New York City’s greatest strength has long been its human capital, but an alarming number of New Yorkers lack the skills to compete in today’s economy.
The Community Service Society of New York (CSS) draws on a 160-year history of excellence in addressing the root causes of economic disparity. Through applied research, advocacy, litigation, and innovative program models, we respond to urgent, contemporary challenges by pioneering programs for a more prosperous city. Find out more at www.cssny.org.

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The Center for an Urban Future (CUF) 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.

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About This Report

The original inspiration for this report came nearly three years ago, when Mayor Michael Bloomberg took the occasion of Earth Day 2007 to release PlaNYC 2030, a much-lauded blueprint to put New York City on a path toward sustainability. Like many New Yorkers, we lauded the plan for its audacity and wholeheartedly embraced its goals.

It occurred to us, however, that envisioning and committing to necessary changes to New York’s built environment encompasses only half the work of securing a stable, prosperous future for our city. At least as important as issues of housing stock, transportation, and energy are questions of how those who live here will fare in the economy of 2030 and beyond. We wanted to see city leaders set forth a corresponding vision for the people of New York City that addresses two fundamental questions: How can we ensure that current and potential employers here have a steady supply of adequately skilled workers, and that New Yorkers of modest means can fully share in the city’s prosperity?

Our two organizations—the Community Service Society (CSS) and the Center for an Urban Future (CUF)—have spent years grappling with these questions. We understand that the quality of human capital in New York City has powered the city’s economic pre-eminence. At the same time, we observe that large segments of the city’s population currently lack the skills to fully participate in the labor market or advance in their careers. And our research suggests that employers in nearly every sector of the economy are likely to demand even more advanced levels of skills and educational attainment in the years ahead—raising the concerns that those New Yorkers already on the economic margins will continue to fall further behind, and that our stock of human capital will prove insufficient to the demands of a knowledge economy.

A collaboration around the need for New York to embrace a focused, integrated human capital strategy was the obvious next step in our work. We began serious discussions about this project in 2008, planning both to build upon the previous research we had published separately and to place that work in the larger context we felt was appropriate. In early 2009, both organizations gathered data, convened focus groups of industry leaders and service providers, and interviewed dozens of employers, administrators, researchers, and public officials. In July and August, we held two well-attended forums for employers and non-profit leaders around human capital issues that helped shape the final contours of this report.

As the Bloomberg administration embarks upon its third term, we believe the time is now to embrace a holistic approach toward building New York City’s stock of human capital—and we stand ready to work with all New Yorkers toward that end.
Inside This Report

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Part One: Meeting the Future Workforce Needs of New York’s Employers

Part Two: Investing in the Skills of New Yorkers

Recommendations: A Blueprint for Building New York’s Human Capital

K-12 Education

Higher Ed/Community Colleges

1. Reward quality teachers and create incentives for them to work in the most challenging schools.
2. Do much more to align primary and secondary education with the needs and priorities of the labor market.
3. Create school-level incentives for exceptional student achievement.
4. Support career and technical education as a viable pathway to high school completion and post-secondary choices.
5. Harness public and private resources to close the persistent racial achievement gap in citywide testing.

6. Embrace community colleges as platforms for mobility and give them the resources to succeed.
7. Invest resources in “persistence” programs to improve two-year degree attainment rates at CUNY schools along the lines of the Accelerated Study in Associate Programs (ASAP) initiative.
8. Expand “middle college” models in which students can simultaneously progress toward high school completion and an associate’s degree.
9. Refine financial aid initiatives to supplement the state Tuition Assistance Program (TAP).
Workforce Development System

10. Broaden the focus of workforce development beyond short-term job placement to put greater emphasis on job retention and career advancement.

11. Impose accountability and coordination on a workforce system that remains fragmented and characterized by both gaps and redundancies.

12. Finish the job of linking economic development to workforce development.

Immigrants

13. Significantly expand support for ESOL programs to serve the more than 1.6 million working-age adult New Yorkers with limited English proficiency.

14. Encourage Congress to support comprehensive immigration reform and other federal policies to ensure that New York City can retain foreign-born workers from around the world.

15. Focus on the needs of immigrant students and English Language Learners in New York City public schools.

16. Enforce existing laws.

The Formerly Incarcerated

17. Significantly increase access to education and training during incarceration.

18. Invest in large-scale transitional jobs program for men and women recently released from prison.

19. Make reentry a mayoral priority.

20. Lead by example.

21. Take advantage of federal funding opportunities.

Public Assistance Recipients

22. Reform welfare-to-work programming to focus on the acquisition of skills, not solely placement in low-wage jobs.

23. Expand paid transitional jobs programs and other subsidized work opportunities

24. End the Work Experience Program (WEP).

25. Embrace a career pathways framework for employment programming.

26. Better integrate HRA's public assistance programs with the workforce development system.

27. Use ARRA to support public assistance recipients

Young Adults

28. Invest more in basic skills programs for youth and young adults.

29. Offer more and better programming to help young, low-skilled New Yorkers earn a GED.

30. GED programs should incorporate transitions to careers and post-secondary education opportunities.

31. Create supported work/transitional jobs programs for youth and young adults.

32. Facilitate more early work opportunities.

33. Focus on improving workforce outcomes for older youth and young adults.

34. Better Coordinate Existing Programs for Disconnected Youth.

Appendix A: New York City Employment by Race, Age, and Education

Appendix B: Low-Wage Work in New York City
Introduction

New York City’s Economic Future

“We can’t succeed as an economy with a population that’s undereducated and under-skilled. We need to invest in the people who are born here and grow up here.”

—Seth Pinsky, President, New York City Economic Development Corporation

While public attention remains focused on the highest unemployment numbers in a generation, New York City is drifting toward a structural crisis with which policymakers could be grappling long after the recession fades to a bad memory. Even as the concerns about financial capital that spurred the downturn begin to subside, public officials must turn their efforts toward ensuring that the city’s stock of human capital—its most vital economic resource through good times and bad—continues to grow. The stakes are nothing less than New York City’s traditional economic preeminence.

Over the long term, human capital—the skills, educational attainments, talents, and creativity of a workforce—is the single most important determinant of a community’s economic success or failure. Nowhere is this more true than in New York: virtually every industry most crucial to the city’s current and future prosperity, from finance to health care to information technology, relies upon a robust supply of highly educated and skilled employees.

But there are reasons to fear that as the economy offers ever-greater rewards for accumulating human capital—and ever-
harsher punishments for communities that fail to do so—New York is starting to fall behind. Several key industries already expect workforce shortages in the future. Employers in other sectors anticipate new challenges in finding qualified employees as their jobs require higher levels of skills and educational attainment. An even bigger problem is that large segments of the city’s workforce currently lack the skills to fully participate in the labor market, advance in their careers, and achieve economic security. Not only has this limited the pool of qualified workers for local employers, it has left alarming numbers of public assistance recipients, the formerly incarcerated, young adults, and immigrants all but permanently unemployed, underemployed, or stuck in low-wage jobs with little opportunity for advancement.

These long-standing challenges were coming into focus even before the recession began. But with the city’s unemployment rate now above 10 percent and long-term joblessness approaching all-time highs, we believe it is imperative for city policy makers to begin developing and implementing a comprehensive human capital agenda immediately. This report offers just such a blueprint for the mayor and City Council.

The first part of this analysis focuses on employers: what are the current and long-term skills needs of the city’s business community, and which sectors are experiencing worker shortages? The second part considers the readiness of New York City’s workforce: how can we address the significant skills gaps that exist among the city’s working-age population? The report concludes with a comprehensive set of recommendations, including more than 30 specific action steps.

For the New York City of the 21st century, no task will be more important than maintaining the human capital advantages it has long enjoyed—and closing the significant skills gaps that now separate much of its population from the economic mainstream.

To start with, the city’s future economic growth will depend on this. Indeed, a growing number of economists believe that cities with the strongest human capital assets will have the most success in the 21st century economy. “Human capital predicts urban success,” writes Edward Glaeser, an economics professor at Harvard and one of academia’s foremost thinkers about the future growth of cities.1 “The enormously tight connection between skills and unemployment should remind us of the importance of investing in human capital. Skills drive the success of individuals, cities, and nations.”2 Researchers Ray Uhalde and Jeff Strohl reached the same conclusion in a 2006 report for the New Commission on the Skills of the American Workforce: “Policy makers and economists strongly agree that a highly educated and skilled workforce is one of the indispensable keys to economic success… Studies confirm that education enhances labor productivity and, hence, economic growth through improvements in worker skills and by upgrading the quality of human capital embodied in workers.”3

At the same time, developing the skills of the city’s population will be instrumental in restoring New York as a city of opportunity where people of even the most modest backgrounds can climb into the middle class. In today’s knowledge economy, more than half of all new jobs—and as much as three-quarters of the fastest growing occupations—now require more than a high school diploma. “The skills and knowledge to be able to make sound career choices, pursue good jobs, and adapt to economic realities have been rising steadily,” concludes a recent report by Jobs for the Future.4 “A high school diploma alone cannot guarantee a path to a decent standard of living—and the lack of high school credentials makes economic hardship all but certain.”

But while the labor market continues to evolve toward valuing educational attainment and advanced skills, too many New York City residents are left behind. To cite just a few examples:

- Over 1.5 million adults in the five boroughs—more than a quarter of all adult New Yorkers—don’t have adequate literacy skills. In every borough other than Staten Island, at least 25 percent of adults are functionally illiterate, meaning that they are unable to perform such tasks as reading medical instructions, signing a form, or adding the amounts on a bank deposit slip.

- It is far from clear that the rising generation will fare much better: as of 2006–2007, just under half (49.2 percent) of all elementary and middle school students in the five boroughs read below state and city standards.

- Nearly 1.2 million New York City residents aged 25 and older—more than 21 percent of the total—lack a high school diploma or its equivalent.
If current demographic and educational attainment trends persist, New York’s future workforce will become less skilled even as the economy continues to shift toward “knowledge jobs.” Hispanics and other non-white residents are expected to drive much of the city’s future population growth, but these groups have significantly lower rates of educational attainment. Among eighth graders in New York City, only 52 percent of Hispanics and 45 percent of black students scored “at or above Basic” level in math—compared with 77 percent of white students. Reading scores showed a similar pattern: 80 percent of white students scored at or above Basic, compared with 50 percent of blacks and 51 percent of Hispanics.8

New York has the lowest percentage of teens who are working of the 20 largest cities in the nation9—and, distressingly, the labor participation rate for 16–24 year olds has plummeted over the past decade. Even before the current recession, approximately 200,000 young New Yorkers between the ages of 16 and 24 were “disconnected”—neither in school nor working.10

Immigrants make up a large and growing share of the city’s workforce, yet too many of these individuals lack the English skills to qualify for many positions, leaving employers unable to fill numerous mid- and upper-level openings and limiting workers’ ability to advance into higher-paying jobs. Despite the problem, only about 3 percent of the 1.23 million adults in the city who spoke English “less than very well” in 2005 were enrolled in state-funded ESOL programs.11

About 70,000 New York City residents are released from jails and prisons each year; the large majority face long odds against finding steady employment thanks to low educational attainment and severely limited skills. Statistics show that most of those who don’t find work will eventually find themselves back behind bars, at public expense.

For more than a century, New York has relied upon its appeal as a destination location for bright, ambitious people from around the country and beyond in a wide variety of fields. The city’s allure has allowed leaders in the public and private spheres to assume that employers would never lack for the talent that feeds and sustains our economy, and has somewhat relieved them of the need to ensure that those who grew up here are supported in reaching their full educational and occupational potential. “Our number one competitive advantage is intellectual capital,” said Kathryn Wylde, president of the Partnership for New York City, at a forum in July 2009 sponsored by our two organizations. “We’ve basically for years sucked up the best and the brightest from around the world.” But there are reasons to believe this will not be the case forever. As other cities and regions in the U.S. and abroad ramp up their own efforts to build an economy around high-skilled workers, their first step will be to retain a larger share of the local native talent that heretofore might have migrated toward the bright lights of the Big Apple. Adding in considerations of cost and quality of life, it is not hard to imagine that the flood of incoming talent could ebb to a trickle. Perhaps more to the point, people don’t often move to New York City primarily to be nurses, carpenters, or HVAC (heating, ventilation, and air conditioning) technicians—so it’s important that we ensure opportunities in such jobs, which require skill and training beyond high school but not necessarily a bachelor’s degree, for those who begin their lives here. Already, several key city industries, including high-value jobs in health care and information technology, have experienced periodic worker shortages in recent years. The impending retirement of the baby boomers, who are disproportionately represented in the upper levels of these and other talent-intensive industries, will only heighten the dilemma.

“There are a whole range of health care disciplines which are shortage areas,” noted Dr. Herbert Pardes, president and CEO of New York-Presbyterian Hospital, at our July 2009 forum. “We need more people.” Research has identified similarly high concentrations of older workers who hold demanding jobs in sectors such as construction and transportation, among others.

This is a long-term problem that requires a long-term solution: vastly increasing the supply of “homegrown human capital” to complement or replace what the city traditionally has been able to import.

During the eight years of the Bloomberg administration, New York City’s leaders have engaged in thoughtful planning for how to manage projected population growth between now and 2030, with particular focus on environmental sustainability, housing stock, and transportation infrastructure. The long-dysfunctional public school system, too, has come in
for exacting scrutiny and far-reaching reform efforts. But while we salute the mayor and his counterparts in the public and private sectors for this forward-looking focus, it seems worth pointing out that they missed something: the current and future workers of New York, and how they will fare in a competitive global economy in which competitive advantage increasingly goes to the regions strongest in human capital.

The city does not lack for institutions and programs dedicated to helping develop human capital, from the K-12 school system to the City University of New York (CUNY) and the workforce development efforts of multiple city agencies. But there has not yet been a concerted strategy to address the alarming skills gaps that currently exist among the city’s working-age population. Nor is there a plan to reconcile, align, and strengthen the governmental and private programs in the city that provide education, job training, and specialized skills and experience for New York’s workforce of today and tomorrow. We believe that if New York City is to maintain its economic preeminence and improve quality of life for its residents, a comprehensive human capital strategy is badly needed.

Among its components must be outcome improvements in these subsystems, none of which have approached their potential and several of which are severely under-performing:

- Far too many New York students are leaving college without attaining a credential. On average, about one-third of CUNY entrants are no longer enrolled a year after beginning classes. By two years after entry, a majority of students are no longer enrolled.

