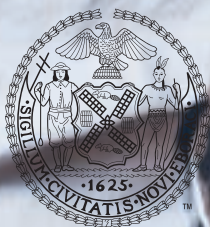


New York Works

Creating Good Jobs



The City of New York
Mayor Bill de Blasio

Alicia Glen
Deputy Mayor for Housing and
Economic Development

New York Works

Creating Good Jobs

Table of Contents

Letter from the Mayor
pg.04

Executive Summary
pg.06

Introduction
pg.14

The City's Toolbox
pg.26

5 Strategies to Create 100,000 Good Jobs
pg.28

Connecting New Yorkers to Good Jobs
pg.94

Additional Economic Impacts
pg.100

Implementing the Plan
pg.106

01. **Tech** + 30,000
jobs
pg.28

02. **Life Sciences
and Healthcare** + 15,000
jobs
pg.40

03. **Industrial and
Manufacturing** + 20,000
jobs
pg.52

04. **Creative and
Cultural Sectors** + 10,000
jobs
pg.66

05. **Space for Jobs of
the Future** + 25,000
jobs
pg.82

Letter from the Mayor

To My Fellow New Yorkers:

By many measures, our city is in an extraordinary period of progress. Unemployment is at a record low. We have more jobs than ever before. Wages are finally rising again, after tumbling sharply during the recession. Our economy is more diverse than ever, with technology transforming industries from finance to manufacturing to media.

But there is deep inequity in this success story.

Access to the good-paying jobs of the “New Economy” is far from equal. Hundreds of thousands of working New Yorkers struggle to earn enough to afford raising a family in this city. And the jobs and sectors that historically supported our middle-class are in tremendous upheaval. These challenges cut to the heart of the city we want to be.

Every New Yorker deserves a fair shot at a good job that pays a quality wage and offers the opportunity to develop a meaningful career. Focusing on job quality is not only a moral imperative, but essential for the future of New York City.

This is a plan to put the force of City government behind a new generation of middle-class jobs and promising, high-paying industries within reach of New Yorkers. It invests in our workers, in our buildings, in our neighborhoods, and in our companies.

Through these direct actions, we will create 100,000 good, middle-class jobs over the coming decade.

We will attract new industries to New York City, like cybersecurity and life sciences.

We will train workers to secure jobs in high-demand fields with good pay and good benefits, and work directly with employers to actively place them, through initiatives like ApprenticesNYC.

We will help companies with strong job-growth potential succeed by making sure they have the physical spaces they need—in both City-owned and private assets.

These programs will strengthen both the economic security of our people and the economic future of our city.

Given the challenges and uncertainty coming out of Washington, there has never been a more urgent time for New York to serve as a model for inclusive economic growth. And what better time to take up this mantle than now—from our current position of economic strength, when we are most able to bring our full resources to bear and make the most of this historic opportunity.

Together, let us lead the way to a bright economic future.



Mayor Bill de Blasio



Executive Summary

New York City is witnessing a time of historic growth.

Today, New York City has a population of just over 8.5 million residents—and that number is expected to reach 9 million by 2040. Since 2014, the city has added over 300,000 jobs. And over the last three years, employment growth in the city has outperformed the nation in almost every sector, and unemployment has fallen to as low as 4 percent.

New York continues to be the place where companies and people choose to locate. Our city remains the global financial capital of the world and is home to more Fortune 500 companies than any other U.S. city. The city continues to grow through economic diversification. From 2007-2015,

nearly 50 percent of employment growth came from the education, health, and technology industries. The city's diverse talent pool attracts companies looking for employees with global understanding, and demographics reflective of their customers. Foreign born workers in New York make up 45 percent of the workforce and over 200 languages are spoken across the five boroughs.

The city remains a global destination, not only for businesses and talent, but also for visitors. A record-setting 60 million visitors came to New York in 2016, drawn by world class culture and entertainment, robust transportation networks, and inviting public space. New York is at a historic moment of growth and opportunity.



The Challenges of Our Time

Although the city’s resurgence has been dramatic, these gains have not been distributed evenly across the five boroughs. The unemployment rate for New Yorkers without a college degree is almost double that of the working age population as a whole. Nearly 95 percent of the country’s income gains are claimed by the top 1 percent of households. Over the past 10 years, the percentage of New Yorkers earning middle income wages dropped from 46 percent to 43 percent, impacting a quarter million people. This crisis of affordability has put tremendous strain on families whose wages have barely recovered from the recession.

Alongside this rising inequality, there is tremendous disruption driven by technology that is challenging and changing the way businesses operate, and the skills New Yorkers need to secure the jobs of the future. The impact of technology is being felt on manufacturing floors and in the back offices of major financial firms alike. And more change is coming. The media and entertainment industries will have to

adapt to new mediums like virtual and augmented reality. Artificial intelligence and machine learning will revolutionize healthcare diagnoses and digital advertising. The proliferation of blockchain technology will further push the evolution of global finance and spur continued investment in cybersecurity. Automation could impact 60 percent of occupations based on technology that exists today, fundamentally requiring workers in those fields to develop new skills.

The way in which New Yorkers are working is also changing, with more and more people working part-time and gig economy jobs. In 2014, 400,000 New Yorkers were self-employed or worked as freelancers.

This technological revolution comes at a time of increased affordability challenges, global competition, and uncertainty around investment at the national level. The role of the City is to make strategic investments needed to prepare New York City—and all New Yorkers—for the future.

Foundations for Growth

New York City is thriving thanks to strong fundamentals: safe streets, improving schools, robust public transportation, and dynamic neighborhoods. These conditions are basic responsibilities of government necessary to draw and retain talent, and to encourage companies to locate and grow here.

To build on those strengths, the City is committing \$96 billion to a ten-year capital strategy that includes continued investment in infrastructure, schools, housing, resiliency, economic development, facilities for police and fire, among other agencies.

These investments are focused on ensuring a state of good repair across the city

that will repave roads, improve water infrastructure, and rehabilitate bridges. Going further, the City will continue to make investments to enable business expansion and talent attraction and retention.

The City has made significant strides in the last few years, from financing the creation and preservation of over 63,000 affordable apartments to enrolling 70,000 children in free universal pre-k. The City is supporting climate resiliency and reduced crime below historic levels to make New York City the safest big city in America.

New York’s population today is just over 8.5 million residents and is expected to reach 9 million people by 2040.

A Jobs Plan for All New Yorkers

In the 2017 State of the City, Mayor de Blasio set a goal of using direct City actions to spur 100,000 new, good-paying jobs over the next ten years. While the City will continue to encourage overall economic and job growth, it will specifically catalyze 100,000 quality jobs through City investments and direct actions. The following plan is a roadmap to meet that goal, to drive up New Yorkers’ incomes and, together with investments in housing and schools, make New York a more affordable place for people to live and work.

These jobs will pay at least \$50,000 a year or put people on a clear pathway toward achieving that level of wages. This will provide a new generation of New Yorkers the opportunity to pursue a middle-class career.

This plan has three objectives:

- 1. Invest in the creation of middle-class jobs
- 2. Ensure those jobs are accessible to New Yorkers
- 3. Prepare for the jobs of the future

Tools for Creating Jobs

The state and federal governments have many tools that influence economic growth, including, among others, personal and corporate income taxes, monetary policy, trade policy, and financial regulations. The City will work with its state and federal partners to use these tools and leverage them where possible to improve the economic wellbeing of New Yorkers.

However, New York has the opportunity to be a model at a time of political and economic uncertainty at the federal and global level. Through targeted use of the tools within the City’s control, New York can take direct action in investment and job creation. This report will focus on the use of these tools to specifically enable, support, or incentivize the creation of 100,000 jobs over the next decade.

The City’s tools to incentivize job creation in the private sector include:

- » **City-owned property** that can be activated for commercial and industrial use
- » **Financing and tax incentives** that help business acquire property, construct and renovate facilities, and invest in equipment
- » **Capital investment** in large scale infrastructure that directly enables businesses to start and grow
- » **Land use tools** that set the rules of development
- » **Direct financial investment and support** to industries that have high potential for growth



Photo Credit (image on page right): Mayoral Photography Office, NYC

5 Strategies to Create Good Jobs for New Yorkers

New York City will create 100,000 good-paying jobs across five strategies:

Tech 30,000 jobs

Technology today cuts across and impacts every industry, and will continue to require adaptation and innovation. The City will support innovation across industries to create 30,000 jobs for New Yorkers and strengthen businesses across the city.

Cybersecurity is a large and growing area of investment for companies, as online cyberattacks increase in sophistication, frequency, and financial impact. The City will invest \$30 million to grow New York City's cybersecurity ecosystem, with a goal of adding 10,000 new cybersecurity jobs for New Yorkers over the next ten years and making New York City the home for commercial cybersecurity. The City's investments will directly add 3,500 good-paying new jobs of the 10,000. This will include investments to:

- » Develop a strong pipeline of home-grown talent by growing and scaling entry level cybersecurity training programs
- » Provide shared resources for students and foster industry connections by establishing a cybersecurity center that provides state-of-the-art technology and collaboration space
- » Drive the commercialization of R&D through academic and corporate partnerships
- » Enable early stage companies to scale through investment and support

The City is also advancing job creation in smart cities technologies through investments that include the Urban Technology Hub at Grand Central Tech, New Lab at the Brooklyn Navy Yard, and the Union Square Tech Hub.

Life Sciences and Healthcare 15,000 jobs

The City will support the creation of 15,000 jobs within the life sciences and healthcare industries by developing the life sciences ecosystem and focusing on improved healthcare delivery.

Through **LifeSci NYC**, the City is investing \$500M to be at the forefront of research and innovation in life sciences. Over 85 percent of the 7,000 life sciences jobs created will be good-paying.

- » Connect research to industry, create jobs, and advance healthcare and technology
- » Unlock space for companies to grow and employ New Yorkers
- » Build a pipeline for diverse life sciences talent

The City will also support innovations in healthcare to improve delivery and health outcomes. This will include an investment to accelerate the adoption of technologies by connecting innovative companies to healthcare providers.

Industrial and Manufacturing 20,000 jobs

The City will create 20,000 jobs within the City's industrial and manufacturing assets by increasing manufacturing capacity and facilitating the movement of goods into, around, and out of New York City.

Trucks carry 91 percent of goods into and out of New York City, with 80 percent of those vehicles entering from the west and traveling through key chokepoints like the George Washington Bridge and the Verrazano-Narrows Bridge. This delays and increases costs for businesses in the five boroughs. New York City now has the highest congestion cost of any major city (\$16.9 billion in 2016) and the second highest average time spent in traffic. The City will launch **FreightNYC** to make comprehensive and strategic investments to strengthen the City's logistics and distribution systems. This will create over 4,000 good-paying direct jobs across barging, docks, rail, and distribution, and support thousands more by providing the infrastructure needed for businesses around the city to grow. The City's investments in FreightNYC will reduce the burden of these costs on local businesses and allow them to continue to grow, hire, and thrive.

The City will also invest to modernize and expand manufacturing facilities. This will include an additional \$115 million in ancillary space in the Brooklyn Navy Yard and the Brooklyn Army Terminal. Targeted use of the NYC Industrial Development Authority (NYCIDA) and other financing tools will assist private sector players to invest in and grow the manufacturing sector across the city.

Creative and Cultural Sectors 10,000 jobs

The City will support the creation of 10,000 jobs within the sectors that define the New York City brand and attract talent: fashion, film and TV, media and advertising, music and the arts.

The City will focus on the sustainability and growth of its globally competitive creative sectors. The City will invest in over 1,400 good-paying jobs at the Sunset Park **Made in New York** campus for fashion and film and TV, expand the fashion support package, and develop new film/TV space at Steiner Studios.

Technologies like virtual reality and augmented reality (**VR/AR**) are already impacting media, changing the way news is covered and how advertising is sold. The City will invest \$6 million to create the first publicly funded VR/AR lab in the country to provide entrepreneurs in this space with the technology, funding, and training needed to sustain growth.

The City will make strategic investments in the jobs that come from the cultural and entertainment assets that define the New York City brand. These include initiatives to support affordable artist workspace and the music industry, and financial resources for cultural institutions.

Space for Jobs of the Future 25,000 jobs

The City will create 25,000 jobs by supporting growth in office districts in Manhattan and the emerging commercial centers across the five boroughs.

Core job markets will be strengthened through zoning and other policy tools, as well as public realm and transit improvements. This will include Greater East Midtown, where the City will promote the construction of modern office space while also investing in needed transportation infrastructure and public realm improvements in the surrounding district.

The City will further invest in jobs closer to where New Yorkers live, particularly in regional centers like Downtown Brooklyn and Long Island City, and other commercial and industrial areas in Brooklyn, Queens, Staten Island, and the Bronx. The City will also propose zoning changes that remove barriers to the creation of work space, like outdated use regulations and other restrictions.

The City is exploring new tools to spur job growth, particularly in new commercial areas. One way the City is doing this is by committing to relocate City agencies to **anchor multiple new commercial developments** over the next decade. Not only will these developments create additional space for growing businesses and new jobs—when City agencies vacate their existing spaces, it will free up office space for private businesses in high demand neighborhoods.

Connecting New Yorkers to Good Jobs

These five strategies help create good jobs for New Yorkers, but the City will need to ensure that more New Yorkers have access to these quality jobs. Through its Career Pathways initiative, the City has built, and will expand, a series of workforce programs that bridge the opportunity gap through education, training, and job matching—putting more New Yorkers onto career pathways into the middle-class.

- » **Industry Partnerships** are a series of business advisory councils that provide strategic and tactical input into new and existing job training and preparation programs. The City will expand these partnerships to scale successful programs (like the Web Development Fellowship) and develop new training programs to help connect New Yorkers to quality jobs.
- » Work with City institutions of higher education, particularly the **City University of New York**, to **expand college curriculum to match employer needs** and incorporate industry-specific training.
- » **Deliver “bridge” training, combined with adult basic education**, so New Yorkers can get their high school equivalency and prepare for a job at the same time.
- » **Increase the diversity** of local talent tapped for these jobs through targeted outreach and training.
- » Develop and launch **ApprenticeNYC**, a **new employer-training partnership model** that allows New Yorkers to get the hands-on experience they need while placing them in a career-ladder profession.

ApprenticeNYC will build on the employer relationships the City has developed through our Industry Partnerships, and create a new training model that combines traditional workforce education and training with on-the-job learning provided by employers who have already hired the trainees. By combining the traditional new employee “learning curve” period with pre-hire technical training that builds a job-ready new hire, employers gain the certainty of a pipeline of talented new employees, and workers gain the certainty of employment and skillset that will increase their opportunities beyond the apprenticeship.

ApprenticeNYC will begin as a multi-year pilot in three sectors with employers who have been partners on other City programs and have specifically expressed interest in partnering to build new hiring and training models. As an example, Spotify developed its New York City Technology Fellowship after noticing a gap between their traditional hiring methods and the high potential candidates from underrepresented backgrounds that were excelling in bootcamps but lacked formal professional engineering experience. Building on programs like this, the City will partner with Spotify and other employers in the tech, industrial, and healthcare industries to build out a new model of apprenticeships, with the first cohorts beginning in late 2018.

Additional Economic Impacts

In addition to 100,000 quality direct permanent jobs, the City’s investments will support 240,000 construction jobs that will provide middle-class incomes for thousands of New Yorkers. The City is working to make those jobs accessible to New Yorkers of all backgrounds through HireNYC and capacity building programs for minority and women owned business enterprises (M/WBE). These investments will also help to achieve the City’s ambitious resiliency and sustainability goals through initiatives like the Green Jobs Corps.

This plan will also have much broader indirect effects. Through these investments, the City will create over 15,000 indirect and 17,000 induced jobs over the next ten years.

Implementing the Plan

The City has committed over \$1.1 billion to date. Over \$250 million will be committed in November 2017 and January 2018 plans. Additional investments toward creating 100,000 jobs will come over the next ten years.

Near-term Milestones

The City has identified a number of near-term milestones and will provide an annual update on progress against these as well as future milestones.

Tech

- » Release the first cybersecurity RFP
- » Convene cybersecurity industry leaders to advise on sector needs
- » Top out construction for the Dock 72 project at the Brooklyn Navy Yard
- » Start construction on the B. New York incubator at the Brooklyn Navy Yard

Life Sciences and Healthcare

- » Release LifeSci Hub RFEI
- » Launch the LifeSci NYC incubator
- » Launch the LifeSci NYC internship program
- » Host a Digital Health Marketplace matchmaking event

Industrial and Manufacturing

- » Select an operator for the South Brooklyn Marine Terminal
- » Complete FreightNYC study
- » Open 1 million square feet of space at Building 77 at the Brooklyn Navy Yard
- » Open the FutureWorks TechShop at the Brooklyn Army Terminal
- » Open an additional 500,000 square feet of industrial space at the Brooklyn Army Terminal

Creative and Cultural Sectors

- » Open the first phase of the Steiner Studios expansion at the Brooklyn Navy Yard
- » Open the VR/AR Lab
- » Launch the fashion support package for garment manufacturers
- » Launch the Made in NY Animation Project

Space for Jobs of the Future

- » Release RFP to start the NYC Human Resources Administration’s (HRA) move to anchor new office development in East New York
- » Select a developer for the City-owned site on Vernon Boulevard in Long Island City

Connecting New Yorkers to Good Jobs

- » Launch first cohorts of ApprenticeNYC



NYC's Seasonally Adjusted Employment
(in millions)



Introduction

A generation ago, no one could have imagined the resurgence of New York City.

As legend has it, a defining moment in the life of the city came in 1977, in the middle of a World Series game at Yankee Stadium, with the announcement, “the Bronx is burning.” In the '70s and '80s, not only was the Bronx burning, but so were the other four boroughs. Jobs were down, crime was up. Whole swaths of housing and manufacturing stock were abandoned and derelict. In little more than a decade, upwards of one million people had left the city.

The situation today could not be more different. After losing almost a million residents in the decade from 1970 to 1980, the city has grown dramatically.

Today, the population of New York City is just over 8.5 million residents—and that number is expected to reach 9 million by 2040.

A Global Capital

As New York City witnesses a time of historic growth, it remains the most competitive city for businesses and talent in the world.

Unemployment has fallen to as low as 4 percent this year, and over the last three years, employment growth has outperformed the nation in almost every sector.

The economy is strong and growing. As of March 2017, companies in NYC employed an unprecedented 4.4 million people. Unemployment has fallen to as low as 4 percent this year, and over the last three years, employment growth has outperformed the nation in almost every sector. In 2015, the city's nominal Gross City Product (GCP) was \$805 billion. Real GCP increased 15 percent from 2008.

Globally, New York City remains the financial capital of the world and it is home to more Fortune 500 companies than any other U.S. city. The city continues to grow through economic diversification. From 2007 to 2015, nearly 50 percent of employment gains came from the education, health, and technology sectors. Businesses locating in the city benefit from continued investment in the transportation system, three international airports that in 2016 brought in over 46 million passengers, the development of world-class office space including Hudson Yards and World Trade Center, and access to an unparalleled talent pool.

The city has the most competitive and diverse workforce worldwide. For growing companies looking to serve increasingly diverse global markets, New York is a nat-

ural home. Foreign-born workers make up 45 percent of the labor force and almost 50 percent of business owners are immigrants. Over 200 languages are spoken across the five boroughs.

New York also benefits from a large, skilled workforce, attracting talent from around the country and the world. Millennials make up nearly 20 percent of the population and are the most educated group of young workers in the city's history. The share of people ages 23 to 29 with at least some college education has increased from 61 percent in 2000 to 72 percent in 2014. The city boasts 105 institutions of higher education and CUNY—the nation's largest public higher education system—has propelled around six times as many low-income students into the middle-class as all eight Ivy League campuses, plus Duke, MIT, Stanford, and University of Chicago, combined.

The city is a global destination. A record-setting 60.3 million people visited in 2016, drawn by world class culture and entertainment, a distinctive food scene, and beautiful public spaces.

4.0%

Photo Credit (image on page right): Mayoral Photography Office, NYC



Opportunity at a Time of Change

However, to remain globally competitive, the City needs to continue to invest. Although the city's economic resurgence has been dramatic, it has not been felt evenly across the five boroughs. In recent years, 95 percent of the country's income gains were claimed by the top 1 percent of households.

Affordability in New York City remains a real challenge. Wages have remained largely flat while the cost of living has increased dramatically. One in five New Yorkers is below the poverty line and, overall, over 1 million workers earn less than \$15 an hour. It is a major challenge and demand on limited funding resources

Affordability in New York City remains a real challenge.



Source: ACS PUMS 1-year estimates

to meet the housing needs of the lowest-income New Yorkers. Helping New Yorkers increase their earning potential is an important part of meeting the affordability challenge.

At the same time, the world is on the cusp of a technological revolution that will challenge the way businesses operate and fundamentally change the composition of the city's workforce. New technologies are disrupting every sector of the economy. The media and entertainment industries must adapt to new mediums like VR/AR. Artificial intelligence and machine learning are revolutionizing healthcare diagnoses and digital advertising. The

60 percent of jobs will significantly change from automation

Less than 5 percent of jobs can be entirely automated away using existing technology

Source: "A Future that Works: Automation, Employment, and Productivity," McKinsey Global Institute

proliferation of blockchain technology is further pushing the evolution of global finance and spurring continued investment in cybersecurity.

Automation and machine learning are further disrupting the way New Yorkers work. According to McKinsey, less than 5 percent of all occupations can be entirely automated using existing technologies, but 60 percent can be automated in part. This means that the nature of work in most occupations will change dramatically, even if it doesn't disappear entirely.

The way in which New Yorkers work is further changing, moving more toward part-time work, working multiple jobs at once, and often working across sectors.

On average, millennials change jobs four times before they turn 32. The sharing economy is another contributor to the changing nature of work, with an increasing number of gig workers cobbling together an income across multiple, part-time roles. In 2014, 400,000 New Yorkers were self-employed or worked as freelancers.

Instead of shying away from this challenge, the City needs to prepare and ensure that it becomes home to the jobs created by these new technologies. The City will invest in education and training of New Yorkers since education has never been more critical to accessing quality jobs. The unemployment rate for New Yorkers without a college degree is

almost double that of New Yorkers with a college degree. To participate in the modern economy, the ability to work with computers, smartphones, and industrial robots is becoming an essential. And soon it will become a stronger requirement across the board: for students writing research papers, New Yorkers looking for new jobs, office workers spending their work days on laptops, and factory workers making solar panels.

