



Research Division
Note #75
March 2000

The Arts in the GDP: Consumers Spent \$9.4 Billion on Admission Receipts for Performing Arts Events in 1998

Recently released data from the Bureau of Economic Analysis (BEA), a division of the U.S. Department of Commerce, show that consumers spent \$9.4 billion on admissions to performing arts events in 1998. Also, 1998 spending on performing arts events was \$2.6 billion greater than admissions to motion pictures and \$1.8 billion more than consumer spending on spectator sports. This note summarizes recently issued figures on consumer spending on the arts and entertainment. In addition, the figures reported here reflect the latest comprehensive revisions to the national income and product accounts. This note discusses these revisions and their implications for spending on total recreation spending as well as expenditures on admissions to performing arts events, movie theaters, and spectator sports.

Growth in Admission Receipts for Performing Arts Events, Motion Pictures, and Spectator Sports

Table 1 shows estimates of admission receipts for performing arts events¹, motion pictures, and spectator sports from 1993 to 1998. Measured in chained 1996 dollars to control for inflation², real spending on performing arts events increased by 16 percent, or \$1.2 billion over this six-year time frame. More recently, between 1997 and 1998, real performing arts expenditures grew 6 percent—a gain of \$500 million. Spending on admissions to the movies and sports events also increased between 1993 and 1998, though at a lower level. Over the six-year 1993 through 1998 time-frame, real expenditures for both motion pictures and spectator sports grew by \$900 million—representing a gain of 16 percent for motion pictures and 14 percent for spectator sports. Between 1997 and 1998, consumers increased their spending on movie admissions and spectator sports by \$300 million and \$100 million, respectively.

¹ Admissions to performing arts events include not only non-profit organizations such as symphony orchestras and ballet companies, but also activities in the for-profit sector such as Broadway theater productions and rock music concerts. Further, admission receipts is a broad category, which includes not only the price of a ticket, but can also include receipts as concessions.

² The BEA uses chain-type annual-weighted indexes to measure real output and prices. The base year for these calculations was recently changed from 1992 to 1996. For a detailed discussion of chain-type indexes, see *BEA's Chain Indexes, Time Series, and Measures of Long-Term Economic Growth*. Survey of Current Business, May 1997.

Chart 1 graphically shows growth patterns in these three components of recreation expenditures measured by the BEA. However, the analysis here is extended to a larger 1987 through 1998 time period. Over this longer time span, real spending on performing arts admissions declined by 5 percent in 1989, rose by 10.5 percent in 1990, and then dipped by 1.6 percent to reach \$6.2 billion in 1991. In 1992, real performing arts spending surged by \$700 million to reach \$6.9 billion and then increased another 11.6 percent to \$7.7 billion in 1993. Between 1994 and 1996, performing arts spending grew by modest amounts, however, in 1997 and 1998, spending on performing arts admissions increased by 5 percent and 6 percent, respectively.

While real spending on performing arts events fell in 1989, expenditures grew 11.3 percent for motion pictures in that year. In fact, 1989 was the only year in this time-series in which consumers spent more at movie theaters than they did on performing arts events (\$5.9 billion vs. \$5.7 billion). However, motion picture expenditures fell in 1991 (3.2 percent) and 1992 (6.7 percent), and then displayed moderate growth through 1996. By 1998, spending on motion picture admissions reached \$6.5 billion. Growth in real spectator sports never dropped in this 1987-1998 time series (i.e., spending in this category never fell below what it was for the prior year). But, beginning in 1991, the percentage gains in real spectator sports spending were generally lower than the percentage gains recorded for real performing arts spending. In 1992, and continuing throughout the time series, real expenditures on spectator sports surpassed spending on movie theater admissions.

