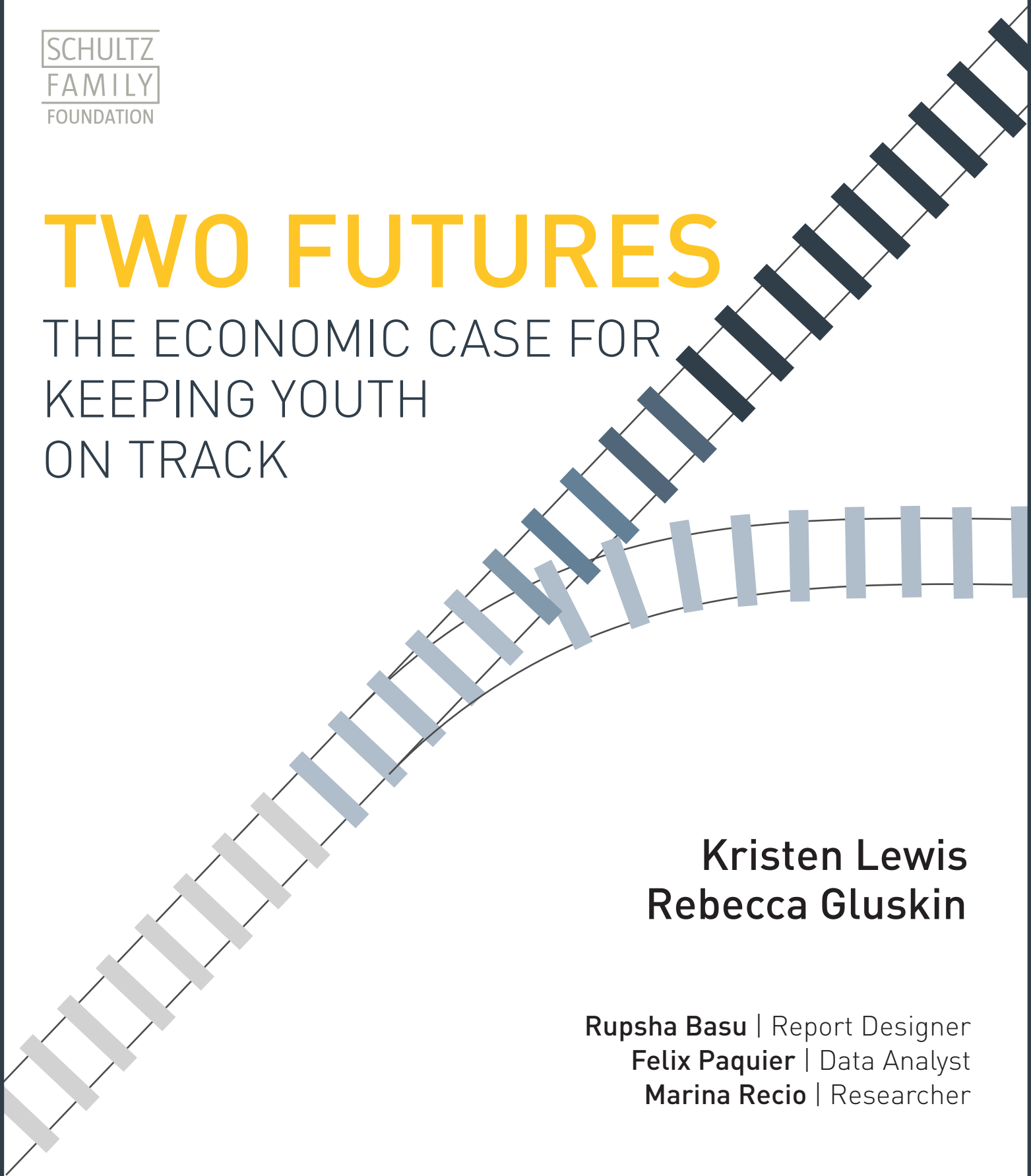
SCHULTZ FAMILY FOUNDATION

TWO FUTURES

THE ECONOMIC CASE FOR KEEPING YOUTH ON TRACK



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MEASUREOFAMERICA
of the Social Science Research Council

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Measure of America is a nonpartisan project of the nonprofit Social Science Research Council founded in 2007 to create easy-to-use yet methodologically sound tools for understanding well-being and opportunity in America. Through reports, interactive apps, and custom-built dashboards, Measure of America works with partners to breathe life into numbers, using data to identify areas of highest need, pinpoint levers for change, and track progress over time.

The root of this work is the human development and capabilities approach, the brainchild of Harvard professor and Nobel laureate Amartya Sen. Human development is about improving people's well-being and expanding their choices and opportunities to live freely chosen lives of value. The period of young adulthood is critical in developing the capabilities required to live a good life: knowledge and credentials, social skills and networks, a sense of mastery and agency, an understanding of one's strengths and preferences, and the ability to handle stressful events and regulate one's emotions, to name just a few. Measure of America is thus concerned with addressing youth disconnection because it stunts human development, closing off some of life's most rewarding and joyful paths and leading to a future of limited horizons and unrealized potential.

The Schultz Family Foundation, established in 1996 by Sheri and Howard Schultz, aims to unlock America's potential, one individual and one community at a time. It creates opportunities for populations facing barriers to success to ensure that their place in life isn't determined by zip code, race, religion, gender or sexual identity. Investing in innovative, scalable solutions and partnerships, the Foundation focuses its efforts on two groups with enormous promise: the 4.6 million youth and young adults aged between 16 and 24 who are out of school and out of work, and the 3.8 million post 9/11 veterans and the approximately 300,000 service members who transition from active, National Guard, or Reserve duty to civilian life each year. To learn more, visit www.schultzfamilyfoundation.org.

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OVERVIEW

Among the most important barometers for a community's well-being is the degree to which its teens and young adults are productively engaged in furthering their educations or securing footholds in the working world. Emerging adulthood is a critical time for acquiring the credentials, skills, networks, and self-knowledge necessary to lead a flourishing, freely chosen life. In this report, Measure of America focuses on young people whose opportunities to lay the groundwork for a thriving adulthood are limited: youth between the ages of 16 and 24 who are neither working nor in school, a group commonly referred to as disconnected youth or opportunity youth. As the research, policy, and business communities increasingly turn their attention to this long-neglected population, the good news is that we now have more data than ever to inform interventions. Three features of this paper break new ground:

1. We follow a large group of individuals over time **to track their life trajectories** approximately five, ten, and fifteen years after their period of youth disconnection.
2. We look at **the effects of the duration of disconnection**, assessing differences among individuals who were disconnected for one, two, or three or more years.
3. We **estimate the future costs** of disconnection, both for the young people who experience it and to the communities in which they live.

We focus in particular on five key factors: **education, earnings, homeownership, employment**, and **health**.

Key Findings

Although there are certainly exceptions, connected and disconnected young people by and large experience divergent paths in life. The most pronounced differences in education, earnings, homeownership, employment, and health outcomes between disconnected and connected youth occur not while they are in their teens and early twenties, but rather thirteen to fifteen years down the road, when they are in their thirties.

	After roughly 14 years, compared to young people who experienced youth disconnection, those who remained connected:
INCOME	Earn $31,000 more
HOMEOWNERSHIP	Are 45% more likely to own a home
UNEMPLOYMENT	Are 42% more likely to be employed
SELF-REPORTED GOOD HEALTH	Are 52% more likely to report excellent or good health

Given the annual difference in earnings fifteen years later between the connected and disconnected, more than $30,000, we estimate that the federal government would gain, on average, $11,900 per year in additional tax revenue for each young person who remains connected. Multiply this figure by the number of disconnected youth in the United States today and the result is an estimated $55 billion in potential federal revenue gain per year. This report goes further to estimate the impact at the national level and on four cities—Atlanta, Dallas, Los Angeles, and Washington, DC—factoring in tax revenue, public health and housing assistance, and justice costs.

Finally, we make the case to the business community that investing in early-career workers can provide positive returns, and we lay out the following agenda for action:

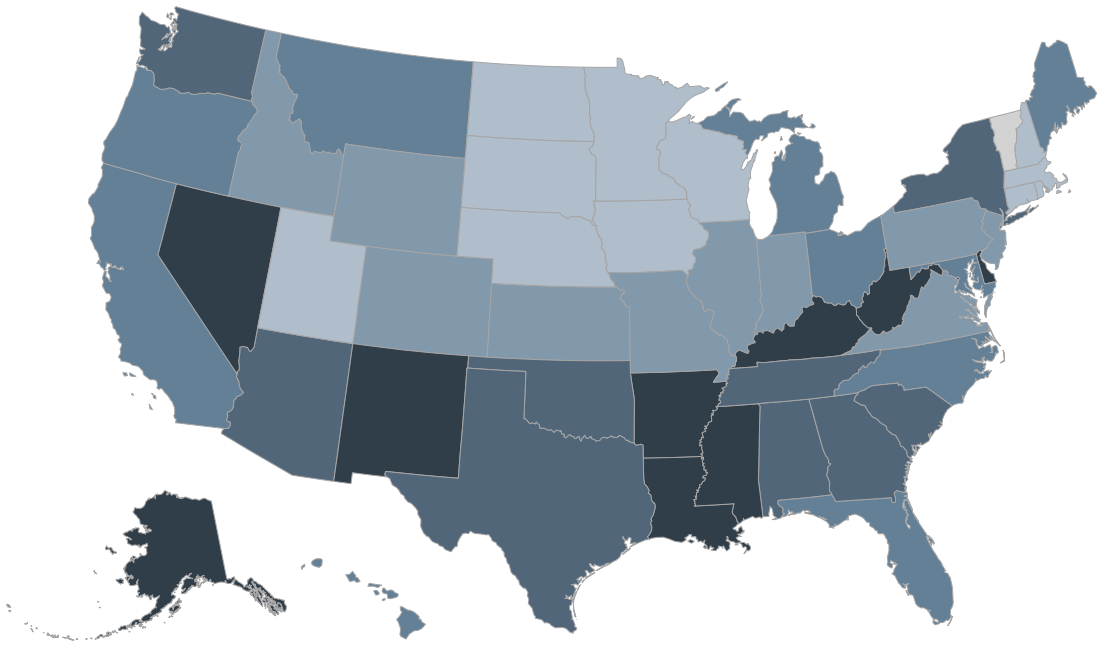
1. **Listen and respond to the views and voices of youth themselves.**
2. **Support at-risk, first-time workers with training and policies that help them stay employed.**
3. **Work together across fractured systems.** Businesses can support and even spur collective action among schools, the criminal justice system, health-care systems, financial systems, philanthropy, workforce development, and others to tackle the unequal conditions of daily life that persist in high-disconnection communities.
4. **Set data-driven goals.** A tremendous engine for private-sector growth today is the use and linking of different datasets to track change and set goals.

INTRODUCTION

Today, 11.7 percent of Americans ages 16 to 24—an estimated 4.6 million teenagers and young adults—are neither in school nor working.[1] These young people are referred to as disconnected, or opportunity youth. Disconnection rates vary widely by state, from 7 percent in North Dakota to 17.9 percent in Alaska. The range is also wide among the country's major metropolitan areas, from 6.1 percent in the Des Moines metro area to 20.7 percent in greater Bakersfield, CA. But **some of the greatest variation is by race and ethnicity**; of the five major racial and ethnic groups in the United States, only 6.6 percent of Asian young people are disconnected, compared to over a quarter of Native American youth.

Being disconnected as a young person matters because our teens and early twenties shape our adult identities and pattern our future opportunities. Through experiences in school and at work, the majority of young adults acquire skills and credentials, discover interests and talents, and move toward self-determination and self-sufficiency. High school and college provide arenas for connected young people to develop not just intellectual skills but also the social and emotional capabilities critical to a rewarding adulthood—from forming healthy, lasting relationships to regulating one's feelings and impulses. First jobs help teens and young adults develop soft skills like punctuality and collaboration, learn the unspoken rules and behavioral norms of the workplace, and forge networks of mentors and peers. Connected teenagers and young adults are often cushioned from the full consequences of their immaturity by supportive, sympathetic adults and institutions.

MAP 1 Youth Disconnection in the United States



Source: Measure of America, *More than a Million Reasons for Hope*, 2018.

Being disconnected during the critical period of emerging adulthood limits the chances and opportunities young people will have throughout their lives. Previous Measure of America research found that disconnected young people differ in critical ways from their connected counterparts, as do the neighborhoods in which they tend to live.[2] **Disconnected young people are more likely to live in poverty, to have a disability, to have dropped out of high school, to have parents with low levels of educational attainment, to be mothers, and to be institutionalized.** At the neighborhood level, factors associated with high rates of youth disconnection include racial segregation, low levels of educational attainment and high levels of unemployment among adults, and high rates of youth disconnection in the previous generations.

The costs of disconnection accrue not just to those who experience it but also to entire communities and indeed to society as a whole. Experiencing disconnection is likely to affect young peoples' parenting resources and thus the well-being outcomes of their children—**this makes youth disconnection not only a "youth" issue but also an issue of intergenerational poverty.** The negative effects of youth disconnection ricochet across the economy, the social sector, the criminal justice system, and the political landscape, affecting all Americans, not just now but also in the next generation.

The impact of disconnection on well-being and life outcomes is severe and measurable, and the costs to society are similarly high. This study seeks to quantify those costs and then reframe the dialogue to start a conversation about the benefits to society of investing in young people, and the steps the business community can take.

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RESEARCH QUESTIONS

In this paper, Measure of America estimates the economic, social, and health costs of disconnection both for young people who experience it and to taxpayers. In the second half of the paper, we show how keeping youth in school and in work benefit the federal, state, and local economies.

There is no easy method for estimating how many billions of dollars could be saved by reconnecting the millions of young people who are out of school and out of work each year—or even better, by supporting youth so that they never become disconnected in the first place. In addition to all the direct social support disconnected young people often require, including government financial assistance for housing, medical care, unemployment, and other costs—both in the present and over a lifetime—there are undoubtedly less-direct costs such as lost tax revenues, costs to the criminal justice system due to higher justice involvement among youth who are disconnected, lost earnings, and lower market productivity, to name a few.

Research on this population in European countries shows that young people who experience long spells of disconnection have lower wages and marriage rates, higher incarceration and unemployment rates, worse health, less job satisfaction, and even less happiness as adults than their peers who did not experience disconnection.[3] Efforts thus far to put a price tag on these effects across the life course in the United States have yielded fairly disparate results. In 2015, Measure of America analyzed a very small subset

of the direct costs of youth disconnection, including incarceration costs, different forms of taxpayer-funded health care such as Medicaid, public assistance payments, and Supplemental Security Income payments and arrived at the figure of $26.8 billion in 2013 alone, or nearly the entire amount the federal government spends on science. But this exercise did not include a host of longer-term or intergenerational costs. A 2012 paper by the White House Office of Community Solutions put the costs at $93 billion per year.[4] Another study, *The Economics of Investing in Opportunity Youth* by Clive Belfield and Henry Levin, also from 2012, estimated a lifetime cost burden to society of more than $900,000 per disconnected young person.[5]

All these studies, the Measure of America study included, used cross-sectional data. Cross-sectional studies, a mainstay of social science and medical research, are a type of observational study that looks at data on a specific population at one point in time. They allow researchers to make associations among different data points, such as the smoking rate and the heart disease rate in a given population at a single point in time. Cohort, or longitudinal, studies, on the other hand, follow the same group of people over time, observing them at set points. These types of studies track change at the individual level. They allow for greater confidence about cause and effect, answering questions like what is the rate at which a specific group of people who smoked for five, ten, or fifteen years later developed heart disease.

In this research, Measure of America builds on the studies of youth disconnection mentioned above in a way that is unique in the current literature: we use cohort data to follow a specific group of youth, namely two Panel Study of Income Dynamics cohorts, over time. **The benefit of this approach is that it allows us to track the specific outcomes of individuals in such areas as education, employment, homeownership, income, and health and thus derive an estimate of costs over time that is based on actual life experiences.**

The data source for this study, the University of Michigan's Panel Study of Income Dynamics (PSID), has been called "one of the most remarkable surveys of American families ever conducted."[6] The PSID is a unique survey of US families begun in 1968 with a nationally representative sample of over 18,000 individuals living in 5,000 families in the United States. The PSID includes a range of social, economic, and demographic questions. The same households are surveyed each time, and when children in these households grow up and start their own households, those new households are added to the survey.

The PSID provides researchers with the unique opportunity to analyze change over generations in American households. Measure of America used the PSID to determine the impacts of youth disconnection on key markers of a successful transition to productive adulthood, including health status, educational attainment, labor market participation, poverty status, homeownership, and other factors. The survey is a representative sample for blacks and whites, allowing for the exploration of race in relation to youth disconnection.[7] Using this dataset, we were able to explore the following research questions:

The PSID provides researchers with the unique opportunity to analyze change over generations in American households.

- What were the number and rate of disconnected youth during the periods examined?
- How did people in the study who experienced youth disconnection differ, at three different points in adulthood, from those in the study who did not experience youth disconnection?
- What factors besides youth disconnection could be driving differences in outcomes and need to be considered, or held constant, in order to better understand the impact of disconnection?
- Were there differences in long-term impacts between short and long periods of disconnection?

For the purposes of this study, we had to put aside important questions related to various aspects of the social inequality attached to youth disconnection. Disconnected youth often experience social isolation and exclusion and have almost no political influence, for example; such issues are important causes and consequences of disconnection. But exploring them requires a dataset that tracks a wider range of outcomes. For this reason, we focused this research on the short- and long-term economic impacts of youth disconnection. Measure of America shows that we, as a society, are already paying a high cost for failing to help millions of young people successfully transition to productive adulthoods, while we could instead use those resources to invest in our future and theirs.

We focused this research on the short- and long-term economic impacts of youth disconnection.

The purpose of the research is to track the status of disconnected youth over time across five categories:

- **Education.** By definition, disconnected youth are not in school; however, this study allows us the opportunity to see if disconnected youth later re-enroll and complete educational degrees.
- **Income.** Missing out on educational and employment opportunities is a risk for missing out on future earnings.
- **Homeownership.** Missed opportunities for earnings and educational attainment during critical late adolescence is a risk for lost future earnings and the chance for building assets like homeownership.
- **Employment.** This study allows us to compare employment over time to see if disconnection during youth increases the chance of unemployment later in life and by how much. This is measured by employment status and further quantified by unemployment insurance payments.
- **Health.** In this study, we have the opportunity to compare the health outcomes of youth who were disconnected to those of youth who remained connected. The outcomes we explore are body mass index, self-reported health status, and health insurance coverage.

