Do Federal Place-Based Policies Improve Economic Opportunity in Rural Communities?

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The U.S. federal government has invested considerable resources in place-based programs to improve local economies, amenities, and infrastructure. Although urban place-based policies have received the most attention, place-based approaches have long been central to efforts addressing rural poverty as well. Using a novel dataset, we document a substantial increase in place-based funding to rural counties from 1990 to 2015. We then assess the association between exposure to place-based funding and socioeconomic outcomes in adulthood using data from the National Longitudinal Survey of Youth 1997. We find that living in counties that received more place-based funding is associated with higher educational attainment and greater earnings, but only for those who migrated in adulthood. We conclude that place-based investment may improve economic opportunity via geographic mobility for rural American youth.

Keywords: public policy, geography, rural youth, economic opportunity

Areas of concentrated economic disadvantage are persistent features of the U.S. landscape, and this persistence is especially notable in rural areas (Duncan 1996). Of the counties defined by the federal government as "persistently poor" in 2010—meaning they had poverty rates above 20 percent for the past thirty years—fully 85 percent were in rural areas (Economic Research Service 2021). Persistent poverty is also spatially concentrated (Lichter and Johnson 2007). The vast majority of poor counties are located in the Mississippi Delta and Appalachia; additional smaller pockets are in the Southwest and Great Plains. Durable patterns of spatial inequality among rural communities have worsened in recent years, fueled by the

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dual forces of economic restructuring and depopulation (Johnson and Lichter 2019; Thiede, Lichter, and Slack 2018).

The spatial clustering and temporal durability of poverty has led scholars and policymakers to consider place-based policies as a means for improving economic opportunity and alleviating multi-generational poverty (Cisneros and Engdahl 2010; Glaeser and Gottlieb 2008; Neumark and Simpson 2015). Over the past quarter century, the federal government has invested considerable resources in place-based programs to stimulate local economies, improve amenities and infrastructure, and build human capital. Whereas people-based interventions target individual sources of disadvantage—such as a lack of income for basic necessities including food, shelter, or childcare—place-based policies are motivated by a recognition that community conditions shape access to opportunity and quality of life above and beyond personal resources. Advocates of place-based investment frequently justify targeting disadvantaged communities on equity grounds, pointing to the blatant neglect (and sometimes active harm) caused by public and private initiatives over generations. As a result, place-based policies focus disproportionately on areas with concentrated and persistent economic or social disadvantage.

Although most scholarly attention has focused on place-based policies in urban areas, place-based approaches have long been central policy tools used to address rural poverty as well. We draw on a novel dataset of federal place-based policies that links longitudinal federal funding to specific counties across the United States from 1990 to 2015 in order to describe the evolution and distribution of federal place-based funding specifically for rural areas, defined here as nonmetropolitan counties.[1] We then integrate the data on place-based funding with data from the nationally representative National Longitudinal Survey of Youth-1997 Cohort (NLSY97) to assess whether exposure to place-based funding was associated with improved educational and economic outcomes for residents of rural areas.

We find that federal place-based funding to rural counties has increased substantially during this time period, mirroring broader national trends. Since the Great Recession, federal place-based policies have provided more than $4 billion annually to nonmetro counties and the majority of this funding went toward economic development initiatives. Although the total funding received by rural counties is considerably less than what metropolitan counties received, on a per capita basis funding levels are roughly comparable across the rural-urban divide. The vast majority of rural counties received some place-based funding from federal sources over this period, but substantial amounts of funding were geographically concentrated in poor areas of the Mississippi Delta, Appalachia, and near the Canadian border. Despite evidence of federal place-based investment in rural counties, we find that the intensity of place-based funding in one's county of residence is associated with upward mobility only for rural young adults who leave their hometowns. We conclude by discussing how federal place-based investment may contribute to the so-called rural brain drain (Kefalas and Carr 2009).

BACKGROUND

Academic characterizations of rural communities typically depict areas with densely connected social ties or places with rigid systems of racial, economic, and social stratification (DuBois 1912; Duncan 1996; Hall and Stack 1982; Tickamyer and Duncan 1990). Both characterizations reflect a limited opportunity structure that is rooted in historical political economy, with powerful local elites who exerted substantial control over rural labor and social institutions—power that was tied to land ownership and control over a single dominant industry, such as natural resource extraction or seasonal agriculture (Baldwin 2018; Billings 1979; Hall and Stack 1982). More recently, some rural communities have experienced increased precarity as the result of economic decline, restructuring, and population loss (Johnson and Lichter 2019; Thiede, Lichter, and Slack 2018).

1. Throughout this article, we categorize counties as metropolitan or nonmetropolitan using 1990 Office of Management and Budget (OMB) definitions and refer to these categories as urban or rural respectively.

These forces are exacerbated by residential mobility patterns, given that highly skilled and highly educated individuals are the most likely to migrate out of rural areas (Foulkes and Schafft 2010). In recent decades, scholars have found high rates of out-migration from rural areas among the young and highly educated (Domina 2006; Weber et al. 2007), leading to rising educational differentials between urban and rural America (Fischer and Mattson 2009). Returns to human capital tend to be greater in urban than rural areas, motivating selective migration to cities for the more educated and skilled, while keeping less educated and skilled residents anchored in rural communities with limited wage or occupational opportunities that restrict upward economic mobility (Lichter and Brown 2011). Dubbed "rural brain drain" (Kefalas and Carr 2009), this migration dynamic has generated sharp socioeconomic disparities between the so-called rural movers and stayers. Rural stayers undertake various labor market strategies to cope with economic decline in their communities, which differs by gender and social class (see Francis 2022, this issue; Niccolai, Damaske, and Park 2022, this issue), whereas rural movers tend to confront a host of social, economic, and emotional hurdles on their pursuit of upward mobility (see Parsons 2022).

Rationales for and Against Place-Based Investment

Against this backdrop of rigid opportunity structures, persistent poverty, and depopulation, both scholars and policymakers have considered place-based policies as a tool for investing in rural communities. Those who advocate for place-based policies typically justify them using either equity or efficiency rationales. Equity arguments frequently point to policies that have either ignored or actively harmed certain communities over time, leading to the concentration of disadvantage, particularly within communities of color (Massey and Denton 1993; Rothstein 2017; Squires 2011). Efficiency arguments for place-based investment suggest that geographically targeted interventions may rectify local market failures, fund public goods and amenities, and generate positive productivity spillovers that are unlikely to accrue to geographically dispersed investments (Kline and Moretti 2014; Neumark and Simpson 2015).

Despite these arguments, the equity and efficiency of place-based policies remains an area of active scholarly and public debate. In economic spatial equilibrium models, the benefit of a location-based subsidy is capitalized into land rents—raising prices and undermining the potential benefits to residents as a result (Glaeser and Gottlieb 2008). Residents can also move in and out of areas targeted for investment as prices rise or as opportunities increase (Freeman 2005; Marcuse 1985). Finally, the incentives to invest within particular areas may distort the market and create inefficiencies by depressing economic activity in other areas where it may have occurred in the absence of any incentives (Neumark and Simpson 2015).

Thus, the potential benefits of place-based policies must be weighed alongside the potential adverse effects on prices, migration flows, and market efficiency. This leads scholars from disparate disciplinary and epistemological traditions to question place-based initiatives as a mechanism to improve equity and spur economic growth (Brenner, Marcuse, and Mayer 2012; Crump 2002; Glaeser 2012). Together, these critiques point to potential adverse consequences of place-based targeting that might undermine intended equity and efficiency goals.[2]

Federal Place-Based Policy in Rural Areas

Although most scholarly attention has focused on place-based policies in urban areas, the federal government has also long used place-based approaches to address rural poverty as well.[3]

2. A full review of the impact of place-based policies is beyond the scope of this article (see Glaeser and Gottlieb 2008; Kline and Moretti 2014; Neumark and Simpson 2015). Most research, however, finds modest short-run effects on a limited set of outcomes that are closely related to the domain of the intervention, such as housing, economic development, or crime (Braga et al. 2001; Busso, Gregory, and Kline 2013; Tach and Emory 2017).

3. States and local jurisdictions have also used place-based targeting initiatives. Future research should consider whether state and local initiatives complement or supplement federal funding.

Some early place-based economic development initiatives were focused on rural communities, such as the New Deal–era Tennessee Valley Authority. This program aimed to stimulate economic development via large-scale public infrastructure spending, albeit using racially exclusionary practices (Alderman and Brown 2011; Bullard 2008). Place-based approaches were also part of the 1960s War on Poverty agenda, for example, when the National Advisory Committee on Rural Poverty produced its influential *People Left Behind* report (Breathitt 1967). Additionally, the Community Development Block Grant (CDBG) Program, which has been administered since 1974, disburses the majority of non-entitlement funds to rural areas; however, it is unclear how effective this program is at promoting development in rural areas (Wiley 2014).

