S	S	S	S

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-6.15. Media Representatives (NAICS 54184) - Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>24.5</b>	<b>23.7</b>	<b>24.6</b>	<b>24.7</b>	<b>4.5</b>	<b>1.6</b>	<b>3.1</b>
<b>Sources of Revenue</b>							
Sales agent services.....	S	29.0	29.0	28.5	S	3.1	3.6
All other operating revenue .....	S	S	S	S	S	S	S

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-6.16. Display Advertising (NAICS 54185) - Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>6.1</b>	<b>4.1</b>	<b>3.2</b>	<b>2.0</b>	<b>3.0</b>	<b>1.4</b>	<b>2.6</b>
<b>Sources of Revenue</b>							
Leased display advertising media space .....	6.2	5.2	4.3	3.5	2.0	1.6	2.4
Large format .....	6.2	5.2	4.7	3.4	1.7	1.7	2.3
Transit .....	7.8	7.5	6.6	5.1	2.8	1.8	3.2
Street furniture and other urban fixtures .....	10.0	9.8	6.9	9.0	5.7	3.3	4.4
Other leased display advertising .....	26.7	24.2	S	S	46.0	S	S
All other operating revenue .....	17.2	11.5	11.8	10.0	20.1	8.5	5.9

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-6.17. Direct Mail Advertising (NAICS 54186) - Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>3.9</b>	<b>3.2</b>	<b>2.5</b>	<b>1.9</b>	<b>2.1</b>	<b>1.7</b>	<b>1.5</b>
<b>Sources of Revenue</b>							
Full direct mail services .....	5.8	3.6	4.4	3.4	2.6	2.8	1.6
Concept development for a direct mail advertising campaign .....	23.1	23.1	22.9	21.9	18.1	29.0	4.2
Mail list creation and support services .....	11.9	13.7	13.3	11.1	10.4	9.7	13.0
Print services for direct mail advertising materials .....	7.9	7.8	8.8	9.8	2.6	6.0	2.1
Letter shop services .....	9.2	9.7	7.3	7.6	5.9	5.5	3.1
Fulfillment services .....	12.8	14.5	14.8	13.1	5.4	12.9	7.4
Other direct mail advertising services .....	11.6	18.4	16.6	17.3	9.8	24.4	7.5
All other operating revenue .....	15.0	11.7	8.7	11.7	5.3	9.9	3.5

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-6.18. Professional, Scientific, and Technical Services (Except Notaries) (NAICS 54) - Estimated Coefficients of Variation for Total Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>54</b>	<b>Professional, scientific, and technical services<sup>1</sup></b> .....	<b>1.9</b>	<b>1.8</b>	<b>1.7</b>	<b>1.5</b>	<b>0.6</b>	<b>0.9</b>	<b>0.5</b>
5411	Legal services <sup>1</sup> .....	2.6	2.1	2.1	2.3	1.1	1.1	1.3
54111	Offices of lawyers .....	2.7	2.0	2.0	2.4	1.2	1.1	1.5
54119	Other legal services .....	8.5	8.7	8.4	7.8	1.5	1.8	1.7
5412	Accounting, tax preparation, bookkeeping, and payroll services .....	2.6	2.3	2.2	1.5	1.8	2.1	2.2
541211	Offices of certified public accountants .....	3.4	3.4	2.8	2.4	1.4	1.9	1.7
541213	Tax preparation services .....	6.5	6.2	5.9	4.9	2.2	4.9	2.8
541214	Payroll services .....	8.0	6.8	5.5	4.1	4.8	5.5	5.9
541219	Other accounting services .....	8.8	5.9	5.5	4.6	5.9	3.5	3.5
5413	Architectural, engineering, and related services .....	5.6	6.1	6.2	5.7	3.3	3.1	1.9
54131	Architectural services .....	5.5	4.4	4.3	3.5	2.3	3.7	2.2
54132	Landscape architectural services .....	5.9	4.4	4.7	4.4	3.1	4.5	2.1
54133	Engineering services .....	7.4	8.3	8.7	7.9	5.3	4.0	2.6
54138	Testing laboratories .....	10.0	8.5	7.3	5.3	4.3	3.4	3.7
5413x	Other related services <sup>2</sup> .....	6.5	6.9	5.6	6.1	4.5	3.9	4.2
5414	Specialized design services .....	3.4	2.6	2.7	2.7	2.5	1.8	1.0
54141	Interior design services .....	5.8	5.9	4.5	5.2	3.6	3.3	2.5
54143	Graphic design services .....	5.3	5.2	5.0	4.5	2.4	2.3	1.9
5414y	All other design services <sup>3</sup> .....	11.4	8.8	9.4	9.2	5.3	5.4	2.5
5415	Computer systems design and related services .....	2.9	3.0	2.6	2.4	1.2	1.2	0.9
541511	Custom computer programming services .....	4.5	5.1	4.6	4.6	2.4	2.3	2.5
541512	Computer systems design services .....	3.9	3.5	2.9	2.5	1.4	1.5	1.2
541513	Computer facilities management services .....	4.3	3.9	3.3	3.0	1.5	1.7	1.0
541519	Other computer related services .....	12.5	9.2	7.6	6.4	5.1	3.3	3.1
5416	Management, scientific, and technical consulting services .....	4.3	4.4	3.8	2.9	1.6	2.0	1.9
54161	Management consulting services .....	4.6	4.7	4.2	3.2	2.0	2.5	2.1
54162	Environmental consulting services .....	7.3	6.7	5.2	5.4	2.3	3.0	2.9
54169	Other scientific and technical consulting services .....	9.7	7.7	6.5	6.5	2.8	7.8	4.3
5417	Scientific research and development services .....	4.3	4.5	3.8	3.7	1.1	1.4	0.9
54171	Research and development in the physical, engineering, and life sciences .....	4.3	4.6	4.0	3.9	1.2	1.3	0.9
54172	Research and development in the social sciences and humanities .....	8.2	7.7	3.7	3.7	1.6	6.1	1.0
5418	Advertising and related services .....	3.3	3.1	2.5	2.5	1.7	1.8	1.3
54181	Advertising agencies .....	5.7	6.0	3.9	4.2	2.8	4.2	2.1
54182	Public relations agencies .....	6.3	5.8	5.1	4.9	2.4	2.2	1.7
54183	Media buying agencies .....	23.7	23.3	24.5	25.1	4.2	3.8	4.0
54184	Media representatives .....	24.6	24.2	27.3	27.9	3.7	3.1	3.4
54185	Display advertising .....	4.9	3.7	2.9	3.0	3.1	2.4	1.9
54186	Direct mail advertising .....	4.4	3.9	5.2	4.3	2.2	3.1	4.9
5418y	All other advertising <sup>4</sup> .....	9.0	7.6	5.3	4.9	4.5	4.0	2.7

See footnotes at end of table.

**Table A-6.18. Professional, Scientific, and Technical Services (Except Notaries) (NAICS 54) - Estimated Coefficients of Variation for Total Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
5419	Other professional, scientific, and technical services .....	2.9	2.7	3.0	2.9	1.6	1.9	1.3
54191	Marketing research and public opinion polling .....	5.7	5.7	5.4	5.1	1.5	1.8	2.1
54192	Photographic services .....	3.9	3.9	4.0	4.2	1.3	1.5	2.3
541921	Photography studios, portrait .....	5.2	5.5	6.1	5.7	2.1	2.2	2.7
541922	Commercial photography .....	4.7	5.5	5.1	4.5	4.0	4.9	2.6
54193	Translation and interpretation services .....	7.6	7.6	8.5	7.6	2.5	3.6	1.9
54194	Veterinary services .....	4.7	3.9	3.3	2.4	3.6	2.9	1.8
54199	All other professional, scientific, and technical services .....	7.1	5.5	10.8	11.1	5.1	4.7	3.2

<sup>1</sup>Excludes NAICS 54112 (Offices of notaries).

<sup>2</sup>Includes NAICS 54134 (Drafting services), NAICS 54135 (Building inspection services), NAICS 54136 (Geophysical surveying and mapping services), and NAICS 54137 (Surveying and mapping (except geophysical) services).

<sup>3</sup>Includes NAICS 54142 (Industrial design services) and NAICS 54149 (Other specialized design services).

<sup>4</sup>Includes NAICS 54187 (Advertising material distribution services) and NAICS 54189 (Other services related to advertising).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-6.19. Professional, Scientific, and Technical Services (Except Notaries) (NAICS 54) – Estimated Coefficients of Variation for Expenses and Standard Error of Percent Change for Tax-Exempt Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>54</b>	<b>Professional, scientific, and technical services .....</b>	<b>3.9</b>	<b>3.6</b>	<b>3.3</b>	<b>3.5</b>	<b>0.9</b>	<b>1.8</b>	<b>0.9</b>
54111	Offices of lawyers .....	5.4	6.0	3.8	3.5	3.8	5.0	2.8
5417	Scientific research and development services .....	4.2	4.0	3.7	3.9	0.9	2.0	0.8
54171	Research and development in the physical, engineering, and life sciences .....	4.5	4.0	4.1	4.2	1.0	0.9	0.9
54172	Research and development in the social sciences and humanities .....	9.5	10.4	3.2	3.3	2.1	11.6	1.1

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.



**Table A-6.20. Professional, Scientific, and Technical Services (Except Notaries) (NAICS 54) - Estimated Coefficients of Variation and Standard Error of Percent Change for Selected Expenses for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>1.9</b>	<b>1.8</b>	<b>1.7</b>	<b>1.5</b>	<b>0.6</b>	<b>0.9</b>	<b>0.5</b>
Personnel costs.....	2.1	1.9	1.5	1.4	0.5	0.8	0.5
Gross annual payroll.....	2.2	1.9	1.6	1.5	0.5	0.8	0.6
Employer's cost for fringe benefits.....	2.3	2.2	1.5	1.6	1.3	1.2	0.6
Health insurance.....	2.3	NA	NA	NA	NA	NA	NA
Pension plans.....	3.1	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	5.1	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	3.3	NA	NA	NA	NA	NA	NA
Other.....	2.4	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	4.9	4.4	5.5	3.5	2.2	2.9	3.4
Expensed materials, parts and supplies (not for resale).....	3.5	4.1	3.3	3.1	2.1	2.2	1.2
Expensed equipment.....	3.4	4.0	3.4	2.9	2.3	3.6	1.6
Expensed purchase of other materials, parts, and supplies.....	4.4	5.1	3.9	3.9	2.4	2.9	1.4
Expensed purchased services.....	1.7	2.5	1.8	1.8	1.8	2.1	0.5
Expensed purchases of software.....	7.0	6.9	3.4	3.2	5.0	7.7	2.2
Purchased electricity and fuels (except motor fuels).....	3.7	4.8	5.0	5.5	3.2	3.6	1.7
Purchased electricity.....	4.4	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	5.3	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	2.1	2.0	1.7	1.6	1.3	1.3	0.6
Lease and rental payments for machinery, equipment, and other tangible items.....	3.5	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	2.0	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	2.6	7.1	3.0	2.6	4.9	4.2	2.1
Purchased repairs and maintenance to machinery and equipment.....	2.4	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	4.0	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	3.5	6.6	5.4	5.5	3.9	6.3	1.9
Other operating expenses.....	2.3	2.2	3.0	2.3	1.7	1.9	1.1
Depreciation and amortization charges.....	2.6	1.9	1.8	2.2	1.4	1.7	1.4
Governmental taxes and license fees.....	4.3	2.6	3.7	4.8	5.1	2.6	2.8
All other operating expenses.....	2.4	2.5	3.3	2.5	1.9	2.1	1.1
Data processing and other purchased computer services.....	3.4	NA	NA	NA	NA	NA	NA
Purchased communication services.....	2.2	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	3.5	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	4.5	NA	NA	NA	NA	NA	NA
All other operating expenses.....	2.2	NA	NA	NA	NA	NA	NA

NA Not available.

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-7.1. Administrative and Support and Waste Management and Remediation Services (NAICS 56) - Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>56</b>	<b>Administrative and support and waste management and remediation services .....</b>	<b>2.5</b>	<b>2.4</b>	<b>1.8</b>	<b>1.5</b>	<b>0.7</b>	<b>1.0</b>	<b>0.7</b>
56*	Administrative and support and waste management and remediation services <sup>1</sup> .....	2.4	2.3	1.8	1.4	0.7	0.9	0.6
561	Administrative and support services .....	2.7	2.6	2.0	1.6	0.8	1.0	0.7
561*	Administrative and support services <sup>1</sup> .....	2.6	2.5	2.0	1.6	0.7	1.0	0.6
56111	Office administrative services .....	6.0	6.1	4.6	4.2	2.1	3.4	1.4
56121	Facilities support services .....	6.6	5.5	4.7	3.8	2.1	3.7	4.3
5613	Employment services .....	5.3	5.1	4.4	3.7	1.8	1.5	1.4
56131	Employment placement agencies .....	7.5	8.2	7.9	7.0	2.8	3.5	2.0
56132	Temporary help services .....	6.7	6.8	6.1	5.4	1.3	1.8	2.1
56133	Professional employer organizations .....	9.0	7.6	6.9	5.8	3.1	3.3	2.6
5614	Business support services .....	2.3	2.1	1.8	1.2	1.2	1.6	1.1
56141	Document preparation services .....	8.2	8.8	15.0	15.8	2.8	7.4	1.6
56142	Telephone call centers .....	3.7	3.9	3.6	2.0	3.1	3.9	2.8
561421	Telephone answering services .....	8.6	6.3	5.7	5.3	5.1	2.4	3.3
561422	Telemarketing bureaus .....	4.7	4.8	4.5	2.3	3.4	4.6	3.2
56143	Business service centers .....	5.1	4.6	3.2	3.1	1.4	1.8	0.7
561431	Private mail centers .....	12.3	10.5	10.6	10.0	3.9	3.0	2.4
561439	Other business service centers (including copy shops) .....	4.3	4.4	2.3	2.1	1.4	2.1	0.7
56144	Collection agencies .....	7.5	6.2	4.4	3.5	2.7	3.0	2.0
56145	Credit bureaus .....	2.6	1.5	1.6	1.4	1.9	1.4	0.9
56149	Other business support services .....	5.6	4.5	2.6	1.8	1.7	3.3	2.2
561491	Repossession services .....	S	26.5	21.3	18.5	S	6.2	6.9
561492	Court reporting and stenotype services .....	6.7	7.7	7.2	6.1	2.2	2.4	3.5
561499	All other business support services .....	9.3	6.9	3.2	1.9	3.0	4.2	2.7
5615	Travel arrangement and reservation services .....	2.8	2.6	2.3	2.3	0.7	1.4	1.0
56151	Travel agencies .....	4.5	3.7	3.2	3.7	1.3	2.0	2.1
56152	Tour operators .....	6.6	6.4	6.4	5.1	3.2	2.9	2.5
56159	Other travel arrangement and reservation services .....	3.5	3.6	2.7	2.0	1.1	2.1	1.4
561591	Convention and visitors bureaus .....	3.7	3.7	2.9	2.8	0.8	1.8	1.2
561599	All other travel arrangement and reservation services .....	4.0	4.0	3.0	2.2	1.3	2.4	1.5
5616	Investigation and security services .....	4.1	3.7	3.5	3.3	1.1	1.7	1.6
56161	Investigation, guard, and armored car services .....	4.8	4.0	3.4	3.4	1.6	1.8	2.6
561611	Investigation services .....	9.1	7.8	7.4	5.8	4.2	6.5	7.0
561612	Security guards and patrol services .....	5.0	4.6	4.4	4.2	2.2	1.7	3.5
561613	Armored car services .....	3.3	3.0	1.4	0.7	0.5	2.0	1.4
56162	Security systems services .....	8.5	7.6	7.1	6.8	2.3	3.1	2.0
561621	Security systems services (except locksmiths) .....	9.6	8.7	8.0	7.7	2.6	3.5	2.2
561622	Locksmiths .....	6.9	7.5	7.0	7.6	2.6	3.5	4.1
5617	Services to buildings and dwellings .....	4.4	3.8	2.7	2.1	2.2	2.0	1.1
5617*	Services to buildings and dwellings <sup>1</sup> .....	4.4	3.8	3.2	2.2	1.8	1.9	1.6
56171	Exterminating and pest control services .....	3.2	3.1	3.6	3.0	1.7	1.6	1.4
56172	Janitorial services .....	5.6	4.4	3.6	2.6	2.7	2.5	2.1
56173	Landscaping services .....	6.6	5.2	4.1	3.4	3.8	2.8	2.1
56174	Carpet and upholstery cleaning services .....	8.4	6.6	4.4	3.4	3.5	2.9	3.9
56179	Other services to buildings and dwellings .....	11.1	9.7	6.4	4.8	3.3	5.4	4.9
5619	Other support services .....	8.1	7.7	5.8	4.3	1.8	3.1	3.4
56191	Packaging and labeling services .....	25.1	26.5	27.3	25.3	2.1	2.7	3.5
56192	Convention and trade show organizers .....	5.6	4.4	3.6	3.4	3.2	2.4	4.7
56199	All other support services .....	12.8	11.8	7.6	3.2	4.5	5.1	5.8

See footnotes at end of table.

**Table A-7.1. Administrative and Support and Waste Management and Remediation Services (NAICS 56) - Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007 —Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
562	Waste management and remediation services .....	1.4	1.5	1.4	1.1	0.9	1.2	1.0
5621	Waste collection .....	2.5	2.5	2.0	1.7	1.3	1.7	1.5
562111	Solid waste collection .....	2.7	2.7	2.2	1.9	1.4	1.7	1.6
562112	Hazardous waste collection .....	3.2	3.7	3.3	2.5	2.5	2.4	2.0
562119	Other waste collection .....	13.4	15.4	14.9	14.7	5.7	5.6	3.2
5622	Waste treatment and disposal .....	2.3	2.1	1.8	1.3	1.4	1.3	1.0
562211	Hazardous waste treatment and disposal .....	2.7	2.8	2.1	1.6	1.7	1.2	1.7
562212	Solid waste landfill .....	4.0	3.5	3.1	2.2	1.6	2.0	1.7
562213	Solid waste combustors and incinerators .....	4.7	3.7	3.8	2.7	0.8	1.1	4.1
562219	Other nonhazardous waste treatment and disposal .....	9.0	13.1	5.0	3.1	10.0	8.4	5.4
5629	Remediation and other waste management services .....	6.6	5.6	5.6	5.5	1.9	2.7	1.1
56291	Remediation services .....	9.1	8.6	8.2	8.4	2.2	4.0	1.7
56292	Materials recovery facilities .....	12.5	12.1	9.5	9.1	3.9	2.3	1.1
56299	All other waste management services .....	9.2	8.3	7.1	6.9	8.7	4.3	1.9
562991	Septic tank and related services .....	14.5	13.1	10.6	9.7	3.9	4.2	2.8
562998	All other miscellaneous waste management services .....	14.2	11.9	11.2	10.6	57.9	7.6	1.9

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Excludes NAICS 56173 (Landscaping services).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-7.2. Administrative and Support and Waste Management and Remediation Services (NAICS 56) - Estimated Coefficients of Variation for Export Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>56</b>	<b>Administrative and support and waste management and remediation services .....</b>	<b>7.1</b>	<b>7.1</b>	<b>10.7</b>	<b>12.6</b>	<b>2.7</b>	<b>4.1</b>	<b>2.8</b>
561	Administrative and support services .....	7.7	8.1	11.6	13.6	2.5	4.6	3.1
56111	Office administrative services .....	S	S	S	S	S	S	S
56121	Facilities support services .....	S	S	10.8	8.5	S	S	4.9
5613	Employment services .....	S	S	S	S	S	S	S
56131	Employment placement agencies .....	S	S	S	S	S	S	S
56132	Temporary help services .....	S	S	S	S	S	S	S
56133	Professional employer organizations .....	9.2	ZZ	9.3	9.2	Z	Z	Z
5614	Business support services .....	S	S	S	S	S	S	S
56141	Document preparation services .....	S	S	S	S	S	S	S
56142	Telephone call centers .....	S	S	S	S	S	S	S
561421	Telephone answering services .....	ZZ	ZZ	ZZ	ZZ	Z	Z	Z
561422	Telemarketing bureaus .....	S	S	S	S	S	S	S
56143	Business service centers .....	S	S	S	S	S	S	S
561431	Private mail centers .....	S	S	S	S	S	S	S
561439	Other business service centers (including copy shops) .....	S	S	S	S	S	S	S
56144	Collection agencies .....	6.8	6.8	7.3	7.3	0.1	1.0	0.5
56145	Credit bureaus .....	2.4	2.4	2.4	2.4	0.3	0.4	1.8
56149	Other business support services .....	25.1	S	S	S	S	S	S
561491	Repossession services .....	26.4	S	S	S	S	S	S
561492	Court reporting and stenotype services .....	6.3	6.4	ZZ	ZZ	Z	Z	Z
561499	All other business support services .....	S	S	S	11.8	S	S	S
5615	Travel arrangement and reservation services .....	5.2	4.2	3.4	3.3	1.2	1.0	2.3
56151	Travel agencies .....	5.1	3.8	5.3	5.3	1.5	1.6	10.9
56152	Tour operators .....	29.8	18.1	14.3	18.8	70.6	9.0	5.6
56159	Other travel arrangement and reservation services .....	7.9	6.4	5.0	4.6	2.5	1.5	1.3
561591	Convention and visitors bureaus .....	4.7	4.4	4.2	4.2	0.3	0.2	Z
561599	All other travel arrangement and reservation services .....	7.9	6.4	5.0	4.7	2.5	1.5	1.3
5616	Investigation and security services .....	27.1	S	S	S	S	S	S
56161	Investigation, guard, and armored car services .....	S	S	S	S	S	S	S
561611	Investigation services .....	D	D	7.3	7.3	D	D	0.4
561612	Security guards and patrol services .....	6.7	S	S	S	S	S	S
561613	Armored car services .....	D	D	S	S	D	D	S
56162	Security systems services .....	S	S	S	8.5	S	S	S
561621	Security systems services (except locksmiths) .....	S	S	S	S	S	S	S
561622	Locksmiths .....	10.8	8.4	8.0	8.7	3.1	3.2	1.4
5617	Services to buildings and dwellings .....	6.3	6.1	5.5	5.1	2.1	6.8	1.5
56171	Exterminating and pest control services .....	ZZ	ZZ	ZZ	ZZ	Z	Z	Z
56172	Janitorial services .....	4.4	5.5	5.5	5.1	1.9	2.1	1.5
56173	Landscaping services .....	S	S	ZZ	ZZ	S	S	Z
56174	Carpet and upholstery cleaning services .....	4.8	4.9	4.9	S	1.3	0.4	S
56179	Other services to buildings and dwellings .....	ZZ	ZZ	ZZ	ZZ	Z	Z	Z
5619	Other support services .....	18.4	S	S	25.7	S	S	S
56191	Packaging and labeling services .....	S	S	S	S	S	S	S
56192	Convention and trade show organizers .....	21.0	21.3	S	S	8.6	S	S
56199	All other support services .....	11.6	S	S	S	S	S	S
562	Waste management and remediation services .....	13.8	8.2	8.1	7.6	5.1	2.2	2.1
5621	Waste collection .....	9.7	D	3.5	3.3	D	D	2.1
562111	Solid waste collection .....	4.1	D	3.5	3.3	D	D	2.1
562112	Hazardous waste collection .....	3.5	S	S	S	S	S	S

See footnotes at end of table.

**Table A-7.2. Administrative and Support and Waste Management and Remediation Services (NAICS 56) - Estimated Coefficients of Variation for Export Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007 —Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
562119	Other waste collection .....	S	S	ZZ	ZZ	S	S	Z
5622	Waste treatment and disposal .....	14.1	D	7.4	5.3	D	D	9.0
562211	Hazardous waste treatment and disposal .....	9.8	2.6	2.5	5.3	17.3	1.3	4.0
562212	Solid waste landfill .....	S	ZZ	ZZ	ZZ	Z	Z	Z
562213	Solid waste combustors and incinerators .....	S	S	S	ZZ	Z	Z	Z
562219	Other nonhazardous waste treatment and disposal .....	S	ZZ	ZZ	ZZ	Z	Z	Z
5629	Remediation and other waste management services .....	16.1	9.8	10.0	9.7	5.1	2.9	2.1
56291	Remediation services .....	20.1	7.3	8.1	9.8	7.9	3.0	2.8
56292	Materials recovery facilities .....	16.5	15.4	16.0	13.8	3.9	3.8	2.4
56299	All other waste management services .....	S	10.7	ZZ	ZZ	S	Z	Z
562991	Septic tank and related services .....	ZZ	ZZ	ZZ	ZZ	Z	Z	Z
562998	All other miscellaneous waste management services .....	ZZ	ZZ	ZZ	ZZ	Z	Z	Z

Z Absolute value is less than 0.05. ZZ Absolute value is less than 0.5. D Estimate in table is withheld to avoid disclosing data of individual companies; data are included in higher level totals. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-7.3. Employment Placement Agencies (NAICS 56131) - Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	7.5	8.2	7.9	7.0	2.8	3.5	2.0
<b>Sources of Revenue</b>							
Placement of individuals as permanent employees .....	12.2	15.2	17.5	16.6	6.8	6.8	5.3
Placement of individuals as independent contractors .....	10.8	10.3	8.4	8.8	2.7	3.9	2.7
Temporary staffing services .....	10.5	10.3	9.5	10.8	6.3	7.6	3.7
Long-term staffing .....	S	28.2	S	S	S	S	S
Temporary staffing-to-permanent placement .....	21.8	24.5	24.8	22.7	17.9	13.1	7.2
All other operating revenue .....	14.5	11.3	10.3	9.9	5.3	1.2	1.4

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-7.4. Temporary Help Services (NAICS 56132) - Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>6.7</b>	<b>6.8</b>	<b>6.1</b>	<b>5.4</b>	<b>1.3</b>	<b>1.8</b>	<b>2.1</b>
<b>Sources of Revenue</b>							
Placement of individuals as permanent employees .....	29.0	28.6	S	S	7.4	S	S
Placement of individuals as independent contractors .....	9.3	12.3	8.9	10.4	2.7	3.6	2.6
Temporary staffing services .....	6.9	6.6	5.5	5.1	1.4	2.2	1.5
Long-term staffing .....	20.1	22.4	26.7	18.6	9.2	11.2	13.7
Temporary staffing-to-permanent placement .....	23.7	21.7	20.5	19.3	6.1	6.0	5.1
All other operating revenue .....	18.9	11.8	11.3	9.2	7.1	4.0	5.1

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-7.5. Professional Employer Organizations (NAICS 56133) - Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>9.0</b>	<b>7.6</b>	<b>6.9</b>	<b>5.8</b>	<b>3.1</b>	<b>3.3</b>	<b>2.6</b>
<b>Sources of Revenue</b>							
Co-employment with payroll, benefits, and human resource services .....	8.7	7.4	6.5	6.4	2.7	3.5	2.1
Payroll services .....	11.5	15.0	13.7	12.2	5.2	2.2	3.9
Payroll and benefit services .....	25.7	23.0	23.6	24.0	10.8	7.3	11.8
Payroll and human resource services .....	S	S	S	S	S	S	S
All other operating revenue .....	13.2	15.4	18.9	19.1	9.0	11.4	8.5

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.



**Table A-7.6. Travel Agencies and All Other Travel Arrangement and Reservation Services (NAICS 561510 and 561599) - Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>2.8</b>	<b>2.5</b>	<b>2.2</b>	<b>2.2</b>	<b>0.9</b>	<b>1.5</b>	<b>1.2</b>
<b>Sources of Revenue</b>							
Reservation services .....	4.3	3.9	2.9	3.0	1.3	2.2	1.3
Airline seats, domestic destinations .....	4.5	5.0	3.5	3.0	2.3	2.0	3.1
Airline seats, international destinations .....	11.9	10.6	9.1	7.2	3.8	4.2	15.2
Cruises .....	23.7	18.1	16.0	13.8	5.2	3.7	4.9
Lodging .....	8.5	8.8	3.7	4.0	1.1	10.2	1.7
Event tickets .....	S	11.7	12.3	12.2	S	5.6	5.0
Computerized reservation systems .....	7.8	S	7.5	6.1	S	S	2.3
Packaged tours .....	5.6	5.2	9.8	14.0	1.7	4.5	2.9
Other reservation services .....	21.2	19.1	17.6	16.5	6.3	5.0	2.8
Other travel arrangement services .....	3.1	2.7	2.7	2.9	2.3	1.5	1.9
Trip planning .....	6.2	7.5	7.5	8.7	4.7	3.9	4.3
Automobile clubs and road and travel service .....	7.6	6.9	7.3	7.2	2.8	2.2	2.9
Other travel arrangement services revenue .....	9.6	10.2	9.5	8.4	8.3	2.8	1.5
All other operating revenue .....	5.2	5.1	5.3	5.3	3.7	1.2	2.0
<b>Breakdown of Revenue by Type of Customer</b>							
Business .....	5.8	4.9	4.9	4.3	1.2	4.1	1.4
Leisure .....	2.4	2.6	2.6	3.0	1.5	1.7	1.2

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-7.7. Tour Operators (NAICS 56152) - Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>6.6</b>	<b>6.4</b>	<b>6.4</b>	<b>5.1</b>	<b>3.2</b>	<b>2.9</b>	<b>2.5</b>
<b>Sources of Revenue</b>							
Pre-packaged tours .....	8.9	7.6	7.6	5.4	3.1	3.9	3.3
Domestic travel .....	8.8	8.1	11.7	8.3	2.1	7.6	4.4
International travel .....	11.7	9.2	7.5	7.3	5.1	4.6	3.2
Customized group tours .....	9.0	8.1	8.1	7.3	5.4	8.7	3.6
Domestic travel .....	11.2	9.8	9.6	10.1	9.3	16.6	3.9
International travel .....	18.7	16.7	14.9	14.5	9.8	14.9	4.9
All other operating revenue .....	20.8	12.4	12.5	14.1	14.8	4.4	11.0
<b>Breakdown of Revenue by Type of Customer</b>							
Business .....	13.3	11.0	14.7	10.1	5.2	3.9	4.7
Leisure .....	6.7	5.6	4.8	4.3	4.6	2.5	2.1

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-7.8. Waste Collection (NAICS 5621) - Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	2.5	2.5	2.0	1.7	1.3	1.7	1.5
<b>Sources of Revenue</b>							
Nonhazardous waste management collection services .....	2.7	2.8	2.7	2.3	1.1	2.0	1.6
Residential nonhazardous waste and recyclable material collection services .....	5.6	5.3	3.3	2.4	2.3	5.8	1.9
Nonhazardous waste collection services .....	5.8	5.7	3.1	2.6	2.5	6.1	1.9
Nonhazardous recyclable collection services .....	29.7	27.8	19.6	11.7	21.0	9.0	8.7
Non-residential nonhazardous waste and recyclable material							
collection services .....	3.0	3.3	3.0	2.7	1.6	1.6	1.6
Nonhazardous waste collection services .....	3.7	3.9	3.3	2.9	1.9	3.2	1.8
Nonhazardous recyclable collection services .....	18.8	20.6	21.8	21.3	19.3	7.2	1.9
Nonhazardous waste collection from construction							
and demolition sites .....	15.4	16.9	17.9	16.0	25.7	15.6	6.0
Operation of waste transfer facilities .....	15.5	9.8	7.4	5.7	14.0	9.7	6.2
Hazardous waste management collection services .....	9.1	7.8	7.4	7.2	5.7	5.2	3.2
Hazardous waste collection .....	11.9	12.0	10.3	9.7	8.0	7.6	3.2
Hazardous waste transportation services .....	8.2	6.9	9.7	10.0	7.5	9.9	5.4
All other operating revenue .....	14.3	13.0	14.2	15.2	7.9	3.2	2.7

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-7.9. Waste Treatment and Disposal (NAICS 5622) - Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>2.3</b>	<b>2.1</b>	<b>1.8</b>	<b>1.3</b>	<b>1.4</b>	<b>1.3</b>	<b>1.0</b>
<b>Sources of Revenue</b>							
Nonhazardous waste disposal services .....	3.2	2.8	2.1	1.4	2.0	1.6	1.3
Nonhazardous waste landfill disposal services .....	4.0	3.8	2.9	1.8	2.5	1.8	1.7
Nonhazardous waste incineration disposal services .....	2.1	1.9	1.8	1.8	0.8	1.0	1.0
Other nonhazardous waste disposal services .....	13.3	9.7	7.1	7.0	8.3	5.8	1.5
Hazardous waste treatment and disposal services .....	3.9	4.0	3.7	3.4	1.4	1.3	2.5
Hazardous waste treatment - biological infectious waste .....	6.0	7.1	6.8	6.8	2.7	2.0	2.7
Hazardous waste treatment - radioactive waste .....	3.5	3.3	4.2	6.1	0.9	1.9	3.4
All other hazardous waste treatment .....	8.2	8.2	6.8	4.9	1.8	3.4	6.7
Hazardous waste disposal services .....	5.8	7.7	7.2	6.3	4.4	3.5	2.6
Other hazardous waste treatment and disposal services .....	20.6	12.1	6.6	6.5	5.6	4.2	1.9
All other operating revenue .....	6.1	8.7	9.7	10.2	5.8	6.4	4.6

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-7.10. Remediation Services (NAICS 56291) - Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total .....</b>	<b>9.1</b>	<b>8.6</b>	<b>8.2</b>	<b>8.4</b>	<b>2.2</b>	<b>4.0</b>	<b>1.7</b>
<b>Sources of Revenue</b>							
Remediation services .....	8.4	7.9	7.5	7.4	2.6	4.6	2.0
Site remediation services .....	8.2	8.9	6.7	6.3	3.1	6.9	2.3
Building remediation services - asbestos contamination .....	14.9	11.0	12.0	11.5	5.7	6.6	3.5
Building remediation services - other contaminations .....	16.9	19.7	18.2	16.6	14.3	15.0	6.4
Environmental emergency response services .....	23.0	21.7	22.5	26.5	2.6	2.7	4.6
Other remediation services .....	S	23.9	18.1	18.9	S	29.7	4.4
All other operating revenue .....	18.0	17.9	18.3	18.4	5.6	10.7	5.7

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-7.11. Materials Recovery Facilities and All Other Waste Management Services (NAICS 56292 and 56299) - Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Revenue</b>							
<b>Total</b> .....	<b>8.3</b>	<b>6.8</b>	<b>5.7</b>	<b>5.4</b>	<b>5.2</b>	<b>2.6</b>	<b>1.3</b>
<b>Sources of Revenue</b>							
Nonhazardous waste and recyclable material consolidation, storage, and preparation services .....	6.6	7.6	6.9	6.6	4.4	3.0	0.9
Nonhazardous recyclable material recovery preparation services .....	4.9	8.1	7.4	7.1	4.5	3.1	1.1
Operation of nonhazardous waste transfer facilities .....	S	18.8	19.1	17.8	S	22.3	4.8
Sale or brokerage of nonhazardous recyclable material .....	22.9	24.3	19.7	18.2	3.0	2.7	1.4
Other waste management services .....	11.5	10.6	10.5	10.1	5.0	3.9	2.5
Septic tank services .....	19.0	18.2	16.6	15.8	11.4	7.7	3.7
Cleaning and maintenance for nonhazardous waste holding and drain facilities .....	8.0	8.5	9.4	9.2	5.9	7.4	1.6
Portable toilet rental services .....	19.4	17.9	17.5	17.1	6.5	4.2	4.8
All other operating revenue .....	20.5	17.4	15.9	16.3	55.0	13.2	2.9

