



Time and Money: Using Federal Data to Measure the Value of Performing Arts Activities

Abstract

This Note examines large datasets from multiple federal sources including the U.S. Economic Census, the Bureau of Economic Analysis (BEA), and the Bureau of Labor Statistics (BLS), to arrive at monetary and non-monetary value measurements of the nation's performing arts sector. The first section reports the total number, staff, and budget size of performing arts organizations. The second part addresses U.S. consumer spending on performing arts admissions and other cultural events.

Part Three takes a different approach. It represents the NEA's first-ever analysis of Americans' daily time spent doing arts and cultural activities, including performing arts attendance. This section relies on previously unpublished data from the BLS' American Time Use Survey. The Note concludes by reviewing several possible measures of arts and cultural value that extend beyond mining federal databases.

Key Findings

1. The U.S. performing arts industry is supported by nearly 8,840 organizations with a total of 127,648 paid workers. These organizations

generate nearly \$13.6 billion in annual revenues, according to the most recent estimates.

- The not-for-profit sector alone accounted for 45 percent of these organizations (about 4,000) and 58 percent of their paid workers. Total annual revenue and expenses of not-for-profit performing arts groups were \$5.6 billion and \$5.2 billion, respectively.
- “Theater and opera” companies accounted for just over half of the total revenue and total expenses of all not-for-profit performing arts groups. They also provided over half (38,130) of this sector’s paid employees.
- Contributed income, including individual donations, made up 41 percent (\$2.3 billion) of the total revenue of not-for-profit performing arts groups. Admission fees made up 35 percent (\$2 billion) of total revenue.
- These estimates draw on results from the 2007 Economic Census, which enumerates establishments with payrolls.¹ An alternative data source, one not restricted to

establishments with paid workers, yields a count of nearly 7,000 not-for-profit performing arts groups with annual budgets of \$75,000 or greater. These organizations generated \$8.9 billion in annual revenue and \$8.2 billion in expenses.

(Sources: U.S. Census Bureau’s Economic Census for 2007; U.S. Internal Revenue Service Form 990 filings for 2007, via the Urban Institute’s National Center for Charitable Statistics)

2. Americans recently spent an annual total of \$14.5 billion on performing arts admissions.

- In comparison, Americans recently spent \$20.7 billion on sports admissions and \$10.4 billion on movie box-office tickets.
- The average U.S. household spent \$139 annually on arts and crafts, a category that includes toys and (non-video) games. This amount was roughly comparable to that spent on sports and exercise equipment (\$130).

(Sources: U.S. Department of Commerce's Bureau of Economic Analysis, National Income and Product Accounts data for 2009; U.S. Department of Labor's Bureau of Labor Statistics, Consumer Expenditure Survey for 2009)

3. On any given day, 1.5 million Americans attend arts performances, usually with family or friends.

- In common with sports-goers, performing arts attendees are more

likely than museum- or movie-goers to bring a friend along.

- Most museum-goers spend 2.4 hours on this particular activity. Visits peak during lunch hour.
- 2.6 million Americans do arts and crafts activities on any given day. Thirty percent do these activities with other family members—and 19 percent, with children.
- On an average day, more than 500,000 people write for personal interest, generally for 1.5 hours.

(Source: U.S. Department of Labor's Bureau of Labor Statistics, American Time Use Survey annual averages for 2003-2009 and 2005-2009)

Part I. Value Expressed by Numbers and Budgets of Performing Arts Organizations

A good place to begin estimating the value of the performing arts sector is through data collected by the Economic Census, which the U.S. Census Bureau conducts every five years. The most recent census enumerated 8,838 performing arts establishments in 2007.² These establishments employed 127,659 workers and generated \$13.6 billion in revenue.³

For the performing arts industry, the Economic Census reports tallies of both for-profit (taxable) and not-for-profit (tax-exempt) organizations.

Of the 8,838 performing arts establishments in 2007, for example, nearly 5,000 were taxable. The for-profit performing arts employed roughly 54,000 workers and generated \$8 billion in revenue.⁴

As the table below shows, most taxable performing arts organizations are “other music groups” (such as jazz, rock, and country bands) and theaters. Together, other music groups and theaters make up 86 percent of the taxable performing arts.

For-Profit Performing Arts Groups, 2007

Performing arts companies	4,899
Theaters	1,205
Dinner theaters	166
Opera companies	10
Dance companies	118
Symphony orchestras and chamber groups	46
Other music groups	3,007
Other performing arts companies	347

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

Theaters, combined with dinner theaters and opera companies, employ the majority of workers in the for-profit performing arts industry—more than 31,000 in 2007.⁵ These establishments also generated the most

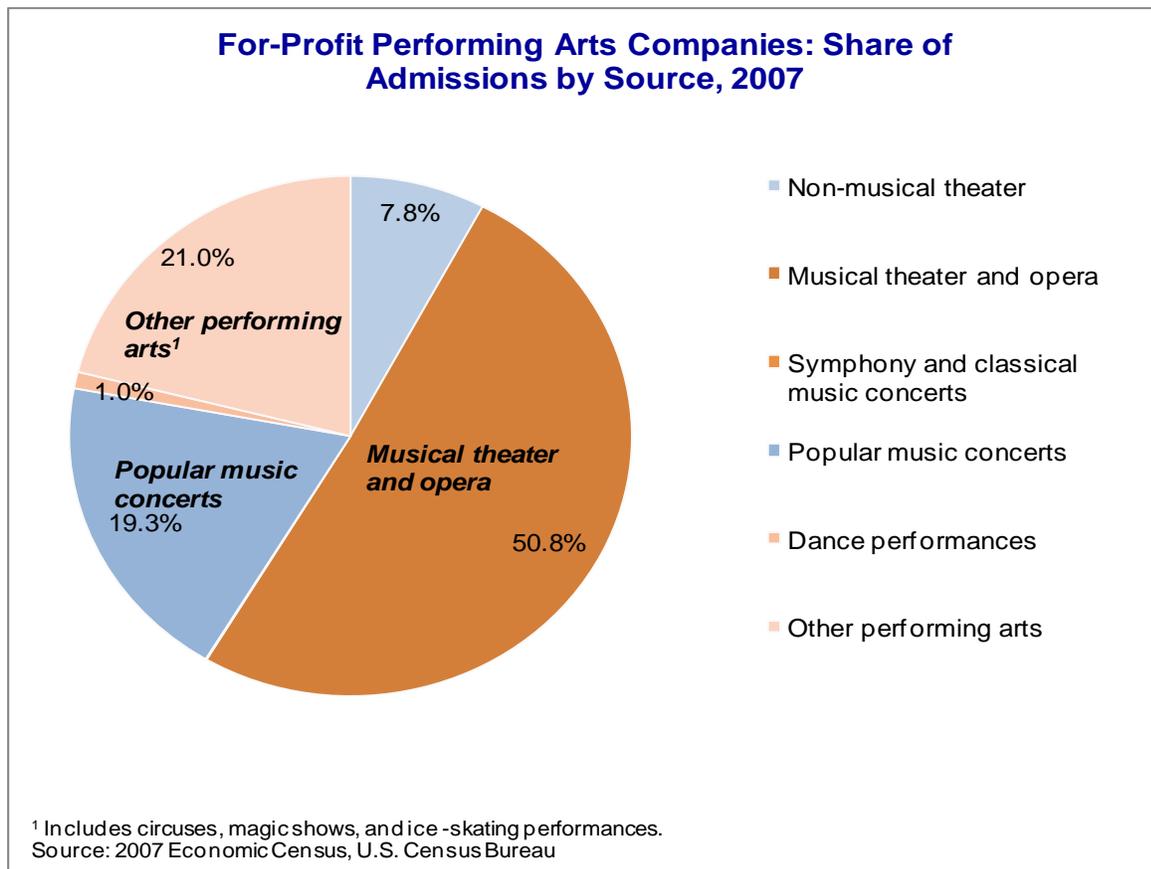
revenue (\$3.8 billion). Other music groups, alternatively, employed fewer than half that number (just under 14,000), but reported annual revenues totaling \$3.2 billion.