- While a growing number of jobs require applicants to have at least a two-year college degree, graduation rates at the city’s community colleges are woefully low. Only 2.3 percent of the 17,248 students who enrolled as first-time, full-time freshman at the six City University of New York (CUNY) community colleges in the fall of 2006 had graduated by 2008. About 7.9 percent took three years to graduate.

- Our efforts to improve the knowledge and skill level of current workers—most of whom will still be on the job in 2020, and many of whom are likely to be working in 2030—are inadequate and ineffective. As of 2003, New York ranked 43rd of the 50 states in college attendance by adults (ages 25–49), with less than 4 percent of those who have high school degrees in college. By contrast, 6.4 percent of California’s adult population was enrolled in college. Worse, the number of adult learners in New York City colleges dropped sharply between 1995 and 2005, falling by 20 percent.

- Perhaps most damning, in light of the more than one million adults who lack a high school degree or equivalency, New York ranked 50th of the 50 states in 2008 in pass rate for those who take the GED exam. The biggest reason for this poor ranking is the city’s abysmal pass rate, which is chronically under 50 percent and lags far below the statewide average.

Just as its unsurpassed human capital has been the key to New York City’s economic dynamism, its potential diminishment holds great peril for the future. At the July conference held to inform this report, Seth Pinsky, president of the city’s Economic Development Corporation, asked and then answered the key rhetorical question: “Why would [an employer] come to a place where it’s hard to find space, where it’s expensive to do business, where it’s congested? The reason businesses come here is because of our people.” He later added, “We can’t succeed as an economy with a population that’s undereducated and under-skilled. We need to invest in the people who are born here and grow up here.”

The time for laying the foundation to increase New York City’s stock of human capital is now. At a moment of economic insecurity and facing a global economy that will only become more competitive, it is more important than ever for the city to be able to sustain a capable home-grown workforce.

Over the past several years, our two organizations have published detailed analyses on the nature and performance of New York City’s systems of human capital formation, from workforce development programs to career and technical education, and on high-priority target populations for these services, including disconnected youth and unemployed black men. This blueprint draws substantially upon those earlier reports, but places their findings into the larger context of a rapidly changing city in an economy undergoing profound transformation. Commitment to a focused, sustained effort to improve and align those systems, with the goal of helping all New Yorkers to maximize their abilities and claim a stake in the economic life of our city, will go a long way toward ensuring that we emerge from that transformation with both our values and our prosperity intact.
Meeting the Future Workforce Needs Of New York’s Employers

New York City has maintained its economic preeminence in recent years thanks in large part to its unmatched store of human capital. Employers of all types have chosen to be here because of the city’s unparalleled pool of highly talented, creative, and skilled workers. As the competition for talent intensifies, it’s likely that the city will see its traditional appeal to talented college graduates and professionals from around the world somewhat diminished. But even if the city continues to draw the best and brightest, there’s compelling evidence that this will not be enough to sustain a growing economy in which employers in sectors from health care and construction to auto maintenance and transportation are requiring workers with advanced levels of skills. New York will need to produce significantly more middle- and high-skilled workers to meet the demands of a labor market focused ever more sharply on “knowledge workers.”

Employer expectations and projected shifts in labor market demand ensure that the workforce of tomorrow will need greater educational attainment and skill mastery simply to keep pace. “Pressed by the forces of global competition, in-

“High school is no longer enough. In today’s world, a postsecondary credential has become as important as a high school diploma used to be.”
creasing workforce skills requirements, an aging workforce, and a substantially less-educated populace, employers are scrambling—even during the current economic downturn—to staff their operations with people bearing the technical and soft skills and knowledge required to do increasingly more technology-based and sophisticated work,” concludes an October 2009 study by the Workforce Strategy Center. “Large and small businesses alike are suffering or will suffer severe economic consequences if they are not able to employ qualified personnel.”

Tim Nitti, principal and head of the location strategy practice at KLG Advisors, a consultancy dedicated to assisting companies make location and site decisions, believes that these dynamics are already occurring in New York. “Whereas not too long ago businesses generally assumed that they could meet their human capital needs wherever, now they are much more conscious of talent geography in their search for a place to grow,” he explains. Nitti adds that for “skill-intensive businesses”—the ones that add the most value to the communities in which they operate—human capital considerations far outweigh traditional economic development blandishments such as financing assistance and tax abatements. “Since they are now concerned with long-term growth, the structure of education, regulation, and talent attainment and retention are far more important.”

While the city has long boasted relatively high-skilled labor, in recent years several key city industries—from information technology and nursing to automotive repair and high-end jobs in manufacturing—have already begun to experience worker shortages. The impending retirement of baby boomers, who are disproportionately represented in a number of these industries, will only heighten the dilemma. To provide just a few examples:

- New York City’s construction workforce is heavily skewed toward older workers, particularly on the unionized side of the industry.
- A 2007 survey conducted by the Greater New York Hospital Association found that 60 percent of registered nurses—a job that, because of its physically and psychologically demanding work conditions, generally does not allow for individuals to work beyond retirement age—were over 40 years of age, and 27 percent were over 50; among nurse managers, the figures were 81 percent and 39 percent respectively. As the overall population ages, with corresponding rise in demand for health care services, there is a real risk that the city's providers of medical services will not have enough skilled workers to effectively deliver those services.
- The transportation sector faces a potential “age-out” problem that likely translates into job slots for those looking for work. The New York City Labor Market Information Service reports that the workforce in three subsectors within transportation—air, truck, and transit/ground passenger transport—includes a high percentage of older workers within a few years of retirement.
- Many maintenance and repair jobs also could face shortages due to an aging workforce close to retirement. As of 2000, the last year from which data are available, roughly 20 percent of Heating, Air Conditioning, and Refrigeration Mechanics and Installers were aged 50 or older, as were 25 percent of Home Appliance Repairers, 26 percent of Automotive Body and Related Repairers, and 32 percent of Maintenance and Repair Workers, General.
- Information technology is not a field with very many workers nearing retirement age, but the sector faces a skills crunch nonetheless: 53 percent of respondents to an industry survey in the fourth quarter of 2008 identified finding qualified candidates as their biggest hiring challenge. Areas of particular demand include workers with skill sets in virtualization, “web 2.0” (social media sites), and IT architecture and security.

To be sure, New York City today draws from a deeper pool of the most highly skilled workers than just about anywhere else. Overall, the city boasts a substantially larger share of very highly educated people—adults holding a bachelors degree or higher—than does the United States as a whole: 32.5 percent compared with 27.4 percent, as of 2008. But just as the city is home to extremes of poverty as well as wealth, its population—not coincidentally—includes a significantly higher proportion of the least-educated alongside the most: 21.4 percent of New York City adults did not have a high-school degree as of 2000, compared with 15.5 percent nationwide.
This is problematic for New York City, since more than half of all new jobs will require applicants to have some form of postsecondary education. “High school is no longer enough,” concludes a 2009 study by the Bill and Melinda Gates Foundation. “Success in the 21st century demands skills, attitudes, and abilities that make some form of postsecondary education a virtual requirement. In today’s world, a postsecondary credential has become as important as a high school diploma used to be.”

James Brown, a labor market analyst for the New York State Department of Labor, observes that a large share of the decent-paying jobs that have been created in recent years specifically require a two-year associate’s degree. And for a number of other positions that do not necessarily require college, a two-year degree gives applicants a leg up over those who only have a high school diploma. “If you’re an employer and six [applicants] have an associate’s degree and four have only a high school diploma, you might cut out the people that only have a high school diploma. It becomes a way of screening, even if it doesn’t say so in the ad,” says Brown.

“A nice chunk of the workforce falls into the education category of ‘some college,’” he says—perhaps not even a two-year degree, but indicative of time spent in a college classroom. “You don’t need a four-year college degree. You do, however, need significant training beyond high school,” Brown says. “For instance, legal secretaries make quite good money and [at least before the downturn, the field was] growing well. You don’t need a college degree to be a legal secretary, but you’ll find that college degrees are becoming more common.”

The current recession likely provides a foretaste of how the labor market will continue to evolve. Since its onset, individuals with less education have fared the worst in terms of overall job loss. Between December 2007 and January 2009, the employment rate for New York City residents without a high school diploma dropped 7 percent, well over twice the falloff for those with a high school degree or higher.

When growth resumes, the divergence of those with different levels of education is likely to be even more pronounced: the laid-off lawyer or financial manager will likely find employers eager to pay for her skills, while the dismissed ticket-taker might find that his former job has been automated out of existence. “Given the way the global economy works, by and large the low-skill, low-wage jobs you lose [in a recession] won’t come back,” says Anthony Carnevale, a leading labor market researcher who currently serves as director of Georgetown University’s Center on Education and the Workforce. “There’s almost no temporary unemployment anymore; when you come out the other side, you’re looking at a different distribution. And one of the characteristics of it is that it’s more human capital-intensive.”

The good news for many New Yorkers is that the local economy still includes plenty of jobs that pay a decent wage but do not require a four-year college degree, and should continue to do so well into the future. The catch, however, is that these jobs increasingly require some postsecondary education—a level of schooling which too many New Yorkers currently lack.

Skills2CompeteNY, a nonpartisan coalition of business and industry associations, union and labor affiliates, postsecondary institutions, and community-based organizations that advocates for universal access to post-

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<th>Education level</th>
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<th>Gain over previous level</th>
<th>Avg salary, U.S.</th>
<th>Gain over previous level</th>
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primary education or training, estimates that through 2014, 41 percent of all jobs in New York City will remain “middle skill,” requiring education beyond a high school diploma but less than a four-year college degree. The organization has compiled a list of 20 middle-skill jobs with high projected demand through 2014 that are crucial to the functioning of New York City, including among others registered nurses, carpenters, electricians, supervisors and managers of office and administrative workers, computer support specialists, and advertising sales agents. Each of these fields is projected to offer over 400 job openings per year with average annual compensation above $50,000.

More recent analysis by the New York State Department of Labor confirms that opportunity persists in many of these fields even through the current recession. Middle-skill jobs in highest current demand in New York City include accountants and auditors, licensed practical and vocational nurses, maintenance and repair workers, registered nurses, and sales representatives. The persistence of these openings suggests a problem that threatens to become far more acute in the years ahead: a “skills mismatch” of too many low-skilled jobseekers chasing too few openings, while better-paying jobs that require more education and specific skills go unfilled for lack of candidates.

To fully capitalize on these opportunities—and to ensure that young New Yorkers from disadvantaged backgrounds receive the education and training needed to fill these positions—stakeholders in government, industry, education, and philanthropy must find ways to improve the performance of secondary and postsecondary schools and workforce development programs.

Of Learning and Earning

Raising the skills of New York City’s homegrown workforce is crucial both to ensure the city’s continued economic success and to increase the earning power of countless New Yorkers who have jobs but are still poor.

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### Table 2:
Expected Lifetime Earnings of 18–64 Year Olds in New York City28

<table>
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<th>Level of education</th>
<th>Lifetime median earnings, men</th>
<th>Lifetime median earnings, women</th>
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<td>TOTAL</td>
<td>$2,072,726</td>
<td>$1,336,042</td>
<td>$1,686,518</td>
</tr>
</tbody>
</table>

### Table 3:
Trends in Expected Lifetime Earnings of New York City Residents Aged 18–64 (in 2008 constant dollars)

<table>
<thead>
<tr>
<th>Educational Attainment</th>
<th>1979</th>
<th>2005/07</th>
<th>Absolute Change</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–12 Years of HS</td>
<td>$686,984</td>
<td>$626,470</td>
<td>-$60,513</td>
<td>-8.8</td>
</tr>
<tr>
<td>HS Graduate</td>
<td>$1,073,169</td>
<td>$1,034,476</td>
<td>-$38,693</td>
<td>-3.6</td>
</tr>
<tr>
<td>1–3 Years of College</td>
<td>$1,434,342</td>
<td>$1,398,605</td>
<td>-$35,736</td>
<td>-2.5</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>$1,962,282</td>
<td>$2,521,667</td>
<td>$559,385</td>
<td>28.5</td>
</tr>
<tr>
<td>Master’s or Higher Degree</td>
<td>$2,451,762</td>
<td>$3,567,292</td>
<td>$1,115,530</td>
<td>45.5</td>
</tr>
<tr>
<td>Total</td>
<td>$1,190,503</td>
<td>$1,686,518</td>
<td>$496,015</td>
<td>41.7</td>
</tr>
</tbody>
</table>
Economists universally recognize the “education premium”—the fact that every additional level of educational attainment confers added earning power for an individual in the labor market. Data suggest that this is especially true in New York City. As Table 1 shows, city residents with an associate’s degree earn an average of $10,000 more annually than those with only a high school degree—$61,000 versus $51,000. Those with a bachelor’s degree earn $9,000 more per year than individuals with a two-year degree ($70,000 compared with $61,000).24

“This is a city that rewards education,” adds James Brown of the state Department of Labor. “Overall, it’s increasingly clear that you need more than a high school education to make good salaries.”26

The importance of this education premium cannot be overstated in New York City, especially given the sharp rise in the number of working-poor New Yorkers over the past 15 years. In 2005, 46 percent of New Yorkers living below the poverty line held regular jobs, versus only 29 percent in 1990. In 2007, a whopping 31 percent of workers over the age of 18 citywide were employed in low-wage jobs; the share was even higher in the Bronx (42 percent) and Queens (34 percent).27

Not surprisingly, higher levels of educational attainment also produce significantly higher lifetime earnings. As Table 2 shows, New York City residents with a bachelor’s degree earn an average of 144 percent more than individuals with only a high school diploma over the course of a working lifetime—$2.52 million, compared with $1.03 million.

