



# New York City Regional Economic Development Council



STATE OF THE REGION:

# New York City 2023 STRATEGIC PLAN









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## MESSAGE FROM THE CO-CHAIR

Governor Hochul, Lieutenant Governor Delgado, and Commissioner Knight:

On behalf of the New York City Regional Economic Development Council (NYCREDC), I am pleased to submit our 2023 Strategic Plan, including the council's submission for the Challenge Competition.

From its inception, the NYCREDC has promoted inclusive growth across the five boroughs of New York City. We have engaged extensively with diverse community stakeholders, business sectors, state agencies, and local leadership. This comprehensive engagement has fostered a robust pipeline of projects that has increased economic opportunity and strengthened the workforce of our region.

Our report details the NYCREDC's continued efforts to work with community stakeholders and entrepreneurial sectors to implement our regional plan and to secure the best possible applications for state support. We also highlight priority projects that align with Governor Hochul's priorities in infrastructure, affordable housing, education, and workforce development.

Additionally, we outline our response to the state's Challenge Competition. The NYCREDC has chosen "Workforce" as our challenge topic. Based on input from stakeholders regarding the humanitarian and fiscal implications of the migrant/asylum seeker influx to our city, the NYCREDC has identified this population as our most immediate workforce challenge and opportunity. We have developed a proposal that specifically addresses their needs.

The regional council initiative, which Governor Hochul has championed, has established a more transparent and inclusive economic planning and development process in New York state. We thank you for your continued commitment to strengthening the city's economy through the REDC, which we are proud to be a part of.

Sincerely,



**Félix V. Matos Rodríguez**  
*Chancellor*  
City University of New York



BROADWAY  
KEEP  
LEFT

MADISON SQUARE NORTH HISTORIC DISTRICT  
5 AV

MADISON SQUARE NORTH HISTORIC DISTRICT  
W 27 St

PART ONE

# Executive Summary & Progress

ONE

ONE WAY





# Executive Summary

The NYREDC has developed a strategic plan for inclusive economic growth and established priorities to help guide New York State's investments and policies related to economic opportunity and job creation. The NYCREDC's long-term vision is a New York City where the benefits of prosperity are widely shared across its neighborhoods and diverse populations, especially where need is greatest. The updated strategic plan laid out in this report seeks to reinforce the prominent industries and institutions that anchor the city's economy and to foster collaboration between the public and private sectors to build new clusters in growth sectors of the city's economy. This report was produced with the assistance of Kearney, a global management consultancy which the NYCREDC commissioned to provide fresh and objective perspectives and insights on building long-term economic growth.

The strategic plan envisions a renewed focus on innovation and climate resiliency, modernization and expansion of the region's infrastructure, public-private partnerships, and a redoubled commitment to workforce development. This will require leadership from the public sector, as well as industry, civic, and labor leaders.

The city also has strategic competitive advantages and assets that enable its growth. New York City is the headquarters for multiple industries including finance, tech, tourism, entertainment, media, fashion, professional and information services, real estate, healthcare, and education. The concentration of leading industry firms is a magnet for global talent and business investment. The city boasts of a diverse and highly skilled population, 33% of whom have a bachelor's degree.<sup>1</sup> There is a pool of homegrown talent passing through the city's broad network of community and four-year colleges, graduate institutions, research facilities, workforce training programs, and other educational opportunities.

At the same time, the city faces a number of challenges:

- **Shortage of affordable housing** (defined as when a household spends more than 30% of its income on rent) is an obstacle to talent attraction and retention.<sup>2</sup>

- **Public safety** is a significant quality-of-life issue, and while the crime rate is relatively low in New York City compared to other large U.S. cities, there was a 23% increase in major felony offenses in 2022.<sup>3</sup>
- **Climate risk** resulting from the city's 500 miles of coastline necessitate innovative solutions that promote sustainability and resiliency, but at a significant cost.
- The expense of providing **pre-K-12 education** to a multilingual community with significant additional needs represents another major financial commitment.
- Finally, New York City's complex **legal and regulatory environment** drives up the cost of doing business and is particularly difficult for small and new businesses to navigate.

The COVID-19 pandemic has created new challenges for the city with respect to the increase in remote work, the slow return of international tourism and business travel, and the acceleration of a digital economy that demands new skills from the workforce. As of September 2023, New York City had regained almost one million jobs lost during the pandemic and today has a total of 4.7 million jobs (with 4.1 million in the private sector). A recent-to-office survey by the Partnership for New York City showed a 30% increase in return-to-office numbers since October 2021. Office occupancy is still less than 60% of pre-pandemic numbers, proving that commercial vacancy rates due to remote work are still a challenge.<sup>4</sup>

The major areas that the NYREDC has identified as top priorities are:

- Continued investment in building the city's innovation economy, to achieve global leadership in artificial intelligence (AI), advanced manufacturing, life science, and climate tech. The strategic plan hinges on the city's ability to achieve democratized access to frontier technologies for residents and entrepreneurs. An example of how the NYCREDC is contributing to this objective is in our investment in Nanotronics Imaging, a provider of AI-enhanced super imaging systems with application across industries. The NYCREDC



has also invested in the development of the Brooklyn Navy Yard as a center of advanced manufacturing initiatives such as Newlab and the Green Manufacturing Center. Over \$1.5 billion in city and state funds have been committed to investments in the life science sector, creating incubators and research programs such as the New York Genome Center. On Governors Island, the NYCREDC is supporting a climate resilient solutions project that will complement a new climate solutions consortium led by Stony Brook University.

- Investments in upgrading the city’s built environment to meet changing demands of a growing, 21st century city. The NYCREDC has prioritized the need for creating and upgrading affordable housing as well as upgrading facilities that provide training, social services, educational, and cultural benefits. The NYCREDC focuses on infrastructure investments that make aging buildings more climate resilient and efficient, reduce carbon emissions, and improve public health. The strategic plan highlights opportunities and examples of successful infrastructure partnerships that enable economic growth and job creation, including offshore wind developments at the South Brooklyn Marine Terminal and a new mixed-use project combining light manufacturing with affordable and supportive housing developed by the Greenpoint Manufacturing and Design Center.
- Finally, economic opportunity and upward mobility require a better prepared and connected workforce. The NYCREDC is interested in continuous workforce development, particularly in critical growth industries anchored by approaches that allow New Yorkers to live in dignity and equity, strengthen communities, and help employers to train, attract, and retain top talent.

The NYCREDC is leveraging this year’s Challenge Competition to support the development of human capital and achieve a more diverse, qualified, and inclusive workforce. The NYCREDC chose “Workforce” as a topic and has developed a proposal that addresses the needs of recently arrived migrants. Specifically, the NYCREDC hopes to develop a facilitation program, implemented by community-based organizations, which will provide referrals for the individual needs of new migrants, whether those be legal, job and language training, housing, or wraparound support services (to name just a few).

## INTRODUCTION

Throughout its 400-year history, New York has been America’s preeminent gateway city, welcoming diverse populations from around the world with the promise of freedom, personal security, and economic opportunity. The pandemic had a profound impact on the city in terms of exposing disparities that contradict these values. As of September 2023, New York City had an unemployment rate of 5.2%, accounting for over 211,000 unemployed New Yorkers.<sup>5</sup> This rate increases for Black New Yorkers, more than 12% of whom are unemployed and job seeking. The public assistance rolls have increased 52% since February 2020.

The NYCREDC’s mission is to design and execute strategies that become templates for investing in projects with the potential to create long-term inclusive growth and make the city more equitable and livable.







# State of the Region

Since its inception, the NYCREDC has released an annual progress report detailing the region's steady economic growth. In 2023, the NYCREDC's strategic plan assesses the city's economy and updates strategies and priorities for investment with a continued focus on economic development.



New York City continues to be the primary driver of the state’s overall economy, with a gross regional product (GRP) of \$886 billion, or 58% of the state’s GRP of \$1.5 trillion in 2021.

- The city’s outsized contribution to the state’s economy reflects the sheer size of its population and its diverse mix of industries. Accounting for 874,000 and 789,000 jobs respectively, health-care, and social assistance and professional services represent nearly 36% of the city’s jobs.
- New York City is on a solid path to recovery, reclaiming nearly a million jobs lost during the pandemic. The overall unemployment rate stood at 5.7% as of 2022, a far cry from the 12.2% numbers seen in 2020 during the peak of the pandemic.
- At the same time, as of April 2023, white unemployment stood at 1.7%, while Hispanic unemployment was 6.8%, and the unemployment rate among Black New Yorkers was 12.4%.<sup>6</sup> Addressing these disparities is essential to achieve a stronger and more equitable recovery.
- “More than a quarter of New York City employers’ job postings in Q3 2023—nearly 44,000 openings—were for entry-level roles that require less than a bachelor’s degree and no prior professional experience<sup>7</sup>.
- Venture capital (VC) is a critical component of modern economic growth, especially in high-tech industries. An increasing number of VC firms have made a strong commitment to investing in local companies with firms like Sequoia and Index Ventures both recently opening inaugural offices in New York City. Although 2022 saw a decrease in funding from 2021, New York City-based companies received approximately \$30 billion in VC funding, the second most on record.
- As it relates to the quality of life for residents, it’s essential to recognize that the skills gap for quality employment starts in Pre-K. The city’s public high school graduation rate has been trending upward, reaching over 80% as of 2022, with an average year-over-year increase of 3% from 2016 to 2022. Every year, a greater share of students graduates from high school. The impact of the pandemic, however, resulted in roughly half of public-school graduates failing to

be college ready, according to the New York City Public Schools.<sup>8</sup>

- New York City is home to several outstanding centers of higher education, including, among others, the City University of New York (CUNY), America’s largest urban university system. Roughly one-third of residents have a bachelor’s degree or advanced degree; however, participation is unevenly distributed, particularly in the outer boroughs where less than 30% of the population has completed a bachelor’s or advanced degree.
- High poverty remains a challenge in the city, where 17% of individuals live below the federal poverty line, compared to 13.5% of residents statewide. While poverty plagues all age cohorts, it disproportionately impacts the city’s youth. Over 20% of New Yorkers under 20 years of age live in poverty.

Since its inception, the NYCREDC has released an annual progress report detailing the region’s steady economic growth. In 2023, the REDC’s strategic plan assesses the city’s economy and updates strategies, priorities, and focus areas for investment with a continued focus on economic development.

### JOBS BY INDUSTRY SECTORS AND SUBSECTORS (EMPLOYMENT BY INDUSTRY)

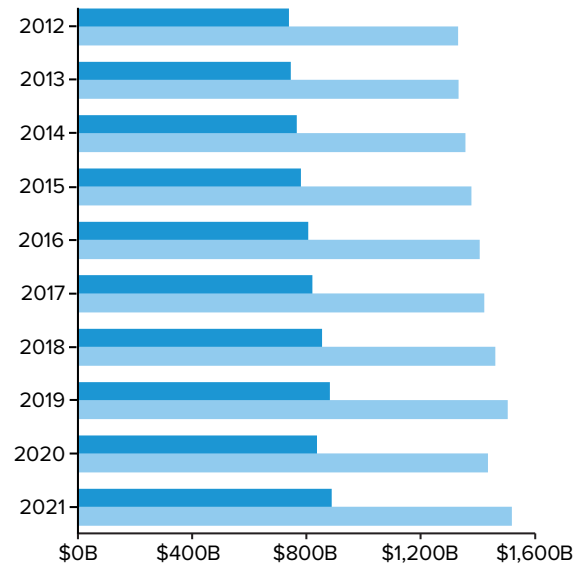
Figure 1.1

| Industry Sectors and Sub-Sectors            | New York City    |             |
|---|------------------|-------------|
|   | Jobs             | % of Total  |
| <b>Construction</b>                         | <b>171,258</b>   | <b>4%</b>   |
| <b>Education</b>                            | <b>195,989</b>   | <b>4%</b>   |
| <b>Health Care and Social Assistance</b>    | <b>873,536</b>   | <b>19%</b>  |
| <b>Financial Activities</b>                 | <b>485,646</b>   | <b>11%</b>  |
| Finance and Insurance                       | 345,767          | 8%          |
| Real Estate                                 | 139,879          | 3%          |
| <b>Information</b>                          | <b>235,151</b>   | <b>5%</b>   |
| <b>Leisure and Hospitality</b>              | <b>429,283</b>   | <b>9%</b>   |
| <b>Manufacturing</b>                        | <b>62,062</b>    | <b>1%</b>   |
| <b>Natural Resources and Mining</b>         | <b>912</b>       | <b>0%</b>   |
| <b>Professional and Business Services</b>   | <b>788,576</b>   | <b>17%</b>  |
| <b>Trade, Transportation, and Utilities</b> | <b>618,992</b>   | <b>14%</b>  |
| Retail Trade                                | 317,379          | 7%          |
| Wholesale Trade                             | 124,180          | 3%          |
| Transportation and Utilities                | 177,433          | 4%          |
| <b>Other Services</b>                       | <b>199,854</b>   | <b>4%</b>   |
| <b>Total Private</b>                        | <b>4,063,281</b> | <b>88%</b>  |
| <b>Government</b>                           | <b>553,080</b>   | <b>12%</b>  |
| <b>Total</b>                                | <b>4,616,361</b> | <b>100%</b> |

# 1. GENERAL ECONOMY

## GROSS REGIONAL PRODUCT (\$B, 2012–2021)

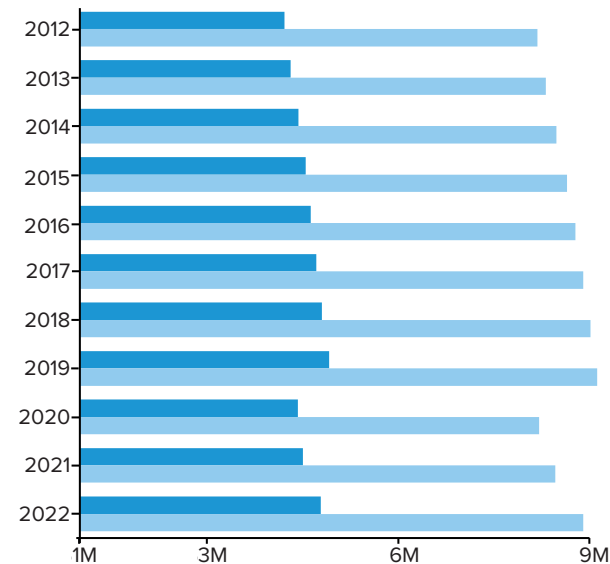
Figure 1.2



Source: Bureau of Economic Analysis  
 Note: Figures are inflation-adjusted to 2012 dollars

## PRIVATE SECTOR EMPLOYMENT (M, 2012–2022)

Figure 1.3

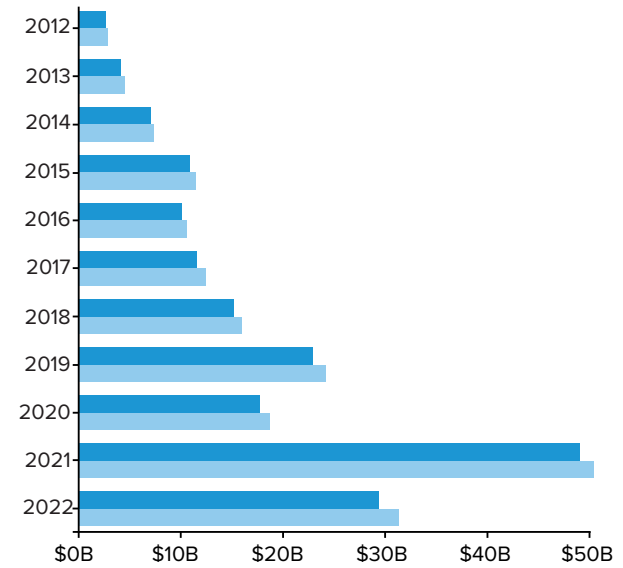


Source: Lightcast

New York City New York State

## VENTURE CAPITAL INVESTMENT (\$B, 2012–2022)

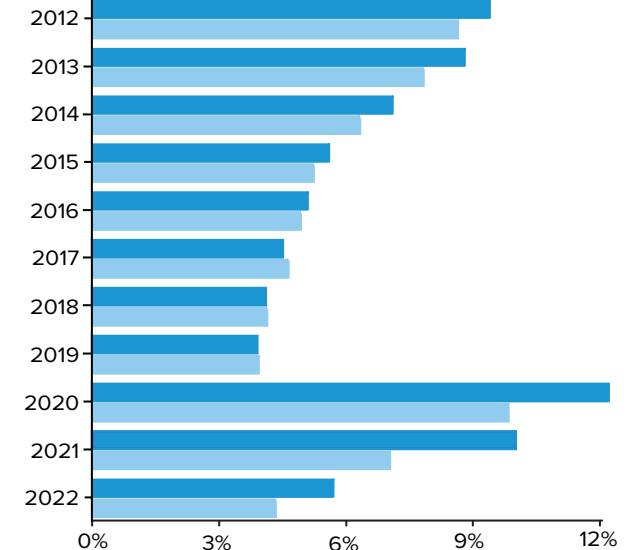
Figure 1.4



Source: Pitchbook

## UNEMPLOYMENT RATE (% , 2012–2022)

Figure 1.5



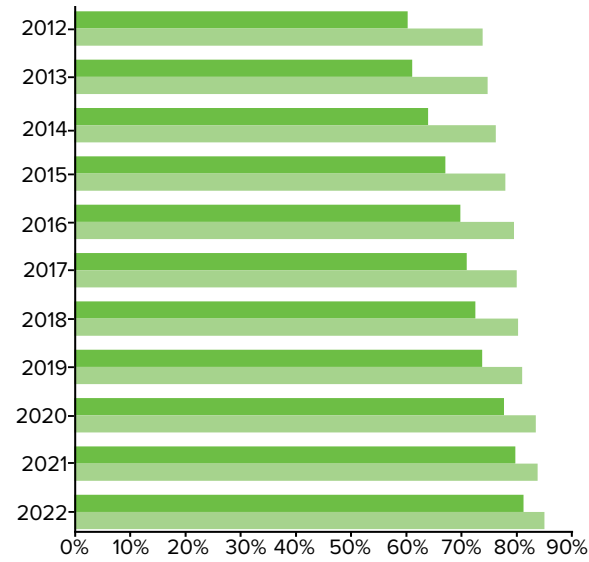
Source: NYS Department of Labor



## 2. QUALITY OF LIFE

### PUBLIC HIGH SCHOOL GRADUATION RATE (% , 2012–2022)

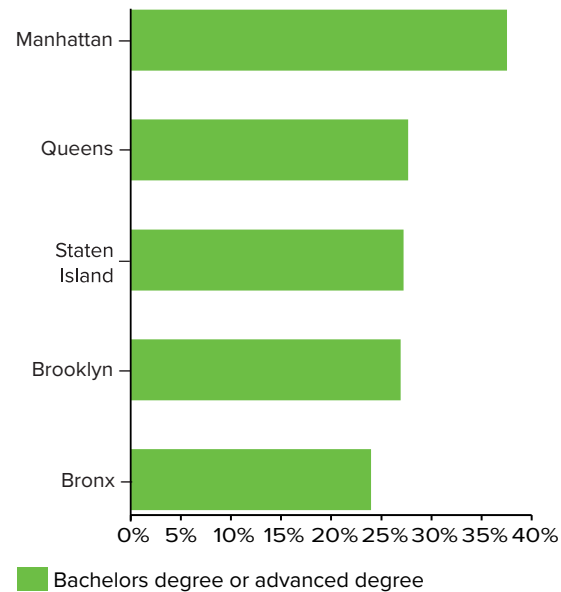
Figure 1.6



Source: NYC Department of Education; NYS Education Department

### EDUCATIONAL ATTAINMENT BY BOROUGH (% , 2022)

Figure 1.7

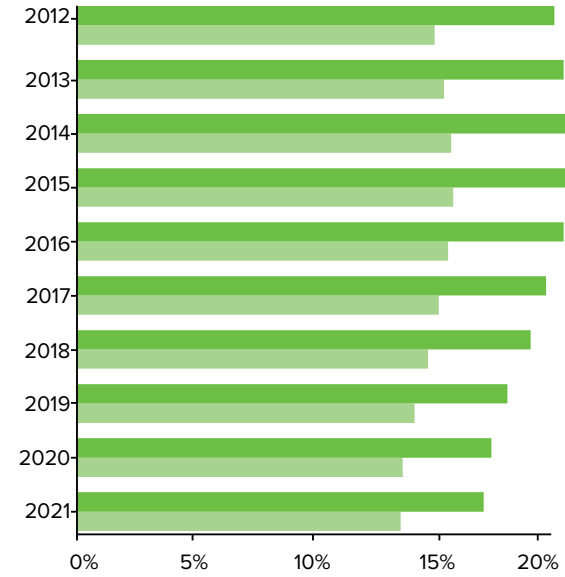


Source: Lightcast

New York City New York State

### SHARE OF RESIDENTS LIVING IN POVERTY (% , 2012–2021)

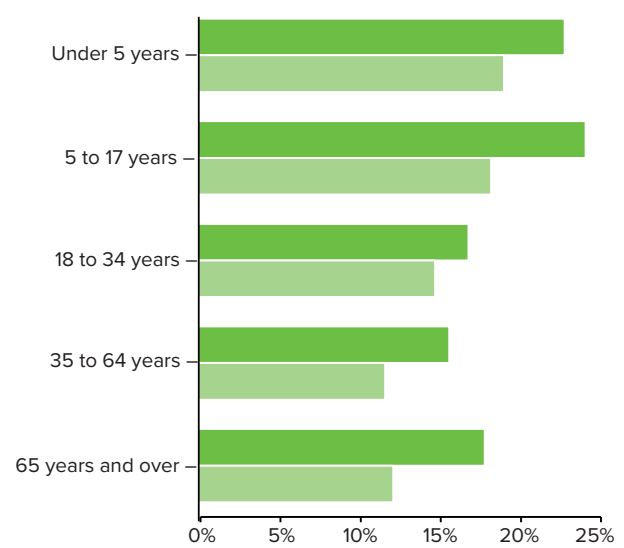
Figure 1.8



Source: U.S. Census, American Community Survey

### POVERTY RATE BY AGE (% , 2021)

Figure 1.9



Source: U.S. Census, American Community Survey



# Status of Past CFA Projects

Through the statewide REDC and CFA process, the New York City region has been awarded \$535.2 million in grants and ESD Excelsior tax credits in the first 12 funding rounds for 980 total projects.





