



Office of Research & Analysis
National Endowment for the Arts
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Arts Data Profile: The U.S. Arts and Cultural Production Satellite Account (1998-2015)

Research Brief #1: National Summary

In 2015, the most recent year for which estimates are available, arts and cultural production contributed \$763.6 billion to the U.S. economy, or 4.2 percent of U.S. GDP.

That same year, 4.9 million wage and salary workers were employed to produce arts and cultural goods and services. Those workers were compensated \$372 billion.

The arts contribute more to the U.S. economy than do construction, transportation and warehousing, or agriculture (among other sectors), and they generate a widening trade surplus.

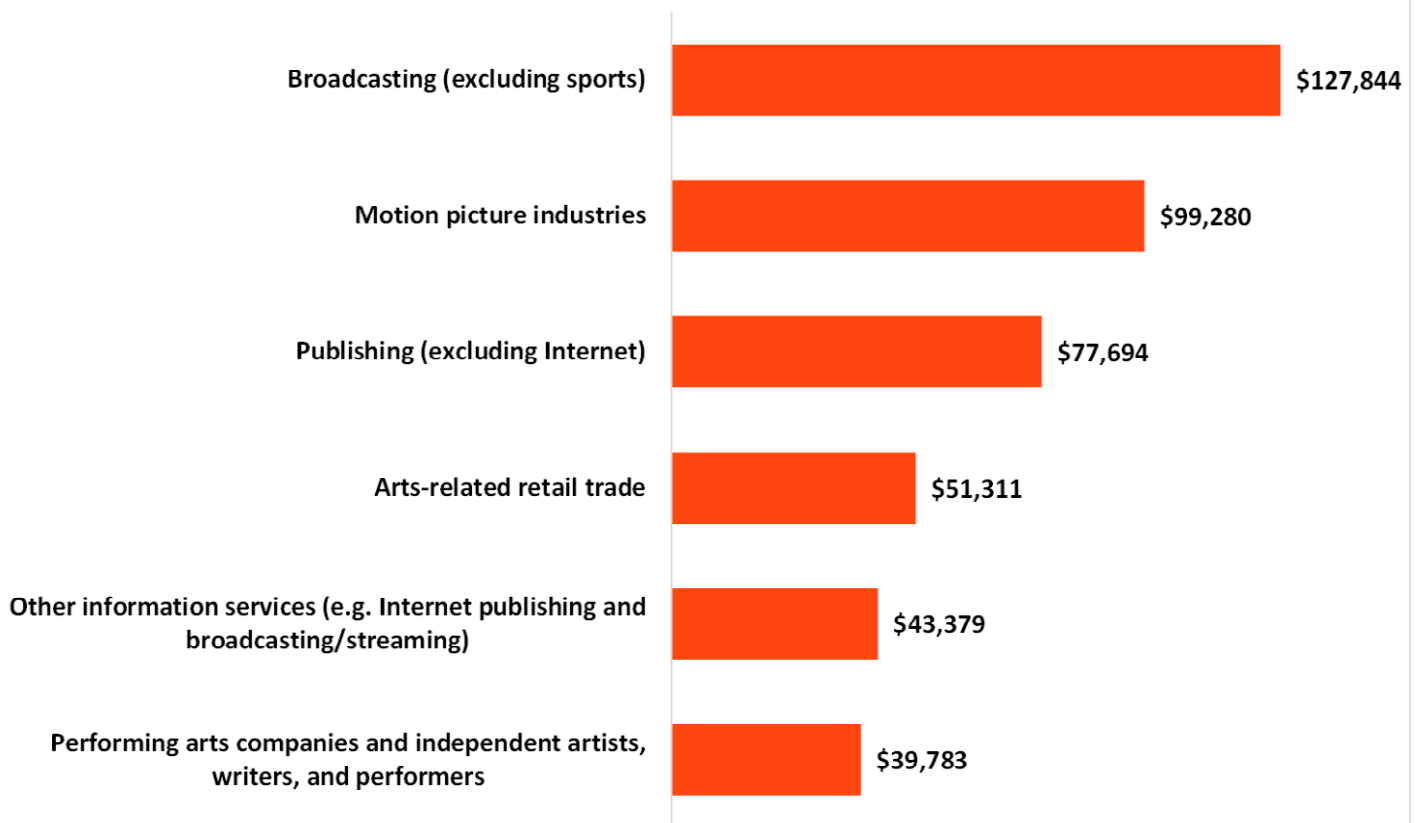
Below are other summary findings from the 2015 Arts and Cultural Production Satellite Account (ACPSA). The following topics are discussed in these pages. (Click on the topic to go directly to that section of the document.)

- I. Value Added by Arts and Cultural Industries
- II. Comparing Arts and Culture with Other Sectors of the Economy
- III. Trends in Arts and Cultural Production
- IV. Workers Engaged in Arts and Cultural Production
- V. Consumer Spending on Admissions to Performing Arts Events
- VI. Arts and Cultural Contributions to the Creative Economy
- VII. Exports of Arts and Cultural Goods and Services
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I. Value Added by Arts and Cultural Industries

1. In 2015, arts and cultural production contributed \$763.6 billion to the U.S. economy.
 - That production amounted to 4.2 percent of U.S. GDP.
2. Six detailed industries emerge as top contributors to the total economic value added by arts and culture:
 - Broadcasting (excluding sports); motion picture industries; publishing (excluding Internet); arts-related retail trade; “other information services” (an industry composed largely of Internet publishing and broadcasting/streaming); and performing arts companies and independent artists, writers, and performers.

Top contributors to arts and cultural GDP, selected industries: 2015
(millions)



Data source: Arts and Cultural Production Satellite Account (ACPSA), U.S. Bureau of Economic Analysis

- 3. Government (federal, state, and local) contributed \$101.5 billion of ACPSA’s value added in 2015. ◇ Government provides 92 percent of all U.S. academic-based arts education—in 2015, that amounted to \$99.2 billion.
- The government’s greatest contribution to arts and cultural production is in educational services, a commodity that describes visual and performing arts education at public primary and secondary schools and at public colleges and universities. ◇ The provision of academic-based arts education (in both public and private schools) continues to decline. Between 2012 and 2015, production fell by 3.9 percent, after adjusting for inflation.

