Do Grants from the National Endowment for the Arts Represent a Wealth Transfer from Poorer to Wealthier Citizens?

By:

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Summary of findings

In the March 2013 budget resolution for FY 2014, the House Committee on the Budget raised concerns that the activities and content funded by the National Endowment for the Arts (NEA) constitute "a wealth transfer from poorer to wealthier citizens." Although the idea that the NEA derives its funding from poorer citizens seems dubious, the argument that NEA-funded activities are "generally enjoyed by people of higher-income levels" is worthy of exploration. This research examines the accuracy of this argument through data-driven inquiry.

Our analysis seeks to understand if relationships exist between NEA funding and community wealth. To accomplish this, we focus on the following question: **Does NEA grant-making show bias towards arts organizations in wealthier communities, constituting an inter-community transfer of wealth?** We compare the community wealth characteristics of all arts organizations receiving NEA grants to the community wealth characteristics of all arts organizations that did not receive NEA grants. We are looking for empirical evidence that organizations receiving grants are situated in wealthier communities, which would support the inter-community wealth transfer hypothesis.

The House Committee on the Budget's concern regarding wealth transfer raises the more general concern of whether the arts disproportionally serve wealthier individuals. This raises the following question: Do the arts – and therefore government funding for the arts – constitute an allocation of disproportionate benefits to the wealthy? Understanding the relationship of overall arts attendance and community characteristics is important for two reasons: 1) The set of arts organizations that apply for and receive NEA funding changes annually, and 2) 40% of the NEA's grant funds are distributed to state arts agencies for re-granting, so organizations that may or may not receive direct funding from the NEA benefit from federal funds indirectly through their state funding. We examine the correlations between community wealth characteristics and arts attendance across a large sample of arts organizations. We are looking for empirical evidence that supports the hypothesis that wealthier individuals are more likely to attend and therefore benefit from the arts than poorer individuals.

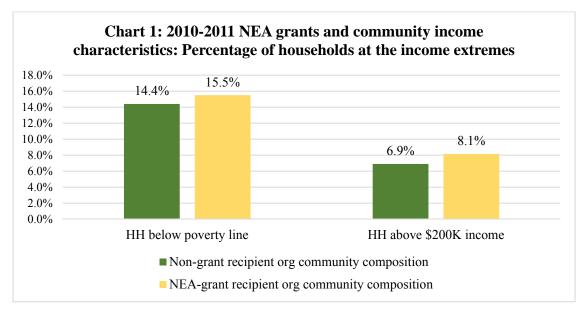
Finding 1: NEA grants do not favor arts organizations in wealthier communities; instead, funding is more often awarded to economically diverse communities with a higher percentage of households that are wealthy and a higher percentage of households that are below the poverty line.

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We approached our analysis by examining both median household income and income diversity. Based on a comparison of median household income, the community wealth characteristics of NEA grant recipient organizations and those of non-recipient organizations are remarkably similar. Specifically, there is no significant difference in median household income in communities with an NEA-funded organization and those without.² This finding indicates that there is no bias in NEA grant-making either towards or against organizations on the basis of the median household income of the surrounding community.

We also looked into differences in the distribution of household incomes within communities touched and untouched by NEA funding. As shown in Chart 1, there are slight income distribution differences in communities where organizations receive NEA funding and communities where no organizations receive NEA funds. On average, NEA grant-recipient communities have a slightly higher percentage of households at both extremes; that is, there is a higher percentage of households below the poverty line in the communities of NEA grant recipients than in communities without an NEA grant recipient and the same trend holds true for percentage of households with incomes over \$200,000. This data shows that NEA funding is more often granted to organizations in more economically diverse communities that feature a larger percentage of wealthier and poorer households. In both NEA grant-recipient and non-recipient communities, the proportion of poorer households outweighs wealthier households.