The technological revolution comes at a time of affordability challenges, increased global competition, and economic uncertainty at the national level. The role of the City is to make the strategic investments needed to prepare all New Yorkers for the future.

Three objectives:

1

Invest in the creation of middle-class jobs

The City will address the increasing divide in the quality of job opportunities available to New Yorkers by investing in industries where middle-class jobs are growing. Across fields ranging from advanced manufacturing to freight, from film and television to the life sciences, the City's efforts will specifically focus on creating good, accessible jobs.

2

Ensure jobs are accessible to New Yorkers

The City will create career pathways and invest in industry partnerships that make these middle-class jobs accessible across the diverse New York talent pool. As the nature of work changes, industrial and technology jobs will require an increasing level of qualification. The City will invest in education, training, and industry partnerships to ensure that New Yorkers have the skills and digital savvy they need to access middle-class job opportunities today and into the future.

3

Prepare for the jobs of the future

The city is in the midst of a technology revolution. New technologies like VR/AR and machine learning, and new ways of working, like the sharing and gig economies, are transforming the jobs New Yorkers have and how they perform them. The City will invest to stay at the forefront of future technologies, ensuring that New Yorkers are the beneficiaries of these changes.

Foundations for Growth

To support good-paying jobs and prepare for the future, the City needs to invest significantly in the physical and social infrastructure that serves as the foundation for economic growth. The City is committing \$96 billion in capital over ten years. This includes continued investment in infrastructure, schools, housing, resiliency, economic development, facilities for police and fire, among other agencies.

First, these investments will focus on ensuring a state of good repair across the city by repaving roads, improving water infrastructure, and rehabilitating bridges. Between 2014 and the end of fiscal year 2019, the City will have repaved 6,600 lane miles. The City will activate its third water tunnel between Brooklyn and Queens by the end of 2017, and further invest in bridge rehabilitation and core infrastructure improvements across the five boroughs. The City has committed to a \$1 billion Neighborhood Development Fund to support the underlying infrastructure needed to support growth in neighborhoods that are rezoned for more housing.

Going further, the City will continue to make investments that enable business expansion and talent attraction and retention. The City has made significant strides in the last few years—from financing the creation and preservation of over 63,000 affordable housing units to enrolling 70,000 children in free universal pre-k. The City has committed to making \$20 billion in investments to support climate resiliency and has reduced crime below historic levels to make New York City the safest big city in the U.S.

The City is committing \$96 billion in capital over ten years. This includes continued investment in infrastructure, schools, housing, resiliency, economic development, facilities for police and fire, among other agencies.



Housing

The City has already made meaningful investments in affordable and public housing. Housing New York, the City’s ten-year affordable housing plan, seeks to ensure that New Yorkers have access to affordable housing by building or preserving 200,000 housing units over ten years—enough inventory to house over half a million New Yorkers. Through the Department of Housing Preservation and Development (HPD), as of March 2017 the City has financed the creation and preservation of over 63,500 affordable units across the five boroughs, providing over 150,000 New Yorkers with housing. Another 85,000 residents depend on HPD for Section 8 vouchers and nearly 600,000 residents rely on the New York City Housing Authority (NYCHA) for public housing or Section 8 vouchers. As part of the ten-year strategic plan for NYCHA, the City has committed nearly \$2 billion in capital for roof repairs, façade repairs, and permanent lighting.



Public Transportation

The City is committed to continued investment in public transportation, particularly as infrastructure ages and new connections are needed. In 2015 the City made its largest capital commitment to the Metropolitan Transportation Authority (MTA) in history: \$2.5 billion. This is part of a five-year plan to improve subway stations, upgrade the frequency of subway service, and continue to expand Select Bus Service in New York City. To connect the growing economic centers along the Brooklyn and Queens waterfronts—which encompass 409,000 residents and 295,000 workers—the City has expanded the Citi Bike bike-share system, launched a state-of-the-art ferry system, and is studying a new waterfront streetcar project. The new NYC Ferry waterway transit service served 250,000 riders in its first month, and by the end of 2018 will include six routes and 20 landings across the city.



Education

The City has also made a major investment in education. Since 2008, spending on education has increased 42 percent to \$24.3 billion in 2017, creating a historic increase in graduation rates to 72.6 percent. The de Blasio Administration has pioneered free universal pre-k education, which has enrolled 70,000 children and will expand to 3-year-olds by 2021. New York is one of the few cities in the country that offers free preschool to all 3-year-olds, and is the largest of such programs. Among other investments, the June 2017 budget dedicates more funding for school lunches, improved library facilities, and universal physical education.



Public Safety

The City continues to reduce crime far below historic levels to make New York City the safest big city in the country. In the first quarter of 2017, overall offenses were down 5 percent, murders were down 10 percent, and shootings were down 22 percent from the previous year. The City continues to invest to ensure that the New York Police Department (NYPD) is at the cutting edge of innovation and pioneering police strategies to strengthen relationships between police officers and the communities they serve.



24

Resiliency against Climate Change

The City has committed to making \$20 billion in federal and local investments to support climate resiliency and ensure New York’s long-term sustainability. The work includes the \$355 million East Side Coastal Resiliency project on the Lower East Side, nearly \$2 billion to strengthen public hospitals at risk, and a \$45 million commitment in Hunts Point to ensure the long-term viability of the city’s food supply. In addition to large-scale infrastructure investments, the City is also supporting innovative projects to boost resiliency and sustainability, such as the launch of a mitigation banking program at the Saw Mill Creek on Staten Island.

These investments are the crucial foundations of a vibrant city, but they are not sufficient by themselves. The city still needs to attract and grow industries and jobs that will employ New Yorkers for decades to come. To build on these foundations, the City is pursuing strategies that will directly lead to the creation of 100,000 quality jobs accessible to New Yorkers.



5 Strategies to Create 100,000 Good Jobs

Good jobs will pay at least \$50,000 a year or put people on a clear pathway toward achieving that wage, affording a new generation of New Yorkers the opportunity to pursue a middle-class career. The City is investing in five strategies that will lead to the creation of 100,000 good-paying jobs. To estimate the share of good-paying jobs for projects, the City looked at the share of workers in any given sector annually making greater than \$50,000.

The largest number of new middle-class jobs—30,000—will be created in tech-related fields. The infusion of technology across finance, insurance, energy, advertising, and a range of other industries will create opportunities that offer a clear pathway to the middle-class.

The City will stimulate the creation of 20,000 industrial and manufacturing jobs. As these sectors evolve, they will continue to offer opportunities for middle-class jobs in New York. The City is investing to ensure that manufacturing, logistics, and distribution jobs remain in New York for the long term.

Another 15,000 jobs will be created in life sciences and healthcare. These range from high-level research and development to positions in medical technology, and hospital and home care delivery jobs (many of which do not require a college education).

The City’s investments will support the creation of 10,000 jobs in a wide range of creative and cultural sectors, including film and television, fashion,

music, and the arts. These industries are a core part of quality of life for New Yorkers and attract millions of tourists every year. They promote the NYC brand and draw Fortune 500 companies and top talent here, which directly and indirectly contributes to job creation.

Finally, the City will take action to ensure that nearly 25,000 jobs can be created through the development of office and professional space for jobs of the future throughout the five boroughs. As the economy changes, this development will ensure that space is available for companies to grow and that people are able to work closer to where they live.

In addition to specific investments to generate these 100,000 jobs, the City will continue to invest in broader economic growth. City investments in construction for commercial, residential, transportation, and other infrastructure building projects will create 240,000 construction jobs. The City’s efforts to create 100,000 direct jobs will also support over 15,000 indirect jobs and 17,000 induced jobs.

Good jobs will pay at least \$50,000 a year or put people on a clear pathway toward achieving that wage.

The City's Toolbox

The foundation for economic growth is strong infrastructure. But beyond investing in housing, transportation, schools, a reduced crime rate, neighborhood infrastructure, and resiliency against climate change, the City can use its tools to directly incentivize job creation. These tools span strategic investments in industries and neighborhoods, financing and funding programs, and mechanisms to guide the use of land throughout the city.

In addition to the tools directly under the City's purview, the federal and New York State governments have a variety of programs that the City does not control. The federal government's various agencies provide tax credits to develop affordable housing, financial assistance for low-income New Yorkers, regulations to lower the cost of telecom and broadband services, capital funding to invest in climate change resiliency, and more. The state government wields direct control over how New Yorkers are taxed, including the share that the City collects to fund its services. Although the City does not control these tools, it does advocate for their existence and expansion in a responsible way, and builds upon them with its own resources where possible.

New York City will use the tools that it controls, in coordination with the federal and state programs it does not control, to enable, support, or incentivize the creation of 100,000 jobs over the next decade.

The City's primary tools include:

City-Owned Property

As neighborhoods grow and evolve, there are opportunities to activate City-owned land for public benefit.

The City's goals might include affordable housing, industrial space, community facilities, and parks. The City can work with private and nonprofit developers to activate these sites or develop and tenant the sites itself.

Financing and Tax Incentives

The City offers a number of financing tools to help businesses acquire property, construct and renovate facilities, and invest in equipment. The primary mechanism for the delivery of benefits is the NYC Industrial Development Agency (IDA), which encourages economic development throughout the five boroughs. IDA programs are discretionary, meaning the City can target companies that will use the benefits to further City policy goals like the creation of good-paying jobs.

Federal grant programs and state tax incentives offer additional financing options. The federal government offers tax credits for affordable housing, workforce training, and more. And while the City doesn't control state tax policies, it helps New York developers and companies access the state's tax incentives, especially the popular Industrial and Commercial Abatement (ICAP) and Relocation and Employment Assistance (REAP) programs that promote development of commercial office space in the boroughs.

Capital Investment

From transportation to distribution systems, the City invests billions in infrastructure projects. These investments directly support job creation by enabling businesses to grow as a result of infrastructure. For example, a distribution facility would be able to operate because of road improvements that improve access to the facility or a new rail line that connects to it.

Land Use Tools

Zoning sets rules for the use and development of land, which in turn shapes what investment can occur in the city's neighborhoods and business districts. By ensuring that regulations are versatile enough to meet a range of work space needs, and by providing capacity for commercial growth in appropriate areas, the City can unlock space for jobs and support the ability of businesses to adapt to evolving economic conditions.

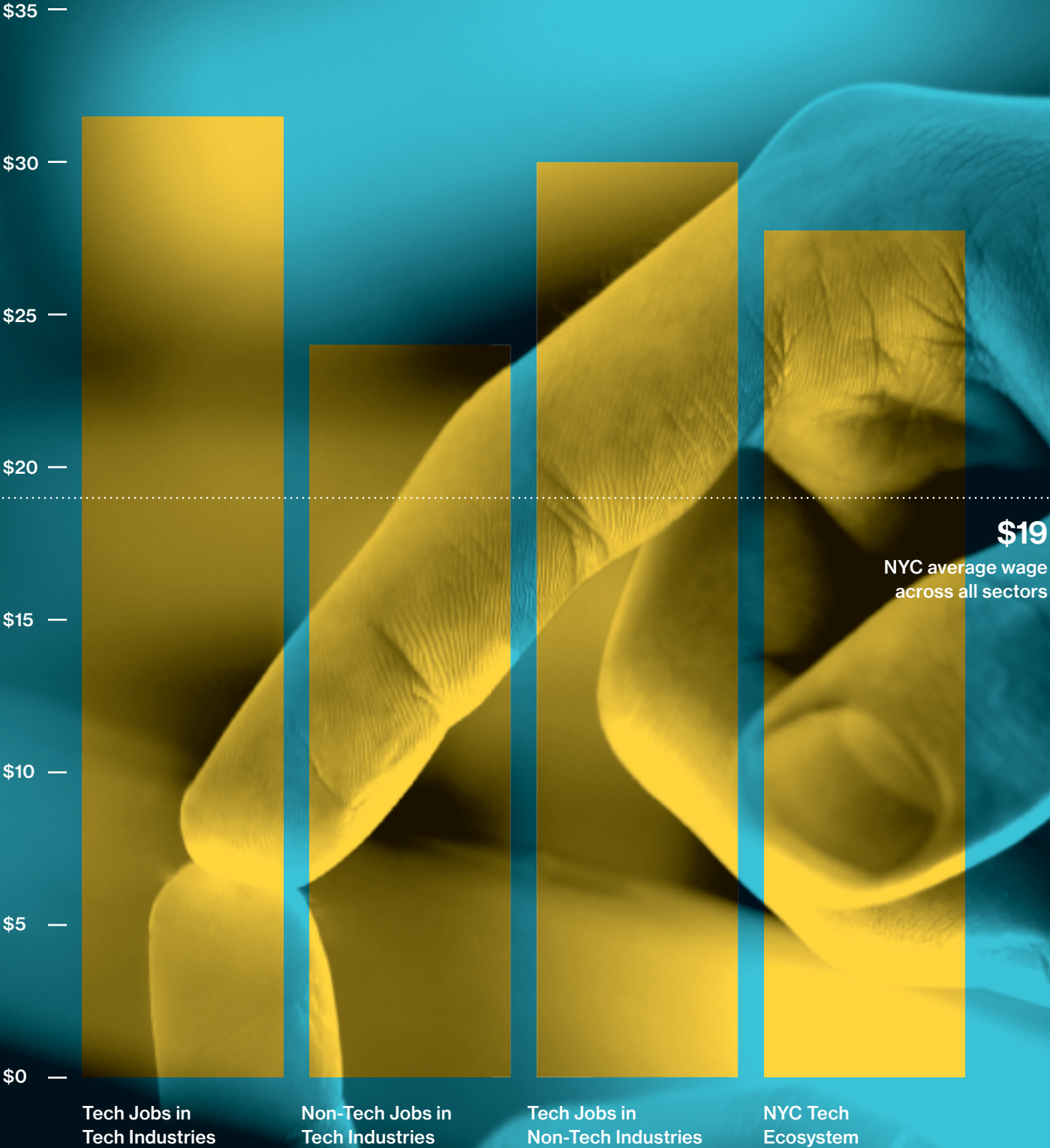
Direct Investment and Support

The City operates a wide variety of business development and support programs, particularly in industries that have high potential for growth in New York but face barriers that government can help eliminate or reduce. These investments include seed funding, business management education, connections to customers, and branding. The City connects with more than 10,000 entrepreneurs and small businesses per year through neighborhood business hubs, helping them launch and grow their companies and connect with capital.

Tech: Innovation across Industries

30,000 jobs
for New Yorkers

Wages for Jobs that Do Not Require a Bachelor's Degree



Data from the 2013 HRA report, NYC's Tech Ecosystem

Tech: Innovation across Industries

Building on its booming tech economy, the City will support the application of new and innovative technologies across industries to create 30,000+ good-paying jobs for New Yorkers and strengthen businesses across the city.

New York's tech ecosystem contributes nearly 300,000 jobs. This figure is likely to grow even further as technology continues to power innovation across industries. Tech jobs now encompass all businesses and every industry. The average annual salary in the tech sector is \$70,000 to \$80,000, making it one of the best sources of good-paying jobs in the city. Further, 44 percent of these jobs are accessible through skills training that does not require a college degree. In jobs that do not require a college degree, tech jobs pay 45 percent more in hourly wages than average.

school district in the nation to teach this critical subject to all students. As a result of a \$10 million industry partnership via the NYC Tech Talent Pipeline, thousands of New Yorkers will be trained with the skills they need in demand fields like web development and server administration.

As advancements in new technologies like machine learning, artificial intelligence, and virtual reality continue to progress, New York City will be at the forefront of translating these innovations into good-paying jobs. The City will expand on this foundation to add 30,000 good-paying jobs in technology across multiple industries over the next ten years.

The City's strategy will make seed investments in new technologies that will create good-paying jobs and improve the competitiveness of New York City industries.

The City has already made large investments in programs like Computer Science for All and the NYC Tech Talent pipeline. Because of the program, every public school student in New York City will learn computer science by 2025, making NYC the largest

44 percent of tech jobs are accessible to New Yorkers without a bachelors degree.

44%

Make Seed Investments in New Technologies that Will Create Good Jobs and Improve the Competitiveness of NYC Industries

To remain on the leading edge, New York City’s companies must continue to adapt and harness new technological advancements. Initially, the City will invest in cybersecurity and smart city technologies, and continue to identify additional areas where the City can take a leadership position.

The City will invest \$30 million to grow New York City’s cybersecurity ecosystem, with a goal of adding 10,000 new cybersecurity jobs for New Yorkers over the next ten years.

Initiative 1: Make New York City the home of commercial cybersecurity

Cybercrime is a large and increasing problem for local companies, government, and individual accounts. This is highlighted by regular media coverage of high-profile breaches. As a result, global spending on cybersecurity is increasing rapidly and is expected to grow more than 1.2 times to \$170 billion in 2020. With its strength in key industries like finance, tech, and healthcare, New York City is well-positioned to become the next home for cybersecurity as demand shifts from federal intelligence agencies to the private sector.

The City will invest \$30 million to grow New York City’s cybersecurity ecosystem, with a goal of adding 10,000 new cybersecurity jobs for New Yorkers over the next ten years.

The City’s investments will directly add 3,500 good-paying jobs of the 10,000. This will include investments to:

- » Develop a strong pipeline of homegrown talent by growing and scaling cybersecurity training programs
- » Provide shared resources for students and foster industry connections by establishing a cybersecurity center that provides state-of-the-art technology and collaboration space
- » Advance the commercialization of R&D by supporting the development of academic R&D labs that create partnerships between academia, industry, and entrepreneurs
- » Enable early stage companies to scale through investment and support

The City is already home to more than 6,000 cybersecurity jobs and local businesses are eager to add more. If the growth in demand for cybersecurity jobs keeps pace with the recent trend line and growth of other major hubs of activity, New York City will need more than 10,000 additional cybersecurity professionals to fill jobs across the spectrum of talent over the next ten years.

Cybersecurity jobs pay good wages, provide a range of access points, and offer good career ladders. Many types of cybersecurity roles exist, including IT analysts, software developers, risk auditors, and compliance analysts that manage security regulations. These jobs pay a median annual starting salary of \$65,000 and are accessible to everyday New Yorkers with some training. Emerging bootcamp-style programs like Per Scholas, supported by the City, have successfully trained New Yorkers who do not have four-year degrees to become security monitoring analysts at large financial institutions, and companies around the city are experimenting with innovative ways to train diverse New Yorkers for these jobs.

The City’s investment will go further to develop the local talent needed to support job growth in the cybersecurity field and to ensure the long-term competitiveness of New York within this industry.



Cybersecurity will employ thousands of New Yorkers



The financial services industry has an ever growing demand for cybersecurity analysts. Barclays, for example, benefits from investments made in meeting the growing demand for analysts through a pipeline of New Yorkers. Barclays hired **Angela Nelson**, a graduate of Per Scholas’ first cybersecurity program, as an internal risk management intern.

A Brooklyn resident and single mom with a 16-year-old daughter, Angela found Per Scholas after working in real estate and customer service, frustrated with the unstable nature of work that made it hard to support her family. Through her internship at Barclays, she’s building the valuable experience needed for a career in cybersecurity.

Per Scholas has received over 300 applications for its course and its graduates have been hired by five New York employers, including Barclays. They are in talks with additional employers about hiring future graduates.

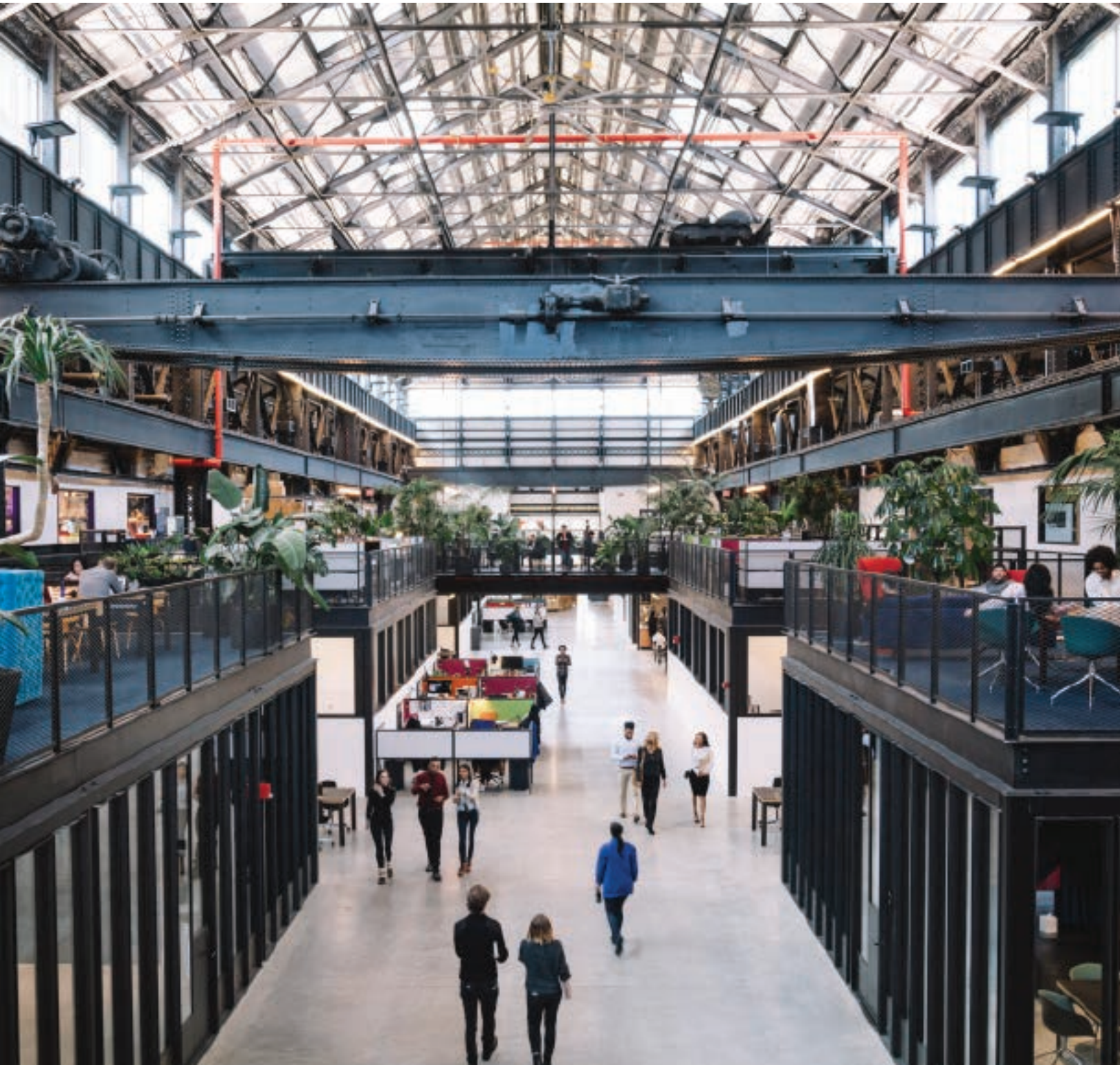
Initiative 2: Invest in smart city technologies

Population growth, climate change, and aging infrastructure present challenges to urban settings. Technology can provide new ways to take them on.