We look at the differences between the two populations (connected vs. disconnected young people) in these five categories at four points: first, when they are in the 16–24 year age range; second, three to five years later; third, eight to ten years later; and fourth, thirteen to fifteen years later. Using the results from this longitudinal analysis, we then estimate the costs of disconnection at different levels: for the individual, for the local government and local business community, and in terms of national global competitiveness.

BOX 2 Research Method

The first step in the research was to identify two groups ("cohorts") of youth ages 16 to 24 in the dataset and separate them into two subgroups: connected (working or in school) and disconnected. The next step was to use the data to understand how periods of disconnection affected the lives of those in the second subgroup in five critical areas—education, income, homeownership, employment, and health—roughly five, ten, and fifteen years after disconnection. We built one regression model to measure the differences between connected and disconnected youth on these variables. The model controls for gender, whether the youth was black or white, and age, geographic location, and family income.

We then applied the results of the regression to an analysis of the costs of youth disconnection and the benefits of keeping youth connected for the whole country and in four cities: Atlanta, Dallas, Los Angeles, and Washington, DC.

Unlike previous studies, this research investigates the impact of multiple years of disconnection—the research takes into account disconnection during the first year but also whether the youth remained disconnected two and three years later.

Two time periods were chosen for the research in part to make sure the results were replicable across time and not just at a specific point in time, as well as to capture new variables in a survey that has evolved over the years. The two groups were youth ages 16 to 24 in the period from 1981 to 1983 (Cohort 1) and youth ages 16 to 24 in the period from 1988 to 1990 (Cohort 2). Starting with points in the past allowed us to follow these young people forward in time to see how their lives had changed five, ten, and fifteen years down the road. Members of the 1981–1983 cohort were born between 1957 and 1967, and members of the 1988–1990 cohort were born between 1964 and 1974. We use the results from the more contemporary group, Cohort 2, to build out our cost/benefit analysis.

While Measure of America's standard definition of "disconnected" is being neither working nor in school, available survey questions in the PSID required us to build the employment definition from several questions. The survey, designed in the late 1960s, included the categories employed, unemployed, and housewife. Despite huge changes in the role of women in the workforce since this time, "housewife" has remained an option in response to the question about a respondent's employment. Disconnected youth, for the purposes of this research, (i) are between 16 and 24 years of age; (ii) are looking for work, unemployed, permanently disabled, a housewife, or other; and (iii) worked less than 500 hours over the whole year. Including "housewives" among disconnected youth is not to cast aspersions on young women who made this choice; however, being out of the labor force, for whatever reason, has major impacts on the choices and opportunities subsequently available over the life course. Less than 12 percent of all respondents identified as a housewife.

The PSID has consistently had response rates equal to or higher than other panel surveys worldwide.[8] As with any survey following individuals for decades, however, attrition is inevitable. The PSID Survey Research Center provides technical documentation on how to compensate for differential attrition when using the survey dataset for research. This attrition factors into our confidence intervals.

FINDINGS

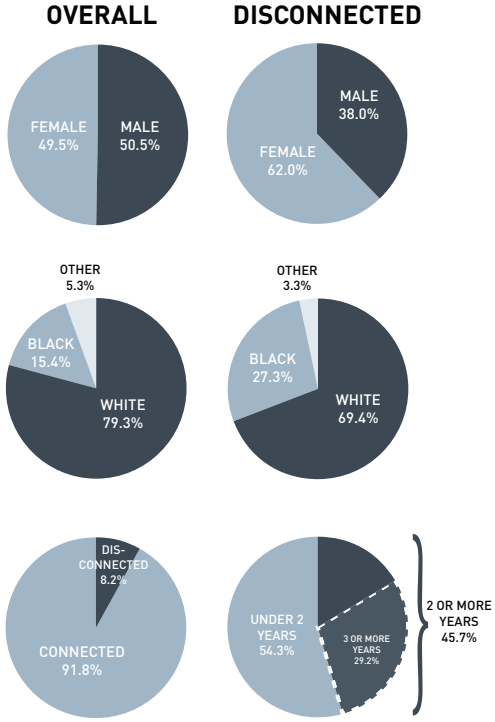
Disconnection by Gender, Race, and Duration

When we surveyed the data for all years between 1979 and 1992, we found the rates of youth disconnection vary by gender and race in the survey. White youth disconnection rates are almost always half or less those of black youth. While the rates for white youth decrease over time, black youth rates remain relatively high. **The rates of disconnection for males are almost always at least half the rate of their female counterparts.** This can be partially explained by women leaving school or work, either by choice or not, to care for children or tend to the household more generally. In recent years, youth disconnection rates for girls and young women have tended to be lower than rates for boys and young men, representing girls' greater persistence in school as well as women's increased labor force participation.

While the rates for white youth decrease over time, black youth rates remain relatively high.

FIGURE 3 **Descriptive Statistics**

Cohort 2



Disconnection Rates among Youth Groups for Selected Years

	YOUTH DISCONNECTION (%)				
	Overall	White	Black	Male	Female
1979	10.1	8.4	17.7	4.8	15.2
1980	11.4	10.0	18.7	6.1	16.5
1981	11.5	9.4	21.2	5.6	17.2
1982	13.4	11.2	24.5	8.6	18.0
1983	12.3	9.9	24.9	6.9	17.4
1984	10.2	7.4	24.1	6.8	13.6
1985	10.7	8.6	22.0	6.5	14.9
1986	9.5	7.5	18.7	5.9	13.1
1987	8.2	6.1	17.8	5.4	10.9
1988	7.8	6.1	16.4	4.7	10.9
1989	8.1	6.8	15.6	6.2	10.1
1990	8.6	7.1	14.6	5.0	12.2
1991	10.1	7.9	19.4	6.8	13.3
1992	10.9	7.7	24.9	7.3	14.6

Source: Measure of America calculations using PSID, Institute for Social Research, University of Michigan, 2017.

Unique to this study, we investigate the share of disconnected youth who reported that they were disconnected for more than two years or more than three years. **These rates show that disconnection, for the majority of young adults surveyed, was not just a one-year event.** This finding is troubling, considering that the longer the duration of disconnection, the harder it is to reconnect to school or work.

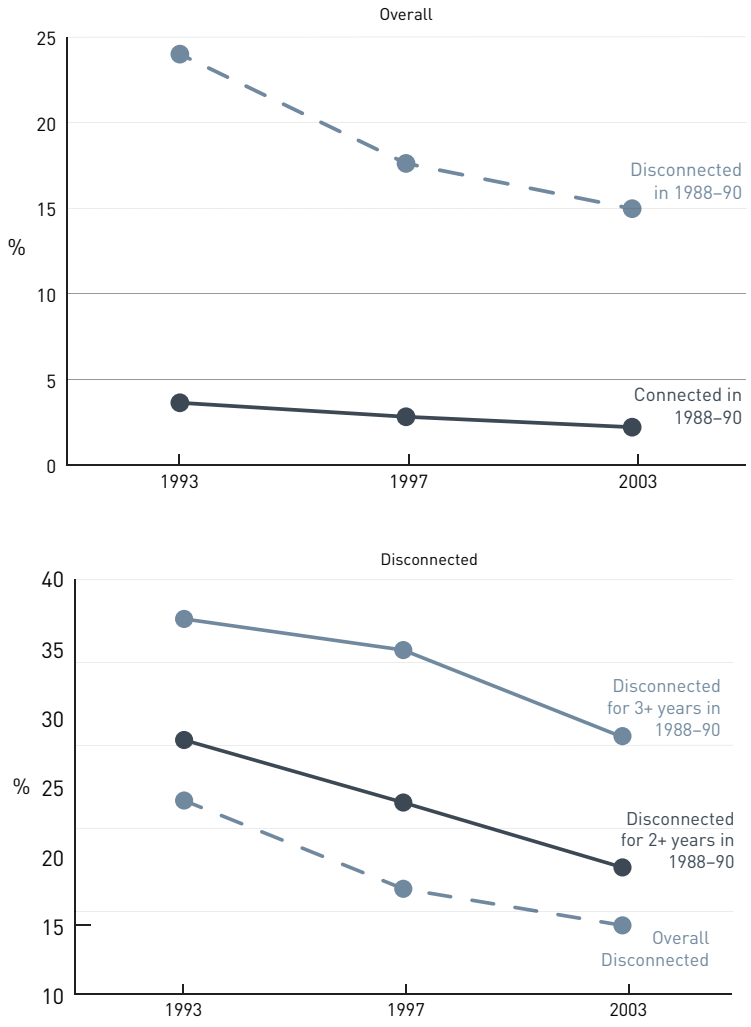
Disconnection, for the majority of young adults surveyed, was not just a one-year event.

Impacts on Youth Outcomes

Education. Being disconnected from school between the ages of 16 and 24 has a major impact on the chance of that person completing secondary and postsecondary education. While in theory one can re-enter the education system at any time, doing so gets harder as one ages. This reality is apparent in the longitudinal data; the data in **FIGURE 4** show that those who were disconnected while in the 16–24 age range were less likely to have completed tenth grade three to five years later compared to those who had been connected. In 1993, five years after disconnection, 24 percent of the disconnected group had not completed high school, compared with less than 4 percent of the connected group. This percentage was greater with each additional year of disconnection; 29 percent of those who were disconnected for two or more years did not complete high school, and 37 percent of those disconnected for three or more years did not complete high school.

