This research brief draws from data in the National Equity Atlas—an online resource for data to track, measure, and make the case for inclusive growth in America’s cities, regions, states, and nationwide.

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Summary

America is in the midst of two dramatic demographic shifts: rising diversity, with the highest levels of diversity among our youngest, and rapid aging as the baby boomers head into retirement. While the U.S. Census Bureau projects that America will become a majority people-of-color population by 2044, the country’s public school population has already reached that milestone. Meanwhile, the senior population is set to double over the next 20 years and by 2033, seniors will outnumber youth for the first time in this country’s history.

These twin forces—the browning and graying of America—are widening the demographic divergence between our youngest and oldest: a phenomenon known as the racial generation gap.
In 1975, 13 percent of seniors were people of color, compared with 25 percent of youth under age 18, for a racial generation gap of 12 percentage points. Over the next four decades, all age groups became more diverse, but this shift occurred much more rapidly among the young. By 2015, 22.3 percent of seniors were people of color, compared with 48.7 percent of youth, for a gap of 26.4 percentage points.

Research suggests that the racial generation gap can have serious consequences. Society relies on a kind of intergenerational compact, whereby seniors invest in younger generations because they share a stake in their success—both for their own security in old age and for the future of their community and country. But studies have shown that America's seniors are less likely to support spending on youth when they are from different racial groups. This trend is particularly disconcerting given recent scholarship showing the positive impact that adequate school funding has on closing the educational achievement gap that persists for low-income students and students of color.

This brief shares new research demonstrating the consequences of America's racial generation gap. Using demographic and school spending data from the U.S. Census Bureau, we examine trends in the racial generation gap and its relationship to education spending in states and counties since 1990. Our findings include:

- While the national racial generation gap seems to have peaked and will now slowly decline, the gap is much higher and quickly growing in many states and counties. Arizona has the highest racial generation gap of any state, at 41 percentage points, and 90 counties face even higher gaps. In 154 counties, the racial generation gap has grown at least 20 percentage points since 1990.

- States and counties with larger racial generation gaps tend to spend less on K-12 education on a per-capita basis. Estimates suggest that every percentage-point increase in the racial generation gap is associated with a decrease in state and local per-child education spending of around 1.5 percent.

- Given the significant growth in the racial generation gap over time in many states and counties, this reduction in spending adds up. For example, a state with a large increase in the gap over the last 20 years, such as Nevada, would have seen about $2,600 more in spending per child (in inflation-adjusted 2012 dollars) had the gap had no effect.

The link between the size of the racial generation gap and spending on public education at a time when the demand for skilled workers is rising increases the urgency of a policy response. Leaders across sectors must take steps to ensure all youth, including low-income children of color and English language learners, can access the education and supports they need to succeed. This includes implementing equitable school funding policies at the state level that better target those in the need of most assistance. It also includes investing in youth beyond school funding through place-based “cradle-to-career” efforts, universal pre-school, career academies, and more.

But our research suggests that it will be hard to get to those policies unless steps are taken to bridge our nation's persistent racial divide. A full program to close the achievement gap will also need to close the racial generation gap—not by changing the demographics but by restoring a social compact across age groups. This could include campaigns to increase awareness and build political support for investing in youth, strategies to specifically enhance senior support for school funding, efforts to increase voting among youth, and the development of approaches that link education spending to programs that benefit other community residents more directly, such as multigenerational facilities and communities.

These policy and organizing strategies to bridge the racial generation gap are critical for today's diverse young generation, and for the nation's economic future. America's economic security and prosperity depends on the ability of our young people to participate as workers, leaders, and innovators—and a strong and equitable public education system is essential to ensuring all youth can reach their full potential.
Introduction

America is well on its way to becoming a majority people-of-color nation—a demographic shift that is largely being fueled by rising diversity among its younger generations. While the U.S. Census Bureau projects that the country will be majority of color by 2044, the youngest Americans are already there. More than half of children under 10 are people of color, compared with 39 percent of the total population, and 23 percent of seniors. Demographers estimate that a majority of youth under age 18 will be people of color before the end of this decade.

Alongside the nation’s rapid diversification is a second major demographic trend: the aging of the population. In 2011, the first of the country’s 75 million baby boomers born between 1946 and 1964 turned 65 and entered retirement. They are expected to live to age 84, the longest life expectancy among all generations.

While the population will continue to grow overall, the longevity of the senior population combined with the baby boomer population bulge will fundamentally shift the country’s overall age structure. Historically, youth have always represented a larger share of the overall U.S. population than seniors, but by 2033 seniors will outnumber youth. (See the chart below.) Between 2014 and 2060, the share of seniors is expected to grow from 15 to 24 percent of the population, while the share of youth is expected to decline from 23 to 20 percent of the population.

By 2033, U.S. Seniors Are Expected to Outnumber Youth

Together, the growth of the senior population and diversification of the youth population are widening the demographic divergence between young and old: a phenomenon known as the racial generation gap. In 1975, 13 percent of seniors were people of color, compared with 25 percent of youth under age 18, for a racial generation gap of 12 percentage points. Over the next four decades, all age groups became more diverse, but this shift occurred much more rapidly among the young. By 2015, 22.3 percent of seniors were people of color, compared with 48.7 percent of youth, for a gap of 26.4 percentage points.

