



An Average Day in the Arts: State Participation Patterns from the American Time Use Survey for 2006-2010

Introduction

In 2009, the National Endowment for the Arts released Research Note #99, [*State and Regional Differences in Arts Participation: A Geographic Analysis of the 2008 SPPA*](#). The Note focused on the 32 states for which statistically reliable information could be obtained from the 2008 Survey of Public Participation in the Arts (SPPA).

The SPPA, which was conducted as part of the U.S. Census Bureau's Current Population Survey, asked adults about their habits of attendance at art museums, galleries, and performing arts events over a one-year period. The survey also asked adults whether they created their own artworks or performances in the previous year. The NEA's 2009 analysis of the state-level participation data revealed key links between how many people attend arts activities and how well-educated a state's population is, how many nonprofit arts organizations are in the state, and what is the state's rate of poverty.

Like Research Note #99, the current Note revisits state-level arts participation in terms of access and opportunity. But Note #106 uses a different data source: the American Time Use Survey (ATUS). Sponsored by the U.S. Department of Labor's Bureau of Labor Statistics, the ATUS is administered by the U.S. Census Bureau

Unlike the SPPA, which measures arts participation during a 12-month period, the ATUS gauges how Americans spend an *average day*. ATUS respondents describe the amount of time they spent doing various things (e.g., sleeping, eating, working, watching T.V., etc.) the day before the survey is conducted. The survey occurs throughout the year, resulting in aggregate statistics for an average day's worth of activity. It turns out that the amount of time people spend doing many daily activities changes very little over multi-year periods. For this reason, the ATUS is well-suited to combining results from several years. Indeed, state-level estimates from the ATUS are drawn from combined

ATUS surveys conducted over five-year periods. This Note, therefore, reports the number and percentage of state residents attending the performing arts, visiting museums, and engaging in other arts and leisure activities on an average day in 2006-2010.

Apart from the time periods referenced, the SPPA and the ATUS define arts and leisure participation quite differently. The SPPA, for example, identifies specific forms of performing arts attendance, such as jazz concerts, plays, and ballet, while the ATUS reports attendance at any concert, play, or dance or comedy club performance as attending the performing arts.¹

Similarly, the SPPA measures visits to art museums or galleries; the ATUS, alternatively, reports visits to all types of museums (art, natural history, zoos, etc.).

Despite these differences, findings from a geographic analysis of the ATUS data corroborate a key finding from the SPPA: attendance at performing arts events and

museums is generally higher in states with well-educated populations, ample numbers of arts organizations, and low rates of poverty.

This Note contains a summary of findings, followed by a narrative section highlighting state-level attendance at performing arts events, museums, and “other arts/entertainment.” State-level participation in arts and crafts activities, as well as listening to or playing music, are also discussed. Rather than report state rankings of arts and leisure participation, which is largely infeasible due to ATUS sampling methodology, this Note lists the states that cluster around high, low, and medium levels of participation.

The tables accompanying this Note show estimates of arts and leisure activities, including attendance at movies and sporting events, as well as the number and percentage of state residents who volunteer and use computers for leisure. The appendix to this Note discusses sampling error associated with ATUS state-level estimates.

An Average Day in the American Time Use Survey

Sponsored by the Bureau of Labor Statistics, the American Time Use Survey is conducted throughout the year as a monthly sample divided into four randomly selected panels, one for each week of the month. The ATUS sample is split evenly between weekdays and weekend days—10 percent of the sample is allocated to each weekday, and 25 percent of the sample is allocated to each weekend day.²

The ATUS respondents (ages 15 and older) describe the activities they did the previous day. Unlike the SPPA, which directly asks respondents if they have attended or participated in a variety of arts and leisure activities during a 12-month period, 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.

Responses to the ATUS are coded by using the survey's lexicon. For example, an ATUS respondent who reported attendance at a concert, play, or dance performances is enumerated by the ATUS as attending the performing arts. A respondent who reported taking photographs is counted as doing arts and crafts activities.

After coding, the ATUS results are combined and then adjusted (i.e., weighted) to reflect how American's (ages 15 and older) spend an average day.³

Although the ATUS was designed primarily to capture results for the nation, the state-level estimates reported in this Note have utility, provided the survey sample error is considered. At the state level, ATUS sample error prevents the patent ranking of many states in arts and leisure participation. In place of ranking, this Note highlights states that cluster in high, medium, and low ranges of arts and leisure participation.

At the national level, the ATUS can also be used to estimate the amount of time Americans spend on the arts, the time of day selected arts activities are most likely to take place, whether these activities were done alone or with others, and where those activities occurred. For example, using combined data from the 2005-2009 ATUS, NEA Research Note #102 reported that Americans attending the performing arts generally spent 2.6 hours at these events.⁴ Performing arts attendance peaks between 8:00 and 9:00 p.m., and more than 40 percent of performing arts attendees go to these events with friends.

However, due to smaller sample sizes, the Bureau of Labor Statistics does not report state-level ATUS estimates of the time of day activities take place, or where and with whom activities occur.

Summary

State-Level Arts Participation on Any Given Day

- High-ranking states in performing arts attendance include **Virginia, Maryland, Illinois, New York, and Pennsylvania**. On an average day, approximately 1 percent of residents in each of these states attend the performing arts.
- **Massachusetts** and Maryland, along with **Michigan**, Virginia, and New York, rank high in museum attendance. On any given day, 18,000 Massachusetts residents visit museums; in Maryland, that figure is 17,000.⁵
- “Other arts/entertainment” refers to having attended one of a variety of events, including festivals, poetry readings, amusement parks, and auto shows. Attendance rates at these events are high in Illinois (1.5 percent) and **Louisiana, Iowa**, and New York (1.3 percent).
- Residents from **Colorado** and California listen to or play music at rates well above the U.S. average. On an average day, 4 percent of Colorado’s residents (155,000) listen to or play music; in California, 3.3 percent (842,000) listen to or play.
- **Washington, Minnesota**, and **New Mexico** are among states with high rates of arts and crafts activity on any

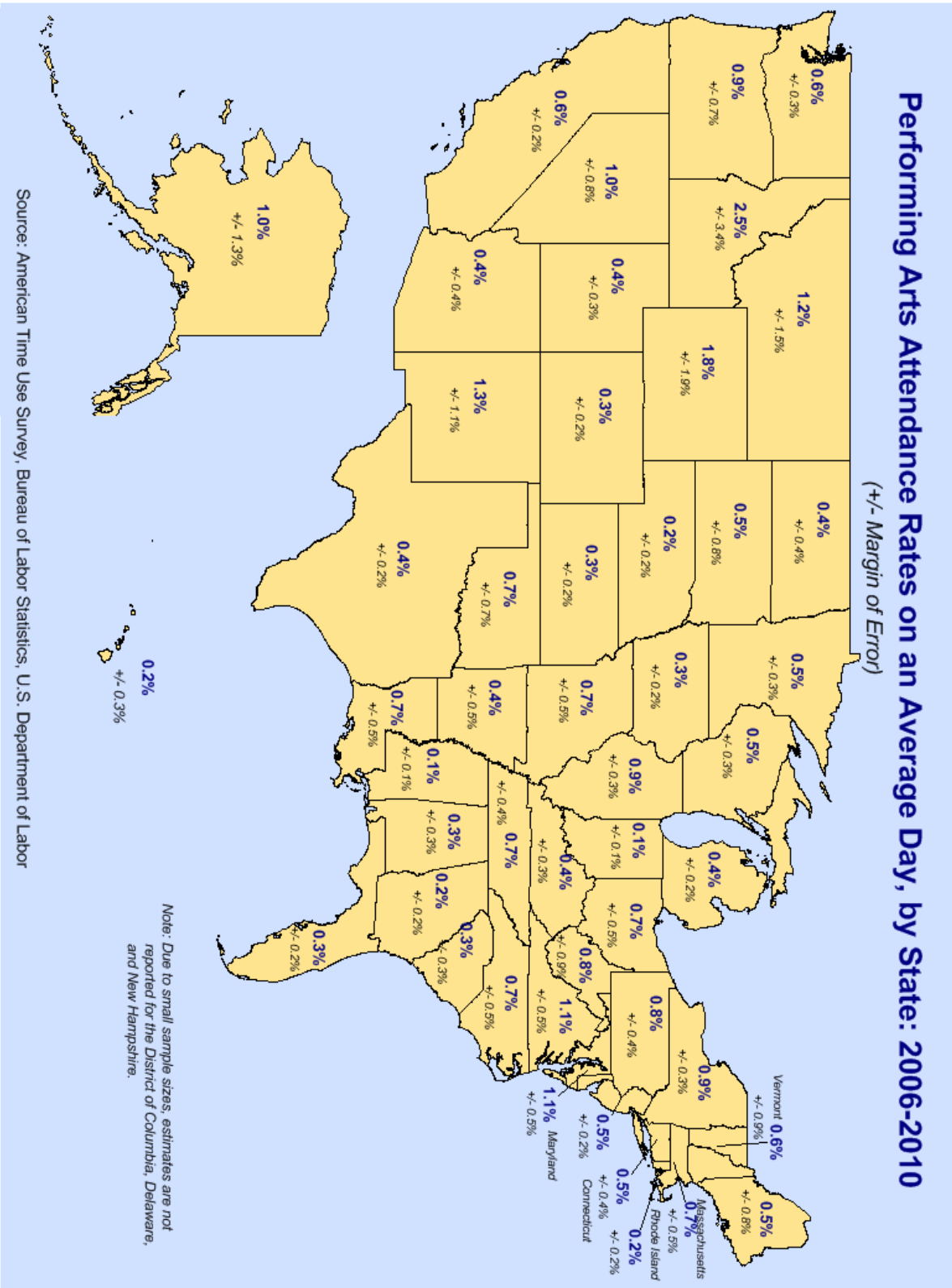
given day—between 1.7 and 1.9 percent of people in those states.

State-Level Access to the Arts

- Performing arts and museum attendance is positively correlated with education and, albeit to a lesser extent, with access to performing arts organizations and museums.
 - * Maryland, as noted above, ranks high in performing arts attendance. But Maryland’s residents are also well above-average in educational attainment. Similarly, though museum attendance is high in Massachusetts, the state’s number of museums (per capita) is 55 percent greater than the national average.
- Poverty remains negatively correlated with attendance. Texas and Mississippi, for instance, rank low in performing arts and museum attendance and high in poverty incidence.

The Special Case of Oregon

- Results from both the 2006-2010 ATUS and the 2008 SPPA suggest that **Oregon** scores high in performing arts attendance and museum visits. Oregon is also home to above-average numbers of performing arts organizations and museums, and its residents are fairly well-educated.



Policy Relevance of Time-Use Surveys

Against the backdrop of a severe economic recession, which, in the United States, began in December 2007 and ended in June 2009, there has been renewed interest in alternative measures of economic well-being. Among the most notable efforts to “go beyond GDP” was the 2009 report titled *Report by the Commission on the Measurement of Economic Performance and Social Progress* (a.k.a., the “Sarkozy Report”). In it, authors Joseph Stiglitz, Amartya Sen, and Jean-Paul Fitoussi discussed the importance of leisure time for quality of life, and discussed “leisure participation indicators,” including participation in sports and cultural events.⁶

The ATUS estimates shown in this Note, along with previously released NEA research, broaden and extend the Arts Endowment's efforts to examine and report on arts participation patterns in the United States.⁷

Participation in Selected Arts and Leisure Activities on an Average Day

The narrative below highlights state-level attendance, on an average day, at performing arts events, museums, and “other arts/entertainment,” as well as participation in arts and crafts activities and listening to or playing music.

To the extent that ATUS sample sizes and methods allow such comparisons, this Note ranks states into high, medium, and low ranges of arts activity.

Performing Arts Attendance

Although ATUS sample sizes and methods prevent the patent ranking of states for many sorts of daily activities, some patterns clearly emerge from the data. We can, for example, reasonably conclude that Virginia, Maryland, Illinois, New York, and Pennsylvania exhibit some of the highest performing arts attendance rates in the country. On any given day, 71,000 Virginians, or 1.1 percent of that state’s population (ages 15 and older), attend the performing arts. Maryland residents, too, report an average daily performing arts attendance rate of 1.1 percent.