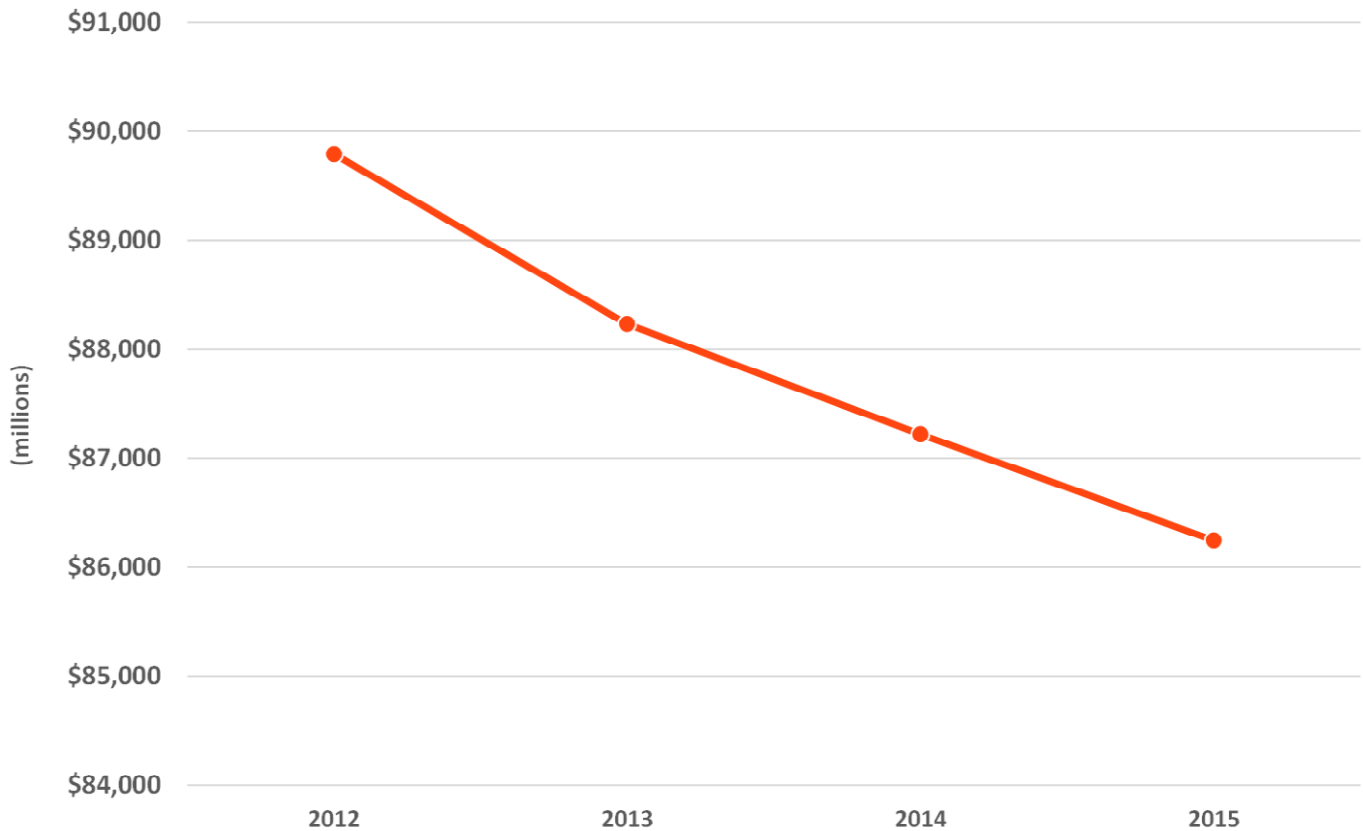
Government production of selected arts and cultural goods and services, 2015

Goods and services	Gross output (millions)
Arts educational services	\$99,245
Government commodities ¹	\$26,963
Nature parks	\$3,923
Museums	\$1,354
Construction	\$903
Historical sites	\$876
Architectural services	\$596
Botanical gardens and zoos	\$416

¹ Includes services provided by arts-related government agencies at the federal, state, or local level.

Data source: Arts and Cultural Production Satellite Account (ACPSA)
U.S. Bureau of Economic Analysis

Value of academic-based arts education: 2012-2015 (Adjusted for inflation)



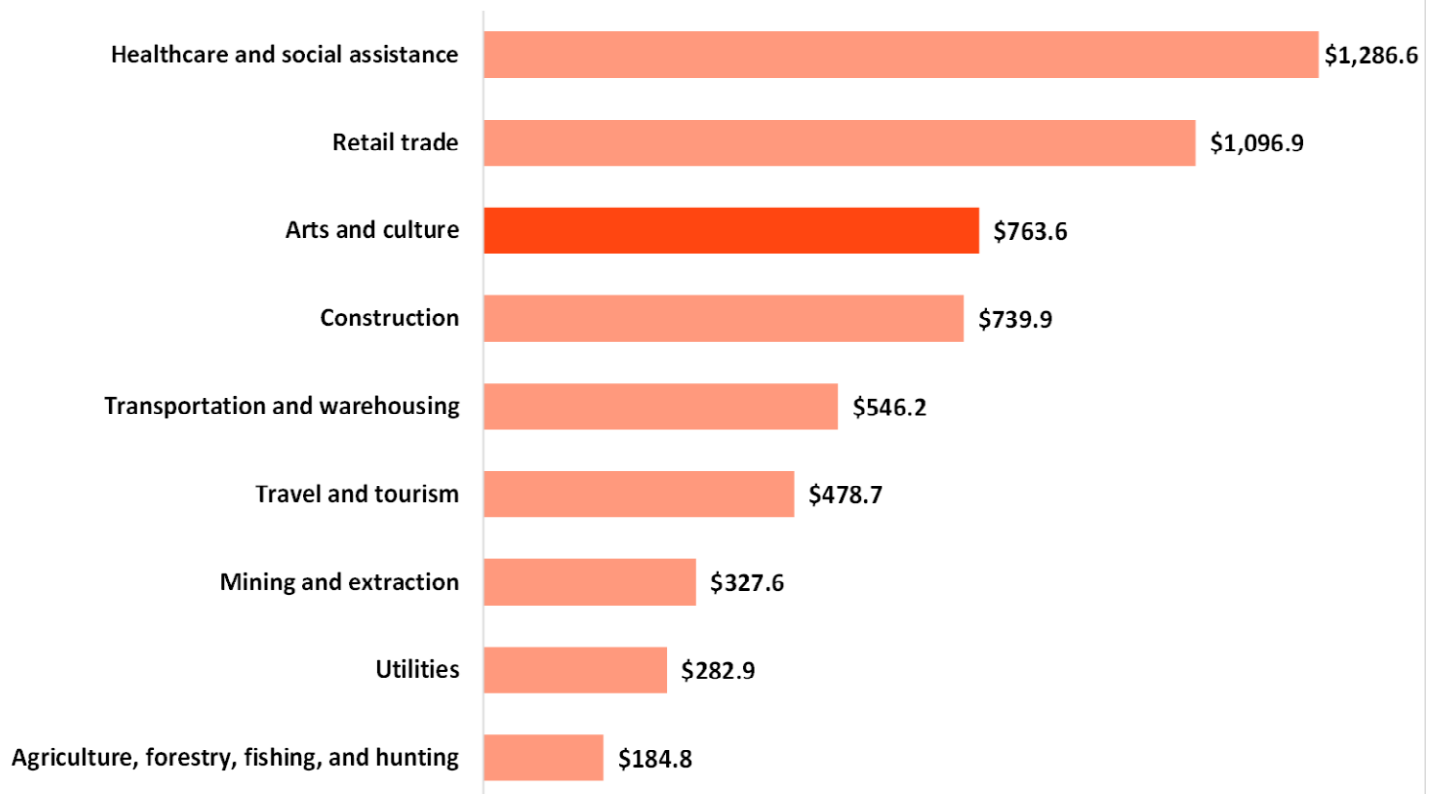
Data source: Arts and Cultural Production Satellite Account (ACPSA), U.S. Bureau of Economic Analysis

II. Comparing Arts and Culture with Other Sectors of the Economy

1. Arts and culture's value-added is smaller than that of sectors such as healthcare and social assistance and retail trade. However, arts and culture surpasses a number of other sectors such as construction, transportation and warehousing, and agriculture (including forestry, fishing, and hunting).¹
 - Arts and cultural value-added is more than 4 times greater than that of the agricultural sector.
 - Arts and culture adds \$200 billion more to the U.S. economy than does transportation and warehousing.