**INTRODUCTION**







Through the statewide REDC and Consolidated Funding Application (CFA) process, the New York City region has been awarded \$535.2 million in grants and Empire State Development (ESD) Excelsior tax credits in the first 12 funding rounds for 980 total projects. Currently, 40.1% of these projects are complete, while another 45.2% are on schedule.







The region’s 886 active projects will create and retain 42,400 jobs. With the assistance of nearly \$447 million in grants and ESD Excelsior tax credits, these projects will result in nearly \$6.3 billion in private and other public investment, with a ratio of award amount to total project cost of approximately 1:14.

Over the first 12 rounds of the CFA, the NYCREDC designated 110 ESD capital-grant-awarded projects as priority projects. The 87 active priority projects have been awarded a total of nearly \$115 million, which will leverage a total of nearly \$3.6 billion in private and other public investment at a ratio of award amount to total project cost of approximately 1:31. Approximately 70% of the priority projects are either complete or on schedule.

# Overview of All Previously Funded Priority Projects

## SUMMARY STATUS OF PAST PRIORITY PROJECTS BY ROUND

| Status  | Round I  | Round II | Round III | Round IV | Round V   | Round VI  | Round VII | Round VIII | Round IX | Round XI  | Round XII | Total      |
|---|----------|----------|-----------|----------|-----------|-----------|-----------|------------|----------|-----------|-----------|------------|
|  | 2        | 6        | 1         | 1        | 9         | 7         | 3         | 5          | -        | 1         | -         | <b>35</b>  |
|  | -        | -        | 1         | 3        | 3         | 4         | 1         | 6          | 3        | 10        | 11        | <b>42</b>  |
|  | -        | -        | -         | -        | -         | 2         | 1         | 2          | -        | 2         | -         | <b>7</b>   |
|  | -        | -        | -         | -        | -         | -         | -         | -          | 1        | 2         | -         | <b>3</b>   |
|  | -        | -        | -         | -        | -         | -         | -         | -          | -        | -         | -         | <b>0</b>   |
|  | 2        | -        | -         | 2        | 4         | 8         | 4         | -          | 2        | 1         | -         | <b>23</b>  |
| <b>Total</b>  | <b>4</b> | <b>6</b> | <b>2</b>  | <b>6</b> | <b>16</b> | <b>21</b> | <b>9</b>  | <b>13</b>  | <b>6</b> | <b>16</b> | <b>11</b> | <b>110</b> |

-  Project is complete
-  Project concerns need to be resolved
-  Project is on schedule
-  Project contract not yet executed
-  Project is progressing more slowly than anticipated
-  Project canceled or funding declined

## LEVERAGE OF STATE INVESTMENT IN ALL PAST PRIORITY PROJECTS\*

The table below lists the ratio of the total investment in past priority projects to the state investment over Rounds I through XII of the REDC.

| Round        | Total Number of Priority Projects | Total Amount of Priority Project Awards | Total Project Cost     | Ratio of Award Amounts to Total Project Cost |
|--------------|-----------------------------------|---|------------------------|--|
| Round I      | 2                                 | \$10,000,000                            | \$312,143,692          | 1:31.21                                      |
| Round II     | 6                                 | \$12,436,346                            | \$296,117,964          | 1:23.81                                      |
| Round III    | 2                                 | \$5,000,000                             | \$542,627,520          | 1:108.53                                     |
| Round IV     | 4                                 | \$5,500,000                             | \$687,732,320          | 1:125.04                                     |
| Round V      | 12                                | \$10,390,088                            | \$206,668,633          | 1:19.89                                      |
| Round VI     | 13                                | \$12,944,792                            | \$422,738,256          | 1:32.66                                      |
| Round VII    | 5                                 | \$4,280,351                             | \$58,678,586           | 1:13.71                                      |
| Round VIII   | 13                                | \$16,319,871                            | \$536,076,344          | 1:32.85                                      |
| Round IX     | 4                                 | \$8,000,000                             | \$93,103,916           | 1:11.64                                      |
| Round XI     | 15                                | \$12,439,261                            | \$114,260,365          | 1:9.19                                       |
| Round XII    | 11                                | \$17,645,000                            | \$316,811,218          | 1:17.95                                      |
| <b>Total</b> | <b>87</b>                         | <b>\$114,955,709</b>                    | <b>\$3,586,958,814</b> | <b>1:31.2</b>                                |

\* Does not include 23 terminated or cancelled CFA project awards. Project data is updated through October 2023. For additional analysis and a full appendix of all projects, please visit <https://regionalcouncils.ny.gov/new-york-city> to view the Project Tracking Dashboard.





## MAPPED STATUS OF PAST PRIORITY PROJECTS

- Project is complete
- Project is on schedule
- Project is progressing more slowly than anticipated

- Project concerns need to be resolved
- Project contract not yet executed
- Project canceled or funding declined

### Bronx

- A Hunts Point Produce Market
- B Urban Development Center - Per Scholas
- C Silvercup Studios
- D Hunts Point Cooperative Market
- E Cosmoledo LLC
- F Ghetto Film School Culture & Media Center
- G New York Botanical Garden Conservatory Restoration Project

### Brooklyn

- A Green Manufacturing Center
- B NYC SeedStart
- C New Lab
- D Brooklyn Navy Yard - Building 77
- E NYU Veterans Incubator
- F Brooklyn Brewery
- G BioBAT
- H Smart Cities Innovation Center
- I Per Scholas
- J Brooklyn Navy Yard Steiner Studios Media Campus
- K Medgar Evers START-UP NY: Selfiepay, Inc.
- L Brooklyn Industrial Development Center
- M Steiner Studios Master Plan Phase 4
- N 1776 New York City Tech Accelerator
- O Brooklyn Navy Yard Transportation System
- P Medgar Evers START-UP NY: Derbywire, Inc.
- Q Medgar Evers START-UP NY: Tuki, Inc.
- R Central Library Business and Career Center - Brooklyn Public Library
- S B.NYC
- T Brooklyn Fashion + Design Accelerator

- H Hunts Point Market Cooling Towers Replacement
- I Bronx Music Hall Capital Project
- J SUNY Maritime College - Seamanship Training Center
- K Great Performances Catering Bronx Project
- L Universal Hip Hop Museum
- M Bronx Hall of Music Capital Project Enhancements
- N Bronx Building Renovation Project - Emerald Isle Immigration Center
- U BNY Food Manufacturing & Shared Kitchen Space
- V Commissary for Social Justice
- W Cresilon Inc. Headquarters
- X NYU AR/VR Lab
- Y Nanotronics Project Chip
- Z GMDC Brownsville Industrial Center
- 1 Newlab Building 127
- 2 Education & Welcome Center - Green-Wood Historic Fund
- 3 Sure We Can
- 4 Pioneer Works Accessibility Upgrades
- 5 PPE Manufacturing - New York Embroidery Studio
- 6 Light it up!
- 7 Brownsville Arts Center



## Manhattan

- A Taystee Lab Building
- B New York Genome Center
- C Victoria Theater
- D National Urban League
- E Harlem BioSpace
- F New-York Historical Society
- G Billion Oyster Project
- H China Institute Facility Renovations
- I Henry Street Settlement Firehouse Renovation
- J Galvanize Tech Campus
- K Lower East Side Girls Club NextGen Nurses Center
- L Celmatix Expansion
- M Cambridge BioLabs
- N Northside Center Construction Project
- O Exalt Youth
- P Mount Sinai Center for Data Science and Technology
- Q New-York Historical Society Equality & Justice for All
- R New Museum Expansion
- S Covenant House Building Project
- T Harlem Gallery of Science

## Queens

- A JFK Air Cargo
- B Boyce Technologies
- C NY State Pavilion
- D GMDC Ozone Park Industrial Center
- E Long Island City Wayfinding and Streetscape Improvements
- F South Conduit Terminal Logistics Facility
- G Pursuit Workforce Development Project

## Staten Island

- A Saw Mill Creek Pilot Wetland Mitigation Bank
- B Empire Outlets
- C Lighthouse Point Capital I
- D Brooklyn Brewery

## Citywide

- Connect NYC

## New York City location search underway

- Rgenix Inc

- U Intrepid Reconstruction Capital
- V The Studio Museum Reconstruction
- W TARA Biosystems Expansion
- X Governors Island Climate Resiliency Accelerator
- Y Kitchen Commons
- Z Penthouse Lobby Renovation - American Airlines Theatre
- 1 Clinical Simulation Laboratory Expansion - Pace University
- 2 Center for Planetary Health - Newlab
- 3 New-York Historical Society: American LGBTQ Museum Partnership Project
- 4 National Black Theatre Victory Development Project
- 5 Governors Island - Nolan Park Cultural Campus
- 6 CUNY City Innovations Collaborative - Life Science Incubator Facility
- 7 NY Urban League Headquarters
- 8 Solar One
- 9 NY Immigration Coalition Acquisition Project

- H Greater Jamaica Development Corporation Industrial Development
- I Queens Community House - Forest Hills Community Center
- J St. John's University Health Sciences Center
- K Collab Studio
- L Tempco - Clear as Glass
- M Crystal Windows and Door Systems
- N Magellan Aerospace NY Expansion

- E Howland Hook Marine Terminal
- F Staten Island Institute Meseum
- G Lighthouse Point Capital II







- City of New York - Brownfield Cleanup Capital Program







# Overview of All Previously Funded CFA Projects

Implementation of the projects identified in the 2011 Strategic Plan and the 11 subsequent progress reports is proceeding. Through 12 rounds of the CFA, 42,400 jobs have been created or retained through awards to 886 active projects across New York City.

## SUMMARY STATUS OF ALL PROJECTS AWARDED CFA FUNDING

The table summarizes the aggregate of all projects receiving CFA awards in Rounds I-XII. The chart below lists the number of projects falling within each status category.

| Status  | Round I   | Round II  | Round III | Round IV  | Round V    | Round VI   | Round VII  | Round VIII | Round IX   | Round XI  | Round XII | Total      |
|---|-----------|-----------|-----------|-----------|------------|------------|------------|------------|------------|-----------|-----------|------------|
|   | 42        | 46        | 41        | 55        | 63         | 84         | 36         | 23         | 2          | 1         |           | 393        |
|  | 4         | 7         | 13        | 19        | 22         | 18         | 74         | 108        | 103        | 41        | 34        | 443        |
|  | -         | -         | 1         | -         | 3          | 5          | 5          | 3          | 1          | 4         |           | 22         |
|  | -         | 1         | 1         | -         | -          | 1          | 6          | 1          | 5          | 6         | 4         | 25         |
|  | -         | -         | 1         | -         | 1          | -          | -          | -          | 1          | -         | -         | 3          |
|  | 12        | 7         | 11        | 12        | 15         | 13         | 10         | 5          | 4          | 5         | -         | 94         |
| <b>Total</b>  | <b>58</b> | <b>61</b> | <b>68</b> | <b>86</b> | <b>104</b> | <b>121</b> | <b>131</b> | <b>140</b> | <b>116</b> | <b>57</b> | <b>38</b> | <b>980</b> |

-  Project is complete
-  Project concerns need to be resolved
-  Project is on schedule
-  Project contract not yet executed
-  Project is progressing more slowly than anticipated
-  Project canceled or funding declined



## LEVERAGE OF STATE INVESTMENT IN ALL CFA PROJECTS\*

| Round        | Total # of Awards | Total Amount of All CFA Awards | Total Project Cost     | Ratio of Award Amount to Total Project Cost |
|--------------|-------------------|--------------------------------|------------------------|---|
| Round I      | 46                | \$32,215,138                   | \$626,794,175          | 1:19.46                                     |
| Round II     | 54                | \$50,485,403                   | \$550,152,988          | 1:10.9                                      |
| Round III    | 57                | \$28,232,975                   | \$695,302,833          | 1:24.63                                     |
| Round IV     | 74                | \$38,361,873                   | \$832,990,301          | 1:21.71                                     |
| Round V      | 89                | \$58,386,995                   | \$678,642,886          | 1:11.62                                     |
| Round VI     | 108               | \$31,638,036                   | \$627,389,730          | 1:19.83                                     |
| Round VII    | 121               | \$50,888,988                   | \$246,615,045          | 1:4.85                                      |
| Round VIII   | 135               | \$40,367,413                   | \$789,720,956          | 1:19.56                                     |
| Round IX     | 112               | \$35,278,049                   | \$352,876,870          | 1:10  |
| Round XI     | 52                | \$47,605,322                   | \$379,981,435          | 1:7.98                                      |
| Round XII    | 38                | \$33,486,278                   | \$492,526,069          | 1:14.71                                     |
| <b>Total</b> | <b>886</b>        | <b>\$446,946,470</b>           | <b>\$6,272,993,287</b> | <b>1:14.04</b>                              |

\*Does not include 94 terminated or cancelled CFA project awards.

## JOB CREATION IN ALL CFA PROJECTS\*

The table below lists the total number of permanent jobs retained and created through the CFA.

| Round        | Projected Jobs Created | Projected Jobs Retained | Total         |
|--------------|------------------------|-------------------------|---------------|
| Round I      | 621                    | 741                     | 1,362         |
| Round II     | 1,305                  | 6,470                   | 7,775         |
| Round III    | 2,078                  | 3,793                   | 5,871         |
| Round IV     | 2,571                  | 4,852                   | 7,423         |
| Round V      | 3,167                  | 1,569                   | 4,736         |
| Round VI     | 1,086                  | 982                     | 2,068         |
| Round VII    | 2,562                  | 2,557                   | 5,119         |
| Round VIII   | 1,056                  | 1,357                   | 2,413         |
| Round IX     | 1,449                  | 740                     | 2,189         |
| Round XI     | 2,374                  | 89                      | 2,463         |
| Round XII    | 284                    | 697                     | 981           |
| <b>Total</b> | <b>18,553</b>          | <b>23,847</b>           | <b>42,400</b> |

\*Does not include 94 terminated or cancelled CFA project awards.





PART TWO

# Regional Strategic Plan Update & Participation

In 2023, the NYCREDC conducted a series of interview discussions with industry leaders from both the private and public sector. The aim was to pinpoint strategic investment areas, aligning with New York City's crucial assets and challenges. These priority areas are innovation, infrastructure, and workforce.



## CORE ASSETS

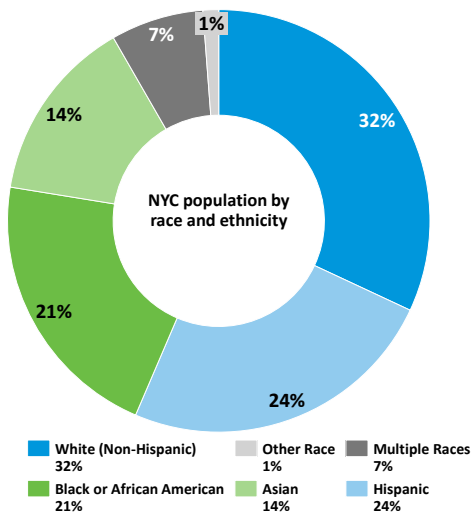
New York City is distinguished by unique assets that collectively define its global prominence. It is headquarters for multiple global industries, boasts the nation's largest public transportation system, is home to hundreds of world-class universities, research, and cultural institutions and has the largest and most diverse pool of professional talent in America.

**Global Industry Hub:** New York City is home to 44 Fortune 500 headquarters, more than any other American city.<sup>9</sup> This concentration fosters unique cross-sector opportunities that define the city's dynamic business landscape. It is also the largest consumer and business market in the country.

**Mass Transit Network:** At the heart of New York City's success lies its robust and interconnected transportation infrastructure, weaving together the city's diverse people, industries, and neighborhoods. Mass transit supports density and is, therefore, a catalyst for economic growth.

**Diversity:** Roughly 36% of New York City's population was born in a foreign country, and every year, the city only gets more diverse.<sup>10</sup> A report from the CUNY Graduate Center found that between 2010 and 2020, the city became more ethnically diverse and less racially segregated.<sup>11</sup> The city's strength is not just in its demographic diversity but also in the opportunities it affords for cross-cultural exchange, artistic expression, and economic collaboration. The acceptance and celebration of differences contribute to a vibrant urban landscape where individuals from various walks of life coexist, creating a unique and powerful strength that sets New York City apart as a beacon of cultural pluralism on the global stage.

Figure 2.1 New York City Demographic



Source: U.S. Census

**Culture:** New York City's culture is a fusion of global art, music, fashion, cuisine, and innovation. The city's cultural institutions, from the theaters on Broadway to museums like the Metropolitan Museum of Art and music venues such as the Apollo Theater, contribute to a cultural landscape that showcases an interplay between tradition and innovation, earning New York City its designation as one of the nation's most popular tourist destinations. New York City's streets are a runway for global fashion trends, and its food scene is a culinary world tour, with restaurants reflecting the diverse heritage of its residents.

**Talent:** With the broad network of community colleges, four-year colleges, graduate institutions, research facilities, vocational training programs, and other educational opportunities, the combined educational pipeline provides a constant stream of specialized talent, positioning the city as a global hub for employers seeking out skilled and well-trained employees.

This concentration of academic institutions encourages cutting-edge research and promotes a strong culture of entrepreneurship, attracting businesses looking to invest in groundbreaking ideas.

- **CUNY System:** With 25 campuses spread throughout the city, CUNY plays a pivotal role in providing accessible, affordable, and quality education. Year over year, CUNY institutions gain top recognition, especially for advancing social mobility by placing students from low-income backgrounds into good-paying jobs.<sup>12</sup> With nearly 400,000 students enrolled in degree and non-degree programs across CUNY colleges annually, these institutions graduate new members of the workforce as diverse as they are essential to the city. Over 80% of CUNY graduates stay in New York City.
- **Private Universities:** New York City's prestigious private universities are among the best in the world. Columbia University, for instance, is consistently ranked among the top Ivy League institutions, while New York University is renowned for its influential research and global reach. These universities and others, like Cornell Tech, Fordham University, and The New School, collectively enroll over 100,000 students each year.<sup>13</sup>



- **Postsecondary Programs:** New York City’s educational institutions also offer a diverse array of postsecondary non-degree programs dedicated to career and talent advancement. From coding bootcamps to advanced apprenticeships, programs like Pursuit, a \$2.5 million NYCRED award recipient, ensure that individuals from all backgrounds can access and acquire the skills they need to excel in their chosen fields in an ever-evolving professional landscape.

