



The economic outlook may appear bleak today for thousands of young adults in New York who have limited levels of educational attainment, but more than two dozen occupations expected to have ample job openings in the years ahead could provide these young people with a chance of a lifetime

CONTENTS

INTRODUCTION	3
THE OCCUPATIONS	
HEALTHCARE	8
TELECOMMUNICATIONS AND UTILITIES	12
PROPERTY MAINTENANCE	15
TRANSPORTATION	18
OFFICE AND ADMINISTRATIVE SUPPORT	22
RETAIL TRADE	28
HOSPITALITY	30
SIDEBAR: Two more Occupations with potential	33
OBSTACLES TO EMPLOYING DISCONNECTED YOUTH	34
RECOMMENDATIONS	36
ENDNOTES	41
APPENDIX	44

This report was written by Margaret Stix and Glenn von Nostitz. Edited by Jonathan Bowles and Sarah Brannen. Additional research by Madeline Sims and Evan Lacher. Design by Ahmad Dowla.

The report was generously funded by JobsFirstNYC. General operating support for City Futures has been provided by Bernard F. and Alva B. Gimbel Foundation, Fund for the City of New York, Salesforce Foundation and Unitarian Universalist Veatch Program at Shelter Rock.

The Center for an Urban Future is a New York City-based think tank dedicated to independent, fact-based research about critical issues affecting New York's future, including economic development, workforce development, higher education and the arts. For more information or to sign up for our monthly e-mail bulletin, visit www.nycfuture.org.

Executive Director: Jonathan Bowles
Deputy Director: Amy Crawford
Operations Manager: Ahmad Dowla
Research Director: David Giles
Senior Fellow: Thomas Hilliard
Research Associate: Kahliah Laney

City Futures Board of Directors: Andrew Reicher (Chair), Margaret Anadu, Gerrard Bushell, Michael Connor, Russell Dubner, Gretchen Dykstra, Blake Foote, Jalak Jobanputra, David Lebenstein, Eric Lee, Gifford Miller, Monisha Nariani, John Siegal, Stephen Sigmund and Mark Winston Griffith.

Cover: [eyefruit/flickr](#)

NOW HIRING

Even before the Great Recession began, an alarming number of young adults in New York City between the ages of 18 and 24 were neither in school nor working. The employment challenges for these New Yorkers have only magnified in recent years. There are now an estimated 172,000 of these “disconnected youth” in the five boroughs.¹ Though the overall economy is again on the upswing, the city’s unemployment rate stands over 9 percent²— and young adults with low levels of educational attainment and limited work experience are among those who are having the hardest time finding decent paying jobs.

Although many young adults in New York understandably wonder whether they will ever be able to access jobs that provide a pathway to the middle class in an economy where more and more of the decent-paying jobs require a college degree, the outlook isn’t all bleak. Our research has identified 26,000 openings a year for much of the next decade in 26 occupations that older young adults could realistically fill. Seven of these are among the top 16 occupations “with the most expected hiring” in New York City, according to projections made by the New York State Department of Labor (NYSDOL).³

These are not the lowest paying jobs or those with little chance for advancement. Twenty-two of the 26 occupations we identified, with an estimated combined total of nearly 15,000 openings annually, pay a median wage of at least \$25,000. In contrast, an entry-level home health aide in New York City earns \$17,360 on average. The other 11,000 entry-level openings are in four retail and hospitality sector occupations that offer faster promotions to managerial positions than most other industries and, perhaps most important, provide crucial work experience and training to young people who have been, at best, sporadically employed.

Many of these employment opportunities will result from natural job turnover. For instance, NYSDOL projects that job turnover will result in thousands of openings a year in entry level occupations such as office clerk. Demographic and social changes will create thousands more. The number of New Yorkers aged 65 and over is expected to grow 35 percent by 2030,⁴ leading to employment growth in sectors such as healthcare, transportation, and office and administrative support. Across three healthcare occupations—pharmacy technicians, medical assistants and certified nursing assistants—there are projected to be 970 job openings a year. Similarly, there could be as many as 600 job openings each year for paratransit drivers, who operate Access-a-Ride and other vehicles to transport seniors and the disabled. With high unemployment and wages at a plateau, more people are struggling to make ends meet, pay their bills and stay debt free—and that is prompting bill collection companies to hire workers. Growth in the number of tourists visiting New York will likely mean employment gains at stores, restaurants, hotels and attractions that cater to these visitors.

These trends present a unique chance for helping New York’s young adults gain a foothold in the workforce. But, as we detail in this report, making the most of this opportunity will require new strategies and policies from both city policymakers and the private and nonprofit workforce development providers who work with this population.

This study follows our *Chance of a Lifetime* report, published in 2006, which concluded that the anticipated retirement of tens of thousands of Baby Boomers would create an unprecedented opportunity for New York City to move significant numbers of young, at-risk New Yorkers into decent-paying, career-track jobs. That report profiled seven industries with projected job growth, modest entry qualifications and solid career prospects—from health care and construction to automotive repair and information technology.

Much has changed since 2006. For instance, the construction industry has lost thousands of jobs and, at least for now, no longer holds as much promise for young people. Similarly, many of the anticipated retirements in fields such as health care did not happen as the financial crisis prompted many older workers to continue working. Further, several hospitals and nursing homes have closed in recent years, although there are new opportunities in outpatient care.

At the same time, however, the challenges facing disconnected youth today are arguably even more pressing.

With all of this as a backdrop, JobsFirstNYC, a not-for-profit intermediary focused on reconnecting young adults to the economy, provided support for us to update and expand our analysis in light of the current economic climate. They charged us with looking ahead for future job prospects, not merely evaluating the current job market for young adults in New York City.

We began with a thorough review of NYSDOL employment projections through 2018, focusing on occupations that meet four criteria: they are expected to have at least 100 job openings a year in New York City through 2018; they pay a median annual wage of at least \$25,000 or can lead fairly directly to a job paying at that rate; they require little formal training—ideally less than four months; and a substantial share of the workers have only a high school diploma, high school equivalency (HSE) diploma or less.

In other words, our primary focus was to identify decent-paying jobs that will be in demand over the next decade and are accessible to the city's disconnected youth. Further, although the roughly 172,000 New Yorkers age 18 to 24 who are out of school and out of work have a range of skills and academic abilities, this report focuses on those at the lower range of educational attain-

ment who are traditionally the hardest to reconnect to the workforce. And where formal training is required, we selected occupations in which the training was not particularly costly. Occupations such as heating, ventilation and air conditioning repair, for example, were omitted because the least expensive training program we found cost \$5,960. The threshold of at least 100 job openings a year was set in acknowledgement of the difficulty in developing cost-effective approaches to train and place youth in occupations with few openings.

In addition to relying on Labor Department projections, we field-tested whether these occupations are indeed realistic for young adults with limited educational attainment by interviewing more than 75 leaders from local businesses, industry associations, workforce training organizations, industry associations, labor unions, academia and government. For example, economists and labor market experts were asked to confirm assumptions about job growth and turnover, directors of the city's Workforce1 Career Centers and business managers were queried about whether and under what circumstances disconnected youth would be hired for the selected occupations, and colleges and community-based organizations that work with young adults were asked about the training and supports necessary to make them job-ready employment candidates, and about employer expectations and preconceptions.

What we found is encouraging. Altogether, we identified 26 occupations that disconnected youth could realistically fill and which can be a first step toward economic self-sufficiency (See chart of "26 Promising Occupations" on page 7). These occupations fall into seven economic sectors: healthcare, property maintenance, transportation, telecommunications/utilities, office/administrative, retail and hospitality.

Some occupational trends of note include:

- The aging of the city's population and realignment of healthcare delivery away from acute care and toward outpatient care is boosting demand for medical assistants in clinics, certified nurse aides in non-hospital settings and pharmacy technicians in drug stores. For example, NYSDOL projects that by 2018, the number of pharmacy technicians, at a median salary of

\$34,530, is expected to increase upwards of 30 percent while medical assistant jobs, with a median salary of \$32,360, will grow by 21 percent.

- The aging of the population has also contributed to a dramatic increase in the number of paratransit vehicles that shuttle older adults and the disabled to doctor's appointments, nursing homes and other destinations. Ridership on Access-a-Ride vehicles grew by 15 percent a year between 2005 and 2009. With the city's elderly population expected to grow faster in the decades ahead, a Metropolitan Transportation Authority paratransit official told us they expect annual ridership growth of seven or eight percent going forward. We estimate that there will be as many as 600 job openings a year for paratransit drivers across the city.

- The number of tourists visiting New York has grown significantly in the last few years. In 2011 there was a record 50.5 million visitors. Tourism industry employment grew by 34 percent from 2002 to 2009. While many of these jobs pay low wages, some occupations in the food service and hospitality industries that support tourism, such as hotel and resort desk clerks, can pay up to \$40,000, even without postsecondary education.

- While many New Yorkers are less than thrilled with new banks sprouting up across the city—the number of branches increased from 452 to 694 over the past decade—these new branches have created hundreds of teller positions that pay \$12 to \$15 an hour and do not require a college degree. The State Department of Labor projects continued employment growth in this sector.

- The personal financial crises many New Yorkers are experiencing in the difficult economy have also had an upside—positions for bill collectors are expected to grow 8.6 percent by 2018 and offer a median salary of over \$40,000, with only short-term on-the-job training required.

Additionally, thousands of openings simply result from normal turnover:

- Demand for an average of 4,620 office clerks a year is projected through 2018. Al-

though a significant share is expected to come from employment growth, most of these openings will result from turnover among the 232,350 workers currently in office clerk positions. Office clerks earn median wages of \$28,000 to \$42,000 depending on their title. Only a high school diploma or HSE diploma is required to start.

- In property maintenance there is an average of 1,700 openings a year for janitors with a median salary of \$30,870 and 700 openings a year for general maintenance and repair workers with a mean salary of \$45,060.

Much of what we learned challenged preconceptions about the kinds of jobs that disconnected youth could perform. For example, the position of computer support technologist would not seem to be a natural fit, as most of New York's computer support techs have attended college. However, we identified two nonprofit organizations with long track records in training and placing youth who had nothing more than a high school diploma in these well-paying, highly competitive positions.

Experts we interviewed also challenged common assumptions about some of the occupations. For instance, we were not initially planning to include opportunities in the retail and hospitality sectors, based on the widely held belief that they offered dead-end jobs with low wages. However, directors of the city's Workforce1 Career Centers and workforce development practitioners made us take a second look after they pointed out how these sectors offer a crucial foothold in the job market for youth with lower educational attainment and minimal work experience.

On the other hand, some occupations that initially seemed like good options were found to be less auspicious after further investigation. For instance, we eliminated the occupation of tractor-trailer driver from our target list after learning that drivers had to be over 25 and have years of professional driving experience. We also dropped some jobs because we were told that youth shied away from them. For example, there are a significant number of sales openings in the wholesale trade and manufacturing sector at base salaries of \$10 to \$15 per hour, plus commissions that raise total compensation to \$40,000 to \$50,000 per year, according to Martin D'Andrade, direc-

tor of the city's Workforce1 Manufacturing Career Center. Although these jobs are available to youth without a high school degree, we learned that they are hard to fill, likely because they require a degree of confidence to sell products and services that many youth may lack.

Although we found more than two dozen occupations that offer good career prospects, there are serious obstacles standing in the way. Nearly every occupation with a median salary of at least \$25,000 requires some form of post-secondary training and many employers require a high school diploma and reading proficiency at a 10th grade level to perform basic tasks.

Even more important than skills training and educational qualifications may be job readiness. According to many of the employers and workforce development experts we interviewed, employers want workers who understand how to dress appropriately, how to speak to customers and how to accept criticism. But even with these basic skills, young adults may have a hard time getting hired because there is no easy way for them to find openings.

All of these barriers are especially keen for young adults with little or no work experience. Our recommendations to address them include the following:

- **Beef up the role of workforce development intermediaries.** For a variety of reasons, the city's WorkForce1 Career Centers provide little of the intermediary services necessary to help young adults get and keep jobs and are typically not equipped to serve disconnected youth who are not job ready and lack a resume. As a result, young adults across the city who obtain decent paying jobs with career ladders are often connected to them by intermediaries, typically by "job developers" at community-based workforce development organizations. These organizations prepare applicants for the hiring process, train youth in workplace expectations and coach them on how to hold on to a job. Unfortunately, these organizations serve just a fraction of the young adults in need today and many neighborhoods have relatively few options for these services.

- **Expand short-term sectoral training programs into additional occupations.** Short-term sectoral training programs operated by

nonprofit organizations, community colleges and the New York City Technical College have been particularly effective at qualifying New Yorkers for many of the occupations discussed in this report. However, in two of the occupations listed here—clerical and administrative support, and property management—the number of available training slots meets only about a tenth of the demand for workers in these two sectors.

- **Create sectoral training programs for youth.** The sector-based approach to workforce training has largely focused on adults. Programs should be adapted to better serve young adults.

- **Provide young adults with information.** Even young people who are work ready often struggle to access jobs because they simply aren't aware of the opportunities that are out there. To remedy this career information deficit, the city should consider creating storefront community outreach centers in neighborhoods where large numbers of unemployed young adults live. These centers would be a source of referrals to job openings, as well as to education and training programs.

- **Assist young adults in obtaining a driver's license.** One of the more surprising barriers for young adults to access decent paying career opportunities is the lack of a driver's license. Our research found that many of the occupations expected to grow in the years ahead require workers to have a driver's license, something that too few young adults in New York have. Even if employers don't require commercial driving skills, some occasionally need their workers to pick up or deliver supplies. For example, retail and food service employers might ask employees to move a vehicle or pick up goods for them. Some employers also see having a driver's license as a sign of responsibility and job readiness.

- **Create better connections between workforce providers and employers.** While community-based workforce providers are playing a critical role in getting young adults into decent paying jobs, a number of these organizations could benefit from having stronger relationships with employers.

- **Help young adults meet entry-level job requirements.** Most of New York City's unemployed young adults lack a high school degree or a high school equivalency (HSE) diploma. At the same time, most of the jobs paying a median annual wage of at least \$25,000 require a degree or HSE diploma. Without this basic credential, these young adults cannot qualify for a reasonable entry level job and are unlikely to ever be able to support a family. Programs that help prepare individuals for the high school equivalency exam are generally regarded as valuable, but the number of slots for these prep programs is inadequate to meet the need.

- **Develop more internships and apprenticeship opportunities.** Employers are often reluctant to take a chance on a young person without work experience and no training program can substitute for real world experience. More opportunities are needed for young people to learn how to work at job sites and apprenticeships that groom young people for stable jobs that pay livable wages.

The Occupations

This report discusses occupations in seven economic sectors—office/administrative, health-care, property maintenance, transportation, telecommunications/ utilities, retail and hospitality—that provide good first jobs for young persons with limited education, training, work experience and economic resources.

Our analysis below details 26 occupations across seven sectors that could provide nearly 26,000 disconnected youth with the “chance of a lifetime” for decent paying work, without substantial educational and training requirements. Each of these occupations pays a median wage of least \$25,000 a year, or can directly lead to a position paying at that level. Additionally, 16 of the occupations do not require a high school degree or high-school-equivalency degree and are projected to have over 16,000 openings annually. The remaining occupations require no more than a high school diploma or high-school-equivalency degree and no more than six months of additional training. Across these sectors and occupations, there will be significant turnover and some

growth, providing good opportunities for youth to gain a foothold in the workplace.

26 Promising Occupations

Sector and Occupation	Annual Average Openings
Office and administrative support	7,540
Clerk (aggregate of 9 clerk occupations)	4,620
Customer Service Representative	2,190
Computer Support Specialist	560
Bill and Account Collector	170
Retail Trade	6,880
Cashier	3,130
Retail Salesperson	3,080
Teller	670
Hospitality	5,980
Waiter & Waitress	2,970
Food Preparation Worker	1,440
Cook, restaurant, not fast food	690
Host, Hostess, restaurant, lounge, and coffee shop	420
Cook, institution and cafeteria	210
Hotel, Motel and Resort Desk Clerk	130
Baggage Porter and Bellhop	120
Property Maintenance	2,630
Janitor/Cleaner	1,700
Building Maintenance Worker	700
Landscaping and Groundskeeping Worker	230
Healthcare	1,410
Certified Nursing Assistant/Patient Care Technician ⁵	880
Pharmacy Technician	270
Medical Assistant	260
Transportation	1,060
Paratransit Driver	620
Truck Driver, light and delivery services	370
Cargo and Freight Agent	70
Telecommunications and Utilities	460
General Utility Worker	140
Telecommunications Equipment Installer	110
Telecommunications Line Installer	110
Meter Reader	100

HEALTHCARE

From 1990 to 2010, employment in New York City's healthcare sector soared 48 percent, to 405,000,⁶ largely as a result of the growth and aging of the city's population. From 2000 to 2010 New York City's population increased 2 percent but the number of city residents age 65 and older increased 5.9 percent.⁷

The aging of the population is expected to continue to drive long-term healthcare industry growth.

