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Office of Research & Analysis

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Pre-Pandemic Estimates of State-Level Arts Participation Patterns

This report is based on selected findings from the Arts Basic Survey (ABS), covering the pre-pandemic months of February 2019 to February 2020.

For each state and the District of Columbia, the report examines selected forms of arts participation, including: attendance at live music, theater, and dance events; attendance at visual art exhibits; touring buildings, parks, or monuments for their historical or architectural and design value; reading literature; playing a musical instrument; performing or practicing singing; taking photographs for artistic purposes; working with pottery or creating other visual art such as paintings and sculptures, and weaving, crocheting, or creating other textile arts.

An additional report, released in tandem with this document, examines national-level demographic characteristics of arts participants.

Analysis suggests that for the majority of states, there is little geographic variation in arts participation. In other words, residents in most states participate at rates similar to those witnessed for the U.S. in aggregate. There are, however, key exceptions. The purpose of this report is to illumine such differences as do arise, and to inquire about state-level factors contributing to those differences.

Summary

1) For most types of arts activity, five states show consistently **higher rates** of arts participation, compared with U.S. adults as a whole. Those states are: **Vermont**, **Minnesota**, **Colorado**, **Montana, Oregon**, and **Utah**.

2) Residents of four southern states—**Alabama, Louisiana, Mississippi, and West Virginia**—participated in most types of arts activity at **lower rates** than did the U.S. adult population.

3) Within each state, the following factors are correlated with rates of arts attendance and literary reading: **educational level, poverty status, and the state's concentration of arts workers**. None of these factors, however, are closely linked to levels of music-instrument playing or working with pottery or creating other visual art within a state.

Beyond these main findings, analysis of the Arts Basic Survey dataset shows notable state-level differences in arts participation rates for selected activity types. For example:

- Photography, as well as working with pottery or creating visual art such as paintings, were popular activities among adults living in **Maine.**
- The rates at which adults living in **Arkansas**, **Missouri,** and **Nebraska** performed or practiced singing was significantly greater than the rate for all U.S. adults.

- Among states with notably high rates of literary reading were **Alaska, Idaho, Montana, South Carolina**, and **Wisconsin.**
- In northern plains and northwest states, including **North Dakota, South Dakota,** and **Wyoming**, arts participation via weaving, crocheting, and doing other textile arts was significantly more popular than for the U.S. as a whole.
- Rates of social dancing—dancing at weddings, clubs, and other social dancing—were high in **Arizona, Maryland**, and **Wisconsin**.

The narrative below, organized by U.S. region, highlights state-level arts participation in comparison with national participation rates. Activities covered include: (1) attendance at live music, theater, and dance performances; (2) attendance at visual art exhibits; (3) touring buildings, parks, or monuments for their historical or architectural and design value; (4) literary reading (i.e., novels and short stories, poetry, or plays); (4) playing a musical instrument; (5) performing or practicing singing; (6) taking photographs for artistic purposes; (7) working with pottery or creating other visual art such as paintings or sculptures; and (8) weaving, crocheting, or creating other textile arts

Accompanying this report are maps showing state-level participation in the activities discussed in this report. State-level data tables containing these and other estimates from the 2020 ABS are available from the National Archive of Data on Arts and Culture.

In this analysis, as well as the accompanying maps and data tables, state-level estimates are reported if their associated coefficients of variation are lower than 30 percent.

Highlights: State-Level Arts Participation, by U.S. Region

Northeast

New England: Connecticut; Maine; Massachusetts; New Hampshire; Rhode Island; Vermont

Middle Atlantic: New Jersey; New York; Pennsylvania

For most of the types of arts activities considered in this research report, when it comes to participation, Vermont residents rate significantly higher than does the overall U.S. population.

During the pre-pandemic period of February 2019 to February 2020, for example, 54.1 percent of adults in Vermont attended a live music, theater, or dance performance. This rate was nearly 22 percentage points higher than the overall U.S. rate.

While 39.9 percent of U.S. adults reported reading literature (novels/short stories, poetry, or plays), the share of Vermont adult residents who did so was 58.4 percent. Vermonters are also more likely than the average U.S. adult to work with pottery or create other visual art such as paintings—20.3 percent versus 10.0 percent.

Vermont joins Maine in high arts engagement rates through weaving, crocheting, or doing other textile arts. In Maine the percentage of adults doing these activities was 19.0 percent, in Vermont, the share was 17.0 percent. These rates were roughly 8 to 9 percentage points greater than U.S. rate.

In addition to Vermont, Connecticut and New Hampshire have higher rates of performing arts attendance —44.4 percent and 42.1 percent, respectively—than does the U.S. adult population as a whole.

Adults residing in New Hampshire also read literature at relatively high rates. At the U.S. level, 39.9 percent of adults reported reading novels/short stories, poetry, or plays; in New Hampshire, the literary reading rate was 47.7 percent.

The share of adults reading literature in Massachusetts was also above the overall U.S. rate—50.0 percent, as was the state's rate of attending art exhibits: 26.2 percent versus 20.2 percent for the U.S.

During the period considered, the share of U.S. adults working with pottery or creating other visual art (e.g., paintings) was 10.0 percent. In Maine, however, the share of adults engaging in those activities was 15.6 percent. Adults living in Maine are also more likely than U.S. adults as a whole to take photographs for artistic purposes—18.9 percent versus the national rate of 10.4 percent.

Maine also ranked highly in weaving, crocheting, and creating other textile arts. In Maine, 19.0 percent created textile arts. This compares with the U.S. rate of 9.2 percent.