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-7.12. Administrative and Support and Waste Management and Remediation Services (NAICS 56) - Estimated Coefficients of Variation for Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>56</b>	<b>Administrative and support and waste management and remediation services .....</b>	<b>2.7</b>	<b>2.6</b>	<b>2.1</b>	<b>1.6</b>	<b>0.9</b>	<b>0.8</b>	<b>0.8</b>
561	Administrative and support services .....	3.1	2.9	2.3	1.8	1.0	0.9	0.9
56111	Office administrative services .....	7.1	7.2	5.1	4.9	2.1	3.7	1.9
56121	Facilities support services .....	7.0	6.1	5.2	4.0	1.7	5.2	3.3
5613	Employment services .....	5.5	5.2	4.4	3.7	1.9	1.4	1.4
56131	Employment placement agencies .....	7.0	7.9	7.9	7.0	3.3	4.1	2.5
56132	Temporary help services .....	6.6	6.9	6.4	5.4	1.7	2.1	2.3
56133	Professional employer organizations .....	9.4	7.9	6.5	5.7	3.2	2.9	2.2
5614	Business support services .....	2.3	2.4	1.9	1.4	1.1	1.1	1.2
56141	Document preparation services .....	8.1	8.6	9.6	9.6	2.9	4.4	1.7
56142	Telephone call centers .....	3.9	5.0	4.3	2.9	3.5	1.5	3.0
561421	Telephone answering services .....	8.1	6.5	6.1	5.9	4.1	3.1	3.9
561422	Telemarketing bureaus .....	4.9	6.2	5.3	3.2	3.8	1.7	3.3
56143	Business service centers .....	3.9	3.5	3.0	3.0	1.6	2.1	0.9
561431	Private mail centers .....	11.1	9.1	8.5	7.5	4.6	4.0	2.5
561439	Other business service centers (including copy shops) .....	3.0	2.9	2.5	3.0	1.4	1.9	0.8
56144	Collection agencies .....	8.4	7.2	5.3	4.9	3.6	3.9	2.1
56145	Credit bureaus .....	2.3	1.7	2.1	1.6	1.4	1.5	0.9
56149	Other business support services .....	4.5	4.4	3.5	2.8	2.0	1.9	2.4
561491	Repossession services .....	26.4	29.8	23.1	19.0	4.2	6.3	5.6
561492	Court reporting and stenotype services .....	7.3	8.4	7.5	6.3	3.7	3.2	3.4
561499	All other business support services .....	6.7	6.1	4.6	3.3	2.7	2.0	3.1
5615	Travel arrangement and reservation services .....	3.3	2.9	2.4	2.4	1.2	1.6	1.0
56151	Travel agencies .....	4.9	4.3	3.9	3.5	2.0	2.7	2.4
56152	Tour operators .....	7.4	7.1	7.6	6.6	2.5	3.2	2.3
56159	Other travel arrangement and reservation services .....	4.4	3.7	3.3	2.9	2.0	2.3	1.4
561591	Convention and visitors bureaus .....	3.2	3.1	3.0	2.8	1.6	1.6	1.1
561599	All other travel arrangement and reservation services .....	5.0	4.2	3.8	3.3	2.1	2.6	1.6
5616	Investigation and security services .....	4.3	4.1	3.7	3.8	1.3	1.9	1.9
56161	Investigation, guard, and armored car services .....	4.8	4.1	3.4	3.9	1.3	2.0	2.5
561611	Investigation services .....	6.6	6.4	5.5	6.5	5.1	5.0	3.3
561612	Security guards and patrol services .....	5.5	4.7	4.3	4.7	1.8	2.1	3.0
561613	Armored car services .....	3.5	3.1	1.4	1.5	0.7	2.7	1.4
56162	Security systems services .....	8.5	8.3	7.3	7.4	3.4	4.0	2.0
561621	Security systems services (except locksmiths) .....	9.6	9.6	8.2	8.3	4.4	4.4	2.2
561622	Locksmiths .....	6.9	8.1	6.6	7.8	3.5	4.2	4.3
5617	Services to buildings and dwellings .....	4.9	4.0	2.8	2.1	2.3	1.8	1.7
56171	Exterminating and pest control services .....	3.4	3.4	3.6	3.2	1.9	2.0	1.6
56172	Janitorial services .....	6.2	5.2	4.1	3.5	2.7	2.9	2.0
56173	Landscaping services .....	6.7	4.9	3.5	3.3	3.9	2.9	2.7
56174	Carpet and upholstery cleaning services .....	8.6	6.3	5.4	4.4	4.5	4.9	3.7
56179	Other services to buildings and dwellings .....	12.0	10.4	6.3	5.6	4.4	6.5	4.8
5619	Other support services .....	8.0	9.7	9.1	7.5	3.8	2.3	4.4
56191	Packaging and labeling services .....	15.0	14.9	16.1	14.6	2.3	2.3	3.6
56192	Convention and trade show organizers .....	5.7	4.4	4.0	3.9	3.9	2.4	3.9
56199	All other support services .....	13.2	15.7	14.8	11.2	5.8	4.7	6.9
562	Waste management and remediation services .....	1.4	1.6	1.5	1.4	0.9	1.3	1.0
5621	Waste collection .....	2.0	2.2	2.0	1.7	1.5	2.0	1.4
562111	Solid waste collection .....	2.3	2.5	2.2	1.9	1.6	2.1	1.5
562112	Hazardous waste collection .....	3.1	S	2.9	2.3	S	S	1.2

See footnotes at end of table.

**Table A-7.12. Administrative and Support and Waste Management and Remediation Services (NAICS 56) - Estimated Coefficients of Variation for Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**—Con.

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
562119	Other waste collection .....	15.0	12.6	14.6	14.3	5.7	5.4	2.3
5622	Waste treatment and disposal .....	2.3	2.0	1.8	1.6	1.2	1.4	1.1
562211	Hazardous waste treatment and disposal .....	3.0	3.0	1.9	1.6	1.3	2.0	1.6
562212	Solid waste landfill .....	3.5	3.2	2.8	2.3	1.2	1.9	1.6
562213	Solid waste combustors and incinerators .....	7.0	5.5	5.8	3.4	1.0	0.6	7.4
562219	Other nonhazardous waste treatment and disposal .....	10.5	15.4	6.3	3.9	12.0	8.7	6.2
5629	Remediation and other waste management services .....	6.9	5.7	5.9	6.4	2.1	2.7	1.1
56291	Remediation services .....	8.7	8.2	8.2	8.6	2.5	4.6	1.5
56292	Materials recovery facilities .....	11.8	6.5	5.4	6.1	6.4	3.7	1.5
56299	All other waste management services .....	9.5	8.7	7.1	7.4	8.9	5.3	2.4
562991	Septic tank and related services .....	14.7	13.8	11.8	12.0	4.0	5.8	4.1
562998	All other miscellaneous waste management services .....	14.8	9.6	11.7	11.5	56.1	7.0	4.1

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at [www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html).



**Table A-7.13. Administrative and Support and Waste Management and Remediation Services (NAICS 56) - Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>ADMINISTRATIVE AND SUPPORT SERVICES (NAICS 561)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>3.1</b>	<b>2.9</b>	<b>2.3</b>	<b>1.8</b>	<b>1.0</b>	<b>0.9</b>	<b>0.9</b>
Personnel costs.....	3.3	3.2	2.5	2.2	0.9	1.0	0.7
Gross annual payroll.....	3.3	3.2	2.8	2.4	0.9	0.9	0.7
Employer's cost for fringe benefits.....	3.6	3.6	2.9	3.0	2.2	2.5	1.6
Health insurance.....	4.2	NA	NA	NA	NA	NA	NA
Pension plans.....	6.3	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	9.4	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	4.7	NA	NA	NA	NA	NA	NA
Other.....	3.4	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	7.9	8.6	8.5	8.6	3.2	11.2	2.3
Expensed materials, parts and supplies (not for resale).....	5.3	3.9	3.6	3.6	3.8	2.5	2.7
Expensed equipment.....	8.9	8.3	8.7	7.8	6.7	7.4	5.4
Expensed purchase of other materials, parts, and supplies.....	5.2	3.8	3.5	3.6	4.0	2.4	2.8
Expensed purchased services.....	2.7	2.7	2.1	2.3	1.5	1.8	1.1
Expensed purchases of software.....	5.0	7.5	3.7	3.9	3.9	7.8	4.0
Purchased electricity and fuels (except motor fuels).....	8.2	9.7	11.0	10.2	5.2	9.7	1.7
Purchased electricity.....	4.4	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	16.3	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	3.0	2.5	1.7	2.3	2.1	1.2	1.2
Lease and rental payments for machinery, equipment, and other tangible items.....	6.0	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	2.8	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	5.0	5.0	3.6	4.1	4.5	4.0	2.2
Purchased repairs and maintenance to machinery and equipment.....	6.1	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	6.1	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	3.1	2.5	2.7	3.0	1.9	1.8	1.5
Other operating expenses.....	3.3	3.6	3.3	2.7	1.8	1.9	2.1
Depreciation and amortization charges.....	3.5	4.0	3.9	4.0	1.5	2.9	3.6
Governmental taxes and license fees.....	4.0	3.3	5.0	5.1	3.7	4.5	2.8
All other operating expenses.....	3.6	3.9	3.5	2.9	2.0	2.0	2.3
Data processing and other purchased computer services.....	5.5	NA	NA	NA	NA	NA	NA
Purchased communication services.....	3.5	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	5.5	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	5.7	NA	NA	NA	NA	NA	NA
All other operating expenses.....	3.8	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-7.13. Administrative and Support and Waste Management and Remediation Services (NAICS 56) - Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007 —Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>WASTE MANAGEMENT AND REMEDIATION SERVICES (NAICS 562)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>1.4</b>	<b>1.6</b>	<b>1.5</b>	<b>1.4</b>	<b>0.9</b>	<b>1.3</b>	<b>1.0</b>
Personnel costs.....	2.6	2.3	2.2	2.3	1.0	1.0	0.9
Gross annual payroll.....	2.6	2.2	2.1	2.2	1.1	1.0	1.0
Employer's cost for fringe benefits.....	3.6	2.8	2.9	2.6	2.4	2.1	1.2
Health insurance.....	3.5	NA	NA	NA	NA	NA	NA
Pension plans.....	4.9	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	11.6	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	5.0	NA	NA	NA	NA	NA	NA
Other.....	4.7	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	9.1	10.5	10.0	9.4	2.5	2.5	1.2
Expensed materials, parts and supplies (not for resale).....	3.8	4.6	4.9	4.1	4.0	4.4	1.7
Expensed equipment.....	13.2	10.7	10.3	10.3	6.7	8.6	3.1
Expensed purchase of other materials, parts, and supplies.....	4.1	5.0	5.5	4.7	4.2	4.8	1.7
Expensed purchased services.....	3.0	2.7	2.2	2.3	3.0	2.5	0.9
Expensed purchases of software.....	13.9	9.2	8.7	6.5	13.5	8.3	4.9
Purchased electricity and fuels (except motor fuels).....	7.5	6.4	5.6	5.3	10.8	4.2	1.3
Purchased electricity.....	3.5	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	14.1	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	6.1	6.4	4.6	5.0	4.5	7.0	2.1
Lease and rental payments for machinery, equipment, and other tangible items.....	6.5	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	8.4	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	2.7	3.1	3.0	3.0	3.2	2.8	1.0
Purchased repairs and maintenance to machinery and equipment.....	2.6	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	5.5	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	5.6	6.7	5.7	3.7	3.2	2.3	2.5
Other operating expenses.....	1.6	2.0	1.6	1.4	1.0	1.9	1.1
Depreciation and amortization charges.....	2.1	2.3	2.3	1.7	1.0	1.6	1.2
Governmental taxes and license fees.....	3.1	3.1	6.6	2.2	2.3	5.3	6.6
All other operating expenses.....	1.8	2.1	1.8	1.6	1.2	2.3	1.0
Data processing and other purchased computer services.....	22.4	NA	NA	NA	NA	NA	NA
Purchased communication services.....	5.1	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	20.8	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	5.1	NA	NA	NA	NA	NA	NA
All other operating expenses.....	1.8	NA	NA	NA	NA	NA	NA

NA Not available.

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-8.1. Health Care and Social Assistance (NAICS 62)–Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>62</b>	<b>Health care and social assistance .....</b>	<b>0.8</b>	<b>0.6</b>	<b>0.5</b>	<b>0.4</b>	<b>0.3</b>	<b>0.3</b>	<b>0.2</b>
621	Ambulatory health care services .....	1.1	1.1	0.8	0.7	0.4	0.6	0.5
6211	Offices of physicians .....	2.0	1.9	1.3	1.1	0.6	0.9	1.0
6212	Offices of dentists .....	1.9	1.9	1.5	1.2	0.6	1.0	0.5
6213	Offices of other health practitioners .....	1.7	1.2	1.1	1.0	1.0	0.7	0.5
62131	Offices of chiropractors .....	3.0	2.7	2.6	2.2	1.0	1.0	0.9
62132	Offices of optometrists .....	3.3	3.0	2.0	1.4	1.4	2.4	2.0
62133	Offices of mental health practitioners (except physicians) .....	3.5	2.2	2.1	2.0	2.6	1.2	1.5
62134	Offices of physical, occupational and speech therapists, and audiologists .....	4.2	3.4	2.7	2.9	2.5	1.4	1.7
62139	Offices of all other health practitioners .....	3.0	2.0	2.2	1.5	1.2	1.1	1.1
621391	Offices of podiatrists .....	4.0	3.6	3.5	3.3	2.0	0.9	1.5
621399	Offices of all other miscellaneous health practitioners .....	4.3	4.2	4.9	4.2	1.8	2.0	1.7
6214	Outpatient care centers .....	1.6	1.4	1.2	1.3	0.8	0.4	1.0
62141	Family planning centers .....	6.5	3.3	2.4	3.1	6.8	1.6	1.7
62142	Outpatient mental health and substance abuse centers .....	3.6	3.2	3.0	2.8	1.1	1.6	0.7
62149	Other outpatient care centers .....	1.9	1.6	1.4	1.5	1.0	0.5	1.2
621491	HMO medical centers .....	11.0	10.5	10.8	10.7	0.2	0.6	0.4
621492	Kidney dialysis centers .....	2.9	2.8	1.7	2.1	0.9	2.1	1.8
621493	Freestanding ambulatory surgical and emergency centers .....	5.6	3.6	3.4	3.8	5.2	2.0	1.0
621498	All other outpatient care centers .....	3.0	2.5	2.1	1.3	1.1	0.9	2.0
6215	Medical and diagnostic laboratories .....	2.0	1.9	1.7	1.5	1.0	0.9	1.0
621511	Medical laboratories .....	3.0	2.1	1.5	1.4	1.4	0.9	0.8
621512	Diagnostic imaging centers .....	2.8	2.8	2.9	2.7	1.8	1.5	1.6
6216	Home health care services .....	3.4	3.1	3.1	3.1	1.2	1.7	1.2
6219	Other ambulatory care services .....	4.2	4.2	3.9	3.6	0.9	1.5	0.9
62191	Ambulance services .....	3.8	4.2	5.1	4.7	1.5	2.6	1.6
62199	All other ambulatory health care services .....	6.0	6.1	5.6	5.4	1.3	1.5	0.7
622	Hospitals .....	1.4	1.2	0.8	0.8	0.6	0.7	0.3
6221	General medical and surgical hospitals .....	1.4	1.3	0.9	0.8	0.7	0.8	0.3
6222	Psychiatric and substance abuse hospitals .....	4.6	4.6	2.1	1.9	1.2	4.0	0.8
6223	Specialty (except psychiatric and substance abuse) hospitals .....	2.9	2.1	1.5	1.5	2.2	1.1	0.7

See footnotes at end of table.

**Table A-8.1. Health Care and Social Assistance (NAICS 62)—Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
623	Nursing and residential care facilities .....	2.0	1.7	1.1	0.9	0.8	0.9	0.6
6231	Nursing care facilities .....	3.0	2.5	1.7	1.4	1.2	1.4	1.0
6232	Residential mental retardation, mental health and substance abuse facilities .....	2.2	1.7	1.9	1.4	1.3	1.2	1.1
62321	Residential mental retardation facilities .....	2.8	2.3	2.2	1.8	1.8	1.3	1.4
62322	Residential mental health and substance abuse facilities .....	3.1	2.9	2.3	2.3	0.8	2.4	1.0
6233	Community care facilities for the elderly .....	2.3	2.4	1.7	1.6	1.4	1.3	1.0
623311	Continuing care retirement communities .....	3.6	4.0	2.5	1.8	1.6	1.8	1.3
623312	Homes for the elderly .....	2.7	2.8	2.8	2.7	2.6	1.5	1.9
6239	Other residential care facilities .....	3.0	3.0	2.7	2.9	1.1	2.4	1.3
624	Social assistance .....	1.7	1.7	1.4	1.4	0.6	0.8	0.5
6241	Individual and family services .....	2.0	2.3	1.9	2.1	0.7	1.0	0.7
62411	Child and youth services .....	3.6	3.4	2.5	2.3	1.5	2.2	1.1
62412	Services for the elderly and persons with disabilities .....	2.9	2.7	1.9	1.3	0.8	1.4	1.4
62419	Other individual and family services .....	5.1	5.1	4.7	4.5	1.7	1.8	1.2
6242	Community food and housing, and emergency and other relief services .....	2.2	2.1	2.1	1.6	0.7	1.1	1.1
62421	Community food services .....	3.2	3.9	3.5	3.2	1.9	2.2	1.6
62422	Community housing services .....	4.5	4.5	4.6	3.5	1.9	2.0	1.8
62423	Emergency and other relief services .....	2.3	2.7	2.8	2.0	0.7	1.1	1.8
6243	Vocational rehabilitation services .....	3.9	4.1	4.2	3.4	0.9	2.6	1.9
6244	Child day care services .....	5.3	4.6	3.5	3.2	1.6	1.8	1.2

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-8.2. Health Care and Social Assistance (NAICS 62)–Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Taxable Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>62</b>	<b>Health care and social assistance .....</b>	<b>1.0</b>	<b>1.0</b>	<b>0.7</b>	<b>0.7</b>	<b>0.3</b>	<b>0.5</b>	<b>0.4</b>
621	Ambulatory health care services .....	1.2	1.2	0.8	0.8	0.4	0.7	0.6
6211	Offices of physicians .....	2.0	1.9	1.3	1.1	0.6	0.9	1.0
6212	Offices of dentists .....	1.9	1.9	1.5	1.2	0.6	1.0	0.5
6213	Offices of other health practitioners .....	1.7	1.2	1.1	1.0	1.0	0.7	0.5
62131	Offices of chiropractors .....	3.0	2.7	2.6	2.2	1.0	1.0	0.9
62132	Offices of optometrists .....	3.3	3.0	2.0	1.4	1.4	2.4	2.0
62133	Offices of mental health practitioners (except physicians) .....	3.5	2.2	2.1	2.0	2.6	1.2	1.5
62134	Offices of physical, occupational and speech therapists, and audiologists .....	4.2	3.4	2.7	2.9	2.5	1.4	1.7
62139	Offices of all other health practitioners .....	3.0	2.0	2.2	1.5	1.2	1.1	1.1
621391	Offices of podiatrists .....	4.0	3.6	3.5	3.3	2.0	0.9	1.5
621399	Offices of all other miscellaneous health practitioners .....	4.3	4.2	4.9	4.2	1.8	2.0	1.7
6214	Outpatient care centers .....	2.8	2.4	2.3	2.4	1.7	0.8	1.6
62141	Family planning centers .....	15.5	5.3	5.3	5.5	25.2	1.4	2.0
62142	Outpatient mental health and substance abuse centers .....	6.9	6.4	6.6	5.2	3.2	2.1	2.5
62149	Other outpatient care centers .....	3.1	2.5	2.4	2.4	1.8	0.8	1.8
621491	HMO medical centers .....	S	S	S	S	S	S	S
621492	Kidney dialysis centers .....	3.1	3.0	1.9	2.3	1.0	2.3	2.0
621493	Freestanding ambulatory surgical and emergency centers .....	6.3	4.0	3.9	4.4	6.0	2.3	1.3
621498	All other outpatient care centers .....	6.9	5.7	5.5	2.3	2.7	1.4	5.2
6215	Medical and diagnostic laboratories .....	2.0	1.9	1.7	1.5	1.0	0.9	1.0
621511	Medical laboratories .....	3.0	2.1	1.5	1.4	1.4	0.9	0.8
621512	Diagnostic imaging centers .....	2.8	2.8	2.9	2.7	1.8	1.5	1.6
6216	Home health care services .....	4.8	4.2	4.3	4.6	1.5	2.4	1.6
6219	Other ambulatory care services .....	4.5	4.4	4.8	4.2	1.3	2.4	1.6
62191	Ambulance services .....	4.8	5.3	6.2	5.7	1.8	3.2	2.0
62199	All other ambulatory health care services .....	5.8	5.7	5.8	5.4	2.6	2.6	1.7
622	Hospitals .....	1.3	1.1	1.5	1.4	0.7	0.6	0.6
6221	General medical and surgical hospitals .....	1.3	1.1	1.8	1.7	0.4	0.7	0.7
6222	Psychiatric and substance abuse hospitals .....	2.5	2.7	2.4	2.7	1.5	2.0	1.2
6223	Specialty (except psychiatric and substance abuse) hospitals .....	6.4	5.0	4.0	3.7	4.7	2.0	1.7

See footnotes at end of table.

**Table A-8.2. Health Care and Social Assistance (NAICS 62)—Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Taxable Employer Firms: 2004 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
623	Nursing and residential care facilities .....	3.0	2.5	1.7	1.4	1.0	1.4	1.0
6231	Nursing care facilities .....	3.8	3.2	2.3	2.0	1.4	1.7	1.2
6232	Residential mental retardation, mental health and substance abuse facilities .....	5.9	4.9	4.5	4.6	3.0	3.0	1.2
62321	Residential mental retardation facilities .....	7.9	6.7	6.0	6.2	4.3	4.6	1.4
62322	Residential mental health and substance abuse facilities .....	5.1	4.8	5.3	5.4	1.7	1.6	2.3
6233	Community care facilities for the elderly .....	3.0	3.6	2.9	2.6	2.6	2.0	1.6
623311	Continuing care retirement communities .....	5.5	8.0	5.2	4.3	3.2	3.0	1.6
623312	Homes for the elderly .....	2.9	3.6	3.6	3.5	3.1	1.8	2.2
6239	Other residential care facilities .....	6.3	4.5	4.7	4.3	2.8	2.6	2.0
624	Social assistance .....	5.2	4.5	3.4	3.4	1.8	2.2	1.7
6241	Individual and family services .....	5.4	5.7	4.7	4.2	2.0	3.2	2.4
62411	Child and youth services .....	8.1	6.8	5.7	4.9	2.5	5.6	2.4
62412	Services for the elderly and persons with disabilities .....	7.9	7.3	6.4	5.0	2.2	2.8	4.2
62419	Other individual and family services .....	7.9	8.7	6.9	6.7	3.5	8.1	4.4
6242	Community food and housing, and emergency and other relief services .....	S	S	S	S	S	S	S
62421	Community food services .....	21.7	24.7	20.7	21.2	2.5	16.1	2.9
62422	Community housing services .....	25.8	27.0	12.7	11.4	6.5	20.1	7.2
62423	Emergency and other relief services .....	S	S	S	S	S	S	S
6243	Vocational rehabilitation services .....	6.2	5.6	4.9	4.0	1.5	1.6	1.7
6244	Child day care services .....	7.7	7.1	5.0	5.0	2.2	3.1	2.0

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at [www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html).

**Table A-8.3. Health Care and Social Assistance (NAICS 62)–Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Tax-Exempt Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>62</b>	<b>Health care and social assistance .....</b>	<b>1.1</b>	<b>0.9</b>	<b>0.6</b>	<b>0.5</b>	<b>0.5</b>	<b>0.6</b>	<b>0.2</b>
621	Ambulatory health care services .....	1.8	1.8	1.6	1.2	0.4	0.7	1.0
6214	Outpatient care centers .....	2.2	2.0	1.8	1.1	0.6	0.6	1.2
62141	Family planning centers .....	4.8	4.5	3.3	3.7	1.3	2.4	2.6
62142	Outpatient mental health and substance abuse centers .....	4.2	3.6	3.2	3.1	1.1	1.9	0.6
62149	Other outpatient care centers .....	2.7	2.5	2.2	1.3	0.6	0.9	1.7
621491	HMO medical centers .....	0.6	0.5	0.3	0.1	0.2	0.2	0.3
621492	Kidney dialysis centers .....	1.5	0.5	0.5	0.3	1.5	0.3	0.3
621493	Freestanding ambulatory surgical and emergency centers .....	2.4	2.2	1.8	1.8	0.4	1.0	0.4
621498	All other outpatient care centers .....	3.6	3.3	2.8	1.7	0.8	1.2	2.2
6216	Home health care services .....	3.4	3.3	3.6	3.3	1.1	1.1	1.8
6219	Other ambulatory care services .....	8.5	8.4	7.4	7.1	0.4	1.2	0.6
62191	Ambulance services .....	2.8	2.8	2.5	2.3	1.0	2.0	1.0
62199	All other ambulatory health care services .....	10.6	10.4	9.2	8.8	0.5	1.4	0.7
622	Hospitals .....	1.6	1.4	0.9	0.9	0.7	0.9	0.3
6221	General medical and surgical hospitals .....	1.6	1.4	1.0	0.9	0.8	0.9	0.3
6222	Psychiatric and substance abuse hospitals .....	5.9	5.7	2.5	2.1	1.5	4.8	0.9
6223	Specialty (except psychiatric and substance abuse) hospitals .....	1.1	0.9	0.6	0.4	0.6	0.7	0.4
623	Nursing and residential care facilities .....	1.6	1.4	1.1	0.7	1.2	0.8	0.7
6231	Nursing care facilities .....	3.5	2.6	1.9	1.6	2.4	1.3	1.0
6232	Residential mental retardation, mental health and substance abuse facilities .....	2.1	1.9	1.8	1.4	1.2	1.4	1.2
62321	Residential mental retardation facilities .....	2.3	2.4	2.2	1.6	1.4	1.6	1.6
62322	Residential mental health and substance abuse facilities .....	4.2	4.0	2.8	2.7	1.1	3.3	1.3
6233	Community care facilities for the elderly .....	3.5	3.9	2.1	1.6	0.9	2.1	1.4
623311	Continuing care retirement communities .....	4.5	4.9	2.6	1.7	0.9	2.5	1.7
623312	Homes for the elderly .....	5.2	3.5	3.3	3.0	3.3	1.9	1.8
6239	Other residential care facilities .....	3.2	3.3	2.9	3.1	1.1	2.8	1.4

See footnotes at end of table.

**Table A-8.3. Health Care and Social Assistance (NAICS 62)—Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Tax-Exempt Employer Firms: 2004 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
624	Social assistance .....	1.7	1.8	1.4	1.4	0.4	1.0	0.7
6241	Individual and family services .....	2.6	2.8	2.3	2.3	0.7	1.1	0.7
62411	Child and youth services .....	3.8	3.8	2.7	2.5	1.7	2.1	1.2
62412	Services for the elderly and persons with disabilities .....	3.5	3.1	2.2	1.3	0.9	1.7	1.7
62419	Other individual and family services .....	5.6	5.6	5.2	5.0	1.7	1.7	1.2
6242	Community food and housing, and emergency and other relief services .....	2.2	2.2	2.1	1.6	0.7	1.1	1.1
62421	Community food services .....	3.3	3.9	3.5	3.2	2.0	2.2	1.6
62422	Community housing services .....	4.6	4.6	4.6	3.6	1.9	2.0	1.8
62423	Emergency and other relief services .....	2.3	2.7	2.8	2.0	0.6	1.1	1.8
6243	Vocational rehabilitation services .....	5.0	5.2	4.9	4.0	1.1	3.5	2.2
6244	Child day care services .....	3.9	3.6	3.2	2.4	1.2	2.8	2.3

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.



**Table A-8.4. Health Care and Social Assistance (NAICS 62)–Estimated Coefficients of Variation for Expenses and Standard Error of Percent Change for Tax-Exempt Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>62</b>	<b>Health care and social assistance .....</b>	<b>1.2</b>	<b>1.0</b>	<b>0.6</b>	<b>0.6</b>	<b>0.5</b>	<b>0.6</b>	<b>0.1</b>
621	Ambulatory health care services .....	1.6	1.5	1.4	1.5	0.3	0.6	0.7
6214	Outpatient care centers .....	1.3	1.3	1.3	1.7	0.3	0.6	1.2
62141	Family planning centers .....	4.7	4.3	3.2	3.8	1.4	2.5	2.9
62142	Outpatient mental health and substance abuse centers .....	3.5	3.6	3.4	2.9	0.7	2.0	1.6
62149	Other outpatient care centers .....	1.7	1.7	1.5	2.2	0.3	0.8	1.6
621491	HMO medical centers .....	0.6	0.3	0.3	0.1	0.3	0.1	0.3
621492	Kidney dialysis centers .....	1.4	0.7	0.6	0.7	1.1	0.2	0.4
621493	Freestanding ambulatory surgical and emergency centers .....	2.4	2.3	1.8	1.9	0.4	1.0	0.3
621498	All other outpatient care centers .....	2.3	2.2	2.0	2.9	0.4	1.0	2.0
6216	Home health care services .....	3.5	3.2	3.1	3.2	0.9	1.7	1.0
6219	Other ambulatory care services .....	9.0	8.7	8.0	7.8	0.5	1.3	0.4
62191	Ambulance services .....	2.9	2.9	2.5	2.4	1.0	2.3	1.0
62199	All other ambulatory health care services .....	11.2	10.8	9.8	9.6	0.7	1.6	0.4
622	Hospitals .....	1.7	1.5	1.0	1.0	0.6	0.9	0.2
6221	General medical and surgical hospitals .....	1.7	1.5	1.0	1.0	0.7	0.9	0.2
6222	Psychiatric and substance abuse hospitals .....	5.8	5.6	2.5	2.5	1.5	4.0	0.8
6223	Specialty (except psychiatric and substance abuse) hospitals .....	1.2	0.9	0.6	0.5	0.5	0.5	0.3
623	Nursing and residential care facilities .....	1.4	1.4	1.1	0.7	1.2	0.7	0.7
6231	Nursing care facilities .....	3.4	3.0	2.0	1.7	2.3	1.4	0.9
6232	Residential mental retardation, mental health and substance abuse facilities .....	2.2	1.9	2.0	1.6	1.3	1.7	1.2
62321	Residential mental retardation facilities .....	2.4	2.2	2.4	1.8	1.5	1.6	1.7
62322	Residential mental health and substance abuse facilities .....	4.6	4.1	3.1	2.8	1.6	3.3	1.4
6233	Community care facilities for the elderly .....	3.3	3.8	2.8	1.8	1.0	1.6	2.1
623311	Continuing care retirement communities .....	4.3	4.9	3.5	2.0	1.2	1.9	2.5
623312	Homes for the elderly .....	4.4	3.3	3.2	3.1	3.0	2.7	1.5
6239	Other residential care facilities .....	3.0	2.8	3.0	3.4	1.1	2.0	1.2

See footnotes at end of table.

**Table A-8.4. Health Care and Social Assistance (NAICS 62)—Estimated Coefficients of Variation for Expenses and Standard Error of Percent Change for Tax-Exempt Employer Firms: 2004 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
624	Social assistance .....	1.6	1.8	1.4	1.5	0.4	1.0	0.6
6241	Individual and family services .....	2.7	2.7	2.2	2.4	0.6	1.0	1.0
62411	Child and youth services .....	3.4	3.5	2.8	2.8	1.5	1.8	1.4
62412	Services for the elderly and persons with disabilities .....	4.2	3.7	2.7	1.8	1.3	1.9	2.1
62419	Other individual and family services .....	5.7	5.6	5.2	4.6	1.2	1.6	1.4
6242	Community food and housing, and emergency and other relief services .....	2.5	2.3	2.1	1.3	1.1	1.0	1.5
62421	Community food services .....	3.9	4.4	4.6	4.1	2.1	2.4	3.2
62422	Community housing services .....	5.3	4.4	4.4	3.2	1.4	1.6	1.7
62423	Emergency and other relief services .....	2.0	2.4	2.5	2.9	0.8	1.2	1.8
6243	Vocational rehabilitation services .....	5.3	5.8	5.1	5.0	1.6	2.8	1.3
6244	Child day care services .....	3.5	3.8	3.2	2.0	1.4	2.9	1.8

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-8.5. Selected Health Care Services (NAICS 622 and 623)—Estimated Coefficients of Variation for Expenses and Standard Error of Percent Change for Taxable Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
622	Hospitals .....	1.2	1.1	1.5	1.5	0.7	0.6	0.5
6221	General medical and surgical hospitals .....	1.3	1.3	1.8	1.7	0.4	0.7	0.6
6222	Psychiatric and substance abuse hospitals .....	2.8	2.7	2.5	2.9	2.3	2.0	1.2
6223	Specialty (except psychiatric and substance abuse) hospitals .....	6.6	5.2	4.0	3.9	4.6	2.2	1.0
623	Nursing and residential care facilities .....	3.0	2.6	1.7	1.6	1.0	1.5	0.9
6231	Nursing care facilities .....	3.6	3.2	2.3	2.1	1.4	1.8	1.1
6232	Residential mental retardation, mental health and substance abuse facilities .....	6.1	4.7	4.8	4.9	3.8	4.1	0.7
62321	Residential mental retardation facilities .....	8.4	6.7	6.3	6.3	5.1	6.3	1.0
62322	Residential mental health and substance abuse facilities .....	6.0	5.1	5.4	5.6	2.3	2.6	2.2
6233	Community care facilities for the elderly .....	3.6	4.0	2.7	2.7	2.7	2.2	1.6
623311	Continuing care retirement communities .....	6.3	9.2	5.5	4.6	3.9	3.6	1.7
623312	Homes for the elderly .....	4.0	3.6	3.4	3.7	3.5	2.1	2.1
6239	Other residential care facilities .....	6.0	5.0	4.5	4.5	2.7	3.1	1.9

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-8.6. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Coefficients of Variation for Revenue for Employer Firms by Source: 2006 and 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

Kind of business	Coefficient of variation		Standard error
	2007	2006	2007/2006
<b>OFFICES OF PHYSICIANS (NAICS 6211)</b>			
<b>Patient Care Revenue</b>			
Medicare .....	6.8	5.4	1.4
Medicaid .....	4.4	4.3	3.5
Other government (Veterans, NIH, Indian Affairs, etc.) .....	7.3	5.5	4.2
Worker's compensation .....	8.9	9.0	4.6
Private insurance .....	1.9	2.0	1.1
Private health insurance .....	1.9	2.0	1.0
Property/Casualty and auto insurance .....	14.1	11.5	9.5
Patient (out-of-pocket) .....	4.7	4.3	1.9
All other patient care sources not elsewhere classified .....	5.6	5.4	5.7
<b>Non-Patient Care Revenue</b>			
All other sources .....	S	6.6	S
<b>OFFICES OF DENTISTS (NAICS 6212)</b>			
<b>Patient Care Revenue</b>			
Medicare .....	27.1	23.5	7.0
Medicaid .....	12.3	12.6	5.4
Other government (Veterans, NIH, Indian Affairs, etc.) .....	20.9	18.9	8.8
Worker's compensation .....	17.9	13.7	8.9
Private insurance .....	2.5	2.5	1.2
Private health insurance .....	2.5	2.5	1.2
Property/Casualty and auto insurance .....	S	S	S
Patient (out-of-pocket) .....	2.5	2.2	1.4
All other patient care sources not elsewhere classified .....	12.8	12.4	6.7
<b>Non-Patient Care Revenue</b>			
All other sources .....	S	24.9	S
<b>OFFICES OF OTHER HEALTH PRACTITIONERS (NAICS 6213)</b>			
<b>Patient Care Revenue</b>			
Medicare .....	3.4	3.2	1.4
Medicaid .....	4.0	3.7	2.5
Other government (Veterans, NIH, Indian Affairs, etc.) .....	12.1	8.9	4.1
Worker's compensation .....	6.7	7.7	3.7
Private insurance .....	2.0	1.3	1.3
Private health insurance .....	2.2	1.4	1.5
Property/Casualty and auto insurance .....	4.4	4.8	2.3
Patient (out-of-pocket) .....	1.5	1.6	1.7
All other patient care sources not elsewhere classified .....	8.0	6.8	3.9
<b>Non-Patient Care Revenue</b>			
All other sources .....	S	7.9	S

See footnotes at end of table.

