

NEA Arts Data Profile #8: Issue Brief #2

Illustration of Arts & Livability Indicators: Income Diversity; Arts and Entertainment Establishments and Payrolls

The NEA Arts & Livability Indicators can help users attain a better understanding of their community on a number of important dimensions. Below are examples of two key indicators (income diversity and arts-and-entertainment establishments and payroll), as well as a hypothetical scenario of how these indicators might be applied to creative place-making activities.

Hypothetical Scenario: Freeway District Revitalization Project

“A three-quarter mile stretch of an elevated double-decker freeway built in 1965 and bisecting a key section of our large city has reached the end of its design life, is too costly and undesirable to repair, and is scheduled to be demolished and replaced with a two-lane boulevard. Diverse ethnic neighborhoods in the freeway’s proposed path were removed by eminent domain; since construction, adjacent areas have been marked by noise, disinvestment, and pollution.

“Removal of the section of freeway is predicted by many to have important environmental and economic consequences. In addition, many artists and cultural workers live in the urban parcels surrounding the proposed boulevard. A grassroots coalition of local residents, artists, urban design professionals, and several foundations has formed to ensure the revitalization proceeds in a fair and equitable manner. The coalition seeks to integrate livable, pedestrian-friendly urban design along the new boulevard with dedication of public space to contemporary art and music.

“Among the group’s proposals are (1) that work from local artists is incorporated into the urban streetscape as both permanent and rotating installments, and (2) that a percentage of newly developed property along the boulevard is devoted to arts and cultural institutions, businesses and education.”

Anticipated impacts include: encouragement of more physical activity by providing an aesthetically pleasing infrastructure; increased foot traffic and economic activity at arts institutions and businesses; creation of a central venue for arts and cultural installations and events; and greater support for the city’s cultural offerings.”

Although any changes are not necessarily traceable to the Freeway District Revitalization Project, the coalition can examine specific indicators to learn whether, in or near the area of the project activity, **income diversity will increase, along with arts and entertainment payrolls.**¹

The sections below draw on various data sources to illustrate these indicators for a sample community: selected Census tracts (i.e., neighborhoods) and counties in **Northern Virginia**.²

Indicator E5: Income Diversity (see map, p.3)

The Gini index is a summary measure of household income inequality. The index varies from 0 to 1, where “0” indicates perfect equality, i.e., a proportional distribution of income. An index of “1” indicates perfect inequality where one person has all the income. In 2010, the U.S. Gini index of income inequality was 0.47.

Alexandria, Virginia, comprises 38 Census tracts.³ For the period covered by the 2006-2010 American Community Survey, the Gini index in those neighborhoods ranged from a low of 0.22 to a high of 0.52. However, the index in Alexandria’s tracts hovered around 0.38 to 0.44—the Gini index range for 15 of the city’s 38 tracts.