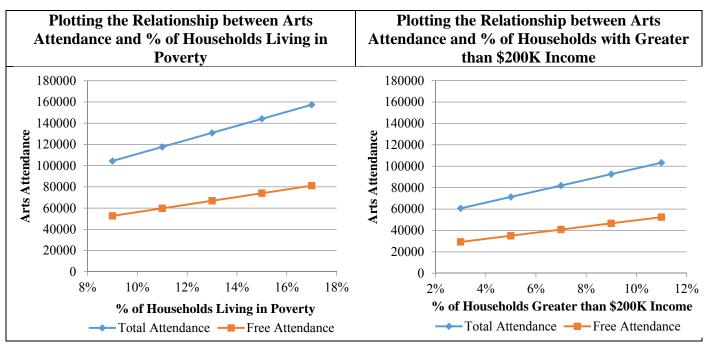
Finding 2: There is no relationship between arts attendance and the median household income of the local community. However, attendance increases with increases in the percentage of households below the poverty line and with increases in the percentage of households with incomes above \$200,000.

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 $^{^2}$ For the purposes of this research, a statistically significant correlation is defined as one with >95% confidence, or p<0.05.

As was the case with our exploration of community wealth characteristics and NEA grant awards, we analyze median income and income diversity as they relate to arts attendance. When looking across all arts organizations and their resident communities, there is no statistically significant relationship between total physical attendance and median household income, nor is there a significant relationship between free attendance and median household income. Since no relationship was found for median income and attendance, the extremes of the income spectrum (poverty and wealth) were analyzed for their relationships to attendance. As shown in Chart 2, there is a positive correlation between attendance at local arts organizations and the percentage of households below the poverty line; as the percentage of households below the poverty line increases, an increase in attendance at local arts organization is observed. We observe a similar positive relationship between attendance and the percentage of households with incomes greater than \$200,000. Thus, the evidence indicates that arts organizations serve diverse audiences, with the poor and the wealthy benefitting from the arts more or less equally.

Chart 2: The Relationships between Arts Attendance and Community Wealth Characteristics*



Note: *The x-axes show different scales to reflect the ranges of poor and wealthy households, respectively. The mean percentage of households living in poverty is approximately 15% whereas the mean for households with greater than \$200k income is approximately 7%.

Introduction

The National Endowment for the Arts is an independent federal agency that funds and promotes "artistic excellence, creativity, and innovation for the benefit of individuals and communities."

³ National Endowment for the Arts. *Annual Report: 2012*. Washington, DC. Accessed 1/15/2014. http://arts.gov/sites/default/files/2012-NEA-Annual-Report.pdf

In fiscal year 2012, its budget was \$146 million and it awarded 2,218 grants, which reached more than 75 million Americans.

On January 13, 2014, leaders in Congress unveiled the Fiscal Year 2014 Omnibus Appropriations bill, which included renewal of the NEA's \$146 million in funding. Four days later the spending package was signed by President Obama. Although the final budget level reflects no reduction in arts funding, there was considerable debate throughout 2013 regarding the 2014 level of NEA budget appropriation. The 2014 budget proposed by the House of Representatives (H.Con.Res.25) in March 2013 included a cut to the NEA budget of \$71 million, a 49% reduction. The March 15, 2013 House committee report to accompany the budget proposal states:

"Federal subsidies for the National Endowment for the Arts, the National Endowment for the Humanities, and the Corporation for Public Broadcasting can no longer be justified. The activities and content funded by these agencies go beyond the core mission of the federal government, and they are generally enjoyed by people of higher-income levels, making them a wealth transfer from poorer to wealthier citizens."

Much research exists on the economic impact of the arts and the observed benefits of art on various constituent groups. This paper investigates the hypothesis set forth in the Report of the Committee on the Budget that federal arts grants support activities that disproportionately benefit wealthier citizens. To support the idea that NEA activities disproportionately benefit wealthier citizens, the data should demonstrate that either (1) wealthier communities receive more funding than poorer communities, or (2) wealthier individuals are more likely than poorer individuals to attend and benefit from arts activities. By testing the claim in two ways, we provide insights into the relationship between NEA grants and community household income levels and between arts attendance and community household income levels.

