



2019 DRI Application

BASIC INFORMATION

- REDC Region: New York City
- Municipality Name: New York
- Downtown Name: East Harlem
- County Name: New York
- Applicant Contact(s) Name and Title: Michael Zigman, Chief Operating Officer, NYC First
- Applicant Contact(s) Email Address: michael@nycfirst.org

VISION FOR DOWNTOWN

Our vision for the large and vibrant East Harlem community is expansive and transformative, and is centered around an East Harlem STEM Center focused on robotics. This STEM (“Science, Technology, Engineering and Mathematics”) Center would be housed in the beautiful, landmarked Corn Exchange Building, at 125th St. and Park Ave., and would be a beacon to the community, while also tying together the many projects and developments across the neighborhood. It would be a hub of learning for both hard and soft skills, as well as a center for job training and preparation for the next generation of jobs and entrepreneurs.

The Time is Right and the Neighborhood Wants More

Throughout this application, we describe how the foundation on which East Harlem stands today has been built for decades by its people with abundant help from public and private investments that have totaled hundreds of millions of dollars. The past couple of years in particular have brought significant and catalyzing events, making the timing of this application that much more relevant.

One of these events is the rezoning of East Harlem, completed in November 2017, with a “Points of Agreement” that codified 57 distinct commitments by New York City to the neighborhood, covering everything from housing to education, transportation, jobs, safety and wellness, with many projects receiving specified financial support, totaling over \$200 million.

There has also been investment from the private side, both large and small. The New York Proton Center, a collaboration between Mount Sinai, Memorial Sloan-Kettering and Montefiore, is preparing to open its doors imminently, in July 2019. We also have received strong interest from organizations, such as East Harlem Tutorial Program, that want to invest more in the education of East Harlem’s youth, and would be able to take advantage of a STEM Center to vault ahead in these efforts.



The East Harlem STEM Center

The East Harlem STEM Center will engage, educate, train and inspire many more youth and adults to pursue studies and careers in the next generation of STEM fields. The STEM Center would focus on robotics, an interdisciplinary subject incorporating computer science, mechanical engineering, digital and non-digital fabrication, electronics, sensors and artificial intelligence, among other sub-disciplines. Woven together, these disciplines form the fabric of the economy that has emerged today and that will dominate in the decades to come.

The East Harlem STEM Center would be easily accessible to the residents of East Harlem but also to the residents in Central and West Harlem and other neighborhoods in Manhattan. The 2/3/4/5/6 lines are all within a couple of blocks of our proposed STEM Center. Metro-North makes the trip to Grand Central Station in one stop, many buses both run along and cut across 125th St., and the Q train and future T train will make their terminus at the 125th St. 4/5/6 subway station.

The STEM Center will be tightly integrated with both local community groups and leading technology-driven corporations, and will be the bridge to a technology-driven future by engaging, educating, training and empowering the people of East Harlem specifically as well as Central and West Harlem, too. Opportunities for entrepreneurship, innovation, startups, and community-based projects and scholarship will challenge both students and the larger community.

Based on the above statement of need, and the answers throughout the rest of this DRI application, this STEM Center would provide an excellent and exciting response to the needs underlying this DRI application. It would:

- tie together many of the private and public investments and other initiatives already underway in East Harlem
- serve as a catalyst for jobs and workforce training, and would both attract current professionals and create new ones, providing pathways to future employment
- provide tighter economic integration with other neighborhoods and constituencies in Manhattan, including some of the leading technology-driven corporations
- be a hub for schools, CBOs and businesses that have asked to do more in robotics specifically and STEM more broadly
- be easily accessible from all directions and by varied and numerous transportation options
- act as a stimulus to local businesses in East Harlem, given the number of people coming daily
- be a bridge to deeper integration with universities outside of East Harlem, including City College and its Grove School of Engineering, and Cornell Tech
- work with young and old and everyone in between
- be a hub from which to go out into the community and make STEM more accessible by bringing it to where people live
- help anchor East Harlem's present progress, while propelling it into a future based increasingly on technological advances

As has been said often, “Creativity is broadly distributed. Opportunity is not.” The East Harlem STEM Center will provide that opportunity.

JUSTIFICATION

Background and Statement of Need

East Harlem, commonly referred to as Spanish Harlem, or El Barrio, for its rich Latino community, has had an abundant history as a cultural hub for various immigrant groups. Starting off as New York City’s original Little Italy in the 1930s, the neighborhood welcomed a large Latino population that defined it for several decades. Since 2000, East Harlem has seen an influx of Chinese and African immigrants. Today, East Harlem faces new challenges and opportunities with demographic shifts being brought on by gentrification and rezoning or what some are calling the new Harlem renaissance.