To source new innovations that will address these urban challenges, the City is investing \$7.2 million to create Grand Central Tech in Manhattan and New Lab at the Brooklyn Navy Yard. These Urban Technology Growth hubs will offer 100,000 square feet where companies working on solutions to urban challenges can grow. This flexible space will accommodate company expansion and provide resources for prototyping and testing products, as well as technical support. Programming will include support from

the operators, the City, and educational and corporate partners. It will create 2,000 good-paying jobs over ten years.

Early tenants include Honeybee Robotics, which designs products for medical, space, and military applications; Strongarm Technologies, which produces high-tech performance and safety equipment for physical laborers; and Nanotronics Imaging, which produces advanced industrial microscopes.



The community of companies in New Lab at the Brooklyn Navy Yard are using technology to solve urban challenges

“We only planned to be in New York for three months, but the City really rolled out the red carpet for us. We’re proud to be inaugural members of the Urban Tech Hub, and look forward to working with City agencies as we expand.”

— Andrew Shearer, Cofounder, Farmshelf



As cofounder and CEO Andrew Shearer tells it, Farmshelf was “born in San Francisco but raised in New York.”

Andrew and his cofounder came to New York to be part of the UrbanX startup accelerator, with the intention of returning to San Francisco after the program. Intrigued by the opportunities that New York City offers to startups, Andrew moved the company to the Urban Tech Hub at New Lab instead.

The company creates modular hydroponic farms. They’ve created a smart system of internet-connected hydroponic units, LED lights, cameras, and sensors that grows produce twice as fast, uses 90 percent less water, and yields more nutritious produce. New Lab provided Farmshelf with space, a community of likeminded entrepreneurs, 24/7 access to prototyping equip-

ment, and connections to mentors and investor relationships. Through the course of the year Farmshelf has spent at New Lab, the company has grown from two to eight paid employees—each making more than \$50,000 annually—and raised \$1 million in funding. Last month, Farmshelf launched its first public beta installation—Farmshelf units in Grand Central Terminal growing fresh produce.

Farmshelf has now outgrown its space at New Lab and is taking an additional 4,000 square feet in Brooklyn Navy Yard Building 77. The new space will be used for prototyping and small-batch manufacturing, as well as growing fresh produce. However, as an important part of the community, Farmshelf will maintain its headquarters at New Lab.

Initiative 3: Create a tech hub in Union Square

Technology has the potential to address great civic challenges. New York City is home to entrepreneurs who are building solutions to challenges that range from accessibility of healthcare to traffic congestion and climate change. Until now, these innovators have lacked a central location where they can collaborate and develop solutions.

The Union Square Tech Hub is a \$250 million project that will anchor New York City’s growing tech ecosystem, support the creation of over 500 good-paying jobs in the industry, and provide high impact training to New Yorkers of many backgrounds. The 258,000-square-foot space will open in 2020 at what is now the P.C. Richard and Son building on 14th Street in Manhattan’s Union Square. **The space will provide wired, open, and accessible workspaces to an array of technology companies looking to grow in New York City, and serve as a focal point for tech training and activity in the city.**

An innovative 36,500-square-foot digital training hub will be at the core of the Union Square development and lay the groundwork for a much-needed new talent pipeline for the city. The hub will be anchored by Civic Hall, a collaborative new work and event space advancing the use of technology for the public good. Civic Hall’s strong educational partners will provide best-in-class and affordable trainings to help New Yorkers build the digital skills of the future. Partners include the New York City Foundation for Computer Science Education, General Assembly, Per Scholas, FedCap, Code to Work, and Coalition for Queens.

In addition to supporting talent, the hub will offer 58,000 square feet of much needed flexible, wired work space catering to small, growing companies that have less capacity to commit to large offices or long-term leases.



Tech Talent Pipeline equips New Yorkers with the skills they need to access tech jobs

Demand for tech talent continues to outpace New York City’s available supply. While there have been 88,000 job openings for tech occupations in the city in the past year, the local talent pipeline isn’t large or strong enough to fill them. Many jobs in the sector require a four-year degree. By working with employers to address the root causes that limit the ability of New Yorkers to access these jobs, this suite of talent initiatives will ensure that these growing careers of the future will be accessible to more New Yorkers.

With this in mind, in May 2014, Mayor de Blasio launched the NYC Tech Talent Pipeline (TTP), the City’s tech industry partnership designed to work with public and private partners to deliver quality jobs for New Yorkers and quality talent for city businesses. In three years, TTP has partnered with a network of 175 companies to define needs and take what works to scale across the city’s workforce and education infrastructure. To help realize this goal and to align tech education with industry needs, 16 New York City public and private college presidents and provosts have committed to working as members of the TTP Academic Council with the City and employers. To date, the NYC Tech Talent Pipeline has had tremendous success working with employers, CUNY, education providers, and community members to equip New Yorkers for 21st century jobs.

Employers can find local talent

Time Inc.’s news engineering team was rapidly growing and needed to find the talent to support its increasingly dynamic digital features across various brands, including TIME, FORTUNE, and MONEY. When the senior director of engineering heard about TTP Residency @ Queens College, a program that connects qualified, advanced-standing computer science majors at the CUNY senior college to short-term tours at local companies, he was excited by the potential of uncovering a new source of talent for his growing team. Although Time Inc. had never before recruited from Queens College, he brought on two residents. One year later, Time Inc.’s partnership with TTP Residency has strongly paid off. The company has hosted seven residents, hired two, and has committed to bringing on an additional eight in the coming semester across various brands including TIME, Sports Illustrated, Travel + Leisure, and various lifestyle publications. Additionally, TIME and other TTP Residency hosts are providing constant feedback to participating colleges to help better align computer science education with industry needs, building a qualified pool of talent to meet the needs of employers today and in years to come. TTP residents and interns are among the 400 New Yorkers that have been connected to tech jobs through all Tech Talent Pipeline programs.



Photo Credit: Mayoral Photography Office, NYC

New Yorkers can get industry-informed training

A Washington Heights native, Lois faced a life-changing moment when one of his parents was deported back to the Dominican Republic, leaving him alone with very few options. Living in his grandmother’s living room, he spent most days in between shifts as a sales representative working odd jobs and learning new technologies so he could succeed in these roles. Inspired to develop a better understanding of the tools he used every day, he applied and was accepted into the NYC Web Development Fellowship, a 22-week intensive web development training program offered by the NYC Tech Talent Pipeline in partnership with the Flatiron School. After completing the program, Lois landed a front-end engineer internship at LearnVest and within a few months was promoted to full-time software engineer. He and his classmates now earn an average annual salary of \$65,000 at companies like Microsoft, Viacom, and Goldman Sachs. As Lois continues his career as a software engineer, he strives to be a source of inspiration for youth with limited opportunities.

Initiative 4: Double the number of CUNY computer science graduates

Employers say that despite their desire to turn to public institutions for local talent, they cannot currently meet their hiring needs from CUNY graduates. CUNY is a pathway for motivated students from all across the city, 36 percent of whom are foreign-born and 42 percent of whom are part of the first generation in their family to attend college. Yet at CUNY, fewer than 1,000 students earn bachelor's degrees in tech each year.

From 2005 to 2015, CUNY's STEM faculty grew by only 20 percent—even as STEM (science, technology, engineering, and math) enrollment grew by 70 percent. This initiative focuses on building capacity for CUNY in three core areas, with the goal of doubling the number of CUNY computer science graduates each year and leading to over 1,000 additional graduates over five years.

The City will work with CUNY colleges and major tech companies in the City to develop a plan to double the number of computer science graduates to 2,000 annually after 5 years, and deliver 2,600 New Yorkers into good paying tech jobs in five years.

Key elements of this plan will include:

- » **Faculty:** Creating an “Adjunct Corps,” to bring industry to the classroom and prepare students directly for the jobs in demand, and adding support for new CS instructors. The City will also work with CUNY to help leverage work/study programs to fund teaching assistant positions, providing instruction and jobs to students and help for new and existing faculty.
- » **Real world experience:** Expanding internship programs, co-op programs, and work/study programs so students can build the real world experience they need to be competitive for jobs.
- » **Career advising:** Investing to hire new advisors and equip existing staff with tech industry insights, including tech specific recruitment practices. This will reduce existing student/advisor ratios (currently 600 to 1,000 students per advisor) and better prepare advisors to support students targeting tech-specific jobs.

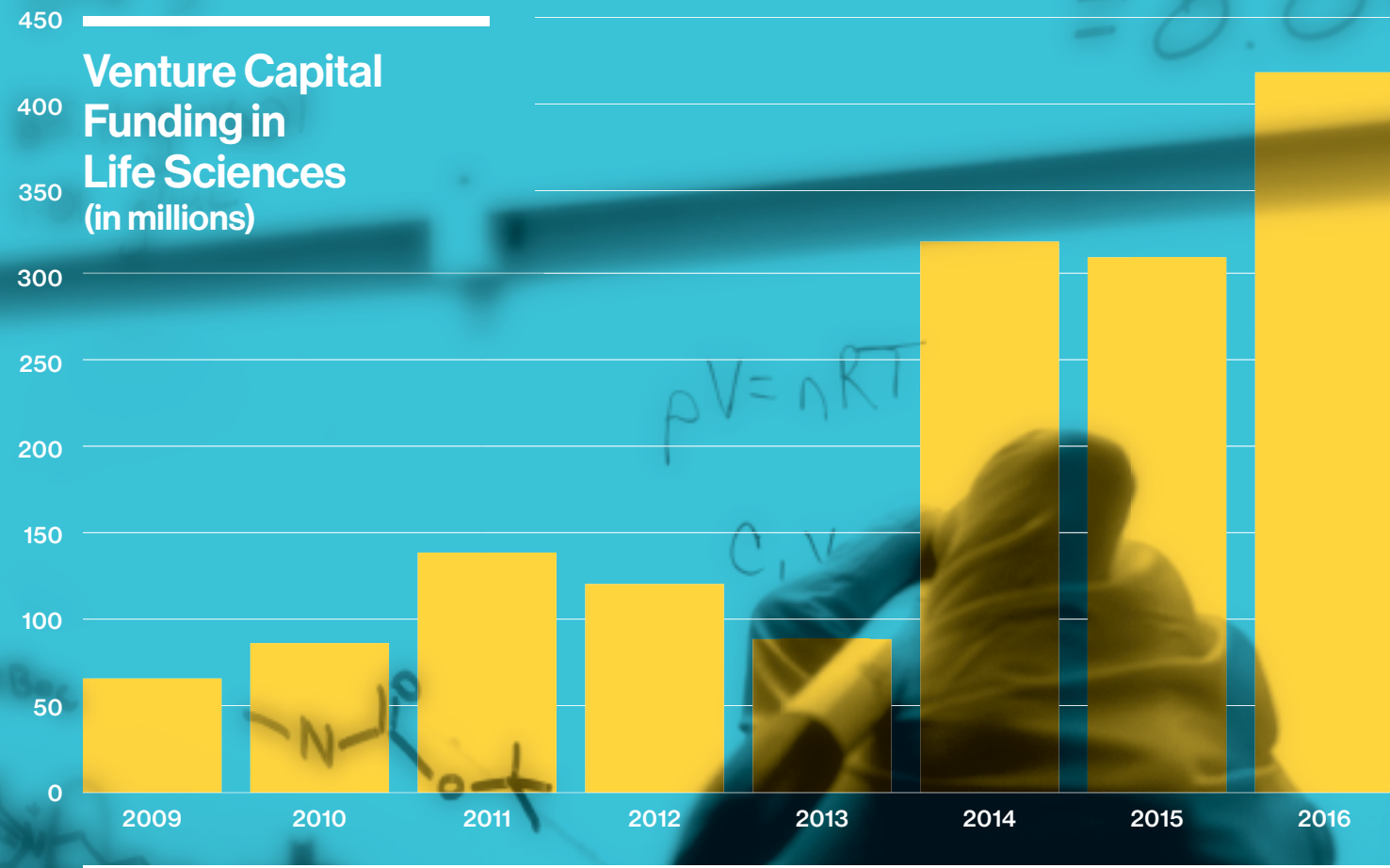
The City will work with CUNY colleges to double the number of computer science graduates to 2,000 annually and deliver 2,600 New Yorkers into good-paying tech jobs in five years.

Face of Tech and Innovation
Leadership and Digital Diversity

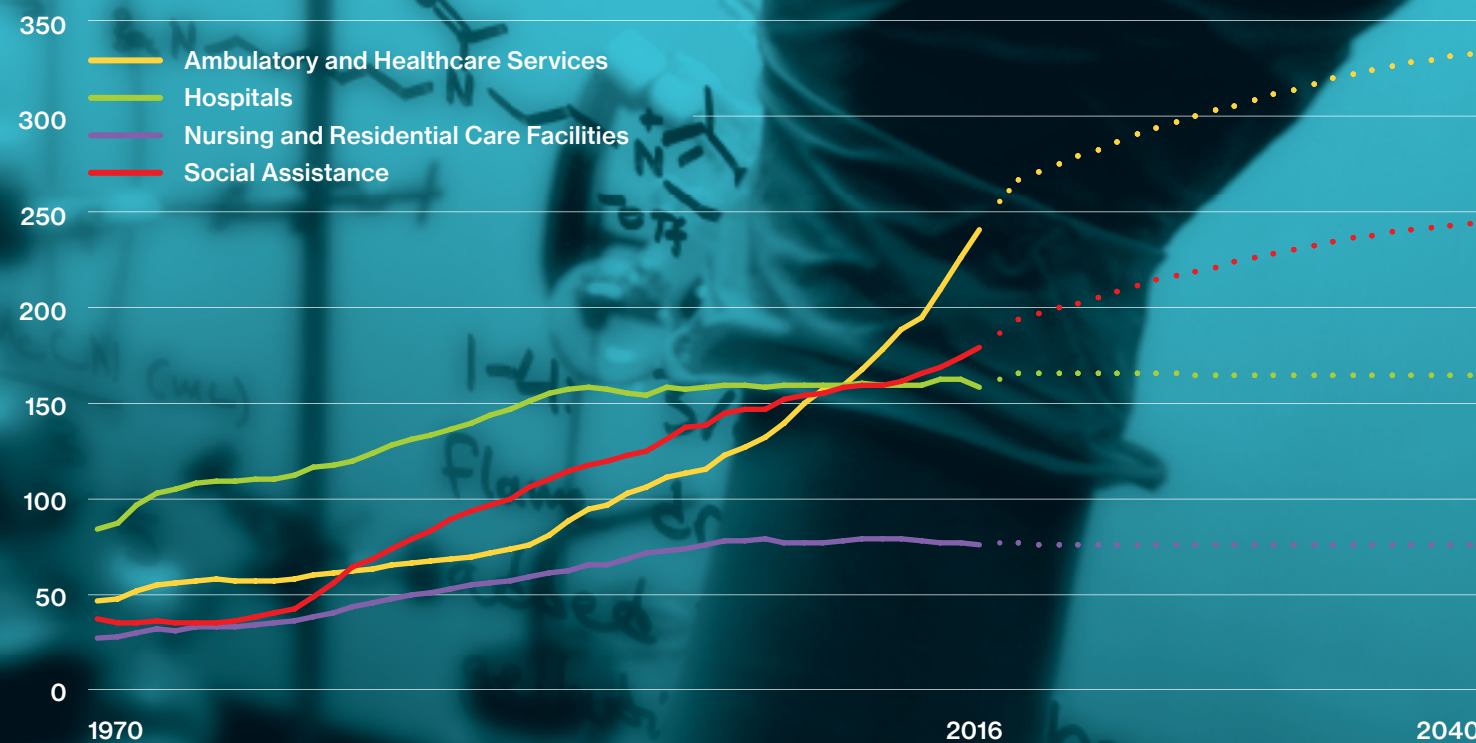


Life Sciences and Healthcare: Good Jobs and Better Lives

15,000 jobs
for New Yorkers



Historical and Projected Employment in NYC's Healthcare and Social Assistance Industry



Source: Moody's Data Buffet

Life Sciences and Healthcare: Good Jobs and Better Lives

The New York metropolitan area has the largest bioscience workforce in the country, \$1.4 billion in National Institutes of Health (NIH) awards, and the world's largest concentration of academic institutions with nine major academic medical centers.

The City will support the creation of 15,000 jobs within the life sciences and healthcare sectors, continuing to spur the development of the life sciences ecosystem and focusing on improved healthcare delivery.

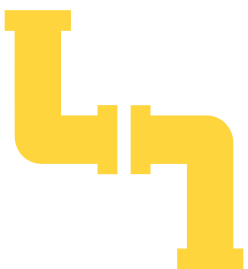
New York City is well positioned for success in the life science industry, providing world-renowned research, talent, and resources that no other city can offer. The New York metropolitan area has the largest bioscience workforce in the country, \$1.4 billion in National Institutes of Health (NIH) awards, and the world's largest concentration of academic institutions with nine major academic medical centers including Columbia University Medical Center, Weill Cornell Medical College, NYU Langone Medical Center, Mt. Sinai Medical Center, Albert Einstein College of Medicine, and Rockefeller University. With over 120 life science companies, the city has a strong foundation to build upon to become the home of the life sciences industry.

Healthcare is the largest employer in New York City, with approximately 650,000 jobs. Within the industry, ambulatory health services have seen employment growth of over 60 percent between 2006 and 2016, while wages grew around 40 percent. The City is actively working to ensure that quality healthcare jobs are available and continue to grow in communities across all five boroughs. At the same time, the nature of healthcare delivery is rapidly changing; costs are skyrocketing, the population is aging, and technology is disrupting old models. To ensure that growth continues in this important sector, the City will support innovative companies that are developing new technologies and business models for care.

To fulfill the strategy of creating 15,000 quality jobs over the next ten years in the life sciences and healthcare sectors, the City will invest in both with the objective to:

- » Vault New York City to the forefront of research and innovation in life sciences
- » Drive innovation in healthcare to improve delivery and health outcomes

The nature of healthcare delivery is rapidly changing; costs are skyrocketing, the population is aging, and technology is disrupting old models.



Vault New York City to the Forefront of Research and Innovation in Life Sciences

Initiative 5: Implement a \$500 million, ten-year plan to build the life sciences ecosystem

LifeSci NYC is a bold initiative to create thousands of good-paying jobs while making New York City a global leader in life sciences R&D and venture creation. The City is investing in three main focus areas of the ten-point initiative:

- » **Connect** research to industry, create jobs, and advance healthcare and technology
- » **Unlock** space for companies to grow and employ New Yorkers
- » **Build** a pipeline for diverse life sciences talent

Connect

One of the most ambitious and central initiatives in the LifeSci NYC plan is the creation of a new Applied Life Sciences hub. The hub would serve as a focal point for the industry and be anchored by a large-scale R&D organization that can drive the next generation of venture and product creation. The City will offer \$100 million and consider the use of an existing City-owned site to catalyze development of the hub. The City will also support commercialization activity at existing institutions through the expansion of translational R&D.

Space

To create the much needed wet lab and business incubation space critical to early stage venture creation, the City is investing \$10 million in funding for incubators and accelerators. The City is also offering \$300 million in tax incentives to private developers to develop commercial lab space, and is updating land use regulation policies to allow development of labs in all commercial zones.

Talent

A number of initiatives are under development that continue to build much needed seasoned entrepreneurial talent in commercializing life sciences research, and create career pathways into the industry for New Yorkers. This broad set of initiatives will include curriculum, support services, internships, and training opportunities at all levels of employment.

Through LifeSci NYC, the City will create 16,000 permanent jobs (9,000 direct jobs and 7,000 in related fields) and 7,400 new construction jobs. Just over 7,000 of the direct jobs will be created over the next ten years, 85 percent of which will be good-paying jobs. In order to connect local talent to the industry, the City will create 1,000 paid internships. Beyond the space created by the Applied Life Sciences hub, the initiative will also bring online 2.8 million square feet of new commercial space using tax incentives. Overall, economic output is expected to increase by \$2.5 billion per year and generate \$1 billion in tax revenues.



LifeSci NYC will enable companies like Kallyope to grow in New York City

Kallyope is a biotechnology company founded and headquartered in New York City. Growing out of research efforts at Columbia University, the company is developing a transformative platform to harness biochemical interactions between the gastrointestinal tract and the central nervous system, or the “gut-brain axis.” The 18-member, cross-disciplinary biotechnology team works out of space in the Alexandria Center for Life Science. Kallyope applies sequencing, bioinformatics, neural imaging, cellular and molecular biology, and genetics to generate novel therapeutics and consumer products to improve human health. With CEO Nancy Thornberry, formerly of Merck & Co and currently a LifeSci NYC Advisory Council member, Kallyope successfully raised an initial \$44 million in 2015 and is committed to expanding their R&D and operations within the five boroughs once they outgrow their space at Alexandria.

Through LifeSciNYC, the City will create 6,000 good-paying jobs in 10 years.

