Computities & Banking

Supporting the Economic Strength of Lower-Income Communities

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The Widening Wealth Gap in Metro Boston

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Communities & Banking magazine aims to be the central forum for the sharing of information about low- and moderate-income issues in New England.

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LETTER FROM THE EDITOR

As this is my last issue, I want to thank you for 10 years of amazing support. Your emails, participation in focus groups, and ideas for articles have been vital.

I think you will like Ana Patricia Muñoz's cover story on the shocking racial wealth gaps in the Boston metropolitan area. In other Boston Fed articles, Bo Zhao and Calvin Kuo use a "municipal gap" lens

to describe the fiscal disparities across Connecticut municipalities. Mary Burke and Austin Drukker take a look at some hard data contradicting the common wisdom about Rhode Island's relatively slow economic recovery. Amy Higgins maps changes in mortgage originations in New England.

Brown University's Matthew Kraft offers confirmation that teacher-parent communication has positive effects on student success. NBER researchers Scott Carrell and Bruce Sacerdote examine coaching programs that nudge students to apply to college. And Keith Wardrip, Philadelphia Fed, highlights the disconnect between housing costs in Greater Hartford and the wages many residents earn.

UC Berkeley's Ken Jacobs and colleagues discuss how a higher minimum wage keeps working families from needing public assistance. Drexel's Paul Harrington and Ishwar Khatiwada show that US teens have diminished opportunities for work experience and, hence, future success. Finally, Third Sector New England's Jonathan Spack warns about the impending shift in nonprofit leadership.

I leave *Communities & Banking* in the hands of outstanding colleagues. If you find it valuable, please let them know at CommunityDevelopment@bos.frb.org.

Caroline Ellis Managing Editor CommunityDevelopment@bos.frb.org



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by Bo Zhao and Calvin Kuo, Federal Reserve Bank of Boston Using a "municipal gap" lens, the authors find great fiscal disparities across Connecticut municipalities, resulting from a wide variation in the property-tax base and the cost of services.

Not Much to Rely on:

Racial Wealth Disparities in the Boston Metro Area

Ana Patricia Muñoz FEDERAL RESERVE BANK OF BOSTON

WHITE WEALTH

NONWHITE WEALTH

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Recently collected data reveal striking wealth gaps between the white population and different racial and ethnic groups in the Boston metropolitan area.

Despite increasing prosperity in the Boston metropolitan area, many families are being left out. The growing inequality is raising both moral and economic concerns and spurring calls for action.¹ In terms of inequality of income, Boston is one of the most unequal metro areas in the United States.² However, inequality of wealth (or net worth) in metro Boston is even more stark. (See "Defining Wealth.")

Income may help families cover current needs, but wealth allows them to make investments in education, create businesses, deal with medical emergencies and job losses, and provide better opportunities for future generations.

At a 2014 Boston Fed conference, Federal Reserve chair Janet Yellen noted that widening wealth inequality is incompatible with "values rooted in our nation's history, among them the high value Americans have traditionally placed on equality of opportunity."³ For Greater Boston, the financial well-being of communities of color is critical also because of minorities' importance in the region's economic and population growth.⁴

Previous national surveys that collect data on assets and debts have limitations: they do not provide data at the local level, and they classify different groups in broad categories such as white and black.⁵ To address those shortcomings, the Boston Fed partnered with the Ford Foundation and Duke University's Consortium on Social Equity to bring the National Asset Scorecard for Communities of Color (NASCC) survey to Greater Boston.⁶

Assets

Let us consider the differences just among white, US black, Puerto Rican, and Dominican households.

Financial Assets

White households were more likely to hold every type of financial asset than US black, Puerto Rican, or Dominican households.⁷ More than 93 percent of white households have either a savings or checking account; only 76 percent of blacks do, 55 percent of Puerto Ricans, and 62 percent of Dominicans. This means that about half of Puerto Ricans lack formal liquid savings for emergencies. Not being part of the banking sector has negative consequences in itself, the most obvious being the cost to cash a check and pay bills.⁸

Given that reality, it is not surprising that even fewer nonwhite families have stocks or private retirement accounts. What *is* surprising is how wide the difference is with white households. Whereas 40 percent of white families own stocks or mutual funds, less than 10 percent of US black, Puerto Rican, and Dominican families do. Very few nonwhite households have private retirement accounts either. Most white households (56 percent) own either an IRA or a private annuity, but only 21 percent of US blacks, 16 percent of Puerto Ricans, and 8 percent of Dominicans hold such accounts. Without Social Security, the vast majority would have virtually no financial assets for their retirement. (See "Percentage of Households Owning Assets in the Boston Metro Area.")

Homeownership

Homeownership is, by and large, the most important investment a family makes. Although it may not be the best option for everyone, the disparities in Boston are problematic since investing in a home can provide long-term returns that increase families' net worth. Nearly 80 percent of white households in the survey are homeowners; only about 34 percent of US blacks, 21 percent of Puerto Ricans, and 17 percent of Dominicans are. Moreover, of the households that report owning a home, white households are less likely to have an outstanding mortgage: 60 percent of White households have a mortgage, compared with more than 84 percent of US black, Puerto Rican, and Dominican households.

Percentage of Households Owning Assets in the Boston Metro Area



Source: NASCC, author's calculations

Debts

Assets are only one side of a family's balance sheet. To get the whole picture, we also need to look at liabilities. A family may have savings, but if it also has large amounts of debt, the net value of its assets is much smaller. US blacks, Dominicans, and Puerto Ricans were more likely than whites to hold unsecured debt such as a credit card, student loan, and medical debt.⁹ Notably, 28 percent of black families have student loans, and only 19 percent of white households do. Dominicans are twice as likely as whites to have medical debt. (See "Percentage of Households with Debt in the Boston Metro Area.")

Percentage of Households with Debt in the Boston Metro Area



Source: NASCC, author's calculations

Defining Wealth

All families have to find a balance between what they own with what they owe. Wealth, or net worth, captures what families can use in case of emergencies or to invest for future gains. Income is a flow that provides a snapshot of a family's resources at a given point in time; wealth reflects the stock that a family accumulates. Net worth is measured by taking into account the difference between assets (liquid assets, such as savings and checking accounts, government bonds, stocks, and retirement accounts; and nonfinancial assets, such as homes and vehicles) and liabilities (including mortgages, auto loans, credit card debt, and family loans).



In short, wealth—total assets minus total debts—provides a snapshot of households' financial well-being. Nonwhite households have only a fraction of the wealth of white households. White households have a median wealth of \$247,500; Dominicans and US blacks have a median wealth of close to zero.

Looking Forward

Implementing solutions that can address such huge wealth disparities is complicated and requires a multifaceted approach. One would have to dissect each of the components of wealth to prioritize policy solutions at either the local or national level.

Clearly, most Hispanic and black families don't have enough to rely on when faced with emergencies and even less to invest for the long term. Such differences will only widen over time unless measures to provide equal opportunity for less advantaged families are implemented. Policies should address discrimination in the housing and financial arenas, improve access to quality education and health services, incentivize both short- and long-term savings for lowerincome families, and ensure that jobs provide not only fair pay but access to benefits. A look at policies that go beyond income inequality is needed.¹⁰

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Acknowledgment

This article is a summary of findings from Ana Patricia Muñoz, Marlene Kim, Mariko Chang, Regine Jackson, Darrick Hamilton, and William Darity, "The Color of Wealth in Boston" (Community Development Discussion Paper, Federal Reserve Bank of Boston, Duke University, and the New School, 2015), www.bostonfed.org/ color-of-wealth.

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- ³ See http://www.federalreserve.gov/newsevents/speech/yellen20141017a.htm.
- ⁴ New England and Greater Boston population growth was entirely driven by increases in nonwhite population. Non-Hispanic whites declined 3 percent from 2000 to 2012 in the Boston area; the Hispanic and black population grew 58 percent and 33 percent, respectively.
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- ⁶ The NASCC initiative involves surveys in Boston, Los Angeles, Miami, Tulsa, and Washington, DC. It delves beneath the standard information about the net worth of broadly defined ethnic groups. In Boston, it provides detailed data for Puerto Rican, Dominican, US black, Caribbean black, Cape Verdean, and white households. It also collected unconventional information, such as use of payday lending and remittances. The principal investigators of the NASCC initiative are Darrick Hamilton and William Darity.
- ⁷ "Households" and "families" are used interchangeably. "Assets" include financial assets (savings and checking accounts, government bonds, stocks, and retirement accounts) and tangible assets such as homes and vehicles.
- ⁸ Tyler Desmond and Charles Sprenger, "Estimating the Cost of Being Unbanked," *Communities & Banking* 18, no. 2 (spring 2007), https://www. bostonfed.org/commdev/c&b/2007/spring/article9.pdf.
- ⁹ None of those differences were statistically significant.
- ¹⁰ In one promising example, the Boston Fed has been supporting efforts in the six New England states to establish children's savings accounts early in life. See http://www.bostonfed.org/commdev/childrens-savings-accounts/index.htm.