The Department of City Planning has projected that the portion of the city's population aged 65 and older will increase by 44 percent, to comprise 14.8 percent of the population in 2030, up from 11.7 percent in 2000.⁸ This increase in the senior population will, in part, drive growth in the health field. New York City healthcare employment is expected to grow by 11 percent for healthcare professional and technical occupations and a hefty 26 percent for healthcare support occupations between 2008 and 2018.⁹ Notwithstanding the continuing need to find healthcare industry jobs for workers laid off by the recent closures of St. Vincent's and other city hospitals,¹⁰ and Medicaid funding cuts that affect the entire healthcare system, there will likely be a substantial number of entry-level openings for qualified young people in the healthcare sector.

Because much of the anticipated healthcare employment increase is driven by the aging of the population, by far the biggest employment increases are projected in occupations that serve the elderly. From 2008 to 2018 the number of home health aides and personal care aides in the city is expected to increase by about 40 percent. Realignment of New York State's long-term care delivery system away from institutional care¹¹ and toward home and community-based care will also contribute to the rapid growth in these occupations. But because the median salary for home health aides is only \$20,190 and is only \$21,610 for personal care aides, and these occupations experience high worker turnover and have lim-

ited career advancement opportunities, we do not focus on them in this report.

Fortunately, demand is also expected to grow for workers in healthcare occupations that pay somewhat higher salaries and are suitable for young people who have not attended college. These include pharmacy technicians, certified nursing assistant/patient care technicians and medical assistants. And there are training programs for these occupations that are accessible to disconnected youth. The Hostos Community College Allied Health Career Pipeline Program, for example, will train over 900 public assistance recipients and other low-income individuals over the next four years to become certified nursing assistants, patient care technicians and pharmacy technicians.

Healthcare is a very attractive career option for disconnected youth because with additional education and training it offers career ladders leading to progressively higher paying jobs. A young person who is interested in patient care can start as a certified nursing assistant, obtain an associate's degree and become a licensed practical nurse and ultimately a registered nurse earning a median annual wage of \$73,000 per year. A young person who prefers a technical career can begin as a patient care technician, and with an associate's degree can become a surgical technician earning a median salary of \$44,000 per year, a medical lab technician at \$18 per hour, a respiratory therapist at \$22.51 per hour, or a radiological technician at \$26 per hour. An individual who is not interested in working directly with patients can begin as a medical assistant and then become a medical coding specialist earning \$50,000 per year.

Pharmacy technician

Pharmacy technicians work mostly in drug stores, assisting pharmacists in counting pills and preparing prescription labels. Some also work in hospitals. The opening of numerous chain drug stores in New York City—the city's four largest

drugstore chains added a net 56 stores from 2008 to 2010—has created many new pharmacy technician jobs. NYSDOL projects that demand will continue to rise, with a strong 30 percent increase in pharmacy technician employment through 2018. According to the SUNY Albany Center for Health Workforce Studies, the expansion is fueled by a shortage of pharmacists and by the aging of the population, as older people fill more prescriptions than younger people.

Deborah Reid, director of Hostos College's Allied Health Career Pipeline Program, says that her program places pharmacy techs with CVS and Walgreen's and is developing relationships with Duane Reade and Rite Aid. Paula Bailey, vice president of Dale Grant Associates, which operates the city's Workforce1 Career Centers in Brooklyn and Queens, reports that the Brooklyn Workforce1 Center has been receiving substantial numbers of requests for pharmacy techs from CVS and other large chains. She notes that a pharmacy tech without previous experience may have to work first as a pharmacy service associate, at \$8 to \$10 an hour, before they can move up to a full-fledged pharmacy technician job at \$14 to \$15 an hour. "Trust is the big issue with these jobs, because workers are surrounded by drugs," she says.

Although pharmacy technician certification, obtained by passing the National Pharmacy Technician Certification Board test, is not legally required to work as a pharmacy technician in New York, the major pharmacy chains prefer to hire applicants who are certified. Several CUNY colleges offer certification training programs. Kingsborough Community College, for example, offers a 120-hour program. Bailey says, "Certification as a pharmacy technician will give a candidate a leg up, because it will be seen as evidencing commitment to the job." However, she also notes that an individual can start as a pharmacy services associate and be trained by the chain to become a pharmacy technician if they remain on the job. Kristina Sepulveda, employment director for Henry Street Settlement, found that to be the case. She tells of one individual placed by Henry Street at Duane Reade at \$7.25 an hour who within four months became a "drug technician" in their pharmacy at \$15 an hour.

Certified nursing assistant and patient care technician

Certified nursing assistants (CNAs) provide direct care to patients under the supervision of nursing and medical staff, primarily in nursing homes. They serve meals, make beds, set up equipment, help patients eat and get into and out of bed. They may also check patients' vital signs like pulse rate and temperature. CNAs with additional skills, such as phlebotomy, administering electrocardiograms (EKGs) and inserting Foley catheters, are known as patient care technicians (PCTs) or patient care associates (PCAs) and are employed primarily by hospitals. The U.S. Department of Labor has identified patient care technician as a "new and emerging occupation."¹²

Certification as a CNA requires completing an approved 100-hour training program, passing a competency examination, and becoming listed on the New York State Nurse Aide Registry. LaGuardia Community College offers a 120-hour program and requires reading proficiency at a 10th grade level and math proficiency at an 8th grade level. Certification as a PCT generally requires completing a CNA program, as well as phlebotomy, EKG and cardio pulmonary resuscitation training. Omari Asante, senior account manager with the city's Healthcare Workforce1 Career Center at LaGuardia Community College, reports that the starting salaries for CNAs they have placed range from \$20,800 to \$31,200 and that experienced CNAs earn as much as \$37,400. He says that salaries for PCTs start at \$33,400 to \$37,400.

Sherry Chorost, a director in the policy department at the Healthcare Association of New York State (HANYS), which represents hospitals, says that there "definitely is a career track" for CNAs. Some CNAs train to become licensed practical nurses or certified medication aides (CMA), and a specialized geriatric CNA position is being developed, according to Meghan Shineman, New York policy analyst for PHI, an advocacy group for direct care workers.

Even though overall employment growth in the city's hospitals has largely ceased and nursing home employment has begun to decline, there continue to be CNA and PCT openings. The 2010 HANYS Annual Health Care Professionals Work-

force Survey of hospitals reported that in 2010 there was an 11.7 percent vacancy rate for CNA/PCTs and 26 percent of hospitals anticipated that their CNA/PCT employment would grow in 2011. CNA/PCT work is very challenging, which may explain some of the higher vacancy and turnover rates compared to the other occupations HANYS reported. Some vacancies may also be positions that haven't been filled because of budget constraints. Openings also result from movement of CNAs up the career ladder to positions such as licensed practical nurse. And CUNY York College's description of its PCT training program says that demand for patient care technicians has "increased significantly in recent years," as "typical duties that nurses used to perform are now being performed by PCTs."

CNAs are also employed outside of hospitals and nursing homes. Kathleen Kearns, senior vice president at Continuum Healthcare and chair of the city's Workforce Investment Board (WIB), reports that CNAs work at outpatient clinics, such as Continuum's large Union Square ambulatory care center. Although they do not provide nursing services, a "good number" of assisted living facilities have CNAs on staff, according to Lisa Newcomb, executive director of the Empire State Association of Assisted Living.

Omari Asante of the Healthcare Workforce1 Center notes that CNA positions are highly competitive and difficult to secure at better nursing homes without experience. He recommends that recent CNA training program graduates first work as direct support professionals. They assist people with developmental and physical disabilities to live independently. "It is a good option for

recent CNA grads with no previous work experience to help them build their resumes," he says. Direct support professional starting salaries are typically paid about \$21,000 a year, but can be as high as \$31,000 a year, with CNAs and medical assistants getting the higher pay. Asante reports that the Healthcare Workforce1 Center has about 30 openings a month for these positions. These include positions in agencies such as United Cerebral Palsy and the Young Adult Institute that are funded by New York State.

Medical assistant

Medical assistants handle administrative tasks such as scheduling appointments, billing and coding for insurance claims and maintaining medical records, as well as clinical duties such as taking and recording vital signs. They mostly work in doctors' offices and outpatient care centers. The New York State Department of Labor projects medical assistant employment will grow 21 percent from 2008 to 2018 and that there will be 260 job openings each year in New York City. A study on the supply and demand for medical assistants in New York City issued in 2011 by the Center for Health Workforce Studies at SUNY Albany reported that demand "is strong and is projected to remain strong into the future."¹³

Demand for medical assistants has grown in large part because technology advances have made it possible to perform many more types of medical procedures in outpatient settings instead of in hospitals. Since 1990, employment in New York City doctor's offices has soared 84 percent and in outpatient care centers employment rose 82 percent—a combined total of 30,500 new jobs. Medical assistants are also in demand because they are versatile and cost-effective; depending on their training they can handle a wide variety of tasks.

The healthcare reform law which President Obama signed in 2010 encourages preventive and primary care, which should spur demand for medical assistants.¹⁴ Jean Moore, director of the Center for Health Workforce Studies at SUNY Albany, says that medical assistants with advanced training can become health coaches who assist patients with chronic disease management and help avoid costly hospitalizations. Hostos Com-

Demand [for medical assistants in NYC] is strong and is projected to remain strong into the future.

community College is launching a program to train community health workers who will coach patients with chronic heart disease or diabetes in emergency rooms and community-based clinics.

According to NYSDOL, the median salary for New York City medical assistants is \$32,360 and opportunities for advancement are very good. Donald Balasa, president of the Medical Assistant Association of the U.S, explains, "Some go in a clinical direction and become licensed practical nurses (LPNs) or registered nurses (RNs). Others enjoy imaging and become radiological technologists. Some become physician assistants. And others go in an administrative direction and become office managers or focus on medical billing or coding."

To become a medical assistant, a high school diploma or equivalent is typically required, in addition to training of widely varying durations—between six months and two years—depending on the additional skills taught. Training

program applicants are assessed for basic reading and math skills and some require remediation before entering a program, according to the SUNY Albany medical assistant study. Training providers include CUNY and a wide array of proprietary schools. Certification as a medical assistant is not required for employment, but some employers prefer it. There are considerable differences among training programs; some focus on administrative duties, others on clinical services, some on both. Kingsborough Community College's 261-hour Certified Clinical Medical Assistant Program includes training in EKG/ECG and phlebotomy and prepares students for the National Healthcareer Association certification exam. CUNY's York College offers a less comprehensive clinical medical assistant training program of 134 hours of classroom instruction and a 160-hour externship preparing students for certification by the National Center for Competency Testing.

Table 1. 2008 NYC employment and 2008-2018 projected change and annual average openings, starting and median salaries, percentage of NYS workers 25-44 with less than HS/ High School Equivalency (HSE) and with HS/HSE, educational attainment and training.¹⁵

Occupation title and Standard Occupation Classification code	2008-18	2008	Annual Openings	Median Starting Salary	No HS/ HSE	Education and training required
				Median Salary	HS/HSE only	
Pharmacy technician (29-2052)	+30.3%	4,850	270	\$23,330	2.5%	HS/HSE and PTCB certification preferred by most employers
				\$34,530	27.8%	
Certified Nursing Assistant/ Patient Care Technician ¹⁶	+11.3%	41,440 ¹⁷	880	\$28,910	N/A	HS/HSE and 130 hours of training (CNA)
				\$35,430 ¹⁸		
Medical assistant (31-9092)	+20.6%	8,430	260	\$25,510	4.8% ¹⁹	HS/HSE and six months to two years training
				\$32,360	29.06%	

TELECOMMUNICATIONS AND UTILITIES

Several occupations within the telecommunications and utilities sectors will see substantial hiring in New York City in coming years. Specifically, a near-doubling of employment to 9,800 workers in the city's "cable and other subscription programming" sector since 1990 has helped drive demand for telecommunications equipment and line installers and repairers. The U.S. Bureau of Labor Statistics (BLS) reports that in telecommunications job openings are expected to rise as a result of the growing number of retirements and the continuing need for skilled workers and that prospects will be best for installation, maintenance, and repair workers.²⁰ Altogether, the NYSDOL projects over 200 openings each year in these occupations.

BLS also reports that the utilities workforce is getting older and a large number of utilities workers are nearing retirement, which will create additional opportunities for younger workers. In 2010, 20.1 percent of New York City utility sector workers were age 55 to 64, which is substantially higher than their share of the general working population.²¹ James Slevin, Senior Business Agent, Local 1-2 of the Utility Workers Union of America, predicts an "exodus" of older workers from the utility industry after the next contract is negotiated in 2012, based on what he has heard from workers represented by the union. He believes that the utility companies have not begun to plan for how openings will be filled by trained workers. Slevin also said that utility jobs "offer a great chance to get a career in a good stable job." Because both of these sectors are relatively immune from market downturns, jobs in them can also provide long-term security.

In addition to the considerable number of openings available each year, occupations in the telecommunications and utilities sectors offer some the highest paying entry level jobs. The telecommunications and utilities sectors also have excellent promotional opportunities, with training to upgrade job titles often provided at employer expense.

Telecommunications line and equipment installers/repairers

Telecommunications line installers and repairers install and repair communications cable, including fiber optic and television cable, in homes and businesses. Telecommunications equipment installers and repairers work with telephone, cable TV, Internet, security systems and other communications equipment. Cable TV companies expanding into telephone and Internet service, the widespread installation of fiber-optic lines, and information technology investments by businesses have driven the demand for telecommunications line and equipment installers and repairers in the city. For example, since 1990, employment in the city's "cable and subscription programming" sector nearly doubled to 9,800.

Kathleen Duncan, regional director for talent acquisition at Time Warner Cable, says that her company is seeing increased demand for cable installation from small businesses as well as Fortune 500 companies. Duncan reports that in 2010 Time Warner Cable hired over 100 "technicians"—the workers who install equipment in homes and businesses. Graciano Matos, outreach employment coordinator at the Jobs-Plus site at the Jefferson Houses in East Harlem, also reports that jobs are widely available. "I am in constant contact with the recruitment people at Time Warner," he says.

Telecommunications line installation jobs pay relatively well to start. Brooklyn Networks, sponsored by Brooklyn Workforce Innovations (BWI), trains jobless and working poor people to be cable installers. Associate Director Tammy Burgess says that Cablevision starts their graduates at \$12.09 per hour. Cable installation also offers good opportunities for advancement. Duncan reports that installers at her company can increase their earnings by upgrading their skills after they are hired. "It's all about professional development," she says. "Journeyman installers

can earn \$32 an hour and foremen earn \$36.45 an hour.”

Burgess is optimistic about future hiring even though the number of new openings in cable installation has dipped slightly since the 2008 downturn, as building construction and new office leasing also declined. She notes that industries that depend on data will need to upgrade from the current standard “Category 5” cable to “Category 6,” which will create more employment opportunities. She also expects digitization of healthcare records to create additional demand for her program’s graduates as hospitals and medical offices upgrade their existing cable and equipment to handle the increased data load from converting paper health records to digital records.²² In the meantime, there has been increased demand for installers of telecommunications equipment such as security and audio/visual systems, says Burgess. To give its graduates a better chance of getting hired, Brooklyn Networks has modified its curriculum to capture these new opportunities.

BWI’s Brooklyn Networks program is both unique and intensive with 35 hours of instruction per week and two to four hours of homework each night to prepare for the BICSI (Building Industry Consulting Service International) certification exam. “The textbook is two inches thick,” notes Burgess. Still, 80 to 85 percent of trainees

complete the program and 90 percent of those who take the certification exam pass. Although some companies may hire workers without training, Burgess says that BWI’s program makes its graduates much more employable. To enroll, applicants must have 8th grade math skills, although BWI will give them remediation if their math scores are lower. Large companies require a high school diploma or high school equivalency (HSE) diploma, but smaller companies will hire without it. Applicants must also be able to lift and bend 50 pounds and pass a drug test. To be hired, cable installers must have a driver’s license. Younger applicants are attractive candidates because “it is physically demanding exhausting work slapping cable in a ceiling from the side of a ladder.” She says that ex-offenders can get placed, but it is much tougher in today’s economy because employers can be choosier. When the economy was humming, a criminal record was less of a problem.

Duncan of Time Warner says that as of summer 2011 her company no longer requires a high school diploma or HSE diploma for entry-level positions “because we could not reasonably say that it is required to do an entry-level job,” but she does point out that Time Warner prefers technician applicants who have A+ computer service certification because it demonstrates “that they can connect different technical products.”²³

MOVING UP AT CON EDISON

Con Edison workers can move up to progressively higher skilled occupations with no personal outlay through a training institute operated by the utility. For example, a general utility worker with a few years of experience can obtain the training necessary for promotion to a Mechanic B position, which pays a starting pay of \$20.58 an hour (rising to a high of \$35.80 per hour). Mechanic B’s must have a commercial driver’s license and be able to drive utility trucks and operate the truck’s equipment.

