**Technical Appendix (v.7-11-22)**

In this Technical Appendix, we provide details about our data sources and measures as well as provide additional tables and figures complementing analyses presented in the main article. The first part of this Technical Appendix presents a more thorough demographic portrait of the urban and suburban counties centered in our analyses. Discussion then turns to a more thorough treatment of the nature of nonprofit human service provision. Next, we discuss the details and limitations of our measures reflecting nonprofit service provision across suburban and urban counties. Finally, we examine a set of supplementary descriptive tables and figures that complement the analyses presented in the main article.

**Poverty, Race, and Ethnicity in Urban and Suburban Counties**

The Office of Management and Budget (OMB) formally defines metropolitan areas, or metropolitan statistical areas, as those areas containing an urbanized population center with 50,000 or more inhabitants and adjacent communities that have a high degree of economic and social integration with that urban center. While the number of metropolitan areas does not change much over time, the counties included within a given metropolitan area can expand over time as the geographic footprint of the metro area grows. For the purposes of this paper, we use OMB metropolitan area definitions based on 2010 census data and revised in 2013 (Office of Management and Budget, 2013). Urban counties are defined as those containing the primary urban center of a given metropolitan area and suburban counties are those counties that are defined as part of the same metropolitan area, but do not contain the metro’s primary city. “Large” urban counties are defined as those within the largest 100 metropolitan areas and “small” urban counties as those located in metropolitan areas outside the largest 100 metros. Small urban counties outside the largest 100 metropolitan areas have fewer than 500,000 residents generally and small suburban populations, whereas large urban counties within the largest 100 metropolitan areas contain about three-quarters of the U.S. population and include the vast majority of suburban residents.

Technical Appendix Tables 1 through 4 provide more detail about the demographic characteristics of urban versus suburban counties. Across metropolitan America, the number of people living in poverty increased from 27 million in 2000 to nearly 35 million in 2017 – a 28.5 percent increase. Much of that increase happened in suburban counties and heavily suburbanized urban counties in the largest 100 metropolitan areas, where the number of people in poverty increased by 44.4 percent and 31.9 percent from 2000 to 2017 respectively. Poverty rates remain a few percentage points higher in urban counties than in suburban counties, but poverty rates have increased by about 1.5 percentage points across most urban and suburban counties since 2000. Finally, Technical Appendix Table 1 shows the impact of sustained economic growth following the Great Recession. Both the total population in poverty and poverty rates fall between 2010 and 2017 across urban and suburban geography. Technical Appendix Table 2 reports the mean percent of the population identifying as Non-Hispanic White, Black, Hispanic, and Asian across urban and suburban counties. In general, suburban counties and urban counties with larger suburban populations had a larger share of Non-Hispanic White residents relative to other groups. However, suburban areas became more racially and ethnically diverse between 2000 and 2017.

To understand how nonprofit capacity varies by race and ethnic composition, the main article compares nonprofit health and human service provision across urban and suburban counties where non-Hispanic Black residents and Hispanic residents compose a significant share of the population. A county is considered to have a low percent Hispanic or Black population if the share of the county’s population identifying as Hispanic or Black is more than half a standard deviation below the mean for urban or suburban counties in a given year. Similarly, we categorize a county as having a high percent Hispanic or Black population if the population share for that group is more than half a standard deviation above the mean for urban or suburban counties in that year. For example, the mean percent Hispanic among suburban counties in 2010 was 6.73 percent, with a standard deviation of 8.92 percent. Therefore, suburban counties in that year were characterized as having a low percent Hispanic population if the county was 2.27 percent Hispanic or lower (that is, 6.73 – 0.5\*8.92). Similarly, a suburban county in 2010 was considered to have a high percent Hispanic population if the county was more than 11.2 percent Hispanic (that is, 6.73 + 0.5\*8.92).

Technical Appendix Table 3 provides descriptive demographic detail about the urban and suburban counties where non-Hispanic Black residents compose a low, moderate, and high share of the population. Technical Appendix Table 4 provides the same descriptive demographic detail for urban and suburban counties where Hispanic residents compose a low, moderate, and high share of the population. Most relevant to the discussion in the main article, we find a few key demographic differences between suburban counties where non-Hispanic Black residents or Hispanic residents compose a smaller versus a larger share of the population than the typical suburban county. Overall poverty rates are slightly lower in counties with a relatively high share of Hispanic residents than in counties with a relatively low share of Hispanics or a relatively high share of non-Hispanic blacks. Similarly, median household income and the percent of adults with a college degree are much higher in suburban counties with a high share of Hispanic residents versus a low share of Hispanic residents. Combined, these different demographic conditions imply greater wealth and income in suburban counties with large Hispanic communities compared to those with smaller Hispanic communities, which should translate into greater nonprofit health and human service capacity.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Technical Appendix Table 1. Poverty Population and Rates across Urban and Suburban Counties, 2000 to 2017** | | | | | | |
|  |  |  |  |  |  |  |
|  | Urban Counties in the Largest 100 Metropolitan Areas | | |  |  |  |
|  |  |  |
| 0 to 33 percent Suburban | 33 to 66 percent Suburban | > 66 percent Suburban | Suburban Counties | Small Urban Counties |  |
| Total Number of Poor People (1,000s) |  |  |  |  |  |  |
| 2000 | 4,473 | 6,599 | 4,213 | 6,380 | 5,342 |  |
|  |  |  |  |  |  |  |
| 2007 | 4,744 | 7,463 | 4,864 | 8,128 | 6,552 |  |
|  |  |  |  |  |  |  |
| 2010 | 5,274 | 8,456 | 5,748 | 9,488 | 7,433 |  |
|  |  |  |  |  |  |  |
| 2017 | 4,917 | 7,843 | 5,556 | 9,213 | 7,166 |  |
| Percent Change 2000-17 | 9.9% | 18.9% | 31.9% | 44.4% | 34.1% |  |
| Mean Poverty Rate |  |  |  |  |  |  |
| 2000 | 16.4% | 13.0% | 11.7% | 10.6% | 13.4% |  |
|  |  |  |  |  |  |  |
| 2007 | 17.2% | 14.4% | 12.8% | 12.0% | 15.4% |  |
|  |  |  |  |  |  |  |
| 2010 | 18.9% | 16.3% | 14.4% | 13.0% | 16.8% |  |
|  |  |  |  |  |  |  |
| 2017 | 16.7% | 14.5% | 13.2% | 12.1% | 15.6% |  |
|  |  |  |  |  |  |  |
| N | 34 | 39 | 45 | 717 | 265 |  |
| **Sources**: U. S. Office of Management and Budget, U.S. Census Bureau, 2000 Decennial Census; American Community Survey Five-Year Estimates 2005-09, 2008-12, 2015-19. | | | | | |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Technical Appendix Table 2. Racial and Ethnic Composition of Urban and Suburban Counties, 2000 to 2017** | | | | | |
|  |  |  |  |  |  |
| Mean Percent of Population | Urban Counties in the Largest 100 Metropolitan Areas | | |  |  |
|  |  |
| 0 to 33 percent Suburban | 33 to 66 percent Suburban | > 66 percent Suburban | Suburban Counties | Small Urban Counties |
| **2000** |  |  |  |  |  |
| Non-Hispanic White | 0.50 | 0.63 | 0.70 | 0.83 | 0.77 |
|  | (0.18) | (0.18) | (0.17) | (0.16) | (0.16) |
| Black | 0.27 | 0.15 | 0.12 | 0.09 | 0.10 |
|  | (0.2) | (0.13) | (0.09) | (0.14) | (0.12) |
| Hispanic | 0.16 | 0.14 | 0.13 | 0.05 | 0.08 |
|  | (0.18) | (0.13) | (0.16) | (0.08) | (0.14) |
| Asian | 0.04 | 0.05 | 0.03 | 0.01 | 0.02 |
|  | (0.06) | (0.08) | (0.03) | (0.02) | (0.02) |
|  |  |  |  |  |  |
| **2010** |  |  |  |  |  |
| Non-Hispanic White | 0.46 | 0.57 | 0.63 | 0.80 | 0.73 |
|  | (0.17) | (0.18) | (0.18) | (0.17) | (0.17) |
| Black | 0.27 | 0.16 | 0.13 | 0.10 | 0.11 |
|  | (0.2) | (0.13) | (0.1) | (0.14) | (0.12) |
| Hispanic | 0.19 | 0.18 | 0.17 | 0.07 | 0.11 |
|  | (0.19) | (0.15) | (0.17) | (0.09) | (0.15) |
| Asian | 0.06 | 0.06 | 0.04 | 0.02 | 0.02 |
|  | (0.07) | (0.08) | (0.04) | (0.03) | (0.02) |
|  |  |  |  |  |  |
| **2017** |  |  |  |  |  |
| Non-Hispanic White | 0.44 | 0.54 | 0.60 | 0.78 | 0.70 |
|  | (0.16) | (0.18) | (0.18) | (0.17) | (0.18) |
| Black | 0.26 | 0.16 | 0.13 | 0.10 | 0.11 |
|  | (0.2) | (0.13) | (0.1) | (0.14) | (0.12) |
| Hispanic | 0.20 | 0.20 | 0.19 | 0.08 | 0.13 |
|  | (0.19) | (0.16) | (0.18) | (0.1) | (0.16) |
| Asian | 0.06 | 0.07 | 0.05 | 0.02 | 0.03 |
|  | (0.07) | (0.08) | (0.05) | (0.03) | (0.02) |
| **Sources**: U.S. Census Bureau, 2000 Decennial Census; American Community Survey 5-Year Estimates 2008-12, 2015-19.  **Notes**: Numbers in parentheses are standard deviations. 2010 figures in the table reflect the American Community Survey 2008-12 5-Year Estimates, while 2017 data in the table reflect the 2015-19 5-Year Estimates. Based on Census and ACS estimates, we define a county’s Hispanic population as the population reporting they are of Hispanic, Latino, or Spanish origin. A county’s Black population consists of residents who indicated they identify as Black or African American alone and who are not of Hispanic, Latino, or Spanish origin. Similarly, a county’s Asian population consists of individuals who indicated they identify as Asian alone (including Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese, or Other Asian) and who are not of Hispanic, Latino, or Spanish origin. | | | | | |