More recently, scholars of rural areas have debated the efficacy of place-based policies aimed to revitalize struggling rural business districts and industries, in an effort to both stem the tide of depopulation in small town America and aid in recovery from the Great Recession (Austin, Summers, and Glaeser 2018; Partridge and Rickman 2008; Shambaugh and Nunn 2018; Weber 2007). Rural communities were included in a patchwork of federal place-based economic development programs, such as the Empowerment Zone program in the 1990s and more recently the New Markets Tax Credit program. Some evidence indicates that being designated an Empowerment Zone reduced out-migration in rural areas and increased housing stability, but researchers have been unable to identify a broader impact on economic indicators in rural areas (Cho 2019; Estrada and Allen 2004).

In addition to resources available from the Department of Housing and Urban Development, specific funding streams for housing and economic development were also offered to rural communities through the Department of Agriculture (USDA) and other federal agencies. Under President Obama's administration, several new initiatives such as federal Promise Zones, StrikeForce, and Cool & Connected specifically targeted rural areas with funding for economic development, housing, and infrastructure (Scally and Posey 2017). Implementation in each community varied widely because of need, though evidence indicates localized successes. Case studies demonstrate that some communities were able to use these newly available funds to increase graduation rates, improve public infrastructure, and increase children's school readiness (Scally and Posey 2017). However, research suggests that high-poverty rural counties lack the resources to pursue much of this federal funding (Dewees, Lobao, and Swanson 2003), and that the strength of local community leadership is a key determinant to receiving federal funding and improving overall community vitality (Cook et al. 2009). Despite the historical emergence and recent growth of place-based policies in rural areas (Swanson 2001), we currently lack a comprehensive picture of how federal place-based policies have been distributed across rural and urban areas, and whether residents experience different returns to these investments depending on where they live.

Geographic Variation in Upward Mobility

Recent scholarly investigations have revealed that prospects for upward mobility in the United States are strongly influenced by geography. Children from the bottom quintile of family income face dramatically different chances of moving up in the income distribution based on the county, and even the neighborhood, where they grow up (Alvarado 2016; Chetty et al. 2014). Areas characterized by high levels of upward mobility tend to be less racially segregated and more economically equal, have better K–12 schools, higher levels of social capital, and greater family stability (Chetty et al. 2014). Although empirical evidence is limited, in theory policies that generate improvements to such local community contexts—including economic opportunity and security, the built and social environment, and health care and educational institutions—could have a positive impact on resident outcomes (Chetty, Hendren, and Katz 2016; Sharkey and Faber 2014).

Although most of this work has focused on either the nation as a whole or metropolitan areas only, rural counties tend to have slightly higher average levels of upward mobility than

urban counties (Krause and Reeves 2017; Weber et al. 2018). Better job matching, lower inequality, and higher social capital can provide low-income rural youth a greater chance at upward mobility (Weber et al. 2018). Eleanor Krause and Richard Reeves (2017) also find that rates of upward mobility are more variable among rural areas than urban: counties in the upper Midwest and Northern Plains have some of the nation's highest rates of upward mobility from poverty, whereas rural parts of the Southeast have among the nation's lowest. In general, these place-based predictors of upward mobility are as strong, if not stronger, in rural counties than urban. In particular, economic prosperity and population growth are strong predictors of upward mobility for residents of urban areas, but even stronger predictors of upward mobility for rural residents (Krause and Reeves 2017).

Despite renewed scholarly attention to the geographic contours of economic opportunity in America, and the increased attention to place that this work has inspired, we still know little about the role of place-based policies in either reinforcing or disrupting spatial differences in economic opportunity. This dearth of information is particularly acute for rural areas. In the analyses that follow, we aim to fill this gap in existing research by using a novel data source to document the evolution and distribution of federal place-based funding for nonmetropolitan areas from 1990 to 2015. We then integrate data on place-based policies with data from the nationally representative NLSY-1997 Cohort to compare the associations between place-based funding and economic outcomes for nonmetro and metro residents who had varying exposure to these policies as children and young adults. We also consider the role of migration, given its ongoing importance in shaping the economic fortunes of rural communities.

DATA AND METHOD

We obtained data on the sources of federal place-based funding from public records of federal agencies. We developed an initial list of candidate programs by consulting Notifications of Funding Availability, annual budgets of federal agencies and congressional appropriations, existing federal data sources, and inquiries with key executive and agency personnel and other policy experts. From the initial list of programs, we developed a set of criteria to identify the final set of programs to include in this analysis. First, we defined an initiative as *place-based* if eligibility was determined, and implementation occurred, for a specific bounded geographic area (Kline and Moretti 2014; Neumark and Simpson 2015; Orszag et al. 2009). Further, that area must be geographically concentrated at the county level or smaller. Most initiatives targeted counties or neighborhoods based on specific community characteristics, such as the poverty, crime, or unemployment rate. We excluded policies that targeted people based on individual or family characteristics (such as family poverty status) and retained those that targeted geographic units based on community-level characteristics (such as neighborhood poverty rate). We also excluded funding that went only to urban areas, as well as those that went to very broad geographic areas (such as the U.S.-Mexico border) without any further geographic targeting below that level.

Second, we defined an initiative as *federal* if awards were determined by a federal agency and funding came primarily from federal sources in the form of grants, loans, tax expenditures, or technical assistance. These were awarded on both formula and competitive bases. Some initiatives did not include new funding, consisting instead of coordination among agencies or helping organizations to apply for existing funding; these were not included in our sample because no funding was allocated. Third, we focus on the period from 1990 to 2015. As we show, federal place-based investment prior to 1990 was minimal. At the other end of the time series, 2015 was the most recent year for which data were available for most initiatives. We exclude programs that started after 2015 for this reason. Table 1 lists the names and key details for all initiatives that met the above criteria. We identified nineteen distinct programs, totaling more than $368 billion in funding over the twenty-five-year period. We adjusted all funding for inflation using the

Table 1. Data Sources and Funding Information for Rural Counties, 1990–2015

Place-Based Program	Funding Agency	Total Funding	Years Covered	Eligibility	Domain	Type
Low-Income Housing Tax Credit (LIHTC)	Department of Housing and Urban Development (HUD)	$154,439,086,122	1990–2015	No geographic restrictions for where units are developed. Qualified census tracts (QCTs) and difficult development areas (DDA) receive "bonus" tax credits. QCTs have high poverty rates or low median household incomes, and DDAs have high land, construction, and utility costs relative to area median incomes.	housing	tax
HOME Investment Partnership Program (HOME)	HUD	$21,728,701,108	1990–2015	States and local jurisdictions with inadequate housing supply, high resident poverty rates, and fiscal distress. Participating jurisdictions determine specific neighborhoods and affordable housing activities to receive funding.	housing	formula
Neighborhood Stabilization Program (NSP)	HUD	$6,855,343,910	2008–2010	Neighborhoods with the greatest need for stabilization based on a high concentration of foreclosed or vacant properties, delinquent loans, and subprime loans.	housing	grant
HOPE VI	HUD	$8,228,579,988	1993–2010	Distressed public housing based on population density, rates of vandalism and criminal activity, availability of supportive services, and occupied by residents dependent on public assistance who are low income or unemployed.	housing	grant

Rural Innovation Fund (RIF)	HUD	$4,505,616	2010	Rural areas, Indian tribal entities, Colonias, Appalachian distressed counties, and communities in the Lower Mississippi Delta region	housing	grant
Federally Qualified Health Centers	Department of Health and Human Services	$37,623,151,610	1990–2015	Medically underserved areas (MUAs) at various geographic scales are calculated using four criteria: provider to population ratio, infant mortality rate, percent of the population 65^{+}, and percent of the population below the federal poverty level	health	grant
Healthy Food Financing Initiative (HFFI)	Departments of Agriculture, Treasury, and Health and Human Services	$46,020,078	2011–2015	Neighborhoods in urban and rural communities with food deserts, defined as low-income areas in which residents do not live in close proximity to affordable and healthy food retailers.	health	grant
Promise Neighborhoods	Department of Education	$196,813,238	2010–2015	Distressed neighborhoods with an education need (defined as a neighborhood within the attendance zone of a low-performing school) and a family and community support need (based on neighborhood health indicators, crime rates, and housing and poverty thresholds).	education	grant

(*continued*)

Table 1. (*continued*)