Yet another indication of the intensifying economic returns to education is that over the past three decades, New Yorkers with bachelor’s degrees or higher have seen their expected lifetime earnings shoot up, while those with high school degrees or some college have lost a bit of ground and high school non-completers have seen their real wages decline by nearly 9 percent. These changes reflect national trends over the same period, but are more pronounced in New York City’s information-intensive economy.29

In addition to government’s indirect interest in boosting human capital for reasons of business attraction and retention and the jobs consequences that follow, the public sector has a direct interest as well. Just as increasing educational attainment confers greater compensation rewards to individuals, those individuals in turn pay much more back in taxes. On average, a four-year college graduate

---

**Chart 1:** Expected Lifetime Tax Payments of New York City Residents Aged 18–6430

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Lifetime Tax Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;12 or 12, No HS Diploma</td>
<td>$306,800</td>
</tr>
<tr>
<td>HS Graduate or GED</td>
<td>$475,302</td>
</tr>
<tr>
<td>1-3 years of College</td>
<td>$633,027</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>$934,686</td>
</tr>
<tr>
<td>Master’s or Higher</td>
<td>$1,576,359</td>
</tr>
<tr>
<td>Total</td>
<td>$702,213</td>
</tr>
</tbody>
</table>

**Chart 2:** Expected Lifetime Cash and In-Kind Transfers and Institutional Costs of New York City Residents Aged 18–6431

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Lifetime Costs</th>
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</thead>
<tbody>
<tr>
<td>&lt;12 or 12, No HS Diploma</td>
<td>$440,837</td>
</tr>
<tr>
<td>HS Graduate or GED</td>
<td>$282,587</td>
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<tr>
<td>1-3 years of College</td>
<td>$210,253</td>
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<tr>
<td>Bachelor’s Degree</td>
<td>$83,088</td>
</tr>
<tr>
<td>Master’s or Higher</td>
<td>$72,201</td>
</tr>
<tr>
<td>Total</td>
<td>$231,310</td>
</tr>
</tbody>
</table>
pays nearly twice as much in taxes over the course of her working lifetime than a high-school graduate; an individual with a graduate degree will contribute more than three times as much to public coffers compared with the high-school completer. In this sense, human capital accretion contributes to a virtuous cycle, in which local government can offer more support for education and related services to improve the earning power and quality of life of residents.

By the same token, those with more education and higher earnings typically require far less support from publicly funded programs over their working lifetimes, in cash and in-kind assistance, than do individuals who did not advance as far as in school. On average, a man who did not complete high school will cost the public treasury more than $440,000 in assistance and institutional costs, such as incarceration. His counterpart who completed college can be expected to require just $83,000 over his working lifetime, less than a fifth as much.

Not only does education increase earning power, it helps preserve employment in difficult times. Though many media accounts of hardship in the current recession have focused on better-educated workers who suddenly found themselves without jobs, as Table 4 shows, the data indicate that those with less schooling and lower pay are still getting hit the hardest.\(^2\) In September 2009, while the unemployment rate for Americans with at least a bachelor’s degree was just 5.0 percent, it was double that rate (10.0 percent) for individuals with only a high school diploma and considerably higher (13.7 percent) for those who never completed high school.\(^3\)

New York City is home to a variety of systems and institutions that develop human capital, including career and technical education in public high schools, for-profit proprietary schools of the type advertised on city subways, and union apprenticeship programs. But considering both the types of skills now being required by employers and the connection between education and earning power, the city’s institutions of higher education arguably have the most important role to play in expanding the skills of New York’s current and future workforce. Perhaps more than any other institution, the City University of New York (CUNY) will be critical to any effort to create a better-educated workforce.

CUNY reaches the largest number of New Yorkers aspiring to better jobs and higher earnings, and by virtue of its reliance upon public funding, it is the most likely institution to prove responsive to suggested improvements in how it can deliver education and training of greater relevance to labor market needs.

As Table 5 shows, total CUNY enrollment over the last two decades essentially has kept pace with the growth in city population. Unfortunately, CUNY data on retention and graduation rates indicate that far too many New York City students continue to leave college without any attainment of credentials. Wage data suggest that workers with “some college” enjoy higher average earnings than individuals whose education ended with a high school degree or GED, but the

<table>
<thead>
<tr>
<th>Year</th>
<th>Community colleges</th>
<th>Senior colleges</th>
<th>Total</th>
<th>NYC population</th>
<th>Pctg NYC pop</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>60,677</td>
<td>139,951</td>
<td>200,628</td>
<td>7,322,564</td>
<td>2.7</td>
</tr>
<tr>
<td>1995</td>
<td>65,997</td>
<td>139,702</td>
<td>205,699</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>2001</td>
<td>63,497</td>
<td>133,856</td>
<td>197,353</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>2007</td>
<td>76,864</td>
<td>156,096</td>
<td>232,960</td>
<td>8,274,527</td>
<td>2.8</td>
</tr>
</tbody>
</table>

---

\(^2\) In September 2009, while the unemployment rate for Americans with at least a bachelor’s degree was just 5.0 percent, it was double that rate (10.0 percent) for individuals with only a high school diploma and considerably higher (13.7 percent) for those who never completed high school.

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high incidence of debt among non-completers likely erases some of that gain. Based on CUNY tracking of enrollment cohorts (full-time freshmen) between 1997 and 2006, we find that:

- On average, more than one-third of CUNY entrants are no longer enrolled a year after beginning classes. By two years later, a majority of students are no longer enrolled (though on average about 2 percent have obtained an associate degree by that point).
- Ten years after the Fall 1997 Cohort began studies, only 31.2 percent—less than a third—had earned a degree.36

Perhaps as much of a concern is the poor performance of our systems for improving the knowledge and skill level of incumbent workers—most of whom will still be on the job in 2020, and many of whom are likely to be working in 2030—through postsecondary education. New York ranks 43rd of the 50 states in college attendance by adults (defined as those ages 25–49), with less than 4 percent of those who have high school degrees but no further education enrolled in college. By contrast, 6.4 percent of California’s adult population was enrolled in college as of 2003.38 Worse, the number of adult learners in New York City colleges dropped sharply between 1995 and 2005, falling by 20 percent.39

Public policies to support older learners, including incumbent workers, who wish to upgrade their skills and earning power by acquiring a further postsecondary educational credential or through other means are also insufficient. The state’s financial aid policies remain focused on “traditional” college students, and higher education institutions themselves have been slow to develop more flexible class structures and curricula to align with the needs of private sector firms and other economic development stakeholders. Mayor Bloomberg announced in mid-August that if elected to a third term, he would spend $50 million to raise the number of graduates from community colleges to 120,000 by 2020 through a four-year initiative to improve access and affordability.40 It is not yet clear, however, if specific plans under that proposal include attention toward the needs of students who are attempting to balance work and education, or to employers who could take greater advantage of community colleges in the city as a retraining resource.

From School to Work

It is also not clear if New York City’s schools are doing as well as they should in preparing students for jobs and careers at either the high school or college level. Vocational education in New York City high schools, once a hallmark of the public school system, fell into a decades-long decline in the second half of the 20th century as funding dried up and programs devolved into dumping grounds for low-achieving students. More recently, reforms at the state level early in this decade and attention from a high-profile task force convened by Mayor Bloomberg in 2008 have offered hope for progress. Analysts and policy makers found that students in the programs, now known as career and technical education (CTE), were far less likely to drop out of high school and performed comparably on standardized testing despite both the additional time spent on CTE courses and a range of risk factors for dropping out. But true improvements within CTE await additional resources to improve pedagogy around academics and career skills. Also needed are stronger ties to industry associations, individual employers, and postsecondary institutions that offer related instruction and training.41

The disconnection between school and work is not limited to high school, however. Tim Nitti of KLG Advisors observes that New York City’s leading colleges and universities are increasingly disconnected from the business community and the labor market. “The city’s most important educational institutions have 19th-century talent-building structures,” Nitti explains, citing Columbia and
New York University in particular. “Ideally, universities work closely with state economic drivers—government, companies, industry players—to keep everyone up-to-date on what their needs are and identify opportunities for growth.” But this is more difficult to do with private institutions not dependent upon government funding. “Columbia and NYU are the largest players in education, but they focus heavily on law and business. Can they focus on 21st century industry needs? They need to be more relevant, but their funding structure means public powers have far less say.”

“It’s very challenging to quickly adapt university curricula to changing job market conditions,” adds Eva Cramer, a professor at SUNY Downstate in Brooklyn who has been involved with a number of job training initiatives. “Also, courses aren’t necessarily designed to teach what is currently needed in the workplace.” With funding from the New York City Workforce Investment Board as well as private philanthropic foundations, Cramer has helped to bridge the gap between classroom and workplace through a program with Hunter College that trains CUNY students for lab work in biotechnology, culminating in paid internships that often lead to permanent jobs.

The educational institution in New York City most heavily reliant upon public funding is, of course, CUNY. CUNY’s role as a provider of short- and long-term workforce training is well known, and the school has stepped up its level of engagement with the business community in recent years through the creation of its School of Professional Studies, which offers flexible, customized credit and non-credit training for employers of all sizes in a wide range of industries.

In its attractiveness to working adults who return to school in mid-career to shore up skills and improve earning power, CUNY offers a glimpse into the likely future of colleges as workforce providers. But even this more responsive and nimble institution struggles to keep pace with the rate of change in the private sector. “I think CUNY is a big competitive advantage for the region,” states Bruce E. Bernstein, former executive director of the New York Software Industry Association. He adds, however, that it is not equipped to respond to changing industry conditions in anything approaching real time.

“Changes in this industry take place in a three-year cycle, a five-year cycle. It’s very difficult for any sort of standard college to respond to that. If the basic language you’re teaching in CS101 is Java, you can’t change that every year. You can’t even change that every two years; it’s just not possible.”

“Another concern of business leaders is that colleges still tend to offer educational upgrades in delivery systems that do not meet the needs of adult learners trying to balance school and work. Reg Foster, IBM’s corporate citizenship manager for New York, New Jersey, Connecticut, and Canada, and a member of the New York City Workforce Investment Board, cites the need “to unlock the delivery of information and knowledge from this two-year and four-year box.” He suggests adding a range of certifications which students could earn in shorter stretches of time, such as three or six months. “The schools that do this first and best will be very successful, I think.”

One more issue that came up in our research was cost. While few industries can match the pace of change within information technology, new tools and practices create incentives for additional learning virtually across the breadth of the economy. Often, however, education costs exceed what businesses are willing to pay. “The problem is that for CUNY and higher education in general, it’s not necessarily a well priced product,” says Hank Kita, vice-president of the New York City Building Trades Employers Association. “If a course is $800 per person, people don’t want to pay that for somebody they already have on board. We’ve worked with some higher education institutions on proposals, and you run into all these layers of cost that lie within the colleges. By the time you get to the bottom line, it’s not attractive to our members.”
“In hard times, jobs cascade downward. As people from higher-level jobs start moving down the ladder, the people most likely to be displaced are the people at the bottom of the ladder who have the weakest skills.”

—David Hansell, former Commissioner, New York State Office of Temporary and Disability Assistance

There are two main components to the conversation about human capital in New York City. The first, discussed in the previous section, is the economic rationale for greater investment: tens of thousands of jobs that add value for employers and are vital for the day-to-day functioning of our community will be newly created or will open as a result of retirements over the next few years, and the workers who aspire to fill them must be adequately educated and trained. The second, however, speaks to something deeper than numbers on a balance sheet: ensuring that every New Yorker can be a full participant in the city’s economic life.

As this section details, we are currently very far from realizing that ideal. Large swaths of the city’s population have been relegated to the economic margins for the bulk of their lives. Far too often, the least able to compete are concentrated in low-income communities of color, where the absence of hope compounds and intensifies every other problem of modern urban life. The undeveloped human capital in these communities represents both an under-utilized asset to the city and a stinging rebuke to our dearly-held notions of equal opportunity for all.
As has been the case nationally, the recession that began in December 2007 has both placed new strains on New York City’s labor market and severely exacerbated old ones. The overall unemployment rate in the five boroughs reached 10.3 percent in October 2009, but groups that barely enjoyed a taste of prosperity in previous years—notably black men, young adults, and those of all racial and gender groups with limited education—have fared the worst of all. The “real” jobless rate for black males in New York State, including those who want full-time work but are working part time and discouraged workers who are no longer actively looking for employment, reached 27 percent in the first half of 2009. And those with less than a high school education—who are disproportionately black or Hispanic—have lost jobs in the recession at more than twice the rate of New Yorkers whose educational attainment stretched at least to a high school degree or equivalency.

Within these larger demographic groups, four sub-populations have faced the hardest road of all in the labor market: young adults, immigrants, the formerly incarcerated, and public assistance recipients. Individuals who fall into one or more of these groups work at the lowest rates, earn the least money when they do find jobs, and are least likely to advance to better-paying positions. Inadequate public education has spurred a dropout crisis of historic magnitude, greatly limiting the workplace options and lifetime earnings of those young adults who do not finish high school. And far too many young people who do graduate high school are unable to make a successful transition to college, which can provide them with even greater benefits. The dearth of English language and literacy funding presents major challenges to hard-working immigrants looking for family-sustaining jobs. Since the 1970s, criminal justice policy has locked up a generation of mostly young men of color, even as efforts to help these individuals find work upon their release—which has proven to be the best prevention against recidivism—have been severely curtailed. And while welfare reform pushed many women into the labor market in the late 1990s and first few years of the current decade, many welfare-leavers remained in poverty even when they had jobs—and have been the first to be fired since the recession began, finding themselves disadvantaged due to a lack of skills and, all too often, back on public assistance.

Each of these problems represents a fundamental failure and an opportunity squandered on the part of government. A New York City that lives up to our stated values...
and maximizes its economic potential will develop and implement a human capital plan to ensure that all our residents—including public assistance recipients, young adults, individuals with a criminal justice history, and immigrants—can access work and educational opportunities, advance in their careers, and achieve a measure of economic security.

**New York City’s Workforce: Who is In, Who is Out**

The New York City labor market shows major structural disparities with regard to age, race, and education. Blacks, Latinos, younger adults and individuals with limited education are more likely to be unemployed and excluded from the labor market.

**Race and Employment**

As Chart 3 shows, the unemployment rate for blacks in New York City is the most severe—and has grown most rapidly—for all ethnic groups. The third quarter unemployment rate of blacks in New York City is 15.5 percent, compared with 11.8 percent for Latinos, 7.3 percent for whites, and 6.1 percent for Asians. While the unemployment rate was lower for non-blacks in New York City than in the U.S. as a whole in the third quarter of 2009, the black unemployment rate is higher.45

While black New Yorkers have been disproportionately impacted by the current recession, the trend of non-whites experiencing higher rates of unemployment than their white counterparts has held steady through three complete business cycles—those that reached their peaks in 1989/1990, 1999/2000, and 2007/2008.46 Table 7 shows that black men and Latinas saw sharp drops in their unemployment rates over the last two decades, before the current recession reached full force. Meanwhile, whites—both men and women—retained steady unemployment rates that were far lower than those of blacks and Latinos.

But unemployment rates alone do not tell the full employment story: whites also have higher Labor Force Participation Rates (LPR) and Employment- Population Rates (EPR) than their black and Latino counterparts. LPR and EPR are much better indicators of systematic exclusion from the labor market, as those who have given up on looking for work are not included in traditional employment numbers.