Established and new institutions are putting down roots and growing in the community. The New York Proton Center will open on 126th St. in East Harlem imminently, in July 2019, and is a collaboration between Memorial Sloan-Kettering Cancer Center, Montefiore Medical Center, and Mount Sinai Health System. East River Plaza has brought national retailers, such as Costco and Target. And new schools are being established in the area.

These opportunities for positive change also present challenges and naturally raise fundamental questions. With technology-driven change here and coming ever faster, how will East Harlem take advantage of this change and turn it into an opportunity? We believe the benefits should be spread more evenly and that it is essential to ensure that all segments of the East Harlem community share the benefits of technological change and do not get left behind.

A compelling and inclusive way forward for East Harlem, with benefits extending to Central and West Harlem, as well as Upper Manhattan more broadly, is to establish a center for learning and job creation based on technology, engineering and robotics. A number of community-based organizations and schools have already begun to embrace progress in these areas, including the East Harlem Tutorial Program, Silicon Harlem, and the Manhattan Center for Science and Mathematics.

Our proposed East Harlem STEM Center would bind these initiatives together based on a comprehensive hub centered around education and training. It would help anchor East Harlem’s present progress, with many of these developments that focus on STEM and economic growth listed in this application, while propelling it into a future based increasingly on technological advances.

It would also serve as a hub for businesses and schools from across Manhattan, to come and share knowledge and highlight the role that East Harlem would be taking as a leader in critical STEM fields. These groups have asked repeatedly about a central hub, where equipment, technology, materials and, most importantly, expertise, is concentrated. This would benefit New York City as a whole, but in particular bring a reputation for technological advancement to East Harlem.

Past and Future Private and Public Investment in the Neighborhood and Surrounding Areas

The time is right for additional public and private investments in East Harlem, particularly those focused on STEM and the next generation of jobs. These additional investments would leverage all of the investment activity that has already been made as well as the investments that are currently in development or that have been approved to proceed. The list of past investments already made and future investments to be made that focus on science, technology, transportation, infrastructure, jobs and housing is extensive and transformative, including, among others:

- New York Proton Center, a collaboration between Memorial Sloan-Kettering, Mount Sinai, and Montefiore Medical Center; \$330 million; 126th St., between 2nd and 3rd Aves.
- The \$6 billion Q train expansion to 125th St., connecting to the 4/5/6 trains
- Uptown Grand Central plaza for Metro North (New East Harlem Merchants Association)
- One East Harlem, a large mixed use development, at 125th St. and 3rd Avenue
- Creation of Two Career and Technical Education (CTE) Schools – Heritage and Park East
- Increased After-School Funding for District 11 High School Students
- Creation of Three Community Schools – PS 83, PS 108, Esperanza Prep. Academy School
- New SBS bus station at 125th St. and Lexington Ave.
- HireNYC - employment opportunities tied to public housing in Harlem, with focus on out-of-school and out-of-work youth aged 18-24
- Neighborhood 360 Degrees Grant Program – customized revitalization programs for East Harlem’s primary commercial corridors
- Building Opportunity Initiative – requires developers to support minority- and women-owned business enterprises

This list does not include a number of well-established East Harlem institutions that continually invest in their community, many focused on education, including the East Harlem Tutorial Program, Harlem Children’s Zone, Boys’ Club of New York, Mount Sinai Medical Center, and dozens of other schools and organizations.

The East Harlem STEM Center: Robotics Education and Industry

The East Harlem STEM Center will fill in the need in East Harlem (with benefits extending to Central Harlem and West Harlem) for comprehensive and community-centric STEM education and workforce preparation. It will be tightly integrated with both local community groups and leading technology-driven corporations, and be the bridge to a technology-driven future by engaging, educating, training and empowering the people of East Harlem specifically as well as Harlem more generally. Opportunities for entrepreneurship, innovation, startups, and community-based projects and scholarship will challenge both students and the larger community.

The East Harlem STEM Center will focus on robotics, an interdisciplinary subject incorporating computer science, mechanical engineering, digital and non-digital fabrication, electronics, sensors and artificial intelligence. Woven together, these disciplines form the fabric of the economy that has emerged today and that will dominate in the decades to come.

The importance of robotics in the current and future economy cannot be overstated. It is fast becoming a critical linchpin of the modern economy. Already it is central to a range of industries, including aerospace, agriculture, the military, health care, retail, automotive and the home. According to Statista, an online market research portal, the size of the global market for industrial and non-industrial robots was \$31 billion in 2016 and is projected to reach \$237 billion in 2022, an annual growth rate of just over 40%.

Some might say that robotics is intimidating, as it is seemingly difficult to access in everyday life. But it is not difficult to for youth and adults to grasp, partly because they can literally grasp it. That one can hold one's own creation is a powerful way to engage, demystify and inspire. It helps make robotics tangible, real, welcoming and accessible.