Sources

Our analyses use the National Center for Arts Research (NCAR)⁵ database, which compiles arts and cultural organization data from three distinct sources: the National Center for Charitable Statistics, the Cultural Data Project and Theatre Communications Group. The National Center for Charitable Statistics (NCCS)⁶ provides the widest coverage of the sector through its reporting of IRS 990 tax form filings. More than 40,000 arts and cultural organizations were represented through this data set in 2010 and 2011. The Cultural Data Project (CDP)⁷ collects the industry's most in-depth financial, operating, and attendance data from individual arts organizations on an annual basis. CDP currently collects data in 13 states and the District of Columbia. Theatre

⁴ U.S. House. Committee on the Budget. *Establishing the budget for the United States Government for Fiscal Year* 2014 and Setting Forth Appropriate Budgetary Levels for Fiscal Years 2015 through 2023 (to accompany H. Con. Res. 25) Together with Minority Views. (113 H. Rpt. 17). Text from U.S. Government Printing Office; Accessed: 11/16/13. Text concerning NEA on p. 76: http://www.gpo.gov/fdsys/pkg/CRPT-113hrpt17/pdf/CRPT-113hrpt17

⁵ NCAR website: http://mcs.smu.edu/artsresearch/

⁶ NCCS website: http://nccs.urban.org/

⁷ CDP website: http://www.culturaldata.org/

Communications Group (TCG)⁸ collects national, in-depth, sector-specific data. We acquired the NEA grant data through a Freedom of Information Act request to the NEA.

When possible, we use data from all organizations in the database to explore the research questions. These analyses feature data from more than 40,000 arts and cultural organizations through fiscal year 2011. We rely on a subset of data provided by CDP and TCG to examine arts attendance since the IRS 990 filings do not provide this information. Another advantage of this subset is that data are available through fiscal year 2012 whereas the NCCS data is currently available only through 2011.

The NCAR database features a spatial model for each cultural organization and every zip code in America⁹. The spatial model uses U.S. Census Bureau data and aggregate arts and cultural organization data to create a geographic trade area for each organization. The trade areas incorporate:

- Individual level estimates, e.g., total population, median income, the percentage of individuals with graduate degrees, the percentage of individuals in the labor force;
- Household level estimates, e.g., average household size, single-parent households, percentage of households living in poverty and the percentage of households with income greater than \$200,000;
- Arts-related business-level estimates, e.g., number of art dealers, number of grants-making foundations;
- Complementary and substitute business-level estimates, e.g., number of hotels, restaurants, cinemas, sports teams, and zoos; and
- Overall business-level activity: number of businesses by size (estimated as the number of employees).

Detailed findings

Question 1: Does NEA grant-making show a bias towards arts organizations in wealthier communities, constituting an inter-community transfer of wealth?

The first question examines whether there are significant differences in the community wealth characteristics of organizations that are selected to receive NEA funding versus those that do not receive funding. If the hypothesis that the NEA demonstrates bias towards wealthier communities were true, organizations receiving NEA funding would be in communities with higher median household incomes than the communities of those organizations that do not receive NEA funding. In addition, if NEA grant-making were biased towards wealthier communities, one would expect to observe that in NEA grant-recipient communities there is a higher percentage of wealthy households (defined here as households with annual income greater

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⁸ TCG website: http://www.tcg.org/

⁹ For a full explanation of the spatial models employed in this research, visit: http://mcs.smu.edu/artsresearch/questiondocsadditional/modeling-arts-culture-ecosystem-0

than \$200,000¹⁰) <u>and</u> a lower percentage of households below the poverty line than in communities that did not receive NEA funding.