**Technical Appendix Table 3. Characteristics of Counties by Percent Population Non-Hispanic Black in 2017**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Urban Counties | | | | | | Suburban Counties | | | | | |
|  | Percent Population Non-Hispanic Black | | | | | | Percent Population Non-Hispanic Black | | | | | |
|  | Low | | Moderate | | High | | Low | | Moderate | | High | |
|  | Mean | Median | Mean | Median | Mean | Median | Mean | Median | Mean | Median | Mean | Median |
| Percent Hispanic | 18.5% | 9.2% | 13.9% | 9.2% | 9.0% | 6.3% | 6.7% | 3.1% | 9.6% | 5.7% | 6.6% | 4.6% |
| Percent NH-White | 71.0% | 80.5% | 66.8% | 70.2% | 50.5% | 52.6% | 88.0% | 92.3% | 77.0% | 80.6% | 56.0% | 58.5% |
| Percent NH-Black | 2.8% | 2.3% | 11.7% | 10.9% | 34.6% | 30.9% | 1.2% | 1.0% | 7.7% | 6.8% | 32.8% | 27.3% |
| Percent in poverty | 14.1% | 13.5% | 14.8% | 14.7% | 18.3% | 17.8% | 11.0% | 10.0% | 11.2% | 11.3% | 15.8% | 15.5% |
| Hispanic Poverty Rate | 22.3% | 21.1% | 23.2% | 22.5% | 25.4% | 25.5% | 19.0% | 16.6% | 20.3% | 17.5% | 22.7% | 19.9% |
| White Poverty Rate | 11.0% | 10.8% | 10.7% | 10.3% | 11.1% | 10.7% | 10.1% | 9.3% | 9.3% | 8.9% | 10.7% | 10.7% |
| Black Poverty Rate | 25.5% | 24.3% | 27.9% | 28.7% | 26.8% | 26.8% | 24.2% | 20.9% | 20.6% | 17.9% | 23.0% | 24.1% |
| Total Population | 317,709 | 170,910 | 545,749 | 250,680 | 541,682 | 296,698 | 80,099 | 34,512 | 195,341 | 89,468 | 132,580 | 39,535 |
| Median Household Income | $60,709 | $59,050 | $58,334 | $55,379 | $52,437 | $51,356 | $63,369 | $61,485 | $69,071 | $64,468 | $56,361 | $52,928 |
| Percent high school degree | 88.7% | 90.7% | 88.8% | 89.4% | 87.8% | 88.2% | 89.7% | 90.8% | 89.1% | 89.8% | 85.5% | 85.7% |
| Percent college degree | 39.5% | 39.2% | 39.2% | 37.9% | 38.9% | 38.1% | 33.9% | 32.4% | 37.9% | 36.7% | 31.0% | 27.5% |
| **Sources**: U.S. Census Bureau, American Community Survey 5-Year Estimates 2015-2019 | | | | | | | | | | | | |
| **Notes**: Determinations of low, moderate, or high percentages of population that is non-Hispanic Black are made within urban and suburban counties separately. Counties defined as having a low percent population non-Hispanic Black if the share of the county’s population identifying as non-Hispanic Black is more than half a standard deviation below the mean. Counties defined as having a high percent non-Hispanic Black population if the share of the county’s population identifying as non-Hispanic Black is more than half a standard deviation above the mean. Counties falling between these two thresholds are defined as having a moderate percent population non-Hispanic Black. | | | | | | | | | | | | |

**Technical Appendix Table 4. Characteristics of Counties by Percent Population Hispanic in 2017**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Urban Counties | | | | | | Suburban Counties | | | | | | |
|  | Percent Population Hispanic | | | | | | Percent Population Hispanic | | | | | | |
|  | Low | | Moderate | | High | | Low | | Moderate | | High | | |
|  | Mean | Median | Mean | Median | Mean | Median | Mean | Median | Mean | Median | Mean | Median |
| Percent Hispanic | 4.0% | 3.9% | 12.1% | 10.8% | 42.7% | 37.8% | 1.9% | 2.0% | 5.9% | 5.3% | 24.9% | 21.2% |
| Percent NH-White | 74.1% | 78.9% | 67.2% | 69.8% | 41.1% | 43.0% | 86.6% | 93.0% | 78.1% | 82.7% | 58.1% | 59.3% |
| Percent NH-Black | 16.3% | 10.1% | 12.3% | 9.3% | 7.7% | 5.4% | 8.7% | 1.9% | 10.9% | 5.4% | 9.2% | 6.8% |
| Percent in poverty | 16.1% | 16.0% | 14.1% | 13.8% | 15.9% | 15.1% | 13.0% | 12.0% | 11.6% | 11.1% | 11.4% | 11.1% |
| Hispanic Poverty Rate | 25.3% | 25.5% | 22.6% | 21.9% | 20.4% | 19.9% | 20.8% | 17.5% | 20.9% | 18.9% | 17.0% | 16.6% |
| White Poverty Rate | 12.1% | 11.8% | 10.2% | 9.8% | 9.9% | 9.6% | 11.3% | 10.5% | 9.5% | 9.2% | 8.1% | 7.7% |
| Black Poverty Rate | 30.9% | 30.8% | 25.0% | 24.3% | 21.1% | 20.1% | 25.3% | 23.4% | 22.0% | 20.4% | 19.1% | 16.5% |
| Total Population | 226,614 | 148,255 | 391,990 | 257,581 | 1,039,598 | 441,093 | 54,157 | 28,181 | 120,840 | 59,845 | 329,312 | 159,971 |
| Median Household Income | $53,691 | $53,106 | $60,844 | $58,860 | $61,246 | $59,195 | $57,795 | $57,217 | $65,351 | $63,309 | $73,243 | $68,489 |
| Percent high school degree | 90.5% | 90.7% | 89.7% | 90.1% | 82.1% | 84.7% | 88.4% | 89.1% | 89.4% | 90.3% | 87.2% | 88.1% |
| Percent college degree | 39.6% | 38.1% | 40.6% | 39.7% | 35.7% | 35.8% | 30.6% | 28.8% | 36.4% | 35.6% | 38.7% | 37.5% |
| **Sources**: U.S. Census Bureau, American Community Survey 5-Year Estimates 2015-2019 | | | | | | | | | | | | | |
| **Notes**: Determinations of low, moderate, or high percentages of population that is Hispanic are made within urban and suburban counties separately. Counties defined as having a low percent population Hispanic if the share of the county’s population identifying as Hispanic is more than half a standard deviation below the mean. Counties defined as having a high percent Hispanic population if the share of the county’s population identifying as Hispanic is more than half a standard deviation above the mean. Counties falling between these two thresholds are defined as having a moderate percent population Hispanic. | | | | | | | | | | | | | |

**Local Nonprofit Health and Human Service Provision**

In this project, we define nonprofit human service organizations broadly to be legally-incorporated, 501c(3) tax-exempt entities that are registered with the IRS as primarily providing one or more of the following types of services: public health; substance abuse treatment and prevention; mental health treatment; adult education and literacy; employment and job training; food assistance; housing and shelter assistance; general social services; financial counseling; preschool and day care; youth development; family services; domestic violence counseling; and care for the disabled. We exclude large nonprofit hospital networks, charitable foundations, private universities or colleges, or private K-12 schools (though we do include preschool and day care provision organizations). If such entities provide direct support for services provided by other types of nonprofit organizations included in our data, however, we would capture those funds in our IRS 990 expenditure and revenue data. Our data, however, do not capture direct aid to families provided by local hospitals, charitable foundations, or private schools.