For-Profit Performing Arts Groups, 2007

	Revenue (\$1,000)	Annual payroll (\$1,000)	Number of paid employees
Performing arts companies	8,001,509	1,971,822	53,728
Theater companies, dinner theaters, and opera companies	3,840,676	961,903	31,044
Dance companies	64,510	19,230	844
Symphony orchestras and chamber groups	30,945	9,593	464
Other music groups	3,165,966	740,541	13,562
Other performing arts companies	930,357	250,148	8,278

Source: 2007 Economic Census, U.S. Census Bureau, U.S. Department of Commerce

Nearly all revenue generated by for-profit performing arts establishments flows from “operating” sources, mainly admissions and contract fees. Musical theater and opera accounted for the largest share of ticket sales (51 percent), while popular music concerts (e.g., jazz, rock, country) commanded the largest percentage of contract fees (68 percent).



Not-For-Profit Performing Arts

The 2007 Economic Census counted 3,939 tax-exempt performing arts establishments. As with the for-profit performing arts, theaters accounted for the largest share of tax-exempt

companies—52 percent in 2007. With nearly 800 establishments, symphony orchestras and chamber groups made up 20 percent of the not-for-profit performing arts industry.

Not-For-Profit Performing Arts Groups, 2007

Performing arts companies	3,939
Theaters	2,042
Opera companies	154
Dance companies	407
Symphony orchestras and chamber groups	799
Other music groups	646
Other performing arts companies	45

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

Budgets of Not-For-Profit Performing Arts Companies

As the chart below shows, the majority of tax-exempt performing arts groups fall into a budget category of \$100,000 to \$249,999.

More than half of all not-for-profit establishments reported budgets ranging from \$100,000 to just under \$1 million.⁶

Tax Forms as an Alternative Data Source

Data obtained from filings of the U.S. Internal Revenue Service Form 990 offer an alternative measure of the number of tax-exempt performing arts organizations and their budgets.

For the time period examined in this Note, the IRS required tax-exempt organizations with annual gross receipts of at least \$25,000 to file the Form 990 (or Form 990EZ).ⁱ The IRS collects these forms regardless of whether the entity has employees on payroll. Thus, Form 990 filings can and do capture organizations run solely by volunteers.

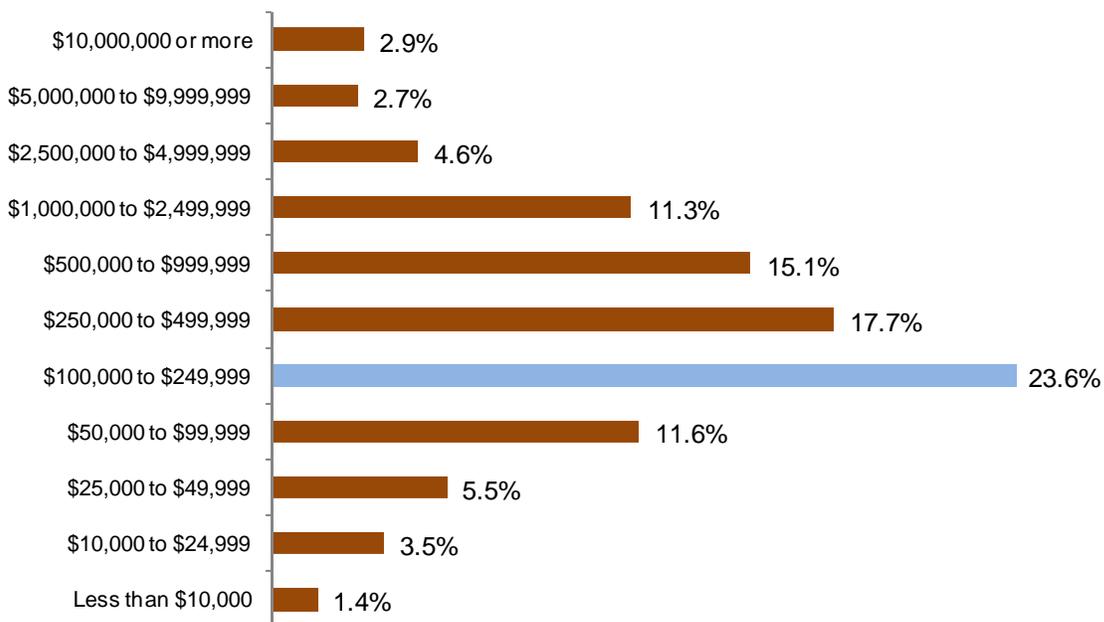
The U.S. Economic Census, on the other hand, requires census forms only of “business establishments” with paid employees. This difference between the IRS’ and Economic Census’ data-collection methodologies is largely responsible for varying counts of tax-exempt organizations.

In an attempt to reconcile the estimates—or, at any rate, to bring them closer together—researchers often set a budgetary threshold for examining IRS data on not-for-profit organizations. With the threshold set at \$75,000, for example, the Form 990 data show **more than 6,900 tax-exempt performing arts organizations in filing year 2008**. Together, they brought in total revenues of \$8.9 billion, and they spent a total of \$8.2 billion that year.ⁱⁱ

ⁱ In 2010, the filing threshold requirement was increased to tax-exempt entities with at least \$50,000 in gross receipts.

ⁱⁱ The IRS Form 990 estimates reported here were obtained from data provided by the National Center for Charitable Statistics at the Urban Institute.

Not-For-Profit Performing Arts Organizations: Percentage of All Organizations by Budget Size, 2007