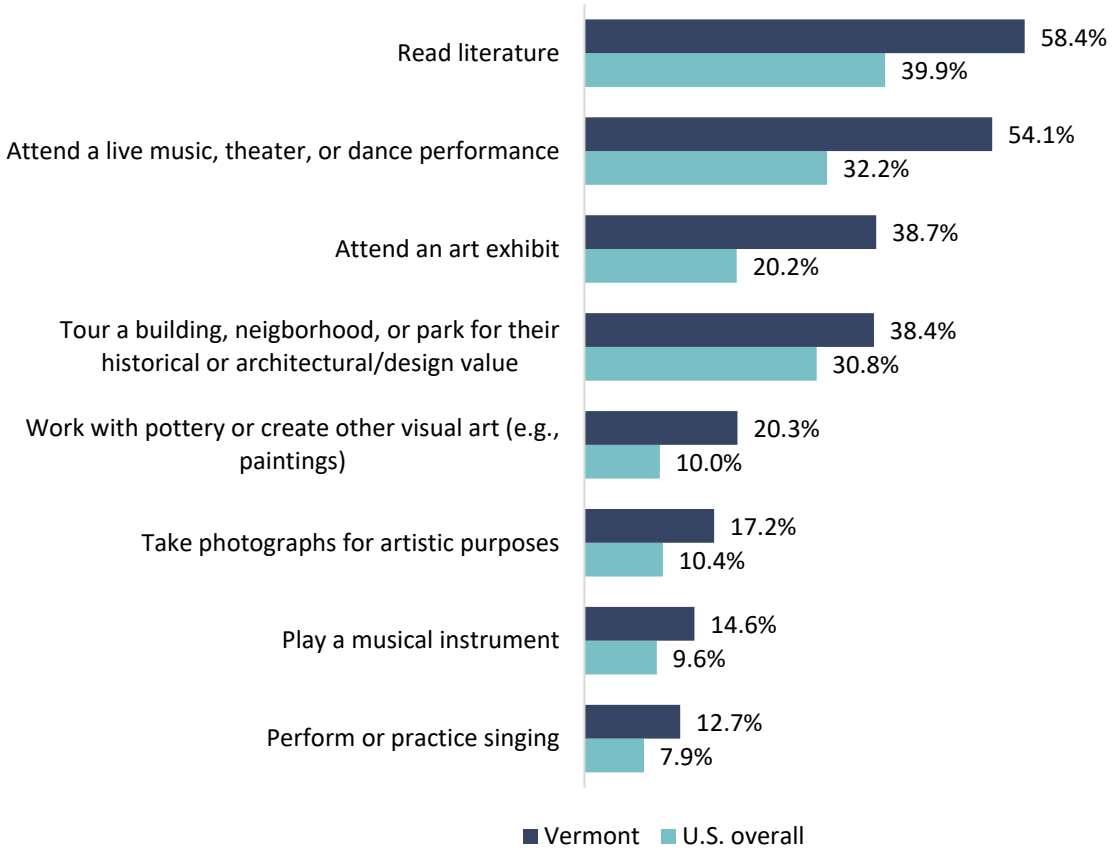
Arts participation rates for Middle Atlantic states were similar to the U.S. rates.

Still, Pennsylvania residents were more likely than the U.S. adult population to report playing a musical instrument and taking photographs for artistic purposes.

For example, the survey shows that 9.6 percent of U.S. adults played a musical instrument in the 12 months ending in February 2020. In Pennsylvania, that share was 13.3 percent.

The share of Pennsylvania's adults who took photographs was 15.0 percent—4.6 percentage points greater than the U.S. rate.

Selected arts participation rates, Vermont vs. U.S.: 2020



Covers the pre-pandemic period of February 2019 to February 2020.
Differences are statistically significant at 90 percent confidence.
Arts Basic Survey, National Endowment for the Arts

Midwest

East North Central: Indiana; Illinois; Michigan; Ohio; Wisconsin

West North Central: Iowa; Kansas; Minnesota; Missouri; Nebraska; North Dakota; South Dakota

In Minnesota, the attendance rate at live performing arts events (music, theater, and dance events) was 45.1 percent, nearly 13 percentage points greater than the U.S. rate of 32.2 percent. Minnesotans are also more likely to tour buildings, parks, or monuments for their historical or architectural and design value. In the period considered, 37.2 percent of adults in the state engaged with this activity, versus 30.8 percent of all U.S. adults. Moreover, the literary-reading rate in this state was nearly 51 percent, 10.8 percentage points greater than the U.S. reading rate of 39.9 percent.

The rate of touring places for historical, architectural, or design value was as similarly high in Nebraska, where 38.4 percent did this activity.

Wisconsin's adult population, like Minnesota's residents, showed an above-average rate of literary reading—48.0 percent.

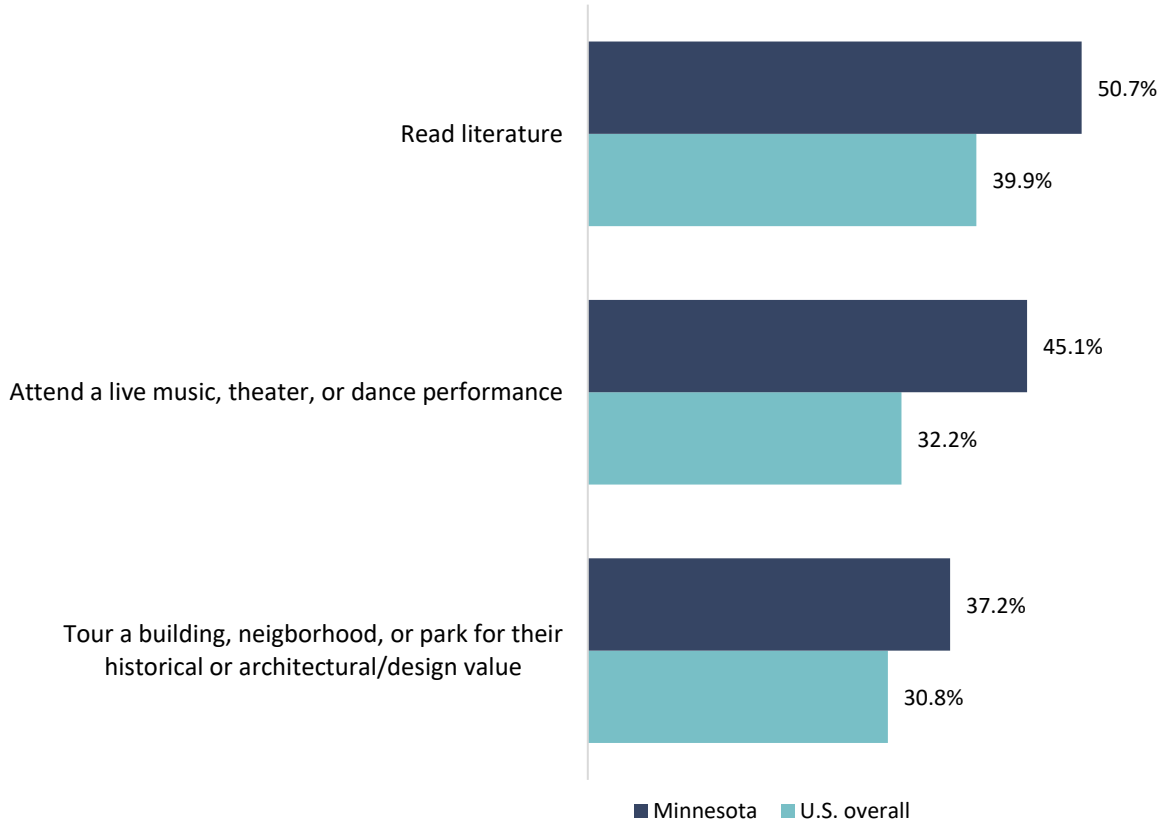
In Ohio, 25.0 percent attended an art exhibit. That rate was nearly five percentage points greater than the rate for the overall U.S. Ohioan adults also played musical instruments at a high rate—roughly 14 percent, a rate shared by Indiana residents— versus 9.6 percent for the U.S. as a whole. Also, in Illinois, the share of adults who took photographs for artistic purposes was six percentage points greater than the U.S rate.