Performing Arts Attendance

From the ATUS lexicon, examples of attending the performing arts include attending concerts, opera, musicals, ballet, theater, dance troupe performances, jazz bar, comedy club, or plays.

Attendance is also comparatively high in Illinois, New York, and Pennsylvania. On an average day, 88,000 residents of Illinois go to performing arts events. In New York and Pennsylvania, 126,000 and 87,000 attend, respectively.

States that fall into the mid-range of performing arts attendance include North Carolina, Massachusetts, Missouri, and Ohio. In each of these states, 0.7 percent of residents attend the performing arts on an average day. In Ohio, for example, an estimated 70,000

residents go to performing arts events on an average day; in North Carolina, that figure is 50,000 residents.

The ATUS also shows that states such as Mississippi and Indiana are among the lowest in performing arts attendance. On an average day, 0.1 percent of residents of both states go to performing arts events. Although comparatively low, the rates still add up to thousands of attendees. On any given day, 8,000 residents of Indiana attend performances; in Mississippi, 3,000 attend.

**Performing Arts Attendance Rates on an Average Day, by State Range:
(2006-2010)**

	Percent attending	90% margin of error (+/-)	Number attending (thousands)
U.S. average	0.6%	0.04%	1,411
<i>High range:</i>			
Virginia	1.1%	0.54%	71
Maryland	1.1%	0.49%	48
Illinois	0.9%	0.35%	88
New York	0.9%	0.35%	126
Pennsylvania	0.8%	0.43%	87
<i>Medium range:</i>			
California	0.6%	0.18%	147
Louisiana	0.7%	0.51%	23
Massachusetts	0.7%	0.46%	33
Missouri	0.7%	0.46%	37
North Carolina	0.7%	0.48%	50
Ohio	0.7%	0.46%	70
Tennessee	0.7%	0.38%	36
Washington	0.6%	0.28%	34
<i>Low range:</i>			
Indiana	0.1%	0.13%	8
Mississippi	0.1%	0.15%	3

Source: ATUS 2006-2010, Bureau of Labor Statistics, U.S. Department of Labor

Museum Attendance

Visiting Museums

From the ATUS lexicon, examples of museum attendance include: attending an art gallery; visiting the zoo; attending exhibitions; attending an arboretum; and attending a botanical garden.

Five states exhibit relatively high rates of museum visits: Massachusetts, Maryland, Michigan, New York, and Virginia. On an average day, 0.4 percent of residents in each of these states visit museums. In New York, this rate translates into 52,000 residents visiting museums on any given day—in Maryland, 17,000 residents visit museums.⁸

At the medium level of this scale are states such as Florida, Illinois, Ohio, Wisconsin, and California. On an average day, for example, 0.3 percent of Florida’s residents (37,000) visit museums. In California, 0.2 percent visit museums, or 44,000 people.

And in North and South Carolina, Texas, and New Jersey, the percentage of residents visiting museums is comparatively low—approximately 0.10 percent in each state.

**Museum Attendance Rates on an Average Day, by State Range:
(2006-2010)**

	Percent attending	90% margin of error (+/-)	Number attending (thousands)
U.S. average	0.2%	0.02%	540
<i>High range:</i>			
Massachusetts	0.4%	0.25%	18
Maryland	0.4%	0.23%	17
Michigan	0.4%	0.21%	31
New York	0.4%	0.21%	52
Virginia	0.4%	0.18%	24
<i>Medium range:</i>			
Florida	0.3%	0.18%	37
Illinois	0.3%	0.18%	34
Ohio	0.2%	0.10%	16
Wisconsin	0.2%	0.10%	10
California	0.2%	0.08%	44
<i>Low range:</i>			
North Carolina	0.1%	0.08%	6
South Carolina	0.1%	0.08%	2
Texas	0.1%	0.08%	16
New Jersey	0.1%	0.05%	4

Source: ATUS 2006-2010, Bureau of Labor Statistics, U.S. Department of Labor

Other Arts and Entertainment Attendance

Other Arts/Entertainment

From the ATUS lexicon, examples of “other arts/entertainment” participation include: attending an art/history/music lecture; taking a guided nature walk; attending a flower show; attending an amusement park; attending a festival; attending a poetry reading; attending a book signing; setting off fireworks; visiting historic sites; attending a county fair; attending a circus; attending a carnival; watching a parade or fireworks; and attending an auto show.

“Other arts/entertainment” is an eclectic leisure category that includes not only activities such as attending or visiting festivals, poetry readings, and historic sites, but also auto shows, carnivals, and county fairs.

Illinois ranks among the highest in arts/entertainment attendance. On an average day, an estimated 1.5 percent of Illinois’ residents (151,000 people) attend these events.

Also comparatively high are the rates for Louisiana, Iowa, and New York—in each state, an estimated 1.3 percent attends “other” arts/entertainment events.

At the other end of this distribution are Kentucky and Oklahoma, where 0.1 percent of residents from both states attend.

High and low extremes notwithstanding, most states exhibit mid-range attendance at “other” arts/entertainment events. In 20 states, for example, attendance rates on an average day range from 0.9 percent to 0.7 percent. Examples of states falling into this medium range include Alabama (0.9 percent); Arizona (0.9 percent); New Jersey (0.9 percent); Tennessee (0.8 percent); Mississippi (0.7 percent); Indiana (0.7 percent); and Michigan (0.7 percent).

**Other Arts/Entertainment Attendance Rates on an Average Day, by State Range:
(2006-2010)**

	Percent attending	90% margin of error (+/-)	Number attending (thousands)
U.S. average	0.9%	0.04%	2,023
<i>High range:</i>			
Illinois	1.5%	0.48%	151
Iowa	1.3%	0.67%	33
Louisiana	1.3%	0.74%	44
New York	1.3%	0.39%	181
<i>Medium range: (Selected examples)</i>			
Alabama	0.9%	0.39%	33
New Jersey	0.9%	0.38%	59
Mississippi	0.7%	0.51%	17
Michigan	0.7%	0.30%	63
<i>Low range:</i>			
Georgia	0.3%	0.16%	21
Kentucky	0.1%	0.13%	5
Oklahoma	0.1%	0.10%	3

Source: ATUS 2006-2010, Bureau of Labor Statistics, U.S. Department of Labor

Arts and Crafts Engagement

Arts and Crafts

From the ATUS lexicon, examples of arts and crafts activities include: scrapbooking; making holiday decorations; photography; jewelry making; pottery, sculpting, and woodworking; artistic painting; dying Easter eggs; and making Halloween costumes.

Ranging from 2.6 percent to 2.9 percent, arts and crafts participation rates are among the highest in Oregon, Nebraska, and Montana. However, the margin of error associated with each of these estimates is also high. In Oregon, for example, an estimated 2.9 percent of the state’s population engages in arts and

crafts activities. But this estimate ranges from a high of 4.8 percent to a low of 1 percent once the margin of error is considered.

The state of Washington also has a relatively high arts and crafts participation rate—1.9 percent. And, at 0.82 percent, the margin of

error of this estimate is considerably lower, resulting in a more reliable estimate of arts and crafts participation.

Other states with comparatively high rates of arts and crafts participation include New Mexico and Minnesota. On an average day, an estimated 1.7 percent of residents in both states do arts and crafts activities.

At the mid-range of this distribution are Ohio, Pennsylvania, and California. On any given day, 1.2 percent of residents in each state engage in arts and crafts activities.

Kentucky and New Hampshire, alternatively, are among the lowest in arts and crafts participation—0.2 percent and 0.1 percent, respectively.

Percentage Engaged in Arts and Crafts Activities on an Average Day, by State Range: (2006-2010)

State	Percent engaged	90% margin of error (+/-)	Number engaged (thousands)
U.S. average	1.1%	0.06%	2,691
<i>High range:</i>			
Oregon	2.9%	1.89%	93
Nebraska	2.8%	1.63%	42
Montana	2.6%	1.91%	19
Washington	1.9%	0.82%	108
New Mexico	1.7%	1.28%	25
Minnesota	1.7%	0.63%	81
<i>Medium range:</i>			
Ohio	1.2%	0.46%	117
Pennsylvania	1.2%	0.39%	131
California	1.2%	0.30%	298
<i>Low range:</i>			
Kentucky	0.2%	0.18%	8
Hampshire	0.1%	0.08%	1

Source: ATUS 2006-2010, Bureau of Labor Statistics, U.S. Department of Labor

Listening to/Playing Music

Listening to/Playing Music

From the ATUS lexicon, examples of listening to or playing music include: listening to recorded music/records/CDs; playing a musical instrument (for leisure); singing or Christmas caroling; listening to someone play the piano; composing music; and tuning a musical instrument.

The ATUS shows that Colorado and Washington are among states with the highest shares of residents listening to or playing music. In Colorado, 4 percent listen to or play music on an average day; and the rate for Washington is nearly as high (3.6 percent).

Other states with relatively high rates of music activity include Kansas and California (3.3 percent of residents in both states), and Utah and Minnesota—where 3 percent of residents in both states listen to or play music on an average day.

Eleven states fall into a medium range of 2.4 percent to 1.9 percent in terms of listening to or playing music on an average day. Examples include Oklahoma (2.4 percent), Massachusetts (2.3 percent), Wisconsin (2.3 percent), and Georgia (2.3 percent).

In Alabama and Nebraska, less than 1 percent listens to or plays music on an average day.

**Percentage Listening to/Playing Music on an Average Day, by State Range:
(2006-2010)**

	Percent listening to/playing	90% margin of error (+/-)	Number listening to/playing (thousands)
U.S. average	2.5%	0.08%	5,878
<i>High range:</i>			
Colorado	4.0%	1.32%	155
Washington	3.6%	1.04%	203
Kansas	3.3%	1.50%	78
California	3.3%	0.49%	842
Utah	3.0%	1.56%	74
Minnesota	3.0%	1.04%	148
<i>Medium range: (Selected examples)</i>			
Oklahoma	2.4%	1.50%	74
Massachusetts	2.3%	1.04%	119
Wisconsin	2.3%	0.97%	128
Ohio	2.3%	0.66%	226
Georgia	2.3%	0.58%	150
Tennessee	2.0%	0.81%	99
<i>Low range:</i>			
Alabama	0.9%	0.63%	33
Nebraska	0.8%	0.71%	12

Source: ATUS 2006-2010, Bureau of Labor Statistics, U.S. Department of Labor

Other Leisure Activities

The tables accompanying this Note also report ATUS estimates of participation in the following leisure activities: reading for personal interest; writing for personal interest; volunteering; using computers for leisure; watching T.V.; playing sports or exercising; going to the movies; and attending sporting events.

For each state (and the District of Columbia), the tables report the estimated number and percentage of people participating in these activities on an average day.⁹ The standard errors of each estimate are also shown.

Arts and Leisure Participation in Relation to Access and Opportunity

As shown in NEA Research Note #99, state-level data from the 2008 SPPA suggest a correlation between arts participation and access to the arts as defined in three ways: (1) state counts of art organizations, per capita; (2) percentage of state residents with a bachelor's degree (or higher); and (3) percentage of state residents living below the poverty line.

The correlation coefficient, "r," is a value between zero and one; the stronger the relationship between two variables, the closer their correlation coefficient is to one. Of the three access variables examined in Note #99, education was most strongly related to performing arts and art museum attendance--the correlation coefficients were 0.63 and 0.72, respectively.¹⁰

The relationship between attendance and number of arts organizations was positive, though not quite as strong—0.38 (performing arts attendance) and 0.30 (museums attendance).

The incidence of poverty, alternatively, was found to be inversely related to performing arts attendance ($r = -0.60$) and art museum visits ($r = -0.58$). (This negative correlation suggests that higher attendance is associated with lower poverty rates.)

Although this correlation analysis cannot account for all the factors shaping arts participation, such links emerge in many of the state-level estimates of performing arts and museum attendance from the ATUS.

