

FINDINGS AND RECOMMENDATIONS FOR 16- TO 25-YEAR-OLDS IN THE SOUTH BRONX

A JobsFirstNYC Working Paper



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About JobsFirstNYC

JobsFirstNYC is a neutral intermediary and a champion for the workforce needs of out-of-school, out-of-work young adults in New York City. Our mission is to improve the system for young adults by bringing together—effectively and efficiently—all available community, corporate, private, and public resources to accelerate the connection of out-of-school, out-of-work young adults with the economic life of New York City.

About This Working Paper

The James and Judith K. Dimon Foundation engaged JobsFirstNYC in 2015 to undertake both supply and demand side research for the South Bronx and to identify institutions, practices, and strategies that could help advance youth career pathways and HERE TO HERE in the South Bronx.

The James and Judith K. Dimon Foundation launched HERE to HERE in partnership with Dreamyard and Big Picture Learning to respond to the urgent need to connect young people from low income neighborhoods to family sustaining careers, help employers find the diverse, skilled talent they need for our country's competitiveness, and to prove that a youth-driven strategy can strengthen communities.

HERE TO HERE's mission is to create enduring, systemic change that breaks the cycle of poverty through employment opportunities. HERE TO HERE identifies, cultivates, and supports robust partnerships between young people, their families, educators, employers and community based organizations to enhance paths to rewarding employment.

This report and the research to develop the findings included herein were fully funded by the James and Judith K. Dimon Foundation.

GLOSSARY OF TERMS

1. **Career and technical education:** A term applied to schools, institutions, and educational programs that specialize in the skilled trades, applied sciences, modern technologies, and career preparation (Glossary of Education Reform)
 - a. **Career and technical education (CTE) certificate:** A classroom teaching certificate that authorizes the holder to teach a specific subject in a New York State public high school in a career and technical education program. CTE certificates place an emphasis on occupational experience and are designed for teachers in programs preparing high school students for specific occupations (New York State Department of Education)
2. **Career pathways/pathways:** A series of connected education and training strategies and support services that enable individuals to secure industry-relevant certification and obtain employment within an occupational area and to advance to higher levels of future education and employment in that area (MDRC)
3. **Sector:** A broad area of the economy (NYC Labor Market Information Service at the CUNY Graduate Center)
4. **South Bronx:** The Bronx neighborhoods south of the Cross Bronx Expressway: Mott Haven/Hunts Point, Highbridge/South Concourse, University Heights/Fordham, and Morrisania/East Tremont
5. **Subsector:** A group of similar industries within a sector (NYC Labor Market Information Service at the CUNY Graduate Center)
6. **Successive learning model:** A model that includes sequenced learning opportunities from ninth to twelfth grade that build upon each other as they progress (JobsFirstNYC)
7. **Work-based learning:** The umbrella term used to identify activities which collaboratively engage employers and schools in providing structured learning experiences for students. These experiences focus on helping students develop broad, transferable skills for postsecondary education and the workplace (New York State Department of Education)

BACKGROUND

Many policymakers, practitioners, and researchers across the nation view early intervention within the K–12 system as a way to decrease the number of young adults who either drop out of school and enter the out-of-school, out-of-work population, or who graduate and enter the labor market unprepared for living-wage careers. Findings show that a system-wide approach that encompasses K-12, post-secondary, and out-of-school intervention strategies around career exploration and market-demand training could have long-term positive impacts on young adults' economic prosperity.

New York City has developed a number of approaches, including multiple pathways to graduation and the addition of academically rigorous CTE schools. CTE programs are based on the premise that if students develop a stronger, earlier connection to careers, dropout rates will decrease and students will be able to access stronger pathways to post-secondary education and careers.¹ There are currently 47 dedicated CTE high schools throughout the city's five boroughs, including seven 9–14 early college schools where students have the opportunity to earn a high school diploma and an associate's degree.² New York City is currently expanding the CTE program to include additional CTE schools throughout the city. Other recent initiatives in New York City aimed at better connecting students to work-based learning opportunities include JPMorgan Chase's New Skills at Work initiative, a global effort to increase career-based education and summer job opportunities, the City's decision to join the Pathways to Prosperity Network, and the mayor's 2015 launch of the Center for Youth Employment, which supports partnerships between city agencies, employers, and other stakeholders in order to offer thousands of jobs, internships, and mentorships to students in New York City.³ While these and other efforts to prepare students for college or careers after high school are promising, much work remains to be done.

The number of young adults who are out of school and out of work in New York City—172,000 18- to 24-year-olds—has been documented by JobsFirstNYC in its reports *Barriers to Entry* (2013) and *Unleashing the Economic Power of the 35 Percent* (2014). Both reports highlight the depth of this problem and the communities with the greatest rates of young adults who are out of work and out of school. In 2015, Measure of America, a project of the nonprofit Social Science Research Council, and Opportunity Nation, a national campaign for economic mobility, developed a real-time Opportunity Index that calculates the number of out-of-school, out-of-work 16- to 24-year-olds in any US county.⁴ According to this index, the total number of out-of-school, out-of-work 16- to 24-year-olds in New York City's five boroughs is 184,140.⁵

In addition to the city's large out-of-school, out-of-work young adult population, there is a large group of underemployed young New Yorkers. More than 25 percent of 16- to 25-year-olds in New York City work in low-wage service jobs, and another 22 percent work in retail.⁶ According to a 2016 report from the New York City Comptroller's Office, despite millennials being the most educated generation of young workers in the city's history, they tend to hold low-wage jobs and make up a significant portion of the city's working poor.⁷ The comptroller's report also found that in addition to grim employment and earning trends for young workers, fewer young adults aged 18 and older are enrolling in school. The percentage of 18- to 29-year-olds attending school in New York City decreased from almost 39 percent in 2012 to 24 percent in 2014.

Although there has been recent progress in high school graduation rates—which increased from 46.5 percent in 2005 to 70.5 percent in 2015⁸—fewer than half of high school graduates in the city meet career and college readiness standards based on New York State's Aspirational Performance Measures.⁹ Students enrolled in CTE schools have slightly higher graduation rates, at 70.5 percent, but they attend post-secondary education and training programs at lower rates—44 percent compared to 53 percent of those graduating from non-CTE high schools.¹⁰ Moreover, while the New York City Council is supporting legislation to require the New York State Department of Education to report on certification and employment data for CTE schools as part of a 2016 CTE expansion, there is currently no available data on employment rates among CTE graduates. There is also little to no evidence of consistent, strategic employer engagement in CTE schools to prove that the programs are truly market driven.

Despite major investments in in-school career preparation through CTE and other programs, thousands of young New Yorkers remain out of school and out of work, and many young adults who are graduating from high school on time are not meeting the city's standards for college and career readiness. Furthermore, some neighborhoods of the city, such as the South Bronx, continue to have disproportionately high rates of young adults who are unemployed or underemployed and not enrolled in school. This paper examines the education and employment conditions among young adults in the South Bronx, where high school graduation rates are as low as 54 percent, and where three-year college completion rates for associate's degree programs barely reach 11 percent.¹¹ Several districts in the South Bronx are home to New York City's highest rates of out-of-school, out-of-work young adults and the city's highest concentrations of young adults working in low-paying jobs.¹²

OVERVIEW

This paper focuses on 16- to 25-year-olds living in the South Bronx. One in five residents in this borough belongs to this age group, the highest share of any age group in the area other than those under 16. The paper also examines the growing employment sectors in the Bronx and the need for demand-based education and training pathways.

SUMMARY OF FINDINGS

- 1. High poverty:** The South Bronx has the highest rates of poverty in New York City. Four out of every ten South Bronx residents, or 41 percent, live in poverty, compared to 28 percent in the rest of the Bronx.
- 2. Low educational attainment:** In the South Bronx, only 58 percent of high school-age residents without a high school diploma are enrolled in school, compared to 70 percent in New York City overall. The high school graduation rate at public schools is much lower in the South Bronx (as low as 54 percent) than in the rest of the city. Higher education degree achievement also lags in the South Bronx.
- 3. Notable racial disparities:** Two-thirds, or 66 percent, of South Bronx residents between the ages of 16 and 25 are Latino—a higher share than in the city as a whole and in the rest of the Bronx. In this same age group, 93 percent of South Bronx residents are black or Latino. Young black residents in the South Bronx are slightly more likely to have graduated from high school than young Latino residents; but of those who do graduate, Latino residents are more likely to have attended some college.
- 4. Three Bronx CUNY Schools:** There are three City University of New York (CUNY) schools in the Bronx, Bronx Community College, Hostos Community College, and Lehman College. More than 50 percent of Bronx residents who are enrolled in post-secondary education attend one of these three schools.
- 5. Limited work-based learning:** There are six CTE schools and two 9–14 early college schools open in the South Bronx. There are also some public and nonprofit work-based learning programs for in-school young adults, and limited public programs for out-of-school young adults.
- 6. Diverse CTE schools:** The student bodies at CTE high schools in the South Bronx are at least 90 percent black or Latino. In addition, many of these schools enroll significant numbers of English-language learner students and students with disabilities. Black and Latino students graduate from CTE schools at higher rates than from traditional public schools.
- 7. High rates of out of school, out of work:** One out of four, or 25 percent, of 16- to 25-year-olds in the South Bronx are out of school and out of work, a far higher rate than that of any other area of the city. Over 40 percent of out-of-school, out-of-work young adults in the South Bronx lack a high school diploma, and seven out of ten are not even looking for work.
- 8. Employment in low-wage jobs:** Of the South Bronx's 14,450 employed young adult residents, 54 percent work in Manhattan. Similar to citywide trends, the most common occupations for young adults with fewer than 12 years of education who live and work in the South Bronx are cashier, retail salesperson, and cook.

- 9. Lowest salaries in the Bronx:** The mean salary for full-time, 16- to 25-year-old workers in the South Bronx (\$24,000) is significantly lower than in the rest of the Bronx (\$28,000) and the city as a whole (more than \$32,000).
- 10. Largest employment sectors:** The two largest employment sectors in the South Bronx are the healthcare and social assistance sector and the education sector. The employment subsectors that grew the most during 2010–2014 and the largest job growth subsectors for businesses in the Bronx were ambulatory healthcare and social assistance. For employers with large numbers of employees, the top subsector growth area is hospitals.
- 11. Many small employers:** Almost 8,000 businesses are identified as doing business in or adjacent to the South Bronx. Over 90 percent employ 100 or fewer individuals in healthcare, food services, retail services, government, social assistance, and manufacturing. Employers with 1,000 employees or more are concentrated in the healthcare sector—Montefiore Medical System is the borough’s largest employer.
- 12. Occasional employer engagement with education and training programs:** Employers engage at varying levels with South Bronx’s young adults through relationships with colleges, nonprofits, and high schools.

SUMMARY OF RECOMMENDATIONS

- 1. Focus career readiness and education efforts on growing employment sectors and subsectors.** Healthcare and social assistance is the largest employment sector in the Bronx. There are a wide range of occupations in this sector that require only short-term training and that offer good starting wages and promising pathways to higher-paying jobs. Computer and information technology, finance and insurance, and professional, scientific, and technical services are also promising sectors with growth potential in the Bronx.
- 2. Invest in successive learning models.** A system-wide work-based learning model that includes in-school young adults should start at ninth grade and extend into post-secondary in order to generate a long-term impact on students’ opportunities and choices for career and post-secondary options.
- 3. Effectively coordinate educators, work-based learning providers, and partners.** K–12 schools should strategically partner with post-secondary institutions and community-based organizations to effectively deliver market-demand skills training. These partnerships should be supported by a central coordinator who aligns strategy and practice.
- 4. Engage Bronx-based employers.** Given the detailed information available on employers and growth sectors, additional follow-up should be conducted with Bronx-based employers (including regional employers with a significant presence in the Bronx) to assess their interest in collaborating with the public workforce system and K–12 schools. Engaging groups of small businesses, organized by sector, should also be a priority given the vast number of small businesses in the borough.
- 5. Align economic and workforce development efforts.** Stakeholders working to connect young adults to employers in the South Bronx should create workforce initiatives that align with economic development activities in the borough. We recommend the creation of a partnership mechanism similar to the Lower East Side Employment Network (LESEN).
- 6. Incorporate financial capability to help young people achieve economic mobility.** Given the number of young adults working in low-wage jobs, any new effort to address the concerns of young, economically insecure residents in the Bronx should factor for the inclusion of financial development services in order to strengthen the financial capability of all young adults.

