

The Human Capital Deficit of Disconnected Youth in Philadelphia

Neeta Fogg and Paul Harrington
Center for Labor Markets and Policy
Drexel University

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Introduction

A coalition of big businesses including companies such as Starbucks, Wal-Mart, CVS, recently organized the 100,000 Opportunities Initiative designed to build pathways for teens and young adults between 16 and 24 that can build workplace skills, raise levels of education attainment and earn post-secondary credentials that are valued in the job market— towards the goal of securing a job. These companies' efforts will help young workers who do not have work experience to prepare for the labor market with internships, apprenticeships and on-the-job training. For youth who already have work experience but are looking to build new skills, the 100,000 Opportunities Initiative will provide them with appropriate education and training opportunities to build these skills and launch a career.

A central feature of this initiative is that it is targeted at a group of young people who are largely ignored by federal and state education leaders—disengaged or disconnected youth (also called Opportunity Youth by the coalition)—who are out of school and not working—essentially idle—at a time in their lives when most young people are intensely investing in the development of their long-term productive abilities and simultaneously making key career and life decisions that will impact the quality of their lives and the lives of their children for decades into the future.

Disconnected youth are disengaged from the two primary activities in which most youth are engaged—school and work. Both these activities are considered to be human capital building activities, that is, activities that add to the long term productive abilities of individuals. Human capital refers to the knowledge, skills, abilities and character traits that are developed in each of us in varying degrees. Individuals who are engaged in education are growing their stock of human capital. Work experience also adds to the stock of human capital as skills, knowledge and work place savvy are also acquired through work—even at very young ages.

Investments in the development of a person's stock of skills, knowledge, abilities and work-related behaviors is referred to by economists as a human capital investment because spending (in cash and time) on the development of these attributes is akin to investment in physical capital. Acquiring physical capital requires a sacrifice in current consumption (think saving instead of buying) in anticipation of a higher future consumption as physical capital is expected to generate a stream of benefits (returns) in the future. In the case of human capital the investment occurs in the form of schooling and work experience, both activities resulting in an increase in the productive abilities or stock of human capital of a person. And the labor market returns on this investment (in human capital) represent the stream of future benefits that primarily accrue in the form of higher levels of employment and earnings in the future.

The major hurdle to reengage disconnected youth to the labor market is that these youngsters started out with very low levels of human capital. Poor elementary and secondary schooling and little opportunity to work leaves these youngsters with human capital deficits. By age 18 when on-time high school graduation occurs for most youngsters, we already find the disconnection problem manifest among high school dropouts especially, but even high school graduates with no work experience and few job prospects. The 100,000 Opportunities Initiative is the first large scale employer-based effort that recognizes the need to engage these youth in the labor market—making investments in their human

capital through education, training and perhaps most importantly through a job, in an effort to raise their level of employability.

Philadelphia teens and young adults are quite likely to be disconnected from work and school. This paper examines the size and characteristics of the 18- to 24-year-old teens and young adults in the city. The findings reveal widespread disconnection of young adults in the city. The time to re-connect these youngsters to the broader world of work and school is now. The economic recovery is finally expanding into the labor market with the nation posting sizable employment gains each month for the past year and a half, with commensurate reductions in the unemployment rate. The ratio of unemployed workers to job seekers has fallen from nearly 7 unemployed persons per job opening to 1.5 unemployed persons per job opening; a level of labor market supply-demand balance not seen in the nation since 2007.

Data and Measures of Human Capital

Findings in this brief are based on our analysis of the American Community Survey (ACS) public use micro data files. We have used three most recent years of ACS data (2011-2013) to yield a sample size large enough to produce high quality, statistically reliable measures of the job market activity and educational status of the 18 to 24 year old resident population of the city and the metro area.¹ We have also presented some findings for youth across the nation to provide a national context for our regional and city findings.