We see similar rates of degree completion for at least twelfth grade. In 2003, the rate of having completed at least twelfth grade is above 90 percent for the connected group; it is only about 62 percent for those who were disconnected. For those who were disconnected more than two years and more than three years (see **FIGURE 6**), the rates of high school

FIGURE 4 Less Than 10th Grade Completed

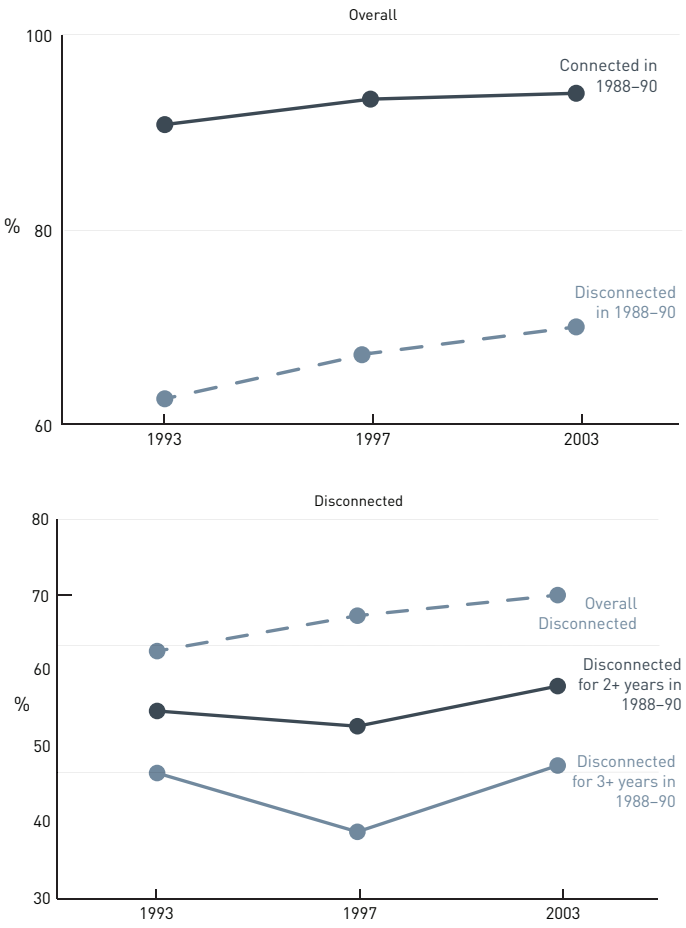


Source: Measure of America calculations using PSID, Institute for Social Research, University of Michigan, 2017.

degree completion in 2003 are approximately 54 percent and 47 percent, respectively. Not surprisingly, those who were connected to school and work fifteen years prior are also more than twice as likely to have attended at least two years of postsecondary school.

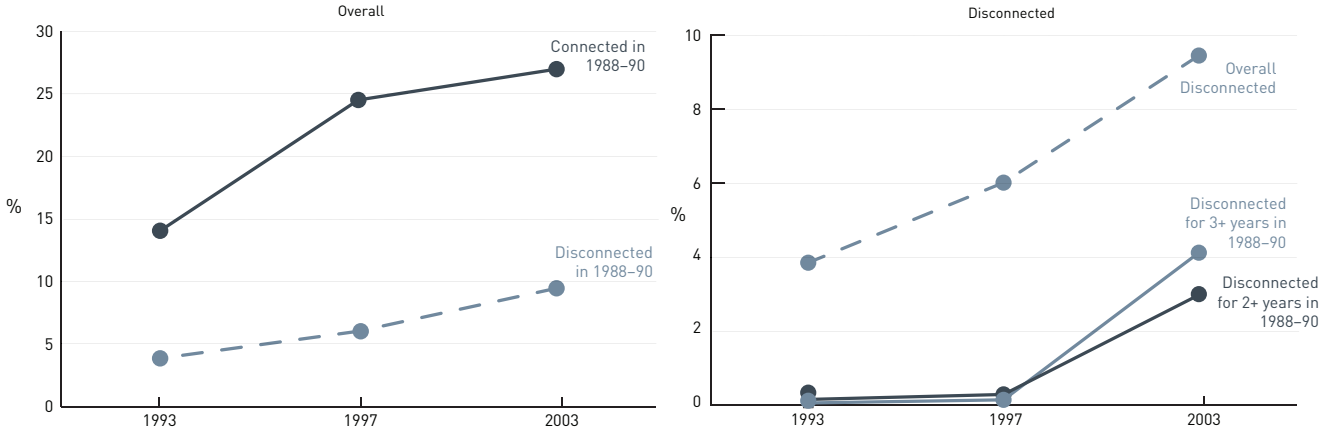
Adults with higher levels of education earn more and are less likely to be unemployed than those who leave school without a high school diploma or who graduate high school but do not continue their educations. In 2016, the unemployment rate for bachelor's degree holders was 2.7 percent, about half the rate for high school graduates (5.2 percent) and about one-third the rate for those without a high school diploma (7.4 percent). Higher levels of education are also associated with less crime and lower incarceration rates; greater civic engagement and political participation; better health and longer life expectancy; more stable romantic relationships; more sensitive, responsive parenting; and greater ability to adjust to change.[9] Many of the positive effects of employment described in the following pages are rooted in education, as those with higher levels of education are more successful in the labor market than those with limited education.

FIGURE 5 At Least 12th Grade Completed



Source: Measure of America calculations using PSID, Institute for Social Research, University of Michigan, 2017.

FIGURE 6 Some College Completed



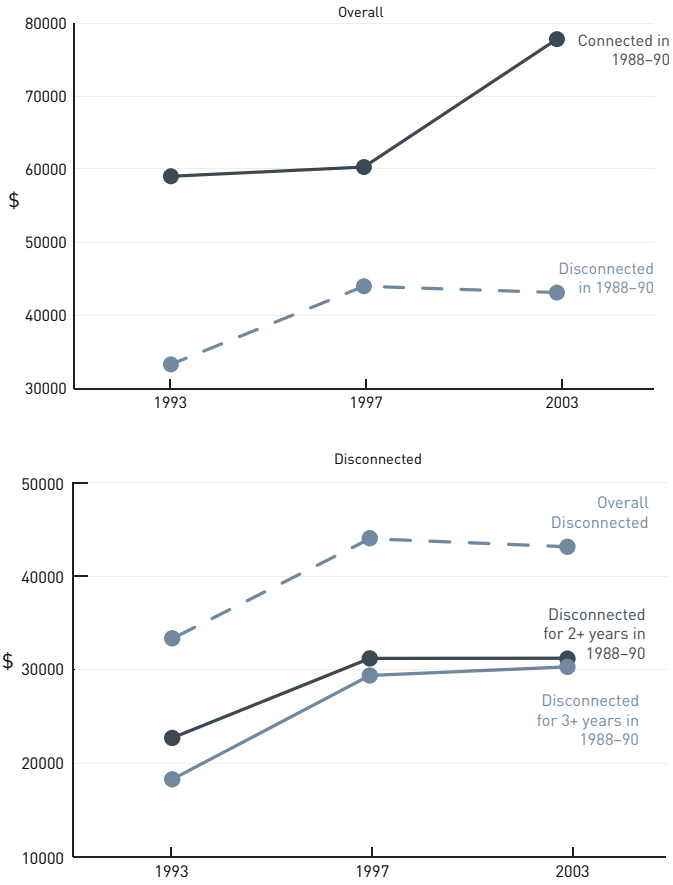
Source: Measure of America calculations using PSID, Institute for Social Research, University of Michigan, 2017.

Income. Median family incomes for connected and disconnected youth three to five years on are not statistically different; however, thirteen to fifteen years later, differences become apparent. For youth who were connected during the critical ages of 16 to 24, approximately fiftteen years later the median family income was about $78,000, compared to about $44,000 for those who were disconnected for one year or more. Future earnings are even lower for those who reported being disconnected for two years or more, around $31,000. **This pattern indicates lasting, direct economic benefits of keeping students in school and gainfully employed in the years of emerging adulthood.**

Homeownership. Homeownership is a measure of wealth, a societally recognized indicator of middle-class life, and among the most reliable ways available to middle- and working-class people to build assets. Three to five years out of their late teens and early twenties, only one-third of young adults in the study owned a home, and there was little difference between connected and disconnected youth.