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Understanding Rhode Island in the Great Recession

Mary A. Burke and Austin J. Drukker FEDERAL RESERVE BANK OF BOSTON

A look at the hard data could sharpen the narrative about the state's slow comeback.

Rhode Island was among the states hit hardest during the Great Recession. Payroll fell 8 percent, the largest decline among the New England states and larger than the nationwide decline of 6 percent. Rhode Island's unemployment rate reached an alarmingly high peak of 11.3 percent in June 2009, and for an extended period (October 2013 to June 2014), the jobless rate was the highest in the nation. (See "Unemployment Rates in New England States.")

Although Rhode Island's unemployment rate has since fallen considerably and is no longer the highest in the nation, the state has yet to fully regain the jobs it lost in the recession. As of June 2015, Rhode Island's employment level remained 2.4 percent below its prerecession peak, the largest such jobs deficit in the region. (See "Employment Levels in New England States.")

Can Rhode Island ever expect to regain the jobs it lost in the recession? The answer is both yes and no. Although the state is forecast to get back to its prerecession employment level by 2017, it won't get back all of the *same* jobs, and the state's labor force may be obliged to adapt to a changing employment landscape.¹

What Went Wrong

What elements contributed most to Rhode Island's historic job losses, and why has its economy been so slow to recover? Two key factors are to blame: Rhode Island experienced a more pronounced housing boom-and-bust cycle than the other New England states (and even more pronounced than many other states nationwide), and its manufacturing sector was structurally weak before the recession.²

During the recession, Rhode Island saw steeper house-price declines than any other New England state and the nation overall. From peak to trough, house prices in Rhode Island fell by about 27 percent, the sixth-largest decline among US states, and above the national average decline of 18 percent.³

House-price declines can exert both direct and indirect effects on employment levels. Directly, house-price declines cause job losses in construction and real estate services. Indirectly, when house prices fall, households suffer a loss of wealth and may spend less, which then leads to job losses in other sectors, such as retail.

Separately, the state's manufacturing sector experienced steeper job losses than did manufacturing in any other New England state or the nation overall. Manufacturing accounted for about 10 percent of Rhode Island's payroll jobs prior to the recession and contributed roughly 27 percent of the state's total recession job losses.⁴

Rhode Island's manufacturing job losses contributed to additional job losses in other sectors because of multiplier effects.⁵ More important from the standpoint of the state's prospects for recovery, a large share of the lost manufacturing jobs are likely to have been structural, or permanent, job losses, caused in part by forces that were in place well before the recession.

Consider that between 1990 and 2007, the traditional manufacturing industries of the state capital—such as the historically important jewelry industry—faced above-average increases in compe-

Unemployment Rates in New England States





Employment Levels in New England States, Indexed to Pre-recession Peaks

tition from Chinese imports, compared with the other New England cities and the nation as a whole.⁶ (See "Jewelry Manufacturing in Rhode Island.") Global competition was creating job losses before the recession.

However, during the early-to-mid 2000s, the job gains in other sectors generated by the housing boom absorbed many of those displaced workers, leaving the state's overall unemployment rate largely undisturbed and masking the problem.⁷ In the Great Recession, the housing bust brought a negative shock to consumer demand, and that accelerated the pace of manufacturing layoffs and destroyed the housing safety net for displaced manufacturing workers.

Hope for the Future

Rhode Island has often been characterized as having the weakest economy in the region. This depiction has been based, first, on the state's unemployment rate remaining roughly tied (along with Connecticut) for highest in New England, and second, on Rhode Island's payroll employment number remaining farther below its prerecession peak level than seen in any other New England state.

However, the ongoing shortfall in employment compared with peak partly reflects the fact that the state's jobs tally fell farther to begin with. While Rhode Island has experienced a significantly weaker recovery than either Massachusetts or Vermont, its cumulative employment growth rate during the recovery period exceeds that of both Maine and New Hampshire and trails Connecticut's by only a small margin.⁸

To understand Rhode Island's middling recovery, it is tempting to again blame its ailing manufacturing sector, within which employment has barely budged since the depths of the recession. However, during the recovery period, manufacturing employment has also fared poorly in Massachusetts and Vermont, states where total employment now surpasses prerecession levels by a healthy margin. A key factor has been those states' combined education and health services supersector, which has contributed significantly larger employment gains (percentage) than it has in Rhode Island. At the national level, the same supersector has led the economy in terms of total job gains as of this writing.

Although employment growth in Rhode Island's education and health services supersector has lagged that of Massachusetts and Vermont (as well as Connecticut), the state has experienced solid employment growth within both its professional and business-services supersector and its leisure and hospitality supersector, ranking a close second within the region in both cases.⁹

This robust growth in two key service-oriented supersectors represents an encouraging sign for Rhode Island's economic future. Economic research suggests that employment growth, continuing recent trends, will likely favor service-oriented occupations, including both high-skill managerial and so-called "knowledge" jobs as well as low-skilled jobs such as food service. Those trends have arisen because provision of services is harder to outsource than production of manufactured goods, and because both complex intellectual tasks and nonroutine, manual tasks are not easily accomplished by computers or robots.¹⁰

A key question looking to the future, then, is to what extent Rhode Island's displaced manufacturing workers can find new jobs in service-oriented sectors, and whether such jobs will offer lower wages and reduced benefits or, if not, will require significant retraining.

Jewelry Manufacturing in Rhode Island

Providence was one of the first cities in the country to industrialize, becoming noted for its manufacturing—particularly its jewelry and silverware industries. By the start of the 20th century, the city boasted some of the largest manufacturing plants in the United States, including Brown & Sharpe, Nicholson File, and Gorham Silverware. From the 1950s to the 1980s, 30 percent of Rhode Island's workforce was employed in manufacturing.¹ During the 1960s, the state was considered a global hub for jewelry manufacturing, and in the 1980s, it produced an estimated 80 percent of costume jewelry made in America.²

Nowadays, most jewelry manufacturing has moved overseas. However, a handful of companies continue to make jewelry in Rhode Island, including household names such as Tiffany and Swarovski, and relative newcomer Alex and Ani. Carolyn Rafaelian, founder of Alex and Ani, says that the jewelry her factory produces can't be found in China or anywhere else in the world.



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Endnotes

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- ⁸ This ranking compares the total employment change in each state between the state's employment trough and June 2015, calculated as a percentage of each state's prerecession peak employment level. The ranking is robust to computing the employment change as a share of each state's trough employment level.
- ⁹ These rankings compare—across states within a given sector—the net employment change in the sector between the state's recession trough date and June 2015, calculated as a percentage of the state's total employment level as of its recession trough date.
- ¹⁰ David H. Autor, "How Structural Shifts in Labor Demand Affect Labor Supply Prospects" (in *Labor Supply in the New Century*, conference proceedings, Federal Reserve Bank of Boston, June 2007): 162–208.





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US Teens Want to Work

Paul Harrington and Ishwar Khatiwada DREXEL UNIVERSITY

Weak economic growth and employer preferences have left teens with diminished opportunities to gain work experience and improve their chances of job market success.

After the Great Recession of 2007–2009 ended, several of the nation's key economic and labor-market indicators improved substantially. For example, since 2011, the number of payroll jobs in the United States has increased by more than 11 million, the unemployment rate has fallen to 5 percent from its peak of more than 9 percent in 2009–2010, and the real gross domestic product has grown by more than \$1 trillion.

Yet despite signs of overall recovery, 16- to 19-year-olds still have extraordinary difficulty finding employment, whether parttime during the school year or full-time during summer.

Teens do want jobs. Moreover, exposing them to the world of work has broad benefits. The more a teen works today, the more she will work next year. Work also keeps teens off the streets, which may be particularly important for those from low-income families with fewer free-time options.

In the longer term, cumulative work experience during teen years has been shown to have a positive impact on employment and earnings of adults in their 20s. Work experience also helps teens develop desirable behavioral traits, like dependability and self-control—essential for virtually all occupations and often the sole qualifications for employment in entry-level jobs.