We begin with a brief examination of the size of the disconnected youth population in the city and metro area. This is followed by an examination of the human capital traits among the city's disconnected youth with a comparison to their counterparts who were engaged in school and/or work (we will refer to this group as 'connected' youth). This comparison will shed light on the size of the gap in human capital traits between the two groups. This difference is a measure of the human capital deficit of disconnected youth compared to connected or engaged youth. The analysis will provide insights into the level of education and training efforts that will be required to build the productive abilities of disconnected youth to raise their odds of success in the labor market—now and in the future.

We examine three measures of human capital: formal educational attainment, current labor force status, and work experiences in the past five years. The level of formal educational attainment measures the level of educational human capital of disconnected youth. Disconnected youth are (by definition) not currently employed. They could however remain engaged in the labor market by continuing to look for a job even though they are not working. An examination of the current labor force status of disconnected youth provides insight into the level of an individual's current engagement in the labor market; that is, whether they are available for employment and remain engaged in the labor market by looking for a job or whether they have quit the labor force entirely. An examination of the work experiences of disconnected youth over the past five years will shed light on the past work experiences of disconnected youth and the length of time that they were disengaged from the labor market.

¹ We have chosen to exclude 16 and 17 year old youth as they have not had sufficient opportunity to accumulate human capital. Most are still enrolled in high school and would have had a period of just 1-2 years since they reached official working-age.

Disconnection among the City's Youth

Over one in four 18- to 24-year old residents of Philadelphia were disconnected from school and work.² There were 42,600 disconnected youth in the city out of a total of 167,100 youth between the ages of 18 and 24 residing in households. Disconnection rates were considerably higher among males than females; 28.5 percent versus 22.7 percent.

Table 1: Number and Percent of 18- to 24-Year Old Youth that were Out of School and Not Working at the time of the 2011-2013 ACS Surveys

	Total	Number Disconnected	Percent Disconnected
Philadelphia City			
Total, 18-24	167,101	42,632	25.5%
Male	80,892	23,033	28.5%
Female	86,209	19,599	22.7%
Philadelphia Metro Area Excluding Philadelphia City			
Total, 18-24	185,011	24,482	13.2%
Male	94,882	13,109	13.8%
Female	90,129	11,373	12.6%
Philadelphia Metro Area			
Total, 18-24	352,112	67,114	19.1%
Male	175,774	36,142	20.6%
Female	176,338	30,972	17.6%
U.S.			
Total, 18-24	28,019,363	4,951,759	17.7%
Male	14,230,389	2,461,212	17.3%
Female	13,788,974	2,490,547	18.1%

Youth residing in the remainder of the Philadelphia metropolitan area (outside of Philadelphia City) were only half as likely to be disconnected as their counterparts residing in the city (13% vs. 26%). And a little less than one in five (19%) of 18- to 24-year old youth residing in the entire Philadelphia Metro areas were disconnected from school and work. Nationwide, 17.7 percent of youth were out of school and out of work at the time of the 2001-2013 ACS surveys. The disconnection rate of male residents of Philadelphia city and suburban areas was higher than that of females whereas across the nation, females were more likely than males to be disconnected from school and work (18.1% versus 17.3%).