Both awareness and access are critical to demystifying robotics. Regarding awareness, many people do not even know to ask about robotics in the first place, as it is often not in plain view, and what's out of sight is out of mind. For those who do know about robotics, many do not know how to get access to the opportunity to build robots. The organization leading the East Harlem STEM Center effort, NYC FIRST, has been focused on stimulating awareness and providing access since its founding in 2000. NYC FIRST has found that once robotics is taught properly, in an encouraging environment under the guidance of expert teachers, people are able to learn robotics just as they would any other subject. The keys are to make it known, accessible, easily taught, sustained, and applied.

Overview of East Harlem STEM Center: Location, Programs, Operational Structure

The East Harlem STEM Center will engage, educate, train and inspire many more youth and adults to pursue studies and careers in the next generation of STEM fields. It will:

- Prepare youth and adults to successfully fill the many high-tech jobs being created for the 21st century workforce through sustained and immersive educational programs
- Lay the groundwork for participants to drive the next waves of innovation and entrepreneurship
- Foster a creative, confident mindset to apply innovative solutions when approaching technology-based problems and other challenges
- Provide teaching, training and guidance by expert teachers and mentors
- Provide access to technology and engineering equipment and tools
- Provide exposure and access to workforce training, internships and career opportunities
- Host robotics competitions to make STEM more accessible as a team sport

The East Harlem STEM Center would be housed on two floors in the landmarked Corn Exchange Building, on the northwest corner of 125th Street and Park Avenue, totaling approximately 10,000 square feet of space. We selected this location for a number of reasons.

First, it is rooted in East Harlem and highly accessible by some of the busiest and most important public transportation routes in New York City, including:

- 4/5/6 subway lines, with links to the east side of Manhattan and the Bronx
- 2/3 subway lines, with links to the west side of Manhattan and the Bronx

- Metro-North, with links to midtown east, Westchester and other counties north of NYC
- A range of buses, including the M60 Select Bus Service (“SBS”) that is the main bus link to LaGuardia Airport
- The terminus of the Q and T subway lines will be at 125th St. and Lexington Avenue

Second, the building itself is a beautiful and historic landmarked building, which is both inspirational and aspirational, making it a place that people will want to learn and work in, and to visit.



Third, each level has large, open floor plates and abundant natural light, making it an ideal space in which to learn, work and compete, as discussed below. Each floor will have a range of digital and non-digital fabrication equipment and tools, computers and software, electronics systems, and materials. Equipment will include laser cutters, 3D printers, 3D scanners, CNC routers and mills, laptop and workstation computers, vinyl cutters, drill presses, vacuum sealers, oscilloscopes, multimeters and more.

NYC FIRST will be the anchor organization to run the East Harlem STEM Center, and it is uniquely qualified to lead this effort. NYC FIRST, one of the largest STEM education organizations in New York City, runs immersive, hands-on robotics and STEM education programs and competitions that serve over 7,000 students and hundreds of adults annually, on over 600 robotics teams across four leagues. It also operates two STEM Centers, including one at Cornell Tech and one in partnership with the New York Public Library at its Washington Heights Branch. NYC FIRST has been running robotics programs in New York City for nearly 20 years and is particularly focused on working with groups underrepresented in the

STEM fields. NYC FIRST has the experience, programs and teachers that can motivate and help achieve success in the study of robotics for both youth and adults.

Mentorship is critical, and there are a number of institutions in East Harlem (and outside of East Harlem) that are logical feeders of mentors to the STEM Center. These include the Grove School of Engineering at City College, Mount Sinai Medical Center, and the new New York Proton Center.

A Proven Model

The STEM Center model exists and is thriving in smaller incarnations, including at Cornell Tech, on Roosevelt Island, and in the Washington Heights Branch of the New York Public Library. Currently, eight high schools in Manhattan and Queens are sending students to take formal, credit-bearing courses at these STEM Centers. These schools include the Manhattan Center for Science and Mathematics, Energy Tech High School, The Young Women's Leadership School of Astoria, the High School for Environmental Studies, Legacy High School, Gregorio Luperon High School, City College Academy of the Arts, and WHEELS (part of the NYC Outward Bound network). For its part, Cornell Tech has been a thought partner, contributing programmatic and structural ideas. It has also led to mentorship by Cornell Tech graduate students, made high school students aware of higher education and workforce possibilities, and has provided opportunities for internships for STEM Center participants to work with technology-driven start-ups and larger technology corporations. Cornell Tech is enthusiastic about having a chance to bring its resources to bear and to work and interact with the community of East Harlem.

The high school students who are currently engaged in the sustained and immersive learning at the STEM Center are a highly diverse group, with the majority of students from underrepresented groups, with near-parity in terms of gender. These students, as well as many other participants in NYC FIRST, have explored career opportunities or have received employment from leading technology-driven corporations in New York City, including AllianceBernstein, Bloomberg, Goldman Sachs, IBM, S&P Global, and other large and small businesses.