Per Capita Personal Expenditures on Performing Arts Events, Motion Pictures, and Spectator Sports

Table 2 shows per capita spending on admissions to performing arts events, movie theaters, and spectator sports. Like Table 1, the data are presented in nominal and “real” (i.e., adjusted for inflation) dollar values. Among the findings are 1998 per capita spending on performing arts of \$34.78 (nominal dollars). This compares to \$25.16 on motion picture admissions and \$28.12 for spectator sports. On a per capita basis, therefore, spending on the performing arts in 1998 was 38 percent larger than spending at movie theaters and 24 percent greater than expenditures for spectator sports events.

In real terms, per capita expenditures on performing arts grew from \$29.87 in 1993 to \$32.93 in 1998, a gain of roughly 10 percent. Real per capita spending on motion picture admissions grew by about 11 percent over this time frame, from \$21.73 in 1993 to \$24.05 in 1998. And, real per capita spending on spectator sports increased by 9 percent—\$24.44 in 1993 and \$26.64 in 1998. Chart 2 of this Research Note shows a graphic representation of these trends.

GDP, Personal Consumption Expenditures, and Recreation Expenditures

The figures in Table 3 show that the economy, as measured by real gross domestic product (GDP), grew by 4.3 percent in 1998. In fact, 1998 marked the longest peacetime economic expansion since World War II. The “outstanding economic performance”³ in 1998 included gains in all personal consumption expenditures (4.88 percent growth over 1997 spending), as well as a 10.25 percent increase in real recreation spending. However, Table 3 shows that even though spending on admissions to performing arts events, movie theaters, and spectator sports increased over the 1993-1998 time period, spending on these activities actually fell as a share of all recreation spending. For example, in 1993, consumer spending on performing arts events made up 2.10 percent of recreation spending. By 1998, this share fell to 1.68 percent. Similar declining patterns are found in movie theater and spectator sports spending. As a share of all recreation spending, outlays for movie theater admissions dropped from 1.53 percent in 1993 to 1.23 percent in 1998. Admissions to sporting events declined from 1.72 percent to 1.36 percent. Other categories of recreation spending also show declining shares. Spending on books and maps and gardening materials (flowers, seeds, and potted plants) also fell as a share of all recreation spending. Between 1993 and 1998, consumption expenditures on magazines, newspapers, and sheet music dropped by nearly 1.6 percentage points (7.6 percent in 1993 down to 6.03 percent in 1998).

While the performing arts, movie theaters, spectator sports, and other selected categories of spending are falling as shares of all recreation expenditures, personal consumption outlays on computers and software have made up increasing shares of recreation spending. In 1993, consumer spending on computers and software constituted 2.07 percent of recreation expenditures. By 1998, this share increased by more than 600 percent to reach 12.48 percent.

Comprehensive Revisions to the National Income and Product Accounts

The estimates presented in this note reflect the BEA’s latest comprehensive revisions to the national income and product accounts⁴. For example, in 1998, growth in GDP was originally estimated at 3.9 percent over 1997 GDP values. The revised growth rate in 1998 is 4.3 percent—a 0.4 percentage point gain. The BEA sites statistical changes to prices and the recognition of software as investment as the primary factors for the upward revisions to real GDP. The BEA also revised personal consumption expenditures to reflect data from the 1997 Census of Retail Trade and updates to the I-O (input-output) accounts⁵. Recreation spending and expenditures on admissions to performing arts,

³ For more information about the 1998 economy, see *The FOMC in 1998: Can It Get any Better Than This?* David C. Wheelock. July/August 1999 *Review*. Federal Reserve Bank of St. Louis.

⁴ For a detailed discussion of these revisions, see *Improved Estimates of the National Income and Product Accounts for 1958-98. Results of the Comprehensive Revision*. Survey of Current Business, December 1999.

⁵ Input-output accounts for the U.S. economy show the relationships between all the industries in the economy and all the commodities that these industries produce and use.

motion picture theaters, and spectator sports are very detailed types of personal consumption expenditures. Like total personal consumption expenditures, revisions to these smaller spending categories were due to revisions to the I-O accounts as well as improved data from the Service Annual Survey conducted by the U.S. Census Bureau.