Local nonprofit human service organizations come in many different organizational forms and sizes. Some large local nonprofit service organizations, such as the YMCA, support multi-million dollar operations with hundreds of staff and are part of large regional or even national networks. Many other local nonprofit providers operate on more modest budgets and staffing levels. Delivering more than $100 billion in services and assistance to low-income populations each year, nonprofit human service organizations have become essential actors within the antipoverty safety net and critical sources of support for low-income households, particularly those who may not be eligible for public assistance cash or in-kind programs (Allard 2009).

In both the published article and the Technical Appendix, our analyses examine nonprofit health and human service provision using data drawn from the National Center for Charitable Statistics (NCCS). Data from the NCCS are based on IRS-990 forms that nonprofit organizations submit annually to verify tax-exempt status. While these data are good approximations of county-level nonprofit service capacity, IRS 990 data are not generated to examine spatial trends in nonprofit activity across urban and suburban areas. First, the data are tied to a single organizational address. Regional providers submit their 990 forms from their administrative headquarters, with little detail about satellite offices. This means that financial data often is tied to an urban center, or a national office, even though program activity occurs in a much broader geography. Other factors may lead to the underreporting of nonprofit human service opportunities in suburban counties. As noted above, suburban counties often are home to religious congregations and very small volunteer-based nonprofits that do not appear in IRS data. In addition, some nonprofits may be late in filing forms; other organizations may not provide address information accurate enough to be assigned a county identifier. Expenditure estimates reported here and in the main article reflect only what is reported in IRS 990 forms by registered nonprofit human service organizations. Our data will not capture expenditures from smaller nonprofits or religious congregations that do not file 990 forms, nor will we capture direct assistance provided by charitable foundations that are not registered as human service providers. Finally, although we report expenditures here, it is important to note that IRS 990 data collapse revenue from different sources in such a way that do not permit us to make distinctions between government grants and contracts, different types of commercial revenue, or the many sources of private charitable giving. For example, there is not a line-item for Medicaid payments or reimbursements, even though those funds are part of the revenue mix for many nonprofit behavioral health organizations. Instead, these revenues are reported in with other fee-for-service or commercial sources of revenue (Allard and Smith 2014).

We use the following National Taxonomy of Exempt Entities (NTEE) codes attached to NCCS data to sort organizations into three broad service areas. First, health service organizations self-classify as one of the following groups of NTEE codes: public health (E70); behavioral health services (F20; F21; F22; F30; F32; F33; F60). Social service organizations are defined as those that self-classify as one of the following NTEE codes: adult education and training (B60; J20; J21; J22; J30; J32; J33); emergency assistance (K30; K31; K34; K35; K36); housing assistance (L40; L41; P84); human services (P20; P21; P22; P24; P27; P28; P29; P50; P51; P52). Nonprofit child and family service organizations are those that self-classify as one of the following NTEE codes: preschool and day care (B21; P33); child and family services (O20; O21; O22; O23; P27; P30; P40; P42; P43; P44; P45; P46). See Jones (2019) for more details about NTEE codes.

*Faith-based Service Providers.* While most human service assistance is delivered through secular nonprofit organizations with no formal religious affiliations, many nonprofit providers maintain affiliations with religious organizations, retain administrative or financial connections to religious congregations, and/or embrace a faith-related mission. Such religious, faith-connected, or faith-based organizations (FBOs) often receive public funding for their work, but are not allowed to use public funds for worship or proselytizing activities. Nor can they incorporate elements of faith into service programs that receive support from government funds or contracts. Public funding of faith-based or faith-related service organizations is limited to programs that do not have an explicit religious purpose, are not primarily designed to promote a religious viewpoint, and do not involve substantial “entanglement” between religious organizations and public offices or bureaucracies (Allard 2009).

FBOs with a human or social service mission come in all sizes and structures, but often are widely recognized and trusted sources of social assistance across metropolitan and rural America. There are many small food and clothing programs operated out of religious congregations or through inter-faith organization that draw material support from many different religious congregations. Some of the most elaborate regional providers offering extensive professionalized health and human services also have a faith affiliation or mission. For example, there are Catholic Charities offices, Salvation Army locations, and Jewish Family Service organizations in most suburban (as well as rural and urban) communities. Aside from direct service provision, FBOs can help link low-income households with other community-based agencies and public programs of assistance (Allard 2009; Smith and Sosin 2001).

In many suburban communities, faith-based organizations (FBOs), whether religious congregations or faith-affiliated service organizations, are key sources of support for low-income populations (Allard 2017). Yet, it is difficult to provide accurate estimates of the work of FBOs – particularly those housed within congregations or those that are of modest size. Data from Internal Revenue Service (IRS) 990 forms (see discussion below) that often are used to provide information about nonprofit human service provision often exclude religious congregations and programs with budgets under $25,000 because those organizations are not required to file 990 forms with the IRS. Any estimate of nonprofit human service provision, therefore, grossly underestimates the contributions of many small or congregation-based FBOs.

*Nonprofit Human Service Program Revenue Sources and Volatility.* Nonprofit human service organizations generate program and operational revenues from several primary sources: government grants or contracts; Medicaid reimbursements; grants or contracts funded by nonprofit organizations or foundations; private giving from individuals; and revenues from fees or commercial sales.

Once modest in scope, government funding of social service programs has grown steadily since the late 1960s (Grønbjerg 2001; Smith, 2012). Most public sources of funding originate with the federal and state government, although county and municipal governments also commit their own resources to supporting nonprofit service provision. Increased availability of public funding has facilitated growth of the nonprofit human service sector, which have more than doubled in size over the past few decades to include more than 100,000 nonprofit organizations reporting revenues just over $100 billion annually (Allard 2009; 2017). Historically, private giving and support from charitable philanthropy have been critical sources of revenues for nonprofit service providers. The share from private giving, however, has declined over time (Allard 2009). Despite significant variation in size, form, and scope, therefore, many nonprofit human service organizations are highly reliant on those public sources of revenue (Allard 2009; Grønbjerg 2001; Salamon 1992; Smith 2012).

Government grants and contracts are advantageous sources of support for nonprofit organizations. Public revenue streams often commit large multi-year sums of money to support programs, staff, and operations in a manner that is stable and predictable for several years. The dependence of the nonprofit service sector upon public revenues, however, has several important implications. First, dependency upon public funding can force nonprofit service agencies to modify operations in a manner that undermines their autonomy and distinctive qualities as nongovernmental entities. Second, public funding streams are inherently “blocky” in that government agencies tend to fund programs in entirety or not at all. Reductions in government funding, as a result, often entail the loss of an entire contract or grant. Such cuts typically are non-incremental in nature and can create significant challenges for nonprofit service providers, particularly given that private funding composes a relatively small share of total revenues (Allard 2009; Smith 2012; Smith and Sosin 2001).

To this latter point, it is not uncommon for public and private funding for nonprofit human services to ebb and flow over time. Economic recessions and budget deficits often translate into reduced public human service funding. Government funding for human services can be particularly vulnerable to cuts at the state and local levels during times of austerity because those governments cannot easily run budget deficits. Similarly, private giving and support from charitable philanthropy often flattens out or trends downward during economic downturns. Ironically, cuts to public and private support for nonprofit human service programs are more likely to occur at the exact moment when need or demand for assistance is on the rise. Funding for nonprofit human service programs, therefore, may be less responsive to rising poverty than we might assume.

Erratic or volatile funding of service programs has a number of consequences for organizations. Even modest cuts or uncertainties in funding can upend a nonprofit’s revenue portfolio and create instability within the organization. Declines in funding will lead nonprofit providers to reduce programs or cut client caseloads, possibly even ceasing operations under the most extreme scenarios. The vacuum left by a service cuts also works to place a greater burden on remaining nonprofit service providers. To the extent that cuts in program funding persist or cannot be replaced by other revenues, we would expect to see highly unstable nonprofit actors and a less predictable nonprofit human service sector upon which many depend for help.