Declining Employment of Teens

In a given month during 1999–2000, 45 percent of teens were gainfully employed. (See "Trends in Employment-to-Population Ratio of US Teens.") But the economic turbulence that has characterized the US economy since 2000 sparked a long and steep descent in employment prospects for teens. The dot.com recession, followed by the jobless recovery, saw a steady decline in the teen employment rate, falling to 37 percent by 2007. The Great Recession resulted in another sharp reduction in 2009.

By 2011, only one in four teens was employed in a given month during the year. In 2014, just slightly more than

Trends in Employment-to-Population Ratio of US Teens (Age 16–19), 1999–2014

Seasonally adjusted Current Population Surveys annual averages



1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 Source: Current Population Surveys (CPS), US Bureau of Labor Statistics, 1999 through 2014, with tabulations by authors.

27 percent of US teens were employed, a modest increase of just 1.8 percentage points.

A comparison of the trend in the employment-to-population ratio by age reveals that teens experienced the sharpest decline (-18 percentage points), followed by young adults (aged 20–24), among whom the ratio declined by nearly 10 percentage points. Workers in different age groups between 25 years and 54 years experienced declines of 4 to 6 percentage points. In contrast, the employment-topopulation ratio of older workers (55 and over) increased by 3 to 5 percentage points between 1999–2000 and 2013–2014. (See "Trends in Employment-to-Population Ratio of the Working-Age Population.")

This age twist in employment rates is historically a unique occurrence and stands in sharp contrast to the conventional wisdom of an aging population causing the decline in the nation's overall employment rate.

Declining Employment in Summer Months

In the summer months, when schools are closed, teens often aspire to work. Historically, US teens worked at substantially higher rates during the summer months. Research has found that teens who remain idle in summer are more likely than their employed counterparts to risk social isolation and to get involved in antisocial or even criminal behaviors.¹

Sadly, the share of teens likely to work during the summer months has declined sharply. More than half of teens were employed during the summer months of 1999 and 2000. By summer 2007, the employment-to-population ratios of teens had plummeted to 39.6 percent. (See "Summer Trends in Employment-to-Population Ratios of US Teens.") During and after the Great Recession, employment prospects for teens fell even further, reaching historic lows of 26.9 percent during the summer months of 2010–2011. Even as the nation's economy has recovered, the teen summer employment rate has barely budged. During the summers of 2013 and 2014, only 31 percent of teens were employed.

In absolute terms, roughly 8.3 million teens were employed during the summer months of 1999–2000. By 2013–2014, only 5.3 million teens were employed, a drop of 36 percent in absolute employment level.

Since 2000, the pace of loss in summer employment has varied by gender, race/ethnicity, and age subgroups, with a greater decline occurring among males, Asians, blacks, and 16- to 17-year-olds.² The summer employment rates of teens have also varied widely by their family income. (See "Employment-to-Population Ratios of US Teens (Age 16–19) by Household Income.")

Teens from affluent families were more likely to be employed than teens from low-income families. Only 1 in 5 teens from low-income families (less than \$20,000 annual income) were employed in the summer months of 2013–2014. Teen employment rates rose fairly steadily with levels of family income, rising from 27.5 percent among teens in families with annual incomes between \$20,000 and \$39,000, to 32 percent among teens in families with annual incomes between \$40,000 and \$59,000, and 41 percent among teens with annual family incomes between \$100,000 and \$149,000.

Compared with teens from low-income families (family income under \$20,000), teens from affluent families (family income \$100,000 and over) were nearly twice as likely to be employed during summer months of 2013–2014.

Trends in Employment-to-Population Ratio of the Working-Age Population

Current Population Surveys two-year averages



Source: Current Population Surveys public-use data files, 1999 through 2014, US Census Bureau, with tabulations by authors.

Summer Trends in Employment-to-Population Ratios of US Teens, 1999–2014

June–July–August averages, not seasonally adjusted



Source: Current Population Surveys, US Bureau of Labor Statistics, 1999 through 2014, with tabulations by authors.

Employment-to-Population Ratios of US Teens (Age 16–19) by Household Income Summer months, 2013–2014 averages



Source: Current Population Surveys public-use data files, 2013 and 2014, US Census Bureau, with tabulations by authors.

Trends in Labor Market Problems of Teens, Summer, 1999–2000 to 2013–2014

Current Population Surveys two-year averages



Source: Current Population Surveys public-use data files, 1999 through 2014, US Census Bureau, with tabulations by authors.

What Do Teens Want?

There has been debate about whether teens want to work in summer or have part-time jobs during the school year. Some research shows that teens are opting more often for school-related activities than for work in summer months.³ But although school enrollment levels during the summer months have increased by more than 10 percentage points since 2000, the lack of work among teens does not appear to stem from a lower desire to work.

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Rather, we see that many teens want to work. Evidence shows a high incidence of underutilization among teens—measured by unemployment, hidden unemployment, and underemployment. In the summer of 2013–2014, 1.55 million teens were unemployed (the open unemployed), 1.08 million wanted to work but had given up looking for work (the hidden unemployed), and another 0.6 million had a desire to work full-time, but were working part-time for economic reasons (the underemployed). (See "Trends in Labor Market Problems of Teens.")

The combined collections of these three groups of teens, which we have labeled as the underutilized, was 3.23 million, representing an underutilization rate of 40.7 percent, the highest among any group of workers and much higher than the teen underutilization rate of 26.4 percent in the summer months of 1999–2000.

Our findings reveal that teens do have a strong desire to work in summer months but that their ability to find work has deteriorated sharply since the full-employment days of the late 1990s.

Paul Harrington is professor and director at Drexel University's Center for Labor Markets and Policy in Philadelphia, where **Ishwar Khatiwada** is an economist. Contact them at peh32@drexel.edu and ik329@drexel.edu.

Endnotes

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Even as the nation's economy has recovered, the teen summer employment rate has barely budged. During the summers of 2013 and 2014, only 31 percent of teens were employed.



The Public Cost of Low-Wage Work in New England

Ken Jacobs, Ian Perry, and Jenifer MacGillvary UNIVERSITY OF CALIFORNIA, BERKELEY

Stagnating wages are causing many working families to end up on public assistance. More minimum-wage laws could change that scenario.

The decade 2003 to 2013 was a tough one for workers in the United States, 70 percent of whom saw their real (inflation-adjusted) wages decline. In New England, 50 percent of workers experienced a decline in real wages. Although that was less than workers nation-wide, the changes were more extreme, with lower-wage workers experiencing deeper drops in their real wages and higher-wage earners making greater gains than in the nation as a whole.¹ (See "Change in Real Wages, 2003–2013.")

The decline in employer-provided health insurance has exacerbated the pain, with the share of nonelderly New Englanders who receive insurance from their employer falling from 72.3 percent in 2003 to 67.8 percent in 2013.² As job-based coverage has declined, more workers and their family members have enrolled in public health-care programs.

Stagnating wages and decreased employer benefits are a problem not only for low-wage workers, who increasingly cannot make ends meet, but also for state governments, which help finance the public safety net that many workers and their families must use.

State Dollars to Families

We examined the amount of state dollars that went to working families annually during the years 2009 to 2011 for two public benefit programs: health care (Medicaid and Children's Health Insurance Program, or CHIP) and basic household income assistance (Temporary Aid to Needy Families, or TANF).

Although costs for both programs are shared by the federal government and the states, we are reporting only the state portion here. Also, our analysis is just for the cash-assistance portion of TANF. We define working families as those that have at least one family member who works 27 or more weeks per year and 10 or more hours per week.³ Throughout the New England states, sizeable majorities of enrollees in Medicaid/CHIP were found to be members of working families. At the national level, working families made up 61 percent of Medicaid/CHIP enrollment. (See "Enrollment in Medicaid/ Children's Health Insurance Program, 2009–2011.")

It is important to note that there have been significant changes in Medicaid enrollment since implementation of the Affordable Care Act (ACA), but the data are not yet available. A key provision of the ACA expanded Medicaid coverage starting in 2014 to low-income adults under age 65, including those without children living at home, with the federal government paying 100 percent of the cost through 2016.

Thirty states and Washington, DC, have adopted the expanded Medicaid provision. That includes all the New England states except Maine. In addition, enrollment in traditional Medicaid—



Activists raise awareness of the plight of low-wage workers.