Source: 2007 Economic Census, U.S. Census Bureau

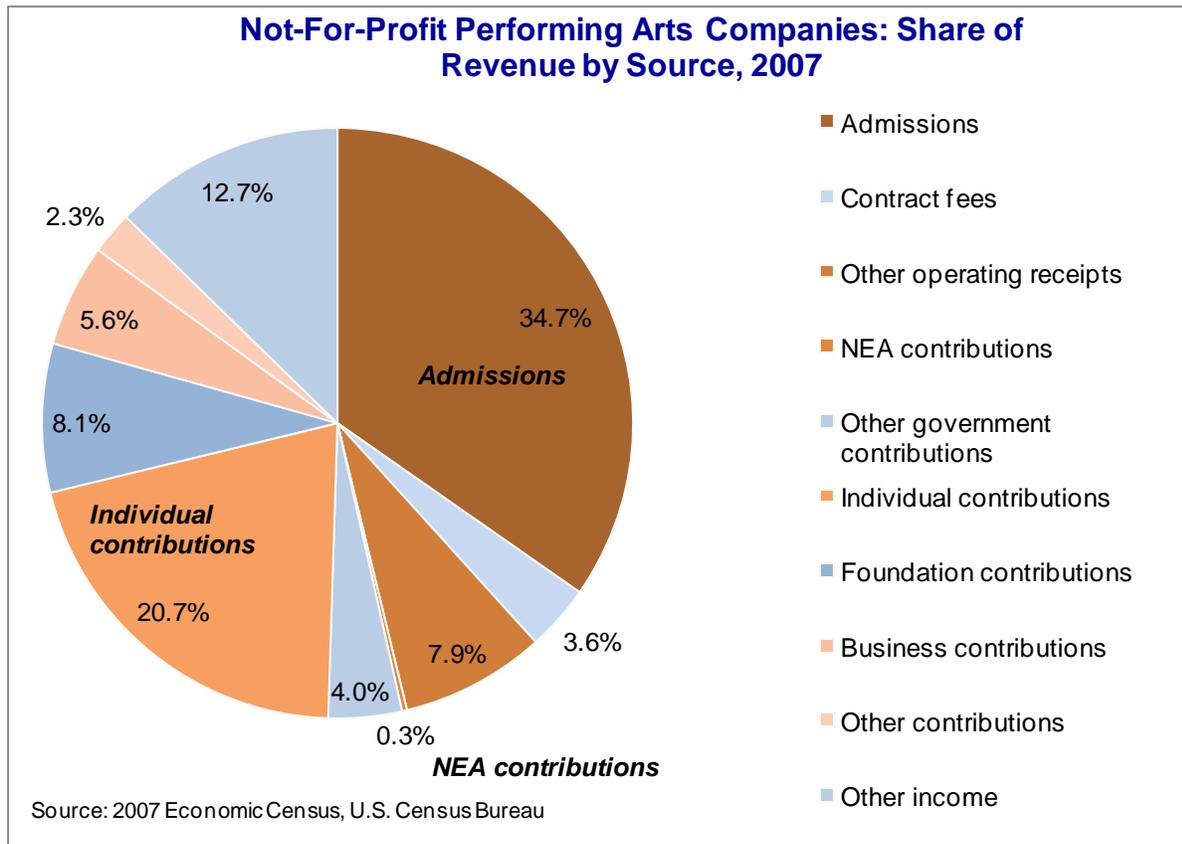
In total, tax-exempt performing arts groups garnered revenues of \$5.6 billion and spent \$5.2 billion in 2007. The not-for-profit performing arts industry generated \$2 billion in annual payroll, and employed nearly 74,000 workers.

Theaters and opera companies (combined) generated \$3 billion in revenue, a figure that amounts to 55 percent of all not-for-profit performing arts revenue in 2007. Theaters and opera companies also employed the largest share of workers—38,000, or 52 percent of all workers in the tax-exempt performing arts industry.

Not-For-Profit Performing Arts Groups, 2007

	Revenue (\$1,000)	Expenses (\$1,000)	Annual payroll (\$1,000)	Number of paid employees
Performing arts companies	\$5,572,271	\$5,201,187	\$2,007,965	73,920
Theater and opera companies	\$3,049,317	\$2,879,697	\$1,033,333	38,130
Dance companies	\$532,396	\$479,473	\$196,006	7,770
Symphony orchestras and chamber groups	\$1,715,102	\$1,585,481	\$695,345	23,848
Other music groups	\$237,142	\$220,584	\$69,996	3,623
Other performing arts companies	\$38,314	\$35,952	\$13,285	549

Source: 2007 Economic Census, U.S. Census Bureau, U.S. Department of Commerce



Revenue by Source

The Economic Census shows that earned income, such as admissions, contract fees, and membership services, accounted for 46 percent of total revenue. Contributed income (i.e., giving from individuals, businesses, foundations, and government agencies) make up 41 percent of all revenues.⁷

The largest component of earned revenue is admissions (34.7 percent of all revenue), while the largest share of contributed income flows from individuals (20.7 percent of all revenue).

Government contributions (including grants from the NEA, other federal agencies, and state and local government sources) and

“other” contributions, such as those stemming from guilds or unions, make up the smallest shares of revenue—4.3 percent and 2.3 percent, respectively.

This section has focused on understanding the total direct value of the performing arts sector as represented by organizational counts and budgets. Measurements of earned and contributed income in particular can be used as proxies of the perceived value of this sector to individuals, businesses, foundations, and public agencies. In the next two sections of this Note, we will take direct measurements of the value of the performing arts to U.S. consumers.

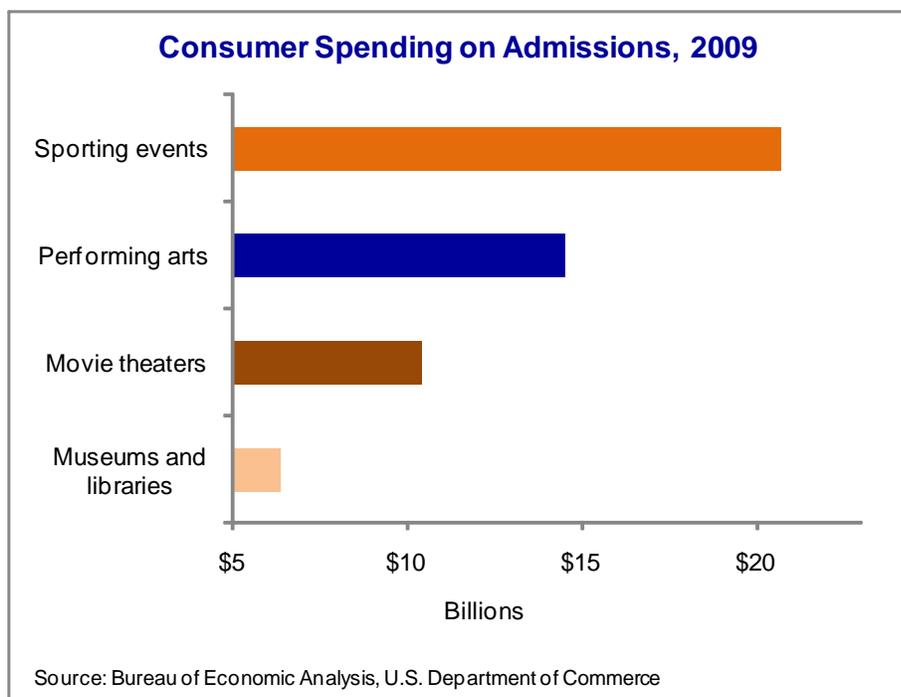
Part Two: Value Expressed by Consumer Spending on Performing Arts Admissions and Other Cultural Events

The most direct economic measure of the performing arts’ value to individuals is provided by examining amounts spent on tickets to art performances. The U.S. Department of Commerce’s Bureau of

Economic Analysis (BEA) measures, as part of its National Income and Product Accounts, detailed consumer spending on arts and entertainment admissions and a variety of recreational items.

In 2009, the most recent year for which estimates were available, **Americans spent \$14.5 billion on tickets to performing arts events**—\$4 billion more than they spent on tickets to movie theaters, but \$6 billion less

than spending on sports admissions. U.S. consumers spent \$6 billion on admissions to museums and libraries.



The BEA also reports that consumers spent \$3.9 billion on photography equipment, \$5.6 billion on musical instruments, and \$33.8 billion on books.⁸ Consumer spending on video and audio equipment is among the largest of BEA’s tallies of recreational spending—\$107 billion in 2009.