The dramatic shift in the age structure of the U.S. population will have major consequences for communities, local and state governments, and the national economy. A growing senior population that has aged out of the workforce creates additional societal costs in health care and Social Security, while the funding for those benefits derives from the taxes generated by today's workers. This increases the pressure on the workforce to be more productive. University of Southern California demographer Dowell Myers has quantified the growing economic and social importance of children in California, estimating that as the ratio of seniors to children grows, children born today will carry twice the economic burden as children born in 1985.6

Even as the need for the young to be more productive and more engaged economically is on the rise, America’s diverse youth population is starting off at a disadvantage. Latino, Black, and Native American children are more likely than their White counterparts to grow up in poverty, live in high-poverty neighborhoods, attend high-poverty schools, graduate high school at below-average rates, and be disconnected from school and work.7

Many researchers have examined the question of “gray peril,” or whether a growing senior population will negatively impact support for public education and other public services.8 While the jury is out regarding the general effect of a growing elderly population on education spending, previous research has consistently shown that seniors are less likely to support education spending for children of different racial and ethnic groups. Three important studies examined this question using data from the 1960 to 1992 period.

- MIT economist James Poterba found that at the state level, an increase in the share of seniors corresponded with a significant reduction in per-child education spending, and the reduction was larger when the child population was more heavily made up of children of color.9

- Helen Ladd and Sheila Murray analyzed county data from 1970 to 1992, finding the same negative correlation between the racial generation gap and per-child education spending, but no relationship between the overall share of seniors and education spending.10

- David Figlio and Deborah Fletcher examined data on 1,004 suburban school districts from 1960 to 1992 and also found that as people aged in place, their support for public schools shrank, and even more so when the local schoolchildren were children of color.11

This relationship between the racial generation gap and education spending is ominous for youth, and ultimately, America’s economic future. To the extent that seniors decide not to support more school funding where it is most needed, it means depriving disadvantaged students of educational and economic opportunities. Recent studies show that ensuring adequate funding in low-income districts significantly increases test scores, shrinking the achievement gap between lower- and higher-income districts, and that low-income students attending schools where funding increases by 10 percent each year are more likely to graduate high school, less likely to be poor as adults, and can expect to see 10 percent higher earnings.12

Moreover, while some of the dynamics driving faltering support for public education may be rooted in racial difference, the effects will not be confined solely to children of color. If seniors feeling a generational disconnect oppose state and local funding proposals that would benefit a more diverse youth population, they are simultaneously denying those supports to White youth as well. Although the majority of children in public schools are now children of color, it is also true that the vast majority of White children attend public schools.13 And everyone, including seniors reliant on Social Security and Medicare paid for by current employees, benefits when young workers are more educated and better able to sustain the overall economy.

Is the racial generation gap’s impact on spending found in earlier studies still occurring at the same level? After all, hasn’t the American public moved past the sort of social distance in which racist attitudes work against commonsense policies?
Perhaps not: the November 2016 presidential election, for example, seems to have seen a stew of racial and economic anxiety cloud better judgement (or at least obscure the discussion) on what might be a more effective economic strategy for all Americans. Moreover, Arizona, which has the country’s largest racial generation gap, comes in nearly dead-last in terms of state spending per student and the Grand Canyon state also saw the third-largest cuts nationally in inflation-adjusted per-pupil spending since 2008.14

But pointing to political trends and particular data points is not sufficient. In order to help policymakers and civic leaders craft effective solutions it is useful to see whether the spending gap holds up even when we control for other potential explanations for state and local investments in education. This means, in turn, redoing and updating with contemporary data the sort of detailed analysis undertaken by previous authors.

This brief does just that, reexaming the relationship between the racial generation gap and school funding at the state and county level for the 1990 through 2012 period. While, at some points, we present data on the size of the racial generation gap itself from the more recent years (as well as projections), our key analysis of the relationship between the racial generation gap and education spending since 1990 is based on a dataset that was designed to be consistent with, and extend forward, the previous work noted above.

Specifically, we compiled data on district-level school spending and revenues for all public school districts providing K-12 education in the lower 48 contiguous United States from the U.S. Census Bureau’s Public Elementary-Secondary School System Finance (F33 file) for the years 1992, 2002, and 2012. We then aggregated this data to the county and state levels to match with demographic measures for the nearest corresponding years from the 1990 and 2000 censuses, and the 2012 five-year American Community Survey summary file (for which the middle year is 2010, making it more compatible with the other decadal data).15

As others have done, we focus on school revenues (and not expenditures) since they are broken down in the school finance data by source (federal, state, and local). Given that they provide a good approximation of spending, we use the terms revenue (funding), and spending interchangeably. As in previous research, our state-level analysis focuses on state and local spending since this is a better measure of local willingness to invest. Please see the technical appendix for more detailed information about our analyses.

Findings

The Racial Generation Gap Is Rising in Many States and Counties

Nationally, the racial generation gap—the difference between the share of youth who are of color and the share of seniors who are of color—rose from 12 percentage points in 1975 to 27 percentage points in 2013. The gap has begun to slowly decrease as the senior population becomes more diverse. The racial generation gap is now hovering around 26 percentage points but it is expected to decline to 19 percentage points by the year 2060 (see the chart on page 6). However, we are currently at the near-peak level in America’s racial generation gap—and certainly some aspects of our contemporary national politics seem to reflect the problematic impacts of social distance by race and generation.

While the national racial generation gap is slated to start falling more rapidly around 2019, it continues to rise in many states and counties. Among states, the racial generation gap ranges from 41 percentage points in Arizona—where 59 percent of youth are of color compared with 18 percent of seniors—to just 6 percentage points in West Virginia.16 Arizona’s fellow border states of Nevada, California, New Mexico, and Texas, as well as Florida, also have high gaps due to their large Latino youth populations, ranging from 33 to 36 percentage points. Delaware, Oklahoma, Rhode Island, and Washington round out the list of the 10 states with the highest racial generation gaps.17

Among the 10 states with high racial generation gaps, the gap has also grown quickly since 1990 in Nevada, Rhode Island, Washington, and Oklahoma.18 In California, the gap has leveled off and indeed begun to close; the state’s gap peaked in the period 1994-1999, an era when state politics were riven by struggles around immigration, affirmative action, and bilingualism (which has led some to suggest that America’s current political turmoil is partly a parallel to that earlier time in the Golden State).19 New York is another large, diverse state where the gap is relatively large but has now begun to shrink as the senior population has become more diverse.