On an average day, for example, Virginia, Maryland, Illinois, New York, and Pennsylvania are among the top states in performing arts attendance. With the exception of Pennsylvania, each of these states is also above average in educational attainment. In Maryland, the share of adults (ages 25 and older) with at least a bachelor's degree is almost 8 percentage points above the U.S. average.

Massachusetts is among the top states in museum attendance. Massachusetts' residents are also well educated—38.2 percent hold a bachelor's degree or higher level of training. Most of the states ranking high in performing arts and museum attendance also exhibit below-average levels of poverty. In Virginia, for example, the share of residents falling below the poverty line is 10 percent, more than 3 percentage points below the U.S. average of 13.6 percent.

Among states with comparatively high attendance rates, however, the correlation between attendance and numbers of performing arts and museums is demonstrably weaker. Only New York and Illinois, for example, exhibit above-average (index greater than 100 percent) counts of performing arts troupes. And Massachusetts and New York

are the only states with comparatively high museum attendance coupled with above-average counts of museums.

Alternatively, the low rates of performing arts and museum attendance in Texas and Mississippi appear linked to low access in

those states. In Texas, for example, the number of museums per capita is 26 percent below the national average. Texas is also below average in educational attainment and above average in poverty.

	<i>Attendance rates: (on an average day)¹</i>		<i>Index to the U.S. average:</i>			
	Performing arts	Museums	Number of performing arts organizations ^{2,3}	Number of museums ^{2,3}	Percent with bachelor's degree or higher ^{4,5}	Percent below poverty ⁴
U.S.	0.6%	0.2%	100.0%	100.0%	27.8%	13.6%
Illinois	0.9%	0.3%	108.4%	67.5%	30.2%	12.6%
Maryland	1.1%	0.4%	66.0%	69.7%	35.4%	8.4%
Massachusetts	0.7%	0.4%	96.0%	155.4%	38.2%	10.1%
Michigan	0.4%	0.4%	51.1%	81.6%	24.5%	15.1%
Mississippi	0.1%	-	34.5%	78.1%	19.4%	21.4%
New York	0.9%	0.4%	240.8%	133.1%	32.2%	13.9%
Pennsylvania	0.8%	0.2%	85.1%	100.6%	26.3%	12.1%
Texas	0.4%	0.1%	56.9%	74.4%	25.5%	16.6%
Virginia	1.1%	0.4%	69.2%	100.7%	33.7%	10.3%

¹ ATUS 2006-2010, Bureau of Labor Statistics, U.S. Department of Labor

² Per 100,000 residents

³ Calculation based on data from 2009 County Business Patterns and *Annual Estimates of the Resident Population of the United States, 2009*, U.S. Census Bureau, U.S. Department of Commerce.

⁴ American Community Survey: 2007-2009, U.S. Census Bureau, U.S. Department of Commerce

⁵ Adults 25 and older

Oregon Rates High in Performing Arts and Museum Attendance

This Note highlights states for which associated standard errors are small enough to reasonably delineate state rankings of high, medium, and low ranges of participation.

Oregon does not generally meet that criterion. Although Oregon's performing arts and museum attendance rates are high, so too are the standard errors associated with those estimates. The ATUS shows that on an average day 0.9 percent of Oregon's residents attend the performing arts. This rate is comparable to the percentages reported for New York and Illinois. Yet the standard error for Oregon's performing arts attendance rate yields an estimate that ranges from a high of 1.6 percent to a low of 0.2 percent. Estimates of Oregon's museum attendance rate range even more (from 1.1 percent to virtually zero).

Taken alone, these wide ranges make it difficult to ascertain Oregon's state rank in performing arts and museum attendance. However, the 2008 Survey of Public Participation in the Arts (SPPA), which measured arts participation in the 12 months ending in May 2008, also indicated that

Oregon ranks among the highest in state-level attendance of the performing arts and art museums.

Moreover, Oregon is home to an above-average number of performing arts troupes and museums, and Oregon's population is fairly well educated. The share of Oregon's population (age 25 and older) holding at least a bachelor's degree is almost 1 percentage point greater than the U.S. average. Recent data also show that Oregon's share of artists (adults whose primary job, counted by number of hours worked, is being some sort of artist) exceeds the U.S. average (See NEA Research Note #105, Artists and Arts Workers in the U.S.: Findings from the American Community Survey and the Quarterly Census of Employment and Wages.)

Oregon's access to the arts and museums, combined with results from both the ATUS and the SPPA, suggests that Oregon is likely a frontrunner in performing arts and museum attendance.

Suppression of ATUS Estimates

The 2006-2010 ATUS estimates presented in this Note derive from unpublished tables produced by the Bureau of Labor Statistics. The BLS uses several criteria in determining whether an ATUS estimate is published or if it is suppressed because the estimate does not meet the agency's standard of quality. For example, this Note does not report average time (hours) spent by state residents participating in selected arts and leisure activities. For many states, the BLS has suppressed these figures because there were fewer than 10 respondents engaged in these activities.¹¹

This Note, instead, shows the number of state residents participating in arts and leisure activities and corresponding participation rates. However, the BLS suppresses participation rates if fewer than 10 respondents participated or if the standard error of the estimated participation rate exceeds 5 percent. If the participation rate is publishable, but rounds to zero (0.0 percent), then the BLS reports the rate as ~0, meaning approximately zero.

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Attendance at Performing Arts and Other Events on an Average Day: 2006-2010 <i>(population counts and number of persons are measured in thousands)</i>									
	United States	Alabama	Alaska	Arizona	Arkansas	California	Colorado	Connecticut	
Estimated state population	237,810	3,571	434	4,157	2,397	25,371	3,855	2,813	
Performing arts									
Number of persons attending	1,411	10	4	16	10	147	13	15	
se	87	6	3	10	7	28	5	7	
Percent of persons attending	0.6%	0.3%	1.0%	0.4%	0.4%	0.6%	0.3%	0.5%	
se	0.04%	0.16%	0.80%	0.25%	0.28%	0.11%	0.13%	0.23%	
Museums									
Number of persons attending	540	22	5	-	9	44	5	3	
se	49	11	5	-	6	12	3	3	
Percent of persons attending	0.2%	0.6%	1.3%	-	0.4%	0.2%	0.1%	0.1%	
se	0.02%	0.32%	0.99%	-	0.23%	0.05%	0.08%	0.11%	
Other arts/entertainment									
Number of persons attending	2,023	33	8	35	17	180	18	60	
se	101	9	7	14	8	31	7	26	
Percent of persons attending	0.9%	0.9%	1.9%	0.9%	0.7%	0.7%	0.5%	2.1%	
se	0.04%	0.24%	1.55%	0.35%	0.49%	0.12%	0.19%	0.92%	
Movies									
Number of persons attending	3,311	21	4	61	10	547	49	26	
se	130	9	3	17	7	65	15	9	
Percent of persons attending	1.4%	0.6%	1.0%	1.5%	0.4%	2.2%	1.3%	0.9%	
se	0.05%	0.27%	0.73%	0.40%	0.28%	0.25%	0.38%	0.33%	
Sporting events									
Number of persons attending	2,647	25	5	19	32	243	32	19	
se	139	17	4	7	14	43	9	12	
Percent of persons attending	1.1%	0.7%	1.1%	0.5%	1.3%	1.0%	0.8%	0.7%	
se	0.06%	0.47%	0.83%	0.16%	0.60%	0.17%	0.24%	0.44%	

Attendance at Performing Arts and Other Events on an Average Day: 2006-2010 <i>(population counts and number of persons are measured in thousands)</i>										
	Delaware	District of Columbia	Florida	Georgia	Hawaii	Idaho	Illinois	Indiana		
Estimated state population	729	449	12,730	6,970	720	1,375	10,204	5,691		
Performing arts										
Number of persons attending	-	-	44	16	2	34	88	8		
se	-	-	15	7	1	29	21	5		
Percent of persons attending	-	-	0.3%	0.2%	0.2%	2.5%	0.9%	0.1%		
se	-	-	0.12%	0.11%	0.18%	2.06%	0.21%	0.08%		
Museums										
Number of persons attending	2	8	37	14	-	-	34	16		
se	1	5	13	9	-	-	12	9		
Percent of persons attending	0.2%	1.8%	0.3%	0.2%	-	-	0.3%	0.3%		
se	0.20%	1.12%	0.11%	0.13%	-	-	0.11%	0.16%		
Other arts/entertainment										
Number of persons attending	6	6	85	21	6	6	151	39		
se	3	4	17	7	4	4	31	12		
Percent of persons attending	0.8%	1.3%	0.7%	0.3%	0.8%	0.4%	1.5%	0.7%		
se	0.49%	0.81%	0.13%	0.10%	0.62%	0.32%	0.29%	0.21%		
Movies										
Number of persons attending	17	13	235	91	13	11	146	49		
se	11	6	39	22	7	6	27	24		
Percent of persons attending	2.3%	2.9%	1.8%	1.3%	1.8%	0.8%	1.4%	0.9%		
se	1.48%	1.24%	0.30%	0.31%	0.90%	0.46%	0.27%	0.42%		
Sporting events										
Number of persons attending	-	7	72	70	8	20	113	89		
se	-	6	16	21	5	10	20	33		
Percent of persons attending	-	1.6%	0.6%	1.0%	1.2%	1.5%	1.1%	1.6%		
se	-	1.26%	0.13%	0.30%	0.68%	0.67%	0.19%	0.56%		

Attendance at Performing Arts and Other Events on an Average Day: 2006-2010
(population counts and number of persons are measured in thousands)

	Iowa	Kansas	Kentucky	Louisiana	Maine	Maryland	Massachusetts	Michigan
Estimated state population	2,529	2,369	3,846	3,308	1,158	4,492	5,123	8,628
Performing arts								
Number of persons attending	9	8	15	23	6	48	33	33
se	3	3	8	10	6	13	14	11
Percent of persons attending	0.3%	0.3%	0.4%	0.7%	0.5%	1.1%	0.7%	0.4%
se	0.13%	0.15%	0.21%	0.31%	0.51%	0.30%	0.28%	0.13%
Museums								
Number of persons attending	6	3	3	7	-	17	18	31
se	4	2	2	3	-	6	7	11
Percent of persons attending	0.2%	0.1%	0.1%	0.2%	-	0.4%	0.4%	0.4%
se	0.16%	0.08%	0.06%	0.09%	-	0.14%	0.15%	0.13%
Other arts/entertainment								
Number of persons attending	33	15	5	44	5	43	29	63
se	11	6	3	15	3	14	10	15
Percent of persons attending	1.3%	0.6%	0.1%	1.3%	0.4%	1.0%	0.6%	0.7%
se	0.41%	0.27%	0.08%	0.45%	0.22%	0.33%	0.20%	0.18%
Movies								
Number of persons attending	29	30	34	28	35	44	39	120
se	14	11	14	10	22	13	11	23
Percent of persons attending	1.2%	1.3%	0.9%	0.8%	3.0%	1.0%	0.8%	1.4%
se	0.53%	0.47%	0.36%	0.31%	1.91%	0.29%	0.21%	0.26%
Sporting events								
Number of persons attending	35	37	74	16	18	40	77	82
se	12	13	25	8	7	13	23	21
Percent of persons attending	1.4%	1.6%	1.9%	0.5%	1.6%	0.9%	1.5%	0.9%
se	0.51%	0.54%	0.66%	0.23%	0.63%	0.28%	0.45%	0.24%

Attendance at Performing Arts and Other Events on an Average Day: 2006-2010
(population counts and number of persons are measured in thousands)