In addition to the BEA’s estimates of aggregate consumer spending from the national accounts, the U.S. Department of Labor’s Bureau of Labor Statistics (BLS) reports annual consumer spending through its Consumer Expenditure Survey. In some cases, the CES does not provide the detailed

spending categories available from the national accounts. The CES does, however, report average household spending. In 2009, for example, U.S. households spent an average of \$120 on admissions to movies, theaters, and amusement parks.⁹ They spent nearly \$51 on tickets to sporting events.

Average Household Spending on Selected Leisure and Entertainment Items, 2009
Consumer Expenditure Survey

	Average household spending	CV ¹
All entertainment	\$2,692.66	\$2.38
Admissions to movies, theaters, and amusement parks	\$120.38	\$3.88
Admissions to sporting events	\$50.86	\$7.92
Video game hardware and software	\$53.32	\$10.89
Musical instruments	\$23.30	\$18.39
Toys, games, and arts and crafts	\$139.07	\$4.77
Sports, recreation, and exercise equipment	\$129.98	\$8.17
Photographic equipment, supplies, and services	\$59.08	\$8.29
All reading	\$109.60	\$2.64
Books ²	\$47.28	\$3.75
Newspaper and magazines ³	\$43.30	\$2.97

Source: Bureau of Labor Statistics, U.S. Department of Labor

¹ The coefficient of variation (CV) is calculated by dividing the standard deviation by the estimate for average household spending. For example, spending on admissions to movies, theaters, and amusement parks ranges from \$116.50 to \$124.26, per the \$3.88 CV.

² Excludes purchases of books through book clubs.

³ Purchased through subscriptions; non-subscription purchases of newspapers and magazines totaled \$14.97 in 2009.

Part Three: Value Expressed by Time Spent on Performing Arts Attendance and Other Cultural Activities

While spending estimates are reliable economic indicators of how Americans value performing arts events, a more comprehensive understanding of consumer preferences should draw on non-monetary measures. Chief among these is the NEA's Survey of Public Participation in the Arts (SPPA), which has been conducted periodically since 1982. The Arts Endowment has used the SPPA to report on a wide variety of arts participation topics, including the influence of media and technology, how age affects arts participation, and the frequency of "informal" arts participation in urban and rural areas.¹⁰

In addition to the SPPA, a relatively new federal data source has begun to provide an alternative view of arts participation. Sponsored by the Bureau of Labor Statistics, and launched in 2003, the American Time Use Survey (ATUS) tracks how individuals age 15 and older spend their time. Unlike the SPPA, which covers activities over a 12-month period, the ATUS captures activities on an average day.

The ATUS aggregates arts and leisure activities to a greater extent than the SPPA. For example, the SPPA can be used to estimate the number of people who attended live opera or created photographs in a given year. However, activities captured by the ATUS are grouped into larger categories such as "attend the performing arts" or "did arts and crafts hobbies." This is because participation in many art forms is infrequent when measured on a daily basis. ATUS must combine arts and leisure activities in order to gain reliable estimates.

Although less detailed in the type of activity reported, the ATUS measures factors related to arts participation that cannot be glimpsed through the SPPA. In addition to how much time Americans spend on the arts, the ATUS also reveals the time of day that selected arts activities are most likely to take place, whether the activities were done alone or with others, and where those activities occurred.¹¹

Attendance

The ATUS shows that **on any given day 1.5 million people** (age 15 and older) **attend the performing arts.**¹² And, like many of the arts and leisure activities tracked by the survey, performing arts attendance is considerably higher on weekend days or holidays—2.3 million people (almost 1 percent of the population) go to the performing arts on weekends and holidays.

Moreover, performing arts attendees typically spend from 2.6 to 2.8 hours (2 hours and 48 minutes) at live performing arts events.¹³

On an average day, museums draw more than 500,000 people. And on an average weekend day or holiday, this figure climbs to 885,000 people. The survey shows that most visitors spend 2.4 hours (2 hours and 24 minutes) at museums.

“Other arts and entertainment” is a broad attendance category that includes poetry readings, festivals, historic sites, circuses, and amusement parks.¹⁴ These varied activities, combined, attract 2 million people on any

given day and 2.3 million individuals on an average weekend day or holiday. Participants typically spend 2.7 to 2.6 hours attending “other arts and entertainments.”

What about time spent on other cultural events? Of a typical day, movie theaters draw 3.4 million moviegoers (5.9 million on weekends and holidays). Most moviegoers spend 2.2 hours watching movies at theaters. On any given day, 2.7 million individuals attend sporting events; on weekends and holidays, sporting events typically attract 3.9 million individuals. Attendees generally spend 2.8 to 3.2 (3 hours and 12 minutes) at sporting events.

Time Spent Attending Performing Arts and Other Events

Averages for 2005-2009

	On an average day ¹			On an average weekend or holiday		
	Total number of persons (in thousands)	Share of total ²	Average hours	Total number of persons (in thousands)	Share of total ²	Average hours
Attend:						
Performing arts	1,511	0.6%	2.6	2,304	1.0%	2.8
Museums	532	0.2%	2.4	885	0.4%	2.4
Other arts/entertainment ³	2,037	0.9%	2.7	2,326	1.0%	2.6
Movies	3,384	1.4%	2.2	5,859	2.5%	2.2
Sporting events	2,694	1.1%	2.8	3,915	1.7%	3.2

Source: American Time Use Survey, Bureau of Labor Statistics, U.S. Department of Labor

¹ Includes weekdays and weekends.

² Share of U.S. population, 15 years and older.

³ Includes poetry readings, festivals, historic sites, circuses, and amusement parks.

Arts and Crafts and Other Selected Cultural Activities

In addition to reporting daily time spent on cultural event attendance, the American Time Use Survey captures selected types of personal arts engagement. On an average day, 2.6 million people engage in arts and crafts, a category that includes not only artistic painting, sculpting, and photography, but also creating scrapbooks, holiday costumes and decorations, and jewelry. Individuals who engage in arts and crafts typically spend 2.5 hours on these activities.

Approximately 6 million individuals listen to or play music on any given day. This category includes playing music (or listening to someone else playing music), listening to records or CDs, composing music, tuning a

musical instrument, and singing karaoke or carols. (It does not include listening to the radio.) Most people who play or listen to music do so for about an hour-and-a-half.

On an average day, more than half a million people write for personal interest, including stories, lyrics, or diary entries. Most write for an hour and 30 minutes.

TV-viewing is the most popular leisure activity. On any given day, approximately 190 million people (80 percent of the population age 15 and older) watch TV for 3 to 4 hours, on average. By contrast, 25 percent of the population (nearly 60 million people) read for personal interest.

On a daily basis, about 23 million people use computers for leisure activities such as surfing

the Internet, participating in chat rooms, or downloading music or photographs.¹⁵ People who use computers for leisure usually spend an hour-and-a-half doing these activities. On any given day, approximately 40 million

people play sports or exercise, usually for about 1 hour and 40 minutes (longer on weekends and holidays).