Table 4 shows both previously published and revised estimates of recreation spending and expenditures on admissions to performing arts events, movie theaters, and spectator sports, all measured in nominal dollars (i.e., not adjusted for inflation). Between 1988 and 1992, recreation spending was revised up by a range of \$2.1 to \$3.3 billion dollars. However, beginning with the 1993 estimate and continuing through 1998, the BEA adjusted recreation spending downward—by \$100 million in 1993; \$2.6 billion in 1995; and \$10.5 billion in 1998. The revisions to spending on performing arts admissions were downward throughout the 1988-1998 horizon. For example, the estimate of 1990 performing arts spending was decreased by \$400 million—revised 1998 spending was decreased by \$1 billion. Similarly, most of the revisions to estimates of spending at movie theaters were also downward. The BEA reduced its calculation by \$100 million in 1990 and 1991; by \$300 million in 1995; and \$700 million in 1998. Revisions to nominal spending on spectator sports were, for the most part, upward. For example, the 1993, 1994, and 1995 estimates were each increased by \$600 million. In 1998, however, the BEA decreased its estimated admissions to spectator sports by \$200 million.

Table 5 also shows BEA revisions to recreations spending. However, the figures reported here are adjusted for inflation. The reader will note that the original estimates of these spending categories are reported in chained 1992 dollars to adjust for inflation. However, in addition to the comprehensive revisions to the national income and product accounts, the BEA also recently changed its base year for adjusting for inflation. Hence, the revised spending estimates on recreation and admissions expenditures are shown in chained 1996 dollars.

As shown in Table 5, over the 1988-1998 time-span, real recreation spending was revised up for some years and down in other years. In 1988, for example, real recreation spending was decreased by \$1.8 billion. Between 1989 and 1993, however, revisions added to recreation spending, by \$2.2 billion in 1992. Estimates for 1995-1998 were, again, downward. In 1998, the BEA originally estimated real recreation spending at \$520.3 billion. The revised estimate is \$512.2 billion—a decrease of \$8.1 billion. Revisions to real spending on the performing arts were, for most of the 11-year time series, upward. The largest increase to real performing arts spending, approximately \$400 million, was recorded for 1998 (\$8.5 billion for the original estimate vs. \$8.9 billion for the revised figure). Similarly, adjustments to real spending on admissions to movie theaters and spectator sports were up. Throughout the time series shown in Table 5, the revisions added between \$300 million and \$600 million to spending on motion pictures admissions. The revised increases to spending on spectator sports were larger—ranging between \$500 million and \$1.4 billion.

Final Notes

The Research Division of the National Endowment for the Arts has been reporting annual statistics on performing arts and other recreation expenditures and their significance to the arts community since 1982⁶. A list of earlier notes on this subject can be found on the National Endowment for the Arts Web site at arts.endow.gov. The data reported were obtained from the Bureau of Economic Analysis. For more information see the Bureau's Web site at <http://bea.doc.gov>.

⁶ For a list of earlier Notes on this subject, visit the National Endowment for the Arts Web site at www.arts.gov.

Table 1. Admission Receipts for Performing Arts Events, Motion Pictures, and Spectator Sports: 1993-1998

	1998 \$ Billions		1997 \$ Billions		1996 \$ Billions		1995 \$ Billions		1994 \$ Billions		1993 \$ Billions	
	Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real
Admission Receipts to Specified Entertainments (change from previous year)	\$23.8	\$22.6	\$22.2	\$21.6	\$20.7	\$20.7	\$19.2	\$20.2	\$18.2	\$19.8	\$17.5	\$19.7
	7.21%	4.63%	7.25%	4.35%	7.81%	2.48%	5.49%	2.02%	4.00%	0.51%	8.70%	7.65%
Performing Arts (change from previous year)	\$9.4	\$8.9	\$8.7	\$8.4	\$8.0	\$8.0	\$7.6	\$8.0	\$7.2	\$7.8	\$6.8	\$7.7
	8.05%	5.95%	8.75%	5.00%	5.26%	0.00%	5.56%	2.56%	5.88%	1.30%	13.33%	11.59%
Motion Pictures (change from previous year)	\$6.8	\$6.5	\$6.4	\$6.2	\$5.8	\$5.8	\$5.5	\$5.8	\$5.2	\$5.7	\$5.0	\$5.6
	6.25%	4.84%	10.34%	6.90%	5.45%	0.00%	5.77%	1.75%	4.00%	1.79%	2.04%	0.00%
Spectator Sports (change from previous year)	\$7.6	\$7.2	\$7.1	\$6.9	\$6.9	\$6.9	\$6.1	\$6.4	\$5.8	\$6.3	\$5.7	\$6.3
	7.04%	4.35%	2.90%	0.00%	13.11%	7.81%	5.17%	1.59%	1.75%	0.00%	11.76%	8.62%