Other states experiencing a quickly rising racial generation gap since 1990 (of 13 percentage points or more) include Alaska, Oregon, Nebraska, Minnesota, Kansas, and Hawaii (though Hawaii’s gap is still very low at 12 percentage points). The states
Bridging the Racial Generation Gap Is Key to America’s Economic Future

Nationwide, the Racial Generation Gap Grew Dramatically Since 1990 and Is Expected to Slowly Decline

Percent people of color by age, 1975 to 2060

- Under 18
- 65+

The Racial Generation Gap was 27 percentage points in 2013


with the fastest-rising racial generation gaps generally have less diverse youth and senior populations than the national average, but quickly growing youth-of-color populations. In Oregon, for example, the share of youth of color grew from 13 percent of all youth in 1990 to 35 percent in 2015. In Rhode Island, youth of color grew from 16 to 39 percent.²⁰

On the other end of the spectrum, the predominantly White states of West Virginia, Vermont, and Maine have the lowest racial generation gaps (6 to 9 percentage points) with slow growth on this metric as well (of less than 1 percentage point).

The racial generation gap is often much higher and/or growing more rapidly at the county level: there are 90 counties with a racial generation gap equal to or higher than Arizona’s and there are 154 counties where the gap has increased by at least 20 percentage points since 1990. At 61 percentage points, the rural retirement community of La Paz County, Arizona, has the highest racial generation gap of any county in the nation: 72 percent of its youth are of color (predominantly Latino and Native American) compared with 11 percent of its seniors.
Since 1990, the Racial Generation Gap Has Increased in the Vast Majority of U.S. Counties

Racial generation gap by county (percentage points), 1990 and 2015

Most of the counties with the very largest gaps are small, rural counties that attracted many Latino immigrants to work in agriculture or meat packing—places like Colfax County, Nebraska, and Ford County, Kansas. In many of these counties, the racial generation gap has grown very quickly.

Several large urban counties also have very high racial generation gaps (between 39 to 43 percentage points). This includes the counties of Riverside and Kern (home to Bakersfield), California; Dallas, Texas; Palm Beach and Lee (Fort Myers) Florida; Milwaukee, Wisconsin; Ramsey (St. Paul), Minnesota; and Pima (Tucson) and Maricopa (Phoenix), Arizona.

In contrast, there are 340 counties where the racial generation gap is static or shrinking. This list includes many of our largest urban counties, such as San Francisco, California; Miami-Dade, Florida; Orleans (New Orleans), Louisiana; Los Angeles, California; Cook (home to Chicago), Illinois; and Kings, Bronx, New York, and Queens counties in New York City, New York. These places have long attracted immigrants and thus their senior populations have diversified more quickly than their youth populations.

In sum, while the racial generation gap is beginning to decline at the national level, the gap is still on the rise in many states and counties. Over the next several decades, dozens of states and hundreds of counties will face growing racial generation gaps and contend with the consequences.

High and Rising Racial Generation Gaps Correspond with Lower Education Spending

One of the key policy questions emerging from this demographic reality is whether seniors will invest in the public education systems needed to prepare a more diverse young population for work and career. To answer this question, we look at the relationship between the size and growth of the racial generation gap in states and counties, and per-child spending on K-12 education in the 1990 to 2012 period.21

School financing continues to be highly inequitable in the United States, with wide variation in per-child funding both across states as well as across the school districts within states. America’s public schools are funded by a mix of revenue sources: about 45 percent of public school funding comes from state government, another 45 percent comes from local government, and about 10 percent comes from the federal government. Much of the inequity derives from the fact that most localities fund schools through the property tax, so wealthier communities end up with more funding for their schools. In the Philadelphia area, for example, the Upper Moreland District, where the median household income is $65,180, spends about $1,200 more per student than the William Penn School District, where median income is $48,511.22 Since 1990, 27 states have passed school financing legislation to allocate more funds to lower-income districts.23 Nevertheless, even in states with school finance reform, inequities persist across school districts.

Bridging the Racial Generation Gap Is Key to America’s Economic Future
Looking at the combined state and local components of per-child school funding and the racial generation gap for the lower 48 states, we find a general pattern consistent with previous research: as the racial generation gap increases, education spending declines. The chart below plots the size of the racial generation gap on the horizontal x-axis and the level of per-child spending on the vertical y-axis, with both sets of data from around 2012. Here we see how Arizona, with its racial generation gap of 41 percentage points, has the second-lowest level of state and local education spending while Vermont, with one of the lowest racial generation gaps (6 percentage points) has the highest spending levels. In general, the red dotted line shows the negative relationship between educational spending and the racial mismatch between the young and the old.

As the Racial Generation Gap Increases, Spending on Education Declines

State and local spending per child and the racial generation gap, lower 48 states

Source: U.S. Census Bureau, 2012 Public Elementary Secondary Education Finance Data (F33 file) and 2012 five-year American Community Survey. Note: Data on school revenue is from the 2011-2012 school year while data on the racial generation gap represents a 2008 through 2012 average.
Of course, the apparent negative bivariate (or two variable) relationship between the racial generation gap and K-12 spending could be a function of other factors that also impact spending. To tease out the independent impact of the racial generation gap, we conducted a multivariate regression analysis of spending over the 1990-2012 period. Such a regression analysis tries to control for other factors that might explain a difference; for example, before labeling a wage discrepancy between ethnic groups a result of discrimination, labor market analysts frequently try to control for education level, immigration status, work experience, sector of the economy, and such. Each of the factors, including race, is allowed to have its own independent impact—that way, what gets attributed to race is not due to some other background factor.