In addition to high school students taking credit-bearing courses, NYC FIRST also runs community-based workshops and open hours for youth and adults, including programs on weekends and after school. These workshops focus on design, fabrication, computer science and other areas of STEM, and they scale from basic introductions to more advanced, in-depth learning. These STEM Centers also run summer programs to address the negative consequences of summer learning loss.

Finally, companies from outside the STEM Center neighborhoods participate, rubbing shoulders with local youth and adults. Google, Goldman Sachs and Bloomberg have used NYC FIRST STEM Centers to design and build robots, and to learn alongside students.



Benefits to the Harlem Community and Northern Manhattan

The East Harlem STEM Center would serve the communities of East Harlem, as well as Central and West Harlem, and Upper Manhattan even more broadly, with a number of critical benefits and advantages, listed below.

Pathways to Future Employment: Workforce Development and Skills Development

The STEM Center will be a powerful hub of STEM education to build critical skills for thousands of youth and adults alike to take advantage of, and it will foster a continuum from elementary through middle and high school through college and career. These skills include gaining an understanding of computer science, mechanical engineering, digital and non-digital fabrication, and electronics. For adults, there would be expanded opportunities to seek and gain employment. Students would benefit in seeking college admission or getting a job, as well as gaining an advantage from experience in summer employment, internships and full-time employment.

Additional Job and Internship Opportunities: Economic Integration with the Rest of Manhattan

While the STEM Center will bring through its doors a large and steady stream of over 100 participants and staff each day, seven days a week, 52 weeks a year (except for major holidays), it will also bring a range of small business and large corporations to the STEM Center. Businesses participate through volunteer mentorships, but they also get an opportunity to see first-hand the quality and motivation of the individual participants. We have already witnessed the involvement in robotics education of leading corporations and how this leads to job and internship opportunities at well-established companies such as the ones listed in the previous section.

A Well Resourced STEM Hub to Bind CBOs and Schools Already Participating in Robotics & STEM

There is already much robotics and STEM activity in East Harlem involving, among others, the East Harlem Tutorial Program, the Manhattan Center for Science and Mathematics, and Silicon Harlem. These organizations have already embraced robotics programs and teams, with a significant impact on the youth they serve, and they have asked for even more resources. With respect to schools alone, there are over 40 elementary and middle schools, as well as 12 high schools, in the DRI catchment area, with many more schools within a short trip by public transportation.

More Business for Local Businesses

Since the East Harlem STEM Center will bring over 100 individuals a day through its doors and onto the streets surrounding the Center, the ripple effect of these highly motivated individuals on local businesses will be profound. They will eat, shop and commute, helping support local businesses.

Deeper Integration with Higher Education

The connection of K-12 students to college is a natural pipeline link that fits well with the established presence of the City College of New York (CCNY) in West Harlem. According to the Chronicle of Higher Education, CCNY is one of the leading institutions in the nation to drive socioeconomic upward mobility from lower income status into the middle class. More specifically, the Grove School of Engineering serves as a natural and aspirational bridge for K-12 students pursuing the study of robotics. The Dean of the Grove School of Education, Gilda Barabino, serves on the Board of Directors of NYC FIRST, and is one of the leading voices in the United States on issues relating to students of color and female students pursuing the STEM fields. Cornell Tech, the newly established technology and engineering graduate school on Roosevelt Island, has also engaged with New York City well beyond the confines of its own neighborhood and is keenly focused on reaching out to a range of communities across New York City. NYC FIRST has a close partnership with Cornell Tech and would look forward to tying the school closer to East Harlem.

A Perfect Match for the Renovated 125th Street Metro-North Plaza

It's significant that the plaza at 125th and Park Avenue will be renovated as a gateway to neighborhood. It's also difficult to imagine a more appropriate neighbor across the street than our forward-looking and welcoming center of education and job training for the community. It would serve as an ideal reason for commuters going to and from Grand Central Station at 42nd Street to stop and become involved, either as mentors or as a conduit to jobs at their companies.

Accessible and Welcoming

The East Harlem STEM Center will be open seven days a week, morning to evening. This will be a place that both newcomers and veterans of STEM will be welcomed and can easily participate. Just like recruiting for sports teams, and to create an activity that people can relate to, participants will be encouraged to join robotics teams. And while the STEM Center itself will be welcoming to those who come through its doors, the staff at the STEM Center, along with its volunteers, will make it a priority to reach out to the community and go to where its residents are to explain what is happening at 125th and Park. Outreach can be through existing CBOs, churches, schools and housing developments, such as the Lincoln Houses in northern East Harlem to the King, Jefferson and Taft Houses in southern East Harlem.