Place-Based Program	Funding Agency	Total Funding	Years Covered	Eligibility	Domain	Type
New Markets Tax Credits (NMTC)	Department of the Treasury	$45,409,133,761	2001–2015	Rural or urban census tracts meeting individual poverty or median family income thresholds. Rural census tracts that are either located in an Empowerment Zone contiguous to one other low-income community or that experience net out-migration.	economic development	tax
Community Development Financial Institution (CDFI) Fund	Department of the Treasury	$37,768,446,124	1994–2015	Economically distressed communities with financial institutions (CDFIs and CDEs) recognized for their support of underserved populations in low-income areas.	economic development	grant
Federal Empowerment Zones, Enterprise Communities, Renewal Communities (EZ/EC/RC)	HUD	$12,126,055,040	1995–2015	Economically distressed census tracts with high levels of poverty and unemployment.	economic development	tax
Economic Development Administration (EDA) Programs	Department of Commerce, Economic Development Administration	$4,926,021,104	2001–2015	Economically distressed communities, including those negatively impacted by changes to the coal economy, determined by average per capita income, the unemployment rate of the region, or deemed a "special need" by the EDA.	economic development	grant
StrikeForce for Rural Growth and Opportunity	Department of Agriculture	$48,514,777	2010–2015	Rural counties meeting persistent poverty thresholds.	economic development	grant

Appalachia Economic Development Initiative (AEDI)	HUD	$550,000	2015	Counties in the Appalachia Region that are chronically underserved, undercapitalized, and lack capacity to support business development.	economic development	competitive
Project Safe Neighborhoods (PSN)	Department of Justice	$233,324,680	2003–2015	Places with gun-related violence and gang violence, especially elevated youth gang-related incidences.	crime	grant
Innovations in Community-Based Crime Reduction (CBCR)	Department of Justice	$31,168,936	2012–2015	High-poverty neighborhoods with crime hot spots, defined as microplaces in communities that have persistent crime problems.	crime	grant
Community Development Block Grants (CDBG)	HUD	$37,235,757,320	1990–2015	Counties and cities awarded funding on a formula basis according to poverty rates, population, age of housing stock, and housing overcrowding. Local jurisdictions determine specific neighborhoods to receive funding.	multidimensional	formula
Rural Housing and Economic Development (RHED)	HUD	$186,814,066	2002–2005; 2007–2009	Rural areas.	multidimensional	grant
Youth Opportunity Grants	Departments of Labor and Education	$1,181,699,966	1999–2005	Economically distressed census tracts with high levels of poverty and unemployment.	multidimensional	formula

Source: Authors' tabulation from public records of federal agencies.

personal consumption expenditures (PCE) index and present amounts in 2016 dollars.[4] More details on analytic decisions for each program are available from the authors upon request.

Unit of Geography

The primary geographic target for federal place-based programs differed in metropolitan and nonmetropolitan areas. Although census tracts or neighborhoods were the most common geographic target in metropolitan areas, most place-based initiatives in nonmetropolitan areas used the county as the geographic target—it was uncommon for nonmetropolitan programs to target smaller geographic units like neighborhoods. As a result, we use the county as the geographic unit of analysis.

Metrics for categorizing counties along the rural-urban divide are numerous. We use the broad Office of Management and Budget (OMB) definitions rather than the more granular USDA or Census Bureau ones, a decision driven primarily by statistical power and temporal comparability considerations. We categorize counties as metropolitan and nonmetropolitan using 1990 OMB definitions throughout the analyses. Because OMB definitions have changed considerably since the beginning of our study's period (Johnson and Lichter 2020) and could, in part, be related to policy interventions such as those considered here, we use the 1990 time invariant measure as a stable baseline. However, in supplemental analyses (table A.2), we also present time-varying definitions of metropolitan status to account for changes in OMB definitions between the 1990 and 2010 Censuses; the results remain substantively similar.

Individual-Level Mobility Analysis

After providing a descriptive portrait of the evolution and geographic dispersion of federal place-based funding to rural areas, we analyze the association between exposure to place-based programs and individual economic outcomes using data from the NLSY-1997 Cohort. The NLSY-1997 is a nationally representative longitudinal panel of 8,984 youth born between 1980 and 1984. The youth were ages twelve to seventeen when first interviewed in 1997. They were reinterviewed every one to two years thereafter. We measure respondent socioeconomic outcomes—individual earnings and educational attainment—in 2015, the last year for which we have place-based funding data. Respondents were excluded from the analysis if they were not interviewed in 2015, or if they were missing on these key outcome variables, resulting in a sample size of 4,871.

To measure exposure to place-based funding, we use restricted county identifiers to locate where respondents lived in each survey wave from 1997 to 2015. The NLSY did not obtain information on the respondent's county of residence prior to the 1997 survey. For measuring exposure to place-based funding prior to 1997, we assume that respondents lived in the same county from 1990 through 1997. We sum the annual total place-based funding for each county in which the respondent lived from 1990 to 2015 and calculate a total exposure amount for each respondent, and log transform this measure because of its skewed distribution. We also create measures to compare the domain of investment (such as housing, economic development), as well as the exposure to funding in childhood (younger than eighteen) and adulthood. Finally, to examine the relationship between place-based funding and out-migration, we identify respondents who moved from or stayed in their childhood home county between 1997 and 2015.

We regress 2015 socioeconomic outcomes, as well as out-migration, on the logged measure of exposure to place-based funding, plus vectors of individual- and county-level controls. As we show, federal place-based funding is not distributed evenly across counties. Research suggests that places receiving more federal place-based funding are both positively and negatively se-

4. Although no price index is perfect, the PCE is less likely to overstate inflation relative to other indices such as the Consumer Price Index (see Federal Reserve Bank of Cleveland, "PCE and PCI Inflation: What's the Difference?" April 17, 2014, https://www.clevelandfed.org/newsroom-and-events/publications/economic-trends/2014-economic-trends/et-20140417-pce-and-cpi-inflation-whats-the-difference.aspx, accessed November 12, 2021).

lected: they are more economically disadvantaged, but also have characteristics such as strong housing markets (Tach et al. 2019). We therefore include several controls for both individual- and county-level characteristics that may be associated with both exposure to place-based funding and the likelihood of experiencing economic mobility. The individual-level controls include 1997 household income, maternal and paternal educational attainment, gender, race-ethnicity, age, nativity, and childhood family structure. The county-level contextual controls include indicator variables for region and metro status as well as 1997 poverty rate, unemployment rate, and population obtained from linear interpolations of census data (Logan, Xu, and Stultz 2014). Our results stratify by the respondents' metropolitan status during childhood, measured in 1997, but are also robust to measures using the cumulative number of years respondents lived in nonmetro versus metro counties. We also stratify models according to whether the respondent moved out of their childhood home county by 2015 (for descriptive statistics from the NLSY sample, see table A.1). No differences in educational attainment or earnings between youth growing up in metro and nonmetro areas are significant. All results are weighted using customized NLSY national sampling weights and are not sensitive to excluding counties receiving the highest share (top 1 or 2 percent) of funding.

RESULTS

From 1990 to 2015, we identified more than $368 billion in federal place-based investment nationwide. The annual funding amounts for metro and nonmetro areas are shown in figures 1 and 2. Federal place-based funding amounted to less than $8 billion per year in metro counties and less than $2 billion annually in nonmetro counties in the 1990s. Annual funding grew more rapidly for metropolitan areas in both total and per capita terms. The primary sources of place-based funding came from the CDBG program, categorized as multidimensional, and the Low-Income Housing Tax Credit (LIHTC program), categorized as housing, in the early 1990s. Funding increases were more substantial in metro areas in the later 1990s, resulting from several high-profile programs targeting primarily urban areas with concentrated poverty: the HOPE VI program to redevelop distressed public housing and the Empowerment Zone/Enterprise Communities/Renewal Communities (EZ/EC/RC) program to stimulate economic activity in high-unemployment areas.