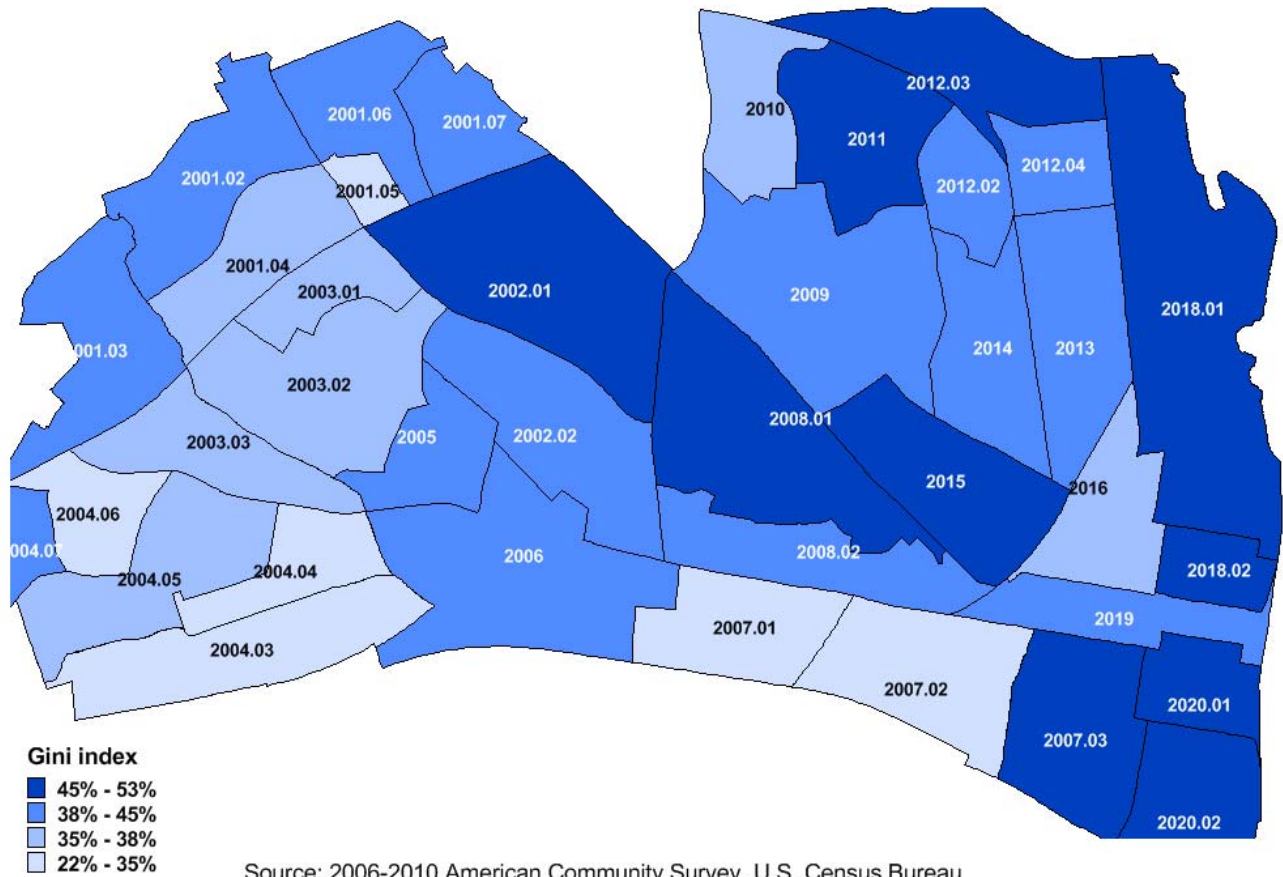
Notably, the Gini index does not indicate the size of income in a particular area.⁴ Among Alexandria’s tracts, for example, Tract 2004.3 (in the south-western section of Alexandria) reported the lowest Gini index (0.22), indicating the greatest level of income diversity. Residents of that neighborhood are relatively affluent—in 2006-2010, median household income was \$106,711, twice the national median of \$51,914, and greater than median household income for all of Alexandria City (\$80,847).

Alternatively, the Gini index for Tract 2020.02 (located in the south-eastern part of the city) was 0.52, indicating less income diversity in that neighborhood. Median income was also lower--\$89,801 in 2006-2010.

Although there is more income diversity in Alexandria Tract 2004.3, the incidence of poverty is also greater. In 2006-2010, the percentage of that neighborhood’s residents living below poverty was 14 percent (a rate similar to the national poverty rate of 13.8 percent).

However, in Tract 2020.02, where there was less income diversity, the poverty rate was 6 percent.

Income Inequality: 2006-2010 Census Tracts in Alexandria City, Virginia



Note: For a map of Alexandria tracts showing more geographic detail, see the [U.S. Census Bureau's reference maps](#).

Indicator AC3: Arts and Entertainment Payrolls (see chart, p.5).

The U.S. Census Bureau's County Business Patterns (CBP) is an annual series reporting, by industry, number of employees, payroll, and business establishments for the U.S., states, counties, and zip codes.