METHODOLOGY

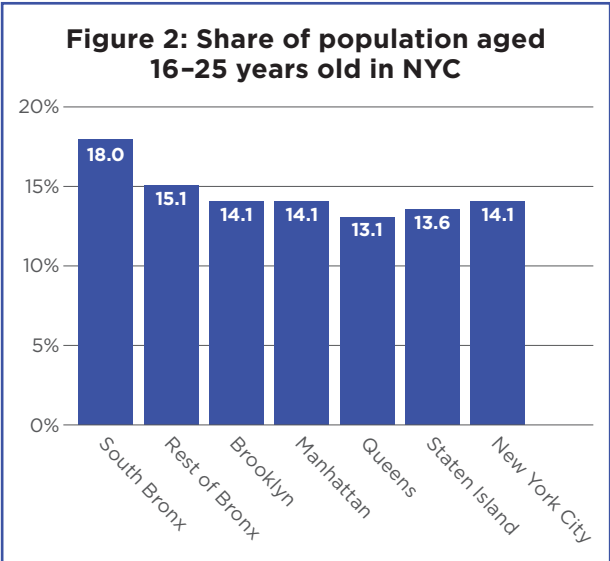
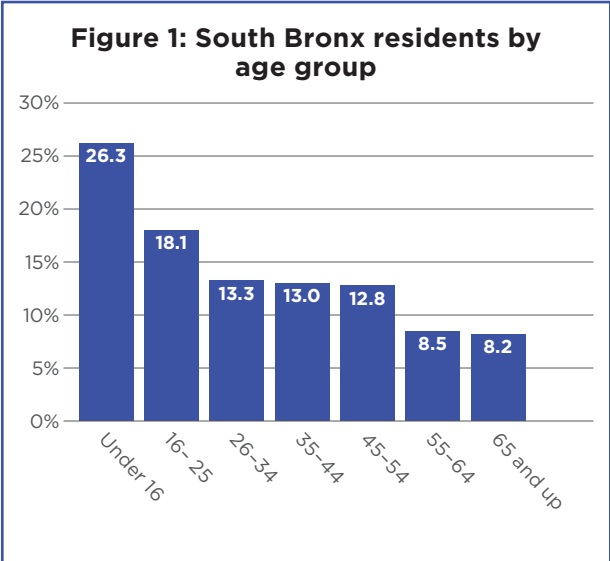
For this paper’s supply- and demand-side analyses, JobsFirstNYC collected data from the American Community Survey, the NYC Department of Education, and the NYC Labor Market Information Service at the City University of New York. The supply-side analysis highlights the demographic profile of young adults in the South Bronx in order to locate potential talent. The demand-side analysis highlights occupational information and career-track opportunities for young adults; identifies sectors experiencing job growth and sectors that are receptive to young adults; and identifies large employers in the Bronx. We interviewed local employers to gather feedback on their experiences with young adult employees, and interviewed representatives from the Bronx Chamber of Commerce and local business improvement districts to gain an understanding of how these employer intermediaries are involved with younger workers and institutions in the South Bronx. In addition, we consulted with employers in neighborhoods surrounding the South Bronx about their history of hiring young adults. We also interviewed several school leaders to collect data on where employer engagement strategies are being implemented within existing K–12 structures.

NEIGHBORHOODS IN THE SOUTH BRONX

This paper defines the South Bronx as consisting of the Bronx neighborhoods south of the Cross Bronx Expressway: Mott Haven/Hunts Point, Highbridge/South Concourse, University Heights/Fordham, and Morrisania/East Tremont.

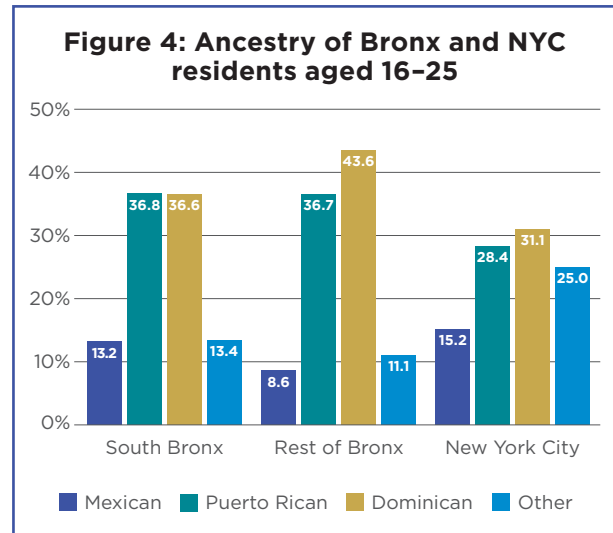
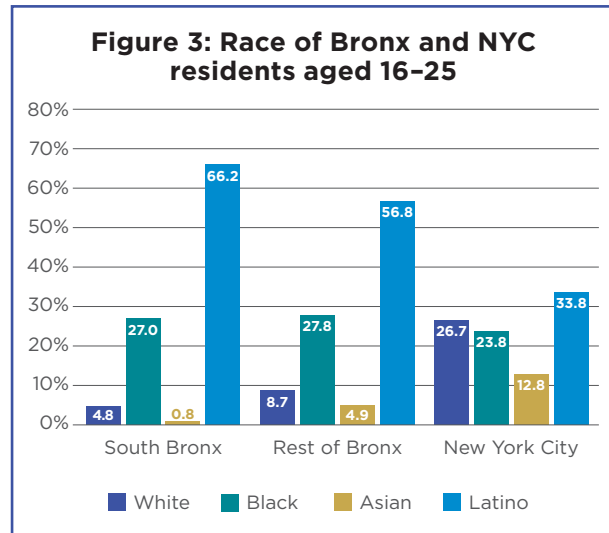
DEMOGRAPHY OF THE SOUTH BRONX

The South Bronx is young compared to the rest of the borough and the city. Nearly one in five South Bronx residents (18 percent) is between the ages of 16 and 25, the highest share of any age group other than those under 16 (figure 1). The South Bronx’s share of 16- to 25-year-olds is higher than that of the rest of the Bronx, which is 15 percent, and higher than that of any other borough, which averages about 13.5 percent. The overall rate for New York City is 14 percent (figure 2).



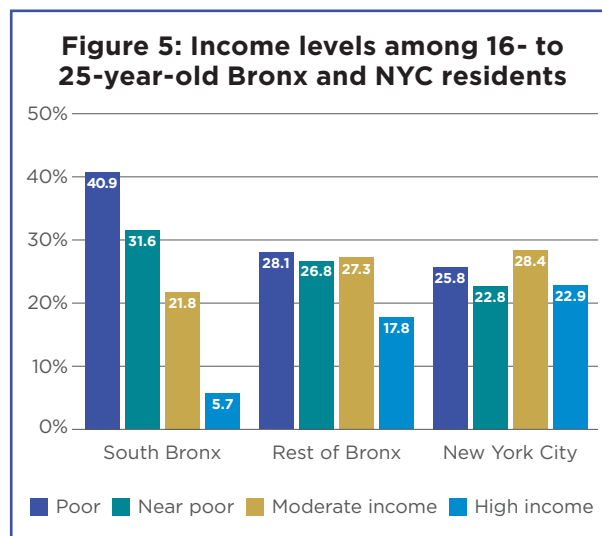
RACE AND ETHNICITY

The South Bronx is predominantly Latino, with a notable increase in residents of Mexican descent. Two-thirds (66 percent) of South Bronx residents between the ages of 16 and 25 are Latino—a higher share than that of the city as a whole and the rest of the Bronx (figure 3). Overall, 93 percent of South Bronx residents aged 16–25 are black or Latino, compared to 85 percent in the rest of the Bronx and 58 percent in the city overall. Young Latinos in the South Bronx are more likely to be Mexican than those in the rest of the Bronx, but, like in the rest of the Bronx, young South Bronx Latinos are more likely to be Puerto Rican than young Latinos in New York City overall. Puerto Ricans and Dominicans represent 38 and 36 percent of young adults in the South Bronx, respectively, compared to 37 percent and 44 percent, respectively, in the rest of the Bronx and 31 percent and 28 percent, respectively, across the city as a whole (figure 4).



HOUSEHOLD INCOME AND POVERTY

Four out of ten (40 percent) of young South Bronx residents live in poverty, and more than 70 percent live below 200 percent of the federal poverty level (figure 5). In the rest of the Bronx, 28 percent of young people live in poverty, and 55 percent live below 200 percent of the federal poverty level.



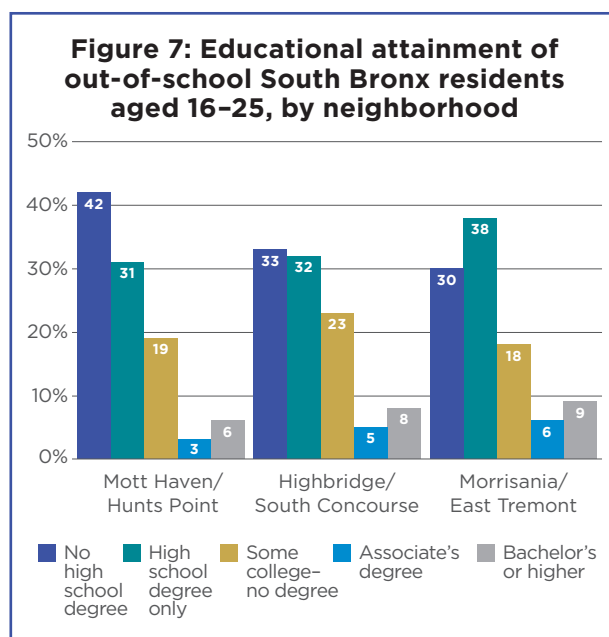
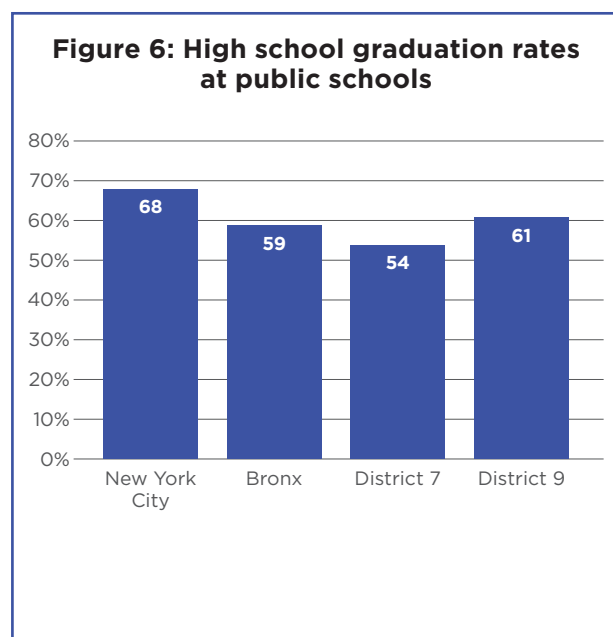
EDUCATION CHARACTERISTICS

Educational Attainment

Graduation rates at public high schools in New York City are much lower in the Bronx, including the South Bronx, than in the rest of the city. Higher education achievement also lags in the South Bronx, where less than 12 percent of young residents possess associate's, bachelor's, or higher degrees, compared to 15.3 percent in the rest of the Bronx and 34 percent in New York City overall (figure 6).