Time Spent On Selected Leisure Activities

Averages for 2005-2009

	On an average day ¹			On an average weekend or holiday		
	Total number of persons (in thousands)	Share of total ²	Average hours	Total number of persons (in thousands)	Share of total ²	Average hours
Arts and crafts ³	2,606	1.1%	2.5	2,735	1.2%	2.1
Listening to/playing music ⁴	5,605	2.4%	1.4	6,097	2.6%	1.6
Read for personal interest	59,469	25.3%	1.4	59,614	25.5%	1.6
Write for personal interest	557	0.2%	1.6	598	0.3%	1.6
Volunteer	16,156	6.9%	2.1	16,458	7.0%	2.4
Watch TV and movies ⁵	189,055	80.3%	3.3	191,075	81.6%	3.9
Use computer for leisure ⁶	23,170	9.8%	1.5	22,257	9.5%	1.6
Play sports or exercise	42,001	17.8%	1.7	39,711	17.0%	2.4

Source: American Time Use Survey, Bureau of Labor Statistics, U.S. Department of Labor

¹ Includes weekdays and weekends.

² Share of U.S. population, 15 years and older.

² Includes artistic painting, photography, pottery, jewelry-making, sculpture, and creating holiday decorations.

³ Includes playing a musical instrument, listening to someone play a musical instrument, and listening to recordings; the category excludes radio listening.

⁴ Excludes religious television.

⁵ Excludes computer games and e-mails.

A Day in the Life

The proportion or number of people who participate in any activity tracked by the American Time Use Survey cannot be computed for any period longer than a day. The ATUS is conducted throughout the year and its respondents describe the activities they did the day before the survey was conducted. The responses are then averaged to represent an average day for a given year or for combined years.

For example, the ATUS shows that 99.9 percent of the population reported sleeping on any given day in 2009. In other words, 240 million individuals (99.9 percent of the population 15 and older) slept on any given day in 2009. Any erroneous attempt to add this figure to obtain a longer timeframe—for example, a week—would result in a number that far exceeds the U.S. population.

The ATUS polls a representative sample to measure a day in the life of the U.S. population.

For more information, see page 31 of the ATUS' User's Guide, available at <http://www.bls.gov/tus/atususersguide.pdf>.

Time of Day

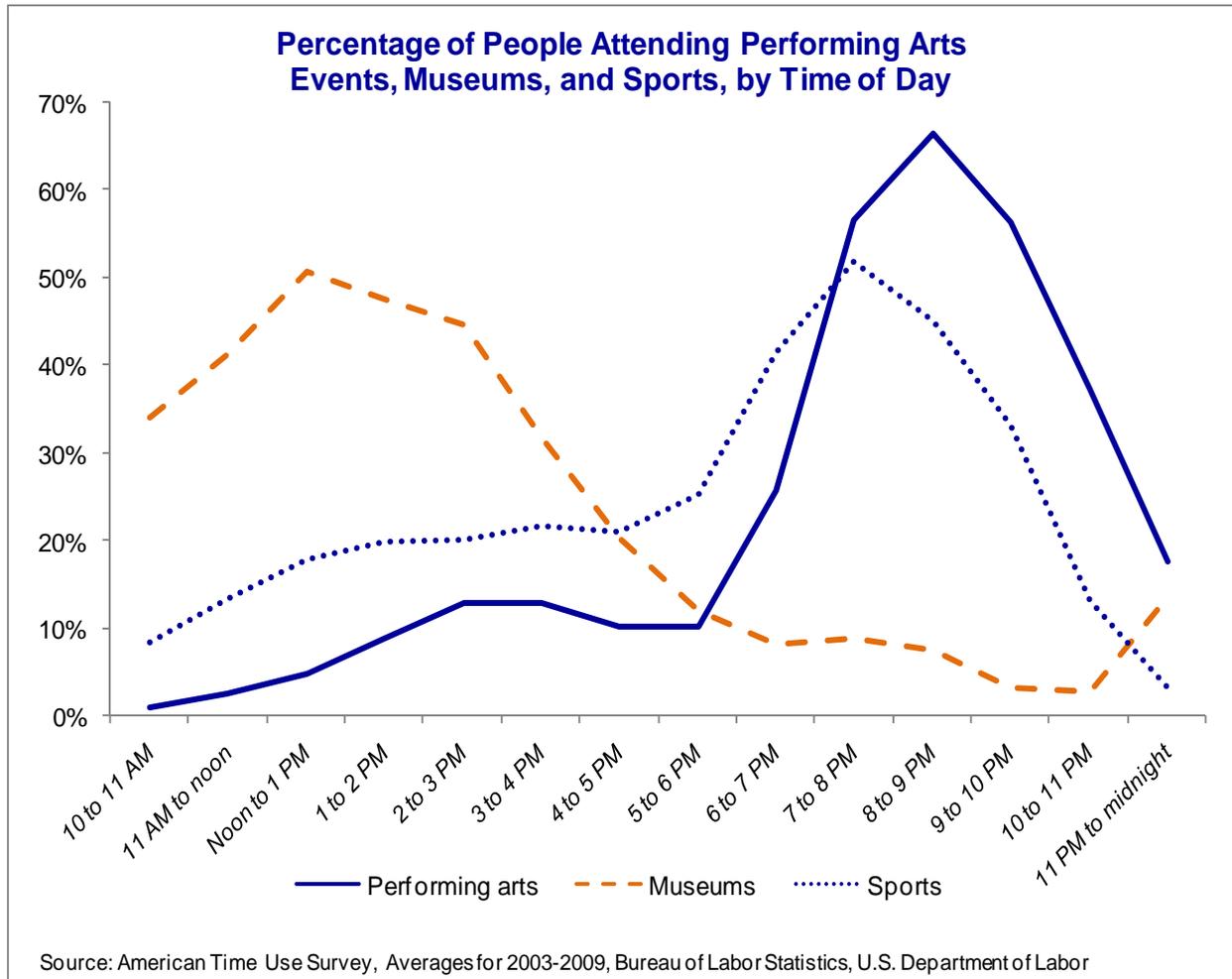
Although both performing arts and sports attendance are generally activities reserved for the evening, performing arts attendance often occurs later in the evening. Before noon, for example, the percentage of people attending the performing arts is nearly zero; at 5:00 pm, only 10 percent attend. By 7:00 pm, the percentage of people attending the performing arts reaches 56 percent. **Performing arts attendance peaks between 8:00 and 9:00 pm.**

Sports attendance displays a similar, albeit earlier, pattern. Before 7:00 pm, sports attendance is higher than performing arts attendance. At 7:00 pm, however, sports attendance reaches its peak and falls below the total for performing arts attendance; the total number of individuals attending sports events remains lower for the remainder of the evening and night.