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that is, among those who had been previously eligible—has also been boosted, in both expansion and nonexpansion states. That is the result of both the individual mandate to obtain health insurance and increased outreach, awareness, and system improvements to Medicaid related to the ACA—particularly since the opening of the health-care exchanges in October 2013. The costs will be shared by the federal government and the states as determined under traditional Medicaid formulas.

More than 90 percent of states' expenditures on Medicaid/ CHIP and TANF went to Medicaid/CHIP, with TANF receiving a fraction of that amount. (See "Annual Cost for Medicaid/ Children's Health Insurance Program and Temporary Aid to Needy Families, 2009–2011.")

On average, 51 percent of New England states' public-assistance spending supported working families, essentially the same as the national average (52 percent). Collectively, the New England states spent \$1.8 billion per year on public assistance to working families through the Medicaid/CHIP and TANF programs during the period 2009 to 2011.

Increasing Wages

When jobs don't pay enough, workers turn to public assistance in order to meet their basic needs. Such programs provide support to millions of working families. In fact, at both the state and federal levels, more than half of total spending on Medicaid/CHIP and TANF goes to working families. Given that reality, higher wages

Change In Real Wages, 2003-2013

Enrollment in Medicaid/Children's Health Insurance Program, 2009–2011

	Enrollment of members of working families	Percent of enrollment from members of working families	
Connecticut	346,000	63%	
Maine	147,000	59%	
Massachusetts	770,000	61%	
New Hampshire	94,000	72%	
Rhode Island	90,000	56%	
Vermont	100,000	66%	
New England	1,547,000	62%	
United States	34,100,000	61%	

Source: Authors' calculations from 2010–2012 March Current Population Survey (CPS) and administrative data from the Medicaid and CHIP programs. Note: TANF enrollment data are not listed, because of sample size.

and increases in employer-provided health insurance would be expected to result in Medicaid savings. And in the case of TANF—a federal block grant that requires states to maintain a specified level of funding for programs directed to low-income families—higher wages would allow states to reduce the portion of program dollars



Half of New England workers earn less now than they did in 2003, compared to 70 percent of workers in the nation as a whole, but changes in real wages were more extreme in New England.

Source: Authors' analysis of Center for Economic and Policy Research Current Population Survey Outgoing Rotation Group extracts.

Annual Cost for Medicaid/Children's Health Insurance Program and Temporary Aid to Needy Families, 2009–2011

	Total state portion 2013 (\$ millions)	Working-family state portion 2013 (\$ million)	Working-family state share
Connecticut	\$902	\$486	54%
Maine	\$140	\$63	45%
Massachusetts	\$1,965	\$967	49%
New Hampshire	\$160	\$104	65%
Rhode Island	\$199	\$97	49%
Vermont	\$160	\$87	54%
New England total	\$3,527	\$1,805	51%
United States total	\$48,400	\$25,000	52%

Source: Authors' calculations from 2010–2012 March Current Population Survey and administrative data from Medicaid, CHIP, and TANF programs.

Low-Wage Occupations and Public-Assistance Rates

Reliance on public assistance can be found among workers in a diverse range of occupations. Nationally, three of the recently analyzed occupations with particularly high levels of publicassistance program utilization are frontline fast-food workers, child-care providers, and home-care workers (mainly home health aides and personal-care aides). At or near 50 percent of each group's workforce is in families where at least one member is enrolled in one or more of Medicaid/CHIP, TANF, Earned Income Tax Credit, and SNAP (food stamps).

However, high reliance on public-assistance programs among workers isn't found only in service occupations. Fully onequarter of part-time college faculty and their families also are enrolled in public-assistance programs.



Source: Ken Jacobs, Ian Perry, and Jenifer MacGillvary, "The High Public Cost of Low Wages" (see endnote 3).

going to cash assistance and consider increasing the funding for services such as child care, job training, and transportation assistance. Lowering public-assistance costs through higher wages and employer-provided health care should allow all levels of government to do a better job of targeting their tax dollars.

In 2014, Massachusetts committed to raising its minimumwage to \$11 by 2017, and in June 2015, the state's home-care workers won a \$15-an-hour starting wage, to be provided by 2018. (See "Low-Wage Occupations and Public-Assistance Rates.") Vermont, Connecticut, and Rhode Island also recently passed minimumwage increases. Maine will have a \$12 minimum-wage proposal on the 2016 ballot, and Massachusetts lawmakers are pursuing legislation similar to New York State's requiring a \$15 wage for fast-food workers and workers at big retail chains. Portland, Maine, joined a growing number of cities and counties across the country that are raising minimum wages at the local level. A \$10.68 minimum wage passed in the Portland City Council, and as of this writing, a \$15 minimum-wage referendum was on Portland's November ballot. Meanwhile, Connecticut legislators proposed in spring 2015 first-of-its-kind legislation that would have fined large corporations \$1 an hour for each employee whose wages were lower than \$15 an hour. The full bill did not pass, but it established an advisory council of workers and consumers to make recommendations on how the state can handle low-wage employment.

Currently, it appears to be left to state and local governments to address the declining real wages that workers, especially low-wage workers, have contended with over the past decade. Acting on the problem of low-wage work will help more than just the recipients of pay increases. Since the cost of low-wage work is borne widely, the benefits of wage increases are likely to be enjoyed widely.

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The Underutilized Potential of Teacher-Parent Communication

Matthew A. Kraft BROWN UNIVERSITY

Though still the exception rather than the rule, teacher-parent communication can have strong positive effects on students' success in school.

There is widespread agreement among educators and parents that communicating with each other benefits students. However, evidence suggests that teacher-parent communication is infrequent and unsystematic in most schools.

The best information on the frequency of communication between schools, teachers, and parents comes from the nationally representative Parent and Family Involvement in Education survey.¹ Data collected on the frequency and quality of school-initiated communication with public-school parents from 2003 to 2012 show that although the percentage of parents who report having ever received an email or note about their student has gone up, calls home have gone down since 2007, as has the percentage of parents who say they are "very satisfied with their interactions with school staff." (See "Frequency and Quality of School-Initiated Communication with Public-School Parents.")

There are three main takeaways from the data. First, communication in any form between schools, teachers, and parents is surprisingly rare. For example, 59 percent of public-school parents report never receiving a phone call home in 2012. Second, there is considerable room for improvement in the quality of communication. About half of all parents are not "very satisfied" with their interactions with school staff. Third, overall trends across the last decade suggest schools are not making much progress in improving the frequency and quality of communication with parents.

Although the use of email as a form of communication has increased steadily over the last decade, this increase has not benefitted all families equally. Email communication with families living at or below the poverty line has remained flat since 2007. The incomebased "email communication gap" between families above and

Frequency and Quality of School-Initiated Communication with Public-School Parents



Source: Author's calculations from the US Department of Education's Parent and Family Involvement in Education Survey of the National Household Education Surveys Program (NHES: 2003, 2007, 2012). Data are restricted to parents with students attending assigned public schools and exclude public schools of choice. *Note: This question was not included in the 2002–2003 parent survey.

Percentage of Parents Who Report Receiving a School-Initiated Email or Note About Their Student



Source: US Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education Survey of the National Household Education Surveys Program (NHES: 2003, 2007, 2012).

below the poverty line has more than doubled. (See "Percentage of Parents Who Report Receiving a School-Initiated Email or Note.")

The Power of Teacher-Parent Communication

These statistics should sound alarm bells, given growing causal evidence that communication can empower parents and improve students' academic performance.

For example, a small randomized control trial that Shaun Dougherty and I conducted during a charter school summer academy demonstrated that frequent phone calls home immediately increased students' engagement in school as measured by homework completion, in-class behavior, and in-class participation.²

In a related experiment, Todd Rogers and I found that sending parents weekly one-sentence individualized messages from teachers during a high school summer credit-recovery program reduced the percentage of students who failed to earn course credit by 41 percent.³

Additionally, a fascinating experimental study conducted in France found that inviting parents to attend three two-hour meetings with school leaders to talk about how to support their students in the transition to middle school increased both parents' and students' engagement in school.⁴ Parents who were randomly chosen to receive invitations to the meetings were more likely to join the parent association and monitor their child's schoolwork, while their students' attendance, behavior, and performance in French class increased.