## CRITICAL ISSUES

The following is a distillation of the critical issues currently facing the city that the REDC intends to address.

**Affordability:** The issue of affordability – of housing, healthcare, food, operating a business, childcare, taxes, and energy – touches almost every New Yorker. Apartment and home prices are the chief drivers of the city’s high cost of living, all too often eventually leading to homelessness, housing insecurity, or people leaving the city for more affordable locations. Roughly half of all New York City renters are considered “rent burdened,” meaning they spend more than 30% of their gross monthly income on rent. One-third of all the city’s renters spend over half their income on rent.<sup>14</sup> This housing affordability crisis is exacerbated by the stark imbalance between supply and demand. As of 2019, the New York City metro area had a housing deficit of 342,000 units.<sup>15</sup>

**Public Safety:** A safe city is a fundamental prerequisite for economic growth. Public safety affects residents’ well-being and the city’s ability to attract investment, encourage entrepreneurship, and bolster tourism and consumer confidence. While crime statistics point to an improving situation, with overall index crime down 5.7% in July 2023 versus July 2022, as illustrated in the charts below, the rate of major crime remains relatively high, with 127,000 reported felony offenses for 2022.<sup>6</sup>

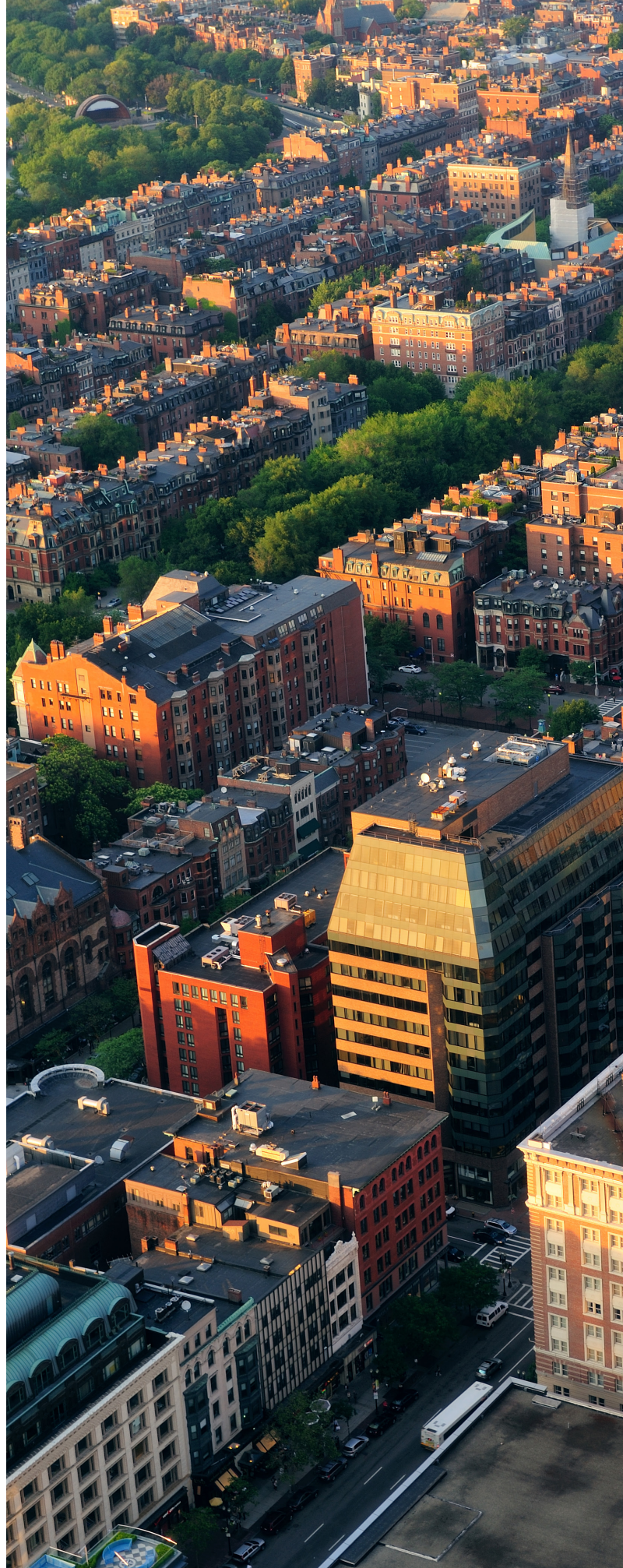
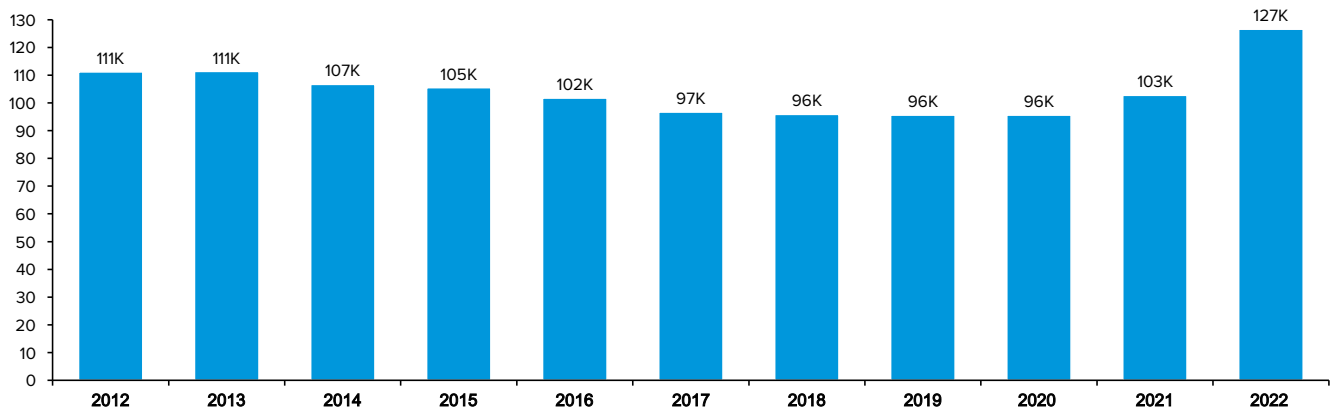




Figure 2.2: New York City Major Felony Offenses



Source: New York City Police Department

Figure 2.3: New York City Major Felony Offenses

| Offense                           | 2012    | 2013    | 2014    | 2015    | 2016    | 2017   | 2018   | 2019   | 2020   | 2021    | 2022    |
|-----------------------------------|---------|---------|---------|---------|---------|--------|--------|--------|--------|---------|---------|
| Murder & non-negl. manslaughter   | 419     | 35      | 333     | 352     | 335     | 292    | 295    | 319    | 468    | 488     | 438     |
| Rape                              | 1,445   | 1,378   | 1,352   | 1,438   | 1,438   | 1,449  | 1,794  | 1,755  | 1,427  | 1,491   | 1,617   |
| Robbery                           | 20,144  | 19,128  | 16,539  | 16,931  | 15,500  | 13,956 | 12,913 | 13,371 | 13,106 | 13,831  | 17,411  |
| Felony assault                    | 19,381  | 20,297  | 20,207  | 20,270  | 20,847  | 20,052 | 20,208 | 20,698 | 20,572 | 22,835  | 26,063  |
| Burglary                          | 19,168  | 17,429  | 16,765  | 15,125  | 12,990  | 12,083 | 11,687 | 10,783 | 15,478 | 12,811  | 15,746  |
| Grand larceny                     | 42,497  | 45,638  | 43,862  | 44,005  | 44,279  | 43,150 | 43,558 | 43,250 | 35,505 | 40,870  | 51,565  |
| Grand larceny of motor vehicle    | 8,093   | 7,400   | 7,664   | 7,332   | 6,327   | 5,676  | 5,428  | 5,430  | 9,037  | 10,415  | 13,749  |
| Total seven major felony offenses | 111,147 | 111,335 | 106,722 | 105,453 | 101,716 | 96,658 | 95,883 | 95,606 | 95,593 | 102,741 | 126,589 |

Source: New York City Police Department

**Climate Risk:** As an archipelago with 520 miles of shoreline, New York City is particularly vulnerable to the risks of climate change. As it grapples with increasing threats posed by rising sea levels and extreme weather events, investing in innovative and climate-resilient solutions – especially infrastructure investments – becomes an imperative for environmental protection as well as a driver of economic growth.

New York City’s status as a global financial and commercial hub necessitates its resilience to climate-related disruptions. The property damage, loss of homes, and severe business disruptions and asset loss associated with Superstorm Sandy in 2012 stand as a stark reminder of what can happen when a city is ill prepared to address unprecedented weather events. Sandy’s storm surge flooded low-lying neighborhoods, severely damaging and disrupting transportation systems, power supplies, and essential city services. The storm’s final price tag came in at a staggering \$19 billion in damages and economic losses.<sup>17</sup>

**Pre-K-12 Education:** Guaranteeing a quality education to all New York City students, including equal access to educational tools and technologies across all boroughs and regions, is the cornerstone of any viable economic growth model.

As it stands today, there are legitimate concerns surrounding equitable access to educational opportunities, particularly in underprivileged areas. In the 2022 to 2023 school year, there were almost 1 million students across 1,867 schools, including 275 charter schools, in New York City. Of these students, 72.8% were economically disadvantaged, defined as those who participate in, or whose family participates in, economic assistance programs, such as the free or reduced-price lunch programs.<sup>18</sup>

According to a New York State Education Department 3-8 Assessment Report from 2022, overall student proficiency in math and English language arts in New York City district schools was 37.9% and 49.0%.

Figure 2.4

**Black Student Proficiency:**

|      | NYC Charter Schools | NYC District Schools | All Schools Statewide |
|------|---------------------|----------------------|-----------------------|
| Math | 46.0%               | 20.6%                | 24.1%                 |
| ELA  | 55.2%               | 35.8%                | 36.3%                 |

**Latino Student Proficiency:**

|      | NYC Charter Schools | NYC District Schools | All Schools Statewide |
|------|---------------------|----------------------|-----------------------|
| Math | 42.5%               | 23.3%                | 25.5%                 |
| ELA  | 52.0%               | 36.8%                | 36.3%                 |

Source: New York State Education Department

Collaborative efforts between educators, policymakers, and community stakeholders are essential to fostering an educational environment where every student has the opportunity to thrive and reach their full potential, regardless of their background or ZIP code.

**Complex Regulatory Landscape:** To succeed, New York City-based companies must negotiate a complex labyrinth of federal, state, and city regulations. New York City alone demands over 250 business-related licenses and permits, as well as numerous processes designed to enforce legal compliance.<sup>19</sup> Regulatory complexity can come with high compliance costs, often requiring expensive legal and consulting services to navigate these regulations, an irritant for large

corporations and, all too often, a deal breaker for emerging and small businesses. Under the federal Immigration and Nationality Act, H-1B visas allow foreign workers to work in specialty occupations. From fiscal year 2017 through 2022, metro New York City was home to the largest number of successful H-1B applicants – 372,100 people, or roughly 15.2% of all approved petitioners.<sup>20</sup> But the number of petitioners is capped by a quota far below the demand for these highly skilled workers. Recent regulatory changes have increased the complexity and uncertainty of the application process, causing delays and challenges for both employers and immigrant workers, especially those involved in areas such as technology, finance, healthcare, and academia.







# Regional Strategic Plan Update

To effectively address the critical challenges confronting the city, the NYCREDC has devised pragmatic strategies focused on three pivotal priority areas: innovation, infrastructure, and the workforce.



## Innovation

Ensuring democratized access to cutting-edge technologies for founders, businesses, and residents by establishing a robust support system. This entails fostering an inclusive environment that encourages innovation across key sectors that include AI, advanced manufacturing, life science, and clean tech while ensuring that the prerequisites to success in these spaces for founders are present and accessible regardless of background.

## Infrastructure

**Energy:** Revitalizing the city's energy infrastructure by prioritizing solutions that enhance energy efficiency, modernize the grid and battery storage capacity, and promote the viability of renewable power generation. This strategic approach aligns with sustainability goals, reducing environmental impact, and fostering a resilient energy ecosystem.

**Transportation:** Advocating for the development of climate-resilient and energy-efficient transportation alternatives and infrastructure. This includes supporting initiatives that prioritize sustainability, reduce congestion, and enhance the overall efficiency and reliability of the city's transportation network.

**Buildings:** Embracing innovative solutions that not only expand affordable housing options, but also enhance the climate resiliency of buildings. This involves incentivizing sustainable construction practices, exploring new materials and technologies, and promoting the development of structures that can withstand environmental challenges.

## Workforce

Fostering upward mobility and opportunity by supporting the creation of quality jobs and closing the skills gap. This entails investing in education and skill development programs that align with emerging industries, promoting diversity and inclusion in the workforce, and collaborating with employers to ensure a well-prepared talent pool for the evolving needs of the city's economy.

Through targeted efforts in these three critical areas, the strategic plan seeks to address immediate challenges while building a foundation for long-term, inclusive growth.





## Process

To build the recommendations for selecting the city's strategic priorities for economic opportunity, we worked closely with a wide variety of government, nonprofit, and private sector leaders in a structured and comprehensive effort to pinpoint key areas capable of driving significant and sustainable economic growth. Over 60 interviews were conducted to detail the specific needs and issues across the five boroughs. Individual industry sectors were assessed based on their alignment with the NYCREDC's objectives, growth potential, level of social impact, and overlap with the city's regional assets and talent. This was accomplished through:

- **Sector Screening:** Sectors were assessed (See Appendix Figure 1.1) through a process ranking all industries based on size and growth, their alignment with the NYCREDC objectives – such as the ability of the NYCREDC to influence change – forecasted jobs, social impact, historical returns, and overlap with the city's regional assets. Here, sectors that had a high potential for growth with additional support were identified and selected. This assessment ultimately identified five areas of focus within technology, science and R&D, manufacturing, retail, and hospitality.
- **Interviews With Key Industry Leaders:** We engaged in detailed discussions with industry leaders from the identified sectors that form the backbone of the city's economy. Our discussions revealed valuable insights into the challenges, opportunities, and emerging trends within their sectors.
- **Review of NYCREDC Objectives and Reports:** We reviewed past NYCREDC strategic priorities and recommendations to assess the progress made since our initial strategic plan, recognize areas no longer in need of additional support, and identify areas requiring continued work and investment.
- **Data Analysis:** An extensive amount of data from federal databases, city and state agencies, research organizations, and accredited universities were synthesized.
- **Consultation of Thought Partners:** We partnered with consultants who helped provide structured frameworks to advance our thinking on solutions around key strategic areas that are sustainable, replicable, and scalable. We then conducted workshops to push forward-thinking concepts and collaboration.

- **Public Validation:** Preliminary strategic areas were validated via public engagement through an anonymized survey of New York City residents. This helped to ensure our strategic priorities were deeply rooted in the realities and aspirations of New York City's businesses and residents.

Through these steps, a shared vision for the city's economic future emerged, recognizing areas of convergence and challenges demanding collective attention and investment by the NYCREDC. Notably, themes within innovation, infrastructure, and workforce consistently surfaced, reflecting the pulse of New York City's economic landscape. Insights gleaned from interviews exemplified the significance of these focus areas in shaping our strategic priorities.



## FOCUS AREAS

### Focus Area – Innovation

For the purposes of this effort, we are defining innovation as the application of new technologies to achieving economic development and societal goals and the creation of a supportive ecosystem to drive forward New York City's future economic growth.

### Innovation and the New York City Economy/ Ecosystem

Innovation is the source of new companies, new industries, and new job opportunities. New York City's innovation economy is growing. The city had a total of 281,100 tech jobs spread across software, biotech, research, and tech manufacturing in 2021, a 58% increase since 2011.<sup>21</sup> One of the strategic plan's goals is to ensure that New York City's innovation economy is one that provides democratized access to opportunities.

Today the city has more than 9,000 high-tech startup businesses in such sectors as fintech, clean tech, e-commerce, life science, advanced manufacturing, and more.<sup>22</sup> With over 200 coworking spaces and more than 100 accelerators and incubators that provide facilities, access to funding, and mentorship, the city is a breeding ground for innovative solutions across a range of industries.<sup>23</sup>

New York City recently surpassed San Francisco as the city with the most early-stage startup activity in the nation.<sup>24</sup> According to Startup Genome, thanks to its impressive concentration of capital, New York City ranks as the second-leading innovation hub globally.<sup>25</sup>

As the headquarters of many global financial institutions, private equity firms, and over 300 venture capital firms, New York offers abundant access to capital.<sup>26</sup> In 2022, approximately \$30 billion in venture capital investment flowed into the city's economy, marking the second-best year for venture capital investments in the city's history.<sup>27</sup>



## Challenges to the New York City Innovation Ecosystem

While the New York City innovation economy is growing, there are still challenges with respect to high costs, equitable access to capital, adequate skills training, and a difficult regulatory environment.

**Affordability of space:** Among the many things that growing innovation-based companies need to be successful are access to affordable space and quality talent. According to Cushman & Wakefield, while the average cost to rent office space in the United States is \$42 per square foot, in New York City, prices are substantially higher, ranging from \$60 per square foot for space in Brooklyn to upward of \$90 per square foot in midtown.<sup>28</sup> When companies do find available space, it often lacks flexibility in size, lease conditions, or security deposit requirements. As companies mature and expand, the issue of space becomes critical. A report by Colliers found that despite vacancy rates being high at around 18%, Manhattan's asking rent average for office space grew year over year.<sup>29</sup> Newlab, a \$4 million ESD grant recipient and NYCRED priority project, provides space that caters to deep tech startups developing solutions across mobility, energy, and materials.<sup>30</sup>

**Cost and Availability of Skilled Workers:** Due to the high cost of living in New York City, hiring high-tech talent can be expensive. According to a study by Carta, startups in the New York City metro area have to pay all employees significantly higher compensation compared to other regions. For instance, New York City compensation across all roles is on average 10% higher than in metros like Chicago, 15% higher than places like Houston and Atlanta, and 20% higher than cities like Phoenix.<sup>31</sup> The need to offer higher salaries can pose a challenge for startups, particularly those in their early stages with limited operational capital.

There is also a shortage of technology workers. Today, the city has 162,000 job openings, including over 11,000 tech positions<sup>32</sup>. Public schools and universities have only recently focused on tech training as a priority for large numbers of students, and gaining digital skills can be a long process that starts at a young age.

**Funding:** Access to funding is difficult, particularly for startups with limited personal resources. Venture firms have a limited appetite for early-stage companies and only 3% of venture capital funding goes to Black and Latinx founders, which represents a significant disparity.<sup>33</sup> The risk associated with driving entrepreneurial innovation is amplified for these diverse founders.

**Regulatory environment:** While regulations are often put in place to ensure safety and fairness, they can also create barriers for businesses, particularly startups. Compliance can be time-consuming and expensive. Regulatory requirements for certain industries, like healthcare or finance, can be particularly onerous. New York has a particularly difficult and expensive legal and regulatory environment, which can stifle innovation and deter businesses from piloting new technologies essential for the innovation sector growth.

**Opportunities in innovation:** The sectors where New York City has a particular advantage, according to interviews conducted for this report, include AI, life science, advanced manufacturing, and clean technologies. With sufficient additional investment, an additional 50,000 incremental jobs could be realized over and above the traditional forecast for 2028 that projects ~350,000 jobs.<sup>34</sup>



**Artificial intelligence:** Artificial intelligence is a versatile tool that can be used across nearly any sector, offering unprecedented opportunities for innovation and efficiency.