A similar procedure is required here. Following the model established by prior analysts, we examined the specific effect of the racial generation gap on spending while taking into account other factors that the literature (and previous research) says could impact education spending such as household income, share of youth and seniors, and homeownership. We found that the racial generation gap is the most significant state-level characteristic for explaining differences in per-child spending. In terms of the size of the impact, every percentage-point increase in the racial generation gap is associated with a decline in spending of approximately 1.5 percent, with the actual percentage dependent on the initial starting point for spending. While that can sound small, the estimated impact implies that the gap in many states can be a major drag on school finances. For example, the 6.8 percentage-point difference in the racial generation gaps between Arizona and New Mexico likely accounts for more than a quarter of the $2,200 difference in spending per child between these states. And if the racial generation gap in Florida (31 percentage points) were as small as New York’s (22 percentage points), per-child spending would be 15 percent higher, or about $8,300 instead of only $7,200.

The table on page 10 looks at the states with the largest increases in the racial generation gap over the 1990 to 2012 period. Here, we are not comparing the states but rather asking how much higher spending in any particular state would be if there was no change in the racial generation gap (or if the gap had no impact on spending levels). The data suggest that in Nevada, where the racial generation gap rose to 37 percentage points in 2012 from 19 percentage points in 1990, per-child spending would have been about $10,100 instead of $7,700, or 32 percent higher. Education spending might have been 29 percent higher in Oregon and about a quarter higher in Rhode Island, Washington, and Delaware had they not experienced increases in their racial generation gaps. In general, per-child education spending in nearly all states would likely have been higher from 1990 to 2012 were it not for the growth of the racial generation gap.
### Estimated impact of rise in racial generation gap on per-child spending, top half of states by rise in gap

<table>
<thead>
<tr>
<th>Racial generation gap in percentage points</th>
<th>Per-child state and local revenue, 2012</th>
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<tbody>
<tr>
<td></td>
<td>1990</td>
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<tr>
<td>Nevada</td>
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<tr>
<td>Oregon</td>
<td>9.5</td>
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<tr>
<td>Rhode Island</td>
<td>12.4</td>
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<tr>
<td>Washington</td>
<td>12.5</td>
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<tr>
<td>Delaware</td>
<td>14.8</td>
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<td>Nebraska</td>
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<tr>
<td>Oklahoma</td>
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<td>Minnesota</td>
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<tr>
<td>Kansas</td>
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<tr>
<td>Georgia</td>
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<td>Arizona</td>
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<td>North Carolina</td>
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<td>Colorado</td>
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<td>Arkansas</td>
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<td>Indiana</td>
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<td>Wisconsin</td>
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<td>Connecticut</td>
<td>17.2</td>
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<tr>
<td>South Dakota</td>
<td>11.2</td>
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**Note:** See the technical appendix for a description of the dataset used for this analysis, and the regression model upon which it is based.
At the County Level, the Racial Generation Gap Also Corresponds with Lower Education Spending

Thus far, we have presented state-level patterns, partly because they are easier to track and understand. However, past research has suggested that it is important to look beneath the state level and examine relationships at a more local level, such as counties, to be sure that the same sort of patterns hold. A simple visual comparison of the racial generation gap and per-child local revenues for education at the county level suggests there is a relationship, (see maps, right).

A more detailed analysis of the data from 1990 through 2012 confirms that the negative relationship between the racial generation gap and investments in education that we find at the state level does in fact hold at the county level, although the size of the impact is reduced. To examine this, we applied the same state-level regression model described above to county-level data. However, given that we would expect county-level demographic and economic characteristics to directly impact only education revenues generated from local sources (e.g., school districts within each county), the outcome variable was specified to include only local education revenues.

We find that a 1 percentage-point increase in the racial generation gap at the county level is associated with an approximately 0.2 percent decline in local per-child revenues for education—just over one-tenth of the impact that the state-level racial generation gap was found to have on combined state and local per-child spending. This difference in the impact of the racial generation gap at the state and county levels is consistent with past research. Part of the reason may have to do with the ways in which changes in local spending levels are more “rigid” in that they are largely determined by the relative size of the youth population and the amount of property taxes generated. In addition, improved local schools can positively impact local housing prices, thus incentivizing increased investment in education. Finally, the social distance between old and young may be easier to close when operating at a local level.
Policy Implications

America's diverse young population is a tremendous asset in the global economy, and in hundreds of small towns, suburbs, and cities across the nation, growing communities of color are buffering population loss and breathing new life into long-disinvested areas. But for today's diverse youth to realize their full potential in the rapidly shifting world of work, they need access to high-quality teachers, school supplies, facilities, and Advanced Placement (AP) courses, as well as learning supports like English language programs. Unfortunately, many of America's schools are underfunded, and especially schools serving low-income children and children of color.

Our research reveals that the nation's racial divide is weakening our education system: the demographic divergence between youth and seniors is a significant factor driving inequities in school funding over the past several decades. States and counties with larger racial generation gaps spend less on their schoolchildren. Arizona, with its fights over ethnic studies and school funding struggles epitomizes the tensions of a wide racial generation gap. Strains caused by a reduced state budget have led one in five Arizona school districts to now run four-day school weeks, providing their poorly paid teachers with a three-day weekend as a retention strategy.29

Ultimately, there is a large societal cost when children are inadequately educated. One analysis found that each 25-year-old who is jobless and has little education past age 16 costs taxpayers $258,000 over their lifetime.30 As more school districts and communities experience demographic changes that place their youth at risk, what can be done to ensure that all youth, including low-income children of color, can access the education and supports they need to succeed?