In Nebraska and Missouri, the share of adults who performed or practiced singing was 13.5 percent and 12.1 percent, respectively. Those rates were significantly greater than the overall U.S. rate of 7.9 percent.

In North Dakota, the proportion of adults who worked with pottery or created other visual art such as paintings was 15.2 percent—5.2 points greater than the national rate of 10.0 percent.

North and South Dakotans wove, crocheted, and created other textile arts at above-average rates. Nationally, 9.2 percent of U.S. adults did these activities; in North Dakota, 15.0 percent did them. In South Dakota, the share was 12.2 percent.

Selected arts participation rates, Minnesota vs. U.S.: 2020



Covers the pre-pandemic period of February 2019 to February 2020.
Differences are statistically significant at 90 percent confidence.
Arts Basic Survey, National Endowment for the Arts

South

South Atlantic: Delaware; District of Columbia; Florida; Georgia; Maryland; North Carolina; South Carolina; Virginia; West Virginia

East South Central: Alabama; Kentucky; Mississippi; Tennessee;

West South Central: Arkansas; Louisiana; Oklahoma; Texas

In the District of Columbia, and in neighboring Virginia, the percentage of adults attending live performing arts events and visual art exhibits was significantly greater than the national percentages of adults attending those types of events.

In the 12 months ending February 2020, 50.0 percent of the District's adults went to a live music, theater, or dance event; in Virginia, 41.9 percent attended. Those rates compare with 32.2 percent of U.S. adults attending live performing arts events.

The District and Virginia also witnessed above-average rates of touring buildings, neighborhoods, parks, and monuments for their historical or architectural and design value. In both areas, the percentage of adults doing this activity exceeded 40 percent, well above the 31 percent reported for all U.S. adults.

In addition, the District's residents are more likely than the average U.S. adult to take photographs for artistic purposes. In the period considered, 22.6 percent of the Capitol's residents engaged with this activity, versus 10.4 percent of all U.S. adults.[1]

In South Carolina, the percentage of adults who read literature was 48.2 percent, 8.3 percentage points greater than the U.S. rate of 39.9 percent.

In Arkansas, performing and practicing singing is popular. In pre-pandemic 2020, 16.0 percent of Arkansas' residents engaged with this activity. By contrast, the overall U.S. rate was 7.9 percent.

For Maryland, North Carolina, and Tennessee, participation in most of the art forms tracked by the 2020 ABS were similar to those of the overall U.S.

In Maryland, for example, 33.9 percent of adults went to a live music, theater, or dance performance during the period considered. This rate was comparable to the 32.2 percent reported for the U.S., as a whole, once the ABS design is considered.

Live performing arts attendance rates comparable to the overall U.S. estimate were also found in North Carolina (31.4 percent) and Tennessee (36.5 percent). All three of those states also experienced visual arts-attendance rates similar to the U.S. rate, which was 20.2 percent.

[1] The percentage of adults living in Virginia who take photographs for artistic purposes was 10.8 percent, a share comparable to the U.S. figure.

For some southern states, however, arts participation rates were below-average. This is particularly true of Alabama, Mississippi, Louisiana, and West Virginia. Most of these states lag behind national arts participation rates in: attendance at live music, theater, and dance performances; attendance at visual art exhibits; touring buildings, neighborhoods, parks, or monuments for their historical or architectural and design value; and reading literature, though the literary-reading rate in West Virginia (38.8 percent) was on par with the U.S. rate.[2]

In Alabama, for example, 16.2 percent of adult residents attended a live performing arts event; 10.5 percent saw a visual art exhibit. For U.S. adults in general, those rates were 32.2 percent and 20.2 percentage, respectively.