Characterized by its ability to identify patterns and make data-driven decisions, projections, and recommendations, AI can enhance sector operations, potentially bolster environmental resiliency, and accelerate the process of upskilling workers. Empowered by AI and machine learning (ML), leading New York City-based platforms like Etsy are aiding small business owners in marketing and selling their goods with unprecedented ease as algorithms analyze user behavior and historical data to provide customized product recommendations. In the hospitality sector, MCR Hotels is using AI-driven predictive technologies to optimize services through preventive maintenance. In biological research, AI is facilitating breakthroughs in healthcare, drug discovery, and genomics research, offering new hope for personalized and enhanced patient care.

In 2022, New York City based startups in the AI and ML space secured over \$6 billion in funding.<sup>35</sup> Moreover, the Adams administration has demonstrated its commitment to AI with the recent release of The New York City Artificial Intelligence Action Plan, which lays out the city plans for harnessing AI's potential while addressing the associated risks.

### The path forward

Ensuring the inclusivity of AI technologies is critical for the future of New York City's innovation ecosystem, particularly with the emergence of generative AI applications like Google's Bard and ChatGPT. Democratizing AI requires making it as accessible to everyone as possible. This involves the development of AI technologies as well as the fortification of the support systems that it requires to operate effectively.

5G coverage, for example, represents the latest and fastest technology in internet connectivity. Access to a 5G network plays a central role in enhancing AI applications and their processing by accelerating the amount of data that can be transmitted and reducing delays. Affordable access is therefore essential to ensuring that AI applications can be readily accessed and utilized by residents, small businesses, and larger corporations alike.

Recognizing the pivotal role of AI in shaping the city's future, the NYCREDC is poised to make impactful contributions. By strategically funding and supporting AI companies, the NYCREDC not only propels advancements within the sector, but also enables their

integration into other key industries. Additionally, by endorsing initiatives aimed at broadening access to AI and its prerequisites, such as 5G, or related education, the NYCREDC actively contributes to fortifying an inclusive innovation landscape.





## Case Study: Nanotronics Imaging - NYCREDC Priority Project



Located in the Brooklyn Navy Yard, Nanotronics Imaging, a 2018 NYCREDC priority project, is an advanced machines and intelligence company that helps customers across the public, private, and nonprofit sectors solve for the unique inspection and process control challenges of precision manufacturing. A leading developer of automated optical inspection tools for the semiconductor industry, Nanotronics uses hardware and software to provide industrial-scale, high-throughput super

imaging systems.

Today, high-tech companies are integrating Nanotronics' advanced optical inspection systems into their precision manufacturing processes. The company's flagship technology, nSpec, is the world's first automated industrial microscope. Compact enough for deployment on the factory floor, with software configurable to client specifications, it combines advanced computer vision, machine learning, AI, optical microscopy, and robotics to inspect the world's most advanced technologies, including microchips, LEDs, nanotubes, and more. nSpec can recognize, classify, and measure nanoscopic flaws, allowing for real-time correction.

In 2020, Nanotronics developed and designed nHale™, a bi-level positive air pressure device to support spontaneous breathing in adults. The device obtained Emergency Use Authorization from the U.S. Food & Drug Administration to assist patients suffering from COVID-19 disease in traditional healthcare facilities and spaces converted for the care of large numbers of COVID-19 patients, as well as for at-home treatment of COVID-19 patients. It is a noninvasive approach designed to be used in non-life-threatening situations where a patient is in need of breathing assistance but is not in need of invasive ventilatory support based on standard medical protocols.

To meet increased domestic and international demand for its products, Nanotronics has renovated a 45,000-square-foot facility in the Brooklyn Navy Yard. The project will involve the manufacturing, finishing, calibration, testing, assembly, software integration, and shipping of sensors, tools, and systems used across many industries. It will house an R&D team focused on developing AI technology to increase factory efficiency. Construction began in early 2019 and was completed in April 2021. The \$11.3 million project was awarded a \$2.25 million ESD capital grant and will create 190 new jobs and retain 34 existing jobs. Nanotronics was also admitted into the START-UP NY program through Medgar Evers College (CUNY).



**Advanced Manufacturing:** New York City accounts for roughly 60,000 jobs within the broader manufacturing sector.<sup>36</sup> Advanced manufacturing, a subsector of manufacturing fueled by cutting-edge technologies like 3D printing, robotics automation, and augmented reality, has emerged as a critical pillar for economic development within the region’s innovation ecosystem. This wave of innovative, data-driven manufacturing is the cornerstone for the creation of highly flexible and customized products. New York City-based advanced manufacturers secured more than \$270 million in venture capital funding over the last seven years, highlighting the sector’s growing importance.<sup>37</sup>

An instance of advanced manufacturing can be seen in Long Island City-based Boyce Technologies, a 2015 NYCREDC priority project that is pushing the boundaries of traditional manufacturing. Boyce combines state-of-the-art fusion welding, advanced manufacturing techniques, and robotic laser machines with traditional engineering to enhance machining and manufacturing processes for greater automation and accuracy. Specializing in mass transit security and communications equipment, Boyce develops state-of-the-art solutions, including emergency response systems, intercoms, security alarms, radio networks, and customer information displays.

Notably, their Help Point Unit utilizes digital voice systems to provide information and safety communications for commuters in the New York City subway system. In 2015, Boyce was awarded a \$1.0 million ESD grant and \$1.64 million in Excelsior tax credits in connection with acquiring, renovating, and equipping its \$40 million Long Island City manufacturing facility.

Investments in advanced manufacturing in the city are growing with a variety of public-sponsored programs such as ApprenticesNYC: Advanced Manufacturing, an apprenticeship program that is designed to support New Yorkers by helping them to develop the essential hands-on and in-demand skills needed for a successful career in advanced manufacturing. Through partnerships with accredited employers, participants receive 52 weeks of training and paid on-the-job experience.

## The path forward

As advanced manufacturing continues to have an increased focus in New York City, it is imperative to maintain the essential elements of success – the right space, incentives, and support – to ensure the continued growth of the sector and the employment of New York City’s workforce. Advanced manufacturing’s hallmark is its ability to rapidly customize products, significantly reduce time to market, encourage innovations, and produce goods with remarkable speed. Considering this, a critical area that requires attention is facilitating the effective testing and piloting of these technologies.

Places like the Navy Yard provide advanced manufacturing companies an effective place to develop and pilot innovative new technologies driven by advanced manufacturing. The Yard Labs program, for instance, accepts four technology piloting applications yearly and enables advanced manufacturing developers to pilot their technologies as rapidly as eight weeks post application.<sup>39</sup>

In an industry hallmarked by flexibility and rapid go-to-market approaches, initiatives that enable manufacturers to test and pilot technologies in this manner are essential and often limited. Too often, the piloting of advanced technologies within the landscape of New York City can be extremely challenging given existing regulations and a lack of pilot-specific testing space.

The NYCREDC can direct crucial support to companies focused on advanced manufacturing technologies, upskilling and development programs, and incubators, as well as help facilitate the piloting of these technologies.





### Case Study: Brooklyn Navy Yard - NYCREDC Priority Project



The Brooklyn Navy Yard is a global model of an advanced manufacturing hub. The Brooklyn Navy Yard has not only preserved its rich history, but also harnessed the potential of modern industrial innovation. What truly sets the Brooklyn Navy Yard apart is its commitment to innovation, particularly when it comes to piloting and driving new technologies forward. The NYCREDC has supported 16 projects in the Brooklyn Navy Yard with nearly \$30.7 million in ESD grants and Excelsior tax credits. Companies in the Brooklyn Navy Yard, if eligible, can apply for and receive a mix of New York City benefits that may

include tax advantages, including no real estate taxes; eligibility for relocation and employment assistance; and the energy cost savings program.

Yard Labs, an additional perk offered by the Brooklyn Navy Yard allows companies to beta-test emerging technology products within its 300-acre space. Showcasing the Brooklyn Navy Yard's role in piloting new initiatives, Citi Bike established its first bike-sharing station at the Brooklyn Navy Yard and now has over 1,500 stations spread across the five boroughs. Similarly, the Brooklyn Navy Yard currently has the most electric vehicle charging stations of any property in the city.

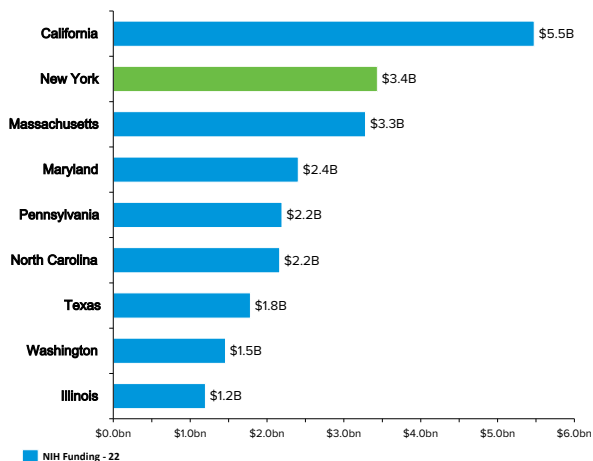


**Life Science:** New York has doubled the size of its life science sector in the past decade and has great opportunities to grow, particularly in areas like precision medicine and gene editing.<sup>40</sup> Projections indicate that the city has the potential to generate over 40,000 jobs in the coming decade, with the establishment of 1,000 new companies.<sup>41</sup>

Before the COVID-19 pandemic, the sector was already gaining significant momentum. However, key advances, such as the manufacturing of one of the COVID-19 vaccines by Pfizer, a New York City-based company, in partnership with BioNTech have underscored the critical importance of further investments in this field.

As of October 2023, NIH awards to New York City researchers surpassed \$2.8 billion.<sup>42</sup> New York City-based life science companies received a record \$2 billion in private venture capital funding in 2020, a significant increase over 2016’s private funding levels of ~\$350 million.<sup>43</sup>

Figure 3.1: NIH Funding by State - FY2022



Source: National Institutes of Health

Historically, the scarcity of suitable space, particularly the specialized lab facilities and equipment essential for R&D, has been a significant limitation of the development of the region’s life science sector. Substantial progress has been made toward addressing this challenge, enabling new industry entrants to thrive. Notable investments have been made in making more lab spaces available, including the Taystee Lab Building, a \$10 million REDC grant recipient and initiatives like Harlem Biospace, a \$1.5 million REDC grant recipient, which offer essential facilities for life science research.

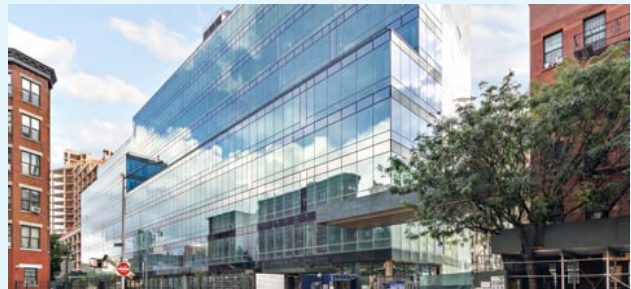
Additionally, BioLabs at NYU Langone provides an extensive 50,000 square feet of state-of-the-art lab space, and BioBAT, a \$300,000 REDC grant recipient, contributes over 250,000 square feet to the sector’s growth.

### The path forward

The city recently announced plans for 1.7 million square feet of dedicated space and a vision to add an additional 10 million square feet of life science innovation space over the next 10 to 15 years.<sup>44</sup>

Although the life science sector represents a relatively small share of citywide employment, its promising growth prospects, emerging clusters, and the demand for candidates without traditional four-year degrees make it an ideal target for support by the NYCREDC. Approximately 40% of the city’s life science jobs do not require a four-year degree, showcasing the sector’s substantial potential for inclusive growth.<sup>45</sup>

### Case Study: Taystee Lab Building – NYCREDC Priority Project



Developed by the Janus Property Company in partnership with JP Morgan Asset Management, the Taystee Lab Building, a \$10 million NYCREDC grant recipient, is purpose-built for life science, commercial, innovative manufacturing, education and retail tenants, mirroring and adding to the diversity of the growing 125th Street corridor. The new building, which is an 11-story, 350,000 square-foot mixed-use development located in West Harlem’s Manhattanville Factory District, is equipped with all necessary infrastructure for life science lab and innovation users to utilize above-standard high-capacity power, high-velocity ducts, acid waste neutralization, and tenant emergency power capacity. The \$700 million project was identified as a priority project in NYCREDC Round I.



**Case Study: New York Genome Center (NYGC) - NYCREDC Priority Project**



The New York Genome Center (NYGC), a \$1.5 million NYCREDC Round II grant recipient, stands as a cutting-edge example of an institution dedicated to revolutionizing genomics research and its applications, with a strong focus on advancing healthcare, innovation, and scientific discovery. Located in the heart of New York City, the NYGC serves as a hub for collaborative genomics research. It brings together leading academic and medical institutions, as well as industry partners, fostering a multidisciplinary approach to genomics.

Institutional founding members include Cold Spring Harbor Laboratory, Columbia University, Albert Einstein

College of Medicine, Memorial Sloan Kettering Cancer Center, Icahn School of Medicine at Mount Sinai, NewYork-Presbyterian, New York University, Northwell Health, The Rockefeller University, Stony Brook University, and Weill Cornell Medicine.

The NYGC's mission extends far beyond research and is deeply committed to translating scientific discoveries into tangible benefits for patients. The NYGC's initiatives encompass diverse areas, from cancer genomics and neurological disorders to infectious diseases and rare genetic conditions.

It provides the resources, expertise, and collaborative environment necessary to unlock the potential of genomics in improving diagnostics, treatments, and therapies. Additionally, the NYGC is instrumental in training the next generation of genomics researchers and equipping them with the tools and knowledge needed to address some of the most pressing challenges in healthcare and biology.



**Climate Tech:** New York City is emerging as a key player in clean technology, which is projected to grow at an annual rate of 20% globally according to projections from Fortune Business Insights.<sup>46</sup> The city's clean tech ecosystem now ranks as the fourth leading hub in North America, according to a report by Startup Genome, following closely behind Silicon Valley and Boston.<sup>47</sup>

The state of New York has established ambitious and pioneering targets, encompassing goals such as a reduction of 22 million tons of carbon through energy efficiency and electrification, achieving 70% renewable energy by 2030, attaining 100% zero-emission electricity by 2040, and realizing an 85% reduction in greenhouse gas emissions from 1990 levels by 2050.<sup>48</sup>

New York City is actively pursuing ambitious goals of its own. This includes reducing building emissions by 40% by 2030, particularly within the city's largest buildings, and achieving carbon neutrality by 2050.<sup>49</sup> Aligned with these targets, New York City is strategically positioned for substantial economic growth driven by groundbreaking innovations in the clean tech and renewable energy sector. Projections indicate that by 2030, the city will support over 230,000 green jobs, underscoring the profound impact that these innovative advancements will have on the city's economic landscape.<sup>50</sup>

Climate-related solutions are critical to enhance New York City's resilience given its geographic location and increased frequency of extreme weather events. The city is home to Climate Week, a series of events held in partnership with the United Nations General Assembly that brings together global leaders from business government, and nonprofits as well as local decision makers to actively lead the clean transition and accelerate the development of clean technologies

such as electrifying heating systems and heat pumps, power generation, and storage. A report by PwC found that relative to all startup investment, investments in climate technologies have increased from ~1% in 2013 and now account for upward of 10% of all venture and private equity investments globally.<sup>51</sup>

### The path forward

Promoting technological innovation within the clean tech sector often involves significant upfront costs associated with design, engineering, and legal considerations. This is particularly true when it comes to developing and implementing pilot projects that serve as the vital testing grounds for

novel technologies and innovations. High capital requirements can be a major barrier and so the NYCREDC should be on the lookout for opportunities to bridge the funding gap. The clean tech sector is promising, but the path from development to implementation can be filled with regulatory hurdles and restrictions. Resolving these issues necessitates active engagement from state, city, and utility stakeholders. The multifaceted layers of approvals and permits required for projects, such as offshore wind initiatives, for example, can take developers years to acquire.<sup>52</sup> Moving forward, the NYCREDC can support initiatives that assist in facilitating and accelerating the process of implementing and executing clean tech initiatives.

### Case Study: Buttermilk Labs – NYCREDC Priority Project



Led by Stony Brook University, the New York Climate Exchange — when completed, will be a first-of-its-kind, cross-sector consortium with 15 members representing universities, businesses, and nonprofits dedicated to climate research, solution development, education, workforce training, and public programs on Governors Island.

As a complement to this effort, the Trust for Governors Island (the Trust) is partnering with a development team to create Buttermilk Labs, an accelerator hub for commercial businesses and nonprofits working in climate and the environment. The Trust plans to adaptively reuse historic Building 301, a 23,000-square-foot waterfront building.

Over the years, Building 301 served as a former school for children of soldiers and later Coast Guard personnel. Soon, it will house small and medium-sized offices, co-working space, labs, a convening space, and a public café. The project, set for completion by spring 2026, was designated a priority project in NYCREDC Round XI. It is expected to create 150 jobs for employees of the accelerator's tenants. ESD will provide a \$2.5 million grant to the \$23 million project.



### Case study: Urban Future Lab



Established in 2009, the Urban Future Lab serves as a home for clean tech startups. It has crafted a learning and research environment where pioneers of clean innovation can thrive.

It currently manages five incubators and one educational program. The oldest incubator, ACRE, started with funding from the New York State Energy Research and Development Authority (NYSERDA). These incubators, like C2V (Carbon to Value) and LCHA (Low-Carbon Hydrogen Accelerator) are structured to help companies to scale their operations over two to five years.

Nurturing clean tech innovation involves connecting these companies to industry leaders. Startups that participate in the programs have access to corporate sponsors who help run the programs, like Shell in programs like the LCHA and Equinor as part of their offshore wind innovation hub.

The Lab's results speak for themselves. Since its inception, the Lab has incubated 70 companies that have gone on to raise over \$2 billion in capital, creating over 3,000 jobs. Most remarkably, over 85% of companies that have passed through the Urban Future Lab's incubators are still thriving today, defying the odds against startups.



**Incubators / Accelerators:** In the New York City innovation landscape, incubators and accelerators serve as vital engines propelling the growth of startups. Incubators provide a nurturing environment for early-stage businesses, offering shared offices and resources. Similarly, accelerators operate as intensive programs designed to fast-track the development of startups with focused mentorship, funding, and exposure to potential investors.

Together, these initiatives contribute to a dynamic ecosystem where diverse ideas flourish, and new ventures are brought to life. The importance of incubators and accelerators cannot be understated in democratizing the access to success that founders have, as well as commercializing and making their innovations accessible to a broader audience. Incubators and accelerators therefore play a pivotal role in promoting equitable access in innovative sectors.

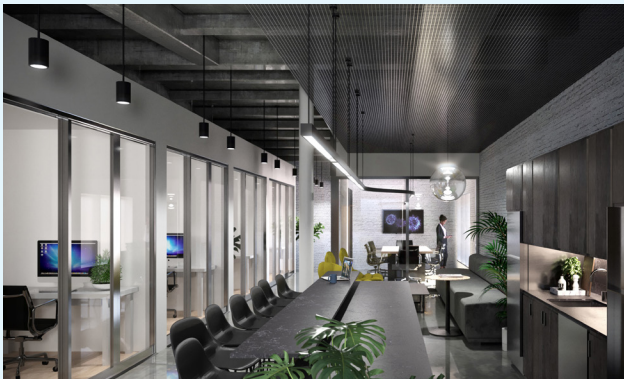
### The path forward

Considerable momentum has been generated to ensure the success and growth of the innovation ecosystem. Accessing co-working spaces in New York City marks a significant starting point for many startups with the progression into an incubator serving as the next. The continued addition and funding of incubators and accelerators that provide essential support such as mentorship, funding, and legal and regulatory assistance is essential.

The path to an innovative future lies in recognizing that these supportive initiatives are not merely convenient to have but foundational essentials for all founders. This recognition is crucial for powering innovations across sectors and democratizing access to successful discoveries for all founders.

Despite significant progress, only 3% of venture capital funding goes to Black and Latinx founders, indicating a continued disparity. The NYCREDDC can play a crucial role by strategically supporting emerging sectors and technologies through the continued development and backing of incubators and accelerators. These entities provide much-needed support systems for founders, especially those from diverse or nontraditional backgrounds.