With additional experience and completion of the training institute, this same worker could go on to qualify for a Mechanic A position starting at \$27.23 per hour (topping out at \$41.91 per hour). A Mechanic A leads a work crew and is skilled in welding, electrical cable insulation and the installation of natural gas piping. According to Matthew Ketschke, human resources director for Con Edison, an entry-level employee can progress to a Mechanic A position in approximately five to eight years. To be promoted to the higher job title, employees must pass written promotional tests and demonstrate skill in a performance test.

General utility worker

At Con Edison, which has more than 14,000 workers, general utility workers assist in the maintenance of electric, gas and steam distribution systems. They connect underground cables, install and maintain distribution equipment, excavate and clear obstructed ducts and install new ducts. After approximately two weeks of basic classroom and lab instruction in Con Edison's Learning Center, workers are assigned to a field crew. Con Edison hires about 300 general utility workers per year, at starting salaries of \$17.52 per hour.²⁴ After eight years as a general utility worker or a production tech, they can earn as much as \$29.25 per hour.

Applicants for a general utility worker position must have a high school diploma or HSE diploma, 10th grade reading and math skills and exhibit general aptitude for the position. Selected candidates must also have a valid driver's license and be medically approved to wear a respirator. David Gmach, director of public affairs for Con Edison, adds that they must be able to perform physically demanding labor and work in outdoor weather conditions and heavy traffic. Elec-

trical workers must be comfortable working on elevated poles accessed via aerial devices, while gas line workers cannot become claustrophobic working underground.

Meter reader

Meter readers, also termed customer field representatives, typically drive along a route and record utility meter readings, inspect meters for defects and monitor abnormal usage volume or tampering that may indicate unlawful usage. They are employed by Con Edison as well as by National Grid. Many utility companies are beginning to use automated electronic systems to remotely monitor utility meters so demand for meter readers is expected to decline but Con Edison's meter reader hiring, for example, has remained steady at about 100 per year.

To qualify, Con Edison requires a high school diploma or HSE diploma, and a driver's license. Candidates must be fit enough to handle extensive walking and stair climbing and have excellent customer service skills. Meter readers are paid a median salary of \$22.90 an hour in New York City.

Table 2. 2008 NYC employment and 2008-2018 projected change and annual average openings, starting and median salaries, percentage of NYS workers 25-44 with less than HS/ High School Equivalency (HSE) and HS/HSE, required educational attainment and training.

Occupation title and Standard Occupation Classification code	2008-18	2008	Annual Openings	Median Starting Salary	No HS/ HSE	Education and training required
				Median Salary	HS/HSE only	
Telecommunications equipment installer and repairer (49-2022)	+1.5%	5,930	110	\$46,110	3.1%	HS/HSE and one year of training
				\$69,560	31.7%	
Telecommunications line installer and repairer (49-9052)	-1.1%	7,070	110	\$43,310	4.9%	HS/HSE and five weeks to three months training
				\$69,880	41.1%	

Table 2, cont'd

Occupation title and Standard Occupation Classification code	2008-18	2008	Annual Openings	Median Starting Salary	No HS/HSE	Education and training required
				Median Salary	HS/HSE only	
General utility worker ²⁵	+1.0%	3,740	140	\$36,442	7.2%	HS/HSE and on-the-job training
				\$73,800	46.6%	
Meter reader (43-5041)	-22.7%	1,460	100 ²⁶	\$29,990	6.1%	HS/HSE and short-term on-the-job training
				\$42,090	45.2%	

PROPERTY MAINTENANCE

Property maintenance encompasses a number of job functions, including general repairs, such as retiling and painting, as well as boiler and burner maintenance and maintenance of grounds and public areas. It also includes resolution of safety and health-related issues such as the presence of asbestos. Turnover and growth is projected to result in an average of more than 2,640 property maintenance openings a year through 2018.

Jody Steinhardt, career services compliance manager at the Metropolitan Council on Jewish Poverty, which runs a building maintenance training program, confirms that there are plenty of openings for building maintenance staff. As she put it, “every NYC building needs maintenance staff, every residential building, every commercial building, even Madison Square Garden needs building maintenance staff.”

Building maintenance workers

For the purposes of this study, we aggregate several occupation titles tracked by NYSDOL under the heading “building and maintenance worker.” These consist of “janitors and cleaners (except maids and housecleaners)”, “landscaping and groundskeeping workers”, and “general maintenance and repair workers” employed in residential and commercial buildings. Although NYSDOL distinguishes among them, their responsibilities often overlap.

Building maintenance workers are employed in nearly every New York City building, from office and residential buildings to stadiums and department stores. NYSDOL projects that the number of general maintenance and repair workers employed in buildings will grow by six percent per year in New York City through 2018, creating about 700 openings.

According to Steinhardt of Met Council, building maintenance is a very good occupation for young people who are not academically inclined, do not mind working their way up from the bottom and are good with their hands. Nearly 43 percent of New York City general maintenance and repair workers have only a high school diploma and 14 percent have no high school diploma. The starting salary in New York City for a general maintenance and repair worker averages \$27,000 and the median salary is a solid \$41,680, owing to the high proportion of workers who are members of Local 32BJ of the Service Employees International Union (SEIU). Although formal education requirements are low, employers prefer that workers have hands-on experience. Graciano Matos of Jobs-Plus cautions, "People

The program also includes a customer service skills component tailored to situations that arise in a building maintenance context, like dealing with difficult clients and building superintendents.

The Northern Manhattan Improvement Corporation (NMIC) has offered a 12-week building maintenance program for more than ten years that includes 80 hours of classroom instruction and 100 hours of hands-on construction training. Nontraditional Employment for Women (NEW), a nonprofit organization that prepares women for careers in construction, utilities, maintenance, and transportation, has a six-week pre-apprenticeship training program that teaches basic carpentry, electric, blueprint reading and Occupational Safety and Health Administration rules, as

"Every NYC building needs maintenance staff, every residential building, every commercial building, even Madison Square Garden needs building maintenance staff."

think it's an easy job and they do not understand the amount of training it takes for some of these maintenance jobs—changing locks, fixing light fixtures, doing electrical work. It is much more than just mopping floors."

For example, a New York City Technical College building maintenance training program for New York City Housing Authority residents includes 16 classroom hours on working with suspended scaffolding (platforms suspended by ropes or cables) and 35 hours of asbestos abatement training. City Tech also offers a handyman training program in partnership with the Metropolitan Council on Jewish Poverty. Graduates complete a 100-hour technical course followed by a 210-hour paid apprenticeship program that gives them experience in framing, tile work, door lock installation, plumbing and electrical work.

well as "soft skills." To qualify, applicants must be 18-years-old, have a high school diploma or equivalent, "an interest in blue collar work and good attitude" and be able to do math and read at a 7th grade level. In addition to requiring a wide range of construction-related skills, some employers also require applicants to pass a drug test.

For many program graduates, their first job in building maintenance is as a janitor. Janitorial workers keep buildings in a clean and orderly condition, which may also involve routine equipment maintenance activities. The New York State Department of Labor projects an average of 1,700 openings per year for janitors in New York City through 2018, at a median salary of \$30,870. Although the overall number of janitors is projected to decline slightly, with more than 90,000

current workers normal turnover will still produce a significant number of openings.

Sara Farimani, the workforce development director at NMIC, says that many of her program’s graduates get first jobs as janitors, typically earning about \$10 per hour for those with a high school diploma or high school equivalency (HSE) diploma, and \$9.00 per hour for those without. She says that hiring is seasonal and peaks between February and late April of each year. NEW has placed graduates in jobs as heavy cleaners with Columbia University at wages of \$15.54 per hour. “Generally after a three month probation period a worker is eligible to join the union and can start to receive benefits,” says Jessica Suarez, tradeswoman field liaison at NEW, adding “Union membership also comes with additional training opportunities that raise salaries.” Free classes offered by the SEIU Local 32BJ can qualify workers to become building superintendents, for example.

Union jobs are primarily found in larger residential and commercial buildings and with universities. Farimani of NMIC points out that laid-off construction workers are now being hired as building maintenance workers, so that the opportunity for an unemployed youth to be hired for a union job is likely to be limited at present. However, once construction resumes in New York City, we anticipate that openings as union-represented building maintenance workers will again be available for disconnected youth.

In addition to building maintenance, there are an average of about 230 annual openings in property maintenance as landscaping and grounds keeping workers. Landscaping and grounds keeping workers may lay sod, mow lawns, and trim, water and fertilize plantings. Although the majority of groundskeepers lack a high school diploma or HSE diploma, their median annual salary of \$33,180 makes the occupation a solid option for disconnected youth in the city.

Table 3. 2008 NYC employment and 2008-2018 projected change and annual average openings, starting and median salaries, percentage of NYS workers 25-44 with less than HS/ High School Equivalency (HSE) and with HS/HSE, educational attainment and training.

Occupation title and Standard Occupation Classification code	2008-18	2008	Annual Openings	Median Starting Salary	No HS/ HSE	Education and training required
				Median Salary	HS/HSE only	
Maintenance and repair worker-general (49-9071) ²⁷	+6.0%	31,647	700	\$27,000	14.2%	Short-term on-the-job training
				\$41,680	42.8%	
Janitor and cleaners, except maids and housecleaners (37-2011)	-1.2%	90,190	1,700	\$18,460	29.3%	Short-term on-the-job training
				\$30,870	44.8%	
Landscaping and groundskeeping worker (37-3011)	+7.5%	11,580	230	\$22,750	40.7%	Short-term on-the-job training
				\$33,480	34.4%	

TRANSPORTATION

Several occupations within the transportation field offer good job prospects to disconnected youth. Each of these occupations have low barriers to entry and either pay a good starting wage or offer the chance to move up an established career ladder to progressively higher paid positions. One local commercial driver training program, Brooklyn Workforce Innovation's Red Hook on the Road (RHOR), reports a 92 percent graduate placement rate. According to BWI Executive Director Aaron Shiffman, RHOR trains and places up to 300 graduates in driving positions annually at an average starting pay of \$14.12 an hour. "There are jobs. If someone wants a job, we can get them a job," Shiffman says.

Andrea Hanley, director of the Commercial Driver's License School, Inc. confirms that there is strong demand for commercial drivers. She reports, "At our Bronx location, we need to draw at least 20 new drivers every month for the next five years to keep up with industry demand." In addition, the city's Transportation Workforce1 Career Center is placing 50 to 60 persons per month in commercial driving positions. And, due to the rapidly gaining older population, paratransit ridership is up and programs such as Access-a-Ride will require more drivers.

Not only are these driving occupations promising, but because of the high volume of passenger traffic, New York City airports also offer substantial numbers of transportation-related jobs. LaGuardia employs 8,000 people and serve over 23 million passengers each year and JFK employs 35,000 people and serves over 46 million passengers each year.²⁸ Ridership at JFK alone has soared 41 percent in the past ten years, causing a need for more workers.²⁹ Although entry-level airport occupations tend to have low starting salaries, they can lead reasonably quickly to higher paying positions.

person with a driver's license because there will be growth in this occupation and it provides a career ladder to higher paying bus driving jobs.

Access-a-Ride is by far the city's single largest paratransit provider. Between 2005 and 2009, ridership grew more than 15 percent a year³⁰ and paratransit vans and cars with the Access-a-Ride logo on the side have become ubiquitous on the city's streets. Demand for paratransit drivers is expected to continue. Tom Charles, vice president of MTA's Paratransit Division, projects annual growth in ridership of seven or eight percent for Access-a-Ride, while NYSDOL projects somewhat more conservatively that employment for paratransit drivers will grow by 15 percent during the ten year period ending 2018.

There are likely to be more than 600 job openings each year for paratransit drivers in the city, due not only to this growth in ridership, but also to a high turnover rate. Julio Perez, RHOR Assistant Director says that there will always be ample demand for paratransit drivers because turnover is so high. "We call it "Stress-a-Ride," he says, noting the difficulty drivers have "just getting around." The MTA provides a two-week training program, but because it doesn't include training on navigating around the city, drivers regularly become lost, even though the vans have GPS. Perez says that the job is very challenging, particularly for parents of young children, due to the work schedule required. Drivers are often assigned to work 11-hour shifts, from 1:00 p.m. until midnight, and work weekends and holidays.

Paratransit van drivers earn \$10 to \$11 an hour to start, increasing to \$13 an hour after six months, according to Carolyn Johns, workforce director at St. Nick's Alliance, a Brooklyn-based nonprofit that provides free paratransit driving training for low-income individuals. To qualify as a paratransit driver, applicants need a Class C commercial driver's license (CDL) but do not need to have previous commercial driving experience. Having a regular Class D driver's license for at least three years with no more than four

Paratransit driver

Driving seniors and the disabled as a paratransit driver is a good career choice for a young

MOVING UP THE TRANSPORTATION CAREER LADDER

Each of the three highlighted occupations provide opportunities for entry-level jobs, but can also be an important bridge to better paying jobs with more attractive hours and working conditions. Kerwin Rivera, workforce director at South Bronx Overall Economic Development Corporation, which provides free paratransit driver training, says that his graduates have found paratransit driving jobs “can be a wonderful stepping stone” to bus driving jobs. For example, after six months to one year of experience as a paratransit driver, workers can move up the career ladder to become an airport shuttle bus driver, which offers shorter driving routes within JFK or LaGuardia airports, according to Jessica Alatis, business manager at the city’s Transportation Business Solutions Center. The city’s transportation-focused Workforce1 Center reports between five and 20 job orders a month for these kinds of shuttle bus drivers. Airport shuttle bus drivers earn \$11 per hour.

After one year as an airport shuttle bus driver, most move on to become transit and intercity earning a median salary of \$50,900. However, in addition to driving experience, transit and intercity bus drivers must also obtain a Class B commercial driver’s license (CDL) with passenger endorsement.³¹ According to NYS-DOL, there will be a good number of openings, at an average of 340 annually, for transit and intercity bus drivers in New York City through 2018.

With two years of experience, a paratransit driver can also advance to a job with a bus company that works with special populations, such as the elderly and disabled, in nursing homes, adult day care centers and in charter schools, according to Alatis. Paratransit can also lead to a job driving a school bus. Julio Perez of RHOR noted that school bus hiring has recently picked up, pointing to the fact that the organization recently made 16 to 17 placements at salaries of \$11 to \$16 per hour. New York City school bus drivers are union members and earn a decent wage, starting at \$14.90 per hour and increasing to \$27.90 after five years. NYS-DOL projects a positive hiring outlook for school bus drivers, with employment in New York City likely to increase by 4.9 percent through 2018.

If a young person has a Class B CDL and paratransit driving experience, the next rung in the career ladder could be a light truck driver job, according to Shiffman of BWI. By obtaining a Class A CDL later on, a light truck driver can then qualify to drive a tractor-trailer and earn as much as \$70,000 per year.

Cargo and ramp service agent jobs can also lead to a range of better paying occupations. Doug Cotter, director of the city’s Transportation Workforce1 Center, reports that workers can quickly advance into lead agent jobs at \$12 per hour and then to manager-on-duty positions at \$15 per hour “almost by default, because there is so much turnover.” He adds, “We encourage job seekers entering as ramp agents to stick through the heavy lifting and bad weather. If they do, it is almost built-in that they would become a lead agent and then a manager.”

Philippa Karteron, executive director of Council for Airport Opportunity, a New York City-area airport trade association, notes that ramp agent jobs can also lead to passenger service positions such as reservations agent, customer service agent or ticket agent because the airlines tend to promote from within. Although these jobs do not pay more than ramp agent jobs, workers can soon be promoted to supervisory positions if they work on holidays and evening shifts.

Although fewer than 10 percent of RHOR's trainees in 2010 were younger than 25, [Shiffman] reports that employers snapped them up quickly because "employers want strong backs." Younger applicants are favored especially by ice cream and beverage deliverers for this reason.

points against them and passing a written test and road test will suffice before they can obtain the commercial driver's license.

Light or delivery truck driver/ driver helper

The New York State Department of Labor has identified light or delivery truck driver as one of the 16 occupations "with the most expected hiring" in New York City and projects an annual average of 300 openings through 2018. Light truck drivers earn \$11 to \$20 per hour, depending on the size and age of the truck, according to Jessica Alatis of the city's Transportation Business Solutions Center. Employers consider younger drivers particularly attractive candidates, says BWI's Shiffman. Although fewer than 10 percent of the organization's trainees in 2010 were younger than 25, he reports that employers snapped them up quickly because "employers want strong backs." Younger applicants are favored especially by ice cream and beverage deliverers for this reason.