**Table A-8.6. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Coefficients of Variation for Revenue for Employer Firms by Source: 2006 and 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

Kind of business	Coefficient of variation		Standard error
	2007	2006	2007/2006
<b>OFFICES OF CHIROPRACTORS (NAICS 62131)</b>			
<b>Patient Care Revenue</b>			
Medicare .....	5.5	5.0	1.7
Medicaid .....	14.1	13.2	8.5
Other government (Veterans, NIH, Indian Affairs, etc.) .....	S	S	S
Worker's compensation .....	4.3	5.3	3.4
Private insurance .....	3.4	3.0	1.2
Private health insurance .....	3.5	3.0	1.5
Property/Casualty and auto insurance .....	5.0	4.1	2.7
Patient (out-of-pocket) .....	3.3	2.7	2.1
All other patient care sources not elsewhere classified .....	14.1	8.5	12.0
<b>Non-Patient Care Revenue</b>			
All other sources .....	S	16.6	S
<b>OFFICES OF OPTOMETRISTS (NAICS 62132)</b>			
<b>Patient Care Revenue</b>			
Medicare .....	5.4	4.2	2.9
Medicaid .....	8.0	7.5	3.4
Other government (Veterans, NIH, Indian Affairs, etc.) .....	20.2	9.3	24.0
Worker's compensation .....	19.9	16.6	39.0
Private insurance .....	4.5	4.4	2.3
Private health insurance .....	4.5	4.4	2.3
Property/Casualty and auto insurance .....	S	S	S
Patient (out-of-pocket) .....	3.3	3.4	1.9
All other patient care sources not elsewhere classified .....	S	15.2	S
<b>Non-Patient Care Revenue</b>			
All other sources .....	S	8.7	S
<b>OFFICES OF MENTAL HEALTH PRACTITIONERS (EXCEPT PHYSICIANS) (NAICS 62133)</b>			
<b>Patient Care Revenue</b>			
Medicare .....	7.8	7.2	2.8
Medicaid .....	7.2	6.2	3.1
Other government (Veterans, NIH, Indian Affairs, etc.) .....	14.0	9.2	5.7
Worker's compensation .....	22.4	20.1	7.0
Private insurance .....	4.2	4.6	2.7
Private health insurance .....	4.6	5.0	2.8
Property/Casualty and auto insurance .....	26.2	25.1	7.1
Patient (out-of-pocket) .....	5.8	5.3	3.0
All other patient care sources not elsewhere classified .....	13.0	14.1	10.0
<b>Non-Patient Care Revenue</b>			
All other sources .....	S	6.7	S

See footnotes at end of table.

**Table A-8.6. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Coefficients of Variation for Revenue for Employer Firms by Source: 2006 and 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

Kind of business	Coefficient of variation		Standard error
	2007	2006	2007/2006
<b>OFFICES OF PHYSICAL, OCCUPATIONAL AND SPEECH THERAPISTS, AND AUDIOLOGISTS (NAICS 62134)</b>			
<b>Patient Care Revenue</b>			
Medicare .....	6.9	7.6	2.5
Medicaid .....	14.3	9.9	7.3
Other government (Veterans, NIH, Indian Affairs, etc.) .....	23.0	17.3	6.5
Worker's compensation .....	9.0	10.4	5.7
Private insurance .....	5.5	3.5	4.0
Private health insurance .....	5.9	3.6	4.3
Property/Casualty and auto insurance .....	15.9	15.8	7.5
Patient (out-of-pocket) .....	11.6	10.3	5.8
All other patient care sources not elsewhere classified .....	10.6	9.0	5.2
<b>Non-Patient Care Revenue</b>			
All other sources .....	S	18.0	S
<b>OFFICES OF PODIATRISTS (NAICS 621391)</b>			
<b>Patient Care Revenue</b>			
Medicare .....	4.6	4.5	2.7
Medicaid .....	10.9	8.8	5.5
Other government (Veterans, NIH, Indian Affairs, etc.) .....	9.3	8.9	11.6
Worker's compensation .....	8.5	5.3	9.0
Private insurance .....	4.5	3.8	2.3
Private health insurance .....	4.6	3.9	2.2
Property/Casualty and auto insurance .....	S	S	S
Patient (out-of-pocket) .....	6.6	6.3	4.5
All other patient care sources not elsewhere classified .....	20.8	19.9	11.0
<b>Non-Patient Care Revenue</b>			
All other sources .....	S	S	S
<b>OUTPATIENT CARE CENTERS (NAICS 6214)</b>			
<b>Patient Care Revenue</b>			
Medicare .....	3.9	2.7	1.6
Medicaid .....	2.9	2.8	1.1
Other government (Veterans, NIH, Indian Affairs, etc.) .....	4.5	3.4	2.8
Worker's compensation .....	S	3.4	S
Private insurance .....	2.3	1.7	2.1
Private health insurance .....	2.3	1.7	2.1
Property/Casualty and auto insurance .....	16.5	15.7	8.5
Patient (out-of-pocket) .....	3.3	3.6	2.5
All other patient care sources not elsewhere classified .....	4.1	3.8	1.6
<b>Non-Patient Care Revenue</b>			
All other sources .....	S	2.1	S

See footnotes at end of table.

**Table A-8.6. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Coefficients of Variation for Revenue for Employer Firms by Source: 2006 and 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

Kind of business	Coefficient of variation		Standard error
	2007	2006	2007/2006
<b>OUTPATIENT MENTAL HEALTH AND SUBSTANCE ABUSE CENTERS (NAICS 62142)</b>			
<b>Patient Care Revenue</b>			
Medicare .....	18.3	19.3	5.5
Medicaid .....	5.8	5.2	1.3
Other government (Veterans, NIH, Indian Affairs, etc.) .....	7.9	6.4	3.7
Worker's compensation .....	S	28.9	S
Private insurance .....	7.7	7.5	2.7
Private health insurance .....	7.9	7.7	2.7
Property/Casualty and auto insurance .....	S	S	S
Patient (out-of-pocket) .....	8.6	7.7	5.9
All other patient care sources not elsewhere classified .....	9.2	9.8	8.5
<b>Non-Patient Care Revenue</b>			
All other sources .....	S	8.1	S
<b>OTHER OUTPATIENT CARE CENTERS (NAICS 62149)</b>			
<b>Patient Care Revenue</b>			
Medicare .....	4.0	2.7	1.6
Medicaid .....	3.2	3.3	1.6
Other government (Veterans, NIH, Indian Affairs, etc.) .....	5.1	5.1	4.8
Worker's compensation .....	S	3.3	S
Private insurance .....	2.4	1.6	2.1
Private health insurance .....	2.5	1.6	2.1
Property/Casualty and auto insurance .....	17.4	16.5	8.9
Patient (out-of-pocket) .....	4.4	4.6	3.0
All other patient care sources not elsewhere classified .....	4.9	4.4	1.4
<b>Non-Patient Care Revenue</b>			
All other sources .....	S	S	S
<b>KIDNEY DIALYSIS CENTERS (NAICS 621492)</b>			
<b>Patient Care Revenue</b>			
Medicare .....	3.0	2.4	1.2
Medicaid .....	4.0	4.8	1.9
Other government (Veterans, NIH, Indian Affairs, etc.) .....	8.0	9.1	2.1
Worker's compensation .....	S	S	S
Private insurance .....	3.2	4.0	1.2
Private health insurance .....	3.2	4.0	1.2
Property/Casualty and auto insurance .....	4.7	S	S
Patient (out-of-pocket) .....	12.2	14.2	14.0
All other patient care sources not elsewhere classified .....	4.6	4.7	1.1
<b>Non-Patient Care Revenue</b>			
All other sources .....	S	5.6	S

See footnotes at end of table.

**Table A-8.6. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Coefficients of Variation for Revenue for Employer Firms by Source: 2006 and 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

Kind of business	Coefficient of variation		Standard error
	2007	2006	2007/2006
<b>FREESTANDING AMBULATORY SURGICAL AND EMERGENCY CENTERS (NAICS 621493)</b>			
<b>Patient Care Revenue</b>			
Medicare .....	7.0	4.2	7.8
Medicaid .....	6.8	8.3	4.5
Other government (Veterans, NIH, Indian Affairs, etc.) .....	7.0	5.5	7.3
Worker's compensation .....	9.2	4.5	9.1
Private insurance .....	5.8	3.0	6.5
Private health insurance .....	5.9	3.1	6.5
Property/Casualty and auto insurance .....	S	28.9	S
Patient (out-of-pocket) .....	9.5	7.3	7.1
All other patient care sources not elsewhere classified .....	14.4	12.3	27.0
<b>Non-Patient Care Revenue</b>			
All other sources .....	S	11.7	S
<b>ALL OTHER OUTPATIENT CARE CENTERS (NAICS 621498)</b>			
<b>Patient Care Revenue</b>			
Medicare .....	7.3	3.0	7.2
Medicaid .....	S	S	S
Other government (Veterans, NIH, Indian Affairs, etc.) .....	6.4	S	S
Worker's compensation .....	S	5.0	S
Private insurance .....	3.2	3.0	1.0
Private health insurance .....	3.2	3.0	1.0
Property/Casualty and auto insurance .....	17.9	12.6	9.7
Patient (out-of-pocket) .....	S	6.3	S
All other patient care sources not elsewhere classified .....	S	5.0	S
<b>Non-Patient Care Revenue</b>			
All other sources .....	S	S	S
<b>MEDICAL AND DIAGNOSTIC LABORATORIES (NAICS 6215)</b>			
<b>Patient Care Revenue</b>			
Health practitioners .....	6.7	5.8	2.9
Hospitals .....	3.1	3.0	1.8
Outpatient care facilities .....	11.8	15.2	8.7
All other health care providers .....	6.3	6.0	3.4
Medicare .....	2.9	2.5	1.6
Medicaid .....	4.5	2.6	3.5
Other government (Veterans, NIH, Indian Affairs, etc.) .....	16.5	16.9	7.3
Worker's compensation .....	13.2	11.1	9.3
Private insurance .....	2.1	2.1	1.0
Private health insurance .....	2.1	2.0	1.0
Property/Casualty and auto insurance .....	22.8	25.8	7.9
Patient (out-of-pocket) .....	3.9	3.3	3.1
<b>Non-Patient Care Revenue</b>			
All other sources .....	S	6.9	S

See footnotes at end of table.



**Table A-8.6. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Coefficients of Variation for Revenue for Employer Firms by Source: 2006 and 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

Kind of business	Coefficient of variation		Standard error
	2007	2006	2007/2006
<b>HOME HEALTH CARE SERVICES (NAICS 6216)</b>			
<b>Patient Care Revenue</b>			
Medicare .....	4.7	3.2	3.1
Medicaid .....	5.1	4.9	2.3
Other government (Veterans, NIH, Indian Affairs, etc.) .....	11.1	12.4	8.5
Worker's compensation .....	21.1	12.9	36.1
Private insurance .....	5.9	6.6	4.3
Private health insurance .....	5.5	6.3	4.4
Property/Casualty and auto insurance .....	S	23.7	S
Patient (out-of-pocket) .....	9.2	8.7	7.8
All other patient care sources not elsewhere classified .....	9.6	12.6	8.1
<b>Non-Patient Care Revenue</b>			
All other sources .....	S	15.8	S
<b>OTHER AMBULATORY CARE SERVICES (NAICS 6219)</b>			
<b>Patient Care Revenue</b>			
Medicare .....	4.5	4.9	1.9
Medicaid .....	S	S	S
Other government (Veterans, NIH, Indian Affairs, etc.) .....	12.0	12.7	4.8
Worker's compensation .....	10.6	10.9	2.0
Private insurance .....	5.2	5.1	1.5
Private health insurance .....	5.2	4.8	1.4
Property/Casualty and auto insurance .....	15.2	18.3	5.5
Patient (out-of-pocket) .....	17.9	15.6	2.7
All other patient care sources not elsewhere classified .....	2.9	3.1	1.7
<b>Non-Patient Care Revenue</b>			
All other sources .....	S	5.8	S
<b>HOSPITALS (NAICS 622)</b>			
<b>Patient Care Revenue</b>			
Medicare .....	2.1	2.1	0.8
Medicaid .....	3.2	3.3	1.2
Other government (Veterans, NIH, Indian Affairs, etc.) .....	6.3	6.3	2.3
Worker's compensation .....	4.9	3.5	2.0
Private insurance .....	1.6	1.4	0.8
Private health insurance .....	1.5	1.4	0.7
Property/Casualty and auto insurance .....	20.5	11.1	42.3
Patient (out-of-pocket) .....	3.1	2.2	2.7
All other patient care sources not elsewhere classified .....	5.7	6.2	4.2
<b>Non-Patient Care Revenue</b>			
All other sources .....	S	5.0	S

See footnotes at end of table.

**Table A-8.6. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Coefficients of Variation for Revenue for Employer Firms by Source: 2006 and 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

Kind of business	Coefficient of variation		Standard error
	2007	2006	2007/2006
<b>NURSING AND RESIDENTIAL CARE FACILITIES (NAICS 623)</b>			
<b>Patient Care Revenue</b>			
Medicare .....	3.2	3.1	1.6
Medicaid .....	3.0	2.5	1.1
Other government (Veterans, NIH, Indian Affairs, etc.) .....	5.2	4.3	2.6
Worker's compensation .....	S	S	S
Private insurance .....	3.7	3.5	2.7
Private health insurance .....	3.2	3.0	2.9
Property/Casualty and auto insurance .....	S	S	S
Patient (out-of-pocket) .....	2.4	2.0	1.0
Payment from patients and their families .....	2.6	2.1	1.1
Patients' assigned Social Security benefits .....	5.8	5.7	6.0
All other patient care sources not elsewhere classified .....	4.3	5.5	6.5
<b>Non-Patient Care Revenue</b>			
All other sources .....	S	4.8	S
<b>NURSING CARE FACILITIES (NAICS 6231)</b>			
<b>Patient Care Revenue</b>			
Medicare .....	3.4	3.3	1.7
Medicaid .....	3.6	2.9	1.4
Other government (Veterans, NIH, Indian Affairs, etc.) .....	12.9	10.4	19.3
Worker's compensation .....	S	S	S
Private insurance .....	4.2	3.8	3.0
Private health insurance .....	3.9	3.6	3.3
Property/Casualty and auto insurance .....	S	S	S
Patient (out-of-pocket) .....	4.4	4.1	2.6
Payment from patients and their families .....	4.4	4.3	2.4
Patients' assigned Social Security benefits .....	9.6	9.1	9.7
All other patient care sources not elsewhere classified .....	9.3	10.3	7.6
<b>Non-Patient Care Revenue</b>			
All other sources .....	S	7.4	S
<b>RESIDENTIAL MENTAL RETARDATION, MENTAL HEALTH AND SUBSTANCE ABUSE FACILITIES (NAICS 6232)</b>			
<b>Patient Care Revenue</b>			
Medicare .....	17.5	16.9	9.9
Medicaid .....	3.5	3.8	2.3
Other government (Veterans, NIH, Indian Affairs, etc.) .....	6.3	5.9	3.5
Worker's compensation .....	12.0	6.6	5.9
Private insurance .....	6.5	7.1	1.6
Private health insurance .....	6.8	7.5	1.7
Property/Casualty and auto insurance .....	13.2	16.8	2.7
Patient (out-of-pocket) .....	7.6	10.9	4.8
Payment from patients and their families .....	10.1	14.4	8.3
Patients' assigned Social Security benefits .....	9.4	10.0	5.5
All other patient care sources not elsewhere classified .....	7.4	6.6	10.8
<b>Non-Patient Care Revenue</b>			
All other sources .....	S	11.0	S

See footnotes at end of table.

**Table A-8.6. Selected Health Care Services (NAICS 621, 622, and 623)—Estimated Coefficients of Variation for Revenue for Employer Firms by Source: 2006 and 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

Kind of business	Coefficient of variation		Standard error
	2007	2006	2007/2006
<b>COMMUNITY CARE FACILITIES FOR THE ELDERLY (NAICS 6233)</b>			
<b>Patient Care Revenue</b>			
Medicare .....	7.8	5.8	4.3
Medicaid .....	5.4	4.5	2.9
Other government (Veterans, NIH, Indian Affairs, etc.) .....	18.5	23.8	22.7
Worker's compensation .....	S	S	S
Private insurance .....	9.0	9.4	8.4
Private health insurance .....	9.1	9.4	8.4
Property/Casualty and auto insurance .....	S	S	S
Patient (out-of-pocket) .....	2.9	3.0	2.0
Payment from patients and their families .....	2.9	2.8	1.9
Patients' assigned Social Security benefits .....	16.8	15.1	28.9
All other patient care sources not elsewhere classified .....	12.4	16.7	21.4
<b>Non-Patient Care Revenue</b>			
All other sources .....	S	3.5	S

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-8.7. Health Care and Social Assistance (NAICS 62)-Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>AMBULATORY HEALTH CARE SERVICES (NAICS 621)</b>							
<b>Operating Expenses</b>							
Total .....	1.0	1.0	0.7	0.7	0.3	0.5	0.3
Personnel costs.....	1.1	1.1	0.7	0.7	0.4	0.7	0.3
Gross annual payroll.....	1.1	1.1	0.8	0.8	0.4	0.7	0.3
Employer's cost for fringe benefits.....	1.1	1.2	1.0	1.4	1.1	0.9	0.9
Health insurance.....	1.1	NA	NA	NA	NA	NA	NA
Pension plans.....	1.6	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	2.5	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	2.0	NA	NA	NA	NA	NA	NA
Other.....	1.4	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	5.3	4.9	5.3	5.1	3.0	3.3	2.1
Expensed materials, parts and supplies (not for resale).....	1.5	1.2	1.1	1.3	0.9	0.9	0.5
Medical supplies.....	1.9	1.5	1.4	1.4	1.3	1.1	0.6
Expensed equipment.....	4.7	3.1	2.8	3.5	3.9	3.2	2.4
Expensed purchase of other materials, parts, and supplies.....	1.6	1.7	1.7	2.4	1.1	1.6	1.0
Expensed purchased services.....	1.6	1.2	0.9	0.8	1.2	0.9	0.8
Expensed purchases of software.....	3.9	2.7	4.5	3.9	3.6	4.0	5.2
Purchased electricity and fuels (except motor fuels).....	1.9	2.0	1.5	2.4	1.4	2.2	1.3
Purchased electricity.....	2.0	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	4.2	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	1.4	1.5	1.2	1.2	1.3	1.6	1.1
Lease and rental payments for machinery, equipment, and other tangible items.....	2.9	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	1.5	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	1.2	1.6	1.5	1.3	1.6	2.5	1.0
Purchased repairs and maintenance to machinery and equipment.....	1.6	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	3.0	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	4.2	3.1	2.7	2.6	2.1	1.4	2.0
Professional liability insurance.....	3.6	2.6	1.5	1.8	2.0	1.8	1.1
Other operating expenses.....	1.5	1.6	1.4	1.4	0.8	1.0	0.7
Depreciation and amortization charges.....	1.8	2.6	1.7	1.4	1.8	2.4	1.2
Governmental taxes and license fees.....	2.9	2.3	2.3	2.2	2.5	2.4	0.9
All other operating expenses.....	1.7	1.9	1.5	1.6	0.9	1.4	0.8
Data processing and other purchased computer services.....	6.9	NA	NA	NA	NA	NA	NA
Purchased communication services.....	1.3	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	3.6	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	2.6	NA	NA	NA	NA	NA	NA
All other operating expenses.....	2.0	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-8.7. Health Care and Social Assistance (NAICS 62)-Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>OFFICES OF PHYSICIANS (NAICS 6211)</b>							
<b>Operating Expenses</b>							
Total .....	1.6	1.6	1.1	1.2	0.5	0.8	0.6
Personnel costs.....	1.8	1.9	1.3	1.4	0.7	1.0	0.5
Gross annual payroll.....	1.8	1.9	1.3	1.4	0.7	1.0	0.5
Employer's cost for fringe benefits.....	1.8	2.3	1.8	2.0	1.8	1.3	0.7
Health insurance.....	1.7	NA	NA	NA	NA	NA	NA
Pension plans.....	2.3	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	3.9	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	3.0	NA	NA	NA	NA	NA	NA
Other.....	2.8	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	11.7	8.5	8.6	8.5	8.1	5.3	4.4
Expensed materials, parts and supplies (not for resale).....	2.6	2.4	2.3	3.1	1.5	2.1	1.1
Medical supplies.....	3.2	2.8	2.7	2.9	2.2	2.3	0.9
Expensed equipment.....	5.1	5.7	4.3	5.7	7.0	3.0	3.4
Expensed purchase of other materials, parts, and supplies.....	4.3	4.0	5.2	8.7	3.0	4.7	3.1
Expensed purchased services.....	3.2	2.5	1.8	1.8	1.8	1.7	1.2
Expensed purchases of software.....	7.4	5.4	9.0	7.9	7.0	7.1	11.6
Purchased electricity and fuels (except motor fuels).....	4.8	5.9	4.8	7.6	4.3	6.2	2.2
Purchased electricity.....	4.9	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	10.7	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	2.7	2.6	2.0	2.2	2.2	2.6	1.4
Lease and rental payments for machinery, equipment, and other tangible items.....	6.2	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	2.7	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	3.0	3.6	3.2	3.8	3.2	2.9	1.2
Purchased repairs and maintenance to machinery and equipment.....	3.6	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	7.0	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	13.0	9.7	8.7	8.1	3.1	2.7	4.6
Professional liability insurance.....	5.0	3.4	1.9	2.2	2.4	2.6	1.4
Other operating expenses.....	1.7	2.1	2.2	2.1	1.2	1.8	1.5
Depreciation and amortization charges.....	4.2	6.6	4.2	3.2	4.0	4.3	2.1
Governmental taxes and license fees.....	2.8	4.0	4.0	3.7	3.8	4.2	1.5
All other operating expenses.....	1.8	2.2	2.5	2.4	1.5	2.4	1.6
Data processing and other purchased computer services.....	9.6	NA	NA	NA	NA	NA	NA
Purchased communication services.....	2.2	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	9.2	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	4.3	NA	NA	NA	NA	NA	NA
All other operating expenses.....	2.2	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-8.7. Health Care and Social Assistance (NAICS 62)-Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>OUTPATIENT CARE CENTERS (NAICS 6214)</b>							
<b>Operating Expenses</b>							
<b>Total</b> .....	1.3	1.3	1.3	1.4	1.0	0.6	0.7
Personnel costs.....	1.2	0.7	0.8	1.5	1.2	0.5	1.2
Gross annual payroll.....	1.4	0.9	0.9	1.6	1.3	0.5	1.4
Employer's cost for fringe benefits.....	1.3	1.3	1.4	2.9	1.1	0.6	1.8
Health insurance.....	1.7	NA	NA	NA	NA	NA	NA
Pension plans.....	1.9	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	3.1	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	1.9	NA	NA	NA	NA	NA	NA
Other.....	1.4	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	5.9	6.3	5.1	5.2	2.2	3.2	1.6
Expensed materials, parts and supplies (not for resale).....	1.8	1.7	1.5	1.7	1.0	1.3	1.0
Medical supplies.....	2.0	1.8	1.9	2.0	1.4	1.6	0.9
Expensed equipment.....	5.1	5.1	3.9	6.2	6.7	7.2	3.9
Expensed purchase of other materials, parts, and supplies.....	3.0	3.3	3.1	3.3	1.1	1.6	1.5
Expensed purchased services.....	1.4	1.1	1.5	1.3	1.2	1.1	0.9
Expensed purchases of software.....	4.3	3.9	2.8	3.1	3.3	3.7	1.6
Purchased electricity and fuels (except motor fuels).....	2.6	2.9	3.3	2.1	0.9	2.0	2.4
Purchased electricity.....	2.5	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	5.3	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	1.9	1.3	1.8	1.8	1.7	1.9	1.3
Lease and rental payments for machinery, equipment, and other tangible items.....	3.1	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	1.8	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	2.0	1.8	1.9	1.4	1.6	2.9	0.8
Purchased repairs and maintenance to machinery and equipment.....	2.0	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	2.9	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	5.7	5.8	5.7	6.9	2.9	3.5	2.6
Professional liability insurance.....	2.7	2.6	2.4	1.9	2.3	2.2	1.8
Other operating expenses.....	3.1	3.3	3.6	3.6	1.2	1.6	1.0
Depreciation and amortization charges.....	1.3	1.5	2.2	1.6	1.0	2.3	1.7
Governmental taxes and license fees.....	2.3	2.0	2.4	1.5	2.2	2.0	2.3
All other operating expenses.....	3.6	3.9	4.2	4.3	1.4	1.7	1.0
Data processing and other purchased computer services.....	3.0	NA	NA	NA	NA	NA	NA
Purchased communication services.....	1.8	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	2.7	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	2.7	NA	NA	NA	NA	NA	NA
All other operating expenses.....	4.3	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-8.7. Health Care and Social Assistance (NAICS 62)-Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>OUTPATIENT MENTAL HEALTH AND</b>							
<b>SUBSTANCE ABUSE CENTERS (NAICS 62142)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	3.2	3.2	3.1	2.7	0.8	1.7	1.3
Personnel costs.....	3.5	3.3	3.5	3.0	0.7	1.6	1.2
Gross annual payroll.....	3.6	3.4	3.7	3.2	0.9	1.6	1.3
Employer's cost for fringe benefits.....	3.9	4.0	4.0	3.8	1.5	2.6	1.2
Health insurance.....	5.1	NA	NA	NA	NA	NA	NA
Pension plans.....	4.3	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	11.1	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	7.1	NA	NA	NA	NA	NA	NA
Other.....	3.9	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	11.3	10.1	10.0	9.1	4.8	8.1	3.3
Expensed materials, parts and supplies (not for resale).....	4.7	4.1	5.6	5.5	3.1	4.4	2.3
Medical supplies.....	10.1	9.2	9.5	9.2	5.3	6.4	1.7
Expensed equipment.....	6.6	6.8	8.2	8.4	6.9	11.3	6.0
Expensed purchase of other materials, parts, and supplies.....	4.1	3.5	5.1	5.0	3.1	5.2	3.3
Expensed purchased services.....	4.8	4.5	4.2	4.0	1.7	4.3	2.3
Expensed purchases of software.....	8.8	14.3	8.7	9.9	18.6	12.1	5.4
Purchased electricity and fuels (except motor fuels).....	11.0	10.1	7.8	6.2	3.3	10.9	8.5
Purchased electricity.....	11.3	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	13.5	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	5.2	4.5	5.2	5.1	2.6	2.5	2.5
Lease and rental payments for machinery, equipment, and other tangible items.....	9.1	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	5.6	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	7.6	9.1	6.2	7.6	6.6	11.1	4.7
Purchased repairs and maintenance to machinery and equipment.....	9.6	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	7.8	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	14.2	10.3	11.2	9.2	8.0	7.5	4.6
Professional liability insurance.....	4.5	4.8	6.0	6.4	2.8	3.6	2.9
Other operating expenses.....	3.9	4.7	5.0	3.2	2.6	4.0	3.7
Depreciation and amortization charges.....	5.5	4.6	5.6	5.5	2.9	3.3	2.5
Governmental taxes and license fees.....	4.7	5.0	3.8	4.9	3.5	3.5	3.3
All other operating expenses.....	4.1	4.9	5.3	3.4	3.1	4.5	4.3
Data processing and other purchased computer services.....	9.1	NA	NA	NA	NA	NA	NA
Purchased communication services.....	4.7	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	7.9	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	10.2	NA	NA	NA	NA	NA	NA
All other operating expenses.....	4.0	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-8.7. Health Care and Social Assistance (NAICS 62)-Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>KIDNEY DIALYSIS CENTERS (NAICS 621492)</b>							
<b>Operating Expenses</b>							
Total .....	2.9	2.6	2.4	2.4	1.1	1.8	1.6
Personnel costs.....	2.7	2.4	2.3	2.3	1.2	1.0	1.2
Gross annual payroll.....	2.8	2.5	2.4	2.3	1.4	1.0	1.1
Employer's cost for fringe benefits.....	S	S	2.7	2.8	S	S	1.8
Health insurance.....	S	NA	NA	NA	NA	NA	NA
Pension plans.....	S	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	S	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	S	NA	NA	NA	NA	NA	NA
Other.....	S	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	2.4	3.0	5.8	6.6	2.4	3.6	3.8
Expensed materials, parts and supplies (not for resale).....	3.1	2.7	2.3	2.3	1.0	1.8	2.0
Medical supplies.....	S	D	D	D	D	D	D
Expensed equipment.....	9.2	16.0	27.2	29.2	21.3	30.4	40.6
Expensed purchase of other materials, parts, and supplies.....	4.4	D	D	D	D	D	D
Expensed purchased services.....	S	S	2.8	2.7	S	S	2.1
Expensed purchases of software.....	13.0	14.9	14.0	15.3	14.7	8.7	9.4
Purchased electricity and fuels (except motor fuels).....	S	S	3.7	3.6	S	S	1.4
Purchased electricity.....	S	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	S	S	2.7	2.6	S	S	2.2
Lease and rental payments for machinery, equipment, and other tangible items.....	S	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	S	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	S	5.2	6.4	6.5	S	4.4	4.8
Purchased repairs and maintenance to machinery and equipment.....	S	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	S	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	S	S	S	6.6	S	S	S
Professional liability insurance.....	S	S	5.3	5.1	S	S	1.6
Other operating expenses.....	S	3.2	5.5	5.3	S	7.6	2.7
Depreciation and amortization charges.....	3.3	3.1	3.2	2.1	2.6	1.7	2.2
Governmental taxes and license fees.....	S	3.7	4.2	4.5	S	3.4	3.1
All other operating expenses.....	S	3.5	7.9	7.5	S	12.1	3.1
Data processing and other purchased computer services.....	S	NA	NA	NA	NA	NA	NA
Purchased communication services.....	S	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	S	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	S	NA	NA	NA	NA	NA	NA
All other operating expenses.....	S	NA	NA	NA	NA	NA	NA

See footnotes at end of table.