Certificate Program for Job Seekers

We will leverage our close relationships with both Cornell Tech and City College to help enable a certification program in robotics, computer science and other STEM disciplines, with escalating levels. Some will be more attainable, some more difficult to achieve, depending on level of mastery. While some learners at the STEM Center will be given an initial spark to go to the next level perhaps merely for fun, others will try to master ever-more complex levels of understanding, as they may pursue career options where doors are now open to them. According to the Bureau of Labor Statistics, the average annual salary in the New York City metropolitan area for jobs in technology/computer occupations is

\$103,960, with significant growth foreseen. Additionally, the Department of Commerce noted that workers in the STEM fields command 29% higher wages than those workers in non-STEM fields.

The Quantified Impact of the East Harlem STEM Center

We foresee directly serving over 100-200 people per week (or over 5,000 people annually), at the East Harlem STEM Center, with up to 15 individuals in full-time, year-round teaching and staff jobs, and another 10-15 individuals serving in summer staff positions. The vast majority of participants will come for month-long and semester-long programs, as a key component to the success of individuals' learning at the STEM Center is to have them participate for more than one-off drop-in sessions. Rather, the focus will be on sustained and effective learning over weeks and months.

DOWNTOWN IDENTIFICATION

1) Boundaries of the proposed DRI area.

In accordance with the guidelines of DRI, our proposal for East Harlem defines the boundaries of our area as:

West: 5th Avenue

East: East River

North: 143rd Street

South 96th Street

We selected these officially defined boundaries of East Harlem for the Downtown Revitalization Initiative because they are logical and natural borders (i.e., the river, 5th Ave.) but also because of the following reasons/opportunities:

- **Investments and Rezoning.** With over \$200 million in public investment coming to the area and a significant rezoning completed just months ago, coupled with over \$1 billion in private investment, we believe that the DRI would have maximum benefit focused on East Harlem.
- **Population and Housing.** The area has a large, relatively young population with a highly dense housing stock, and a large number of apartment units currently in development with anticipation of population growth.
- **Transportation and Infrastructure.** The area is served by some of the best public transportation options in New York City, with the 2/3/4/5/6 subway lines all running through it, Metro-North serving the only stop in Manhattan outside of Grand Central Terminal, the M60 SBS to LaGuardia Airport, and the longer term but highly impactful extension of the 2nd Ave. subway line to link with the 4/5/6 at 125th St.

It is important to note that the impact of this DRI will have ripple effects beyond these borders, spilling over in particular to Central Harlem and to a lesser effect to West Harlem, as the neighborhoods are

intertwined geographically, economically and culturally, with short commute times between them. As such, though our catchment area is focused on East Harlem, we would incorporate partners from beyond the DRI borders. These partners have a stake in the success of East Harlem, and they include a range of corporations and universities, all of which are within a short commute of East Harlem, and some of which are highlighted in our “Public Support” section herein.



2) Past investment, future investment potential.

There is significant prior and current private and public investment in East Harlem, along with additional future commitments to the neighborhood, that set it up ideally to capitalize on DRI funding to catalyze further future investments in the neighborhood and surrounding areas. Some of the more noteworthy investments are documented below.

In particular, recent investments in STEM-related fields, combined with an existing foundation of organizations that have already embraced STEM, sets up well the catalytic investments in a STEM Center and other projects that would be transformative to the neighborhood.

Public Investment

Public investment has been strong and has set the stage for private investments. The most recent large-scale public commitment, in November 2017, which was linked to a rezoning of East Harlem, was

codified in the Points of Agreement from New York City, which recognized the economic potential of this neighborhood. It stated:

“Zoning has been updated to promote mixed-use development that both requires affordable housing and promotes economic development through job generation. We are protecting the historic fabric of the neighborhood by preserving the low-rise character of smaller residential streets. We are making open space and public realm improvements which will improve quality of life for years to come. And, we are bringing crucial investments in infrastructure and community resources....”

Some of the more relevant and noteworthy public commitments from the Points of Agreement are:

Small Business, Workforce, and Economic Development

1. Establishing a satellite **Workforce1 Career Center** in East Harlem in a location accessible to the public and developed with input from the community and local councilmembers. The satellite Workforce1 Career Center will offer connections to employment and training services, including services for target populations such as out of school, out of work youth aged 18-24 years old. Small Business Services (SBS) operates 21 Workforce1 Career Centers throughout the city, providing recruitment expertise, industry knowledge, and skill-building workshops to connect New Yorkers to jobs. SBS connects more than 25,000 New Yorkers with quality employment each year. Through HireNYC and the Workforce1 Career Center system, New Yorkers have a first shot at jobs related to City projects, and employers have access to a pool of talent from the local community.
2. \$30 million to renovate **La Marqueta**, an East Harlem landmark since 1936 located along Park Avenue, between 111th St. and 119th St., with construction anticipated to start in 2019.
3. \$1.5 million to the **Neighborhood 360 Degrees** grant program to fund local non-profit partners to staff, plan and, implement customized commercial revitalization programs for East Harlem’s primary commercial corridors