Museum attendance, on the other hand, is decidedly a late-morning and early-afternoon activity. At 10:00 am, for example, 34

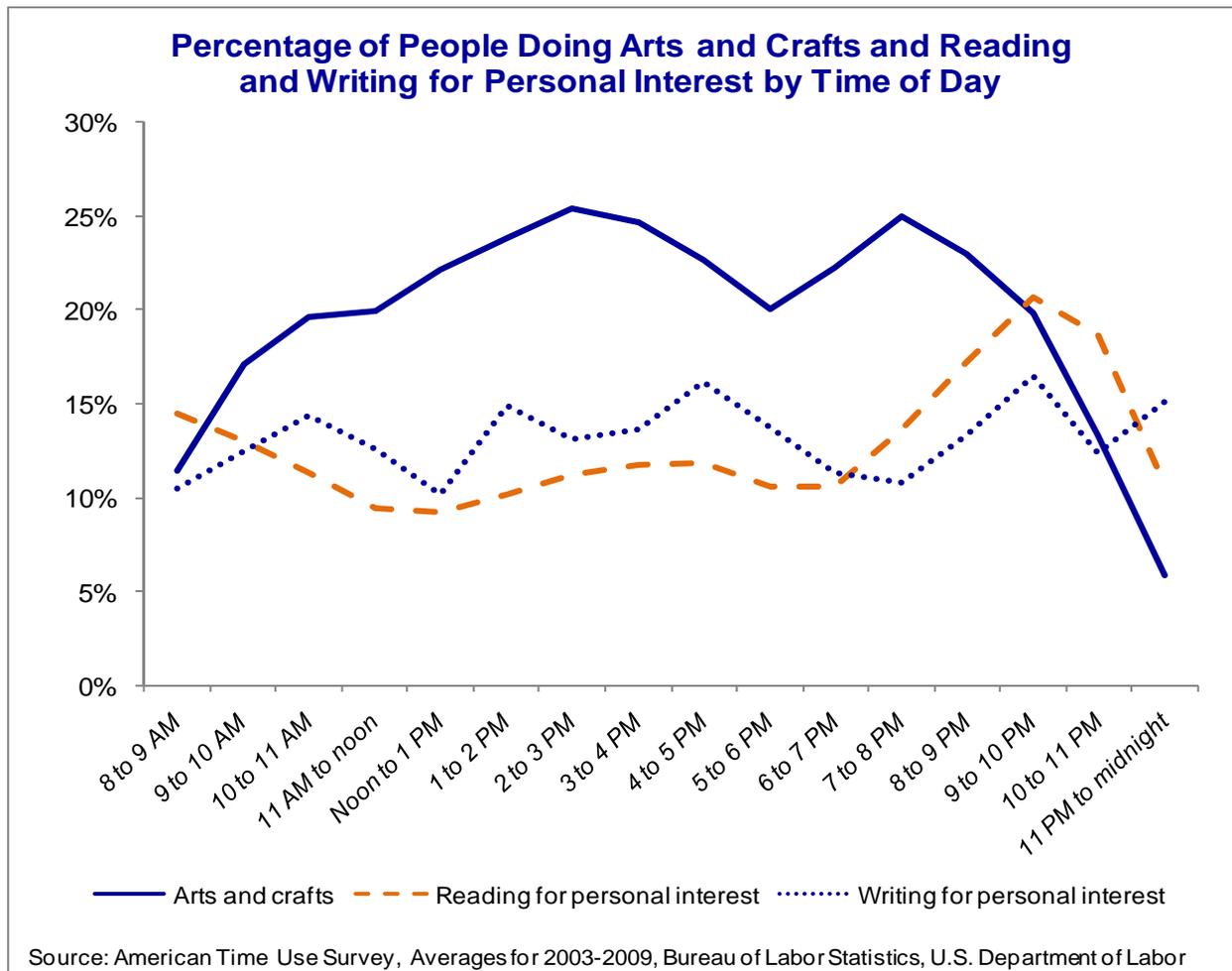
percent of participants are visiting museums.

Museum attendance peaks between noon and 1:00 pm.



The percentage of people engaging in arts and crafts hobbies rises throughout the morning and early afternoon. This activity reaches its first peak between 2:00 and 3:00 pm, and then falls throughout the afternoon. A trough in the percentage of people doing arts and crafts occurs between 5:00 and 6:00 pm. This activity rises again through 7:00 pm, but then drops strongly as the evening wears on.

Reading and writing for personal interest are more likely to occur in the evening. Both activities peak between 9:00 and 10:00 pm. After that time period, the percentage of individuals reading declines. Writing, however, displays a distinctive spike at 11:00 pm, suggesting that people who produce stories, poems, letters, and other personal writings are the arts' proverbial night owls.



The Social Aspect to Arts and Leisure

The ATUS also tracks information about who was with respondents when they did their various daily activities. The survey shows that individuals attending arts and sporting events, as well as those visiting museums, are usually accompanied by spouses, family members, children, or friends.

As the table below reports, less than 7 percent of individuals attend the performing arts alone. Rather, **most performing arts attendees are accompanied by family members** (54 percent) **and friends** (41 percent). In fact, performing arts and sports attendees are more likely to attend with friends than are individuals visiting museums, or than individuals going to other entertainments or movie theaters.¹⁶

Although performing arts and sports attendees are similar in that many attend their respective events with family and friends, **performing arts attendees are more likely than sports-goers to attend with their spouses—37 percent versus 27 percent.**¹⁷

Museum-goers and individuals attending other arts and entertainments are more likely to attend with family members and children. Approximately 70 percent of both attendees are accompanied by family members. Almost 45 percent of museum-goers visit museums with children; the same is true for other arts and entertainment attendees—nearly 45 percent are accompanied by children.

Perhaps not surprisingly, most arts and crafts activities are done alone. Even so, almost 30 percent of arts and crafts hobbyists do these activities with family members and almost 19 percent create crafts with children. Similarly, 71 percent of reading for personal interest is done alone. Yet 34 percent read for personal interest in the presence of family members. Writing for personal interest and using computers for leisure are activities largely done alone.

With certain exceptions, such as sleeping or working, the ATUS collects information on people accompanying the respondent during his or her activities. The “with whom” categories of the ATUS are not mutually exclusive. If, for example, a respondent visited a museum with his or her spouse, the activity is counted not only as visiting with a spouse, but also with a family member, because spouse is part of the survey definition of family (related through marriage, blood, or adoption). Similarly, a respondent visiting a museum with his or her child is counted as visiting with children and with family. There are multiple records in the ATUS for activities with multiple people present.

Percentage of People Engaged in Arts and Leisure Activities, by Whom They Were With When They Did the Activity

Averages for 2003-2009

	Alone	With spouse or partner	With family	With children	With friends	With co- workers	With roommate	With neighbors or acquaintances
Attend:								
Performing arts	6.5%	37.2%	54.2%	17.6%	40.8%	1.6%	0.7%	1.3%
Museums	4.7%	46.3%	71.2%	44.6%	18.8%	0.4%	0.0%	0.2%
Other arts/entertainment	8.2%	44.0%	69.5%	45.7%	23.2%	1.3%	0.8%	1.9%
Movies	6.7%	34.2%	54.0%	27.2%	31.3%	0.2%	0.5%	0.5%
Sporting events	8.5%	26.9%	54.2%	33.7%	33.0%	1.9%	0.1%	2.6%
Arts and crafts	67.0%	15.8%	29.5%	18.7%	5.3%	0.4%	0.1%	0.8%
Read for personal interest	71.1%	28.7%	34.3%	6.6%	0.8%	1.6%	0.3%	0.1%
Write for personal interest	88.9%	6.0%	11.2%	6.9%	1.0%	0.0%	0.0%	0.0%
Watch TV and movies	53.3%	42.2%	58.3%	23.1%	4.7%	0.3%	1.0%	0.1%
Use computer for leisure	77.1%	11.4%	22.2%	9.3%	2.4%	0.6%	0.3%	0.1%
Play sports or exercise	51.7%	14.8%	27.6%	16.1%	17.4%	2.8%	0.4%	2.1%

Source: American Time Use Survey, Bureau of Labor Statistics, U.S. Department of Labor

Locations

ATUS respondents also report where activities take place. On any given day, for example, 85 percent of individuals who engage in arts and crafts hobbies do so in their homes. Writing for personal interest also occurs, for the most part, at home.