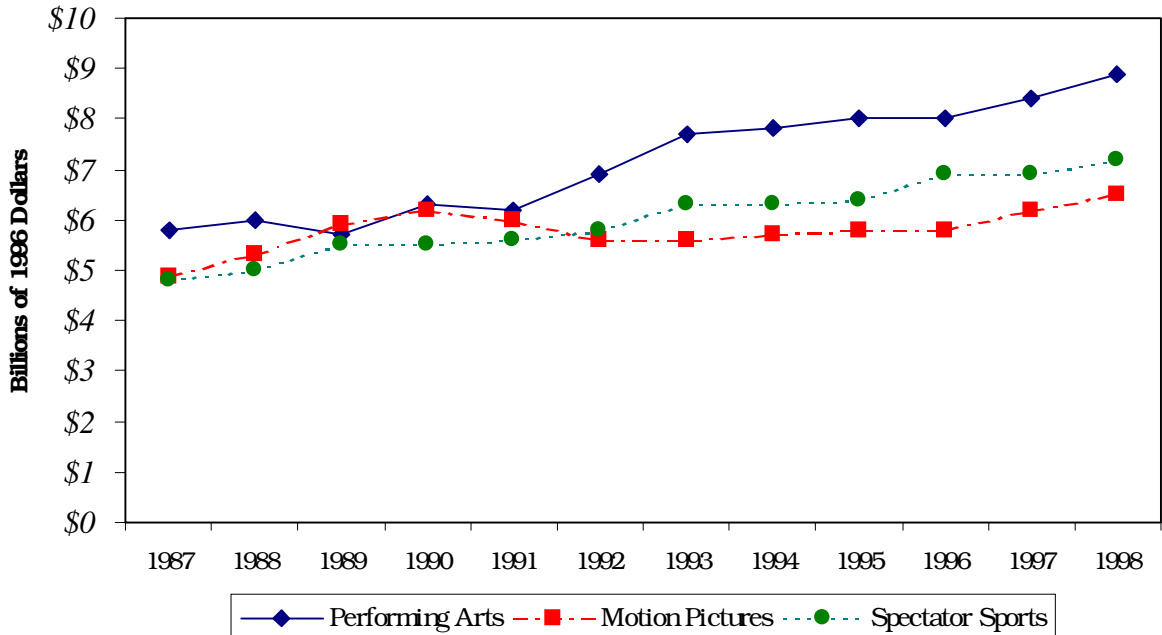
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

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Note: "Real" refers to estimates that are measured in 1996 chained dollars to control for inflation.

For a detailed discussion of chain-type indexes, see the May 1997 issue of the *Survey of Current Business*.