To address these wealth difference questions, arts organizations and their surrounding communities were grouped into those that received NEA grants and those that did not receive NEA grants. Table 1 shows the average community characteristics for arts organizations in 2010 and 2011, segmented into communities with NEA grant recipients and those with organizations not receiving an NEA grant in that year. First, in 2011, the difference in median household income for NEA recipient and non-recipient communities was not significantly different; the difference in median household income between these two groups in 2010 was also not significantly different. Second, at the bottom end of the income spectrum, for both 2010 and 2011, there were 1.1% more households in poverty within NEA grant recipient communities than in communities without an NEA grant, and the difference between the two segments in each year was statistically significant. Third, comparing recipient and non-recipient communities, there is a similar trend for households with incomes greater than \$200,000. Grant-receiving communities in 2010 and 2011 have higher percentages of wealthy households than do communities that did not have a grant recipient, and this difference is statistically significant.

Table 1: Community characteristics of organizations receiving NEA funding and organizations not receiving NEA funding

		2011		2010	
		Did not receive NEA grant	Received NEA grant	Did not receive NEA grant	Received NEA grant
	Number of organizations	40,282	1,494	41,342	1,611
Community characteristics (averages)	Median household (HH) income	\$61,012*	\$61,183*	\$59,744*	\$60,257*
	Percent of HH with incomes below the poverty line	14.6%	15.7%	14.2%	15.3%
	Percent of HH with incomes greater than	7 10/	9.20/	6.70/	9.00/
	\$200,000 Population	7.1% 891,495	8.3% 1,645,730	6.7% 928,881	8.0% 1,715,551
Com	Total arts activity in the area ¹¹	\$11,849,238	\$27,389,497	\$12,989,141	\$30,921,678

Note: *denotes a non-significant difference between two segments; all other averages are significantly different (p < .05)

¹¹ Total arts activity in area is defined as total revenue from contributions and programming activity for art organizations in the defined trade area around the arts organization

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¹⁰ We also examined lower cutoff points for wealthy households (\$100,000), which <u>weakened</u> all reported relationships between NEA funding and wealthy households.

The data in Table 1 suggest that NEA grant recipients are found, on average, in more populous areas with a greater amount of arts activity. Compared with communities that did not receive NEA grants, NEA grant-recipient communities have higher percentages of households both below the poverty line and with incomes above \$200,000. No significant difference was found in median household incomes, implying that the median income in NEA grant-recipient communities is not different from median income in non-recipient communities. The hypothesis that NEA grants constitute inter-community wealth transfer from poorer to wealthier communities can be rejected from the analysis above.

We repeated the same analyses testing the inter-community wealth transfer hypothesis for the subset of approximately 8,000 organizations with supplemental CDP and TCG information, using data for fiscal years 2011 and 2012. Table 2 contains the same metrics as in Table 1 and includes additional organization-level data points on attendance. As in the larger data set, the difference between the segments' median household incomes is not statistically significant. Similarly, the observation holds that NEA grant-receiving communities have a significantly greater percentage of households at both ends of the economic spectrum than communities without NEA grants.

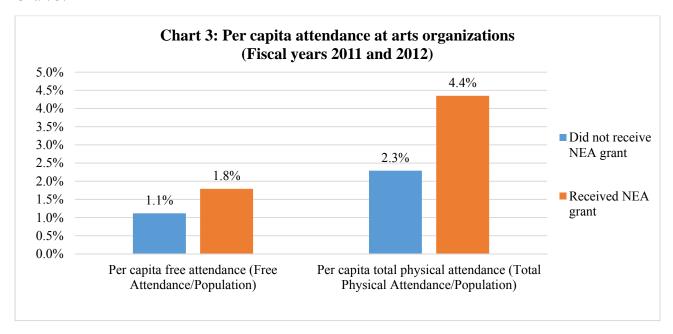
Tables 1 and 2 demonstrate that the NEA does not show bias towards communities with higher median wealth when awarding grants. Instead, the communities that receive NEA grants are more likely to have a greater percentage of households at either end of the wealth spectrum and demonstrate greater economic diversity.