Value added to U.S. GDP by sector: 2015

(billions)

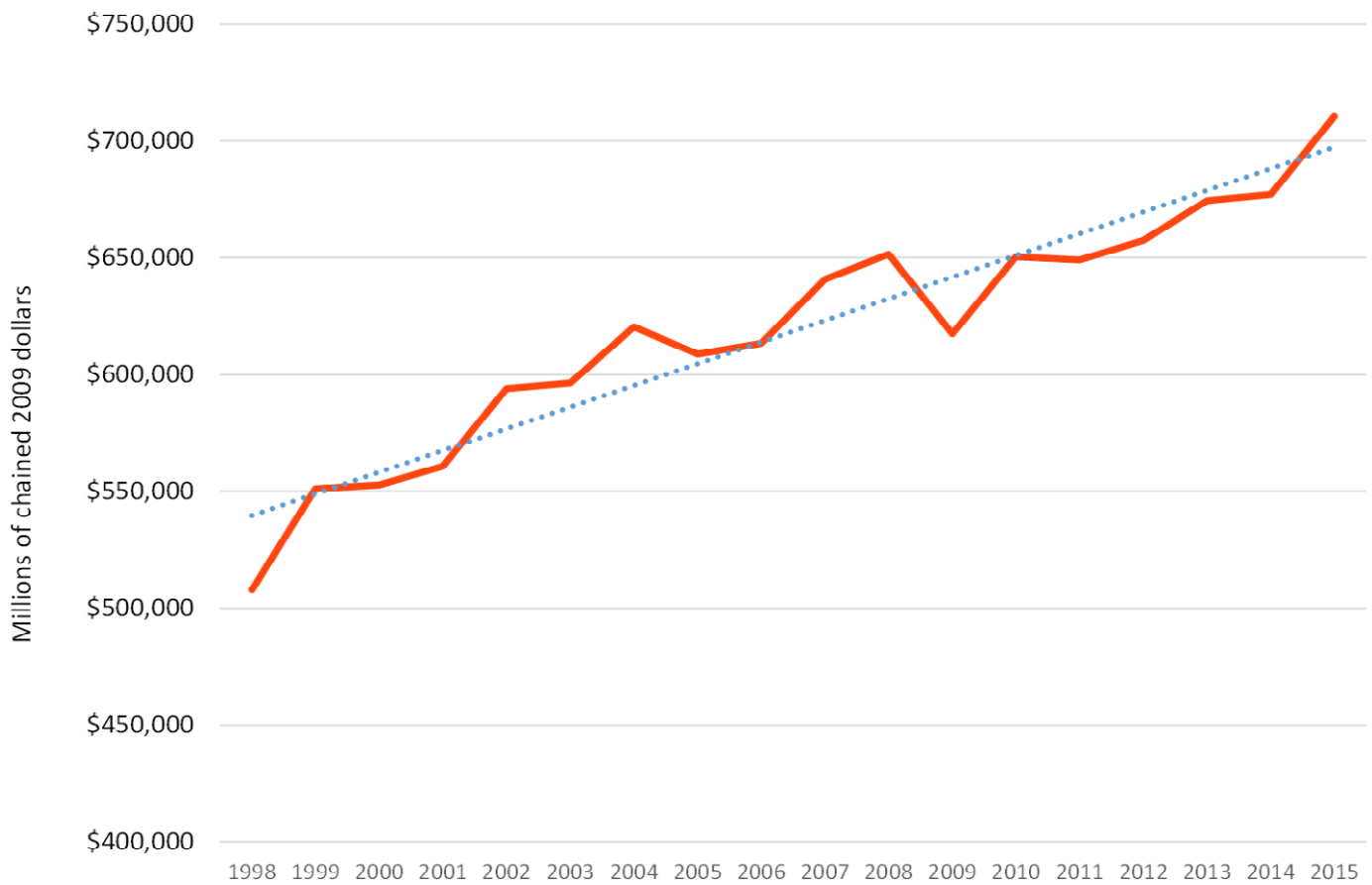


Data source: Arts and Cultural Production Satellite Account, Travel and Tourism Satellite Account, and Gross Domestic Product by Industry; U.S. Bureau of Economic Analysis.

III. Trends in Arts and Cultural Production

1. Arts and culture's value-added has generally risen throughout the 18-year period captured by the ACPSA.
 - Between 2014 and 2015 (the most recent one-year timeframe reported by the ACPSA), "real" (i.e., inflation-adjusted) value added by arts and cultural production rose sharply—by 4.9 percent.²
 - Over the most recent three-year period (2012-2015), the *average annual growth rate* of real value added by arts and culture was 2.6 percent, slightly stronger than the 2.4 percent growth rate generated by the total U.S. economy.³