There are three City University of New York (CUNY) schools in the Bronx, which are home to 57 percent of Bronx residents enrolled in post-secondary education.¹³ There are also several private universities in the Bronx, including Fordham University, Boricua College, and Monroe College. A review of the 2008 cohorts at CUNY's Bronx and Hostos Community Colleges showed that after three years, only about 10 percent had graduated and 30 percent had remained enrolled.¹⁴ This means that about 60 percent of students leave the CUNY system within three years without a degree. The 2011 cohort at CUNY's four-year colleges in the Bronx had a 43 percent graduation rate after six years, with only 13 percent still enrolled; 40 percent left without a degree.¹⁵

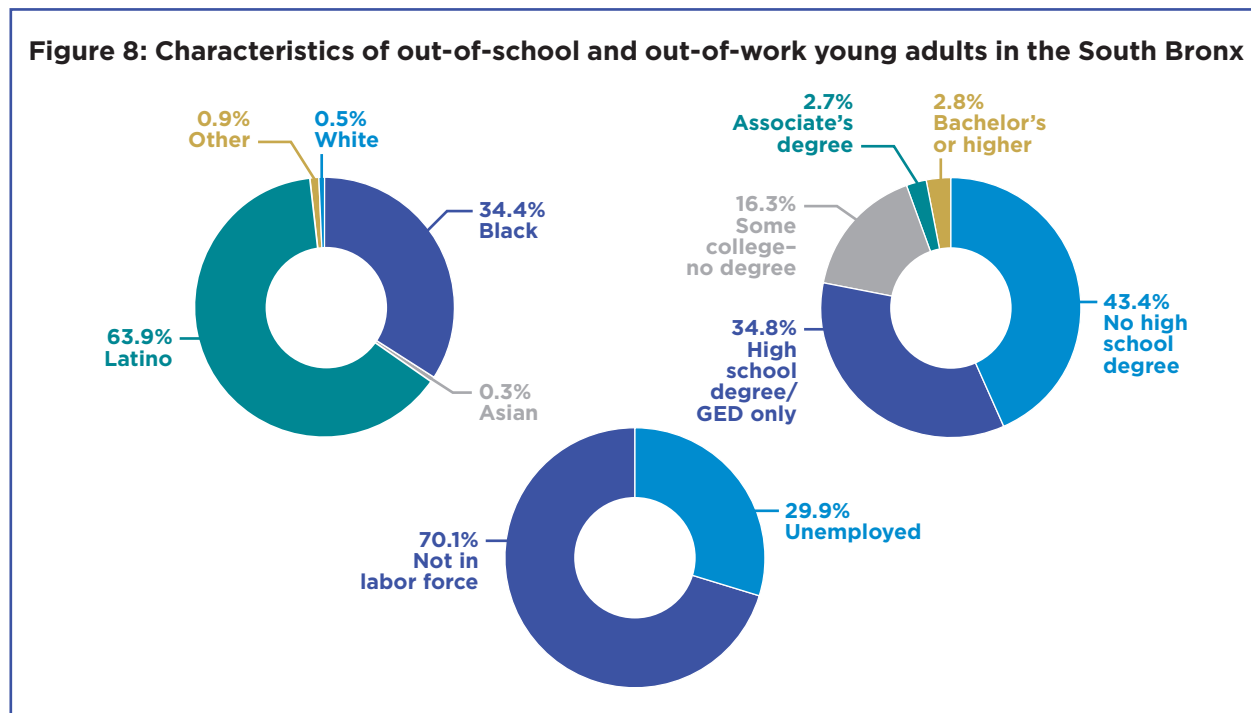
Some neighborhoods in the South Bronx fare particularly poorly in educational attainment. In the South Bronx school districts, District 7 and District 9, graduation rates are lower than the New York City average (figure 6). In the Mott Haven/Hunts Point neighborhood, four out of ten (42 percent) out-of-school 16- to 25-year-olds lack a high school diploma and only 6 percent possess a bachelor's degree (figure 7).



Out-of-School and Out-of-Work Young Adults

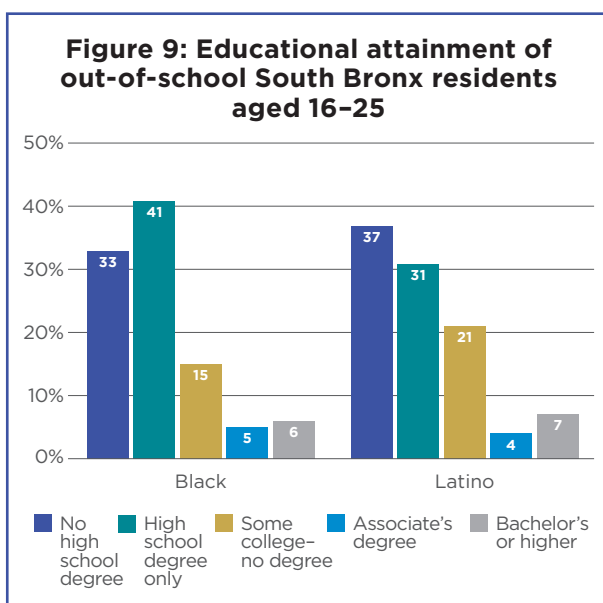
One out of four (25 percent) 16- to 25-year-olds in the South Bronx is out of school and out of work, a rate far higher than that of any other area of the city (figure 8). In the rest of the Bronx, the rate is 19.5 percent, and across New York City, it is 16 percent. Out-of-school, out-of-work young adults have very low school enrollment and completion rates; a much smaller share of South Bronx high school-age residents without a high school diploma are enrolled in school (58 percent) compared to their counterparts in the rest of the Bronx and New York City overall (70 percent). Of those who are not in school, more than one-third of South

Bronx 16- to 25-year-olds lack a high school diploma, a rate far higher than in the rest of the Bronx and New York City in general. Over 40 percent of out-of-school, out-of-work South Bronx 16- to 25-year-olds lack a high school diploma, and seven out of ten are not looking for work.



RACIAL AND ETHNIC DISPARITIES IN HIGH SCHOOL GRADUATION RATES

In the South Bronx, young black residents are slightly more likely to have graduated from high school than young Latino residents; but of those who do graduate, Latino residents are more likely to have attended some college (figure 9). Of those who have some college experience and are no longer in school, young black residents are more likely to have completed some type of degree than young Latino residents. Two-thirds of Latino residents aged 25 and younger who start college drop out of school before earning a degree.



WORK-BASED LEARNING TRENDS AND PROMISING PRACTICES

For many years, K–12 school systems across the country have been aligning education, work-based training, and career education in partnerships with higher education institutions, employers, and job training institutions to better prepare students for the job market and post-secondary education.¹⁶ The body of evidence to support the value of in-school, work-based learning programs continues to grow through the documentation of results from experienced models, such as Big Picture Learning, Boston Private Industry Council, Linked Learning, NAF, and Pathways to Prosperity, which recently launched in New York City. In New York City, the emphasis on work-based learning can be seen in the Department of Education's expansion of its 47 dedicated CTE schools (see appendix A). This group of CTE schools includes seven 9–14 early college schools that have formal partnerships with colleges across the CUNY system.

Career and Technical Education

CTE's success is based on graduation and post-secondary enrollment, not employment. Of a 2012 cohort of New York City CTE graduates, around 70 percent graduated (compared to the 2012 citywide rate of 65 percent), while only 44 percent enrolled in post-secondary education (compared to the citywide rate of 53 percent).¹⁷ About 35 percent of these graduates passed an industry-recognized technical assessment,¹⁸ but there is no close tracking of CTE students' certification attainment and related field employment after high school. At the school level, more than half of the city's CTE schools for which graduation and post-secondary enrollment data is available have strong graduation and post-secondary enrollment outcomes when compared to non-CTE schools with similar student bodies.¹⁹

The South Bronx is one of the many areas where the city has opened CTE schools. Of the ten CTE schools that have been opened in the South Bronx, the six newest ones remain open, while the four oldest are closed.²⁰ One of the city's 9–14 early college schools—High School for Health, Education and Research Occupations (HERO)—is located in the South Bronx. Outcomes for students attending these two schools are not yet available (see appendix B).

The student bodies of CTE high schools in the South Bronx are at least 90 percent black or Latino; in addition, many of these schools enroll significant numbers of English-language learners and students with disabilities.²¹ Black and Latino students, especially male ones, have higher graduation and college readiness rates at CTE schools than at other public schools.²² The promising outcomes for black and Latino young people at CTE schools indicate the need for greater investment in CTE-like education more broadly in the South Bronx, where the majority of young people are black or Latino.

Big Picture Learning

Big Picture Learning operates 60 schools throughout the nation, including three schools in the Bronx, that engage ninth- to twelfth-grade students in work-based learning programs that culminate in internships for all eleventh- and twelfth-grade students. The Big Picture Learning model has also seen positive results with student bodies that are demographically similar to the South Bronx. A study of graduates from a sample of Big Picture Learning high schools found that 74 percent of graduates enrolled in college within one year of graduation; 84 percent of those who enrolled in college persisted to their second year; and 74 percent of those who were working and not in school reported securing employment through their high school internship.²³

Boston Private Industry Council

The Boston Private Industry Council, or Boston PIC, is the workforce development board and school-to-career intermediary for Boston, Massachusetts. It works with the K–12 system and employers to connect young adults to education and employment in high-demand industries throughout the city. Boston PIC oversees the one-stop career centers in the city and runs programs for in-school career exploration, summer employment, and year-round internships, as well as programs for out-of-school, out-of-work young adults. Boston PIC also

runs a program to better transition high school seniors into post-secondary and career activities. It integrates its school-based career exploration and internship services with its one-stop career services and partners with community-based organizations, colleges, and employers to provide students with a range of supports and pathway opportunities. Boston PIC's activities range from preparing students for traditional college and career opportunities to preparing them for alternative education, training, and development programs. Employers rely on Boston PIC to build their own talent pipelines and to offer high school and college students work-based learning opportunities within their workplaces.

Linked Learning

Another model is Linked Learning Certified Pathways in California, which combines advanced academics with CTE and work-based learning strategies. A six-year evaluation of this model found that students in the program had higher graduation and college readiness rates, higher credit accumulation rates, and lower dropout rates than their peers at traditional high schools.²⁴ Like the New York City CTE outcomes, these positive outcomes were even more pronounced for black and Latino students.

NAF

NAF, which opened its first academy in Brooklyn in 1982 and now operates 483 academies in public high schools throughout the nation, offers students robust career readiness programs in finance, health sciences, hospitality and tourism, information technology, and engineering. More than 65 percent of NAF students are black or Latino, and 63 percent are from low-income homes.²⁵ The model's success in college and career preparation is evident: 97 percent of NAF seniors graduate; 52 percent of its graduates earn bachelor's degrees within four years; and 85 percent of its five- and ten-year alumni work in a professional field.²⁶

Pathways to Prosperity

Pathways to Prosperity is a network of states that collaborate with Jobs for the Future and the Harvard Graduate School of Education to build state-wide career pathways that better connect K–12 schools, colleges, and employers. These pathways are designed to increase students' success and to build prosperous state and regional labor markets. Working alongside Jobs for the Future and the Harvard Graduate School of Education, leaders in the network's 13 member states and regions (Arizona, California, Delaware, Georgia, Illinois, Maine, Minnesota, Missouri, New York City, Ohio, Tennessee, Texas, and Wisconsin) complete customized strategic plans, develop policy agendas, complete asset mapping reports, develop employment pathways in promising industries, and create fundraising and marketing plans for sustainability. A core component of the Pathways to Prosperity framework is work-based learning opportunities that connect businesses with educators and students. In its report *Not As Hard As You Think: Engaging High School Students in Work-Based Learning*, Pathways to Prosperity details the benefits of work-based learning for both students and businesses and describes specific ways that employers can engage with K–12 schools and colleges.²⁷ The report also includes case studies from different Pathways to Prosperity member states and describes how state leaders are working across public, private, and nonprofit systems to build employment experiences for students, improve business outcomes for participating employers, and encourage economic growth within their states.

LOCAL ECONOMIC DEVELOPMENT

The Bronx has experienced significant economic development over the past ten years, notably in the establishment of facilities hosting retail and office spaces. These include the Bronx Terminal Market,²⁸ the Hutchinson Metro Center,²⁹ Fordham Plaza,³⁰ and Hunts Point markets.³¹ In February 2015, Mayor de Blasio announced the Lower Concourse Infrastructure Initiative, a \$200 million investment led by the NYC Economic Development Corporation that will result in jobs and more affordable housing.³²

In the past decade, private sector employment in the Bronx has grown by 7.7 percent—a higher rate than that of any other borough except Brooklyn.³³ The South Bronx has grown the most, boasting a 25 percent increase in new businesses between 2000 and 2011.³⁴ Despite this economic growth, however, the Bronx continues to suffer a high unemployment rate of 7.7 percent,³⁵ which is higher than city, state, and federal rates. Most of the 16,000 businesses in the Bronx are small businesses, with 80 percent employing ten or fewer individuals.³⁶ A significant number of these employers are in retail, food services, and healthcare.