### Case Study: Harlem Biospace – NYCREDDC Priority Project



Harlem Biospace will open a second incubator located at 1361 Amsterdam Avenue in West Harlem’s Manhattanville Factory District. Harlem Biospace is a biotech incubator that offers affordable shared wet lab space for early-stage small and mid-sized life science companies. The facility will help fulfill a need for lab space for biotech companies with growing teams and for those graduating from shared spaces and facilities.

This venture will result in a 10,250-square-foot step-out graduation incubator lab for approximately 12 to

15 companies that are too large for typical lab incubators but too small to lease a private commercial lab. It will have a total capacity of up to 210 researchers. The offices and lab space will be equipped with state-of-the-art facilities and amenities with access to equipment and resources, including incubators, centrifuges, and biosafety cabinets, and biohazardous and chemical waste disposal.

The project also includes 11,000 square feet of space for a life science anchor tenant, currently Volastra Therapeutics, a New York City-based drug discovery and therapeutics company pioneering novel approaches to treating cancer. The \$9 million project was awarded a \$1.5 million grant in NYCREDDC Round V.



## Focus area – Infrastructure

### Importance of Infrastructure to the Economy

The city's economic vitality and global competitiveness are inexorably tied to the quality and resilience of its built environment. New York City's status as a global financial and commercial hub means that its infrastructure must be capable of withstanding the growing threats posed by climate change. Key components of this infrastructure include energy systems, transportation networks, housing, and commercial buildings. Investments that enable the city's climate resiliency also generate employment for residents and can be a major contributor to workforce development efforts. With sufficient investments, New York City's energy, transportation, and building infrastructure hold the potential to drive up to an additional 102,000 incremental jobs above traditional forecasts through 2028.<sup>53</sup>

### Federal Legislation

The NYCREDC will look for opportunities to leverage state resources to attract federal investment. Key pieces of federal legislation are providing considerable support for infrastructure and climate change resilience investments across the city and state of New York.

Passed in 2021, the Infrastructure Investment and Jobs Act (IIJA) is a historic infrastructure funding program. Over a five-year period, the IIJA is set to deliver \$550 billion in new funding above previously guaranteed federal levels to transportation, clean energy and water, broadband, and resilience projects across the country. New York state is set to secure at least \$36 billion dedicated solely to transportation over the five-year period, \$23 billion of which is expected to be spent in New York City. A majority of this funding will be apportioned to support public transit projects, with the remainder dedicated toward roads and bridges.

The Inflation Reduction Act (IRA), passed in 2022, offers residents and businesses a significant opportunity to access \$370 billion in funding for clean energy and environmental initiatives. This legislation provides tax credits and rebates for homeowners, renters, and businesses, encouraging energy-resilient infrastructure upgrades. The IRA will expand clean energy opportunities in New York City, investing an estimated \$34 billion in clean power generation and storage through 2030.<sup>54</sup>

## Challenges of Infrastructure in New York City

**Aging Infrastructure:** Aging infrastructure is a significant and persistent issue in New York City. Many of the city's essential systems and structures, ranging from transportation networks to water and sewer systems to affordable housing, were built decades ago.

In the November 2023 Asset Information Management System report, the city identified nearly \$13.5 billion in needed repairs, replacements, and major maintenance projects across all its agencies from fiscal year 2025 to 2028, excluding the cost of infrastructure expansion and assets leased to public benefit corporations.<sup>55</sup> Beyond maintaining infrastructure, the city needs to invest significantly in resiliency upgrades to prepare for the impacts of climate change. Infrastructure problems, such as subway delays, bridge closures, and water main breaks, can have a substantial economic impact.

The city's capital budget is capped by its level of tax assessment. In 2024, local government will need the state legislature to approve an increase in its debt cap or it will be unable to meet basic needs.

**Building and Transportation Emissions:** Building and transportation emissions are significant contributors to air pollution and greenhouse gas (GHG) emissions in New York City, presenting many challenges for the city's environment and public health. Buildings, especially older ones, are a major source of carbon emissions, constituting two-thirds of the city's annual GHG emissions and totaling 52.9 million metric tons of carbon dioxide in 2021, due to energy consumption for heating, cooling, and electricity.<sup>56</sup> The transportation sector, primarily composed of cars, trucks, and public transit, is also a substantial emitter of greenhouse gases: The sector is responsible for almost 30% of New York City's GHG emissions, with most of these emissions coming from passenger cars.<sup>57</sup>

Legislation such as the New York State Climate Act and New York City's Local Law 97 (LL97) are aimed at reducing these emissions. Passed in 2019, LL97 sets carbon emission caps on buildings greater than 25,000 square feet, covering 50,000 properties, or 60% of the region's building area. Of these, 59% are residential buildings and the remaining 41% are commercial. Driving toward net-zero emissions by 2050, these carbon caps become more stringent over a series of compliance periods. Noncompliance without good faith efforts to make emissions reductions under the prescribed caps will result in heavy fines. To meet compliance standards, many older buildings require comprehensive retrofits, which can be both complex

and expensive. For example, to be compliant, boilers and furnaces throughout New York City will need to be replaced by high-efficiency heating systems that run on electricity, delivered by a grid powered with renewable energy. The increasing demand for electricity necessitates that more and more electricity be generated by renewable sources, which will require drastic changes to the grid. Solutions to address the issue of building and transport emissions in New York City will require city and state collaborations with key stakeholders.

### **Opportunities in Infrastructure**

The NYCREDC is prioritizing looking for solutions that reduce greenhouse gas emissions, promote energy efficiency, and modernize infrastructure systems.





**Energy:** Top priorities include improving energy efficiency, modernizing the grid and battery storage capacity, and boosting the viability of renewable power generation. NYCREDC priorities include support for actions and investments that enable the growth of the clean energy sector. According to a 2022 NYSEDA report, the clean energy sector provided more than 165,000 jobs across the state by the end of 2021, an increase of 17% from 2015.<sup>58</sup>

### The path forward

A focus on resilient and sustainable energy sources contributes to the city's environmental goals. Investments in clean energy and energy-efficient technologies also foster innovation and green economy job growth. Sustainable energy investments, such as transitioning to renewable sources like wind, not only reduce the city's carbon footprint, but also enhance energy security, helping ensure an uninterrupted power supply critical for maintaining economic productivity across a broad spectrum of industries.

New York City is positioned to serve as a national model for delivering renewable energy at scale through key offshore wind developments. These growing opportunities will play a key role in not only helping the region meet its clean energy goals, but also positioning the city as a leader in the green economy, attracting innovative businesses and creating jobs in the burgeoning sector.

### Case Study: South Brooklyn Marine Terminal



Sustainable South Brooklyn Marine Terminal – is expected to create 13,000 jobs over time, generate \$1.3 billion in average annual investment citywide, stimulate economic growth, and reduce greenhouse gas emissions.<sup>59</sup>

The development of SBMT is crucial to the supply chain of offshore wind energy in New York City, serving as a hub for the Empire Wind and Beacon Wind projects. Developed in partnership by Equinor and BP, these projects harness the abundant wind resources of the Atlantic Ocean to generate clean, renewable energy. These projects are being developed in phases; Empire Wind I, Empire Wind II, and Beacon Wind I are expected to generate 816, 1,260, and 1,230 megawatts, respectively. Altogether, this will provide enough electricity to power about 1.3 million homes in New York state.<sup>60</sup>

In 2021, the city, in partnership with the EDC, announced a 15-year plan that commits \$191 million to offshore wind projects – consisting of \$57 million in support of SBMT and the remainder in new investments – through 2025.<sup>61</sup> Including the Empire Wind and Beacon Wind projects, five offshore wind projects are in development that are expected to remove more than 34 million tons of CO<sub>2</sub> from the environment, power more than 2.4 million homes across the state, and bring a combined economic impact of \$12.1 billion to New York state.

In October 2023, New York state regulators denied requests by Orsted, Equinor, BP, and other renewable developers for additional subsidies from New York ratepayers as rising costs from inflation and supply chain issues threaten the completion of these projects. It remains to be seen how developers react to these recent changes, but this could make it challenging for the state to reach its clean energy goals by 2040.

**Transportation:** After years of debate, New York City is finally set to implement congestion pricing in 2024, an initiative aimed at reducing traffic congestion, improving air quality, and generating revenue for vital transportation infrastructure projects. Under the plan, all vehicles entering the Manhattan central business districts, which includes all of Manhattan south of Central Park, during peak hours will pay a fee. The primary motivation for congestion pricing is to reduce excess traffic and fund the MTA.

The MTA estimated that on a per capita basis, New Yorkers lose on average, 117 hours each year due to traffic congestion, resulting in nearly \$2,000 in lost productivity and other costs.<sup>62</sup> By implementing a congestion pricing system, the city seeks to reduce reliance on private cars and the number of vehicles on the road during peak times.

Fewer vehicles in this congestion zone will reduce emissions, boost safety for pedestrians and bikers, and allow vehicles such as buses and emergency vehicles to move faster. The program is expected to generate \$1 billion in net annual revenue for the MTA to help

fund critical infrastructure maintenance and upgrades, and make public transit more efficient, reliable, and accessible.<sup>63</sup>

Progress is also being made elsewhere. This November, the Biden administration granted the city over \$3.4 billion to begin Phase Two of the long-dormant Second Avenue Subway project in Manhattan.<sup>64</sup> When completed, this project will boost connectivity for East Harlem, ensuring that residents in previously underserved neighborhoods will have greater access to jobs and essential services.

### The path forward

Sustainable transport investments, including efficient public transportation networks and cycling-friendly urban planning, alleviate traffic congestion, reduce the time and cost of commuting, and contribute to cleaner air and a healthier urban environment, enhancing residents' quality of life and the city's overall attractiveness to businesses. Sustainable transportation is also essential for keeping goods and labor flowing efficiently, ensuring that the city's supply chains remain robust and its businesses competitive.

### Case Study: Gateway Hudson River Tunnel Development Project



The Gateway Program's Hudson Tunnel Project is a critical infrastructure initiative aimed at addressing the pressing need for modernized and resilient transportation infrastructure between New Jersey and New York City. The existing Hudson River rail tunnels, which connect New Jersey and Manhattan, are over a century old and are in dire need of replacement and expansion. These tunnels are crucial arteries for commuter and intercity rail traffic, carrying Amtrak and NJ TRANSIT passengers, among others. However, their age and deteriorating condition pose significant risks to both the region's economy and transportation system. The Hudson Tunnel Project seeks to build two new rail tunnels under the Hudson River, providing additional capacity for passenger and freight trains while allowing for the maintenance and repair of the existing tunnels. This expansion is vital for maintaining efficient and reliable transportation between New Jersey and New York City, as the existing tunnels are vulnerable to damage from severe weather events, particularly hurricanes and superstorms.

The project, designed to enhance transportation resilience by improving the reliability of rail connections and ensuring that the region's economy is not paralyzed by transit disruptions, represents a critical investment in disaster preparedness, climate resilience, and the long-term economic stability of the Northeast Corridor. By expanding rail capacity, the Hudson Tunnel Project will alleviate congestion, reduce travel times, and encourage economic growth, making it an essential infrastructure endeavor for the entire New York–New Jersey metropolitan region and beyond. It is expected that over the project's construction period 72,000 direct, indirect, and induced jobs will be created and over \$19 billion in economic activity will be generated.<sup>65</sup>

In November of 2023, Governor Hochul announced that the Biden administration had awarded \$6.76 billion for four key rail projects, \$3.80 billion of which are dedicated to the Hudson Tunnel Project. This federal investment comes in addition to \$292 million granted through the IIJA in January 2023 for supporting the Hudson Yards Concrete Casing project, a prerequisite rail preservation project that will eventually connect Gateway Hudson Tunnel to Penn Station. This phase began construction in November and is expected to be complete in 2026.



### Case Study: Con Edison Public Charging



Con Edison's New York City Public Charging Project is a pivotal initiative aimed at advancing electric vehicle (EV) adoption in New York City. It involves the strategic deployment of 120 Level 2 curbside charging ports that provide up to 20 miles of range per hour of charging, 100 of which will be publicly available and the remaining 20 of which will be dedicated to city fleet use. The project places a strong emphasis on innovation by introducing fast-charging stations that

reduce the time required for EV owners to charge their vehicles, addressing a common concern known as "range anxiety." This project is a part of New York City's PlugNYC program dedicated to providing a comprehensive network of Level 2 and DC fast chargers and building public awareness of and support for EVs. Beyond individual benefits, the project contributes to the city's broader sustainability goals by reducing greenhouse gas emissions, improving air quality, and addressing climate change. It also aligns with the state's ambitious renewable energy targets and fosters economic growth by creating jobs and supporting local industries.

The New York State Public Service Commission (PSC) approved a \$701 million statewide "Make Ready Program" that provides funding to support the deployment of 50,000 Level 2 chargers and 1,500 DC fast chargers statewide by 2025.<sup>66</sup> This program allocates around \$233 million to Con Edison's service territory in New York City and Westchester and allocates a minimum of \$206 million dedicated to ensuring fair access and benefits for disadvantaged. In July of 2022, the PSC also approved managed charging programs that provide EV drivers discounts when charging at the most beneficial times for the grid, estimated to grow the societal benefits of EV deployments to more than \$5 billion through 2030.<sup>67</sup> By incentivizing off-peak charging behavior, managed charging programs simultaneously deliver lower-cost fuel to drivers and promote grid resiliency. The further expansion of EV infrastructure and accessibility will continue to encourage EV adoption, reducing transportation sector emissions and providing a cleaner environment.



**Buildings and Affordable Housing:** In terms of the “built environment,” New York City should embrace innovative solutions that expand affordable housing options and boost the resiliency of its buildings.

The city’s extensive building infrastructure is integral to its economic vibrancy. Real estate is a colossal component of the city’s economy, encompassing not only the development and management of buildings but also the buying, selling, and renting of properties that house all residents and companies.

Building new structures and maintaining existing ones create a multitude of jobs and housing opportunity. The New York Building Congress reports that, in 2022, construction spending reached over \$70 billion in inflation-adjusted dollars and forecasts \$83 billion in spending by the end of 2023.<sup>68</sup> The Building Congress also reports employment in the construction of buildings and specialty trades accounted for over 134,000 jobs in 2022.

Unfortunately, despite these impressive investments in construction, there remains a shortfall in affordable housing units. As of 2019, the New York City metro area had a housing deficit of 342,000 units, and the production of new housing has proved to be insufficient, with fewer than 26,000 new units completed in 2022 citywide. This largely contributes to the continuously high percentage of New Yorkers who remain rent burdened.

In July of 2023, Governor Hochul unveiled a comprehensive executive action plan aimed at addressing New York State’s housing crisis by boosting the supply of affordable housing. The initiative focuses on streamlining the development process and accelerating the construction of new housing units across the state. To achieve this, the plan includes initiatives to address regulatory hurdles for affordable housing projects, leverage state-owned land for affordable housing development, and reward localities across the state that comply with a new “Pro-Housing Community” certification process. In addition, certified Pro-Housing Communities will be considered first among localities applying for several programs that the REDCs support, including: the Downtown Revitalization Initiative (DRI), the NY Forward program, the Regional Council Capital Fund, capital projects in the Market New York program, and the New York Main Street program.

Additionally, Mayor Adams’ “City of Yes for Housing Opportunity” proposal, announced in August of 2023, is an effort to address the affordable housing shortfall through zoning reform that is expected to create an additional 100,000 homes. While New York City’s

complex zoning laws historically limited housing development, the Office Adaptive Reuse Task Force explored opportunities to convert underused commercial spaces to other uses, particularly housing.

The Task Force outlined recommendations that include expanding the range of buildings eligible for conversion, allowing most buildings constructed in 1990 or before to convert and thereby providing for the conversion of over 120 million square feet of existing space. This permits the conversion of office buildings to a broader array of housing types, such as supportive housing, and provides tax incentives to support affordable housing.

These state and city initiatives have enabled NYCREDC to direct funding toward a multitude of housing and sustainability projects.

### **The path forward**

Climate-resilient infrastructure not only safeguards the city against catastrophic events, but also fosters economic stability and growth. While New York City is committed to building and maintaining climate-resilient infrastructure, it is wise to explore opportunities for dual benefits.

Sustainable building investments – characterized by energy-efficient designs, green construction practices, and resilient architecture – elevate property values, ensure residents’ safety, and offer an opportunity to address affordable housing needs.

Analysis by the Urban Green Council found that implementation of LL97 alone through needed retrofits in building spaces can drive up to \$20 billion in economic activity while creating as many as 140,000 jobs in New York City by 2030. These retrofits also provide an opportunity to reevaluate zoning policies for more sustainable housing and office-to-residential conversions.

The “City of Yes” initiative, which proposes citywide zoning reforms, and the Governor’s executive action plan present an opportunity for the NYCREDC to act as a driving force for new zoning laws and encourage the adaptive reuse of buildings. Additionally, as exemplified by the GMDC, opportunities may emerge for the NYCREDC to bridge transformative projects by subsidizing new housing constructions.



## Case Study: Greenpoint Manufacturing and Design Center (GMDC) – NYCREDC Priority Project



The Greenpoint Manufacturing and Design Center (GMDC) is partnering with The Bridge and Mega Development to redevelop a former industrial complex in Brownsville, Brooklyn. This \$118 million development serves as a compelling example of adaptive reuse, where existing structures are repurposed to address modern demands effectively.

GMDC's 39,000-square-foot facility will combine a multitenant center for small-scale manufacturing with affordable and supportive housing (174 units) known as Bridge Rockaway. This aligns the region's need for housing with the growing emphasis on retaining manufacturing space for small businesses.

Half of the 174 apartment units in development will be designated as affordable housing for households with incomes up to 70% of the Area Median Income or lower, as part of the New York City Department of Housing Preservation and Development's Extremely Low- and Low-Income Affordability program. The other half of those units will be designated as homes for formerly homeless New Yorkers, with on-site support services.

Crucial to this development is the substantial role of subsidized funding in making mixed-use development a reality. ESD is contributing \$1.6 million through a NYCREDC Round IX grant in addition to subsidized support, including a \$16.9 million subsidy from New York State Homes and Community Renewal and a \$6.5 million subsidy by the New York State Office of Temporary and Disability Assistance.<sup>69</sup>

Ultimately, GMDC's innovative approach demonstrates the power of collective action in addressing the affordable housing crisis while simultaneously promoting economic growth.



## Case Study: Bronx Point and Universal Hip Hop Museum – NYCREDC Priority Project



Bronx Point is a transformative development project aimed at revitalizing the South Bronx waterfront. The \$349 million mixed-use development, situated along the Harlem River, encompasses approximately 2.8 acres of open space, and is designed to seamlessly blend mixed-income housing, community amenities, and cultural spaces.<sup>70</sup> The key objective is to create a vibrant and inclusive neighborhood that contributes to the economic and cultural fabric of the Bronx.

At the heart of Bronx Point is the Universal Hip Hop Museum (UHHM), an institution that will celebrate and preserve the history of local and global hip hop music and culture, past and present. UHHM will lease 52,000 square feet in the Bronx Point (Phase 1) development, located in the Mott Haven section of the Bronx. The museum is expected to be a focal point, providing educational programs, cultural events, and a dynamic space for artistic expression. Developed by L+M Development Partners, Type A Projects, Bronx Works, and the City of New York, this mixed-use development also includes 542 units of mixed-income housing, featuring a range of affordability levels to accommodate people with diverse socioeconomic backgrounds. The project also prioritizes waterfront access and open spaces, incorporating a public plaza, esplanade, over 10,000 square feet of retail space, and recreational areas to foster community engagement through new public spaces.<sup>71</sup>

The development broke ground in May 2021 and celebrated a ribbon-cutting ceremony on October 19, 2023. UHHM is receiving \$3.5 million in NYCREDC capital funding for the \$49 million project, which is expected to be completed in 2025.



### Case Study: National Black Theatre – NYCREDC Priority Project



National Black Theatre (NBT), founded in 1968 by the late visionary artist Dr. Barbara Ann Teer, is partnering with Ray, LXMD, an affiliate of L+M Development Partners, to construct a new theater and cultural hub that will be part of Ray Harlem, a \$200 million mixed-use development in East Harlem that will include 222 mixed-income apartments. The project, designated as a NYCREDC Round XII priority project, will feature a 27,000-square-foot home for NBT, including offices, classrooms, a 250-seat immersive technology

performance space, a 99-seat flexible studio theater, and a set-building shop to support workforce development in theatrical trades. ESD is providing a total of \$3 million in NYCREDC capital grant funding. NBT held a topping-off event on October 5, 2023. Completion of the NBT project is expected in early 2026.