**Table A-8.7. Health Care and Social Assistance (NAICS 62)-Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>FREESTANDING AMBULATORY SURGICAL AND EMERGENCY CENTERS (NAICS 621493)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	6.4	3.6	3.3	3.7	7.4	2.0	1.2
Personnel costs.....	8.3	3.9	4.0	4.2	8.6	2.5	1.2
Gross annual payroll.....	9.1	4.0	4.3	4.5	8.8	1.3	1.4
Employer's cost for fringe benefits.....	6.9	4.4	3.9	3.8	8.0	3.3	1.5
Health insurance.....	6.1	NA	NA	NA	NA	NA	NA
Pension plans.....	8.2	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	11.0	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	7.9	NA	NA	NA	NA	NA	NA
Other.....	7.7	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	14.9	18.1	12.5	13.9	7.7	29.2	10.3
Expensed materials, parts and supplies (not for resale).....	5.1	3.5	3.5	4.3	3.4	2.6	2.3
Medical supplies.....	5.7	3.6	3.8	4.7	3.7	2.2	2.2
Expensed equipment.....	14.0	19.9	7.8	18.2	26.2	25.9	15.3
Expensed purchase of other materials, parts, and supplies.....	5.5	4.5	5.7	6.0	6.3	4.5	2.7
Expensed purchased services.....	5.8	4.5	3.7	4.5	9.5	3.3	1.6
Expensed purchases of software.....	S	14.3	15.1	18.6	S	48.7	8.7
Purchased electricity and fuels (except motor fuels).....	4.9	5.2	5.0	5.5	8.5	3.3	3.2
Purchased electricity.....	5.5	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	10.1	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	7.0	5.4	4.4	4.7	15.4	4.4	2.3
Lease and rental payments for machinery, equipment, and other tangible items.....	10.5	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	7.3	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	3.4	3.2	3.5	4.4	3.8	4.2	2.2
Purchased repairs and maintenance to machinery and equipment.....	3.5	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	5.6	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	10.5	10.6	13.0	19.1	18.5	8.1	10.9
Professional liability insurance.....	10.3	8.4	5.1	4.9	7.4	5.3	1.6
Other operating expenses.....	7.5	4.0	4.4	5.1	9.1	2.9	1.5
Depreciation and amortization charges.....	5.4	4.3	4.2	5.0	4.4	2.8	2.2
Governmental taxes and license fees.....	5.8	4.5	5.4	5.0	5.8	4.9	2.2
All other operating expenses.....	8.6	4.5	4.8	5.5	11.4	3.4	1.6
Data processing and other purchased computer services.....	10.0	NA	NA	NA	NA	NA	NA
Purchased communication services.....	10.3	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	3.8	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	6.5	NA	NA	NA	NA	NA	NA
All other operating expenses.....	11.5	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-8.7. Health Care and Social Assistance (NAICS 62)-Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>HOME HEALTH CARE SERVICES (NAICS 6216)</b>							
<b>Operating Expenses</b>							
Total .....	4.1	3.7	3.3	3.6	1.6	2.2	1.2
Personnel costs.....	4.1	3.3	3.5	4.0	1.3	1.9	1.6
Gross annual payroll.....	4.2	3.5	3.5	3.6	1.2	1.8	1.3
Employer's cost for fringe benefits.....	3.7	2.7	4.2	11.6	3.0	3.0	4.8
Health insurance.....	3.5	NA	NA	NA	NA	NA	NA
Pension plans.....	5.9	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	9.7	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	5.5	NA	NA	NA	NA	NA	NA
Other.....	4.5	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	7.3	8.2	11.1	9.3	6.1	11.5	2.6
Expensed materials, parts and supplies (not for resale).....	6.3	6.0	4.6	4.3	3.6	3.9	1.7
Medical supplies.....	7.6	7.3	5.7	5.5	4.5	4.6	1.8
Expensed equipment.....	8.8	9.3	8.7	10.3	5.8	6.2	4.2
Expensed purchase of other materials, parts, and supplies.....	9.3	4.6	6.4	6.7	8.7	4.0	2.0
Expensed purchased services.....	7.2	7.5	4.2	5.3	2.2	5.9	3.6
Expensed purchases of software.....	7.1	8.1	6.1	9.0	6.9	13.2	5.8
Purchased electricity and fuels (except motor fuels).....	10.4	8.7	7.9	8.8	9.7	9.5	3.9
Purchased electricity.....	8.6	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	22.0	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	4.8	4.0	4.3	7.0	2.7	3.3	4.4
Lease and rental payments for machinery, equipment, and other tangible items.....	6.9	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	5.2	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	8.0	5.8	8.0	9.6	9.0	6.6	4.4
Purchased repairs and maintenance to machinery and equipment.....	12.4	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	6.2	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	5.6	6.0	6.5	7.6	4.1	6.9	4.2
Professional liability insurance.....	26.7	S	4.2	4.2	S	S	3.4
Other operating expenses.....	5.4	7.3	4.9	4.7	7.5	5.0	2.5
Depreciation and amortization charges.....	8.0	7.2	5.2	6.1	2.3	6.5	2.9
Governmental taxes and license fees.....	15.9	8.0	10.8	10.2	12.1	12.6	2.9
All other operating expenses.....	5.3	7.7	5.3	5.1	9.1	6.1	2.7
Data processing and other purchased computer services.....	15.8	NA	NA	NA	NA	NA	NA
Purchased communication services.....	7.3	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	23.7	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	6.0	NA	NA	NA	NA	NA	NA
All other operating expenses.....	6.5	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-8.7. Health Care and Social Assistance (NAICS 62)-Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>HOSPITALS (NAICS 622)</b>							
<b>Operating Expenses</b>							
Total .....	1.5	1.3	0.9	0.9	0.6	0.8	0.2
Personnel costs.....	1.5	1.4	1.0	0.9	0.6	0.8	0.3
Gross annual payroll.....	1.5	1.4	1.0	0.9	0.5	0.7	0.4
Employer's cost for fringe benefits.....	1.9	1.7	1.3	1.5	0.9	1.2	0.5
Health insurance.....	2.2	NA	NA	NA	NA	NA	NA
Pension plans.....	1.9	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	3.6	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	3.1	NA	NA	NA	NA	NA	NA
Other.....	2.3	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	3.6	3.1	3.0	3.9	1.9	1.6	3.4
Expensed materials, parts and supplies (not for resale).....	1.7	1.6	1.1	1.2	0.7	0.9	0.4
Medical supplies.....	1.6	1.5	1.0	1.1	0.7	0.9	0.5
Expensed equipment.....	4.5	3.8	4.3	3.6	1.9	2.8	2.6
Expensed purchase of other materials, parts, and supplies.....	3.5	3.3	3.5	3.0	1.8	2.5	1.2
Expensed purchased services.....	1.6	1.5	1.4	1.4	1.1	1.5	0.4
Expensed purchases of software.....	5.1	4.7	4.6	3.6	3.9	4.2	2.8
Purchased electricity and fuels (except motor fuels).....	2.1	2.1	2.4	2.3	1.2	2.0	0.5
Purchased electricity.....	2.4	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	2.0	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	2.0	1.3	2.7	2.9	1.3	3.1	0.7
Lease and rental payments for machinery, equipment, and other tangible items.....	3.1	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	2.1	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	2.4	3.8	2.8	2.6	2.9	2.8	0.9
Purchased repairs and maintenance to machinery and equipment.....	1.8	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	5.6	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	3.5	3.1	1.8	2.1	1.8	1.9	1.2
Professional liability insurance.....	2.7	2.7	2.7	3.0	1.7	1.4	1.2
Other operating expenses.....	1.6	1.5	0.9	1.1	1.1	1.1	0.5
Depreciation and amortization charges.....	1.9	1.6	1.2	1.3	0.9	1.1	0.9
Governmental taxes and license fees.....	5.7	5.5	6.5	7.8	2.8	3.4	1.9
All other operating expenses.....	1.7	1.6	0.9	1.1	1.4	1.3	0.5
Data processing and other purchased computer services.....	5.8	NA	NA	NA	NA	NA	NA
Purchased communication services.....	1.8	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	4.1	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	4.1	NA	NA	NA	NA	NA	NA
All other operating expenses.....	2.2	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-8.7. Health Care and Social Assistance (NAICS 62)-Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>NURSING AND RESIDENTIAL CARE FACILITIES (NAICS 623)</b>							
<b>Operating Expenses</b>							
Total .....	2.0	1.7	1.1	1.0	0.7	1.0	0.5
Personnel costs.....	2.2	1.7	1.2	1.1	0.8	0.9	0.5
Gross annual payroll.....	2.3	1.8	1.3	1.2	0.8	0.8	0.5
Employer's cost for fringe benefits.....	1.8	1.8	1.4	1.3	1.0	1.6	0.7
Health insurance.....	1.9	NA	NA	NA	NA	NA	NA
Pension plans.....	3.5	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	6.4	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	4.0	NA	NA	NA	NA	NA	NA
Other.....	2.0	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	7.2	4.3	5.8	5.1	5.1	4.1	2.3
Expensed materials, parts and supplies (not for resale).....	3.0	2.4	2.4	2.1	2.0	2.4	0.8
Medical supplies.....	3.9	3.3	3.1	2.8	2.1	3.3	1.0
Expensed equipment.....	3.7	4.8	6.2	6.3	2.7	5.5	3.2
Expensed purchase of other materials, parts, and supplies.....	2.9	2.4	2.8	2.7	3.1	2.9	1.0
Expensed purchased services.....	1.9	2.8	2.0	1.8	2.1	2.0	0.8
Expensed purchases of software.....	4.7	4.2	7.6	8.1	4.6	5.9	4.1
Purchased electricity and fuels (except motor fuels).....	1.9	2.0	1.4	1.3	1.1	1.8	1.0
Purchased electricity.....	2.0	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	2.6	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	2.6	4.7	3.5	3.1	4.1	3.2	1.3
Lease and rental payments for machinery, equipment, and other tangible items.....	2.8	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	2.7	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	3.5	4.0	2.9	2.8	4.5	3.7	2.4
Purchased repairs and maintenance to machinery and equipment.....	2.9	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	5.0	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	2.7	3.1	2.9	2.8	2.7	2.9	1.3
Professional liability insurance.....	2.3	2.4	1.7	1.7	1.9	1.1	1.1
Other operating expenses.....	2.3	2.8	2.0	1.8	1.5	1.8	0.9
Depreciation and amortization charges.....	3.3	2.8	1.9	1.9	2.7	2.0	1.3
Governmental taxes and license fees.....	3.5	3.2	2.2	2.3	3.2	2.8	1.9
All other operating expenses.....	2.4	3.2	2.4	2.1	1.7	2.1	0.9
Data processing and other purchased computer services.....	9.9	NA	NA	NA	NA	NA	NA
Purchased communication services.....	2.0	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	2.0	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	3.4	NA	NA	NA	NA	NA	NA
All other operating expenses.....	2.8	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-8.7. Health Care and Social Assistance (NAICS 62)-Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>NURSING CARE FACILITIES (NAICS 623110)</b>							
<b>Operating Expenses</b>							
Total .....	2.9	2.4	1.6	1.5	1.3	1.4	0.8
Personnel costs.....	3.0	2.5	1.8	1.6	1.4	1.2	0.7
Gross annual payroll.....	3.1	2.6	1.9	1.8	1.4	1.1	0.7
Employer's cost for fringe benefits.....	2.6	3.0	2.1	1.9	1.6	2.1	0.9
Health insurance.....	3.1	NA	NA	NA	NA	NA	NA
Pension plans.....	4.3	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	7.2	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	4.9	NA	NA	NA	NA	NA	NA
Other.....	2.7	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	10.0	6.0	8.5	7.3	7.2	5.8	2.9
Expensed materials, parts and supplies (not for resale).....	4.6	3.7	3.1	2.8	2.5	3.3	1.0
Medical supplies.....	4.8	4.1	3.6	3.3	2.4	3.7	1.2
Expensed equipment.....	6.1	5.7	9.6	10.0	2.7	8.3	1.9
Expensed purchase of other materials, parts, and supplies.....	5.2	4.2	4.1	3.5	4.3	4.9	1.5
Expensed purchased services.....	3.5	4.4	2.9	2.7	2.7	2.8	1.2
Expensed purchases of software.....	5.8	6.9	13.4	14.5	6.4	9.5	4.8
Purchased electricity and fuels (except motor fuels).....	2.8	2.9	2.7	2.6	1.6	2.5	1.7
Purchased electricity.....	3.0	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	3.7	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	4.9	7.4	5.1	4.4	5.2	4.3	1.6
Lease and rental payments for machinery, equipment, and other tangible items.....	4.1	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	5.2	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	4.5	7.4	4.8	4.0	4.9	8.3	4.6
Purchased repairs and maintenance to machinery and equipment.....	5.8	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	5.4	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	4.8	3.7	3.8	3.7	4.2	4.5	2.8
Professional liability insurance.....	3.4	2.9	2.1	2.0	2.5	1.3	1.1
Other operating expenses.....	3.0	3.5	2.5	2.6	2.0	2.4	1.6
Depreciation and amortization charges.....	4.5	3.2	2.9	3.7	3.4	2.2	2.2
Governmental taxes and license fees.....	4.8	4.9	3.7	3.7	4.8	3.8	2.7
All other operating expenses.....	3.3	4.0	2.9	2.9	2.1	3.0	1.6
Data processing and other purchased computer services.....	8.2	NA	NA	NA	NA	NA	NA
Purchased communication services.....	3.4	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	3.2	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	5.5	NA	NA	NA	NA	NA	NA
All other operating expenses.....	3.8	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-8.7. Health Care and Social Assistance (NAICS 62)-Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses.]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>SOCIAL ASSISTANCE (NAICS 624)</b>							
<b>Operating Expenses</b>							
Total .....	1.6	1.6	1.4	1.3	0.6	0.8	0.6
Personnel costs.....	1.7	1.7	1.5	1.4	0.6	0.8	0.8
Gross annual payroll.....	1.8	1.9	1.6	1.4	0.6	0.9	0.8
Employer's cost for fringe benefits.....	1.6	1.6	1.8	2.1	1.3	1.6	1.0
Health insurance.....	2.3	NA	NA	NA	NA	NA	NA
Pension plans.....	3.4	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	7.3	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	3.0	NA	NA	NA	NA	NA	NA
Other.....	1.7	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	10.1	6.8	4.7	4.7	6.2	4.7	2.8
Expensed materials, parts and supplies (not for resale).....	3.7	4.7	3.5	3.2	2.8	4.1	2.4
Medical supplies.....	X	X	X	X	X	X	X
Expensed equipment.....	10.3	9.4	3.5	7.6	4.6	10.5	6.4
Expensed purchase of other materials, parts, and supplies.....	3.8	4.7	3.7	3.0	3.3	4.3	2.3
Expensed purchased services.....	2.8	2.8	2.7	2.5	2.0	1.6	1.1
Expensed purchases of software.....	7.3	6.8	4.9	4.6	5.1	6.3	4.9
Purchased electricity and fuels (except motor fuels).....	3.4	2.2	2.9	2.5	2.1	2.5	1.2
Purchased electricity.....	3.6	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	6.3	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	3.4	3.6	3.5	3.3	2.1	2.1	1.6
Lease and rental payments for machinery, equipment, and other tangible items.....	4.2	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	3.5	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	3.5	3.9	3.7	3.9	6.0	3.6	2.9
Purchased repairs and maintenance to machinery and equipment.....	8.3	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	3.3	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	5.5	4.5	5.8	4.7	5.0	3.3	4.2
Professional liability insurance.....	X	X	X	X	X	X	X
Other operating expenses.....	2.4	2.5	2.0	1.9	1.2	1.5	0.8
Depreciation and amortization charges.....	3.2	1.3	2.9	3.0	3.6	2.3	1.7
Governmental taxes and license fees.....	6.9	7.1	7.5	5.2	4.3	5.4	7.2
All other operating expenses.....	2.5	2.7	2.2	2.1	1.2	1.4	0.8
Data processing and other purchased computer services.....	6.5	NA	NA	NA	NA	NA	NA
Purchased communication services.....	3.0	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	4.9	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	6.0	NA	NA	NA	NA	NA	NA
All other operating expenses.....	2.7	NA	NA	NA	NA	NA	NA

NA Not available. X Not applicable. D Estimate in table is withheld to avoid disclosing data of individual companies; data are included in higher level totals. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-9.1. Arts, Entertainment, and Recreation Services (NAICS 71) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>71</b>	<b>Arts, entertainment, and recreation .....</b>	<b>1.3</b>	<b>1.3</b>	<b>1.3</b>	<b>1.1</b>	<b>0.6</b>	<b>0.7</b>	<b>0.7</b>
711	Performing arts, spectator sports, and related industries .....	0.8	1.1	1.3	1.2	0.8	1.2	1.0
7111	Performing arts companies .....	4.7	4.8	3.3	2.3	1.7	3.7	2.9
7112	Spectator sports .....	2.2	1.6	2.6	1.7	1.2	2.1	2.2
711211	Sports teams and clubs .....	2.8	2.1	3.5	2.0	1.6	3.7	2.8
711212	Racetracks .....	4.7	5.0	6.2	5.6	2.1	2.7	4.2
711219	Other spectator sports .....	11.2	10.1	12.5	6.0	3.0	5.4	6.7
7113	Promoters of performing arts, sports, and similar events .....	4.0	3.9	2.3	1.8	1.6	3.4	1.3
7114	Agents and managers for artists, athletes, entertainers, and other public figures .....	5.4	4.3	3.5	2.8	4.0	3.8	2.6
7115	Independent artists, writers, and performers .....	6.4	6.2	7.2	5.5	3.5	3.6	4.0
712	Museums, historical sites, and similar institutions .....	4.6	4.3	3.3	3.1	1.8	3.0	1.3
713	Amusement, gambling, and recreation industries .....	2.3	2.3	2.3	2.0	0.8	0.8	0.8
7131	Amusement parks and arcades .....	1.2	1.2	1.2	1.1	0.9	0.7	0.9
71311	Amusement and theme parks .....	1.2	0.9	0.8	0.7	0.6	0.3	0.4
71312	Amusement arcades .....	5.0	7.2	7.1	7.2	3.5	6.0	6.4
7132	Gambling industries .....	5.0	5.6	5.8	5.2	1.6	1.0	0.8
71321	Casinos (except casino hotels) .....	8.6	9.3	9.1	8.0	2.1	1.4	1.2
71329	Other gambling industries .....	5.2	5.0	4.6	4.9	3.1	2.2	1.3
7139	Other amusement and recreation industries .....	3.2	2.9	3.1	2.4	0.8	1.3	1.4
71391	Golf courses and country clubs .....	5.3	4.8	3.9	3.1	1.9	2.1	1.8
71392	Skiing facilities .....	21.7	20.8	20.1	18.9	2.3	1.7	1.7
71393	Marinas .....	4.7	4.3	4.3	3.2	1.8	3.1	3.2
71394	Fitness and recreational sports centers .....	4.9	4.8	4.4	3.9	1.4	1.8	2.2
71395	Bowling centers .....	7.9	7.4	18.2	7.5	3.3	5.5	7.7
71399	All other amusement and recreation industries .....	6.3	5.2	4.8	4.4	2.1	3.4	2.7

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-9.2. Arts, Entertainment, and Recreation Services (NAICS 71) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Taxable Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>71</b>	<b>Arts, entertainment, and recreation .....</b>	<b>1.5</b>	<b>1.5</b>	<b>1.6</b>	<b>1.3</b>	<b>0.8</b>	<b>0.7</b>	<b>0.9</b>
711	Performing arts, spectator sports, and related industries .....	0.9	1.2	1.5	1.3	1.0	1.3	1.1
7111	Performing arts companies .....	5.9	6.5	5.2	3.5	2.5	6.2	5.1
7112	Spectator sports .....	2.2	1.6	2.6	1.7	1.2	2.1	2.2
711211	Sports teams and clubs .....	2.8	2.1	3.5	2.0	1.6	3.7	2.8
711212	Racetracks .....	4.7	5.0	6.2	5.6	2.1	2.7	4.2
711219	Other spectator sports .....	11.2	10.1	12.5	6.0	3.0	5.4	6.7
7113	Promoters of performing arts, sports, and similar events .....	5.4	4.9	2.7	2.1	2.6	3.6	1.7
7114	Agents and managers for artists, athletes, entertainers, and other public figures .....	5.4	4.3	3.5	2.8	4.0	3.8	2.6
7115	Independent artists, writers, and performers .....	6.4	6.2	7.2	5.5	3.5	3.6	4.0
712	Museums, historical sites, and similar institutions .....	9.9	6.5	4.9	3.6	4.0	5.2	3.5
713	Amusement, gambling, and recreation industries .....	2.6	2.6	2.7	2.4	0.9	0.8	1.1
7131	Amusement parks and arcades .....	1.2	1.2	1.2	1.1	0.9	0.7	0.9
71311	Amusement and theme parks .....	1.2	0.9	0.8	0.7	0.6	0.3	0.4
71312	Amusement arcades .....	5.0	7.2	7.1	7.2	3.5	6.0	6.4
7132	Gambling industries .....	5.0	5.6	5.8	5.2	1.6	1.0	0.8
71321	Casinos (except casino hotels) .....	8.6	9.3	9.1	8.0	2.1	1.4	1.2
71329	Other gambling industries .....	5.2	5.0	4.6	4.9	3.1	2.2	1.3
7139	Other amusement and recreation industries .....	3.8	3.4	3.8	2.8	1.0	1.2	2.0
71391	Golf courses and country clubs .....	8.6	7.5	6.7	5.0	2.7	2.4	3.4
71392	Skiing facilities .....	21.7	20.8	20.1	18.9	2.3	1.7	1.7
71393	Marinas .....	4.7	4.3	4.3	3.2	1.8	3.1	3.2
71394	Fitness and recreational sports centers .....	5.7	5.8	5.3	4.7	1.6	2.3	2.9
71395	Bowling centers .....	7.9	7.4	18.2	7.5	3.3	5.5	7.7
71399	All other amusement and recreation industries .....	7.4	6.6	5.9	5.3	1.9	3.1	3.4

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.



**Table A-9.3. Arts, Entertainment, and Recreation Services (NAICS 71) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Tax-Exempt Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>71</b>	<b>Arts, entertainment, and recreation .....</b>	<b>2.2</b>	<b>2.4</b>	<b>1.6</b>	<b>1.6</b>	<b>1.0</b>	<b>1.9</b>	<b>0.8</b>
711	Performing arts, spectator sports, and related industries .....	3.0	2.6	1.8	1.7	1.4	2.6	1.1
7111	Performing arts companies .....	4.2	3.8	3.7	3.2	2.3	2.5	1.3
7113	Promoters of performing arts, sports, and similar events .....	4.6	3.6	2.7	2.7	1.9	5.2	1.1
712	Museums, historical sites, and similar institutions .....	4.7	4.5	3.4	3.3	1.9	3.3	1.5
713	Amusement, gambling, and recreation industries .....	2.8	3.2	2.4	2.1	1.9	2.3	1.1
7139	Other amusement and recreation industries .....	2.8	3.2	2.4	2.1	1.9	2.3	1.1
71391	Golf courses and country clubs .....	4.2	5.2	3.2	3.0	2.3	3.3	1.4
71394	Fitness and recreational sports centers .....	4.1	2.8	2.5	2.4	3.1	1.6	2.0
71399	All other amusement and recreation industries .....	7.4	5.3	2.7	2.4	7.6	7.3	1.0

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-9.4. Arts, Entertainment, and Recreation Services (NAICS 71) – Estimated Coefficients of Variation for Export Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>71</b>	<b>Arts, entertainment, and recreation .....</b>	<b>14.7</b>	<b>16.3</b>	<b>18.3</b>	<b>19.2</b>	<b>18.3</b>	<b>12.3</b>	<b>21.6</b>
711	Performing arts, spectator sports, and related industries .....	14.7	16.3	18.5	19.3	18.3	12.2	21.6
7111	Performing arts companies .....	13.4	17.7	19.8	13.9	22.3	70.7	17.4
7115	Independent artists, writers, and performers .....	24.9	23.0	22.9	25.0	24.1	13.6	34.3

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-9.5. Arts, Entertainment, and Recreation Services (NAICS 71) – Estimated Coefficients of Variation for Sources of Revenue and Standard Error of Percent Change for Taxable Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>PERFORMING ARTS COMPANIES (NAICS 7111)</b>							
<b>Total revenue</b> .....	<b>5.9</b>	<b>6.5</b>	<b>5.2</b>	<b>3.5</b>	<b>2.5</b>	<b>6.2</b>	<b>5.1</b>
Admissions revenue .....	7.0	6.8	6.3	4.5	2.4	6.8	6.1
All other revenue .....	9.3	10.2	5.0	4.3	5.1	12.3	4.8
<b>SPORTS TEAMS AND CLUBS (NAICS 711211)</b>							
<b>Total revenue</b> .....	<b>2.8</b>	<b>2.1</b>	<b>3.5</b>	<b>2.0</b>	<b>1.6</b>	<b>3.7</b>	<b>2.8</b>
Admissions revenue .....	3.1	3.6	4.9	3.6	4.5	5.3	4.1
All other revenue .....	3.9	3.2	4.1	3.6	1.8	3.1	2.4
<b>RACETRACKS (NAICS 711212)</b>							
<b>Total revenue</b> .....	<b>4.7</b>	<b>5.0</b>	<b>6.2</b>	<b>5.6</b>	<b>2.1</b>	<b>2.7</b>	<b>4.2</b>
Admissions revenue .....	13.0	8.9	7.5	7.4	4.5	4.7	1.1
All other revenue .....	5.7	6.3	7.2	6.3	1.8	2.8	4.7
<b>OTHER SPECTATOR SPORTS (NAICS 711219)</b>							
<b>Total revenue</b> .....	<b>11.2</b>	<b>10.1</b>	<b>12.5</b>	<b>6.0</b>	<b>3.0</b>	<b>5.4</b>	<b>6.7</b>
Admissions revenue .....	16.0	13.5	14.2	16.9	19.6	12.2	9.9
All other revenue .....	13.3	11.9	14.9	7.7	3.2	6.2	7.0
<b>AMUSEMENT AND THEME PARKS (NAICS 71311)</b>							
<b>Total revenue</b> .....	<b>1.2</b>	<b>0.9</b>	<b>0.8</b>	<b>0.7</b>	<b>0.6</b>	<b>0.3</b>	<b>0.4</b>
Admissions revenue .....	1.9	1.2	1.0	0.9	1.3	0.7	0.7
All other revenue .....	2.0	1.2	1.1	1.0	1.4	0.8	0.4

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-9.6. Arts, Entertainment, and Recreation Services (NAICS 71) – Estimated Coefficients of Variation for Total Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>71</b>	<b>Arts, entertainment, and recreation .....</b>	<b>1.6</b>	<b>1.3</b>	<b>1.3</b>	<b>1.0</b>	<b>1.0</b>	<b>0.6</b>	<b>0.6</b>
711	Performing arts, spectator sports, and related industries .....	2.3	1.2	1.7	1.4	2.1	0.8	0.8
7111	Performing arts companies .....	4.2	4.6	3.4	2.6	1.4	3.7	2.4
7112	Spectator sports .....	2.6	2.4	3.3	2.3	1.8	2.0	1.8
711211	Sports teams and clubs .....	2.9	2.7	3.4	1.9	2.3	3.5	2.7
711212	Racetracks .....	5.7	5.8	8.9	8.8	2.3	2.7	1.4
711219	Other spectator sports .....	10.1	10.9	13.2	10.4	4.6	3.9	3.8
7113	Promoters of performing arts, sports, and similar events .....	3.7	3.2	2.2	2.4	1.9	2.9	1.4
7114	Agents and managers for artists, athletes, entertainers, and other public figures .....	5.6	6.9	7.7	9.1	3.1	4.8	6.5
7115	Independent artists, writers, and performers .....	10.7	7.0	8.6	6.2	19.5	3.8	4.0
712	Museums, historical sites, and similar institutions .....	4.3	4.1	3.9	3.7	0.8	1.1	1.0
713	Amusement, gambling, and recreation industries .....	3.0	2.6	2.4	2.1	1.0	1.0	0.7
7131	Amusement parks and arcades .....	2.3	1.4	1.3	1.6	2.1	1.2	1.2
71311	Amusement and theme parks .....	2.2	1.1	0.9	0.9	2.0	1.0	0.7
71312	Amusement arcades .....	5.3	8.4	6.2	9.0	4.7	6.7	4.7
7132	Gambling industries .....	5.6	6.2	6.2	5.8	2.2	1.3	1.1
71321	Casinos (except casino hotels) .....	9.0	10.1	9.3	8.4	3.0	1.8	1.2
71329	Other gambling industries .....	5.7	5.4	5.4	5.9	3.5	2.2	1.6
7139	Other amusement and recreation industries .....	3.7	3.3	3.1	2.5	1.1	1.3	1.1
71391	Golf courses and country clubs .....	5.8	5.3	4.7	4.0	1.8	2.1	1.8
71392	Skiing facilities .....	14.0	12.7	11.5	10.8	2.3	2.1	1.4
71393	Marinas .....	4.9	4.9	5.3	5.0	2.6	3.9	1.7
71394	Fitness and recreational sports centers .....	5.0	4.8	4.5	4.2	2.3	2.0	2.1
71395	Bowling centers .....	8.6	7.3	14.7	6.5	5.0	7.5	7.0
71399	All other amusement and recreation industries .....	6.9	6.4	5.4	4.9	2.5	3.8	2.5

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-9.7. Arts, Entertainment, and Recreation Services (NAICS 71) – Coefficients of Variation for Expenses and Standard Error of Percent Change for Tax-Exempt Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>71</b>	<b>Arts, entertainment, and recreation .....</b>	<b>1.9</b>	<b>1.9</b>	<b>1.4</b>	<b>1.6</b>	<b>0.8</b>	<b>1.1</b>	<b>0.6</b>
711	Performing arts, spectator sports, and related industries .....	2.1	1.8	1.8	1.9	1.7	1.4	1.2
7111	Performing arts companies .....	3.2	3.3	3.6	3.5	1.5	1.3	1.2
7113	Promoters of performing arts, sports, and similar events .....	4.1	3.4	3.1	2.9	2.6	2.6	1.9
712	Museums, historical sites, and similar institutions .....	4.2	4.4	4.1	3.9	0.6	1.2	1.1
713	Amusement, gambling, and recreation industries .....	4.0	3.5	2.6	2.9	1.7	2.2	0.6
7139	Other amusement and recreation industries .....	4.0	3.5	2.6	2.9	1.7	2.2	0.6
71391	Golf courses and country clubs .....	5.8	4.8	3.8	4.1	2.3	2.9	0.9
71394	Fitness and recreational sports centers .....	4.1	4.6	3.0	3.4	2.1	3.0	1.0
71399	All other amusement and recreation industries .....	8.0	5.1	3.0	3.2	6.6	6.6	0.9

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-9.8. Performing Arts, Spectator Sports, and Related Industries (NAICS 711), Museums, Historical Sites, and Similar Institutions (NAICS 712), and Amusement, Gambling, and Recreation Industries (NAICS 713) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>PERFORMING ARTS, SPECTATOR SPORTS, AND RELATED INDUSTRIES (NAICS 711)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>2.3</b>	<b>1.2</b>	<b>1.7</b>	<b>1.4</b>	<b>2.1</b>	<b>0.8</b>	<b>0.8</b>
Personnel costs.....	1.7	2.2	2.6	2.4	1.2	1.8	0.9
Gross annual payroll.....	1.7	2.3	2.8	2.5	1.3	2.1	1.0
Employer's cost for fringe benefits.....	2.8	3.3	3.1	2.9	2.0	1.8	1.7
Health insurance.....	3.3	NA	NA	NA	NA	NA	NA
Pension plans.....	3.6	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	4.2	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	8.2	NA	NA	NA	NA	NA	NA
Other.....	3.8	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	11.7	7.2	5.6	5.7	7.1	11.8	3.1
Expensed materials, parts and supplies (not for resale).....	5.2	5.2	6.3	6.0	8.3	3.8	2.7
Expensed equipment.....	9.9	7.1	9.6	9.0	7.7	4.5	6.5
Expensed purchase of other materials, parts, and supplies.....	6.1	5.9	7.2	6.5	9.4	4.2	2.8
Expensed purchased services.....	2.8	2.0	3.6	3.4	1.9	3.1	1.4
Expensed purchases of software.....	11.6	6.7	15.8	25.8	6.5	7.4	23.5
Purchased electricity and fuels (except motor fuels).....	4.2	3.7	4.2	3.3	2.4	1.9	1.3
Purchased electricity.....	4.4	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	7.3	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	3.6	3.6	4.8	4.6	4.2	2.4	1.8
Lease and rental payments for machinery, equipment, and other tangible items.....	6.2	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	3.9	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	4.9	5.6	S	S	4.7	S	S
Purchased repairs and maintenance to machinery and equipment.....	6.0	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	5.6	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	3.0	2.6	2.9	2.9	3.1	3.4	1.5
Other operating expenses.....	4.0	1.8	2.2	1.8	4.7	2.1	1.9
Depreciation and amortization charges.....	6.7	6.2	6.4	4.6	3.2	1.5	3.7
Governmental taxes and license fees.....	7.9	12.8	11.1	11.0	4.7	3.7	1.7
All other operating expenses.....	4.3	2.1	2.5	2.4	5.8	2.5	2.1
Data processing and other purchased computer services.....	5.9	NA	NA	NA	NA	NA	NA
Purchased communication services.....	6.4	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	6.5	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	8.9	NA	NA	NA	NA	NA	NA
All other operating expenses.....	4.0	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-9.8. Performing Arts, Spectator Sports, and Related Industries (NAICS 711), Museums, Historical Sites, and Similar Institutions (NAICS 712), and Amusement, Gambling, and Recreation Industries (NAICS 713) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>MUSEUMS, HISTORICAL SITES, AND SIMILAR INSTITUTIONS (NAICS 712)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>4.3</b>	<b>4.1</b>	<b>3.9</b>	<b>3.7</b>	<b>0.8</b>	<b>1.1</b>	<b>1.0</b>
Personnel costs.....	4.1	4.1	4.0	3.8	0.5	0.5	0.8
Gross annual payroll.....	4.0	4.1	4.1	3.9	0.6	0.6	0.8
Employer's cost for fringe benefits.....	4.6	4.3	3.8	3.8	1.5	1.2	0.8
Health insurance.....	4.4	NA	NA	NA	NA	NA	NA
Pension plans.....	4.7	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	5.6	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	5.4	NA	NA	NA	NA	NA	NA
Other.....	5.1	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	8.5	7.9	6.9	6.6	6.5	9.4	4.2
Expensed materials, parts and supplies (not for resale).....	7.1	5.7	4.5	4.1	2.2	3.5	2.8
Expensed equipment.....	8.8	6.1	6.1	4.5	3.9	5.3	4.5
Expensed purchase of other materials, parts, and supplies.....	7.6	6.1	4.8	4.4	2.4	4.3	2.8
Expensed purchased services.....	3.6	4.2	3.9	3.4	2.5	2.2	1.8
Expensed purchases of software.....	4.8	5.2	9.3	10.3	3.9	7.5	4.4
Purchased electricity and fuels (except motor fuels).....	4.8	5.7	5.0	5.0	3.3	1.8	1.0
Purchased electricity.....	4.9	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	6.2	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	4.8	6.7	4.1	5.1	6.0	5.0	3.5
Lease and rental payments for machinery, equipment, and other tangible items.....	6.3	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	5.4	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	5.1	4.3	5.6	4.9	4.4	3.7	3.4
Purchased repairs and maintenance to machinery and equipment.....	6.9	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	6.6	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	4.5	4.7	3.9	4.2	3.2	2.6	3.6
Other operating expenses.....	5.1	4.3	4.3	4.5	1.8	2.2	2.2
Depreciation and amortization charges.....	4.9	5.1	4.9	4.4	1.2	1.8	0.9
Governmental taxes and license fees.....	4.6	7.7	17.3	16.5	6.8	12.2	3.7
All other operating expenses.....	5.5	4.4	4.3	5.0	2.2	2.7	2.8
Data processing and other purchased computer services.....	7.4	NA	NA	NA	NA	NA	NA
Purchased communication services.....	5.4	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	6.3	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	6.8	NA	NA	NA	NA	NA	NA
All other operating expenses.....	5.8	NA	NA	NA	NA	NA	NA

See footnotes at end of table.

**Table A-9.8. Performing Arts, Spectator Sports, and Related Industries (NAICS 711), Museums, Historical Sites, and Similar Institutions (NAICS 712), and Amusement, Gambling, and Recreation Industries (NAICS 713) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>AMUSEMENT, GAMBLING, AND RECREATION INDUSTRIES (NAICS 713)</b>							
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>3.0</b>	<b>2.6</b>	<b>2.4</b>	<b>2.1</b>	<b>1.0</b>	<b>1.0</b>	<b>0.7</b>
Personnel costs.....	2.6	2.6	2.1	2.0	0.7	1.1	0.9
Gross annual payroll.....	2.7	2.6	2.2	2.1	0.8	1.0	0.9
Employer's cost for fringe benefits.....	2.5	3.3	2.7	2.7	1.5	2.1	0.9
Health insurance.....	3.2	NA	NA	NA	NA	NA	NA
Pension plans.....	3.4	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	6.7	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	2.8	NA	NA	NA	NA	NA	NA
Other.....	2.6	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	8.6	7.3	7.6	8.1	6.1	5.7	6.7
Expensed materials, parts and supplies (not for resale).....	3.1	3.1	5.1	4.3	2.6	4.2	1.5
Expensed equipment.....	10.0	4.3	14.8	14.2	8.1	9.4	2.5
Expensed purchase of other materials, parts, and supplies.....	3.2	3.4	4.7	3.9	2.5	4.0	1.5
Expensed purchased services.....	2.7	2.5	2.3	2.3	1.9	1.5	0.7
Expensed purchases of software.....	11.2	13.6	6.9	9.0	12.8	20.3	2.2
Purchased electricity and fuels (except motor fuels).....	2.7	2.9	3.0	2.7	2.1	2.3	1.1
Purchased electricity.....	2.7	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	5.6	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	3.8	3.6	3.8	4.3	2.8	2.5	1.2
Lease and rental payments for machinery, equipment, and other tangible items.....	5.3	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	4.7	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	3.8	3.4	2.6	2.5	3.7	4.2	1.3
Purchased repairs and maintenance to machinery and equipment.....	4.0	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	4.7	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	3.1	3.7	2.8	2.6	2.1	2.9	1.5
Other operating expenses.....	4.5	3.2	3.3	2.9	2.2	1.3	1.0
Depreciation and amortization charges.....	4.4	3.1	2.7	2.3	2.6	2.0	1.7
Governmental taxes and license fees.....	5.4	6.7	7.2	7.0	1.4	2.5	1.9
All other operating expenses.....	5.2	3.3	3.5	3.1	3.3	2.4	1.3
Data processing and other purchased computer services.....	21.1	NA	NA	NA	NA	NA	NA
Purchased communication services.....	3.2	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	4.6	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	5.5	NA	NA	NA	NA	NA	NA
All other operating expenses.....	5.6	NA	NA	NA	NA	NA	NA

NA Not available. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.