**Supplemental Analyses of Suburban and Urban Nonprofit Human Service Provision**

In this part of the Technical Appendix, we briefly review a set of analyses that supplement the findings reported in the main article. Technical Appendix Table 5 presents nonprofit health and human service expenditures per poor person for organizations with less than $10 million in annual revenue, which complement the nonprofit expenditure results discussed in of the main article. Here, by focusing on organizations with less than $10 million in annual revenue, we intend to consider capacity of smaller community-based nonprofit service providers. Largely, however, the findings reported in Technical Appendix Table 5 are consistent with those reported in Table 2 of the main article: suburban counties dramatically lag urban counties in per poor person spending overall. It is important to note that mean and median per capita expenditures are much lower when focused on this subset of nonprofit organizations than on all nonprofit organizations overall. Technical Appendix Table 6 examines urban and suburban county nonprofit service expenditures per capita by region of the country. Again, we see consistent evidence that suburban counties lag urban counties in per poor person spending in all regions of the country.The typical suburban county in the Northeast has a much higher per capita spending level from 2000 to 2017 than typical suburban counties in other regions of the country. Suburban (and urban) counties in the South, however, lag far behind other regions in per capita nonprofit health and human service expenditure. Technical Appendix Table 7 presents per capita nonprofit health and human service expenditures by county for three different metropolitan areas: Seattle-Tacoma, Chicago, and Atlanta. Overall, the same patterns observed in the aggregate are observed in the urban and suburban areas of these three metro areas: suburban counties typically lag urban counties in per poor person spending. Yet, Technical Appendix Table 7 shows how much variation there is within suburban counties of the same metro area and how much heterogeneity in nonprofit service provision exists within a given metropolitan area.

Technical Appendix Table 8 presents detailed coefficients and standard errors for the descriptive regressions presented in Figure 7 of the main article. Technical Appendix Table 9 presents an alternative specification of county racial composition where we simply include a continuous measure of the percent of the population that is Hispanic and non-Hispanic Black rather than the categorical low/moderate/high designations used in the main models. The categorical specification is relative and compares counties to other suburban or urban counties in the same year, while the continuous measure is simply an absolute percentage. In the specification using continuous percentages to describe county racial composition, we find a negative association between both the share Hispanic and non-Hispanic Black residents in a county and per capita nonprofit spending in that county. Technical Appendix Table 10 presents descriptive statistics for the sample used to estimate the regressions.

Next, Technical Appendix Figures 1 through 7 explore volatility and arc percentage change in nonprofit health and human service provision in greater depth. Volatility in nonprofit expenditures is calculated as the standard deviation of the arc percent change from year to year. Technical Appendix Figure 1 charts year-to-year volatility in nonprofit spending across three service sectors: public & behavioral health; social services; and child & family services (see above for more detail on these categories), which complements Figure 4 in the main article reporting year-over-year volatility in per capita spending aggregated across all services. We find evidence in Technical Appendix Figure 1 that volatility rises and falls consistently across these different service areas, with some indication that child and family service program funding may be slightly less volatile year-to-year than other types of programming. Overall, however, the findings here are consistent with those reported in the main article.

Technical Appendix Figures 2 and 3 provide more detailed charts of year-to-year volatility and arc percentage change in total nonprofit expenditures across race and class composition of a suburban county. These two figures complement analyses presented in Figure 4 of the main article. Technical Appendix Figure 2 examines year-to-year volatility by share of population that identifies as Hispanic population (Panel A), share of the population that identifies as non-Hispanic Black (Panel B), and whether county poverty rate is above or below 20 percent (Panel C). Technical Appendix Figure 3 presents arc percentage change year-to-year for the same county demographic breakouts. Consistent with findings in the main article, we find suburban counties with high percentages of Hispanic residents have lower levels of year-to-year volatility than those where Hispanics compose a smaller share of residents (see Technical Appendix Figure 2, Panel A). A relatively small share of suburban counties where Hispanics compose a large share of residents – about 20 percent – experience a negative shock to nonprofit expenditures of more than 10 percent (see Technical Appendix Figure 3, Panel A). By contrast, suburban counties with high percentages of non-Hispanic Black residents have higher levels of year-to-year volatility than those where non-Hispanic Blacks compose a smaller share of residents (see Technical Appendix Figure 2, Panel B). The share of suburban counties with large non-Hispanic black communities that experience negative expenditure shocks of 10 percent or more is about the same as the share that experience positive expenditure shocks of 10 percent or more – about 25 percent annually (see Technical Appendix Figure 3, Panel B). High-poverty suburban counties (poverty rate over 20 percent) also show consistent evidence of year-to-year volatility in nonprofit expenditures that is much higher than in low-poverty suburban counties (poverty rate under 20 percent, see Technical Appendix Figure 2, Panel C).