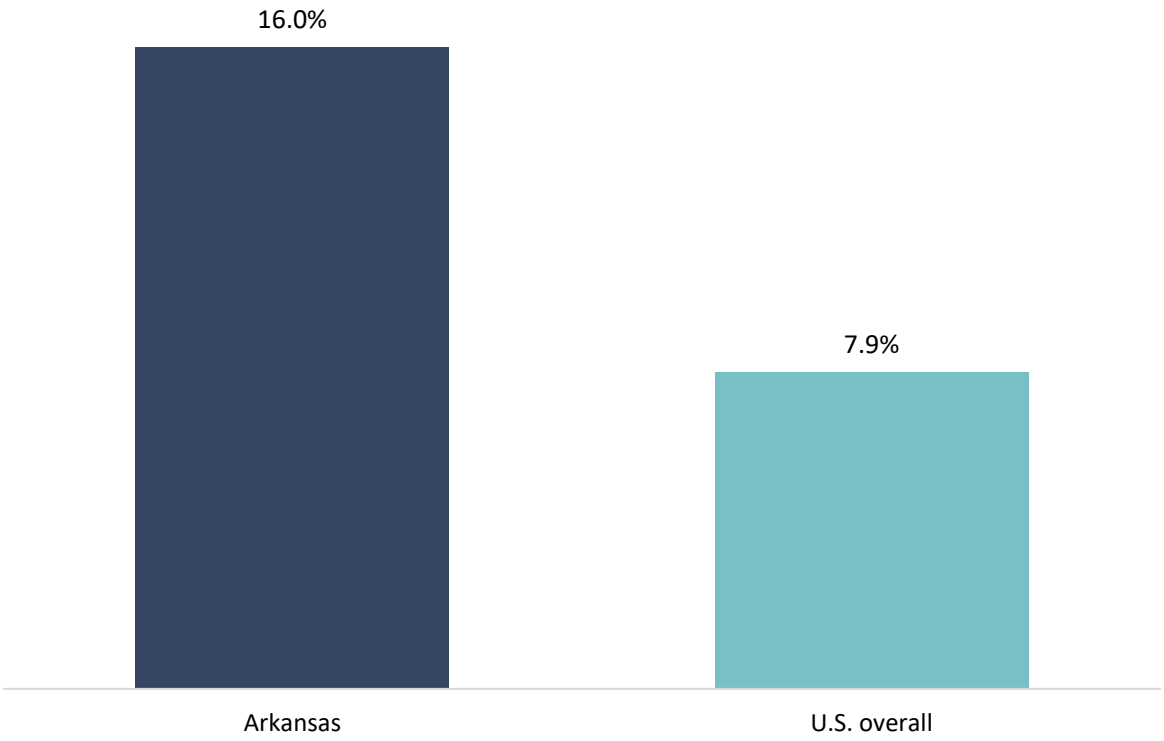
During the 12 months ending February 2020, nearly 40 percent of U.S. adults reported reading literature—novels or short stories, poetry, or plays. In Mississippi, the percentage of adults reading literature was 24.3 percent. The literary reading rates was also below average in: Alabama (23.7 percent) and Louisiana (28.9 percent).

In addition to attending live performing arts events and visual art exhibits at below-average rates, Louisiana and West Virginia join Alabama and Mississippi in reflecting low rates of touring buildings, neighborhoods, parks, and monuments for their historic or architectural/design value.

In pre-pandemic 2020, 21.6 percent of adults in Louisiana toured these sites; in West Virginia, the share was 22.4 percent. Those rates are well below the U.S. average of 30.8 percent.

[2] The coefficient of variation corresponding to the estimate of adults residing in Mississippi who attended visual art exhibits during the year ended February 2020 is 31.3, a value that exceeds the NEA's reporting criterion.

Percent of adults who perform or practice singing, Arkansas vs. U.S.: 2020



Covers the pre-pandemic period of February 2019 to February 2020.
Differences are statistically significant at 90 percent confidence.
Arts Basic Survey, National Endowment for the Arts

West

Mountain: Arizona; Colorado; Idaho; New Mexico; Montana; Utah; Nevada; Wyoming

Pacific: Alaska; California; Hawaii; Oregon; Washington

Several western states exhibit above-average arts participations rates, in particular, Colorado, Montana, Oregon, and Utah. These four states outperform the U.S. in nearly all of the arts participation activities covered in this report.

Over the 12 months ending in February 2020, residents in each of these states were more likely to attend live performing arts events, go to visual art exhibits, and tour buildings, neighborhoods, parks, and monuments for their historical or architectural/design value.

For example, while 32.2 percent of U.S. adults went to a live music, theater, or dance event, the attendance rate for adults residing in Oregon was 43.5 percent; in Montana, it was 40.5 percent.

In Colorado, the share of adults who attended a visual art exhibit was 35.8 percent—a rate more than 15 points greater than the U.S. rate overall.

Arizona joins Colorado, Montana, Oregon, and Utah in attendance rates exceeding the overall U.S. rates for going to live performing arts events and touring buildings, parks, etc. for their historical or architectural/design value. For the period considered, 30.8 percent of all U.S. adults did this kind of touring, but in Arizona, 40.0 did so. Also, Arizona's attendance rate at live music, theater, and dance events was nearly 11 percentage points greater than for the overall U.S.

Considering literary reading, residents of Colorado reported among the highest rates in the country. Approximately 40 percent of all U.S. adults read literature (novels/short stories, poetry, or plays); in Oregon, 66.2 percent (a majority of the state's residents) did this activity.

Additionally, the share of adults who read literature in Alaska was also above-average — (55.1 percent), and 47.0 percent of Idaho's residents read literature—a rate statistically greater than the national literary-reading rate.

Residents of both Alaska and Idaho engaged in weaving, crocheting, and other textile arts at rates exceeding the U.S. rate of 9.2 percent—16.0 percent (Alaska) and 14.4 percent (Idaho).

Of the western states, only Utah witnessed not only above-average attendance and literary-reading rates, but also rates of personal performance and creation greater than for the U.S. as a whole. For example, just under 10 percent of all U.S. adults reported playing a musical instrument, but in Utah, the share was 17 percent. Performing or practicing singing was done by 7.9 percent of the U.S. adult population; in Utah, nearly 18 percent did this activity.

In Utah, nearly 21 percent of adults did weaving, crocheting, or other textile arts. Fewer than 10 percent of all U.S. adults did so.

Roughly one in ten U.S. adults took photographs for artistic purposes, or worked with pottery or created other visual art such as paintings or sculptures. This rate compares with one in four Utah residents who engaged with those activities.

While attendance rates in the state of Washington tended to be statistically similar to those of the overall U.S., Washington residents read literature at above-average rates—48.2 percent, or more than 8 percentage points greater than the national average.

Additionally, and like Utah, Washington residents are more likely than the typical U.S. adult to personally perform or create art. For all such activities tracked by this analysis, Washington residents participated at rates greater than the overall U.S.

While residents of Wyoming tended to participate in the arts at rates similar to the U.S., the percentage of Wyoming's adults who weave, crochet, or create other textile arts was above average—13.3 percent.

California, Nevada, and Hawaii residents, alternatively, tended to participate in the arts at rates below the U.S. rates overall. Over the 12 months ending in February 2020, just 28.2 percent of Californians attended a live music, theater, or dance event. This rate was four percentage points lower than for the U.S.

While 30.8 percent of all U.S. adults toured buildings, neighborhoods, parks, and monuments for historical or architectural/design value, the share of Nevadan adults doing those activities (16.0 percent) was nearly half that rate.