Drive Innovation in Healthcare to Improve Delivery and Health Outcomes

Despite the expansion of health insurance under the Affordable Care Act, nearly 1.5 million New Yorkers go without regular checkups or medical care and 30 percent of the city's zip codes are considered medically underserved areas. Given these statistics and the recent threats to existing coverage under the Act, the City will continue to find ways to locally improve health outcomes, working in close collaboration with communities to forge new models of care and embed healthcare more deeply into communities—from pioneering wellness and emergency care at community centers to planning integrated healthy community developments.

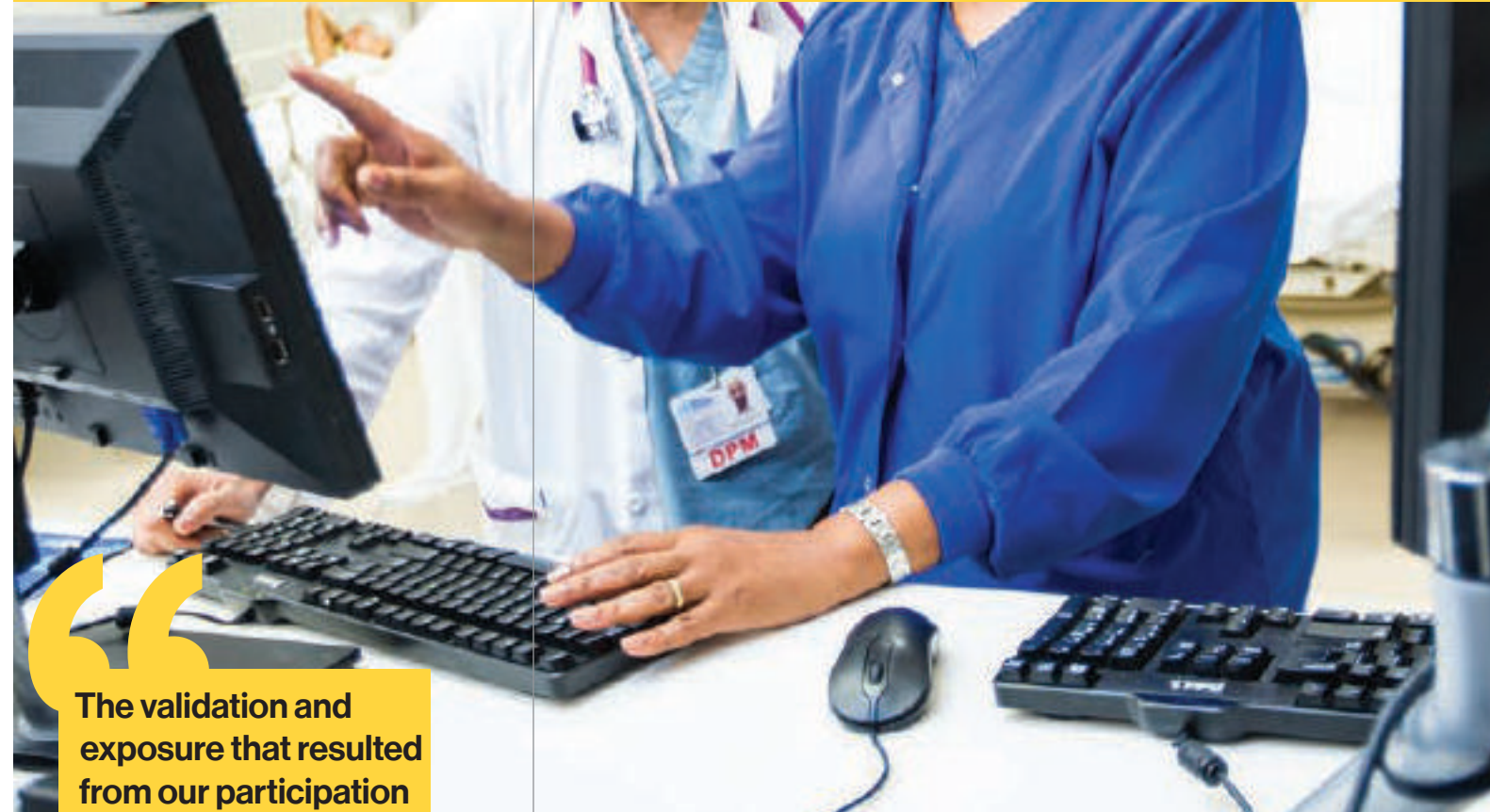
With its scale, its world-class health and hospital sector, and its strength in finance and technology, New York City is positioned to become the national leader in healthcare innovation. To those who want to innovate, the City offers diverse populations that present every conceivable health challenge in a wide range of circumstances and an unparalleled density of healthcare institutions that offer both routine and extraordinary care.

Since its launch, the Digital Health Marketplace has facilitated 700 matches between buyers and sellers.

Initiative 6: Accelerate the growth of digital health by connecting innovative companies to healthcare providers

The Digital Health Marketplace is a New York City Economic Development Corporation (NYCEDC) program that aims to help companies with a market-ready product access commercial relationships. The Marketplace helps facilitate relationships between health tech buyers (health systems, hospitals, and doctors) and health tech sellers (entrepreneurs, companies) through two curated half-day matching sessions in the spring and fall of each year. Since its launch, the Digital Health Marketplace has facilitated 700 matches between buyers and sellers. The program has also disbursed \$2.5 million in commercialization grants to 20 companies who've gone on to receive \$160 million in total venture funding.

Building on this success, the City will invest \$750,000 to support three years of expanded operations for the Marketplace. With these resources, the Marketplace can double the number of matchmaking events to four per year, which will increase companies' access to customers. The program will also tackle disease areas of concern to New Yorkers to improve quality of health and livability for all New Yorkers. The expansion will create approximately 1,100 good-paying jobs over ten years.



The validation and exposure that resulted from our participation with Digital Health Marketplace was a critical factor in helping our medication adherence predictive analytics business to grow faster, enabling us to build on our successes and sign larger contracts with clients that serve tens of millions of patients.

— Clifford Jones, CEO
AllazoHealth

The Digital Health Marketplace connects digital health tech to the New York healthcare system

In 2014, AllazoHealth and Accountable Care Coalition of Greater New York (ACCGNY) received a \$92,000 grant through the Digital Health Marketplace.

AllazoHealth is an analytics company working to improve existing medication adherence programs. Its primary product, AllazoEngine, incorporates machine learning of population data and uses predictive analytics to forecast individual patient adherence levels. The product pilot in New York City targets ACCGNY's Medicare-eligible beneficiaries and focuses on improving medication adherence for patients with hypertension, epilepsy, heart failure, diabetes, and/or hyperlipidemia.

Piloting with the Marketplace has enabled AllazoHealth to expand and grow in both the city and beyond. The pilot has exceeded the original number of patients reached, and, to date, has analyzed and made predictions on over 7,500 patients' data.

Initiative 7: Create a physical lab for early testing of health technologies in real world clinical settings

Digital health and health tech companies benefit greatly from early testing opportunities in real world clinical settings. The opportunity to test technologies with potential end users such as doctors and patients is the ideal way for entrepreneurs to get the feedback they need to validate their products.

Building on the success of the City's Digital Health Breakthrough Network, which virtually connects eight companies a year to clinical testing opportunities, the City will invest up to \$5 million to create a physical Digital Health Lab. The lab will offer digital health and health tech companies a mix of coworking space, meeting/event space, clinical space, and prototyping facilities. The clinical space could include anything from a clinical "sandbox" for testing health informatics on an actual electronic medical records terminal to a simulation lab that would allow companies to model patient interactions. Meanwhile, as a convening point for healthcare innovation, the meeting/event space would attract membership of early-stage companies, established healthcare entities, and companies piloting new technologies.

This investment will create over 600 good-paying jobs over ten years.

Sea View will be a new model for healthy communities in the center of Staten Island

New model for healthy communities in the center of Staten Island



The Sea View plan is a holistic approach to wellness that will include job-creating core medical facilities (a primary and urgent care facility, medical offices and research facilities, wellness facilities, and pharmacies). It will also become a model for a healthy community that fosters connections and makes it easier for residents to access healthy food and recreation. Activating this community will provide hundreds of jobs in healthcare and supporting services.

As the emphasis on health and wellness shifts from infectious disease to chronic disease and from targeted interventions to holistic wellbeing, the City has developed a plan to transform the underutilized Sea View medical facility into an innovative project that reimagines the role that healthcare plays in communities.

Created almost a century ago to treat tuberculosis, the Sea View Hospital campus now houses a wide variety of facilities—including 1,032 units of senior housing, a 304-bed skilled nursing facility, a drug and alcohol rehab center, and a number of community facilities. To reactivate the campus's vacant buildings while looking at the community's health needs in a new way, the City has worked with stakeholders to envision a new “healthy community” that promotes better diet, living amid nature, greater physical activity, and social engagement.

Sea View will serve residents from seniors to families and include fresher food options, increased access to nature, and community programming to encourage active lifestyles.

Initiative 8: Expand community health centers to improve healthcare delivery and create local jobs

With many New Yorkers lacking healthcare, there is a strong need for investment in affordable community health centers that deliver comprehensive care to all patients, regardless of their ability to pay or immigration status.

To bring healthcare close to communities, the City is investing \$8.45 million to expand its network of community health centers. The City will support the creation of over eight new private, nonprofit health centers across all five boroughs, which will serve 75,000 patients per year and create 600 good-paying jobs over four years.

In addition to creating jobs, these health centers will enable healthier communities and help reduce healthcare costs. By offering preventive health services, the centers forestall minor ailments from becoming major health crises—reducing not only costs, but freeing up emergency rooms for real emergencies.

The City will support the creation of over eight new private, nonprofit health centers across all five boroughs, which will serve 75,000 patients per year and create 550 good-paying jobs over four years.

At Apicha CHC, we operate health centers that recruit people from the communities we serve, help them improve their language skills, and train them to become the medical assistants of the future.

— Mihaela Mihai, Director of Clinic Operations, Apicha Community Health Center (CHC)



Healthcare training programs are preparing New Yorkers for careers in a growing industry

Demand for qualified workers in healthcare is projected to significantly increase over the next ten years. As New Yorkers age and care moves away from hospitals and into the home, medical assistants will be in high demand, and these jobs are expected grow nearly 30 percent between 2012 and 2022. In addition, the industry is facing a host of disruptions, including a changing regulatory environment, the introduction of new occupations that support growing community care centers, calls to improve job quality through ideas like scheduling and clearer advancement paths, and the emergence of new payer models that offer Medicaid/Medicare reimbursement under the “health home” model.

New York City is investing in these jobs and preparing for future change through the New York Alliance for Careers in Healthcare (NYACH). This partnership brings together multiple stakeholders in the healthcare workforce development system to address the industry’s rapidly changing labor force needs. NYACH’s mission is to build an effective healthcare workforce development system in New York City by identifying healthcare employers’ needs, helping education and training organizations adapt their approach to better meet those needs, and ensuring that low-income and unemployed New Yorkers have access to viable career opportunities in healthcare.

To support these efforts, the City is investing in building a pipeline of talent for community clinics through “bridge programs.” Many of these positions as health coaches, patient service

representatives, and medical assistants are only accessible to New Yorkers with specialized training. Through bridge programs, the City can help New Yorkers translate and maximize the skills they already have while filling in any gaps in fundamental knowledge to allow them to apply for these jobs.

The City supports another bridge program tailored to the needs of foreign-born New Yorkers that helps them move into positions as bilingual medical assistants at community health centers and other healthcare institutions. The program, offered by LaGuardia Community College in partnership with the Washington Heights Workforce Career Center and various health centers and physicians’ offices, helps students improve their English, learn medical vocabulary in their native language, and train to be a medical assistant at the same time. The program fills the gap between the highest level offered at many federally-funded English classes in New York City and the level of English proficiency required for training and employment as a medical assistant. Employers have committed to hire many of the graduates from this initiative because there is a severe shortage of culturally competent, bilingual medical assistants that reflect the diverse patient population of New York City.

Over the next ten years, the City will significantly expand its bridge programming, building upon the growth of the life sciences and healthcare sectors described above, including programs for front desk/patient service representatives, certified peer recovery counselors, and lab technologists.

Through bridge programs, the City can help New Yorkers translate and maximize the skills they already have while filling in any gaps in fundamental knowledge to allow them to apply for these jobs.



Giana Saloman was born in Haiti. When she was 19, her older sister, a nurse, convinced her to go to school to pursue nursing. She worked as a registered nurse in Haiti for seven years until the 2010 earthquake caused her family to move to the United States to find safety, stability, and opportunity for her then 3-year-old daughter. After years of unemployment and underemployment in the U.S., Giana joined the National Council Licensure Examination for Foreign Trained Nurses (NCLEX-RN) program at the LaGuardia Community College Welcome Back Center, funded by the NYC Department of Small Business Services (NYCSBS). The program integrates English as a second language instruction with NCLEX-RN exam preparation using the Integrated Basic Education Skills Training (I-BEST) model. Giana graduated from the program, passed her license exam, and now works as a school nurse in Brooklyn.

Industrial and Manufacturing: Powering New York

20,000 jobs
for New Yorkers



Industrial and Manufacturing: Powering New York

The City will create 20,000 jobs within the New York City industrial and manufacturing ecosystem to facilitate the production and movement of goods into, around, and out of the city.

Industrial jobs have provided New Yorkers with good wages and a path to career growth for decades. Automation, offshoring, and other macro-economic factors have caused the sector to contract significantly. And although industry continues to remain at risk, it can be stabilized through investment and new opportunities for growth.

Today, the industrial ecosystem, which spans manufacturing and goods distribution, employs over 530,000 New Yorkers and provides many access points into good-paying jobs. Median wages are just over \$50,000 per year and over 60 percent of jobs within the sector do not require a college degree. Many offer a component of on-the-job training. Further, nearly half of all New Yorkers working in industrial and manufacturing jobs were born outside the U.S., making it an important pathway to helping immigrants become part of the New York City economy.

The City will continue to build upon the work of its Industrial Action Plan to strengthen the city's industrial sector by investing in logistics and distribution systems and modernizing manufacturing facilities.

To invest further in the creation of 20,000 jobs, the City will:

- » Strengthen the city's logistics and distribution systems through FreightNYC
- » Modernize and expand manufacturing facilities, particularly in City-owned assets

Today, the industrial ecosystem, which spans manufacturing and goods distribution, employs over 530,000 New Yorkers and provides many access points into good-paying jobs.

Strengthen the City’s Logistics and Distribution Systems through FreightNYC

New York City’s distribution system serves the largest consumer market in the country, moving \$720 billion in goods annually through the region’s seaports, rail yards, and warehouses. This complex network relies on distribution hubs that serve the surrounding areas, as well as smaller facilities that support local manufacturing businesses.

Trucks carry 91 percent of goods into and out of New York City, with 80 percent of those vehicles entering from the west and traveling through key chokepoints like the George Washington Bridge and the Verrazano-Narrows Bridge. This delays and increases costs for businesses in the five boroughs. New York City now has the highest congestion cost of any major city (\$16.9 billion in 2016) and the second

highest average time spent in traffic. This burden will only be compounded as the population continues to grow and more and more goods are bought and sold via e-commerce. Meanwhile, the Metropolitan Rail Freight Council projects a 35 percent increase in goods volume in the New York-New Jersey metropolitan region by 2040, when the City’s population is projected to reach 9 million.

Over the past half century, jobs in transportation, logistics, and distribution have followed the interstate highway system and moved to large hubs in places like New Jersey and eastern Pennsylvania. However, with increasing congestion and overburdened infrastructure, there is now an opportunity to reinvest in many of these jobs and bring thousands back to New York City.

FreightNYC is an ambitious effort to invest in and prepare for a modern, modally-balanced freight and distribution system that will create thousands of good-paying jobs for New Yorkers. These will be connected to modern distri-

bution hubs that enable the improved flow of goods across the city. These jobs are also accessible to New Yorkers with a variety of skill sets, as 79 percent are available to those without a bachelors’ degree. Investments in moving distribution jobs closer to end consumers could also improve wages, for example, by allowing self-employed truckers to complete more truck turns, distributing more efficiently within the five boroughs.

With FreightNYC, the City will create over 4,000 good-paying jobs through a series of strategies:

- » Make initial investments in multiple modes of freight transportation, starting with barging connections to America’s “Marine Highway.”
- » Conduct a strategic review of the region’s freight and distribution network to make further investments to reactivate multi-modal freight and grow jobs.
- » Invest in urban distribution centers across the City to support investments in multi-modal freight, add thousands of jobs and improve distribution efficiencies.

Key bottlenecks in NYC contribute to millions in lost time and value



Source: “Unlogging America’s Arteries 2015,” American Highways Users Alliance

The “Marine Highway” is a federal program that aims to better utilize the nation’s waterways for cargo and passenger movement by linking a network of ports over 29,000 nautical miles.

New York City is a critical link in the national Marine Highway Program

Initiative 9: Invest in multiple modes of freight transportation, starting with barging connections to America’s Marine Highway

Investments in diverse modes of transportation will unlock hundreds of jobs within water and rail freight and will also support hundreds of thousands of jobs across the City. Improving the movement of goods will allow businesses to reduce the high costs of distribution as their trucks spend less time in traffic and complete more turns. In turn, it will allow them to expand and grow, hiring more workers in manufacturing and wholesale trades.

As a first step, the City is investing \$39 million to install cranes and create additional infrastructure capacity at the South Brooklyn Marine Terminal (SBMT) in Sunset Park. This highly connected multimodal facility will become a key link in the Marine

Highway—a federal program that aims to better utilize the nation’s waterways for cargo and passenger movement by linking a network of ports over 29,000 nautical miles. As a vital facility that will be able to handle deep sea cargo as well as containerized freight, the SBMT could play a vital role in both the national Marine Highway and the regional port network. The median wage in the water transportation sector is roughly \$72,000 a year, with a majority of those jobs accessible to New Yorkers without a college degree. These jobs are also highly unionized and provide good benefits and career pathways. By investing in the working waterfront, the City will ensure that these jobs return to and thrive in New York. Port projects will also eliminate 275,000 truck trips in the next five years.



Initiative 10: Invest in the future of freight and distribution in NYC

While making near-term investments in the SBMT and other City assets, the City will invest in a strategic review of the region's distribution network. This FreightNYC study will result in recommendations for further investments to reactivate multi-modal freight and grow jobs associated with those investments.

FreightNYC will focus on the city's long-term freight needs, providing a blueprint for investments in new facilities and technologies that will enable the city to meet its future freight needs more efficiently and sustainably. The goal of the study will be to better understand how to holistically manage freight across the five

boroughs in a manner that reduces environmental impact, leverages water and rail, and supports local jobs. It will look at the current freight industry, undertake a future freight needs assessment, and create a strategic plan for near and long-term freight investments and policies.

NYCEDC will work with a consultant in undertaking the study, which is expected to begin in the summer of 2017. NYCEDC will also work closely with the NYC Department of Transportation (DOT) to cross-reference FreightNYC with the ongoing citywide Smart Truck Management Plan, which seeks to improve understanding of truck route usage, needs of shippers, and community concerns.



Many New York businesses barge goods to take trucks off the road

Healthy Brand Oils sells edible oils and cooking supplies to restaurants in NYC. Oils are shipped from the Midwest via tanker car, directly to their bottling facility in Queens. Because rail is used to transport the product as close as possible to end users in the city, Healthy Brand Oil has been able to save \$840,000 and 900 truck trips a year, making their use of rail a win-win for their bottom line and for the environment. This is an example of businesses that could thrive with further investment in rail infrastructure.

Sims Recycling is a municipal recycling plant in Sunset Park, Brooklyn, that receives residential metal, glass, and plastic by barge. After materials are bailed they are sent out on rail car, via a float bridge, to be recycled in other states. The barge and rail operation saves 150,000 annual truck trips, minimizing air pollution and traffic congestion in the surrounding neighborhood.

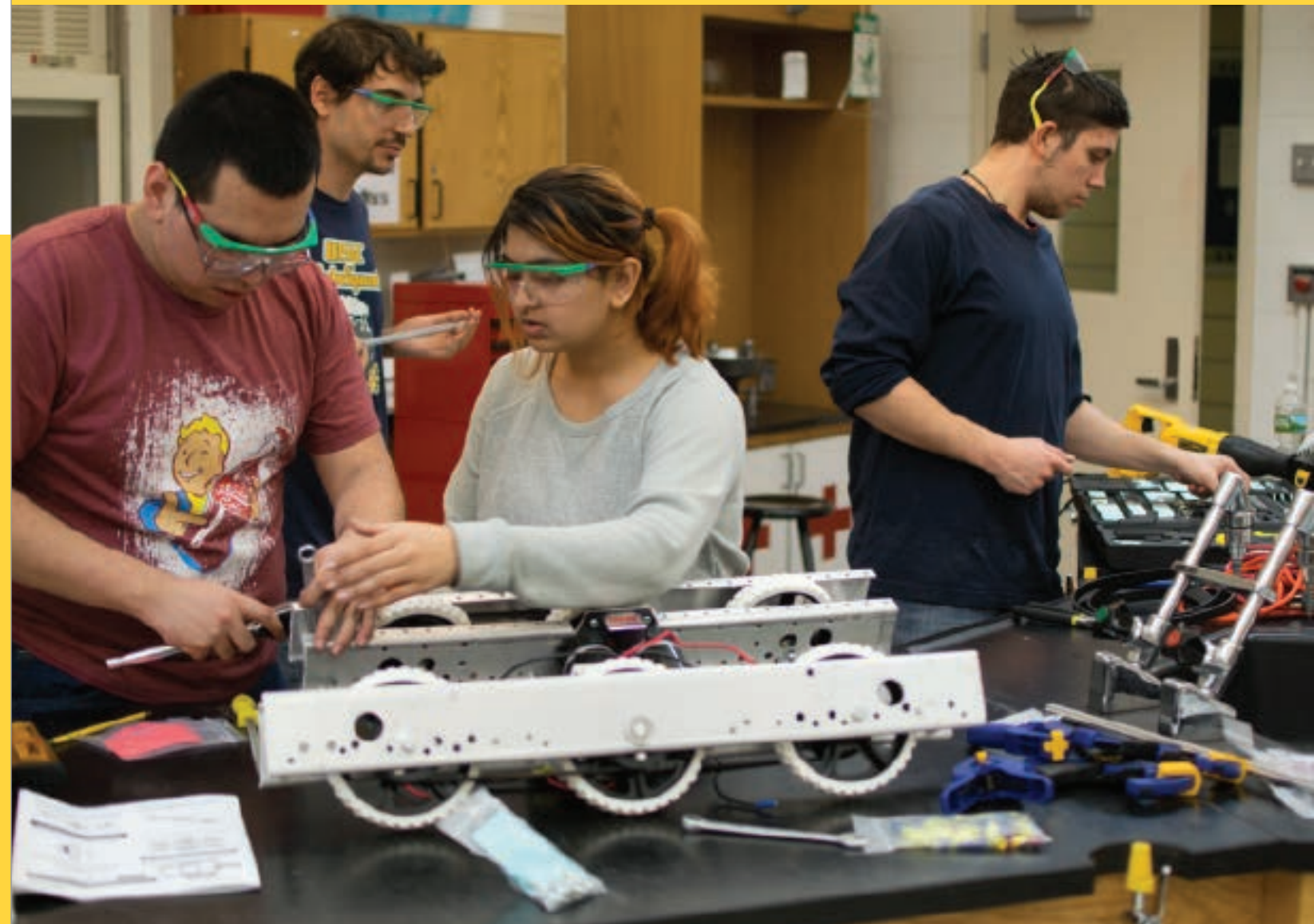
The City is preparing New Yorkers for jobs in freight and distribution

The City is creating a “Cradle to Career” initiative to link New Yorkers to jobs in transportation, distribution, and logistics. The effort will enlist City agencies, advocacy organizations, and private businesses to train and link New Yorkers to good-paying jobs in these industries.