To qualify as a light or delivery truck driver requires a Class B CDL and at least two years of regular driving experience. According to RHOR's Julio Perez, Fresh Direct hires as many as 15 graduates of each RHOR class without prior commercial driving experience. However, that is the exception. Hiring candidates who have not graduated from RHOR's program will generally need

to show that they have some professional driving experience. Some companies, like FedEx, will hire applicants with less than one year of professional driving experience if they have satisfactory experience driving with a regular license. However, major employers generally require at least one year of "box truck" driving experience. Andrea Hanley, of the Commercial Driver's License School, notes that the trucking companies she works with require 160 hours of formal training as a hiring prerequisite, in addition to three years of personal driving experience and one year of professional experience.

According to Julio Perez, a shortcut to a light or delivery truck driver job for persons without prior commercial driving experience is to start out as a driver helper and move into a driver job after one year with the Class B CDL. Driver helpers for Fresh Direct, for example, are employed at about \$10 per hour and receive tips.

Airport cargo agent and ramp service agent

With more than 43,000 workers at JFK International and LaGuardia airports, normal turnover results in large numbers of entry-level job openings at any given time. Doug Cotter, director of the city's Transportation Workforce1 Center, says many of these are for cargo agents and ramp service agents (also called baggage han-

dlers). Cargo agents unload and load cargo to and from cargo aircraft. Ramp service agents marshal aircraft in the gate and load, unload and sort freight and baggage. NYSDOL estimates 70 annual openings for cargo and freight job openings, but Jessica Alatis of the Transportation Business Solutions Center believes that estimate is much too low. "We have cargo companies that can bring on 20 ramp agents at one time for one company at JFK alone," she says.

Starting pay for cargo and ramp service agent is low, at \$10 per hour, but can lead quickly to higher paid positions. "Being a ramp agent is

a tough job, the work is hard, you're out in all kinds of weather, you work overnight and holidays," says Cotter of the Workforce1 Transportation Center. The biggest hurdle to securing a job as a cargo or ramp service agent is the pre-application screening, Cotter cautions. The background investigation for airport jobs looks back ten years, requires fingerprints, a criminal record review and a drug test. Nevertheless, if an applicant can pass these requirements, the jobs offer decent paying jobs with no prior training.

Table 4. 2008 NYC employment and 2008-2018 projected change and annual average openings, starting and median salaries, percentage of NYS workers 25-44 with less than HS/ High School Equivalency (HSE) and HS/HSE, required educational attainment and training.

Occupation title and Standard Occupation Classification code	2008-18	2008	Annual Openings	Median Starting Salary	No HS/ HSE	Education and training required
				Median Salary	HS/HSE only	
Truck drivers, light and delivery services (53-3033)	-6.2%	20,250	370	\$19,960	19.4%	Class B commercial driver's license.
				\$33,930	49.4%	
Cargo and freight agent (43-5011)	-8.8%	2,830	70	\$27,830	3.7%	Short-term on-the-job training
				\$41,630	35.8%	
Paratransit driver ³²	+15%	933	620	\$22,800*	15%	Class C commercial driver's license, passenger endorsement. Must be 21.
				\$27,040*		
				\$36,700	36.7%	

*According to Carolann Johns of St. Nick's Alliance. Median salary shown is salary after six months.

OFFICE AND ADMINISTRATIVE SUPPORT

Despite the weak economy and technological improvements that have eliminated some clerical positions, there is surprisingly strong demand for office and administrative workers. General office clerks and bookkeeping clerks are among the 16 occupations with the most expected openings in New York City through 2018, according to NYSDOL, which projects an average of 7,540 openings a year for clerks, receptionists, office machine operators, bill and account collectors and computer support specialists during this period. These occupations are generally available for workers with a high school diploma or high school equivalency (HSE) diploma and pay a median salary of at least \$25,000 a year. According to James Brown of the State Labor Department, general clerk, receptionist and information clerk positions are “in stable or growing industries such as accounting, healthcare, education and local government.” He says that “employment in these occupations holds up better” than other types of clerical jobs “which are more dependent on finance or wholesaling.” Yet even for these latter types of clerical occupations, there will be a significant number of openings in the coming years due to turnover.

Organizations we interviewed confirmed the demand for these occupations, noting that they have found success placing young adults into these jobs. For example, Opportunities for a Better Tomorrow (OBT), a Brooklyn-based not-for-profit youth employment and training organization, places nearly 280 of its graduates annually in data entry, file clerk and customer service representative jobs. OBT graduates are working in law firms such as Connors & Sullivan and Greenberg Traurig, at publishing companies like Random House and in small businesses at the Brooklyn Navy Yard, Brooklyn Army Terminal and the East Williamsburg Industrial Park. Another organization that offers office skills training, Career and Educational Consultants, Inc. (CEC), has had similar success placing hundreds of its graduates annually in back office jobs at banks, insurance

and brokerage companies at starting salaries that range from \$10 to \$15 per hour. Participants are largely public assistance recipients whose training is paid for by a city Human Resources Administration “Back to Work” contract. Many trainees are single mothers under age 25 who do not have a high school degree, says Susan Melocarro, president and founder of CEC.

Clerk

New technologies and increased automation of offices might be expected to reduce the demand for entry-level office workers like clerks and receptionists, but the U.S. Department of Labor-sponsored Occupational Information Network (O*NET) reports a “bright outlook” for employment in many of the clerk and receptionist occupations and NYSDOL projects that in New York City demand in these occupations will grow overall. The U.S. Bureau of Labor Standards Occupational Outlook Handbook 2010-11 says that Billing and Posting Clerk and Machine Operator employment, for example, is expected to grow “faster than average due to an increasing number of transactions, especially in the rapidly growing healthcare industry.”³³ The Handbook also says that nationally, employment of receptionists and information clerks is expected to increase faster than all occupations because of employment growth in offices of physicians and other health practitioners, personal care services, construction, and management and technical consulting.

Office clerks handle a wide array of office functions, from operating photocopiers and sorting mail to taking orders and maintaining databases. Specialized clerks, like bookkeeping and auditing clerks, debit and credit accounts, record financial information, and compile statistical data among other responsibilities. For the purposes of this report, we aggregate nine specific job titles that will have at least 100 openings each year and pay \$25,000 or more. Across these nine clerk occupations, the Labor Department projects there will be an annual average of 4,620

“Because we provide them with a core set of skills, they have a wide array of options. They can work at a big law firm or at the small business down the block that makes tortillas that still needs someone who can answer the phone.”

openings through 2018. With median salaries just under \$30,000 for many of these jobs, becoming a clerk could be a very good opportunity for disconnected youth to enter the workforce.

Although the skills to perform office clerk and receptionist jobs are customarily learned on the job, in a competitive labor market, rarely will an employer take the time to train an unskilled youth on required job activities or “soft skills,” such as proper office attire and behavior. To give its participants a fighting chance of getting hired, OBT provides a 22-week intensive full-time training program that combines HSE preparation and office skills such as Microsoft Office, keyboarding, business English and business math.

Randy Peers, executive director of OBT, says, “Because we provide them with a core set of skills, they have a wide array of options. They can work at a big law firm or at the small business down the block that makes tortillas that still needs someone who can answer the phone.” His organization also focuses on soft skills, including a work readiness curriculum with a public speaking component, which can make the difference between being hired and passed over. Not every young person who applies for OBT’s program is ready to join, however. Trainees must dress in professional attire during their training and arrive on time every day or face expulsion from the program. “They have to make changes up-front. Everything from the dress code and haircuts. They have to make some pretty hefty com-

mitments off the bat,” Peers says. To enroll, they must perform at a 6th grade level in math and 8th grade level in reading and are screened by a counselor.

Career and Educational Consultants similarly provides a solid grounding in office skills and workplace readiness to its trainees. The offer a 920-hour administrative office support training program that includes modules in basic office skills, word processing, data entry, automated bookkeeping and meeting and travel planning. To be eligible, participants must demonstrate 8th grade reading and math skills.

Customer service representative

Customer service representatives provide information on products and services and handle customer complaints within the office and administrative sector, as well as in a variety of other sectors, from transportation to retail to healthcare. NYSDOL projects more than 2,000 customer service representative openings a year across all sectors in New York City through 2018.

The New York City Labor Market Information Service named customer service representative as one of the top ten occupations in the city’s transportation sector, based on the number of people employed, recent job growth trends, wages, and basic educational requirements. In air transportation, customer service representative accounted for the fourth largest number of

jobs, and in transportation support, for the second largest number of jobs.

Cable TV companies and utilities also employ large numbers of customer service representatives. Kathleen Duncan, regional director for talent acquisition at Time Warner, reports that her company has a call center for residential customers in Flushing, Queens, with 800 workers. New hires start at \$13 an hour (\$27,040 a year) and earn up to \$18 an hour (\$37,440 a year). Duncan says that Time Warner is planning to replicate their Flushing call center for customers in their expanding commercial division. David Gmach, public affairs director for Con Edison, says his company will be recruiting representatives for its call centers also, particularly bilingual customer service representatives. Bilingual customer service representatives start at \$17.95 per hour and can earn as much as \$40.05 per hour after eight years. Customer service representatives lacking second language skills who work regular Monday through Friday shifts are paid \$16.87 per hour to start (rising to \$38.62 per hour). Customer service representatives who work weekends and evenings earn more, at \$19.54 per hour (rising to a maximum of \$39.64 per hour). A common career path for these workers is to become a supervisor in a call center.

Customer service representatives also work in corporate human resources departments, where they serve the needs of the corporation's employees. Another setting for customer service representatives is the healthcare industry. Here, they are called "patient representatives" and help patients obtain services, understand policies and make healthcare decisions. Customer service representatives also work in the fast-growing home healthcare services industry where their duties include answering phones, completing referral intake forms and verifying insurance benefits.

On average, customer service representatives earn about \$24,000 to start but their earnings can rise to well over \$30,000 annually. Some specific types of employers pay even more, especially for bilingual workers. Typically, customer service representatives receive training prior to beginning work. Career and Educational Consultants, Inc. for example, offers a 360-hour customer service training program that teaches oral and

written communications, organizational skills required for servicing customer inquiries and complaints, keyboarding and how to maintain accurate work records.

Bill and account collector

NYSDOL projects that the number of bill and account collectors in the city will grow by eight percent annually and generate 200 openings a year through 2018. Eric Najork, president of the Collectors Association of New York State, says that the weak economy has meant that more New Yorker's are falling behind in their bills, which, he says, is "absolutely" leading to substantial employment growth in the industry. James Brown, New York City labor market analyst at the NYS-DOL, observes, "We have seen a lot of staffing up by banks. There are so many delinquent accounts."

In addition to collection agencies and banks, bill collectors work for colleges, utilities, hospitals and physician's offices. The increasing demand for healthcare services as the city's population ages will mean more jobs for medical billers, one type of bill and account collector. Medical billing jobs usually require at least a high school diploma, and there are certificate programs in medical billing at CUNY community colleges.

Notably, the Labor Department has included bill and account collector on a list of occupations in the city it considers promising for individuals with lower educational attainment. Najork confirms that education requirements are low: "Some get a GED barely by the skin of their teeth. You need to be somewhat computer savvy, but that can be taught. The hardest part is being well spoken and motivated to make quite a lot of calls and face constant rejection." Although educational and training requirements are low, the occupation can pay very well. Najork says that compensation ranges from "the low \$20,000s to as high as \$80,000 or \$90,000" a year. Because the job also has flexible work hours, it is a more attractive option to many workers and can be a good option for students and parents.

Bill and account collector jobs have relatively low entry barriers, but learning about openings could be a challenge for young people. We could not identify any existing youth services provider

that placed program participants in bill and account collector jobs. Najork explained that because of high real estate prices, most collection agencies are located outside New York City. However, a significant number are “just across the Queens border” in Nassau County, within reasonable commuting distance for many city residents, but outside the catchment area of the city’s Workforce1 system.

Computer support specialist

Computer support specialists install and maintain computers and staff the help desks in corporate offices. With a projected 550 openings a year in New York City, they are in high demand and they are paid well, with a median salary of \$55,900.

As Table 5 shows, the majority of workers in this occupation have more than a high school diploma or equivalent. However, the Bronx-based non-profit Per Scholas demonstrated in 1995 that one does not have to have attend college to become a computer support specialist. Per Scho-

las trains low-income individuals to become A+ computer service technicians through a 15-week, 500-hour hands-on program in computer assembly, configuration, repair, and computer network troubleshooting, coupled with an on-the-job internship. To enroll, prospective trainees must be able to read and do math at a 10th grade level. The program’s trainees have been placed with major corporations such as GE Capital, 4G Data and AMC Corporation (Paypro).

Linda Quinones-Lopez, vice president of education & training at Per Scholas, reports that starting wages for A+ technicians range between \$12 and \$15 per hour (\$24,000 to \$27,000 a year) although most younger students start at \$10 an hour because employers will pay more to workers with work experience, even if their prior experience is not in a technical field. In 2011, Quinones expects to place 300 trainees and is targeting 50 percent of training slots to youth aged 18 to 25. These youth tend to do well after graduating. Dustin Hart, a 19-year old Per Scholas graduate from the Bronx, is now earning \$28,000 per year

EMPLOYER PROFILE

Angel L. Piñeiro, Jr., senior vice president for client services at ASI System Integration, Inc. has hired more than 300 Per Scholas graduates for entry level IT jobs in the last eight years. ASI is an IT support staffing company headquartered in New York City with offices in every state and five other countries. The company places workers with financial services, insurance, real estate, publishing and manufacturing companies, law firms and health care facilities. Piñeiro says that he has found that Per Scholas’ graduates are young, energetic and motivated to want a career, not just a job, and that they will do whatever it takes to succeed. He noted that some Per Scholas graduates have been promoted to management positions.

Graduates are typically hired as installers and entry-level technicians. Piñeiro says that hiring staff without prior work experience required a major change in the way the company did business. During most of its history, ASI hired computer support technicians with seven or eight years of experience at wages of \$50,000 to \$60,000. Instead, ASI now hires entry-level workers as installers or entry-level technicians and provides them with the training to qualify for progressively more senior positions. Bringing on inexperienced workers “represented a big investment and risk, but it turned out to be a great decision for us,” Piñeiro says. Not only has this strategy made the company more efficient and lowered its costs, it has had another unintended upside. Piñeiro has found that young people who have no previous work experience do not have to “unlearn” habits. With a young individual, he’s “willing to learn how to do things your way. As long as your training program is on track, these people will perform the way you want them to perform.” He has also found younger workers from low-income households to be more highly motivated than their more affluent coworkers. Piñeiro says, “When you have someone who has struggled financially, they will do more, listen more, and be more disciplined, because they know that if they do, they will move up.

as a remote support specialist for the GG Group, an information technology contracting firm. The first member of his family to finish high school, he could not find a job when he graduated and was rejected by both colleges to which he applied. He started at Per Scholas in February 2011 and was hired one month after finishing an internship. He says, "I never thought of myself being in a corporate environment," but he is already planning to become certified as a networking systems administrator.

Per Scholas recently began training for a Network Specialist credential in addition to its A+ certification training because "every year employers demand more qualifications," says Quinones. She says the additional certification can increase incomes from between \$24,000 to \$27,000 per year to the low \$30,000s.

Another organization, the Npower Technology Service Corps (TSC), is preparing New York

City young adults age 18 to 25 with a high school diploma or HSE diploma to become IT professionals. TSC's 22-week training program covers topics such as PC configuration, networking, troubleshooting and customer service and leads to an A+ certification. It also includes seven weeks of training in the Salesforce business software program, server and database maintenance and web design. According to TSC-New York Program Director Patrick Cohen, "A+ is a good entry-level certification that opens a lot of doors." He notes that "the additional training makes NPower's graduates marketable for a variety of different occupations." After skills training, graduates are placed in five week internships at corporations and nonprofit organizations. Hires generally earn between \$30,000 and \$40,000 per year. The program serves about 100 students a year.

Table 5. 2008 NYC employment and 2008-2018 projected change and annual average openings, starting and median salaries, percentage of NYS workers 25-44 with less than HS/ High School Equivalency (HSE) and with HS/HSE, educational attainment and training.