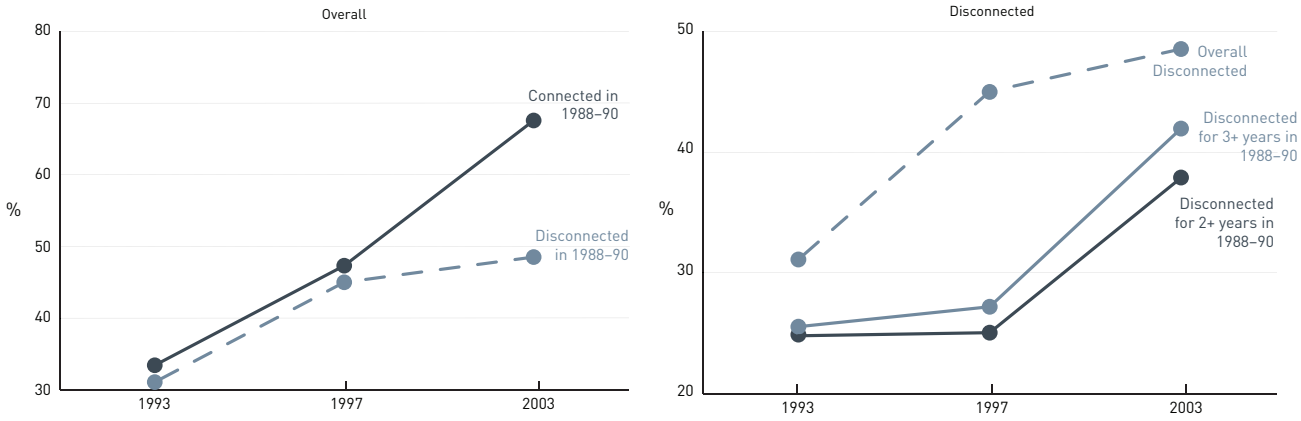
Thirteen to fifteen years later, however, the divergence is clear. Over 60 percent of the connected group owned a home, whereas roughly 48 percent the disconnected group did.

FIGURE 7 Family Income



Source: Measure of America calculations using PSID, Institute for Social Research, University of Michigan, 2017.

FIGURE 8 Homeownership



Source: Measure of America calculations using PSID, Institute for Social Research, University of Michigan, 2017.

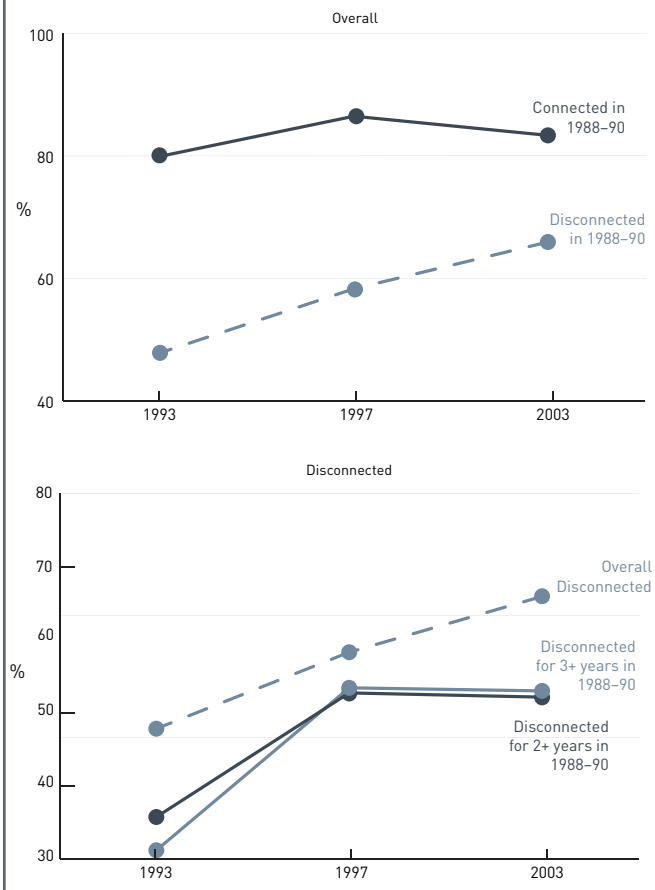
Employment. By definition, disconnected youth are "not working." Three to five years following the first survey, 80 percent of the connected group reported that they were working, whereas only 44 percent of the disconnected group did. Those who had been disconnected were more likely to report that they were unemployed or a "housewife."

Following these same individuals thirteen to fifteen years later, more respondents reported working; however, a difference of over 20 percentage points persisted between those who were connected and those who were not.

Health. Health was measured by a question that asked respondents to rate their own personal health. Self-reported health status has flaws,[10] but for the purposes of this study we must rely on this measurement as no others are available. Three to five years out, the health status differences between connected and disconnected groups are not significant.

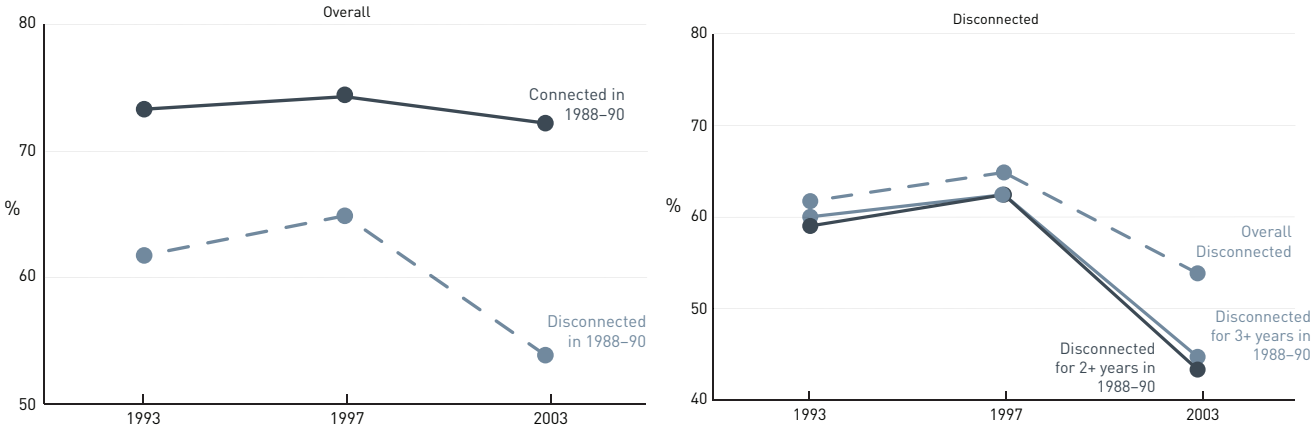
The two groups start to split, however, at the thirteen-to-fifteen-year mark, when they are roughly in their thirties. In general, about seven in ten of those who remained connected throughout their youth reported "Excellent or Very Good" health, compared to only five in ten in the disconnected group.

FIGURE 9 Employment



Source: Measure of America calculations using PSID, Institute for Social Research, University of Michigan, 2017.

FIGURE 10 Self-Reported Health as "Excellent"



Source: Measure of America calculations using PSID, Institute for Social Research, University of Michigan, 2017.

Regression Findings

Using the PSID survey, Measure of America conducted a regression analysis to better understand the lasting effects of youth disconnection. The benefit of a regression model is that it allows us to control for variables that might influence outcomes. In this regression, we controlled for gender, race (black vs. white), age, geography, and family income. We set up two models, one for **Cohort 1 (1981–1983)** and the other for **Cohort 2 (1988–1990)**. We ran the regression on the two cohorts to make sure that the results were in agreement. We used the results from Cohort 2 to build out our cost/benefit analysis because Cohort 2 is more contemporary (see Methodological Note for the Cohort 1 and Cohort 2 comparison table).

Thirteen to fifteen years on, the connected group is financially better off overall. Those who had remained connected throughout their teens and young adulthood **made approximately $31,000 more** annually than those who were disconnected. They were also **45 percent more likely to own the home in which they lived**. The connected group was **42 percent more likely to be employed** than those who had been disconnected. At the thirteen-to-fifteen-years-on point, respondents were in their late twenties to late thirties, a time when most adults report good health. Those who had remained connected were **52 percent more likely to report excellent or good health** than those who had been disconnected. Somewhat counterintuitively, however, the connected group was nine times less likely to have medical coverage compared to the disconnected group. This likely has to do with the issue of undercoverage with employer-covered health insurance and comprehensive coverage for people who qualify for Medicaid. The body mass indices (BMI) of once-connected versus once-disconnected members of the cohort were not statistically different.

TABLE 11 The Benefits of Connection

	COHORT 2
INCOME	Earn $31,000 more
HOMEOWNERSHIP	45% more likely to own a home
UNEMPLOYMENT	42% more likely to be employed
MEDICAL COVERAGE	Over nine times less likely to have medical coverage
SELF-REPORTED GOOD HEALTH	52% more likely to report excellent or good health

Source: Measure of America calculations using PSID, Institute for Social Research, University of Michigan, 2017.

The Cost and Gains beyond the Individual

In our next step, Measure of America took the results from this longitudinal survey and investigated the effects at the local and national levels. We used a linear model to estimate the costs of youth disconnection and, conversely, the benefits that would accrue if the youth disconnection rate were to decrease. We aggregated the economic impact of that difference across four cities, Atlanta, Dallas, Los Angeles, and Washington, DC. These cities were selected because each has hosted a **100K Opportunities Career Fair to re-engage disconnected youth**. The analysis accounts for local economic benefits via greater income taxes, discretionary income, and better self-reported health. It also aims to tabulate some of the societal costs, such as reliance on public assistance (housing assistance, Subsidized Nutritional Assistance Program [SNAP] benefits, Medicaid, Temporary Assistance to Needy Families [TANF] benefits, and unemployment payments) and incarceration cost.

Thirteen to fifteen years on, the connected group was financially better off overall.