A prime example is the Urban Assembly School of Global Commerce, a public high school that aims to equip New York students for careers in the transportation and logistics industries. The school was started by the NYC Department of Education (DOE) with NYCEDC and a group of advisors from other City agencies, business associations, colleges, and private businesses. It is located in East Harlem and more than 90 percent of its students qualify for school lunch. The school's first class will graduate this year, with 71 percent of seniors graduating and 70 percent of graduates accepted into junior and senior colleges.

Students participate in job shadowing, annual harbor tours, and other work-based learning situations where they observe and directly take part in freight transportation industry jobs. Dozens of students have interned for NYC area businesses and agencies, including NYCEDC, NYCDOT, the Port Authority, transportation consultants, trucking companies, stevedoring companies, investment banks, and global shipping companies. Students have also participated in academic enrichment programs related to freight logistics at Arizona State University, Rutgers University, and City College of NY.

The logistics-based curriculum has allowed students to excel in a variety of areas related to evolving trends in freight transportation, most notably robotics. The school placed first in the prestigious FIRST Robotics NY Regional Competition, beating out 48 high school teams from across the Tri-State area, as well as teams from Turkey, China, and Australia.



Initiative 11: Support the creation of more modern distribution facilities with urban distribution centers

In order to build the future distribution network and enable businesses to scale across the five boroughs, the City will partner with private businesses to create urban distribution centers.

These urban distribution centers will create over 2,000 good-paying jobs. Similar modern facilities being built around the world increase job density by building vertically. One model is a three-story building with two lower floors of distribution space (each with truck ramp access) and a top floor of additional manufacturing space. This model increases the number of jobs per site. Many of the goods to be distributed within the City move in and out of the distribution facility within a single day. This creates a number of good-paying jobs to move product quickly and accurately.

The City will support basic infrastructure improvements to make the sites development ready, allowing for private sector investment.



In addition to multimodal freight, NYC's logistics and distribution system relies on distribution space to facilitate the movement of goods to businesses and consumers.

New York Works will build on the City's Industrial Action Plan

To support the growth of this important sector, Mayor de Blasio released a ten-point Industrial Action Plan in 2015 to promote industrial development, coordinate city services, and train the City's workforce for these jobs. The City remains committed to the plan's three goals, which are:

1. Protecting and strengthening core industrial areas
2. Investing in the long-term development of industrial and manufacturing businesses
3. Preparing New Yorkers for the industrial and manufacturing jobs of the future

The \$8 million investment will create over 2,600 good-paying jobs and provide key support services for businesses to start, grow, and thrive in the five boroughs.

In recent support of these efforts, the City has taken on further protection for industrial space and completed several of the investments laid out in the plan.

The City has built on the mayor's commitment with the development of the North Brooklyn Industry and Innovation Plan, a comprehensive strategy for the manufacturing zones of north Brooklyn that will inform better land use, transportation, and economic planning for industrial areas. The plan seeks to balance growth and stability for industry with new opportunities to support office-based jobs near transit.

As part of these efforts, the Department of City Planning (DCP) is developing a special permit requirement for hotels in light manufacturing zones and self-storage facilities in Industrial Business Zones—some of the City's most important industrial areas. These efforts are intended to promote the availability of space for industrial businesses while maintaining suitable siting opportunities for the hotel and self-storage industries.

The City is investing in the **Industrial Developer Fund**, a \$150 million public/private loan pool to spur nonprofit development of industrial sites. The Fund released its rolling RFP in March 2016 and announced the Greenpoint Manufacturing and Design Center (GMDC) in December 2016 as its first grantee. GMDC will use the funds awarded through the fund toward the \$37 million renovation of a former factory in Ozone Park in Queens, turning it into a multi-tenant manufacturing center.

Futureworks NYC is a network of partnerships, services, and spaces dedicated to increasing local production and supporting advanced manufacturing in New York City. The \$8 million investment will create over 2,600 good-paying jobs and provide key support services for businesses to start, grow, and thrive in the five boroughs. One component is a \$5.31 million Advanced Manufacturing Center, a 20,500-square-foot facility at BAT, that will provide state-of-the-art robotics, 3D printing, and other cutting-edge equipment for companies through an open access membership model. The center will also provide a wide range of training and support services for member companies. Beyond BAT, Futureworks NYC will work with partners such as the Research Foundation for CUNY, Coalition for Queens (C4Q) Ventures, and Staten Island Makerspace to provide support services and increase access to technologies. In 2016, four companies, including manufacturers of drone vehicles, robotics kits for children, and high-tech equipment for video operators, each received grants of \$30,000 for space and equipment.

Modernize and Expand Manufacturing Facilities

Manufacturing has always played an important role within the city economy. Though the industry has seen a decline in jobs over the past several decades, in recent years modern manufacturing companies have stabilized and are seeing some growth. These companies are increasingly taking advantage of new technologies to make specialty products for businesses and consumers in the region. Despite the high cost of land, NYC offers important advantages to producers, namely skilled talent and access to one of the largest regional markets in the U.S.

The City uses a range of tools to support modern manufacturing, including a variety of financing tools through the IDA that allow industrial businesses across the city to grow. Among the strongest investments the City can make to modernize and activate manufacturing space is to invest in its assets, ensuring the long-term preservation of industrial use space and competitive rents that can accommodate business growth. By transforming manufacturing and industrial complexes, the City can ensure that a wide range of manufacturing businesses continue to play a crucial role in meeting local demand.

To achieve this goal, the City will invest \$104 million in capital to add additional manufacturing space in City-owned sites, where occupancy rates of existing space are close to 100 percent. This investment builds on the \$357 million in initiatives already underway, particularly in the Brooklyn Navy Yard, the Brooklyn Army Terminal, Bush Terminal, and Hunts Point.



Initiative 12: Grow the Brooklyn Navy Yard as a major employment center

The Brooklyn Navy Yard is an example of the transformation of New York City's industrial sector. At its peak during World War II, the Yard employed 70,000 workers building ships 24 hours a day. Today, after years of investment, companies at the Yard employ more than 7,000 workers in traditional and advanced manufacturing, distribution, media and the arts, technology, food manufacturing, and a mix of other activities.

The City is further growing the Yard as a major employment center—one focused on supporting the industrial sector and creating accessible, high-quality jobs. The Yard aims to add 4,800 good-paying industrial jobs in the next few years by implementing comprehensive development plans for several major facilities, such as Building 77. Additional jobs will be created across other sectors.

In addition to these commitments, the City will invest an additional \$40 million

to develop brand new manufacturing space for up to 1,000 employees at the Brooklyn Navy Yard. This will add another 200,000+ square feet of manufacturing space to the Yard's footprint, providing sorely needed space for light manufacturing businesses looking to grow and hire in New York City.

This summer, Building 77—a 1 million-square-foot manufacturing center—will open, and is expected to create jobs in food, manufacturing, and technology. Building 77 will be the public face of the Yard, with a food manufacturing hub anchored by Russ and Daughters. It will provide hundreds of thousands of much needed square footage for growing manufacturing companies, ranging from jewelry makers to woodworkers to 3D printing companies. Tenants include Lafayette 148, a major global fashion brand that employs workers from seamstresses to high-level executives, which will occupy over 60,000 square feet of space.

Industrial companies at the Navy Yard are using cutting-edge manufacturing tools and methods to grow their business

Founded in 1989, Ferra Designs is a precision architectural metal fabrication firm that employs traditional metal-working techniques combined with state-of-the-art technology. The skillset of company employees is vast and adaptable to high-end residential, commercial, and product design.

Ferra is an example of how the Brooklyn Navy Yard supports business growth as well as workforce expansion, and is a model of a manufacturing business that can benefit from the opportunities that the Yard provides to potential tenants.

After 13+ years of steady success and continued growth, Ferra moved from their 6,900-square-foot shop in Building 275 to 25,000 square feet in Building 10. They've also incorporated a client meeting area, a design center, and ample room for the industrial and hi-tech equipment they utilize for manufacturing their products.

During their time at the Brooklyn Navy Yard, the design company has grown from four to 24 employees and is a frequent user of the on-site Employment Center (EC), which works to place local residents and those with barriers to employment into high-quality, skilled positions at the Yard.



Initiative 13: Make the Brooklyn Army Terminal a home for traditional and advanced manufacturing

Once the biggest concrete building in the U.S., the Brooklyn Army Terminal (BAT) campus was constructed during World War I to distribute supplies and personnel to battlefronts.

The complex includes 4 million square feet of factory space, warehouse space, and support offices. The City acquired the facility from the federal government in 1981 and has invested \$230 million to re-activate it. Today, BAT is home to a mix of traditional and advanced manufacturing tenants. It offers an abundance of spaces—from 2,000 to 120,000 square feet—for virtually all forms of manufacturing.

In its next phase of reactivation, the City will invest \$49 million in new capital to attract both large and small manufacturing tenants to BAT. This will create over 1,300 good-paying jobs. Through investment in 275,000 square feet of industrial space, the City will create space for both anchor tenants and smaller industrial tenants across traditional and advanced manufacturing, food and garment manufacturing, and media production. These new tenants will join the over 100 businesses that currently call BAT home, and will be able to take advantage of campus amenities such as TechShop's DIY advanced manufacturing workshop and fabrication studio, two on-site childcare facilities, and the on-site Workforce1 Career Center.

The new infusion of funding builds on previously committed investments: \$100 million invested in Building A and campus improvements and \$15 million in renovations in the Annex Building. Modernization will provide good-paying local jobs for residents of Sunset Park, South Brooklyn, and the city as a whole.

These new tenants will join the over 100 businesses that currently call Brooklyn Army Terminal home, and will be able to take advantage of campus amenities such as TechShop's DIY advanced manufacturing workshop and fabrication studio, two on-site childcare facilities, and the on-site Workforce1 Career Center.



The City is using industry partnerships and Workforce1 centers to help New Yorkers access industrial jobs

As outlined in the *Mayor's Industrial Action Plan* and in the *City's Career Pathways* report, the City created the Industrial Industry Partnership to support businesses and workers in this sector. The partnership works directly with employers, industry associations, labor unions, community-based organizations, and training providers to prepare and connect New Yorkers to jobs in this evolving and important sector.

Industrial business employers have cited two challenges in recruiting talent:

1. New Yorkers are often not aware of these opportunities
2. Skilled labor required is in short supply

To address this issue the City has expanded its Industrial Workforce1 Career Center system—launching several new sites in the last twelve months in neighborhoods rich with manufacturing and transportation jobs such as Port Morris in the Bronx, the North Shore of Staten Island, and the Brooklyn Army Terminal. These sites build upon the success of the long-standing Industrial & Transportation Career Center in Queens, but are oriented to the unique make-up of the businesses and residents of these neighborhoods. They are intended to serve as access points to raise awareness of employment opportunities in the sector among local residents, and to give employers a voice and platform to direct the alignment of training with the skills needed for 21st century industrial jobs. In addition, the City will be working with employers and other key stakeholders to develop a set of new programs to provide more New Yorkers with the skilled labor training necessary to fulfill the pipeline of new jobs in the City's increasingly technical industrial economy. ApprenticeNYC will also feature dedicated industrial cohorts.



Initiative 14: Invest in the growth of the NYC brewing and distilling industry

New York City is widely known for the cultural significance of its food and beverage industry (largely restaurants and hospitality), but the City is also home to a growing food and beverage manufacturing industry. The City has made a few key strategic investments to support food manufacturing, including the 2016 launch of Brooklyn Foodworks and the development of a food manufacturing hub at the BAT Annex building. Yet no such investment has been made in the production of beer, alcohol, and wine (craft beverages) within the City. Wages in the craft beverage subsector approach \$50,000 per year on average, and there are many small brewers and distillers in the City looking to grow their businesses and become the next Brooklyn Brewery. To support the craft beverage sector, the City will be working with industry stakeholders to develop a suite of Made in NY programmatic interventions used by the City and its agencies to facilitate the expansion or development of larger scale brewing and distilling in New York City.

Creative and Cultural Sectors: Community Asset, Global Brand

10,000 jobs
for New Yorkers

Where the Creative Jobs Are

Total Employment in 2013 and Percent Growth



Source: "Creative New York 2015," Center for an Urban Future (CUF). CUF's definition of "creative" sectors includes fewer occupations than the City.

Creative and Cultural Sectors:

Community Asset, Global Brand

The City will support the creation of 10,000 jobs within the creative and cultural sectors that attract talent and define the New York City brand.

Creative and cultural sectors are at the heart of the New York City brand. Its world class cultural offerings make the city a top destination for talent and visitors from across the nation and around the world.

The creative and culture sectors most positioned to grow and generate middle-class jobs include fashion, film and television, media and design, and music. These sectors provide over 500,000 jobs in New York City.

Growth in these sectors comes from New York's historic position of strength and the co-location of many creative fields. Many creative professionals work across sectors, with each sector's strength benefiting greatly from the strength of others. For example, advertising agencies benefit from being located near music labels, artist management, music publishers, and rank and file musicians to secure existing songs or create original music for their advertising campaigns.

New York is one of the global centers of the **fashion** industry. Fashion design and garment manufacturing have been an iconic part of the city's brand for generations, but it's also a major economic contributor. The industry employs over 183,000 people, paying an average annual wage of \$57,000

and generating \$2 billion in taxes. New York Fashion Week generates \$900 million in economic activity each year.

The city's **film and television** industries have never been stronger. The filmed production sub-sector employs 130,000 people in the city, with an average annual salary of \$53,000. In 2015, New York studios shot and produced 336 feature films, a 40 percent increase over the year prior, as well as 52 television series. However, the sector's growth is limited due to the high cost of real estate, which restricts the growth of studios and ancillary support services.

The **media and design** sectors are entrenched deeply in New York's fabric, employing over 125,000 people in media and 44,000 in design. **Media** provides a median annual wage of \$61,512, and a quarter of these jobs are accessible to New Yorkers without a college degree. However, **technology is rapidly transforming the nature of these jobs, making the City's investment critical to retaining a competitive advantage.** The **design** sector employs New Yorkers across a range of industries, from photography and graphic design to furniture design and architecture. With an average annual wage of \$87,213, New York City has more designers than any other metropolitan area in the U.S.

The **music** industry in New York has a rich history—from serving as a home for jazz and the blues to being the birthplace of hip hop and disco. Today, the industry supports over 31,000 jobs, has an average annual wage of \$90,000, and creates \$13.7 billion in total economic output each year. The return of the Grammys in 2018 ensures that New York will continue to feature prominently on the map for the music industry. Similar to other creative sectors, the rising cost of real estate is a threat to the continued rise of New York City's music scene, having already forced many small venues and independent recording studios to close.

To create 10,000 middle-class jobs over the next ten years, the City will:

- » Maintain leadership in "Made in NY" fashion and entertainment
- » Drive New York City's rise as the capital for technology-driven media and design
- » Preserve the cultural and entertainment assets that make NYC a great place to live and visit

These sectors provide over 500,000 jobs in New York City.

Maintain Leadership in “Made In NY” Fashion and Entertainment

The Made in NY brand was created to launch, develop, and implement initiatives that support sectors that are critical to the New York City brand, including fashion, film, television, digital media, and theater.

Initiative 15: Develop facilities for creative industries at the Made in NY Campus at Bush Terminal

The City is investing \$136 million in Bush Terminal to create a creative campus that will support the continued growth of two core New York creative industries: fashion and film/television. This investment will create 1,500 permanent new jobs, 90 percent of which are good-paying, and 800 temporary construction jobs.

With the fashion and film/television industries facing a shortage of stable, affordable space within the five boroughs, the City is helping to secure the long-term sustainability of these industries. The new Made in NY Campus at Bush Terminal will offer affordable, best-in-class industrial space for garment manufacturing, film and media production, and related services.

By offering long-term affordable leases, a variety of unit sizes, and support services, the campus will provide garment manufacturing companies with the stability they need to grow. The campus environment will also support synergies among these creative manufacturing uses, which benefit from clustering in a larger ecosystem.

The \$136 million investment will facilitate major renovations to existing assets, creating a 200,000-square-foot garment manufacturing hub, a 160,000-square-foot hub for light manufacturing tenants, new construction of a 100,000-square-foot, state-of-the-art film and television production facility, streetscape upgrades, and infrastructure improvements.



Made in NY: Film, Television, Digital Media, Theater

For over 50 years, the City has supported the growth of the film, television, and theater industries to become one of the world's largest production centers, serving as host to film, television, commercial, musical, and theatrical productions.

The Made in NY brand celebrates New York City's media and entertainment sector—including new media industries like digital media and virtual reality—and highlights the important role they play in the local economy through public service campaigns, marketing efforts, educational and workforce development programs, and investments in infrastructure.

- » The Made in NY Marketing Credit Program recognizes film and television projects with at least 75 percent of the overall production made in New York City and provides them with a number of opportunities to promote their project in the top media market in the country.
- » Developed in partnership with Brooklyn Workforce Innovations, the Made in NY Production Assistant Training Program is a free program that prepares unemployed and low-income New Yorkers for production assistant positions in the film/television industry. Since its launch in 2006, nearly 700 have graduated from the program.
- » The Made in NY Media Center, developed in partnership between the Independent Filmmaker Project (IFP), the Mayor's Office of Media and Entertainment (MOME), and NYCEDC, is a 20,000-square-foot, state-of-the-art facility in DUMBO that connects the next generation of artists, innovators, and entrepreneurs through education, events, and industry resources. Programming include fellowships, professional development programs, youth programs, and industry summits.

The Made in NY brand celebrates New York City's media and entertainment sector—including new media industries like digital media and virtual reality.

MOME invests over \$15 million across a variety of entertainment subsectors to support the expanding needs of film, television, theatre and, more recently, music and digital production.

Initiative 16: Invest over \$15 million per year to support jobs in the entertainment industry

MOME invests over \$15 million per year across a variety of entertainment subsectors to support the expanding needs of film, television, theater and, more recently, music and digital production. Included in these investments are a number of new programs that create, expand, and diversify talent pipelines to prepare New Yorkers for jobs in these sectors.

Podcasting

To ensure that New York remains at the forefront of digital trends, MOME will launch a Podcast Producers initiative that provides the training and resources podcast productions need to get off the ground or expand. With podcast networks predicted to grow 30 percent in the next year, the industry is expected to add up to 400 employees over the next four years. MOME investments aim to ensure that these jobs can be filled by New Yorkers.

Theater

MOME is working to grow the universe of industry jobs and also to ensure that a diversity of New Yorkers are able to access them. To that end, MOME, in partnership with SBS, the Roundabout Theatre Company, the International Association of Theatrical Stage Employees (IATSE), and the youth development not-for-profit The Door, will support the theater industry's first workforce development program to prepare a diverse new generation for professional technical theater careers.

Animation

Similarly, through MOME's Animation Project, the agency will provide 1,800 at-risk youth with the technical training and workplace skills necessary to pursue careers in animation—a sector that is expecting to provide 10,000 new jobs over the next ten years.

These programs will build on MOME's extensive portfolio of talent initiatives. These initiatives include: a \$5 million Women's Fund that provides grants to support film and theater projects by, for, and about women; a financing lab and pitch workshop program for women filmmakers that connects them with project financing; and the Made in NY Writers Room, a program that pairs emerging writers of diverse backgrounds and perspectives with experienced showrunners in a six-month fellowship program.



Initiative 17: Support the expansion of Steiner Studios at the Brooklyn Navy Yard to create new space for film and television production

The City plays a significant role in supporting the space needs of studios that want to work in New York.

At the Brooklyn Navy Yard, Steiner has commenced construction on the first \$100 million of a \$400+ million public-private partnership between Steiner Studios, the City, and the State of New York that will transform a historic, vacant site into the biggest film studio on the East Coast. The first \$90 million of the expansion will add 900 good-paying new jobs on the Steiner campus and create 180,000 square feet of soundstage and support space. This investment builds on the significant amount of production space that already exists at the Yard, with Steiner Studios having created 580,000 square feet of production space since opening in 2004. The full expansion will create hundreds of thousands of square feet of space, including sound stages and support facilities like editing suites, mill shops, prop storage, a screening room, lighting and grip services, and dining facilities.

Steiner Studios also serves as home to the Feirstein Graduate School of Cinema. Part of Brooklyn College and funded by the City, it's the first public film school in New York and the nation's first film school located on a working film lot. The school is dedicated to cultivating emerging voices from NYC.

Made in NY: Fashion

In February 2015, the City tripled its commitment to the fashion industry from \$5 million to \$15 million. The City’s programs aim to create and retain quality jobs, catalyze innovation within and across the fashion industry, and support business and entrepreneurship through public-private partnerships. City programs support the range of occupations within the fashion ecosystem: students, emerging designers, retail professionals, and garment workers, from fashion tech to manufacturing.