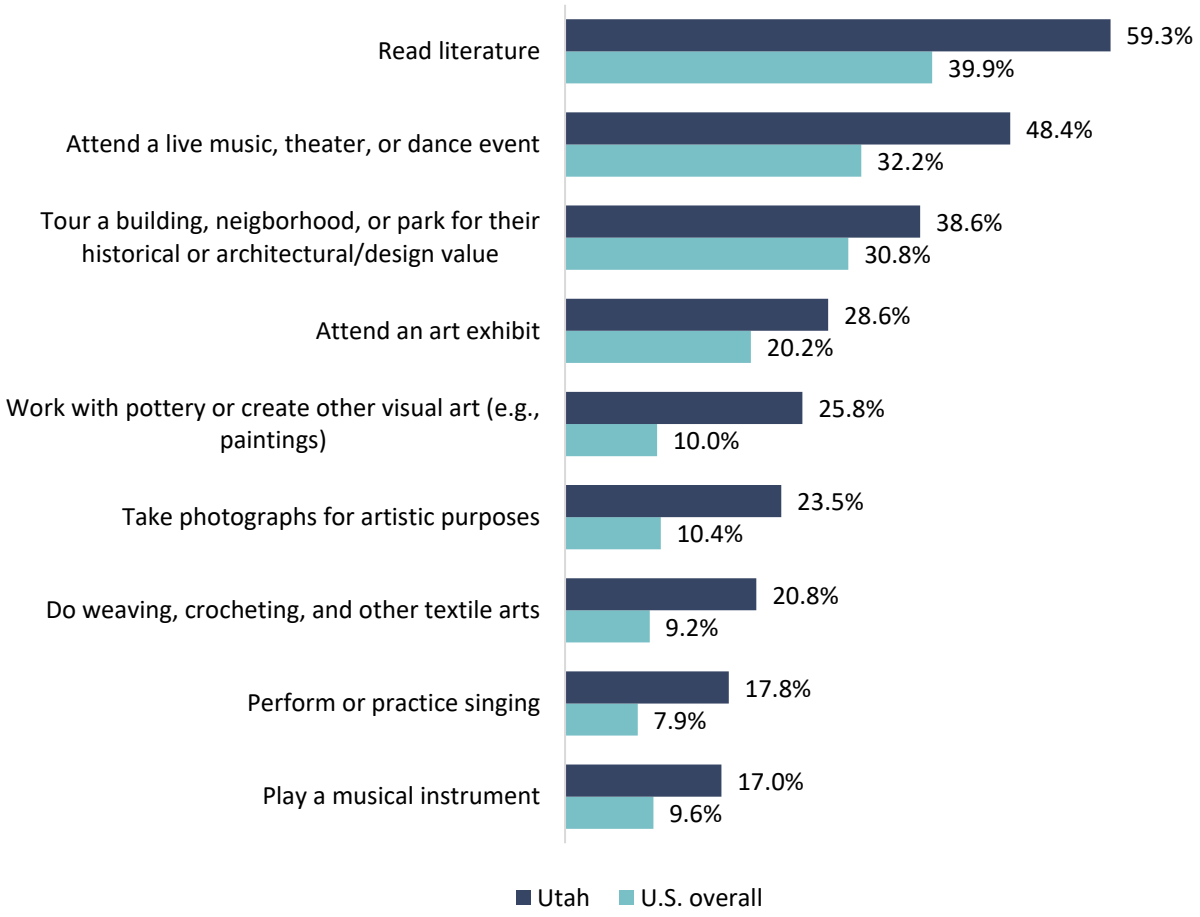
All three states witnessed literary reading rates below the overall U.S. rate of 39.9 percent: California (32.2 percent); Nevada (26.5 percent); and Hawaii (27.8 percent).

Percent of Washington residents who perform or create art: 2020

	Washington	U.S.
Take photographs for artistic purposes	18.9%	10.4%
Work with pottery or create other visual art (e.g., paintings)	17.5%	10.0%
Do weaving, crocheting, and other textile arts	16.6%	9.2%
Play a musical instrument	16.2%	9.6%
Perform or practice singing	14.3%	7.9%

Covers the pre-pandemic period of February 2019 to February 2020.
Differences are statistically significant at 90 percent confidence.
Arts Basic Survey, National Endowment for the Arts

Selected arts participation rates, Utah vs. U.S.: 2020



Covers the pre-pandemic period of February 2019 to February 2020.
Differences are statistically significant at 90 percent confidence.
Arts Basic Survey, National Endowment for the Arts

Social Dance

State-level estimates from the 2020 Arts Basic Survey are unreliable for tracking the shares of adults who "perform or practice" dance. (The coefficients of variation for most states exceed 30 percent.[1]) Nevertheless, the survey does permit reporting of state-level estimates for the percentage of adults who engage in social dancing—i.e., dancing at weddings, clubs, or other social settings.

As with many types of arts participation covered in this report, Vermont and Utah exhibited high shares of adults who did social dancing. Approximately 31 percent of adults in both states did this activity during the year ended February 2020. The share of U.S. adults who did social dancing was 22.5 percent.

States such as Alabama, Mississippi, Nevada, and West Virginia score significantly below the U.S. rate of social dancing. In each state, roughly 11-14 percent did this activity.

Still, for social dancing, there are state patterns not witnessed in other forms of arts participation. In New England, for instance, residents of Rhode Island are more likely than the average U.S. adult to do social dancing—at a 33.4 percent rate, compared with the national rate of 22.5 percent, respectively.

In the Midwest, social dancing rates are high in Illinois (28.6 percent), Nebraska (30.7 percent), and Wisconsin (30.1 percent).

Although not a state, the District of Columbia ranks particularly high in the share of residents doing social dancing—37.6 percent—as does the District's neighboring state of Maryland, where 31.6 percent did this activity.

As for the Western states, Utah is not alone in ranking significantly higher than the overall U.S. in social dancing. In the 12 months ending in February 2020, 31.2 percent of Arizona's adults danced socially.

Why Some States Exhibit Higher (or Lower) Estimates of Arts Participation

Variations in state-level patterns of arts participation naturally raise questions about reasons for such differences. According to the ABS, as has been shown, residents of states such as Colorado and Utah participate in many types of arts activity at high rates, while residents of states such as Mississippi and West Virginia are less likely to do so.