Real value added by arts and culture: 1998-2015

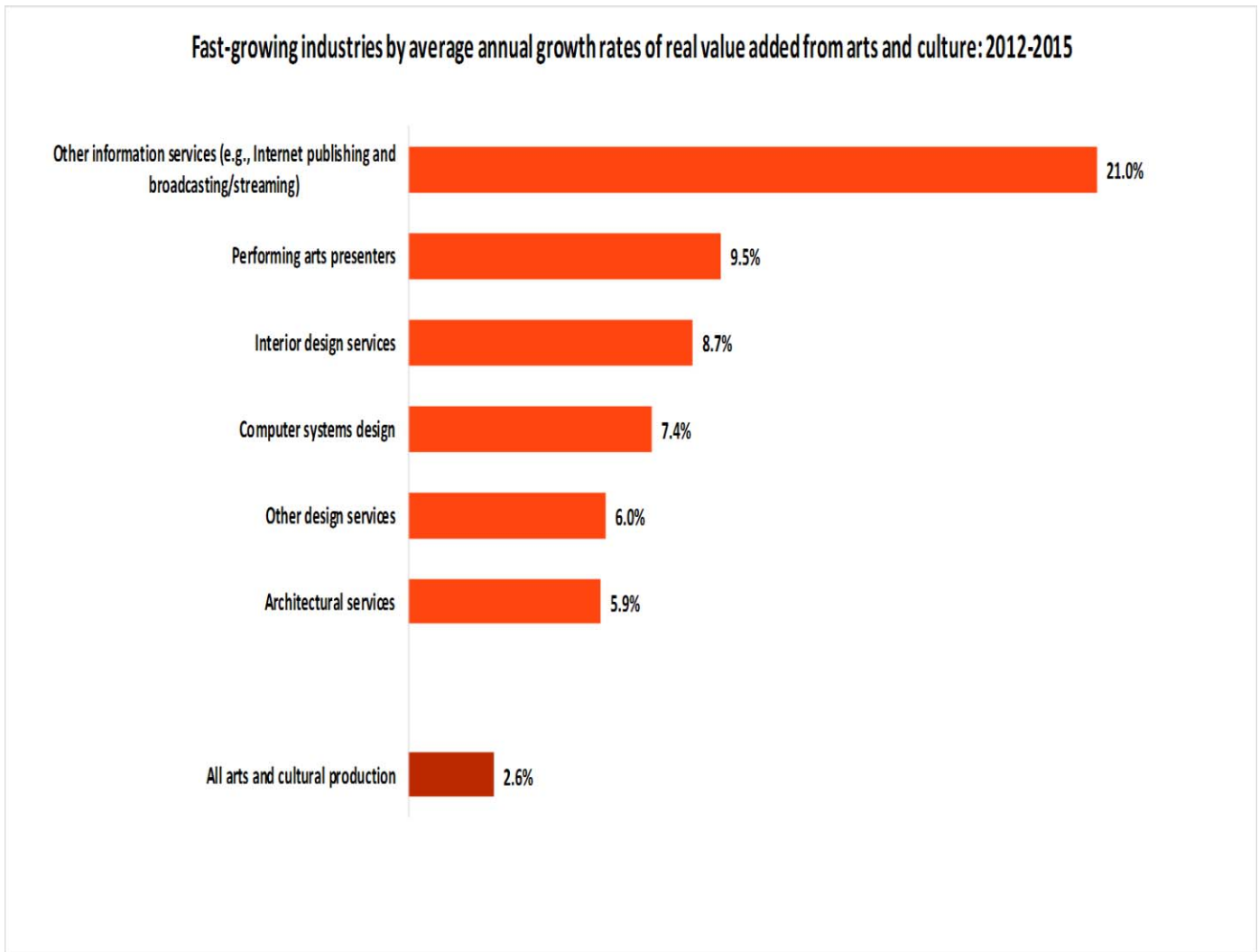


Real value added is measured in chained 2009 dollars to control for inflation.

Source: Arts and Cultural Production Satellite Account (ACPSA), U.S. Bureau of Economic Analysis.

2. The fastest-growing industries producing arts and cultural goods and services span Internet publishing and broadcasting (i.e., “other information services”), performing arts presenters, design, and architectural services.
 - Arts and cultural value added by “other information services” (including Internet publishing and broadcasting/streaming) grew by an annual average rate of 21.0 percent between 2012 and 2015.
 - Value added by performing arts presenters grew by 9.5 percent over the three-year period.

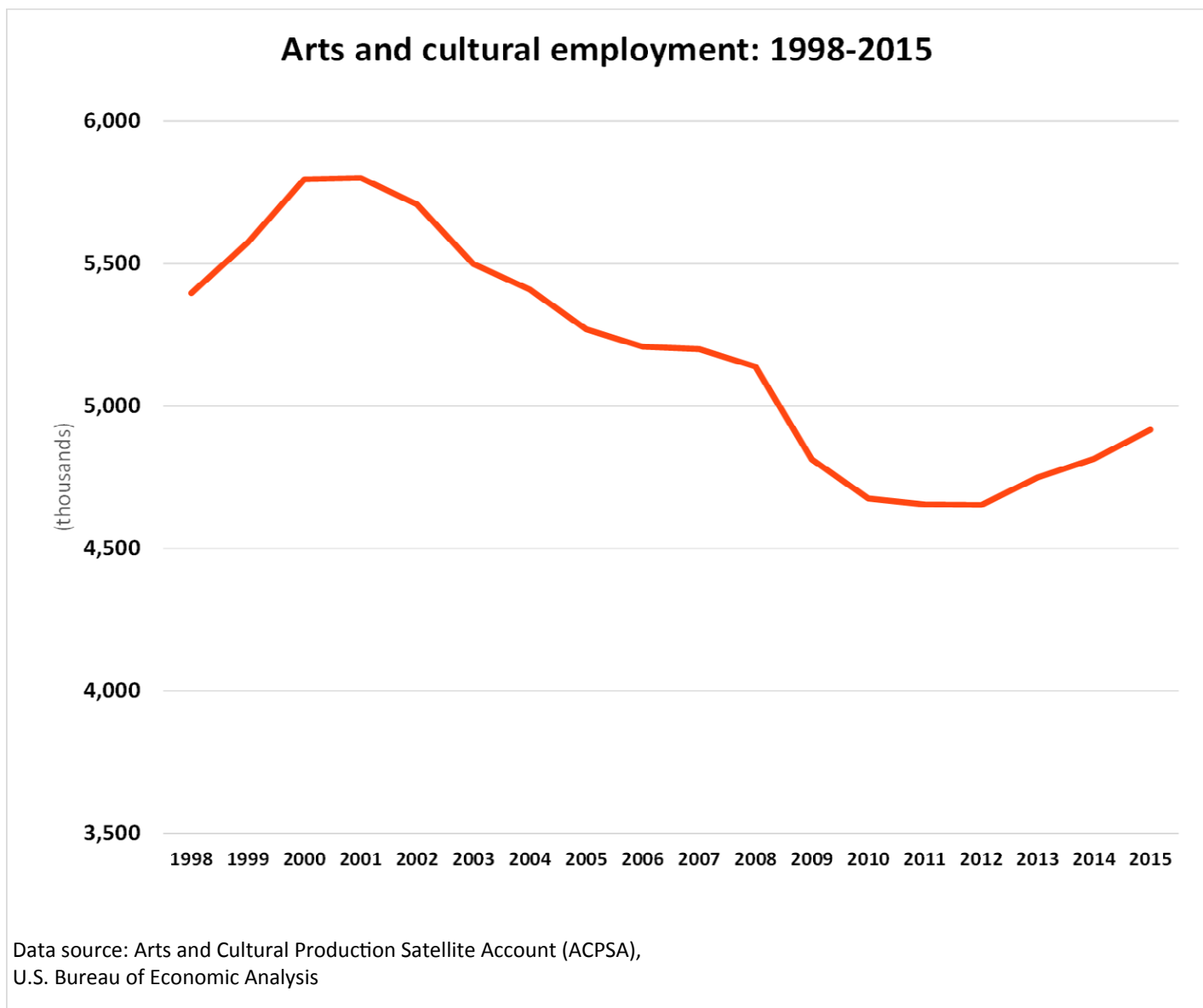
- 3. Declines in value-added were reported for arts-related manufacturing and construction.
 - Between 2012 and 2015, average annual growth in value added by jewelry and silverware manufacturers declined by 18.6 percent.
 - Over the same period, real value added by camera and motion picture equipment manufacturers dropped by 17.0 percent.
- Value added by arts-related construction (i.e., construction of new cultural facilities) slipped by 3.4 percent.