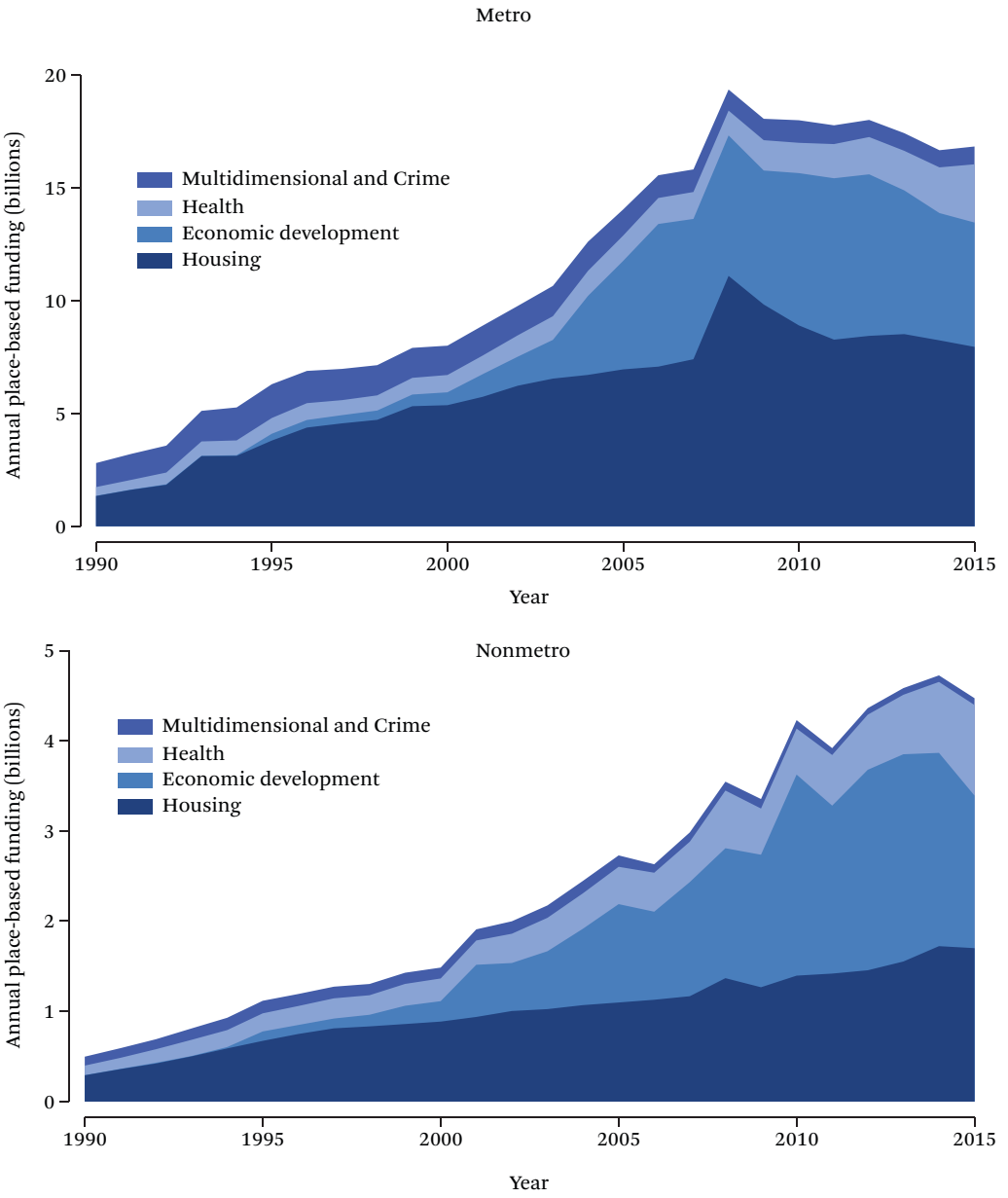
Annual funding increased more rapidly in the early 2000s, peaking at about $18 billion in metro areas during the Great Recession. This growth was due in large part to the creation of the New Markets Tax Credit program, which provides tax incentives for businesses to locate within, hire residents from, make loans to, and provide human capital training for residents of high poverty communities. Since 2010, funding has continued to increase for nonmetro areas—albeit unevenly year to year—and has tapered off slightly for metropolitan areas. Annual funding peaked later for nonmetro areas, at just under $5 billion dollars in 2014, the result of newer and smaller place-based programs targeted to rural areas, such as StrikeForce for Rural Growth and Opportunity, as well as shifts in program focus, with more funding of established programs earmarked for nonmetro areas. By the end of 2015, per capita funding across metro and nonmetro areas were close to parity.

Variation of Federal Place-Based Initiatives

Federal place-based investment was distributed unevenly across the urban-rural divide, reflecting differences in population concentration (table 2). A large majority of the funding ($306 billion) went to metropolitan areas, whereas about $62 billion went to nonmetro areas. On a per capita basis, however, these geographic disparities narrow considerably: $1,549 per capita in metropolitan and $1,230 per capita in nonmetro areas.[5] On a per capita basis, nonmetro counties tended to receive relatively more funding from economic development and health

5. Comparing per capita funding across metro and nonmetro areas is complicated by lower population densities and lack of scale economies in rural areas, which makes it difficult for programs to serve comparable number of people.

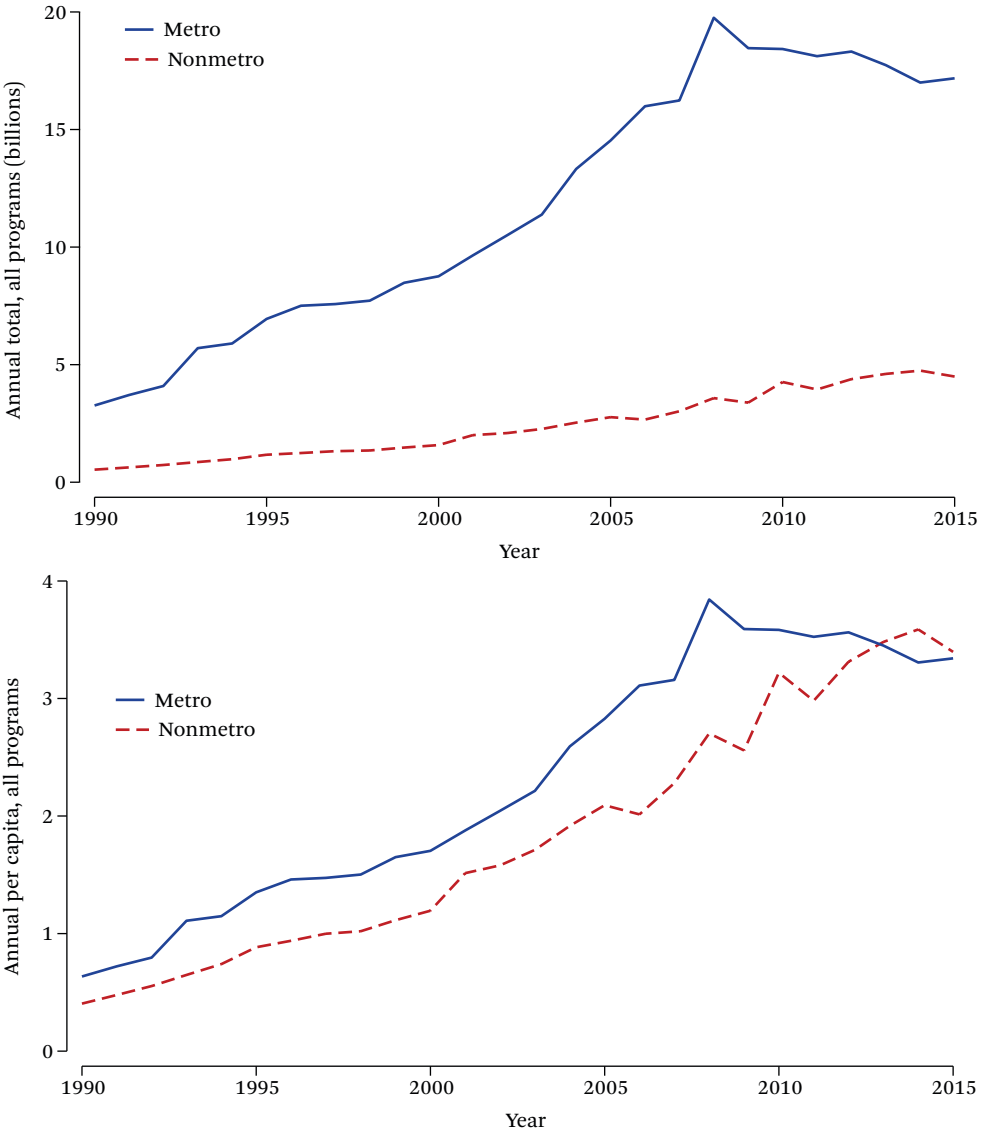
Figure 1. Annual Place-Based Funding (in billions)



Source: Authors' tabulation based on public records of federal agencies.
Note: Annual funding amounts adjusted for inflation to 2016 dollars. Geography based on 1990 OMB definitions.

programs than metropolitan counties did, and relatively less from housing, crime, and other multidimensional programs. Although virtually all counties received some place-based investment over the twenty-five years covered here, the levels of investment varied considerably. The median levels of funding on a per capita basis were modest—$1,047 per capita for metropolitan and $799 for nonmetro counties—but the counties in the top tail of the distribution received substantially more. The 99th percentile of funding was $4,573 per person in metro

Figure 2. Total and Per Capita Annual Place-Based Funding (in billions)



Source: Data compiled by authors from public records of federal agencies.
Notes: Annual funding amounts adjusted for inflation to 2016 dollars. Geography based on 1990 OMB definitions.

counties and $9,210 per person in nonmetro counties. Although average funding levels were relatively modest on a per capita basis, a small share of counties received substantial funding amounts from place-based programs.[6]

What happened in the counties that received the most funding? Table 3 presents sociodemographic change in counties in the top and bottom 10 percent of the per capita funding distribution, demonstrating the mixed se-

6. Metro classifications changed over this time period. Table A.2 compares counties that were consistently nonmetro to those that transitioned from nonmetro in 1990 to metro in 2010. The transition counties, which were more advantaged, received proportionately less place-based funding than consistently nonmetro counties.