Finally, Technical Appendix Figures 4 through 7 present a set of scatterplots that examine arc percentage change in nonprofit health and human service expenditures and arc percentage change in number of poor people across suburban counties over four time periods: 2000-17; 2000-08; 2008-13; 2013-17. Again, consistent with findings in the main article that nonprofit expenditures are more pro-cyclical than we might expect, Technical Appendix Figures 4 through 7 show evidence that nonprofit health and human service expenditures are more likely to increase during relatively good economic periods (economic expansions from 2000 to 2008 and 2013 to 2017), but stay flat or decline during economic downturns (the immediate post-recession period from 2008 to 2013).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Technical Appendix Table 5. Nonprofit Health and Human Service Expenditures Per Poor Person, Organizations with Less Than $10 Million in Revenue, across Urban and Suburban Counties, 2000 to 2017** | | | | | | | | | | | | | | | |
| **Nonprofits with < $10m Revenue** | | Urban Counties in the Largest 100 Metropolitan Areas | | | | | | | Suburban Counties | | | Small Urban Counties | | | |
| 0 to 33 percent Suburban | | 33 to 66 percent Suburban | | > 66 percent Suburban | | |
| Mean | Median | Mean | Median | Mean | | Median | Mean | Median | | Mean | | Median |
| 2000 | All Organizations | 1,073.56 | 895.35 | 1,096.11 | 1,053.64 | 1,217.54 | | 1,073.72 | 756.50 | 283.91 | | 1,197.19 | | 964.05 |
|  |  | (6,689) |  | (2,743) |  | (2,049) | |  | (2,848) |  | | (2,057) | |  |
|  | Public & Behavioral Health Services | 204.15 | 187.41 | 267.59 | 211.19 | 264.95 | | 177.01 | 186.02 | 0.00 | | 236.68 | | 121.84 |
|  | (525) |  | (428) |  | (682) | |  | (1,053) |  | | (878) | |  |
|  | Social Services | 447.79 | 381.45 | 439.05 | 354.26 | 462.98 | | 393.19 | 305.29 | 41.54 | | 452.72 | | 349.05 |
|  |  | (6,113) |  | (992) |  | (1,013) | |  | (1,261) |  | | (1,327) | |  |
|  | Child & Family Services | 421.61 | 371.57 | 389.47 | 366.33 | 489.61 | | 489.94 | 265.20 | 69.77 | | 507.80 | | 407.65 |
|  |  | (873) |  | (1,948) |  | (961) | |  | (1,721) |  | | (630) | |  |
| 2010 | All Organizations | 1,062.70 | 849.72 | 901.28 | 896.94 | 1,073.53 | | 841.75 | 630.50 | 270.02 | | 1,028.40 | | 851.54 |
|  |  | (5,817) |  | (1,356) |  | (2,386) | |  | (2,666) |  | | (2,274) | |  |
|  | Public & Behavioral Health Services | 198.43 | 179.52 | 193.54 | 157.61 | 207.82 | | 141.39 | 129.80 | 0.00 | | 192.44 | | 118.19 |
|  | (804) |  | (406) |  | (633) | |  | (1,615) |  | | (985) | |  |
|  | Social Services | 484.95 | 399.03 | 381.35 | 334.17 | 442.35 | | 320.24 | 266.32 | 57.63 | | 405.27 | | 292.95 |
|  |  | (5,294) |  | (933) |  | (1,253) | |  | (1,537) |  | | (1,501) | |  |
|  | Child & Family Services | 379.32 | 282.52 | 326.39 | 280.73 | 423.36 | | 361.73 | 234.39 | 81.39 | | 430.70 | | 334.95 |
|  |  | (981) |  | (553) |  | (994) | |  | (737) |  | | (606) | |  |
| 2017 | All Organizations | 1,168.85 | 909.84 | 948.57 | 923.00 | 928.04 | | 841.07 | 647.23 | 329.80 | | 1,067.98 | | 901.93 |
|  |  | (7,080) |  | (2,060) |  | (2,687) | |  | (4,394) |  | | (2,912) | |  |
|  | Public & Behavioral Health Services | 211.57 | 170.90 | 170.56 | 134.15 | 193.21 | | 121.40 | 121.42 | 0.00 | | 191.93 | | 108.02 |
|  | (947) |  | (520) |  | (782) | |  | (2,696) |  | | (1,071) | |  |
|  | Social Services | 564.23 | 455.72 | 447.92 | 410.67 | 413.81 | | 331.89 | 303.82 | 92.14 | | 434.61 | | 345.36 |
|  |  | (6,130) |  | (1,398) |  | (1,645) | |  | (3,021) |  | | (2,170) | |  |
|  | Child & Family Services | 393.05 | 310.39 | 330.09 | 293.04 | 321.01 | | 281.68 | 221.99 | 75.54 | | 441.43 | | 352.36 |
|  |  | (1,054) |  | (693) |  | (958) | |  | (822) |  | | (659) | |  |
| Percent Change 2000-17 | All Organizations | 8.9% | 1.6% | -13.5% | -12.4% | -23.8% | | -21.7% | -14.4% | 16.2% | | -10.8% | | -6.4% |
| Public & Behavioral Health Services | 3.6% | -8.8% | -36.3% | -36.5% | -27.1% | | -31.4% | -34.7% | 0% | | -18.9% | | -11.3% |
| Social Services | 26.0% | 19.5% | 2.0% | 15.9% | -10.6% | | -15.6% | -0.5% | 121.8% | | -4.0% | | -1.1% |
| Child & Family Services | -6.8% | -16.5% | -15.2% | -20.0% | -34.4% | | -42.5% | -16.3% | 8.3% | | -13.1% | | -13.6% |
| **Sources**: National Center on Charitable Statistics, 2000, 2010, 2017. U.S. Census Bureau, 2000 Decennial Census; American Community Survey 5-Year Estimates 2008-12, 2015-19. | | | | | | | | | | | | | | | |
| **Notes**: Reported figures are in $2020. Numbers in parentheses are standard deviations. | | | | | |  |  | |  | |  |  |  | |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Technical Appendix Table 6. Nonprofit Health and Human Service Spending Per Poor Person, by Geographic Region** | | | | | | |
| **All Nonprofit Organizations** | | **Suburban Counties** | |  | **Urban Counties** | |
|  |  | Mean | Median |  | Mean | Median |
| 2000 | Northeast | $3,482.65 | $2,715.93 |  | $3,655.57 | $3,075.16 |
|  | South | $893.05 | $151.69 |  | $2,023.12 | $1,378.79 |
|  | Midwest | $1,415.34 | $646.33 |  | $3,179.67 | $2,575.69 |
|  | West | $1,410.77 | $613.48 |  | $2,304.25 | $1,808.89 |
|  |  |  |  |  |  |  |
| 2010 | Northeast | $4,187.72 | $3,195.70 |  | $4,775.62 | $4,376.89 |
|  | South | $903.91 | $155.69 |  | $2,203.40 | $1,654.44 |
|  | Midwest | $1,442.66 | $706.07 |  | $3,042.51 | $2,836.26 |
|  | West | $1,282.95 | $556.37 |  | $2,931.72 | $2,225.47 |
|  |  |  |  |  |  |  |
| 2017 | Northeast | $3,193.45 | $2,426.77 |  | $3,891.41 | $3,112.43 |
|  | South | $1,151.39 | $176.10 |  | $2,372.95 | $1,648.87 |
|  | Midwest | $1,905.96 | $769.28 |  | $3,625.27 | $3,414.58 |
|  | West | $1,708.71 | $724.64 |  | $3,574.23 | $2,463.65 |
| **Nonprofit Organizations < $10m Revenue** | |  | |  |  | |
|  |  | Mean | Median |  | Mean | Median |
| 2000 | Northeast | $1,661.94 | $1,453.41 |  | $1,621.31 | $1,476.10 |
|  | South | $499.54 | $134.52 |  | $824.32 | $700.23 |
|  | Midwest | $958.34 | $631.48 |  | $1,583.90 | $1,384.23 |
|  | West | $749.96 | $456.36 |  | $1,088.21 | $920.23 |
|  |  |  |  |  |  |  |
| 2010 | Northeast | $1,695.06 | $1,401.22 |  | $1,481.72 | $1,310.08 |
|  | South | $392.79 | $138.86 |  | $745.55 | $655.42 |
|  | Midwest | $736.25 | $468.39 |  | $1,168.80 | $993.38 |
|  | West | $635.48 | $381.71 |  | $1,076.35 | $845.60 |
|  |  |  |  |  |  |  |
| 2017 | Northeast | $1,321.17 | $1,152.13 |  | $1,103.27 | $1,009.85 |
|  | South | $434.58 | $166.32 |  | $786.38 | $702.23 |
|  | Midwest | $818.45 | $510.08 |  | $1,327.57 | $1,158.65 |
|  | West | $726.63 | $521.34 |  | $1,182.58 | $901.93 |
| **Sources**: U.S. Census Bureau, Decennial Census 2000; American Community Survey 5-Year Estimates 2008-12, 2015-19; National Center for Charitable Statistics, 2000-2017. | | | | | | |
|  | | | | | | |

