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Estimates of Quarterly Revenue for Selected Services 4th Quarter 2008

Special Notice: Quarterly services revenue estimates have been revised based on the results of the 2007 Service Annual Survey. The Annual Benchmark Report showing revised data can be found on our website at <http://www.census.gov/qss>.

For the first time, seasonally adjusted revenue estimates for selected kinds of business are being released. Estimates are available beginning with the fourth quarter of 2003 as part of the Annual Benchmark Report. Subsequent releases will contain seasonally adjusted estimates in Table 1a of the press release.

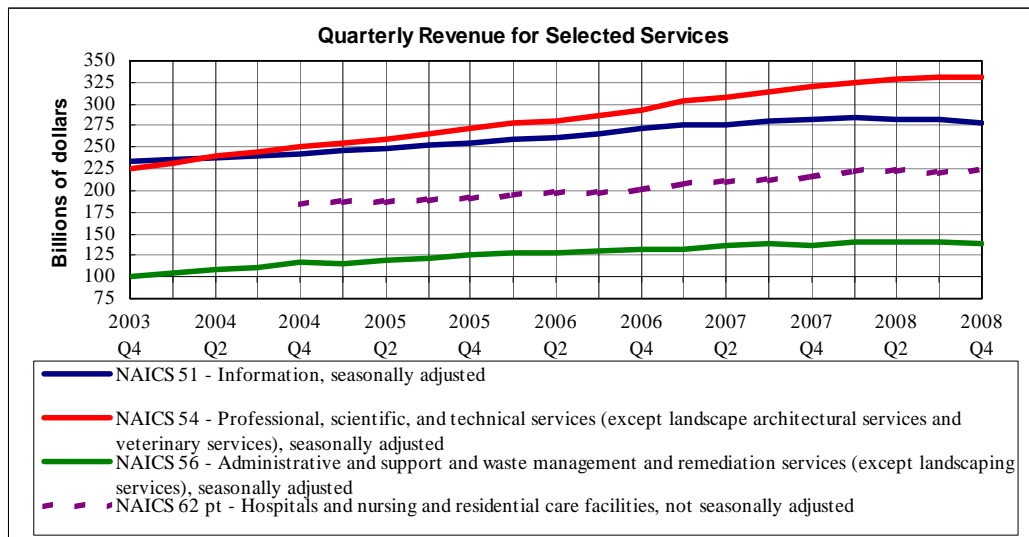
Information The U.S. Census Bureau announced today that the estimate of U.S. information sector revenue for the fourth calendar quarter of 2008, *adjusted* for seasonal variation but not for price changes, was \$278.9 billion, a decrease of 1.2 percent ($\pm 0.5\%$) from the third quarter of 2008 and down 0.3 percent ($\pm 1.0\%$)* from the fourth quarter of 2007.

Professional, scientific, and technical services (except landscape architectural services and veterinary services) The estimate of U.S. professional, scientific, and technical services (except landscape architectural services and veterinary services) revenue for the fourth quarter of 2008, *adjusted* for seasonal variation but not for price changes, was \$329.6 billion, a decrease of 0.7 percent ($\pm 1.0\%$)* from the third quarter of 2008 and up 1.2 percent ($\pm 1.5\%$)* from the fourth quarter of 2007.

Administrative and support and waste management and remediation services (except landscaping services) The estimate of U.S. administrative and support and waste management and remediation services (except landscaping services) revenue for the fourth quarter of 2008, *adjusted* for seasonal variation but not for price changes, was \$139.1 billion, a decrease of 1.2 percent ($\pm 2.0\%$)* from the third quarter of 2008 and up 0.3 percent ($\pm 2.8\%$)* from the fourth quarter of 2007.

Hospitals and nursing and residential care facilities The estimate of U.S. hospitals and nursing and residential care facilities revenue for the fourth quarter of 2008, *not adjusted* for seasonal variation, or price changes, was \$226.3 billion, an increase of 2.0 percent ($\pm 1.5\%$) from the third quarter of 2008 and up 4.8 percent ($\pm 1.5\%$) from the fourth quarter of 2007. The second quarter of 2008 to third quarter of 2008 percent change was revised from -0.5 percent ($\pm 1.2\%$)* to -1.1 percent ($\pm 1.5\%$)*.

For survey description and an explanation of the measures of sampling variability included in this report, please see the last page of the publication.