Table 2. Total and Per Capita Place-Based Funding by Intervention Domain and Metropolitan Status, 1990–2015

	Metro (N = 837)	Nonmetro (N = 2,306)
National total	$306,277,389,384	$62,621,409,827
Housing	$164,567,357,314	$27,206,604,005
Economic development	$78,230,029,854	$22,174,476,977
Health	$27,646,105,349	$10,023,066,339
Crime	$250,927,799	$16,803,203
Multidimensional	$35,582,968,885	$3,200,459,295
Mean county total funding	$365,922,807	$27,138,282
National per capita	$1,549.20	$1,229.77
Housing	$832.41	$534.24
Economic development	$395.70	$435.56
Health	$139.84	$196.82
Crime	$1.27	$0.33
Multidimensional	$179.98	$62.81
Mean per capita funding	$1,244	$1,302
Mean per person-in-poverty funding	$11,828	$7,750
Percentiles of county per capita funding		
10th	$391	$154
25th	$664	$397
50th	$1,047	$799
75th	$1,567	$1,427
90th	$2,234	$2,507
99th	$4,573	$9,210

Sources: Authors' tabulations from public records of federal agencies and 1990 census data (Logan et al. 2014).
Notes: Metropolitan status determined with 1990 OMB definitions, per capita calculations use 1990 county populations.

lection into which places receive more (or less) investment. Between 1990 and 2015, nonmetro counties receiving the most place-based funding (greater than $2,507 per capita) experienced population growth, increases in the share of residents with college educations and in median home values, and declines in poverty, unemployment, as well as the non-Hispanic White population. For metro counties receiving the most per capita funding (greater than $2,234 per capita) relative to nonmetro counties, growth in average population was even larger and the decline greater in the non-Hispanic White population, a similar growth in the share college-educated as well as median home value, whereas poverty and unemployment remained roughly the same. Counties that received the least amount of funding experienced similar trends in sociodemographic change to the top tenth percentile, except for stable population size in nonmetro counties and lower overall levels of economic disadvantage. Overall, we find that economically disadvantaged counties were selected into receiving substantial amounts of place-based funding and that they experienced improved economic conditions, on average, though these gains have not eliminated persistent poverty.

The distribution of particular programs was similar across urban and rural counties (table 4), although greater shares of metro counties received funding compared to nonmetro counties. The programs with the largest presence in both rural and urban areas were long-running formula programs like HOME and CDBG: 63 percent of all nonmetro counties

Table 3. Sociodemographic Change in Counties Receiving the Top and Bottom Percentiles of Per Capita Place-Based Funding, 1990–2015

	1990	2015	% Change	1990	2015	% Change
	Top 10% Nonmetro (N = 231)			Top 10% Metro (N = 84)		
Population	17,371	21,150	21.75	402,883	529,811	31.50
Share poverty	24.66	20.35	−17.47	16.01	17.00	6.20
Share unemployed	9.47	8.15	−13.92	6.89	6.86	−0.51
Share non-Hispanic White	70.28	63.62	−9.49	68.80	55.00	−20.06
Share college educated	12.05	18.14	50.54	20.55	31.82	54.84
Median home value	$73,818	$125,203	69.61	$141,118	$228,974	62.26
	Bottom 10% Nonmetro (N = 231)			Bottom 10% Metro (N = 84)		
Population	8,167	8,161	−0.07	145,348	174,156	19.82
Share poverty	15.80	12.85	−18.64	8.96	10.17	13.50
Share unemployed	4.70	4.03	−14.40	5.08	5.49	7.92
Share non-Hispanic White	91.57	85.76	−6.35	89.30	82.79	−7.28
Share college educated	11.93	19.32	61.97	17.43	28.85	65.59
Median home value	$58,836	$111,383	89.31	$144,137	$209,943	45.65

Source: Authors' tabulations from public records of federal agencies, 1990 census data, and 2015 ACS data (Logan et al. 2014).

Note: Top 10 percent equates to investments greater than $2,507 per capita in nonmetro counties and $2,234 per capita in metro counties. Bottom 10 percent (conditional on receiving any funding) equates to investments less than $154 per capita in nonmetro counties and $391 per capita in metro counties. Median home values are adjusted for inflation to 2016 dollars.

and 96 percent of all metropolitan counties received HOME funding, and 47 percent of nonmetro counties and 87 percent of metropolitan counties received CDBG funding. Tax expenditure programs also had a large presence in counties across the rural-urban divide, with 56 percent and 88 percent of nonmetro and metropolitan counties, respectively, receiving LIHTC funding, and 20 percent and 45 percent receiving funding from the Community Development Financial Institutions Fund. In total, 90 percent of all rural counties and 99.2 percent of all urban counties received some place-based funding from a federal program between 1990 and 2015, making federal place-based funding ubiquitous over this period. These levels are similar if one considers all counties, or only high poverty counties (above 20 percent in 1990).

The map in figure 3 displays the geographic variability in place-based funding for nonmetro counties. Place-based funding was concentrated in poor areas of Appalachia, the Mississippi Delta, and the Southwest. A number of rural counties located close to the Canadian border—from the Pacific Northwest to the Great Lakes to northern Maine—also received significant investment; less funding flowed to the Midwest than to other areas.

Taken together, the results from the first part of this analysis reveal a substantial increase in federal place-based funding going to rural counties between 1990 and 2015. What began as annual funding of roughly $500 million to nonmetro counties has grown to more than $4 billion annually. Economic development funding increased substantially during the 2000s, particularly after the recession, and has remained at that level since. Although the total amount of funding going to nonmetro places is substantially less than that going to urban places, on a per capita basis the funding amounts are roughly comparable. The vast majority of nonmetro counties—90 percent—received some place-based funding over this period, but substantial levels of investment were geographically concentrated—in high-poverty areas of the Mississippi Delta and Appalachia,

Table 4. Share of Counties Receiving Place-Based Funding by Program, 1990–2015

	All Counties		High-Poverty Counties	
Program Name	Nonmetro	Metro	Nonmetro	Metro
Housing				
LIHTC	56.15	88.42	54.86	86.61
HOME	62.80	96.06	60.47	98.73
NSP	0.40	2.95	0.35	2.68
HOPE VI	0.04	1.40	0.06	2.04
RIF	0.01	0.00	0.02	0.00
Health				
FQHC	41.66	55.16	57.12	72.10
HFFI	0.01	0.28	0.03	0.49
Education				
PROMISE	0.01	0.20	0.03	0.00
Economic development				
NMTC	1.46	7.63	2.03	10.56
CDFI	19.57	44.47	20.40	54.67
EZ	1.81	5.30	4.74	16.75
EDA	2.76	7.44	2.90	12.17
StrikeForce	0.04	0.05	0.09	0.19
AEDI	0.04	0.01	0.10	0.05
Crime				
PSN	0.29	4.94	0.41	7.06
CBCR	0.01	0.17	0.02	0.19
Multidimensional				
CDBG	46.93	86.62	44.33	91.14
RHED	0.56	0.84	0.93	2.00
YOG	0.12	0.67	0.25	0.97
Any Program	89.60	99.20	91.20	100.00

Source: Authors' tabulations from public records of federal agencies and 1990 census data (Logan et al. 2014).

Note: High poverty defined as > 20 percent of residents below the poverty line in 1990. Metropolitan status determined using 1990 OMB definitions. See table 1 for unabbreviated program names.

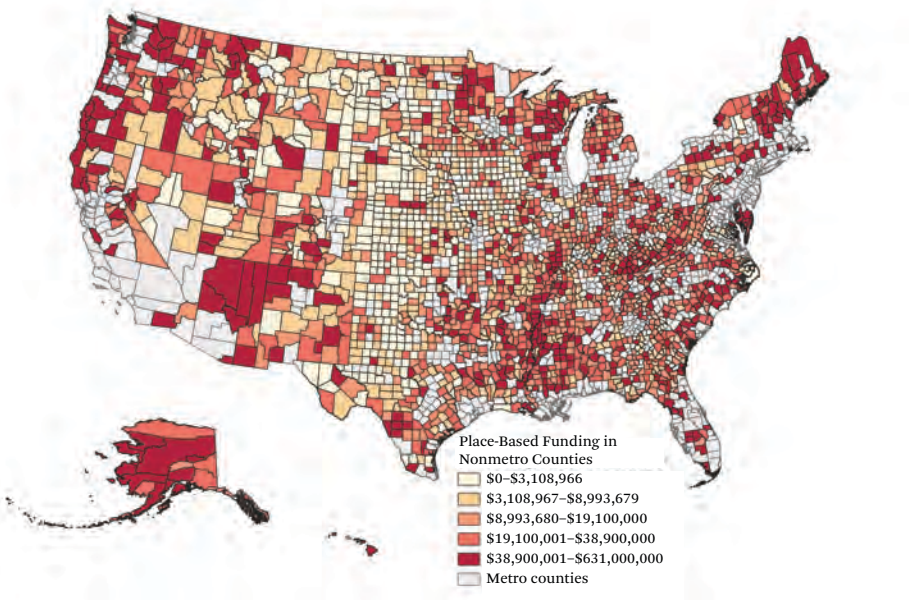
and also in rural northern counties close to the Canadian border.