We recommend three directions for policy, advocacy, and organizing:

• Ensure equitable school funding via state and federal policy reforms
• Invest in youth beyond school
• Build multigenerational communities and coalitions for change

Ensure Equitable School Funding via State and Federal Policy Reforms

State education funding policy plays a large role in determining the level of overall school funding and how it is distributed in relation to student need. Research has found that in the 27 states that have passed policies to ensure adequate funding for low-income school districts, students do better and the achievement gap decreases.31 Massachusetts exemplifies the potential of state policy reform. In 1993, Republican Governor William Weld passed school finance reform legislation directing more state dollars to low-income school districts. Education statewide improved, and districts like Revere, with a rapidly increasing share of Latino students and a county with a 40 percentage-point racial generation gap in 1990, saw tremendous improvements in test scores and graduation rates.32 California's innovative Local Control Funding Formula, passed in 2013, also provides a promising approach: districts receive extra funding if they have a larger number of English learners, poorer students, and foster youth—and even more resources if there is a concentration of such students. They also get more flexibility. While more remains to be done—there is some concern about whether the extra money going to less advantaged districts is making its way to the neediest schools—the policy points in the right general direction.33

Despite the evidence that state policy matters, 23 states still have not improved their policies. And states that have passed reforms must continue to evaluate and strengthen their formulas for ensuring adequate funding for high-need districts and schools.

In addition to state policy reforms, federal education dollars could be better targeted to low-income students. The current formula for distributing precious Title I resources, which are intended to improve outcomes for poor students by supplementing local and state education spending, rewards states that already spend more. In Mississippi, about a third of children are eligible for federal Title I resources, but each student only receives about $1,100, while in North Dakota only about 12 percent of students are eligible yet each student receives more than $2,400 in Title I dollars.34 Focusing Title I dollars on high-need schools could help ensure adequate funding for schools serving low-income children of color.35
Bridging the Racial Generation Gap Is Key to America’s Economic Future

Invest in Youth Beyond School

In addition to ensuring adequate school funding, communities can strengthen education and training pathways for children through the following approaches.

- Place-based “cradle-to-career” efforts, like the Promise Neighborhoods sites now in more than 50 communities, provide children and families living in low-income neighborhoods with education, health, and social supports from birth to college to career.\(^{36}\)
- Universal pre-K—as the City of San Antonio and many other cities and states are striving to achieve for four- and sometimes three-year-olds—is a proven approach that increases lifetime earnings, boosts high school graduation rates, and decreases incarceration.\(^{37}\)
- Career academies, and programs like Year Up and Code 2040, provide young people with the work-related skills and paid internships to help them land that essential first job.\(^{38}\)
- Sector-focused career pathway efforts like Oakland’s EMS Corps connect young people who face barriers to employment with high-quality training programs (often at community colleges) that lead to jobs in growing sectors of the economy, such as health care and technology.\(^{39}\)
- Reforming harsh, “zero tolerance” school discipline policies reduces school pushout for boys of color and keeps them on track to graduate.\(^{40}\)

Strong public education campaigns that make the case as to why investing in youth matters for our collective future is important for garnering public support for these strategies.

Build Multigenerational Communities and Coalitions for Change

While money cannot solve all the problems in education, starving the public system of resources is not a winning strategy to improve student outcomes. The reluctance to invest in public education can stem from many factors, including concerns about testing regimes, worries about teacher quality, and a generalized distrust of government. But what our research suggests is that one of the factors impeding necessary investments is the racial generation gap.

It is not possible to address this gap (and so, address the achievement gap) by changing the demographics—no amount of wishing is either going to change the growing diversity of the young or the lengthening lives of the old. Instead differences must be bridged in ways that recognize the potential divisions of age and race and build on shared needs, interests, and values.

Intergenerational alliances, coalitions, and campaigns can better align young people and seniors around common policy goals. For example, one arena where seniors and young workers of color and their families have shared interests is elder care. Ensuring living wages, benefits, and adequate training and standards for care workers is a win-win path to strengthen the quality of elder care. When care jobs are good jobs that can support a family, turnover is lower and care is not disrupted. Caring Across Generations, a national movement to transform the care industry and ensure seniors and care workers can live with dignity, exemplifies this intergeneration approach. In Illinois, Missouri, Ohio, and elsewhere, the campaign builds broad coalitions to make care work visible, highlighting its value to the overall economy and the support it provides families. Caring Across Generations’ policy reforms include increasing access to in-home care for Medicaid recipients and ensuring care jobs pay a living wage and provide benefits, training opportunities, and a pathway to citizenship.\(^{41}\)

Another approach involves simply getting people of different ages to live together. Intergenerational day care facilities, senior centers at schools, multigenerational affordable housing, and Head Start programs in senior communities are all examples of ways that facilities and community spaces can serve the needs of both seniors and youth. Multigenerational communities and spaces can facilitate social interactions across age and race, potentially building greater social cohesion and intergenerational altruism. In addition, facilities that serve the needs of multiple generations might generate greater support based on self-interest. In the country’s 900 counties where
Conclusion

America stands at a critical demographic juncture. Our youth population is growing more racially and ethnically diverse while our expanding senior population remains far more White. In theory, this should not be an issue—there is only one America and the only thing that is always sure is change—but the research presented in this brief suggests that the current racial generation gap can have and is having impacts on the willingness to invest in the public education that will guarantee our national future.

Addressing this question is key. The education and opportunities children receive today will translate into our success, productivity, and well-being tomorrow. Despite the racial and other differences between our youth and seniors, there are policies and investments that can benefit multiple generations. Too often, American politics and economics is perceived as a zero-sum game—but in reality our fates are intertwined.

