BEA
BUREAU OF ECONOMIC ANALYSIS
U.S. DEPARTMENT OF COMMERCE

FY 2007
Report on the Customer Satisfaction Survey

The Bureau of Economic Analysis (BEA) remains committed to two endeavors—delivering the most accurate and timely economic data and packaging these data so that they are relevant to customers. To assess customers' opinions about its data products, its staff, and its Web site, BEA has conducted annual surveys since FY 2000. The outcomes of these surveys have served as catalysts for new strategic planning goals and spurred Bureau-wide improvement efforts. Many recent improvements have been prompted by survey results, including data accelerations, Web site improvements, more detailed estimates, and plain-language communications products aimed at enhancing economic understanding by non-economists.

In FY 2006, BEA dramatically improved its customer survey by taking it online, which rendered additional detail about those who use BEA data. That survey showed—and the FY 2007 survey further illustrates—that diversity is a key characteristic of BEA's customers. Everyone from students and educators to international financiers and small business owners use BEA economic accounts data. The information obtained from this year's survey will be used to improve dissemination and tailor outreach efforts to meet the needs of BEA's user groups.

The FY 2007 customer survey was conducted year-round on the BEA Web site, providing multiple statistically-relevant sample sets. All data in this report were collected from July 1, 2006, through June 30, 2007. There were more than 1,700 respondents during this time period.

Customer Satisfaction

Since their inception, the *Customer Satisfaction Surveys* have helped BEA meet customers' expectations. FY 2007 customer survey respondents were asked to rank their satisfaction with BEA's products and services on a 10-point scale, with 1–5 being 'unsatisfied;' 6–7 being 'somewhat satisfied;' 8–9 being 'moderately satisfied;' and 10 being 'very satisfied.' A majority of survey respondents (69.0%) indicated they were either moderately or very satisfied with BEA's products and services. Slightly more than a quarter of respondents (26.5%) indicated they were very satisfied. When separated by role, standout satisfaction levels with BEA products and services were reported by news professionals (80.0% moderately or very satisfied), economists and statisticians (78.3%), educators (75.9%), and business owners (73.1%).

The Office of Management and Budget (OMB) requires that Federal agencies report annually their customers' satisfaction on a 5-point scale. When FY 2007 scores were converted to this scale, BEA's products and services scored 4.3, which was a 0.1 increase from FY 2006. This meets an FY 2007 strategic goal by exceeding 4.0.

While the public Web site is the most prevalent method for accessing BEA data, the Bureau continues to emphasize personal interactions as critical in connecting with customers. To this end, BEA has designated subject matter experts to speak authoritatively to the media and the public, established multiple subject-specific e-mail accounts and phone lines for expeditious responses to inquires, and developed a multi-faceted exhibit services program that connects with users at targeted events. BEA has clearly excelled at these efforts, as FY 2007 survey respondents ranked the courtesy and responsiveness of BEA staff a 4.5 on OMB's 5-point scale.

BEA Web Site

In FY 2007, BEA's public Web site underwent major improvements in navigation and design. The search engine was refined and the FAQ database was expanded. According to the Federal Consulting Group, which tracks customer satisfaction with Web sites, <bea.gov> is among the best-scoring Federal news and information sites.

Using the survey's 10-point scale, respondents were asked to rank their satisfaction with the BEA Web site. Overall, 63.0% of FY 2007 respondents indicated they were moderately or very satisfied with BEA's public Web site. Among user groups, reporters and news professionals gave the highest scores, with 51.4% of them indicating they were very satisfied. Also indicating they were very satisfied with BEA's Web site were 31.7% of the general public, 29.5% of educators, 25.6% of students, and 25.0% of trade or policy association representatives.

Customer Demographics

BEA's online survey obtains anonymous information about its customers. Again in FY 2007, the four largest data user groups among respondents were: economists & statisticians (33.87%); students (20.54%); those working in financial, securities, and investment capacities (8.77%); and educators (7.44%). Other survey respondents self-identified as:

Business owners & managers	6.64%
Government representatives	5.60%
Other	3.81%
General public	3.46%
Accountants	3.46%
Marketing professionals	2.37%
Reporters & news professionals	2.02%
Trade or policy associations	1.15%
Attorneys	0.87%

BEA strives to connect with all of its data users; however fiscal constraints dictate that we prioritize initiatives. For FY 2008, BEA will focus on finding improved ways to serve the top four customer groups: economists and statisticians; students; those in the financial, securities, and investment industries; and educators. Other groups will be engaged via outreach and the e-mail subscription service. In the pages that follow, additional FY 2007 survey details about these user groups are provided.

Who uses BEA data?