Exposure to Place-Based Investment and Upward Mobility

Is federal place-based investment associated with improved socioeconomic outcomes for the residents of rural communities? We report the results for regressions of NLSY-97 adult socioeconomic outcomes in 2015 on exposure to county place-based funding between 1990 and 2015, first for educational attainment (table 5) then for individual earnings (table 6). We find a strong association between living in a county that received more place-based funding and higher educational attainment in adulthood, controlling for individual and contextual covariates (see table 5, panel A).[7] Nationally, every

7. This finding holds when we restrict the analysis to respondents at age twenty-five, when the average adult completes their education. We include older than age twenty-five for the main results to capture adults who finished degrees later in life.

Figure 3. Total Place-Based Funding in Nonmetro Counties, 1990–2015



Source: Data compiled by authors from public records of federal agencies.
Note: Annual funding amounts adjusted for inflation to 2016 dollars. Geography based on 1990 OMB definitions.

1 percent increase in exposure to place-based funding is associated with 11 percent greater odds ($e^{0.108}$) of obtaining a higher level of education (where educational categories are measured as: no high school degree, high school degree, some college, four-year college degree, or advanced degree). Converted into marginal effects for interpretation, the change in probability of completing a high school degree only decreases by 1.1 percentage points with a 1 percent increase in funding, whereas the probability of completing a college or advanced degree increases by 0.8 and 0.7 percentage points, respectively. This association is strongest for the top two quintiles of the place-based funding distribution, suggesting that substantial levels of investment are required to see noticeable consequences for adult educational outcomes. The association between county place-based funding and greater educational attainment is substantively large and statistically significant for respondents who grew up in *both* metro and nonmetro areas.

We then examine the patterns of educational attainment separately for those who stayed in their childhood home county and those who moved. We find null results for both metro and nonmetro youth who stayed in their same county of residence; place-based investment is associated with higher educational attainment only for those who moved counties, particularly for those who moved from nonmetro home counties. The interactions presented in panel B of table 5 confirm a statistically significant difference in the association between place-based funding and educational attainment for movers and stayers among rural youth only; this difference is not statistically significant for urban youth. These results support qualitative evidence that high levels of investment in educational "achievers" may prompt migration out of nonmetro areas and contribute to the "brain drain" in rural America, where there are fewer employment opportunities that allow residents to translate human capital into higher earnings (Kefalas and Carr 2009).

The results for earnings are presented in table 6. We find that, net of individual and contextual controls, exposure to a one percent increase in county place-based funding is associated with 9.5 percent greater earnings in

Table 5. Ordinal Logistic Regressions Predicting 2015 Educational Attainment, Weighted Coefficients

	National		Childhood County		Stayed		Moved	
	Logged Funding	Funding Quintiles	Metro Logged Funding	Nonmetro Logged Funding	Metro Logged Funding	Nonmetro Logged Funding	Metro Logged Funding	Nonmetro Logged Funding
Panel A. Overall								
Exposure to place-based funding								
Total place-based funding	0.108***		0.101**	0.160**	−0.018	0.063	0.175***	0.217**
	(0.028)		(0.033)	(0.056)	(0.050)	(0.124)	(0.047)	(0.074)
By quintiles (Ref=1st quintile)								
2nd quintile		0.190+						
		(0.103)						
3rd quintile		0.236*						
		(0.108)						
4th quintile		0.367**						
		(0.112)						
5th quintile		0.435***						
		(0.132)						
Metro county of residence	−0.062	−0.058						
	(0.088)	(0.089)						
Panel B. Interaction								
Moved counties*place-based funding	0.053		−0.003	0.242*				
	(0.041)		−0.054	−0.113				
Panel C. Life course timing								
Childhood place-based funding	−0.074**		−0.067*	−0.130+	−0.067	−0.158	−0.037	−0.156+
	(0.024)		(0.028)	(0.072)	(0.042)	(0.176)	(0.038)	(0.080)
Adulthood place-based funding	0.156***		0.137***	0.245***	−0.001	0.105	0.192***	0.228***
	(0.025)		(0.031)	(0.049)	(0.048)	(0.109)	(0.041)	(0.063)
Observations	4,871	4,871	3,844	1,027	1,989	449	1,855	578

Source: Authors' tabulations from public records of federal agencies, NLSY–1997, 1990 census data, and 2015 ACS data (Logan et al. 2014).
Notes. Robust standard errors in parentheses. Models include individual-level controls for 1997 household income, maternal and paternal educational attainment, gender, race-ethnicity, age, nativity, childhood family structure, and whether the respondent moved counties by 2015. County-level controls include indicator variables for region and metropolitan status as well as 1997 poverty rate, unemployment rate, and population. All models weighted using NLSY custom national sampling weights. Stayed and moved are in reference to childhood home counties.
***$p < .001$, **$p < .01$, *$p < .05$, +$p < .1$

2015; although substantively large this result is only marginally statistically significant.[8] When we examine quintiles of place-based funding, we find that the associations are strongest for the fourth quintile. We do not find significant differences in this association for children growing up in metro or nonmetro counties. The latter columns of table 6 separate those who stayed in their childhood county and those who moved. For respondents who moved counties between childhood and adulthood, increased county place-based investment was strongly associated with greater earnings. On the other hand, those who stayed in their childhood county experienced no economic returns from greater place-based investment. Panel B of table 6 shows a marginally significant difference in the association of place-based funding for youth who moved and stayed in their childhood home counties. The results suggest that place-based investment may influence young adults' economic prospects primarily through the channel of geographic mobility, creating opportunities that then enable youth to move to metro areas with robust economies and earnings potential.

Both the educational attainment and earnings results indicate that migration plays an important role in enabling greater economic opportunity for youth. To assess the relationship between exposure to place-based investment in childhood and out-migration in greater detail, we present logistic regressions on the log odds that respondents move from their original home county in adulthood (table 7). We find that, at the national level, living in counties that received more place-based funding in childhood is associated with significantly lower odds of migration. This pattern appears to be strongest for counties in the top two quintiles of funding. However, this overall negative relationship is driven by youth living in metro counties, whereas nonmetro youth exposed to more place-based funding have increased odds of out-migration. Specifically, exposure to one percent more place-based funding for nonmetro youth is associated with 29 percent greater odds ($e^{0.255}$) of out-migration (or a change in probability of 2.7 percentage points), and this association is even stronger for moves to metro counties. Taken together, rural place-based investment appears to benefit economic and educational outcomes for young adults who migrate to metro areas, while we do not find evidence of these benefits for those who stay in their nonmetro home county or for those who move to a nonmetro county.

Do these associations vary by the life course timing or domain of place-based investment? Our results suggest that exposure to place-based funding in adulthood is associated with more favorable economic outcomes, rather than funding during childhood (see panel C of tables 5 and 6). A one percent increase in place-based investment in adulthood is associated with a 10.5 percent increase in individual earnings and 13 percent greater odds ($e^{0.16}$) of obtaining higher education (or in marginal effects, the change in probability of completing a college degree increases by 1 percentage point), whereas exposure to funding in childhood is insignificant or negative for both of these outcomes.[9] Importantly, when considering residential mobility, we find these positive associations in adulthood only among rural and urban youth who moved and not those who stayed in their childhood home counties.

The positive associations in adulthood may be because place-based investment was comparatively scant in the 1980s and early 1990s, during the early childhood years of the NLSY respondents' lives, relative to the later years when funding became more widespread and substantial. It also may be that federal place-based funding streams have done more to alter economic opportunity for adults—through access to job training or credit, for example—than they have for youth, especially due to the selective out-migration of rural youth among

8. The results are largely similar when we use household income in 2015 as the dependent variable, though smaller in magnitude, as the broader household income measure less closely corresponds with the individual survey respondent, for whom we measure exposure to place-based investment.

9. Results using quintiles also show that intensity of funding in childhood did not vary, suggesting further that exposure during young adulthood matters more for the economic outcomes considered here.