Table 2: Community and attendance characteristics of organizations receiving NEA funding and organizations not receiving NEA funding (CDP and TCG subset providing attendance data)

		CDP and TCG Subset	
		2011-2012	
		Did not receive NEA grant	Received NEA grant
×	Number of organizations	7,073	1,224
ity stic ss)	Median household (HH) income	\$62,005*	\$62,424*
Community characteristi (averages)	Percent of HH with incomes at or below the poverty line	14.7%	15.5%
ract	Percent of HH with incomes greater than \$200,000	8.0%	9.2%
Co	Population	1,432,714	2,286,718
	Total arts activity	\$17,432,599	\$39,992,420
n- nce ics	Total Physical Attendance (Paid and Free)	32,800	99,482
atio ndan risti ges)	Free Attendance	16,001	40,931
Organization- level attendance characteristics (averages)	Per capita free attendance (Free Attendance / Population)	1.1%	1.8%
Or leve cha	Per capita total physical attendance (Total Physical Attendance / Population)	2.3%	4.4%

Note: *Denotes a non-significant difference between two segments; all other averages are significant (p < .05)

Furthermore, the attendance data in Table 2 show that both total physical attendance and free attendance are greater at organizations receiving NEA grants, and this difference is statistically significant. As a percentage of the population, free attendance is about 1.6 times greater in NEA grant-receiving organizations than in organizations without NEA grants (1.8% vs. 1.1%, respectively). Likewise, total physical attendance (including free and paid) is about 1.9 times greater as a percent of the population in grant-receiving communities than in communities without NEA grants (4.4% vs. 2.3%, respectively). These relationships are illustrated below in Chart 3.

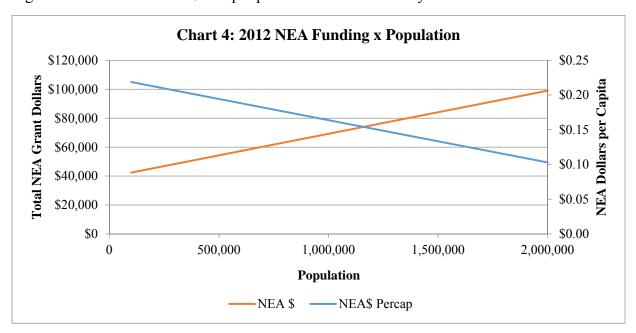


Question 1.1: Based on the finding above that communities receiving NEA grants have higher populations on average, is NEA grant funding biased towards more populous communities?

Though grant recipient communities are on average more populous than communities without grant recipients, correlation analysis shows that among grant-receiving communities, the NEA grant dollars per person in each community are negatively correlated to population (in 2012, r = -0.12 with p < 0.01; in 2011, r = -0.18 with p < 0.01). In other words, this inverse relationship shows that while the absolute funding dollars rise with population size, NEA dollars per capita actually increase as a community's population decreases.

This inverse relationship – with more NEA dollars per capita granted to less populous communities - is illustrated in Chart 4. Specifically, Chart 4 plots the relationship between (1) total NEA funding and total population in the orange line and (2) per-capita NEA funding and total population in the blue line. The blue line of per-capita NEA funding decreases as total population increases, indicating that smaller communities receive more per-capita funding per person than larger communities. For example, in a community of 200,000 receiving NEA

funding, the average organization receives about \$0.20 per person in their community. At the other end of the spectrum, for a community of 2,000,000 receiving NEA funding, the average organization receives about \$0.10 per person in their community.



Question 2: Do the arts – and therefore government funding for the arts -- constitute an allocation of disproportionate benefits to the wealthy?

The second research question addresses whether wealthier individuals are more likely to benefit from the arts than poorer individuals. Benefit is defined as physical attendance at an arts organization. Two attendance categories are considered here: total physical attendance, representing the number of people who "walked through the door" of an arts organization to participate in programmatic offerings¹², and the subset of free attendance, or how many people physically participated in the arts organization's offerings for free. Because comprehensive data tracking individuals' wealth characteristics and arts attendance are not available, aggregate data on community wealth characteristics and attendance from the NCAR database were used. This analysis looks at each arts community to understand if there is an association between higher arts attendance levels and a greater percentage of wealthy households, which would imply that the arts disproportionally serve wealthy individuals.