**Table A-10.1. Other Services (Except Public Administration, Religious, Labor, and Political Organizations, and Private Households) (NAICS 81) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>81</b>	<b>Other services (except public administration, religious, labor, and political organizations, and private households) .....</b>	1.5	1.2	1.3	1.1	0.9	0.5	0.5
81*	Other services (except public administration, religious, labor, and political organizations, and private households) <sup>1</sup> .....	1.5	1.2	1.3	1.1	0.9	0.5	0.5
811	Repair and maintenance .....	2.5	2.4	2.4	2.1	0.8	1.0	0.9
8111	Automotive repair and maintenance .....	2.8	2.7	2.1	1.5	1.0	1.3	1.1
81111	Automotive mechanical and electrical repair and maintenance .....	3.5	3.5	3.4	3.0	1.6	1.6	1.5
811111	General automotive repair .....	4.2	4.2	3.8	3.5	1.7	2.0	1.7
811112	Automotive exhaust system repair .....	7.6	6.5	4.9	4.8	4.5	4.5	3.0
811113	Automotive transmission repair .....	11.4	9.8	6.3	5.1	4.7	5.1	3.8
811118	Other automotive mechanical and electrical repair and maintenance .....	6.2	5.2	3.2	3.3	4.0	3.9	3.0
81112	Automotive body, paint, interior, and glass repair .....	6.4	5.9	4.8	3.9	2.3	2.7	2.3
811121	Automotive body, paint, and interior repair and maintenance .....	6.7	6.2	5.2	4.0	2.5	3.1	2.7
811122	Automotive glass replacement shops .....	8.1	8.2	8.3	6.0	3.8	3.5	4.4
81119	Other automotive repair and maintenance .....	4.3	4.4	3.0	2.7	2.8	2.6	1.8
811191	Automotive oil change and lubrication shops .....	7.9	8.2	5.7	4.6	4.6	6.1	4.2
811192	Car washes .....	6.6	5.7	3.5	4.0	3.0	3.6	2.3
811198	All other automotive repair and maintenance .....	4.7	4.6	4.2	4.3	3.5	2.7	1.5
8112	Electronic and precision equipment repair and maintenance .....	6.0	6.0	5.6	4.8	1.8	3.2	1.3
811211	Consumer electronics repair and maintenance .....	7.0	6.7	6.1	3.2	2.2	3.3	5.4
811212	Computer and office machine repair and maintenance .....	12.4	13.4	12.8	11.1	1.4	1.7	2.5
811213	Communication equipment repair and maintenance .....	12.1	8.9	7.8	9.3	3.2	4.2	2.8
811219	Other electronic and precision equipment repair and maintenance .....	5.8	8.2	4.1	4.6	3.8	6.9	2.0
8113	Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance .....	9.7	9.8	11.5	10.4	1.9	2.7	2.2
8114	Personal and household goods repair and maintenance .....	6.9	5.1	4.0	3.8	2.5	2.0	2.3
81141	Home and garden equipment and appliance repair and maintenance .....	7.5	7.3	6.6	5.3	2.5	2.0	3.9
81142	Reupholstery and furniture repair .....	7.9	5.6	4.6	3.8	4.5	4.9	3.6
81143	Footwear and leather goods repair .....	9.6	8.8	7.6	7.8	4.4	4.9	2.4
81149	Other personal and household goods repair and maintenance .....	11.1	7.6	6.4	7.0	4.9	4.3	3.5
812	Personal and laundry services .....	2.7	2.3	1.9	1.7	0.6	0.9	0.8
812*	Personal and laundry services <sup>1</sup> .....	2.7	2.3	1.9	1.7	0.6	0.9	0.8
8121	Personal care services .....	3.3	3.2	3.0	3.0	0.8	1.2	1.7
81211	Hair, nail, and skin care services .....	4.3	4.1	4.1	3.6	0.8	1.4	1.5
812111	Barber shops .....	12.6	12.9	11.0	10.6	5.2	2.8	3.0
812112	Beauty salons .....	4.6	4.3	4.4	3.8	1.0	1.5	1.6
812113	Nail salons .....	7.5	8.2	6.7	6.3	2.9	6.1	4.1
81219	Other personal care services .....	7.4	7.0	6.3	3.2	2.1	2.4	6.3
812191	Diet and weight reducing centers .....	17.7	15.3	13.4	4.3	3.2	2.6	19.6
812199	All other personal care services .....	6.8	6.0	4.4	4.4	3.0	3.4	3.1

See footnotes at end of table.

**Table A-10.1. Other Services (Except Public Administration, Religious, Labor, and Political Organizations, and Private Households) (NAICS 81) – Estimated Coefficients of Variation for Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
8122	Death care services .....	2.9	2.7	2.4	2.4	1.3	1.1	0.8
81221	Funeral homes and funeral services .....	3.5	3.4	3.3	3.3	1.6	1.2	1.0
81222	Cemeteries and crematories .....	4.0	3.7	3.1	2.8	1.7	1.6	0.6
8123	Drycleaning and laundry services .....	5.1	4.1	3.8	3.3	1.3	1.5	1.8
81231	Coin-operated laundries and drycleaners .....	4.8	3.9	3.4	3.4	2.8	2.9	2.4
81232	Drycleaning and laundry services (except coin-operated) .....	12.8	11.1	10.2	7.9	3.0	4.1	4.9
81233	Linen and uniform supply .....	3.1	2.9	2.3	2.3	1.1	1.6	1.0
812331	Linen supply .....	6.3	5.9	3.8	3.7	1.5	4.7	1.2
812332	Industrial laundrers .....	3.9	3.4	S	2.9	1.4	S	S
8129	Other personal services .....	5.6	4.2	2.4	2.2	2.1	3.1	1.6
8129*	Other personal services <sup>1</sup> .....	6.4	4.8	2.9	2.8	2.5	3.4	1.8
81291	Pet care (except veterinary) services .....	5.5	4.6	5.0	6.1	3.7	2.7	3.8
81292	Photofinishing .....	13.4	8.8	5.3	4.4	3.7	3.9	3.0
81293	Parking lots and garages .....	6.7	6.4	3.5	3.5	1.5	5.8	1.2
81299	All other personal services .....	8.3	6.6	5.3	4.5	4.2	3.6	3.9
813	Religious, grantmaking, civic, professional, and similar organizations (except religious, labor, and political organizations) .....	2.3	1.5	1.4	1.3	1.8	0.9	0.9
8132	Grantmaking and giving services .....	5.1	3.0	3.3	2.7	3.8	1.7	1.8
8133	Social advocacy organizations .....	4.8	4.5	5.2	4.6	1.5	1.9	1.6
8134	Civic and social organizations .....	5.0	4.2	3.4	3.2	3.5	3.7	1.2
8139	Business, professional, and other organizations (except labor and political organizations) .....	1.8	2.3	2.1	1.7	1.2	1.7	1.5

S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

<sup>1</sup>Excludes NAICS 81291 (Pet care services).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-10.2. Other Services (Except Public Administration, Religious, Labor, and Political Organizations, and Private Households) (NAICS 81) – Estimated Coefficients of Variation for Export Revenue and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>81</b>	<b>Other services (except public administration, religious, labor, and political organizations, and private households) .....</b>	11.5	11.2	S	10.3	2.4	S	S
811	Repair and maintenance .....	11.5	11.2	S	10.3	2.4	S	S
8112	Electronic and precision equipment repair and maintenance .....	24.8	S	S	S	S	S	S
811211	Consumer electronics repair and maintenance .....	S	S	S	S	S	S	S
811212	Computer and office machine repair and maintenance .....	19.8	20.1	20.0	17.9	1.0	6.5	8.2
811213	Communication equipment repair and maintenance .....	14.3	S	S	S	S	S	S
811219	Other electronic and precision equipment repair and maintenance .....	S	27.1	25.3	16.0	S	9.1	7.7
8113	Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance .....	12.2	13.2	S	16.8	2.1	S	S
8114	Personal and household goods repair and maintenance .....	S	S	ZZ	ZZ	S	S	Z
81141	Home and garden equipment and appliance repair and maintenance .....	S	S	ZZ	ZZ	S	S	Z
81142	Reupholstery and furniture repair .....	ZZ	ZZ	ZZ	ZZ	Z	Z	Z
81143	Footwear and leather goods repair .....	ZZ	ZZ	ZZ	ZZ	Z	Z	Z
81149	Other personal and household goods repair and maintenance .....	ZZ	ZZ	ZZ	S	Z	Z	S

Z Absolute value is less than 0.05. ZZ Absolute value is less than 0.5. S Estimate does not meet publication standards because of high sampling variability (coefficient of variation is greater than 30%) or poor response quality (total quantity response rate is less than 50%). For a description of publication standards and the total quantity response rate, see [http://www.census.gov/quality/S20-0\\_v1.0\\_Data\\_Release.pdf](http://www.census.gov/quality/S20-0_v1.0_Data_Release.pdf).

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-10.3. Other Services (Except Public Administration, Religious, Labor, and Political Organizations, and Private Households) (NAICS 81) – Estimated Coefficients of Variation for Total Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>81</b>	<b>Other services (except public administration, religious, labor, and political organizations, and private households) .....</b>	1.4	1.2	1.2	1.2	0.5	0.6	0.4
811	Repair and maintenance .....	2.8	2.6	2.2	2.0	0.7	1.2	0.7
8111	Automotive repair and maintenance .....	3.0	3.0	1.9	1.7	1.1	1.5	1.0
81111	Automotive mechanical and electrical repair and maintenance .....	5.4	5.4	4.3	4.0	2.0	2.0	1.9
811111	General automotive repair .....	6.3	6.4	5.0	4.7	2.3	2.6	2.1
811112	Automotive exhaust system repair .....	7.6	6.8	5.7	5.7	4.5	4.3	2.1
811113	Automotive transmission repair .....	12.4	7.9	7.6	7.3	5.7	4.1	4.4
811118	Other automotive mechanical and electrical repair and maintenance .....	5.9	5.2	4.6	5.9	3.0	3.5	3.9
81112	Automotive body, paint, interior, and glass repair .....	6.0	5.1	3.9	4.0	2.3	2.2	1.8
811121	Automotive body, paint, and interior repair and maintenance .....	6.4	5.5	4.2	4.4	2.6	2.7	2.1
811122	Automotive glass replacement shops .....	7.6	7.6	8.0	6.8	2.5	3.5	3.1
81119	Other automotive repair and maintenance .....	5.0	4.9	3.7	3.1	3.2	3.0	3.1
811191	Automotive oil change and lubrication shops .....	9.2	9.7	7.9	5.6	6.0	7.1	7.3
811192	Car washes .....	6.6	5.8	3.4	3.5	3.1	4.6	2.1
811198	All other automotive repair and maintenance .....	6.5	5.3	5.8	6.2	2.9	2.9	1.6
8112	Electronic and precision equipment repair and maintenance .....	6.5	6.4	6.4	5.5	1.3	2.0	1.3
811211	Consumer electronics repair and maintenance .....	7.6	7.7	8.3	7.6	3.1	4.6	5.4
811212	Computer and office machine repair and maintenance .....	12.9	13.5	13.4	11.7	1.5	2.4	1.6
811213	Communication equipment repair and maintenance .....	13.0	9.6	8.4	9.5	2.8	5.5	3.1
811219	Other electronic and precision equipment repair and maintenance .....	5.8	5.9	4.9	5.3	3.0	2.9	1.0
8113	Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance .....	10.4	10.2	10.6	10.2	2.5	3.2	1.2
8114	Personal and household goods repair and maintenance .....	5.9	4.9	3.4	4.1	2.0	2.0	2.0
81141	Home and garden equipment and appliance repair and maintenance .....	6.7	6.8	6.1	6.3	2.4	1.9	2.5
81142	Reupholstery and furniture repair .....	7.3	5.9	5.6	5.4	4.5	5.0	3.6
81143	Footwear and leather goods repair .....	8.3	8.3	7.6	7.8	5.2	4.8	2.7
81149	Other personal and household goods repair and maintenance .....	10.9	9.0	5.7	7.7	4.2	4.8	3.6
812	Personal and laundry services .....	2.7	2.2	2.2	2.2	0.7	1.0	1.0
8121	Personal care services .....	3.8	3.5	3.5	4.4	0.7	1.3	2.4
81211	Hair, nail, and skin care services .....	4.9	4.3	4.7	5.2	1.1	1.5	1.8
812111	Barber shops .....	19.2	16.7	12.0	14.1	6.1	4.4	3.5
812112	Beauty salons .....	5.1	4.5	5.1	4.7	1.3	1.6	1.6
812113	Nail salons .....	8.3	8.2	7.4	29.8	3.4	5.5	11.6
81219	Other personal care services .....	10.2	9.0	8.4	3.3	2.9	2.3	8.4
812191	Diet and weight reducing centers .....	26.4	22.4	20.5	4.1	4.0	3.1	23.7
812199	All other personal care services .....	7.3	5.5	5.3	4.6	3.4	2.7	4.5
8122	Death care services .....	2.7	2.6	2.2	2.6	0.8	1.0	1.0
81221	Funeral homes and funeral services .....	3.3	3.1	3.1	3.7	0.9	1.2	1.4
81222	Cemeteries and crematories .....	4.4	3.6	3.1	3.2	1.5	1.3	0.7
8123	Drycleaning and laundry services .....	5.3	4.4	4.1	3.3	1.1	1.9	1.8
81231	Coin-operated laundries and drycleaners .....	5.5	4.4	3.3	4.2	3.3	3.8	2.7
81232	Drycleaning and laundry services (except coin-operated) .....	13.3	12.3	11.5	8.2	3.3	4.8	5.5
81233	Linen and uniform supply .....	3.8	3.3	3.1	3.6	1.0	1.7	0.9
812331	Linen supply .....	6.9	6.4	5.3	4.9	1.9	4.6	2.0
812332	Industrial launderers .....	4.6	3.6	3.8	4.6	1.4	0.6	1.1

See footnotes at end of table.

**Table A-10.3. Other Services (Except Public Administration, Religious, Labor, and Political Organizations, and Private Households) (NAICS 81) – Estimated Coefficients of Variation for Total Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007—Con.**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

NAICS code	Kind of business	Coefficient of variation				Standard error		
		2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
8129	Other personal services .....	5.5	4.0	3.1	3.0	2.2	3.9	1.7
81291	Pet care (except veterinary) services .....	5.9	5.0	8.2	6.1	3.2	5.5	11.7
81292	Photofinishing .....	8.1	6.2	4.3	4.2	3.4	3.3	2.1
81293	Parking lots and garages .....	6.5	6.5	4.1	4.6	1.4	6.5	1.1
81299	All other personal services .....	9.6	6.9	6.7	5.6	4.8	5.2	5.1
813	Religious, grantmaking, civic, professional, and similar organizations (except religious, labor, and political organizations) ..	1.6	1.3	1.2	1.5	0.6	1.1	0.5
8132	Grantmaking and giving services .....	3.7	3.6	3.5	3.4	0.9	1.0	0.7
8133	Social advocacy organizations .....	5.0	5.0	5.7	4.9	0.9	1.5	1.1
8134	Civic and social organizations .....	4.4	4.4	3.6	3.2	1.4	2.2	1.0
8139	Business, professional, and other organizations (except labor and political organizations) .....	2.1	2.1	2.0	2.2	1.6	1.9	1.2

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

**Table A-10.4. Other Services (Except Public Administration, Religious, Labor, and Political Organizations, and Private Households) (NAICS 81) – Estimated Coefficients of Variation for Selected Expenses and Standard Error of Percent Change for Employer Firms: 2004 Through 2007<sup>1</sup>**

[Estimates are based on data from the 2007 Service Annual Survey and administrative data and are published as percents. Estimates for 2006 and prior years have been revised to reflect historical corrections to individual responses]

Kind of business	Coefficient of variation				Standard error		
	2007	2006	2005	2004	2007/2006	2006/2005	2005/2004
<b>Operating Expenses</b>							
<b>Total .....</b>	<b>1.4</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	<b>0.5</b>	<b>0.6</b>	<b>0.4</b>
Personnel costs.....	1.8	1.6	1.6	1.6	0.5	0.6	0.4
Gross annual payroll.....	1.9	1.6	1.5	1.5	0.5	0.6	0.4
Employer's cost for fringe benefits.....	1.9	1.7	1.9	2.0	1.1	1.1	0.6
Health insurance.....	2.0	NA	NA	NA	NA	NA	NA
Pension plans.....	2.3	NA	NA	NA	NA	NA	NA
Defined benefit pension plans.....	4.1	NA	NA	NA	NA	NA	NA
Defined contribution plans.....	2.2	NA	NA	NA	NA	NA	NA
Other.....	2.3	NA	NA	NA	NA	NA	NA
Temporary staff and leased employee expense.....	6.3	5.6	5.6	5.0	3.2	2.8	2.3
Expensed materials, parts and supplies (not for resale).....	3.3	2.3	2.0	1.8	1.9	1.9	0.8
Expensed equipment.....	3.9	5.8	5.0	4.6	4.6	7.5	3.2
Expensed purchase of other materials, parts, and supplies.....	3.4	2.4	2.2	2.0	2.0	2.1	0.8
Expensed purchased services.....	2.2	2.4	2.0	2.1	1.7	2.2	1.2
Expensed purchases of software.....	4.2	4.3	3.7	4.8	3.0	4.7	2.2
Purchased electricity and fuels (except motor fuels).....	2.0	2.4	2.5	2.4	1.6	2.2	1.5
Purchased electricity.....	2.4	NA	NA	NA	NA	NA	NA
Purchased fuels (except motor fuels).....	3.0	NA	NA	NA	NA	NA	NA
Lease and rental payments.....	2.5	2.5	2.6	2.2	1.6	1.1	1.6
Lease and rental payments for machinery, equipment, and other tangible items.....	3.1	NA	NA	NA	NA	NA	NA
Lease and rental payments for land, buildings, structures, store spaces, and offices.....	2.7	NA	NA	NA	NA	NA	NA
Purchased repair and maintenance.....	4.4	9.3	2.2	3.6	5.7	11.6	2.6
Purchased repairs and maintenance to machinery and equipment.....	3.7	NA	NA	NA	NA	NA	NA
Purchased repairs and maintenance to buildings, structures, and offices.....	6.4	NA	NA	NA	NA	NA	NA
Purchased advertising and promotional services.....	3.6	3.3	3.2	2.7	1.5	2.1	1.3
Other operating expenses.....	1.7	1.8	1.9	1.9	0.6	1.0	0.5
Contributions, gifts, and grants paid.....	4.0	4.1	3.7	3.5	1.0	1.3	1.0
Depreciation and amortization charges.....	1.9	2.2	1.5	1.5	1.8	2.0	1.1
Governmental taxes and license fees.....	3.7	3.9	2.4	2.6	2.2	3.0	1.0
All other operating expenses.....	1.6	1.6	2.0	1.9	0.9	1.3	0.8
Data processing and other purchased computer services.....	9.1	NA	NA	NA	NA	NA	NA
Purchased communication services.....	2.5	NA	NA	NA	NA	NA	NA
Water, sewer, refuse removal, and other utility payments.....	5.5	NA	NA	NA	NA	NA	NA
Purchased professional and technical services.....	2.1	NA	NA	NA	NA	NA	NA
All other operating expenses.....	1.9	NA	NA	NA	NA	NA	NA

NA Not available.

<sup>1</sup>Due to the addition of detailed expense data to the 2007 Service Annual Survey, the 2007 expenses may not be comparable to previously published estimates.

Note: The introduction and appendixes give information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions. Links to this information on the Internet may be found at <[www.census.gov/svsd/www/cv.html](http://www.census.gov/svsd/www/cv.html)>.

# Appendix B.

## Explanation of Terms

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### TERMS COMMON TO MULTIPLE NAICS INDUSTRIES

**E-commerce receipts/revenue.** Sales and receipts from any transaction completed over an Internet, Extranet, EDI network, electronic mail, or other online system. Transactions are agreements between buyers and sellers to transfer ownership of, or rights to use, goods or services. Payment for these goods and services may, or may not be, made online. Examples of e-commerce revenue include:

- Revenue from online orders for goods or services placed by a buyer.
- Revenue from online services provided where charges are based on the usage of those services. (e.g., commissions or fees from the use of computerized reservation systems, financial transaction processing systems, etc.)
- Commissions or fees from the trading of securities or the sale of other financial products online.
- Commissions or fees from selling or from facilitating the sale of third party products through a company's Web site.
- Revenue from orders or contracts negotiated online with a buyer and seller on the price and terms for transferring ownership or the rights to use goods and services.
- Revenue from telephone transactions using interactive voice response systems.

Examples of receipts/revenue excluded from e-commerce figures are:

- Online billings where the order or contract was not negotiated online.
- Delivery of services online where the order or contract was not negotiated online.
- Provision of telecommunications and related infrastructure systems (e.g., data transfer, Web hosting, Internet

access) where the order or contract for such services was not negotiated online.

- Orders for goods or services placed by facsimile machine or over a switched telephone network.

**Establishment.** A single physical location where business is conducted or services are performed.

**Exports.** A tangible or intangible product (e.g., good, license agreement, reproduction right, service) that is sold or transferred to a customer or client (individual, government, business establishment, etc.) located outside the United States (i.e., outside of the 50 states, District of Columbia, U.S. Commonwealth Territories, or U.S. possessions). Products transferred to, sold to, or services performed for unaffiliated or affiliated foreign firms (i.e., foreign parent firms, subsidiaries, branches, etc.) are included. Products or services provided to domestic subsidiaries of foreign firms are excluded.

**Federal income tax status.** Firms that indicate all or part of their income are exempt from federal income tax under provision of Sections 501 or 521 of the Internal Revenue Service are classified as tax-exempt. Firms indicating no such exemption are classified as taxable. For all firms, the tax status classification is based upon administrative records.

**Firm.** A business organization or entity consisting of one or more domestic establishments/locations under common ownership or control.

**Taxes.** Includes sales, amusement, and other taxes collected directly from customers and paid directly to a local, state, or federal tax agency.

**Total expenses.** (Basic dollar volume measure of expenses for firms exempt from federal income tax.) Costs incurred during the survey year whether or not payments were made in that year. Total expenses include annual payroll; employee benefits, interest, and rent expenses; supplies used for operating; cost of merchandise sold; and other expenses allocated to operations during the year. Also included are contracted or purchased

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services; fees paid to other organizations for fundraising; depreciation expenses; and expenses of locations providing support services (e.g., repair services, administrative services, etc.) for service establishments.

Total expenses exclude outlays for the purchase of real estate (land and buildings); for construction; for additions, major alterations, and improvements to existing facilities; all other capital expenditures; funds invested; income taxes; assessments (dues) paid to the parent or other chapters of the same organization. Firms engaged in raising funds, exclude funds that are transferred to charities or other organizations.

**Total operating expenses.** Costs incurred during the survey year, even though payment may be made at a later date. Excludes interest on loans and sales taxes and other taxes collected from customers and paid directly to a taxing authority.

**Total operating revenue.** Includes charges or billings for services rendered and any sales of merchandise during the survey year, even though payments may be received at a later date.

Excludes income from interest, investments, gifts, loans, contributions, or grants; the sale of securities, real estate,

etc; sales taxes or other taxes collected from customers and remitted directly by the firm to a local, state, or federal tax agency; revenue from the sale of merchandise and equipment from retail establishments; and revenue from a domestic parent organization, or from franchise locations owned by others and any franchise or license fees.

**Total revenue.** (Basic dollar volume measure for firms exempt from federal income tax.) Charges or billings to customers or clients for services rendered and merchandise sold during the survey year whether or not payment was received in that year. Also includes income from interest, dividends, contributions, gifts and grants, rents, royalties, dues and assessments from members and affiliates, and net receipts from fundraising activities. Receipts from taxable business activities, as well as tax-exempt activities are included.

Excludes sales taxes or other taxes (real estate, admissions, etc.) collected by the organization from customers or clients and paid directly to local, state, or federal income tax agencies; income from the sale of real estate, investments, or other assets; or amounts transferred to operating funds from capital or reserve funds. Firms providing legal services report payments received in the survey year regardless of when services are rendered.



# Appendix C.

## NAICS Codes, Titles, and Descriptions

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### **484 Truck Transportation**

Industries in the Truck Transportation subsector provide over-the-road transportation of cargo using motor vehicles, such as trucks, truck-tractors, and trailers. The subsector is subdivided into general freight trucking and specialized freight trucking. This distinction reflects differences in equipment used, type of load carried, scheduling, terminal, and other networking services. General freight transportation establishments handle a wide variety of general commodities, generally palletized, and transported in a container or van trailer. Specialized freight transportation is the transportation of cargo that, because of size, weight, shape, or other inherent characteristics require specialized equipment for transportation.

Each of these industry groups is further subdivided based on distance traveled. Local trucking establishments primarily carry goods within a single metropolitan area and its adjacent nonurban areas. Long-distance trucking establishments carry goods between metropolitan areas.

The Specialized Freight Trucking industry group includes a separate industry for Used Household and Office Goods Moving. The household and office goods movers are separated because of the substantial network of establishments that has been developed to deal with local and long-distance moving and the associated storage. In this area, the same establishment provides both local and long-distance services, while other specialized freight establishments generally limit their services to either local or long-distance hauling.

### **4841 General Freight Trucking**

This industry group comprises establishments primarily engaged in providing general freight trucking. General freight establishments handle a wide variety of commodities, generally palletized, and transported in a container or van trailer. The establishments of this industry group provide a combination of the following network activities: local pickup, local sorting and terminal operations, line-haul, destination sorting and terminal operations, and local delivery.

### **48411 General Freight Trucking, Local**

This industry comprises establishments primarily engaged in providing local general freight trucking. General freight establishments handle a wide variety of commodities, generally palletized and transported in a container or van trailer. Local general freight trucking establishments usually provide trucking within a metropolitan area which may cross state lines. Generally the trips are same-day return.

### **48412 General Freight Trucking, Long-Distance**

This industry comprises establishments primarily engaged in providing long-distance general freight trucking. General freight establishments handle a wide variety of commodities, generally palletized and transported in a container or van trailer. Long-distance general freight trucking establishments usually provide trucking between metropolitan areas which may cross North American country borders. Included in this industry are establishments operating as truckload (TL) or less than truckload (LTL) carriers.

### **484121 General Freight Trucking, Long-Distance, Truckload**

This industry comprises establishments primarily engaged in providing long-distance general freight truckload (TL) trucking. These long-distance general freight truckload carrier establishments provide full truck movement of freight from origin to destination.

### **484122 General Freight Trucking, Long-Distance, Less Than Truckload**

This industry comprises establishments primarily engaged in providing long-distance, general freight, less than truckload(LTL) trucking. LTL carriage is characterized as multiple shipments combined into a single truck for multiple deliveries within a network. These establishments are generally characterized by the following network activities: local pickup, local sorting and terminal operations, line-haul, destination sorting and terminal operations, and local delivery.

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#### **4842 Specialized Freight Trucking**

This industry group comprises establishments primarily engaged in providing local or long-distance specialized freight trucking. The establishments of this industry are primarily engaged in the transportation of freight which, because of size, weight, shape, or other inherent characteristics, requires specialized equipment, such as flatbeds, tankers, or refrigerated trailers. This industry includes the transportation of used household, institutional, and commercial furniture and equipment.

#### **48421 Used Household and Office Goods Moving**

This industry comprises establishments primarily engaged in providing local or long-distance trucking of used household, used institutional, or used commercial furniture and equipment. Incidental packing and storage activities are often provided by these establishments.

#### **48422 Specialized Freight (Except Used Goods) Trucking, Local**

This industry comprises establishments primarily engaged in providing local, specialized trucking. Local trucking establishments provide trucking within a metropolitan area that may cross state lines. Generally the trips are same-day return.

#### **48423 Specialized Freight (Except Used Goods) Trucking, Long-Distance**

This industry comprises establishments primarily engaged in providing long-distance specialized trucking. These establishments provide trucking between metropolitan areas that may cross North American country borders.

#### **492 Couriers and Messengers**

Industries in the Couriers and Messengers subsector provide intercity and/or local delivery of parcels. These articles can be described as those that may be handled by one person without using special equipment. This allows the collection, pick-up, and delivery operations to be done with limited labor costs and minimal equipment. Sorting and transportation activities, where necessary, are generally mechanized. The restriction to small parcels partly distinguishes these establishments from those in the transportation industries. The complete network of courier services establishments also distinguishes these transportation services from local messenger and delivery establishments in this subsector. This includes the establishments that perform intercity transportation as well

as establishments that, under contract to them, perform local pick-up and delivery. Messengers, which usually deliver within a metropolitan or single urban area, may use bicycle, foot, small truck, or van.

#### **4921 Couriers**

This industry comprises establishments primarily engaged in providing air, surface, or combined courier delivery services of parcels generally between metropolitan areas or urban centers. The establishments of this industry form a network including courier local pickup and delivery to serve their customers' needs.

#### **4922 Local Messengers and Local Delivery**

This industry comprises establishments primarily engaged in providing local messenger and delivery services of small items within a single metropolitan or within an urban center. These establishments generally provide point-to-point pickup and delivery and do not operate as part of an intercity courier network.

#### **493 Warehousing and Storage**

Industries in the Warehousing and Storage subsector are primarily engaged in operating warehousing and storage facilities for general merchandise, refrigerated goods, and other warehouse products. These establishments provide facilities to store goods. They do not sell the goods they handle. These establishments take responsibility for storing the goods and keeping them secure. They may also provide a range of services, often referred to as logistics services, related to the distribution of goods. Logistics services can include labeling, breaking bulk, inventory control and management, light assembly, order entry and fulfillment, packaging, pick and pack, price marking and ticketing, and transportation arrangement. However, establishments in this industry group always provide warehousing or storage services in addition to any logistic services. Furthermore, the warehousing or storage of goods must be more than incidental to the performance of services, such as price marking.

Bonded warehousing and storage services and warehouses located in free trade zones are included in the industries of this subsector.

#### **49311 General Warehousing and Storage**

This industry comprises establishments primarily engaged in operating merchandise warehousing and storage facilities. These establishments generally handle goods in

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containers, such as boxes, barrels, and/or drums, using equipment, such as forklifts, pallets, and racks. They are not specialized in handling bulk products of any particular type, size, or quantity of goods or products.

#### **49312 Refrigerated Warehousing and Storage**

This industry comprises establishments primarily engaged in operating refrigerated warehousing and storage facilities. Establishments primarily engaged in the storage of furs for the trade are included in this industry. The services provided by these establishments include blast freezing, tempering, and modified atmosphere storage services.

#### **49313 Farm Product Warehousing and Storage**

This industry comprises establishments primarily engaged in operating bulk farm product warehousing and storage facilities (except refrigerated). Grain elevators primarily engaged in storage are included in this industry.

#### **49319 Other Warehousing and Storage**

This industry comprises establishments primarily engaged in operating warehousing and storage facilities (except general merchandise, refrigerated, and farm product warehousing and storage).

#### **511 Publishing Industries (except Internet)**

Industries in the Publishing Industries (except Internet) subsector group establishments engaged in the publishing of newspapers, magazines, other periodicals, and books, as well as directory and mailing list and software publishing. In general, these establishments, which are known as publishers, issue copies of works for which they usually possess copyright. Works may be in one or more formats including traditional print form, CD-ROM, or proprietary electronic networks. Publishers may publish works originally created by others for which they have obtained the rights and/or works that they have created in-house. Software publishing is included here because the activity, creation of a copyrighted product and bringing it to market, is equivalent to the creation process for other types of intellectual products.

In NAICS, publishing—the reporting, writing, editing, and other processes that are required to create an edition of a newspaper—is treated as a major economic activity in its own right, rather than as a subsidiary activity to a manufacturing activity, printing. Thus, publishing is classified in the Information sector; whereas, printing remains in the NAICS Manufacturing sector. In part, the

NAICS classification reflects the fact that publishing increasingly takes place in establishments that are physically separate from the associated printing establishments. More crucially, the NAICS classification of book and newspaper publishing is intended to portray their roles in a modern economy, in which they do not resemble manufacturing activities.

Music publishers are not included in the Publishing Industries (except Internet) subsector, but are included in the Motion Picture and Sound Recording Industries subsector. Reproduction of prepackaged software is treated in NAICS as a manufacturing activity; on-line distribution of software products is in the Information sector, and custom design of software to client specifications is included in the Professional, Scientific, and Technical Services sector. These distinctions arise because of the different ways that software is created, reproduced, and distributed.

The Publishing Industries (except Internet) subsector does not include establishments that publish exclusively on the Internet. Establishments publishing exclusively on the Internet are included in Subsector 516, Internet Publishing and Broadcasting. The Publishing Industries (except Internet) subsector also excludes products, such as manifold business forms. Information is not the essential component of these items. Establishments producing these items are included in Subsector 323, Printing and Related Support Activities.

#### **5111 Newspaper, Periodical, Book, and Directory Publishers**

This industry group comprises establishments primarily engaged in publishing newspapers, magazines, other periodicals, books, directories and mailing lists, and other works, such as calendars, greeting cards, and maps. These works are characterized by the intellectual creativity required in their development and are usually protected by copyright. Publishers distribute or arrange for the distribution of these works.

Publishing establishments may create the works in-house, contract for, purchase, or compile works that were originally created by others. These works may be published in one or more formats, such as print and/or electronic form, including proprietary electronic networks. Establishments in this industry may print, reproduce, or offer direct access to the works themselves or may arrange with others to carry out such functions.

Establishments that both print and publish may fill excess capacity with commercial or job printing. However, the

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publishing activity is still considered to be the primary activity of these establishments.

#### **51111 Newspaper Publishers**

This industry comprises establishments known as newspaper publishers. Establishments in this industry carry out operations necessary for producing and distributing newspapers, including gathering news; writing news columns, feature stories, and editorials; and selling and preparing advertisements. These establishments may publish newspapers in print or electronic form.

#### **51112 Periodical Publishers**

This industry comprises establishments known as magazine or periodical publishers. These establishments carry out the operations necessary for producing and distributing magazines and other periodicals, such as gathering, writing, and editing articles, and selling and preparing advertisements. These establishments may publish magazines and other periodicals in print or electronic form.

#### **51113 Book Publishers**

This industry comprises establishments known as book publishers. Establishments in this industry carry out design, editing, and marketing activities necessary for producing and distributing books. These establishments may publish books in print, electronic, or audio form.

#### **51114 Directory and Mailing List Publishers**

This industry comprises establishments primarily engaged in publishing directories, mailing lists, and collections or compilations of fact. The products are typically protected in their selection, arrangement and/or presentation. Examples are lists of mailing addresses, telephone directories, directories of businesses, collections or compilations of proprietary drugs or legal case results, compilations of public records, etc. These establishments may publish directories and mailing lists in print or electronic form.

#### **51119 Other Publishers**

This industry comprises establishments known as publishers (except newspaper, magazine, book, directory, mailing list, and music publishers). These establishments may publish works in print or electronic form.

#### **51191 Greeting Card Publishers**

This U.S. industry comprises establishments primarily engaged in publishing greeting cards.

#### **51199 All Other Publishers**

This U.S. industry comprises establishments generally known as publishers (except newspaper, magazine, book, directory, database, music, and greeting card publishers). These establishments may publish works in print or electronic form.

#### **512 Software Publishers**

This industry comprises establishments primarily engaged in computer software publishing or publishing and reproduction. Establishments in this industry carry out operations necessary for producing and distributing computer software, such as designing, providing documentation, assisting in installation, and providing support services to software purchasers. These establishments may design, develop, and publish, or publish only.