	Minnesota	Mississippi	Missouri	Montana	Nebraska	Nevada	New Hampshire	New Jersey
Estimated state population	4,892	2,267	5,101	744	1,472	1,755	1,113	6,601
Performing arts								
Number of persons attending	24	3	37	9	2	17	-	35
se	9	2	14	7	2	8	-	10
Percent of persons attending	0.5%	0.1%	0.7%	1.2%	0.2%	1.0%	-	0.5%
se	0.18%	0.09%	0.28%	0.94%	0.11%	0.49%	-	0.15%
Museums								
Number of persons attending	11	-	31	-	5	3	5	4
se	8	-	18	-	4	3	4	2
Percent of persons attending	0.2%	-	0.6%	-	0.4%	0.2%	0.4%	0.1%
se	0.16%	-	0.35%	-	0.25%	0.18%	0.39%	0.03%
Other arts/entertainment								
Number of persons attending	34	17	36	19	12	13	6	59
se	10	7	7	13	6	6	4	15
Percent of persons attending	0.7%	0.7%	0.7%	2.5%	0.8%	0.8%	0.6%	0.9%
se	0.21%	0.31%	0.13%	1.74%	0.39%	0.37%	0.33%	0.23%
Movies								
Number of persons attending	87	3	111	3	4	11	10	112
se	23	2	31	2	3	5	5	26
Percent of persons attending	1.8%	0.1%	2.2%	0.4%	0.3%	0.7%	0.9%	1.7%
se	0.47%	0.09%	0.60%	0.22%	0.20%	0.27%	0.44%	0.39%
Sporting events								
Number of persons attending	75	15	87	12	38	14	2	87
se	18	7	21	7	12	12	2	29
Percent of persons attending	1.5%	0.7%	1.7%	1.6%	2.6%	0.8%	0.2%	1.3%
se	0.37%	0.32%	0.40%	1.01%	0.76%	0.71%	0.14%	0.44%

Attendance at Performing Arts and Other Events on an Average Day: 2006-2010 <i>(population counts and number of persons are measured in thousands)</i>										
	New Mexico	New York	North Carolina	North Dakota	Ohio	Oklahoma	Oregon	Pennsylvania		
Estimated state population	1,453	13,951	7,236	631	9,840	3,122	3,171	11,294		
Performing arts										
Number of persons attending	19	126	50	2	70	23	27	87		
se	10	30	21	1	27	14	13	29		
Percent of persons attending	1.3%	0.9%	0.7%	0.4%	0.7%	0.7%	0.9%	0.8%		
se	0.65%	0.21%	0.29%	0.23%	0.28%	0.45%	0.40%	0.25%		
Museums										
Number of persons attending	4	52	6	2	16	7	14	27		
se	2	19	4	2	6	4	12	12		
Percent of persons attending	0.3%	0.4%	0.1%	0.3%	0.2%	0.2%	0.5%	0.2%		
se	0.15%	0.13%	0.05%	0.30%	0.06%	0.13%	0.39%	0.10%		
Other arts/entertainment										
Number of persons attending	10	181	53	13	98	3	13	133		
se	4	34	16	11	27	2	8	33		
Percent of persons attending	0.7%	1.3%	0.7%	2.1%	1.0%	0.1%	0.4%	1.2%		
se	0.29%	0.24%	0.22%	1.79%	0.27%	0.06%	0.27%	0.30%		
Movies										
Number of persons attending	11	177	81	-	161	47	47	146		
se	4	36	15	-	38	14	15	27		
Percent of persons attending	0.8%	1.3%	1.1%	-	1.6%	1.5%	1.5%	1.3%		
se	0.31%	0.25%	0.20%	-	0.38%	0.45%	0.48%	0.24%		
Sporting events										
Number of persons attending	11	125	44	12	178	22	21	145		
se	8	23	14	9	41	11	8	41		
Percent of persons attending	0.8%	0.9%	0.6%	2.0%	1.8%	0.7%	0.7%	1.3%		
se	0.52%	0.17%	0.19%	1.39%	0.40%	0.35%	0.25%	0.35%		

Attendance at Performing Arts and Other Events on an Average Day: 2006-2010
(population counts and number of persons are measured in thousands)

	Rhode Island	South Carolina	South Dakota	Tennessee	Texas	Utah	Vermont	Virginia
Estimated state population	666	3,349	703	4,994	17,978	2,463	473	6,412
Performing arts								
Number of persons attending	1	11	4	36	77	10	3	71
se	1	6	3	12	19	5	3	21
Percent of persons attending	0.2%	0.3%	0.5%	0.7%	0.4%	0.4%	0.6%	1.1%
se	0.15%	0.19%	0.49%	0.23%	0.11%	0.19%	0.57%	0.33%
Museums								
Number of persons attending	-	2	-	-	16	-	-	24
se	-	2	-	-	9	-	-	7
Percent of persons attending	-	0.1%	-	-	0.1%	-	-	0.4%
se	-	0.05%	-	-	0.05%	-	-	0.11%
Other arts/entertainment								
Number of persons attending	9	25	14	40	99	21	7	74
se	7	13	14	17	20	10	5	20
Percent of persons attending	1.4%	0.7%	2.0%	0.8%	0.5%	0.8%	1.4%	1.1%
se	1.08%	0.39%	1.95%	0.34%	0.11%	0.39%	0.98%	0.31%
Movies								
Number of persons attending	10	44	6	56	251	40	5	94
se	7	13	2	21	34	11	4	18
Percent of persons attending	1.5%	1.3%	0.8%	1.1%	1.4%	1.6%	1.0%	1.5%
se	1.01%	0.40%	0.35%	0.41%	0.19%	0.46%	0.74%	0.29%
Sporting events								
Number of persons attending	8	11	8	61	246	47	4	65
se	6	6	5	16	41	19	3	16
Percent of persons attending	1.2%	0.3%	1.1%	1.2%	1.4%	1.9%	0.8%	1.0%
se	0.91%	0.16%	0.65%	0.33%	0.23%	0.76%	0.60%	0.25%

Attendance at Performing Arts and Other Events on an Average Day: 2006-2010				
<i>(population counts and number of persons are measured in thousands)</i>				
	Washington	West Virginia	Wisconsin	Wyoming
Estimated state population	5,609	1,600	5,447	550
Performing arts				
Number of persons attending	34	13	26	10
se	10	9	9	6
Percent of persons attending	0.6%	0.8%	0.5%	1.8%
se	0.17%	0.53%	0.16%	1.15%
Museums				
Number of persons attending	15	-	10	1
se	10	-	3	1
Percent of persons attending	0.3%	-	0.2%	0.1%
se	0.17%	-	0.06%	0.10%
Other arts/entertainment				
Number of persons attending	51	18	54	2
se	18	9	14	2
Percent of persons attending	0.9%	1.2%	1.0%	0.4%
se	0.32%	0.58%	0.25%	0.29%
Movies				
Number of persons attending	92	6	39	4
se	21	3	12	3
Percent of persons attending	1.6%	0.4%	0.7%	0.8%
se	0.4%	0.19%	0.22%	0.49%
Sporting events				
Number of persons attending	61	12	95	6
se	15	6	23	5
Percent of persons attending	1.1%	0.8%	1.8%	1.1%
se	0.26%	0.41%	0.42%	0.89%
Source: American Time Use Survey, Bureau of Labor Statistics, U.S. Department of Labor				
Notes: "se" refers to the standard error of the estimate;				
"-" indicates the estimate is suppressed because it does not meet the American Time Use Survey standard for quality and reliability, or the estimate is less than 0.05 percent of the population, or the estimate is approximately zero.				

Participation in Selected Leisure Activities on an Average Day: 2006-2010
(population counts and number of persons in thousands)

	United States	Alabama	Alaska	Arizona	Arkansas	California	Colorado	Connecticut
Estimated state population	237,810	3,571	434	4,157	2,397	25,371	3,855	2,813
Arts and crafts								
Number of persons engaged	2,691	24	4	64	23	298	31	41
se	137	12	3	24	10	45	8	14
Percent of persons engaged	1.1%	0.7%	1.0%	1.5%	1.0%	1.2%	0.8%	1.4%
se	0.06%	0.33%	0.62%	0.56%	0.42%	0.18%	0.22%	0.51%
Listen to/play music								
Number of persons engaged	5,878	33	30	107	40	842	155	72
se	187	14	16	33	11	77	31	21
Percent of persons engaged	2.5%	0.9%	7.0%	2.6%	1.6%	3.3%	4.0%	2.6%
se	0.08%	0.38%	3.61%	0.77%	0.45%	0.30%	0.80%	0.70%
Read for personal interest								
Number of persons engaged	57,231	736	-	906	481	5,735	1,041	821
se	516	55	-	82	54	166	71	65
Percent of persons engaged	24.1%	20.6%	-	21.8%	20.1%	22.6%	27.0%	29.2%
se	0.22%	1.28%	-	1.88%	1.81%	0.60%	1.73%	1.98%
Write for personal interest								
Number of persons engaged	546	24	3	-	-	68	7	29
se	59	14	3	-	-	17	4	15
Percent of persons engaged	0.2%	0.7%	0.8%	-	-	0.3%	0.2%	1.0%
se	0.02%	0.38%	0.59%	-	-	0.07%	0.11%	0.53%
Volunteer								
Number of persons engaged	16,168	258	53	258	115	1,717	321	203
se	332	48	11	47	21	110	38	32
Percent of persons engaged	6.8%	7.2%	12.1%	6.20%	4.8%	6.8%	8.3%	7.2%
se	0.14%	1.41%	2.47%	1.04%	0.89%	0.42%	0.92%	1.11%
Use computer for leisure								
Number of persons engaged	24,691	263	57	381	135	2,917	430	372
se	374	49	18	43	33	136	48	55
Percent of persons engaged	10.4%	7.4%	13.2%	9.2%	5.6%	11.5%	11.2%	13.2%
se	0.16%	1.23%	3.92%	1.02%	1.40%	0.52%	1.14%	1.83%
Watch TV and movies								
Number of persons engaged	190,701	3,000	310	3,331	1,949	20,018	3,012	2,307
se	560	141	36	148	110	361	123	126
Percent of persons engaged	80.2%	84.0%	71.5%	80.1%	81.3%	78.9%	78.1%	82.0%
se	0.24%	1.61%	4.35%	1.44%	1.60%	0.72%	1.77%	1.93%
Play sports or exercise								
Number of persons engaged	42,914	534	-	910	386	5,517	799	579
se	507	71	-	90	53	190	62	57
Percent of persons engaged	18.0%	15.0%	-	21.9%	16.1%	21.7%	20.7%	20.6%
se	0.21%	1.75%	-	1.78%	2.02%	0.70%	1.51%	1.82%

Participation in Selected Leisure Activities on an Average Day: 2006-2010 (population counts and number of persons in thousands)									
	Delaware	District of Columbia	Florida	Georgia	Hawaii	Idaho	Illinois	Indiana	
Estimated state population	729	449	12,730	6,970	720	1,375	10,204	5,691	
Arts and crafts									
Number of persons engaged	33	9	92	35	-	25	85	47	
se	27	6	24	13	-	11	21	19	
Percent of persons engaged	4.5%	1.9%	0.7%	0.5%	-	1.8%	0.8%	0.8%	
se	3.55%	1.30%	0.19%	0.19%	-	0.82%	0.21%	0.33%	
Listen to/play music									
Number of persons engaged	19	26	224	150	20	26	294	103	
se	9	11	36	25	8	12	49	27	
Percent of persons engaged	2.6%	5.9%	1.8%	2.3%	2.7%	1.9%	2.9%	1.8%	
se	1.30%	2.38%	0.27%	0.35%	1.19%	0.84%	0.48%	0.44%	
Read for personal interest									
Number of persons engaged	208	-	2,811	1,291	141	417	2,485	1,289	
se	31	-	168	89	26	49	119	66	
Percent of persons engaged	28.6%	-	22.1%	18.5%	19.6%	30.3%	24.4%	22.6%	
se	4.03%	-	1.12%	1.30%	3.58%	2.78%	1.14%	1.21%	
Write for personal interest									
Number of persons engaged	-	2	17	20	-	8	43	17	
se	-	2	8	13	-	8	16	14	
Percent of persons engaged	-	0.5%	0.1%	0.3%	-	0.6%	0.4%	0.3%	
se	-	0.49%	0.07%	0.19%	-	0.60%	0.15%	0.25%	
Volunteer									
Number of persons engaged	57	30	695	521	30	100	684	455	
se	20	10	64	63	12	21	60	57	
Percent of persons engaged	7.8%	6.6%	5.5%	7.5%	4.2%	7.2%	6.7%	8.0%	
se	2.60%	2.40%	0.46%	0.83%	1.79%	1.49%	0.56%	0.91%	
Use computer for leisure									
Number of persons engaged	77	76	1,494	646	103	132	925	570	
se	19	23	119	71	26	29	74	54	
Percent of persons engaged	10.5%	17.0%	11.7%	9.3%	14.4%	9.6%	9.1%	10.0%	
se	2.69%	4.44%	0.88%	1.02%	3.23%	1.92%	0.68%	0.86%	
Watch TV and movies									
Number of persons engaged	603	320	10,681	5,733	568	996	8,040	4,589	
se	67	36	310	218	64	98	232	212	
Percent of persons engaged	82.6%	71.3%	83.9%	83.4%	79.0%	72.4%	78.8%	80.6%	
se	3.57%	4.70%	0.74%	1.55%	3.96%	3.00%	1.03%	1.93%	
Play sports or exercise									
Number of persons engaged	118	60	2,564	1,015	117	284	1,822	905	
se	24	13	149	78	29	42	112	83	
Percent of persons engaged	16.1%	13.4%	20.1%	14.6%	16.3%	20.6%	17.9%	15.9%	
se	3.17%	2.81%	0.95%	1.05%	3.97%	2.44%	0.99%	1.25%	