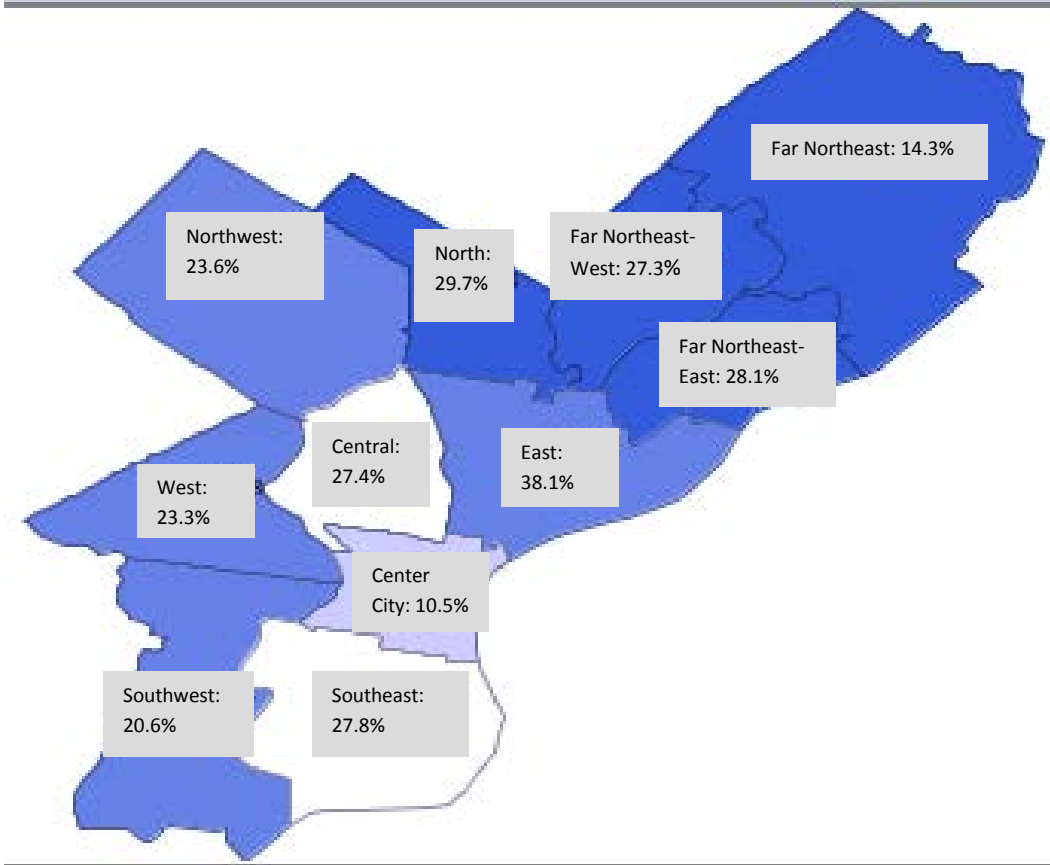
² The analysis in this paper is restricted household residents. Youth residing in group quarters—institutionalized as well as non-institutionalized group quarters—are excluded from the analysis in this paper. Youth in institutionalized group quarters (which for youth mostly comprise of correctional facilities) were excluded since not all residents of an institution represent permanent residents of the community in which it is located. Similarly, non-institutional group quarters were excluded from our analysis in this paper since not all residents of non-institutional group quarters (e.g., residence halls of colleges and universities) are permanent residents of the community in which the non-institutional group quarters are located.

We have defined the Philadelphia Metro Area as consisting of the following five counties: Bucks, Chester, Delaware, Montgomery, and Philadelphia.

The ACS Public Use Microdata Samples (PUMS) data files provide information on the place of residence of respondents. However, in order to protect confidentiality of respondents, the geographic detail regarding the place of residence on the ACS PUMS data files is limited to areas with a population of at least 100,000. These areas are called Public Use Microdata Areas (PUMAs). The ACS PUMS data files identify 11 separate PUMAs within the City of Philadelphia. Using combined three years (2011-2013) of ACS PUMS data files, the sample size of 18- to 24-year old household residents in each of these 11 PUMAs were large enough to produce statistically reliable estimates of disconnection rates. However, the sample sizes were not large enough to produce subgroup level analysis or to gauge the level of different kinds of human capital of youth in these 11 sub-city areas.

The share of disconnected youth varied widely across the 11 sub-city areas in Philadelphia. The highest rate of disconnection was among youth residing in the eastern section of the city. Nearly four in ten

Figure 1: Percent of 18- to 24-Year Old Residents of Philadelphia Neighborhoods who were Out of School and Out of Work at the time of the 2011-2013 ACS Survey



youth in this section of the city were disconnected from school and work. In contrast, the adjoining Center City area had a youth disconnection rate of just 10%. Three out of ten youth in North Philadelphia were out of school and work. The far Northeast section of the city had a lower

disconnection rate of 14% whereas the two closer Northeast areas, Far Northeast-East and Far Northeast-West had much higher rates of disconnection (28% and 27%). Between 21% and 23% of youth residing in West and Southwest Philadelphia were out of school and work, while those who lived in Central and Southeast sections of the city had higher disconnection rates (27% to 28%).