Appendix A includes more detailed analyses of LPR and EPR by race and gender.

<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Men</strong></td>
</tr>
<tr>
<td>White</td>
</tr>
<tr>
<td>Black</td>
</tr>
<tr>
<td>Latino</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Table 8: Defining Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unemployment Rate</strong></td>
</tr>
<tr>
<td><strong>Labor Force Participation Rate (LPR)</strong></td>
</tr>
<tr>
<td><strong>Employment-Population Rate (EPR)</strong></td>
</tr>
</tbody>
</table>
**Age and Employment**

In addition to factors of race and gender, data also reveal a relationship between age and labor market outcomes. Individuals aged 25–54 had the highest EPR in 1989/1990, 1999/2000, and 2007/2008—and that rate increased over the course of these peaks in the last two business cycles. At the same time, the share of young adults working decreased, while the share of working older adults rose. Over the last two decades, we have seen the presence of older and older workers in the labor market keep younger workers out.

The presence of older workers in the labor market has increased in absolute as well as relative terms as the baby boomer generation approaches the age at which past generational cohorts typically opted to retire—and many find that they lack the wealth to do so. New York City gained approximately 155,000 more workers aged 55–64 between 1989/1990 and 2007/2008.

Appendix A further examines the changing age demographics of the workforce.

**Education and Employment**

At the core of the argument for a human capital plan in New York City is the large and growing disparity in labor market outcomes by educational attainment. Not surprisingly, the employment-population ratio of those with the highest levels of education has remained the strongest over the last three business cycles.

While the actual number of New Yorkers in the labor market—including both the employed and the unem-

<table>
<thead>
<tr>
<th>Borough</th>
<th>Percent of “Illiterate” Working Age New Yorkers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manhattan</td>
<td>25%</td>
</tr>
<tr>
<td>Bronx</td>
<td>41%</td>
</tr>
<tr>
<td>Brooklyn</td>
<td>37%</td>
</tr>
<tr>
<td>Queens</td>
<td>46%</td>
</tr>
<tr>
<td>Staten Island</td>
<td>14%</td>
</tr>
</tbody>
</table>
mailroom, or the Navy Yard, and they were able to advance and succeed. For today’s livable wage—skills-based jobs—you can’t even get started without a high school diploma or GED.”

Appendix A highlights these education and employment trends in greater detail.

New Yorkers without a high school diploma or equivalency are concentrated in a number of neighborhoods: the South Bronx, Upper Manhattan, the Lower East Side of Manhattan, and Central Brooklyn. Map 1 shows the percentage of individuals with no high school diploma by PUMAs (Public Use Microdata Areas).48

New York City employers also face the challenge of a labor market in which too many incumbent workers and jobseekers have very weak basic skills, including English language literacy. In January 2009, the National Assessment of Adult Literacy (NAAL) reported that 22 percent of New York State residents aged 16 and older are functionally illiterate, meaning that they lack the basic skills, including English language skills, to perform simple everyday activities.49 New York’s literacy rate ranks 49th out of 50 states, ahead only of California, and in three of the five boroughs, the rate is significantly higher than the statewide average.

Interviews with workforce development professionals revealed that even many individuals deemed “literate” by educational standards demonstrate low skill levels. “The reason the employers usually want a GED or high school diploma, in my experience, is it’s the only way that they can get an indicator that there’s some level of literacy,” says Sandra Greenstein, director of HealthCare Highways of the Vocational Services of the Jewish Community Center of Greater Coney Island. “But we know that’s not true. And people have come into my program with a two-year college degree with reading comprehension at a third-grade level—this is not one or two people. I’ve seen them not able to write a sentence. Employers don’t want them.”

| Table 10: Share of NYC Workers in Low-Wage Jobs, 2008, All Employed, by Gender |
|-----------------------------------------------|-----------------------------------------------|
| Low-wage (hourly wage of $13.90 or less in 2008$) | Not low-wage |
| Count | Share of all low-wage workers | Share of demographic in low-wage jobs | Count | Share of all non-low-wage workers | Share of demographic in non-low-wage jobs |
| All Employed | 1,316,949 | 100% | 40.4% | 1,941,113 | 100% | 59.6% |
| Men | 607,212 | 46.1% | 36.3% | 1,066,537 | 54.9% | 63.7% |
| Women | 709,737 | 53.9% | 44.8% | 874,576 | 45.1% | 55.2% |

| Table 11: Share of NYC Workers in Low-Wage Jobs, 2008, All Employed, by Race |

| Low-wage (hourly wage of $13.90 or less in 2008$) | Not low-wage |
| Count | Share of all low-wage workers | Share of demographic in low-wage jobs | Count | Share of all non-low-wage workers | Share of demographic in non-low-wage jobs |
| All Employed | 1,316,949 | 100% | 40.4% | 1,941,113 | 100% | 59.6% |
| White | 312,268 | 23.7% | 25.9% | 893,943 | 46.1% | 74.1% |
| Black | 364,158 | 27.7% | 48.4% | 388,271 | 20.0% | 51.6% |
| Hispanic | 443,965 | 33.7% | 53.5% | 386,614 | 19.9% | 46.5% |
| Asian & Other | 196,558 | 14.9% | 41.9% | 272,285 | 14.0% | 58.1% |
New York City’s Low-Wage Workforce

Over the past decade-plus, welfare reform pushed many individuals into the labor market. But for many of those newly working, employment gains have not blazed a path out of poverty: calculations from the Fiscal Policy Institute\textsuperscript{51} show that while female New York City residents are more likely to be working now than they were in 1989/1990, they are currently overrepresented in low-wage jobs.\textsuperscript{52}

Further, as Table 11 shows, black and Latino workers of both genders in NYC are also more likely to be working in low-wage jobs than their white counterparts.

The industry sectors with the highest proportion of low-wage jobs, defined as those that pay $13.90 or less per hour, are wholesale and retail trade, and leisure and hospitality. Minorities are more likely to be working in many of these low-wage positions. Minorities represent 69 percent of the labor force in the retail sector, and 49 percent of retail workers are immigrants.\textsuperscript{53}

Appendix B presents sector analyses of low-wage work in much greater detail.

Education and Earnings

Educational attainment and skills acquisition is the most powerful predictor of earning power. In New York City, workers with less than a high school diploma earn a median wage of $10.39 an hour, while workers with a bachelor’s degree or higher earn a median wage of $24.42 an hour—more than twice as much, as Table 12 shows.\textsuperscript{54} While annual earnings rise dramatically with each additional level of education, racial and gender disparities within education levels persist.

Wage disparity by gender persists as well: female workers across all education levels earn, on average, 87.9 percent of male wages.\textsuperscript{56} Women with the lowest educational attainment face the largest wage disparity: their median hourly earnings are significantly lower than those of their male counterparts with the same level of education.

“Fifteen or 20 years ago, if you didn’t have a high school or diploma or GED, we could have connected you to a job and you would have figured it out. For today’s livable wage—skills-based jobs—you can’t even get started without a high school diploma or GED.”

–Angelo Rivera, Chief Operating Officer, STRIVE

<table>
<thead>
<tr>
<th>Table 12: Median Hourly Earnings by Educational Attainment, NYC, 2007–2008 Working Age Individuals, by Race and Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Less than High School</strong></td>
</tr>
<tr>
<td>All Men</td>
</tr>
<tr>
<td>White Men</td>
</tr>
<tr>
<td>Black Men</td>
</tr>
<tr>
<td>Latino Men</td>
</tr>
<tr>
<td>All Women</td>
</tr>
<tr>
<td>White Women</td>
</tr>
<tr>
<td>Black Women</td>
</tr>
<tr>
<td>Latino Women</td>
</tr>
<tr>
<td>All Workers</td>
</tr>
</tbody>
</table>

\textsuperscript{**}Sample size too small to produce statistically significant estimate.
Closing the skills gap: investing in the skills of New Yorkers

As Chart 6 shows, labor force participation for 16–24 year olds has dropped sharply over the past decade. As of 2005, the most recent data available, New York had the lowest employment-to-population rate among teens of the 20 largest cities in the U.S. by a large margin. While school enrollment has risen over the same period—a positive outcome—it might be an oversimplification to conclude simply that the difficulties young New Yorkers face in finding work exert a “push” for more of them to persist in high school or pursue postsecondary education. It is likely that for many college students, in particular, who are earning money to help put themselves through school, the choice is not necessarily whether to go to school or to work, but to do both or neither.

An abiding concern is the problem of “disconnected youth” in New York City—those aged 16 to 24 years who are not in school and not working. Chart 6 compares rates of school enrollment, employment, and disconnection and how they have changed over a recent five-year stretch. On a percentage basis, school enrollment has increased, employment has declined considerably, and disconnection has declined by a smaller fraction.

CSS first highlighted the issue of out-of-school, out-of-work youth in 2003, finding distressingly high num-

High-Need Jobseeker Populations

Among those who are excluded from labor market participation and/or are underemployed in large numbers in New York City, four populations of jobseekers particularly stand out:

- Young adults
- Immigrants
- The formerly incarcerated
- Public assistance recipients

Each of these populations requires unique education and employment services to help them find work, stay employed, and advance in their careers.

Youth and Young Adults

There are more than one million New Yorkers aged 16 through 24. Chart 5 shows that since 1999/2000, labor force participation for young adults aged 16–24 has decreased, while school enrollment has risen.

Earnings are more than 18 percent less than their male counterparts, compared with a 10 percent differential among women and men with a bachelor’s degree or higher.


<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Less than high school diploma</td>
<td>$20</td>
<td>$18</td>
<td>$16</td>
</tr>
<tr>
<td>High school graduate</td>
<td>$25</td>
<td>$24</td>
<td>$22</td>
</tr>
<tr>
<td>Some college but no degree</td>
<td>$15</td>
<td>$16</td>
<td>$18</td>
</tr>
<tr>
<td>Associate’s degree</td>
<td>$20</td>
<td>$22</td>
<td>$25</td>
</tr>
<tr>
<td>Bachelor’s degree or higher</td>
<td>$30</td>
<td>$28</td>
<td>$30</td>
</tr>
</tbody>
</table>

Chart 5: Labor Market Participation and School Enrollment Young Adults, Aged 16–24

<table>
<thead>
<tr>
<th>Year</th>
<th>Labor Force Participation</th>
<th>Employment/Population Ratio</th>
<th>Unemployment</th>
<th>School Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989/90</td>
<td>60%</td>
<td>70%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>1999/2000</td>
<td>50%</td>
<td>60%</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>2007/08</td>
<td>60%</td>
<td>70%</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>
bers of disconnected youth: 168,000 individuals, or 16 percent of all 16 to 24 year olds in the city. When the “unemployed” (individuals not working but actively seeking employment, who are included in labor force participation rates) were added to this group, there were approximately 223,000 young people who were not in school, nor working. As the economy continued to shed jobs after the 2001 recession, young people who could not find work were not returning to school—leading to the growth of the disconnected population. This trend ran against the traditional “counter-cyclical” dynamic of the youth labor market, in which more youth enroll or persist in school when the labor market for young people weakens.

Five years later, the counter-cyclical pattern appears to have at least somewhat reasserted itself. With fewer employment options for younger workers—even after the overall economy began to add jobs again—many young adults remained in school.60 Public schools reform in the city was another factor. Launched in 2003, the “Children First” initiative of the city Department of Education closed a number of large, poorly functioning high schools and replaced them with hundreds of small high schools. Children First also has developed and refined more and better program options for “over-aged and under-credited” students, who have fallen behind and are on the verge of dropping out, among other efforts at dropout prevention. Taken together, these actions have led to steady improvement in graduation and dropout rates.

Table 13 highlights the size of the disconnected youth population in 2002/2003 and 2007/2008.61

Despite the small decline, the number of disconnected youth in New York City remains alarmingly large—over 200,000, including those actively looking for work. Worse, just over half of this population—104,000—does not have a high school diploma or equivalent.62 Data also indicates that racial disparities persist for these young adults. Chart 7 shows that approximately one in five black and Latino young adults is disconnected from school.

Table 13: Number of Disconnected Youth in NYC

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Not in School, Not in Labor Market</td>
<td>167,800</td>
<td>147,350</td>
</tr>
<tr>
<td>Unemployed (in the Labor Market)</td>
<td>55,500</td>
<td>54,300</td>
</tr>
<tr>
<td>Total Not in School, Not Currently Working</td>
<td>223,300</td>
<td>201,650</td>
</tr>
</tbody>
</table>

Chart 6: School Enrollment and Labor Market Trends, New Yorkers Aged 16–24

Chart 7: Labor Market and School Enrollment Status, By Race, 2007, Young Adults Aged 16–2463
and work—as opposed to less than 1 in 10 white and Asian young adults.

Another hint that school reforms are having some impact is that the disconnection rate is far higher for 22 to 24 year olds (20.1 percent) than for 16 to 21 year olds (12.7 percent).64 With the city closing high school doors to anyone over age 21—and not making a corresponding investment in GED preparation or other programming for those without a high school degree over that age—22 to 24 year olds are much less likely to be in school (32.7 percent) than are 16 to 21 year olds (75.9 percent). But they’re also much less likely to be employed than individuals age 25 or over: only 47.0 percent are employed, compared with 71.3 percent of 25 to 64 year olds.65

Despite the fact that more than 200,000 young adults are out of school and out of work, government offers little programming to reconnect these young people to education and employment. In a 2008 report, CSS found that no more than 30,000 disconnected youth are engaged in any type of public program toward these outcomes. And only 12,000 of these young adults—just 6 percent of the entire eligible population—receive services designed for youth or young adults.67

Not only are services to reconnect young people to education and employment woefully insufficient compared with the need, but much of what is available does not align with the needs of out-of-school youth. An overwhelming majority of the more than 100,000 disconnected youth without a high school diploma has extremely low literacy levels. “They often read at only a fourth- or fifth-grade level,” says Randy Peers, executive director of Opportunities for a Better Tomorrow, a leading youth employment and training organization. He adds, “These young adults also have very limited work histories; if they have held a job before, it’s generally in fast food. Their deficits in basic skills and work experience are exacerbated by an absence of soft skills”—standards of behavior, attire, and attitude that young people from better supported backgrounds tend to absorb in the course of passing through school, work, and other experiences of adolescence. “But we have found that most of them have a sincere desire to learn, if only they are provided with a safe and creative environment to achieve.”