#### **512 Motion Picture and Sound Recording Industries**

Industries in the Motion Picture and Sound Recording Industries subsector group establishments involved in the production and distribution of motion pictures and sound recordings. While producers and distributors of motion pictures and sound recordings issue works for sale as traditional publishers do, the processes are sufficiently different to warrant placing establishments engaged in these activities in a separate subsector. Production is typically a complex process that involves several distinct types of establishments that are engaged in activities, such as contracting with performers, creating the film or sound content, and providing technical postproduction services. Film distribution is often to exhibitors, such as theaters and broadcasters, rather than through the wholesale and retail distribution chain. When the product is in a mass-produced form, NAICS treats production and distribution as the major economic activity as it does in the Publishing Industries subsector, rather than as a subsidiary activity to the manufacture of such products.

This subsector does not include establishments primarily engaged in the wholesale distribution of videocassettes and

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sound recordings, such as compact discs and audio tapes; these establishments are included in the Wholesale Trade sector. Reproduction of videocassettes and sound recordings that is carried out separately from establishments engaged in production and distribution is treated in NAICS as a manufacturing activity.

### **5121 Motion Picture and Video Industries**

This industry group comprises establishments primarily engaged in the production and/or distribution of motion pictures, videos, television programs, or commercials; in the exhibition of motion pictures; or in the provision of postproduction and related services.

#### **51211 Motion Picture and Video Production**

This industry comprises establishments primarily engaged in producing, or producing and distributing motion pictures, videos, television programs, or television and video commercials.

#### **51212 Motion Picture and Video Distribution**

This industry comprises establishments primarily engaged in acquiring distribution rights and distributing film and video productions to motion picture theaters, television networks and stations, and exhibitors.

#### **51213 Motion Picture and Video Exhibition**

This industry comprises establishments primarily engaged in operating motion picture theaters and/or exhibiting motion pictures or videos at film festivals, and so forth.

#### **512131 Motion Picture Theaters (except Drive-Ins)**

This U.S. industry comprises establishments primarily engaged in operating motion picture theaters (except drive-ins) and/or exhibiting motion pictures or videos at film festivals, and so forth.

#### **512132 Drive-In Motion Picture Theaters**

This U.S. industry comprises establishments primarily engaged in operating drive-in motion picture theaters.

#### **51219 Postproduction Services and Other Motion Picture and Video Industries**

This industry comprises establishments primarily engaged in providing postproduction services and other services to the motion picture industry, including specialized motion

picture or video postproduction services, such as editing, film/tape transfers, titling, subtitling, credits, closed captioning, and computer-produced graphics, animation and special effects, as well as developing and processing motion picture film.

#### **512191 Teleproduction and Other Postproduction Services**

This industry comprises establishments primarily engaged in providing specialized motion picture or video postproduction services, such as editing, film/tape transfers, subtitling, credits, closed captioning, and animation and special effects.

#### **512199 Other Motion Picture and Video Industries**

This industry comprises establishments primarily engaged in providing motion picture and video services (except motion picture and video production, distribution, exhibition, and teleproduction and other postproduction services).

### **5122 Sound Recording Industries**

This industry group comprises establishments primarily engaged in producing and distributing musical recordings, in publishing music, or in providing sound recording and related services.

#### **51221 Record Production**

This industry comprises establishments primarily engaged in record production (e.g., tapes, CDs). These establishments contract with artists and arrange and finance the production of original master recordings. Establishments in this industry hold the copyright to the master recording and derive most of their revenues from the sales, leasing, and licensing of master recordings. Establishments in this industry do not have their own duplication or distribution capabilities.

#### **51222 Integrated Record Production/Distribution**

This industry comprises establishments primarily engaged in releasing, promoting, and distributing sound recordings. These establishments manufacture or arrange for the manufacture of recordings, such as audio tapes/cassettes and compact discs, and promote and distribute these products to wholesalers, retailers, or directly to the public. Establishments in this industry produce master recordings themselves, or obtain reproduction and distribution rights to master recordings produced by record production

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companies or other integrated record companies.

### **51223 Music Publishers**

This industry comprises establishments primarily engaged in acquiring and registering copyrights for musical compositions in accordance with law and promoting and authorizing the use of these compositions in recordings, radio, television, motion pictures, live performances, print, or other media. Establishments in this industry represent the interests of the songwriter or other owners of musical compositions to produce revenues from the use of such works, generally through licensing agreements. These establishments may own the copyright or act as administrator of the music copyrights on behalf of copyright owners. Publishers of music books and sheet music are included in this industry.

### **51224 Sound Recording Studios**

This industry comprises establishments primarily engaged in providing the facilities and technical expertise for sound recording in a studio. Establishments in this industry may provide audio production or postproduction services for producing master recordings, and may provide audio services for film, television, and video productions.

### **51229 Other Sound Recording Industries**

This industry comprises establishments primarily engaged in providing sound recording services (except record production, distribution, music publishing, and sound recording in a studio). Establishments in this industry provide services, such as the audio recording of meetings and conferences.

### **515 Broadcasting (except Internet)**

Industries in the Broadcasting (except Internet) subsector include establishments that create content or acquire the right to distribute content and subsequently broadcast the content. The industry groups (Radio and Television Broadcasting and Cable and Other Subscription Programming) are based on differences in the methods of communication and the nature of services provided. The Radio and Television Broadcasting industry group includes establishments that operate broadcasting studios and facilities for over the air or satellite delivery of radio and television programs of entertainment, news, talk, and the like. These establishments are often engaged in the production and purchase of programs and generating revenues from the sale of air time to advertisers and from donations, subsidies, and/or the sale of programs. The

Cable and Other Subscription Programming industry group includes establishments operating studios and facilities for the broadcasting of programs that are typically narrowcast in nature (limited format, such as news, sports, education, and youth-oriented programming) on a subscription or fee basis.

The distribution of cable and other subscription programming is included in Subsector 517, Telecommunications. Establishments that broadcast exclusively on the Internet are included in Subsector 516, Internet Publishing and Broadcasting.

### **5151 Radio and Television Broadcasting**

This industry group comprises establishments primarily engaged in operating broadcast studios and facilities for over-the-air or satellite delivery of radio and television programs. These establishments are often engaged in the production or purchase of programs or generate revenues from the sale of air time to advertisers, from donations and subsidies, or from the sale of programs.

#### **51511 Radio Broadcasting**

This industry comprises establishments primarily engaged in broadcasting audio signals. These establishments operate radio broadcasting studios and facilities for the transmission of aural programming by radio to the public, to affiliates, or to subscribers. The radio programs may include entertainment, news, talk shows, business data, or religious services.

#### **515111 Radio Networks**

This industry comprises establishments primarily engaged in assembling and transmitting aural programming to their affiliates or subscribers via over-the-air broadcasts, cable, or satellite. The programming covers a wide variety of material, such as news services, religious programming, weather, sports, or music.

#### **515112 Radio Stations**

This industry comprises establishments primarily engaged in broadcasting aural programs by radio to the public. Programming may originate in their own studios, from an affiliated network, or from external sources.

#### **51512 Television Broadcasting**

This industry comprises establishments primarily engaged in broadcasting images together with sound. These

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establishments operate television broadcasting studios and facilities for the programming and transmission of programs to the public. These establishments also produce or transmit visual programming to affiliated broadcast television stations, which in turn broadcast the programs to the public on a predetermined schedule. Programming may originate in their own studios, from an affiliated network, or from external sources.

#### **5152 Cable and Other Subscription Programming**

This industry comprises establishments primarily engaged in operating studios and facilities for the broadcasting of programs on a subscription or fee basis. The broadcast programming is typically narrowcast in nature (e.g., limited format, such as news, sports, education, or youth-oriented). These establishments produce programming in their own facilities or acquire programming from external sources. The programming material is usually delivered to a third party, such as cable systems or direct-to-home satellite systems, for transmission to viewers.

#### **516 Internet Publishing and Broadcasting**

Industries in the Internet Publishing and Broadcasting subsector group establishments that publish and/or broadcast content exclusively for the Internet. The unique combination of text, audio, video, and interactive features present in informational or cultural products on the Internet justifies the separation of Internet publishers and broadcasters from more traditional publishers included in subsector 511, Publishing Industries (except Internet) and subsector 515, Broadcasting (except Internet).

#### **517 Telecommunications**

Industries in the Telecommunications subsector include establishments providing telecommunications and the services related to that activity. The Telecommunications subsector is primarily engaged in operating, maintaining, and/or providing access to facilities for the transmission of voice, data, text, sound, and video. A transmission facility may be based on a single technology or a combination of technologies. Establishments primarily engaged as independent contractors in the maintenance and installation of broadcasting and telecommunications systems are classified in Sector 23, Construction.

#### **5171 Wired Telecommunications Carriers**

This industry group comprises establishments primarily engaged in operating, maintaining or providing access to facilities for the transmission of voice, data, text, sound,

and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies.

#### **5172 Wireless Telecommunications Carriers (except Satellite)**

This industry group comprises establishments primarily engaged in operating, maintaining or providing access to facilities for the transmission of voice, data, text, sound, and video using wireless telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies.

#### **517211 Paging**

This industry comprises establishments primarily engaged in operating paging networks. The establishments of this industry may also supply and maintain equipment used to receive signals.

#### **517212 Cellular and Other Wireless Telecommunications**

This industry comprises establishments primarily engaged in operating cellular telecommunications and other wireless telecommunications networks (except paging).

#### **5173 Telecommunications Resellers**

This industry comprises establishments primarily engaged in purchasing access and network capacity from owners and operators of the networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate and maintain telecommunications switching and transmission facilities.

#### **5174 Satellite Telecommunications**

This industry comprises establishments primarily engaged in providing point-to-point telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications.

#### **5175 Cable and Other Program Distribution**

This industry comprises establishments primarily engaged as third-party distribution systems for broadcast programming. The establishments of this industry deliver

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visual, aural, or textual programming received from cable networks, local television stations, or radio networks to consumers via cable or direct-to-home satellite systems on a subscription or fee basis. These establishments do not generally originate programming material.

### **5179 Other Telecommunications**

This industry comprises establishments primarily engaged in (1) providing specialized telecommunications applications, such as satellite tracking, communications telemetry, and radar station operations; or (2) providing satellite terminal stations and associated facilities operationally connected with one or more terrestrial communications systems and capable of transmitting telecommunications to or receiving telecommunications from satellite systems.

### **518 Internet Service Providers, Web Search Portals, and Data Processing Services**

Industries in the Internet Service Providers, Web Search Portals, and Data Processing Services subsector group establishments that provide: (1) access to the Internet; (2) search facilities for the Internet; and (3) data processing, hosting, and related services. The industry groups (Internet Service Providers and Web Search Portals, Data Processing Hosting, and Related Services) are based on differences in the processes used to access information and process information. The Internet Service Providers and Web Search Portals industry group includes establishments that are providing access to the Internet or aiding in navigation on the Internet. The Data Processing, Hosting, and Related Services industry group includes establishments that process data. These establishments can transform data, prepare data for dissemination, or place data or content on the Internet for others. In addition, the shared use of computer resources is included in the Data Processing, Hosting, and Related Services industry group.

Establishments that are publishing exclusively on the Internet are included in Subsector 516, Internet Publishing and Broadcasting and establishments that are retailing goods using the Internet are included in Sector 44-45, Retail Trade.

### **5181 Internet Service Providers and Web Search Portals**

This industry comprises establishments known as Internet service providers or known as Web search portals. Establishments in this industry provide clients access to the Internet or operate Web sites that use a search engine to

provide Internet search services. Establishments in this industry generally provide related services, such as Web hosting, Web page design, and related advice and assistance. Web search portals often provide additional Internet services, such as e-mail, connections to other Web sites, auctions, news, and other limited content, and serve as a home base for Internet users.

### **518111 Internet Service Providers**

This U.S. industry comprises establishments known as Internet service providers. Establishments in this industry provide clients access to the Internet and generally provide related services such as Web hosting, Web page designing, and hardware or software consulting related to Internet connectivity. Establishments in this industry may provide local, regional, or national coverage for clients or provide backbone services (except telecommunications carriers) for other Internet service providers. Internet service providers have the equipment and telecommunication network access required for a point-of-presence on the Internet.

### **518112 Web Search Portals**

This U.S. industry comprises establishments known as Web search portals. Establishments in this industry operate Web sites that use a search engine to generate and maintain extensive databases of Internet addresses and content in an easily searchable format. Web search portals often provide additional Internet services, such as e-mail, connections to other Web sites, auctions, news, and other limited content, and serve as a home base for Internet users.

### **5182 Data Processing, Hosting, and Related Services**

This industry comprises establishments primarily engaged in providing infrastructure for hosting or data processing services. These establishments may provide specialized hosting activities, such as Web hosting, streaming services or application hosting, provide application service provisioning, or may provide general timeshare mainframe facilities to clients. Data processing establishments provide complete processing and specialized reports from data supplied by clients or provide automated data processing and data entry services.

### **519 Other Information Services**

Industries in the Other Information Services subsector group establishments supplying information, storing information, providing access to information, and searching and retrieving information. The main components of the



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subsector are news syndicates, libraries, and archives.

#### **51911 News Syndicates**

This industry comprises establishments primarily engaged in supplying information, such as news reports, articles, pictures, and features, to the news media.

#### **51912 Libraries and Archives**

This industry comprises establishments primarily engaged in providing library or archive services. These establishments are engaged in maintaining collections of documents (e.g., books, journals, newspapers, and music) and facilitating the use of such documents (recorded information regardless of its physical form and characteristics) as are required to meet the informational, research, educational, or recreational needs of their user. These establishments may also acquire, research, store, preserve, and generally make accessible to the public historical documents, photographs, maps, audio material, audiovisual material, and other archival material of historical interest. All or portions of these collections may be accessible electronically.

#### **51919 All Other Information Services**

This industry comprises establishments primarily engaged in providing other information services (except news syndicates and libraries and archives).

#### **5231 Securities and Commodity Contracts Intermediation and Brokerage**

This industry group comprises establishments primarily engaged in putting capital at risk in the process of underwriting securities issues or in making markets for securities and commodities; and those acting as agents and/or brokers between buyers and sellers of securities and commodities, usually charging a commission.

#### **52311 Investment Banking and Securities Dealing**

This industry comprises establishments primarily engaged in underwriting, originating, and/or maintaining markets for issues of securities. Investment bankers act as principals (i.e., investors who buy or sell on their own account) in firm commitment transactions or act as agents in best effort and standby commitments. This industry also includes establishments acting as principals in buying or selling securities generally on a spread basis, such as securities dealers or stock option dealers.

#### **52312 Securities Brokerage**

This industry comprises establishments primarily engaged in acting as agents (i.e., brokers) between buyers and sellers in buying or selling securities on a commission or transaction fee basis.

#### **52313 Commodity Contracts Dealing**

This industry comprises establishments primarily engaged in acting as principals (i.e., investors who buy or sell for their own account) in buying or selling spot or futures commodity contracts or options, such as precious metals, foreign currency, oil, or agricultural products, generally on a spread basis.

#### **52314 Commodity Contracts Brokerage**

This industry comprises establishments primarily engaged in acting as agents (i.e., brokers) in buying or selling spot or future commodity contracts or options on a commission or transaction fee basis.

#### **52392 Portfolio Management**

This industry comprises establishments primarily engaged in managing the portfolio assets (i.e., funds) of others on a fee or commission basis. Establishments in this industry have the authority to make investment decisions, and they derive fees based on the size and/or overall performance of the portfolio.

#### **52393 Investment Advice**

This industry comprises establishments primarily engaged in providing customized investment advice to clients on a fee basis, but do not have the authority to execute trades. Primary activities performed by establishments in this industry are providing financial planning advice and investment counseling to meet the goals and needs of specific clients.

#### **532 Rental and Leasing Services**

Industries in the Rental and Leasing Services subsector include establishments that provide a wide array of tangible goods, such as automobiles, computers, consumer goods, and industrial machinery and equipment, to customers in return for a periodic rental or lease payment.

The subsector includes two main types of establishments: (1) those that are engaged in renting consumer goods and

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equipment and (2) those that are engaged in leasing machinery and equipment often used for business operations. The first type typically operates from a retail-like or store-front facility and maintains inventories of goods that are rented for short periods of time. The latter type typically does not operate from retail-like locations or maintain inventories, and offers longer term leases. These establishments work directly with clients to enable them to acquire the use of equipment on a lease basis, or they work with equipment vendors or dealers to support the marketing of equipment to their customers under lease arrangements. Equipment lessors generally structure lease contracts to meet the specialized needs of their clients and use their remarketing expertise to find other users for previously leased equipment. Establishments that provide operating and capital (i.e., finance) leases are included in this subsector.

Establishments primarily engaged in leasing in combination with providing loans are classified in Sector 52, Finance and Insurance. Establishments primarily engaged in leasing real property are classified in Subsector 531, Real Estate. Those establishments primarily engaged in renting or leasing equipment with operators are classified in various subsectors of NAICS depending on the nature of the services provided (e.g., Transportation, Construction, Agriculture). These activities are excluded from this subsector since the client is paying for the expertise and knowledge of the equipment operator, in addition to the rental of the equipment. In many cases, such as the rental of heavy construction equipment, the operator is essential to operate the equipment. Likewise, since the provision of crop harvesting services includes both the equipment and operator, it is included in the agriculture subsector. The rental or leasing of copyrighted works is classified in Sector 51, Information, and the rental or leasing of assets, such as patents, trademarks, and/or licensing agreements is classified in Subsector 533, Lessors of Nonfinancial Intangible Assets (except Copyrighted Works).

### **5321 Automotive Equipment Rental and Leasing**

This industry group comprises establishments primarily engaged in renting or leasing the following types of vehicles: passenger cars and trucks without drivers, and utility trailers. These establishments generally operate from a retail-like facility. Some establishments offer only short-term rental, others only longer-term leases, and some provide both type of services.

### **53211 Passenger Car Rental and Leasing**

This industry comprises establishments primarily engaged in renting or leasing passenger cars without drivers.

#### **532111 Passenger Car Rental**

This industry comprises establishments primarily engaged in renting passenger cars without drivers, generally for short periods of time.

#### **532112 Passenger Car Leasing**

This industry comprises establishments primarily engaged in leasing passenger cars without drivers, generally for long periods of time.

### **53212 Truck, Utility Trailer, and RV (Recreational Vehicle) Rental and Leasing**

This industry comprises establishments primarily engaged in renting or leasing, without drivers, one or more of the following: trucks, truck tractors or buses: semitrailers, utility trailers, or RVs (recreational vehicles).

### **5322 Consumer Goods Rental**

This industry group comprises establishments primarily engaged in renting personal and household-type goods. Establishments classified in this industry group generally provide short-term rental although in some instances, the goods may be leased for longer periods of time. These establishments often operate from a retail-like or store-front facility.

#### **53221 Consumer Electronics and Appliances Rental**

This industry comprises establishments primarily engaged in renting consumer electronics equipment and appliances, such as televisions, stereos, and refrigerators. Included in this industry are appliance rental centers.

#### **53222 Formal Wear and Costume Rental**

This industry comprises establishments primarily engaged in renting clothing, such as formal wear, costumes (e.g., theatrical), or other clothing (except laundered uniforms and work apparel).

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### **53223 Video Tape and Disk Rental**

This industry comprises establishments primarily engaged in renting prerecorded video tapes and disks for home electronic equipment.

### **53229 Other Consumer Goods Rental**

This industry comprises establishments primarily engaged in renting consumer goods (except consumer electronics and appliances, formal wear and costumes, and prerecorded video tapes).

### **532291 Home Health Equipment Rental**

This industry comprises establishments primarily engaged in renting home-type health and invalid equipment, such as wheel chairs, hospital beds, oxygen tanks, walkers, and crutches.

### **532292 Recreational Goods Rental**

This industry comprises establishments primarily engaged in renting recreational goods, such as bicycles, canoes, motorcycles, skis, sailboats, beach chairs, and beach umbrellas.

### **532299 All Other Consumer Goods Rental**

This industry comprises establishments primarily engaged in renting consumer goods and products (except consumer electronics and appliances; formal wear and costumes; prerecorded video tapes and discs for home electronic equipment; home health furniture and equipment; and recreational goods). Included in this industry are furniture rental centers and party rental supply centers.

### **5323 General Rental Centers**

This industry comprises establishments primarily engaged in renting a range of consumer, commercial, and industrial equipment. Establishments in this industry typically operate from conveniently located facilities where they maintain inventories of goods and equipment that they rent for short periods of time. The type of equipment that establishments in this industry provide often includes, but is not limited to: audio-visual equipment, contractors' and builders' tools and equipment, home repair tools, lawn and garden equipment, moving equipment and supplies, and party and banquet equipment and supplies.

### **5324 Commercial and Industrial Machinery and Equipment Rental and Leasing**

This industry group comprises establishments primarily engaged in renting or leasing commercial-type and industrial-type machinery and equipment. The types of establishments included in this industry group are generally involved in providing capital or investment-type equipment that clients use in their business operations. These establishments typically cater to a business clientele and do not generally operate a retail-like or store-front facility.

#### **53241 Construction, Transportation, Mining, and Forestry Machinery and Equipment Rental and Leasing**

This industry comprises establishments primarily engaged in renting or leasing one or more of the following without operators: heavy construction, off-highway transportation, mining, and forestry machinery and equipment.

#### **53242 Office Machinery and Equipment Rental and Leasing**

This industry comprises establishments primarily engaged in renting or leasing office machinery and equipment, such as computers, office furniture, duplicating machines (i.e., copiers), or facsimile machines.

#### **53249 Other Commercial and Industrial Machinery and Equipment Rental and Leasing**

This industry comprises establishments primarily engaged in renting or leasing nonconsumer-type machinery and equipment (except heavy construction, transportation, mining, and forestry machinery and equipment without operators; and office machinery and equipment). Establishments in this industry rent or lease products, such as, manufacturing equipment; metalworking, telecommunications, motion picture, or theatrical machinery and equipment; institutional (i.e., public building) furniture, such as furniture for schools, theaters, or buildings; or agricultural equipment without operators.

#### **54111 Offices of Lawyers**

This industry comprises offices of legal practitioners known as lawyers or attorneys (i.e., counselors-at-law) primarily engaged in the practice of law. Establishments in this industry may provide expertise in a range or in specific

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areas of law, such as criminal law, corporate law, family and estate law, patent law, real estate law, or tax law.

#### **54119 Other Legal Services**

This industry comprises establishments of legal practitioners (except lawyers and attorneys) primarily engaged in providing specialized legal or paralegal services.

#### **5412 Accounting, Tax Preparation, Bookkeeping, and Payroll Services**

This industry comprises establishments primarily engaged in providing services, such as auditing of accounting records, designing accounting systems, preparing financial statements, developing budgets, preparing tax returns, processing payrolls, bookkeeping, and billing.

#### **541211 Offices of Certified Public Accountants**

This industry comprises establishments of accountants that are certified to audit the accounting records of public and private organizations and to attest to compliance with generally accepted accounting practices. Offices of certified public accountants (CPAs) may provide one or more of the following accounting services: (1) auditing financial statements; (2) designing accounting systems; (3) preparing financial statements; (4) developing budgets; and (5) providing advice on matters related to accounting. These establishments may also provide related services, such as bookkeeping, tax return preparation, and payroll processing.

#### **541213 Tax Preparation Services**

This industry comprises establishments (except offices of CPAs) engaged in providing tax return preparation services without also providing accounting, bookkeeping, billing, or payroll processing services. Basic knowledge of tax law and filing requirements is required.

#### **541214 Payroll Services**

This industry comprises establishments (except offices of CPAs) engaged in the following without also providing accounting, bookkeeping, or billing services: (1) collecting information on hours worked, pay rates, deductions, and other payroll-related data from their clients and (2) using that information to generate paychecks, payroll reports, and tax filings. These establishments may use data processing and tabulating techniques as part of providing

their services.

#### **541219 Other Accounting Services**

This industry comprises establishments (except offices of CPAs) engaged in providing accounting services (except tax return preparation services only or payroll services only). These establishments may also provide tax return preparation or payroll services. Accountant (except CPA) offices, bookkeeper offices, and billing offices are included in this industry.

#### **54131 Architectural Services**

This industry comprises establishments primarily engaged in planning and designing residential, institutional, leisure, commercial, and industrial buildings and structures by applying knowledge of design, construction procedures, zoning regulations, building codes, and building materials.

#### **54132 Landscape Architectural Services**

This industry comprises establishments primarily engaged in planning and designing the development of land areas for projects, such as parks and other recreational areas; airports; highways; hospitals; schools; land subdivisions; and commercial, industrial, and residential areas, by applying knowledge of land characteristics, location of buildings and structures, use of land areas, and design of landscape projects.

#### **54133 Engineering Services**

This industry comprises establishments primarily engaged in applying physical laws and principles of engineering in the design, development, and utilization of machines, materials, instruments, structures, processes, and systems. The assignments undertaken by these establishments may involve any of the following activities: provision of advice, preparation of feasibility studies, preparation of preliminary and final plans and designs, provision of technical services during the construction or installation phase, inspection and evaluation of engineering projects, and related services.

#### **54134 Drafting Services**

This industry comprises establishments primarily engaged in drawing detailed layouts, plans, and illustrations of buildings, structures, systems, or components from engineering and architectural specifications.

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### **54135 Building Inspection Services**

This industry comprises establishments primarily engaged in providing building inspection services. These establishments typically evaluate all aspects of the building structure and component systems and prepare a report on the physical condition of the property, generally for buyers or others involved in real estate transactions. Building inspection bureaus and establishments providing home inspection services are included in this industry.

### **54136 Geophysical Surveying and Mapping Services**

This industry comprises establishments primarily engaged in gathering, interpreting, and mapping geophysical data. Establishments in this industry often specialize in locating and measuring the extent of subsurface resources, such as oil, gas, and minerals, but they may also conduct surveys for engineering purposes. Establishments in this industry use a variety of surveying techniques depending on the purpose of the survey, including magnetic surveys, gravity surveys, seismic surveys, or electrical and electromagnetic surveys.

### **54137 Surveying and Mapping (Except Geophysical) Services**

This industry comprises establishments primarily engaged in performing surveying and mapping services of the surface of the earth, including the sea floor. These services may include surveying and mapping of areas above or below the surface of the earth, such as the creation of view easements or segregating rights in parcels of land by creating underground utility easements.

### **54138 Testing Laboratories**

This industry comprises establishments primarily engaged in performing physical, chemical, and other analytical testing services, such as acoustics or vibration testing, assaying, biological testing (except medical and veterinary), calibration testing, electrical and electronic testing, geotechnical testing, mechanical testing, nondestructive testing, or thermal testing. The testing may occur in a laboratory or on-site.

### **5414 Specialized Design Services**

This industry group comprises establishments providing specialized design services (except architectural,

engineering, and computer systems design).

### **54141 Interior Design Services**

This industry comprises establishments primarily engaged in planning, designing, and administering projects in interior spaces to meet the physical and aesthetic needs of people using them, taking into consideration building codes, health and safety regulations, traffic patterns and floor planning, mechanical and electrical needs, and interior fittings and furniture. Interior designers and interior design consultants work in areas, such as hospitality design, health care design, institutional design, commercial and corporate design, and residential design. This industry also includes interior decorating consultants engaged exclusively in providing aesthetic services associated with interior spaces.

### **54142 Industrial Design Services**

This industry comprises establishments primarily engaged in creating and developing designs and specifications that optimize the use, value, and appearance of their products. These services can include the determination of the materials, construction, mechanisms, shape, color, and surface finishes of the product, taking into consideration human characteristics and needs, safety, market appeal, and efficiency in production, distribution, use, and maintenance. Establishments providing automobile or furniture industrial design services or industrial design consulting services are included in this industry.

### **54143 Graphic Design Services**

This industry comprises establishments primarily engaged in planning, designing, and managing the production of visual communication in order to convey specific messages or concepts, clarify complex information, or project visual identities. These services can include the design of printed materials, packaging, advertising, signage systems, and corporate identification (logos). This industry also includes commercial artists engaged exclusively in generating drawings and illustrations requiring technical accuracy or interpretative skills.

### **54149 Other Specialized Design Services**

This industry comprises establishments primarily engaged in providing professional design services (except architectural, landscape architecture, engineering, interior, industrial, graphic, and computer system design).

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### **5415 Computer Systems Design and Related Services**

This industry comprises establishments primarily engaged in providing expertise in the field of information technologies through one or more of the following activities: (1) writing, modifying, testing, and supporting software to meet the needs of a particular customer; (2) planning and designing computer systems that integrate computer hardware, software, and communication technologies; (3) onsite management and operation of clients' computer systems and/or data processing facilities; and (4) other professional and technical computer-related advice and services.

#### **541511 Custom Computer Programming Services**

This industry comprises establishments primarily engaged in writing, modifying, testing, and supporting software to meet the needs of a particular customer.

#### **541512 Computer Systems Design Services**

This industry comprises establishments primarily engaged in planning and designing computer systems that integrate computer hardware, software, and communication technologies. The hardware and software components of the system may be provided by this establishment or company as part of integrated services or may be provided by third parties or vendors. These establishments often install the system and train and support users of the system.

#### **541513 Computer Facilities Management Services**

This industry comprises establishments primarily engaged in providing on-site management and operation of clients' computer systems and/or data processing facilities. Establishments providing computer systems or data processing facilities support services are included in this industry.

#### **541519 Other Computer Related Services**

This industry comprises establishments primarily engaged in providing computer related services (except custom programming, systems integration design, and facilities management services). Establishments providing computer disaster recovery services or software installation services are included in this industry.

#### **54161 Management Consulting Services**

This industry comprises establishments primarily engaged

in providing advice and assistance to businesses and other organizations on administrative management issues, such as strategic and organizational planning, financial planning and budgeting, marketing objectives and policies, human resource policies, practices, and planning; production scheduling; and control planning.

#### **54162 Environmental Consulting Services**

This industry comprises establishments primarily engaged in providing advice and assistance to businesses and other organizations on environmental issues, such as the control of environmental contamination from pollutants, toxic substances, and hazardous materials. These establishments identify problems (e.g., inspect buildings for hazardous materials), measure and evaluate risks, and recommend solutions. They employ a multidisciplinary staff of scientists, engineers, and other technicians with expertise in areas, such as air and water quality, asbestos contamination, remediation, and environmental law. Establishments providing sanitation or site remediation consulting services are included in this industry.

#### **54169 Other Scientific and Technical Consulting Services**

This industry comprises establishments primarily engaged in providing advice and assistance to businesses and other organizations on scientific and technical issues (except environmental).

#### **5417 Scientific Research and Development Services**

This industry group comprises establishments engaged in conducting original investigation undertaken on a systematic basis to gain new knowledge (research) and/or the application of research findings or other scientific knowledge for the creation of new or significantly improved products or processes (experimental development). The industries within this industry group are defined on the basis of the domain of research; that is, on the scientific expertise of the establishment.

#### **54171 Research and Development in the Physical, Engineering, and Life Sciences**

This industry comprises establishments primarily engaged in conducting research and experimental development in the physical, engineering, or life sciences, such as agriculture, electronics, environmental, biology, botany, biotechnology, computers, chemistry, food, fisheries, forests, geology, health, mathematics, medicine, oceanography, pharmacy, physics, veterinary, and other

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allied subjects.

#### **54172 Research and Development in the Social Sciences and Humanities**

This industry comprises establishments primarily engaged in conducting research and analyses in cognitive development, sociology, psychology, language, behavior, economic, and other social science and humanities research.

#### **54181 Advertising Agencies**

This industry comprises establishments primarily engaged in creating advertising campaigns and placing such advertising in periodicals, newspapers, radio and television, or other media. These establishments are organized to provide a full range of services (i.e., through in-house capabilities or subcontracting), including advice, creative services, account management, production of advertising material, media planning, and buying (i.e., placing advertising).

#### **54182 Public Relations Agencies**

This industry comprises establishments primarily engaged in designing and implementing public relations campaigns. These campaigns are designed to promote the interests and image of their clients. Establishments providing lobbying, political consulting, or public relations consulting are included in this industry.

#### **54183 Media Buying Agencies**

This industry comprises establishments primarily engaged in purchasing advertising time or space from media outlets and reselling it to advertising agencies or individual companies directly.

#### **54184 Media Representatives**

This industry comprises establishments of independent representatives primarily engaged in selling media time or space for media owners.

#### **54185 Display Advertising**

This industry comprises establishments primarily engaged in creating and designing public display advertising, campaign materials, such as printed, painted, or electronic displays, and/or placing such displays on indoor or outdoor billboards and panels, or on or within transit vehicles or facilities, shopping malls, retail (in-store) displays, and

other display structures or sites.

#### **54186 Direct Mail Advertising**

This industry comprises establishments primarily engaged in (1) creating and designing advertising campaigns for the purpose of distributing advertising materials (e.g., coupons, flyers, samples) or specialties (e.g., key chains, magnets, pens with customized messages imprinted) by mail or other direct distribution; and/or (2) preparing advertising materials or specialties for mailing or other direct distribution. These establishments may also compile, maintain, sell, and rent mailing lists.

#### **54187 Advertising Material Distribution Services**

This industry comprises establishments primarily engaged in the direct distribution or delivery of advertisements (e.g., circulars, coupons, handbills) or samples. Establishments in this industry use methods, such as delivering advertisements or samples door-to-door, placing flyers or coupons on car windshields in parking lots, or handing out samples in retail stores.

#### **54189 Other Services Related to Advertising**

This industry comprises establishments primarily engaged in providing advertising services (except advertising agency services, public relations agency services, media buying agency services, media representative services, display advertising services, direct mail advertising services, advertising material distribution services, and marketing consulting services).

#### **5419 Other Professional, Scientific, and Technical Services**

This industry group comprises establishments engaged in professional, scientific, and technical services (except legal services; accounting, tax preparation, bookkeeping, and related services; architectural, engineering, and related services; specialized design services; computer systems design and related services; management, scientific, and technical consulting services; scientific research and development services; and advertising and related services).

#### **54191 Marketing Research and Public Opinion Polling**

This industry comprises establishments primarily engaged in systematically gathering, recording, tabulating, and presenting marketing and public opinion data.

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### **54192 Photographic Services**

This industry comprises establishments primarily engaged in providing still, video, or digital photography services. These establishments may specialize in a particular field of photography, such as commercial and industrial photography, portrait photography, and special events photography. Commercial or portrait photography studios are included in this industry.

#### **541921 Photography Studios, Portrait**

This industry comprises establishments known as portrait studios primarily engaged in providing still, video, or digital portrait photography services.

#### **541922 Commercial Photography**

This industry comprises establishments primarily engaged in providing commercial photography services, generally for advertising agencies, publishers, and other business and industrial users.

#### **54193 Translation and Interpretation Services**

This industry comprises establishments primarily engaged in translating written material and interpreting speech from one language to another and establishments primarily engaged in providing sign language services.

#### **54194 Veterinary Services**

This industry comprises establishments of licensed veterinary practitioners primarily engaged in the practice of veterinary medicine, dentistry, or surgery for animals; and establishments primarily engaged in providing testing services for licensed veterinary practitioners.

#### **54199 All Other Professional, Scientific, and Technical Services**

This industry comprises establishments primarily engaged in the provision of professional, scientific, or technical services (except legal services; accounting, tax preparation, bookkeeping, and related services; architectural, engineering, and related services; specialized design services; computer systems design and related services; management, scientific, and technical consulting services; scientific research and development services; advertising and related services; market research and public opinion polling; photographic services; translation and

interpretation services; and veterinary services).