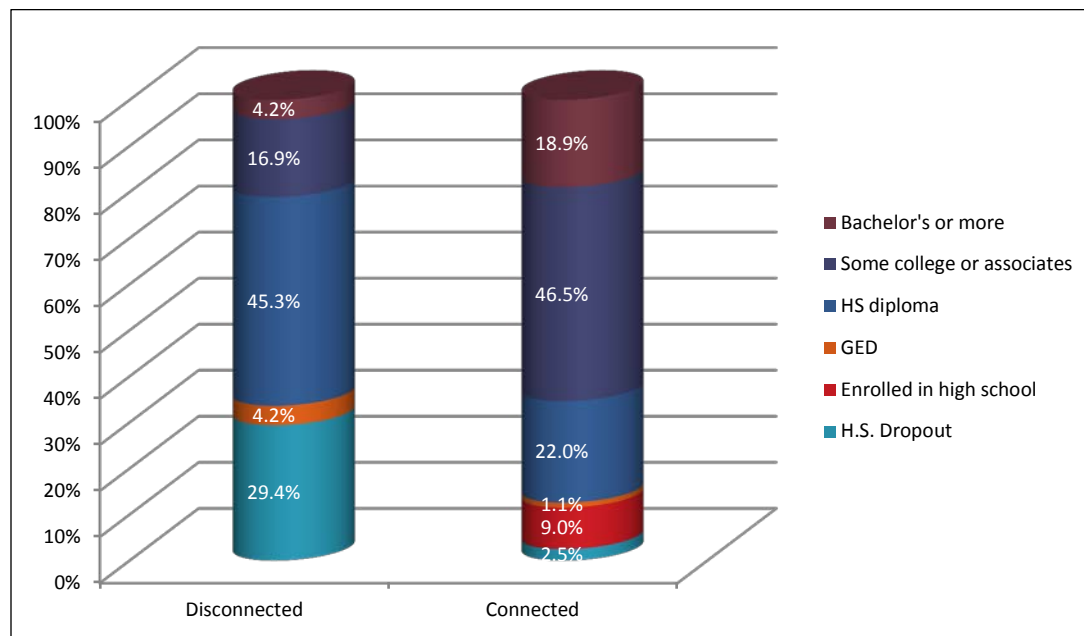
Human Capital: Educational Attainment

Human capital among young people is primarily acquired through formal schooling. Long before they enter the labor market, most young people are engaged in formal schooling in elementary, middle and high school and for about two-thirds of those who graduate high school this trajectory of formal education extends into college. Although schooling is the primary activity among teens and young adults, many young people are engaged in the labor market as well; combining work with school or just working without attending school.

A look at the educational attainment of the city's youth reveals sharp differences between the educational attainment of disconnected youth and their counterparts who were engaged in work or school. Disconnected youth had considerably lower levels of formal educational attainment than youth who were connected with work and/or school.

In 2011-2013, nearly 3 out of 10 disconnected youth in the city had failed to complete high school. In contrast, youth who were connected to school and/or work were considerably less likely to have dropped out of school without a high school diploma. Only 2 percent of the city's connected youth had dropped out of high school without graduating and another 9 percent had not graduated from high school but were still enrolled in high school. Disconnected youth were 4 times as likely as connected youth to have completed their high school education with a GED, 8 percent versus 2 percent. (Chart 1).

Chart 1: Percentage Distribution of 18- to 24-Year Old Disconnected and Connected Youth by Educational Attainment at the time of the 2011-2013 ACS Surveys, Philadelphia City



Completing some college education or a college degree was also much less prevalent among disconnected youth. Only 21 percent of the city’s disconnected youth had completed some college education compared to two-thirds of their connected counterparts. And only 4 percent of the city’s disconnected youth had earned a bachelor’s or higher degree compared to nearly 19 percent of connected youth.