Participation in Selected Leisure Activities on an Average Day: 2006-2010 (population counts and number of persons in thousands)										
	Iowa	Kansas	Kentucky	Louisiana	Maine	Maryland	Massachusetts	Michigan		
Estimated state population	2,529	2,369	3,846	3,308	1,158	4,492	5,123	8,628		
Arts and crafts										
Number of persons engaged	38	45	8	34	7	71	66	81		
se	15	14	4	15	4	19	19	20		
Percent of persons engaged	1.5%	1.9%	0.2%	1.0%	0.6%	1.6%	1.3%	0.9%		
se	0.60%	0.59%	0.11%	0.44%	0.37%	0.44%	0.37%	0.22%		
Listen to/play music										
Number of persons engaged	48	78	66	59	14	97	119	153		
se	19	21	16	22	6	24	32	29		
Percent of persons engaged	1.9%	3.3%	1.7%	1.8%	1.2%	2.2%	2.3%	1.8%		
se	0.74%	0.91%	0.42%	0.67%	0.52%	0.54%	0.63%	0.33%		
Read for personal interest										
Number of persons engaged	704	576	743	623	294	1,126	1,684	2,048		
se	62	66	74	65	41	81	104	103		
Percent of persons engaged	27.8%	24.3%	19.3%	18.8%	25.4%	25.1%	32.9%	23.7%		
se	2.36%	2.82%	1.64%	1.82%	3.21%	1.67%	1.90%	0.99%		
Write for personal interest										
Number of persons engaged	-	11	-	-	7	16	5	29		
se	-	7	-	-	5	7	4	14		
Percent of persons engaged	-	0.4%	-	-	0.6%	0.4%	0.1%	0.3%		
se	-	0.29%	-	-	0.38%	0.15%	0.08%	0.16%		
Volunteer										
Number of persons engaged	207	192	261	136	75	339	289	548		
se	39	18	32	29	20	39	41	71		
Percent of persons engaged	8.2%	8.1%	6.8%	4.1%	6.5%	7.6%	5.6%	6.4%		
se	1.54%	0.69%	0.79%	0.85%	1.72%	0.84%	0.83%	0.75%		
Use computer for leisure										
Number of persons engaged	274	244	413	321	93	525	589	849		
se	38	29	59	46	25	54	64	84		
Percent of persons engaged	10.8%	10.3%	10.7%	9.7%	8.0%	11.7%	11.5%	9.8%		
se	1.40%	1.32%	1.33%	1.27%	2.06%	1.11%	1.19%	0.98%		
Watch TV and movies										
Number of persons engaged	2,030	1,964	3,155	2,640	912	3,482	4,165	6,895		
se	94	92	171	127	73	152	174	250		
Percent of persons engaged	80.2%	82.9%	82.0%	79.8%	78.8%	77.5%	81.3%	79.9%		
se	2.38%	1.79%	1.14%	1.69%	2.96%	1.56%	1.41%	1.17%		
Play sports or exercise										
Number of persons engaged	381	423	542	592	259	788	1,029	1,518		
se	45	51	66	66	42	72	72	114		
Percent of persons engaged	15.1%	17.9%	14.1%	17.9%	22.4%	17.5%	20.1%	17.6%		
se	1.54%	2.12%	1.44%	1.81%	3.19%	1.50%	1.27%	1.22%		

Participation in Selected Leisure Activities on an Average Day: 2006-2010 (population counts and number of persons in thousands)									
	Minnesota	Mississippi	Missouri	Montana	Nebraska	Nevada	New Hampshire	New Jersey	
Estimated state population	4,892	2,267	5,101	744	1,472	1,755	1,113	6,601	
Arts and crafts									
Number of persons engaged	81	23	82	19	42	23	1	82	
se	19	16	23	9	15	10	1	26	
Percent of persons engaged	1.7%	1.0%	1.6%	2.6%	2.8%	1.3%	0.1%	1.2%	
se	0.38%	0.69%	0.44%	1.16%	0.99%	0.59%	0.05%	0.39%	
Listen to/play music									
Number of persons engaged	148	44	79	19	12	46	18	165	
se	45	18	23	8	7	14	10	36	
Percent of persons engaged	3.0%	1.9%	1.5%	2.5%	0.8%	2.6%	1.6%	2.5%	
se	0.89%	0.79%	0.45%	1.13%	0.43%	0.75%	0.92%	0.54%	
Read for personal interest									
Number of persons engaged	1,499	402	1,096	215	337	315	298	1,652	
se	93	72	83	30	35	44	39	109	
Percent of persons engaged	30.7%	17.7%	21.5%	28.9%	22.9%	17.9%	26.8%	25.0%	
se	1.62%	2.79%	1.45%	3.30%	2.31%	1.97%	3.15%	1.44%	
Write for personal interest									
Number of persons engaged	13	-	7	5	12	2	9	20	
se	9	-	5	4	11	1	7	13	
Percent of persons engaged	0.3%	-	0.1%	0.7%	0.8%	0.1%	0.8%	0.3%	
se	0.18%	-	0.09%	0.50%	0.70%	0.08%	0.60%	0.20%	
Volunteer									
Number of persons engaged	402	115	298	44	117	106	96	526	
se	62	24	33	13	29	29	26	61	
Percent of persons engaged	8.2%	5.1%	5.8%	5.9%	8.0%	6.1%	8.6%	8.0%	
se	1.17%	1.18%	0.65%	1.50%	1.92%	1.51%	2.24%	0.91%	
Use computer for leisure									
Number of persons engaged	586	97	458	45	173	207	134	771	
se	61	21	57	12	28	34	29	76	
Percent of persons engaged	12.0%	4.3%	9.0%	6.0%	11.8%	11.8%	12.0%	11.7%	
se	1.22%	0.83%	1.08%	1.47%	1.85%	1.77%	2.56%	1.10%	
Watch TV and movies									
Number of persons engaged	3,719	1,772	4,066	547	1,168	1,406	879	5,469	
se	130	113	163	60	68	100	85	201	
Percent of persons engaged	76.0%	78.2%	79.7%	73.5%	79.4%	80.1%	79.0%	82.8%	
se	2.01%	2.25%	1.38%	3.33%	2.02%	2.46%	3.56%	1.07%	
Play sports or exercise									
Number of persons engaged	1,060	304	750	162	255	235	223	1,144	
se	82	47	68	27	40	36	38	94	
Percent of persons engaged	21.7%	13.4%	14.7%	21.8%	17.3%	13.4%	20.1%	17.3%	
se	1.46%	2.01%	1.25%	3.58%	2.26%	1.80%	3.32%	1.32%	

Participation in Selected Leisure Activities on an Average Day: 2006-2010 (population counts and number of persons in thousands)									
	New Mexico	New York	North Carolina	North Dakota	Ohio	Oklahoma	Oregon	Pennsylvania	
Estimated state population	1,453	13,951	7,236	631	9,840	3,122	3,171	11,294	
Arts and crafts									
Number of persons engaged	25	124	93	6	117	19	93	131	
se	11	26	31	4	27	8	38	27	
Percent of persons engaged	1.7%	0.9%	1.3%	0.9%	1.2%	0.6%	2.9%	1.2%	
se	0.78%	0.19%	0.43%	0.62%	0.28%	0.25%	1.15%	0.24%	
Listen to/play music									
Number of persons engaged	25	407	192	9	226	74	79	320	
se	12	54	35	7	38	29	19	50	
Percent of persons engaged	1.7%	2.9%	2.7%	1.4%	2.3%	2.4%	2.5%	2.8%	
se	0.76%	0.38%	0.47%	1.11%	0.40%	0.91%	0.62%	0.43%	
Read for personal interest									
Number of persons engaged	286	3,656	1,744	-	2,431	723	1,007	3,191	
se	47	161	129	-	116	91	82	142	
Percent of persons engaged	19.7%	26.2%	24.1%	-	24.7%	23.2%	31.8%	28.2%	
se	2.75%	1.10%	1.49%	-	1.10%	2.79%	2.18%	1.19%	
Write for personal interest									
Number of persons engaged	2	40	8	3	24	4	14	18	
se	2	14	5	4	13	4	8	9	
Percent of persons engaged	0.1%	0.3%	0.1%	0.5%	0.2%	0.1%	0.4%	0.2%	
se	0.13%	0.10%	0.07%	0.56%	0.13%	0.12%	0.25%	0.08%	
Volunteer									
Number of persons engaged	105	850	576	29	669	259	302	845	
se	20	81	62	10	58	36	36	79	
Percent of persons engaged	7.2%	6.1%	8.0%	4.6%	6.8%	8.3%	9.5%	7.5%	
se	1.32%	0.55%	0.86%	1.44%	0.56%	1.12%	1.06%	0.69%	
Use computer for leisure									
Number of persons engaged	110	1,433	759	65	1,021	265	390	1,162	
se	24	104	85	26	96	42	58	83	
Percent of persons engaged	7.5%	10.3%	10.5%	10.3%	10.4%	8.5%	12.3%	10.3%	
se	1.61%	0.70%	1.11%	3.82%	0.92%	1.33%	1.79%	0.73%	
Watch TV and movies									
Number of persons engaged	1,152	11,176	6,122	482	7,961	2,470	2,410	9,336	
se	87	283	206	63	225	111	110	250	
Percent of persons engaged	79.3%	80.1%	84.6%	76.4%	80.9%	79.1%	76.0%	82.7%	
se	2.72%	0.81%	0.93%	4.24%	1.03%	1.63%	1.75%	1.02%	
Play sports or exercise									
Number of persons engaged	259	2,475	1,295	189	1,519	427	626	1,913	
se	40	147	94	37	102	54	66	116	
Percent of persons engaged	17.9%	17.7%	17.9%	29.9%	15.4%	13.7%	19.7%	16.9%	
se	2.37%	0.87%	1.11%	4.91%	0.98%	1.71%	2.10%	0.99%	