To understand factors that may reflect differences in arts participation, by state, this report uses correlation analysis. The following section investigates relationships between selected forms of state-level arts participation and three socioeconomic variables: percentage of state population holding a bachelor's degree or higher level of education; percentage of a state population living below poverty; and state-level concentration of workers employed to produce arts and cultural goods and services.[3]

Arts participation variables figuring in this analysis included: attendance at live performing arts events; attendance at visual art exhibits; literary reading; and engagement in selected personal performance and creation activities—playing a musical instrument; taking photographs for artistic purposes; working with pottery or creating other visual art such as paintings or sculptures; and doing weaving, crocheting, and other textile arts. For each of these activities, 9 percent or more of the U.S. population participates.

The analysis uses Pearson's pairwise correlation. The correlation coefficient ("r") measures the strength and direction of the relationship between two variables, ranging from 0 to 1, and can be either positive or negative.

Strength of correlation is defined as: (1) strong ("r" of 0.5 or greater); moderate ("r" of less than 0.5, but greater than 0.3); and weak ("r" is 0.3 or smaller). The correlation coefficient can be either positive or negative.

Statistical significance was tested at 90 percent confidence.

[3] At the national level, logistic regression models, using individual responses to the ABS, showed that adults living in metropolitan statistical areas (i.e., urban areas) were more likely to attend live performing arts events. At the state level, however, the correlation coefficients relating metro status and arts participation are small and not statistically significant.
Unlike the national level logistic regression models, which used dichotomous, categorical, and ordinal data for each ABS respondent, the correlation analysis reported here uses quantitative, linear data, aggregated for each state and the District of Columbia. This analysis permits a more direct examination of the predictive power between selected socioeconomic variables and the forms of arts participation considered.

Arts and cultural goods and services include a broad array of commodities, including: arts performances (e.g., concerts, plays, and dance performances); museum exhibits; works by independent artists and writers; architectural and specialized designs (e.g., interior designs, industrial/commercial designs, and graphic designs); motion pictures and sound recordings; web-published and streamed artistic content; and the construction of new cultural facilities such as theaters and libraries.

A state's concentration of workers employed to produce arts and cultural goods and services is measured by a "location quotient" (LQ). An LQ measures an industry's state-level concentration of arts and cultural employment relative to the share of those workers in the U.S. For example, an LQ of 1.2 indicates that the state's employment in arts and cultural industries is 20 percent greater than the share of workers employed in those industries nationwide. An LQ of 0.8 indicates that the state's share of employment in arts and cultural industries is 20 percent below the share of workers in those industries at the U.S. level.

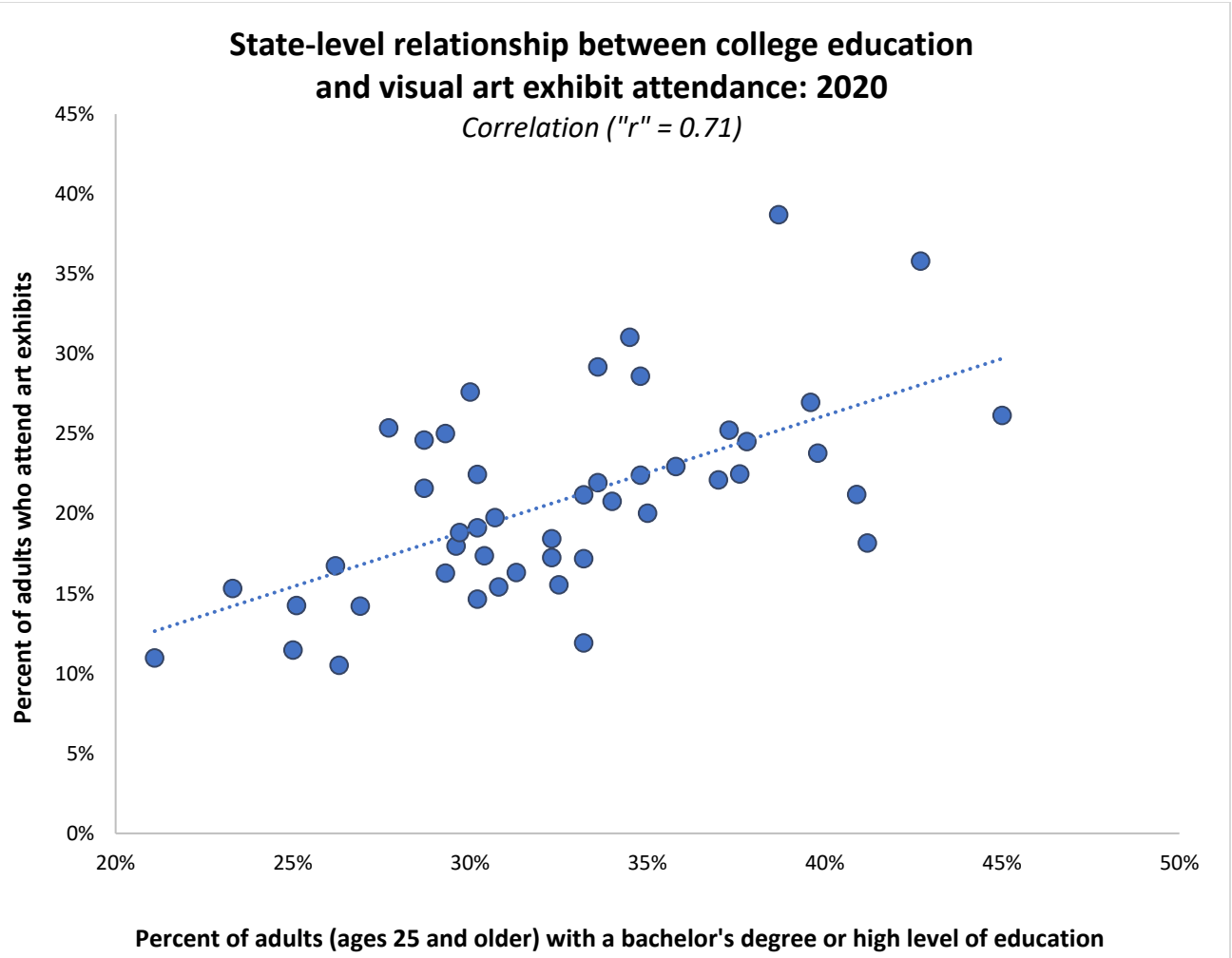
The LQs used for this analysis came from the Arts and Cultural Production Satellite Account (ACPSA), a joint product of the U.S. Bureau of Economic Analysis and the National Endowment for the Arts.