Transportation and Safety

1. \$1.5 million to build a **new SBS station** on 125th St. and Lexington Ave. This SBS route is NYC’s version of bus rapid transit. In the decade since SBS began, SBS routes have seen: 10-30% faster bus speeds, 10% increase in ridership, and customer satisfaction of 95%. To enhance the existing SBS service at Lexington Ave and 125th St, the Department of Design and Construction (DDC) will install two new bus bulbs, bus pads and a new bus shelter, providing riders more waiting space and shelter.
2. \$5.5 million to construct a new **125th Street Plaza (“Uptown Grand Central”)**, at Park Ave. between 124th and 126th St. as the Metro-North gateway to the area. This station is the only one in Manhattan for Metro-North aside from Grand Central Terminal, at 42nd Street. This construction will make room for expanded sidewalks surrounding the station, improved

crosswalks and street lighting, and traffic signal timing changes, will improve the pedestrian experience and calm traffic movements.

Education

1. The creation of **three Community Schools** – PS 83, PS 108, and Esperanza Preparatory Academy School (Union Settlement) – bringing the total number of Community Schools in East Harlem to eight. Community Schools are neighborhood hubs where students receive high-quality academic instruction, families can access social services, and communities congregate to share resources and address common challenges.
2. Creation of **two new certified Career and Technical Education (CTE) programs** at Heritage High School and Park East High School.
3. \$3.3 million over three years for **increased afterschool funding for high school students** at 5 Cornerstones Programs located in community centers located in Clinton, East River, Lehman, Wagner, and Johnson Houses. These programs serve 275 high school aged youth. Additionally, there are two Beacon programs located at M.S. 224 and Coalition School for Social Change.

Housing

1. \$50m in **capital improvements in New York City Housing Authority (NYCHA)** developments within East Harlem
2. Prioritize the development of **over 2,600 affordable homes** on public owned land

The 2nd Avenue Subway Line

The \$6 billion extension of the 2nd Avenue Subway (initially the “Q” and later the “T” lines) cannot be overstated in its importance for the neighborhood, let alone Manhattan more broadly. This second phase of this first new subway line in New York City in decades, this will bring much needed subway service to a dense and vibrant part of New York City, along 2nd Ave. Importantly, the Q and T’s terminus at 125th St. will link with the 4/5/6 stop there to create one of the more important transportation hubs in New York City.

Recent Large-Scale Private Investment – Industry

The public sector has helped pave the way for vibrant private sector investment, across retail, housing and industry. Recent private investments include:

One East Harlem, which broke ground in April 2019, will bring 400 new units of housing (300 of which are affordable), 70,000 sq. ft. of retail space, 5,000 sq. ft. of cultural space, and 10,000 sq. ft. of public

outdoor space. Additionally, the project is expected to create nearly 300 construction jobs and over 140 permanent jobs. The project is expected to be completed in 2021.



The **New York Proton Center** will be a state-of-the-art cancer treatment facility that is a \$330 million collaboration between Mount Sinai Medical Center, Memorial Sloan-Kettering, and Montefiore. It is slated to open imminently, in July 2019, and at capacity, it will treat 1,400 patients annually, including 200 pediatric patients.



Recent Large-Scale Private Investments – Housing

Regarding private housing developments, in August 2017, a 63-story residential tower at 96th St. and 2nd Ave. was approved by the City Council and will create a new building for three schools, including the School of Cooperative Technical Education, or “Coop Tech.” And in November 2017, the Sendero Verde project was approved, calling for an additional 655 units of affordable housing on Madison Ave. between 111th and 112th St.

Rezoning of East Harlem: Points of Agreement, November 2017

There was recognition of the vibrancy in East Harlem, as New York City, in November 2017, rezoned East Harlem and made a series of commitments to the neighborhood, with over \$200 million allocated for capital projects. The Points of Agreement outlines financial and other commitments to the neighborhood in the following categories:

- Affordable Housing
- Safety and Health
- Open Space and Public Realm
- Small Business, Workforce and Economic Development
- Transportation
- Education
- Arts and Culture

Case for DRI Designation

As a result of this development activity, the time and conditions are right for additional public and private investments, particularly those focused on STEM and the next generation of jobs, in East Harlem. DRI designation would be an extraordinary boost for these efforts, both from a funding perspective and from a planning perspective, especially with the weight of New York State behind this effort. DRI designation would leverage all of the investment activity that has already been made as well as the investments that are currently in development or that have been approved to proceed – across science, technology, infrastructure, jobs, retail and housing – and would tie them together with a focus on STEM that would be forward looking and transformative. This binding together would be especially catalyzed and aided by the creation of the East Harlem STEM Center contemplated and detailed in the “Vision for Downtown” (Basic Information Section) and the “Justification” section.

3) Recent or impending job growth.