First quarter 2009 revenue is scheduled to be released on June 10, 2009, at 10:00 a.m. EDT.

This report is available on the day of issue through the Department of Commerce's STAT-USA Website; for more information, call (202) 482-1986.

* The 90 percent confidence interval includes zero. The Census Bureau does not have sufficient statistical evidence to conclude that the actual change is different from zero.

Our Internet site is <http://www.census.gov/qss>

Table 1a. Selected Services - Estimated Quarterly Revenue for Employer Firms, Seasonally Adjusted¹

[Estimates are adjusted for seasonal variation but not for price changes and are based on data from the Quarterly Services Survey. For additional information see www.census.gov/qss]

2002 NAICS code ²	Kind of business	Total revenue (millions of dollars)						Percent change					
		4Q 2008 (p)	3Q 2008	2Q 2008	1Q 2008	4Q 2007	3Q 2007	4Q 2008 from 3Q 2008 (p)	3Q 2008 from 2Q 2008	2Q 2008 from 1Q 2008	1Q 2008 from 4Q 2007	4Q 2008 from 4Q 2007	3Q 2008 from 3Q 2007
51	Information	278,917	282,249	283,269	284,024	283,094	279,520	-1.2	-0.4	-0.3	0.3	-1.5	1.0
54 pt	Professional, scientific, and technical services (except landscape architectural services and veterinary services)	329,618	331,775	329,227	325,192	320,655	313,453	-0.7	0.8	1.2	1.4	2.8	5.8
5411	Legal services	61,746	64,122	64,054	62,387	64,527	62,922	-3.7	0.1	2.7	-3.3	-4.3	1.9
5412	Accounting, tax preparation, bookkeeping, and payroll services	31,849	32,221	32,517	31,978	32,248	31,214	-1.2	-0.9	1.7	-0.8	-1.2	3.2
56 pt	Administrative and support and waste management and remediation services (except landscaping services)³	139,059	140,718	140,535	140,117	137,255	138,013	-1.2	0.1	0.3	2.1	1.3	2.0
5613	Employment services	45,853	47,058	46,774	46,883	46,071	44,714	-2.6	0.6	-0.2	1.8	-0.5	5.2
5615	Travel arrangement and reservation services	7,806	8,097	7,997	8,085	7,914	7,986	-3.6	1.3	-1.1	2.2	-1.4	1.4
562	Waste management and remediation services	19,298	19,148	19,382	18,845	18,258	17,876	0.8	-1.2	2.8	3.2	5.7	7.1

(p) Preliminary estimate.

(1) The seasonal factors are based on a short time series that may not have stable seasonal patterns. As more estimates are added to the time series, large revisions in seasonal factors and consequently historical estimates may be observed. Data users should exercise caution when drawing inferences based on the seasonally adjusted estimates. Unless otherwise specified, seasonally adjusted estimates are obtained using a direct seasonal adjustment at the published NAICS level.

(2) For a full description of the NAICS codes used in this table, see the 2002 NAICS manual or <http://www.census.gov/eos/www/naics/>.

(3) Seasonally adjusted estimates for 56pt are obtained by summing the seasonally adjusted estimates for 5613, 5615, and 562 and the not seasonally adjusted estimate for 561pt* found in Table 1b.

Note: Sector totals and subsector totals may include data for kinds of business not shown. Table 2 provides estimated measures of sampling variability. Data users who create their own estimates using data from this report should cite the U.S. Census Bureau as the source of the original data only. Additional information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions may be found at www.census.gov/svsd/www/qssreliability.html.

Table 1b. Selected Services - Estimated Quarterly Revenue for Employer Firms, Not Seasonally Adjusted

[Estimates are not adjusted for seasonal variation or for price changes and are based on data from the Quarterly Services Survey. For additional information see www.census.gov/qss]