The Made in NY: Fashion brand seeks to celebrate and strengthen New York City’s position as a global fashion hub. The City has implemented an array of programs to maintain its world-class fashion design industry by investing in the educational and manufacturing community.

One set of these programs is focused on fostering the next generation of great American fashion designers. NYC Fashion Forward is a public-private partnership with the Council of Fashion Designers of America (CFDA), creating 100 paid internships throughout the fashion industry for New York high school and college students. The Fashion Future Graduate Showcase, launched in May 2017, highlights the 60 best graduating fashion design students and connects them to New York City recruiters.

Another set of programs help emerging design entrepreneurs grow their brand and companies. The City builds marketing campaigns around the Made in NY brand to raise the profile of New York-based fashion designers and manufacturers and retain the City’s reputation as a top fashion capital. Brands featured in the most recent campaign, launched during New York Fashion Week in February 2017,



benefited from increased press and social media exposure. To increase the spotlight on the city’s fashion talent, the City partnered with the CFDA to create an entire collection of Made in New York clothing and jewelry that was featured at Barneys New York. Subsequently, a ten day pop-up retail store, launched as “Not Just A Label | Made in NY,” featured over 100 local designers and attracted over 1,500 visitors.

Finally, the City uses the brand to preserve and grow garment manufacturing production. About 65 percent of emerging designers rely on local factories and suppliers for virtually all of their production. The ability to produce in New York is critical for designers to grow their business, making access to local production one of the city’s biggest competitive advantages in the fashion industry.

In February 2015, the City tripled its commitment to the fashion industry from \$5 million to \$15 million.

Photo Credit: Mayoral Photography Office, NYC

Initiative 18: Provide financial support for New York garment manufacturers to modernize and expand their businesses

Launched in 2014, the Fashion Production Fund provides emerging designers with below market rate loans to finance production with the local garment manufacturers that they rely upon. To date, \$3 million has been awarded through 36 low interest loans.

To continue supporting the garment manufacturing industry, the City has partnered with the CFDA and Garment District Alliance to launch a \$51.3 million fashion support package, which will provide business support for garment producers citywide, as well as grants for relocation, expansion, and other costs for garment producers that want to move to Sunset Park. A major part of that package includes \$14 million to expand the Fashion Manufacturing Initiative (FMI), a program that invests in technology, machinery, and workforce development. The initiative was created to nurture,

elevate, and preserve garment production in the city, as well as to connect fashion designers with local manufacturing.

Grant recipients receive financial awards for equipment, software, infrastructure upgrades, and workforce training that will increase the business’ capacity, generate economic growth, and create and preserve jobs within New York City’s fashion industry. Among other investments, production companies could use the funds for equipment and technology acquisitions—3D printers, pattern-making and cutting machines, body scanning technology, and more—that will allow them to enhance or expand their services. To date, FMI has granted more than \$2.3 million to New York City apparel and accessory production facilities and studios, all with the aim to help strengthen the New York City garment industry.

The City has partnered with the CFDA and Garment District Alliance to launch a \$51.3 million fashion support package.

New York Binding

is a fourth-generation family business provider of binding, pleating, and trimming services to the apparel and home furnishings industries.

New York Binding Co. will be able to expand the services we have been providing to our clients in the New York garment industry for nearly a century. The grant will reinforce our ability to serve a wide variety of designers and brands right here in New York City.

— Roger Levin
NY Binding Co., Inc.

76 This new commitment builds on the City’s \$15 million investment in Made in NY: Fashion initiatives. It further strengthens the City’s support for New York’s fashion manufacturing and design industries by promoting New York-based manufacturers and designers, helping them better access the resources and financing they need, and connecting them with major brands like Barneys and Not Just a Label.

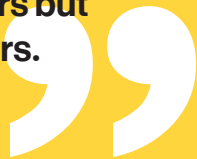


Anya Cole

Anya Cole, of HANIA by Anya Cole, a local garment manufacturer:

Being Made in New York is at the core of what we do. By hand knitting each piece in New York City we can oversee every step of our process from design to finished garment to insure everything is of the highest quality. We’re thrilled that we can utilize the immense talent in this city and feel it’s important that we employ and celebrate local artisans, while also helping the next generation build their skills and keep these traditions alive. Preserving the manufacturing side of the fashion industry in New York City not only provides important resources for designers but can ensure well-paying jobs in the industry for all New Yorkers.

— Anya Cole
HANIA by Anya Cole



Drive New York City’s Rise as the Capital for Technology-Driven Media and Design

Technology is influencing consumer preferences and changing how people create. In the future, a fashion designer may use augmented reality technology to shape their designs and perhaps sell directly to consumers. Big data is transforming how media targets advertising dollars toward specific demographics, with a real time data feedback loop.

The City has invested in this transition through programs like the NYC Media Lab, a public-private partnership to prototype

projects that require collaboration across a range of disciplines core to the future of media. The Combine, part of the Lab, is an early-stage accelerator that matches faculty and students with industry mentors to launch new ventures and commercialize emerging media and technology.

To continue to support this digital transformation of media—and the resulting jobs creation—the City will make investments that actively support collaboration and the development of new technologies.

Initiative 19: Launch a Virtual Reality/Augmented Reality Lab to anchor this emerging industry in New York City

By offering new ways of exploring the world both visually and physically, virtual reality and augmented reality will have a transformative impact on everything from medical diagnostics to education. Through specialized equipment like goggles and sensor-equipped gloves, VR offers a computer-generated simulation of the physical world from every angle, while AR offers computer-enhanced views of the physical world by overlying digital content on top of reality. Anchor industries like healthcare, education, and media in NYC position the city particularly well to capture the economic growth that will come from advances in VR/AR technology.

Over the past year, New York City has seen a 125 percent increase in VR/AR job demand and over \$50 million in investment. Despite this emerging growth, the New York City ecosystem remains fragmented and lacks centralized support for growth stage businesses. Funding is a challenge for early stage companies in any nascent industry, and without a central hub there are limited resources for access

to affordable technology and training. To leverage this opportunity, the City will invest \$6 million to create the first publicly funded VR/AR Lab in the country. The lab will create thousands of jobs and accelerate the City’s leadership position by providing entrepreneurs with the space, technology, and training to turn their ideas into viable companies, and provide the space and resources they need to sustain initial growth. The lab will also serve as a central hub where VR/AR companies can draw on a pipeline of talent trained in the latest VR/AR technology.

New York City has all the ingredients for a vibrant VR/AR media ecosystem

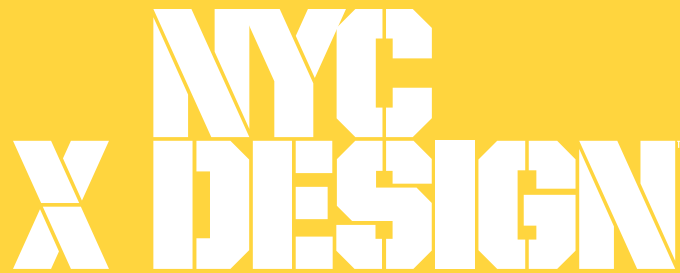
When Tony Mugavero and his two cofounders started Littlstar, an immersive media company, they had the opportunity to choose where they wanted to locate. They eventually chose New York City because it’s a media hub and any company they wanted to work with would only be a few subway stops away. Two years later, Littlstar has raised over \$6 million in seed funding, employs 17 people, and has won distribution deals with major television networks and publishers. Now, the company is hoping to raise additional funds and expects to be able to employ 50 to 60 people in the next year.

Littlstar feels that a VR/AR industry lab would bring increased attention from investors and create jobs around the growing ecosystem. According to Tony Mugavero, “Community centers like that lead to investment in industries. New York investors have been less exposed to VR/AR companies. Investments in any VR/AR company are good for the entire industry.”

NYCxDesign showcases New York City as a design capital

New York City's design industry employs over 44,000 people—that's more designers than any other metropolitan area in the U.S. Employment trends reflect the fact that design is now a critical factor in keeping companies across all sectors competitive. From 2004 to 2014, design employment grew by 28 percent and there is strong potential for continued growth.

In 2014, the City launched NYCxDESIGN, a three-week program held each May. The international event brings together New York City's diverse design community, showcases contributions to the city's unique cultural fabric and economy, and provides a platform for the latest in global design. The program has grown in scope and popularity both locally and internationally.



NYCxDesign brings prominence and attention to New York City designers

Michele Varian is a product designer with her own shop in SoHo. In addition to selling lighting, furniture, textile, and wallpaper designs, the shop also curates the work of over 100 small home product design businesses and 70 jewelry design and manufacturing businesses, many of which are New York-based. She currently has five full-time employees and four employees staffing her revolving “Guest Shops,” paying them an average annual salary of \$50,000. For NYCxDESIGN 2017, Michele launched new furniture and lighting pieces. NYCxDESIGN's coordinated marketing efforts drew hundreds of people to the first Howard Street “block party” during Design Week, bringing welcome attention and business to surrounding businesses like Michele's. NYCxDESIGN's promotion of the block party, and the numerous Howard and Crosby Street shops that participated in it, also drew the attention of the design elite that consider NYCxDESIGN a marquee event.



Preserve the Cultural and Entertainment Assets that Make NYC a Great Place to Live, Work, and Visit

Rising real estate costs across the city have impacted many of the cultural and entertainment assets that make New York a great place to live, work, and visit.

Through the Department of Cultural Affairs, the City provides over \$300 million in expense and capital funding at nearly 1,000 nonprofit cultural groups every year, making New York the second largest public funder of arts and culture in the nation, after the federal government. The city's cultural institutions collectively employ thousands of New Yorkers and need the City's continued support to serve residents and millions of visitors. To go a step further and comprehensively address some of these challenges, the City will release CreateNYC in summer 2017—a plan to evaluate the city's cultural assets and proposed investments. The plan will create a long-term roadmap to promote greater equity, access, diversity, and vibrancy, as well as expand opportunities for all New Yorkers to participate in cultural life.

Initiative 20: Create affordable workspace for artists and artist groups

The City is focused on its goal of bringing 500 artist workspaces online by 2024 to preserve affordable artist workspace for the long term. At Brooklyn Army Terminal, the City has created 63 artist workspaces by signing a lease with Artopolis, a

local artist workspace operator. On Governors Island, the City's support enabled the Lower Manhattan Cultural Council to set up an arts center in a former Army warehouse, with studios for visual artists, rehearsal spaces for performing artists, and gallery space. The City also supports organizations like Spaceworks, which provides affordable studio and rehearsal space across multiple sites in multiple boroughs—for all types of artists from fine arts to dance and music. The City has supported these organizations in both site selection efforts and in their drive to attract private investment.

Through the Department of Cultural Affairs, the City provides over \$300 million in expense and capital funding to nearly 1,000 nonprofit cultural groups every year, making New York the second largest public funder of arts and culture in the nation.



Initiative 21: Strengthen cultural nonprofits with access to affordable space, financial support, and technical assistance

The City will continue to build the capacity of nonprofit groups and cultural institutions by providing over 100,000 square feet of affordable space, financial support, and technical assistance.

Many New York nonprofits struggle with the financial, organizational, and legal obstacles of major real estate projects and find it increasingly difficult to secure suitable space. The City is committed to projects that reduce real estate costs for these organizations.

One way the City can accomplish this goal is to proactively integrate creative space into its real estate projects and provide financial support for cultural projects. This includes investments in the South Street Seaport museum and the Wavertree, a newly restored, full-rigged 1885 cargo sailing vessel. The City also awarded the National Lighthouse Museum on Staten Island a lease on the St. George waterfront.

Beyond providing space, NYCEDC is helping cultural nonprofits tackle the obstacles of major real estate projects. Nonprofits are learning to successfully engage in the acquisition, financing, development, and leasing processes via a continuing series of educational lectures led by industry experts and convened by NYCEDC. Participating nonprofits will gain a fundamental understanding of real estate deal structures, opportunities for financing real estate projects, and proactive methods for preparing to undertake such projects.



Initiative 22: Create an advocate position within MOME for music and nightlife

New York’s culture and nightlife are part of the city’s brand, attracting the best talent and defining neighborhood character. However, over the past 15 years, more than 20 percent of the city’s smaller music venues have closed. In addition to high rents, venues also face challenges navigating the City’s permit and licensing systems. New York City is at risk of losing the perception of its brand as an incubator of arts and culture.

In February 2016, the portfolio of the Mayor’s Office of Media and Entertainment was expanded to include music, with a mandate to keep New York a capital for the industry. In June 2016, MOME brought together over 75 music companies and organizations for the first New York Music Industry Convening. Having just issued its first-ever Music Industry Economic Impact Study, which addresses music jobs, wages, and economic output, MOME is commit-

ted to ensuring the continued success of the New York music industry.

The City will designate a Nightlife Ambassador to serve as an advocate for the music and nightlife community at MOME, who will serve as a central point for coordination between venues, local authorities, and communities. The role will be supported by an advisory board that will include representatives from each of these entities. The advocate will provide support with licensing and permits and may, over time, provide financial support for legal services, architectural services, and safety improvements.

Other cities like London, Paris, Amsterdam, and Berlin have a similar office, often called the “night mayor,” and have seen reductions in noise complaints and retention in an industry that provides significant jobs and economic impact.

The City creates and subsidizes workspace for visual and performance artists to stay and create in New York

Latasha Alcindor, informally known as “L.A.,” is an independent music and visual artist based out of New York City. She has a multimedia practice that draws from a wide range of inspiration found in experimental, dance, jazz, electronic, and hip hop music. Her work centers on her experience as a woman of color and her experiences growing up in Flatbush, Brooklyn. L.A. has performed at SXSW, A3C, Manifesto, and as the headlining act for Brooklyn Museum’s First Saturdays and Toronto’s AGO First Thursdays. She is currently an artist-in-residence at National Sawdust, a partner of Spaceworks.

L.A. has used free rehearsal space, funded by MOME through New York Music Month, to visualize and develop the show, All A Dream, the first part of an immersive multimedia project entitled The LALYTES Project. L.A. is working with dancers and musicians to produce a multimedia and interactive performance that includes visual art in projection, dance, music, and theater. L.A. will perform All A Dream at National Sawdust on August 19, 2017.

L.A. will continue cultivating The LALYTES Project and has hopes of touring with the production. She plans to bring on board 10-15 dancers, 5-6 musicians, DJs, producers, makeup artists, and stylists. Each dancer, musician, and DJ will be paid \$75-\$200 per show and \$35-\$100 per rehearsal, while producers will get 50 percent of the profits from music revenue.



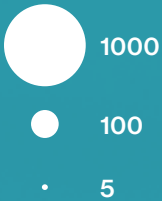
Space for Jobs of the Future

Enabling Growth

25,000 jobs
for New Yorkers

Total Workers at Place of Work, 2015

Dot area is proportional to the amount of workers in each hub, in thousands:

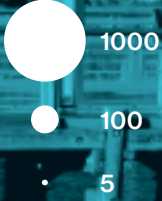


Growth in the boroughs opens new opportunities for a wide range of businesses that want to attract employees with reduced commute times. Office development in these areas also helps bring economic opportunity to more neighborhoods and reduce the strain on the city's transit infrastructure.

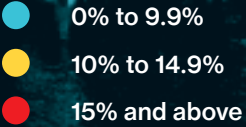


Total Workers at Place of Work, 2040

Dot area is proportional to the amount of workers in each hub, in thousands:



Dot color indicates percent change between 2015 and 2040:



Sources: 2050 NYMTC Socioeconomic and Demographic Forecasts, TAZ-level employment estimates adjusted based on 2010-2014 LEHD LODS, Workplace Area Characteristics file, all primary jobs.

Space for Jobs of the Future: Enabling Growth

The City will create 25,000 jobs through supporting robust office districts in Manhattan and investing in emerging commercial centers.

New York City is one of the largest job markets in the world. It relies on a stock of 550 million square feet of office space that directly supports approximately 1.5 million jobs.

Demand for office space in New York City is projected to grow by over 60 million square feet by 2025, with nearly half of the demand outside Manhattan. Activating and increasing the supply of commercial office space is essential to expanding opportunity and increasing the number of middle-class jobs across the five boroughs. Currently, over 40 percent of middle income jobs come from private sector professional services based in offices, and even more come from the office-using components of healthcare, public administration, and education.

While demand for office space is increasing, it is also changing. New Yorkers are starting companies near where they live and beginning to demand shorter commute times to the office. Close proximity office space improves not only commute times but also the burden on the City's transit infrastructure. Companies and entrepreneurs are also seeking new types of office space: open layouts, room for collaborative work and shared amenities, and more robust digital infrastructure.

However, due to a variety of factors, new office development has generally lagged outside of existing, centralized office markets. In many neighborhoods, office space does not command high rents, and new office construction has been more difficult to finance than housing or other uses. Another challenge is that much of the demand for office space comes from smaller, growing, tech-driven companies. These companies need space but lack the financial capability to anchor new construction or support substantial rehabilitation.

The City will create 25,000 jobs through investments in existing and emerging commercial centers across the five boroughs, using tools such as zoning, financial and tax incentives, and its role as a credit-worthy leaseholder. The City will invest to:

- » Support jobs closer to where New Yorkers live
- » Strengthen core job markets and global competitiveness

Demand for office space in New York City is projected to grow by over 60 million square feet by 2025, with nearly half of the demand outside Manhattan.

Support Jobs Closer to Where New Yorkers Live

Population growth in New York has been driven by the boroughs. Between 2000-2015, the size of the labor force grew the most dramatically in Brooklyn and the Bronx. Brooklyn grew 26.3 percent, the Bronx 26.7 percent, Queens, 14.6 percent, Manhattan 12.2 percent, and Staten Island 9.5 percent. The Bronx saw the largest increase of just over 5 percent since 2010, then Brooklyn at a 5 percent increase, Queens at 4.6 percent, Manhattan at 3.6 percent, and Staten Island at 1.6 percent. However, over 70 percent of the city’s commercial office space is centered in Manhattan.

HRA’s move to East New York will free up in-demand office space

The City’s Human Resources Administration (HRA) will be the first agency mover in this new program. HRA will anchor at least one development in Brooklyn, with a preference for East New York. HRA would occupy up to 250,000 square feet of office space. The balance of the space in the building will be available for lease to local businesses looking to grow and create jobs in East New York, especially small businesses and nonprofits that currently have limited access to quality office space. In addition, HRA’s move will free up office space that it currently occupies in higher demand areas of the city, thereby delivering additional space for private use. NYCEDC will be releasing the HRA-focused RFP later this summer and will be working in the months ahead to release additional RFPs anchored by agencies who have interest in relocating their operations to other parts of the city.

With a leased portfolio of over 22 million square feet, the City is one of the largest private office tenants in New York.

Initiative 23: The City will act as an anchor tenant to encourage new office growth

Near-term office demand outside of Manhattan is increasingly driven by local businesses and startups looking to scale. These companies want to stay in their neighborhoods, often close to where their employees work, but are limited in terms of available and affordable professional office space. They are often either too small to anchor a new development or lack the creditworthiness needed to be the anchor tenant a developer needs to secure financing. At the same time, many neighborhoods across the city would benefit from job clusters and the presence of a workforce that will help support local businesses and neighborhood institutions.

With a leased portfolio of over 22 million square feet, the City is one of the largest private office tenants in New York. Recently, the City has undertaken a comprehensive review of its leased office space portfolio, including potential new needs, anticipated future renewal costs, and an assessment of current space utilization and models for new, more efficient space. The City has focused, in particular, on opportunities to relocate tenancies in high rent areas to modern, lower-cost space. Moves by City agencies to anchor new buildings could create over 8,000 good-paying jobs over the next ten years. As the agency vacates previous space a private sector company could move in—and space would also unlock in the new building the agency anchors.

Over the next ten years, the City will use agency moves to anchor new developments, both spurring new development and freeing up space that would be more strategic to a private business. The City is developing a new system to assist its agencies in moving into developments outside Manhattan. Once an agency indicates a desire to move, the City will issue an RFP to develop office buildings at strategic locations—in downtowns, emerging job centers, and transit-rich neighborhoods.

Initiative 24: Update outdated zoning to support creation of modern space

Many of the zoning regulations that govern commercial space and business activities were established in 1961, when the city’s economy had a vastly different shape. The vision that remains codified in zoning in many locations encourages auto-oriented office towers or low-slung industrial warehouses in a sea of parking. While amendments have been made to modernize zoning in some areas, obsolete zoning remains a problem in many others. This includes outdated use categories, impractical or undesirable requirements, and inflexible rules limiting the ability for existing companies to grow or for new space to be created to meet contemporary business needs.

The definition of uses have changed little since 1961, when the city’s economy was still highly dependent on finance and manufacturing, and when today’s diversity of professional service, creative, and technology jobs simply did not exist. The zoning code’s anachronisms include provisions for activities that have long since disappeared, and a lack of clear standards describing where today’s growing industries can

locate. The zoning code sets standards for the manufacture of “charcoal, lampblack or fuel briquettes” and “shoddy” (processed rags) but does not specify where biotech businesses are permitted. Breweries and distilleries face barriers to finding space because of tight restrictions. University partnerships with film, media, life sciences, and other businesses can be hamstrung by use restrictions based on traditional industry categories.

New York also has high requirements for parking in commercial buildings in most locations outside dense business districts, making office construction unnecessarily costly or even infeasible, and encouraging driving in congested areas while limiting opportunities for new transit-oriented development near subways and rail.

More recent zoning in many parts of the city is intended to encourage a mix of commercial and residential uses, yet has favored housing over offices. This is because the height limits that apply in some of these areas are based on standards for apartments, which have lower ceilings than offices, meaning less office space can fit within the same volume. These limits discourage the development of office buildings in many commercial and mixed-use districts.

In medium-density districts that allow local commercial uses, second-story spaces can provide reasonable space for offices,

cultural organizations, or other activities. But these districts generally limit commercial uses to the first floor, unnecessarily restricting opportunities for businesses and services for local residents.

In many parts of the city, aging loft buildings have been repurposed and renovated for office space, providing a product favored by many of today’s innovative and creative companies. However, zoning regulations make it difficult to build new, modern versions of these iconic and versatile buildings.