Making sure that this sense of intergenerational and multiracial connection become our guiding vision will require concrete policies but it will also require the sort of community organizing and movement building typified by efforts like Caring Across Generations. An old Greek proverb goes, “A society grows great when old men plant trees whose shade they know they shall never sit in.” These days the connection may be more direct: America will achieve greatness when the old see themselves in the young and invest in the educational and other platforms that will allow the Next America to fully realize its potential.
Technical Appendix

At some points in this brief, we present data on the size of the racial generation gap itself from the 2015 five-year American Community Survey (as well as projections). However, our key analysis of the relationship between the racial generation gap and education spending since 1990 is based on a dataset that was designed to be consistent with, and extend forward, previous work in this area. Here, we provide a more detailed description of the regression analysis that is the basis of our primary analytical results, and a more elaborate account of the underlying dataset that was used.

The goal of our analysis was to update the results of two previous studies with more recent data, James Poterba and Helen Ladd and Sheila Murray, to test for whether the negative and statistically significant relationship between the racial generation gap and per-child spending on education found in both studies still holds today. Interestingly, the findings of these studies with regard to the racial generation gap seems to have been downplayed. This may simply be partly due to the focus of both studies—on how the rising elderly share of the U.S. population may impact education finance—and partly due to that fact that there was less media attention given to the rapid demographic changes taking place in the country at the time they were published. In any case, it seemed an important finding that was worthy of highlighting and exploring for deeper exploration and analysis.

Our initial efforts sought to update both the state-level regression analysis by James Poterba and the county-level analysis by Helen Ladd and Sheila Murray with more recent data matching their modeling specifications as closely as possible to determine whether their results around the racial generation gap still hold. While the data we assembled covers the period from 1990 to 2012, Poterba’s analysis covered the period from roughly 1960 to 1992 and Ladd and Murray’s covered roughly 1970 to 1992. We say roughly because in each of the previous studies, while the most data used are from the decadal years (e.g., 1960, 1970, 1980, 1990), the data on school finances comes from the following fiscal year, which straddles two calendar years (e.g., 1961-1962, 1971-1972, 1981-1982, 1991-1992). All models include time fixed effects (for each year) and geographic fixed effects (state fixed effects for the state-level models and county fixed effects for the county-level models).

We compiled data on district-level school spending and revenues for all regular K-12 districts from the U.S. Census Bureau’s Public Elementary-Secondary Education Finance Data (F33 file) for the years 1992, 2002, and 2012. We chose to use 1992 (which reflects the 1991-1992 school year) as the base year for the education finance data rather than 1990 because it was the year used in both studies we sought to replicate and it included a larger number of school districts than the previous two years. We chose the subsequent years of 2002 and 2012 to make for decadal data points. The district-level data was aggregated to the county level to match with demographic measures for the nearest corresponding years from the 1990 and 2000 censuses, and the 2012 five-year American Community Survey (ACS) summary file. The middle year of the 2012 ACS file is 2010, which makes for consistent decadal points for the demographic measures, and mirrors the data assembly in the studies we sought to replicate in that the demographic data always lags the education finance data by two years. To be consistent with the previous analyses, we also restricted our dataset to the 48 continental U.S. states. The resulting county-level dataset was used to replicate the results presented in Table 4 of the Ladd and Murray paper, and was aggregated to the state level to replicate the results reported in Table 5 of the Poterba paper.

One important note regarding the various regression specifications (both those found in the previous studies and our own) is how we derive the measure we refer to as the racial generation gap. While the definition of the racial generation gap measure used throughout this report is the percentage of youth aged under 18 who are of color (non-White) minus the percentage of seniors ages 65 or older who are of color, this definition is slightly different in both of the studies we attempt to update. While in the Poterba analysis this measure is referred to as “demographic heterogeneity” and is defined as the non-White percentage of youth ages 5 through 17 minus the non-White percentage of seniors ages 65 or older, in Ladd and Murray analysis it is referred to as the “racial mismatch” and (for reasons of data availability at the county level in 1970) is defined as the non-White percentage of youth aged under 18 minus the non-White percentage of adults ages 18 or older.
In updating each respective regression analysis, we entered the same specification of the racial generation gap that the authors used (along with making all other aspects of the models consistent) so that we can consistently determine whether the negative partial correlation with per-child education spending they found is still present (and whether it may have strengthened over time). In subsequent modeling and in the results we present in the main body of this brief, we enter the racial generation gap measure under specifications used elsewhere in this report.

The results of our updates of both the state- and county-level regression models, along with the original results reported in the Poterba analysis and the Ladd and Murray analysis, respectively, can be found in the table below. There we see that the magnitude of the negative coefficient on the racial generation gap measure used in the Poterba analysis increased substantially, with the impact of a 10 percentage-point increase in the racial generation gap at the state level going from about a 6.2 percent decline in per-child spending to an 11.1 percent decline. The county-level results show that while still highly significant, the magnitude and significance level of the negative coefficient on the racial generation gap measure used in the Ladd and Murray analysis declined slightly, suggesting that the impact of a 10 percentage-point increase in the racial generation gap at the county level fell from about a 2.1 percent decline in per-child spending to a 1.8 percent decline. Since, on average, 45 percent of school funding comes from the state level and since the size effect of the state generation gap is much larger, this implies that overall the generation gap impact is larger in the contemporary period.

### Update of Previous State- and County-Level Models

<table>
<thead>
<tr>
<th>Variables</th>
<th>State-level model update</th>
<th>County-level model update</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Previous results from Poterba (1997), Table 5, Column 2</td>
<td>PolicyLink/PERE updated results</td>
</tr>
<tr>
<td>Youth population share (natural logarithm)</td>
<td>-1.025*** [4.83]</td>
<td>0.409 [1.46]</td>
</tr>
<tr>
<td>Senior Population share ages 65+ (natural logarithm)</td>
<td>-0.244** [2.00]</td>
<td>-0.193 [0.86]</td>
</tr>
<tr>
<td>Percent of population non-white</td>
<td>0.037 [1.00]</td>
<td>-0.154* [1.97]</td>
</tr>
<tr>
<td>Racial generation gap measure</td>
<td>-0.621* [1.58]</td>
<td>-1.105** [2.35]</td>
</tr>
</tbody>
</table>

Note: In the state-level model, the youth share variable includes those ages 5-17 and the racial generation gap measure is figured as the non-White percentage of the population ages 5-17 minus the non-White percentage of the population ages 65+. In the county-level model, the youth share variable includes those ages 0-17 and the racial generation gap measure is figured as the non-White percentage of the population ages 0-17 minus the non-White percentage of the population ages 18+. T-statistics are in brackets. Statistical significance annotation is as follows: *** = p < .01; ** = p < .05; * = p < .10.
The regression models that underlie the results reported in this brief are presented in the table on page 18. In developing them, we began with the aforementioned state- and county-level models from the Poterba and Ladd and Murray analyses, respectively, and modified them in two ways.