Implementation Barriers

Three primary factors are contributing to the low rate of teacherparent communication: implementation barriers, time costs, and the absence of schoolwide communication policies. Implementation barriers include the lack of easy access to parent contact information, outdated contact information records, language barriers between teachers and parents, and the lack of noninstructional time teachers have to make calls or send texts or emails during the school day. Many of these are technical challenges that schools can address with systematic efforts to update contact information, translation software and services, and data management systems with user-friendly teacher dashboards. Providing dedicated time during the workday for teachers to reach out to parents is a more difficult challenge. One option would be to relieve teachers of noninstructional responsibilities that could be performed by less costly teachers' aides or parent volunteers. Another would be to increase the amount of noninstructional time in teachers' contractually obligated workdays, as Boston Public Schools recently did in their expanded school-day initiative.⁵ A third option is to enhance the efficiency of the time that teachers already spend communicating with parents.

Detailed time-use data for educators is hard to come by. However, a time-use study of a random sample of classroom teachers in Washington State found that teachers spend approximately 8 percent of their noninstructional work hours communicating with parents—about one hour each week.⁶ In ongoing work, Jason Grissom and Susanna Loeb have found that principals spend even less time communicating with parents—as little as 3 percent of their workday. Although less than ideal, even secondary-school teachers who work with over 100 students would be able to speak with every parent at least once during the school year for 10 minutes if they dedicated just 30 minutes a week to making phone calls. And a growing body of research demonstrates that text messages provide an efficient and effective way to reach parents with individualized messages on a more frequent basis.⁷

The lack of guidance and clear expectations around teacherparent communication is arguably the most commonly overlooked factor. Beyond general encouragement by administrators to contact parents, teachers are left to determine when, how, and why they should reach out. Reducing the income-based email communication gap requires both increasing access to email and proactive communication policies designed to distribute teacher-initiated communication across all families. The rapidly increasing access to mobile phones even among low-income families presents an opportunity to connect with all families using communication technology and to increase the efficiency of the communication. Without formal expectations, sufficient time, and the necessary communication infrastructure, teachers often take a passive approach to communication as they shift their attention to other tasks. Promoting more transparency around the frequency with which each staff member is contacting parents could also serve to foster positive peer effects among teacher teams. It is well within our ability to make teacher-parent communication the norm rather than the exception.

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Mapping New England

Changes in Home Purchase Mortgage Originations, by County

Amy Higgins FEDERAL RESERVE BANK OF BOSTON

Between 2013 and 2014, New England's percentage of home purchase loan originations slightly declined. However, at state and county levels, the picture is more mixed, with both increases and decreases. The largest declines were experienced by three Vermont counties: Bennington, Windham, and Windsor. The largest increase in New England was seen in Somerset County, Maine, where home loan originations increased almost 23 percent.

Looking at New England as a whole, in general blacks and Latinos are more likely to be denied home purchase loans than whites are. Though we do not have data on individual debt-to-income ratios or credit scores, we do know annual income for individuals in these groups. Interestingly, the largest disparities are found among applicants who earn \$91,000 to \$120,000. In this income bracket, blacks and Latinos are at least twice as likely to be denied loans as their white peers.



New England: Home Loan Denial Rates for Blacks and Latinos Relative to Whites

Source: 2014 Home Mortgage Disclosure Act (HMDA) data.



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How Can We Expand College Going and Retention?

Mentoring, Nudges, and Information

Scott Carrell and Bruce Sacerdote

mtcurado/iStoc

College coaching programs show promise as a way to boost enrollment in higher education.

One of the nation's biggest policy challenges and opportunities centers on the US college-going and graduation rate. Relative to the rest of the Organisation for Economic Co-operation and Development (OECD), the United States has fallen from world-leader status on these two measures to middle of the pack.¹ The Obama administration has pursued a variety of policies to enhance both college going and graduation—policies that include increasing Pell Grants and refundable tax credits (such as the American Opportunity Tax Credit), and providing new information via scorecards that rank colleges on the basis of graduation rates and earnings of their graduates.²

Economists, education researchers, and other social scientists have spent the last five to 10 years designing and evaluating a variety of innovative measures to encourage college attendance. Some of the more promising interventions include having tax preparers autofill the Free Application for Federal Student Aid (FAFSA), texting college-bound high school graduates to remind them of key deadlines (including course registration and student orientation), and texting college students with reminders to refile the FAFSA each year.³ Other researchers have contacted high-achieving, lowincome high school seniors to inform and prompt them to apply to a broad range of selective colleges, including ones where the student was likely to be admitted and receive a substantial amount of financial aid.⁴

A New Approach

In our National Bureau of Economic Research working paper, we investigate a somewhat different and more intensive intervention.⁵ We started with the premise that many academically capable high school seniors do not apply to college because they are intimidated by the process, lack parental support, or are stymied by their own tendency to procrastinate. Our intervention attempted to mitigate all three of those problems through an intensive mentoring program.

We teamed up with the New Hampshire Department of Education and high schools throughout the state, all of which were excellent partners. We asked guidance departments to identify seniors who had expressed interest in college but, as of December of senior year, had made little or no progress on filing a college application. We randomly assigned half of the high school seniors to receive help from a Dartmouth undergraduate student who coached the high school student through the application process. The mentors visited the students for one to two hours each week until applications were completed. In addition to college-application coaching, we paid for application fees, College Board fees, and in some cases, we paid students a \$100 bonus for completing the process.

Not surprisingly, being assigned to our mentoring treatment yielded large increases in the likelihood that a student applied to

college. Eighty-five percent of students assigned to the treatment group applied to college versus 60 percent of control-group students.

Of even more interest is the fact that our intervention had large impacts on college going, particularly for the women in the sample. Even though only half of the women assigned to the mentoring treatment actually pursued the offer, the treatment women were 14 percentage points more likely to attend college in the first year after high school (that is, 14 percentage points above the baseline college-going rate of 30 percent.) And considering that only half of the assigned women took advantage of the mentorship, the estimated treatment effect of the program for that subset was 28 percentage points.

When we examined effects on attending a four-year college, the results were even more striking. Women assigned to the mentoring treatment were 11 percentage points more likely to enroll in a four-year college. This is almost a doubling of the baseline rate of 14 percent of control-group women enrolling in a four-year college. And again, if we consider women who actually accepted the treatment once offered, the effects are twice as large.

An important question with our intervention is whether, even though we were successful in encouraging students to attend college, they actually persisted in college. It is possible that students are even harmed by a short and potentially expensive spell of college attendance. Our analysis showed that treatment students actually persisted into their second and third years of college at the same rate as control-group students. In other words, the marginal students that we induced to attend college persisted as much (or as little, at 50 percent) as all of the other college-bound students in the sample.

Digging Deeper

Naturally, we wanted to investigate the program further and determine which aspects were the most effective and for which types of students. We tried to pursue these deeper questions by separating the experiment into different components and by surveying the students who were in the sample to learn more about their personality characteristics and their sources of college-going support.

We discovered a number of interesting patterns. Most important, the mentoring program is particularly effective for students who do not or cannot rely on parents and friends for help with college applications. About half of the students in our sample said that they were unable to rely on parents to help with applications, and our treatment effects are much larger for them.

Second, the \$100 cash bonus that we paid students for completing the program was not the primary motivator for completing applications. However, the cash bonus does appear to have been a good incentive to get students in the door to start the process. In cohorts where we removed the cash bonus, student willingness to accept our offering of mentoring fell from 50 percent to a mere 19 percent.

One mystery is why the program is so much more effective for women than for men. On the basis of our sample and American Community Survey data, we believe that high school–educated men in New Hampshire have more access to higher-paying jobs than do high school–educated women. Our working hypothesis is that the men in our sample are more likely to be drawn into the labor market immediately after high school by relatively highpaying jobs in skilled trades, construction, and manufacturing. Specifically, men in the sample were much more likely

than women to report they had a career path that they preferred to college. And among the non-college-educated workers, the men report average wages that are 30 percent higher.

We also considered interventions that were less intense than one-on-one mentoring. Specifically, we wanted to try nudges that would both inform students as to college opportunities and reduce the fear of the application process.

We tried an intervention in which we offered to aid a randomly chosen set of students by collecting their transcripts and sharing these transcripts with college admissions offices throughout the state. The college admissions offices then sent "likely" letters to strongly encourage qualified students to apply. We found that fewer than 10 percent of the students accepted our offer of help and even those that participated did not have increased rates of application and attendance.

Overall, we have contributed one piece to the complex puzzle of why many academically qualified students do not attend college in the United States. For some high school students, the application process appears to be overly daunting, and they simply need help to navigate the complexity. However, despite the demonstrated value of mentoring, we also believe that reminders, nudges, information provision, and process simplification can play a large role in tackling this nationwide challenge.