Occupation title and Standard Occupation Classification code	2008-18	2008	Annual Openings	Starting Salary	No HS/ HSE	Education and training required
				Median Salary	HS/HSE only	
Customer service representative (43-4051)	+3.8%	64,270	2,190	\$24,470	4.5%	HS/HSE and short-term vocational training preferred
				\$37,310	30.5%	
1) Office clerk, general (43-9061)	+2.3%	91,400	1,460	\$19,080	4.3%	HS/HSE and short-term vocational training preferred
				\$28,770	34.5%	
2) Receptionist and information clerk (43-4171)	+5.4%	38,100	1,240	\$21,040	4.7%	HS/HSE and short-term vocational training preferred
				\$29,910	39.5%	

Table 5 cont'd

Occupation title and Standard Occupation Classification code	2008-18	2008	Annual Openings	Median Starting Salary	No HS/HSE	Education and training required
				Median Salary	HS/HSE only	
3) Bookkeeping, accounting and auditing clerk (43-3031)	-0.6%	58,930	710	\$29,100	3.3%	HS/HSE and short-term vocational training preferred
				\$41,880	32.9%	
4) Shipping and receiving clerk (43-5071)	-15.1%	14,390	420	\$19,630	15.2%	Short-term on-the-job training
				\$30,200	48.4%	
5) Billing and posting clerk and machine operator (43-3021)	+5.2%	12,830	280	\$27,540	3.1%	HS/HSE and short-term vocational training
				\$38,360	34.1%	
6) File clerk (43-4071)	-32.6%	5,230	190	\$19,950	5.1%	Short-term on-the-job training
				\$31,410	34.7%	
7) Mail clerk and mail machine operator (43-9051)	-22.4%	5,080	120	\$23,690	10.5%	Short-term on-the-job training
				\$31,940	46.2%	
9) Information, record clerk, all other (43-4199)	-22.7%	3,510	100	\$33,940	2.4%	Short-term on-the-job training
				\$42,200	26.2%	
Computer support specialist (15-1150)	+2.3%	18,930	560	\$37,220	1.0%	HS/HSE and at least 500 hours vocational training
				\$55,900 ³⁴	12.5%	
Bill and account collector (43-3011)	+8.6%	6,810	170	\$29,160	4.4%	Short-term on-the-job training
				\$40,130	33.6%	

RETAIL TRADE

We did not initially plan on including retail jobs in this analysis, given the relatively low wages paid in this sector. However, many of the workforce development experts who work directly with young adults in New York implored us to include them since they are a critical first rung in the career ladder for countless disconnected youth.

It's also an area of the economy where job growth is occurring. Since 1990, the city's retailers have added 38,700 jobs, a 15 percent increase, to more than 300,000 positions. As most New Yorkers can surmise from seeing chain drug-stores proliferating in recent years, employment in health and personal care stores has soared, increasing by 88 percent in the same period. Clothing and accessory store employment jumped 35 percent, aided by growth in tourism to the city, and grocery store employment increased 24 percent. In one remarkable example, the Upper Manhattan Workforce1 Center staffed Eataly, a 50,000-square foot gourmet Italian food emporium on Madison Square Park that opened in 2010.

All of this growth, combined with normal worker turnover, means there are plenty of retailing jobs for entry-level workers. NYSDOL projects that through 2018 there will be 6,200 openings a year in retail salesperson and cashier jobs and lists these two titles among the 16 occupations expected to hire the most workers in New York City. These jobs typically offer low starting salaries but offer many other benefits to youth trying to enter the workforce. In particular, the flexibility of retail work schedules makes it suitable for young people who want to combine work with school. As Andrea Vaghy Benyola, director of career and education services at The Door, a youth services provider, says, "It's a really good industry for working in while you're also trying to get a GED or even pursue a college degree."

Jobs in these occupations also help young people who have been, at best, sporadically employed build a stable work record. Kristina Sepulveda, director of youth employment at Henry

Street Settlement, says, "If you can work in retail successfully, that means you can keep your register accurate, you have basic math skills, customer service skills, excellent communication abilities, patience, and you know how to present yourself. If you can show that you held a job for six months that gives you a huge advantage." For these reasons, we highlight several retail jobs below.

Retail salesperson and cashier

To be sure, most entry-level retail jobs pay low salaries. Nonetheless, when asked to recommend occupations for disconnected youth, Courtney Hawkins, associate vice president of education and youth services at F.E.G.S., one of the city's largest nonprofit providers of employment and social services, stresses that retail is their strongest shot at gaining a foothold in the workforce. She says, "If you have a young person with no work experience, a retail employer is more likely to hire them." Benyola recommends entry-level retail jobs for disconnected youth, not only because they are widely available but because the "skill sets [they obtain] can benefit them down the line in a wide range of positions and work settings."

Most better-paying jobs require work experience, and a retail job can be the first job that leads to all the rest. Retail jobs are the "ideal launch pad," according to Paula Bailey, vice president of Dale Grant Associates, which operates the Brooklyn, Queens and Transportation Workforce1 Career Centers. "Handling cash can lead to bank teller jobs, while retail customer service skills qualify workers for higher-paying jobs as customer service or sales representatives or as hotel desk clerks."

Entry-level retail sales jobs also have inherent career ladders that lead directly to sales management positions. NYSDOL reports that the median salary for the city's 26,930 first-line supervisors/managers of retail sales workers is \$42,150. "There tends to be a lot of promotion within the retail sector, more so than in a lot of

other industries, and many managers and supervisors start out at the bottom level,” says The Door’s Benyola. Others we interviewed told us that that retailers prefer to promote from within because they want managers who already understand and reflect their corporate culture. For example, dedicated workers who stay on the job and work long hours can be promoted in as little as a year to a keyholder position, so named because they open and close when the assistant manager is absent, and then to assistant manager. At the Harlem Costco, workers who started at \$12 an hour were making \$18 per hour after three years. And not all retail workers start out at low salaries. Paula Bailey notes that grocery store employment has surged and “most of those jobs are unionized.”

Teller

According to the Federal Deposit Insurance Corporation, between 2001 and 2010, the number of bank branches in New York City increased

from 452 to 694. Although many New Yorkers are dismayed that a bank branch seems to be on almost every commercial block in their communities, these new branches have created hundreds of teller positions that pay \$12 to \$15 an hour and do not require a college education.

Workforce1 Career Center staff confirm this surge in teller positions and other banking jobs. Bailey says banks look for individuals with a high school diploma or high school equivalency, six months to one year of experience handling cash and strong customer service skills. “With motivated workers who have gained experience it is very easy to move into other banking jobs as personal bankers or bank managers at higher salaries,” she says. Jeannette Nigro, vice president for economic development at the Brooklyn Chamber of Commerce, says the number of jobs in retail banking is increasing and that although teller jobs have low starting salaries, they do lead to better paying managerial jobs.

Table 6. 2008 NYC employment and 2008-2018 projected change and annual average openings, starting and median salaries, percentage of NYS workers 25-44 with less than HS/ High School Equivalency and with HS/HSE, educational attainment and training.

Occupation title and Standard Occupation Classification code	2008-18	2008	Annual Openings	Median Starting Salary	No HS/HSE	Education and training required
				Median Salary	HS/HSE only	
Retail salesperson (41-2031)	+0.3%	109,260	3,080	\$17,040	7.5%	Short on-the-job training
				\$21,950	32.0%	
Cashier (41-2011)	+4.6%	63,280	3,130	\$16,540	17.1%	Short on-the-job training
				\$18,310	44.1%	
Teller (43-3071)	+1.5%	15,850	670	\$14,880	2.8%	HS/HSE and short on-the-job training
				\$26,420	40.3%	

HOSPITALITY – FOOD SERVICE AND HOTELS

Increased tourism in New York City has supported remarkable growth in hospitality jobs at food service establishments and hotels. In 2011 New York City had a record 50.5 million visitors.³⁵ The city's tourism agency, NYC & Company, reports that from 2002 to 2010 the number of jobs supported by tourism increased by 37 percent, to 310,100.³⁶ This trend is expected to continue, with several of these occupations projected by NYS DOL to grow upwards of 7 or 8 percent through 2018. Even though wages in most entry-level occupations in food service and hotels are generally low, experience in some of these occupations can prove invaluable for a young person with little or no work experience and no high school degree.

Food service occupations

Employment prospects in food service are very good. According to NYS DOL, employment in food services and drinking places in New York City increased by 51 percent since 1990, to 211,000. The Department projects that 10,650 food preparation and serving related jobs will open annually in the city through 2018. Full-service restaurants initially drove much of this employment increase, with openings soaring 74 percent, to 115,000, but in the last few years there has also been a significant increase in limited-service restaurant chains. For example, 'wichcraft, which has 12 locations in the city, and Pret a Manger, which has 30 locations, both provide paid vacation and health benefits. In the year ending September 2011, employment in New York City's limited service restaurants grew by 4.4 percent, far outpacing the healthy 2.7 percent growth in full-service restaurant employment, the State Labor Department reports.

New food service regulations have also created employment and promotion opportunities for disconnected youth. Kevin Coffey, assistant deputy director for youth services at CAMBA, a non-profit that provides job training and placement, says that when new city regulations mandated

that every restaurant and supermarket employ a full-time food protection worker, they began to offer Food Protection Manager Training in their Out-of-School Youth Program. Coffey says that the first round of graduates was hired by restaurants and supermarkets, including Whole Foods, at salaries starting at \$25,000.

One longtime workforce professional we interviewed told us that entry-level food service occupations are "great starter jobs." For example, an individual who starts off as a dishwasher can become a chef after spending extra time helping the prep cook. From there, he or she could advance into progressively higher paying 'back of the house' jobs. Meanwhile, a typical 'front of the house' progression can go from hostess to cashier to shift manager to full-on manager.

Although culinary training and certifications are not considered entry-level requirements, those who take these programs often have an advantage in getting a food service job and moving up the career ladder. In addition to the CAMBA program, there are other opportunities for youth to receive culinary training. At Kingsborough Community College, Project Welcome offers a 72-hour program for low-income youth aged 18 to 24 with at least a 9th grade reading score. Participants learn how to comply with food safety, hygiene and safe food handling regulations to qualify for the Super SafeMark food safety certification (which is less demanding than the Food Protection Certificate issued by the New York City Department of Health). After program completion, job developers place graduates in grill cook, dishwasher/prep cook, counter staff, server, pastry chef and food aide jobs in restaurants, nursing homes, public school kitchens and retail food outlets.

Kingsborough also recently launched a one-year combined high school equivalency/food service training program targeting 18 to 24 year olds who are not working and not in school. The training will qualify students for four certifications: ServSafe Food Safety Manager, NYC Health

Department-Certified Food Handler, Food Production Management First Certification and National Restaurant Educational Foundation Education Foundation Customer Service Certification.

In addition to culinary and food safety training, other skills help food service workers climb the career ladder. Speaking Spanish tends to be an asset in the industry. “Spanish is the language of the kitchen,” says Kingsborough professor Jonathan Deutsch, who developed Kingsborough’s hospitality program. He finds that when placing interns, one of the first questions he is asked is whether the prospective intern speaks Spanish. Advancement for non-Spanish speakers is more difficult because they would likely have to rely on an English-speaking manager for on-the-job training, instead of learning from a front-line cook who is more likely to be a native Spanish speaker.³⁷ Deutsch notes that the city’s more expensive restaurants hire chefs trained at culinary institutes who are native English speakers.

Deutsch also advises that soft skills and job readiness are critical for food service jobs. “Workers can’t get into fights. And if that person needs to show at 7:45 a.m., they need to be there at 7:45 a.m. every day.” The emphasis on good customer service skills is apparent from the recruitment sections of websites of the city’s expanding retail food purveyors. Pret a Manger, for example, asks for “Pret Behaviors” from their workers, including: “has initiative, doesn’t wait to be told, copes well under pressure, communicates sensitively, is genuinely friendly.” Some of the workforce professionals we interviewed said that moving up the ladder at a corporate chain restaurant like Pret a Manger is much easier than at an independent restaurant.

Hotel occupations

Employment in accommodations in the city has increased 20 percent since 1990, according to NYSDOL. Thousands of jobs have been added, and the growth is continuing. From 2006 to 2011, the number of hotel rooms in the city grew by 24 percent³⁸ with another 7,000 hotel rooms under construction or planned for the next two years.³⁹ Occupations that offer some promise to disconnected youth include baggage porters and desk attendants at hotels. Although some of these jobs

Entry-level food service occupations are “great starter jobs,” ... a typical ‘front of the house’ progression can go from hostess to cashier to shift manager to full-on manager.

start at a relatively low salary, they offer a good entry into the industry and can lead to higher pay, even for those with limited educational attainment.

Although hotel occupations do not necessarily require formal training before being hired, there are programs that help youth prepare for these jobs. Project Welcome’s 72-hour Hospitality Operations training introduces participants to the hospitality industry, technology applications, customer service and work readiness and prepares them for the National Restaurant Association Education Foundation Customer Service Certification.⁴⁰ The program emphasizes customer service skills, which are transferable to retail and office/administrative jobs as well. Levine says the key to success in customer service is personality. “You have to have a ‘front of the house’ personality and like working with people.”

Levine also, says, however, that the program initially focused more narrowly on the hotel and tourism industry, but that graduates were stymied by the on-line application most employers use and the difficulty “of cracking the hotel workers union.” Kingsborough’s Deutsch says that most entry-level jobs are advertised only within the union, so they are filled primarily by persons who were connected to existing workers. Still, the staff of the Upper Manhattan Workforce1 Center reports that they staffed the new Harlem hotel Aloft—just one of the many new hotels that have opened in the city recently.

Table 7. 2008 NYC employment and 2008-2018 projected increase and annual average openings, starting and median salaries, percentage of NYS workers 25-44 with less than HS/ High School Equivalency (HSE) and with HS/HSE, educational attainment and training.

Occupation title and Standard Occupation Classification code	2008-18	2008	Annual Openings	Starting Salary	No HS/HSE	Education and training required
				Median Salary	HS/GED HSE	
Waiters/waitresses (35-3031)						
Waiters/waitresses (35-3031)	+7.0%	47,860	2,970	\$17,360	17.1%	Short term on-the-job training.
				\$24,200	36.2%	
Food preparation workers (35-2021)	+3.9%	37,730	1,440	\$17,590	33.0%	Short term on-the-job training.
				\$23,840	44.4%	
Cooks, institution and cafeteria (35-2012)	+7.6%	36,330	210	\$22,510	33.4%	Moderate on-the-job training.
				\$29,950	43.0%	
Cooks, restaurant, not fast food (35-2014)	+8.5%	21,820	690	\$20,400	33.4%	Long-term on-the-job training and/or vocational culinary arts training.
				\$27,280	43.0%	
Hosts, hostesses, restaurant, lounge and coffee shop (35-9031)	+7.7%	5,420	420	\$19,870	16.6%	Short-term on-the-job training.
				\$27,150	38.7%	
Accommodations*						
Baggage porters and bellhops (39-6011)	-0.2%	4,490	120	\$18,220	13.1%	Short-term on-the-job training.
				\$25,490	34.3%	
Hotel, motel and resort desk clerks (43-4081)	+8.6%	3,030	130	\$24,460	7.7%	Short-term on-the-job training.
				\$34,740	36.0%	

*In addition to the hotel-specific occupations in this table, hotels employ workers in other occupations discussed in this report, including customer service representative and maintenance and repair worker.

TWO MORE OCCUPATIONS WITH POTENTIAL

There are additional occupations that may hold promise for disconnected youth that are not examined at length in this report because it was not possible to quantify their labor market demand or because training opportunities appear to be limited. However, job developers may want to investigate them further because they pay good salaries and do not require a college education.

Computer numeric control (CNC) Operator

Computer Numerically Controlled (CNC) machines are used in the manufacturing industry where manually controlled machines were used. For example, where lathes and printing presses used to require a person to operate them, many are now controlled by central computers to create parts for cars, computer keyboards and a wide variety of other products. Although much of the computerization and mechanization of processes in the manufacturing industry has led to a decline in employment, there is still need for personnel, called CNC operators, to operate these central computers.

Although the NYSDOL projects that employment in manufacturing in the city will continue to decline at a rate of 15.2 percent through 2018, CNC Operators may be a promising industrial profession. According to Martin D'Andrade, director of the Manufacturing Workforce1 Career Center, they make about 40 placements per month in various occupations, and a number of subsectors—notably food, metal, electronics and aerospace parts manufacturers—show surprising health.

Unmet demand for CNC operators spurred the city's Manufacturing Workforce1 Career Center to create its own CNC training program in 2010. One month after the program finished, more than half of the 13 graduates either had jobs or interviews scheduled. Qualifying as a CNC operator requires specialized computer programming training and a ninth or tenth grade math and reading score. CNC operators can earn a very good wage of up to \$30 per hour.

Environmental Field Technician

Environmental field technicians remove pollutants or contaminants from soil, groundwater, sediment, or surface water and from underground and above-ground storage tanks and industrial facilities. Environmental remediation requires physical labor and is often performed outdoors. Workers must be able to lift at least 50 pounds and be able to wear full protective suits. Environmental field technicians earn from \$12 to \$32 per hour, depending on type of work to be performed and the work often involves travel. Most jobs are performed under a contract for six to nine months, or seasonally. USDOL projects employment growth of 21 percent in New York and 30 percent nationally. A scan of job listings in April 2012 indicated openings in Queens, as well as in Washington State; Jackson, Mississippi and Framingham, Massachusetts.

Because environmental remediation is highly regulated by federal and state laws, workers must be certified to perform each discrete task. Following training and testing, workers may receive certifications in areas such as hazardous waste operations, soil vapor intrusion, lead abatement, asbestos abatement, asbestos handling and OSHA construction safety, among others. St. Nick's Alliance, a Brooklyn-based training provider, has provided training in these specialties since 2000.