EMPLOYMENT TRENDS AMONG YOUNG ADULTS

Nearly 5,000 of the roughly 28,000 employed young adult South Bronx residents work as retail salespeople or cashiers (figure 10). Those aged 16–18 work primarily in these two occupations, while those aged 19–24 also hold a notable number of jobs in healthcare. The most common jobs for 16- to 18-year-olds with less than a twelfth-grade education who live and work in the South Bronx are cashier, janitor, and retail salesperson, similar to New York City citywide trends (figure 11).

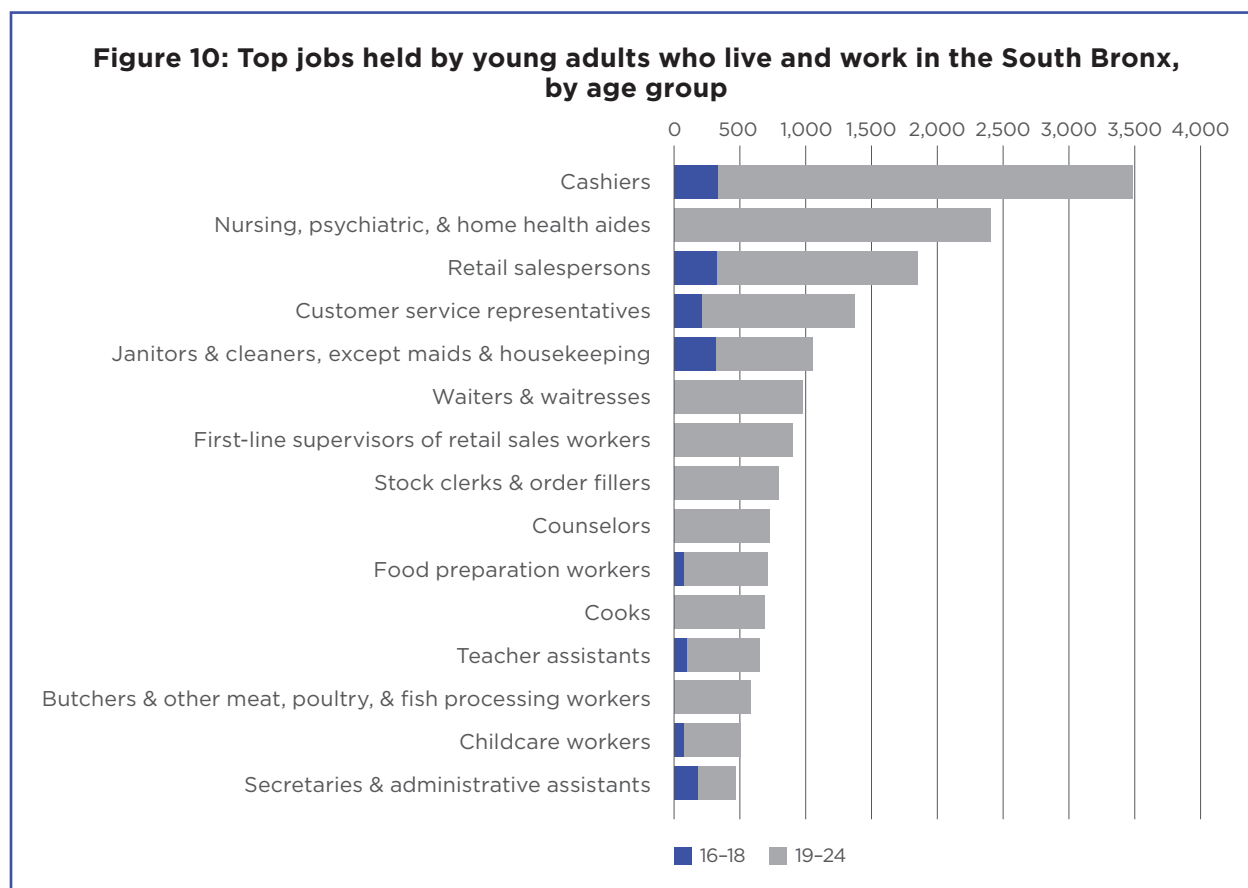
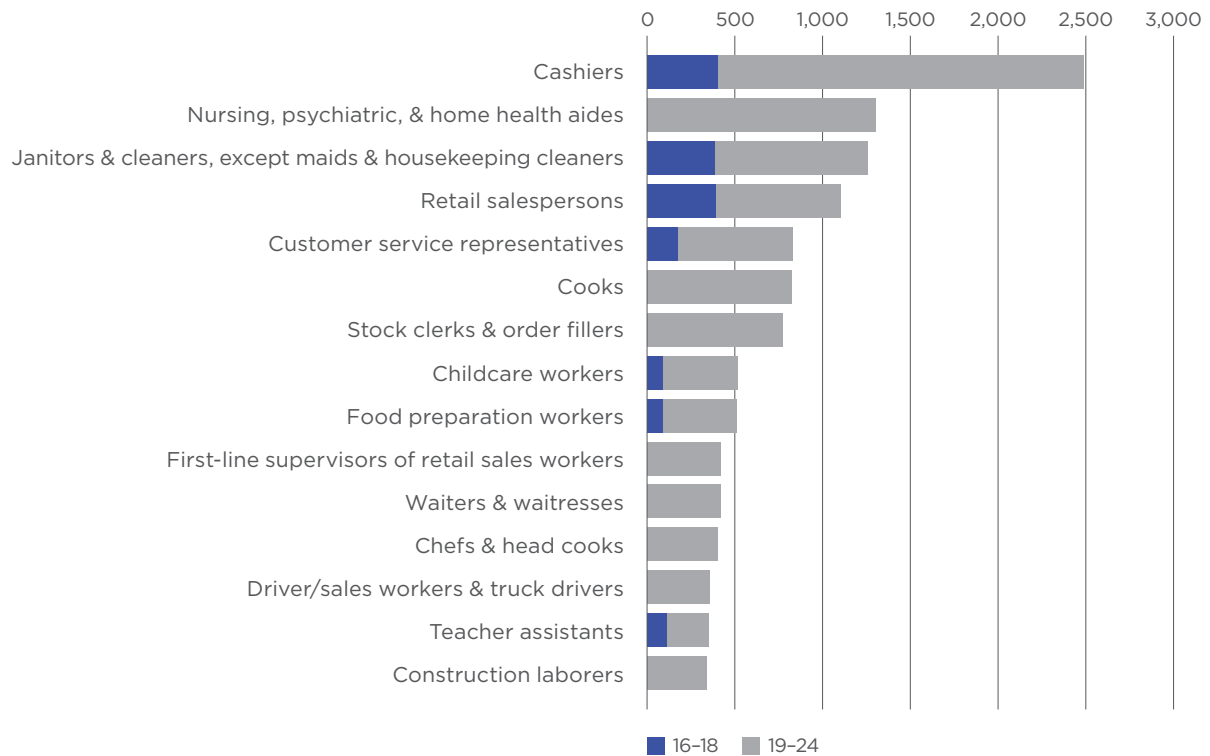


Figure 11: Top jobs held by young adults who have completed grade 12 or less who live and work in the South Bronx, by age group



YOUNG ADULTS WHO LIVE IN THE SOUTH BRONX: BOROUGH OF WORK

Of the 14,450 South Bronx 16- to 25-year-olds who are employed, 54 percent work in Manhattan (figure 12), as do 57 percent of the 8,305 young adults with a twelfth-grade education or less (figure 13).

Figure 12: Young adults who live in the South Bronx: Borough of work

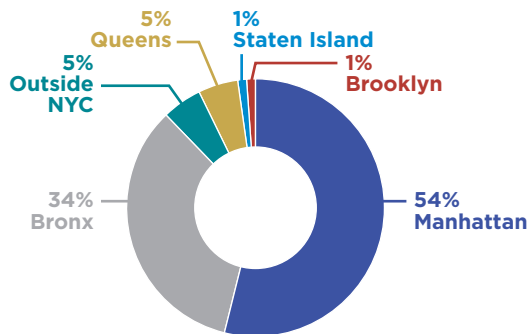
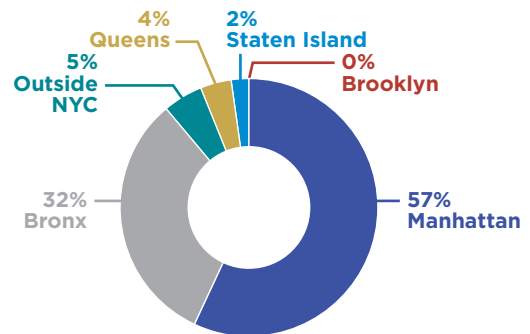


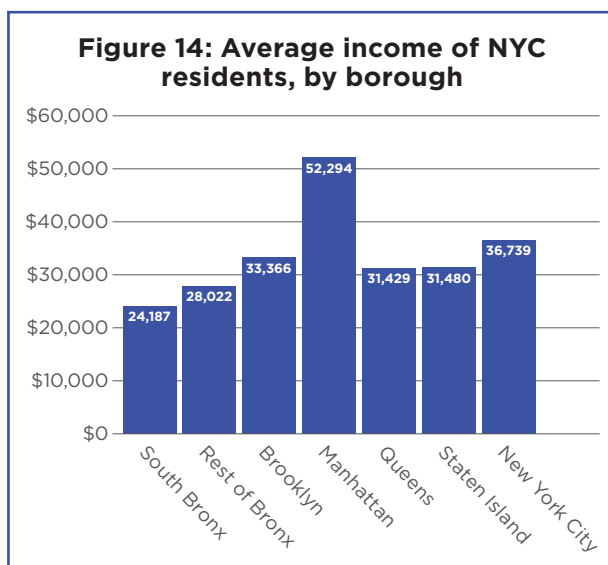
Figure 13: Young adults who have completed grade 12 or less who live in the South Bronx: Borough of work



Source: NYC Labor Market Information Service internal analysis of the 2014 American Community Survey one-year estimates

INCOME OF YOUNG ADULTS IN THE SOUTH BRONX

The mean salary for full-time 16- to 25-year-old workers in the South Bronx is significantly lower than in other parts of the city (figure 14).



EMPLOYMENT: TOP SECTORS AND EMPLOYERS

The Bronx is a largely residential borough, and the majority of its jobs are in the service industry.³⁷ Healthcare, retail, education, and social service jobs make up nearly half of all private sector jobs in the Bronx. In 2015, healthcare and social assistance employed almost a third of the borough's workers.³⁸ Nearly 8,000 businesses do business in or adjacent to the South Bronx.³⁹ Of these, more than 90 percent employ 100 or fewer individuals in small healthcare facilities, food services, retail services, government, social assistance, and manufacturing. Over 80 percent of businesses in the South Bronx neighborhoods of Hunts Point and Mott Haven employ 50 or fewer individuals.⁴⁰

AMBULATORY HEALTHCARE AND SOCIAL ASSISTANCE: TOP BRONX SUBSECTORS

The employment subsectors that grew the most during 2010–2014 and the largest job-growth subsectors in the Bronx are ambulatory healthcare and social assistance. Between 2010 and 2014, the ambulatory healthcare workforce grew by over 4,000, or 10 percent (table 1). Ambulatory healthcare services are outpatient service care and facilities that do not require overnight stays at hospitals and primarily occur in medical offices, medical diagnostic laboratories, dental offices, home care facilities, outpatient centers, and clinics.⁴¹ There are 264 businesses in the ambulatory healthcare services subsector in the Bronx, although about 83 percent of them employ 50 or fewer staff. The subsector encompasses a wide range of jobs, including registered nurses, medical assistants, medical secretaries, licensed practical and licensed vocational nurses, and medical and health services managers. During the same period, the social assistance subsector added 3,770 jobs. Jobs in this sector include those in child day care services and individual and family counseling.⁴²

Table 1: Sectors and subsectors in the Bronx that grew by more than 1,000 jobs during 2010–2014

Sector/subsector	Number of employees in 2010	Change during 2010–2014
Ambulatory healthcare services	16,930	+4,054
Social assistance	21,820	+3,770
Food and beverage services	12,424	+2,858
Hospitals	24,217	+2,422
Food and beverage stores	8,523	+1,699
Educational services	13,819	+1,559
State government	2,221	+1,277
General merchandise stores	3,822	+1,211
Specialty trade contractors	6,648	+1,209