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Investment in Leadership

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Jonathan Spack THIRD SECTOR NEW ENGLAND A new report finds that the impending shift in nonprofit leadership in New England threatens a sector that already suffers from fundamental structural deficits and a lack of investment.

In Third Sector New England's June 2015 study on nonprofit leadership, "Leadership New England: Essential Shifts for a Thriving Nonprofit Sector," we found that 64 percent of nonprofit leaders in the region planned to leave their jobs within five years.¹ Thirty

percent planned to leave within the next two years. Of the departing leaders, more than onethird planned to retire. These data come from 877 leaders (primarily executive directors) and 330 board members of nonprofit organizations who responded to a survey designed to identify who the current leaders are and the challenges they face.

Impending Transitions

The imminent leadership transitions signal big changes for New England's nonprofit sector, but the numbers are hardly a surprise. Over the past decade, the literature about the nonprofit sector has been filled with predictions about trends likely to hurt overall effectiveness.²

When the Great Recession hit, many of those predictions—the departure of baby boomers, nonprofits closing or merging, and the sector crumbling—did not pan out, but the structural and systemic problems on which the predictions were founded did not go away. As the economy recovers and baby boomers begin to retire in greater numbers, we have so far failed to recognize that such a disruption in nonprofit leadership presents an opportunity to fundamentally change how we invest in our nonprofits, our people, and by extension, our communities. It is time to change the mental model of nonprofits as

charities not worthy of serious investment. The new generation of leaders is unlikely to accept that view.

As our report shows, the sector's success and impact continue to rely on unsustainable factors—overworked, underpaid leaders and staff, for example; struggles to balance budgets and keep organizations stable; a lack of investment in professional development and organizational infrastructure; and conflicting views of the optimal role for nonprofit boards. When leaders planning to leave within the next two years were asked what conditions would make them stay longer, 49 percent said higher-performing boards, 42 percent noted better fundraising supports, and 40 percent indicated higher pay.

Like the impending departure of longtime leaders, none of that is new information. But taken as a whole, a picture emerges of a

sector that is chronically undercapitalized and tasked with doing more with less while trying to address problems like poverty, climate change, economic inequality, institutional racism, substance abuse, homelessness, and access to quality health care.

Interestingly, despite the perennial challenges, the sector continues to grow, exhibiting remarkable resilience. Nationwide, the number of nonprofits has shot up since 2008, even adding jobs during the Great Recession.³ As of late 2014, there were 73,410 reporting nonprofits in New England, up from 44,688 in 2008.⁴ If we include new start-ups, benefit corporations, limited-liability

For leaders planning to leave in two years, three conditions would make them stay longer.

49% said

> 42% noted better fundraising supports

40% indicated higher pay corporations, and similar entities working in our communities for social change, it becomes clear that people who see a need in our society and have the wherewithal to start new social enterprises are still doing it.⁵ But although some of the new organizations are exhibiting high levels of growth, innovation, and impact, many will face the same struggles indicated by our study.

What Would Change Look Like?

The key overall findings—that leaders and boards are struggling to make ends meet and have little money for professional development and growth—show that the nonprofit leadership picture has changed little over the years.

We know the structural basis for many of these deficits: the nonprofit sector is dramatically undercapitalized compared with the business sector. Businesses use their capital to make improvements in operations and return more money to investors. Nonprofits have few extra resources to invest in increasing their capacity and infrastructure. Their most valuable asset is usually their staff, and many nonprofits need more staff. Of the 877 leaders we surveyed, 51 percent said

they have five or fewer employees, and 81 percent have 25 or fewer.

Nonprofit organizations rely on their leaders and employees for their programmatic success and to provide the return on investment (the social capital) that serves the needs of so many in our communities. It should be a concern to all that these organizations continue to struggle. Forty-nine percent of New England leaders say they have three months or less of cash reserves, while 21 percent have one month or less. Sixty-seven percent of leaders make \$99,000 or less, and 22 percent make less than \$50,000.

The dearth of capital to invest in professional development and other supports for nonprofit leaders also can undermine efforts to build capacity for the next generation of leaders. The private sector spends many more of its resources on leadership development than the nonprofit sector, but in the past 20 years, annual foundaThis Communities & Banking article is copyrighted by the Federal Reserve Bank of Boston. The views expressed are not necessarily those of the Bank or the Federal Reserve System. Copies of articles may be downloaded without cost at www.bostonfed.org/commdev/c&b.

tion giving for leadership was only 1 percent of total annual giving.⁶ Only 54 percent of leaders said their organizations are able to budget for professional development of staff. Leaders report that they have little bench strength: 60 percent of organizations report they have no succession plan in place.

Of course, there is another side to the story. The fact that 88 percent of the leaders surveyed in our study report that they're happy or very happy in their jobs despite the challenges offers some insight. They told us they feel appreciated, challenged, and fulfilled by their mission-related work. But although they and the staff they lead are the sector's most valuable assets, we have somehow created a system that relies on the willingness of such committed people to accept low pay and little investment in their professional development. Ultimately, some may decide that that state of affairs hurts the causes they so passionately espouse.

How long can this go on? We expect a lot from our nonprofit leaders, but despite the fact that investment in overhead, salaries, and leadership development is minimal, the media and the public often imagine that leaders are paid exorbitant salaries.

It's time the nonprofit sector and its funders raised the bar. Nonprofit leaders may define success as being "stable"—but stable is not enough. For leaders to be truly effective, they need enough financial support to allow them to learn, reflect, and innovate. They need time to develop their staff and to make plans for the future. They need to engage in deep learning about leadership development and to understand how their organizations can achieve mission impact. Our study showed that leaders are significantly more likely to think their organization has the capacity and bench strength to handle a leadership transition when staff have resources committed to professional development.

If our primary funders and capacity builders (foundations or intermediaries like Boston-based Third Sector New England, Bridgespan, and FSG) helped organizations invest more in what leaders say they need to do—build higher-performing boards, create succession plans grounded in a long-term vision for sustainability, achieve financial stability, strengthen the leadership skills of their staff, and work in more collaborative and networked contexts—they would accomplish more with their dollars and yield more of the social capital the sector returns to its supporters. With broad and strategic investment in the capacity of organizations and their people, the sector could become more resilient, address social inequities better, and deliver more on the promise of strengthening communities.

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Endnotes

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- ³ Lester M. Salamon, S. Wojciech Sokolowski, and Stephanie L. Geller, "Holding the Fort" (Nonprofit Employment Bulletin no. 39, Johns Hopkins University Economic Data Project, Baltimore, 2012), http://ccss.jhu.edu/wp-content/ uploads/downloads/2012/01/NED_National_2012.pdf.
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- ⁵ Since the law first passed in Maryland in 2010, 30 states and Washington, DC, have passed legislation permitting benefit corporations, a class of corporation that voluntarily meets different standards of corporate purpose, accountability, and transparency. See benefitcorp.net/faq.
- ⁶ The for-profit sector invests \$129 per employee per year in leadership development; the civic/social sector invests \$29. See Niki Jagpal and Ryan Schlegel, "Cultivating Nonprofit Leadership: A (Missed?) Philanthropic Opportunity" (report, National Council for Responsive Philanthropy, Washington, DC, 2015), http://ncrp.org/paib/smashing-silos-in-philanthropy/ cultivating-nonprofit-leadership; and Laura Callahan, "Under-Investing in Social Sector Leadership" (report, Common Good Careers, Boston, 2014), http://commongoodcareers.org/articles/detail/guest-article-under-investing-insocial-sector-leadership.

Leaders report that they have little bench strength: 60 percent of organizations report they have no succession plan in place.

Aligning Housing Costs and Wages: The Hartford Case

Keith Wardrip FEDERAL RESERVE BANK OF PHILADELPHIA

Greater Hartford residents without a four-year degree face a disconnect between housing costs and the wages they can typically earn.

Housing costs represent the largest expense in most household budgets, a reality that is all too apparent to bill payers in low- and moderate-income households. For those in the bottom two-fifths of the income distribution, housing costs account for between 38 cents and 41 cents of every dollar expended.¹ A long-standing assumption in housing policy and research is that in order to be affordable, housing costs should consume no more than 30 percent of total household income—30 cents of every dollar. The argument is that, particularly for households with lower incomes, the remaining 70 percent is necessary to cover nonhousing expenses such as food, clothing, transportation, health care, and education.