Despite this range of needs, few programs across the city have the resources to effectively assist an individual with low skills to the point where he or she can pass the GED exam, much less successfully transition to college or a career. Young adults over age 21 have “aged out” of most youth-oriented programs, which typically enjoy more financial support and offer programming that takes into account the developmental needs of disadvantaged youth. Not surprisingly, data show that when this group ends up in adult-oriented programs in New York City and elsewhere, which do not offer the same supports or emphasis, they tend to fare poorly.68

### Immigrant Workers

New immigrants continue to change the social and economic fabric of New York City. Currently more than three million New Yorkers—approximately 37 percent of the city’s residents—are foreign-born, and 57 percent of children live in a family with at least one foreign-born adult.70

Immigrant workers are absolutely central to the New York City economy. According to the Fiscal Policy Institute, immigrants account for 45 percent of the city’s working-age population, 46 percent of the labor force, and 37 percent of wage and salary income. And as Table 14 shows, immigrants have lower unemployment rates and higher labor market participation and employment-population rates than native-born New York City residents.

Immigrants work in nearly every economic sector in New York City, from the highest- to the lowest-paid jobs. The Fiscal Policy Institute reports that immigrants account for a quarter of all CEOs, half of accountants, a third of office clerks, a third of receptionists, and half of building cleaners. The top occupations of immigrants in NYC include:71

| Table 14: Labor Market Profile, Native-born vs. Immigrant New Yorkers, 2007/2008 |
|----------------------------------|-------------------------------|-----------------|-----------------|-----------------|
| Share of Labor Force | Labor Force Participation Rate | Employment-Population Rate | Unemployment Rate |
| Native-born | 54.2% | 65.0% | 61.1% | 6.6% |
| Immigrant | 45.8% | 71.2% | 68.2% | 4.6% |
English proficiency is a key indicator as to whether or not immigrants are living in poverty. According to the Fiscal Policy Institute, 27 percent of immigrants either do not speak English well or do not speak it at all.\textsuperscript{77} More than a third of limited-English-proficient adults live in poverty, compared with only 14 percent of immigrants who have English proficiency.\textsuperscript{78}

English language proficiency is also critical to driving economic growth. By one estimate, if 10 percent of the city’s adult

![Map showing neighborhood concentration of immigrant poverty](image)

<table>
<thead>
<tr>
<th>Educational attainment</th>
<th>Foreign-born</th>
<th>U.S.-born</th>
<th>Difference between the two</th>
<th>Share of foreign-born</th>
<th>Share of U.S.-born</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than high school</td>
<td>$9.50</td>
<td>$10.38</td>
<td>9%</td>
<td>21%</td>
<td>7%</td>
</tr>
<tr>
<td>High school</td>
<td>$12.27</td>
<td>$14.53</td>
<td>18%</td>
<td>33%</td>
<td>26%</td>
</tr>
<tr>
<td>Some college</td>
<td>$14.53</td>
<td>$16.74</td>
<td>15%</td>
<td>16%</td>
<td>21%</td>
</tr>
<tr>
<td>College</td>
<td>$21.76</td>
<td>$25.94</td>
<td>19%</td>
<td>31%</td>
<td>46%</td>
</tr>
<tr>
<td>All</td>
<td>$13.85</td>
<td>$18.68</td>
<td>35%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Despite their vital importance for New York City businesses, immigrants are paid less than their native-born counterparts at every level of educational attainment, as Table 15 shows. In total, U.S. born workers earn 35 percent more than immigrant workers.\textsuperscript{74}

While the poverty rate among immigrants in New York City differs only slightly from New Yorkers born in the U.S., this does not mean that no economic gap exists between the two groups.

Median income for immigrant households in New York City as of 2008 was $44,939, compared with $54,561 for residents who were born in this country.\textsuperscript{75} And 39.9 percent of foreign born New Yorkers reside below 200 percent of the poverty line, compared with 36.2 percent of native born New York City residents.\textsuperscript{76}

As Map 2 shows, poor immigrants are particularly concentrated in Washington Heights, Queens, and South Brooklyn.
In 2007, the latest year for which data are available, New York State had nearly 63,000 people incarcerated in state prisons, 30,000 detained in local jails, 123,000 on probation, and another 43,000 under parole supervision—259,000 individuals in all, a larger population than every city in the state other than New York City and Buffalo. A large share of the state prison population hails from New York City. In 2007, 17,252 individuals were newly incarcerated; about half were city residents. In addition to those committed to state prisons, the city’s jail at Rikers Island had an average daily population of 13,850 inmates in 2008 and 107,516 total admissions over the course of the year.

Almost all these men and women sent off to jail or prison eventually come home, often after a short period of incarceration. The city Departments of Correction and Probation reports that the length of stay in jail for the majority of individuals is fleeting: 47 percent are discharged within seven days of being admitted, 70 percent are discharged within 30 days, and a full 92 percent are discharged within 180 days. The average stay for all detainees in city jails is 49.4 days. Looking at prisons, approximately 77 percent of those committed to state prisons are released within six years.

Unfortunately, large numbers of the city’s formerly incarcerated end up back in jail within a year. There is no doubt that unemployment contributes to the cycle of incarceration and re-incarceration. In New York State, 89 percent of people who violate the terms of their probation or parole are unemployed at the time of violation. Most studies agree that higher levels of jobholding and earnings are associated with lower levels of criminal activity. As a former New York City probation commissioner once put it, “Either they work or they go back to jail.” At the moment, however, all individuals with limited work experience and education are facing greater difficulty in finding entry-level jobs—and people with criminal histories have a big additional strike against them. Mindy Tarlow, executive director of the Center for Employment Opportunities (CEO), who are among the city’s leading workforce providers for people with criminal convictions, observes, “Re-entry folks are at the back of the job line, and the line just got a lot longer.”
People with criminal histories face multiple barriers to employment. Beyond those that beset most low-income jobseekers, such as limited recent work experience, low basic skills, and unstable housing or childcare arrangements, individuals with criminal history often face discrimination based on the criminal record itself, inaccuracies in reporting of criminal histories by private reporting firms, and legal obstacles such as temporary or permanent exclusion from a number of industry sectors.

New York State law includes more than three dozen professional restrictions for those who have a criminal record. For example, a person who has been convicted of a felony is barred for life from becoming a state-licensed radiologist, funeral director, undertaker, or embalmer, may be barred from being a sanitation worker at the discretion of the sanitation commissioner, and cannot be employed by any entity that holds a license to distribute alcohol in any capacity whatever unless he or she obtains a pardon, a certificate of relief or good conduct, or written approval from the state liquor authority. Regulations that govern employees and contractors of the New York State Offices of Mental Health and Mental Retardation and Developmental Disabilities include both mandatory and discretionary bars on employment of those with criminal histories for all positions.

Non-white individuals with past criminal involvement face particularly long odds to finding work. Sociology professors Devah Pager and Bruce Western’s seminal research on employment, race, and criminal justice involvement reveals persistent and pervasive racial discrimination in the labor market: one famous experiment found that white men with a criminal record were more likely to be offered a job than blacks without a criminal record, making it that much harder for blacks and Latinos with a criminal record to secure employment. Discrimination based on criminal history records keeps qualified job applicants from even getting an interview: Pager found that a criminal record is associated with a 50 percent reduction in callbacks from employment applications for whites, and a 64 percent reduction for blacks. William Catron, a job developer with NADAP, a local nonprofit organization provider of employment services, highlighted the dilemma of formerly incarcerated jobseekers: “A lot of times you find clients don’t want to put their incarceration on their resumes—but if you don’t put that on, you have a lot of gaps in your work histories.”

In addition to leaving a gap in work history, time spent in prison often exacerbates the basic skill deficiencies and poor workplace competencies that hampered the employment prospects of incarcerated individuals before their convictions. Mindy Tarlow and Marta Nelson of CEO note that most of the formerly incarcerated men they serve read at between a sixth- and eighth-grade level. But the lack of even basic workplace acculturation is perhaps the most serious problem. Tammy Burgess, assistant director of Brooklyn Workforce Innovations, notes that individuals who went to jail or prison at a young age have an especially hard time learning workplace norms: “Being in when you’re young is different. You learn a lot in adolescence and early adulthood. And those folks tend to come from communities where there wasn’t access to those early jobs, so they didn’t work as a cashier or at McDonald’s, and they didn’t get indoctrinated into the economy at an early age.”

Investing in strategies to help formerly incarcerated men and women find and keep jobs—arguably the single most important step they can take to getting their lives back on track—makes good fiscal sense. Unfortunately, in New York and elsewhere, government has spent much more on locking criminals up than on helping them to stay out after release: state expenditures on prisons nearly tripled over the last two decades, from approximately $1 billion in 1988 for the state’s Department of Correctional Services to just under $2.9 billion in the 2009–10 state budget. In addition, the NYC Department of Correction operating

“Re-entry folks are at the back of the job line, and the line just got a lot longer.”

—Mindy Tarlow, Executive Director, Center for Employment Opportunities
budget for fiscal year 2009 totals $984 million. Despite the surge in prison population and related expenditures in recent decades, funding and programming to educate and train incarcerated individuals has fallen sharply over the past 30 years.

The strain on public budgets at every level over the last few years has focused the attention of policy makers and the public on the enormous expenditures and dismal performance (in terms of recidivism rates and other post-release outcomes) of the correctional system, and has helped begin to shift the political winds away from the reflexive “tough on crime” stance that has swollen corrections budgets and prison populations alike. At the federal level, in 2008 Congress passed and President Bush signed the Second Chance Act, a measure to provide funding and other supports for services, including job placement, for persons with criminal histories. It was not funded in 2008, but President Obama allocated $2.5 million toward Second Chance Act services in the American Recovery and Reinvestment Act and requested $100 million for programs under the Act in his Fiscal Year 2010 budget. In Albany, long-overdue reforms to the Rockefeller Drug Laws suggest that a new approach to corrections and rehabilitation might be taking hold at the state level as well. The city should be at the forefront of efforts to ensure that incarceration serves a truly rehabilitative purpose, rather than inflicting a punishment that resonates in the job market for the rest of an ex-offender’s life.

Public Assistance Recipients

In August 2009, there were approximately 347,000 individuals in New York City on public assistance (representing 185,100 cases of individuals or families), down from an all-time high of more than 1.1 million in 1995. When federal welfare reform was enacted in 1996, which included a five-year lifetime limit on cash assistance and mandated participation in work activities as a condition of cash assistance, individuals deemed most job-ready moved into low-wage positions, often with limited opportunity for growth. The majority of those who remain on public assistance today face multiple serious barriers to employment, such as physical and mental health problems, limited English proficiency, child care needs, substance abuse addictions, limited education and work experience, and unstable housing situations.

For instance, The HOPE Program in Brooklyn, a workforce development provider that serves public assistance recipients and other low-income New Yorkers, found in 2007 that their clients faced an average of four barriers to employment—with the most common including limited work experience, a history of substance abuse, lack of stable housing, lack of a high school diploma or GED, low literacy levels, a history of convictions, and mental illness—compared with an average of 2.1 barriers in 2002. Barbara Edwards Delsman, the executive director of the HOPE Program, comments, “Those individuals with fewer employment barriers were able to find jobs in the early years of welfare reform. Those remaining on the caseload face more severe employment barriers, especially low literacy levels, conviction histories and addiction to alcohol and drugs.”

A recent report from the Urban Justice Center which included interviews with Food Stamp recipients also found that half of respondents identified lack of child care, costs of education, and limited English proficiency as key barriers to employment—and the most common including limited work experience, a history of substance abuse, lack of stable housing, lack of a high school diploma or GED, low literacy levels, a history of convictions, and mental illness—compared with an average of 2.1 barriers in 2002. Barbara Edwards Delsman, the executive director of the HOPE Program, comments, “Those individuals with fewer employment barriers were able to find jobs in the early years of welfare reform. Those remaining on the caseload face more severe employment barriers, especially low literacy levels, conviction histories and addiction to alcohol and drugs.”

Frontline workers who serve public assistance recipients cite other common barriers to clients finding and keeping
assistance recipients paid work experience coupled with education and training to improve their employability and build upon their career aspirations, including sector specific programs targeting green jobs and health care careers. Subsidized employment models are critical during an economic recession, as public assistance recipients find themselves competing for jobs with those with more education, skills, and experience. “In hard times, jobs cascade downwards,” explains David Hansell, former commissioner of the state Office of Temporary and Disability Assistance (OTDA).¹¹⁷ “As people who are being displaced from higher-level jobs start moving down the ladder, the people most likely to be displaced are the people at the bottom of the ladder who have the weakest skills.”¹¹⁸

Beyond addressing significant barriers to employment, much more needs to be done so that public assistance recipients can learn hard skills that can help them land career-track jobs in specific industry sectors. Current city programming falls far short on this point: according to a recent report by Community Voices Heard, only 8 percent of individuals in the Human Resources Administration’s (HRA) Back to Work program made it into paid employment—and approximately four out of five applicants to the program dropped out before even entering the 35-hour-a-week program of unpaid workfare and job training.¹¹⁴ The report finds that part of the reason for this major drop-off in participants is that HRA requires that applicants participate in the program during the 30 to 45 day period where they are waiting for their benefits to begin—a city policy that is not mandated by any state or federal rule governing welfare to work.

Equally troubling, a recent report by the Federation of Protestant Welfare Agencies found that while the public assistance caseload declined substantially over the last decade, a contributing factor was an increase in application denial rates in New York State—which went from 26 percent in 1999 to 42 percent in 2007, despite a 35 percent increase in applications.¹¹⁵ In New York City, the denial rate has risen from 20 percent in 1999 to 33 percent in 2007.¹¹⁶

Recently, New York State has begun to address some employment barriers as well as the limited career advancement opportunities public assistance recipients often face when they do move into unsubsidized work. To address participants’ limited work experience, the state has created a Transitional Employment Program to give public assistance recipients paid work experience coupled with education and training to improve their employability and build upon their career aspirations, including sector specific programs targeting green jobs and health care careers. Subsidized employment models are critical during an economic recession, as public assistance recipients find themselves competing for jobs with those with more education, skills, and experience. “In hard times, jobs cascade downwards,” explains David Hansell, former commissioner of the state Office of Temporary and Disability Assistance (OTDA).¹¹⁷ “As people who are being displaced from higher-level jobs start moving down the ladder, the people most likely to be displaced are the people at the bottom of the ladder who have the weakest skills.”¹¹⁸

OTDA has also sought to expand access to education and training statewide for public assistance recipients, including participation in GED, Adult Basic Skills, and ESOL programs. And to address the cycle of low-wage work in which public assistance recipients often find themselves stuck once they do find a job, OTDA partnered with the state Department of Labor in 2008 to launch a pilot Career Pathways program that aims to help public assistance recipients and other low-income New Yorkers access training opportunities and careers in high-growth sectors of the economy, including health care, energy, and advanced manufacturing.