Attendance at Live Performing Arts Events and Visual Art Exhibits

At the state level, attendance at visual art exhibits and at live performing arts events—music, theater, and dance performances—is strongly associated with the percentage of the state's population that holds a bachelor's degree or higher level of education. The associated correlation coefficients are +0.65 (live performing arts attendance) and +0.71 (visual art exhibit attendance).

The percent of a state population living in poverty is also correlated—but negatively—with arts attendance. The negative correlation between poverty and live performing arts attendance is strong (r is -0.54), and moderate in the case of poverty and visual art attendance (r=-0.27).

As with college education, a state's concentration of arts and cultural workers is associated with attendance at live performing arts events (r= 0.46) and visual art exhibits (r= 0.63).



Arts Basic Survey, National Endowment for the Arts

Reading Literature

As with attendance at arts events, the reading of novels and short stories, poetry, or plays is correlated with educational attainment, poverty, and the concentration of workers employed to produce arts and cultural goods and services.

For literary reading and these three socioeconomic variables, however, the correlation coefficients are rather smaller than those observed for arts attendance.

For example, the coefficient between literary reading and share of state population with a college degree is +0.45; poverty, the (negative) coefficient is -0.44. Between literary reading and a state's concentration of arts and cultural workers, the association is + 0.34. Each of these correlation coefficients is statistically significant, but they suggest moderate associations.

Creating or Performing Art

Similar to arts attendance, taking photographs for artistic purposes is strongly and positively associated with educational attainment and concentration of arts and cultural workers. It is also moderately and negatively correlated with poverty.

High levels of college training, as well as a strong arts workforce, appear to have no connections with engaging in the arts by personally playing musical instruments. State-level concentrations of poverty, on the other hand, appear to discourage this activity, albeit, only moderately.

The correlation coefficients between playing a musical instrument and the share of state populations with bachelor's degrees or higher levels of education, as well as between playing music and state concentrations of arts workers, are smaller than 0.20. Moreover, the coefficients are not statistically significant.[4]

The value of "r" between playing instruments and state-level concentrations of poverty is statistically significant, but the coefficient is -0.34, considerably smaller than the -0.54 coefficient associated between attending live performing arts events and poverty.

The analysis suggests that the correlations between working with pottery or creating other visual art (e.g., paintings, sculptures) and the socioeconomic variables considered are moderate—the correlation coefficients for education, poverty, and state concentration of arts workers range from roughly 0.30 to 0.40.

Of the socioeconomic variables examined, only poverty is significantly correlated with weaving, crocheting, or creating other forms of textile art. The value of "r" is -0.46, suggesting a moderate to strong, but negative, correlation between doing textile arts and poverty.

[4] Statistical significance was tested at 90 percent confidence.

Illustration

As an illustration of this correlation analysis, consider that the percentage of adults attending live performing arts events in the year ending February 2020 was 14.6 percentage points greater in Colorado than in it was in the overall U.S.—46.8 percent versus 32.2 percent. The rate at which Coloradans went to visual art exhibits was 15.6 points greater.

More than half of this state's adults reported reading literature, while at the U.S. level, 40 percent read these works.

In 2019, relative to the overall U.S. experience, greater shares of Colorado's residents (ages 25 and older) held bachelor's degrees or higher levels of education—42.7 percent (Colorado) versus 33.1 percent (overall U.S.).

In addition, 10.3 percent of Colorado's state residents lived in poverty. At the U.S. level, the share of people in poverty was 12.3 percent.

Colorado also ranks highly in the share of its workforce employed to produce arts and cultural goods and services. In 2019, the state ranked 15th, among all states, for this type of employment.[5]

Residents of Texas, alternatively, are less likely than the average U.S. adult to attend arts events or read literature. In the year ending February 2020, 26.0 percent of the state's adults attended a live music, theater, or dance performance, and 15.4 percent went to a visual arts exhibit. The literary-reading rate in this state was 34.0 percent.

In 2019, the share of Texans aged 25 and older who held college degrees was 30.8 percent, somewhat lower than the U.S. share of 33.1 percent. Texans were also more likely to live in poverty—14.7 percent versus 12.3 percent at the U.S. level.

And although Texas' overall economy is large, its concentration of workers employed to produce arts and cultural goods and services was 11 percent below the U.S. share of arts and cultural workers in 2019.[6]

As the correlation analysis suggests, however, the socioeconomic conditions present in this state do not appear to dampen arts participation when it comes to musical instrument-playing or working with pottery or creating other visual art.

In Texas, the share of adults who reported playing a musical instrument in the year ending February 2020 was 7.9 percent, a rate statistically comparable to the 9.6 percent of all U.S. adults who played music. The percentage of Texans who work with pottery or create visual art such as paintings or sculptures (8.2 percent) was also not significantly different from the U.S. rate (once the ABS survey design is considered). [7]

[5] See Arts and Cultural Production Satellite Account, U.S. Bureau of Economic Analysis.
[6] In 2019, Gross Domestic Product in Texas was $1.9 trillion, second only to California's GDP of $3.0 trillion.
[7] The share of adults in Colorado who reported playing a musical instrument was 13.4 percent, a percent comparable to the overall U.S. rate, once the design of the Arts Basic Survey is considered. The percentage of Coloradans who worked with pottery or created other visual art—18.8 percent--exceeded the U.S. rate by nearly 9 percentage points.

State-level relationships between selected forms of arts participation and selected demographics

Correlation coefficient, "r"

	Attend a live performing arts event	Attend visual art exhibit	Read literature	Play a musical instrument	Take photographs for artistic purposes	Work with pottery or create other visual art such as paintings	Do weaving, crocheting, or other textile arts
Percent of population with a bachelor's degree or higher level of education[1]	+0.65*	+0.71*	+0.45*	+0.14	+0.48*	+0.29*	+0.09
Percent of population below poverty	-0.54*	-0.27*	-0.44*	-0.34*	-0.32*	-0.38*	-0.46*
Concentration of workers producing arts and cultural goods and services	+0.46*	+0.63*	+0.34*	+0.18	+0.51*	+0.35*	+0.15

Correlation refers to Pearson's pairwise correlation.