Off-street loading requirements are also outdated and excessive in many areas. These requirements sometimes limit the ability of businesses to expand in their current locations. In instances where businesses do not require industrial-level use of trucks, the city is losing out on opportunities for office development.

The Department of City Planning will develop proposals for zoning changes that would alleviate these impediments and create new zoning tools to support the creation of space that meets the needs of a broad range of industries. These efforts will support job growth at scale and in locations that are appropriate to the many different types of neighborhoods around the city.

The zoning code’s anachronisms include provisions for activities that have long since disappeared, and a lack of clear standards describing where today’s growing industries can locate. The zoning code sets standards for the manufacture of “charcoal, lampblack or fuel briquettes” and “shoddy” (processed rags) but does not specify where biotech businesses are permitted.

Downtown Brooklyn and Long Island City are growing job centers



Downtown Brooklyn

After decades of investment by the City in commercial office space, the opportunity for significant job growth in Downtown Brooklyn is here. Over 12,000 residential units are built or under construction, bringing a 24-hour vitality to the area and increasing the number of residents who want to work near where they live. There is historically low vacancy in existing office space and the area is rich in transit, accessible from points throughout the city and Long Island.

Downtown Brooklyn is the largest office district outside of Manhattan, with 23 million out of the borough's 49 million square feet of office space and transit service from a dozen lines. From 2005 to 2015, Downtown Brooklyn had only 200,000 square feet of new office space come online, according to real estate research firm Co-Star. But just three years beyond 2015, 2 million new square feet will be added or reactivated, including 420 Albee, the first new ground-up commercial development since 2004. When combined with housing and amenities, Downtown Brooklyn's development is creating a new destination for a wide variety of businesses—particularly media and technology companies.

The City will continue to support this development. For example, at 141 Willoughby, a rezoning application was approved to increase permitted density in this portion of Downtown Brooklyn, with a greater allowance for commercial use than residential. The zoning will support the construction of a new building with a substantial commercial component, contributing to the growth of office space in the district.

Long Island City

Long Island City is well positioned for dynamic change. The area's transit options connect well to Cornell Tech, midtown Manhattan, Hudson Yards, and the rest of the Queens-Brooklyn tech corridor.

At the center of this growth in Long Island City is the Gotham Center, with two new commercial office towers rising that will bring online 1.1 million square feet of office space. Selected from a City-issued RFP process and scheduled for completion in 2019, the project will bring over 3,000 jobs to the area and much needed retail amenities in the shared base between the towers. Anchor tenants, including WeWork and Bloomingdale's, will bring a new center of gravity to the area.



Rendering by Kohn Pedersen Fox Associates



Strengthen Core Job Markets and Global Competitiveness

To maintain New York’s status as a global capital for industry, finance, and talent, the City has developed strategies to promote production of new state-of-the-art office space and strengthen its traditional central business districts.

**Initiative 25:
Pursue and support zoning changes in core job markets like East Midtown**

The Greater East Midtown business district is one of the largest job centers in the region and provides many of the world’s highest-profile business addresses. It contains more than 60 million square feet of office space, more than a quarter million jobs, and numerous Fortune 500 companies. However, the area faces a number of long-term challenges: aging building stock, limited recent office development (and few available office development sites), an existing zoning framework that hinders new office development, and public spaces and transit infrastructure that are stretched to capacity.

One Vanderbilt, now under construction, will create over 2,000 good-paying jobs in more than 1 million square feet of new office development at the corner of 42nd Street and Vanderbilt Avenue in Manhattan. The City facilitated the transfer of air rights from Bowery Savings Bank and additional floor area bonuses in exchange for the developer undertaking public realm and transportation improvements valued at \$225 million. The development will also provide modern trading floors, retail, restaurants, and public spaces, making it an example of mixed-use and transit-oriented development.



Connecting New Yorkers to Good Jobs

Amid robust growth and historically low unemployment rates, the City is determined to ensure that New Yorkers from all backgrounds can benefit from the City’s good job opportunities.

Right now, 2.2 million New Yorkers lack the education or training necessary to start on a pathway to a career that pays \$50,000 or more per year. In 2014, the City of New York unveiled *Career Pathways: One City Working Together*, a transformative plan to expand access to career-track jobs in fast-growing industries, improve job quality, and foster a better integrated workforce system. Since then, the City has connected more than 75,000 New Yorkers to jobs annually, and has added and shifted resources toward training and educational programming that address today’s business needs.

As a companion to the initiatives and policies that will help create 100,000 new jobs, the City will use the following strategies to help move New Yorkers onto career paths to the middle class:

- » Ensure employers remain at the forefront of City efforts to prepare and support New Yorkers for these jobs through **industry partnerships**
- » Make employer-informed training available at scale through **public institutions of higher education**
- » **Deliver “bridge” training combined with adult basic education** so New Yorkers can get their high school equivalency and prepare for a job at the same time

- » **Increase the diversity** of local talent tapped for these jobs through targeted outreach and training
- » Launch **new employer-training partnerships** through apprenticeships that allow New Yorkers to get the hands-on experience they need

Across these strategies and our newer programs, the City will continue to target some outreach and recruitment to communities where it’s also making concerted talent investments, most notably with immigrant groups and NYCHA residents.

2.2 million New Yorkers lack the education or training necessary to start on a pathway to a career that pays \$50,000 or more annually.

HireNYC connects New Yorkers to employment opportunities in their local area

Through **HireNYC**, Mayor Bill de Blasio is delivering on his commitment to leverage the City’s purchasing power and investments in construction and real estate to create jobs and training opportunities for New Yorkers. HireNYC provides free, high-quality recruitment services to vendors and businesses filling open positions through City procurement contracts and development projects, thereby helping New Yorkers better access these jobs. Since the program launched in early 2016, the

City has placed 3,000 New Yorkers in jobs across goods and services, procurement, human services contracts, and development contracts.

The Jamaica **Workforce1** Industrial & Transportation Career Center (ITC) partnered with Artimus Construction for their recruitment needs for a HireNYC project. Artimus is a 30-year old construction company that has been responsible for the construction/renewal of several mid-rise and high-rise projects that include residential, commercial, retail, and mixed-use properties. Workforce1 helped Artimus hire over a dozen workers through HireNYC for their project in Jamaica, Queens. One of these individuals was Douglas Jackson.

Douglas Jackson, a local Jamaica Queens resident, started with Workforce1 looking for an entry level opportunity in construction. Douglas joined the NYC CoolRoofs program last year to gain construction knowledge. After NYC CoolRoofs ended, Douglas was hired at “2 Men and a Truck” for a moving position. He worked there for a few months until they let him go for lack of work. Douglas then returned to Workforce1 to join Artimus Construction’s entry level construction internship in February. He worked there for 4 months, learning the in’s and out’s of construction. Douglas was offered a full time position with Artimus as a general laborer and started as a permanent employee in June 2017.

ApprenticeNYC

One new employer-training partnership is ApprenticeNYC. ApprenticeNYC recasts a traditional workforce development approach to address the 21st century skills that New York City employers want and need. These employer partnerships will support on-the-job training while guaranteeing job placement. This new approach will open up new opportunities for those without higher education degrees.

In its initial stage, the program will be implemented in the tech, industrial, and healthcare industries and will target launching the first apprentice cohorts in 2018.



Photo Credit: Mayoral Photography Office, NYC

Tech

The focus of apprenticeships within the technology sector will be front end, back end, and mobile app developers, occupations that have shown both tremendous growth and also successful adaptation to the apprenticeship model.

In tech, this initiative will build on new associate models pioneered by companies like Spotify, LinkedIn, and Viacom to scale industry-driven on-ramps to additional businesses. In doing so, ApprenticeNYC will not only equip New Yorkers with the experience needed to help companies thrive, but deliver new models that help employers surface and cultivate high potential talent they might otherwise have passed over.

Industrial

The focus of ApprenticeNYC within the industrial sector will be to build upon the current tradition of apprenticeships and on-the-job learning, help employers fill open positions, and increase the number and diversity of New Yorkers who choose these career paths.

New York City industrial businesses have difficulty finding enough skilled machinists, welders, and diesel technicians. Part of the challenge is the long hours of training required to succeed in these highly technical jobs. In order to support New Yorkers and their families during the long training period required for the complex machinery that today's industrial businesses use, the City will partner with employers to share the cost of trainee wages during the learning period. This will make these career paths accessible to those who need to earn family sustaining wages from the first day of apprenticeship.

Furthermore, the public perception of industrial jobs does not match the innovative practices and 21st century technology that industrial businesses in New York use. By launching ApprenticeNYC in partnership with industrial businesses, the City will not only help employers find much needed talent, but also give New Yorkers a clear and modern entrance into this sector.

The program will create a new model that combines traditional workforce training and education with on-the-job training provided by employers who have already hired trainees.

Healthcare

The focus of apprenticeships within healthcare will be coordinated with NYACH. Currently, NYACH partners with 1199SEIU Training and Employment Funds, Bronx Lebanon Hospital Center, and LaGuardia Community College (CUNY) to develop a nationally recognized Community Health Worker Apprenticeship program. Community health workers provide outreach services, community education, patient advocacy, and informal counseling within communities. They are some of the most important actors in healthcare delivery today, especially as demand for ambulatory and preventative care increases.

The program combines classroom instruction with on-the-job learning. Throughout the program, apprentices will work at Bronx Lebanon Hospital to acquire the hands-on skills necessary for this position. They will also receive related classroom training from LaGuardia Community College. This program is one of the first to provide a standard certification and training for the Community Health Worker position through a competency-based learning approach. Upon successful completion of the six-month program, participants will receive a national credential from the U.S Department of Labor Office of Apprenticeships and will become full-time, permanent community health worker employees at Bronx Lebanon Hospital.

Over the next ten years, NYACH will work with employer, education, labor management, and community-based partners to launch additional new apprenticeships.



Early Support for
ApprenticeNYC

Employers across sectors have identified apprenticeships, or learning while working, as a good solution for hard-to-fill open positions. These employers are willing to invest in and train workers, but look to partner with the City to pay workers a living wage while they learn on the job.

Examples of the wide range of employers who have already committed to developing models with the City include:

- » Community health clinics looking for bilingual medical assistants
- » Tool manufacturers looking for computer controlled (CNC) machine operators
- » Community-based organizations looking for care managers with skills in serving those facing mental health challenges
- » Tech businesses looking for developers
- » Hospital systems looking for medical coders and billers

The City is working with New York employers on setting up apprenticeships to recruit new talent

A few years after opening their first office in NYC, **Spotify’s technology team** noticed that there was a growing pool of local talent that had high potential to become great developers. But many of these candidates were recent grads of tech bootcamps or early-stage developers without much professional engineering experience. As a result of their non-traditional backgrounds, these candidates often passed under the radar of Spotify’s other hiring pipelines.

Recognizing this challenge, the team launched The Spotify New York City Technology Fellowship—a development program aimed at hiring engineers just entering the professional tech environment from a diverse set of backgrounds. Participants in the fellowship program operate as a team within Spotify for 16 weeks while receiving mentoring and personal and professional development from a broad set of employees to help them reach their full potential and learn what it’s like to work at Spotify.

The City will partner with Spotify, and other tech leaders like it, to expand and enhance similar programs that help employers fill open positions and offer a diversity of New Yorkers entry paths into tech careers.

Additional Economic Impacts

In addition to creating 100,000 permanent jobs over the next ten years, the City is also creating hundreds of thousands of additional jobs through:

Construction

240,000 construction jobs generated from City investment

Indirect and Induced Impacts

Over 15,000 indirect and 17,000 induced jobs generated from the City's investment in 100,000 jobs

Tourism

375,000 jobs supported through tourism and visitor spending, driven by investments in culture, entertainment, and attractions across the five boroughs



Create and Connect New Yorkers to Construction Jobs

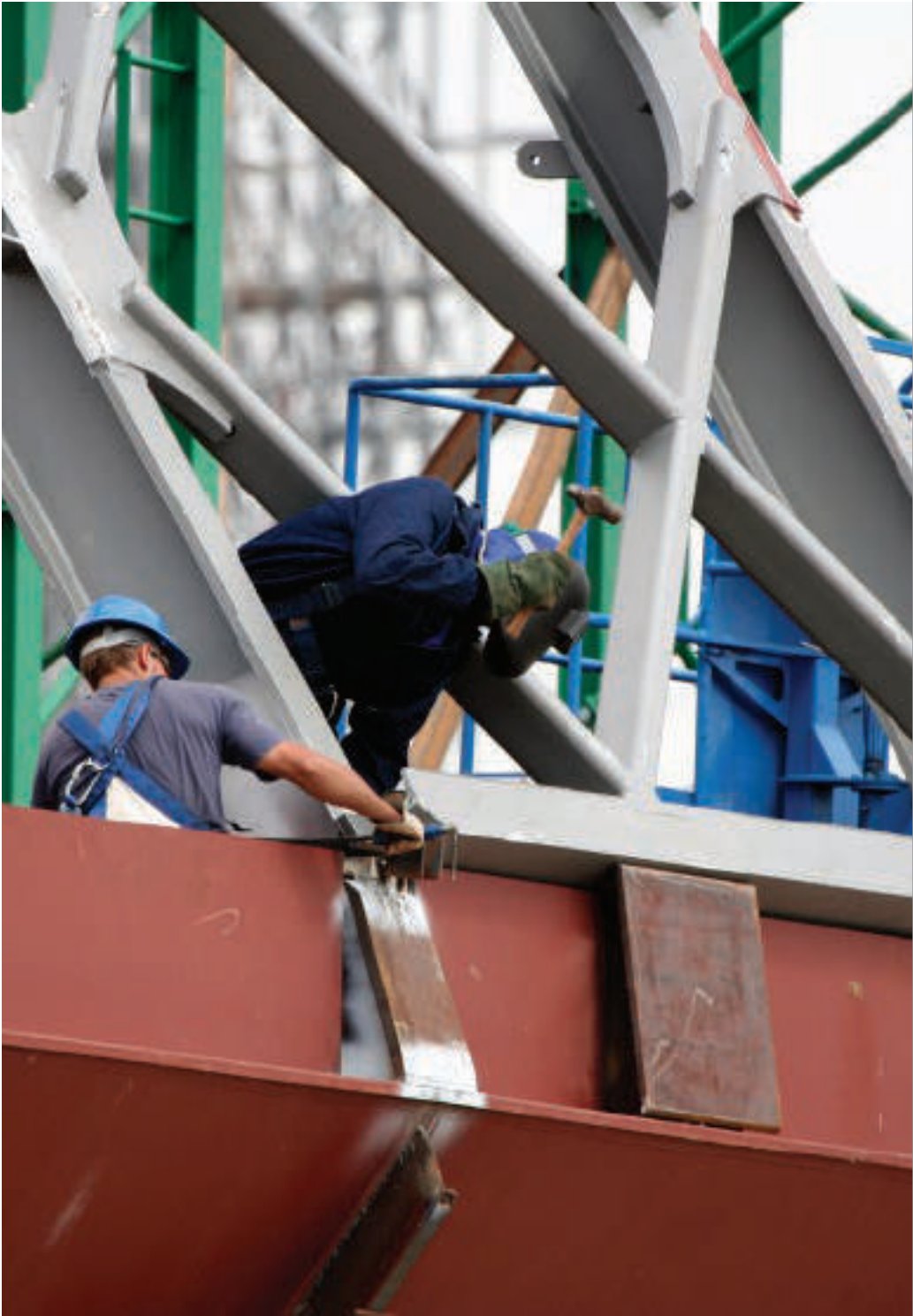
New York City is in the midst of a building boom. According to the New York Building Congress, employment in the NYC construction industry reached its highest level in more than 40 years, at 151,000 individuals in March 2017. This easily surpasses the number of jobs created during the height of the previous building boom in 2007-2008.

Construction spending is up, with nearly \$42 billion spent in 2016. Although much of that growth has been fueled by the strong residential market, there is also growth in commercial office, healthcare, education, and government spending. After adjusting for inflation, spending in 2016 topped the level reached during the 2007 building boom.

The construction industry is a source of jobs that are good pathways to the middle class. The average annual wage is \$43,576 and with benefits, 46 percent of construction jobs pay good wages of \$50,000 per year or more. Further, the industry is young and diverse. Hispanic workers make up 40 percent of the workforce and nearly 61 percent of workers speak a language other than English as their primary language. Workers age 20-39 increased to 44 percent of the workforce in 2015.

The industry is accessible to New Yorkers with a variety of educational backgrounds. Approximately 65 percent of the building industry workforce never attended college, and 46 percent of all workers ended their education after earning a high school diploma.

The city's spending on public works and infrastructure will create 240,000 jobs over the next ten years.



Employment in the NYC construction industry reached its highest level in more than 40 years, at 145,500 individuals in March 2017.

Green Jobs Corps

The Mayor's NYC Green Jobs Corps will train 3,000 New Yorkers over the next three years in critical construction and maintenance skills that support the City's climate action agenda. The Green Jobs Corps will expand access to good careers in the building construction and maintenance trades and develop the workforce needed to meet the mayor's commitment to reduce citywide greenhouse gas emissions 80 percent by 2050.

On Earth Day 2017, the City and the Building Construction Trades Council (BCTC) signed a memorandum of understanding (MOU) to launch the program and begin identifying the first 200 candidates for pre-apprenticeship training courses that will begin this summer, leading to apprentice opportunities at BCTC-affiliated construction unions.

One of the most important green job skills needed to meet this goal are associated with energy efficiency retrofits to the city's nearly 1 million buildings. These buildings, including municipal buildings, contribute approximately two-thirds of the city's greenhouse gas emissions. As part of the effort, the City is leading by example and has allocated up to \$2.6 billion in work on municipal buildings retrofits.

This construction work, both public and private, is expected to create approximately 30,000 construction jobs over the next ten years.

Construction Industry Partnership

The construction industry partnership focuses on four training programs under BuildNYC2030:

- » Welding (six-month training program in partnership with CUNY's CityTech)
- » Electricians (cable installing program with preparation to take exam to receive installer credential, approximately 28 trainees per year)
- » Carpentry (training in building materials, cabinet fabrication, and advanced wall systems to at least 36 trainees in 2016. Carpenters make up the largest building trades occupation in the industry and those with all-around skills are in high demand)
- » Green building operators and cool roof-building to promote green/sustainable construction

HireNYC

In the construction industry, HireNYC connects low-income workers to construction job opportunities generated by NYCEDC and HPD projects. Qualifying developers, general contractors, and sub-contractors are required to enroll with the HireNYC program and interview qualified candidates who meet the requirements of the entry- and mid-level positions associated with contract. Solicitations for NYCEDC projects above \$1 million and HPD projects above \$2 million require HireNYC obligations.

Build It Back

Connecting New Yorkers to City economic development investments, the Sandy Build It Back program placed over 800 local residents on residential rebuilding efforts. Using an innovative workforce development model, the City provided free pre-apprenticeship training vouchers for local residents, placing 113 residents in full apprenticeship programs. These individuals are on a path to high-wage careers in the trades as a result of City spending and programs.

ConstructNYC

ConstructNYC is designed to connect small- to mid-sized M/WBE, veteran-owned, and otherwise disadvantaged business enterprises with exclusive opportunities to work on NYCEDC projects through contracts of up to \$1 million. Firms are prequalified to work on EDC projects in areas like HVAC, site improvements, general construction, and demolition. These firms gain top-notch training and on-the-job technical assistance alongside valuable experience working on transformative NYC projects.

NYC Construction Mentorship

This eight-month program offered by SBS aims to help M/WBE certified construction firms build capacity and connect to City contract opportunities. Program benefits include a business needs assessment and customized three-year growth plan to help businesses succeed, one-on-one mentoring from experienced firms, and bidding assistance on City contract opportunities.

Build It Back is creating jobs while rebuilding the city

One resident connected to a quality job is **Jamel Dickerson** in Far Rockaway. When hurricane Sandy hit, Jamel and his family saw water rush into their Beach 25th Street home, flooding the basement and causing damage. A year later, Jamel was working at a call center when he heard about the City's Sandy resident training opportunity at his son's PTA meeting. Jamel went to the Rockaway Workforce Center and signed up for a pre-apprenticeship program. Today, Jamel is a carpenter apprentice in the union. After working on high rise buildings in Manhattan, Jamel has come home to work for Build It Back, rebuilding homes in his own neighborhood.

Extend the Impact of 100,000 Jobs through the Creation of 15,000 Indirect and 17,000 Induced Jobs

The 100,000 jobs the City is investing to create over the next ten years will also produce further economic impact through indirect and induced jobs.

Indirect jobs are those that occur from business-to-business spending. For example, if a business located in an office tower constructed as part of a City project buys office supplies from a wholesaler in the Bronx, the jobs supported by the transaction at the wholesaler are indirect jobs.

Induced jobs are those supported by the earnings of both direct and indirect workers as they spend their wages throughout the regional economy. Continuing the example above, suppose that both the tower office worker (i.e., the direct job) and the wholesale employee (i.e., the indirect job) take home wages and then go out to dinner in New York City. The restaurant jobs supported by their spending are induced jobs.



Direct visitor spending totaled \$43 billion in 2016 and total economic impact, including support services, reached \$63.2 billion.

Continue to Invest in Tourism Growth Across the Five Boroughs to Support the Over 375,000 Jobs Supported by Visitor Spending

Over 60 million people visited NYC in 2016, the seventh straight year the city has broken its own record for tourism. Direct visitor spending totaled \$43 billion in 2016 and total economic impact, including support services, reached \$63.2 billion. The industry supports over 375,000 jobs (4 percent growth over the prior year), making tourism the city’s sixth largest employer. These jobs on average pay \$63,000 per year.

Much of the increase is driven by increased City investment and support for culture, particularly across the five boroughs. In 2015, nearly 30 million tourists visited New York City cultural institutions and spent \$5 billion on arts, recreation, and entertainment. The city’s museums and other cultural institutions saw an increase in tourist visits from 19 to 25 million from 2004 to 2014. Major in-

dustry events like Fashion Week and Book Expo, and festivals like the Governor’s Ball, the Affordable Art Fair, and various open studios events also draw visitors from all over.

Hotel demand has grown and generates nearly 35 million hotel room nights sold, an all-time record for the city. These revenues are estimated to contribute over \$1 billion to the city this year.