### **561 Administrative and Support Services**

Industries in the Administrative and Support Services subsector group establishments engaged in activities that support the day-to-day operations of other organizations. The processes employed in this sector (e.g., general management, personnel administration, clerical activities, cleaning activities) are often integral parts of the activities of establishments found in all sectors of the economy. The establishments classified in this subsector have specialized in one or more of these activities and can, therefore, provide services to clients in a variety of industries and, in some cases, to households. The individual industries of this subsector are defined on the basis of the particular process that they are engaged in and the particular services they provide.

Many of the activities performed in this subsector are ongoing routine support functions that all businesses and organizations must do and that they have traditionally done for themselves. Recent trends, however, are to contract or purchase such services from businesses that specialize in such activities and can, therefore, provide the services more efficiently.

The industries in this subsector cannot be viewed as strictly "support." The Travel Arrangement and Reservation Services industry group includes travel agents, tour operators, and providers of other travel arrangement services, such as hotel and restaurant reservations and arranging the purchase of tickets, serves many types of clients, including individual consumers. This group was placed in this subsector because the services are often of the "support" nature (e.g., travel arrangement) and businesses and other organizations are increasingly the ones purchasing such services.

The administrative and management activities performed by establishments in this sector are typically on a contract or fee basis. These activities may also be performed by establishments that are part of the company or enterprise. However, establishments involved in administering, overseeing, and managing other establishments of the company or enterprise, are classified in Sector 55, Management of Companies and Enterprises. These establishments normally undertake the strategic and organizational planning and decisionmaking role of the company or enterprise. Government establishments engaged in administering, overseeing and managing



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governmental programs are classified in Sector 92, Public Administration.

#### **56111 Office Administrative Services**

This industry comprises establishments primarily engaged in providing a range of day-to-day office administrative services, such as financial planning; billing and recordkeeping; personnel; and physical distribution and logistics for others on a contract or fee basis. These establishments do not provide operating staff to carry out the complete operations of a business.

#### **56121 Facilities Support Services**

This industry comprises establishments primarily engaged in providing operating staff to perform a combination of support services within a client's facilities. Establishments in this industry typically provide a combination of services, such as janitorial; maintenance; trash disposal; guard and security; mail routing reception; laundry; and related services to support operations within facilities. These establishments provide operating staff to carry out these support activities; but are not involved with or responsible for the core business or activities of the client.

Establishments providing facilities (except computer and/or data processing) operation support services and establishments operating correctional facilities (i.e., jails) on a contract or fee basis are included in this industry.

#### **56131 Employment Placement Agencies**

This industry comprises establishments primarily engaged in listing employment vacancies and in referring or placing applicants for employment. The individuals referred or placed are not employees of the employment agencies.

#### **56132 Temporary Help Services**

This industry comprises establishments primarily engaged in supplying workers to clients' businesses for limited periods of time to supplement the working force of the client. The individuals provided are employees of the temporary help service establishment. However, these establishments do not provide direct supervision of their employees at the clients' work sites.

#### **56133 Professional Employer Organizations**

This industry comprises establishments primarily engaged in providing human resources and human resource management services to staff client businesses.

Establishments in this industry operate in a coemployment relationship with client businesses or organizations and are specialized in performing a wide range of human resource and personnel management duties, such as payroll accounting, payroll tax return preparation, benefits administration, recruiting, and managing labor relations. Employee leasing establishments typically acquire and lease back some or all of the employees of their clients and serve as the employer of the leased employees for payroll, benefits, and related purposes. Employee leasing establishments exercise varying degrees of decision making relating to their human resource or personnel management role, but do not have management accountability for the work of their clients' operations with regard to strategic planning, output, or profitability. Professional employer organizations (PEO) and establishments providing labor or staff leasing services are included in this industry.

#### **5614 Business Support Services**

This industry group comprises establishments engaged in performing activities that are ongoing routine business support functions that businesses and organizations traditionally do for themselves.

#### **56141 Document Preparation Services**

This industry comprises establishments primarily engaged in one or more of the following: (1) letter or resume writing; (2) document editing or proofreading; (3) typing, word processing, or desktop publishing; and (4) stenographic (except court reporting or stenotype recording), transcription, and other secretarial services.

#### **56142 Telephone Call Centers**

This industry comprises (1) establishments primarily engaged in answering telephone calls and relaying messages to clients and (2) establishments primarily engaged in providing telemarketing services on a contract or fee basis for others, such as promoting clients' products or services by telephone; taking orders for clients by telephone; and soliciting contributions or providing information for clients by telephone. These establishments never own the product or provide the services they are representing and generally can originate and/or receive calls for others.

#### **561421 Telephone Answering Services**

This U.S. industry comprises establishments primarily engaged in answering telephone calls and relaying

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messages to clients.

#### **561422 Telemarketing Bureaus**

This U.S. industry comprises establishments primarily engaged in providing telemarketing services on a contract or fee basis for others, such as: (1) promoting clients' products or services by telephone, (2) taking orders for clients by telephone, and (3) soliciting contributions or providing information for clients by telephone. These establishments never own the product or provide the services they are representing and generally can originate and/or receive calls for others.

#### **56143 Business Service Centers**

This industry comprises (1) establishments primarily engaged in providing mailbox rental and other postal and mailing services (except direct mail advertising); (2) establishments generally known as copy centers or shops primarily engaged in providing photocopying, duplicating, blueprinting, and other document copying services, without also providing printing services (e.g., offset printing, quick printing, digital printing, prepress services); and (3) establishments engaged in providing a range of office support services (except printing services), such as mailing services, document copying services, facsimile services, word processing services, on-site PC rental services, and office product sales.

#### **561431 Private Mail Centers**

This U.S. industry comprises (1) establishments primarily engaged in providing mailbox rental and other postal and mailing (except direct mail advertising) services or (2) establishments engaged in providing these mailing services along with one or more other office support services, such as facsimile services, word processing services, on-site PC rental services, and office product sales.

#### **561439 Other Business Service Centers (including Copy Shops)**

This U.S. industry comprises (1) establishments generally known as copy centers or shops primarily engaged in providing photocopying, duplicating, blueprinting, and other document copying services, without also providing printing services (e.g., offset printing, quick printing, digital printing, prepress services) and (2) establishments (except private mail centers) engaged in providing a range of office support services (except printing services), such as document copying services, facsimile services, word

processing services, on-site PC rental services, and office product sales.

#### **56144 Collection Agencies**

This industry comprises establishments primarily engaged in collecting payments for claims and remitting payments collected to their clients.

#### **56145 Credit Bureaus**

This industry comprises establishments primarily engaged in compiling information, such as credit and employment histories on individuals and credit histories on businesses, and providing the information to financial institutions, retailers, and others who have a need to evaluate the credit worthiness of these persons and businesses.

#### **56149 Other Business Support Services**

This industry comprises establishments primarily engaged in providing business support services (except secretarial and other document preparation services; telephone answering or telemarketing services; private mail services or document copying services conducted as separate activities or in conjunction with other office support services; monetary debt collection services; and credit reporting services).

#### **561491 Repossession Services**

This industry comprises establishments primarily engaged in repossessing tangible assets (e.g., automobiles, boats, equipment, planes, furniture, appliances) for the creditor as a result of delinquent debts.

#### **561492 Court Reporting and Stenotype Services**

This industry comprises establishments primarily engaged in providing verbatim reporting and stenotype recording of live legal proceedings and transcribing subsequent recorded materials.

#### **561499 All Other Business Support Services**

This industry comprises establishments primarily engaged in providing business support services (except secretarial and other document preparation services; telephone answering and telemarketing services; private mail services or document copying services conducted as separate activities or in conjunction with other office support services; monetary debt collection services; credit reporting

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services; repossession services; and court reporting and stenotype recording services).

#### **56151 Travel Agencies**

This industry comprises establishments primarily engaged in acting as agents in selling travel, tour, and accommodation services to the general public and commercial clients.

#### **56152 Tour Operators**

This industry comprises establishments primarily engaged in arranging and assembling tours. The tours are sold through travel agencies or tour operators. Travel or wholesale tour operators are included in this industry.

#### **56159 Other Travel Arrangement and Reservation Services**

This industry comprises establishments (except travel agencies and tour operators) primarily engaged in providing travel arrangement and reservation services.

#### **561591 Convention and Visitors Bureaus**

This U.S. industry comprises establishments primarily engaged in marketing and promoting communities and facilities to businesses and leisure travelers through a range of activities, such as assisting organizations in locating meeting and convention sites; providing travel information on area attractions, lodging accommodations, restaurants; providing maps; and organizing group tours of local historical, recreational, and cultural attractions.

#### **561599 All Other Travel Arrangement and Reservation Services**

This U.S. industry comprises establishments (except travel agencies, tour operators, and convention and visitors bureaus) primarily engaged in providing travel arrangement and reservation services.

#### **56161 Investigation, Guard, and Armored Car Services**

This industry comprises establishments primarily engaged in providing one or more of the following: (1) investigation and detective services; (2) guard and patrol services; and (3) picking up and delivering money, receipts, or other valuable items with personnel and equipment to protect such properties while in transit.

#### **561611 Investigation Services**

This U.S. industry comprises establishments primarily engaged in providing investigation and detective services.

#### **561612 Security Guards and Patrol Services**

This U.S. industry comprises establishments primarily engaged in providing guard and patrol services, such as bodyguard, guard dog, and parking security services.

#### **561613 Armored Car Services**

This U.S. industry comprises establishments primarily engaged in picking up and delivering money, receipts, or other valuable items. These establishments maintain personnel and equipment to protect such properties while in transit.

#### **56162 Security Systems Services**

This industry comprises establishments engaged in (1) selling security systems, such as burglar and fire alarms and locking devices, along with installation, repair, or monitoring services or (2) remote monitoring of electronic security alarm systems.

#### **561621 Security Systems Services (Except Locksmiths)**

This U.S. industry comprises establishments primarily engaged in (1) selling security alarm systems, such as burglar and fire alarms, along with installation, repair, or monitoring services or (2) remote monitoring of electronic security alarm systems.

#### **561622 Locksmiths**

This U.S. industry comprises establishments primarily engaged in (1) selling mechanical or electronic locking devices, safes, and security vaults, along with installation, repair, rebuilding, or adjusting services or (2) installing, repairing, rebuilding, and adjusting mechanical or electronic locking devices, safes, and security vaults.

#### **56171 Exterminating and Pest Control Services**

This industry comprises establishments primarily engaged in exterminating and controlling birds, mosquitoes, rodents, termites, and other insects and pests (except for crop production and forestry production). Establishments providing fumigation services are included in this industry.

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### **56172 Janitorial Services**

This industry comprises establishments primarily engaged in cleaning building interiors, interiors of transportation equipment (e.g., aircraft, rail cars, ships), and/or windows.

### **56173 Landscaping Services**

This industry comprises (1) establishments primarily engaged in providing landscape care and maintenance services and/or installing trees, shrubs, plants, lawns, or gardens and (2) establishments primarily engaged in providing these services along with the design of landscape plans and/or the construction (i.e., installation) of walkways, retaining walls, decks, fences, ponds, and similar structures.

### **56174 Carpet and Upholstery Cleaning Services**

This industry comprises establishments primarily engaged in cleaning and dyeing used rugs, carpets, and upholstery.

### **56179 Other Services to Buildings and Dwellings**

This industry comprises establishments primarily engaged in providing services to buildings and dwellings (except exterminating and pest control; janitorial; landscaping care and maintenance; and carpet and upholstery cleaning).

### **5619 Other Support Services**

This industry group comprises establishments primarily engaged in providing day-to-day business and other organizational support services (except office administrative services; facilities support services; employment services; business support services; travel arrangement and reservation services; security and investigation services; and services to buildings and dwellings).

### **56191 Packaging and Labeling Services**

This industry comprises establishments primarily engaged in packaging client-owned materials. The services may include labeling and/or imprinting the package.

### **56192 Convention and Trade Show Organizers**

This industry comprises establishments primarily engaged in organizing, promoting, and/or managing events, such as business and trade shows, conventions, conferences, and meetings (whether or not they manage and provide

the staff to operate the facilities in which these events take place).

### **56199 All Other Support Services**

This industry comprises establishments primarily engaged in providing day-to-day business and other organizational support services (except office administrative services, facilities support services, employment services, business support services, travel arrangement and reservation services, security and investigation services, services to buildings and other structures, packaging and labeling services, and convention and trade show organizing services).

### **56211 Solid Waste Collection**

This industry comprises establishments primarily engaged in one or more of the following: (1) collecting and/or hauling nonhazardous solid waste (i.e., garbage) within a local area; (2) operating nonhazardous solid waste transfer stations; and (3) collecting and/or hauling mixed recyclable materials within a local area.

### **562 Waste Management and Remediation Services**

Industries in the Waste Management and Remediation Services subsector group establishments engaged in the collection, treatment, and disposal of waste materials. This includes establishments engaged in local hauling of waste materials; operating materials recovery facilities (i.e., those that sort recyclable materials from the trash stream); providing remediation services (i.e., those that provide for the cleanup of contaminated buildings, mine sites, soil, or ground water); and providing septic pumping and other miscellaneous waste management services. There are three industry groups within the subsector that separate these activities into waste collection, waste treatment and disposal, and remediation and other waste management.

Excluded from this subsector are establishments primarily engaged in collecting, treating, and disposing waste through sewer systems or sewage treatment facilities that are classified in Industry 22132, Sewage Treatment Facilities and establishments primarily engaged in long-distance hauling of waste materials that are classified in Industry 48423, Specialized Freight (except Used Goods) Trucking, Long-Distance. Also, there are some activities that appear to be related to waste management, but that are not included in this subsector. For example, establishments primarily engaged in providing waste management consulting services are classified in Industry

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54162, Environmental Consulting Services.

### **5621 Waste Collection**

This industry comprises establishments primarily engaged in (1) collecting and/ or hauling hazardous waste, nonhazardous waste, and/or recyclable materials within a local area and/or (2) operating hazardous or nonhazardous waste transfer stations. Hazardous waste collection establishments may be responsible for the identification, treatment, packaging, and labeling of waste for the purposes of transport.

#### **562111 Solid Waste Collection**

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) collecting and/or hauling nonhazardous solid waste (i.e., garbage) within a local area; (2) operating nonhazardous solid waste transfer stations; and (3) collecting and/or hauling mixed recyclable materials within a local area.

#### **562112 Hazardous Waste Collection**

This industry comprises establishments primarily engaged in collecting and/or hauling hazardous waste within a local area and/or operating hazardous waste transfer stations. Hazardous waste collection establishments may be responsible for the identification, treatment, packaging, and labeling of wastes for the purposes of transport.

#### **562119 Other Waste Collection**

This industry comprises establishments primarily engaged in collecting and/or hauling waste (except nonhazardous solid waste and hazardous waste) within a local area. Establishments engaged in brush or rubble removal services are included in this industry.

### **5622 Waste Treatment and Disposal**

This industry comprises establishments primarily engaged in (1) operating waste treatment or disposal facilities (except sewer systems or sewage treatment facilities) or (2) the combined activity of collecting and/or hauling of waste materials within a local area and operating waste treatment or disposal facilities. Waste combustors or incinerators (including those that may produce byproducts, such as electricity), solid waste landfills, and compost dumps are included in this industry.

### **562211 Hazardous Waste Treatment and Disposal**

This industry comprises establishments primarily engaged in (1) operating treatment and/or disposal facilities for hazardous waste or (2) the combined activity of collecting and/or hauling of hazardous waste materials within a local area and operating treatment or disposal facilities for hazardous waste.

#### **562212 Solid Waste Landfill**

This industry comprises establishments primarily engaged in (1) operating landfills for the disposal of nonhazardous solid waste or (2) the combined activity of collecting and/or hauling nonhazardous waste materials within a local area and operating landfills for the disposal of nonhazardous solid waste.

#### **562213 Solid Waste Combustors and Incinerators**

This industry comprises establishments primarily engaged in operating combustors and incinerators for the disposal of nonhazardous solid waste. These establishments may produce byproducts, such as electricity and steam.

#### **562219 Other Nonhazardous Waste Treatment and Disposal**

This industry comprises establishments primarily engaged in (1) operating nonhazardous waste treatment and disposal facilities (except landfills, combustors, incinerators and sewer systems or sewage treatment facilities) or (2) the combined activity of collecting and/or hauling of nonhazardous waste materials within a local area and operating waste treatment or disposal facilities (except landfills, combustors, incinerators and sewer systems, or sewage treatment facilities). Compost dumps are included in this industry.

### **5629 Remediation and Other Waste Management Services**

This industry group comprises establishments primarily engaged in remediation and other waste management services (except waste collection, waste treatment and disposal, and waste management consulting services).

#### **56291 Remediation Services**

This industry comprises establishments primarily engaged

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in one or more of the following: (1) remediation and cleanup of contaminated buildings, mine sites, soil, or ground water; (2) integrated mine reclamation activities, including demolition, soil remediation, waste water treatment, hazardous material removal, contouring land, and revegetation; and (3) asbestos, lead paint, and other toxic material abatement.

#### **56292 Materials Recovery Facilities**

This industry comprises establishments primarily engaged in (1) operating facilities for separating and sorting recyclable materials from nonhazardous waste streams (i.e., garbage) and/or (2) operating facilities where commingled recyclable materials, such as paper, plastics, used beverage cans, and metals, are sorted into distinct categories.

#### **56299 All Other Waste Management Services**

This industry comprises establishments primarily engaged in waste management services (except waste collection, waste treatment and disposal, remediation, operation of materials recovery facilities, and waste management consulting services).

#### **562991 Septic Tank and Related Services**

This industry comprises establishments primarily engaged in (1) pumping (i.e., cleaning) septic tanks and cesspools and/or (2) renting and/or servicing portable toilets.

#### **562998 All Other Miscellaneous Waste Management Services**

This industry comprises establishments primarily engaged in providing waste management services (except waste collection, waste treatment and disposal, remediation, operation of materials recovery facilities, septic tank pumping and related services, and waste management consulting services).

#### **621 Ambulatory Health Care Services**

Industries in the Ambulatory Health Care Services subsector provide health care services directly or indirectly to ambulatory patients and do not usually provide inpatient services. Health practitioners in this subsector provide outpatient services, with the facilities and equipment not usually being the most significant part of the production process.

#### **6211 Offices of Physicians**

This industry comprises establishments of health practitioners having the degree of M.D. (Doctor of medicine) or D.O. (Doctor of osteopathy) primarily engaged in the independent practice of general or specialized medicine or surgery. These practitioners operate private or group practices in their own offices (e.g., centers, clinics) or in the facilities of others, such as hospitals or HMO medical centers.

#### **6212 Offices of Dentists**

This industry comprises establishments of health practitioners having the degree of D.M.D. (Doctor of dental medicine), D.D.S. (Doctor of dental surgery), or D.D.Sc. (Doctor of dental science) primarily engaged in the independent practice of general or specialized dentistry or dental surgery. These practitioners operate private or group practices in their own offices (e.g., centers, clinics) or in the facilities of others, such as hospitals or HMO medical centers. They can provide either comprehensive preventive, cosmetic, or emergency care, or specialize in a single field of dentistry.

#### **6213 Offices of Other Health Practitioners**

This industry group comprises establishments of independent health practitioners (except physicians and dentists).

#### **62131 Offices of Chiropractors**

This industry comprises establishments of health practitioners having the degree of D.C. (Doctor of chiropractic) primarily engaged in the independent practice of chiropractic. These practitioners provide diagnostic and therapeutic treatment of neuromusculoskeletal and related disorders through the manipulation and adjustment of the spinal column and extremities, and operate private or group practices in their own offices (e.g., centers, clinics) or in the facilities of others, such as hospitals or HMO medical centers.

#### **62132 Offices of Optometrists**

This industry comprises establishments of health practitioners having the degree of O.D. (Doctor of optometry) primarily engaged in the independent practice of optometry. These practitioners provide eye examinations to determine visual acuity or the presence of vision

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problems and to prescribe eyeglasses, contact lenses, and eye exercises. They operate private or group practices in their own offices (e.g., centers, clinics) or in the facilities of others, such as hospitals or HMO medical centers, and may also provide the same service as opticians, such as selling and fitting prescription eyeglasses and contact lenses.

#### **62133 Offices of Mental Health Practitioners (Except Physicians)**

This industry comprises establishments of independent mental health practitioners (except physicians) primarily engaged in (1) the diagnosis and treatment of mental, emotional, and behavioral disorders and/or (2) the diagnosis and treatment of individual or group social dysfunction brought about by such causes as mental illness, alcohol and substance abuse, physical and emotional trauma, or stress. These practitioners operate private or group practices in their own offices (e.g., centers, clinics) or in the facilities of others, such as hospitals or HMO medical centers.

#### **62134 Offices of Physical, Occupational and Speech Therapists, and Audiologists**

This industry comprises establishments of independent health practitioners primarily engaged in one of the following: (1) administering medically prescribed physical therapy treatment for patients suffering from injuries or muscle, nerve, joint, and bone disease; (2) planning and administering educational, recreational, and social activities designed to help patients or individuals with disabilities, regain physical or mental functioning or to adapt to their disabilities; and (3) diagnosing and treating speech, language, or hearing problems. These practitioners operate private or group practices in their own offices (e.g., centers, clinics) or in the facilities of others, such as hospitals or HMO medical centers.

#### **62139 Offices of All Other Health Practitioners**

This industry comprises establishments of independent health practitioners (except physicians; dentists; chiropractors; optometrists; mental health specialists; physical, occupational, and speech therapists; and audiologists). These practitioners operate private or group practices in their own offices (e.g., centers, clinics) or in the facilities of others, such as hospitals or HMO medical centers.

#### **621391 Offices of Podiatrists**

This U.S. industry comprises establishments of health practitioners having the degree of D.P. (Doctor of podiatry) primarily engaged in the independent practice of podiatry. These practitioners diagnose and treat diseases and deformities of the foot and operate private or group practices in their own offices (e.g., centers, clinics) or in the facilities of others, such as hospitals or HMO medical centers.

#### **621399 Offices of All Other Miscellaneous Health Practitioners**

This U.S. industry comprises establishments of independent health practitioners (except physicians; dentists; chiropractors; optometrists; mental health specialists; physical, occupational, and speech therapists; audiologists; and podiatrists). These practitioners operate private or group practices in their own offices (e.g., centers, clinics) or in the facilities of others, such as hospitals or HMO medical centers.

#### **62141 Family Planning Centers**

This industry comprises establishments with medical staff primarily engaged in providing a range of family planning services on an outpatient basis, such as contraceptive services, genetic and prenatal counseling, voluntary sterilization, and therapeutic and medically indicated termination of pregnancy.

#### **62142 Outpatient Mental Health and Substance Abuse Centers**

This industry comprises establishments with medical staff primarily engaged in providing outpatient services related to the diagnosis and treatment of mental health disorders and alcohol and other substance abuse. These establishments generally treat patients who do not require inpatient treatment. They may provide a counseling staff and information regarding a wide range of mental health and substance abuse issues and/or refer patients to more extensive treatment programs, if necessary.

#### **62149 Other Outpatient Care Centers**

This industry comprises establishments with medical staff primarily engaged in providing general or specialized

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outpatient care (except family planning centers and outpatient mental health and substance abuse centers). Centers or clinics of health practitioners with different degrees from more than one industry practicing within the same establishment (i.e., Doctor of medicine and Doctor of dental medicine) are included in this industry.

#### **621491 HMO Medical Centers**

This industry comprises establishments with physicians and other medical staff primarily engaged in providing a range of outpatient medical services to the health maintenance organization (HMO) subscribers with a focus generally on primary health care. These establishments are owned by the HMO. Included in this industry are HMO establishments that both provide health care services and underwrite health and medical insurance policies.

#### **621492 Kidney Dialysis Centers**

This industry comprises establishments with medical staff primarily engaged in providing outpatient kidney or renal dialysis services.

#### **621493 Freestanding Ambulatory Surgical and Emergency Centers**

This industry comprises establishments with physicians and other medical staff primarily engaged in (1) providing surgical services (e.g., orthoscopic and cataract surgery) on an outpatient basis or (2) providing emergency care services (e.g., setting broken bones, treating lacerations, or tending to patients suffering injuries as a result of accidents, trauma, or medical conditions necessitating immediate medical care) on an outpatient basis. Outpatient surgical establishments have specialized facilities, such as operating and recovery rooms, and specialized equipment, such as anesthetic or X-ray equipment.

#### **621498 All Other Outpatient Care Centers**

This industry comprises establishments with medical staff primarily engaged in providing general or specialized outpatient care (except family planning centers, outpatient mental health and substance abuse centers, HMO medical centers, kidney dialysis centers, and freestanding ambulatory surgical and emergency centers). Centers or clinics of health practitioners with different degrees from more than one industry practicing within the same establishment (i.e., Doctor of medicine and Doctor of dental medicine) are included in this industry.

#### **6215 Medical and Diagnostic Laboratories**

This industry comprises establishments known as medical and diagnostic laboratories primarily engaged in providing analytic or diagnostic services, including body fluid analysis and diagnostic imaging, generally to the medical profession or to the patient on referral from a health practitioner.

#### **621511 Medical Laboratories**

This industry comprises establishments known as medical laboratories primarily engaged in providing analytic or diagnostic services, including body fluid analysis, generally to the medical profession or to the patient on referral from a health practitioner.

#### **621512 Diagnostic Imaging Centers**

This industry comprises establishments known as diagnostic imaging centers primarily engaged in producing images of the patient generally on referral from a health practitioner.

#### **6216 Home Health Care Services**

This industry comprises establishments primarily engaged in providing skilled nursing services in the home, along with a range of the following: personal care services; homemaker and companion services; physical therapy; medical social services; medications; medical equipment and supplies; counseling; 24-hour home care; occupation and vocational therapy; dietary and nutritional services; speech therapy; audiology; and high-tech care, such as intravenous therapy.

#### **6219 Other Ambulatory Health Care Services**

This industry group comprises establishments primarily engaged in providing ambulatory health care services (except offices of physicians, dentists, and other health practitioners; outpatient care centers; medical laboratories and diagnostic imaging centers; and home health care providers).

#### **62191 Ambulance Services**

This industry comprises establishments primarily engaged in providing transportation of patients by ground or air, along with medical care. These services are often provided during a medical emergency but are not restricted to emergencies. The vehicles are equipped with lifesaving equipment operated by medically trained personnel.



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## **62199 All Other Ambulatory Health Care Services**

This industry comprises establishments primarily engaged in providing ambulatory health care services (except offices of physicians, dentists, and other health practitioners; outpatient care centers; medical and diagnostic laboratories; home health care providers; and ambulances).

## **622 Hospitals**

Industries in the Hospitals subsector provide medical, diagnostic, and treatment services that include physician, nursing, and other health services to inpatients and the specialized accommodation services required by inpatients. Hospitals may also provide outpatient services as a secondary activity. Establishments in the Hospitals subsector provide inpatient health services, many of which can only be provided using the specialized facilities and equipment that form a significant and integral part of the production process.

### **6221 General Medical and Surgical Hospitals**

This industry comprises establishments known and licensed as general medical and surgical hospitals primarily engaged in providing diagnostic and medical treatment (both surgical and nonsurgical) to inpatients with any of a wide variety of medical conditions. These establishments maintain inpatient beds and provide patients with food services that meet their nutritional requirements. These hospitals have an organized staff of physicians and other medical staff to provide patient care services. These establishments usually provide other services, such as outpatient services, anatomical pathology services, diagnostic X-ray services, clinical laboratory services, operating room services for a variety of procedures, and pharmacy services.

### **6222 Psychiatric and Substance Abuse Hospitals**

This industry comprises establishments known and licensed as psychiatric and substance abuse hospitals primarily engaged in providing diagnostic, medical treatment, and monitoring services for inpatients who suffer from mental illness or substance abuse disorders. The treatment often requires an extended stay in the hospital. These establishments maintain inpatient beds and provide patients with food services that meet their nutritional requirements. They have an organized staff of physicians and other medical staff to provide patient care services. Psychiatric, psychological, and social work

services are available at the facility. These hospitals usually provide other services, such as outpatient services, clinical laboratory services, diagnostic X-ray services, and electroencephalograph services.

### **6223 Specialty (Except Psychiatric and Substance Abuse) Hospitals**

This industry consists of establishments known and licensed as specialty hospitals primarily engaged in providing diagnostic and medical treatment to inpatients with a specific type of disease or medical condition (except psychiatric or substance abuse). Hospitals providing long-term care for the chronically ill and hospitals providing rehabilitation, restorative, and adjustive services to physically challenged or disabled people are included in this industry. These establishments maintain inpatient beds and provide patients with food services that meet their nutritional requirements. They have an organized staff of physicians and other medical staff to provide patient care services. These hospitals may provide other services, such as outpatient services, diagnostic X-ray services, clinical laboratory services, operating room services, physical therapy services, educational and vocational services, and psychological and social work services.

## **623 Nursing and Residential Care Facilities**

Industries in the Nursing and Residential Care Facilities subsector provide residential care combined with either nursing, supervisory, or other types of care as required by the residents. In this subsector, the facilities are a significant part of the production process and the care provided is a mix of health and social services with the health services being largely some level of nursing services.

### **6231 Nursing Care Facilities**

This industry comprises establishments primarily engaged in providing inpatient nursing and rehabilitative services. The care is generally provided for an extended period of time to individuals requiring nursing care. These establishments have a permanent core staff of registered or licensed practical nurses who, along with other staff, provide nursing and continuous personal care services.

### **6232 Residential Mental Retardation, Mental Health and Substance Abuse Facilities**

This industry group comprises establishments primarily engaged in providing residential care (but not licensed hospital care) to people with mental retardation, mental

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illness, or substance abuse problems.

#### **62321 Residential Mental Retardation Facilities**

This industry comprises establishments (e.g., group homes, hospitals, intermediate care facilities) primarily engaged in providing residential care services for persons diagnosed with mental retardation. These facilities may provide some health care, though the focus is room, board, protective supervision, and counseling.

#### **62322 Residential Mental Health and Substance Abuse Facilities**

This industry comprises establishments primarily engaged in providing residential care and treatment for patients with mental health and substance abuse illnesses. These establishments provide room, board, supervision, and counseling services. Although medical services may be available at these establishments, they are incidental to the counseling, mental rehabilitation, and support services offered. These establishments generally provide a wide range of social services in addition to counseling.

#### **6233 Community Care Facilities for the Elderly**

This industry comprises establishments primarily engaged in providing residential and personal care services for (1) the elderly and other persons who are unable to fully care for themselves and/or (2) the elderly and other persons who do not desire to live independently. The care typically includes room, board, supervision, and assistance in daily living, such as housekeeping services. In some instances these establishments provide skilled nursing care for residents in separate onsite facilities.

#### **623311 Continuing Care Retirement Communities**

This U.S. industry comprises establishments primarily engaged in providing a range of residential and personal care services with on-site nursing care facilities for (1) the elderly and other persons who are unable to fully care for themselves and/or (2) the elderly and other persons who do not desire to live independently. Individuals live in a variety of residential settings with meals, housekeeping, social, leisure, and other services available to assist residents in daily living. Assisted-living facilities with on-site nursing care facilities are included in this industry.

#### **623312 Homes for the Elderly**

This U.S. industry comprises establishments primarily

engaged in providing residential and personal care services (i.e., without on-site nursing care facilities) for (1) the elderly or other persons who are unable to fully care for themselves and/or (2) the elderly or other persons who do not desire to live independently. The care typically includes room, board, supervision, and assistance in daily living, such as housekeeping services.

#### **6239 Other Residential Care Facilities**

This industry comprises establishments primarily engaged in providing residential care (except residential mental retardation facilities, residential health and substance abuse facilities, continuing care retirement communities, and homes for the elderly). These establishments also provide supervision and personal care services.

#### **624 Social Assistance**

Industries in the Social Assistance subsector provide a wide variety of social assistance services directly to their clients. These services do not include residential or accommodation services, except on a short stay basis.

#### **62411 Child and Youth Services**

This industry comprises establishments primarily engaged in providing nonresidential social assistance services for children and youth. These establishments provide for the welfare of children in such areas as adoption and foster care, drug prevention, life skills training, and positive social development.

#### **62412 Services for the Elderly and Persons With Disabilities**

This industry comprises establishments primarily engaged in providing nonresidential social assistance services to improve the quality of life for the elderly, persons diagnosed with mental retardation, or persons with disabilities. These establishments provide for the welfare of these of individuals in such areas as day care, nonmedical home care or homemaker services, social activities, group support, and companionship.

#### **62419 Other Individual and Family Services**

This industry comprises establishments primarily engaged in providing nonresidential individual and family social assistance services (except those specifically directed toward children, the elderly, persons diagnosed with mental retardation, or persons with disabilities).

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### **62421 Community Food Services**

This industry comprises establishments primarily engaged in the collection, preparation, and delivery of food for the needy. Establishments in this industry may also distribute clothing and blankets to the poor. These establishments may prepare and deliver meals to persons who by reason of age, disability, or illness are unable to prepare meals for themselves; collect and distribute salvageable or donated food; or prepare and provide meals at fixed or mobile locations. Food banks, meal delivery programs, and soup kitchens are included in this industry.

### **62422 Community Housing Services**

This industry comprises establishments primarily engaged in providing one or more of the following community housing services: (1) short term emergency shelter for victims of domestic violence, sexual assault, or child abuse; (2) temporary residential shelter for the homeless, runaway youths, and patients and families caught in medical crises; (3) transitional housing for low-income individuals and families; (4) volunteer construction or repair of low cost housing, in partnership with the homeowner who may assist in construction or repair work; and (5) repair of homes for elderly or disabled homeowners. These establishments may operate their own shelter; or may subsidize housing using existing homes, apartments, hotels, or motels; or may require a low-cost mortgage or work (sweat) equity.

### **62423 Emergency and Other Relief Services**

This industry comprises establishments primarily engaged in providing food, shelter, clothing, medical relief, resettlement, and counseling to victims of domestic or international disasters or conflicts (e.g., wars).

### **6243 Vocational Rehabilitation Services**

This industry comprises (1) establishments primarily engaged in providing vocational rehabilitation or habilitation services, such as job counseling, job training, and work experience, to unemployed and underemployed persons, persons with disabilities, and persons who have a job market disadvantage because of lack of education, job skill, or experience and (2) establishments primarily engaged in providing training and employment to persons with disabilities. Vocational rehabilitation job training facilities (except schools) and sheltered workshops (i.e., work experience centers) are included in this industry.

### **6244 Child Day Care Services**

This industry comprises establishments primarily engaged in providing day care of infants or children. These establishments generally care for preschool children, but may care for older children when they are not in school and may also offer prekindergarten educational programs.

### **711 Performing Arts, Spectator Sports, and Related Industries**

Industries in the Performing Arts, Spectator Sports, and Related Industries subsector group establishments that produce or organize and promote live presentations involving the performances of actors and actresses, singers, dancers, musical groups and artists, athletes, and other entertainers, including independent (i.e., freelance) entertainers and the establishments that manage their careers. The classification recognizes four basic processes: (1) producing (i.e., presenting) events; (2) organizing, managing, and/or promoting events; (3) managing and representing entertainers; and (4) providing the artistic, creative and technical skills necessary to the production of these live events. Also, this subsector contains four industries for performing arts companies. Each is defined on the basis of the particular skills of the entertainers involved in the presentations.