Table 6. OLS Regressions Predicting 2015 Individual Earnings (Logged), Weighted Coefficients

	National		Childhood Residence		Stayed		Moved	
	Logged Funding	Funding Quintiles	Metro Logged Funding	Nonmetro Logged Funding	Metro Logged Funding	Nonmetro Logged Funding	Metro Logged Funding	Nonmetro Logged Funding
Panel A. Overall								
Exposure to place-based funding, 1990–2015								
Total place-based funding	0.096^{+}		0.090	0.116	−0.074	−0.181	0.235*	0.248^{+}
	(0.058)		(0.068)	(0.118)	(0.093)	(0.248)	(0.100)	(0.135)
By quintile (ref=1st quintile)								
2nd quintile		0.108						
		(0.199)						
3rd quintile		0.181						
		(0.219)						
4th quintile		0.526*						
		(0.222)						
5th quintile		0.121						
		(0.274)						
Metro county of residence	−0.279^{+}	−0.288^{+}						
	(0.167)	(0.171)						
Panel B. Interaction								
Moved counties*place-based funding	0.167*		0.141	0.412^{+}				
	(0.08)		(0.11)	(0.246)				
Panel C. Life course timing								
Childhood place-based funding	−0.060		−0.045	−0.201	−0.088	−0.330	0.014	−0.145
	(0.046)		(0.051)	(0.150)	(0.076)	(0.257)	(0.071)	(0.180)
Adulthood place-based funding	0.105^{+}		0.103	0.123	−0.056	−0.133	0.213*	0.245*
	(0.054)		(0.064)	(0.106)	(0.091)	(0.214)	(0.091)	(0.123)
Observations	4,871	4,871	3,844	1,027	1,989	449	1,855	578

Source: Authors' tabulations from public records of federal agencies, NLSY–1997, 1990 census data, and 2015 ACS data (Logan et al. 2014).
Note: Robust standard errors in parentheses. Models include individual-level controls for 1997 household income, maternal and paternal educational attainment, gender, race-ethnicity, age, nativity, childhood family structure, and whether the respondent moved counties by 2015. County-level controls include indicator variables for region and metropolitan status as well as 1997 poverty rate, unemployment rate, and population. All models weighted using NLSY custom national sampling weights. Stayed and moved are in reference to childhood home counties.
***p < .001, **p < .01, *p < .05, ^{+}p < .1

Table 7. Logistic Regressions Predicting Outmigration from Original Childhood County, Weighted Coefficients

					Moved			
	Logged Funding	Funding Quintiles	Childhood Residence		Nonmetro to Nonmetro	Metro to Nonmetro	Nonmetro to Metro	Metro to Metro
			Metro	Nonmetro				
Childhood exposure to place-based funding								
Total funding, logged	−0.098***		−0.101***	0.255**	−0.133	−0.123**	0.345***	−0.055+
	(0.026)		(0.030)	(0.079)	(0.089)	(0.047)	(0.083)	(0.030)
By quintiles in childhood (ref=1st quintile)								
2nd quintile		−0.056						
		(0.104)						
3rd quintile		−0.123						
		(0.123)						
4th quintile		−0.364**						
		(0.128)						
5th quintile		−0.365*						
		(0.154)						
Metro county of residence	0.026	−0.023						
	(0.102)	(0.105)						
Constant	1.125	−0.582	0.446	−1.869	1.238	−1.466	−4.078+	−0.507
	(0.971)	(0.833)	(1.130)	(2.496)	(2.531)	(2.001)	(2.418)	(1.145)
Observations	4,871	4,871	3,844	1,027	1,020	3,844	1,027	3,844

Source: Authors' tabulations from public records of federal agencies, NLSY–1997, and 1990 census data (Logan et al. 2014).

Note: Robust standard errors in parentheses. Models include individual-level controls for 1997 household income, maternal and paternal educational attainment, gender, race-ethnicity, age, nativity, and childhood family structure. County-level controls include indicator variables for region and metropolitan status as well as 1997 poverty rate, unemployment rate, and population. All models weighted using NLSY custom national sampling weights.

***$p < .001$, **$p < .01$, * $p < .05$, +$p < .1$

those more likely to complete secondary education.

In supplemental analyses (table A.3), we find that the general results hold across different domains of investment. These programs often have different aims; for instance, economic development programs tend to focus on developing human capital or creating job opportunities while housing programs attempt to create new housing opportunities in their communities. Indeed, economic development funding was associated with greater earnings and greater odds of obtaining a higher educational degree, while housing funding was strongly associated with higher educational attainment as well as lower odds of out-migration. Health and multidimensional programs were also positively associated with educational attainment, and multidimensional programs were negatively associated with out-migration.

DISCUSSION

Our analysis of federal place-based policy has revealed substantial and sustained growth in funding to rural counties between 1990 and 2015, particularly for economic development initiatives and to a lesser extent housing and health initiatives. Although federal place-based investment in nonmetro counties totaled about $500 million per year in the 1990s, it grew to more than $4 billion annually by 2015. This funding was disbursed widely across the country, with the vast majority of counties receiving funding from a place-based program over this period, including 90 percent of nonmetro counties. At the same time, investment was concentrated among a smaller number of nonmetro counties, located disproportionately in the Mississippi Delta, Appalachia, Southwest, and by the Canadian border from the Pacific Northwest to the Great Lakes to northern Maine.

Despite this sizable growth in federal place-based investment in rural communities, we find mixed evidence that this investment has produced better socioeconomic outcomes for rural residents. For youth growing up in nonmetro counties, exposure to a greater intensity of place-based funding was associated with significantly higher educational attainment and earnings, but only when they left their home counties. Along with our descriptive results (table A.1), this suggests that youth growing up in rural areas do not have significantly different educational or economic outcomes from urban youth so long as they migrate in adulthood. Indeed, qualitative evidence indicates that rural housing and economic development efforts disproportionately advantage wealthier in-migrants to rural areas, rather than long-time residents, and that schools are a key mechanism in this divergence (see Sherman and Schafft 2022).

These findings further align with research showing that returns to education have been diverging across metro and nonmetro areas since the mid-1990s (Domina 2006), such that economic incentives have greatly favored metropolitan residence for college graduates. This has resulted in rising educational segregation between metro and nonmetro areas (Fischer and Mattson 2009). Taken together with the strong relationship we uncovered between place-based funding and out-migration, the results suggest that place-based funding is associated with improved economic opportunity primarily via channels of geographic mobility. Rather than place-based investment inciting residential displacement or gentrification as in urban contexts (Freeman 2005; Marcuse 1985), we find that in rural contexts, place-based investment may improve individual life chances through out-migration to places with greater economic opportunity, contributing to what has been dubbed the rural brain drain (Kefalas and Carr 2009). Such funding could, for example, create conditions that improve human and financial capital that enables college attendance away from one's hometown and skills that are competitive in metropolitan labor markets. But this geographic mobility is not without drawbacks, as moving to places with better opportunity structures can incur economic, social, and emotional costs for disadvantaged rural youth (see Parsons 2022).

Although our key independent variable is funding amount, the modest associations between place-based funding and economic outcomes in adulthood may have less to do with how much was spent and more to do with the products of that expenditure, such as how many jobs were created; how many residents

received access to training, capital, or health care; or how many housing units were built. All individuals in a given county may not personally benefit from investment even though the community experiences improvements in local economic conditions such as employment or home values. This tension between person- versus place-based approaches leads to perennial questions of who benefits from this type of policy intervention. The literature provides only limited evidence about the concrete benefits of place-based investments, and it suggests that those gains tend to be relatively modest in scope and impact in both urban and rural areas (Busso, Gregory, and Kline 2013; Cho 2019; Estrada and Allen 2004; Kline and Moretti 2014). Some evidence also indicates compositional change following place-based investment, an increasing presence of more advantaged residents and a potential displacement of incumbent disadvantaged residents (Freedman 2012; Reynolds and Rohlin 2015; Tach and Emory 2017). None of this literature has explicitly compared place-based investments across multiple programs in urban and rural areas, however. We also know little about how place-based investment intersects with other aspects of community opportunity structure, and it may be that other conditions—such as a sufficient density of population, a robust nonprofit sector, proximity to colleges and universities, or low levels of racial inequality—may be required for place-based investment to reach its full potential.

A different class of methodological and data-driven explanations also highlights some limitations of this study's data and analytic strategy. First, this article focuses on federal place-based policies, but many state, local, and philanthropic initiatives have also taken a place-based approach to investing in communities. To the extent that federal investments are distinct from these other sources, we may not be identifying all relevant place-based investments in communities, which may obscure the effects of federal programs. We also define place-based policies narrowly based on geographic eligibility criteria. Other types of federal investment (such as agricultural subsidies) may have disproportionate concentration and impact on rural areas even though they do not meet the strict definition of place-based program used here.