Ron Lee, St. Nick's former workforce director, says its multi-certification approach gives graduates a better chance of securing consistent employment all year long. Graduates have gone on to become emergency responders addressing oil spills, and field technicians doing air and soil sampling and have been hired to work in New Jersey, the Bahamas and New Orleans. Lee expects there to be local employment opportunities in wastewater and groundwater remediation, now that the Gowanus Canal and Newtown Creek have been declared Superfund sites.

OBSTACLES TO EMPLOYING DISCONNECTED YOUTH – BUT THEY CAN BE OVERCOME

Our research indicates that disconnected youth are already being hired for many of the jobs outlined in this report, and are succeeding in them. However, the day is long gone when someone without experience, significant formal education or training could walk into a job that will lead to economic independence. Even though prerequisites are reasonably attainable, disconnected youth need basic academic qualifications, some degree of skills training, job readiness preparation and a linkage to employers to be hired for many of the jobs that give them any chance for a middle class life.

We found, for example, that nearly every occupation with a median salary of at least \$25,000 requires some post-secondary vocational training ranging from as little as four weeks for light truck drivers to at least six months for medical assistants. Short-term training programs operated by nonprofit organizations, some of which work in partnership with City University of New York community colleges and with New York City Technical College, have been particularly effective at qualifying youth. Notable examples include Brooklyn Workforce Innovations, which trains commercial drivers and cable installers; South Bronx-based Per Scholas, which trains computer support technicians; and Opportunities for a Better Tomorrow, which qualifies youth without high school degrees for clerical jobs. These three programs alone move thousands of New Yorkers into living wage jobs annually.

Moreover, young applicants are often shunned from occupations such as customer service representative unless they have prior skills training, even though training is usually provided on the job. In a tough economy, with many applicants for every opening, employers are less willing to take any chance on new hires. Interviewees told us that employers will invariably pick an adult with work experience over a youth without work experience, even if the adult's ex-

perience is not relevant to the opening. Providing youth with necessary vocational skills helps level the playing field, although they may still be paid less than someone older.

Not only have vocational skills become more important, but educational qualifications have been raised for many of the occupations we identify, with more employers now requiring high school diplomas for jobs like food preparation.

And even more important than skills training and educational qualifications is job readiness, according to Jeanette Nigro, vice president for economic development with the Brooklyn Chamber of Commerce. Employers want workers who understand how to dress appropriately, how to speak to customers and fellow workers, and even how to accept criticism. These are skills that do not necessarily come "naturally," particularly for a youth with no foundation in workplace etiquette.

Finally, youth that obtain jobs that provide a "chance in a lifetime" are being connected to them by intermediaries, most often by "job developers" at community-based organizations who explain how that first job can lead to a career. Finding a decent job in New York City can be a daunting experience for adults with college degrees and twenty years of work experience, but for a youth with limited education and no understanding of the labor market, it is a near impossibility without help. As Tom Pendleton, director of the New York City Department of Education's Learning to Work Program, which serves overage, under-credited high school students, explains, "Youth have no awareness of the array of opportunities and how they are built on growth and education. The presentation of career ladders to them is such an important concept."

Operating somewhat akin to account executives at employment agencies or corporate recruiters, job developers learn as much as they can about the operations of companies in specific

“When I circle back to most managers for feedback on placements of disconnected youth, most of what I hear is how the performance of these young people opened their eyes to the potential of kids they would have written off before.”

industries and the qualifications for entry-level jobs, and develop relationships with human resources staff. When openings occur they look for program participants who are good matches for the job requirements and the corporation’s culture. They will then prepare applicants for the hiring process – by making sure that they have well-drafted resumes and are prepared for interviews.

Unfortunately, programs that work with disconnected youth have been greatly scaled back in recent years by federal and state budget reductions. The loss of these services is especially tragic because, once given an opportunity to obtain a high school equivalency degree or complete post-secondary training, New York’s disconnected youth have shown that they can do the job as well as anyone else. Although disconnected youth are often perceived as having less potential than peers who are working and in school, there is no evidence that that is the case. Tom Pendleton of the Department of Education’s Learning to Work Program says, “When people ask me what the youth are like who are in the program, I tell them to look at the 50 percent who graduated. These are the other 50 percent. In terms of aptitude they are no different; they just had more problems that got in the way of their finishing their high school education.”

This sense of untapped potential was echoed by Paul Ortega, Director of Employee and Organizational Development for Swiss Post Solutions,

an employee placement firm. Ortega has placed more than 85 formerly disconnected youth in New York City corporate offices. Ortega noted that in exercises aimed at finding creative, innovative solutions to problems, disconnected youth outperformed college students. He theorized that being disadvantaged had enabled them to be more resourceful. Ortega says that when he surveys the mentors at the end of each internship cycle, none can identify which interns were the disconnected youth. “When I circle back to most managers for feedback on placements of disconnected youth, most of what I hear is how the performance of these young people opened their eyes to the potential of kids they would have written off before.”

RECOMMENDATIONS

While there are a number of occupations that could provide youth with “the chance of a lifetime,” the uncertain economy has made the challenge of employing disconnected youth more difficult than ever. Workforce trainers and job developers report that employers are becoming more selective when hiring and are requiring higher academic attainment and more job experience. Yet the need for regular work for disconnected youth is as pressing as ever. A report we published jointly with the Community Service Society in 2010 noted that “New York has the lowest percentage of teens who are working of the 20 largest cities in the nation—and distressingly, the labor participation rate for 16-24 year olds has plummeted over the last decade.”⁴¹ Youth unemployment is not simply a short-term problem for the individual who is not working. Studies have found being unemployed when young leaves a “wage scar” that depresses income for decades and is highly predictive of future poverty.⁴²

Based on our findings for the occupations outlined above, we recommend several strategies for improving the employment prospects for New York City’s disconnected youth.

Provide disconnected youth solid information about jobs that lead to careers

There are many smart, talented young New Yorkers who believe the only job for them now and in the future is one behind the counter of a fast food restaurant. They are not aware that jobs are available with career ladders that lead to positions that pay enough to support a family. Nor do they know how to qualify for these openings or how to find them. Disconnected youth, most of whom come from low-income families, are less likely to learn about resources outside their communities and lack the resources to travel to more remote locations. They will need more local sources of this kind of career information.

2011 may begin to address this issue. As part of the initiative, the city will add five Probation Department satellite offices where ex-offenders will receive mentoring and employment services. In addition, the highly successful Job-Plus program, which provides neighborhood-based employment evaluation and referral services in public housing complexes, is being expanded to six more NYCHA complexes. Unfortunately, however, the Young Men’s Initiative is set to expire after three years and is targeted only at men.

To more effectively remedy the career information deficit, additional permanent community-based outreach sites are needed. One model is the Bushwick Workforce Resource Center, which provides walk-ins with an initial assessment of academic skills, interviews them and refers them to appropriate job openings. The BWRC also provides on-site classes in computer and clerical skills, high school equivalency (HSE) diploma and pre-HSE preparation. From 2007 to 2009, the program operated a small “pop-up” storefront in Red Hook offering similar services which provided about a third of the nearby IKEA store’s initial workforce.

Disconnected youth could also be reached through a new website offering comprehensive and accessible information about occupations, how to qualify for them, available training and education programs and subsidies that defray their expense. A communications campaign that includes subway advertisements and radio public service announcements could also be launched to direct young people to the website.

Expand sectoral training programs

Over the past 20 years, sectoral training has proven to be one of the more effective avenues to decent-paying employment for individuals with limited education. Among the country’s most successful sectoral training programs are those sponsored by Per Scholas, Metropolitan Council on Jewish Poverty, Brooklyn Workforce Innovations, Opportunities for a Better Tomorrow and

The \$127 million Young Men’s Initiative the Bloomberg administration announced in August

St. Nick's Alliance, as highlighted in this report. Employers have hired thousands of graduates from these programs.

The success of sectoral programs like these depends on close relationships with employers that ensure that training reflects industry needs. Trainees are then armed with skills that qualify them for specialized in-demand jobs. Sectoral training programs are "win-wins"—employers get workers who can perform from day one, while newly-hired workers get better jobs that pay higher salaries than they could have qualified for without specialized training. A study by Public/Private Ventures found major gains by participants two years after completing sectoral training. On average, they were more likely to be employed and to be working more months than their counterparts in a control group. They also worked more hours each month at higher hourly wages.⁴³

Sectoral training programs are particularly recommended for industries in which skill sets can be applied to multiple occupations. Our research identified three sectors in New York City in which multi-disciplinary training is particularly desirable, and where existing sectoral training programs are insufficient to meet industry demand: office and administrative support, property maintenance, and hospitality.

Together, these three industries are projected to generate a total of 16,190 openings that could be filled by disconnected youth, but there is limited training capacity to meet this demand. In Office and Administrative Support, for example, 4,620 openings are projected for the cluster of nine clerk positions. Although sectoral training could qualify participants for openings as information clerks, general office clerks, or billing and posting clerks, for example, currently only one organization is providing training for these occupations targeted to youth.

Connect youth to employers

A young person without work experience or a high school diploma is unlikely to be hired in any of the occupations we have identified simply by leaving an application with an employer. They need an intermediary to connect them to employers and to help them present themselves

well. The city's Workforce1 Career Centers are reliable sites for jobs with major employers. Community-based organizations, on the other hand, focus more on smaller employers. Yet both of these venues could be improved to better serve the needs of disconnected youth.

Jeannette Nigro, vice president for economic development with the Brooklyn Chamber of Commerce, says that small businesses are often more willing to take a chance on a young person without work experience than are larger employers. These businesses are also more likely to work with community-based organizations than with the Workforce1 Career Centers to find candidates for job openings, she says. Because CBO job developers are able to learn about local employers' workforce needs and their business cultures, they are able to identify suitable job candidates and prepare candidates to be interviewed. Contract payments made to these organizations are contingent on job placements and retention, so organizational survival is tied to making good matches for employers. Community-based organizations with proven job placement records should be expanded. Unfortunately, we were told that the work of many CBOs is jeopardized by funding cuts.

Tens of thousands of jobs are filled every year by the city's 11 Workforce1 Career Centers. However, youth are unable to take full advantage of these Centers for several reasons. For one, few disconnected youth visit the Centers. As reported in our study *Fostering Careers*, issued in September 2011, only about four percent of the clients placed in jobs by Workforce1 Centers in 2010 and the first quarter of 2011 had less than a high school diploma or high school equivalency.⁴⁴ Second, Workforce1 Centers are not equipped to provide the work readiness programs many disconnected youth need. Alex Saavedra, former manager of the Upper Manhattan Workforce1 center, says, "We can't really help anyone who hasn't got a resume." And, finally, because of how city-administered funding is structured, community-based organizations are unlikely to refer a young person they have been assisting to jobs at Workforce1 Centers. If a young person is hired through a Workforce1 Center, the CBO will not be paid for any workforce services it may have pro-

vided unless they are one of a limited number of “community partners” that are permitted by the city’s Department of Small Business Services to refer program participants to the Centers.

To widen access to jobs that can be performed with little specialized training, particularly in retail, hospitality, manufacturing and transportation, rules precluding federally-funded community based organizations from referring disconnected youth to Workforce1 Centers should be relaxed.

Help disconnected youth become job-ready

Many disconnected youth have had little exposure to the world of work and lack “soft skills,” such as knowing how to dress for an interview or even that you must call in to work when sick. Job readiness also means developing the discipline to follow a work routine, a problem that is especially pronounced among many young people who have neither been working nor been in school for a long time. Sara Farimani, workforce director for NMIC, reports that trainees younger than 25 in the organization’s building maintenance program are eager to work, but that their attendance is much more erratic and they are significantly less likely to complete the program than older trainees. Individuals like them need help developing the work habits that are essential to getting and keeping a job.

Alex Saavedra, the former Upper Manhattan Workforce1 Center director, says that employers are willing to hire and train their entry-level workers, but only if they are already “job-ready.” Job readiness preparation is provided by a network of neighborhood-based organizations like NMIC. NMIC case managers help young trainees learn discipline and workplace expectations, prepare for job interviews, and navigate issues that arise on the job, as part of a program that helps them find work. These programs do an excellent job of giving youth the skills they need to get and keep a job, but they need to be expanded to serve more youth who need help.

Link youth to skills training for better-paying jobs

Occupations paying a median salary of at least \$25,000 such as medical assistant, light

truck driver and computer support specialist require short-term vocational training. Training is widely available from proprietary (for profit) schools, community-based organizations and continuing education departments at CUNY colleges. Free vocational training has been available from community based organizations, but many are now undergoing federal, state and private funding cuts. Kerwin Rivera, SoBRO’s Director of Workforce Development, reports that medical assistant, customer service/retail and paratransit training programs were eliminated in 2012 because of cuts in funding from the State Office of Temporary and Disability Assistance’s Career Pathways and Wage Subsidy Programs.

Community college programs, which many disconnected youth could successfully complete, are similarly out of reach because of cost and funding constraints. Cynthia Murphy, director of continuing education at CUNY’s York College, says that one reason why enrollees in York’s certified nursing assistant training program are older than 25 is because “we charge tuition and many of the younger people who are unemployed are looking for a grant-funded program.” She adds, “We would love to work with some of the younger ones but we are very lean and do not have resources.” Tuition for the certified medical assistant program at Hostos Community College, for instance, is \$3,585, not including books. The Department of Small Business Services (SBS) distributes federally-funded individual training grants, but David Fischer, the agency’s former senior advisor for strategy and partnerships, says that the city has enough funding to give out only a few thousand federally-funded Individual Training Grants a year and “close to zero percent” of the grants go to disconnected youth.⁴⁵

In addition to funding needs, training programs must also be tailored to serve the needs and learning styles of disconnected youth. Participating in a training program requires strong work habits. In addition to class time, a student may be assigned challenging homework and be expected to perform well in an internship. As Chuck Hoffman, director of workforce development services at New York City Technical College, put it, “Many of those beginning a program have no idea how hard they will work.” Hoffman notes

that attrition of younger students from training programs is especially high.

The structure of college and proprietary training programs are often not well-suited to the maturity levels and learning styles of disconnected youth. Providers report that disconnected youth can have difficulty concentrating during long lectures and work better when training incorporates “learning by doing.” To address this distinction between young trainees and older ones, St. Nick’s Alliance, for example, has launched an environmental remediation program that is more lab-intensive than its existing environmental remediation program and which includes additional supports.

Program length can also be an issue. Providers report that shorter training programs are more attractive to youth who are desperate to earn money. These youth will quit programs before completing them to take even low-paying jobs in fast food outlets. Stipends would incentivize them to remain and complete programs, but are largely unavailable now due to budgetary constraints. Offering training with case management and other support services, is also important to encourage retention by youth who face issues that can derail them.

Assist youth in obtaining a driver’s license

For many of the occupations identified in this report, driving is a job requirement. Employers are increasingly requiring a driver’s license even for jobs that do not involve commercial driving. Carolann Johns, managing director of workforce development at Brooklyn-based St. Nick’s Alliance, says that food service, customer service and retail employers now favor applicants with licenses, in case they need goods or vehicles to be moved. She adds that a driver’s license is seen as a symbol of responsibility and sobriety. Some employers suspect that job applicants who say they lack a license are hiding a DWI conviction or license suspension. There may be thousands of disconnected youth who would be qualified for openings but lack only a driver’s license.

Brooklyn Workforce Initiatives (BWI) began its own driver training program, NYDrivers, to help cable installation trainees get their licenses because “we just couldn’t place anyone without

it,” according to BWI Associate Director Tammy Burgess.

NYDrivers is a unique program but it is provided in only one industry. Since driving has become a fundamental entry-level skill, driver training needs to be accessible and affordable. A citywide driving academy could cost-effectively deliver driver education to larger groups of young people.

Help disconnected youth meet entry-level education requirements

Most entry-level occupations that pay a median salary of at least \$25,000 require a high school diploma or high school equivalency (HSE) diploma. An ability to read and do math reasonably well is necessary even for occupations that require less formal education. However, an estimated 163,150 New Yorkers aged 18 to 24 lack a high school diploma or HSE diploma and without this basic qualification many youth are virtually shut out of the labor force.⁴⁶

In our 2011 *Failing the Test* study, the Center noted that the passage rate for persons with prior HSE exam preparation was two-thirds higher than the rate for persons who took the test without advance preparation.⁴⁷ Programs that combine degree preparation with job training and internships, such as the city Education Department’s Learning to Work program, are especially effective because they give young people a strong incentive to complete the program. As Adjoa Gzifa, director of LaGuardia Community College Workforce Education Center, explains, “The bottom line is this: if you put a young person in an internship in a field of their interest, then you have a better chance of having that person complete the program.” LaGuardia Community College’s GED Bridge Program combines HSE preparation with training for healthcare services jobs. Kingsborough Community College recently launched a one-year Learning to Work program that combines HSE skills instruction with food service training and job placement services.