HOSPITALS AND SOCIAL ASSISTANCE: LARGEST BRONX EMPLOYERS

For employers with large numbers of employees, the top subsector growth areas are hospitals, which added over 2,000 jobs between 2010 and 2014, and social assistance (table 2). New York State Department of Labor long-term industry projections predict that between 2014-2015, healthcare and social assistance jobs will increase by 21.8 percent, including 39 percent in ambulatory healthcare services and 23.8 percent in nursing and residential care facilities.⁴³ Similarly, the Department predicts that from 2012-2022, healthcare and social assistance jobs in New York City will increase by 22.5 percent, including 41 percent in ambulatory healthcare services and 18 percent in nursing and residential care facilities.⁴⁴

Table 2: Sectors and subsectors in the Bronx that grew the most during 2010–2014: Largest employers

Sector/subsector	Number of employees in 2010	Change during 2010–2014
Hospitals	24,217	+2,422
Social assistance	21,820	+3,770
Ambulatory healthcare services	16,930	+4,054
Nursing and residential care	18,699	-971
Educational services	13,819	+1,559
Food and beverage services	12,424	+2,858
Local government	12,947	-274
Food and beverage stores	8,523	+1,699
Real estate	8,834	+26

A SHIFT IN HEALTHCARE ROLES AND TITLES

Since 2011, a shift in the focus of the healthcare system has led to calls for innovative care delivery models focused on patient-centered medical homes, accountable care organizations, and health homes.⁴⁵ This shift encourages a broader, team-based approach and has resulted in new job titles across healthcare subsectors (for example, care coordinators, patient navigators, and community health workers); many of these job titles are not included in current healthcare classifications, making it difficult to accurately count all the emerging jobs in these subsectors. Moreover, classifying and tallying these new jobs is difficult because some of their associated responsibilities can be performed by other occupations, such as registered nurses. On top of this shift are technological efficiencies in the administration of healthcare services that have helped streamline processes.⁴⁶ These changes in healthcare delivery have led to some services being moved out of facilities like hospitals and nursing care facilities, which can affect overall employment within those structures, but not necessarily the institutions as a whole, as many of them have ties to the newly developed healthcare service delivery mechanisms. Some patients with chronic medical issues can now receive coordinated care through a health home collaborative (instead of at hospitals or nursing care facilities), which works with a network of health providers to manage healthcare in patients' homes.⁴⁷

LARGEST BRONX EMPLOYERS: HOSPITALS

The top large-scale employers in the Bronx (businesses with 1,000 employees or more) are concentrated in the healthcare sector (table 3). Montefiore Medical System is the largest employer in the Bronx, with more than 24,000 employees and six hospitals.⁴⁸

Table 3: Largest hospital subsector businesses in the Bronx

Business	Number of employees*
Montefiore Medical Center	6,000
Jacobi Medical Center	4,000
Veterans Health Administration	2,000
North Central Bronx Hospital	2,000
Bronx Lebanon Hospital Center	2,000
Saint Barnabas Hospital	1,500
Lincoln Medical Center	1,453

Source: National Establishment Time-Series Database, 2012

* The number of employees is based on those who work in neighborhoods and zip codes in or adjacent to the South Bronx. In addition, many of the hospitals listed here actually employ larger numbers of people in the Bronx than noted in this column. In some instances, it was difficult to discern the exact number of workers located in or adjacent to the South Bronx, since employees are not disaggregated by location.

LARGEST BRONX EMPLOYERS: AMBULATORY HEALTHCARE

The majority of employers in this sector employ 100 or fewer employees and include a wide range of healthcare facilities. There are 13 ambulatory healthcare businesses in the South Bronx that employ more than 100 employees (table 4).

Table 4: Largest ambulatory healthcare subsector businesses in the Bronx

Business	Number of employees*
Montefiore Medical Group	6,194
Physician Affiliate Group of New York	2,000
New York City Health Hospitals Corporation	1,000
Cooperative Homecare Associates	800
Puerto Rican Home Attendant Services	450
Senior Care Emergency	350
Downtown Bronx Medical Associates	318
Morris Heights Health Center	300
City of New York	300
Urban Health Plan	250
D & J Service	200
Citywide Mobile Response	175
New York Eye Surgery Associates	125

Source: National Establishment Time-Series Database, 2012

* The number of employees is based on those who work in neighborhoods and zip codes in or adjacent to the South Bronx.

LARGEST BRONX EMPLOYERS: HEALTHCARE AND SOCIAL ASSISTANCE

Large healthcare and social assistance employers in the Bronx range from those with 100 employees to those with more than 1,500 employees. Their facilities provide a spectrum of services, from those that provide medical care exclusively to those that provide healthcare and social assistance and, finally, to those that provide only social assistance (table 5).

Table 5: Largest social assistance subsector businesses in the Bronx

Business	Number of employees*
IHS Dialysis	1,525
Cooperative Homecare Associates	800
Children's Aid Society	747
Phipps	594
The City of New York	590
Alliance Homecare Services	420
Bronxworks	342
Basic Housing	200
Olangi Wosho Foundation	200
United Oddfellow Housing	200
Riverdale YM-YWCA	150
Forest Neighborhood Housing	140
Family Support System	120
Tolentine-Zeiser Community Life Center	112
Sharon Baptist Church	102
New York League for Early Learning	100
Food Bank of New York City	100

Source: National Establishment Time-Series Database, 2012

* The number of employees is based on those who work in neighborhoods and zip codes in or adjacent to the South Bronx.

LARGEST NYC EMPLOYERS: FOOD AND BEVERAGE AND PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES

Compared to the South Bronx, the top growth sectors in New York City are food and beverage services and professional, scientific, and technical services (table 6). Across the city, the healthcare and social assistance subsectors experienced notable growth during 2010–2014 (particularly in ambulatory healthcare), adding over 44,000 jobs. Meanwhile, for the largest employers in New York City—those with more than 100,000 employees—the top subsector growth during this period was food and beverage services, which added 64,502 jobs, followed by professional, scientific, and technical services, which added 53,512 jobs, followed by ambulatory healthcare services, which added 44,437 jobs. In the wake of the Affordable Care Act, which has led to more people being insured, there is an increased demand for high-quality, cost-effective care; this demand has spurred the growth of ambulatory healthcare services. In New York State, between 1990 and 2012, employment in ambulatory healthcare services increased by 80 percent (an increase of more than 140,000 jobs).⁴⁹

Table 6: Sector and subsector growth in NYC, 2010–2014: Largest employers

Sector/subsector	Number of employees in 2010	Change during 2010–2014
Local government	449,705	-1,825
Professional, scientific, and technical services	310,990	+53,512
Food and beverage	209,172	+64,502
Ambulatory healthcare	178,901	+44,437
Administrative/support	175,272	+23,522
Social assistance	162,477	+9,699
Securities, commodity contracts, financial investment, and related activities	161,685	+3,594
Hospitals	154,207	+10,590
Educational services	142,425	+19,816
Real estate	107,114	+5,140

BRONX INDUSTRIES THAT GREW BY MORE THAN 1,000 JOBS DURING 2011–2015

In the Bronx, the education subsector showed significant growth in elementary and secondary schools, which grew from 5,779 jobs in 2011 to 32,080 jobs in 2015 (table 7). It is worth noting that reporting practices for these entities have changed over the last year. Before, the school system reported employment rates from its central office, making employment appear concentrated in Manhattan even though it was spread out across the five boroughs. New reporting practices disaggregate employment numbers by borough, providing more accurate by-borough estimates for job numbers in the industry.⁵⁰ This change in reporting, however, creates an artificial appearance of staggering growth in the Bronx during the past two years due to the fact that the new data includes non-new jobs in addition to newly created jobs. Home healthcare services added the third largest number of jobs and included a wide range of job titles both within the ambulatory healthcare subsector and across the healthcare sector as a whole.

Table 7: Top subsector growth in the Bronx, 2011–2015

Subsector	Number of employees in 2011	Change during 2011–2015
Elementary and secondary schools	5,779	+32,080
Justice, public order, and safety	1,742	+10,808
Home healthcare services	7,313	+4,277
Restaurants and other eating places	9,537	+3,495
Individual and family services	16,275	+3,068
Grocery stores	6,823	+1,276
Grocery and related product wholesale	5,299	+1,228
Building equipment contractors	3,530	+1,188

LARGEST BRONX EMPLOYERS: PRIVATE AND PUBLIC EDUCATION

The education sector includes both private and public employees within colleges, K–12 schools, and related school administrations (table 8). The NYC Department of Education employs about 39,000 employees; however, this data accounts for several districts in the Bronx, and, as noted above, new reporting practices may create the illusion of new staff being hired.

Table 8: Largest education sector businesses in the Bronx

Business	Number of employees*
NYC Department of Education	39,075
Community School District 8	2,000
Fordham University	2,943
Bronx Community College	1,991
Eugenio Maria de Hostos College	1,200
Herbert Lehman College	1,000
Manhattan College	600
Yeshiva University	668
College of St. Vincent	350

Source: National Establishment Time-Series Database, 2012

* The number of employees is based on those who work in neighborhoods and zip codes in or adjacent to the South Bronx.

LARGEST BRONX EMPLOYERS: GOVERNMENT (NON-EDUCATION), PRIVATE SECTOR (NON-HEALTHCARE), AND NONPROFITS

The government is a major employer in the South Bronx, while large private sector employers play a smaller role. One significant nonprofit in the Bronx is the Wildlife Conservation Society, which is also one of the largest seasonal employers of young adults in New York City (table 9). Each year, it employs more than 1,000 seasonal employees at the Bronx Zoo, Central Park Zoo, Prospect Park Zoo, Queens Zoo, and New York Aquarium.⁵¹

Table 9: Largest government and nonprofit sector businesses in the Bronx

Business	Number of employees*
United States Postal Service	2,000
Wildlife Conservation Society	1,600
Public Employees Federation	1,400
MC2 Security	1,200
Amboy Bus Services	1,000
Consolidated Edison	1,000

Source: National Establishment Time-Series Database, 2012

* The number of employees is based on those who work in neighborhoods and zip codes in or adjacent to the South Bronx.

BRONX-BASED EMPLOYER AND EMPLOYER INTERMEDIARY INTERVIEW OUTCOMES: EXPERIENCES WORKING WITH 16- TO 25-YEAR-OLDS

We spoke with several Bronx-based employers and employer intermediaries. Employers engage at varying levels with South Bronx's young adults through relationships with colleges, nonprofits, and high schools. We received the following responses, categorized by employer type:

- Healthcare and social service providers: Several employers currently work with colleges and offer internship opportunities.
- Geriatric care centers: Many providers did not know if their client population was appropriate for young workers or interns but wanted to learn more.
- Business improvement districts: None were able to identify any youth-focused activities, but they expressed interest in serving as mentors to young adults and in working with workforce intermediaries.
- Career and technical education partnerships: The larger employers who are engaged with high schools partner with individual schools through CTE programs.
- Employers that partner with public sector internships: Some of the employers offer 11-week, paid internships through the Department of Youth and Community Development's Young Adult Internship Program. The majority of these employers were in the healthcare and social assistance sector.

PROMISING SECTORS AND SUBSECTORS

There are several opportunities to further explore the potential development of targeted engagement and training with employers doing business in or adjacent to the South Bronx. Further, many of the sector and industry growth areas identified earlier have also grown significantly across the city as a whole, which presents the opportunity for trained individuals to seek employment throughout the five boroughs. The sectors and subsectors that show the most promise are ambulatory healthcare services, social assistance, and government and education. Other notable sectors to explore are computer and information technology, finance and insurance, and professional, scientific, and technical services, which are experiencing moderate job growth throughout the city and have higher entry-level wages. These sectors have a wide range of entry-level jobs that are ideal for younger workers.