**Technical Appendix Table 7. County Poverty Rates, Racial/Ethnic Composition, and Nonprofit Health and Human Service Spending in the Seattle, Atlanta, and Chicago Metro Areas**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A. Seattle-Tacoma Metro Area** | | | | | | | | | | | | | | |
| **Urban / Suburban Category** | **County** | **State** | **Poverty Rate** | | | **Percent Black** | | | **Percent Hispanic** | | | **Nonprofit Health & Human Service Expenditures Per Poor Resident** | | |
| **2000** | **2010** | **2017** | **2000** | **2010** | **2017** | **2000** | **2010** | **2017** | **2000** | **2010** | **2017** |
| Large Urban, >2/3 Suburban | King | WA | 8.4% | 10.9% | 8.9% | 5.2% | 6.0% | 6.3% | 5.5% | 8.8% | 9.7% | $5,775 | $7,486 | $10,004 |
| Large Urban, >2/3 Suburban | Pierce | WA | 10.5% | 11.9% | 10.4% | 6.8% | 6.6% | 6.5% | 5.5% | 9.2% | 10.9% | $2,229 | $2,358 | $3,501 |
| Suburban | Snohomish | WA | 6.9% | 9.8% | 7.5% | 1.5% | 2.2% | 2.9% | 4.5% | 8.9% | 10.2% | $2,692 | $1,987 | $3,222 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **B. Chicago-Naperville Metro Area** | | | | | | | | | | | | | | |
| **Urban / Suburban Category** | **County** | **State** | **Poverty Rate** | | | **Percent Black** | | | **Percent Hispanic** | | | **Nonprofit Health & Human Service Expenditures Per Poor Resident** | | |
| **2000** | **2010** | **2017** | **2000** | **2010** | **2017** | **2000** | **2010** | **2017** | **2000** | **2010** | **2017** |
| Large Urban, 1/3 - 2/3 Suburban | Cook | IL | 13.5% | 16.4% | 14.4% | 25.8% | 24.4% | 23.1% | 19.9% | 24.0% | 25.3% | $2,726 | $4,449 | $7,171 |
| Large Urban, >2/3 Suburban | Lake | IN | 12.2% | 17.4% | 15.6% | 25.0% | 25.1% | 23.4% | 12.1% | 16.7% | 19.0% | $1,833 | $1,372 | $1,373 |
| Suburban | DeKalb | IL | 11.4% | 16.9% | 16.6% | 4.4% | 6.1% | 7.8% | 6.4% | 10.2% | 11.2% | $2,483 | $1,471 | $1,239 |
| Suburban | DuPage | IL | 3.6% | 6.6% | 6.4% | 2.9% | 4.4% | 4.7% | 9.0% | 13.3% | 14.3% | $7,387 | $9,193 | $2,486 |
| Suburban | Grundy | IL | 4.8% | 8.6% | 7.6% | 0.2% | 1.1% | 1.2% | 4.8% | 8.2% | 9.9% | $652 | $66 | $338 |
| Suburban | Kane | IL | 6.7% | 11.0% | 9.4% | 5.6% | 5.3% | 5.3% | 23.7% | 30.5% | 31.9% | $2,831 | $2,099 | $4,333 |
| Suburban | Kendall | IL | 3.0% | 3.9% | 4.5% | 1.1% | 5.2% | 7.0% | 7.5% | 15.8% | 18.7% | $1,439 | $739 | $733 |
| Suburban | Lake | IL | 5.7% | 8.7% | 7.9% | 6.6% | 6.6% | 6.5% | 14.4% | 19.9% | 21.7% | $1,897 | $1,896 | $1,724 |
| Suburban | McHenry | IL | 3.7% | 7.5% | 7.0% | 0.5% | 1.1% | 1.4% | 7.5% | 11.4% | 13.1% | $2,163 | $1,128 | $763 |
| Suburban | Will | IL | 4.9% | 7.7% | 6.7% | 10.2% | 10.8% | 11.1% | 8.8% | 15.6% | 17.4% | $805 | $2,220 | $3,640 |
| Suburban | Jasper | IN | 6.7% | 8.4% | 8.2% | 0.2% | 0.7% | 0.6% | 2.8% | 5.3% | 6.0% | $206 | $388 | $374 |
| Suburban | Newton | IN | 6.9% | 11.1% | 12.8% | 0.2% | 0.3% | 0.2% | 2.9% | 5.1% | 6.4% | $0 | $0 | $38 |
| Suburban | Porter | IN | 5.9% | 9.8% | 9.9% | 1.1% | 2.8% | 3.5% | 4.8% | 8.5% | 10.0% | $6,597 | $4,722 | $4,094 |
| Suburban | Kenosha | WI | 7.5% | 12.2% | 12.3% | 4.7% | 6.7% | 7.2% | 7.0% | 11.7% | 13.1% | $2,186 | $1,494 | $1,634 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **C. Atlanta-Athens-Clarke County-Sandy Springs Metro Area** | | | | | | | | | | | | | | |
| **Urban / Suburban Category** | **County** | **State** | **Poverty Rate** | | | **Percent Black** | | | **Percent Hispanic** | | | **Nonprofit Health & Human Service Expenditures Per Poor Resident** | | |
| **2000** | **2010** | **2017** | **2000** | **2010** | **2017** | **2000** | **2010** | **2017** | **2000** | **2010** | **2017** |
| Large Urban 1/3 - 2/3 Suburban | Fulton | GA | 15.7% | 16.8% | 14.4% | 44.1% | 43.8% | 43.6% | 5.8% | 7.8% | 7.2% | $3,627 | $4,878 | $6,744 |
| Small Urban | Clarke | GA | 28.3% | 34.9% | 29.6% | 27.4% | 26.0% | 27.7% | 6.1% | 10.4% | 10.8% | $1,131 | $954 | $1,308 |
| Suburban | Barrow | GA | 8.3% | 13.6% | 12.6% | 10.2% | 11.7% | 11.7% | 2.5% | 8.9% | 10.9% | $193 | $619 | $565 |
| Suburban | Bartow | GA | 8.6% | 16.0% | 14.0% | 8.3% | 9.9% | 10.3% | 3.2% | 7.6% | 8.6% | $1,790 | $328 | $336 |
| Suburban | Butts | GA | 11.5% | 13.1% | 21.6% | 29.1% | 28.5% | 28.9% | 0.9% | 2.6% | 3.2% | $252 | $126 | $0 |
| Suburban | Carroll | GA | 13.7% | 17.9% | 17.3% | 16.0% | 18.1% | 19.0% | 2.8% | 6.2% | 6.9% | $71 | $75 | $144 |
| Suburban | Cherokee | GA | 5.3% | 8.4% | 7.5% | 2.2% | 5.4% | 6.7% | 5.6% | 9.6% | 10.5% | $236 | $226 | $501 |
| Suburban | Clayton | GA | 10.1% | 21.5% | 18.6% | 50.9% | 64.4% | 68.3% | 7.5% | 13.3% | 13.2% | $67 | $456 | $168 |
| Suburban | Cobb | GA | 6.5% | 11.9% | 9.1% | 18.4% | 24.6% | 26.7% | 7.7% | 12.2% | 13.0% | $761 | $941 | $1,844 |
| Suburban | Coweta | GA | 7.8% | 11.8% | 10.7% | 18.0% | 17.5% | 17.7% | 3.0% | 6.6% | 7.0% | $58 | $146 | $117 |
| Suburban | Dawson | GA | 7.6% | 13.7% | 8.6% | 0.1% | 0.2% | 1.1% | 0.5% | 3.9% | 4.7% | $170 | $132 | $181 |
| Suburban | DeKalb | GA | 10.8% | 18.6% | 15.1% | 53.7% | 53.7% | 53.4% | 7.7% | 9.6% | 8.5% | $1,301 | $1,363 | $1,122 |
| Suburban | Douglas | GA | 7.8% | 13.4% | 12.8% | 18.1% | 38.7% | 45.9% | 2.9% | 8.3% | 9.7% | $4,221 | $162 | $86 |
| Suburban | Fayette | GA | 2.6% | 6.7% | 5.5% | 11.9% | 19.5% | 22.5% | 2.5% | 6.3% | 7.2% | $687 | $218 | $959 |
| Suburban | Forsyth | GA | 5.5% | 6.7% | 5.7% | 0.3% | 2.6% | 3.3% | 5.5% | 9.4% | 9.5% | $131 | $185 | $465 |
| Suburban | Gwinnett | GA | 5.7% | 13.7% | 10.7% | 13.0% | 22.8% | 27.0% | 10.8% | 20.0% | 21.2% | $252 | $285 | $610 |
| Suburban | Haralson | GA | 15.5% | 23.2% | 14.9% | 5.2% | 4.8% | 5.1% | 0.6% | 1.2% | 1.7% | $59 | $57 | $91 |
| Suburban | Heard | GA | 13.6% | 25.2% | 14.3% | 10.8% | 11.7% | 8.7% | 0.6% | 0.9% | 2.7% | $0 | $0 | $0 |
| Suburban | Henry | GA | 4.9% | 10.3% | 8.5% | 14.5% | 35.9% | 43.4% | 2.2% | 5.8% | 6.8% | $905 | $1,115 | $1,306 |
| Suburban | Jasper | GA | 14.2% | 20.2% | 15.5% | 27.5% | 21.3% | 20.4% | 1.3% | 3.8% | 3.9% | $0 | $0 | $25 |
| Suburban | Lamar | GA | 11.2% | 19.8% | 18.6% | 29.2% | 31.2% | 29.4% | 1.4% | 2.0% | 2.5% | $378 | $0 | $122 |
| Suburban | Meriwether | GA | 17.8% | 17.3% | 22.9% | 42.3% | 40.1% | 39.7% | 0.6% | 1.6% | 2.2% | $0 | $0 | $0 |
| Suburban | Newton | GA | 10.0% | 14.6% | 15.5% | 22.2% | 39.5% | 44.3% | 1.8% | 4.6% | 5.6% | $52 | $86 | $89 |
| Suburban | Paulding | GA | 5.5% | 10.3% | 8.2% | 7.2% | 17.0% | 18.5% | 1.5% | 5.1% | 6.3% | $8 | $562 | $67 |
| Suburban | Pickens | GA | 9.2% | 11.8% | 10.2% | 1.6% | 1.2% | 1.0% | 1.6% | 2.8% | 3.1% | $3,006 | $4,555 | $3,308 |
| Suburban | Pike | GA | 9.6% | 11.0% | 9.5% | 15.0% | 10.7% | 8.9% | 0.9% | 1.1% | 1.6% | $0 | $0 | $0 |
| Suburban | Rockdale | GA | 8.2% | 13.9% | 13.1% | 18.3% | 45.2% | 53.8% | 6.3% | 9.6% | 10.2% | $152 | $746 | $1,051 |
| Suburban | Spalding | GA | 15.5% | 21.6% | 17.9% | 30.7% | 32.9% | 34.1% | 1.7% | 3.9% | 4.6% | $76 | $483 | $165 |
| Suburban | Walton | GA | 9.7% | 13.8% | 12.1% | 14.2% | 15.2% | 17.6% | 1.7% | 3.4% | 4.4% | $96 | $188 | $171 |

**Sources:** U.S. Census Bureau, Decennial Census 2000; American Community Survey 2008-12, 2015-19; National Center for Charitable Statistics 2000-2017.