### Case Study: NYS Regional Food Hub – NYCREDC Priority Project



The NYS Regional Food Hub (NYSRFH) is a 60,427-square-foot facility that will include a cold storage facility for farmers, a food-processing center, and other infrastructure to support local farmers and underserved New Yorkers. The facility, which has a cost of \$38.8 million, is being built and managed by GrowNYC, a nonprofit that runs several sustainability programs. NYSRFH will work with a range of small- and mid-sized farms, providing unprecedented access to New York City's wholesale marketplace. The project

was designated as a priority in NYCREDC Round VI and is receiving a \$15 million ESD grant and a \$4 million New York State Agriculture and Markets grant. Construction completion is expected in May 2024.



## Focus Area – Workforce

### Workforce Development and New York City economy

New York City’s greatest strength is its people – entrepreneurs building tomorrow’s businesses, creators making this city a haven for the arts, immigrants starting new lives through opportunity and hard work, and innovators cementing New York City as a hub for technology. The primary focus of the NYCREDC’s workforce initiatives is to close the wage gap for workers and the skills gap for employers. Workforce development opens the door to a host of societal benefits. Several reports, including a study from the Stanford Center on Poverty and Inequality, show that higher employment rates lead to lower crime rates. Additionally, a study published by the Brookings Institution shows a correlation between increased labor supply and reductions in economic inflation.<sup>74</sup>

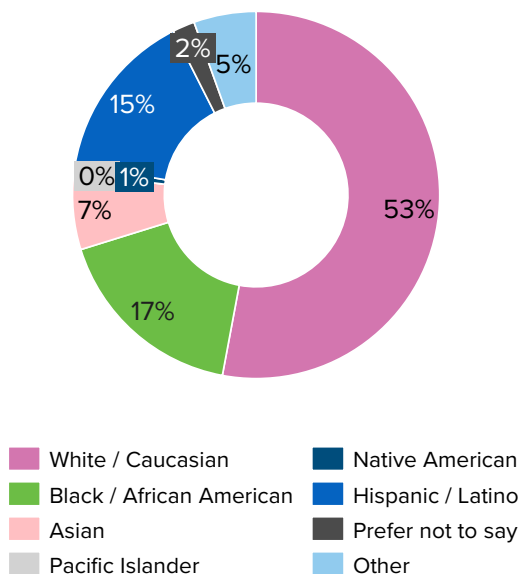
The NYCREDC recently conducted a survey to better understand New York City workforce readiness and challenges. This public engagement survey was distributed across the city’s five boroughs in both English and Spanish. The survey gauged the workforce experience from four perspectives: unemployed job seekers, employees, employers (hiring experts within corporations), and small business owners, each representing 24%, 30%, 22%, and 24% of survey respondents, respectively. Furthermore, the survey captured responses from various ethnic groups indicative of New York City’s overall diversity, with the largest representations being White/Caucasian at 53%, Black/

African American at 17%, and Hispanic/Latino at 15% of respondents. Overall, we found that for a sustainable employment pipeline to be created, a robust infrastructure that is well organized and well connected across various stakeholders is critical. It also facilitates equity in employment opportunities for historically marginalized populations.

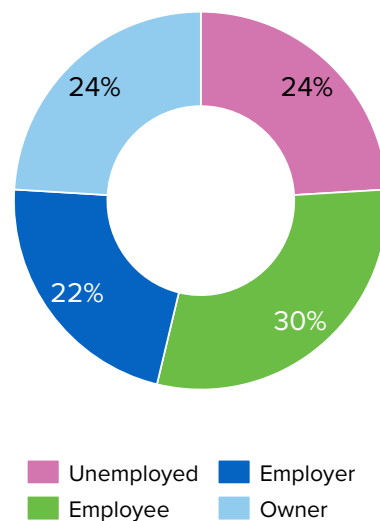
Building workforce development solutions that create good jobs with career pathways is one of the city’s greatest tools to encourage and sustain residency, especially given the high cost of living. Post-COVID, jobs have returned to the city, and the so-called “migrant crisis,” if handled wisely, creates an additional opportunity to secure the future of New York City’s workforce and population.

Workforce development relies on achieving the right balance between job openings and job seekers and limiting any barriers that stand between these two. In September 2023, an average of 158,000 jobs were posted in New York City. During that same period, there were more than 211,000 New Yorkers who were unemployed, including 71,000 who had been out of work for more than six months. This is a reflection of a “skills gap.” Too often, employers just aren’t able to find qualified talent, and job seekers are neither connected to quality opportunities, nor prepared for the jobs that exist in today’s economy.

#### RACE AND ETHNICITY



#### OCCUPATIONAL GROUPING



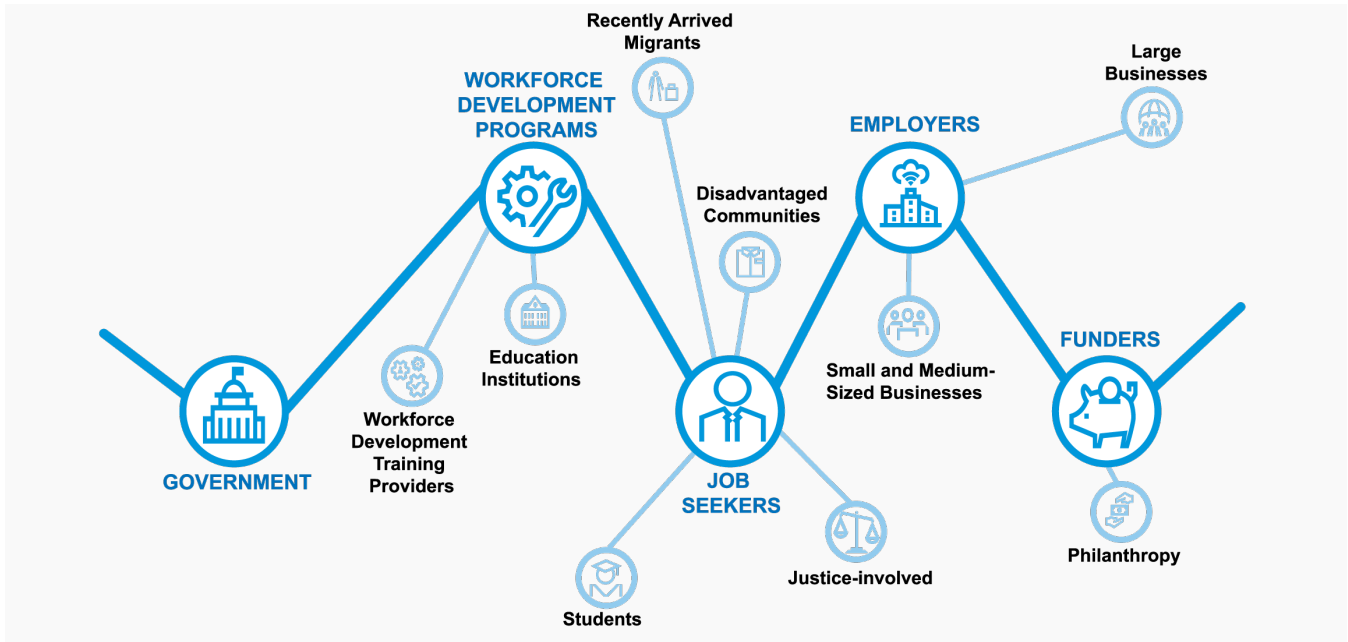
Source: Kearney



**Case Study: Pursuit Transformation Company – NYCREDC Priority Project**

Pursuit Transformation Company will create a tech hub and training center in Queens that will host its software engineering training, apprenticeship, and career development programs, which will train low-income New Yorkers for high-paying tech jobs with more than 100 employer partners. The tech hub will be designed specifically to meet so they can learn and grow their potential—with 24/7 access, reliable Wi-Fi, and collaborative learning spaces. This NYCREDC priority project was recently awarded a \$1.56 million ESD capital grant, a \$1.5 million ESD Office of Strategic Workforce Development (OSWD) capital grant, and a \$1.0 million ESD OSWD P4P operating grant.

**Key stakeholders in New York City workforce ecosystem**



To understand the role the New York City workforce plays in the city’s economic growth, challenges, and opportunities, it’s helpful to understand the different stakeholders and how they interact with one another.

First there are job seekers, each with their own unique skill sets, who come from a variety of backgrounds and communities, have different socioeconomic standings, and face different kinds of barriers to entering the workforce. People who are justice-system involved, for example, often face difficulties getting hired, which range from employer reticence to hire anyone who has been incarcerated – no matter how long ago or for what offense – to gaps in their education and work history. Exalt, a previous recipient of funds from the NYCREDC, has done remarkable work in marrying skill development and an individualized approach to help justice-system-involved youth access work opportunities. New York City needs more equitable workforce solutions like this to meet the needs of this cohort of job seekers as well as other cohorts with barriers to employment.

“Workforce development service provider” is a broad umbrella term we are using to denote vocational training and career pathways providers. Educational institutions like CUNY provide degree and non-degree programs, micro credentials, literacy programs, and even integrated wraparound services like childcare. Nonacademic training institutions like Per Scholas, supported by the NYCREDC in the past, provide job-specific curriculum, sometimes co-developed by major employers.

Many New York City-based employers have a long track record of partnering with training organizations. Small and medium-sized businesses represent a massive piece of New York City’s workforce, making up about half of the private jobs in NYC.

Government bodies can facilitate passage through the workforce system and connect relevant parties. The newly constituted Workforce Development Board (under the purview of the New York City Mayor’s Office of Talent and Workforce Development) for example, will bring together key stakeholders from across the city’s

## **Workforce Challenges**

While there are many stakeholders working to strengthen New York City’s workforce, there are still several challenges that face this aspect of our city.

### **Lack of coordination and integration**

Several notable stakeholders in this space have been quick to tell us “New York City’s workforce isn’t underserved, there’s just a lack of integration.” Job seekers, employers, and training programs all need a better, more equal way to access skill development and job opportunities. The NYCREDC’s 2023 survey found that candidates primarily rely on word of mouth and online applications to connect to workforce development programs. Unfortunately, 88% of large employer respondents and 61% of small business owner respondents do the majority of their hiring online, making it difficult for populations who do not have access to the right technology to apply.

A disconnect between where workforce development program providers and employers advertise and where candidates look for jobs and upskilling opportunities makes it harder to match people looking for workers with workers looking for jobs. Whether it be through organizing the vast resources through a centralized hub or through other simplified mediums, more needs to be done to drive equitable access and awareness in job and development opportunities.

### **Major skill gaps among workers**

Skill gaps also contribute to New York City’s ongoing issues with inequality, unemployment, and underemployment. Labor force participation by the city’s Black or African American residents has decreased steadily from 2014 levels to 55% in 2020, a statistic that could be combatted with greater prioritization of education efforts in underserved communities. These gaps show up in different ways for different segments of the workforce. Many recent grads are finding that despite obtaining a degree, they still lack the experience or technical skills desired by employers. For migrants, lack of English proficiency is a consistent barrier that often keeps them in low-skill, low-wage roles with few opportunities for advancement. For those changing careers, upskilling often requires additional schooling or training.

More importantly, this lack of education becomes apparent when individuals want to enter the workforce. According to the NYCREDC’s 2023 public engagement survey, employers and small business owners overwhelmingly indicate that the greatest hiring

challenge is quickly identifying qualified candidates to fill existing open positions. Among the skills employers are looking for are software literacy, problem solving, timeliness, and data analysis. Respondents reported that communications and so-called “soft skills” represent the largest single candidate skills gap. Exacerbated by a growing skills gap, this further puts disadvantaged communities behind even if they are able to establish an initial connection with employers.

### **Insufficient wraparound services**

Job seekers, especially those from lower-income communities, often require additional services to help them start and complete workforce development programs or hold long-term employment. For a job seeker, having access to wraparound services like childcare, eldercare, English for Speakers of other Language (ESOL) training, access to transportation, job training stipends, food, and health and legal services is often the difference between being able to take a meaningful career step or not. Identifying and providing for the needs of the workforce is crucial for retaining talent and driving equity in New York City. While the city offers a diverse array of wraparound services, a 2022 Progress Report from the NYCREDC shows that a majority of childcare providers are at capacity or still cannot meet demands. Without city support, the expense of accessing these services can be prohibitive. Childcare, for example, ranges between \$9,000 and \$16,000 per year per child, depending on age. While the Adams administration has pledged a \$2 billion investment between 2022 and 2026, there is still more the city can do to drive the equality, efficiency, and reach of wraparound services.<sup>76</sup>

### **Lack of infrastructure connecting job seekers to employers**

The Mayor’s Office of Talent and Workforce Development is working to build a digital infrastructure to connect job seekers to employers – an employer-facing “front door” for the city’s online talent portal to match the access that has already been built for job seekers. New York State Department of Labor (NYSDOL) also offers myriad career services including their own job portal, unemployment assistance, apprenticeships, and job market information (just to name a few services). However, the empire state could still benefit from greater infrastructure connecting job seekers to employers. Finding employees is particularly challenging for small and medium-sized businesses, which struggle to reach talent pools, let alone compete with opportunities from larger employers. This should help employers reach more candidates in a more



equitable manner. Beyond simply connecting seekers with providers, the city also lacks standardized data measurement and sharing between workforce development providers. This could be addressed through the creation of shared impact metrics, which will create consistency in how workforce players view challenges and opportunities.

**Inconsistent private sector participation:** Despite being a center of industrial activity, New York City has mixed participation with private sector engagement in workforce development. There are certainly success stories with private employers – for example, Barclays partners with training programs like Per Scholas to co-develop curriculum and hire program graduates, or the New York Jobs CEO Council’s initiatives to hire 25,000 CUNY students into good jobs by 2030. But many workforce development providers struggle with industry engagement, with over 30% listing growing connections to employers as a top priority for them in the NYCREDC survey.

### **Immigration issues**

While New York City’s diversity makes it a welcoming home for immigrants, there are various barriers to employment for immigrants, including work authorization and H-1B visa shortages for skilled workers, and, more recently, work authorization challenges specifically related to the massive influx of migrants.

The recent surge in the migrant population is creating a significant strain on city and federal resources. Connecting them to employment opportunities could not only alleviate the immediate financial burden on the city, but also enable systemic changes to boost employment opportunities for all New York City residents. Many migrants are intimidated or misinformed about the documentation process, and some participate in the underground economy or work “off the books.” Many industries, like construction, hospitality, and healthcare, are composed of roughly 10% undocumented migrant workers.

### **The path forward**

New York City’s workforce development initiatives need increased funding and should be pooled to maximize effect. This requires greater collaboration between philanthropic, public, and private sources.

Increased and coordinated funding can drive systemic change across the system, like enabling digital platforms for job seekers and employers to interact (especially small and medium-sized businesses), standardizing data reporting, expanding intake capacity with training providers, and expanding wraparound services.







# Participation

To inform the development of the strategic plan, the NYCREDC interviewed 91 stakeholders and experts across industry, the nonprofit community, and government. The NYCREDC also conducted a public survey of New York City residents to better understand workforce readiness and challenges.





## PUBLIC OUTREACH & ENGAGEMENT

The NYCREDC continues to prioritize public engagement and outreach in Round XII. Some examples include the following:

- The NYCREDC met in person at the New York Genome Center on May 17, 2023, and virtually on September 8, 2023, and November 28, 2023. All of these meetings were open to the public.
- The Office of the Queens Borough President hosted a virtual CFA Info Session on June 13, 2022, which included the participation of NYCREDC members, past NYCREDC grant awardees, and ESD staff. The Office of the Bronx Borough President hosted an in-person CFA Info Session on July 11, 2023, at the Bronx County Courthouse. Both meetings were open to the public.
- The NYCREDC collaborated with the offices of the five borough presidents to solicit applications for the DRI and New York Forward. The offices of the borough presidents were asked to work with local elected officials, leading employers, and institutions and community groups to submit applications for this year’s competition.
- NYCREDC staff held virtual meetings and telephone conferences with potential CFA applicants representing the diversity of the city’s economy. These applicants included the following, among others:
  - American Museum of National History
  - Brownsville Arts Center
  - The Bushwick Starr
  - Friends of the High Line
  - Museum of the Moving Image
  - National Black Theatre Workshop
  - New Museum
  - New York Botanical Garden
  - New-York Historical Society
  - The New York Immigration Coalition
  - New York Urban League
  - Solar One
  - The Trust for Governors Island
  - Long Island City Partnership
  - SoHarlem
  - Randall’s Island Park Alliance
  - The Campaign Against Hunger



- The NYCREDC also conducted a public survey open to all New Yorkers, unemployed or employed, to identify trends and pain points among New York City’s workforces. To distribute the survey across the city, the NYCREDC partnered with the following organizations:
  - ITAC
  - Henry Street Settlement
  - Chinatown Partnership
  - Workforce Development Institute
  - Manhattan Chamber of Commerce
  - Staten Island Chamber of Commerce
  - Bronx Chamber of Commerce
  - Staten Island Economic Development Corporation
  - Queens Chamber of Commerce
  - Brooklyn Chamber of Commerce
  - CUNY
  - Exalt Youth
  - Brooklyn Navy Yard
  - NYC Employment and Training Coalition
  - Just Futures
  - New York Immigration Coalition
  - NYCREDC Past Award Recipients
  - Opportunities for a Better Tomorrow
  - Brooklyn Workforce Innovations
  - Emma’s Torch
  - Hotbread Kitchen
  - Pursuit
  - Restoration
  - AHRC
  - AlphaPointe
  - WeACT
  - Youth Action YouthBuild
  - NEW
  - P2A
  - Helmets to Hardhats
  - Construction Skills
  - ReBuilding Together NYC
  - Fortune Society
  - CEO
  - Hospitality Pathways
  - St. Nick’s Alliance
  - WPTI
  - Green City Force
  - Hour Children
  - SoHarlem
  - Cypress Hills Development Corp
  - Drive Change
  - National Elevator Cab & Door
  - AnyBag
  - Mi Jong Lee
  - NY Embroidery Studio
  - Uncommon Goods
  - Catbird
  - Steinway & Sons





## WORKGROUPS

This year, instead of conducting workgroups, the NYCREDC conducted 91 45-minute interviews with regional stakeholders to better understand the growth opportunities and key challenges for New York City. These interviews covered topics such as small business, advanced manufacturing, migrant issues, workforce development, infrastructure, resiliency, innovation, life science and hospitality (just to name a few). These interviews served as foundations for both the strategic plan and the challenge competition proposal portions of this report and the interviewee names are listed below:

### Strategy Plan - Industry Leaders

**Brian Asparro**  
Chief Operating Officer  
CarbonQuest

**David Belt**  
Executive Chairman and Co-Founder  
Newlab

**Charles Boyce**  
President  
Boyce Technologies

**Zofia Ciechowska**  
Vice President of Strategy and Operations  
Etsy

**Wil Fisher**  
External Affairs Manager  
Renewable Energy Company

**Ana Fisyak**  
Community Engagement Manager  
Equinor Wind US

**Jonathan Flaherty**  
Global Head of Sustainability and Building  
Technology Innovation  
Tishman Speyer

**Maria Gotsch**  
President and CEO  
Partnership Fund for New York City

**Lindsay Greene**  
President and CEO  
Brooklyn Navy Yard Development Corporation

**Orin Herskowitz**  
Executive Director  
Columbia Technology Ventures

**Christina Ho**  
Vice President of Strategic Planning  
Con Edison

**Tom Maniatis**  
Scientific Director and CEO  
New York Genome Center

**Camille Manso**  
Partner  
Silicon Foundry

**Anish Melwani**  
Chairman and CEO, North America  
LVMH

**Tyler Morse**  
Founder, Chairman and CEO  
MCR Hotels

**Clare Newman**  
President and CEO  
Trust for Governors Island

**Angela Pinsky**  
Head of Government Affairs and Public Policy  
Google

**Britt Reichborn-Kjennerud**  
Director of E-Mobility  
Con Edison

**Andrew Rigie**  
Executive Director  
New York City Hospitality Alliance

**Carlo Rizzuto**  
Managing Director  
Versant Ventures

**Pat Sapinsley**  
Managing Director of Cleantech Initiatives  
Urban Future Lab

**Julie Samuels**  
President and Executive Director  
Tech:NYC

**Sam Sia**  
Co-Founder  
Harlem Biospace

**Patti Simpson**  
Chief Administrative Officer  
Union Square Hospitality Group

**Elizabeth Zeldin**  
Program Director  
Enterprise Community Partners

## WORKGROUPS *(continued)*

### Workforce

#### **Emary Aronson**

Chief Knowledge Officer and Senior Advisor  
to the CEO  
Robin Hood Foundation

#### **Murad Awawdeh**

Executive Director  
New York Immigration Coalition

#### **Kiersten Barnett**

Executive Director  
New York Jobs CEO Council

#### **Gregg Betheil**

CEO  
PENCIL

#### **Charmaine Bourbon**

Vice President  
Grant Associates

#### **Gisele Castro**

CEO  
Exalt

#### **Steve Choi**

Co-founder  
Just Futures

#### **Cass Conrad**

Executive Director  
The Carroll and Milton Petrie Foundation

#### **Doug Cotter**

CEO  
Grant Associates

#### **Tim Currier**

Executive Director, Construction Industry  
Partnerships  
NYC Mayor's Office of Talent & Workforce  
Development