Tabulations of the ATUS, however, do not include locations such as theaters, museums, or sports arenas. Consequently, the locations of many arts and entertainment events are grouped into a reporting category the BLS labels “other.” On an average day, for instance, the ATUS reports nearly all museum-going (95 percent) at “other” locations. These other places are no doubt museums, a location category not reported by the ATUS.

Although 65 percent of performing arts attendees are reported as attending in “other” locations (many of which are probably theaters or performing arts centers), a significant share attends the performing arts at alternative settings. **On any given day, for example, 8 percent of performing arts attendees take in performances in bars and restaurants. Almost 10 percent of attendees list places of worship as venues, and 9 percent report schools.**

Given that “other arts and entertainment” includes attendance at festivals, amusement parks, and firework displays, it is perhaps not surprising that 35 percent of people attending these activities report attending at outdoor locations away from home.

Location of Arts Attendance

Proportion of Americans Attending the Performing Arts, by Location

- Bars and restaurants (7.7 percent)
- Outdoors away from home (8.1 percent)
- Places of worship (9.7 percent)
- Schools (9.2 percent)
- Other locations (64.3 percent)

Proportion of Americans Attending “Other Arts and Entertainment,” by Location

- Outdoors away from home (35.6 percent)
- Schools (3.6 percent)
- Other locations (51.4 percent)

Final Thoughts on Assigning Value to the Arts

This Note has drawn from readily available federal government data sources to assign value to the performing arts. The U.S. Economic Census, for example, provides basic tallies of the number of performing arts organizations and the size and composition of their budgets.

The consumer spending estimates from the BEA are direct gauges of “revealed preferences”—consumers reveal the value they place on the arts through the amounts they spend on admissions to performing arts events.

Estimates from the American Time Use Survey, alternatively, go beyond monetary

measures and revealed preferences to capture quality-of-life measures. The finding that 41 percent of performing arts attendees go to performances with friends is an implicit measure of the arts’ tendency to foster social interaction.

Yet there remain additional measures—monetary and non-monetary—that have the potential to contribute to an even deeper understanding of the arts’ value. On the monetary side, “value added” measures the contribution to the U.S. economy of selected cultural industries. Happiness and life-satisfaction surveys, on the other hand, are quality-of-life measures that go beyond purely monetary measures of cultural production.

- “Value Added”

Value added refers to an industry’s contribution to the U.S. economy through its labor and capital, and is estimated by using a method similar to that used to calculate the nation’s gross domestic product (GDP).

To prevent multiple counting, “value added” excludes intermediary costs, which were counted in the value added by the industries producing those goods. For example, outlays for toe shoes are excluded from the value added by dance companies because the shoes were produced using the labor and capital of shoe manufacturers (and the manufacturers of the shoe materials such as satin and paper). Energy costs are also excluded from value added.

In its annual estimates of value added, the BEA combines results for the performing arts, sports, and museums.¹⁸ **In 2009**, for example, those **cultural industries contributed \$70.9 billion to the U.S. economy**. The motion picture and sound recording industry added \$59.8 billion to the U.S. GDP, and publishing (including software) contributed \$147.7 billion. A forthcoming Research Note from the NEA will examine value added by cultural industries.

- *Happiness and Life Satisfaction Surveys*

Like time-use studies, happiness and life satisfaction surveys can also be used to inform a greater understanding of arts and culture where spending measures provide only partial information.

Metrics of happiness and satisfaction have recently gained standing in the fields of economics and domestic policy. In 2008, for example, French president Nicholas Sarkozy asked two Nobel laureates in economics, Joseph Stiglitz and Amartya Sen, to create a commission that would identify the limits of GDP as an indicator of economic performance and to determine additional information needed to produce more relevant indicators of social progress.¹⁹

In their 2009 *Report by the Commission on the Measurement of Economic Performance and Social Progress*, Stiglitz and Sen note that only a few years ago the idea of measuring subjective well-being appeared “incongruous.” However, the esteemed authors argue that studies of happiness and satisfaction should now be considered as important quality of life indicators.

In 2010, Great Britain's Office of National Statistics went a step further by initiating plans to add subjective well-being questions to its national household survey.²⁰

Brookings Institution economist Carol Graham also contends that the study of happiness is well suited to informing areas where spending measures (i.e., revealed preferences) provide limited information. If the ticket-spending data discussed above show only one side of the arts' value, then perhaps subjective well-being studies, such as happiness surveys, are applicable to the arts.

A valid happiness survey, it should be noted, requires polling soon after an activity of interest occurs. Because it questions respondents' arts participation over a 12-month period, the NEA's SPPA may not be the best tool for measuring links between arts participation and happiness: too much time may have elapsed between the respondents' arts participation and their sense of happiness.

Daily time-use surveys, on the other hand, may serve as better instruments for linking activities with happiness. A 2007 study conducted by Alan Krueger, in partnership with the National Institute on Aging, is one example. Among the findings was an average happiness score of 4.33 (on a scale of 0 to 6) among respondents who listened to music. By comparison, respondents doing homework reported an average happiness score of 2.71.²¹

Still, on a daily basis, many forms of arts participation occur infrequently. Current time-use surveys may not be able to poll enough people to reliably link happiness and arts participation.²² It may well be that broader, "life satisfaction" surveys, which require respondents to reflect upon long periods of time, are better vehicles to study subjective well-being in relation to the arts.

Other Models, Other Measurers

There are a number of additional tools that may be used to assign value to the arts. The following list briefly explains some techniques, and provides relevant examples.

- *Economic Impact Studies*

Economic impact studies can be designed to measure increases in short-run local income resulting from arts activities and cultural institutions. For example, an economic impact study of the 2008 American Folk Festival estimated that festival attendees from outside the Bangor, Maine, area (where the festival is held) spent a total of \$2.2 million dollars on admissions to the festival and related spending such as outlays for hotels, restaurants, and shopping. Among methodological challenges facing these studies is the ability to isolate new spending from spending that would have occurred in the absence of an arts event or activity.

Silva, B., Mann, M., & Daniel, H. (2009). *Economic Impact of the 2008 American Folk Festival in Bangor, Maine*. Proceedings of the 2009 Northeastern Recreation Research Symposium. Retrieved from <http://www.nrs.fs.fed.us/pubs/gtr/gtr-nrs-p-66papers/34-silva-p-66.pdf>.

- *Studies Linking the Arts to Community Growth and Development*

Studies designed to measure the relationship between a community's arts and cultural organizations and economic development offer another method of ascribing value to the arts. A series of studies in Philadelphia found that neighborhoods with clusters of cultural organizations were four times more likely to see neighborhood populations grow and poverty rates decline.

Stern, M. & Seifert, S. (2007). *Cultivating "Natural" Cultural Districts*. Retrieved from <http://www.trfund.com/resource/downloads/creativity/NaturalCulturalDistricts.pdf>.

Other Models, Other Measures

(continued)

- *Contingent Valuation*

Contingent valuation surveys poll respondents about their willingness to pay for an amenity. These surveys are designed to measure that part of an amenity's consumption value not captured by economic impact studies. A study published in 2002, for example, reported that the average Kentucky resident indicated a willingness to pay almost \$27 to prevent a decline in arts performances and exhibits.

Thompson, E., Berger, M., Blomquist, G., & Allen, S. (2002). "Valuing the Arts: A Contingent Valuation Approach." *Journal of Cultural Economics*, 26, pp. 87-113. Retrieved from <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1048&context=cbafacpub>.