Chart 1. Admission Receipts for Performing Arts Events, Motion Pictures, and Spectator Sports in 1996 Dollars: 1987-1998



Source: U.S. Department of Commerce Bureau of Economic Analysis

Table 2. Per Capita Personal Expenditures on Performing Arts Events, Motion Pictures, and Spectator Sports: 1993-1998

	1998 \$ Billions		1997 \$ Billions		1996 \$ Billions		1995 \$ Billions		1994 \$ Billions		1993 \$ Billions	
	Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real
Admission Receipts to Specified Entertainments	\$88.05	\$83.61	\$82.92	\$80.67	\$78.06	\$78.06	\$73.07	\$76.87	\$69.92	\$76.87	\$67.90	\$76.43
Performing Arts	\$34.78	\$32.93	\$32.49	\$31.37	\$30.17	\$30.17	\$28.92	\$30.45	\$27.66	\$29.97	\$26.38	\$29.87
Motion Pictures	\$25.16	\$24.05	\$23.90	\$23.16	\$21.87	\$21.87	\$20.93	\$22.07	\$19.98	\$21.90	\$19.40	\$21.73
Spectator Sports	\$28.12	\$26.64	\$26.52	\$25.77	\$26.02	\$26.02	\$23.21	\$24.36	\$22.28	\$24.20	\$22.11	\$24.44

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

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For a detailed discussion of chain-type indexes, see the May 1997 issue of the *Survey of Current Business*.