Correlation analyses were run on arts organization data to determine if relationships exist between two variables such as the organization's attendance and the wealth characteristics of its community. These correlations (which range from -1 to +1) were tested to see if the strength of the relationship is statistically significant with at least a 95% confidence level. Correlations do not imply causation (that one factor causes the other). Positive correlations simply indicate that an increase in one variable is accompanied by an increase in the other; negative correlations indicate that an increase in one variable is accompanied by a decrease in the other. This correlation analysis differs from the inter-community analysis that tested for significant

¹² This includes entrance into the physical area of the arts activity such as an outdoor arts festival.

differences between averages. Instead, this analysis examines each arts organization's characteristics and the relationships between variables such as community income and arts organization attendance.

The combined CDP and TCG subset comprising more than 8,000 organizations in fiscal years 2011 and 2012 demonstrates some intuitive relationships about communities and wealth. There is a positive correlation between households with incomes over \$200,000 and median household income; as the percent of households with incomes over \$200,000 increases, the median household income also increases (r = .86 and p < .01). Inversely, there is a negative correlation between households below the poverty line and median household income: as the percent of households below the poverty line increases, median income decreases (r = -.77 with p < .01).

The data also show that for all arts organizations, there is no significant relationship between median household income and total attendance or between median household income and free attendance ($p \approx .28$ and $p \approx .69$, respectively). This indicates that as median household income increases, local arts organizations do not experience an increase or a decrease in attendance. In other words, arts organizations do not disproportionally serve wealthier communities as measured by median household income.

Since median community income has no relationship to arts attendance, total attendance was compared to other wealth indicators within a community: percent of households below the poverty line and percent of households with incomes greater than \$200,000. There is a positive correlation between the percent of households below the poverty line and total attendance at arts organizations (r = .06 with p < .01): when an arts organization's community has a higher percentage of households in poverty, the arts organization has more visitors. This positive association is repeated in the relationship between percent of households in poverty and free attendance (r = .05 with p < .01). There is also a positive correlation between percent of households with income greater than \$200,000 and total attendance (r = .04 with p < .01). The positive relationship also holds for wealthy households and free attendance (r = .04 with p < .01). A summary of correlations and their interpretations appear below in Table 3.

Table 3: Correlations between arts attendance and community wealth characteristics

Community wealth tested for				
Community wealth variable	Arts attendance variable	Correlation coefficient	P-value	Interpretation
Median household	Total physical attendance	-0.01	0.28	Not significant $(p > 0.05)$
(HH) income	Free attendance	-0.00	0.69	Not significant $(p > 0.05)$
Percent of HH with incomes at or below	Total physical attendance	0.06	<.01	Significant; a positive relationship exists
the poverty line	Free attendance	0.05	<.01	Significant; a positive relationship exists
Percent of HH with incomes greater than	Total physical attendance	0.04	<.01	Significant; a positive relationship exists
\$200,000	Free attendance	0.03	<.01	Significant; a positive relationship exists

The data from this analysis show that attendance at arts organizations increases as the percentages of both wealthy households and households below the poverty line increase. While there is no relationship between a community's median income and arts attendance, there is a positive relationship between attendance and percent of households at either end of the wealth spectrum.

Conclusion

By examining the community wealth characteristics of arts organizations that have received NEA grants, we found evidence that contradicts the claim of inter-community wealth transfer. NEA grants are not distributed to organizations in wealthier communities, as measured by median household income. Instead, the organizations receiving NEA grants tend to be in communities with greater income diversity – that is, a high percentage of wealthy and poorer households. We also presented evidence that questions the claim that those in wealthier communities benefit more from the arts: while median household income has no observable relationship with arts attendance, the proportions of wealthy and poorer households in a community both have positive relationships with arts attendance. Thus, the arts benefit all Americans – the poor as well as the wealthy – and NEA funding of the arts is remarkably impartial to community wealth characteristics.