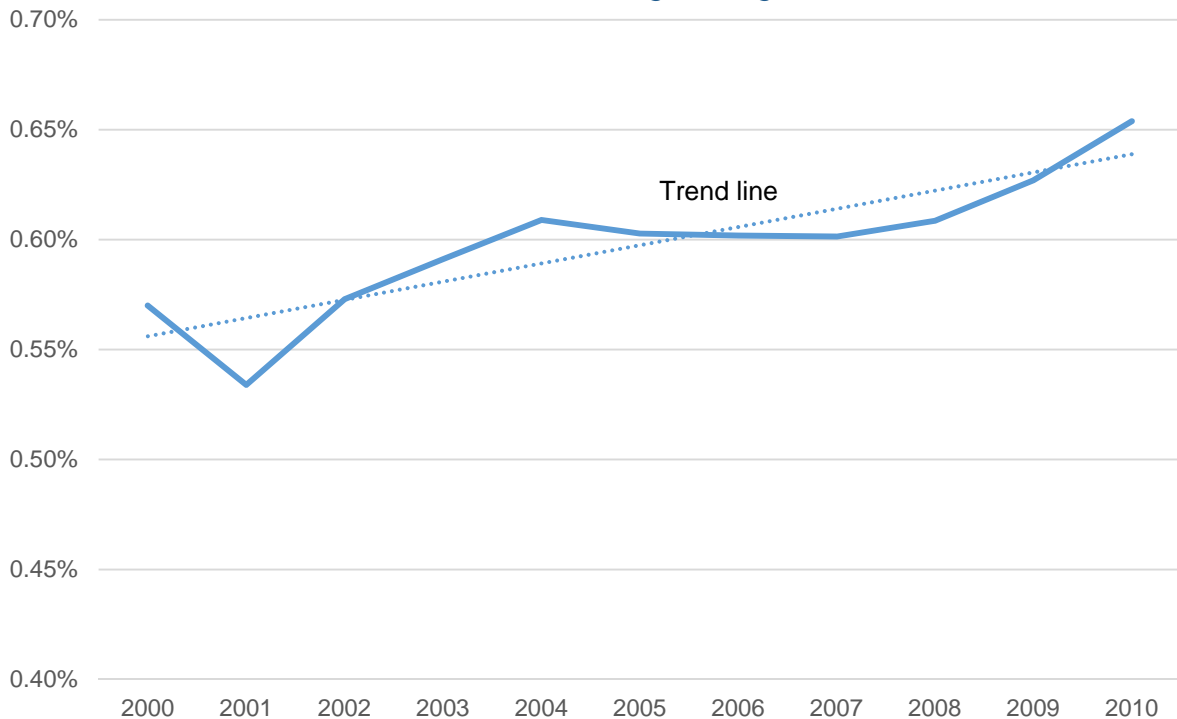
In this section, payroll of sector 71, arts and entertainment, is illustrated as an Arts & Livability indicator.⁵ The arts and entertainment sector includes: performing arts establishments; arts and sports management and promotion companies; independent artists and writers; museums and nature parks; amusement parks; gambling industries; and recreation facilities such as marinas and golf courses.

Among Northern Virginia counties in the greater Washington, D.C. area, Fairfax County has the largest population. In the period covered by the 2006-2010 American Community Survey, Fairfax County's population was more than 1 million.

Fairfax County is also home to the area's largest number of arts, entertainment, and recreation business establishments, and a correspondingly large payroll for that sector. Moreover, as a share of the county's total payroll (i.e., payrolls for all industries), the arts and entertainment payroll edged up slightly during the 2000-2010 timeframe.

Arts, Entertainment, and Recreation Payroll as a Percentage of Total Payroll Fairfax County, Virginia: 2000-2010

Three-Year Moving Average



Source: County Business Patterns, U.S. Census Bureau

Fairfax County, however, does not score as highly when arts and entertainment payroll, expressed as a share of total payroll (from all industries), is compared with figures from several smaller Northern Virginia counties. For example, in 2010, that percentage for Fairfax County was 0.66 percent, well below the figures calculated for Fauquier, Arlington, and Prince William counties.⁶

In 2010, Fauquier County had fewer than 1,800 arts, entertainment, and recreation establishments; its corresponding payroll was \$630 million. However, arts and entertainment payroll, as a share of total payroll in Fauquier, was 1.62 percent. Arts and entertainment payrolls also composed a relatively large share of total payroll in Arlington County (1.29 percent) and Prince William County (1.03 percent).