Economists & statisticians 33.87%

Students 20.54%

Financial, securities, & investment 8.77%

Educators 7.44%
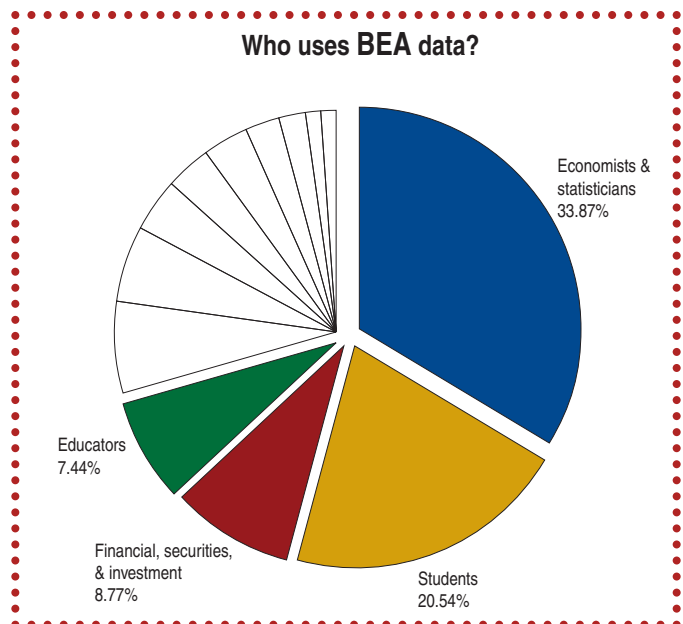
33.87%

Economists & Statisticians

Given BEA's mission to provide national, international, regional, and industry accounts data, it is not surprising that the largest percentage of respondents self-identify as economists and statisticians. Compared to FY 2006 figures, the percent of economist and statistician respondents in FY 2007 edged downward by 2.5%. And economist and statistician respondents are extremely satisfied with BEA's products and services—78.3% are moderately (52.1%) to very (26.2%) satisfied with BEA's products and services. This is the second highest satisfaction level among all respondents.

Moreover, this user group is unique in that more than a third (36.5%) visit the BEA Web site weekly, while another third (33.8%) visit monthly. And among this user group, 9.4% visit <bea.gov> on a daily basis. BEA strives to enhance the online experience and to keep these routine users engaged. In addition to the recent redesign, the site is frequently updated and features a new "Of Interest" section. It is clear these efforts are successful, as economists and statisticians are overwhelmingly pleased with the site—67.9% of survey respondents indicated they were moderately to very satisfied with <bea.gov>.

As BEA's core customers, this user group has long been a focus of outreach efforts. The Bureau has established relationships within its ranks and with its stakeholders. BEA regularly solicits feedback from professional economists via its advisory committee meetings, data user group forums, presentations, published papers, and other interactions.

Table 1. Types of Information Sought by Economist and Statistician Respondents, FY 2007

Type of information sought	Percent seeking	Percent change from FY 2006
Data tables	56.0%	−11.3%
General information on the U.S. economy	21.4%	+4.7%
News releases	10.0%	+2.0%
SURVEY OF CURRENT BUSINESS	5.7%	+3.0%
Other	5.1%	−0.9%

20.54%

Students

In FY 2007, students represented 20.6% of total survey respondents—an increase of nearly 4% from FY 2006 and the second most populous respondent group. Yet students indicated the lowest level of satisfaction with BEA's products and services, except for those self-identifying as "other." Just 56.5% ranked themselves as moderately (31.2%) or very (25.3%) satisfied.

While nearly a third of student respondents are frequent visitors to <bea.gov> (weekly, 17.9%; monthly, 14.3%), more than half (55.6%) of BEA's student respondents were first time visitors. This presents a unique opportunity to convert these first-time data users into repeat visitors. Despite their relative inexperience with the site when compared with other user groups, 57.7% of student respondents indicated they were moderately (31.2%) or very (25.6%) satisfied with the BEA Web site.

Further examination of this user group began in FY 2006, after survey data confirmed their large numbers. This trend continued in FY 2007, with academia data users (comprised of student and educator respondents) accounting for a considerable 27.98% of respondents. Information is still being gathered on how to best serve these populations. Particular effort will be made to

learn more about the Web site's student visitors, what types of products and services they are seeking, and what compels them to return. Additionally, by continuing efforts to repackage existing data products and to disseminate plain-language communications tools, BEA can provide added value for student customers.