“The stakes are so incredibly high for those on public assistance because not only would they potentially lose an employment opportunity due to lack of stable child care, but they run the risk of having to cycle back in the system.”

–David Garza, Chief Administrator, the Workforce Development Center at Henry Street Settlement
The human capital crisis this report has described is no abstraction. The skill deficits of the New York City workforce are having a negative impact today—in the difficulty employers in some high-value industries are having finding talented workers, even in a time of double-digit unemployment, and in the struggles of countless New Yorkers looking for work but unable to find it because they lack the skills and credentials that employers demand. Dramatic progress will not be easy, quick, or cheap, but the current downturn should focus the attention of stakeholders on what needs to be done—as well as the further trouble we invite by continued inaction.

Just as New York City has committed to PlaNYC, a long-term strategy to address long-term infrastructure and environmental challenges, we believe the city should embrace a similar forward-looking approach to tackle critical human capital needs. To start the ball rolling, our two organizations have outlined 34 specific recommendations to raise the skills of New York City’s homegrown workforce and ensure that employers can find all the talent they need within the five boroughs.
A citywide human capital initiative should:

- Greatly increase the number of adult New Yorkers with a high school diploma or a GED.
- Ensure that a greater share of those graduating from New York City high schools is prepared to enroll and excel in postsecondary education.
- Increase community college graduation rates.
- Increase the skills and job opportunities of disconnected youth, public assistance recipients, and the formerly incarcerated.
- Make it possible for a far larger share of immigrants who do not speak English well to access ESOL classes.
- And, especially during this Great Recession, invest in a transitional jobs program that gives New Yorkers with the greatest barriers to employment the opportunity to gain valuable work experience while earning wages and receiving skill development services.

Strengthening New York City’s systems of human capital development will require significant improvements in the K-12 educational system, Career and Technical Education (CTE) schools, CUNY community colleges, and the workforce development system for adults and young people. While new investment will be needed, three common threads that stand apart from resource issues run through our recommendations: internal improvements, rationalization and coordination across turf lines, and a broadening of mission to embrace both educational excellence and real-world relevance. Ultimately, the goal of policy makers and stakeholders should be to create a seamless pipeline of broadly educated, highly trained lifetime learners who reach maturity with the widest possible range of options before them. To realize this vision will require the sustained engagement of elected officials, government administrators, business leaders, and educators at every level.

Policy makers have a number of programmatic tools at their disposal—from work-contextualized adult basic education, GED preparation, and English for Speakers of Other Languages programming to subsidized work models such as Transitional Jobs Corps and Wage Reimbursement programs—that they have not fully utilized. Matching these tools to the specific needs of the hard-to-serve populations discussed in this report—youth and young adults, immigrants, people with criminal justice histories, and public assistance recipients—will be among their most important responsibilities. One short-term boost to these efforts comes from federal assistance through the American Recovery and Reinvestment Act (ARRA), which included substantial expenditures on social services as a key component of government action to dig the country out of the current recession. But while ARRA resources represent a badly needed down payment on future programming in human capital areas, more sustained interventions will be necessary.

It’s a daunting task. But the rewards—ensuring New York City’s prosperity through the 21st century, and empowering every New Yorker to share in the rewards of growth—justify every effort.

**K-12 Education**

The city’s public schools are the foundation for its future welfare. During his first eight years in office, Mayor Bloomberg has consistently placed the progress of the schools at the top of his agenda, and indeed has invited New York City voters to judge the success of his mayoralty on the results of his reforms. Since winning control over the school system and implementing a range of policies under the brand of “Children First,” the mayor has racked up some impressive accomplishments: the high school graduation rate has risen for eight straight years, and standardized test scores are up. Bloomberg and Schools Chancellor Joel Klein have remade the system, opening hundreds of new small schools and empowering principals to manage them without constant interference. But the hardest work remains before us: the graduation rate continues to lag well behind the national average, thousands still drop out—or are pushed out—every year, and even many who do graduate and go on to college find themselves woefully unprepared to handle postsecondary academic work once there. While it can be argued that we are winning the battle against a potential collapse of the K-12 system, the outcome of the war to ensure that every young New Yorker can progress to college or career-track work after graduating remains in doubt. We urge the following actions to support further gains:
1. **Reward quality teachers and create incentives for them to work in the most challenging schools.** While teacher quality isn’t the only factor in student achievement, it is demonstrably among the most important. Unfortunately, the status quo of teacher work arrangements often leaves the most experienced and accomplished—and best-compensated—educators working in the schools that are already performing well, while newly hired teachers are thrown into the most difficult and demanding schools. This exacerbates one problem—low student performance in those schools, which experienced and effective teachers could help improve—while creating another: the Department of Education itself has estimated the attrition rate among its public school teachers within three years of starting the job at approximately 40 percent.119 The demanding and often discouraging experience of trying to master one’s trade in an exceptionally difficult environment, without adequate support, is a large reason why many young teachers either leave the field or choose to pursue teaching positions outside the five boroughs before they have a chance to grow into the job. Changing incentives to reward more challenging placements should be a key position for the city in future contract negotiations with the United Federation of Teachers.

2. **Do much more to align primary and secondary education with the needs and priorities of the labor market.** One simple step in this regard would be to support teacher externships over the summer, through stipends and offering flex-time, for academic as well as career and technical education teachers. Another option would be to build cross-cutting competencies (such as “digital media literacy,” “teamwork and problem solving,” and “written and verbal communication”) into the high school curriculum. Such a step both would help students whose post-high school plans involve an immediate jump into the labor market and would provide a point of engagement for public schools with private-sector employers.

3. **Create school-level incentives for exceptional student achievement.** One variant on proposals to award “merit pay” to teachers is to do so in recognition of schools that show aggregate improvement on standardized testing. An interesting alternative to this approach, however, could be to sponsor an annual “Mayor’s Challenge” between schools to produce the most high-achieving students as measured by citywide competitions in specific fields from robotics to spelling to business simulations.

4. **Support career and technical education as a viable pathway to high school completion and postsecondary choices.** A key to reducing the number of dropouts and raising both the graduation rate and the percentage of New York students who enroll in and complete college is to give sustained support to educational pathways that differ from the traditional path of four years in high school. Career and Technical Education (CTE) is one such approach, in which students simultaneously pursue a Regents diploma and gain vocational skills in an industry of proven importance and high labor demand in the local economy, such as health care, information technology, construction, and graphic arts. CTE has demonstrated value as a strategy to prevent dropping out and raise graduation rates, providing context and direction for thousands of students whose high school experiences otherwise included little of either. It’s also a great strategy to engage employers, who grasp that the programs can provide a pipeline of rising talent to fill high-demand jobs. The Office of Multiple Pathways to Graduation within the Department of Education has developed a number of other promising programs over the past five years, many of which involve work experience for older teens. Determining which pathways are most effective in reaching high-need student populations, and robustly supporting them, should be a priority for city policy makers.

5. **Harness public and private resources to close the persistent racial achievement gap in citywide testing.** Perhaps the single greatest threat to the city’s long-term prosperity is the ongoing gap in school performance and standardized test results between students of different racial/ethnic backgrounds. While closing this gap has been a major focus of school reform efforts at the local and national level, the full resources of our society have not yet been brought to bear. Every step, from business sponsorship of schools to an ongoing PR campaign featuring high achievers from all walks of life, should be considered and tried in addressing this crisis.
Higher Ed/Community Colleges

While a solid K-12 educational system is necessary to ensure sustained and equitable prosperity, it is not sufficient to do so. Equally important for New York City’s future is to come as close as possible to the ideal of “postsecondary for all”: education beyond high school, including both vocational certification and community college completion as well as four-year degrees. Since taking office, President Barack Obama has stated on several occasions that his administration will support a universal entitlement to at least one year of postsecondary education, and in summer 2009 announced an “American Graduation Initiative” that will make $12 billion available toward the goal of graduating five million more Americans from community colleges by 2020. A matching commitment at the city level, in the form of a partnership between city government and local community colleges targeting those whose academic or vocational accomplishments indicate aptitude but whose resources are too modest to allow them to enroll, would provide a powerful ladder out of poverty as well as a new pipeline of workers for the “middle-skill jobs,” discussed on p.11 of this report, that will be vital for both economic growth and quality of life in New York City. While this is welcome news, as is the proposal Mayor Bloomberg advanced toward the same purpose in August (see p.14), we urge that the mayor and his partners in city government specifically consider the following actions to expand access and improve results:

6. Embrace community colleges as platforms for mobility and give them the resources to succeed. New York City’s community colleges have long been the stepchildren of the city’s educational infrastructure. But as an associate’s degree has emerged as the minimum requirement for an ever-greater share of the city’s middle-wage jobs, it’s time to give these colleges the attention and support they deserve. City officials must incorporate community colleges into their overall educational strategy and do more to ensure that a greater number of middle class, poor, and working poor New Yorkers can attend these schools and complete their degrees.

7. Invest resources in “persistence” programs to improve two-year degree attainment rates at CUNY schools along the lines of the Accelerated Study in Associate Programs (ASAP) initiative. ASAP is a CUNY initiative to improve retention and completion of two-year degrees by low-income students at all six CUNY community colleges by offering free tuition, small classes, compressed schedules, and work experience opportunities. Launched in 2007, the program is funded in part with money from the city’s Center for Economic Opportunity. The program’s early results have shown that 30 percent of participants have completed their associate’s degrees in two years, more than twice the rate of a comparison group. Assuming evaluation continues to indicate such success, public support for the program should greatly increase.

8. Expand “middle college” models in which students can simultaneously progress toward high school completion and an associate’s degree. For students with limited resources, any measure to speed up their time in school and get them into the workforce more quickly would be of value. “Middle college” models have proven effective both in engaging high school students and accelerating attainment of postsecondary credentials. They are particularly well suited for career and technical education sequences, in which high schools and colleges could further expand partnerships to include businesses, industry associations, and labor unions to create pathways into the workforce and inform education and training at a range of levels.

9. Refine financial aid initiatives to supplement the state Tuition Assistance Program (TAP). Federal and state policy makers have begun to turn their attention to how to make college more affordable to students of modest means. City leaders should do so as well. One area of focus could be to fill in the gaps around TAP, targeting assistance to adult part-time students, single childless adults, and non-tuition expenses. Another intriguing possibility, recently suggested by former New York Governor Eliot Spitzer, would be for the city to offer financial assistance in which students agree to pay a fixed percentage of their income for a specified period of time, as is done in other countries and has been championed by prominent economists across the political spectrum.
Workforce development system

As individual circumstances and economic conditions both change, communities face a need for supplemental human capital formation. A high-functioning workforce development system can address a large part of that need, but for it to do so in New York City will require policy makers to embrace a more expansive vision for the system. Currently, the array of job training and employment services in New York City and nationally emphasizes placing “job-ready” workers into relatively low-wage positions. This focus, explained in part by the motivation of system administrators to meet or exceed the target outcomes they negotiated with federal regulators, has limited the reach and relevance of programs to the majority of potential jobseeker customers, including both individuals with serious barriers to employment and those with extensive work histories and higher educational and skill attainment. If we are to fulfill the promise of workforce development, this must change: programs should help jobseekers and incumbent workers not only to find short-term employment but to remove their barriers to working, build their skills, and pursue career advancement. We urge the following actions to create this more expansive and effective system:

10. Broaden the focus of workforce development beyond short-term job placement to put greater emphasis on job retention and career advancement. The city’s Department of Small Business Services (SBS) has enjoyed some initial success in this area through its New York City Sectors Initiative, Career and Advancement Program, and other small-scale programming as well as the Business Solutions Training Grant for raising the skills of incumbent workers. On the whole, however, the system remains too narrowly focused on short term placements. Embracing a career perspective with an emphasis on education and skills will better align the system with the needs of both workers and employers.

11. Impose accountability and coordination on a workforce system that remains fragmented and characterized by both gaps and redundancies. While the city’s workforce programs have improved greatly in recent years, the system is still substantially led by the two city agencies that receive federal Workforce Investment Act (WIA) funding: SBS for adult and dislocated worker programs, and the Department of Youth and Community Development (DYCD) for youth programs. Collaboration between those two agencies has remained very limited, with the consequence that key gaps in services for disconnected youth and other high-need populations have persisted. At the same time, several other agencies that have a role in job training and workforce preparation—from the Human Resources Administration (HRA) and the Department of Education (DOE) to CUNY—are still not well integrated into the overall system. One reason for this is that SBS, DYCD, and HRA currently report to three different deputy mayors. City Hall can take two distinct actions to improve system alignment and more efficiently allocate resources:

a. Empower the Workforce Investment Board. The New York City Workforce Investment Board (WIB), mandated by the WIA, has done valuable work in setting policy priorities and generating new concepts and models for programming. Further empowering the WIB to set the agenda, while relegating the two lead agencies to a more strictly operational role, would both better conform to the legislative intent of the WIA—which clearly identifies WIB’s, with their mandated private-sector majorities and chairs, as the decision-making entities within local systems—and render the system more business-friendly.

b. Set a citywide agenda. To create a more cohesive and effective system, City Hall should regularly convene the commissioners or top deputies from all the agencies that offer workforce services to set combined annual performance goals, share information, and plan system expansions.

12. Finish the job of linking economic development to workforce development. In 2003, Mayor Bloomberg shifted responsibility for adult workforce development services to SBS, an agency whose primary mission is to serve the needs of businesses—a decision that, more than any other single action, triggered the dramatic progress on workforce development programming that the city has enjoyed over the last seven years. The city should now take other steps to complete the integration of workforce development within economic development. These could include mandating collaboration between SBS...
and the city’s Economic Development Corporation—an agency located in the same building as SBS but almost entirely distinct from it operationally—in working closely with employers and educational institutions to develop and refine curricula to both prepare workers for entry-level positions and to help advance them subsequently into positions of greater responsibility. To ensure follow-up and accountability, SBS and EDC both should be required to detail their progress in this regard in the annual Mayor’s Management Report. Another important step could be to require that new development projects subsidized by city resources include First Source hiring arrangements that prioritize residents of communities for job openings.