Educational gaps between disconnected and connected youth were also quite large in the suburban Philadelphia area although not as large as the city. In suburban Philadelphia, 15 percent of disconnected youth were high school dropouts compared to 3 percent among connected youth; 11 percent of disconnected youth had a bachelor’s or higher degree versus 18 percent of connected youth.

Table 2: Percentage Distribution of 18- to 24-Year Old Disconnected and Connected Youth by Educational Attainment at the time of the 2011-2013 ACS Surveys, Metro Philadelphia and the U.S.

Educational Attainment	Metro Philadelphia Ex. Philadelphia City		Metro Philadelphia	
	Disconnected	Connected	Disconnected	Connected
Total	24,482	160,529	67,114	284,998
HS Dropout	15.2%	2.6%	24.3%	2.5%
Enrolled in HS	0.0%	8.9%	0.0%	9.0%
GED	6.2%	1.0%	4.9%	1.0%
HS Diploma	48.0%	25.7%	46.3%	24.1%
Some college or associate’s	19.7%	44.0%	17.9%	45.1%
Bachelor’s or more	10.9%	17.8%	6.6%	18.3%

Human Capital: Current Labor Market Status

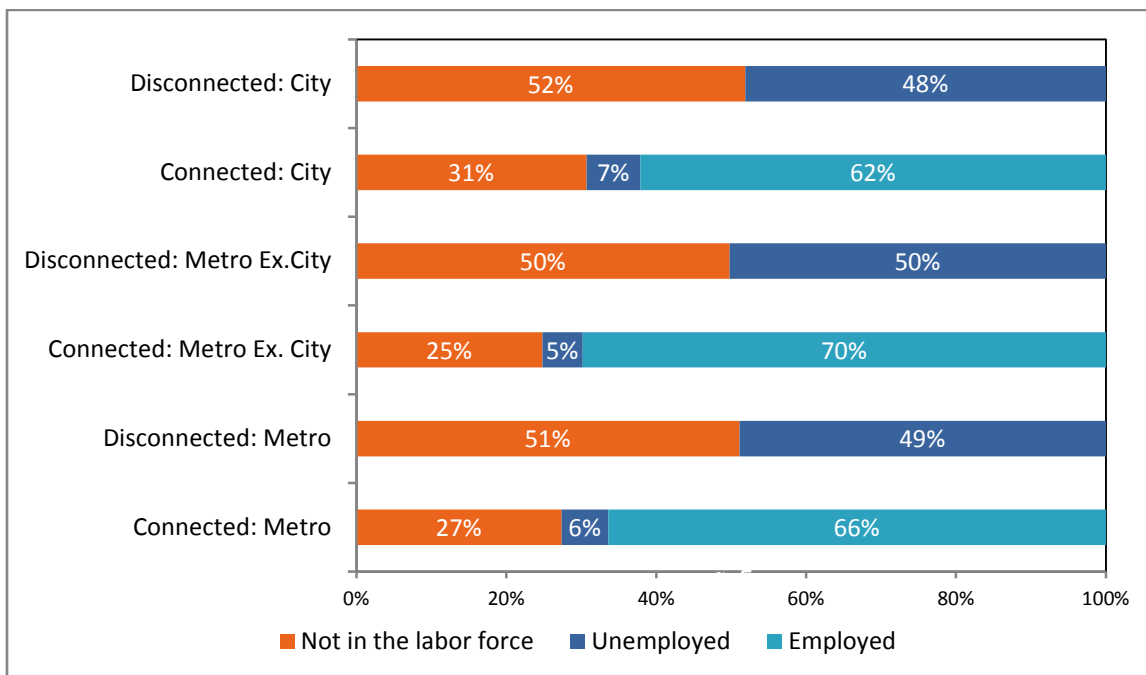
An examination of the labor force status at the time of the ACS survey indicates that disconnected youth were considerably more likely to have stopped their efforts to supply labor than their connected counterparts in the Philadelphia city. More than half (52 percent) of all disconnected youth were out of the labor force—neither employed nor actively looking for a job-- at the time of the ACS survey; over 20 percentage points higher than the 31 percent out of labor force share among connected youth—those who were engaged in school and/or work. The remaining 48 percent of disconnected youth were not working but were actively engaged in looking for work (and so classified as unemployed) at the time of the ACS survey. Among the city’s connected youth, only 7 percent were unemployed (not working but looking for work) and the remaining 62 percent were employed (Chart 2).