Notes: "Computer systems design" refers to design supporting motion picture and sound recordings.
 "Other design services" include jewelry and fashion design.
 Data source: Arts and Cultural Production Satellite Account (ACPSA), U.S. Bureau of Economic Analysis

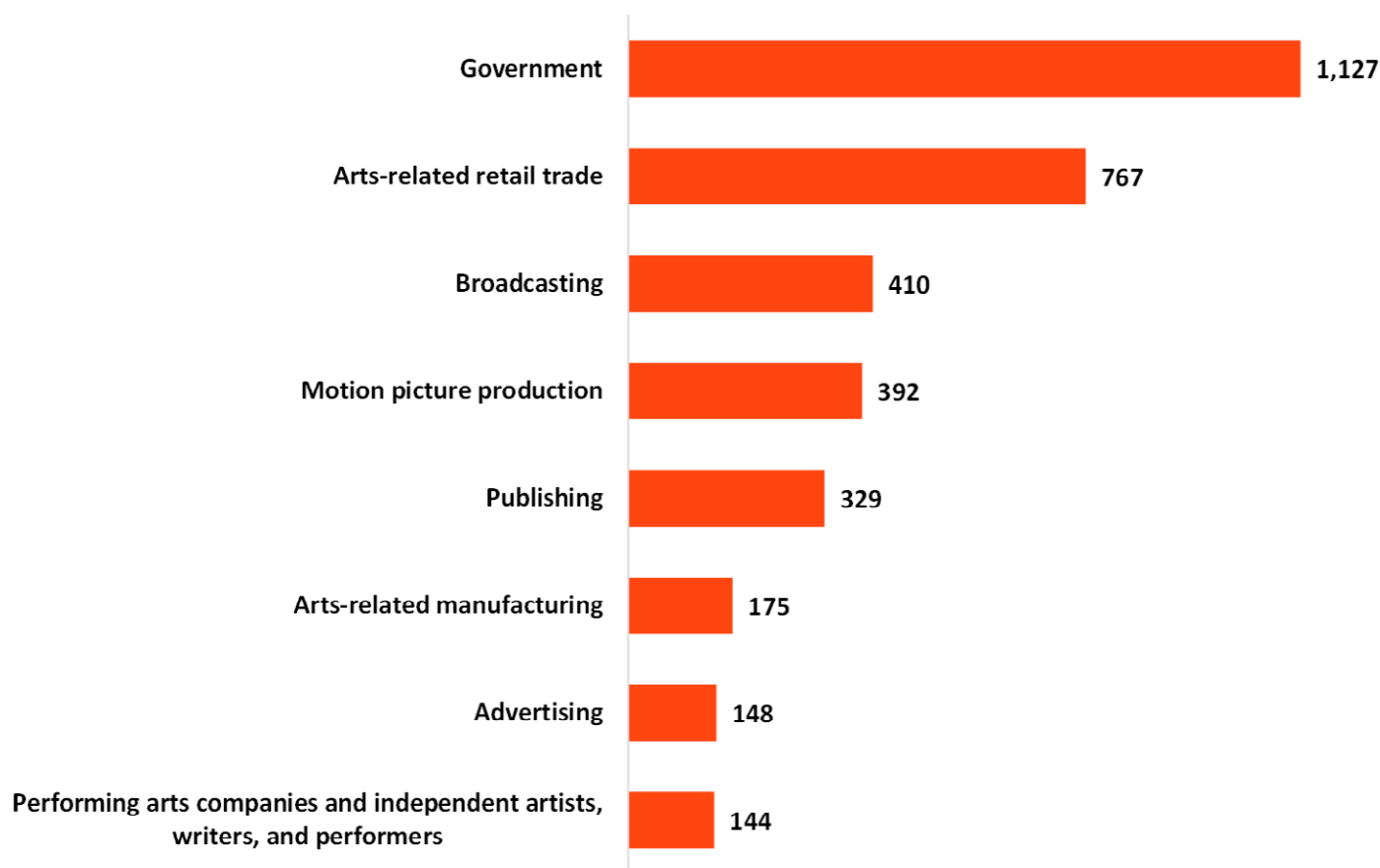
IV. Workers Engaged in Arts and Cultural Production

1. In 2015, the arts and cultural sector employed 4.9 million wage-and-salary workers.
 - Compensation for those workers topped \$372 billion.
2. Although rising in recent years, the number of workers employed to produce arts and cultural goods and services is below the peak observed in 2001.
 - In that year, arts and cultural employment reached 5.8 million, or 884,000 more workers than the arts economy employed in 2015.



3. Industries employing the largest numbers of ACPSA workers are: government (comprising federal, state, and local jurisdictions); arts-related retail trade; broadcasting; motion picture industries; and publishing.
 - These industries employ 62 percent of all U.S. workers producing arts and cultural goods and services.
 - Government represents the single largest arts-and-cultural-sector employer—1.1 million workers in 2015, or one-in-five wage-and-salary employees.
 - In 2015, the retail trade sector (including art galleries, book and music stores, and florist shops) employed 767,000 workers to provide arts and cultural goods and services.
 - That same year, broadcasting, motion picture industries, and publishing each employed between roughly 300,000 to 400,000 workers to produce art and culture.

Top-ranking ACPSA industries by number of people employed to produce arts and cultural goods and services: 2015
(thousands)



Data source: Arts and Cultural Production Satellite Account (ACPSA), U.S. Bureau of Economic Analysis

V. Consumer Spending on Admissions to Performing Arts Events

1. In 2015, U.S. consumers spent \$31.6 billion on admissions to performing arts events.

Personal consumption spending on admissions to performing arts events: 2015

(in millions)

Performing arts	\$31,594
Non-musical theater	\$16,791
Music groups and artists ¹	\$4,380
Other performing arts ²	\$3,628
Opera and musical theater	\$3,504
Symphony orchestras and chamber music	\$2,427
Dance	\$864