The industry structure for this subsector makes a clear distinction between performing arts companies and performing artists (i.e., independent or freelance). Although not unique to arts and entertainment, freelancing is a particularly important phenomenon in this Performing Arts, Spectator Sports, and Related Industries subsector.

Distinguishing this activity from the production activity is a meaningful process differentiation. This approach, however, is difficult to implement in the case of musical groups (i.e., companies) and artists, especially pop groups. These establishments tend to be more loosely organized and it can be difficult to distinguish companies from freelancers. For this reason, NAICS includes one industry that covers both musical groups and musical artists.

This subsector contains two industries for Industry Group 7113, Promoters of Performing Arts, Sports, and Similar Events, one for those that operate facilities and another for those that do not. This is because there are significant differences in cost structures between those promoters that manage and provide the staff to operate facilities and those that do not. In addition to promoters without facilities,

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other industries in this subsector include establishments that may operate without permanent facilities. These types of establishments include: performing arts companies, musical groups and artists, spectator sports, and independent (i.e., freelance) artists, writers, and performers.

Excluded from this subsector are nightclubs. Some nightclubs promote live entertainment on a regular basis and it can be argued that they could be classified in Industry Group 7113, Promoters of Performing Arts, Sports, and Similar Events. However, since most of these establishments function as any other drinking place when they do not promote entertainment and because most of their revenue is derived from sale of food and beverages, they are classified in Subsector 722, Food Services and Drinking Places.

### **7111 Performing Arts Companies**

This industry group comprises establishments primarily engaged in producing live presentations involving the performances of actors and actresses, singers, dancers, musical groups and artists, and other performing artists.

### **7112 Spectator Sports**

This industry comprises (1) sports teams or clubs primarily participating in live sporting events before a paying audience; (2) establishments primarily engaged in operating racetracks; (3) independent athletes engaged in participating in live sporting or racing events before a paying audience; (4) owners of racing participants, such as cars, dogs, and horses, primarily engaged in entering them in racing events or other spectator sports events; and (5) establishments, such as sports trainers, primarily engaged in providing specialized services to support participants in sports events or competitions. The sports teams and clubs included in this industry may or may not operate their own arena, stadium, or other facility for presenting their games or other spectator sports events.

### **711211 Sports Teams and Clubs**

This industry comprises professional or semiprofessional sports teams or clubs primarily engaged in participating in live sporting events, such as baseball, basketball, football, hockey, soccer, and jai alai games, before a paying audience. These establishments may or may not operate their own arena, stadium, or other facility for presenting these events.

### **711212 Racetracks**

This industry comprises establishments primarily engaged in operating racetracks. These establishments may also present and /or promote the events, such as auto, dog, and horse races, held in these facilities.

### **711219 Other Spectator Sports**

This industry comprises (1) independent athletes, such as professional or semiprofessional golfers, boxers, and race car drivers, primarily engaged in participating in live sporting or racing events before a paying audience; (2) owners of racing participants, such as cars, dogs, and horses, primarily engaged in entering them in racing events or other spectator sports events; and (3) establishments, such as sports trainers, primarily engaged in providing specialized services required to support participants in sports events or competitions.

### **71131 Promoters of Performing Arts, Sports, and Similar Events With Facilities**

This industry comprises establishments primarily engaged in (1) organizing, promoting, and/or managing live performing arts productions, sports events, and similar events, such as State fairs, county fairs, agricultural fairs, concerts, and festivals, held in facilities that they manage and operate and/or (2) managing and providing the staff to operate arenas, stadiums, theaters, or other related facilities for rent to other promoters.

### **71132 Promoters of Performing Arts, Sports, and Similar Events Without Facilities**

This industry comprises promoters primarily engaged in organizing, promoting, and/or managing live performing arts productions, sports events, and similar events, such as state fairs, county fairs, agricultural fairs, concerts, and festivals, in facilities that are managed and operated by others. Theatrical (except motion picture) booking agencies are included in this industry.

### **7114 Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures**

This industry comprises establishments of agents and managers primarily engaged in representing and/or managing creative and performing artists, sports figures, entertainers, and other public figures. The representation and management includes activities, such as representing

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clients in contract negotiations; managing or organizing client's financial affairs; and generally promoting the careers of their clients.

### **7115 Independent Artists, Writers, and Performers**

This industry comprises independent (i.e., freelance) individuals primarily engaged in performing in artistic productions, in creating artistic and cultural works or productions, or in providing technical expertise necessary for these productions. This industry also includes athletes and other celebrities exclusively engaged in endorsing products and making speeches or public appearances for which they receive a fee.

### **712 Museums, Historical Sites, and Similar Institutions**

This industry comprises establishments primarily engaged in the preservation and exhibition of objects, sites, and natural wonders of historical, cultural, and/or educational value.

### **713 Amusement, Gambling, and Recreation Industries**

Industries in the Amusement, Gambling, and Recreation Industries subsector (1) operate facilities where patrons can primarily engage in sports, recreation, amusement, or gambling activities and/or (2) provide other amusement and recreation services, such as supplying and servicing amusement devices in places of business operated by others; operating sports teams, clubs, or leagues engaged in playing games for recreational purposes; and guiding tours without using transportation equipment.

This subsector does not cover all establishments providing recreational services. Other sectors of NAICS also provide recreational services. Providers of recreational services are often engaged in processes classified in other sectors of NAICS. For example, operators of resorts and hunting and fishing camps provide both accommodation and recreational facilities and services. These establishments are classified in Subsector 721, Accommodation, partly to reflect the significant costs associated with the provision of accommodation services and partly to ensure consistency with international standards. Likewise, establishments using transportation equipment to provide recreational and entertainment services, such as those operating sightseeing buses, dinner cruises, or helicopter rides, are classified in Subsector 48-49, Transportation and Warehousing.

The industry groups in this subsector highlight particular

types of activities: amusement parks and arcades, gambling industries, and other amusement and recreation industries. The groups, however, are not all inclusive of the activity. The Gambling Industries industry group does not provide for full coverage of gambling activities. For example, casino hotels are classified in Subsector 721, Accommodation; and horse and dog racing tracks are classified in Industry Group 7112, Spectator Sports.

#### **7131 Amusement Parks and Arcades**

This industry group comprises establishments primarily engaged in operating amusement parks and amusement arcades and parlors.

##### **71311 Amusement and Theme Parks**

This industry comprises establishments, known as amusement or theme parks, primarily engaged in operating a variety of attractions, such as mechanical rides, water rides, games, shows, theme exhibits, refreshment stands, and picnic grounds. These establishments may lease space to others on a concession basis.

##### **71312 Amusement Arcades**

This industry comprises establishments primarily engaged in operating amusement (except gambling, billiard, or pool) arcades and parlors.

##### **7132 Gambling Industries**

This industry group comprises establishments (except casino hotels) primarily engaged in operating gambling facilities, such as casinos, bingo halls, and video gaming terminals, or in the provision of gambling services, such as lotteries and off-track betting. Casino hotels are classified in Industry 72112, Casino Hotels.

##### **71321 Casinos (Except Casino Hotels)**

This industry comprises establishments primarily engaged in operating gambling facilities that offer table wagering games along with other gambling activities, such as slot machines and sports betting. These establishments often provide food and beverage services. Included in this industry are floating casinos (i.e., gambling cruises, riverboat casinos).

##### **71329 Other Gambling Industries**

This industry comprises establishments primarily engaged in operating gambling facilities (except casinos or casino

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hotels) or providing gambling services.

### **71391 Golf Courses and Country Clubs**

This industry comprises (1) establishments primarily engaged in operating golf courses (except miniature) and (2) establishments primarily engaged in operating golf courses, along with dining facilities and other recreational facilities that are known as country clubs. These establishments often provide food and beverage services, equipment rental services, and golf instruction services.

### **71392 Skiing Facilities**

This industry comprises establishments engaged in (1) operating downhill, cross-country, or related skiing areas and/or (2) operating equipment, such as ski lifts and tows. These establishments often provide food and beverage services, equipment rental services, and ski instruction services. Four season resorts without accommodations are included in this industry.

### **71393 Marinas**

This industry comprises establishments, commonly known as marinas, engaged in operating docking and/or storage facilities for pleasure craft owners, with or without one or more related activities, such as retailing fuel and marine supplies; and repairing, maintaining, or renting pleasure boats.

### **71394 Fitness and Recreational Sports Centers**

This industry comprises establishments primarily engaged in operating fitness and recreational sports facilities featuring exercise and other active physical fitness conditioning or recreational sports activities, such as swimming, skating, or racquet sports.

### **71395 Bowling Centers**

This industry comprises establishments engaged in operating bowling centers. These establishments often provide food and beverage services.

### **71399 All Other Amusement and Recreation Industries**

This industry comprises establishments (except amusement parks and arcades; gambling industries; golf courses and country clubs; skiing facilities; marinas; fitness and recreational sports centers; and bowling centers) primarily engaged in providing recreational and amusement services.

## **811 Repair and Maintenance**

Industries in the Repair and Maintenance subsector restore machinery, equipment, and other products to working order. These establishments also typically provide general or routine maintenance (i.e., servicing) on such products to ensure they work efficiently and to prevent breakdown and unnecessary repairs.

The NAICS structure for this subsector brings together most types of repair and maintenance establishments and categorizes them based on production processes (i.e., on the type of repair and maintenance activity performed, and the necessary skills, expertise, and processes that are found in different repair and maintenance establishments). This NAICS classification does not delineate between repair services provided to businesses versus those that serve households. Although some industries primarily serve either businesses or households, separation by class of customer is limited by the fact that many establishments serve both. Establishments repairing computers and consumer electronics products are two examples of such overlap.

The Repair and Maintenance subsector does not include all establishments that do repair and maintenance. For example, a substantial amount of repair is done by establishments that also manufacture machinery, equipment, and other goods. These establishments are included in the Manufacturing sector in NAICS. In addition, repair of transportation equipment is often provided by or based at transportation facilities, such as airports, seaports, and these activities are included in the Transportation and Warehousing sector. A particularly unique situation exists with repair of buildings. Plumbing, electrical installation and repair, painting and decorating, and other construction-related establishments are often involved in performing installation or other work on new construction as well as providing repair services on existing structures. While some specialize in repair, it is difficult to distinguish between the two types and all have been included in the Construction sector.

Excluded from this subsector are establishments primarily engaged in rebuilding or remanufacturing machinery and equipment. These are classified in Sector 31-33, Manufacturing. Also excluded are retail establishments that provide after-sale services and repair. These are classified in Sector 44-45, Retail Trade.

### **8111 Automotive Repair and Maintenance**

This industry group comprises establishments involved in providing repair and maintenance services for automotive

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vehicles, such as passenger cars, trucks, and vans, and all trailers. Establishments in this industry group employ mechanics with specialized technical skills to diagnose and repair the mechanical and electrical systems for automotive vehicles, repair automotive interiors, and paint or repair automotive exteriors.

#### **81111 Automotive Mechanical and Electrical Repair and Maintenance**

This industry comprises establishments primarily engaged in providing mechanical or electrical repair and maintenance services for automotive vehicles, such as passenger cars, trucks and vans, and all trailers. These establishments specialize in or may provide a wide range of these services.

##### **811111 General Automotive Repair**

This U.S. industry comprises establishments primarily engaged in providing (1) a wide range of mechanical and electrical repair and maintenance services for automotive vehicles, such as passenger cars, trucks, and vans, and all trailers or (2) engine repair and replacement.

##### **811112 Automotive Exhaust System Repair**

This U.S. industry comprises establishments primarily engaged in replacing or repairing exhaust systems of automotive vehicles, such as passenger cars, trucks, and vans.

##### **811113 Automotive Transmission Repair**

This industry comprises establishments primarily engaged in replacing or repairing transmissions of automotive vehicles, such as passenger cars, trucks, and vans.

##### **811118 Other Automotive Mechanical and Electrical Repair and Maintenance**

This U.S. industry comprises establishments primarily engaged in providing specialized mechanical or electrical repair and maintenance services (except engine repair and replacement, exhaust systems repair, and transmission repair) for automotive vehicles, such as passenger cars, trucks, and vans, and all trailers.

##### **81112 Automotive Body, Paint, Interior, and Glass Repair**

This industry comprises establishments primarily engaged in providing one or more of the following: (1) repairing or

customizing automotive vehicles, such as passenger cars, trucks, and vans, and all trailer bodies and interiors; (2) painting automotive vehicle and trailer bodies; (3) replacing, repairing, and/or tinting automotive vehicle glass; and (4) customizing automobile, truck, and van interiors for the physically disabled or other customers with special requirements.

##### **81121 Automotive Body, Paint, and Interior Repair and Maintenance**

This U.S. industry comprises establishments primarily engaged in repairing or customizing automotive vehicles, such as passenger cars, trucks, and vans, and all trailer bodies and interiors; and/or painting automotive vehicles and trailer bodies.

##### **81122 Automotive Glass Replacement Shops**

This U.S. industry comprises establishments primarily engaged in replacing, repairing, and/or tinting automotive vehicle, such as passenger car, truck, and van, glass.

##### **81119 Other Automotive Repair and Maintenance**

This industry comprises establishments primarily engaged in providing automotive repair and maintenance services (except mechanical and electrical repair and maintenance; transmission repair; and body, paint, interior, and glass repair) for automotive vehicles, such as passenger cars, trucks, and vans, and all trailers.

##### **811191 Automotive Oil Change and Lubrication Shops**

This U.S. industry comprises establishments primarily engaged in changing motor oil and lubricating the chassis of automotive vehicles, such as passenger cars, trucks, and vans.

##### **811192 Car Washes**

This U.S. industry comprises establishments primarily engaged in cleaning, washing, and/or waxing automotive vehicles, such as passenger cars, trucks, and vans, and trailers.

##### **811198 All Other Automotive Repair and Maintenance**

This U.S. industry comprises establishments primarily engaged in providing automotive repair and maintenance services (except mechanical and electrical repair and

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maintenance; body, paint, interior, and glass repair; motor oil change and lubrication; and car washing) for automotive vehicles, such as passenger cars, trucks, and vans, and all trailers.

### **8112 Electronic and Precision Equipment Repair and Maintenance**

This industry group comprises establishments primarily engaged in repairing electronic equipment, such as computers and communications equipment, and highly specialized precision instruments. Establishments in this industry group typically have staff skilled in repairing items having complex, electronic components.

#### **811211 Consumer Electronics Repair and Maintenance**

This industry comprises establishments primarily engaged in repairing and maintaining consumer electronics, such as televisions, stereos, speakers, video recorders, CD players, radios, and cameras, without retailing new consumer electronics.

#### **811212 Computer and Office Machine Repair and Maintenance**

This industry comprises establishments primarily engaged in repairing and maintaining computers and office machines without retailing new computers and office machines, such as photocopying machines; and computer terminals, storage devices, printers; and CD-ROM drives.

#### **811213 Communication Equipment Repair and Maintenance**

This industry comprises establishments primarily engaged in repairing and maintaining communications equipment without retailing new communication equipment, such as telephones, fax machines, communications transmission equipment, and two-way radios.

#### **811219 Other Electronic and Precision Equipment Repair and Maintenance**

This industry comprises establishments primarily engaged in repairing and maintaining (without retailing) electronic and precision equipment (except consumer electronics, computers and office machines, and communications equipment). Establishments in this industry repair and maintain equipment, such as medical diagnostic imaging equipment, measuring and surveying instruments, laboratory instruments, and radar and sonar equipment.

### **8113 Commercial and Industrial Machinery and Equipment (Except Automotive and Electronic) Repair and Maintenance**

This industry comprises establishments primarily engaged in the repair and maintenance of commercial and industrial machinery and equipment. Establishments in this industry either sharpen/install commercial and industrial machinery blades and saws or provide welding (e.g., automotive, general) repair services; or repair agricultural and other heavy and industrial machinery and equipment (e.g., forklifts and other materials handling equipment, machine tools, commercial refrigeration equipment, construction equipment, and mining machinery).

#### **81141 Home and Garden Equipment and Appliance Repair and Maintenance**

This industry comprises establishments primarily engaged in repairing and servicing home and garden equipment and appliance without retailing new equipment or appliances. Establishments in this industry repair and maintain items, such as lawnmowers, edgers, snow- and leafblowers, washing machines, clothes dryers and refrigerators.

#### **81142 Reupholstery and Furniture Repair**

This industry comprises establishments primarily engaged in one or more of the following: (1) reupholstering furniture; (2) refinishing furniture; (3) repairing furniture; and (4) repairing and restoring furniture.

#### **81143 Footwear and Leather Goods Repair**

This industry comprises establishments primarily engaged in repairing footwear and/or repairing other leather or leather-like goods without retailing new footwear and leather or leather-like goods, such as handbags and briefcases.

#### **81149 Other Personal and Household Goods Repair and Maintenance**

This industry comprises establishments primarily engaged in repairing and servicing personal or household-type goods without retailing new personal and household-type goods (except home and garden equipment, appliances, furniture, and footwear and leather goods). Establishments in this industry repair items, such as garments; watches; jewelry; musical instruments; bicycles and motorcycles; motorboats, canoes, sailboats, and other recreational boats.



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## **812 Personal and Laundry Services**

Industries in the Personal and Laundry Services subsector group establishments that provide personal and laundry services to individuals, households, and businesses. Services performed include: personal care services; death care services; laundry and drycleaning services; and a wide range of other personal services, such as pet care (except veterinary) services, photofinishing services, temporary parking services, and dating services.

The Personal and Laundry Services subsector is by no means all-inclusive of the services that could be termed personal services (i.e., those provided to individuals rather than businesses). There are many other subsectors, as well as sectors, that provide services to persons. Establishments providing legal, accounting, tax preparation, architectural, portrait photography, and similar professional services are classified in Sector 54, Professional, Scientific, and Technical Services; those providing job placement, travel arrangement, home security, interior and exterior house cleaning, exterminating, lawn and garden care, and similar support services are classified in Sector 56, Administrative and Support, Waste Management and Remediation Services; those providing health and social services are classified in Sector 62, Health Care and Social Assistance; those providing amusement and recreation services are classified in Sector 71, Arts, Entertainment and Recreation; those providing educational instruction are classified in Sector 61, Educational Services; those providing repair services are classified in Subsector 811, Repair and Maintenance; and those providing spiritual, civic, and advocacy services are classified in Subsector 813, Religious, Grantmaking, Civic, Professional, and Similar Organizations.

### **8121 Personal Care Services**

This industry group comprises establishments, such as barber and beauty shops, that provide appearance care services to individual consumers.

#### **81211 Hair, Nail, and Skin Care Services**

This industry comprises establishments primarily engaged in one or more of the following: (1) providing hair care services; (2) providing nail care services; and (3) providing

facials or applying makeup (except permanent makeup).

#### **812111 Barber Shops**

This industry comprises establishments known as barber shops or men's hair stylist shops primarily engaged in cutting, trimming, and styling boys' and men's hair; and/or shaving and trimming men's beards.

#### **812112 Beauty Salons**

This industry comprises establishments (except those known as barber shops or men's hair stylist shops) primarily engaged in one or more of the following: (1) cutting, trimming, shampooing, weaving, coloring, waving, or styling hair; (2) providing facials; and (3) applying makeup (except permanent makeup).

#### **812113 Nail Salons**

This industry comprises establishments primarily engaged in providing nail care services, such as manicures, pedicures, and nail extensions.

#### **81219 Other Personal Care Services**

This industry comprises establishments primarily engaged in providing personal care services (except hair, nail, facial, or nonpermanent makeup services).

#### **812191 Diet and Weight Reducing Centers**

This industry comprises establishments primarily engaged in providing nonmedical services to assist clients in attaining or maintaining a desired weight. The sale of weight reduction products, such as food supplements, may be an integral component of the program. These services typically include individual or group counseling, menu and exercise planning, and weight and body measurement monitoring.

#### **812199 Other Personal Care Services**

This industry comprises establishments primarily engaged in providing personal care services (except hair, nail, facial, nonpermanent makeup, or nonmedical diet and weight reducing services).

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### **81221 Funeral Homes and Funeral Services**

This industry comprises establishments primarily engaged in preparing the dead for burial or interment and conducting funerals (i.e., providing facilities for wakes, arranging transportation for the dead, selling caskets and related merchandise). Funeral homes combined with crematories are included in this industry.

### **81222 Cemeteries and Crematories**

This industry comprises establishments primarily engaged in operating sites or structures reserved for the interment of human or animal remains and/or cremating the dead.

### **81231 Coin-Operated Laundries and Drycleaners**

This industry comprises (1) establishments primarily engaged in operating facilities with coin-operated or similar self-service laundry and drycleaning equipment for customer use on the premises and (2) establishments primarily engaged in supplying and servicing coin-operated or similar self-service laundry and drycleaning equipment for customer use in places of business operated by others, such as apartments and dormitories.

### **81232 Drycleaning and Laundry Services (Except Coin-Operated)**

This industry comprises establishments primarily engaged in one or more of the following: (1) providing drycleaning services (except coin-operated); (2) providing laundering services (except linen and uniform supply or coinoperated); (3) providing dropoff and pickup sites for laundries and/or drycleaners; and (4) providing specialty cleaning services for specific types of garments and other textile items (except carpets and upholstery), such as fur, leather, or suede garments; wedding gowns; hats; draperies; and pillows. These establishments may provide all, a combination of, or none of the cleaning services on the premises.

### **812331 Linen Supply**

This industry comprises establishments primarily engaged in supplying, on a rental or contract basis, laundered items, such as table and bed linens; towels; diapers; and uniforms, gowns, or coats of the type used by doctors, nurses, barbers, beauticians, and waitresses.

### **812332 Industrial Launderers**

This industry comprises establishments primarily engaged

in supplying, on a rental or contract basis, laundered industrial work uniforms and related work clothing, such as protective apparel (flame and heat resistant) and clean room apparel; dust control items, such as treated mops, rugs, mats, dust tool covers, cloths, and shop or wiping towels.

### **8129 Other Personal Services**

The industry group comprises establishments primarily engaged in providing personal services (except personal care services, death care services, or drycleaning and laundry services).

#### **81291 Pet Care (except Veterinary) Services**

This industry comprises establishments primarily engaged in providing pet care services (except veterinary), such as boarding, grooming, sitting, and training pets.

#### **81292 Photofinishing**

This industry comprises establishments primarily engaged in developing film and/or making photographic slides, prints, and enlargements.

#### **81293 Parking Lots and Garages**

This industry comprises establishments primarily engaged in providing parking space for motor vehicles, usually on an hourly, daily, or monthly basis and/or valet parking services.

#### **81299 All Other Personal Services**

This industry comprises establishments primarily engaged in providing personal services (except personal care services, death care services, drycleaning and laundry services, pet care services, photofinishing services, or parking space and/or valet parking services).

### **813 Religious, Grantmaking, Civic, Professional, and Similar Organizations**

Industries in the Religious, Grantmaking, Civic, Professional, and Similar Organizations subsector group establishments that organize and promote religious activities; support various causes through grantmaking; advocate various social and political causes; and promote and defend the interests of their members.

The industry groups within the subsector are defined in terms of their activities, such as establishments that

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provide funding for specific causes or for a variety of charitable causes; establishments that advocate and actively promote causes and beliefs for the public good; and establishments that have an active membership structure to promote causes and represent the interests of their members. Establishments in this subsector may publish newsletters, books, and periodicals for distribution to their membership.

#### **8132 Grantmaking and Giving Services**

This industry comprises (1) establishments known as grantmaking foundations or charitable trusts and (2) establishments primarily engaged in raising funds for a wide range of social welfare activities, such as health, educational, scientific, and cultural activities.

#### **8133 Social Advocacy Organizations**

This industry comprises establishments primarily engaged in promoting a particular cause or working for the realization of a specific social or political goal to benefit a

broad or specific constituency. These organizations may solicit contributions and offer memberships to support these goals.

#### **8134 Civic and Social Organizations**

This industry comprises establishments primarily engaged in promoting the civic and social interests of their members. Establishments in this industry may operate bars and restaurants for their members.

#### **8139 Business, Professional, and Other Organizations (Except Labor and Political Organizations)**

This industry group comprises establishments primarily engaged in promoting the interests of their members (except religious organizations, social advocacy organizations, and civic and social organizations). Examples of establishments in this industry are business associations and professional organizations.

## Appendix D.

# Sample Design and Estimation Procedures

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A new sample was introduced with the 2005 Service Annual Survey (SAS). The new sample was designed to produce estimates based on the 2002 North American Industry Classification System (NAICS). This section describes the design, selection, and estimation procedures for the new sample. For descriptions of prior samples, see the *Service Annual Survey* publications.

### Sampling Frame

The sampling frame used for the Service Annual Survey (SAS) has two types of sampling units represented: Employer Identification Numbers (EINs) and large, multiple-establishment firms. Both sampling units represent clusters of one or more establishments owned or controlled by the same firm. The information used to create these sampling units was extracted from data collected as part of the 2002 Economic Census and from establishment records contained on the Census Bureau's Business Register as updated to December 2004. The next few paragraphs give details about the Business Register; the distinction between firms, EINs, and establishments; and the construction of the sampling units. Though important, they are not essential to understanding the basic sample design and readers may continue to the **Stratification, Sampling Rates, and Allocation** section.

The Business Register is a multi-relational database that contains a record for each known establishment that is located in the United States or one of its territories and has paid employees. An *establishment* is a single physical location where business transactions take place and for which payroll and employment records are kept. Groups of one or more establishments under common ownership or control are *firms*. A *single-unit* firm owns or operates only one establishment. A *multiunit* firm owns or operates two or more establishments. The treatment of establishments on the Business Register differs according to whether the establishment is part of a single-unit or multiunit firm. In particular, the structure of an establishment's primary identifier on the Business Register differs depending on whether it is owned by a single-unit firm or by a multiunit firm.

A single-unit firm's primary identifier is its EIN. The Internal Revenue Service (IRS) issues the EIN, and the firm uses it as an identifier to report social security payments

for its employees under the Federal Insurance Contributions Act (FICA). The same act requires all employer firms to use EINs. Each employer firm is associated with at least one EIN and only one firm can use a given EIN. Because a single-unit firm has only one establishment, there is a one-to-one relationship between the firm and the EIN. Thus the firm, the EIN, and the establishment all reference the same physical location and all three terms can be used interchangeably and unambiguously when referring to a single-unit firm.

For multiunit firms however, a different structure connects the firm with its establishments via the EIN. Essentially a multiunit firm is associated with a cluster of one or more EINs and EINs are associated with one or more establishments. A multiunit firm consists of at least two establishments. Each firm is associated with at least one EIN and only one firm can use a given EIN. However, one multiunit firm may have several EINs. Similarly, there is a one-to-many relationship between EINs and establishments. Each EIN can be associated with many establishments but each establishment is associated with only one EIN. Because of the possibility of one-to-many relationships, we must distinguish between the firm, its EINs, and its establishments. The multiunit firm that owns or controls a particular establishment is identified on the Business Register by way of the establishment's primary identifier.

The primary identifier of an establishment owned by a multiunit firm consists of a unique combination of an alpha number and a plant number. The alpha number identifies the multiunit firm, and the plant number identifies a particular establishment within that firm. All establishments owned or controlled by the same multiunit firm have the same alpha number. Different multiunit firms have different alpha numbers, and different establishments within the same multiunit firm have different plant numbers. The Census Bureau assigns both the alpha number to the multiunit firm and plant numbers to the corresponding establishments based on the results of the quinquennial economic census and the annual Company Organization Survey.

To create the sampling frame, we extract the records for all establishments located in the United States and classified in select service sectors as defined by the 2002 NAICS. For

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these establishments, we extract revenue, payroll, employment, name and address information, as well as primary identifiers and, for establishments owned by multiunit firms, associated EINs.

To create the sampling units for multiunit firms, we aggregate the economic data of the establishments owned by these firms to an EIN level by tabulating the establishment data for all service establishments associated with the same EIN. Similarly we aggregate the data to a multiunit firm level by tabulating the establishment data for all service establishments associated with the same alpha number. No aggregation is necessary to put single-unit establishment information on an EIN basis or a firm basis. Thus, the sampling units created for single-unit firms simultaneously represent establishment, EIN, and firm information. In summary, the sampling frame is a complex amalgam of establishments, EINs, and firms.

### **Stratification, Sampling Rates, and Allocation**

The primary stratification of the sampling frame is by industry group based on the detail required for publication. We further stratify the sampling units within industry group by a measure of size (substratify) related to their annual revenue. Sampling units expected to have a large effect on the precision of the estimates are selected "with certainty." This means they are sure to be selected and will represent only themselves (i.e., have a selection probability of 1 and a sampling weight of 1). Within each industry stratum, we determine a substratum boundary (or cutoff) that divides the certainty units from the noncertainty units. We base these cutoffs on a statistical analysis of data from the 2002 Economic Census. Accordingly, these values are on a 2002 revenue basis. We also used this analysis to determine the number of size substrata for each industry stratum and to set preliminary sampling rates needed to achieve specified sampling variability constraints on revenue estimates for different industry groups. The size substrata and sampling rates are later updated through analysis of the sampling frame.

### **Sample Selection**

The first step in the sample selection identified firms selected with certainty: the estimated annual revenue of the firm was greater than the corresponding certainty cutoff.

All firms not selected with certainty were subjected to sampling on an EIN basis. If a firm had more than one EIN, we treated each of its EINs as a separate sampling unit. To be eligible for the initial sampling, an EIN had to

have nonzero payroll in 2003. The EINs were stratified according to their major industry and their estimated revenue (on a 2002 basis). Within each noncertainty stratum, a simple random sample of EINs was selected without replacement.

### **Sample Maintenance**

Periodically, we update the sample to represent new EINs appearing on the Business Register. These new EINs, called births, are EINs recently assigned by the IRS on the latest available IRS mailing list for FICA taxpayers and assigned an industry classification (if possible) by the Social Security Administration (SSA).

The EIN births are sampled on a quarterly basis using a two-phase selection procedure. To be eligible for selection, a birth must either have no industry classification or be classified in an industry within the scope of SAS, the Annual Wholesale Trade Survey (AWTS), or the Annual Retail Trade Survey (ARTS), and it must meet certain criteria regarding its number of paid employees or quarterly payroll. In the first phase, births are stratified by broad industry groups and a measure of size based on quarterly payroll. A relatively large sample is selected using equal probability systematic sampling. The selected births are canvassed to obtain a more reliable measure of size, consisting of sales in 2 recent months, company affiliation information, and a new or more detailed industry classification code. Births that haven't returned their questionnaire after 30 days are contacted by telephone.

Using this more reliable information, the selected births from the first phase are subjected to probability proportional-to-size sampling with overall probabilities equivalent to those used in drawing the initial SAS, AWTS, and ARTS samples from the December 2004 Business Register. Because of the time it takes for a new employer firm to acquire an EIN from the IRS, and because of the time needed to accomplish the two-phase birth-selection procedure, births are added to the sample approximately 9 months after they begin operation.

The births that are selected in the quarterly birth-selection procedure in November of the survey year are included in the initial mailing of the SAS questionnaires in January of the following year. To better represent all EIN births in the reference year, and specifically to account for the time it takes to identify and select new EINs, we add births to the SAS sample that are selected in February, May, and August the year following the reference year. We mail survey forms to these births in February, June, and August to supplement the initial survey mailing.

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To be eligible for the sample canvass and tabulation, an EIN selected in the noncertainty sampling operations must meet both of the following requirements:

- It must be on the latest available IRS mailing list for FICA taxpayers from the previous quarter.
- It must have been selected from the Business Register in either the initial sampling or during the quarterly birth-selection procedure.

If a firm was selected with certainty and had more than one establishment at the time of sampling, any new establishments that the firm acquires, even if under new or different EINs, are included in the sample with certainty. However, if a single-unit firm was selected with certainty, only future establishments associated with that firm's originally-selected EIN are included in the sample with certainty; any new EINs that might later be associated with that firm are subjected to sampling through the quarterly birth-selection procedure.

EINs selected into the sample with certainty are not dropped from canvass and tabulation if they are no longer on the IRS mailing list. Rather, the firm that used the EIN is contacted, and if a successor EIN is found, it is added to the survey. For both inactive and reactivated EINs, data are tabulated for only the portion of the reference year that these EINs reported payroll to the IRS.

### Estimation Method

The current sample was introduced with the 2005 SAS to compute estimates based on the 2002 North American Industry Classification System (NAICS). This sample replaced one that was designed to produce estimates based on the 1997 NAICS. For more information on the NAICS industries covered by the 2006 SAS, see the **Coverage** section in the introduction.

Totals estimated from this sample survey are computed as the sum of weighted data (reported and imputed) for all selected sampling units that meet the tabulation criteria given in the **Sample Maintenance** section. The weight for a given sampling unit is the reciprocal of its probability of selection into the sample. The sample-based estimated totals are then adjusted to the 2002 Economic Census using the procedure described below.

For industries affected by the change from 1997 to 2002 NAICS, published census-adjusted revenue estimates for 1998 through 2004 from the prior sample are restated on a

2002 NAICS basis, using revenue distributions from the 2002 Economic Census that link the two sets of classification codes. Of particular note, the estimates for Sector 51 (Information) are revised due to the creation of new industries for Internet publishing and broadcasting and Web search portals. For industries not affected by the change from 1997 to 2002 NAICS, there is no need to restate the published census-adjusted revenue estimates from the prior sample.

Revenue estimates for 2005 and subsequent years from the current sample are adjusted to the 2002 Economic Census by linking these estimates to the published census-adjusted estimates from the prior sample, after historical corrections are made to data from the current sample for 2004 and 2005. The linking is performed by multiplying the sample-based revenue estimate for a given detailed industry, which is generally defined by a 6-digit NAICS code, by a ratio. The numerator and denominator of the ratio are as follows:

- The numerator is the 2004 published census-adjusted revenue estimate of the industry on a 2002 NAICS basis from the prior sample.
- The denominator is the 2004 revenue estimate of the industry on a 2002 NAICS basis from the current sample.

For data items other than revenue, such as total expenses and other revenue items, a similar method is used to adjust the estimates for 2004 and subsequent years from the current sample, by linking these estimates to those from the prior sample. First, the ratio described above is applied to the sample-based estimates for the given detailed industry for 2004 and subsequent years. Then, the difference between the 2004 adjusted estimate from the current sample and the 2004 published adjusted estimate from the prior sample is taken into account by applying a second ratio to the published adjusted estimates for 1998 through 2003 from the prior sample. The numerator and denominator of the second ratio are as follows:

- The numerator is the 2004 adjusted estimate for the industry on a 2002 NAICS basis from the current sample.
- The denominator is the 2004 published adjusted estimate for the industry on a 2002 NAICS basis from the prior sample.

Total estimates at 2-, 3-, 4-, and 5-digit NAICS levels are computed by summing the adjusted totals for the

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appropriate detailed industries comprising the aggregate. Year-to-year change estimates are computed using the appropriate adjusted totals for the industry and time period.

Note that estimates for the following Truck Transportation (NAICS 484) data items are produced directly from the

sample, without adjustment:

- Inventories of Revenue Generating Equipment by Type of Carrier;
- Number of Truck Miles.

## Appendix E. Report Forms

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The 2007 SAS forms are available at the following website:

[http://www.census.gov/svsd/www/services/sas/sas\\_forms/forms.htm](http://www.census.gov/svsd/www/services/sas/sas_forms/forms.htm).