However, there are thousands of disconnected youth without high school degrees whose academic proficiency is too low for a HSE program or to meet basic job requirements. Most HSE programs are six months long, and will not enroll

students with reading and math scores below 8th grade levels, because these students will not be able to pass a HSE test by the end of the term. Training providers are discouraged from serving those most in need of help by contracts that typically condition payments on specified high school pass rates.

New Yorkers with reading and math skills below an eighth grade level are more appropriately placed in pre-HSE basic education courses. A national study found that students in adult basic education programs can advance by 1.3 grade levels within 15 weeks.⁴⁸ However, only about 20,200 seats are available citywide to serve New Yorkers of all ages, when it is estimated that more than 35,000 youth under age 25 could benefit from ABE classes.⁴⁹ A recent evaluation noted that recruitment of students to fill the classes was not difficult because “there are so many out-of-school youth and so few available programs.”⁵⁰

Revive New York City's Urban Youth Service Corps and create a NYC public sector internship program to give disconnected youth a foothold in the city's workforce

Internships can expose disconnected youth to the range of well-paying public sector career opportunities. For more than ten years New York City administered the largest urban national service corps in the nation, enrolling nearly 700 youth per year aged 16 to 25, nearly half of whom had not graduated from high school. Members of the New York City Volunteer Corps (CVC) worked in teams in city agencies and community-based organizations, mentoring children in afterschool programs, caring for the elderly, and creating gardens in vacant lots. The CVC served as a model for AmeriCorps, President Clinton's national service initiative. Placements provided exposure to a variety of potential careers and work settings. Youth were encouraged to pursue their education while participating in the Corps. In exchange for their year of service, Corps members received weekly stipends to cover expenses and a post-service \$5,000 college scholarship.⁵¹

Another possible model is the apprenticeship program operated for many years by the Metropolitan Transit Authority which offered car cleaner jobs to public assistance recipients,

who were ultimately able to take advantage of training to move up to higher-paying supervisory positions. If this or a similar model were implemented within city agencies, a ladder to thousands of well-paying jobs could be created for disconnected youth.

Approximately 250,000 persons are employed by the city of New York. Of these, 19 percent have only a high school diploma or high school equivalency diploma and 5.6 percent have no high school credential. A study issued by New York City Comptroller John Liu in March 2011 found that city workers with a high school degree but no college education earn 13 percent more than workers with the same education in the private sector. The study found that janitors, security guards, bus drivers, bus and truck mechanics, electricians and carpenters employed by the city out-earned their private sector counterparts. The average wage of the estimated 47,500 city workers with only a HS/HSE diploma was \$44,795.⁵²

Even modest turnover could generate a substantial number of entry-level openings that could be filled by disconnected youth. To ensure that they have the skills to perform these jobs, an internship or apprenticeship program like that formerly at the MTA ought to be developed by departments which employ substantial numbers of workers with high school educations or less.

ENDNOTES

1. Fiscal Policy Institute, Community Service Society and JobsFirstNYC, "New York City's Young Adult Labor Market," James Parrott and Lazar Treschan (anticipated July 2012).
2. NYC's unemployment rate was 9.5 percent in April 2012, according to the New York State Department of Labor.
3. New York State Department of Labor, Long-Term Occupational Projections (2008-2018). Accessed at <http://labor.ny.gov/stats/demandm.asp?reg=nyc>. These occupations are cashiers, retail salespersons, waiters and waitresses, customer service representatives, janitors and cleaners, office clerks-general, food preparation workers, receptionists and information clerks, stock clerks-order fillers. We consolidated the three clerk occupations into one.
4. City of New York, *Age Friendly NYC, Enhancing Our City's Livability for Older New Yorkers, 2009*, accessed at http://www.nyam.org/agefriendlynyc/docs/NYC_Age_Friendly_reportEnhancing-Livability.pdf
5. According to the New York State Department of Labor, the number of projected annual openings for certified nursing assistants and patient care technicians cannot be quantified because workers in these occupations are aggregated in the same occupational classification as orderlies and attendants. We have assumed that one-half of the persons employed as nursing aides, orderlies and attendants are CNAs/PCTs.
6. New York State Department of Labor, Current Employment Survey estimates. This number is total employment in "Healthcare and Social Services" less employment in "Social Services."
7. Population Division, New York City Department of City Planning, July 14, 2011.
8. New York City Department of City Planning, *New York City Population Projections by Age/Sex & Borough 2000-2030* December 2006. Accessed at <http://home2.nyc.gov/html/dcp/pdf/census/projectionsreport.pdf>. In 2006, City Planning projected that in 2010 there would be only 931,650 residents 65 older, but the 2010 U.S. Census counted 993,158. So the increase from 2000 to 2030 could turn out to be greater than the 44 percent increase the Department projected in 2006.
9. New York State Department of Labor, New York City Occupational Projections, 2008 to 2018.
10. Although employment in general medical and surgical hospitals in the city increased 10 percent from 1990 to 2000, it increased only one percent between 2000 and 2010, and slightly declined during the past two years.
11. New York City nursing home employment has declined 10 percent since peaking in 2002.
12. U.S. Department of Labor, Monthly Labor Review, December 2004.
13. Center for Health Workforce Studies, School of Public Health, State University of New York at Albany, *Supply of and Demand for Medical Assistants in New York City*, June 2011.
14. The Patient Protection and Affordable Care Act provides \$11 billion over five years to expand community health centers, which should encourage expansion of doctor's office and clinics in lower-income communities and create more jobs for medical assistants.
15. Throughout this report the source for 2008-2018 employment projections is *New York City Occupational Projections*, issued by the New York State Department of Labor. Source for salaries is *Occupational Wages in New York City*, also issued by the New York State Department of Labor; wages are based on Occupational Employment Statistics Survey collected from approximately 57,000 businesses from 2007 through 2010 and updated to the first quarter of 2011. Source for educational attainment and required employment and training is O*Net, accessed at <http://www.oneonline.org>.
16. There is no Standard Occupation Classification code specific to CNAs or PCTs. Because the State Labor Department includes nursing aides with orderlies and attendants (SOC 31-1012), it is not possible to determine the precise number of CNAs/PCTs employed or their average starting or median salaries. However, CUNY York College cites a median salary in New York State of \$29,000 in materials describing the college's CAN training program. <http://www.york.cuny.edu/conted/>
17. This may be a significant over-projection for hospital employment in this occupation. The survey on which the New York State DOL based its 2008-2018 projections was conducted in 2010, about the same time as St. Vincent's Hospital closed. Since then, the financial condition of several additional New York City hospitals indicates that more closures and/or mergers are imminent.
18. These are salaries for Nursing Aides, Orderlies and Attendants (SOC 31-1012). According to O*Net, this SOC was recently discontinued and a new SOC, 31-1014, Nursing Assistants, now applies to CNAs and PCTs and a new SOC, 31-1015, applies to orderlies. However, O*Net does not

currently report educational attainment or education and training requirement data for these two new SOCs.

19. According to the SUNY Albany study on medical assistant supply and demand, 8.4 percent of medical assistants in New York City have less than a high school diploma or GED. The SUNY Albany percentage is derived from the U.S. Census American Community Survey for 2006-2008.
20. U.S. Bureau of Labor Statistics, *Career Guide to Industries* 2010-11 Edition, accessed at <http://www.bls.gov/oco/cg/cgs020.htm>
21. U.S. Census, Local Employment Dynamics.
22. Additional jobs were projected partly as a result of American Recovery and Reinvestment Act spending. The Act requires health care providers to show "they have medical digital records systems and are using them." A report issued by the Obama administration, *The Job Impact of the American Recovery and Reinvestment Plan*, estimated that the Act's incentives to digitize health records would create 50,000 new information technology jobs. See also Carrier Mason-Draffen, "Could digitizing medical records create LI jobs?," *Newsday*, March 24, 2011.
23. A+ is the basic entry level computer technician certification. Sponsored by the Computing Technology Industry Association, it demonstrates that the individual knows how to install, configure, troubleshoot and repair hard drives, modems, printers and other computer equipment.
24. The wages indicated for general utility workers, meter readers, and mechanics apply to Con Edison workers in Brooklyn, Manhattan, Queens and the Bronx pursuant to the contract negotiated by Local 1-2 of the Utility Workers Union of America. Con Edison workers in Staten Island and National Grid are governed by other contracts and may be paid at slightly different rates.
25. There is no single source of data for general utility worker employment and openings, inasmuch as the New York State Department of Labor does not compile data for this occupational title used by utilities. Instead, workers performing general utility worker duties described in this report are counted among workers in several different titles, including maintenance and repair worker and power plant operator. The 3,740 general utility workers shown for 2008 are comprised of the number of electric line installers reported for that year. However, this number does not include steam and gas line maintenance workers employed by Con Edison and National Grid or by New York City power plants operated by US Power Generating, TransCanada and Astoria Generating. The number of projected annual openings for general utility workers was provided by the Con Edison Public Affairs Department so therefore it does not include openings at National Grid or power plant operators.
26. The number of projected openings was provided by the Con Edison Public Affairs Department and pertains only to meter readers employed by them. Meter readers may also be employed by National Grid and paid a different wage than those employed by Con Ed.
27. There is no Standard Occupational Classification (SOC) code for building maintenance worker. According to NYSDOL Labor Market Analyst James Brown, approximately 66 percent of those employed under the SOC 49-9071 as "maintenance and repair workers, general" are employed by property management companies, institutions, and the public sector as building maintenance workers. The numbers of current and projected workers are prorated from the overall employment number for this SOC. The salary and educational statistics indicated on Table 3 reflect those of the SOC 49-9071 as a whole.
28. <http://www.panynj.gov/airports/lga-facts-info.html> and <http://www.panynj.gov/airports/jfk-facts-info.html>
29. <http://www.panynj.gov/airports/jfk-facts-info.html>
30. Interview with Thomas Charles, Vice-President MTA Paratransit, August 4, 2011.
31. A passenger endorsement is required for a holder of a commercial driver's license to drive a vehicle designed to carry 15 or more passengers. A knowledge test must be passed.
32. There is no Standard Occupational Category (SOC) title for paratransit driver. According to NYSDOL Labor Market Analyst James Brown, approximately 44 percent of those employed under the SOC 53-3011 as "Ambulance drivers and attendants, except emergency medical technicians," are paratransit drivers. The numbers of current and projected workers are prorated from the overall figure. The salary and educational statistics indicated on Table 4 reflect those of the SOC title as a whole.
33. Accessed at <http://www.bls.gov/oco/ocos277.htm>.
34. More than 40 percent of computer support specialists in New York State have at least a bachelor's degree. This skews the median wage upward.
35. *TravelDailyNews.com*, "Mayor Bloomberg announces revised 2011 New York City tourism fig-

ENDNOTES cont'd

- ure - record 50.5 million," accessed at http://www.traveldailynews.com/pages/show_page/47472-Mayor-Bloomberg-announces-revised-2011-New-York-city-tourism-figure---record-505.
36. The peak year was 2006, with 368,179 jobs. 2002 is the earliest year for which jobs numbers are posted. See <http://www.nycgo.com/articles/nyc-statistics-page>.
 37. In recognition of this, the Adult Education Department of Drexel College offers a 1.6 credit on-line Spanish for Food Service course designed for restaurant managers, wait staff and cooks who work with Spanish speaking employers and co-workers. In addition to basic greetings and general Spanish vocabulary, the course covers menu terms, hiring, training, job expectations and performance.
 38. NYC & Company, *Hotel Development in NYC, New York City Briefing Sheet*, accessed at http://www.nycgo.com/assets/files/pdf/Hotel%20Development_WTM%202011%20Update%2011%202%2011%20_2_.pdf.
 39. "News from the Blue Room," Press Release 409-11, November 14, 2011.
 40. The National Restaurant Association (NRA) confers certifications recognized by the hospitality industry nationally. Students seeking NRA certification pass a national exam graded by National Restaurant Association Solutions, an affiliate of the NRA. Prospective employers accept the certificate as evidencing proficiency in certain key areas. The ManageFirst program covers competency in ten areas including hospitality management, inventory and purchasing, and managerial accounting, in addition to customer service.
 41. Center for an Urban Future and the Community Service Society, *Closing the Skills Gap, A Blueprint for Preparing New York City's Workforce to Meet the Evolving Needs of Employers*, January 2010.
 42. Thomas A. Mroz and Timothy H. Savage, *The Long-Term Effects of Youth Unemployment*, Employment Policies Institute, October 2001.
 43. "Tuning in to Local Labor Markets: Findings from the Sectoral Employment Impact Study," by Sheila Maguire, Joshua Freely, Carol Clymer, Maureen Conway and Deena Schwartz, Public/Private Ventures, 2010, available at http://www.ppv.org/ppv/publications/assets/294_publication.pdf.
 44. Thomas Hilliard, *Fostering Careers*, Center for an Urban Future, September 2011.
 45. Prior to working for the City, David Fischer served as the Center for an Urban Future's director of workforce development and authored our 2006 *Chance of a Lifetime* report.
 46. E-mail correspondence with Venu Thelakkat, Director of Data Analysis, Literacy Assistance Center, Oct. 14, 2011.
 47. Sarah Brannen, *Failing the Test*, Center for an Urban Future, September 2011.
 48. ProLiteracy America, *U.S. Adult Literacy Programs: Making a Difference, a Review of Research on Positive Outcomes Achieved by Literacy Programs and the People they Serve*, March 2003.
 49. E-mail correspondence with Venu Thelakkat, Director of Data Analysis, Literacy Assistance Center, Oct. 7, 2011, October 14, 2011.
 50. Patricia B. Campbell PhD, Tom R. Kibler, Jennifer L Weissman PhD, *Youth Development Institute: Community Education Pathways to Success, Final Evaluation Report*, Campbell-Kibler Associates, Inc., October 19, 2009.
 51. City Volunteer Corps, Application for Qualification to the Community Development Agency, accessible at <http://www.wultex.com/writing/pdf/CDA.pdf>
 52. Municipal Employee Compensation," Frank Braconi, Ph.D., Chief Economist, Office of the New York City Comptroller, March 2011.

Sector	Occupation	Average Annual Openings	2008 NYC Employment	Median Starting Salary	Median Salary
Healthcare	Pharmacy Technician	270	4,850	\$23,330	\$34,530
	Certified Nurse Assistant, Patient Care Technician	880	41,440	\$28,910	\$35,430
	Medical Assistant	260	8,430	\$25,510	\$32,360
Telecommunications and Utilities	Telecommunications Equipment Installer and Repairer	110	5,930	\$46,110	\$69,560
	Telecommunications Line Installer and Repairer	110	7,070	\$43,310	\$69,880
	General Utility Worker	140	3,740	\$36,442	\$73,800
	Meter Reader	100	1,460	\$29,990	\$42,090
Property Maintenance	Maintenance and Repair Worker-General	700	31,647	\$27,000	\$41,680
	Janitor and Cleaners (except Maids and Housecleaners)	1700	90,190	\$18,460	\$30,870
	Landscaping and Groundskeeping Worker	230	11,580	\$22,750	\$33,480
Transportation	Truck Drivers, Light and Delivery Services	370	20,250	\$19,960	\$33,930
	Cargo and Freight Agent	70	2,830	\$27,830	\$41,630
	Paratransit Driver	620	933	\$22,800	\$36,700
Office and Administrative Support	Customer Service Representative	2,190	64,270	\$24,470	\$37,310
	Clerk: Bookkeeping, Accounting, and Auditing	710	58,930	\$29,100	\$41,880
	Clerk: Office and General	1,460	91,400	\$19,080	\$28,770
	Clerk: Receptionist and Information Clerk	1,240	38,100	\$21,040	\$29,910
	Miscellaneous Clerk Occupations	1,210	43,920	\$19,630 - \$33,940	\$30,200 - \$42,200
	Computer Support Specialist	560	18,930	\$37,220	\$55,900
	Bill and Account Collector	170	6,810	\$29,160	\$40,130
Retail Trade	Retail Salesperson	3,080	109,260	\$17,040	\$21,950
	Cashier	3,130	63,820	\$16,540	\$18,310
	Teller	670	15,850	\$14,880	\$26,420
Hospitality	Waiters/waitresses	2,970	47,860	\$17,360	\$24,200
	Food Preparation Workers	1,440	37,730	\$17,590	\$23,840
	Cooks (Institution and Cafeteria)	210	36,330	\$22,510	\$29,950
	Cooks (Restaurant not Fast Food)	690	21,820	\$20,400	\$27,280
	Hosts, Hostesses (Restaurant, Lounge, and Coffee Shop)	420	5,420	\$19,870	\$27,150
	Baggage Porters and Bellhops	120	4,490	\$18,220	\$25,490
	Hotel, Motel, and Resort Desk Clerks	130	3,030	\$24,460	\$34,740