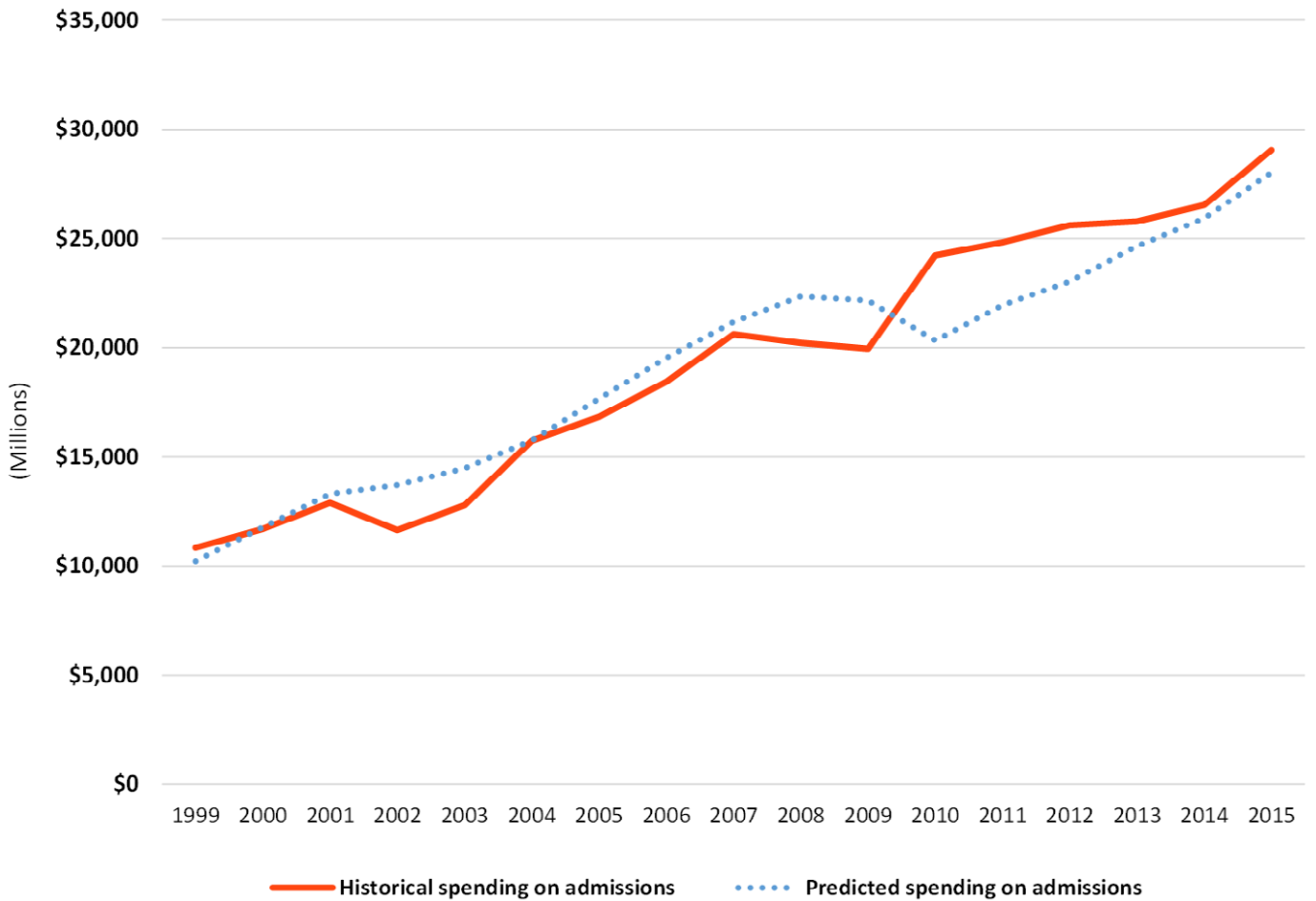
¹ Examples include jazz, rock, and country music performances.

² Includes circus performances and performances by magicians and acrobats.

Data source: Arts and Cultural Production Satellite Account (ACPSA), U.S. Bureau of Economic Analysis.

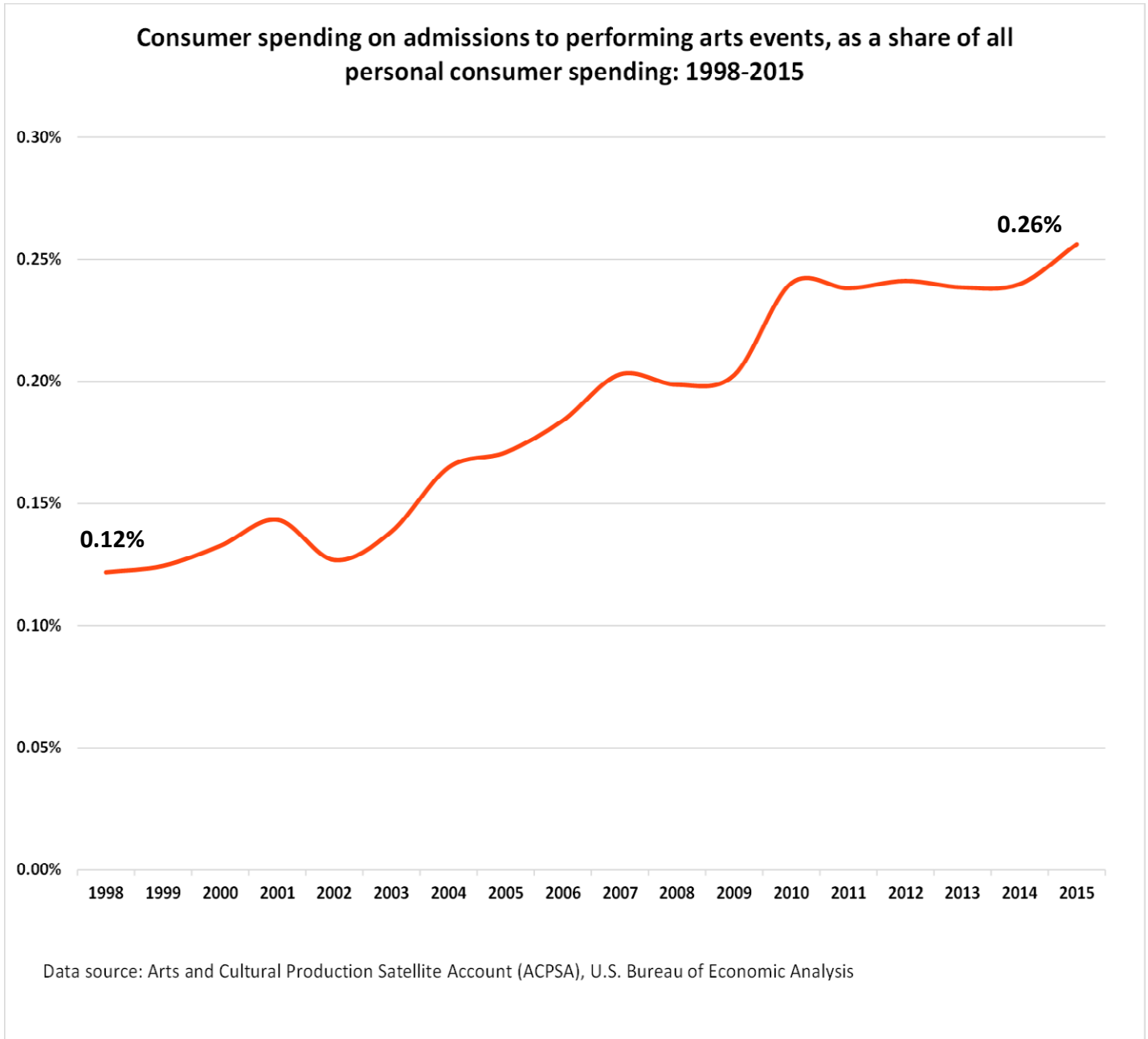
2. Real” (i.e., inflation-adjusted) 2015 spending on performing arts admissions was \$1 billion more than expected, given the level of GDP that year.⁴
 - Consumer outlays to attend the performing arts have been above-trend since 2010.

**Consumer spending on admissions to performing arts events:
1999-2015**
(Adjusted for inflation)



Data source: Arts and Cultural Production Satellite Account (ACPSA) and Gross Domestic Product; U.S. Bureau of Economic Analysis.
Calculations by NEA Office of Research & Analysis.

3. Since 1998, consumer spending on admissions to the performing arts, as a share of all U.S. consumer spending, has more than doubled.
- Consumer spending on tickets to performing arts events rose from 0.12 percent of all U. S. personal consumer spending in 1998 to 0.26 percent in 2015.