Income tax revenue for governments. When we applied the thirteen-to-fifteen-year difference in personal income for each youth, we calculated that the federal government would gain, on average, $11,900 per year in additional tax revenue per connected young adult. Multiply this figure by the number of disconnected youth today and the result is an estimated $55 billion in potential future federal annual revenue gain. To put that number into perspective, the total Centers for Disease Control and Prevention 2019 Budget request was only 5.66 billion.

To see the impact on local governments, we calculated the difference in tax revenue for the average connected and disconnected youth using the most recent state tax brackets (this excludes Texas, which doesn't levy state income taxes).[11] For each city, we ran this calculation multiplied by the current number of disconnected youth living in the metro area (see **TABLE 12**). Potential future revenue ranges from $155 million in Atlanta to over $600 million annually in the Los Angeles metro area. None of these cities has local income tax beyond the state level. All tax revenue estimates are in 2018 dollars.

TABLE 12 Income Tax Revenue Gain from Connected Youth

	DISCONNECTED YOUTH (total # in metro)	POTENTIAL REVENUE GAIN		POTENTIAL REVENUE GAIN (per person)	
		Local	Federal	Local	Federal
US	**4,599,118**		**$54,728,607,372**		**$11,900**
Atlanta	78,808	$155,464,148	$937,799,832	$1,973	$11,900
Dallas	104,047		$1,238,139,011		$11,900
DC	72,663	$270,885,430	$864,675,531	$3,728	$11,900
Los Angeles	166,517	$610,173,896	$1,981,519,829	$3,664	$11,900

Source: See **TABLE 16.**

Potential savings from public benefits. Our analysis reveals that youth who were previously disconnected were more likely to be unemployed and make less money as adults than their connected counterparts. It is safe to say that they will be more likely to rely on the public safety net to make ends meet.

One of the obstacles to estimating the cost of public assistance is that participation in these programs is not uniform. Simply adding up the average cost per recipient of each program yields an inflated figure, given that not all recipients participate in multiple—let alone all—programs. The overlap is also considerably different depending on the program. Those who participate in TANF, for example, are the most likely to also receive other benefits; 96 percent of TANF recipients participate in two or more additional programs. On the other hand, most unemployment compensation recipients (60 percent) participate in that program exclusively.[12] It is also important to note that not all who qualify for government assistance receive it; for instance, only about one-third of qualifying households receive TANF assistance, and about three-quarters of qualifying households receive SNAP.[13] Because this study gauges the effects of disconnection when individuals are in their thirties, we did not include benefits that are targeted at the elderly, children, or only women. Finally, disconnected youth, especially those who did not complete high school, are at an increased risk of becoming incarcerated compared to their connected peers.[14]

If we were to connect all currently disconnected youth, the government would gain an estimated $55 billion in future annual tax revenue.

At the national level, the average potential saving in government costs ranges from about $1,500 for SNAP to an average of over $35,000 a year in incarceration costs per individual. At the city level, these benefits have a wide range (see **TABLE 13**). Annual TANF benefits for a single-parent family of three vary from about $3,500 in Atlanta to nearly $9,000 in Los Angeles. The average Medicaid recipient receives about $5,700 a year in DC, but only $1,900 a year in Los Angeles. Conversely, the cost of incarceration in California is the highest in the country, an average of $68,600 per inmate per year; in Georgia, it is a third of that price, at $21,200 a year per inmate. These costs don't factor in the severe financial and emotional toll of incarceration on the individual, families, and communities affected. In our analysis of the PSID cohort, we found that connected youth were more likely to be homeowners thirteen to fifteen

TABLE 13 Government Costs (per person)

	SNAP	TANF	MEDICAID	HOUSING ASSISTANCE	PRISON	UNEMPLOYMENT BENEFITS
US	**$1,545**		**$3,413**		**$35,290**	**$9,223**
Atlanta	$1,577	$3,515	$4,963	$8,341	$21,187	$4,102
Dallas	$1,447	$3,591	$3,099	$9,627	$23,346	$10,421
DC	$1,605	$6,378	$5,653	$13,559		$9,276
Los Angeles	$1,712	$8,964	$1,878	$11,514	$68,559	$8,762

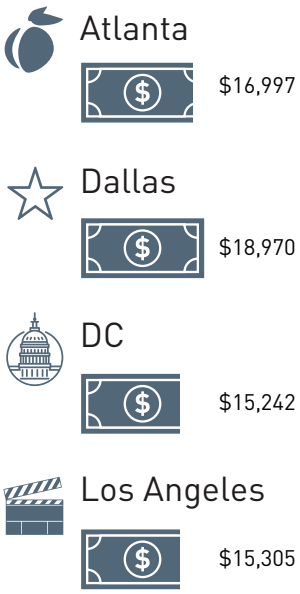
Source: See **TABLE 17.**
Note: All government costs are converted to 2018 dollars.

years later and, in turn, are less likely to rely on public housing assistance. The annual cost of public housing assistance ranges from about $8,300 per unit in Atlanta to roughly $13,600 in DC.

Boost for Business

The earnings of adults are the lifeblood of the local economy; those who earn more can afford to spend more of their paychecks on nonessentials—what is known as discretionary income—including local consumer goods and services. Discretionary income is what is left over from take-home pay after essential expenses like rent or mortgage payments, transportation, food, utilities, and insurance are paid. We calculated discretionary income by subtracting local taxes, local housing costs, and food costs from the average income of previously connected and disconnected youth at the thirteen-to-fifteen-year mark.[15] The greatest difference was **in Dallas, where someone who was connected throughout their youth has an additional $18,970 on average in discretionary income than someone who was previously a disconnected youth.** The smallest difference in discretionary income was in DC, where each previously connected youth would have an average of $15,242 more annually as an adult to spend on nonessentials than would each previously disconnected youth. Supporting services that reconnect youth today is a wise, people-centered investment that would pay business dividends down the road.

Contrasting Discretionary Income of Connected and Disconnected Youth



Good Health, Good for Business

Measure of America found an important difference in self-reported health status between connected and disconnected youth in this study. When asked how they would rate their health status, youth who had remained connected to school or work were 51 percent more likely to report being in good or excellent health. Aside from the costs of poor health—both monetary and otherwise—to the individual, the costs spill over to employers as well. It has been shown that employees with better cardiovascular health cost employers less than employees with moderate or poor health.[16] Health-related productivity loss is estimated to cost employers $260 billion a year.[17]

Another large-scale study found that employees with health conditions and at high risk for health problems were less productive, costing employers from $15 to $1,601 more per year than similar employees without health conditions or risks.[18]

Support Education, Support Business

Turnover, a costly reality for many employers,[19] is particularly problematic in the retail industry, where relatively low pay and little room to advance in entry-

level service jobs provide little incentive to stay.[20] **Supporting education can be a win-win strategy to mitigate this problem.** Investing in the education of employees gives them a good reason to stay; instead of having to choose between earning a paycheck and going back to school, offering tuition support as a benefit encourages employees to do both.[21] At the same time, employers benefit from lower turnover costs and better workplace morale. Making sure employees are happy in their jobs requires more than a fair paycheck; feeling valued and seeing a path forward matter just as much—and employee morale is particularly important in client-facing service jobs.

Investing in education continues to pay dividends even after employees leave; the reputation of a company and how it treats its employees carries weight when it comes to recruiting new workers. In addition to supporting the local community in which a company operates—an end in itself—offering educational opportunities for employees makes good business sense.

Offering educational opportunities for employees makes good business sense.

Global Competitiveness

In an era of fast economic and technological change, even the most prepared young people face uncertainty. It is important that we focus on education and engagement at an early age to prepare the next generation for what lies ahead—not just for the betterment of the individual, but to ensure that the US remains a global economic competitor.

A report by PricewaterhouseCoopers estimates that approximately 39 percent of all US jobs are at risk for loss to automation, making flexible, transferable skills and education more important than ever.[22] Training young people through higher education and vocational programs to prepare them for jobs that are at a lower risk for automation, such as those in the STEM fields, is vital. This is an area where there is much room to grow; the United States lags behind most European Union and BRIICS (Brazil, Russia, India, Indonesia, China, and South Africa) countries in STEM education—only 15 percent of American students graduate with a STEM degree, the third-lowest rate among these forty countries.[23] As automation continues to replace low-skill jobs, those without in-demand skills or higher education will be left with fewer and fewer options to make a living. In light of these changes, the negative effects of disconnection may be even greater for this generation than for the 1988 cohort studied in the first part of this report.

Young people are not the only ones who stand to win from investment; the same study estimates that reducing the disconnection rate of the older youth (20- to 24-year-olds) to approximately 9 percent would give the United States' GDP a 2.2 percent boost. The millions of young people who are currently disconnected are a source of human capital that can be unlocked with the right investments. Remaining competitive in the global economy will require a skilled workforce prepared for the jobs of the future—if we don't prepare our youth for the changing work environment of tomorrow, society at large will pay the price.

Remaining competitive in the global economy will require a skilled workforce prepared for the jobs of the future.

AGENDA FOR ACTION

In this study, we witnessed the magnification of inequality as disconnected youth moved into adulthood. We also saw that the difference in outcomes is real and significant on many levels and can worsen with extended exposure to disconnection. So what can the business community do to ensure that the youth in their communities have a fair shot at a bright future?