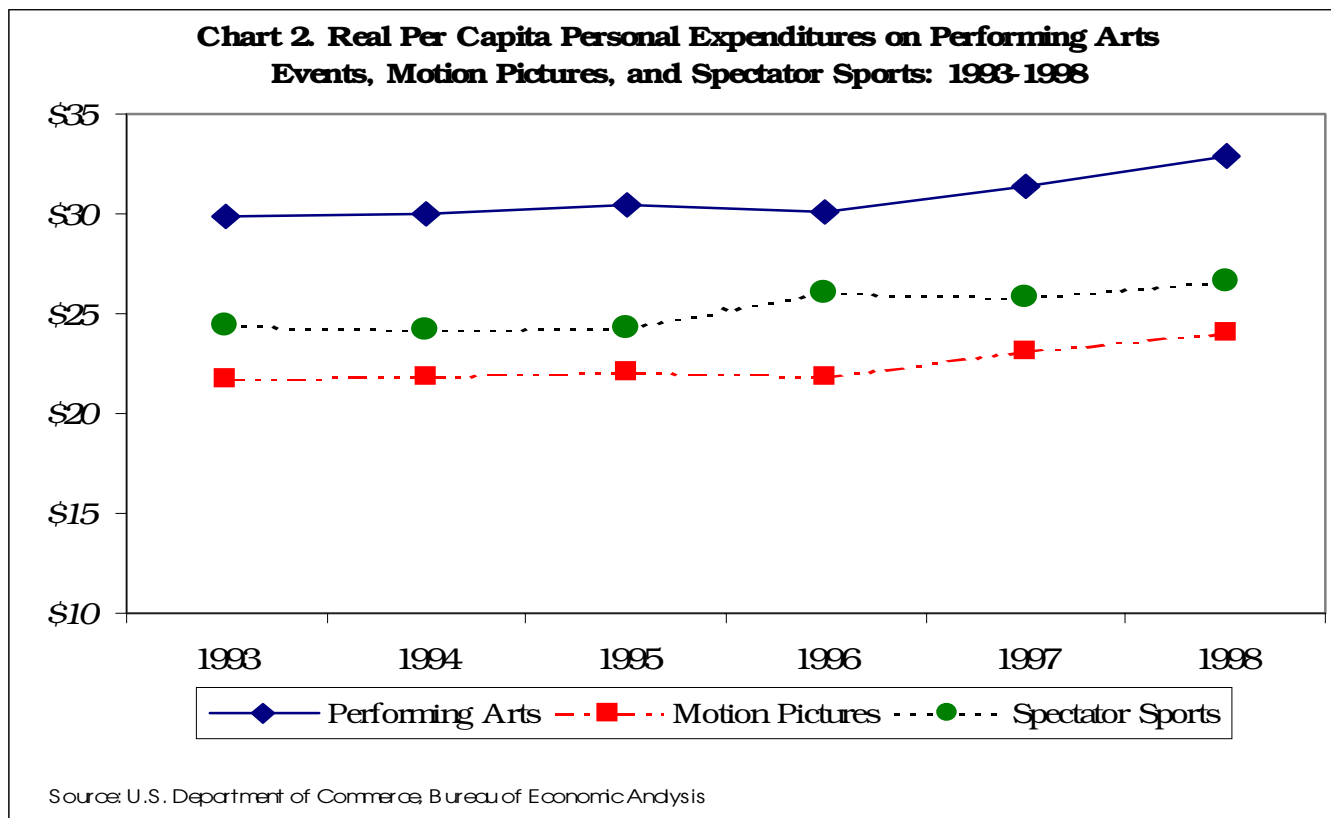


Table 3. GDP, Consumption Expenditures, and Recreation Expenditures

	<i>1998</i>	<i>1997</i>	<i>1996</i>	<i>1995</i>	<i>1994</i>	<i>1993</i>
Real GDP	\$8,516	\$8,165	\$7,813	\$7,537	\$7,338	\$7,054
(change from previous year)	4.30%	4.50%	3.66%	2.72%	4.02%	2.37%
Real Personal Consumption Expenditures	\$5,699	\$5,434	\$5,238	\$5,070	\$4,920	\$4,742
(change from previous year)	4.88%	3.75%	3.30%	3.05%	3.76%	3.00%
Real Recreation Expenditures	\$512	\$465	\$430	\$399	\$365	\$338
(change from previous year)	10.25%	8.15%	7.75%	9.17%	7.95%	8.08%
<i>Selected Expenditures as a % of All Real Recreation Expenditures</i>	<i>1998</i>	<i>1997</i>	<i>1996</i>	<i>1995</i>	<i>1994</i>	<i>1993</i>
Admissions to Performing Arts Events	1.68%	1.72%	1.84%	1.97%	2.04%	2.10%
Admissions to Motion Picture Theaters	1.23%	1.27%	1.33%	1.43%	1.49%	1.53%
Admissions to Spectator Sports	1.36%	1.41%	1.59%	1.57%	1.65%	1.72%
Books and Maps	5.23%	5.66%	5.80%	5.99%	6.02%	6.00%
Magazines, Newspapers, and Sheet Music	6.03%	6.28%	6.42%	6.82%	7.34%	7.60%
Flowers, Seeds, and Potted Plants	3.28%	3.47%	3.47%	3.36%	3.61%	3.69%
Computers, Peripherals, and Software	12.48%	8.20%	5.49%	3.66%	2.74%	2.07%

Source: U.S. Department of Commerce, Bureau of Economic Analysis

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Note: "Real" refers to estimates that are measured in 1996 chained dollars to control for inflation. For a detailed discussion of chain-type indexes, see the May 1997 issue of the *Survey of Current Business*.

Table 4. Comprehensive Revisions to Estimates of Recreation Spending and Admissions to Performing Arts Events, Motion Pictures, and Spectator Sports

Billions of Dollars

(All estimates reported in nominal dollars)