* Statistically significant at 90 percent confidence.

[1] Ages 25 and older

Data sources: 2020 Arts Basic Survey, National Endowment for the Arts; 2019 American Community Survey, U.S. Census Bureau

Technical Notes

The state-level estimates presented in this document were based on the 2020 Arts Basic Survey, which covered the pre-pandemic period of February 2019 to February 2020. Only those estimates with corresponding coefficients of variation (CV) of less than 30 percent are reported.

The analysis compares state-level estimates of arts participation with overall U.S. estimates. Due to overlapping confidence intervals, the analysis does not attempt to compare one or more state-level estimates with those for other states.

The graph below shows state-level estimates, and their corresponding confidence intervals, for reading literature (novels, short stories, poetry, and plays). At first glance, residents of the state of Oregon appear to have the highest literary-reading rate in the nation—66.2 percent. However, once the ABS' survey design is considered, Oregon's high reading rate ranges from a low of 59.7 percent to a high of 72.2 percent. These confidence intervals overlap with other states showing high reading rates: Utah, Vermont, Montana, Alaska, and Colorado.

The literary-reading rate in each of these states surpasses the U.S. rate, as do the rates in: Minnesota; Massachusetts; South Carolina; Washington; Wisconsin; New Hampshire; and the District of Columbia.

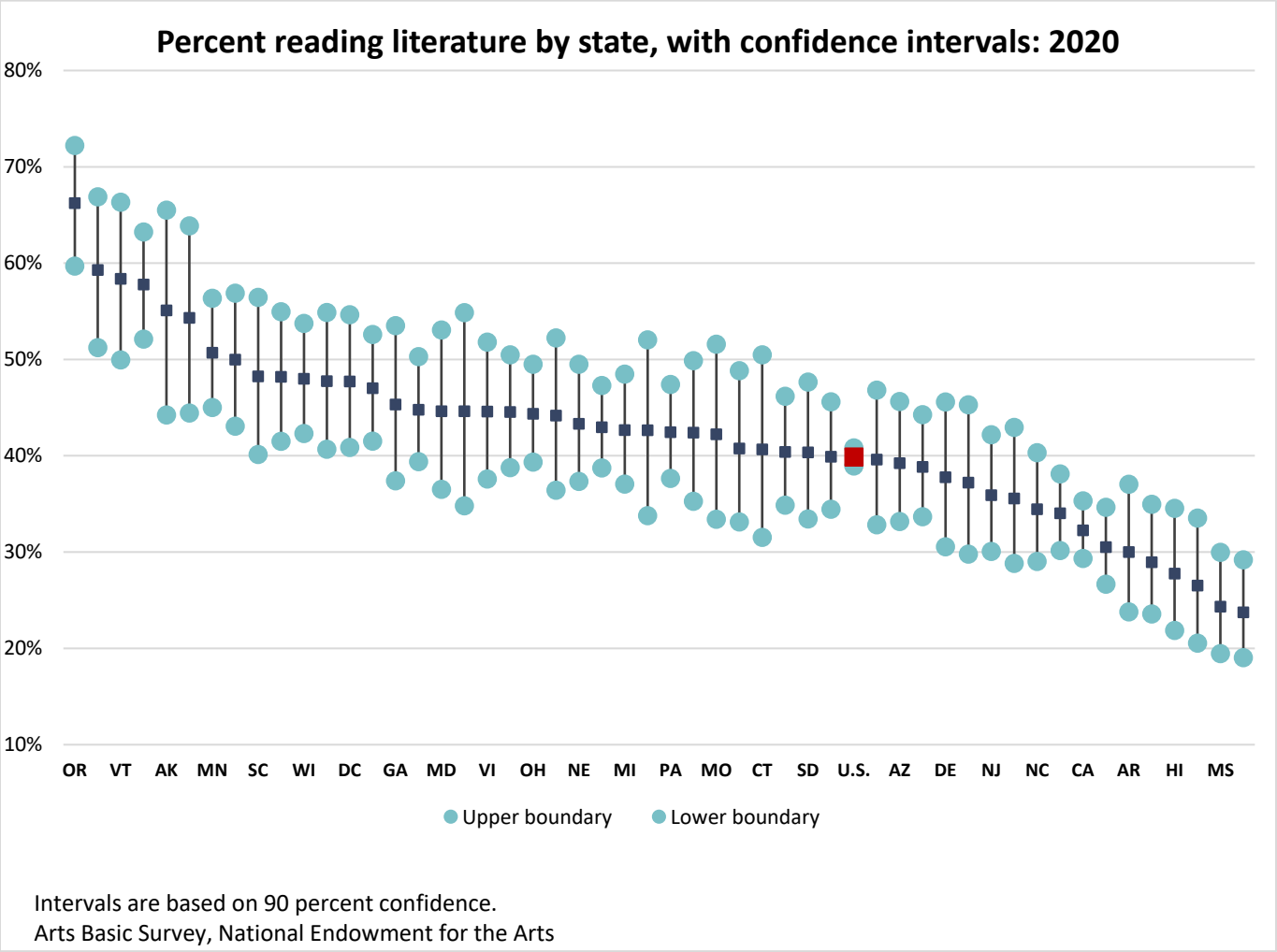
Respondents to the 2020 Arts Basic Survey were assigned one of two sets of questions.[8] The first set of ABS questions concerned personal performance and creation such as playing a musical instrument, performing or practicing singing, taking photographs for artistic purposes, working with pottery or creating other visual art such as paintings and sculptures, and weaving, crocheting, or creating other textile arts.

The second set of questions pertained to attendance at arts events (e.g., live performing arts, visual art exhibits) and reading literature.

Each set of questions in the 2020 ABS contained approximately 17,000 respondents, a tally that includes spouse proxy respondents.

Additionally, no respondent answered questions in both parts of the survey.

[8] For a complete list of ABS questions, see the technical documentation to the *Current Population Survey, February 2020, Arts Benchmark Survey File*.



Intervals are based on 90 percent confidence.
Arts Basic Survey, National Endowment for the Arts