AMBULATORY HEALTHCARE SERVICES SUBSECTOR

Ambulatory healthcare is a promising subsector for young adults living in the South Bronx. In addition to being the fastest-growing subsector in the Bronx, it is growing quickly throughout the city's other four boroughs.⁵² Many jobs in this subsector have promising opportunities for advancement, as well as robust growth projections over the next ten years. Several occupations have an average hourly pay of \$14.35 to \$24.11 and require only non-degree, post-secondary education.⁵³

SOCIAL ASSISTANCE SUBSECTOR

The social assistance subsector is the third-largest-growing subsector in the South Bronx. Social assistance occupations are often found in healthcare settings, such as clinics and hospitals, as well as other settings where clients receive medical and social services. The South Bronx is home to a significant number of social assistance businesses with 100 or more employees, and the subsector has strong projected job growth. Job titles within this subsector include counselor, social worker, and social and human service assistant.

GOVERNMENT AND EDUCATION SECTORS

Employment in these two sectors, which are often closely related, has increased over time in the South Bronx. Jobs in elementary and secondary schools appear to have increased significantly between 2011 and 2015, growing from over 5,000 to over 30,000. While some of this perceived growth is due to changes in the NYC Department of Education's reporting practices, the increase is significant enough to warrant a closer examination of which areas of employment may be receptive to younger workers and require only short-term training. The projected growth of specific occupations in these sectors, which are typically unionized with higher pay, merits further exploration.

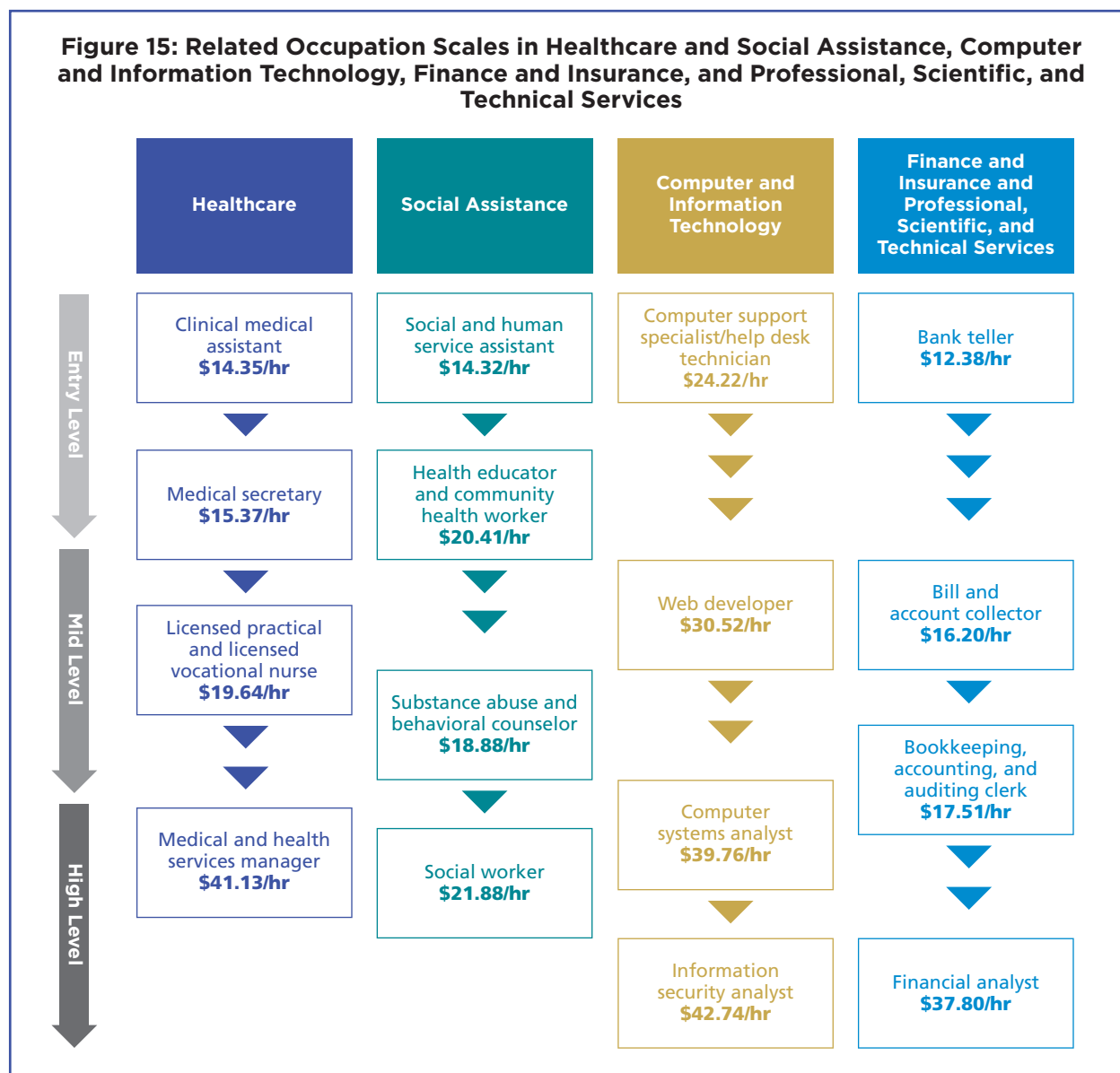
COMPUTER AND INFORMATION TECHNOLOGY SECTOR

All employment indicators project growth in the information technology sector throughout New York City. In 2014, the New York State Comptroller's Office released a report stating that high-tech jobs were growing at a rate of 33 percent—four times faster than jobs in other areas of the city's economy (which were growing at a rate of 8 percent).⁵⁴ Computer and information technology jobs have continued to increase since then, and initiatives such as the newly expanded NYC Tech Talent Pipeline help New Yorkers throughout the city access jobs in the rapidly growing tech industry.⁵⁵ Entry-level jobs in this sector include computer support specialists and help desk technicians.

FINANCE AND INSURANCE AND PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES SECTORS

There are promising entry-level opportunities and career pathways in the finance and insurance and professional, scientific, and technical services sectors. While we recommend a closer examination of the opportunities in these sectors and their viability for younger and lower-skilled workers, these sectors include many entry-level jobs with living-wage pay and opportunities for advancement. Examples include bank tellers, brokerage clerks, and bill and account collectors. Lucrative opportunities in these sectors are plentiful throughout New York City, where professional, scientific, and technical services is the largest sector, with an annual wage almost 44 percent above the citywide average. Moreover, this sector is projected to grow by 28 percent through 2022.⁵⁶

Figure 15: Related Occupation Scales in Healthcare and Social Assistance, Computer and Information Technology, Finance and Insurance, and Professional, Scientific, and Technical Services



RECOMMENDATIONS:

PROMISING OPPORTUNITIES IN EDUCATION, TRAINING, AND WORKFORCE DEVELOPMENT

After analyzing demographic data on young adults, economic development and market conditions, and existing work-based learning and career preparation programs, we identified six strategies to better connect employers and young adults in the South Bronx. These six recommendations represent a system-wide approach that encompasses in-school (K–12, college) and out-of-school intervention strategies around career exploration, market-based training opportunities, and community-based organization supports, as well as post-secondary engagement that can help students make better educational and career choices that have a long-term impact on their economic prospects.

1. FOCUS CAREER READINESS AND EDUCATION EFFORTS ON GROWING EMPLOYMENT SECTORS AND SUBSECTORS

Healthcare and social assistance is the largest employment sector in the Bronx. It includes a wide range of occupations that require short-term training and shorter on-ramps, and that offer good starting wages and promising pathways to advancement. Computer and information technology, finance and insurance, and professional, scientific, and technical services are also promising sectors with growth potential in the South Bronx. Training for many of the entry-level occupations in each of these sectors is offered at schools and nonprofits. Moreover, the city-funded industry partnerships should map additional training opportunities by sector to increase young people’s access to education and employment in in-demand sectors. These efforts should include robust feedback loops between educators, employers, employer associations, and other business stakeholders to develop and improve curricula and identify learning opportunities.

Healthcare and Social Assistance

Table 10.1: Health care occupation opportunities with educational requirements, wages, and relevant training options

Healthcare		
Occupation	Educational requirement	Average wage
Clinical medical assistant	Post-secondary (non-degree)	\$14.35/hr
Medical secretary	Post-secondary (non-degree)	\$15.37/hr
Licensed practical and licensed vocational nurse	Post-secondary (non-degree)	\$19.64/hr
Medical and health services manager	Bachelor’s degree	\$41.13/hr

Relevant certificate and degree programs:

Bronx Community College

Licensed Practical Nurse Certificate; AAS Medical Lab Technician; AAS Medical Office Assistant; AAS Nursing

Hostos Community College

CNA Certificate; Clinical Medical Assistant Certificate; Medical Billing and Coding Certificate; Practical Nursing Certificate; Medical Office Manager Certificate; AAS Nursing; AAS Office Technology

Borough of Manhattan Community College

Health Informatics Certificate

Table 10.2: Largest Bronx Employers in the Hospital and Ambulatory Care Subsectors

Hospitals	
Employers	Number of employees
Montefiore Medical Center	6,000
Jacobi Medical Center	4,000
Veterans Health Administration	2,000
North Central Bronx Hospital	2,000
Bronx Lebanon Hospital Center	2,000
Saint Barnabas Hospital	1,500
Lincoln Medical Center	1,453
Calvary	700

Ambulatory Healthcare	
Employers	Number of employees
Montefiore Medical Group	6,194
Physician Affiliate Group NY	2,000
New York City Health Hospitals Corporation	1,000
Cooperative Homecare Associates	800
Puerto Rican Home Attendants	450
Senior Care Emergency	350
Downtown Bronx Medical Associates	318
Morris Heights Health Center	300
City of New York	300
Urban Health Plan	250
D & J Service	200
Citywide Mobile Response	175
New York Eye Surgery Associates	125

Table 11.1: Social Assistance occupation opportunities with educational requirements, wages, and relevant training options

Social Assistance		
Occupation	Educational requirement	Average wage
Social and human service assistant	High school diploma/equivalent	\$14.32/hr
Health educator and community health worker	High school diploma/equivalent	\$20.41/hr
Substance abuse and behavioral counselor	Bachelor's degree	\$18.88/hr
Social worker	Bachelor's degree	\$21.88/hr

Relevant certificate and degree programs:

Bronx Community College

Community Health Certificate; AS Community Health Education; AA Human Services; AAS Human Services; AAS Office Administration and Technology

Hostos Community College

Case Management Certificate; Administrative Assistant Certificate; AS Community Health; AAS Aging and Health Studies; AAS Public Administration

Table 11.2: Largest Bronx Employers in the Social Assistance Subsector

Employers	Number of employees
Cooperative Homecare Associates	800
Children's Aid Society	747
Phipps	594
The City of New York	590
Alliance Homecare Services	420
Bronxworks	342
Basic Housing	200
Olangi Wosho Foundation	200
United Oddfellow Housing	200
Food Bank of New York City	199
Riverdale YM-YWCA	150
Forest Neighborhood Housing	140
Family Support System	120
Tolentine-Zeiser Community Life Center	112
Sharon Baptist Church	102
New York League for Early Learning	100

High schools, community colleges, and nonprofits in or close to the South Bronx offer a range of training options for healthcare and social assistance jobs. Examples include the 9–14 early college CTE schools, which have partnerships with colleges and employers and offer students associate's degrees and work-based learning opportunities in addition to their high school diploma. In New York City, there are seven such schools, including the High School for Health, Education, Research Occupations (HERO), which is located in the South Bronx. This high school partners with Montefiore Medical System and Hostos Community College to train students for jobs in several areas of healthcare, including community healthcare and nursing.

There are other existing examples of healthcare and social assistance training in the Bronx, where nonprofits, employers, and colleges are working collaboratively to develop the next generation of healthcare workers. One example is the Phipps Career Network, a member of JobsFirstNYC’s Young Adult Sectoral Employment Partnership. Phipps Career Network is a partnership between Hostos Community College, Phipps Neighborhood (a nonprofit organization), and Montefiore Medical System to train and employ young adults who are out of school and out of work for a wide array of jobs within Montefiore. Hostos Community College also partners with The Door through a bridge program that trains out-of-school, out-of-work young adults for emergency medical technician jobs.