14. Encourage Congress to support comprehensive immigration reform and other federal policies to ensure that New York City can retain foreign-born workers from around the world. Current federal immigration policy is a detriment to our city’s ability to meet its human capital needs. An entire class of undocumented workers faces workplace exploitation, which lowers the wage floor for all New York City workers. City employers often must relocate outside the five boroughs to retain the best and brightest from around the world. And many young adults who have grown up here are barred from working once they finish school because they lack proper documentation. Until our federal immigration system is functional again, New York should continue to lead with calls for sensible, comprehensive immigration reform that works for city businesses, students, and employees. Specifically, city policy makers should push federal officials to:

   a. Support comprehensive immigration reform that provides a legal route for millions of undocumented workers to enter the mainstream labor market.

   b. Increase the number of visas available for skilled workers from around the globe, and simplify the process for employers to sponsor these workers.

   c. Pass the DREAM Act (Development, Relief and Education for Alien Minors Act), a bill under consideration in Congress that would make undocumented young people eligible for a conditional path to citizenship in exchange for completing two years in higher education or military service. Currently, thou-
sands of undocumented immigrants in New York City and elsewhere graduate from high schools each year but are barred from attending college because of their immigration status.

15. Focus on the needs of immigrant students and English Language Learners in New York City public schools. The approximately 150,000 New York City students with limited English proficiency, known as English Language Learners (ELLs), have some of the worst outcomes among all students in the city’s public schools. Less than a quarter of all ELLs graduate from city high schools, and only about 1 in 10 earns a Regents diploma. As of 2007, only 5 percent of eighth-grade ELLs were deemed proficient in English Language Arts standards, compared with 43 percent of non-ELLs. And ELL enrollment drops precipitously from 10th to 11th grade—the partial result, advocates say, of a “push-out” policy that high schools pursue to protect their standardized test and graduation rate outcomes. Just as the city has identified and started to remediate systemic shortcomings in career and technical education and invested in programming to offer multiple pathways to graduation for overage and under-credited students, a similar focus on the needs of immigrant students is vital if we are to avoid relegating tens of thousands more young New Yorkers to a life at the socioeconomic margin.

16. Enforce existing laws. Addressing certain needs of immigrant students and workers in New York City, from English language services to federal policy reforms, will require more attention and investment. But many other priorities for serving non-native New Yorkers can be achieved simply by more diligent and attentive enforcement of protections and policies already on the books. Officials at the state level have stepped up attention to and punishment of exploitative workplace practices, but more can be done. In the schools, the city’s Department of Education has obligations to provide tutoring services to ELLs that often go unmet, or are ineffectively delivered because translation services to non-English-speaking parents are not available. Similarly, the city’s Human Resources Administration is currently facing a lawsuit for failure to comply with a 2003 city law that requires city agencies to provide comprehensive translation services, which led to the plaintiffs unjustly losing or being delayed in receiving benefits to which they were entitled. An emphasis from city leadership, public and private, on ensuring that the public sector fulfills its promises and obligations to immigrants would go a long way towards meeting policy goals in this area.

The Formerly Incarcerated

Helping New Yorkers with past criminal justice system involvement get and keep jobs would greatly reduce both recidivism rates and corrections expenditures. Numerous studies have shown that a formerly incarcerated individual’s likelihood of committing a crime and returning to jail or prison is closely correlated with his or her work status. Yet large numbers of New Yorkers with criminal histories remain alienated from the labor market, with the all-too-frequent outcome that they return to criminal activity and find themselves once again behind bars. That so little is done to develop the hard and soft skills of individuals in the criminal justice system, both while they are incarcerated and after they return to the community, represents a lost human capital opportunity. The following actions would help redirect criminal justice policy toward a greater emphasis on the education and employment needs of this population, with the effects of both reducing crime in the short run and yielding huge budgetary savings over a longer time span—as well as opening labor market opportunities to a group now largely on the outside looking in.

17. Significantly increase access to education and training during incarceration. Education and training can fill a significant and positive role in reentry efforts for currently and formerly incarcerated individuals, preparing them to compete in the labor market, join the workforce, and positively contribute to the economy as well as furthering the rehabilitative mission. Policy makers should expand access to vocational skills, GED preparation, and community colleges’ curricula during this period. The Mayor’s Office should encourage legislators in Washington and Albany to push for restoring the federal Pell Grants and state Tuition Assistance Program grants. State officials should take the additional step of requiring the State Division of Parole to consider participation in college programs as a qualifying indicator for parole release. Plus, modular
education and training programs should be available to all those in jail or prison, rather than limited to individuals facing long stretches of incarceration.

18. Invest in a large-scale transitional jobs program for men and women recently released from prison. Transitional employment is a workforce strategy designed to help participants overcome employment obstacles and move into the labor market by placing them into real work in time-limited, wage-paying jobs while offering skill development and supportive services. People with criminal justice histories have proven particularly well suited for this model, frequently advancing from transitional to unsubsidized jobs. Preliminary research demonstrates that participation in transitional jobs programs reduces recidivism for formerly incarcerated individuals who enroll within three months of release from prison. New York state already has a $25 million transitional jobs program, modeled after a proposal CSS developed, that gives priority to formerly incarcerated individuals, as well as $7 million for green transitional jobs and $7 million for health care transitional jobs. New York City should consider expanding its own transitional jobs investments, such as the Park Opportunities Program, to help the formerly incarcerated transition into the workforce and find and keep unsubsidized employment.

19. Make reentry a mayoral priority. In order to best ensure that individuals with criminal histories are connected to appropriate employment assistance and other public and social services, New York City must make reentry a priority. The mayor should elevate reentry on his policy agenda, become a champion of reentry issues, and create a position in the Office of the Criminal Justice Coordinator devoted solely to reentry. This individual would convene and coordinate all relevant stakeholders on the model of the Rikers Island Discharge Enhancement, a collaboration between the city Departments of Corrections and Homeless Services that has reduced both recidivism and homelessness among former Rikers Island inmates, to set goals and develop coordinated strategies to reduce recidivism and assist New Yorkers with a criminal record to turn their lives around.

20. Lead by example. New York City should review its own personnel policy regarding job applicants with criminal histories and adopt hiring guidelines as a model standard for other employers. Already, cities such as Baltimore, Boston, Chicago, Minneapolis, San Francisco, and St. Paul have created a more fair and efficient screening process to ensure that people who have a criminal record are judged by the merits of their skills and experience, not just their criminal history. The National Employment Law Project says that opening up city hiring policies in this way is a critical first step toward convincing private employers to follow suit. As Mayor Richard M. Daley explained when he announced Chicago’s new hiring policy in 2006, “Implementing this new policy won’t be easy, but it’s the right thing to do. . . . We cannot ask private employers to consider hiring former prisoners unless the City practices what it preaches.”

21. Take advantage of federal funding opportunities. New York City should make a focused effort to win federal funding for reentry services. For example, the Edward Byrne Memorial Justice Assistance Competitive Program is authorized by the Consolidated Appropriations Act of 2009 to help local communities improve the capacity of state and local justice systems; it also provides for national support efforts, including training and technical assistance programs strategically targeted to address local needs. New York City should pursue funding available through the Second Chance Act, such as National Adult and Juvenile Offender Reentry Resource Center and Prisoner Reentry Initiative funding, which could be used to support transitional jobs programs for the formerly incarcerated. In addition, New York City should step up efforts to secure funding available through the American Recovery and Reinvestment Act (ARRA), such as the Edward Byrne Memorial Justice Assistance Grant (JAG) Program, which is intended to assist local efforts to prevent or reduce crime and violence.

Public Assistance Recipients

From the welfare rights movement of the late 1960s to the punitive practices put in place by Rudy Giuliani 30 years later, New York City has always been at the forefront of the national debate around public assistance. Through all the
Closing the skills gap: a Blueprint for Building New York’s Human Capital

22. Reform welfare-to-work programming to focus on the acquisition of skills, not solely placement in low-wage jobs. Currently, employment programs for public assistance recipients are evaluated primarily on their results in placing clients into unsubsidized employment—typically, low-wage jobs with limited opportunities for career development and growth. Given the high rate of “churn” between low-wage work and a return to public assistance, this seems an unwise approach. Instead, New York City should help public assistance recipients access a range of education and skill-building programs that will bolster their longer-term employability, including Adult Basic Education (ABE), pre-GED and GED courses, ESOL, vocational programs, and two- and four-year college. To address soft-skills acquisition, educational programs should include work-based and work-contextualized learning. In addition, to help facilitate access to college for public assistance recipients we urge the state Legislature to pass the Office of Temporary Disability Assistance’s Program Bill Number 69, which would expand allowable work participation activities for public assistance recipients to include attendance in an educational program of up to four years.

23. Expand paid transitional jobs programs and other subsidized work opportunities. As the economic downturn has depressed private hiring and put employees with lower skills and shorter work histories at a particular disadvantage, now is the time to expand transitional jobs programs—which use real work in time-limited, wage-paying jobs combined with skill development and supportive services to help participants successfully move into the labor market—to help advance those individuals toward unsubsidized employment. This model has proven effective for helping public assistance recipients find and maintain unsubsidized jobs, as well as for providing relief to strapped public budgets: the Fiscal Policy Institute recently conducted a return on investment analysis showing that an initial $17 million investment in transitional jobs programs for this population results in state and local cost savings of $60 million after three years. Putting low-income jobseekers to work is also a proven economic stimulus, with each dollar earned spent in local communities on basic needs such as food. State legislators recently created the first statewide transitional jobs program, including subsidized work programs in the health care and green sectors. With a funding match from the ARRA Emergency TANF Contingency Fund, these three programs are now funded at $39 million. The city should add its own resources to this effort while federal stimulus money is flowing; by the time ARRA funds dry up, savings from corrections and social service spending should make up the difference.

24. End the Work Experience Program (WEP). As it is currently structured, the Work Experience Program, in which participants “earn” their public assistance benefits by performing menial labor for the city, creates a second-tier workforce. WEP participants are placed side-by-side with city workers, who are paid a real wage and enjoy advancement opportunities through union rules and agency practices. In addition, research has
shown that WEP participants do not have access to the education and training opportunities that provide the theoretical justification for the program. The funding now allocated for WEP should instead fund an expansion of paid transitional jobs opportunities.

25. Embrace a career pathways framework for employment programming. Too often, the jobs that public assistance recipients find offer limited advancement opportunities, with the common result of a quick return to unemployment and receipt of assistance. By reorienting its employment programs to focus on career-track work, New York City can both provide more gain to participants and, over time, save money on those who would otherwise cycle back through public assistance channels. All three major welfare-to-work programs—BEGIN, WeCARE, and Back to Work—should incorporate career advancement principles and milestones, possibly using the New York State Career Pathways program as a model.

26. Better integrate HRA’s public assistance programs with the workforce development system. New York City has at least 33 workforce development funding streams that provide a total of more than $925 million in city, state, and federal funding. The New York City Human Resources Administration (HRA), which administers public assistance, accounts for $389 million, approximately 40 percent, of the city’s workforce development funding. Currently, however, HRA has little substantive engagement with its sister agencies that have workforce responsibilities. Considering the overlap of both mission and population served, the city must more effectively coordinate HRA-administered workforce services with the other pieces of the system to enable greater access for public assistance recipients to a broad range of services. We urge the mayor either to more fully empower the Workforce Investment Board or to name a senior official within City Hall to facilitate coordination among agencies.

27. Use ARRA to support public assistance recipients. The American Recovery and Reinvestment Act provides a great opportunity to link public assistance recipients to job creation efforts, including to new jobs as energy auditors and in weatherization, and to increase pre-apprenticeship and apprenticeship programs for public assistance recipients and other disadvantaged jobseekers in the transit and construction sectors. City officials should persist with and expand current efforts to develop focused pathways to connect these high-needs jobseekers to sector-specific opportunities, including linkages to education and training efforts in compliance with ARRA’s targeted hiring provisions.

Young Adults

Approximately 200,000 New Yorkers between the ages of 16 and 24 are neither in school nor working. They are disproportionately black and Latino, and approximately half have not completed high school. Their skill deficits and sporadic work histories make finding and retaining a job very difficult, especially during an economic downturn. “Pathway dependency,” the concept that early behavior and results, in this case having a job as a teen or young adult or not, is a powerful predictor of future behavior and results: the great concern is that those who remain disconnected at age 25 will spend their lives at the socioeconomic margin. At the same time, a failure on the part of the city’s public and private sector leaders to redirect a large share of these young adults toward the middle- and high-skilled jobs that will increasingly comprise our economy will make it far more difficult for the city to meet its human capital needs. The following recommendations provide a blueprint for ensuring young adults have opportunities to access educational opportunities, find and sustain work, and achieve economic security.

28. Invest more in basic skills programs for youth and young adults. Almost without exception, the skill levels of out of school/out of work youth and young adults—approximately half of whom lack a high school diploma, and almost all of whom did not earn any educational credential beyond a high school degree or equivalency—fall far short of what is needed to succeed in the workforce. It will take a significant investment to close that gap. Basic skills instruction should focus on strong literacy and math abilities (at a 10th grade level or above); ability to work in groups, make presentations, and problem-solve on the job; and a facility with computers and technology. Basic skills programs also should connect
to GED preparation and work opportunities. Community Education Pathways to Success (CEPS), a multi-site model that has successfully provided intensive literacy and numeracy development for low-level learners, could serve as a template for basic skills instruction reforms.

29. Offer more and better programming to help young, low-skilled New Yorkers earn a GED. The GED is both a minimum prerequisite for success in the labor market and a gateway to higher education, but no more than a few thousand disconnected young New Yorkers pass the exam every year. One major reason why is a painful shortage of quality GED preparation programs, most of which are too severely underfunded to offer the sustained, intensive support and high-quality instruction required to serve low-skilled young people.\textsuperscript{146} City policy makers should focus on quality improvements of GED preparation instruction, whether offered by the Department of Education, community-based organizations, or other provider types. Officials also must address the myriad issues around the GED testing system itself—including its near-total disconnection from prep programs. The current separation of the systems of GED testing and preparation creates a structure whereby those who have enrolled in a prep program and worked hard to ready themselves for the test often have to wait months to find a test date and location.