Opportunity Occupations

The housing costs that characterize the Hartford–West Hartford– East Hartford metropolitan area can pose challenges for households of modest means.²

The National Low Income Housing Coalition calculates that a "housing wage" is the wage a full-time worker would have to earn in order to afford the fair market rent (FMR) for a two-bedroom rental unit.³ For the 2015 fiscal year, the two-bedroom FMR in the Hartford area was \$1,144, which was higher than the national average of \$1,006. In order to ensure affordability, rents at this level require an annual income of \$45,760, or a housing wage of \$22 per hour for a household with a single wage earner.⁴

Whether moving to the Hartford metropolitan area from elsewhere or relocating within the region, prospective homebuyers will find that typical housing costs demand a similar income. The National Association of Realtors (NAR) estimates that the median sales price for existing single-family homes in the Hartford area was \$229,500 in the second quarter of 2015—right in line with the median sales price in the United States. Based on NAR's calculations, a household prepared to make a 10 percent down payment would need an income of \$46,626 to qualify for a mortgage on the median-priced existing single-family home.⁵

The knowledge that, whether renting or owning, a household needs roughly \$46,000 in income to afford typical housing costs in the Hartford metropolitan area raises two questions: What employment does the region offer that exceeds that threshold? And can workers without higher levels of formal education expect to be considered for those jobs?

Recent research conducted by the Federal Reserve Banks of Philadelphia, Cleveland, and Atlanta on "opportunity occupations" provides information that helps answer those questions.⁶ Opportunity occupations are defined as occupations that are generally considered accessible to a worker without a bachelor's degree and that have an annual median wage at or above the national annual median wage, after adjusting for differences in local consumption prices. In Hartford, the annual median wage for an occupation must exceed \$35,900 in order to be classified as an opportunity occupation.

On the basis of the level of education typically required to enter the occupation or the views of current workers and occupational experts about the education a new hire would need, roughly 35 percent of the Hartford metropolitan area's employment qualifies as an opportunity occupation. A third assessment—the minimum education specified in online job advertisements—is also used in the research to determine whether an occupation is accessible to a worker without a bachelor's degree. Using that measure, which gives us the perspective of employers looking for talent, Hartford's opportunity occupation share is closer to 25 percent.

For the 15 largest opportunity occupations in the Hartford metropolitan area, there is agreement between assessments of entrylevel education and the views of current workers. (See "Largest Opportunity Occupations in the Hartford Metropolitan Area, May 2014.") The jobs include office and administrative support, production, health-care, and supervisory positions. But although nine of the 15 occupations offer an annual median wage high enough to be classified as an opportunity occupation, the pay is insufficient for typical housing costs in the region because it is below \$46,000. For another three occupations—office and administrative supervisors, computer-user support specialists, and production and operating supervisors—the majority of online job ads in recent years requested a bachelor's degree or higher. As a result, only three occupations typically pay at least \$46,000 and are also considered by most employers to be accessible to a worker without a college degree: registered nurses, executive secretaries, and licensed practical nurses.

It is also instructive to look at the largest occupations that typically pay at least \$46,000 regardless of the education required. The typical worker in such professions would be able to afford a modestly priced rental or for-sale unit in the Hartford metropoli-

Largest Opportunity Occupations in the Hartford Metropolitan Area, May 2014

				Accessible without a bachelor's degree?	
Occupation	Employ- ment	Annual median wage	Based on entry- level education and views of current workers	Based on employers' prefer- ences for education	
Customer service representatives	11,870	\$39,083	Yes	Yes	
Registered nurses	11,780	\$74,110	Yes	Yes	
Secretaries	10,690	\$41,226	Yes	Yes	
Office and administrative supervisors	8,600	\$56,098	Yes	No	
Bookkeeping clerks	6,150	\$43,680	Yes	Yes	
Retail sales supervisors	4,650	\$42,744	Yes	Yes	
Machinists	4,080	\$45,240	Yes	Yes	
Heavy-truck and tractor-trailer drivers	3,770	\$44,782	Yes	Yes	
Computer-user support specialists	3,640	\$56,784	Yes	No	
Maintenance and repair workers	3,630	\$39,853	Yes	Yes	
Executive secretaries	3,390	\$61,152	Yes	Yes	
Inspectors, testers, and sorters	3,380	\$44,866	Yes	Yes	
Automotive ser- vice technicians	2,890	\$39,707	Yes	Yes	
Licensed practical nurses	2,820	\$56,160	Yes	Yes	
Production and operating supervisors	2,770	\$66,144	Yes	No	

Source: Foundational data prepared for Keith Wardrip et al., "Identifying Opportunity Occupations in the Nation's Largest Metropolitan Economies" (report, Federal Reserve Bank of Philadelphia, September 2015), https://philadelphiafed.org/community-development/publications/specialreports. Note: Bold type in chart indicates wages insufficient to cover housing.

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tan area. The annual median wage for many of these occupations far exceeds the \$46,000 threshold, but only two occupations registered nurse and executive secretary—are generally considered accessible to a worker without a four-year college degree using all three assessments of educational attainment. (See "Largest Occupations Typically Paying over \$46,000 in the Hartford Metropolitan Area, May 2014.")

More than 62 percent of residents over the age of 25 in the Hartford region do not have a four-year college degree.⁷ This suggests that a single-wage household that fits this description would find limited employment opportunities that are compensated sufficiently to enable paying for middle-tier housing in the metropolitan area.

Largest Occupations Typically Paying over \$46,000 in the Hartford Metropolitan Area, May 2014

			Accessible without a bachelor's degree?	
Occupation	Employ- ment	Annual median wage	Based on entry- level education and views of current workers	Based on employers' prefer- ences for education
General and oper- ations managers	11,970	\$122,031	No	No
Registered nurses	11,780	\$74,110	Yes	Yes
Office and administrative supervisors	8,600	\$56,098	Yes	No
Elementary school teachers	5,310	\$72,880	No	No
Accountants and auditors	5,270	\$70,699	No	No
Wholesale/ manufacturing sales reps	5,040	\$66,518	No	No
Financial managers	4,900	\$118,373	No	No
Management analysts	4,850	\$85,966	No	No
Secondary-school teachers	4,560	\$71,470	No	No
Business opera- tions specialists	4,180	\$73,133	No	No
Computer systems analysts	4,150	\$87,776	No	No
Computer-user support specialists	3,640	\$56,784	Yes	No
Software develop- ers, applications	3,550	\$90,834	No	No
Executive secretaries	3,390	\$61,152	Yes	Yes
Lawyers	3,390	\$133,001	No	No

Source: Foundational data prepared for Keith Wardrip et al., "Identifying Opportunity Occupations in the Nation's Largest Metropolitan Economies" (report, Federal Reserve Bank of Philadelphia, September 2015), https://philadelphiafed.org/community-development/publications/ special-reports. Note: Bold type in chart indicates occupations considered inaccessible without a bachelor's degree.

Potential Solutions

Nonprofits, community colleges, and workforce-development professionals can effect change by striving to make decent-paying employment opportunities more accessible for workers without a four-year college degree. For example, more programs could provide training and industry-recognized certificates for workers aspiring to employment in computer-user support roles. Short-term, immersive training, often in conjunction with internship opportunities with engaged employers, can provide necessary skills and work experience and substitute for a four-year college degree in some cases.⁸

As indicated in Hartford, jobs that provide an income sufficient to enable someone to afford quality housing are available for workers with lower levels of formal education, but they are few, and some employers indicate preferences for college-educated candidates. Efforts to develop career pathways that move people from lower-wage to higher-wage jobs would benefit from a data-driven analysis of the local economy in which the efforts are situated. In addition to pinpointing the specific occupations in a given economy that offer the greatest potential to meet or exceed the "housing wage," active engagement with employers is necessary to ensure that candidates can develop the skills required for the job without attending college for four years-and that there is an openness to hiring applicants who do not have a bachelor's degree but can demonstrate the requisite skills. Through research and engagement, workforce-development efforts can directly and concretely bring workers' wages and housing costs into better alignment.