First Steps:

1. **Listen and respond to the views and voices of youth themselves.** A recent workshop and related activities spearheaded by the nonprofit Leaders-Up in Chicago, in collaboration with Measure of America, yielded important lessons on how to reach those hardest to reconnect. Opportunity youth led workshop design and discussions alongside employers, bringing to the fore often-overlooked issues. A central theme that emerged was the need to develop trust and transparency between opportunity youth and employers as a way to overcome the biases that erect formidable barriers to connection.
2. **Support at-risk, first-time workers with training and policies that help them stay employed.** Supports such as tuition assistance, mentorship, regular schedules that accommodate school and family responsibilities, and assistance with transportation help vulnerable young people remain employed and on a positive path.
3. **Work together across fractured systems.** Businesses can support and even spur collective action among schools, the criminal justice system, health-care systems, financial systems, philanthropy, and workforce development efforts to attack the unequal conditions of daily life that persist in high-disconnection communities.
4. **Set data-driven goals.** A tremendous engine for private-sector growth today is the use and linking of different datasets to track change and set goals. The same is beginning to happen for youth advocacy organizations systems. Data are being combined across agencies and organizations and used to identify disconnection warning signs; design programs; evaluate alternative interventions; make the case to funders, policymakers, and the public; and track outcomes over time.

Tuition assistance, mentorship, accommodating school and family responsibilities, and transportation assistance help vulnerable young people remain on a positive path.

These are just four of the many steps that businesses can take to keep young people in their communities connected, engaged, supported, valued, and respected. We see from this study that disconnection has a ripple effect for years to come; the institutions that surround our young people need to do everything they can to reconnect youth—and prevent disconnection from occurring in the first place.

METHODOLOGICAL NOTE

The PSID dataset is based on one file with information on each individual in the PSID survey and one file per year with information on families. We merged the files in the statistical package R and created a variable for each PSID wave between 1979 and 1992, and indicated for each individual whether he or she was (i) surveyed that year (i.e., with weight greater than zero) and (ii) between 16 and 24 years old that year.

First, we identified the disconnected youth in each PSID wave using three variables:

- Age (available in all PSID waves)
- Employment status (available in all PSID waves from 1979 on)
- Number of hours worked over the previous year (available from 1968 to 1993; note that this variable always refers to the previous year—for instance, in order to get the number of hours worked during a given year, the variable in the subsequent year's dataset has to be used)

For each PSID wave from 1979 to 1992, we created one variable that has three possible values:

- Disconnected
- Not disconnected
- Unknown
-

We defined disconnected youth as individuals (i) who are between 16 and 24 years old; (ii) whose employment status is either "Looking for work, unemployed," "Permanently disabled," "Housewife," or "Other"; and (iii) who worked less than 500 hours over the whole year. Conversely, we categorized people (i) between 16 and 24 years old (ii) whose employment status is either "Working now," "Only temporarily laid off," or "Student," or (iii) who worked more than 500 hours over the whole year. Finally, some individuals have their employment status equal to zero. The PSID defines this as employment status "inappropriate." In 1981, around 80 percent of those "inappropriate" cases were individuals who belonged to an "institution." An "institution" can be a prison, a college dormitory, or the military. Some of those situations might correspond to disconnection, but some might not. Therefore, we put these into the category of "unknown."

If the number of hours worked is greater than 500, the individual is considered connected; otherwise the youth disconnection variable status is unknown.

TABLE 14 below summarizes the different values of the youth disconnection variables depending on the employment status and number of hours worked.

TABLE 14 Employment Status and Number of Hours Worked

		EMPLOYMENT STATUS		
		Unknown	"Working now," "Only temporarily laid off," or "Student"	"Looking for work, unemployed," "Permanently disabled," "Housewife," or "Other"
Number of hours worked over the whole year	Greater than 500	Not disconnected	Not disconnected	Not disconnected
	Less than or equal to 500	Unknown	Not disconnected	Disconnected

Duration of Youth Disconnection

A new aspect of this research is to investigate the impact of multiyear disconnection. For each wave, we identified individuals who were disconnected not only in the current wave but also in adjacent waves. For the 1981 wave, we identified individuals disconnected for two waves in a row and three waves in a row.

Two Cohorts

We sampled from two separate cohorts for two reasons: first, to make sure that our main results were replicable across time and not just an artifact of a specific point in time; second, to capture different variables, since the survey questions evolved over the years. After identifying the connected and disconnected youth in the two cohorts, we followed them over time to see how they answered subsequent questions three to five, eight to ten, and thirteen to fifteen years later on the PSID survey.

The 1981–1983 cohort is defined as follows: individuals aged 16–24 in the 1981, 1982, or 1983 PSID wave (this is approximately equivalent to selecting individuals born between 1957 and 1967). Similarly, the 1988–1990 cohort is defined as follows: individuals aged 16–24 in the 1988, 1989, or 1990 PSID wave (this is approximately equivalent to selecting individuals born between 1964 and 1974). For the 1981–1983 cohort, we looked into life outcomes in 1986, 1991, and 1996. For the 1988–1990 cohort, we looked at life outcomes in 1993, 1997, and 2003.

Sample Reduction

Individuals with "unknown" youth disconnection status were taken out of the sample. Moreover, the sample is also reduced when we looked at future life outcomes because of attrition. Table 3 shows the sample size reductions. Note that there is no reason to assume that attrition is randomly selected in the sample. However, the PSID wave-specific weights take into account selective nonresponse.

Identification of Youth Disconnection Dependent Variables

There are several variables related to income in the PSID. We selected the family income question because it seems to be one question that is consistently asked across all surveys. It is also the variable chosen in other studies that use PSID data.[24] [25] The question is available in 1986, 1991, 1996, 1993, 1997, and 2003. The main downside is that it does not allow us to get an individual measure of income.

We converted the family income to 2018 levels according to the Consumer Price Index. Finally, we looked at the median family income rather than the average, because the family income variable is equal to 1 for one dollar or less (including zero and negative amounts) and 9,999,999 for $9,999,999 or more, which makes it impossible to estimate the average.

We identified consistent variables for educational attainment, employment, unemployment payments, and homeownership. Health-related questions were only included beginning with the 2003 survey.

Regression

We used the responses to survey questions from Cohorts 1 and 2 to build two regression models that measure the differences between connected and disconnected youth thirteen to fifteen years later. Our regression model controls for gender, whether the youth was black or white, their age, geography, and family income. We then applied the results of the regression to model the costs of youth disconnection and the benefits of keeping youth connected in four cities: Dallas, Atlanta, Los Angeles, and Washington, DC. We also applied these ratios to the national level to demonstrate the benefits to both local businesses and the nation as a whole.

Results

Cohort Attrition

We identified 3,413 youth ages 16–24 in Cohort 1 and 3,574 in Cohort 2. The attrition rate in Cohort 2 is almost double that of Cohort 1.

TABLE 15 Cohort Attrition

	COHORT 1: 1981-83			COHORT 2: 1988-90		
	Headcount	% of the original sample	% of the 1988-90 cohort	Headcount	% of the original sample	% of the 1988-90 cohort
Original sample: everybody aged 16-24 in the 1981 (1988), 1982 (1989) or 1983 (1990) wave	3,712	100.0		3,851	100.0	
Studied cohort (original sample minus individuals with unknown youth disconnection status)	3,413	91.9	100.0	3,574	92.8	100.0
First subsample to look at life outcomes (1986 or 1993)	2,914	78.5	85.4	2,907	75.5	81.3
Second subsample to look at life outcomes (1991 or 1997)	2,508	67.6	73.5	1,391	36.1	38.9
First subsample to look at life outcomes (1996 or 2003)	2,280	61.4	66.8	1,317	34.2	36.8

Rates of Youth Disconnection

In **FIGURE 15**, we compared the rates of disconnection in the PSID data (light and dark blue lines) to Measure of America's calculations of disconnected youth using the US Census Bureau's American Community Survey (ACS) data (black dots). The light blue line is the disconnection rate in the PSID data before screening out youth who work more than 500 hours a year. This line corresponds closely to our national estimates because both analyses select out those not working and not in school. The dark blue line represents the rate of disconnected youth in the PSID cohort that reported they worked fewer than 500 hours in the past year. For the purposes of this study, we were interested in youth with fewer attachments to work.