% Without HS/HSE Diploma	% With Only HS/HSE Diploma	Required Degree	Required Training/Certification/Licensing
2.50%	27.80%	HS/HSE (preferred)	Short-term on-the job training is offered to pharmacy retail workers; Some major pharmacy chains prefer applicants who passed the National Pharmacy Certification Board test; community colleges offer a 120-hour certification program
N/A	N/A	HS/HSE	A 100-hour approved training program is required; most programs are 120-130 hours; Must pass competency exam; Patient Care Technicians usually must have certifications in EKG, phlebotomy, and cardiopulmonary resuscitation
4.80%	29.06%	HS/HSE	Certification not legally required but is preferred; 6 months to 2 years training depending on additional skills taught
3.10%	31.70%	HS/HSE	5 weeks to 3 months training preparing for Building Industry Consulting Service International installation certification is preferred; Cable installers must have a driver's license
4.90%	41.10%	HS/HSE	5 weeks to 3 months training preparing for Building Industry Consulting Service International installation certification is preferred; Cable installers must have a driver's license
7.20%	46.60%	HS/HSE	Training is provided by utility; Must have 10th grade reading and math skills; Con Ed requires a driver's license
6.10%	45.20%	HS/HSE	Short-term on-the-job training provided by utility
14.20%	42.80%	none	Classroom training in carpentry, electric, tiling is recommended; Training programs range from 180 to 210 hours
29.30%	44.80%	none	Short-term vocational training preferred
40.70%	34.40%	none	Short-term on-the-job training
19.40%	49.40%	none	Class B commercial driver's license and at least two years of driving with a regular Class D license is required
3.70%	35.80%	none	Moderate on-the-job training; driver's license required
15.00%	36.70%	none	Requires a Class C commercial driver's license with a passenger endorsement; To qualify must have a regular Class D driver's license for at least three years with no more than four points and pass a written test and road test; Vocational training not required but will facilitate placement
4.50%	30.50%	HS/HSE	Vocational training covering oral and written communications, organizational skills, keeping accurate records and keyboarding is preferred
3.30%	32.90%	HS/HSE (preferred)	Short-term vocational training (preferred)
4.30%	34.50%	HS/HSE (preferred)	Short-term vocational training (preferred)
4.70%	39.50%	HS/HSE (preferred)	Short-term vocational training (preferred)
6.43%	36.65%	HS/HSE (preferred)	Short-term on-the-job training/Short-term vocational training
1.00%	12.50%	HS/HSE	Requires A+ computer technician certification and 10th grade math and reading skills; Training programs generally run for approximately five months
4.40%	33.60%	none	Short-term on-the-job training
7.50%	32.00%	none	Short-term on-the-job training
17.10%	44.10%	none	Short-term on-the-job training
2.80%	40.30%	HS/HSE	Short-term on-the-job training
17.10%	36.20%	none	Short-term on-the-job training
33.00%	44.40%	none	Short-term on-the-job training; vocational training programs facilitate placement
33.40%	43.00%	none	Moderate on-the-job training; candidates will be more competitive with vocational training in food safety, hygiene and safe handling can qualify for certifications, such as the National Restaurant Association Educational Foundation's ServSafe Food Safety Manager certification or the more demanding NYC Department of Health Food Protection Certificate
33.40%	43.00%	none	Long-term on-the-job training and/or culinary arts training
16.60%	38.70%	none	Short-term on-the-job training; National Restaurant Association Education Foundation Customer Service Certification is helpful
13.10%	34.30%	none	Short-term on-the-job training
7.70%	36.00%	none	Short-term on-the-job training

NO DEGREE REQUIRED

Occupation	Average Annual Openings	2008 NYC Employment	Median Starting Salary	Median Salary	% without HS/HSE Diploma	% with only HS/HSE Diploma	Required training/Certification/Licensing requirements
Cashier	3,130	63,820	\$16,540	\$18,310	17.10%	44.10%	Short-term on-the-job training
Retail Salesperson	3,080	109,260	\$17,040	\$21,950	7.50%	32.00%	Short-term on-the-job training
Waiters/waitresses	2,970	47,860	\$17,360	\$24,200	17.10%	36.20%	Short-term on-the-job training
Janitor and Cleaners (except Maids and Housecleaners)	1700	90,190	\$18,460	\$30,870	29.30%	44.80%	Short-term vocational training preferred
Food Preparation Workers	1,440	37,730	\$17,590	\$23,840	33.00%	44.40%	Short-term on-the-job training; vocational training programs facilitate placement
Maintenance and Repair Worker-General	700	31,647	\$27,000	\$41,680	14.20%	42.80%	Classroom training in carpentry, electric, tiling is recommended; Training programs range from 180 to 210 hours
Cooks (Restaurant not Fast Food)	690	21,820	\$20,400	\$27,280	33.40%	43.00%	Long-term on-the-job training and/or culinary arts training
Paratransit Driver	620	933	\$22,800	\$36,700	15.00%	36.70%	Requires a Class C commercial driver's license with a passenger endorsement; To qualify must have a regular Class D driver's license for at least three years with no more than four points and pass a written test and road test; Vocational training not required but will facilitate placement
Hosts, Hostesses (Restaurant, Lounge, and Coffee Shop)	420	5,420	\$19,870	\$27,150	16.60%	38.70%	Short-term on-the-job training; National Restaurant Association Education Foundation Customer Service Certification is helpful
Truck Drivers, Light and Delivery Services	370	20,250	\$19,960	\$33,930	19.40%	49.40%	Class B commercial driver's license and at least two years of driving with a regular Class D license is required
Landscaping and Groundskeeping Worker	230	11,580	\$22,750	\$33,480	40.70%	34.40%	Short-term on-the-job training
Cooks (Institution and Cafeteria)	210	36,330	\$22,510	\$29,950	33.40%	43.00%	Moderate on-the-job training
Bill and Account Collector	170	6,810	\$29,160	\$40,130	4.40%	33.60%	Short-term on-the-job training
Hotel, Motel, and Resort Desk Clerks	130	3,030	\$24,460	\$34,740	7.70%	36.00%	Short-term on-the-job training
Baggage Porters and Bellhops	120	4,490	\$18,220	\$25,490	13.10%	34.30%	Short-term on-the-job training
Cargo and Freight Agent	70	2,830	\$27,830	\$41,630	3.70%	35.80%	Moderate on-the-job training; driver's license required

HS/HSE PREFERRED

Occupation	Average Annual Openings	2008 NYC Employment	Median Starting Salary	Median Salary	% without HS/HSE Diploma	% with only HS/HSE Diploma	Required training/Certification/Licensing requirements
Clerk: Office and General	1,460	91,400	\$19,080	\$28,770	4.30%	34.50%	Short-term vocational training (preferred)
Clerk: Receptionist and Information Clerk	1,240	38,100	\$21,040	\$29,910	4.70%	39.50%	Short-term vocational training (preferred)
Miscellaneous Clerk Occupations	1,210	43,920	\$19,630 - \$33,940	\$30,200 - \$42,200	6.43%	36.65%	Short-term on-the-job training/Short-term vocational training
Clerk: Bookkeeping, Accounting, and Auditing	710	58,930	\$29,100	\$41,880	3.30%	32.90%	Short-term vocational training (preferred)
Pharmacy Technician	270	4,850	\$23,330	\$34,530	2.50%	27.80%	Short-term on-the job training is offered to pharmacy retail workers; Some major pharmacy chains prefer applicants who passed the National Pharmacy Certification Board test; community colleges offer a 120-hour certification program

HS/HSE REQUIRED

Occupation	Average Annual Openings	2008 NYC Employment	Median Starting Salary	Median Salary	% without HS/HSE Diploma	% with only HS/HSE Diploma	Required training/Certification/Licensing requirements
Customer Service Representative	2,190	64,270	\$24,470	\$37,310	4.50%	30.50%	Vocational training covering oral and written communications, organizational skills, keeping accurate records and keyboarding is preferred
Certified Nurse Assistant, Patient Care Technician	880	41,440	\$28,910	\$35,430	N/A	N/A	A 100-hour approved training program is required; most programs are 120-130 hours; Must pass competency exam; Patient Care Technicians usually must have certifications in EKG, phlebotomy, and cardiopulmonary resuscitation
Teller	670	15,850	\$14,880	\$26,420	2.80%	40.30%	Short-term on-the-job training
Computer Support Specialist	560	18,930	\$37,220	\$55,900	1.00%	12.50%	Requires A+ computer technician certification and 10th grade math and reading skills; Training programs generally run for approximately five months
Medical Assistant	260	8,430	\$25,510	\$32,360	4.80%	29.06%	Certification not legally required but is preferred; 6 months to 2 years training depending on additional skills taught
General Utility Worker	140	3,740	\$36,442	\$73,800	7.20%	46.60%	Training is provided by utility; Must have 10th grade reading and math skills; Con Ed requires a driver's license
Telecommunications Equipment Installer and Repairer	110	5,930	\$46,110	\$69,560	3.10%	31.70%	5 weeks to 3 months training preparing for Building Industry Consulting Service International installation certification is preferred; Cable installers must have a driver's license
Telecommunications Line Installer and Repairer	110	7,070	\$43,310	\$69,880	4.90%	41.10%	5 weeks to 3 months training preparing for Building Industry Consulting Service International installation certification is preferred; Cable installers must have a driver's license
Meter Reader	100	1,460	\$29,990	\$42,090	6.10%	45.20%	Short-term on-the-job training provided by utility

HEALTHCARE

Occupation title and Standard Occupation Classification code	2008-18	2008	Annual Openings	Median Starting Salary	No HS/HSE	Education and training required
				Median Salary	HS/HSE only	
Pharmacy technician (29-2052)	+30.3%	4,850	270	\$23,330	2.5%	HS/HSE and PTCB certification preferred by most employers
				\$34,530	27.8%	
Certified Nursing Assistant/ Patient Care Technician ¹⁶	+11.3%	41,440 ¹⁷	880	\$28,910	N/A	HS/HSE and 130 hours of training (CNA)
				\$35,430 ¹⁸		
Medical assistant (31-9092)	+20.6%	8,430	260	\$25,510	4.8% ¹⁹	HS/HSE and six months to two years training
				\$32,360	29.06%	

TELECOMMUNICATIONS AND UTILITIES

Occupation title and Standard Occupation Classification code	2008-18	2008	Annual Openings	Median Starting Salary	No HS/HSE	Education and training required
				Median Salary	HS/HSE only	
Telecommunications equipment installer and repairer (49-2022)	+1.5%	5,930	110	\$46,110	3.1%	HS/HSE and one year of training
				\$69,560	31.7%	
Telecommunications line installer and repairer (49-9052)	-1.1%	7,070	110	\$43,310	4.9%	HS/HSE and five weeks to three months training
				\$69,880	41.1%	

PROPERTY MAINTENANCE

Occupation title and Standard Occupation Classification code	2008-18	2008	Annual Openings	Median Starting Salary	No HS/HSE	Education and training required
				Median Salary	HS/HSE only	
Maintenance and repair worker-general (49-9071) ²⁷	+6.0%	31,647	700	\$27,000	14.2%	Short-term on-the-job training
				\$41,680	42.8%	
Janitor and cleaners, except maids and housecleaners (37-2011)	-1.2%	90,190	1,700	\$18,460	29.3%	Short-term on-the-job training
				\$30,870	44.8%	
Landscaping and groundskeeping worker (37-3011)	+7.5%	11,580	230	\$22,750	40.7%	Short-term on-the-job training
				\$33,480	34.4%	

TRANSPORTATION

Occupation title and Standard Occupation Classification code	2008-18	2008	Annual Openings	Median Starting Salary	No HS/HSE	Education and training required
				Median Salary	HS/HSE only	
Truck drivers, light and delivery services (53-3033)	-6.2%	20,250	370	\$19,960	19.4%	Class B commercial driver's license.
				\$33,930	49.4%	
Cargo and freight agent (43-5011)	-8.8%	2,830	70	\$27,830	3.7%	Short-term on-the-job training
				\$41,630	35.8%	
Paratransit driver ³²	+15%	933	620	\$22,800*	15%	Class C commercial driver's license, passenger endorsement. Must be 21.
				\$27,040*		
				\$36,700	36.7%	

*According to Carolann Johns of St. Nick's Alliance. Median salary shown is salary after six months.

OFFICE AND ADMINISTRATIVE TRADE

Occupation title and Standard Occupation Classification code	2008-18	2008	Annual Openings	Starting Salary	No HS/HSE	Education and training required
				Median Salary	HS/HSE only	
Customer service representative (43-4051)	+3.8%	64,270	2,190	\$24,470	4.5%	HS/HSE and short-term vocational training preferred
				\$37,310	30.5%	
1) Office clerk, general (43-9061)	+2.3%	91,400	1,460	\$19,080	4.3%	HS/HSE and short-term vocational training preferred
				\$28,770	34.5%	
2) Receptionist and information clerk (43-4171)	+5.4%	38,100	1,240	\$21,040	4.7%	HS/HSE and short-term vocational training preferred
				\$29,910	39.5%	
3) Bookkeeping, accounting and auditing clerk (43-3031)	-0.6%	58,930	710	\$29,100	3.3%	HS/HSE and short-term vocational training preferred
				\$41,880	32.9%	
4) Shipping and receiving clerk (43-5071)	-15.1%	14,390	420	\$19,630	15.2%	Short-term on-the-job training
				\$30,200	48.4%	
5) Billing and posting clerk and machine operator (43-3021)	+5.2%	12,830	280	\$27,540	3.1%	HS/HSE and short-term vocational training
				\$38,360	34.1%	

OFFICE AND ADMINISTRATIVE TRADE CONT'D

Occupation title and Standard Occupation Classification code	2008-18	2008	Annual Openings	Median Starting Salary	No HS/HSE	Education and training required
				Median Salary	HS/HSE only	
6) File clerk (43-4071)	-32.6%	5,230	190	\$19,950	5.1%	Short-term on-the-job training
				\$31,410	34.7%	
7) Mail clerk and mail machine operator (43-9051)	-22.4%	5,080	120	\$23,690	10.5%	Short-term on-the-job training
				\$31,940	46.2%	
9) Information, record clerk, all other (43-4199)	-22.7%	3,510	100	\$33,940	2.4%	Short-term on-the-job training
				\$42,200	26.2%	
Computer support specialist (15-1150)	+2.3%	18,930	560	\$37,220	1.0%	HS/HSE and at least 500 hours vocational training
				\$55,900 ³⁴	12.5%	
Bill and account collector (43-3011)	+8.6%	6,810	170	\$29,160	4.4%	Short-term on-the-job training
				\$40,130	33.6%	

RETAIL TRADE

Occupation title and Standard Occupation Classification code	2008-18	2008	Annual Openings	Median Starting Salary	No HS/HSE	Education and training required
				Median Salary	HS/HSE only	
Retail salesperson (41-2031)	+0.3%	109,260	3,080	\$17,040	7.5%	Short on-the-job training
				\$21,950	32.0%	
Cashier (41-2011)	+4.6%	63,280	3,130	\$16,540	17.1%	Short on-the-job training
				\$18,310	44.1%	
Teller (43-3071)	+1.5%	15,850	670	\$14,880	2.8%	HS/HSE and short on-the-job training
				\$26,420	40.3%	

HOSPITALITY

Occupation title and Standard Occupation Classification code	2008-18	2008	Annual Openings	Starting Salary	No HS/HSE	Education and training required
				Median Salary	HS/GED HSE	
Waiters/waitresses (35-3031)						
Waiters/waitresses (35-3031)	+7.0%	47,860	2,970	\$17,360	17.1%	Short term on-the-job training.
				\$24,200	36.2%	
Food preparation workers (35-2021)	+3.9%	37,730	1,440	\$17,590	33.0%	Short term on-the-job training.
				\$23,840	44.4%	
Cooks, institution and cafeteria (35-2012)	+7.6%	36,330	210	\$22,510	33.4%	Moderate on-the-job training.
				\$29,950	43.0%	
Cooks, restaurant, not fast food (35-2014)	+8.5%	21,820	690	\$20,400	33.4%	Long-term on-the-job training and/or vocational culinary arts training.
				\$27,280	43.0%	
Hosts, hostesses, restaurant, lounge and coffee shop (35-9031)	+7.7%	5,420	420	\$19,870	16.6%	Short-term on-the-job training.
				\$27,150	38.7%	
Accommodations*						
Baggage porters and bellhops (39-6011)	-0.2%	4,490	120	\$18,220	13.1%	Short-term on-the-job training.
				\$25,490	34.3%	
Hotel, motel and resort desk clerks (43-4081)	+8.6%	3,030	130	\$24,460	7.7%	Short-term on-the-job training.
				\$34,740	36.0%	

*In addition to the hotel-specific occupations in this table, hotels employ workers in other occupations discussed in this report, including customer service representative and maintenance and repair worker.

Center *for an*
Urban
Future

120 Wall Street, Floor 20
New York, NY 10005

This report and all other publications issued by the Center for an Urban Future can be viewed at www.nycfuture.org. Please subscribe to our monthly e-mail bulletin by contacting us at cuf@nycfuture.org or (212) 479-3344.