2002 NAICS code ¹	Kind of business	Total revenue (millions of dollars)						Percent change				Year to date		
		4Q 2008 (p)	3Q 2008 (r)	2Q 2008	1Q 2008	4Q 2007	3Q 2007	4Q 2008 from 3Q 2008 (p)	3Q 2008 from 2Q 2008 (r)	4Q 2008 from 4Q 2007 (p)	3Q 2008 from 3Q 2007 (r)	2008 (p)	2007	2008 from 2007 (p)
51	Information	285,890	281,685	283,552	276,923	291,021	278,122	1.5	-0.7	-1.8	1.3	1,128,050	1,114,883	1.2
511	Publishing industries (except Internet)	74,816	73,856	74,358	72,795	79,475	73,977	1.3	-0.7	-5.9	-0.2	295,825	297,709	-0.6
51111	Newspaper publishers	10,677	10,473	10,779	10,748	12,482	11,917	1.9	-2.8	-14.5	-12.1	42,677	48,274	-11.6
51112	Periodical publishers	11,801	12,268	11,800	11,739	12,894	12,598	-3.8	4.0	-8.5	-2.6	47,608	49,292	-3.4
5111 pt	Book, directory and mailing list, and other publishers ²	14,173	15,766	13,787	13,295	15,016	15,975	-10.1	14.4	-5.6	-1.3	57,021	56,439	1.0
5112	Software publishers	38,165	35,349	37,992	37,013	39,083	33,487	8.0	-7.0	-2.3	5.6	148,519	143,704	3.4
512	Motion picture and sound recording industries	25,201	23,844	26,203	24,694	27,305	24,520	5.7	-9.0	-7.7	-2.8	99,942	102,166	-2.2
515	Broadcasting (except Internet)	25,799	25,136	25,389	24,292	25,838	23,652	2.6	-1.0	-0.2	6.3	100,616	96,728	4.0
5151	Radio and television broadcasting	13,207	13,530	13,949	13,717	14,808	13,204	-2.4	-3.0	-10.8	2.5	54,403	55,858	-2.6
5152	Cable and other subscription programming	12,592	11,606	11,440	10,575	11,030	10,448	8.5	1.5	14.2	11.1	46,213	40,870	13.1
516,	Internet publishing and broadcasting, Internet													
5181,	service providers and web search portals,													
519	and other information services	15,136	14,827	14,331	14,322	14,856	13,518	2.1	3.5	1.9	9.7	58,616	54,637	7.3
517	Telecommunications	126,854	126,738	125,212	123,511	125,432	124,159	0.1	1.2	1.1	2.1	502,315	490,761	2.4
5171	Wired telecommunications carriers	45,755	46,689	46,505	46,710	48,040	48,761	-2.0	0.4	-4.8	-4.2	185,659	192,779	-3.7
5172	Wireless telecommunications carriers (except satellite)	47,589	47,123	45,947	45,116	45,102	44,213	1.0	2.6	5.5	6.6	185,775	174,085	6.7
5175	Cable and other program distribution	28,145	27,389	27,113	26,341	26,532	25,282	2.8	1.0	6.1	8.3	108,988	100,849	8.1
517 pt	Other telecommunications ³	5,365	5,537	5,647	5,344	5,758	5,903	-3.1	-1.9	-6.8	-6.2	21,893	23,048	-5.0
5182	Data processing, hosting, and related services	18,084	17,284	18,059	17,309	18,115	18,296	4.6	-4.3	-0.2	-5.5	70,736	72,882	-2.9
54	Professional, scientific, and technical services	343,603	334,466	340,849	327,843	334,902	313,878	2.7	-1.9	2.6	6.6	1,346,761	1,276,568	5.5
54 pt	Professional, scientific, and technical services (except landscape architectural services and veterinary services)	336,210	326,467	332,849	320,639	327,709	306,557	3.0	-1.9	2.6	6.5	1,316,165	1,246,720	5.6
5411	Legal services	68,168	62,327	63,670	58,082	71,238	60,846	9.4	-2.1	-4.3	2.4	252,247	254,324	-0.8
5412	Accounting, tax preparation, bookkeeping, and payroll services	28,569	26,969	34,273	38,661	29,055	26,095	5.9	-21.3	-1.7	3.3	128,472	121,290	5.9
5413	Architectural, engineering, and related services	69,289	68,440	66,462	62,563	64,028	61,783	1.2	3.0	8.2	10.8	266,754	243,843	9.4
5413 pt	Architectural and related services ⁴	18,424	19,174	18,837	18,100	18,645	17,718	-3.9	1.8	-1.2	8.2	74,535	71,099	4.8
54133	Engineering services	50,865	49,266	47,625	44,463	45,383	44,065	3.2	3.4	12.1	11.8	192,219	172,744	11.3
5415	Computer systems design and related services	64,702	63,693	63,612	61,714	59,981	58,020	1.6	0.1	7.9	9.8	253,721	228,623	11.0
5416	Management, scientific, and technical consulting services	43,192	42,663	42,812	40,851	42,318	41,419	1.2	-0.3	2.1	3.0	169,518	165,248	2.6
5417	Scientific research and development services	28,146	27,998	27,419	25,503	26,402	25,467	0.5	2.1	6.6	9.9	109,066	101,358	7.6
5418	Advertising and related services	21,270	21,286	20,765	20,240	21,113	19,745	-0.1	2.5	0.7	7.8	83,561	79,033	5.7
541 pt	Other professional, scientific, and technical services ⁵	20,267	21,090	21,836	20,229	20,767	20,503	-3.9	-3.4	-2.4	2.9	83,422	82,849	0.7
56	Administrative and support and waste management and remediation services	151,473	154,028	153,540	148,024	150,649	151,581	-1.7	0.3	0.5	1.6	607,065	594,822	2.1
56 pt	Administrative and support and waste management and remediation services (except landscaping services) ..	139,733	141,014	141,290	138,222	138,177	138,295	-0.9	-0.2	1.1	2.0	560,259	543,258	3.1
561	Administrative and support services	132,156	134,516	133,751	130,046	132,263	133,276	-1.8	0.6	-0.1	0.9	530,469	523,611	1.3
5613	Employment services	46,953	46,917	46,634	45,992	47,269	44,535	0.1	0.6	-0.7	5.3	186,496	178,667	4.4
5615	Travel arrangement and reservation services	7,361	8,170	8,485	7,948	7,510	8,018	-9.9	-3.7	-2.0	1.9	31,964	32,072	-0.3
561 pt	Other administrative and support services ⁶	77,842	79,429	78,632	76,106	77,484	80,723	-2.0	1.0	0.5	-1.6	312,009	312,872	-0.3
561 pt*	Other administrative and support services (except landscaping services) ⁷	66,102	66,415	66,382	66,304	65,012	67,437	-0.5	Z	1.7	-1.5	265,203	261,308	1.5
562	Waste management and remediation services	19,317	19,512	19,789	17,978	18,386	18,305	-1.0	-1.4	5.1	6.6	76,596	71,211	7.6