30. GED programs should incorporate transitions to careers and postsecondary education opportunities. Important as GED attainment is, students should regard the credential as a milestone, not a destination—and they should be thinking about what comes next long before they earn the GED itself. Successful programs will support transitions to work or to college. Some effective program models that emphasize work transitions offer basic and technical skills in the same classroom by pairing two instructors, one for literacy/GED preparation and another to teach toward the attainment of an industry certificate. The primary goal of these programs is employability through certification in a growth industry, with GED credentialing and basic skills mastery as key steps along the way. At the same time, GED programs are not doing enough to help facilitate the difficult transition to college.\textsuperscript{147} One particular challenge seems to be navigating the much less structured college environment; more effective programs such as CUNY Prep address this both by intensive counseling before students begin college and by having staff on campus to assist program completers when problems arise. Programs that focus on youth, such as CUNY Prep and Good Shepherd Services, present college enrollment and graduation as an attainable goal from the first day students arrive for GED preparation; they have shown that when resources are focused on postsecondary transition, good outcomes will follow.

31. Create supported work/transitional jobs programs for youth and young adults. Even young adults who have a high school degree or GED and can demonstrate basic skills mastery have been adversely affected by the recession, to the point that their longer-term career prospects might suffer. Like some formerly incarcerated individuals and those on or transitioning off public assistance, they are good candidates for positions in supported work or transitional jobs programs. For youth in particular, effective programs might include long-term internships, service corps models, or pre-apprenticeship programs that help develop “hard” and “soft” skills and provide clear pathways into subsequent careers. One idea might be to utilize federal ARRA public housing funds to develop a Corps program for young adult residents of New York City Housing Authority (NYCHA) properties. Corps members would work in teams on community improvement projects for four days a week, earning stipends to help meet household expenses, with a fifth day set aside for remedial education. In addition, participants would receive wrap-around support services and job placement assistance upon exit. Local nonprofits could run Corps projects in partnership with NYCHA administrators. Some sample projects might include improving housing sites through painting, maintenance, gardening, renovation, and weatherization.\textsuperscript{148}

32. Facilitate more early work opportunities. Labor market participation for youth and young adults has decreased since 2000. Mindful that early work experience is vital to long-term labor market success,\textsuperscript{149} city officials should provide young people with opportunities to learn about the workplace and to earn money to support their families. In addition to creating subsidized work opportunities, New York City should expand the Summer Youth
meaningful relationships with employers, and provide students with needed supports to transition into related higher education and career opportunities.

33. Focus on improving workforce outcomes for older youth and young adults. The labor market for young people has shrunk to the point where we need to provide greater assistance for their entry and initial success. Currently, the New York City Department of Small Business Services, which operates the adult workforce system, does a poor job with young adults: those between the ages of 18 and 24 seeking employment through the city’s Workforce1 Centers are placed in jobs at a rate of 27 percent, just over half the 47 percent placement rate for those 25 and older. The centers should offer targeted services for young adults, including assistance connecting to educational opportunities.

34. Better coordinate existing programs for disconnected youth. At least eight public funding streams across multiple public agencies in the city support literacy and GED services to young adults, and all program completers seek one or both of two goals: work and higher education. Yet there is no coordinated strategy or even much communication between the involved city agencies, including the Department of Education, the Department of Youth and Community Development, the Department of Small Business Services, and the City University of New York—an absence that exacerbates resource shortages while often facilitating duplication of services, not to mention enormous frustration for young people themselves. A consolidated plan, managed by an official with singular oversight and accountability, is badly needed. Similarly, youth and young adults who want to reconnect to work and/or education have no one place to turn in sorting through the hundreds of reconnection programs supported by 17 different funding streams across eight public agencies—which are themselves largely disconnected from each other. The Mayor’s Office should support the development of a Reconnection Site, which would include a relational database with information about all the different options available to young people seeking to reconnect, and would be overlaid with a youth-friendly website and hotline.
APPENDIX A  NEW YORK CITY EMPLOYMENT BY RACE, AGE, AND EDUCATION

RACE AND EMPLOYMENT

Working Age Men, 16–64
Labor Force Participation Rates and Employment-Population Rates

Working Age Men, 16–64
Employment-Population Rates

Working Age Women, 16–64
Labor Force Participation Rates and Employment-Population Rates

Working Age Women, 16–64
Employment-Population Rates
NYC Labor Force, Employed and Unemployed Combined
Share of Labor Force, Disaggregated by Age

NYC Labor Force, Employed and Unemployed Combined
Total Number of Participants, Disaggregated by Educational Attainment

Working Age New York City Residents
Employment-Population Ratio, by Educational Attainment

NYC Labor Force, Employed and Unemployed Combined
Share of Labor Force, Disaggregated by Educational Attainment
## Share of Low-Wage Workers in Major NYC Economic Sectors

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<td>Manufacturing</td>
<td>72,208</td>
<td>48.3%</td>
<td>77,420</td>
</tr>
<tr>
<td>Wholesale and Retail Trade</td>
<td>219,116</td>
<td>59.8%</td>
<td>147,216</td>
</tr>
<tr>
<td>Transportation and Utilities</td>
<td>95,370</td>
<td>40.7%</td>
<td>139,039</td>
</tr>
<tr>
<td>Information</td>
<td>23,722</td>
<td>18.7%</td>
<td>103,397</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>88,644</td>
<td>26.7%</td>
<td>243,018</td>
</tr>
<tr>
<td>Professional and Business Services</td>
<td>100,519</td>
<td>27.7%</td>
<td>262,603</td>
</tr>
<tr>
<td>Educational and Health Services</td>
<td>327,720</td>
<td>38.4%</td>
<td>525,534</td>
</tr>
<tr>
<td>Leisure and Hospitality</td>
<td>171,493</td>
<td>55.9%</td>
<td>135,534</td>
</tr>
<tr>
<td>Public Administration</td>
<td>43,873</td>
<td>29.7%</td>
<td>104,092</td>
</tr>
<tr>
<td>Other Services</td>
<td>107,918</td>
<td>55.9%</td>
<td>85,242</td>
</tr>
</tbody>
</table>

## Percentage of Workers within Gender in Major Occupations

<table>
<thead>
<tr>
<th>Industry</th>
<th>Total Pop.</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management, professional, and related occupations</td>
<td>36.7%</td>
<td>33.4%</td>
<td>40.5%</td>
</tr>
<tr>
<td>Service Occupations</td>
<td>21.3%</td>
<td>18.9%</td>
<td>24.0%</td>
</tr>
<tr>
<td>Sales and Office Occupations</td>
<td>25.5%</td>
<td>20.5%</td>
<td>30.9</td>
</tr>
<tr>
<td>Farming, fishing, and forestry occupations</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Construction, extraction, maintenance, and repair occupations</td>
<td>7.0%</td>
<td>13.0%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Production, transportation, and material moving occupations</td>
<td>9.4%</td>
<td>14.1%</td>
<td>4.2%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
### Percentage of Workers within Racial Groups in Major Industries

<table>
<thead>
<tr>
<th>Industry</th>
<th>Total Pop.</th>
<th>Black</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, forestry, fishing and hunting, and mining</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Construction</td>
<td>5.5%</td>
<td>4.4%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>4.6%</td>
<td>2.7%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>2.8%</td>
<td>1.5%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>9.3%</td>
<td>9.0%</td>
<td>10.9%</td>
</tr>
<tr>
<td>Transportation and warehousing, and utilities</td>
<td>6.5%</td>
<td>9.1%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Information</td>
<td>4.0%</td>
<td>2.4%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Finance and insurance, and real estate and rental and leasing</td>
<td>10.7%</td>
<td>8.0%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Professional, scientific, and management, and administrative and waste management services</td>
<td>12.2%</td>
<td>8.8%</td>
<td>9.3%</td>
</tr>
<tr>
<td>Educational Services, and health care and social assistance</td>
<td>24.7%</td>
<td>35.4%</td>
<td>22.3%</td>
</tr>
<tr>
<td>Arts, entertainment, and recreation, and accommodation and food services</td>
<td>9.7%</td>
<td>6.6%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Other services (except public administration)</td>
<td>5.6%</td>
<td>5.5%</td>
<td>7.6%</td>
</tr>
<tr>
<td>Public administration</td>
<td>4.1%</td>
<td>6.4%</td>
<td>3.2%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
Notes

21. Ibid.
24. To be sure, human capital attainment is not the sole determinant of compensation. Labor market institutions and norms, form union presence to minimum and living wage laws and how committed officials are to enforcing them, also have much to do with pay levels. But, other things being equal, those with more educational attainment are likely to command higher earnings than those with less, and the magnitude of the “education premium” tends to increase at higher levels of attainment.
27. Ibid.
29. Ibid.
30. Ibid.
31. Ibid.
34. Ibid.
36. City University of New York, “Institution Retention and Graduation Rates of Full-time First-time Freshmen in Associate Programs by Year of Entry, 1997 Data Book.” Online at http://owl.cuny.edu/7778/portal/page/portal/cura/CUNY%20Data%20Book%20by%20Table%20Number%20Fall%202007/RtGL_0001_FT_FTFR_ASSOC_TOT_UNIV.rpt_1.pdf
37. Some recipients earned both an associate’s and a bachelor’s degree while enrolled.
39. Ibid.
44. Harrington presentation, March 6, 2009.

46. The Fiscal Policy Institute (FPI) conducted all the labor market analyses in this report, unless specified otherwise.


48. PUMAs are geographic areas defined by the Census Bureau. They are the smallest areas that can be described using data from the 2005 ACS. Each PUMA usually has a population of at least 100,000 people. The PUMAs closely resemble New York City’s Community Planning Districts. All maps presented in this report are also available in “Mapping Poverty in New York City”, Community Service Society, 2005, available at www.cssny.org


52. The $13.90/hour wage level was determined on the basis of three measures: 1) eligibility for funding under the Workforce Investment Act (WIA) in the NY/Northern NJ/Long Island metro area according to the 2008 Lower Living Standard Income Level (LLSIL) for a family of four; 2) 150 percent of the 2008 federal poverty threshold for a family of three (one adult and two children); and 3) 150 percent of the 2008 federal poverty threshold for a family of four (two adults and two children). WIA eligibility requires an income of no more than 70 percent of the LLSIL. This corresponds to an hourly wage of $13.32 for a person working 40 hours a week for 52 weeks a year. One hundred and fifty percent of the federal poverty threshold corresponds to an hourly wage of $12.51 for a family of three and an hourly wage of $15.75 for a family of four. The average of these three hourly wages is $13.86, which has been rounded to $13.90 for the purposes of this analysis.


57. FPI analysis of Current Population Survey data, 2007–2008, school enrollment data are from FPI analysis of 2007 aCs. Employment data for 22 to 24 year olds are from FPI analysis of 2007 ACS. Employment data for 25 to 65 year olds are from FPI analysis of 2007/2008 CPS. As such, the percentages of 22- to 24-year-old employment and 25- to 64-year-old employment are taken from different datasets and are not perfectly comparable. Given the magnitude of the difference between the figures, however, the variations due to the datasets do not obscure the fact that 22 to 24 year olds are employed far less than individuals aged 25 to 64.


59. Ibid.

60. 2005–2007 American Community Survey Three-Year Estimates, found at NYC Department of City Planning.


62. FPI analysis of 2005 ACS PUMS and NYC Department of City Planning adjustment of 2005 population estimates. Working age is 16 to 64 years old.

63. FPI analysis of CPS data.


65. FPI analysis of CPS data


67. Ibid.

68. An additional 19 percent of immigrants speak English “well.” Less conservative measures of English language proficiency also include those who speak “well” as lacking proficiency, only excluding those who speak “very well” and those who “speak English at home.”


82. Ibid.
84. Also see Advocates for Children, “Creating a Formula for Success: Why English Language Learner Students Are Dropping out of School, and How To Increase Graduation Rates.” Available at http://www.advocatesforchildren.org/pubs/2005/elldropout.pdf. This report shows that the academic achievement on the English Regents Examination (ELA) of the 3,806 General Education ELLs who took the exam indicates that only 36 percent received a passing grade (scoring 55 or higher), in contrast with 75 percent of English Proficient (EP) students. In addition, only 12.8 percent of ELLs received a score of 65 or higher—the score necessary to graduate in a few years—in contrast with 54 percent of English Proficient (EP) students.
85. Michael Bloomberg, From Options to Action: The Mayor’s Summit on Reentry and Employment, Keynote Address to U.S. Conference of Mayors (Feb. 28, 2008).
86. Ibid.
88. See U.S. Census Bureau, http://quickfacts.census.gov/qfd/states/. Based on 2006 estimates, the top five cities in terms of population in New York State are: New York City (8,214,426); Buffalo (276,059); Rochester (208,123); Yonkers (197,852), and Syracuse (140,658).
91. Correspondence with Vaughn Crandall, Assistant Deputy Chief of Staff, Office of the Commissioner, New York City Department of Correction and Probation, December 15, 2008.
103. N.Y. Exec. Law § 845-b(5)(a); N.Y. Comp. Codes R. & Regs. tit. 14 § 550.6; N.Y. Emerg. Regs 633.98. It’s important to note that these discretionary bars are applied on a case-by-case basis by the employees of the agency that is given discretion. Such application, without clear standards, leaves room for many otherwise qualified applicants to be disqualified due to criminal histories.
106. Ibid at 958.
111. Office of Data Reporting and Analysis, NYC Human Resources Administration.
116. Bich Ha Pham, “The State of New York’s Social Safety Net for Today’s Hard Times: Over a Decade Since Welfare Restructuring, a Closer Look at the Changes, Opportunities, Limitations and
117. David Hansell is now the Principle Deputy Assistant Secretary at the Administration for Children and Families, US Department of Health and Human Services.
130. The CSS Transitional Jobs Proposal, “Putting New Yorkers to Work in an Economic Downturn,” can be found at http://www.cssny.org/userimages/downloads/NYS%20TJ%20Proposal-Final.pdf. The $25 million NYS Transitional Jobs Proposal is funded at $5 million through TANF funds, and a $20 million match from the ARRA Emergency TANF Contingency Fund. The $7 million health care and green transitional jobs programs, respectively, are funded with $5 million of NYS TANF funding and $2 million of NYS Legislative funding.
133. Public Law Number 111–8.
135. 42 U.S.C. § 3797w.
141. The NYS Transitional Jobs program is funded at $5 million, with a $20 million ARRA funded match. The NYS Green Jobs Subsidized Work program is funded at $7 million ($5 million in TANF funds, $2 million in Legislature funding). The NYS Health Care Outreach Worker program is also funded at $7 million ($5 million in TANF funds, $2 million in Legislature funding).
146. Treschan and Fischer.
150. Out of Focus.
Acknowledgements

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