Participation in Selected Leisure Activities on an Average Day: 2006-2010 (population counts and number of persons in thousands)									
	Rhode Island	South Carolina	South Dakota	Tennessee	Texas	Utah	Vermont	Virginia	
Estimated state population	666	3,349	703	4,994	17,978	2,463	473	6,412	
Arts and crafts									
Number of persons engaged	15	41	34	45	158	36	5	56	
se	11	14	15	19	34	14	4	20	
Percent of persons engaged	2.3%	1.2%	4.8%	0.9%	0.9%	1.5%	1.0%	0.9%	
se	1.57%	0.40%	2.18%	0.36%	0.19%	0.57%	0.80%	0.31%	
Listen to/play music									
Number of persons engaged	52	44	12	99	465	74	5	104	
se	22	21	6	25	67	24	4	21	
Percent of persons engaged	7.9%	1.3%	1.7%	2.0%	2.6%	3.0%	1.1%	1.6%	
se	3.07%	0.59%	0.91%	0.49%	0.36%	0.95%	0.78%	0.32%	
Read for personal interest									
Number of persons engaged	216	799	206	1,068	3,203	716	-	1,569	
se	32	74	34	85	162	74	-	100	
Percent of persons engaged	32.5%	23.9%	29.3%	21.4%	17.8%	29.1%	-	24.5%	
se	4.36%	1.80%	3.93%	1.62%	0.79%	2.47%	-	1.52%	
Write for personal interest									
Number of persons engaged	2	3	-	3	13	10	3	-	
se	2	3	-	3	9	4	2	-	
Percent of persons engaged	0.3%	0.1%	-	0.1%	0.1%	0.4%	0.6%	-	
se	0.25%	0.08%	-	0.05%	0.05%	0.18%	0.43%	-	
Volunteer									
Number of persons engaged	30	204	65	348	1,003	285	15	403	
se	8	31	29	52	73	38	5	43	
Percent of persons engaged	4.5%	6.1%	9.3%	7.0%	5.6%	11.6%	3.2%	6.3%	
se	1.25%	0.82%	3.60%	1.04%	0.40%	1.62%	1.08%	0.68%	
Use computer for leisure									
Number of persons engaged	46	306	75	517	1,751	275	48	608	
se	15	43	22	84	106	47	11	66	
Percent of persons engaged	7.0%	9.1%	10.7%	10.4%	9.7%	11.2%	10.2%	9.5%	
se	2.22%	1.22%	2.57%	1.57%	0.55%	1.82%	2.59%	1.00%	
Watch TV and movies									
Number of persons engaged	534	2,766	552	4,070	14,186	1,856	-	5,035	
se	54	143	64	153	330	107	-	196	
Percent of persons engaged	80.2%	82.6%	78.5%	81.5%	78.9%	75.3%	-	78.5%	
se	3.47%	1.50%	4.86%	1.58%	0.74%	2.49%	-	1.19%	
Play sports or exercise									
Number of persons engaged	141	584	142	734	2,936	538	-	1,101	
se	32	83	25	81	127	68	-	76	
Percent of persons engaged	21.2%	17.4%	20.2%	14.7%	16.3%	21.8%	-	17.2%	
se	4.28%	2.01%	2.73%	1.41%	0.67%	2.38%	-	1.11%	

Participation in Selected Leisure Activities on an Average Day: 2006-2010				
<i>(population counts and number of persons in thousands)</i>				
	Washington	West Virginia	Wisconsin	Wyoming
Estimated state population	5,609	1,600	5,447	550
Arts and crafts				
Number of persons engaged	108	23	50	2
se	29	10	16	2
Percent of persons engaged	1.9%	1.4%	0.9%	0.4%
se	0.50%	0.62%	0.29%	0.38%
Listen to/play music				
Number of persons engaged	203	41	128	13
se	37	15	32	8
Percent of persons engaged	3.6%	2.6%	2.3%	2.4%
se	0.63%	0.87%	0.59%	1.46%
Read for personal interest				
Number of persons engaged	1,660	379	1,571	125
se	99	50	90	27
Percent of persons engaged	29.6%	23.7%	28.8%	22.8%
se	1.65%	2.95%	1.56%	4.59%
Write for personal interest				
Number of persons engaged	11	2	8	-
se	5	2	5	-
Percent of persons engaged	0.2%	0.1%	0.1%	-
se	0.09%	0.14%	0.09%	-
Volunteer				
Number of persons engaged	422	73	405	34
se	50	22	41	16
Percent of persons engaged	7.5%	4.6%	7.4%	6.2%
se	0.84%	1.37%	0.77%	2.82%
Use computer for leisure				
Number of persons engaged	709	167	578	46
se	68	36	63	17
Percent of persons engaged	12.6%	10.4%	10.6%	8.3%
se	1.13%	2.10%	1.09%	3.00%
Watch TV and movies				
Number of persons engaged	4,368	1,322	4,449	416
se	167	88	177	43
Percent of persons engaged	77.9%	82.6%	81.7%	75.6%
se	1.37%	2.12%	1.23%	4.14%
Play sports or exercise				
Number of persons engaged	1,119	188	1,107	74
se	94	31	75	17
Percent of persons engaged	20.0%	11.8%	20.3%	13.4%
se	1.56%	1.94%	1.43%	2.94%

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

Notes: "se" refers to the standard error of the estimate;
 "-." indicates the estimate is suppressed because it does not meet the American Time Use Survey standard for quality and reliability, or the estimate is less than 0.05 percent of the population, or the estimate is approximately zero.

Summary of Performing Arts Organizations, Educational Attainment, and Poverty				
	Number of performing arts organizations per 100,000 residents, index to the U.S.	Number of museums per 100,000 residents, index to the U.S.	Percent with bachelor's degree or higher ^{2,3}	Percent below poverty ²
	(2009)	(2009)	(2007-2009)	(2007-2009)
United States	100.0%	100.0%	27.8%	13.6%
Alabama	39.6%	66.6%	21.8%	16.7%
Alaska	120.8%	284.2%	26.5%	8.7%
Arizona	61.3%	57.3%	25.6%	15.2%
Arkansas	38.9%	88.7%	19.0%	18.1%
California	135.8%	72.6%	29.9%	13.3%
Colorado	109.9%	131.3%	35.7%	12.2%
Connecticut	115.9%	143.8%	35.5%	9.0%
Delaware	87.4%	180.9%	27.5%	10.7%
District of Columbia	275.6%	299.0%	48.3%	17.4%
Florida	103.4%	76.0%	25.7%	13.6%
Georgia	68.3%	56.0%	27.4%	15.3%
Hawaii	135.8%	143.4%	29.3%	9.3%
Idaho	79.6%	140.9%	24.0%	13.3%
Illinois	108.4%	67.5%	30.2%	12.6%
Indiana	61.9%	106.7%	22.4%	13.4%
Iowa	62.0%	202.3%	24.5%	11.5%
Kansas	72.4%	263.5%	29.3%	12.1%
Kentucky	51.4%	86.1%	20.4%	18.0%
Louisiana	56.4%	91.2%	20.8%	17.9%
Maine	114.7%	315.8%	26.4%	12.4%
Maryland	66.0%	69.7%	35.4%	8.4%
Massachusetts	96.0%	155.4%	38.2%	10.1%
Michigan	51.1%	81.6%	24.5%	15.1%
Minnesota	139.6%	167.8%	31.5%	10.2%
Mississippi	34.5%	78.1%	19.4%	21.4%
Missouri	87.5%	100.5%	25.0%	13.8%
Montana	144.3%	354.7%	27.1%	14.9%
Nebraska	60.7%	185.4%	27.1%	11.7%
Nevada	195.6%	63.0%	21.7%	11.6%
New Hampshire	116.8%	203.1%	32.6%	7.8%
New Jersey	90.1%	58.1%	34.3%	9.0%
New Mexico	68.2%	149.8%	24.9%	17.8%
New York	240.8%	133.1%	32.2%	13.9%
North Carolina	63.0%	86.0%	26.2%	15.2%
North Dakota	125.0%	297.0%	26.1%	12.2%
Ohio	55.1%	87.7%	24.0%	14.0%
Oklahoma	67.7%	119.8%	22.5%	16.1%
Oregon	104.8%	137.3%	28.7%	13.7%
Pennsylvania	85.1%	100.6%	26.3%	12.1%
Rhode Island	100.2%	170.3%	30.1%	11.9%
South Carolina	66.3%	75.8%	23.8%	16.0%
South Dakota	108.2%	291.7%	24.9%	13.4%
Tennessee	216.7%	88.5%	22.6%	16.4%
Texas	56.9%	74.4%	25.5%	16.6%
Utah	70.7%	46.0%	28.8%	10.3%
Vermont	135.7%	381.1%	33.2%	10.9%
Virginia	69.2%	100.7%	33.7%	10.3%
Washington	107.1%	113.4%	30.9%	11.8%
West Virginia	48.3%	88.0%	17.3%	17.4%
Wisconsin	104.5%	129.1%	25.6%	11.4%
Wyoming	77.5%	388.3%	23.5%	9.7%

¹ Calculation based on data from 2009 County Business Patterns and Annual Estimates of the Resident Population of the United States, 2009, U.S. Census Bureau, U.S. Department of Commerce.

² American Community Survey: 2007-2009, U.S. Census Bureau, U.S. Department of Commerce

³ Adults 25 and older

Endnotes

- ¹ Please see page 6 for more information about the ATUS performing arts lexicon.
- ² Estimates for weekdays are an average of estimates for reports about Monday through Friday, excluding major weekday holidays. Estimates for weekend days and holidays are an average of reports about Saturdays, Sundays, and the following holidays: New Year's Day, Easter, Memorial Day, the Fourth of July, Labor Day, Thanksgiving Day, and Christmas Day.
- ³ For more information about how the ATUS is conducted, please see the ATUS User's Guide, available at <http://www.bls.gov/tus/atususersguide.pdf>.
- ⁴ NEA Research Note #102, *Time and Money: Using Federal Data to Measure the Value of Performing Arts Activities*, is available at <http://www.nea.gov/research/Notes/102.pdf>.
- ⁵ Or about 0.4 percent in each state. By a different measure, the NEA's 2008 Survey of Public Participation in the Arts, Maryland also ranked high in art museum and gallery attendance, with 30 percent of the state's residents having visited such a venue in the previous year.
- ⁶ For more information, please see *Report by the Commission on the Measurement of Economic Performance and Social Progress*, Chapter 2, Quality of Life, pages 175-176, available at http://www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdf.
- ⁷ See, for example, *Time and Money: Using Federal Data to Measure the Value of Performing Arts Activities*, NEA Research Note #102, available at <http://www.nea.gov/research/Notes/102.pdf>; and *2008 Survey of Public Participation in the Arts*, NEA Research Report #49, available at <http://www.nea.gov/research/research.php?type=R>.
- ⁸ The percentage of residents visiting museums was also comparatively high in Missouri, Alabama, New Hampshire, Nebraska, and Arkansas. The standard errors of these estimates, however, produced considerably wide ranges of museum-visit rates on any given day.
- ⁹ Some state-level estimates from the ATUS are suppressed by the BLS. Please see the "Suppression of Estimates" section of this Note for more information.
- ¹⁰ Regression analysis of the SPPA shows that education is a strong predictor of arts participation. See, for example, Stern, M, *Age and Arts Participation: A Case Against Demographic Destiny*. Office of Research & Analysis, National Endowment for the Arts, 2011. Available at <http://www.nea.gov/research/2008-SPPA-Age.pdf>.

Endnotes
(continued)

¹¹ The BLS reports state-level average hours if (1) there are at least 77 ATUS respondents; (2) 10 or more respondents engaged in the activity; (3) the standard error of the estimate is less than 5 minutes; and (4) the coefficient of variation is less than 0.3. Average hours spent participating in selected arts and leisure activities are generally reported for states with the largest populations. Texas' performing arts attendees, for example, typically spend three hours at these events.

¹² For more information, please see Frazis, H. and Stewart, J. "Where Does the Time Go? Concepts and Measurements in the American Time Use Survey," in *Hard-To-Measure Goods and Services: Essays in Honor of Zvi Griliches*, National Bureau of Economic Research, 2003. Available at <http://www.nber.org/chapters/c0874.pdf>.

¹³ Other factors affecting sampling error include response rates, the level of variability in the data, and the extent to which observations drawn from the primary sampling units (clustering) differ from estimates that would have resulted from a random sample.

Appendix: Reliability of State-Level ATUS Estimates

Although the ATUS methodology is similar to that of the Current Population Survey (CPS), the ATUS does not apply the CPS method of over-sampling states with small populations. Consequently, the ATUS is a nationally representative survey of how Americans spend their time.¹²

Still, the state-level estimates reported in this Note, taken from the BLS' unpublished tables, have utility, provided that sampling error is considered. Sample error, it should be noted, is largely tied to sample sizes.¹³ The ATUS sample error tends to be greater in small-population states.