Table 1b. Selected Services - Estimated Quarterly Revenue for Employer Firms, Not Seasonally Adjusted

[Estimates are not adjusted for seasonal variation or for price changes and are based on data from the Quarterly Services Survey. For additional information see www.census.gov/qss]

2002 NAICS code ¹	Kind of business	Total revenue (millions of dollars)						Percent change				Year to date		
		4Q 2008 (p)	3Q 2008 (r)	2Q 2008	1Q 2008	4Q 2007	3Q 2007	4Q 2008 from 3Q 2008 (p)	3Q 2008 from 2Q 2008 (r)	4Q 2008 from 4Q 2007 (p)	3Q 2008 from 3Q 2007 (r)	2008 (p)	2007	2008 from 2007 (p)
62 pt	Selected health care services⁸	226,320	221,984	224,456	223,760	215,922	211,714	2.0	-1.1	4.8	4.9	896,520	847,172	5.8
622	Hospitals	182,957	179,208	181,400	181,581	174,559	171,301	2.1	-1.2	4.8	4.6	725,146	687,135	5.5
623	Nursing and residential care facilities	43,363	42,776	43,056	42,179	41,363	40,413	1.4	-0.7	4.8	5.8	171,374	160,037	7.1

(p) Preliminary estimate. (r) Revised estimate. Z Less than .05 percent.

(1) For a full description of the NAICS codes used in this table, see the 2002 NAICS manual or <http://www.census.gov/eos/www/naics/>.

(2) Includes NAICS 51113 (book publishers), 51114 (directory and mailing list publishers), and 51119 (other publishers).

(3) Includes NAICS 5173 (telecommunications resellers), 5174 (satellite telecommunications), and 5179 (other telecommunications).

(4) Includes all of NAICS 5413 (architectural, engineering, and related services) except 54133 (engineering services).

(5) Includes NAICS 5414 (specialized design services) and 5419 (other professional, scientific, and technical services).

(6) Includes NAICS 5611 (office administrative services), 5612 (facilities support services), 5614 (business support services), 5616 (investigation and security services), 5617 (services to buildings and dwellings), and 5619 (other support services).