Labor market engagement at the time of the ACS survey was very weak among disconnected youth especially when compared to their counterparts who were engaged in school and/or work. Despite their engagement in schooling activities, connected youth show a much stronger engagement in the labor market. Indeed, some observers argue that work and schooling are strong complements in the development of human capital. Engagement in the labor market even in the form of job search among unemployed youth is a positive activity as it increases their likelihood of finding a job or a pathway to a job through training. Quitting the labor market entirely removes these pathways to employment and

pulls these youth further away from the labor market, sharply reducing their chances of future engagement in the labor market.

In the suburban areas outside the city, half of the disconnected youth were out of the labor force compared to only a quarter of their connected counterparts. The remaining half of disconnected youth in suburban Philadelphia were unemployed—they had not quit the labor force and were looking for a job (unemployed). The share of unemployed among connected youth in the suburbs of Philadelphia was only 5 percent, and the remaining 70 percent were employed.

Chart 2: Percentage Distribution of 18- to 24-Year Old Disconnected and Connected Youth by Labor Force Status, at the time of the 2011-2013 ACS Surveys, Philadelphia City and Metro Area



Human Capital: Past Work Experiences

Another measure of human capital that we have utilized is past work experiences. Even though disconnected youth were not working at the time of the ACS survey, they could have worked during the past year or at some point in the past. Knowledge of their past work experience can shed light on their longer-term connection to the labor market. Many economists believe that employment is path dependent; that is, the chance of being employed in a current time period is closely associated with employment in the past. More work experience in the past means a better chance of employment today. We have used responses to a question on the ACS survey about work activities in the past to shed light on the past work experiences of youth.³ Based on the data gathered from this question we have distributed disconnected and connected youth into three groups based on the last time that they

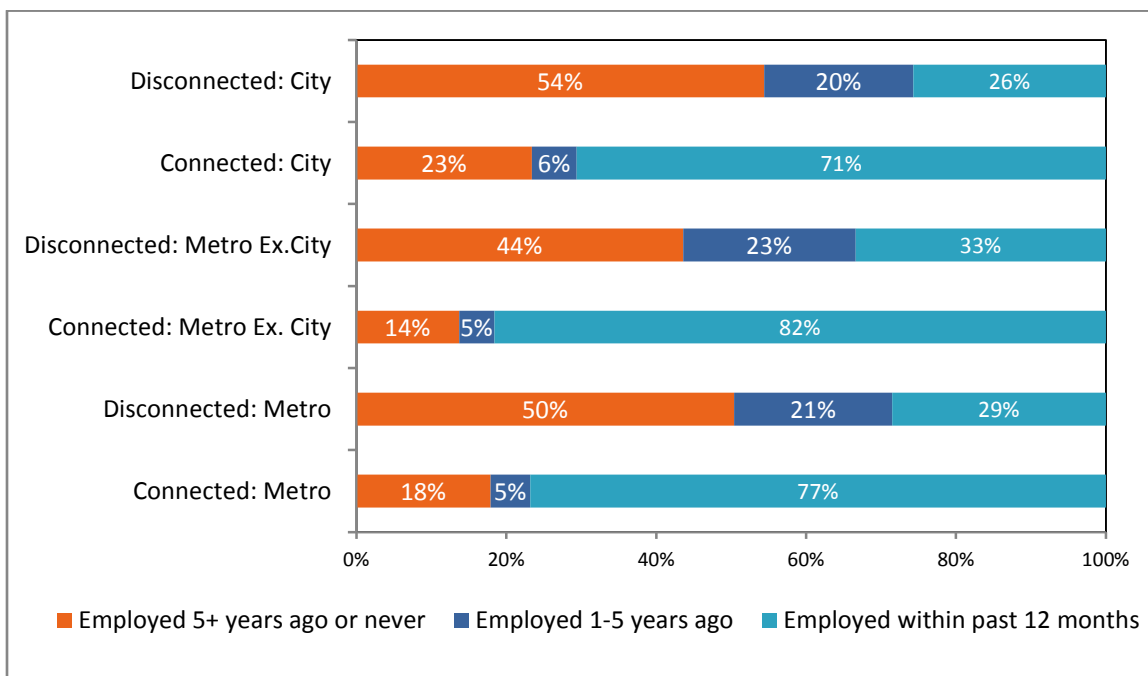
³ Specifically all working-age (16 years or older) respondents to the ACS survey are classified into three groups based on their past work experience: those who had last worked within the past 12 months, within 1-5 years, and 5 years ago or never worked.