Arts, Entertainment, and Recreation Payroll, Northern Virginia Counties: 2010					
Selected Northern Virginia counties	All business establishments		Arts, entertainment, and recreation establishments		Arts, entertainment, and recreation payroll as a percentage of total payroll
	Number of establishments	Payroll (\$1,000)	Number of establishments	Payroll (\$1,000)	Percent
Fairfax	28,782	\$38,299,757	365	\$252,776	0.66%
Arlington	6,019	\$8,897,590	88	\$114,999	1.29%
Prince William	6,971	\$3,172,665	108	\$32,642	1.03%
Alexandria City	4,490	\$4,465,373	50	\$18,427	0.41%
Fauquier	1,785	\$628,173	38	\$10,152	1.62%
Manassas City	1,409	\$1,338,697	12	\$1,597	0.12%

Source: 2010 County Business Patterns, U.S. Census Bureau

What Do These Findings Mean for Our Hypothetical?

By identifying Census tracts that have high versus low levels of income diversity (as rated by the Gini index), planners of the Freeway District Revitalization Project now may consider tailoring their recruitment and outreach efforts to residents from certain tracts. Over time, the planners can track changes in income diversity across the tracts where the Freeway District Revitalization Project will be located; doing so may enable them ultimately to evaluate whether any positive changes can be linked to the project's influence.

Similarly, an understanding of how different Northern Virginia counties express arts/entertainment/recreation as a share of total payroll will allow planners to set aspirational targets for the communities directly affected by the project. Also, the trend data available for this indicator can be used to communicate to other potential funders and stakeholders the generally upward movement of arts/entertainment/recreation payroll as a share of total payroll for a specific county (e.g., Fairfax County, Va.). In such communications, the project could be positioned as riding a broader trend of greater investments in arts and culture within the county.

Other Indicators that Could Prove Useful

Given the goals articulated by the hypothetical project's planners, other NEA Arts & Livability Indicators that might be worth tracking include:

- Q1: Median commute time
- AC1: Median earnings of residents employed in arts-and-entertainment-related establishments
- AC2: Proportion of employees working in arts-and-entertainment-related establishments
- AC3: Relative payroll of arts-and-entertainment-related establishments
- AC4: Arts, culture, and humanities nonprofits per 1,000 population
- AC5: Arts-and-entertainment-related establishments per 1,000 population
- C7: Civic engagement establishments per 1,000 population

In addition, the **Local Arts & Livability Indicators Catalogue** (source: Urban Institute), also within the NEA's Arts Data Profile #8, contains several indicators that might be used, depending on the location of the project. The data for these indicators are collected locally. Examples include:

#1580, Arts and Cultural Attendance: Attendance and Ticketing (Marion County, Public Policy Institute)

#644, Number of Licenses for Performing Arts (Chicago Cultural Indicators)

Endnotes

¹ These expectations assume that other factors--those unrelated to the Freeway District Revitalization Project, but which may affect the local economy--are held constant.

² U.S. Census tracts, which number more than 70,000, are small statistical subdivisions of counties.

³ For statistical purposes, the U.S. Census Bureau treats Alexandria City as a county.

⁴ For more information on the use and interpretation of Gini coefficients, see Morley, E. & Winkler, M., 2014, *The Validating Arts and Livability Indicators (VALI) Study: Results and Recommendations*.

⁵ Payroll and employment data from the CPB refer to workers on payrolls. These data exclude the self-employed.

⁶ Selected Northern Virginia counties (or city county equivalents) were excluded from this analysis because they were not reported in County Business Patterns due to the Census Bureau's disclosure policies. These areas included Loudoun County and the city of Falls Church.