(7) Includes NAICS 5611 (office administrative services), 5612 (facilities support services), 5614 (business support services), 5616 (investigation and security services), 5617 (services to buildings and dwellings except 56173 (landscaping services)), and 5619 (other support services).

(8) Includes NAICS 622 (hospitals) and 623 (nursing and residential care facilities).

Note: Sector totals and subsector totals may include data for kinds of business not shown. Table 2 provides estimated measures of sampling variability. Data users who create their own estimates using data from this report should cite the U.S. Census Bureau as the source of the original data only. Additional information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions may be found at www.census.gov/svsd/www/qssreliability.html.

Table 2. Selected Services - Estimated Measures of Sampling Variability

[Estimates are shown as percents and are based on data from the Quarterly Services Survey]

2002 NAICS code	Kind of business	Median coefficient ¹ of variation for quarterly total revenue	Median standard error ¹ for percent change		Coefficient of variation for year to date	Standard error for percent change
			Ratio of two consecutive quarters	Current quarter to current quarter last year	2008	2008 year to date from 2007 year to date
51	Information	1.0	0.3	0.6	0.9	0.4
511	Publishing industries (except Internet)	2.6	0.9	1.2	2.6	1.0
51111	Newspaper publishers	4.7	1.1	1.6	4.7	1.1
51112	Periodical publishers	6.7	2.3	1.8	6.7	1.4
5111 pt	Book, directory and mailing list, and other publishers	2.3	1.1	1.3	2.1	0.9
5112	Software publishers	3.8	1.9	3.0	3.7	2.5
512	Motion picture and sound recording industries	4.0	1.5	2.1	3.7	1.0
515	Broadcasting (except Internet)	2.4	0.6	0.7	2.4	0.8
5151	Radio and television broadcasting	3.4	0.8	1.3	3.3	1.3
5152	Cable and other subscription programming	1.7	0.4	1.0	1.6	0.6
516, 5181, 519	Internet publishing and broadcasting, Internet service providers and web search portals, and other information services	7.4	1.2	3.6	7.4	2.9
517	Telecommunications	1.1	0.3	1.0	1.1	1.0
5171	Wired telecommunications carriers	3.0	0.5	1.8	3.0	1.7
5172	Wireless telecommunications carriers (except satellite)	1.8	0.2	1.1	1.8	1.0
5175	Cable and other program distribution	1.4	0.2	0.6	1.4	0.6
517 pt	Other telecommunications	6.5	0.8	3.8	6.5	3.2
5182	Data processing, hosting, and related services	3.8	1.7	4.1	3.8	3.5
54	Professional, scientific, and technical services	2.2	0.6	0.9	2.2	0.8
54 pt	Professional, scientific, and technical services (except landscape architectural services and veterinary services)	2.1	0.6	0.9	2.1	0.8
5411	Legal services	7.5	2.3	3.4	7.1	2.0
5412	Accounting, tax preparation, bookkeeping, and payroll services	9.0	2.3	3.2	9.3	2.6
5413	Architectural, engineering, and related services	3.0	1.7	2.1	2.8	1.9
5413 pt	Architectural and related services	6.4	3.5	4.3	6.1	2.6
54133	Engineering services	2.9	1.6	2.2	2.8	2.1
5415	Computer systems design and related services	4.1	2.0	2.9	4.3	2.5
5416	Management, scientific, and technical consulting services	4.8	1.9	2.4	4.8	1.5
5417	Scientific research and development services	11.1	1.7	3.3	10.9	2.9
5418	Advertising and related services	4.0	1.6	3.5	3.8	2.7
541 pt	Other professional, scientific, and technical services	4.4	1.5	2.7	4.4	2.4
56	Administrative and support and waste management and remediation services	2.6	1.4	1.8	2.4	1.4
56 pt	Administrative and support and waste management and remediation services (except landscaping services) ..	3.1	1.2	1.7	2.9	1.5
561	Administrative and support services	2.9	1.6	1.8	2.6	1.2
5613	Employment services	5.8	1.4	2.6	5.7	2.1
5615	Travel arrangement and reservation services	3.8	2.1	3.1	3.4	2.6
561 pt	Other administrative and support services	3.7	2.3	2.8	3.0	1.9
561 pt*	Other administrative and support services (except landscaping services)	4.9	2.0	2.4	4.3	2.0
562	Waste management and remediation services	8.1	1.8	6.1	8.1	6.1
62 pt	Selected health care services	2.7	0.9	0.9	2.7	0.7
622	Hospitals	3.1	1.1	0.9	3.2	0.8
623	Nursing and residential care facilities	5.9	1.1	1.7	5.9	1.4

(1) The medians are based on estimates for the most recent four quarters.