Table 2. Types of Information Sought by Student Respondents, FY 2007

Type of information sought	Percent seeking	Percent change from FY 2006
General information on the U.S. economy	48.0%	+3.3%
Data tables	31.0%	−9.0%
Other	8.3%	—
SURVEY OF CURRENT BUSINESS	4.7%	+1.3%
News releases	3.3%	+0.3%

8.77%

Financial, securities, & investment

After BEA's first online survey in FY 2006, those working in the financial, securities, and investment industries emerged as a key constituency. That year, these users accounted for 7.2% of survey respondents and in FY 2007 that figure increased to 8.8%. Many of the respondents working in the financial, securities, and investment industries were moderately (48.7%) or very (22.4%) satisfied with BEA's products and services.

Financial, securities, and investment respondents indicate they are frequent visitors to <bea.gov>. More than 70% of them visit the Web site weekly (32.9%), monthly (38.2%), or daily (1.3%). More than half (52.6%) of those working in these industries indicated they were moderately satisfied with the BEA Web site, while another 16.4% indicated they were very satisfied. Among BEA's top four user groups, those working in the financial, securities, and investment industries had the highest level of Web site satisfaction.

The ongoing presence of these users in the top four is note-worthy, meriting further examination and presenting new outreach possibilities. In FY 2008, BEA will continue efforts to maintain a highly-engaged relationship with these users.

Table 3 Types of Information Sought by Financial, Securities, and Investment Respondents, FY 2007

Type of information sought	Percent seeking	Percent change from FY 2006
Data tables	41.4%	+3.2%
General information on the U.S. economy	33.6%	+4.4%
News releases	15.1%	−0.6%
Other	5.2%	−4.9%
SURVEY OF CURRENT BUSINESS	4.6%	+0.1%

7.44%

Educators

While educators remain in the top four user groups in FY 2007, the percent of survey respondents who self-identified as educators decreased slightly from the previous year, when they accounted for 8.1% of respondents. With regard to BEA's products and services, educators are the third most satisfied group. More than three-quarters (75.9%) are moderately (42.6%) or very (33.3%) satisfied with BEA's efforts.

According to the FY 2007 survey, most educators visit the BEA Web site either weekly (25.6%) or monthly (31.0%); however, among this user group a considerable 18.6% are first time visitors. Nearly three-quarters of educator respondents are either moderately (43.4%) or very (29.5%) satisfied with the BEA Web site.

Since learning of the FY 2006 survey results, BEA has begun focused outreach efforts to this user group. To date this has included attending conferences for educators of economics at the K–12 and collegiate levels and beginning a dialog with the nation's top-ranked economics schools, as defined by *U.S. News & World Reports*. Early response has been promising, with educator customers expressing a keen interest in communications tools that could be used in the classroom, such as the regional data wheel and the *BEA Customer Guide*. In FY 2008, BEA will continue these efforts and explore others for gathering information from and making inroads with educators.

Table 4. Types of Information Sought by Educator Respondents, FY 2007

Type of information sought	Percent seeking	Percent change from FY 2007
Data tables	42.6%	−8.4%
General information on the U.S. economy	40.3%	+5.3%
News releases	6.9%	−0.1%
Other	6.2%	+1.2%
SURVEY OF CURRENT BUSINESS	3.8%	+1.8%

Appendix A:

About Foresee Results' Survey Design

The Bureau of Economic Analysis uses a Web-based survey instrument that is conducted by Foresee Results, a market leader in online customer satisfaction measurement and management and specializing in converting satisfaction data into user-driven Web development strategies. Using the methodology of the University of Michigan's American Customer Satisfaction Index (ACSI), ForeSee Results has created a model that scientifically quantifies the elements that drive online customer satisfaction and predicts future behaviors, including the likelihood to return to the site or recommend the site to others. This contractor's methodologies and survey instruments are OMB-approved.

There are several key characteristics of ForeSee Results' survey design:

The use of multiple item scales
Instead of relying on the answer to a single question to measure customer perceptions for a particular attribute, or "element" (which typically results in a rather large confidence interval), ForeSee Results asks multiple questions to derive a score for each measured element. For example, rather than asking respondents to "Please rate your overall satisfaction with the functionality of this Web site" to derive a score for Functionality, respondents are asked to rate the "usefulness of services", the "convenience of services" and the "ability to accomplish what you wanted to". Not only is the information gathered more specific and actionable, but combining a number of correlated measures together into an element also reduces the confidence interval around the mean score, enabling us to detect true changes in scores over repeated measurement periods.

Element questions before satisfaction and future behavior questions
ForeSee Results asks all questions relating to specific site elements before asking questions relating to overall satisfaction and future behaviors. This is to help ensure that overall site satisfaction is rated based on respondents' experiences with the various site elements.