FIGURE 16 **Rates of Youth Disconnection**

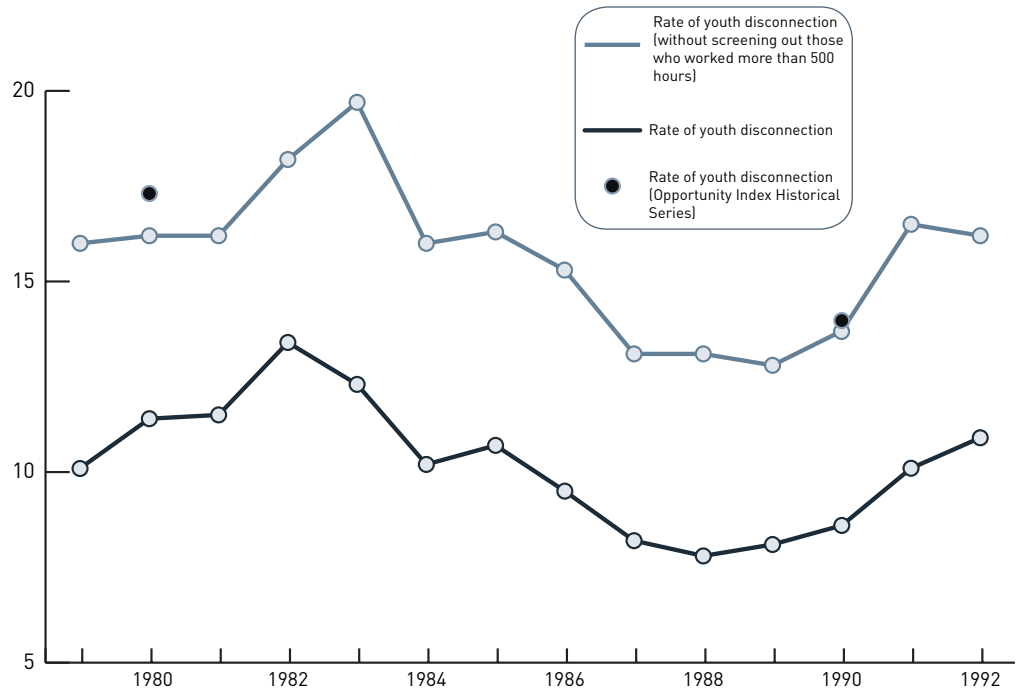


TABLE 17 **Data Sources for Costing Analysis**

INDICATOR	YEAR	SOURCE
FEDERAL TAX	2018	Tax Foundation, 2018. https://taxfoundation.org/2018-tax-brackets/.
STATE TAX	2017	Tax Foundation, 2017. https://taxfoundation.org/state-individual-income-tax-rates-brackets-2017/.
DISCRETIONARY INCOME	Various	Measure of America calculations using PSID, US Census Bureau, 2016 American Community Survey, Table B25105 and USDA2018 Food Plans (Family of 4, low-cost and moderate-cost respectively).
SNAP	2016	Supplemental Nutrition Assistance Program State Activity Report, Fiscal Year 2016. https://fns-prod.azureedge.net/sites/default/files/snap/FY16-State-Activity-Report.pdf.
TANF	2017	Center on Budget and Policy Priorities, "TANF Cash Benefits Have Fallen by More Than 20 in Most States and Continue to Erode." https://www.cbpp.org/sites/default/files/atoms/files/10-30-14tanf.pdf.
MEDICAID	2014	Henry J. Kaiser Family Foundation, "State Health Facts" tool. https://www.kff.org/medicaid/state-indicator/medicaid-spending-per-enrollee/?activeTab=map&currentTimeframe=0&selectedDistributions=adults&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D.
HOUSING ASSISTANCE	2017	US Department of Housing and Urban Development, "Query Tool." https://www.huduser.gov/portal/datasets/assthsg.html#2009-2016_data.
PRISON	2015	Vera Institute, "The Price of Prisons." https://www.vera.org/publications/price-of-prisons-2015-state-spending-trends/price-of-prisons-2015-state-spending-trends/price-of-prisons-2015-state-spending-trends-prison-spending.
UNEMPLOYMENT ASSISTANCE	2018	US Department of Labor, "UI Replacement Rates," 2018, Q1. https://workforcesecurity.doleta.gov/unemploy/ui_replacement_rates.asp; and Center on Budget and Policy Priorities, "Policy Basics: How Many Weeks of Unemployment Compensation Are Available?" https://www.cbpp.org/research/economy/policy-basics-how-many-weeks-of-unemployment-compensation-are-available.

Note: Dollar amounts are converted to 2018 dollars.

Rates by Gender, Race, and Duration

The rates of youth disconnection vary by gender and race in both cohorts. The rates for white youth are almost always half or less than the rates for black youth. While the rates for whites decrease overtime, the rates for black youth remain relatively high. The rates of disconnection for males was almost always half the rate of their female counterparts. This can be partially explained by women leaving school or work, either by choice or not, to care for the home.

We investigate the percentage of disconnected youth reporting if they are disconnected for more than two years or more than three years. These rates show that disconnection, for the majority of young adults surveyed, is not just a one-year event. It can last more than two years and in many cases more than three years. The longer the duration of disconnection, the harder it is to be reconnected to school or work.

TABLE 18 Descriptive Statistics

	YOUTH DISCONNECTION (%)					DURATION OF DISCONNECTION (% of disconnected youth)	
	Overall	White	Black	Male	Female	More than 2 years	More than 3 years
1979	10.1	8.4	17.7	4.8	15.2		
1980	11.4	10.0	18.7	6.1	16.5	64.3	
1981	11.5	9.4	21.2	5.6	17.2	73.4	52.1
1982	13.4	11.2	24.5	8.6	18.0	65.6	45.5
1983	12.3	9.9	24.9	6.9	17.4	65.3	47.1
1984	10.2	7.4	24.1	6.8	13.6	72.0	52.3
1985	10.7	8.6	22.0	6.5	14.9	66.5	49.9
1986	9.5	7.5	18.7	5.9	13.1	68.4	50.1
1987	8.2	6.1	17.8	5.4	10.9	64.8	45.5
1988	7.8	6.1	16.4	4.7	10.9	56.9	39.6
1989	8.1	6.8	15.6	6.2	10.1	55.7	36.5
1990	8.6	7.1	14.6	5.0	12.2	58.8	36.3
1991	10.1	7.9	19.4	6.8	13.3	53.3	
1992	10.9	7.7	24.9	7.3	14.6		

Tables 18 and 19 show descriptive statistics of the two cohorts. The numbers for 1986, 1991, and 1993 (**TABLE 18**) and 1993, 1997, and 2003 (**TABLE 19**) are obtained using the PSID wave-specific weights that take into account selective attrition.

TABLE 19 Descriptive Statistics

%	OVERALL-1982	DY-1982	1986	1991	1993
Disconnected	20.1	100.0	20.1	20.5	20.2
2 or more years	10.8	53.7	11.2	11.3	11.5
3 or more years	7.1	35.4	7.4	7.5	7.7
Males	48.2	31.2	47.7	46.4	46.3
Females	51.8	68.8	52.3	53.6	53.7
White	78.8	65.6	78.6	80.5	79.0
Black	15.8	28.7	16.2	17.4	15.5

TABLE 20 Compared to Those Who Were Disconnected, Those Who Remained Connected...

	COHORT 1	COHORT 2
INCOME	Earn $27,000 more	Earn $31,000 more
HOME OWNERSHIP	55% more likely to own a home	45% more likely to own a home
UNEMPLOYMENT	40% more likely to be employed	42% more likely to be employed
MEDICAL COVERAGE	Three time less likely to have medical coverage	Over nine times less likely to have medical coverage
SELF-REPORTED GOOD HEALTH	Not statistically significant	52% more likely to report excellent or good health

Endnotes

[1] Burd-Sharps and Lewis, *More than a Million Reasons for Hope*.

[2] Lewis and Burd-Sharps, *Zeroing In on Place and Race*.

[3] Carcillo, "NEET Youth in the Aftermath of the Crisis: Challenges and Policies."

[4] The White House Council for Community Solutions, *Final Report: Community Solutions for Opportunity Youth*.

[5] Belfield and Levin, *The Economics of Investing in Opportunity Youth*.

[6] Sharkey, *Stuck in Place*.

[7] The fact that the survey is representative only for blacks and whites is the reason Asian, Latino, and Native American young people are not discussed in this paper. At the time the study began, 1968, an astonishing 98 percent of Americans identified as either black or white, according to Patrick Sharkey in *Stuck in Place*. The demographics of the United States have changed a great deal over the last fifty years. We present youth disconnection rates for all five major racial and ethnic groups in More Than a Million Reasons for Hope.

[8] Schoeni et al., "Response Rates in National Panel Surveys."

[9] Lewis and Burd-Sharps, *A Portrait of New York City 2018*.

[10] Short et al., "How Accurate Are Self-Reports?"

[11] The Tax Foundation, "State Individual Tax Rates and Brackets for 2017."

[12] Reese, "An Analysis of the Characteristics of Multiple Program Participation Using the Survey of Income and Program Participation (SIPP)."

[13] Crouse and Waters, "Twelfth Report to Congress."

[14] Khatiwada et al., "The Consequences of Dropping Out of High School."

[15] Essential costs can encompass more than taxes, housing, and food; this is a rough estimate using the data that is available for what are usually the most essential and most expensive expenses.

[16] Osondu et al., "Favorable Cardiovascular Health Is Associated With Lower Health Care Expenditures and Resource Utilization in a Large US Employee Population."

[17] Doty et al., "Health and Productivity among U.S. Workers."

[18] Mitchell and Bates, "Measuring Health-Related Productivity Loss."

[19] Boushey and Glynn, "There Are Significant Business Costs to Replacing Employees."

[20] Booz, "These 3 Industries Have the Highest Talent Turnover Rates."

[21] Benson et al., "You Paid for the Skills, Now Keep Them."

[22] PricewaterhouseCoopers, "Young Workers Index 2017."

[23] *OECD Science, Technology and Industry Scoreboard* 2015.

[24] Ziol-Guest et al., "Early Childhood Poverty and Adult Body Mass Index."

[25] Grieger et al., "Estimating and Benchmarking the Trend in the Poverty Rate from the Panel Study of Income Dynamics."

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