To illustrate, an estimated 1.2 percent of Montana's residents attend the performing arts on an average day. However, once sampling error is factored in, the percentage that attend ranges widely from a high of 2.75 percent to virtually no performing arts attendance among Montana's residents.

The results for California display far less variation. There, performing arts attendance rates, on any given day, range from 0.42 percent to 0.78 percent.

As shown in the graphs accompanying this Note, many small-population states, such as Montana, exhibit wide ranges of attendance. Conversely, estimates for large-population states, including California, vary less.

The graphs accompanying this Note also illustrate how overlapping ranges make rankings of state attendance difficult. For example, on an average day, an estimated 0.9 percent of Illinois' residents attend the performing arts; in Connecticut, 0.5 percent attends. However, the standard errors of both state estimates indicate that attendance in Illinois ranges between 1.25 percent and 0.55 percent, and in Connecticut, between 0.88 percent and 0.12 percent. These overlapping ranges prevent us from confidently ranking Illinois as higher in performing arts attendance than Connecticut.

A Note on Standard Errors

The large standard errors associated with some state-level ATUS estimates are mitigated, to some extent, by combining results from several surveys across years. Hence, our estimates use combined results from the ATUS for 2006-2010.

Also, large standard errors do not necessarily translate into bad estimates of arts and leisure participation from the ATUS. Rather, large standard errors result in less confidence or longer odds that the estimate is reasonable. For example, the standard error associated with performing arts attendance in Oregon is relatively high. But results from the SPPA, as well as Oregon's access to the arts, suggest that Oregon probably ranks high in performing arts attendance, as indicated by the ATUS (*see text box, above*).

Calculating the Margin of Error

In this Note, the margin of error is calculated by multiplying the standard error of the estimate by 1.645, the “t” value associated with the survey’s sample size at 90 percent confidence.

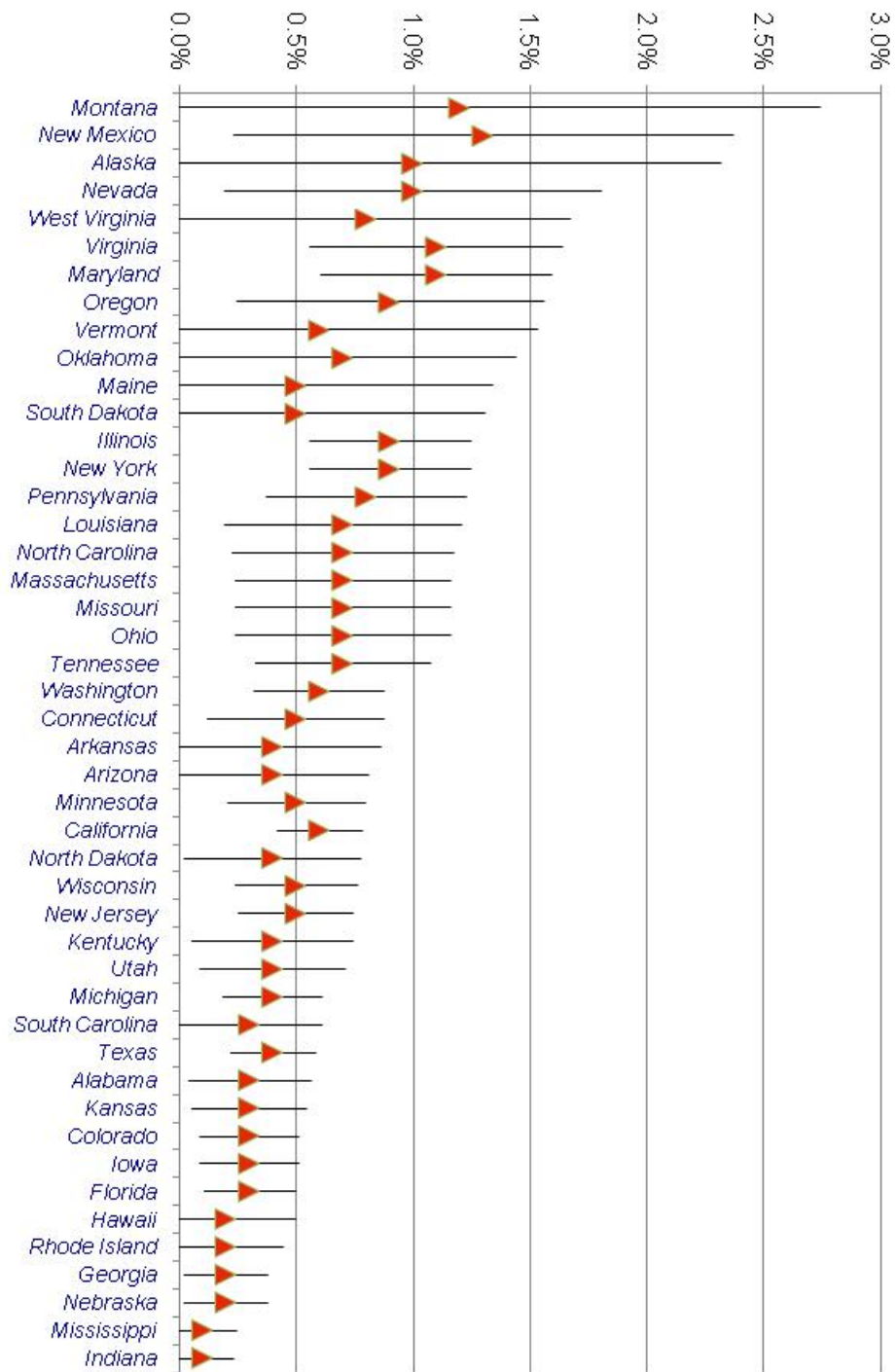
For example, the ATUS shows that, on any given day, 0.2 percent of Georgia’s population (ages 15 and older) attend the performing arts. The standard error of this estimate is 0.11 percent, so the margin of error is +/- 0.18 percent ($1.645 * 0.11$).

Although 0.2 percent is the estimated share attending the performing arts in Georgia, once sampling error is considered, that share ranges from a high of 0.38 percent to a low of only 0.02 percent.

For some ATUS state estimates, the standard errors are large enough to produce negative estimates of the percentage attending the performing arts or participating in other leisure activities.

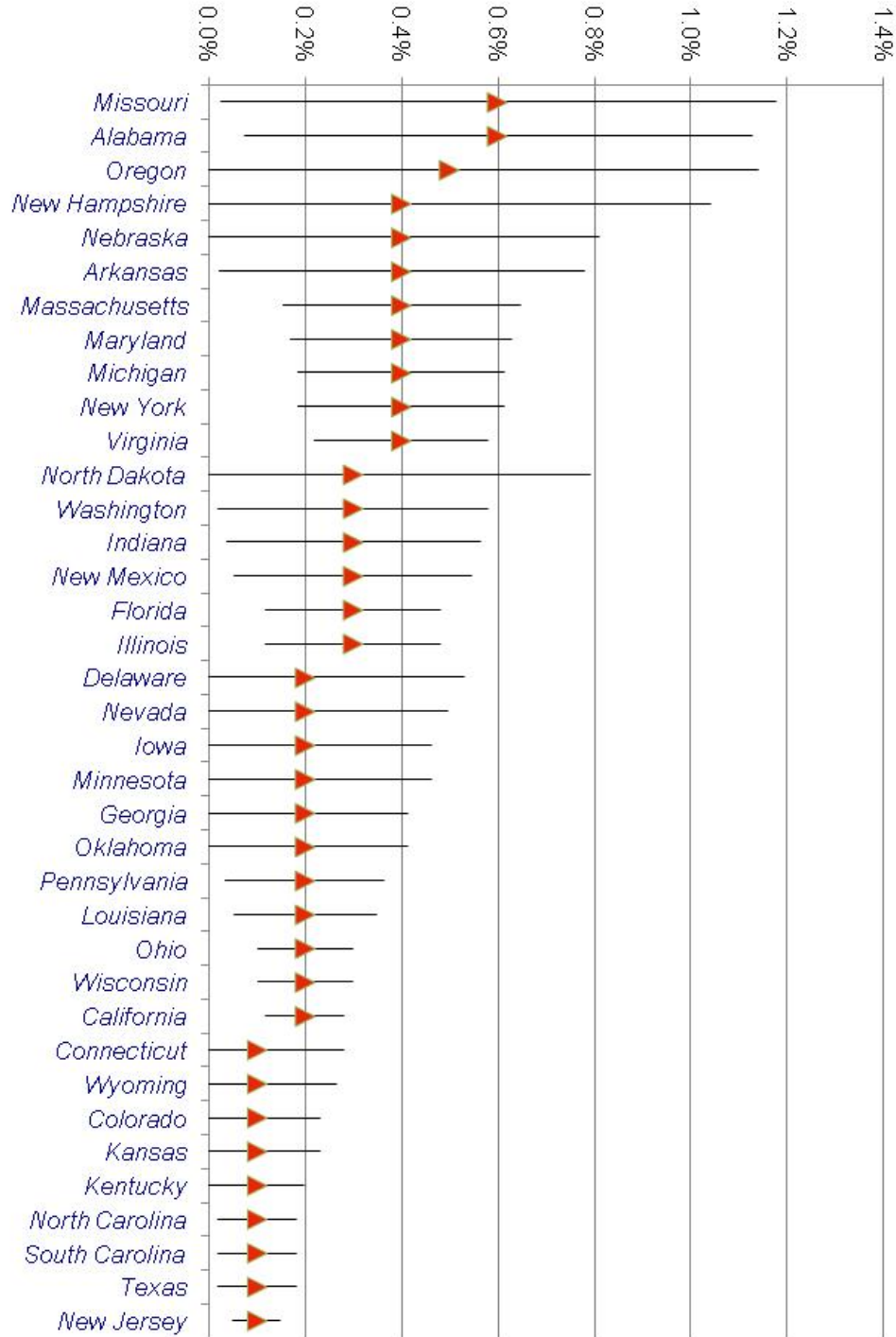
The ATUS, for example, shows that in Kansas, 0.1 percent of the population visits museums on an average day. However, the standard error of this estimate (0.08 percent) is large enough to generate estimates ranging anywhere from 0.23 percent to -0.03, an estimate that translates into zero, or in any case very few people visiting museums.

Attendance at Performing Arts Events on an Average Day, by State: 2006-2010
 90 Percent Confidence Intervals