Year	Recreation Spending			Performing Arts			Motion Pictures			Spectator Sports		
	Original Estimate	Revised Estimate	Change	Original Estimate	Revised Estimate	Change	Original Estimate	Revised Estimate	Change	Original Estimate	Revised Estimate	Change
1988	\$246.3	\$248.4	\$2.1	\$4.5	\$4.4	-\$0.1	\$3.9	\$3.9	\$0.0	\$3.6	\$3.6	\$0.0
1989	\$264.9	\$268.2	\$3.3	\$4.7	\$4.4	-\$0.3	\$4.6	\$4.6	\$0.0	\$4.1	\$4.3	\$0.2
1990	\$281.6	\$284.9	\$3.3	\$5.6	\$5.2	-\$0.4	\$5.2	\$5.1	-\$0.1	\$4.4	\$4.5	\$0.1
1991	\$292.0	\$295.3	\$3.3	\$6.0	\$5.4	-\$0.6	\$5.3	\$5.2	-\$0.1	\$4.5	\$4.9	\$0.4
1992	\$310.8	\$313.8	\$3.0	\$6.8	\$6.0	-\$0.8	\$5.0	\$4.9	-\$0.1	\$4.8	\$5.1	\$0.3
1993	\$340.2	\$340.1	-\$0.1	\$7.8	\$6.8	-\$1.0	\$5.2	\$5.0	-\$0.2	\$5.1	\$5.7	\$0.6
1994	\$370.2	\$368.7	-\$1.5	\$8.2	\$7.2	-\$1.0	\$5.6	\$5.2	-\$0.4	\$5.2	\$5.8	\$0.6
1995	\$404.2	\$401.6	-\$2.6	\$8.7	\$7.6	-\$1.1	\$5.8	\$5.5	-\$0.3	\$5.5	\$6.1	\$0.6
1996	\$432.3	\$429.6	-\$2.7	\$9.3	\$8.0	-\$1.3	\$6.2	\$5.8	-\$0.4	\$6.4	\$6.9	\$0.5
1997	\$462.9	\$457.8	-\$5.1	\$10.0	\$8.7	-\$1.3	\$6.6	\$6.4	-\$0.2	\$6.7	\$7.1	\$0.4
1998	\$505.2	\$494.7	-\$10.5	\$10.4	\$9.4	-\$1.0	\$7.5	\$6.8	-\$0.7	\$7.8	\$7.6	-\$0.2

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

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Table 5. Comprehensive Revisions to Estimates of Recreation Spending and Admissions to Performing Arts Events, Motion Pictures, and Spectator Sports

Billions of Dollars

(All estimates reported in real dollars)

Year	Recreation Spending			Performing Arts			Motion Pictures			Spectator Sports		
	Original Estimate	Revised Estimate	Change	Original Estimate	Revised Estimate	Change	Original Estimate	Revised Estimate	Change	Original Estimate	Revised Estimate	Change
1988	\$270.1	\$268.3	-\$1.8	\$5.7	\$6.0	\$0.3	\$4.9	\$5.3	\$0.4	\$4.5	\$5.0	\$0.5
1989	\$282.1	\$282.7	\$0.6	\$5.4	\$5.7	\$0.3	\$5.3	\$5.9	\$0.6	\$4.7	\$5.5	\$0.8
1990	\$291.8	\$292.6	\$0.8	\$6.1	\$6.3	\$0.2	\$5.6	\$6.2	\$0.6	\$4.8	\$5.5	\$0.7
1991	\$295.0	\$296.4	\$1.4	\$6.2	\$6.2	\$0.0	\$5.5	\$6.0	\$0.5	\$4.6	\$5.6	\$1.0
1992	\$310.8	\$313.0	\$2.2	\$6.8	\$6.9	\$0.1	\$5.0	\$5.6	\$0.6	\$4.8	\$5.8	\$1.0
1993	\$338.1	\$338.3	\$0.2	\$7.7	\$7.7	\$0.0	\$5.1	\$5.6	\$0.5	\$5.0	\$6.3	\$1.3
1994	\$365.2	\$365.2	\$0.0	\$7.7	\$7.8	\$0.1	\$5.2	\$5.7	\$0.5	\$4.9	\$6.3	\$1.4
1995	\$399.1	\$398.7	-\$0.4	\$7.9	\$8.0	\$0.1	\$5.3	\$5.8	\$0.5	\$5.0	\$6.4	\$1.4
1996	\$429.9	\$429.6	-\$0.3	\$8.0	\$8.0	\$0.0	\$5.3	\$5.8	\$0.5	\$5.6	\$6.9	\$1.3
1997	\$466.9	\$464.6	-\$2.3	\$8.4	\$8.4	\$0.0	\$5.8	\$6.2	\$0.4	\$5.6	\$6.9	\$1.3
1998	\$520.3	\$512.2	-\$8.1	\$8.5	\$8.9	\$0.4	\$6.2	\$6.5	\$0.3	\$6.3	\$7.2	\$0.9

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

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"Original" estimates measured in chained 1992 dollars.

"Revised" estimates measured in chained 1996 dollars.