The City continues to invest in this important sector. This year, the City launched a new marketing campaign called “New York City—Welcoming the World” to encourage increased international tourism. The City also runs the Nonstop NYC program that includes NYC Restaurant Week, NYC Broadway Week, Off-Broadway Week, and an NYC Attractions Week.

Implementing the Plan

Overview

The New York Works plan identifies a path to achieve three objectives:

- » Invest in the creation of middle-class jobs
- » Ensure those jobs are accessible to New Yorkers
- » Prepare for the jobs of the future

In order to meet these objectives, the City will work closely with the private sector. The City is committing additional resources for business support and industry engagement, and has identified a number of near-term milestones for future investments.

Financing the Plan

The City has already committed over \$1.1 billion to date for programs that will create jobs. Over \$250 million will be committed in the November and January budgets. Additional investments toward creating 100,000 jobs will come over the next ten years.

\$1.1+ billion

Funding already committed by City toward programs that will create good-paying jobs

\$250+ million

Additional funding that the City will approve in the November and January budget plans

Create a Partnership Team as a Resource for Businesses to Connect with the City

A partnership team will be run out of the Economic Development Corporation and will serve as a front door to businesses looking to stay, expand, or relocate to New York City’s neighborhoods, incubator networks, and major employment districts. NYCEDC will:

- » Heighten outreach efforts in industries the City has prioritized to identify and support businesses coming into the city
- » Align local, state, and regional programs that promote NYC as a place to do business to help facilitate business growth and expansion
- » Develop strategic financing, real estate, and programmatic partnerships with the private sector that advance growth and innovation of target industries
- » Bolster existing international attraction efforts to measurably boost foreign direct investments in the city’s economy and businesses

Near-term Milestones

The City is committed to the following next steps within the year to begin implementing the five strategies articulated in this plan. The City will provide an annual update on progress against these and future milestones:



Tech

- » Release the first cybersecurity RFP
- » Convene cybersecurity industry leaders to advise on sector needs
- » Top out construction for the Dock 72 project at the Brooklyn Navy Yard
- » Start construction on the B. New York incubator at the Brooklyn Navy Yard

Life Sciences and Healthcare

- » Release LifeSci Hub RFEI
- » Launch the LifeSci NYC incubator
- » Launch the LifeSci NYC internship program
- » Host a Digital Health Marketplace matchmaking event

Industrial and Manufacturing

- » Select an operator for the South Brooklyn Marine Terminal
- » Complete FreightNYC study
- » Open 1 million square feet of space at Building 77 at the Brooklyn Navy Yard
- » Open the FutureWorks TechShop at the Brooklyn Army Terminal
- » Lease and open an additional 500,000 square feet of industrial space at the Brooklyn Army Terminal

Creative and Cultural Sectors

- » Open the first phase of the Steiner Studios expansion at the Brooklyn Navy Yard
- » Open the VR/AR Lab
- » Launch the fashion support package for garment manufacturers
- » Launch the Made in NY Animation Project



Space for Jobs of the Future

- » Release RFP to start HRA’s move to anchor new office development in East New York
- » Select a developer for the City-owned site on Vernon Boulevard in Long Island City

Connecting New Yorkers to Good Jobs

- » Launch first cohorts of ApprenticeNYC

Rendering by SHoP Architects





Acknowledgments

New York Works is the result of the work of many people who are deeply committed to the creation of quality jobs for New Yorkers and the continued economic success of New York City. We believe this plan is ambitious, but achievable, largely due to the continued hard work of those who contributed to its creation.

We would especially like to thank the following people for their support and contributions to this report:

Office of the Mayor

Alicia Glen
Deputy Mayor
Housing and Economic Development

Agency Leaders

James Patchett
President & CEO
Economic Development Corporation

Gregg Bishop
Commissioner
Department of Small Business Services

Marisa Lago
Director, *Department of City Planning*
& Chair, *City Planning Commission*

David Ehrenberg
President & CEO
Brooklyn Navy Yard Development Corporation

Julie Menin
Commissioner
Mayor’s Office of Media and Entertainment

Barbara Chang
Executive Director
Mayor’s Office of Workforce Development

Anne Roest
Commissioner
Department of Information Technology and Telecommunications

Miguel Gamino
Chief Technology Officer

Tom Finkelpearl
Commissioner
Department of Cultural Affairs

Fred Dixon
President & CEO
NYC & Company

The staff across the following City agencies:

Economic Development Corporation

Department of Small Business Services

Department of City Planning

Mayor’s Office of Media and Entertainment

Mayor’s Office of Workforce Development

Department of Information Technology and Telecommunications

Department of Cultural Affairs

NYC & Company

A special thanks to :

Sandra Abeles, Lauren Andersen, Ana Ariño, Alia Avidan, Stephanie Baez, Ana Berenguer, Rebecca Blatt, Nathan Bliss, Mary Clarke, Alex Costas, Kate Daly, Lakshmi Davey, Charles Euchner, Carolee Fink, Barry Finnerty, Charles Gans, Shira Gans, Eric Goodnight, Kimberly Grauer, Jennifer Gravel, Lindsay Greene, Kelly Gu, Anthony Hoglebe, Alia Jones-Harvey, Edward Hogikyan, Eleni Janis, Eileen Jones, James Katz, Yume Kitasei, Cecilia Kushner, Matthew Kwatinetz, Jackie Mallon, Kyle Marks, Thomas McKnight, Jeffrey Lee, Louis Lee, Emily Lessard, Caitlin Lewis, Jessie Moore, Jeffrey Nelson, Clare Newman, Wiley Norvell, Andrew Perry, Alicia Powers, Sophia Richter, Carl Rodrigues, Johan Salen, Eileen Salzig, Mohit Shewaramani, Howard Slatkin, Lydon Sleeper, Mark Thomas, SreeKirthi Vadlamuri, Sonam Velani, Nikki Yurkoski

In memory of Peter Wertheim.

This report was designed by:

Bellweather Agency
www.bellweather.agency

Notes

EXECUTIVE SUMMARY

Introduction

NYC’s population today and growth projections are based on data reported by the Department of City Planning in New York City Population Projections by Age/Sex & Borough, 2010-2040. https://www1.nyc.gov/assets/planning/download/pdf/data-maps/nyc-population/projections_report_2010_2040.pdf

Employment statistics on jobs added are based on data and projections reported by Current Employment Statistics from the New York State Department of Labor and the U.S. Bureau of Labor Statistics.

The percentage of foreign born workers in New York City is based on data from the U.S. Census Bureau American Community Survey (2011-2015 5-year estimates).

The number of languages spoken in NYS is reported by the Department of City Planning NYC Population Facts. <https://www1.nyc.gov/site/planning/data-maps/nyc-population/population-facts.page>

The number of visitors to New York City in 2016 is reported by NYC & Company.

The Challenges of Our Time

Employment rate by education level is based on the U.S. Census Bureau Current Population Survey.

Country income gains by household are based on a study by the University of California Berkeley: “Striking it Richer: The Evolution of Top Incomes in the United States.” <http://eml.berkeley.edu/~saez/saez-UStopin-comes-2012.pdf>.

The number and percentage of New Yorkers earning middle income wages are based on data from the U.S. Census Bureau American Community Survey (2005-2015 1-year estimates).

Technological disruptions to the labor market and the impacts of automation are discussed in a report by McKinsey & Company (January 2017). <http://www.mckinsey.com/global-themes/digital-disruption/harnessing-automation-for-a-future-that-works>

Foundations for Growth

The ten-year capital budget amounts are based on the FY 2018-2027 Preliminary Ten-Year Capital Strategy, published by the Office of Management and Budget. <http://www1.nyc.gov/assets/omb/downloads/pdf/typ4-17.pdf>

A report entitled “One New York: The Plan for a Strong and Just New York” outlines the City’s plan to ensure an inclusive economy, a healthier environment, more affordable housing, and more reliable and resilient infrastructure. <http://www.nyc.gov/html/onenyc/downloads/pdf/publications/OneNYC.pdf>

Progress toward the creation and preservation of affordable apartments and enrollment of children in free, universal pre-k are provided in various City press releases. <http://www1.nyc.gov/site/hpd/about/press-releases/2017/01/01-19-17.page> <http://www1.nyc.gov/office-of-the-mayor/news/192-16/with-just-two-weeks-left-apply-early-mayor-de-blasio-urges-parents-sign-up-pre-k-all#/0>

5 Strategies to Create Good Jobs for New Yorkers

Statistics on goods traveling in and out of New York with methods and checkpoints are documented in the Metropolitan Rail Freight Council Action Plan. <https://www.nycedc.com/sites/default/files/file-manager/Programs/MRFC-Action-Plan.pdf>

The percentage of trucks entering the city from the west is an estimate from industry experts.

Congestion rankings by city are based on an INREX press release. <http://inrix.com/press-releases/los-angeles-tops-inrix-global-congestion-ranking/>

INTRODUCTION

Introduction

Loss of residents from 1970 to 1980 is calculated from reports on NYC Total and Foreign Born Population from 1970-2000. https://www1.nyc.gov/assets/planning/download/pdf/data-maps/nyc-population/historical-population/1790-2000_nyc_total_foreign_birth.pdf

A Global Capital

New York City’s Gross City Product (GCP) is published by the New York City Office of Management and Budget.

A listing of Fortune 500 companies and headquarter city was published in 2016 by Fortune Magazine. <http://beta.fortune.com/fortune500/list/>

Statistics on foreign born workers are based on U.S. Census Bureau American Community Survey (2011-2015).

Percentage of business owners who are immigrants comes from the U.S. Census Bureau American Community Survey (5-year sample 2011-2015).

Statistics on millennials and their education levels are based on a report by the Office of Comptroller entitled “New York City’s Millennials in Recession and Recovery” (April 2016).

Higher education institutions in New York City can be found through the New York State Office of Higher Education website. A New York Times article entitled “America’s Greatest Working Class Colleges” discusses the upward mobility of colleges in the United States. <https://www.nytimes.com/2017/01/18/opinion/sunday/americas-great-working-class-colleges.html>

Top entertainment venues by revenue was published in Billboard, “The World’s Top 10-Grossing Concert Venues and the Execs Who Run Them” (September 21, 2015). <http://www.billboard.com/articles/business/6700792/worlds-10-top-grossing-concert-venues-list>

Opportunity at a Time of Change

Statistics on workers below the poverty line are based on data reported by the Mayor’s Office of Economic Opportunity.

The number of workers making less than \$15 per hour (over 1.0 million) is based on data from the U.S. Census Bureau American Community Survey (2015 1-year sample).

The number of millennial job changes before the age of 32 is stated in a CNN Money article entitled “The New Normal: 4 job changes by the time you’re 32.” <http://money.cnn.com/2016/04/12/news/economy/millennials-change-jobs-frequently/index.html>

Estimates of self-employed and freelance workers are based on the U.S. Census Bureau American Community Survey (2014).

Statistics on unemployment rate for New Yorkers without a college degree are based on the U.S. Census Bureau Current Population Survey.

Setting the Foundations for Growth

Statistics on education spending and resulting increased graduation rates are found in a Chalkbeat article entitled “New York City’s education budget has jumped over 40 percent in 10 years. Here’s why.” <http://www.chalkbeat.org/posts/ny/2017/02/28/new-york-citys-education-budget-has-jumped-over-40-percent-in-10-years-heres-why/>

Data on crime rates are reported by the New York City Police Department. <http://www1.nyc.gov/site/nypd/stats/crime-statistics/compstat.page>

TECH: INNOVATION ACROSS INDUSTRIES

Introduction

All statistics about total employment, average salary, and job accessibility in the tech ecosystem come from an HR&A report commissioned by New York City in 2014. This report defines the technology ecosystem as inclusive of both tech jobs in technology industries as well as technology jobs in non-technology industries. http://www.hraadvisors.com/wp-content/uploads/2014/03/NYC_Tech_Ecosystem_032614_WEB.pdf

Seed Investments in New Technologies that Will Create Good-Paying Jobs and Improve the Competitiveness of NYC Industries

Cybersecurity market size and projection come from a March 2016 Forbes article that cites Gartner research for 2015 global cyber spending and a Market and Markets Report for expected 2020 global cyber spending. <https://www.forbes.com/sites/stevemor-gan/2016/03/09/worldwide-cybersecurity-spending-increasing-to-170-billion-by-2020/#8a23cd868323>

The number of current cybersecurity jobs in NYC was estimated by NYCEDC based on information from the U.S. Bureau of Labor Statistics, CB Insights, and survey data. Job growth projections were extrapolated from demand estimates from jobs postings as collated by Burning Glass Labor Insights.

Starting salaries for cybersecurity are based on proxies by starting salaries for information security analysts in the NY-NJ Metro Area per PayScale Human Capital for IT analysts in NY-NJ metro area.

The number of job openings for tech in the last year was collated by Burning Glass Labor Insights (this includes technology occupations in non-technology sectors).

Demographics on students (percentage foreign born and percent first-generation college) come from CUNY’s Fall 2015 Undergraduate Demographic Profile.

http://www.cuny.edu/about/administration/offices/ira/ir/data-book/current/student/ug_student_profile_f15.pdf

CUNY statistics come from internal CUNY data shared with the Department of Small Business Services.

LIFE SCIENCES AND HEALTHCARE: GOOD JOBS AND BETTER LIVES

Introduction

Initial statistics on the life sciences industry come from research previously conducted by NYCEDC. <https://www.nycedc.com/industry/life-sciences>

Data on the healthcare sector (number of jobs in the sector more broadly, as well as job and wage growth in ambulatory health services) comes from Bureau of Labor Statistics QCEW (2015). This refers to both healthcare and social assistance jobs.

Vault New York City to the Forefront of Research and Innovation in Life Sciences

More detail on the Life Sciences initiative can be found at the LifeSci website and in a May 2017 press release. <http://www.lifesci.nyc/> <https://www.nycedc.com/press-release/nycedc-names-mayor-s-life-sciences-advisory-council>

Drive Innovation in Healthcare to Improve Delivery and Health Outcomes

The number of New Yorkers that do not have a regular healthcare provider is reported by the Department of Health and Mental Hygiene’s Division of Epidemiology, derived from their 2014 Community Health Survey of adults age 18+. The percentage of zip codes that are considered medically underserved is based on NYCEDC’s 2014 NYC Health Sector Study conducted by Oliver Wyman.

Growth of the home health aide (or medical assistant) profession are based on projections by the New York State DOL.

INDUSTRIAL AND MANUFACTURING: POWERING NEW YORK

Introduction

Total jobs in the industrial ecosystem (530,000) is based on data reported by the Bureau of Labor Statistics QCEW.

Median wage comes from the U.S. Census American Community Survey (5-yaer sample 2011-2015).

The percentage of jobs not requiring a college degree (60 percent) and the portion of New Yorkers (nearly half) working in industrial and manufacturing jobs that were born outside the U.S. is based on the U.S. Census Bureau American Community Survey (5-year sample 2011-2015).

Strengthen the City’s Logistics and Distribution Systems through FreightNYC

Value of goods distributed annually (\$720B), New York’s status as the largest consumer market, the percentage of goods moved by truck (91 percent), and the expected increase in New York-New Jersey metropolitan region goods volume by 2040 all come from the Metropolitan Rail Freight Council Action Plan. <https://www.nycedc.com/sites/default/files/filemanager/Programs/MRFC-Action-Plan.pdf>

Congestion cost for NYC (\$16.9 billion) and average time spent in traffic comes from INRIX. <http://inrix.com/press-releases/los-angeles-tops-inrix-global-congestion-ranking/>

Median wage of \$52,000 across rail freight, water transport, and truck transport and percentage of jobs available without a bachelor’s degree (79 percent) comes from NYCEDC analysis using underlying American Community Survey data.

More information on the Marine Highway can be found in the DOT America’s Marine Highway Program overview. https://www.marad.dot.gov/wp-content/uploads/pdf/AMH_Fact_Sheet_V9.pdf

Median wage of \$72,000 for water transportation comes from U.S. Census Bureau American Community Survey.

Number of truck trips eliminated in the next five years (275,000) comes from NYCEDC analysis using USDOT TIGER Methodology.

CREATIVE AND CULTURAL SECTORS: COMMUNITY ASSET, GLOBAL BRAND

Introduction

Job count for the creative and culture sector is calculated from the sum of jobs in contributing sectors including fashion, film/television, media and design, and music (see individual sources below).

Job count (183,000), average annual wage (\$57,000), and tax generation (\$2 billion in taxes) in the fashion industry are based on data from the QCEW and a report released by the New York City Economic Development Corporation. <https://www.nycedc.com/in-the-spotlight/fashion>

Estimates of \$900 million in economic activity from Fashion Week were released in a number of news reports including one by Crain’s New York Business. <http://www.crainnewyork.com/article/20160914/OPINION/160919960/its-fashion-week-but-new-data-show-why-nyc-celebrates-fashion-all-year>

Number of jobs (130,000), average annual salary (\$53,000), and number of film/television series produced in the film and television industry are detailed in a February 6, 2017 hearing on the Economic Impact of the Film and Television Industry on NYC.
https://www1.nyc.gov/assets/mome/pdf/2.6.17_Hearing_Testimony_CJM.pdf

Number of jobs (125,000 in media and 44,000 in design) and median wages (\$61,512 in media and \$87,213 in design) are based on data from the U.S. Census Bureau American Community Survey and the Bureau of Labor Statistics Occupational Employment Statistics (May 2014).

Number of jobs (over 31,000), average annual wage (\$90,000), and economic impact (\$13.7 billion) in the music industry are based on a report by the Mayor’s Office of Media and Entertainment entitled “Economic Impact, Trends, and Opportunities Music in New York City.”
https://www1.nyc.gov/assets/mome/pdf/MOME_Music_Report_2017_DIGITAL.pdf

Maintain Leadership in “Made in NY” Fashion and Entertainment

Estimations for the growth of podcast networks and demand for new jobs are based on conversations between the Mayor’s Office of Media and Entertainment and the largest podcast employers in New York City.

Increase of VR/AR job demand and investments are published in a NYCEDC press release entitled “NYCEDC and MOME Release VR/AR Lab RFP.”
<https://www.nycedc.com/press-release/nycedc-and-mome-release-vrar-lab-rfp>

New York City is cited as having more designers than any other metropolitan area in the U.S. in the Center for Urban Future Report “New York’s Design Economy” (May 2014).
<https://nycfuture.org/data/new-yorks-design-economy>

Preserve the Cultural and Entertainment Assets that Make NYC a Great Place to Live, Work, and Visit

New York City is stated as the nation’s largest public funder of arts and culture in the nation (after the federal government) by the New York City Department of Cultural Affairs.
<http://www.nyc.gov/html/dcla/html/funding/funding.shtml>

The percentage of small music venues that have closed in the last fifteen years was released in the Mayor’s Office for Music and Entertainment report entitled “Economic Impact, Trends, and Opportunities Music in New York City.”
https://www1.nyc.gov/assets/mome/pdf/MOME_Music_Report_2017_DIGITAL.pdf

SPACE FOR JOBS OF THE FUTURE: ENABLING GROWTH

Introduction

The number of commercial real estate square feet in New York City is stated in a February 2017 Office of New York State Comptroller report on New York City’s Office Market.
<https://www.osc.state.ny.us/osdc/rpt10-2017.pdf>

Growth in demand for office space in New York City (60 million square feet in the next ten years) came from an internal analysis conducted by NYCEDC.

Statistics on number of jobs relying on commercial office space or office-using components came from an internal analysis conducted by NYCEDC that uses employment information by the Bureau of Labor QCEW and occupational data from NYS DOL Occupational Employment Statistics (2015).

Support Jobs Closers to Where New Yorkers Live

Population growth by borough is published in the NYC Department of City Planning (July 2016).
<http://www1.nyc.gov/site/planning/data-maps/nyc-population/current-future-populations.page>

The concentration of commercial office space in Manhattan is based on data reported by the New York City’s Department of Finance and PLUTO Database.

Commercial office space square footage by borough is based on data from CoStar.

CONNECTING NEW YORKERS TO GOOD JOBS

The number of New Yorkers lacking the education to start on a pathway to career is based on the U.S. Census Bureau American Community Survey stating that 2.2M people do not have a high school diploma and/or have low English proficiency.

The number of connections to jobs (more than 75,000) supported since the Career Pathway plan was put in place is calculated using data from the Mayor’s Management Report (2016) and an internal Office of Workforce Development tracker.
http://www1.nyc.gov/assets/operations/downloads/pdf/mmr2016/2016_mmr.pdf

ADDITIONAL ECONOMIC IMPACTS

Introduction

The number of jobs supported in full or in part by tourism is calculated using direct, indirect, and induced visitor spending in an analysis by NYC & Company and Tourism Economics (October 2016).

Create and Connect New Yorkers to Construction Jobs

Data on employment in the NYC construction industry is based on NYS DOL data (seasonally adjusted) and discussed further in reports by the New York Building Congress.

Construction spending (over \$42 billion in 2016) is stated in a New York Building Congress Report in May 2017. Spending by sector can be found in a number of additional reports by the New York Building Congress.
<https://www.buildingcongress.com/outlook/>
<https://www.buildingcongress.com/outlook/041316.html>
<https://www.buildingcongress.com/research/healthy-city/01.html>

Average annual wage (\$43,576) and income distributions for construction workers are based on U.S. Census Bureau American Community Survey (2011-2015 5-year estimates).

Demographics of construction workers (nationality, primary language, age, and education level) are based on data from the U.S. Census Bureau American Community Survey (2011-2015 5-year estimates).

Tourism statistics (direct visitor spending, number of jobs supported, visits to cultural organizations, and total economic impact of tourism) are released by the NYC & Company. Public figures are available through 2015.
<http://www.nycandcompany.org/research/nyc-statistics-page>

Continue to Invest in Tourism Growth across the Five Boroughs to Support the Over 375,000 Jobs Supported by Visitor Spending

Hotel demand, rooms sold, and revenues contributed to the city are discussed in a NYC & Company report.
<http://www.nycandcompany.org/communications/nyc-company-announces-total-nyc-visitors-surpasses-60-million-for-first-time>



nyc.gov/NewYorkWorks
#NewYorkWorks