Performance ratings of attributes on 10-point scales
ForeSee Results employs the use of 10-point scales (with an option of Don't Know, where applicable) to help maximize the precision of the scores and to extract greater amounts of information from skewed data.

The use of partial (partitioned) questionnaires: ForeSee Results' proprietary technology allows us to partition a 30-to-40 question customer satisfaction survey model into 12-to-20 question surveys. Imputation is used to fill in the missing data based on responses to common questions. Only taking about two minutes to complete, this drastically reduced questionnaire length improves survey response rates. The result is a means of gathering accurate and precise data that is far less intrusive than traditional market research surveys.

Derived impacts rather than self-rated importance
Self-rated importance, (e.g. "Please rate the importance of site performance on your Web experience), is a traditional market research approach that can provide misleading, unreliable results. Using its proprietary methodology, ForeSee Results uses derived impacts to estimate the amount of change in satisfaction that will occur with an improvement in a quality component (such as site performance).

Imputation: What is it and why does it work?
Imputation is a broad class of statistical methods for estimating the missing values in a data set using the information that is available. In essence, imputation allows us to use people's responses to the questions they ARE asked to PREDICT how they would have answered the questions that they WEREN'T asked. There are a number of common methods for handling missing data. The method utilized by Foresee Results is sophisticated method that takes into account the relationships in its customer satisfaction model and intercorrelations in the data.

In simplest terms, imputation works because the survey partitions are set up in such a way that there is sufficient information about the intercorrelations of all the questions in the data to estimate the necessary predictions.

Why does the survey use a sample of 300?
Based on thorough research Foresee Results determined that a sample of 300 is the most optimized in terms of both minimizing measurement error and expediting data collection. This sample size ensures stable and precise impacts and scores. Scores are typically (+/–) 2 points at a 95% confidence interval. It is important to note that the determination of an appropriate sample size is a statistical formula and is not dependent upon population size.

How does Foresee Results know that the survey questions are the "right" questions?
To create its core list customer satisfaction survey model, ForeSee Results went through a rigorous question development process. This process included qualitative, one-on-one interviews with a variety of Internet users, with a follow-up survey to validate the findings. In general there are three types of validity that we apply to the assessment of the survey. First, do the questions have "face validity" that is do they make sense. Second, construct validity is evaluated by examining whether the questions that comprise each element group together statistically in the way we expect them to group. And third discriminant validity is examined and assessed to determine if the various groups are statistically independent from each other (i.e., low inter-correlations between elements).

About the ACSI

The American Customer Satisfaction Index (ACSI) is a uniform, national, cross-industry measure of satisfaction with the quality of goods and services available in the United States. In addition to being a powerful economic indicator of customer satisfaction, the ACSI is also the only econometric indicator that links satisfaction to customers. future behaviors and economic returns. Since its inception in 1994, the ACSI has provided business managers with an independent, customer-based satisfaction measurement of nearly 200 companies and organizations and 39 industries in the U.S. economy, accounting for over 45% of the GDP.

The powerful mathematical models used by the ACSI methodology do not relegate customer satisfaction to the realm of anecdotes, assumptions, personal experiences, inferences or even simple correlations. Rather, the methodology allows businesses to measure customer satisfaction accurately, credibly and precisely, and can be used to point to specific areas of improvement -- to both physical retail sites and Web sites. Year after year and quarter after quarter, the ACSI demonstrates that a scientific link exists between its measurement of customer satisfaction and financial metrics such as market value added, stock price, cash flow and return on investment. In fact since 1994, changes in the ACSI have correlated with changes in both consumer spending and the S&P 500 corporate earnings.

The ACSI methodology assesses satisfaction with multiple satisfaction drivers. Each satisfaction driver is evaluated through multiple questions for greater accuracy and actionability of results. Question responses are rated on a scale of 1–10, which affords a more precise and accurate picture of the distribution of responses. This approach reveals opportunities to increase satisfaction to a higher level that will precipitate greater financial returns.

What about the ACSI methodology makes it econometric?
Econometrics is the application of statistical and mathematical methods in the field of economics to describe the numerical relationships between key economic forces such as capital, interest rates, and labor. The ACSI can be econometric in the sense that it is an aggregate economic force that has been empirically related to other macroeconomic variables, such as consumer spending.

More specifically, the components of the ACSI methodology that are more "econometric" are those that deal with the impacts, which help to set priorities and provide predictions about how changes will affect satisfaction and business outcomes. This would be in contrast to the "psychometric" aspects of the methodology; such as determining which survey questions should comprise each element. This has less to do with causality and prediction and more to do with "how people think about Web sites." The ACSI methodology leverages best practices in both "econometrics" and "psychometrics".