had worked even for a few days—those who had last worked during the past year, those who had last worked 1-5 years ago, and the remaining who had last worked over 5 years ago or have never worked.

Findings are presented in Chart 3 and reveal that disconnected youth in the city and the entire metro area have had a history of weak labor market attachment. Only 26 percent of the city’s disconnected youth had worked one or more weeks during the year prior to the survey: this means that the remaining three-quarters of the city’s disconnected 18-24 year old population had not worked a single week during the entire year. Among connected youth in the city, the work rate during the calendar year (2011-13 average) was 71 percent; a stunning 2.7 times higher incidence of work than that found among disconnected youth.

One-fifth of disconnected youth in the city and only 6 percent of their connected counterparts had last worked 1-5 years ago. More than half of the city’s disconnected youth (53%) had either last worked more than 5 years ago or had never worked before. In comparison the share of connected youth who had never worked or had a 5+ year gap since their last employment was much smaller, 23 percent.

Chart 3: Percentage Distribution of 18- to 24-Year Old Disconnected and Connected Youth by the Last Time that They had Worked, 2011-2013 ACS Averages, Philadelphia City and Metro Area



The past work experience gaps between disconnected and connected youth were large among youth who lived in suburban Philadelphia. One-third of suburban disconnected youth had last worked during the past 12 months; 23 percent had last worked 1-5 years ago and 44 percent had not worked even a few days in the past 5 years or had never worked before. Past work experiences among connected youth in suburban Philadelphia were much stronger with 82 percent employed within the past 12 months, 5 percent employed 1-5 years ago and only 14 percent who employed more than 5 years ago or were never employed before.

Accumulation of work experience is determined by more than whether an individual was employed. It is also determined by the intensity with which the person was employed—the number of hours of work per week or year. The ACS survey provides data on weekly hours of work and annual weeks of work among those who were employed during the past 12 months. Using these data we have computed the mean weekly hours, mean annual weeks, and mean annual hours of employment among disconnected and connected youth who had worked at any time during the 12 months prior to the survey. Even when employed (during the past year), disconnected youth had worked less intensively than connected youth. The hours and weeks of work of disconnected youth who had worked during the past year were much lower than that of connected youth.

The mean weekly hours of disconnected and connected youth in the city were about the same; 31 hours of work per week among the city’s disconnected and connected youth who were employed within the past 12 months. However, the mean weeks of work during the entire year were very different between the two groups of youth—on average a disconnected youth who had worked during the past year was employed for 23 weeks during the year; much lower than 38 weeks of employment among connected

Table 2: Mean Weekly Hours, Annual Weeks, and Annual Hours of Work During the Past Year Among 18- to 24-Year Old Disconnected and Connected Youth who were Employed for At Least One Week During the Past Year, 2011-2013 ACS Averages