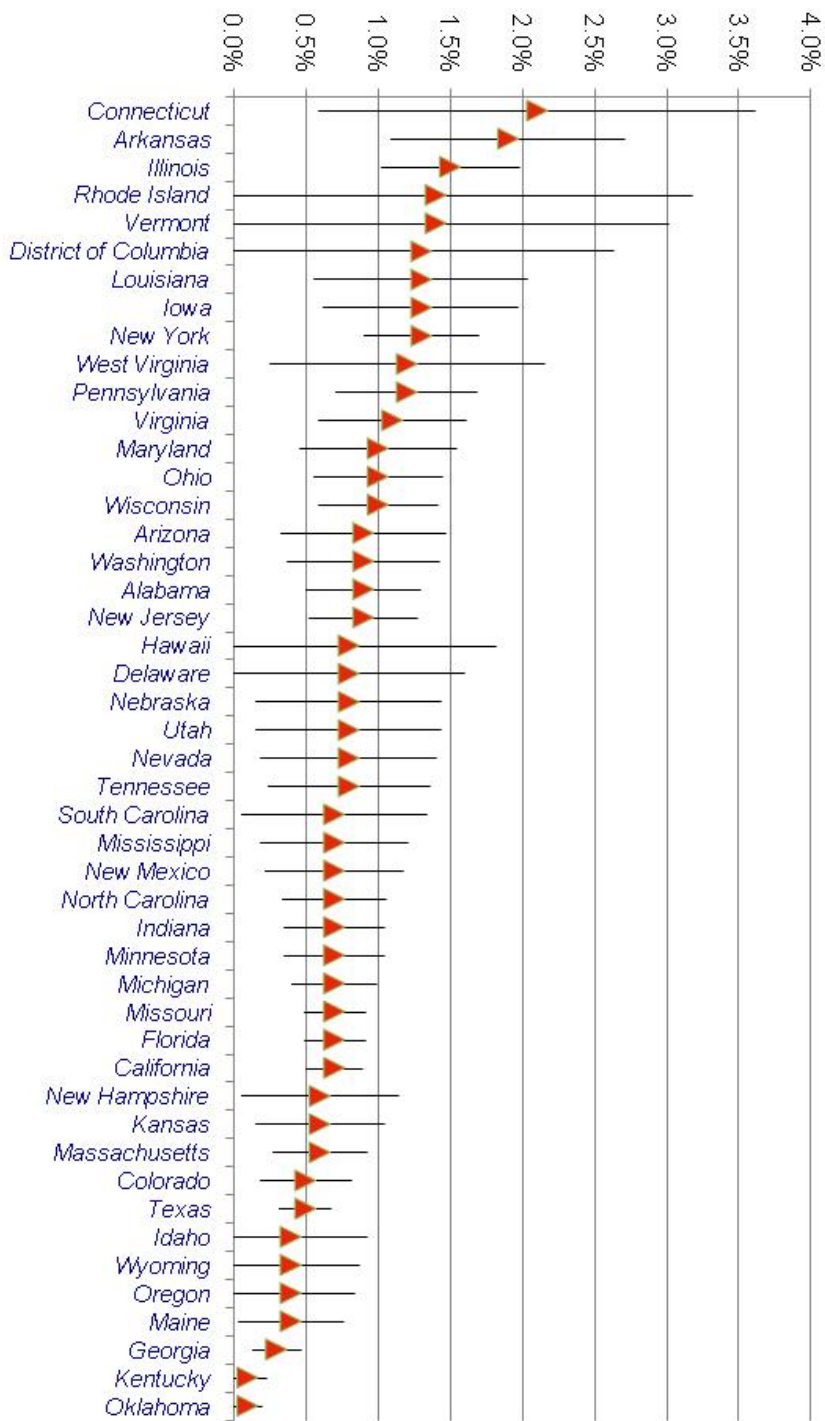
Source: American Time Use Survey, Bureau of Labor Statistics, U.S. Department of Labor
 Key: The triangles are the survey estimates; the top of each vertical line is the upper boundary of the confidence interval; the bottom of each line is that interval's lower boundary.
 Note: Due to either comparatively high standard errors or because the survey estimates do not meet the BLS' standard of data quality, confidence intervals are not reported for the following states: Delaware, the District of Columbia, New Hampshire, Idaho, and Wyoming.

Museum Visits on an Average Day, by State: 2006-2010
 90 Percent Confidence Intervals



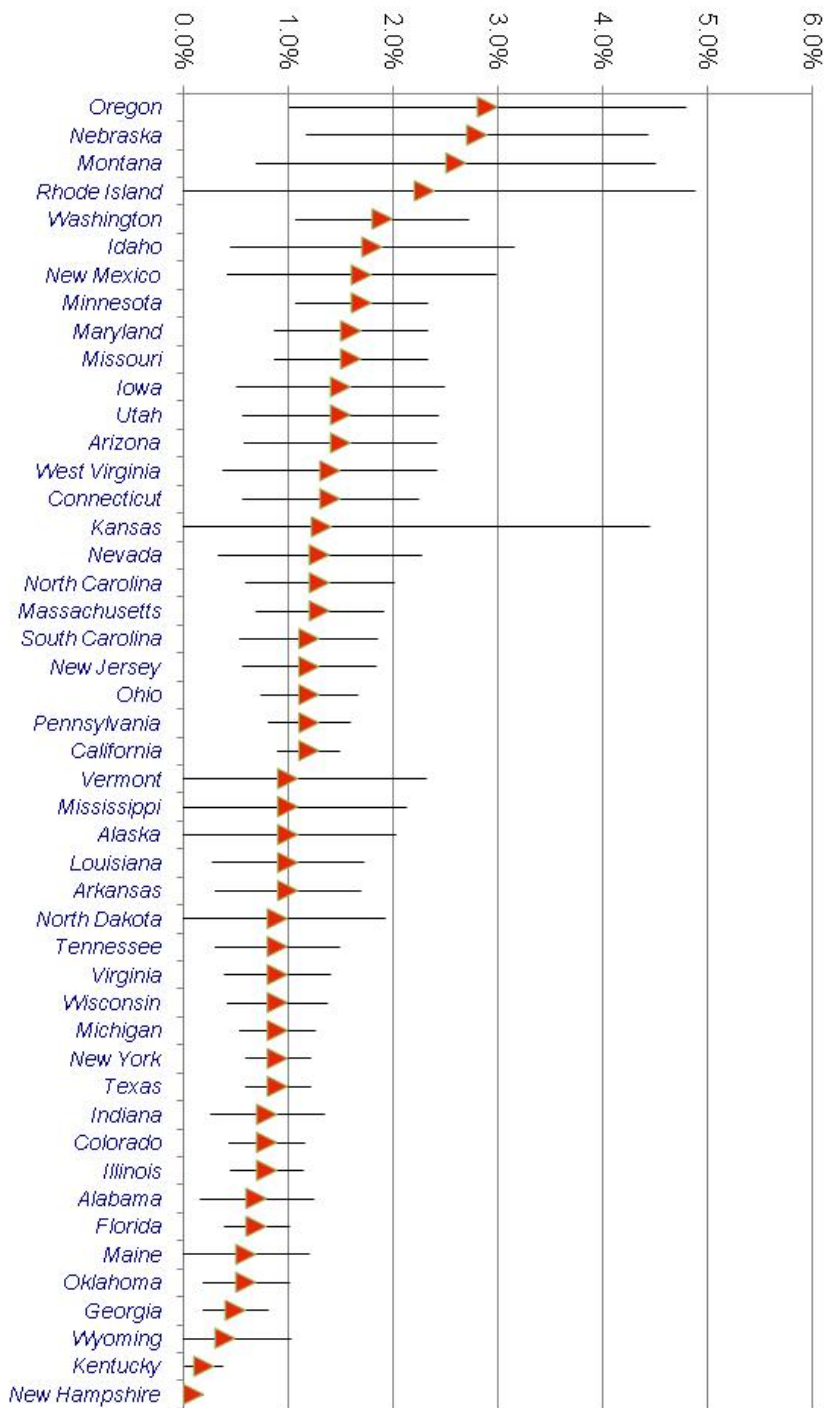
Source: American Time Use Survey, Bureau of Labor Statistics, U.S. Department of Labor
 Key: The triangles are the survey estimates; the top of each vertical line is the upper boundary of the confidence interval; the bottom of each line is that interval's lower boundary.
 Note: Due to either comparatively high standard errors or because the survey estimates do not meet the BLS' standard of data quality, confidence intervals are not reported for the following states: Alaska, the District of Columbia, Hawaii, Idaho, Maine, Mississippi, Montana, Rhode Island, South Dakota, Tennessee, Utah, Vermont, and West Virginia.

Attendance at Other Arts/Entertainment Events on an Average Day, by State: 2006-2010
90 Percent Confidence Intervals



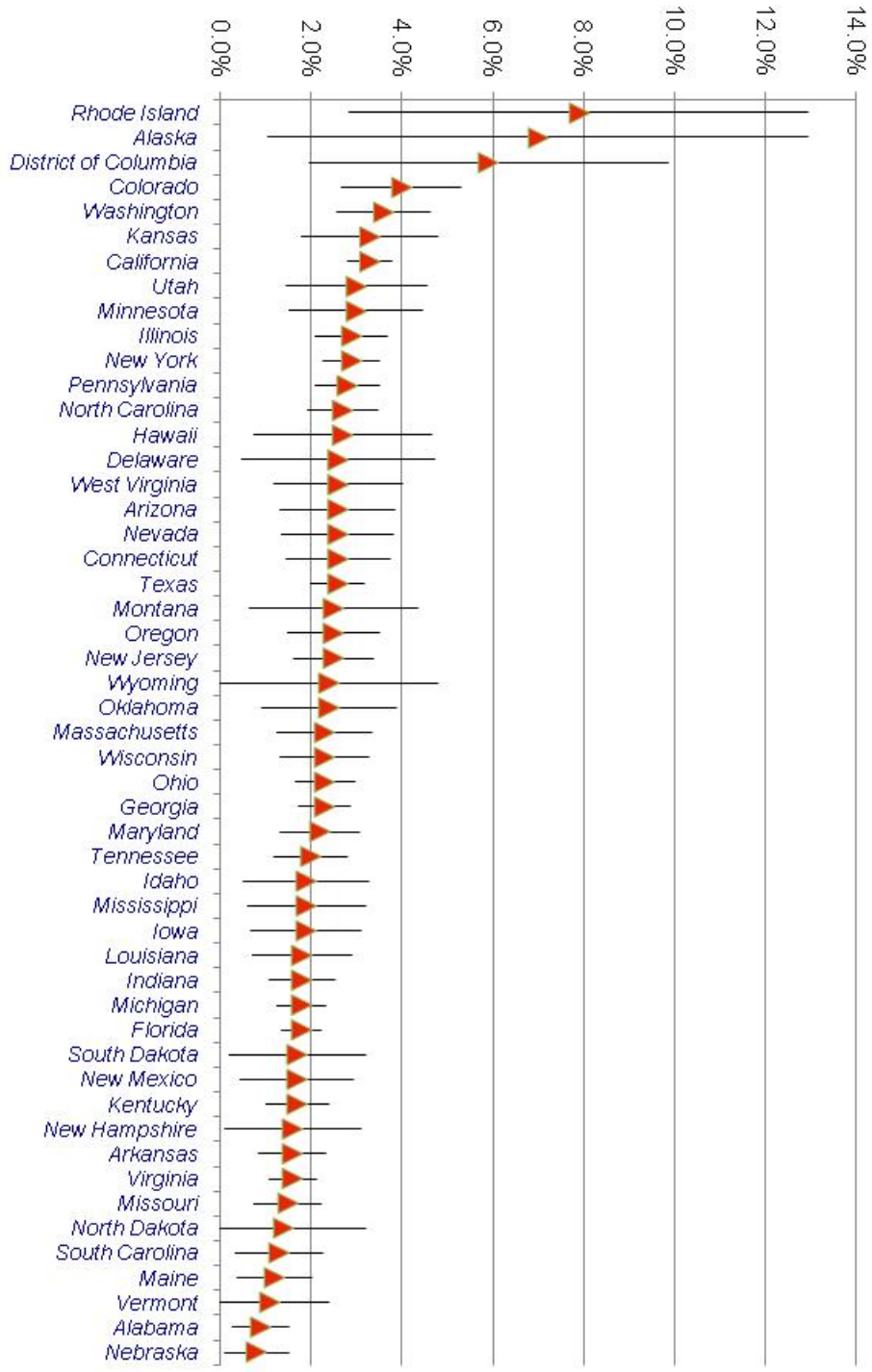
Source: American Time Use Survey, Bureau of Labor Statistics, U.S. Department of Labor
 Key: The triangles are the survey estimates; the top of each vertical line is the upper boundary of the confidence interval; the bottom of each line is that interval's lower boundary.
 Note: Due to comparatively high standard errors, confidence intervals are not shown for Montana, North Dakota, South Dakota, and Alaska.

Percentage Engaged in Arts & Crafts Activities on an Average Day, by State: 2006-2010
 90 Percent Confidence Intervals



Source: American Time Use Survey, Bureau of Labor Statistics, U.S. Department of Labor
 Key: The triangles are the survey estimates; the top of each vertical line is the upper boundary of the confidence interval; the bottom of each line is that interval's lower boundary.
 Note: Due to either comparatively high standard errors or because the survey estimates do not meet the BLS' standard of data quality, confidence intervals are not reported for the following states: District of Columbia, Delaware, Hawaii, and South Dakota.

Percentage Listening to or Playing Music on an Average Day, by State: 2006-2010
 90 Percent Confidence Intervals



Source: American Time Use Survey, Bureau of Labor Statistics, U.S. Department of Labor
 Key: The triangles are the survey estimates; the top of each vertical line is the upper boundary of the confidence interval; the bottom of each line is that interval's lower boundary.