Note: Estimated measures of sampling variability are based on data not adjusted for seasonal variation, and should be used when drawing inferences about both adjusted and not adjusted estimates. Additional information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions may be found at www.census.gov/svsd/www/qssreliability.html.

Survey Description

The U.S. Census Bureau conducts the Quarterly Services Survey (QSS) to provide national estimates of quarterly revenue for employer firms located in the United States and classified in select service industries. The QSS sample includes firms classified in NAICS 51 (Information), NAICS 54 (Professional, scientific, and technical services), NAICS 56 (Administrative and support and waste management and remediation services), and NAICS 62 (Hospitals and nursing and residential care facilities). Each quarter, questionnaires are mailed to a probability sample of approximately 6,000 employer firms selected from the larger Service Annual Survey (SAS) sample. The QSS sample includes firms of all sizes and is updated on a quarterly basis to account for new service businesses, deaths, and other changes to the survey universe. Data for nonresponding firms are imputed based on data for similar-sized firms classified in the same kind of business. For NAICS 51 (Information sector), imputed revenue amounts to about 8 percent of the total revenue estimate; for NAICS 54 (Professional, scientific, and technical services except landscape architectural services and veterinary services) imputed revenue amounts to about 24 percent; for NAICS 56 (Administrative and support and waste management and remediation services except landscape services) imputed revenue amounts to about 31 percent, and for NAICS 62 (Hospitals and nursing and residential care facilities) imputed revenue amounts to about 16 percent. Quarterly revenue estimates are obtained by summing weighted data (either reported or imputed), where the weight for a particular unit is the reciprocal of its probability of being selected into the sample. The quarterly revenue estimates are adjusted using SAS results. Additional information on the QSS can be found on the Census Bureau website at: <http://www.census.gov/qss>.

Description of Seasonal Adjustment

To derive the seasonally adjusted revenue estimates published in this report, we used quarterly revenue estimates for the fourth quarter of 2003 through the most recent quarter, as input to the Census Bureau's X-12 ARIMA program. With each quarterly release, we publish preliminary seasonally adjusted estimates for the current quarter and revised seasonally adjusted estimates for the previous five quarters. The seasonal adjustment models used to derive seasonal factors for each kind of business are evaluated annually and will not be revised until the next benchmarking operation. For a table of the seasonal adjustment factors, see <http://www.census.gov/indicator/qss/qssq4-08seasfactors.xls>. A list of "Frequently Asked Questions" on seasonal adjustment of QSS estimates is available at <http://www.census.gov/indicator/qss/qssseasfaqs.html>.

Reliability of the Estimates

The estimates in this report 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.

Nonsampling error is the difference between the actual population parameter and the value that would be derived by surveying the entire set of units identified as the survey universe (the sampling frame). There are many potential contributors to nonsampling error – 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. Though nonsampling error is not measured directly, the Census Bureau employs quality control procedures throughout the process to minimize this type of error.

Sampling error is the average difference between the estimate and the result that would be obtained from a complete enumeration of the sampling frame conducted under the same survey conditions. This error occurs because only a subset of the entire sampling frame is measured in a sample survey. Common measures of sampling error 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. Standard errors and coefficients of variation are given in Table 2 of this report.

The first page of this release gives statements about the change in revenue from a prior period. Each change estimate is accompanied by a number in parentheses, called the "margin of error." The margin of error can be used to construct a 90-percent confidence interval, which is interpreted as follows. If, for each possible sample, an estimate and its approximate standard error are obtained, then for approximately 90 percent of the possible samples, the interval from 1.65 standard errors below to 1.65 standard errors above the estimate would include the average of the estimates derived from all possible samples. If, for example, a particular change estimate is +1.2 percent and its associated margin of error is ± 1.5 percentage points, then the 90-percent confidence interval for the change estimate is -0.3 percent to +2.7 percent. If the interval contains 0, then one does not have sufficient evidence to conclude at the 90-percent confidence level that the actual change is different from zero. Each comparison stated in this report has undergone statistical testing and is significant at the 90-percent confidence level, unless otherwise noted.