The recent and planned investments in East Harlem as noted earlier will attract a range of professionals to the East Harlem area, will support redevelopment there, and will make growth sustainable long-term. In particular, the investments focused on STEM-related industries (i.e., the New York Proton Center and the East Harlem STEM Center) will be key drivers of sustainable job growth.

The most recent comprehensive data for East Harlem, from 2017 and showing data from 2016, show that the unemployment rate in East Harlem declined from a recessionary peak of 16.2% to 7.3%, according to the Office of the New York State Comptroller. But even more noteworthy, the number of businesses in East Harlem increased by 37% between 2006 and 2016, faster than the citywide growth rate of 19%, and employment has increased by 33%, faster than the citywide growth rate of 20%. By 2016, employment was a record 39,980 jobs. These statistics bolster the case that professionals will be drawn to East Harlem.

Additionally, there is a broad diversity of industries that support the DRI area. These include health care, construction, retail and education. In health care, **Mount Sinai Medical Center** is one of the oldest and largest teaching hospitals in the United States, ranked #18 out of approximately 5,000 hospitals in the United States, according to *U.S. News & World Report*. The soon-to-be-opened **New York Proton Center** will bring together three of the biggest names in health care and will create hundreds of jobs at the 126th St. facility. In retail, **East River Plaza** opened in 2010 and is home to large national retailers,

including Burlington Coat Factory, Costco, Marshalls, Old Navy and Target. In construction, we have outlined the large development projects in this application, of which there are several sizable efforts, including One East Harlem. The dozens of schools in the area are a large generator of future workers for the neighborhood and beyond.

But while there has been progress in East Harlem, the neighborhood still lags the progress of Central and West Harlem, as well as New York City in general. In addition to the way forward driven by both large-scale investments, there are a number of smaller job services organizations and programs in the area, including:

HireNYC - Employment opportunities tied to public housing in Harlem, with focus on out-of-school and out-of-work youth aged 18-24; \$500,000 for development of satellite branch of Workforce1 Career Center, and \$150,000 for local CBOs to recruit serve and prepare residents for training and employment.

Neighborhood 360 Degrees Grant Program – Staff, plan and implement customized revitalization programs for East Harlem’s primary commercial corridors; \$1.5 million to local non-profit partners (2017-2020); partnership with Union Settlement, New Harlem East Merchants Association and Hope Community.

Building Opportunity Initiative - Developers who receive more than \$2 million from Housing Preservation and Development must spend at least of the quarter of the money received on supporting certified Minority and Women-Owned Business Enterprises (M/WBEs) construction, design, or professional service firms.

National Urban League and New York Urban League – The National Urban League is one of the oldest, best known and influential civil rights organizations in the United States. It recently declared that its new headquarters will be on 125th St. The New York Urban League, a local affiliate of the national organization, has operated for over 90 years helping disadvantaged New Yorkers gain access to equal opportunity in employment, education, and financial and technological literacy. It offers a career preparation institute and programming for adults looking to learn more about STEM skills and related jobs in a changing economy geared towards technology.

STRIVE New York, headquartered at 122nd St. and 3rd Ave., has prepared New Yorkers for living wage jobs while also building a skilled workforce for growing companies since 1984. Over the past decade, STRIVE New York has grown, adding targeted programming to serve the most disconnected populations. STRIVE has grown to be an international organization, with over 70,000 graduates of its programs.

East Harlem Talent Network (EHTN) – A sustainable employment program that connected employers with qualified unemployed Harlem residents. Over 100 Harlem residents have been placed with full-time jobs.

4) Attractiveness of physical environment.

East Harlem is a historic neighborhood, with beautiful brownstones and other historic buildings. In general, there are opportunities to continue to improve the physical environment, some of which are underway.

Waterfront

East Harlem has the great benefit of being on the Harlem River. Though it has largely been cut off from the river by the Harlem River Drive, the neighborhood already has an anchor stretch of park by the water with the Harlem River Park Greenway. This Greenway is set to expand with an infusion of \$101 million to connect 125th and 132nd St., in a new seven-block-long waterfront development project. The project is a joint initiative between the community and the NYC Department of Parks and Recreation. New York City has committed \$18 million towards waterfront repair work and is committing an additional \$83 million to develop the open space between 125th and 132nd St. by the Harlem River Drive.



Parks and Playgrounds

Three parks form a triangle around East Harlem, including Marcus Garvey Park, Harlem River Park and Thomas Jefferson Park. \$4.7 million has been committed to develop comfort stations in Harlem River Park, and another \$18.1 million has been committed to build accommodations for seniors in local parks, including the James Weldon Johnson Playground, Abraham Lincoln Playground and Playground 103.

La Marqueta

\$30 million has been committed to renovating La Marqueta, the area underneath the Park Avenue viaduct between 111th and 116th St. This East Harlem institution once housed over 500 vendors back in the 1950s and 1960s, when it was a hub for the neighborhood. It still has a strong hold on the area's consciousness, and the intention is to restore it to become a magnet for merchants and shoppers once again.