Computer and Information Technology

Table 12.1: Computer and Information Technology occupation opportunities with educational requirements, wages, and relevant training options

Computer and Information Technology		
Occupation	Educational requirement	Average wage
Computer support specialist/help desk technician	Post-secondary (non-degree)— Bachelor’s degree	\$24.22/hr
Web developer	Associate’s degree	\$30.52/hr
Computer systems analyst	Bachelor’s degree	\$39.76/hr
Software developer	Bachelor’s degree	\$47.11/hr
Information security analyst	Bachelor’s degree	\$42.74/hr

Relevant certificate and degree programs:

Bronx Community College

AS Business Admin: Computer Programming; AS Computer Science; AAS Computer Information Systems (2 tracks); AAS Digital Arts (2 tracks)

Hostos Community College

CompTIA A+ Certifications; AAS Digital Design and Animation

Additional bridge and certification resources

New York Public Library TechConnect; Per Scholas IT Support; software testing, quality assurance, and engineering programs

Table 12.2: Largest Bronx Employers in Computer and Information Technology Sector

Employers	Number of employees
The City University of New York	507
Cellco Partnership	436
The New York Public Library	435
AT&T Corporation	397
Research Foundation for the State University of New York	300
T-Mobile USA	170
Verizon Communications	105

The computer and information technology sector in the Bronx spans multiple industries, which makes accurately capturing information on all available jobs difficult. However, there are several initiatives in the Bronx working to prepare young adults for the many jobs in this sector. For example, StartUp Box South Bronx is a social enterprise that trains South Bronx residents in software quality assurance and helps them land jobs testing games and other software.

Another local initiative is the New York Public Library’s TechConnect program, which offers more than 80 free programs in computer technology in the Bronx, Manhattan, and Staten Island. The Tremont library branch also offers a free ten-week introduction to coding. Additionally, the Bronx Academy for Software Engineering opened in 2013 to provide computer science and software engineering training to students, and the Bronx High School of Science offers classes in computer game programming and Android app development.

Finally, two premiere Bronx nonprofits, Per Scholas and the Knowledge House, are working with Hostos Community College to develop pathways into technology jobs for out-of-school, out-of-work young adults. Per Scholas will offer students training on software installation, maintenance and troubleshooting, and network certification; the Knowledge House will offer training on front-end and back-end development, HTML, CSS, JavaScript, and Python; and Hostos will offer quality assurance software testing, user research, and user-centered design. This partnership, known as the Bronx Digital Pipeline, engages employer partners from Per Scholas’s robust employer network, including Barclays, Intersection, TEKsystems, JetBlue, and Hackerati.

Finance and Insurance and Professional, Scientific, and Technical Services

Table 13.1: Finance and Insurance and Professional, Scientific, and Technical Services occupation opportunities with educational requirements, wages, and relevant training options

Finance and Insurance and Professional, Scientific, and Technical Services		
Occupation	Educational requirement	Average wage
Bank teller	High school diploma/equivalent	\$12.38/hr
Bill and account collector	Post-secondary (non-degree)— Associate’s degree	\$16.20/hr
Bookkeeping, accounting, and auditing clerk	Post-secondary (non-degree)— Associate’s degree	\$17.51/hr
Financial consultant	Bachelor’s degree	\$38.97/hr
Financial analyst	Bachelor’s degree	\$37.80/hr

Relevant certificate and degree programs:

Bronx Community College

AS Business Admin: Accounting; AAS Accounting

Hostos Community College

AS Accounting; AAS Accounting

Borough of Manhattan Community College

Accounting Certificate

Table 13.2: Largest Bronx Employers in the Finance and Insurance and Professional, Scientific, and Technical Services Sectors

Employers	Number of employees
H&R Block	570
JPMorgan Chase Bank	366
Emigrant Savings Bank	236
Citibank	131
Capital One	104
Ponce De Leon Federal Savings Bank	81
Bank of America	75
Amalgamated Bank	62
Howard Security	60
Alvarez Tax	25
Jackson Hewitt Tax Service	20
Mr. Income Tax	20
Yeshiva University	15

Finance and insurance and professional, scientific, and technical services are two of the largest sectors in New York City. There are several New York City public schools that specialize in financial-related education, including the High School of Economics and Finance in Manhattan, Fordham Leadership Academy for Business and Technology in the Bronx, and the Bronx School of Law and Finance.

In 2007, Capital One partnered with the Fordham Leadership Academy for Business and Technology to open its first student-run bank branch in the nation. The branch employs ten to twelve high school seniors who train to work as tellers and complete financial education courses. In addition, Capital One provides the students with mentoring from bank professionals, career readiness courses, and college prep workshops. Since then, Capital One has opened additional student-run branches in New Jersey, Maryland, and Harlem.

The High School of Economics and Finance partners with dozens of public, nonprofit, and private employers, including several large banks, such as JPMorgan Chase, Citigroup, and Merrill Lynch. The Bronx School of Law and Science partners with Barnard College and Columbia University to develop its curriculum.

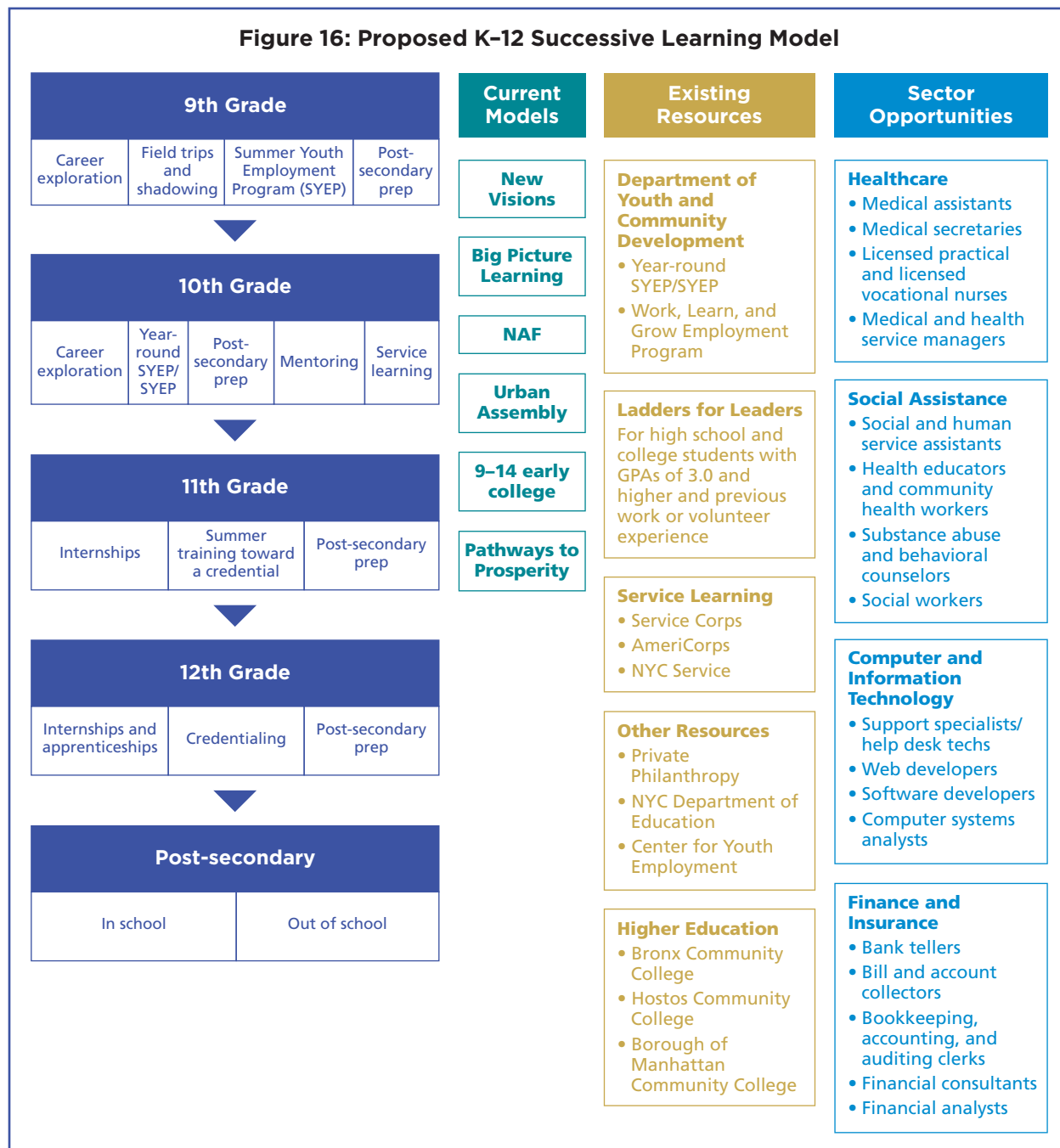
Finally, JPMorgan Chase is partnering with the Stella and Charles Guttman Community College to offer part-time employment and professional development opportunities to Guttman students while they work towards degrees. Students in the program participate in a four-week Teller training and then begin work as part-time Chase bank tellers while earning their Associate's or Bachelor's degrees. After completing the program, students are eligible for full-time Chase positions and primed for a plethora of personal banking careers.

2. INVEST IN SUCCESSIVE LEARNING MODELS

A system-wide work-based learning model that includes in-school young adults should start at ninth grade in order to generate a long-term impact on students' opportunities and choices for their careers and post-secondary options. During our research, we found that a successful element of work-based learning models within schools is a successive learning strategy, such as the one described in figure 16. Such a strategy helps students gain familiarity with college and career options; learn academic concepts through real-world application; and build on experiences over time in order to make informed choices about careers and post-secondary education and training options.⁵⁷

Given the limited pool of available resources, aligning existing public and private programs and funding in New York City could result in young adults being able to access greater resources to widen their learning experiences and post-secondary choices. Figure 16 highlights a ninth- to twelfth-grade engagement strategy that leverages existing public and private resources to provide more comprehensive services to young adults.

One example of a successive learning model is the New Ways to Work Career Development Continuum. New Ways to Work is a California-based consulting and training organization that develops partnerships and programs to serve young adults. Its Career Development Continuum model prepares students for career success by starting with career awareness, moving on to career exploration, and culminating in career preparation. It embraces a broad continuum from early childhood through age 24 and includes school, workplace, family, and neighborhood activities and goals within each level of the continuum.

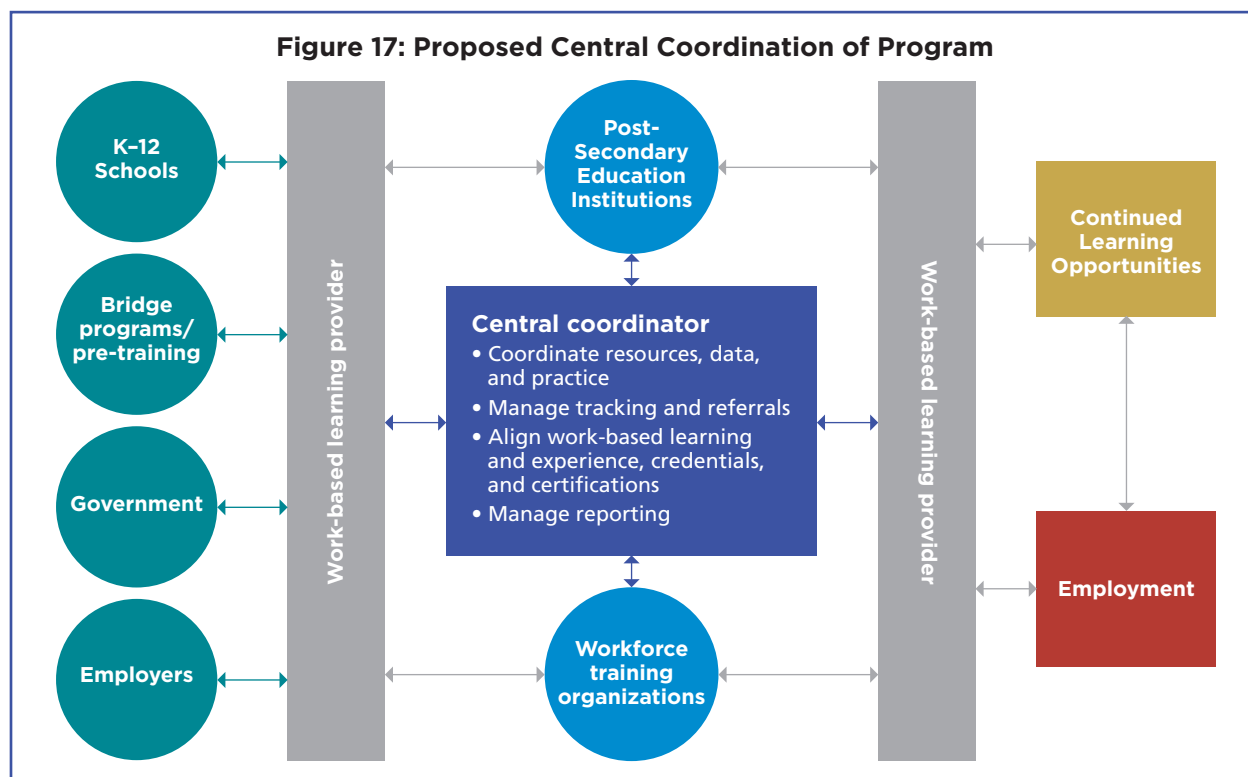


3. EFFECTIVELY COORDINATE WITH WORK-BASED LEARNING PROVIDERS AND PARTNERS

Given the importance of engaging young adults early on to improve long-term outcomes, K–12 schools should strategically partner with post-secondary institutions and community-based organizations to deliver market-demand skills training. These partnerships should be supported by a central coordinating mechanism that is responsible for synchronizing resources, data, and effective practices; tracking and referring among partners; aligning training programs with market demands and employment opportunities; sharing best practices with others in the field; and reporting on the partnership’s progress and impact (figure 17).