VI. Arts and Cultural Contributions to the Creative Economy

1. Arts and cultural production accounts for roughly half of the U.S. “creative economy.”
 - In 2015, copyright-intensive industries contributed \$960 billion to the U.S. economy. Of that value, \$469 billion stemmed from the production of arts and cultural goods and services.⁵
2. Between 2012 and 2015, average annual growth in production of copyright-intensive arts and cultural goods and services grew 3.2 percent, a rate stronger than the 2.6 percent growth rate recorded during this period for total arts and cultural production.
 - Average annual growth in production was particularly strong for “other information services” (which includes Internet publishing and broadcasting/streaming); arts-related computer systems design (supporting motion picture production and sound recordings); and “specialized” design, which includes interior, industrial, graphic, and jewelry and fashion design.

Value added by copyright-intensive industries: 2015

	Total value added (millions)	Value added from arts and cultural production (millions)
Total copyright-intensive industries	\$959,864	\$468,995
Broadcasting	\$281,312	\$127,844
Motion pictures	\$100,166	\$99,280
Publishing	\$198,741	\$77,694
Performing arts companies and independent artists, writers, and performers	\$42,359	\$39,783
Other information services ¹	\$49,548	\$43,379
Advertising	\$93,501	\$33,099
Specialized design	\$21,335	\$19,482
Sound recording	\$14,896	\$14,854
Photographic services	\$10,391	\$10,150
Computer systems design	\$147,615	\$3,430

¹ Includes Internet publishing and broadcasting/streaming.

Data source: Arts and Cultural Production Satellite Account (ACPSA), U.S. Bureau of Economic Analysis.

Average annual growth rates of real arts and cultural value added: 2012-2015

Copyright-intensive industries

All copyright-intensive industries:	3.2%
Other information services ¹	21.0%
Computer systems design	7.4%
Specialized design services	6.5%
Advertising	3.4%
Sound recording	3.0%
Photographic services	2.9%
Performing arts companies and independent artists, writers, and performers	2.9%
Broadcasting	2.6%
Motion pictures	0.2%
Publishing	-0.6%

¹ Includes Internet publishing and broadcasting/streaming.

Data source: Arts and Cultural Production Satellite Account (ACPSA),

U.S. Bureau of Economic Analysis.

Arts and Cultural Production as Investment

Historically, private fixed assets were in the form of physical capital (i.e., plant and equipment assets). In more recent years, however, the BEA has expanded its definition of investment to include the capitalization of intangible assets.

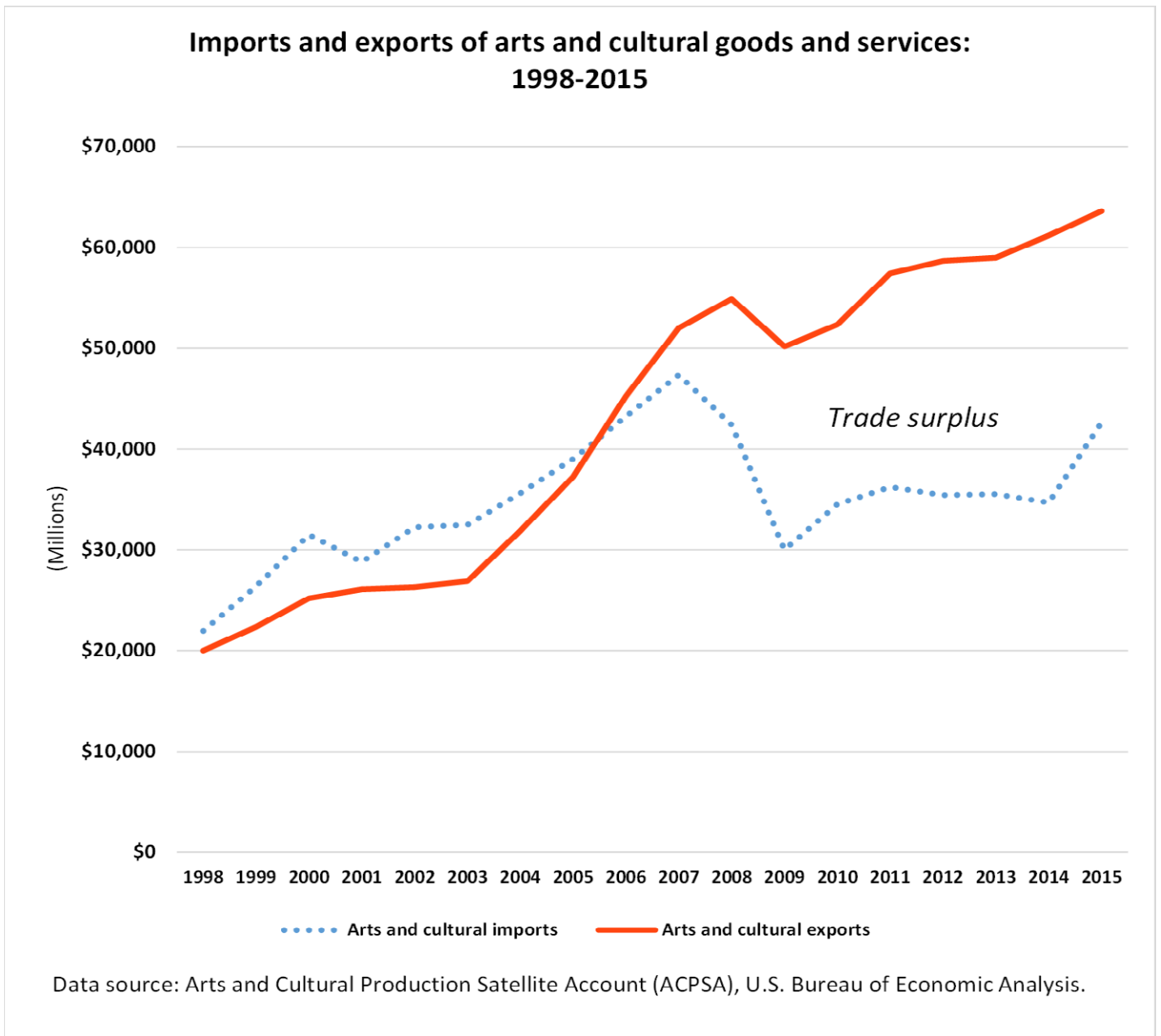
For example, software development was first counted as fixed private investment in 1999. And in 2013, the national income and product accounts (NIPAs) were revised to include research and development expenditures as investment.

Also in 2013 was the BEA revision that capitalized “entertainment originals.” Entertainment originals refer to theatrical movies; long-lived television programs; books; music; and other “miscellaneous entertainment” such as scripts and scores for the performing arts, greeting card designs, and stock photography.

In 2012, for example, investment in entertainment originals was **\$74.5 billion**. In 2015, that investment rose to nearly **\$79 billion**. During this period, and after adjusting for inflation, investment in entertainment originals increased 4 percent (or \$3 billion).