First, we sought to reconcile the explanatory variables included in each of the models to make our state- and county-level models more consistent with each other, and specified the racial generation gap as it is defined throughout this report (the percentage of youth aged under 18 who are of color minus the percentage of seniors ages 65 or older who are of color). Second, we specified the dependent variable in each model to reflect only sources of revenue for education that we would expect to be directly influenced by state- and county-level characteristics.*

Reconciliation of the explanatory, or right-hand-side variables, was necessary due to some inconsistencies between the models. For example, Poterba’s youth share variable includes those ages 5-17 while Ladd and Murray’s includes those aged under 18. We use Ladd and Murray’s definition because it results in a more clear comparison group for the age measures that reflects the size of the working-age population (i.e., people ages 18-64). And while Poterba enters per-capita income as a control and Ladd and Murray enter median household income, we found per-capita income to be collinear with the age distribution controls (particularly in the state-level model) so opted for median household income. Note that this is reflected in our update of Poterba’s results shown in table above. In our updated results, the coefficient on the share ages 5-17 becomes positive and insignificant, while it was found to be negative and significant in his analysis. If we enter median household income instead of per-capita income, the coefficient on the youth share remains negative with a T-statistic of 1.61.

In specifying the dependent variables in each model, we focused on only revenue sources that we would expect to be directly influenced by state- and county-level characteristics that reflect the ability and/or willingness to invest at the particular scale of the analysis. This is important because the amount of federal education funding that a particular state or school district receives is not necessarily a function of the ability or willingness to invest among residents of that state or school district, but is rather determined by a variety of formulae and grant programs. Similarly, the amount of state funding that finds its way to a particular county is not necessarily indicative of the ability or willingness to invest in residents of that county.

Thus, for the state-level model, we specified the dependent variable to include only state and local revenues for education (not federal sources), as the levels of state and local spending on education in a state reflect the net effect of a variety of demographic and economic characteristics within the state as well as decision making at the state and local levels. For the county-level model, we include only local revenues for education, as they are determined by characteristics and decision making in districts within each county. While some county-level characteristics may impact education revenues from state or federal sources indirectly (e.g., if a state allocated funding using a formula that considers the number of children in poverty or for whom English is a second language) such impacts are distinct from the direct impacts on local revenues and may (or are actually quite likely to) work in the opposite direction.

The table below shows the final state- and county-level model results used in this report. Because the racial generation gap is the central variable of concern in this brief, we show what is obtained for the model without that variable and how the results shift once that variable is introduced. There is considerably more variation in the coefficients between each version of the regression in the state-level versus the county-level model—which makes sense given the smaller number of observations. Note in the state-level model that the introduction of the racial generation gap leaves a “pure” youth effect (the percent of the population that is below the age of 18) at nearly a .10 significant level and allows for a more specific (and highly significant) impact of race (i.e., the racial generation gap). In the county-level model, all non-generation gap variables retain their significance and have nearly identical coefficient values.

* Note that for the discussion that follows, all variables should be presumed to be derived as natural logs, as they are in both the Poterba and Ladd and Murray analyses, and entered in real terms (i.e., adjusted for inflation). As was done in the Ladd and Murray analysis, inflation adjustments for education spending (revenues) are adjusted for inflation using the National Income Product Accounts deflator for government purchases of goods and services from the U.S. Bureau of Economic Analysis.
### Final State- and County-Level Models Used for Analysis

<table>
<thead>
<tr>
<th></th>
<th>Per-child state and local revenues</th>
<th>Per-child local revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State Level</td>
<td>County Level</td>
</tr>
<tr>
<td><strong>Dependent Variable</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per-child state and local revenues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per-child local revenues</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Explanatory Variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real median household income ($2012)</td>
<td>0.194 (0.576)</td>
<td>0.407 (0.240)</td>
</tr>
<tr>
<td>Percent youth (&lt;18 yrs)</td>
<td>-1.115*** (0.006)</td>
<td>-0.692 (0.102)</td>
</tr>
<tr>
<td>Percent senior (&gt;64 yrs)</td>
<td>-0.434 (0.159)</td>
<td>-0.436 (0.145)</td>
</tr>
<tr>
<td>Percent of homes owner-occupied</td>
<td>0.747 (0.310)</td>
<td>0.561 (0.433)</td>
</tr>
<tr>
<td>Percent people of color</td>
<td>-0.126 (0.116)</td>
<td>-0.023 (0.787)</td>
</tr>
<tr>
<td>Racial generation gap</td>
<td>N/A</td>
<td>-1.531** (0.010)</td>
</tr>
</tbody>
</table>

| **Notes:** People of color include all people who do not identify as non-Hispanic White. All variables are in natural logarithms except for the racial generation gap, which is figured as the percentage of youth aged under 18 who are of color minus the percentage of seniors ages 65 or older who are of color. The sample includes 3,082 counties from the 48 contiguous U.S. states, with observations from three points in time. Per-child state and local revenues are from the years 1992, 2002, and 2012, and are adjusted to 2012 dollars using the National Income Product Accounts deflator for government purchases of goods and services from the U.S. Bureau of Economic Analysis. All other variables are from years 1990, 2000, and 2008 through 2012 averaged, with household income adjusted to 2012 dollars using the CPI-U from the U.S. Bureau of Labor Statistics. All state and county models include state and county fixed effects, respectively, as well as time fixed effects (for the years 1990 and 2000). Statistical significance annotation is as follows: *** = p<.01; ** = p<.05; * = p<.10. |