	Disconnected Youth	Connected Youth	Ratio (Disconnected/Connected)
Philadelphia City			
Mean Weekly Hours	30.7	31.1	0.99
Mean Annual Weeks	23.1	38.3	0.60
Mean Annual Hours	747	1,258	0.59
Philadelphia Metro Area Excluding Philadelphia City			
Mean Weekly Hours	28.6	28.9	0.99
Mean Annual Weeks	21.1	36.8	0.57
Mean Annual Hours	695	1,138	0.61
Philadelphia Metro Area			
Mean Weekly Hours	29.8	29.8	1.00
Mean Annual Weeks	22.3	37.4	0.60
Mean Annual Hours	725	1,186	0.61
U.S.			
Mean Weekly Hours	30.9	31.1	0.99
Mean Annual Weeks	22.9	38.7	0.59
Mean Annual Hours	758	1,267	0.60

youth (who were engaged in school and/or work). Over the entire year, the mean hours of work among disconnected youth who had worked in the past year was 747 hours; less than 60 percent of the mean annual hours of work among the city’s connected youth who had worked an average of 1258 hours during the past year. Findings in Table 2 reveal similarly large gaps in work intensity between disconnected and connected youth in suburban Philadelphia as well as the nation.

Summary and Conclusions

One in four youth between the ages of 18 and 24 who lived in Philadelphia city were out of school and out of work at the time of the ACS survey (2011-2013 average). Within the city, disconnection rates were as high as 38 percent in East Philadelphia and 29 percent in North Philadelphia. The Center City area was the exception with a disconnection rate of just 10 percent.

The human capital deficits—educational human capital as well as work experience and engagement in the labor market—among Philadelphia’s disconnected youth are sizable. Disconnected youth have much lower levels of formal educational attainment than youth who were connected to school and/or work. Nearly 30 percent of the city’s disconnected youth had dropped out of school without a diploma or a GED, compared to just 2 percent of their connected counterparts.

Work experience human capital deficits were also sizable among the city’s disconnected youth. Over half of the city’s disconnected youth were not even looking for work at the time of the ACS survey and had quit the labor force entirely. A look at their past employment experiences past reveal a very poor employment history among disconnected youth. Over half (53%) had last worked more than 5 years ago or had never worked before and another 20 percent had last worked 1-5 years ago. Only about one-quarter of the city’s disconnected youth had last worked during the 12 months prior to the ACS survey.

Furthermore, among those who had worked during the past year, the intensity of work—hours and weeks of work—was much lower among disconnected youth compared to youth who were engaged in school and/or work. Thus even among the one-quarter of the city’s disconnected youth who did work in the prior 12 months, the considerably lower weeks and hours of work among them means that even when they were employed in the past, disconnected youth had accumulated much less work experience than youth who are engaged in the labor market and/or schooling.

Disconnection from work and school is quite high among Philadelphia’s resident youth and appears stunningly high in some high poverty neighborhoods of the city. And among those who are disconnected, the human capital deficits are sizable. Efforts to re-engage disconnected youth with school and work will be met with the sizable education and work experience (human capital) barriers that will need to be bridged before disconnected youth are ready to engage in the labor market. The deficit in work experience human capital among disconnected youth also means that these youth have not been able to develop the behavioral traits and soft skills that are found to be extremely important to labor market entry and labor market success.⁴ Our findings suggest that employment is a key ingredient in building better pathway for young people in Philadelphia. Efforts in the city to engage employers like those that began the 100,000 Opportunities Initiative are a key part of any strategy to alter the existing pathway toward disconnection and the social and economic pathologies that often characterize the life of young people who are adrift from work and school.

⁴ Paul Harrington and Nancy Snyder, *Signaling Success: Boosting Teen Employment Prospects*, Commonwealth Corporation, Boston MA, April 2013; Neeta Fogg, Paul Harrington, and Anja Petrovich, *Building Blocks of Labor Market Success: Evidence from O*NET Job Analysis Surveys*, Commonwealth Corporation, Boston MA, April 2013.