Second, our place-based data series begins in 1990 because, prior to that period, little federal place-based investment occurred and data records were very uneven in coverage and quality. This means that the cohort of respondents covered in the NLSY—born in the early 1980s—experienced a substantial portion of their childhood with little exposure to place-based policies. If either early childhood or cumulative childhood exposure are important for youth to reap the benefits of place-based investment, the NLSY cohort may be too old relative to the expansion of place-based policymaking for us to observe significant gains. Third, this article takes a broad approach to assessing the consequences of place-based investment defined as exposure to all forms of funding at the county level. Although this approach captures funding in a comprehensive way, we cannot know for sure whether residents actually came into contact with the tangible products of the place-based investment.

Finally, the observational and descriptive approach taken here limits our ability to assess the impact of any single program in a way that is causally identified. The results may be influenced by selection: some places are selected for funding due to great need, whereas others are selected because they are more likely to be successful (Cook et al. 2009; Dewees, Lobao, and Swanson 2003; Tach et al. 2019). Our descriptive findings on this selection pattern (table 3) suggest that the most economically distressed counties did receive more funding, particularly nonmetro counties, than those receiving the least amount of funding; however, the trends in level of demographic change were similar. Although we find that funding is distributed widely across the country over the period, reaching 98.5 percent of all counties, the intensity of place-based investments is not random. Thus our findings are subject to the same limitations as other descriptive work based on covariate adjustment, and more needs to be done to identify the causal impacts of these programs in rural areas.

Although this article has focused on socioeconomic outcomes, place-based policies may affect many other important aspects of per-

sonal and community well-being. Policies that provide access to banking services, better infrastructure, stable housing, or more commerce may be well worth the investment even if they do not yield appreciable improvement in economic outcomes for residents. The NLSY data used in this article also necessitated a broad categorization of counties by metropolitan status, but this likely obscures significant variation in the efficacy of place-based policies across areas experiencing different economic and population trends. We hope that the place-based data used in this article can spur more research on these, and other, important topics in the future with the goal of providing a better understanding of what forms of place-based investment work for rural places and their residents.

Table A.1. Descriptive Statistics of NLSY–1997 Respondents, Place-Based Funding, and Geographic Characteristics

Respondent's Sociodemographic Characteristics	Overall	Metro	Nonmetro	T-test by Metro
Gender (1=Male)	0.51	0.52	0.50	
Household income (1997)	$52,249	$54,402	$45,308	***
Race-Ethnicity and Nativity				
Non-Hispanic Black	0.15	0.16	0.12	**
Non-Hispanic White	0.68	0.64	0.80	***
Non-Hispanic Other Race	0.04	0.05	0.03	
Hispanic	0.13	0.15	0.05	***
U.S.-born	0.97	0.96	0.99	***
Father's education				
Less than high school	0.19	0.19	0.20	
High school or GED	0.37	0.36	0.41	***
Some college	0.17	0.17	0.16	
College or more	0.22	0.23	0.18	
Missing	0.05	0.05	0.04	
Mother's education				
Less than high school	0.18	0.18	0.18	
High school or GED	0.37	0.36	0.38	
Some college	0.25	0.25	0.25	
College or more	0.20	0.21	0.18	
Missing	0.01	0.01	0.01	
Household composition (1997)				
Lived with both biological parents	0.53	0.52	0.57	
Lived with mix of biological or nonbiological parents	0.15	0.14	0.16	
Lived with single biological parent	0.27	0.28	0.23	**
Other living arrangement	0.05	0.05	0.04	
County characteristics (1997)				
Persistent poverty county	0.07	0.04	0.18	***
Percent poverty	0.12	0.12	0.14	***
Percent unemployed	0.60	0.59	0.65	***

Table A.1. (*continued*)

Respondent's Sociodemographic Characteristics	Overall	Metro	Nonmetro	T-test by Metro
Region (1997)				
Northeast	0.17	0.16	0.17	
Midwest	0.28	0.27	0.34	***
West	0.20	0.21	0.19	**
South	0.35	0.36	0.30	
Respondent characteristics (2015)				
Age	32.8	32.8	32.8	
Individual earnings	$38,496	$39,226	$36,138	
Mean years in metro county (1990–2015)	17.98	22.11	4.68	***
Percent lived majority of years in nonmetro county	0.23	0.02	0.91	***
Moved counties	0.53	0.52	0.57	***
Moved to nonmetro county	0.10	0.07	0.20	***
Moved to metro county	0.43	0.45	0.37	**
Respondent has a child	0.34	0.35	0.33	
Highest degree completed (2015)				
Less than high school	0.07	0.07	0.06	
High school or GED	0.51	0.50	0.54	
Some college	0.09	0.09	0.10	
College or more	0.33	0.34	0.30	
Mean place-based funding, 1990–2015 (millions)				
Total	$101.92	$125.08	$27.22	***
By domain				
Economic development	$28.50	$34.57	$8.94	***
Housing	$51.08	$62.78	$13.37	***
Multidimensional	$14.12	$17.77	$2.34	***
Health	$8.13	$9.86	$2.56	***
	N=4,871	N=3,844	N=1,027	

Source: Authors' tabulations from public records of federal agencies, NLSY-1997, 1990 census data, and 2015 ACS data (Logan et al. 2014).

Note: Customized NLSY survey weights applied. Metro status refers to the county where the NLSY respondent lived in the first survey year (1997). Sample excluded NLSY respondents who were not interviewed in 2015 (n = 1,933) or who had missing values on household income in 1997 (n = 1,446) and 2015 (n = 763) or education (n = 18). All monetary measures were converted to 2016 dollars.

Table A.2. Total and Per Capita Place-Based Funding by Intervention Domain, 1990–2015

	Stable Nonmetro (N = 2,003)	Nonmetro to Metro[a] (N = 306)
National total	$52,074,268,597	$10,547,141,229
Housing	$21,432,202,681	$5,774,401,324
Economic development	$19,651,974,427	$2,522,502,549
Health	$8,393,463,983	$1,629,602,356
Crime	$13,561,185	$3,242,017
Multidimensional	$2,583,066,320	$617,392,975
Mean county total funding	$26,018,548	$34,467,782
National per capita	$478.02	$451.03
Housing	$196.74	$246.93
Economic development	$180.40	$107.87
Health	$77.05	$69.69
Crime	$0.12	$0.14
Multidimensional	$23.71	$26.40
Mean per capita funding	$1,337	$1,079
Mean per person-in-poverty funding	$7,832	$7,209
Percentiles of county per capita funding		
10th	$145.48	$171.20
25th	$398.99	$369.14
50th	$804.74	$774.42
75th	$1,475.11	$1,273.59
90th	$2,594.96	$1,984.00
99th	$9,654.49	$6,067.13

Sources. Authors' tabulations from public records of federal agencies.
Notes. Metropolitan status determined with 1990 OMB definitions, per capita calculations use 1990 county populations.
[a]Counties that transitioned from nonmetro in 1990 to metropolitan by 2010.

Table A.3. Supplemental Regression Results, Weighted Coefficients

	Education			Earnings			Out-Migration		
	Overall	Nonmetro	Metro	Overall	Nonmetro	Metro	Overall	Nonmetro	Metro
Domain of place-based funding									
Economic development	0.050***	0.041	0.062***	0.063*	0.069	0.048	−0.006	0.013	−0.009
	(0.014)	(0.028)	(0.017)	(0.030)	(0.050)	(0.038)	(0.006)	(0.013)	(0.007)
Housing	0.094***	0.138*	0.087**	0.084	0.091	0.086	−0.055**	0.034	−0.079*
	(0.027)	(0.056)	(0.033)	(0.057)	(0.116)	(0.067)	(0.021)	(0.030)	(0.031)
Health	0.020**	0.048***	0.006	0.020	0.063*	−0.001	0.000	0.030**	−0.002
	(0.007)	(0.014)	(0.009)	(0.015)	(0.026)	(0.018)	(0.005)	(0.011)	(0.006)
Multidimensional	0.035*	0.055**	0.033	−0.000	−0.040	0.017	−0.024*	0.008	−0.030*
	(0.016)	(0.021)	(0.024)	(0.028)	(0.044)	(0.037)	(0.012)	(0.022)	(0.015)

Source: Authors' tabulations from public records of federal agencies, NLSY–1997, 1990 census data, and 2015 ACS data (Logan et al. 2014).

Note: Robust standard errors in parentheses. All funding measures are log transformed. Models include individual-level controls for 1997 household income, maternal and paternal educational attainment, gender, race-ethnicity, age, nativity, childhood family structure, and whether the respondent moved counties by 2015. County-level controls include indicator variables for region and metropolitan status as well as 1997 poverty rate, unemployment rate, and population. All models weighted using customized national sampling weights.

***$p < .001$, **$p < .01$, *$p < .05$, $^{+}p < .1$

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