A few other aspects of the work are worth mentioning. First, note that the three-year state sample is 144; that is because we are confining our attention, as in the previous work to the 48 contiguous states. Second, the racial generation gap was entered into the regression “as is” while all other variables were entered under a natural log transformation—a scheme that is consistent with the aforementioned studies that informed our modeling. The log transformation was not applied to the racial generation gap variable because it has negative values for some observations. However, in the tables presented in the text, we are careful to apply the coefficient to the log of spending, and then anti-log the results to get the actual impact on spending of the racial generation gap.
Bridging the Racial Generation Gap Is Key to America's Economic Future

Notes


3 U.S. Census Bureau, 2016 Population Estimates, Table PEPASR6H, accessed through American Factfinder.


13 The National Center for Education Statistics does not provide data on the racial/ethnic breakdowns of private school students. However, as of 2016 there are only 5.2 million students enrolled in private school and 50.4 million students enrolled in public school. 24.6 million of the public school students are White, so even if all private school students were White, which we know is not the case, it would still be true that the majority of White students attend public schools; “Fast Facts,” The National Center for Education Statistics, https://nces.ed.gov/fastfacts/display.asp?id=372 (accessed June 14, 2017).


15 We run our “local” analysis at the county level rather than the district level as many pertinent variables are not available at the district level and the county geography offers a more consistent scale of analysis; district boundaries can change dramatically over time while county boundaries typically remain unchanged.

16 In West Virginia, 10 percent of youth are of color compared with 4 percent of seniors.

17 Data on state-level racial generation gaps reported in this paragraph are from the 2015 five-year American Community Survey.

18 Unless otherwise noted, data on state- and county-level generation gaps and changes since 1990 reported in this section are based on the 1990 census and the 2015 five-year American Community Survey.


20 In the two preceding examples, data for 2015 represents a 2011 through 2015 average.

21 As noted above, we chose 2012 as the end year to make for a consistent decadal longitudinal dataset, and to mirror the datasets used by analysts whose work we sought to update. See the technical appendix for more information.


23 Julien Lafortune, Jesse Rothstein, and Diane Whitmore Schanzenbach, School Finance Reform and the Distribution of Student Achievement.
24 We update results reported by James Poterba, which use data from 1960-1992. This analysis is rigorous in the sense that controls for both “observable” characteristics of each state, such as the size of the youth and senior populations and income levels, as well “unobservable” characteristics that persist over time, such as a reputation for quality education or a high value placed on education by residents relative to other public goods. This is only possible through “panel data,” or data on a set of observations (in this case, states) at multiple points in time. Because of this, the estimates we get of the relationship between racial generation gap and per-child spending reflect the average impact over the entire 22-year period.

25 Note that this hypothetical scenario does not assume that there was also no change in the racial/ethnic composition – just that the increase in the share of people of color that took place in all states over this period was similar across different age groups. There is some evidence that this effect may have risen over time. Recall the scatterplot on page 8 showing a negative bivariate relationship between per-child education spending and the racial generation gap in 2012. Looking at similar trend lines for 1990 and 2000, we find a flatter relationship. Our respecification of the results of earlier authors, discussed in the appendix, also seem to square with the notion that the effect has increased over time.

26 Helen F. Ladd and Sheila E. Murray, “Intergenerational Conflict Reconsidered: County Demographic Structure and the Demand for Public Education.”

27 For example, Harris et. al (2001) found that while a growing share of elderly has only a modest negative effect on education spending at the district level, the (negative) effect is much larger at the state level. See Amy Rehder Harris, William N. Evans, and Robert M. Schwab, “Education Spending in an Aging America” Journal of Public Economics, 81 (2001): 449-472.

28 Eric Brunner and Ed Balsdon, “Intergenerational Conflict and the Political Economy of School Spending,” Journal of Urban Economics, 56:2 (2004): 369-388. An analysis of survey data capturing respondents’ support for statewide versus local initiatives to increase school spending found that support for both sorts of initiatives declines with age but that relative support for local initiatives is stronger than for statewide initiatives. Similarly, the analysis found that support for both sorts of initiatives among older White voters (over age 54) declines as the non-White share of students in the respondent’s school district increases, but the magnitude of the impact is slightly weaker for local initiatives.


31 Julien Lafortune, Jesse Rothstein, and Diane Whitmore Schanzenbach, School Finance Reform and the Distribution of Student Achievement.


This is certainly part of the message of Robert Putnam’s important volume, *Our Kids: The American Dream in Crisis*, 2015. While a very important and powerful book, the challenge with the approach Putnam seems to favor is that it downplays race in favor of commonality; while we see the point, we worry that not directly addressing race and racism can lead to the sort of phenomenon of underinvestment we document in this brief.

James M. Poterba, “Demographic Structure and the Political Economy of Public Education.”

Helen F. Ladd and Sheila E. Murray, “Intergenerational Conflict Reconsidered: County Demographic Structure and the Demand for Public Education.”
Author Biographies

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Manuel Pastor is a professor of Sociology and American Studies & Ethnicity at the University of Southern California. He currently directs the Program for Environmental and Regional Equity (PERE) at USC and USC’s Center for the Study of Immigrant Integration (CSII). He holds an economics PhD from the University of Massachusetts, Amherst, and is the inaugural holder of the Turpanjian Chair in Civil Society and Social Change at USC.

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