#### **Kate Dempsey**

Senior Advisor  
Office of the Deputy Mayor for Health and  
Human Services

#### **Siobhan Dennehy**

Executive Director  
Emerald Isle Immigration Center

#### **Laurie Dien**

Vice President/Executive Director for Programs  
The Pinkerton Foundation

#### **Nikki Evans**

Senior Vice President of Workforce  
Development & Education  
Brooklyn Navy Yard Development Corporation

#### **Lisa Futterman**

Regional Director  
New York City Workforce Development Institute

#### **Katy Gaul-Stigge**

President and CEO  
Goodwill of Greater NY and Northern NJ

#### **Ayesha George**

Executive Director  
Strive

#### **Jade Grieve**

Chief of Student Pathways  
NYC Public Schools

#### **Mike Gross**

Executive Director  
Genesys Works NYC

#### **Jukay Hsu**

Founder & CEO  
Pursuit

#### **Angie Kamath**

Dean  
NYU School of Professional Studies

#### **John Kenny**

Vice President, Citizenship  
Barclays

#### **Matt Klein**

Chief Program and Impact Officer  
Robin Hood Foundation

#### **Priscilla Kwak**

Managing Director, Strategic Initiatives  
NYC Department of Small Business Services

#### **Jane MacKillop**

Dean, School of Continuing and Professional Studies  
Lehman College, CUNY

#### **Frankie Miranda**

President  
Hispanic Federation

#### **Greg Morris**

CEO  
NYC Employment & Training Coalition

#### **Marjorie Parker**

President and CEO  
JobsFirstNYC

#### **Yurij Pawluk**

Deputy Commissioner for Workforce Development  
NYC Department of Small Business Services



## **WORKGROUPS** *(continued)*

### **Workforce** *(continued)*

#### **Emma Pfohman**

Senior Advisor  
NYC Deputy Mayor for Housing, Economic  
Development and Workforce

#### **Dana Politis**

Associate Commissioner of Workforce Development  
New York State Department of Labor

#### **John Ratzan**

Managing Director  
Accenture

#### **Debbie Roman**

Managing Director  
Per Scholas

#### **Liza Schwartzwald**

Director of Economic Justice and Family  
Empowerment  
New York Immigration Coalition

#### **Abby Jo Sigal**

Executive Director  
NYC Mayor's Office of Talent and Workforce  
Development

#### **Peter Sloane**

Chairman and CEO  
The Heckscher Foundation for Children

#### **Monsignor Kevin Sullivan**

Executive Director, Archdiocese of New York  
Catholic Charities

#### **Maria Torres-Springer**

Deputy Mayor for Housing, Economic Development  
and Workforce  
NYC Office of the Mayor

#### **Philip Weinberg**

President and CEO  
Strive

### **REDC Members**

#### **Stuart Appelbaum**

President  
RWDSU

#### **Linda Baran**

President & CEO  
Staten Island Chamber of Commerce

#### **Wellington Chen**

Executive Director  
Chinatown Partnership

#### **Michael Cusick**

President & CEO  
Staten Island Economic Development Corporation

#### **David Garza**

President & CEO  
Henry Street Settlement

#### **Thomas J. Grech**

President & Chief Executive Officer  
Queens Chamber of Commerce

#### **Kyle Kimball**

Vice President  
Government Relations & Community  
Engagement, New York University

#### **Kenneth Knuckles**

Vice Chair  
New York City Planning Commission

#### **Gary LaBarbera**

President  
Building and Construction Trades  
Council of Greater New York

#### **Nick Lugo**

President & CEO  
New York City Hispanic Chamber of Commerce

#### **Lisa Sorin**

President  
Bronx Chamber of Commerce

#### **Douglas C. Steiner**

Chairman  
Steiner Studios

#### **Marcel Van Ooyen**

President & CEO  
GrowNYC

#### **Jessica Walker**

President & CEO  
Manhattan Chamber of Commerce

#### **Kathryn Wylde**

President & CEO  
Partnership for New York City

#### **Kinda Younes**

Executive Director  
Industrial & Technology Assistance Corporation

## **WORKGROUPS** *(continued)*

### **Strategic Plan – Kearney Experts**

**Brian Ehrig**

Global Lead of Fashion and Luxury

**Azaz Faruki**

Partner

**Evan Gutoff**

Partner

**Craig Hebert**

Principal

**Sree Kancherla**

Global Director of Sustainability

**Bharat Kapoor**

Global Lead of PERLabs

**Nora Kleinewillinghoefer**

Partner

**Alyson Potenza**

Americas Lead of Leadership, Change, and Organization

**Preethi Prasad**

Partner

**Ben Smith**

Americas Lead of Telecommunications, Media, and Technology

**Karina Toy**

Principal

**Candice Yee**

Partner

Lastly, we wish to thank our consulting partners from Kearney for their diligent work:

*Beth Bovis, Daniel Santiago, Jim Singer, Adrien Le Gouvello, Priyal Morzaria, Fred Copeman, Mayer Estinville, Michael Lin, Justin Lee, Ryan Mathews, Maude Merriman, and Laith Al Tayan.*



A person in silhouette is seen from the back, looking out from a suspension bridge. The bridge's steel structure and numerous cables are visible in the foreground. In the background, a dense city skyline with various skyscrapers is visible under a clear sky. The overall scene is captured in a cinematic, high-angle perspective.

PART THREE

# Challenge Competition Proposal



# Challenge Overview

The NYCREDC has selected workforce as the category of challenge it will undertake. For purposes of applying the \$10 million challenge grant to achieving measurable impact on a specific workforce challenge, the NYCREDC has determined that it will focus on helping the city and state move work-authorized migrants toward self-sufficiency. Specifically, this challenge grant will be used to create a support system that, within one year, will aim to facilitate the employment and stabilization of as many as 7,500 migrants in New York City. Given that the city spends \$171 per migrant per day (estimated total of \$10 million per day), every month this program can reduce in shelter stay equals a reduction in spending of ~\$5,200/migrant (and right now the city shelters over 65,000 migrants).<sup>78</sup>

## **Selection of Workforce as the Challenge Topic**

Interviews with workforce development experts, including several NYCREDC members, revealed the city is rich in public and private workforce development resources but lacks an effective, coordinated delivery system. Workforce solutions are especially important at a time of labor shortages, which is the case in New York City today. While the greatest deficit exists in the category of professional jobs with technical qualifications, there are also serious shortages in industries with entry-level jobs, including nearly 34,000 job postings in retail, hospitality, construction, and healthcare as of Q3 2023.<sup>79</sup> Without a workforce system that is accessible to and successful for the most disadvantaged New Yorkers, we will continue to see a growth in public assistance recipients (up 52% since 2020), Supplemental Nutrition Assistance Program (SNAP) recipients (up 17% since 2020), and incarceration (up 15% since 2020).<sup>80</sup>

In short, workforce solutions are an essential opportunity to solve for larger city issues such as equity, upward mobility, and affordability. Workforce is also a priority for small and medium-sized businesses, which tend to be most impacted in a tight labor market.

## **Selection of Migrants & Asylum Seekers as the Challenge Focus**

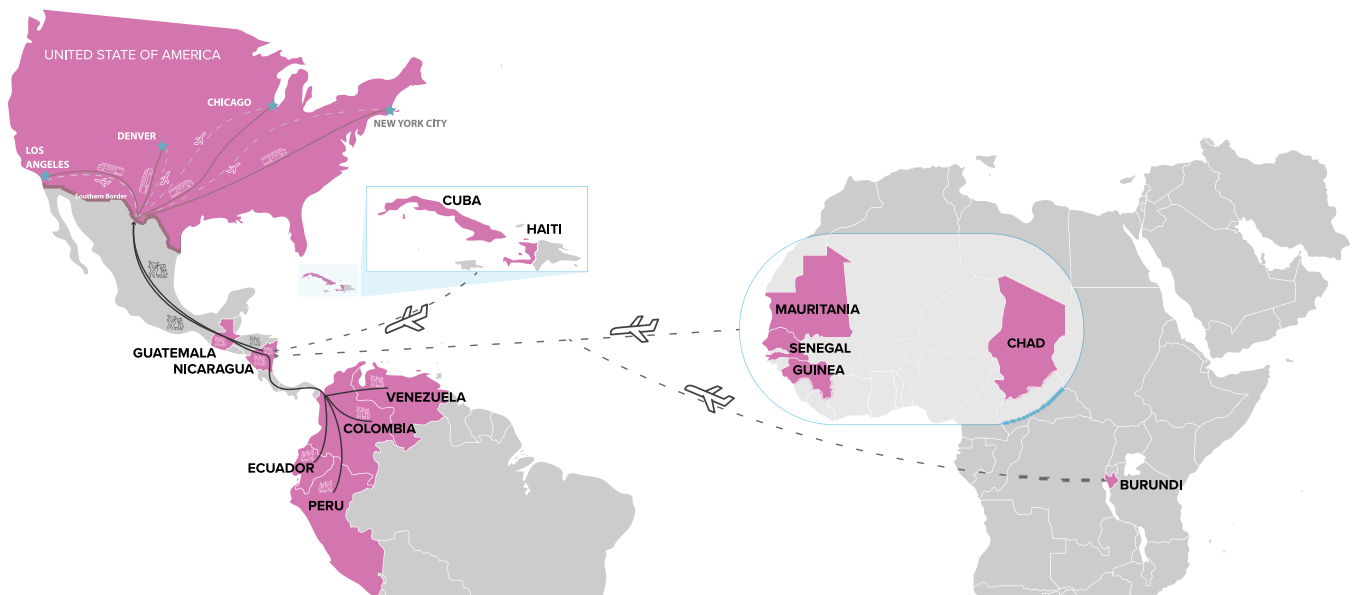
The influx of about 140,000 migrants and asylum seekers into New York City since the spring of 2022 has created a humanitarian and fiscal crisis, one to which accelerated access to employment is the only practical solution.<sup>81</sup> The pool of migrants includes people who generally lack the language skills, resources, or relationships required to secure and hold a job. They represent an opportunity to take a fresh approach to organizing the interventions that can most effectively deal with broader workforce issues. The state Department of Labor and city's Workforce 1 Centers are already collaborating in unprecedented ways to establish the job identification, hiring, and placement services for this target population. Through the Challenge Grant, the NYCREDC proposes to supplement these efforts with a combination of wraparound services that are intended to accelerate the process and ensure success in placing migrant households on a solid path toward independence.

The migrant population is not homogenous and is characterized by a variety of skill levels and English fluency. Many come ready with a niche skill but have low digital literacy (or access to the internet), forming a barrier to connecting with most job opportunities. A large portion of new migrants come with little to no English, preventing them from accessing most New York City jobs.<sup>82</sup>

Through dozens of interviews with New York City's workforce experts, the topic of the migrant crisis was repeatedly mentioned as both a challenge and an opportunity. It became clear that New York City's current workforce development offerings aren't meeting the full potential to address the complicated issues the migrant population face and that fresh ideas coupled with new funding could deliver much-needed support. For these reasons, the NYCREDC selected workforce and the migrant crisis as the focus of its challenge competition proposal.



## The Migrant Journey to New York City



It is difficult to envision how hard the road from, for example, Venezuela to New York City can be, so the NYCREDC has created a composite picture by combining the stories of several real-life migrants into a fictional migrant. Mauricio is a native Venezuelan who left the village his family called home for generations to seek a new life in New York City. He is fleeing a multidimensional crisis in Venezuela that includes political instability, gang warfare, rampant crime, and violence.<sup>83</sup> His journey to New York City started with a 2,700+-mile trek to the Texas border, much of which he did on foot in a small group, guided by a smuggler. Several portions of this trek passed through dangerous territories – risking both natural hazards like perilous jungle and rough mountain terrain, and very human dangers like robbery.<sup>84</sup>

At the border, Mauricio made the treacherous crossing of the Rio Grande, reached the U.S. side, and quickly encountered U.S. Customs and Border Patrol. After being held at the border for several days, while his Venezuelan origins were confirmed, Mauricio was offered several options of destination, and he chose New York City based on what he had heard about services available. After many hours on a bus and waiting days in an intake line, he finally found himself housed in a shelter, sharing a room with 11 other people.<sup>85</sup>

Mauricio had heard rumors about difficulties of navigating the legal paperwork necessary for asylum and work authorization. At least one of them proved true. He arrived after October 3, which meant he didn't qualify for Temporary Protected Status (TPS), an expedited work authorization process.<sup>86</sup> Given this turn of events and his dire need for money, he has deprioritized the legal processes and is for now focused on earning money any way he can. Given his lack of English and work authorization, he must settle for under the table work. For Mauricio, this means using the food delivery account of a friend, to whom he will have to pay a hefty cut of his earnings. Mauricio is stuck – he wants to earn good money, get out of the shelter, and start his new life. He would also like to go through the legal processes for asylum and work authorization, but he doesn't understand how long the process will take, what it will cost, and what results he might have.

Mauricio's story may be fictional, but its components are all too common, shared by the more than 140,000 migrants who have arrived in New York City since the spring of 2022.<sup>87</sup> If something doesn't change, the problems resulting from the lack of provision for this group will only continue to compound.



**MIGRANT:** A general term referring to anyone who has relocated to the U.S. This term is used more predominantly than others in this document given the frequent need to refer to a large group without differentiating between legal or work authorization status amongst the members of said groups.

**ASYLUM SEEKER:** Someone who meets the criteria of a refugee (unable or unwilling to return home because they fear serious harm) who has already entered the U.S. While the term is often used loosely, “asylum seeker” refers specifically to someone who has applied for asylum and is awaiting the decision. In order to be granted asylum, a migrant must apply no more than one year after arriving in the US.



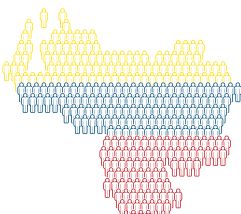
**ASYLEE:** Someone who has received asylum status. An asylee receives documentation allowing them to remain in the U.S. indefinitely and grants them other rights, like Social Security, cash and medical assistance, etc. An asylee receives Employment Authorization Document (EAD) automatically when their asylum is granted.

**EAD AND WORK AUTHORIZATION:** After applying for asylum and waiting at least 150 days, an asylum seeker is eligible to apply for work authorization or EAD (Employment Authorization Document), a federal document that legally permits employment. They are eligible to receive EAD 180 days after their asylum application is filed.



**HUMANITARIAN PAROLE:** Applied for prior to entering the U.S., parole grants temporary allowance to stay in the U.S. Can apply for periods ranging from weeks to years. Parolees can apply to work authorization immediately but can only legally work for as long as their parole has been granted. EAD application for this group costs \$410 unless the applicant applies for a fee waiver. Between August 2021 and July 2022, the USCIS received more than 57K parole requests with past USCIS data indicating roughly ~25% approved based on previous rates.

**TEMPORARY PROTECTED STATUS:** Temporary Protected Status (TPS) is similar to humanitarian parole but is granted to persons already in the U.S. and tends to last for months to years or indefinitely.



In September 2023, the Biden administration granted 18-month TPS to **~427,000 VENEZUELAN MIGRANTS** who had arrived before July 31<sup>1</sup>.

By the New York City Mayor’s Office estimates, that applied to roughly **15,000 migrants in New York City**. Other sources put the number closer to **60,000 migrants**.

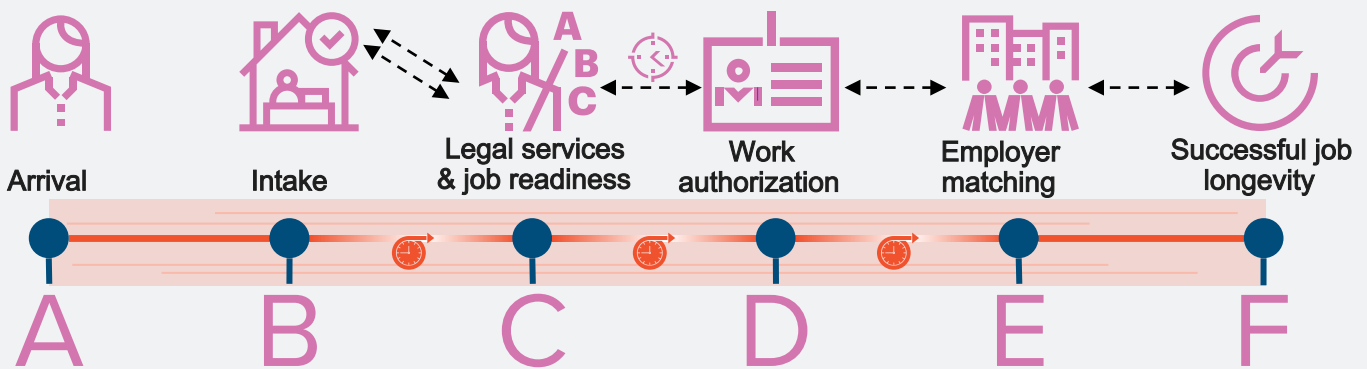


### New York City Provides Shelter to New Migrants

Possibly the greatest challenge associated with this crisis are the burdens of finding adequate shelter, food, and human services. Because of a 1981 consent decree, New York City is required to provide shelter to anyone needing it, and word of the city's guarantee of shelter has spread across the border.<sup>88</sup> In this case, **New York City is currently housing ~65,000 migrants to the tune of ~\$10 million per day.**<sup>89</sup> This problem is particularly challenging as this generation of migrants is arriving with fewer familial or social connections they can turn to for support.<sup>90</sup>

### The Current State of a Migrant's Employment Timeline

The graphic below illustrates the complicated process that non-TPS migrants to New York City (who may be as much as 80% of new migrants), must attempt to navigate in order to potentially find employment and reach financial stability.<sup>91</sup> A migrant with TPS has a different experience because they do not have a 150-day mandatory waiting period. As stated above, once granted TPS status, a migrant can apply for EAD.



## A

### Arrival (Day 1)

Upon arrival in New York City, migrants find their way to one of the city's emergency intake centers where they face language barriers and, sometimes, a lack of effective guidance.

## B

### Intake

At the intake center, where families are given priority, when possible, they fill out an assessment (variable based on shelter operator). Other activities at this point include collection of biographic information, allotment of beds, and providing legal counselors to begin the asylum or work authorization processes.

## C

### Legal Services and Job Readiness

Once sheltered, a migrant may receive outreach for legal services from public or nonprofit entities. As of November 2023, this offering was neither systemic nor consistent. Without legal aid, getting through the long and complicated paperwork for asylum and EAD can delay many applicants, causing some to abandon the process altogether. It is important to note that, for many migrants, taking immediate illegal work opportunities is the only practical option when facing at least a six-month waiting time for work authorization.<sup>92</sup>

Once paperwork is filed, non-TPS migrants begin the 150-day waiting period for EAD eligibility, during which they are not allowed to legally work. While some may use this period to try to find skills training for in-demand jobs, many resources like job and language training programs are reserved for individuals already authorized to work due to limitations on the use of federal Workforce Innovation and Opportunity Act funding.<sup>93</sup>

## D

### Work Authorization

Once a migrant has received work authorization, they can use their EAD card to apply for work. Some migrants may choose to upskill at this stage, but most will look for a job as soon as possible.