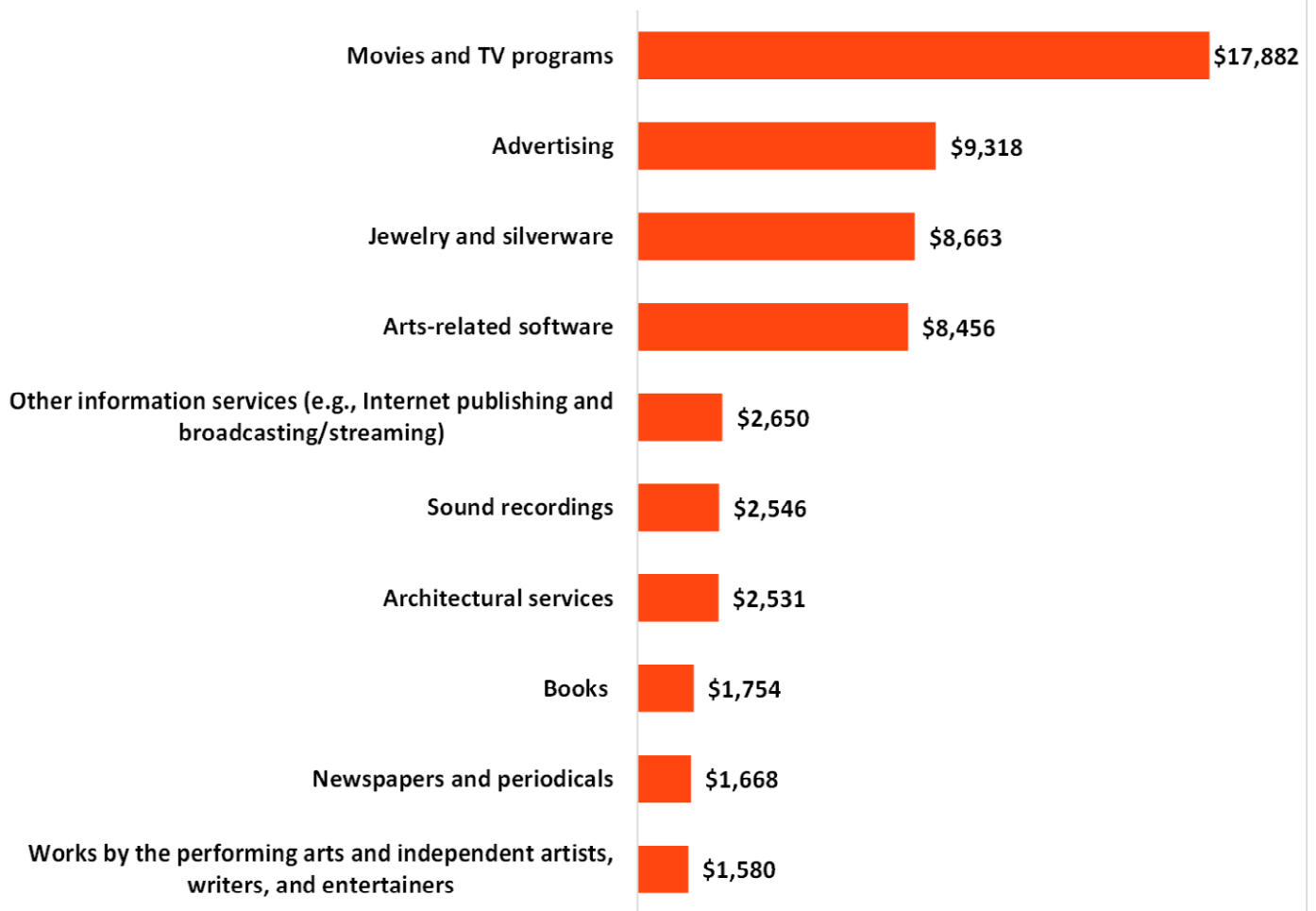
VII. Exports of Arts and Cultural Goods and Services

1. The U.S. exports more arts and cultural goods and services than it imports, resulting in a trade surplus for that sector.
 - In 2015, the U.S. exported nearly \$20 billion more in arts and cultural goods and services than it imported.
 - The arts and cultural trade surplus has generally been widening since 2006.



- 2. ACPSA exports are driven by movies and TV programs, advertising, jewelry and silverware, and arts-related software (e.g., video games).
 - In 2015, those commodities accounted for \$63.6 billion, or nearly 70 percent of all ACPSA exports.
- Other notable U.S. exports of arts and cultural goods and services include architectural services (which generated \$2.5 billion in exports in 2015) and works by performing arts companies and by independent artists (generating nearly \$1.6 billion in U.S. exports).

Top exports of arts and cultural goods and services: 2015
(millions)



Data source: Arts and Cultural Production Satellite Account (ACPSA), U.S. Bureau of Economic Analysis

VIII. The Economic Impact of New Demand for Arts and Culture

1. The ACPSA shows that every \$1 increase in new demand for arts and culture generates \$1.69 in *total output*.⁶
 - Above-average multipliers are reported for arts-related manufactured goods, including custom architectural woodwork and metalwork (\$1.99); musical instruments (\$1.85); and camera and motion picture equipment (\$1.92).
2. For every 10 jobs created from new demand for the arts, an additional 6 positions are created.
 - ACPSA industries with high employment multipliers include publishing, including arts-related software publishing (3.6); sound recording (3.0); and “other information services” such as Internet publishing and broadcasting/streaming (2.9).

Top ACPSA industry employment multipliers: 2015

All ACPSA industries	1.61
Publishing ¹	3.56
Sound recording	3.50
Other information services ²	2.92
Independent artists, writers, and performers	2.90
Rental and leasing ³	2.78

¹ Includes arts-related software publishing such as computer games.

² Includes Internet publishing and broadcasting/streaming.

³ Includes theatrical and motion picture costume and equipment rentals.

Data source: Arts and Cultural Production Satellite Account (ACPSA), U.S. Bureau of Economic Analysis.

Endnotes

¹The sectors given below are not mutually exclusive. For example, arts and cultural production includes parts of the construction sector—namely, the building of new arts and cultural facilities—and travel and tourism includes related performing-arts spending.

²“Real” ACPSA estimates are measured in 2009 chained dollars. For more information, see the BEA’s definition of [“chained dollar estimates.”](#)

³ See [“How is average annual growth calculated?”](#)

⁴These findings are based on a model regressing real consumer spending against real GDP. The model suggests that every 1 percent increase in real GDP leads to a 3 percent increase in real spending on admissions to the performing arts.

⁵The NEA’s Office of Research & Analysis defines the “creative economy” as value added by industries that the U.S. Patent and Trademark Office has identified as copyright-intensive. See [Intellectual Property and the U.S. Economy: 2016 Update](#), Economics & Statistics Administration and U.S. Patent and Trademark Office.

⁶Examples of changes in the demand for arts and culture include shifts in government spending on museums and parks, the construction of new performing arts centers, and changes in exports in arts and cultural goods and services.

For a complete explanation of the BEA’s final demand multipliers, see Bess, R. and Ambargis, Z. (2011). [Input-Output Models for Impact Analysis: Suggestions for Practitioners Using RIMS II Multipliers](#).