Currently, the South Bronx lacks an in-school central coordinating entity; however, a wide range of in-school, work-based service models, such as NAF, Big Picture Learning, and New Visions, operate programs in various Bronx schools. As we highlighted in our 2016 publication *Optimizing Talent: The Promise and the Perils of Adapting Sectoral Strategies for Young Workers*, successful strategies for preparing young adults for specific sectors and career pathways require structured partnering mechanisms.⁵⁸ Moreover, the 2015 Pathways to Prosperity report on work-based learning emphasizes the importance of organizing around a central, neutral intermediary to achieve cross-sector results in education and employment.⁵⁹ As the report states with regard to one case study, “both organizations view this [intermediary] work as essential to creating a foundation of community success across economic development, workforce development, and education.”⁶⁰

In our discussions with in-school, work-based learning providers, the most common elements for effective partnering were the following: ensuring that school leaders are fully involved in developing and implementing any work-based initiative; ensuring that the work-based initiative aligns with the school’s bureaucracy; selecting appropriate staff to bridge work-based strategies between teachers and students, as well as employers and the public sector; and securing both public and private sector employment champions. In order to execute a successful work-based school model with on-ramps to in-demand careers, schools need to develop broad cross-stakeholder partnerships within industry sectors that go beyond individual employer champions to include industry and sector-wide champions.⁶¹



4. ENGAGE BRONX-BASED EMPLOYERS

We recommend additional follow-up with local Bronx employers to assess their interest in collaborating with the public workforce system and K–12 schools. There is a vast network of small-, medium-, and large-sized employers in growth sectors of the economy that can be accessed to explore opportunities to create employer-school partnerships. Some of the larger Bronx-based hospitals (Montefiore and Lincoln) are currently members of partnerships with several colleges and community-based organizations to train younger workers and connect them to careers in the healthcare sector.

Partnering with a strong network of smaller employers could achieve positive results, especially if the partnerships are organized by sector to increase the collective demand and connect more young Bronx residents to employment.⁶² Because the majority of businesses in the Bronx are small businesses employing five or fewer people, a strategy of engaging them by sector or subsector would allow for businesses of all sizes to participate in larger-scale initiatives that could meet multiple employers' talent needs, while also connecting a significant amount of young people to work.

There are ample examples of successful community-wide employer engagement initiatives. These include the Detroit Employment Solutions Corporation, which works with a roster of employers to provide in-school and out-of-school students throughout Detroit with year-round work experience; the Owensboro Community and Technical College initiative entitled Meeting Educational Capacity through Higher Education Alternatives, which brought together manufacturing employers in Owensboro, Kentucky, to offer training and create career pathways for young and incumbent jobseekers in the region; and finally, in Minnesota, the Hennipen County Workforce Development Strategic Initiative, a county-led program that trains young and low-income workers for available jobs with one of Hennipen's largest employers that is experiencing increasing rates of retirement: the local government.

5. ALIGN ECONOMIC AND WORKFORCE DEVELOPMENT EFFORTS

Stakeholders working to connect young adults to employers in the South Bronx should create workforce initiatives that align with economic development activities in the borough. We recommend the creation of a partnership mechanism similar to LESEN.⁶³ Comprised of nine nonprofits and the local community board, LESEN focuses on short- and long-term workforce development and on aligning ongoing economic development and skills training programs to provide Lower East Side resident jobseekers the opportunities to fill new jobs that result from economic development in the neighborhood. LESEN works to ensure that new economic development initiatives result in jobs for residents of New York City's Lower East Side.

In 2007, the National Center for Higher Education Management Systems and the Western Interstate Commission for Higher Education worked with the Ford Foundation to publish a national study titled *The Emerging Policy Triangle: Economic Development, Workforce Development, and Education*. The study profiled the education and economic outcomes of all 50 states and urged states to align K–12, higher education, adult basic education, and workforce and economic development policies and practices in order to create more thriving economies. While some efforts have since emerged to connect education and workforce, more must be done to align these areas with economic development.

The South Bronx has a strong history of partnerships. Among them are the Bronx Opportunity Network, a college access collaborative of seven nonprofits working with community colleges to enroll more high needs students into college,⁶⁴ and South Bronx Rising Together, a community partnership that supports families and young adults in the South Bronx.⁶⁵ Looking ahead, a strong workforce partnership that leverages the resources of existing community partnerships and that incorporates economic development initiatives could help more young adults gain access to timely training for in-demand jobs.

6. INCORPORATE FINANCIAL CAPABILITY TO HELP YOUNG PEOPLE ACHIEVE ECONOMIC MOBILITY

Given the number of young adults working in low-wage jobs, any new effort to address the concerns of young, economically insecure residents in the Bronx should factor for the inclusion of financial security strategies in order to strengthen the financial capability of all young adults. The full spectrum of financial capability services are complex and evolving, but include at their core financial coaching, financial education, and direct financial services to help young people and their families overcome barriers to creating savings and building assets over time. As an accelerant to workforce and education outcomes, financial security strategies can notably help younger people working in lower wage jobs to improve their ability to financially stabilize in those jobs, articulate forward-looking financial goals, and create and retain savings and other assets over time.

While there are limited national examples of financial security strategy work being inclusive of young adult workforce and training, notably in the context of in-school programming, promising new examples are rapidly expanding. WorkBOOST NYC, a project of The Financial Clinic, recently established learning communities that include prominent young adult-facing workforce organizations that are integrating an array of strategies into their programs for younger participants. Early results of this work are showing positive impacts on the outcomes that young adult workforce organizations typically achieve.

CONCLUSION

JobsFirstNYC's mission is to leverage all available community, corporate, private, and public resources to accelerate the connection of out-of-school, out-of-work young adults with the economic life of New York City. Many of the South Bronx's young out-of-school, out-of-work residents include those who have left the K-12 and post-secondary systems either by dropping out or by graduating but failing to make meaningful connections to employment opportunities. We advocate a system-wide approach in the South Bronx that prevents in-school young adults from leaving school without first gaining employment experience and connections to job opportunities in in-demand sectors with family-sustaining wages, while simultaneously supporting young adults who are either underemployed or out of school and out of work.

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APPENDIX A:

NEW YORK CITY'S DEDICATED CAREER AND TECHNICAL EDUCATION HIGH SCHOOLS, 2016-2017

Borough	School
Bronx	Health, Education, and Research Occupations High School (HERO)
Bronx	Bronx Design and Construction Academy
Bronx	Alfred E. Smith Career and Technical Education High School
Bronx	School for Tourism and Hospitality
Bronx	Bronx Academy for Software Engineering (BASE)
Bronx	Crotona International High School
Bronx	High School for Energy and Technology
Bronx	High School of Computers and Technology
Brooklyn	George Westinghouse Career and Technical Education High School
Brooklyn	City Polytechnic High School of Engineering, Architecture, and Technology
Brooklyn	Williamsburg High School for Architecture and Design
Brooklyn	Automotive High School
Brooklyn	Pathways in Technology Early College High School (P-Tech)
Brooklyn	Clara Barton High School
Brooklyn	Academy for Health Careers
Brooklyn	High School for Innovation in Advertising and Media
Brooklyn	Transit Tech Career and Technical Education High School
Brooklyn	Academy of Innovative Technology
Brooklyn	W. H. Maxwell Career and Technical Education High School
Brooklyn	The Urban Assembly School for Collaborative Healthcare
Brooklyn	William E. Grady Career and Technical Education High School
Manhattan	The Urban Assembly School for Emergency Management
Manhattan	Stephen T. Mather Building Arts & Craftsmanship High School
Manhattan	Manhattan Early College School for Advertising
Manhattan	Urban Assembly Maker Academy
Manhattan	Food and Finance High School
Manhattan	Business of Sports School
Manhattan	Urban Assembly Gateway School for Technology
Manhattan	Union Square Academy for Health Sciences
Manhattan	Academy for Software Engineering
Manhattan	Urban Assembly New York Harbor School
Manhattan	The High School of Fashion Industries
Manhattan	Chelsea Career and Technical Education High School
Manhattan	Art and Design High School
Manhattan	The Urban Assembly School for Green Careers
Manhattan	The Urban Assembly School for Global Commerce
Manhattan	Inwood Early College for Health and Information Technologies
Queens	Queens Vocational and Technical High School
Queens	Aviation Career & Technical Education High School
Queens	Business Technology Early College High School
Queens	High School for Construction Trades, Engineering and Architecture
Queens	Thomas A. Edison Career and Technical Education High School
Queens	Institute for Health Professions at Cambria Heights
Queens	Benjamin Franklin High School for Finance & Information Technology
Queens	Energy Tech High School
Queens	Academy for Careers in Television and Film
Staten Island	Ralph R. McKee Career and Technical Education High School

APPENDIX B:

9-14 EARLY COLLEGE SCHOOLS



What is a P-Tech 9-14 School?



P-TECH is new school model developed to help close the gap between young people’s ambitions for college and careers and the specific skills needed by employers in high-growth industries. Over the course of six years, students in 9-14 P-TECH schools earn a high school diploma, an industry-recognized associate’s degree, and relevant work experience in a growing field.

- P-TECH 9-14 schools are small early college high schools and career and technical education schools, serving about 100 students in each grade.
- As of September 2015, **seven P-TECH 9-14 schools** served roughly **2,300** students.
- The schools are designed to prepare students for college and careers in **science, technology, engineering and math** disciplines.
- These redesigned high schools create a seamless program for students to acquire the academic, technical, and workplace skills that employers need.
- President Obama has praised this model as a “good example” of public-private partnerships, and has made funding available for replication.

School	Year Opened	Grade Level/ Student Enrollment	Employer Partner	College Partner	Target Majors
City Polytechnic High School of Engineering, Architecture, and Technology	2009 Redesigned 2015	9-13 473	CH2MHill/ Building Trades Employers Association	New York City College of Technology	Construction management, civil engineering, architecture
Pathways in Technology Early College High School (P-TECH)	2011	9-13 536	IBM	New York City College of Technology	Electromechanical engineering technology, computer information systems
Health, Education, and Research Occupations High School (HERO)	2013	9-11 364	Montefiore Medical Center	Hostos Community College	Nursing, community health
Energy Tech High School	2013	9-11 345	Con Edison/ National Grid	LaGuardia Community College	Electrical engineering, mechanical engineering
Manhattan Early College School for Advertising	2014	9-10 193	4A's/Omnicom Media Group/Deutsch	Borough of Manhattan Community College	Multimedia arts, multimedia programming, business administration
Inwood Early College for Health and Information Technologies	2014	9-10 196	Microsoft/ New York Presbyterian	Guttman Community College	Information technology
Business Technology Early College High School (BTECH)	2014	9-10 216	SAP	Queensborough Community College	Internet technology, computer information systems



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Vivienne Felix, Early College Initiative at CUNY

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