## E

### Employer Matching

There are currently limited resources for job placement. One example is the portal that New York State's Department of Labor established to gauge not only migrant availability but also employers with open positions and willingness to work with this community.<sup>94</sup> Governor Hochul announced as many as 32,000 vacant positions open for authorized workers in October.<sup>95</sup> Employer matching resources like career centers are typically not available to migrants waiting for EAD, as these programs are federally funded and thus only serve those who are legally permitted to work in the U.S. As of now, there are not enough migrant-facing resources to connect this pool of workers with open opportunities.

## F

### Successful Job Longevity

Successful job longevity is a complex and ambitious career goal for recently arrived migrants, requiring:

- Obtaining a stable job.
- Establishing the skills and support needed to perform well and maintain the job.
- Securing long-term support around building a career – a journey that involves advancement and growth between roles and employers.

And, in some cases, it could mean building a life in the city where the migrants began – paying taxes, raising a family, and contributing to the community.

For migrants escaping persecution and starting from scratch, this vision may seem difficult to imagine. But for policymakers, funders, philanthropists, and organizers, this is a vision worth striving for; a way to turn a crisis into an opportunity.



# Challenge Proposal

## Bilingual Facilitation Solution for New Migrants

After extensive analysis on potential uses for the challenge grant, the NYCREDC selected the development of a bilingual facilitation program to accelerate migrants' journey from arrival to employment. This service will prioritize the migrants served in its initial cohort in the following way:

- Migrants who have already applied for **EAD: ~3,200** migrants per City Hall projections.
- Migrants who have already applied for **TPS: ~1,300+** per City Hall projections.<sup>97</sup>
- **750 EAD/TPS** applicants added via current organic rate of ~250/month between now and estimated March 2024 start date.<sup>98</sup>
- **~2,250 migrants** who have not yet applied for TPS or EAD.

An estimated total of **~7,500** are targeted across two waves of intake (timeline and process outlined later in the document).

Examples of services would be legal, job readiness, language skills, interview and résumé skills, credential transfer, and more. The goal is to increase the speed at which migrants move through the system, enter employment, begin their new lives, and exit the shelter system or find stable housing. Key highlights of the program include:

- **Language Needs:** One of the core components of the proposal will be to offer services in the native language of migrants and asylum seekers. Currently, the vast majority of incoming migrants require Spanish-speaking facilitators as well as written resources and online materials in Spanish. Bilingual capacity for other languages such as French will also be necessary.
- **Volunteers:** The facilitation program should seek out and utilize any existing volunteer programs it can to supplement the full-time facilitation staff and allow for a greater number of migrants to be served.<sup>99</sup> This could be particularly helpful in serving migrants who already have English proficiency

- **Early Intervention:** Early engagement to ensure a long-term success rate in the legal process. It also helps minimize confusion, rumors, and sometimes misinformation encountered by migrants on arrival.
- **Handoffs:** Facilitators must work with one another to grow the breadth and depth of the list of service providers and their contacts within these organizations to best serve the migrants with direct referrals.
- **Cohort Facilitation:** In order to efficiently serve this group of ~7,500 migrants, facilitators should identify similarities among cases and create cohorts of individuals with related needs. An example would be looking for ESOL classes for a group of 10 migrants staying at the same shelter instead of individually. This efficiency should allow facilitators to work with the large caseloads envisioned
- **Referrals:** Migrants may not understand the multitude of resources available to them. Facilitators will not only refer migrants to providers across the city that specialize in providing for their needs, but, they can also utilize the State Department of Labor's list of interested employers and focus on job placements in industries with the greatest vacancies. Given that many migrants face an English language barrier, connections to ESOL resources will be vitally important.
- **Resettlement:** In some cases, based on job availability, community ties, and cost of living concerns, migrants will want to resettle in other parts of the state or country. Facilitators will have resources available on resettlement programs

## Potential Program Challenges

The program could potentially face the following challenges:

- **Connecting to Migrants:** The solution is limited to connecting with and maintaining contact with migrants who have been through the city, state, or federal intake process.
- **Technological Access:** Implementing a solution becomes even more challenging because many migrants do not have regular access to devices like phones or computers to stay in touch with their facilitators. One way to mitigate this challenge is to establish computer labs at shelters across the city and partner with the city's public library system and Workforce1 Centers to prioritize computer access for candidates in the facilitation program.
- **Partner Networks:** The solution relies on a strong network of partners the facilitators can refer migrants to. Success of the program is dependent on the capacity of these various programs.
- **Timeline:** The facilitation program is designed to run for one year. This is a challenge because the community-based organizations which this program relies upon may be hesitant to engage with a short-term effort given the investment needed to launch new programs.
- **Staff:** Many community-based organizations in New York City are already running close to capacity, so in all likelihood, organizations implementing the facilitation program will need to hire new, likely temporary staff in order to participate. Additionally, reaching enough people who are qualified to be bilingual facilitators may be a challenge.

## Bilingual Facilitation Program Implementation

The NYCREDC plans to allot the entire \$10 million challenge grant to the bilingual facilitation solution described above. The goal is to serve ~7,500 migrants in one year. There are several factors that will dictate exactly how many migrants are served and succeed:

- **Number of Facilitators:** The impact of the solution depends on the number of facilitators community-based organizations can each deploy (per staff costs laid out in the appendix). Given the length of the program, these may need to be temporary staff members.
- **Cases Per Facilitator:** Facilitators handle a caseload of many migrants whom they work with for several

months. This figure is limited by several factors: the 40-hour workweek, the need for non-case-management administrative time for each facilitator, etc.

- **Placement Rate:** This is the percentage of migrants who successfully find work on the anticipated accelerated timeline. Despite the unprecedented level of attention these migrants will receive, it would be difficult for this program to be 100% effective, especially in its inaugural year. A lower placement rate is more realistic.
- **Total Program Costs**
  - **Staff costs:** Salaries and fringe costs (e.g., benefits, Medicare, other HR costs).
  - **Fixed costs:** Marketing (outreach), IT and tech (digital database infrastructure), etc.

Applying these constraints, assuming an average of ~55-60 cases per facilitator at a placement rate of 90%, the solution can onboard ~145 facilitators.<sup>100</sup> This would imply the corresponding costs of around \$9 million in staff costs and \$1 million in fixed costs (total budget of \$10 million) and could potentially serve around 7,500 migrants. Please see Appendix 1.1 for a detailed accounting breakdown.

The program prioritizes those migrants who have already applied for TPS or EAD; however, if the capacity outnumbers the eligible candidates, it can serve the needs of migrants who need preliminary legal assistance. Until community-based organizations apply and are selected to operate the program, it is difficult to estimate the exact extent to which facilitators will accelerate the "migrant journey." That being said, what is clear is that for every month a migrant's shelter stay is reduced, the city and state save ~\$5,200 per migrant (and the city currently cares for over 65,000 migrants). Please see Appendix 1.2 for a detailed breakdown of these potential savings.

The NYCREDC recommends funding for the facilitation program be administered via RFP to organizations that can demonstrate that they meet the following criteria:

- A. History of working in workforce development and/or migrant issues in New York City for five-plus years.
- B. Track record of working with job seekers and or migrants at several stops along the journey described above (e.g., legal services, case management, and job placement).



- C. The ability to hire and/or dedicate several staff members to the facilitation program within the salary and budgetary limits described; there will likely need to be several community-based organizations that work in conjunction with one another to reach the number of facilitators required for this program.
- D. Successful track record of working with public, private, and nonprofit partners to serve job seekers and/or migrants.

**Proposed timeline and process overview:**

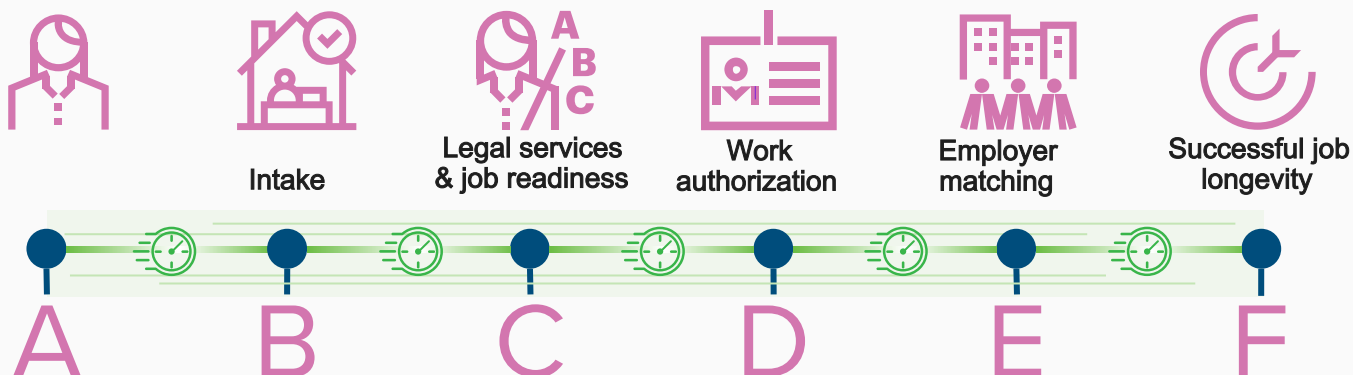
- **Jan. 2024:** Initiate program and launch RFP.
- **Feb. 2024:** Select partner organizations and identify resource requirements.
- **March 2024:** Partner organizations to onboard and train facilitators and kick off program (initiate migrant intake):
  - Estimated to intake **5,250** migrants in wave one (expected total population that will have applied for EAD/TPS by this date).
  - Remaining migrant intake around **2,250** in wave two.

**Funding**

While the \$10 million grant award of the Challenge Competition will enable the facilitation model to support around 7,500 migrants in the first year, the NYCREDC estimates that it could serve a total of half the migrant community with an additional \$20 million in funding. More importantly, an additional \$20 million would allow the program to continue for a total of three years, a timeline that could inspire greater interest from potential partner organizations. The NYCREDC will work to use the award from the Challenge Competition to leverage additional public, private, and philanthropic funding to support expansion of the facilitation model to serve more newly arrived migrants.

**Illustrative Example, Future State of Migrant Employment Timeline**

Overview of migrant journey we aim to achieve by implementing the facilitation program: Illustrative example of a migrant “Maria” and her facilitator “Claire” demonstrates a faster, more efficient, and humane process.



## A

**Maria** is a 29-year-old Peruvian migrant who arrived in New York City with her family and all their necessary home country legal paperwork. Maria is not TPS eligible, but she has already filed her asylum paperwork. Their family has been approved for 60 days at the Roosevelt Hotel shelter in Midtown.<sup>107</sup> Maria's English proficiency is rated as a two out of five, and she has six years of experience as a registered nurse.

**Claire** is a bilingual young professional with two years of experience working in New York City's workforce development ecosystem. Her organization has been selected via RFP to participate in the facilitation program.

## A-B

### Arrival and Intake

When Maria originally filed for asylum, she was flagged as one of the minority occupants at the Roosevelt Hotel who had completed the legal process and was thus offered a facilitator, Claire, which she gratefully accepted.

## C

### Legal Services and Job Readiness

Given that Maria has already filed for asylum, Claire helped her consider the nonlegal concerns at this early stage of her journey:

- Claire evaluates Maria's childcare needs and ensures Maria's children are registered for the local schools and connected with any special services they may need there (e.g., ESOL classes).
- Upon assessing options for the transferability of Maria's professional background as a nurse, Claire determines that Maria's fastest pathway to a stable job will be through CUNY's contextualized language Certified Nurse Assistant (CNA) program.
- Claire helps register Maria for CUNY's Contextualized CNA (Certified Nurse Assistant) program, taking advantage of the six-month work authorization waiting period.

## D-E

### Work Authorization and Employer Matching

After receiving asylum, Maria meets again with her Asylum Seeker Legal Assistance Network (ASLAN) legal counselor to apply for work authorization. This initiates the final 30-day waiting period, during which she meets with her facilitator. In Maria's case, she completed a contextualized language program at CUNY during her six-month work authorization waiting period.<sup>108</sup> Claire, Maria, and a representative from CUNY meet to discuss options and identify several employers with a history of hiring directly from Maria's CUNY program. Claire connects Maria to a local Workforce1 Center, where she can access résumé review services. Claire also helps Maria to review resettlement options once again now that her work authorization is fast approaching.

## F

### Job Longevity

The facilitator also brings knowledge of relevant support services that can help migrants maintain employment and build financial and housing security.

In Maria's case, assuming she successfully started a full-time job at a hospital, Claire can make connections to several services during her ongoing check-in meetings with Maria:

- Claire refers Maria to Workforce1's financial planning services to help Maria and John strategically save to move into their first New York City apartment.
- Claire refers Maria to several city-funded childcare resources as well as several designed for low-income individuals.
- If Maria chooses to pursue certification as a nurse (as she was in Peru), Claire can refer her to relevant resources like Upwardly Global.

Maria's story exemplifies the value of the proposed solution and the ability of the facilitator to tailor the approach to a migrant's unique situation.

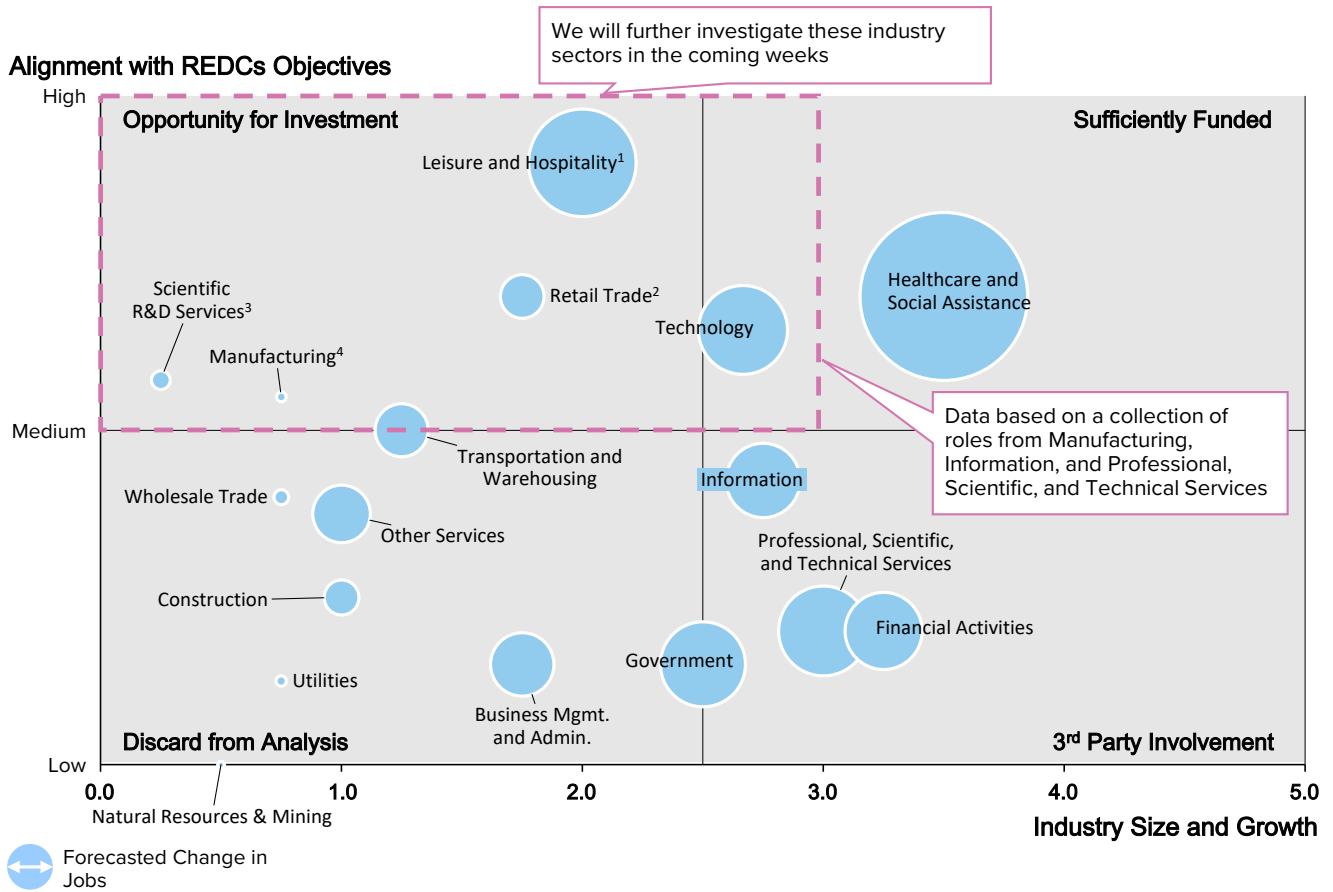




# APPENDIX

**APPENDIX**

**Figure 1.0**



<sup>1</sup> Includes Arts, Entertainment, Recreation, Accommodation, and Food Services

<sup>2</sup> Includes Grocery and Convenience Retailers, Department Stores, Clothing and Jewelry Retailers, and Furniture and Home Appliance Retailers

<sup>3</sup> Includes R&D in Life Sciences, Nanotechnology, Biotechnology, Social Sciences, and Humanities

<sup>4</sup> Includes Durable and Nondurable Goods

Source: New York State Department of Labor, U.S. Bureau of Labor Statistics, Kearney



**Figure 1.1 – Solution Accounting Breakdown**

| # Migrants Served by Facilitation Solution |                |   |
|--|----------------|---|
| # Facilitators employed                    | ~145           | (Investment-fixed cost) / (cost per facilitator + misc. cost * # of migrants * placement rate)                                      |
| Migrant cases / facilitator                | ~58            | Maximum case load determined by the 40hr work week, case grouping and estimated length of appointments                              |
| Placement rate %                           | 90%            | Estimation based on industry interviews   |
| # Migrants impacted                        | ~7,500         | # of migrants per facilitator x # of facilitators   |
| Facilitation Solution - Cost Assumptions   |                |   |
| <b>1. Labor costs:</b>                     |                |   |
| # Facilitators employed                    | 145            | (See above)   |
| Annual salary                              | \$50,000       | Verified starting salary for NYC-area bilingual case managers <sup>140</sup>  |
| Burden (benefits, etc.) %                  | 25%            | Verified burden rate for small case management-based business <sup>105</sup>  |
| Burden (benefits, etc.)                    | \$12,500       | Salary x burden rate  |
| Total cost / employee                      | \$62,500       | Salary + burden cost  |
| <b>Total cost, all employees</b>           | <b>~9M</b>     |   |
| <b>2. Overheads:</b>                       |                |   |
| <b>Total fixed costs</b>                   | <b>~1M</b>     | Overheads are 11% of total (given lack of facility expense): less than 15% or less recommended by Charity Navigator. <sup>106</sup> |
| <b>Total Facilitation Expenses</b>         | <b>~ \$10M</b> |   |

**Figure 1.2 – , Potential Savings breakdown**

| Potential Savings Calculations           |         |  |
|--|---------|--|
| Current cost to the city/ migrant/day    | \$171   | Per Mayor’s Office press release <sup>107</sup>            |
| Current cost to the city/ migrant/ month | \$5,209 | Cost per migrant per day x average days per month (30.437) |

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<sup>62</sup>Why New York City Needs Congestion Pricing (mta.info)

<sup>63</sup>Executive Summary (mta.info)

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<sup>76</sup><https://www.nytimes.com/2023/09/11/nyregion/child-care-nyc.html>

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<sup>78</sup>See Appendix Items 1.1 and 1.2

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<sup>91</sup><https://www.politico.com/newsletters/new-york-playbook/2023/09/28/finding-the-work-eligible-in-nyc-00118697>. 15,000 being ~20% of the ~65,400 currently in the city's care

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<sup>100</sup>Interview with workforce1 Brooklyn

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<sup>104</sup>Interview with representatives at Workforce1 Brooklyn

<sup>105</sup>Interview with representatives at Workforce1 Brooklyn

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