- *Hedonic Housing Price Models*

The consumption value of the arts may also be estimated through hedonic housing price models, which relate housing prices to proximity to amenities such as theaters or art museums.

In the Lowertown area of St. Paul, Minneapolis, residential housing values were found to have increased by \$13,827 within three miles of the Tilsner Artist Cooperative.

Gadwa, A., Markusen, A., & Walton, N. (2010). *How Artists Space Matters: Impacts and Insights from Three Case Studies* drawn from Artspace Project's Earliest Developments. Retrieved from <http://www.metrisarts.com/images/stories/pdf/howartistspacematters.pdf>.

Technical Notes

Conducted once every five years, the U.S. Census Bureau's Economic Census enumerates business establishments with payrolls. Using the North American Industrial Classification System (NAICS), Economic Census results are used to report counts of business establishments and information on business receipts, expenses, and payrolls.

Performing arts establishments (NAICS 7111) are part of the larger Arts, Entertainment, and Recreation Sector (NAICS 71).

For more detailed information, please see the 2007 Economic Census User Guide, available at http://www.census.gov/econ/census07/pdf/econ_user_guide.pdf.

This Note also draws on the Bureau of Economic Analysis' estimates of personal consumption expenditures on admissions to the performing arts, sporting events, and movie theaters, as well as consumer outlays for other leisure and entertainment items. Annual estimates for most of these consumer expenditure categories are based on the Census Bureau's Service Annual Survey. "Benchmark" estimates, alternatively, are derived from the Bureau's Economic Census.

For an in-depth explanation of the BEA's consumer expenditure calculations, see Chapter 5 of the BEA's *NIPA Handbook*, available at <http://www.bea.gov/national/pdf/NIPAch5consumerspending.pdf>.

Supplemental consumer spending is provided by the Bureau of Labor Statistics' Consumer Expenditure Survey. The CES consists of both a diary survey, which is designed to produce data on frequently purchased items such as food, and the interview survey, where respondents report their spending to interviewers. Most of the CES spending categories reported in this Note, including admissions to movies, theaters, sporting events, etc., and spending on books and newspapers and magazines, were based on the interview component of the CES. However, outlays for video game hardware and software, as well as for toys, games, and arts and crafts, were estimated via the diary component.

Detailed information can be obtained from the BLS' Consumer Expenditure website at <http://www.bls.gov/cex/home.htm>.

The Bureau of Labor Statistics also sponsors the American Time Use Survey, which provides estimates of how, where, and with whom respondents aged 15 and older spend

their time. The ATUS is conducted as a detailed account of the respondents' activities, starting at 4 a.m. the previous day, and ending at 4 a.m. on the interview day. For each activity reported, the interviewer asks how long the activity lasted. For most activities, the interviewer also asks who was in the room or who accompanied the respondent during the activity and where the activity took place.

One limitation of the ATUS is that, with the exception of childcare, information on secondary activities (activities that are done at the same time as the primary activity, e.g., listening to music while working) is not systematically collected.

The survey's User Guide, available at <http://www.bls.gov/tus/atususersguide.pdf>, provides a comprehensive narrative on the ATUS.

For Further Reading

Frazis, H., & Stewart, J. (2003). Where Does the Time Go? Concepts and Measurement in the American Time Use Survey. In Berndt, E., & Hulten, C. (Eds.) *Hard-to-Measure Goods and Services: Essays in Honor of Zvi Griliches*. University of Chicago Press. Retrieved from <http://www.nber.org/chapters/c0874.pdf>.

Stiglitz, J., Sen, A., & Fitoussi, J. (2009). *Report by the Commission on the Measurement of Economic Performance and Social Progress*. Retrieved from http://www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdf.

Graham, C. (2010). *The Challenges of Incorporating Empowerment in the HDI: Some Lessons from Happiness and Economics and Quality of Life Research*. United Nations Development Program. Retrieved from http://www.brookings.edu/reports/2010/07_economics_happiness_graham.aspx.

Kahneman, A., Krueger, A., Schkade, D., Schwartz, N., & Stone, A. (2004). *Toward National Well-Being Accounts*. AEA Papers and Proceedings. Retrieved from <http://www.krueger.princeton.edu/Toward%20Well-Being.pdf>.

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Endnotes

¹All of these industry counts exclude self-employed workers. The most recent data available (2008) report nearly 56,000 “non-employer establishments” in the U.S. performing arts industry. Most of these establishments represent self-employed workers.

²An establishment is a single physical location where business is conducted or where services or industrial operations are performed. A company may have one or many establishments.

³The Economic Census enumerates only those employees on payroll.

⁴The Economic Census does not report expenses for for-profit establishments. The number of paid employees (both full and part-time) excludes self-employed workers.

⁵To protect the confidentiality of taxable opera companies and dinner theaters, the Economic Census combines theaters, dinner theaters, and opera companies in its tallies of revenue and paid employees in the for-profit performing arts.

⁶This analysis excludes 346 tax-exempt performing arts establishments that were not in business throughout 2007.

⁷The remaining 13 percent of total revenue derives from sources such as investment income and gains from the sale of assets.

⁸This figures excludes textbooks and books purchased for work.

⁹This spending category includes single and season tickets to movies, plays, operas, or concerts, as well as admissions to museums, amusement parks, zoos, and state parks.

¹⁰For a complete list of NEA research publications, please see the Research section of the agency’s website: <http://www.nea.gov/research/index.html>.

¹¹The BLS routinely tabulates ATUS estimates for 5-year periods, such as the 2005-2009 estimates included in this Note. Also shown in this Note are ATUS tables produced by the BLS at the request of the NEA’s Office of Research & Analysis. These special ATUS tabulations reflect the 2003-2009 period.

¹²The performing arts, as captured by the ATUS, includes plays, musicals, comedy club performances, opera, ballet and dance, concerts, and performances at “jazz bars.”

¹³Fractional hours can be converted to minutes by using the BLS’ conversion chart available at http://www.bls.gov/tus/Conversion_chart.pdf.

¹⁴ Additional activities included in “other arts and entertainments” include flower shows, auto shows, parades, firework displays, fairs, carnivals, and guided nature walks.

¹⁵ Using computers for leisure excludes sending or reading personal e-mails.

¹⁶ The difference between the share attending the performing arts with friends (40.8 percent) and the share attending sports with friends (33 percent) is statistically insignificant.

¹⁷ The difference in rates is statistically significant.

¹⁸ More detailed industry breakouts that isolate the performing arts from sports and museums are done on a five-year, “benchmark” basis.

¹⁹ Jean-Paul Fitoussi was the coordinator of the Commission on the Measurement of Economic Performance and Social Progress.

²⁰ Please see Stratton, A. (November 14, 2010). Happiness Index to Gauge Britain’s National Mood. *guardian.co.uk*. Retrieved from <http://www.guardian.co.uk/lifeandstyle/2010/nov/14/happiness-index-britain-national-mood>.

²¹ See Krueger, A. (2007). *Are We Having More Fun Yet? Categorizing and Evaluating Changes in Time Allocation*. Brookings Panel on Economic Activity. Retrieved from http://www.brookings.edu/es/commentary/journals/bpea_macro/forum/200709krueger.pdf.

²² Using ATUS data requires multi-year results to obtain a large enough sample size to examine arts participation. Therefore, any prospective study using the ATUS may require multi-year surveys and substantial investment of *both time and money*.