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Endnotes

- "Consumer Expenditures Midyear Update—July 2013 through June 2014 Average" (report, Bureau of Labor Statistics, US Department of Labor, Washington, DC), http://www.bls.gov/news.release/pdf/cesmy.pdf.
- ² Different datasets define the Hartford metropolitan area differently. Some use the county-based definition; others define the region by cities and towns. For simplicity's sake and rather than trying to specify the differences in the article, I use "Hartford metropolitan area" throughout.
- ³ The fair market rent in Hartford represents the estimated 50th percentile (or median) rent in the housing market and includes utility costs. The calculation of the housing wage assumes that rent and utilities consume 30 percent of household income and that each household includes only one wage earner. See http://nlihc.org/sites/default/files/oor/OOR_2015_FULL.pdf.
- ⁴ According to the US Census Bureau's 2014 American Community Survey, wage and salary income accounted for 87 percent of total nonretirement household income (excluding Social Security and other retirement income) in the Hartford metropolitan area. Workers in households that receive income from other sources or that include more than one full-time wage earner could earn less than \$22 per hour and still afford the two-bedroom FMR in Hartford.
- ⁵ NAR's qualifying income is approximated by multiplying the estimated annual mortgage principal and interest payments by four and assumes a 4 percent interest rate. NAR's "Metropolitan Median Area Prices and Affordability" can be accessed at http://www.realtor.org/topics/metropolitan-median-area-prices-andaffordability.
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Haves and Have-Nots: Municipal Fiscal Disparities in Connecticut

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Using a "municipal gap" lens, the authors find great fiscal disparities across Connecticut municipalities, resulting from a wide variation in the property-tax base and the cost of services.

From its coastal mansions to the housing projects in its large cities, Connecticut reveals a wide socioeconomic spread. This inequality is likely responsible for the disparities in municipalities' ability to provide public services to their residents, businesses, and visitors. In order to implement appropriate policies, particularly regarding grant distributions by the state, policymakers would benefit from understanding the extent to which fiscal disparities exist.

The Municipal-Gap Approach

To quantify fiscal disparities associated with local nonschool services in Connecticut, a recent research report from the Federal Reserve Bank of Boston's New England Public Policy Center (NEPPC) employs the "municipal gap" approach.¹

A municipal gap is a measure of the difference between the "municipal cost" and "municipal capacity" of each town or city. Municipal cost measures the *underlying* cost to municipalities of providing nonschool services. The main nonschool services on which the cost analysis focuses are public safety, public works, general government services, and other nonschool government functions, such as welfare and government employees' fringe benefits.² Municipal cost is not actual expenditures. Similarly, municipal capacity is a different concept from actual revenues, as it measures the innate ability of municipalities to raise local revenue for funding nonschool services. In other words, both cost and capacity are determined by socioeconomic factors that are outside the direct control of local officials.

The NEPPC report measures municipal capacity as the hypothetical property-tax revenue of each municipality, assuming a



Connecticut's wealthy communities can fund their public services with ease, while needs far outstrip resources in poor communities.

photos Denis Tangney Jr./iStock



uniform tax rate across the state. Using that measure, municipal capacity reflects only the differences in local property-tax base, irrespective of actual local tax policies.

Through statistical analysis, the NEPPC report finds that local nonschool expenditures increase with five cost factors that are outside the direct control of local officials. They are the unemployment rate, population density, the private-sector wage level, locally administered road mileage, and the number of jobs.

There are reasons why such factors are associated with increased nonschool expenditures. For example, municipalities that have higher population densities tend to have greater fire-protection costs. That is because a fire would pose a larger hazard for houses that are tightly packed together than for houses that are more spread out. Similarly, higher private-sector wages may pressure public officials to increase public-sector wages to attract and retain employees, adding to municipal costs. In addition, municipalities with longer locally administered roads have to spend more on road maintenance and snow plowing.

The NEPPC report assumes that municipal capacity statewide is just enough to cover municipal cost statewide, and the overall statewide municipal gap is therefore equal to zero. A negative gap indicates that a municipality has more than sufficient resources to fund its services, compared with the state average. Meanwhile, a positive gap indicates that a municipality is short of adequate resources to fund public services. The larger the municipal gap, the more severe the shortage.

Connecticut Municipal Gaps

There is tremendous variation in municipal cost, capacity, and gap size in Connecticut. That is particularly noticeable across different types of municipality.

What are the municipality types? A 2004 report by the Connecticut State Data Center sorts Connecticut's 169 municipalities into five distinct groups, mostly on the basis of median family income, population density, and the poverty rate: wealthy, rural, suburban, urban periphery, and urban core.³ There appear to be spatial clusters of some municipality groups. For instance, wealthy municipalities tend to be concentrated in the southwestern area of Connecticut, in close proximity to New York City. Rural municipalities are often located in the northeastern, northwestern, and southeastern corners of Connecticut.

The NEPPC report further splits the rural group into two types to reflect socioeconomic differences: rural towns with per capita taxable property wealth above the state average ("aboveaverage-property rural") and those with taxable property wealth below the state average ("below-average-property rural").

Among the resulting six municipality types, wealthy towns and the urban core rank the highest and the lowest, respectively, in

Municipal Gap by Municipality

(FY2007-FY2011 average, 2012 dollars per capita)



Municipal Gap by Municipality Type

(FY2007-FY2011 population-weighted average, 2012 dollars per capita)



Source: Authors' calculations and Don Levy, Orlando Rodriguez, and Wayne Villemz, "The Changing Demographics of Connecticut—1990 to 2000. Part 2: The Five Connecticuts" (white paper, series no. OP 2004-01, University of Connecticut, Connecticut State Data Center, Storrs, Connecticut, 2004).

terms of municipal capacity. (See "Municipal Gap by Municipality Type.") On average, wealthy towns had more than eight times the municipal capacity of urban-core municipalities during the 2007– 2011 period. This large discrepancy reflects the wealthy towns' property wealth relative to the urban-core municipalities' property wealth. The urban core's property wealth per capita is small, even though the property-tax base in the urban core goes beyond residential housing and includes a larger commercial and industrial component than the property-tax base in other types of municipalities.

While there is also considerable variation in municipal cost across municipality types, it is much smaller than the variation in municipal capacity. On average, urban-core municipalities face the largest municipal cost, at more than \$1,600 per capita, whereas above-average-property rural towns possess the lowest municipal cost, \$1,230 per capita.

Different municipality types have different municipal cost, given their different cost factors. Urban-core municipalities, for example, have the highest unemployment rate, population density, and the number of jobs relative to their populations; above-average-property rural towns have the largest locally administered road mileage relative to local populations; and wealthy towns have the highest private-sector wage level.

With large variation in both municipal capacity and cost, one would expect significant municipal-gap differences. That is indeed the case. Unsurprisingly, wealthy towns are better off, having the largest negative average gap, at nearly -\$3,600 per capita; urbancore municipalities have the largest positive gap at over \$1,000 per capita. Recall that a negative gap means that a municipality has more than sufficient resources to fund public services, whereas a positive gap means that a municipality is short of adequate resources to fund its services.

In total, 78 Connecticut municipalities struggled with positive municipal gaps in the fiscal year 2011. These municipalities account for nearly half of all Connecticut municipalities but, more important, represent close to three-fifths of the state's population.

The size of the municipal gap is not evenly distributed across Connecticut's geography. (See "Municipal Gap by Municipality.") The three largest cities and most of the eastern portion of Connecticut, where there is a higher concentration of below-average-property rural towns, contend with relatively large municipal gaps. In contrast, the western portion of Connecticut—especially the northwestern and southwestern corners—features more-affluent areas (wealthy towns and above-average-property rural towns), which enjoy negative municipal gaps.

The municipal-gap measure could be a useful tool for Connecticut policymakers if they decide to reconsider the distribution of state nonschool grants. A gap-based formula could allocate more state nonschool grants to municipalities with larger municipal gaps and might be considered an effective tool in addressing local fiscal disparities that are beyond the towns' direct control.

Other New England states might also benefit from a municipal-gap approach. It can be applied relatively easily to understanding fiscal disparities since the state-local fiscal structure is fairly similar across states in the region.

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Endnotes

- ¹ Bo Zhao and Jennifer Weiner, "Measuring Municipal Fiscal Disparities in Connecticut" (Federal Reserve Bank of Boston NEPPC Research Report no. 15-1, 2015), http://www.bostonfed.org/economic/neppc/researchreports/2015/ rr1501.htm.
- ² The NEPPC report excludes general-fund spending on water, sewer, and solid-waste services because, unlike urban areas, rural towns often do not provide such services.
- ³ Don Levy, Orlando Rodriguez, and Wayne Villemz, "The Changing Demographics of Connecticut—1990 to 2000. Part 2: The Five Connecticuts" (white paper, series no. OP 2004-01, University of Connecticut, Connecticut State Data Center, Storrs, Connecticut, 2004), http://web2.uconn.edu/ctsdc/ Reports/CtSDC_CT_Part02_OP2004-01.pdf. Location seems to be an implicit consideration in defining these five municipality types. For example, urbanperiphery municipalities are mostly located between urban-core and suburban municipalities.



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