Mixed Use Space and Housing

East Harlem has some of the highest density of housing in the country, with rents still relatively quite low but also growing rapidly. There is much activity, both public and private investment, to grow this stock. As noted in other parts of this application, this includes the large, mixed-use One East Harlem development, as well as other large private housing developments that are underway, including a 63-

story residential tower at 96th St. and 2nd Ave.; and the Sendero Verde project will bring an additional 655 units of affordable housing on Madison Ave. between 111th and 112th St.

5) Quality of Life policies.

The highly significant New York City Points of Agreement, dated November 21, 2017, rezoned East Harlem to take advantage of its inherent economic and community vitality, and it articulates 57 specific commitments to East Harlem. Many of these touch on quality of life. They include (with numbers corresponding to the actual points in the Agreement):

1. Keep homes affordable by continuing to offer loans and tax incentives
4. Fund and support the East Harlem/El Barrio Land Trust, to create and maintain permanently affordable housing.
6. \$50 million to modernize ventilation, renovate kitchens and bathrooms, install new gas risers, and more at NYCHA housing.
8. Continue to provide free legal representation to East Harlem tenants facing harassment
13. Prioritize the development of over 2,600 affordable homes on publicly owned land
17. Explore opportunities to finance the development of affordable artist housing
22. \$101 million to expand the Harlem River Greenway Link to connect 125th and 132nd St. and to focus on building a new seven-block-long waterfront park
23. \$15 million to make improvements to the East River Esplanade
24. \$4.7 million to build a comfort station in Harlem River Park to serve the heavily used ballfields.
25. \$18.1 million to build intergeneration playgrounds to accommodate seniors in local parks
26. Improve way-finding to Randall's Island
30. \$30 million for renovations of La Marqueta, the East Harlem institution since 1936, under the Park Avenue Viaduct, from 111th to 119th St.
31. Improved safety for visually impaired pedestrians
32. \$1 million to fund a Safe Routes to School (SRTS) study and implement new routes in East Harlem
34. \$1.5 million to build a new SBS station at 125th St. and Lexington Ave.
35. \$5.5 million to construct a new 125th St. Plaza serving the Metro-North station
36. Locate additional benches in areas that provide respite for seniors
40. Roll out 3-K for All program across East Harlem
41. Improve access to early care and education
42. Install air conditioners in all East Harlem schools
50. \$1.7 million to create the East Harlem Neighborhood Health Action Center
51. Coordinate with Agencies to incorporate green infrastructure into city projects

6) Public support.

Below, please find our list of supporters. The initial local lead for the program will be NYC FIRST, which will work closely with other stakeholders, including the Manhattan Borough President's Office.

Congressman Adriano Espaillat

Manhattan Borough President Gale Brewer

State Senator Brian Benjamin

State Senator Jose M. Serrano

State Assemblymember Robert J. Rodriguez

State Assemblymember Inez E. Dickens

City Councilmember Diana Ayala

City Councilmember Bill Perkins

Mount Sinai Medical Center

East Harlem Tutorial Program

Grove School of Engineering (City College of New York)

Cornell Tech

Harlem Educational Activities Fund (HEAF)

Boys' Club of NY

Silicon Harlem

Manhattan Center for Science and Mathematics

CS4All

NYC DOE

NYC EDC

New York Public Library

New Harlem East Merchants Association

STRIVE

East Harlem Community Alliance

Union Settlement

DREAM

El Museo del Barrio

Ascendant Neighborhood Development

Artimus Construction

Bloomberg

Con Edison

Siegel Family Endowment

Two Sigma Investments

7) Transformative opportunities.

There are several transformative projects that will be ready for implementation with an infusion of DRI funds within the first one to two years. These include, among others:

- The East Harlem STEM Center
- Uptown Grand Central (Metro-North station plaza)
- High-bandwidth Internet connectivity for the public across East Harlem
- Beautification and repairs of sidewalks and streets in the neighborhood

The first two bullet points in particular would be a significant boost in terms of vaulting East Harlem forward into a much more significant position as a technology-focused community, as it would bind together a number of existing but disparate private and public investments and other efforts. It would provide a critical catalyst for jobs and workforce training, and would both attract current professionals and create new ones, providing pathways to future employment. It would provide tighter economic integration with other neighborhoods and constituencies in Manhattan. work with young and old and everyone in between. Finally, it would help anchor East Harlem's present progress, while propelling it into a future based increasingly on technological advances

8) Administrative Capacity.

NYC FIRST and Artimus Construction (owner of the Corn Exchange) would oversee the planning and execution of the STEM Center and will coordinate with the Manhattan Borough President's Office for all other DRI projects. We will also closely work with other parties, including Silicon Harlem, the NYC Economic Development Corporation, the NYC Department of Transportation, and the New Harlem East Merchants Association.