**Technical Appendix Table 8. Pooled Cross-Sectional Regression Models Predicting Nonprofit Expenditures Per Poor Person, with Categorical Measures of County Racial/Ethnic Composition**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Model A. Using Dichotomous Urban-Rural Measure** | | |  | **Model B. Using Five-Category Urban/Rural Scale** | | |
| Urban/ Suburban Category (Reference = Urban) | Suburban | -834.77\*\*\* |  | Urban/ Suburban Category (Reference = Large Urban, <1/3 Suburban) | Large Urban 1/3 - 2/3 Sub. | -302.24 |
| (119.18) |  | (422.13) |
|  |  |  | Large Urban >2/3 Sub. | -460.29 |
|  |  |  | (465.37) |
|  |  |  | Suburban | -1325.65\*\* |
|  |  |  | (396.51) |
|  |  |  | Small Urban | -560.73 |
|  |  |  | (397.55) |
| Year (Reference = 2007) | 2008 | -90.66\*\*\* |  | Year (Reference = 2007) | 2008 | -90.92\*\*\* |
| (21.49) |  | (21.43) |
| 2009 | -79.94\*\* |  | 2009 | -79.88\*\* |
| (24.51) |  | (24.51) |
| 2010 | -49.08 |  | 2010 | -48.93 |
| (39.12) |  | (39.11) |
| 2011 | -142.54\*\*\* |  | 2011 | -145.84\*\*\* |
| (39.54) |  | (39.54) |
| 2012 | -207.49\*\*\* |  | 2012 | -210.78\*\*\* |
| (40.6) |  | (40.58) |
| 2013 | -235.32\*\*\* |  | 2013 | -238.67\*\*\* |
| (42.78) |  | (42.77) |
| 2014 | -253.14\*\*\* |  | 2014 | -256.6\*\*\* |
| (43.94) |  | (43.82) |
| 2015 | -206.27\*\*\* |  | 2015 | -211.84\*\*\* |
| (44.72) |  | (44.37) |
| 2016 | -194.75\*\*\* |  | 2016 | -200.36\*\*\* |
| (49.76) |  | (49.2) |
| 2017 | -234.57\*\*\* |  | 2017 | -240.16\*\*\* |
| (59.22) |  | (58.75) |
| Region (Reference = Northeast) | South | -1530.12\*\*\* |  | Region (Reference = Northeast) | South | -1524.07\*\*\* |
| (248.64) |  | (249.59) |
| Midwest | -1384.12\*\*\* |  | Midwest | -1378.68\*\*\* |
| (227.66) |  | (228.83) |
| West | -1709.13\*\*\* |  | West | -1696.23\*\*\* |
| (280.17) |  | (279.7) |
| Share Hispanic (Ref = Low) | Moderate | 35.78 |  | Share Hispanic (Ref = Low) | Moderate | 17 |
| (104.05) |  | (102.16) |
| High | 65.48 |  | High | 55.87 |
| (157.5) |  | (119.18) |
| Share non-Hispanic Black (Ref = Low) | Moderate | 64.28 |  | Share non-Hispanic Black (Ref = Low) | Moderate | 55.87 |
| (119.77) |  | (119.18) |
| High | -440.49\*\* |  | High | -470.79\*\* |
| (155.99) |  | (155.08) |
|  | Republican Vote Pct. | -27.58\*\*\* |  |  | Republican Vote Pct. | -25.96\*\*\* |
|  | (4.18) |  |  | (4.1) |
|  | Pct. with College Degree | 67.46\*\*\* |  |  | Pct. with College Degree | 67.46\*\*\* |
|  | (6.36) |  |  | (6.36) |
|  | Constant | 3135.95\*\*\* |  |  | Constant | 3551.88\*\*\* |
|  | (359.56) |  |  | (529.08) |

**Sources:** U.S. Census Bureau, American Community Survey 5-year estimates 2005-09 – 2015-19; MIT Election Data and Science Lab 2018; National Center for Charitable Statistics 2007-2017.

**Notes:** \* indicates p < 0.05; \*\* indicates p < 0.01; \*\*\* indicates p < 0.001. This table documents full results from the model visualized in Figure 7 in the main paper. Fifty-seven county-year observations with nonprofit expenditures higher than $20,000 per poor resident were excluded as outliers.Standard errors are clustered by county.

**Technical Appendix Table 9. Pooled Cross-Sectional Regression Models Predicting Nonprofit Expenditures Per Poor Person, with Continuous Measures of County Racial/Ethnic Composition**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Model A. Using Dichotomous Urban-Rural Measure** | | |  | **Model B. Using Five-Category Urban/Rural Scale** | | |
| Urban/ Suburban Category (Reference = Urban) | Suburban | -893.99\*\*\* |  | Urban/ Suburban Category (Reference = Large Urban, <1/3 Suburban) | Large Urban 1/3 - 2/3 Sub. | -351.71 |
| (125.78) |  | (405.16) |
|  |  |  | Large Urban >2/3 Sub. | -476.05 |
|  |  |  | (449.47) |
|  |  |  | Suburban | -1493.2\*\*\* |
|  |  |  | (384.96) |
|  |  |  | Small Urban | -682.54\* |
|  |  |  | (383.86) |
| Year (Reference = 2007) | 2008 | -80.86\*\*\* |  | Year (Reference = 2007) | 2008 | -79.75\*\*\* |
| (21.9) |  | (21.85) |
| 2009 | -66.46\*\* |  | 2009 | -64.29\* |
| (25.3) |  | (25.35) |
| 2010 | -31.88 |  | 2010 | -28.89 |
| (39.76) |  | (39.73) |
| 2011 | -103.12\* |  | 2011 | -102.36\* |
| (41.59) |  | (41.61) |
| 2012 | -163.45\*\*\* |  | 2012 | -161.99\*\*\* |
| (42.56) |  | (42.55) |
| 2013 | -185.35\*\*\* |  | 2013 | -183.14\*\*\* |
| (45.04) |  | (45.03) |
| 2014 | -198.66\*\*\* |  | 2014 | -195.86\*\*\* |
| (46.87) |  | (46.92) |
| 2015 | -134.67\*\* |  | 2015 | -132.97\*\* |
| (50.73) |  | (50.69) |
| 2016 | -117.05\* |  | 2016 | -114.57\* |
| (55.22) |  | (55.25) |
| 2017 | -150.82\* |  | 2017 | -147.53\* |
| (65.27) |  | (65.38) |
| Region (Reference = Northeast) | South | -1344.1\*\*\* |  | Region (Reference = Northeast) | South | -1322.31\*\*\* |
| (261.07) |  | (259.9) |
| Midwest | -1625.09\*\*\* |  | Midwest | -1403.27\*\*\* |
| (285.66) |  | (232.78) |
| West | -1625.09\*\*\* |  | West | -1595.64\*\*\* |
| (285.66) |  | (285.2) |
|  | Percent Hispanic | -10.83\* |  |  | Percent Hispanic | -12.41\*\* |
|  | (4.34) |  |  | (4.31) |
|  | Percent non-Hispanic Black | -22.17\*\*\* |  |  | Percent non-Hispanic Black | -23.67\*\*\* |
|  | (4.85) |  |  | (4.81) |
|  | Republican Vote Pct. | -36.41\*\*\* |  |  | Republican Vote Pct. | -34.99\*\*\* |
|  | (5.18) |  |  | (5.1) |
|  | Pct. with College Degree | 63.28\*\*\* |  |  | Pct. with College Degree | 62.53\*\*\* |
|  | (405.65) |  |  | (564.34) |
|  | Constant | 3963.39\*\*\* |  |  | Constant | 4508.5\*\*\* |
|  | (405.65) |  |  | (564.34) |

**Sources:** U.S. Census Bureau, American Community Survey 5-year estimates 2005-09 – 2015-19; MIT Election Data and Science Lab 2018; National Center for Charitable Statistics 2007-2017.

**Notes:** \* indicates p < 0.05; \*\* indicates p < 0.01; \*\*\* indicates p < 0.001.This table documents full results from the model visualized in Figure 7 in the main paper. Fifty-seven county-year observations with nonprofit expenditures higher than $20,000 per poor resident were excluded as outliers.Standard errors are clustered by county.

**Technical Appendix Table 10. Descriptive Statistics of Regression Sample**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | | Mean | Standard Deviation | Minimum | 25th Percentile | Median | 75th Percentile | Maximum |
| Nonprofit Expenditures Per Poor Person ($2020) | | 1785.51 | 2255.06 | 0.00 | 164.34 | 1013.46 | 2617.63 | 19953.91 |
| Dichotomous Urban/ Suburban Code | Suburban (0=no; 1=yes) | 0.65 | 0.48 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Five-Category Urban/Suburban Code | Large Urban <1/3 Suburban | 0.03 | 0.17 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 |
| Large Urban 1/3-2/3 Suburban | 0.04 | 0.19 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 |
| Large Urban >2/3 Suburban | 0.04 | 0.20 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 |
| Suburban | 0.65 | 0.48 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Small Urban | 0.24 | 0.43 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 |
| Share Black Population | Low | 0.43 | 0.50 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 |
| Moderate | 0.36 | 0.48 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 |
| High | 0.21 | 0.41 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 |
| Percent Black | | 0.11 | 0.14 | 0.00 | 0.01 | 0.05 | 0.15 | 0.82 |
| Share Hispanic Population | Low | 0.36 | 0.48 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 |
| Moderate | 0.46 | 0.50 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 |
| High | 0.18 | 0.38 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 |
| Percent Hispanic | | 0.09 | 0.12 | 0.00 | 0.02 | 0.05 | 0.10 | 0.96 |
| Republican Vote Share | | 0.55 | 0.15 | 0.07 | 0.45 | 0.56 | 0.66 | 0.93 |
| Percent of Adults with College Degree | | 0.33 | 0.11 | 0.08 | 0.25 | 0.32 | 0.40 | 0.83 |

**Sources:** U.S. Census Bureau, American Community Survey 5-year estimates 2005-09 – 2015-19; MIT Election Data and Science Lab 2018; National Center for Charitable Statistics 2007-2017.

**Notes:** 57 county-year observations with nonprofit expenditures higher than $20,000 per poor resident were excluded as outliers.

**Technical Appendix Figure 1. Year-over-year Volatility in Nonprofit Health and Human Service Expenditures in Suburban Counties, by Sector, 2000-2017**

**Sources**: National Center on Charitable Statistics, 2000-2017

**Notes**: Figures represent the standard deviation (across all suburban counties) of the arc percent change in expenditures between the year listed and the prior year.

**Technical Appendix Figure 2. Year-over-year Volatility in Nonprofit Health and Human Service Expenditures in Suburban Counties, by County Racial/Ethnic Composition and Poverty Rate, 2007-2017**

|  |  |
| --- | --- |
| **Panel A. Nonprofit Expenditure Volatility by Hispanic Population** | **Panel B. Nonprofit Expenditure Volatility by Black Population** |
| **Panel C. Nonprofit Expenditure Volatility by Poverty Rate** |  |

**Sources**: National Center on Charitable Statistics, 2000-2017; American Community Survey five-year estimates, 2005-09 through 2015-19.

**Notes**: All expenditures converted to $2020. Figures represent the standard deviation (across all counties in the category listed) of the arc percent change in expenditures between the year listed and the prior year. A county was considered to have a high percent Hispanic or Black population if the share of the county’s population identifying as Hispanic or Black was more than half a standard deviation above the mean across all suburban counties in a given year. A county was considered to have a high poverty rate if its poverty rate was 20 percent or higher in a given year.

**Technical Appendix Figure 3. Year-Over-Year Changes in Nonprofit Expenditures In Suburban Counties, by Racial/Ethnic Composition and Poverty Rate**

|  |  |
| --- | --- |
| **Panel A. Suburban Counties with a High Percent Hispanic Population** | **Panel B. Suburban Counties with a High Percent Black Population** |
| **Panel C. Suburban Counties with Poverty Rate > 20 percent** |  |

**Sources**: National Center on Charitable Statistics, 2000-2017; American Community Survey five-year estimates, 2005-09 through 2015-19.

**Notes**: All expenditures converted to $2020. Year-over-year changes are calculated using the arc percent change in expenditures between the year displayed and the prior year. A county was considered to have a high percent Hispanic or Black population if the share of the county’s population identifying as Hispanic or Black was more than half a standard deviation above the mean across all suburban counties in a given year. A county was considered to have a high poverty rate if its poverty rate was 20 percent or higher in a given year.

**Technical Appendix Figure 4. Change in Poor Population and Change in Nonprofit Health and Human Service Expenditures in Suburban Counties, by Racial/Ethnic Composition and Poverty Rate, 2000-2017**

|  |  |
| --- | --- |
| **Panel A. High % Hispanic** | **Panel B. High % Black** |
| **Panel C. High Poverty Rate** |  |

**Sources**: National Center on Charitable Statistics, 2000-2017; U.S. Census Bureau, Decennial Census 2000; American Community Survey five-year estimates, 2015-19.

**Notes**: All expenditures converted to $2020. A county was considered to have a high percent Hispanic or Black population if the share of the county’s population identifying as Hispanic or Black was more than half a standard deviation above the mean across all suburban or urban counties in a given year. A county was considered to have a high poverty rate if its poverty rate was 20 percent or higher in a given year.

**Technical Appendix Figure 5. Change in Poor Population and Change in Nonprofit Health and Human Service Expenditures in Suburban Counties, by Racial/Ethnic Composition and Poverty Rate, 2000-2008**

|  |  |
| --- | --- |
| **Panel A. High Percent Hispanic** | **Panel B. High Percent Black** |
| **Panel C. High Poverty Rate** |  |

**Sources**: National Center on Charitable Statistics, 2000-2017; U.S. Census Bureau, Decennial Census 2000; American Community Survey five-year estimates, 2006-2010.

**Notes**: All expenditures converted to $2020. A county was considered to have a high percent Hispanic or Black population if the share of the county’s population identifying as Hispanic or Black was more than half a standard deviation above the mean across all suburban or urban counties in a given year. A county was considered to have a high poverty rate if its poverty rate was 20 percent or higher in a given year.

**Technical Appendix Figure 6. Change in Poor Population and Change in Nonprofit Health and Human Service Expenditures in Suburban Counties, by Racial/Ethnic Composition and Poverty Rate, 2008-2013**

|  |  |
| --- | --- |
| **Panel A. High Percent Hispanic** | **Panel B. High Percent Black** |
| **Panel C. High Poverty Rate** |  |

**Sources**: National Center on Charitable Statistics, 2000-2017; American Community Survey five-year estimates, 2006-10, 2011-15.

**Notes**: All expenditures converted to $2020. A county was considered to have a high percent Hispanic or Black population if the share of the county’s population identifying as Hispanic or Black was more than half a standard deviation above the mean across all suburban or urban counties in a given year. A county was considered to have a high poverty rate if its poverty rate was 20 percent or higher in a given year.

**Technical Appendix Figure 7. Change in Poor Population and Change in Nonprofit Health and Human Service Expenditures in Suburban Counties, by Racial/Ethnic Composition and Poverty Rate, 2013-2017**

|  |  |
| --- | --- |
| **Panel A. High Percent Hispanic** | **Panel B. High Percent Black** |
| **Panel C. High Poverty Rate** |  |

**Sources**: National Center on Charitable Statistics, 2000-2017; American Community Survey five-year estimates, 2011-15, 2015-19.

**Notes**: All expenditures converted to $2020. A county was considered to have a high percent Hispanic or Black population if the share of the county’s population identifying as Hispanic or Black was more than half a standard deviation above the mean across all suburban or urban counties in a given year. A county was considered to have a high poverty rate if its poverty rate was 20 percent or higher in a given year.

**References**

Allard, Scott W. 2009. *Out of Reach: Place, Poverty, and the New American Welfare State*. New Haven: Yale University Press.

Allard, Scott W. 2017. *Places in Need: The Changing Geography of Poverty*. Russell Sage Foundation Press.

Allard, Scott W. and Steven Rathgeb Smith. 2014. “Medicaid and the Funding of Social Service Organizations.” Journal of Health Politics, Policy, and Law, 39(6): 1135-72.

Grønbjerg, Kirsten A. 2001. "The U.S Nonprofit Human Service Sector: A Creeping Revolution." *Nonprofit and Voluntary Sector Quarterly* 30 (2):276–297.

Jones, Deondrè. 2019. “IRS Activity Codes.” Urban Institute, National Center for Charitable Statistics.

Office of Management and Budget. 2013. “Revised Delineations of Metropolitan Statistical Areas, Micropolitan Statistical Areas, and Combined Statistical Areas, and Guidance on Uses of the Delineations of These Areas.” Accessed January 13, 2022. https://www.bls.gov/bls/omb-bulletin-13-01-revised-delineations-of-metropolitan-statistical-areas.pdf

Salamon, Lester M. 1992. “Social Services.” In C. Clotfelter, *Who Benefits from the Nonprofit Sector?* Chicago, IL: University of Chicago Press.

Salamon, Lester M. ed. 2002. *The State of Nonprofit America*. Washington, D.C.: Brookings Institution Press.

Smith, Steven Rathgeb. 2012. "Social Services." In *The State of the Nonprofit Sector*, edited by Lester M. Salamon. Washington, D.C.: Brookings Institution Press.

Smith, Steven Rathgeb, and Michael R. Sosin. 2001. “The Varieties of Faith-Related Agencies.” *Public Administration Review* 61, no. 6:651–70.