# REIMAGINETHE **CROSS BRONX** EXPRESSWAY

Connected, Safe, Healthy Communities

Final Vision March 2025













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### Letter from NYSDOT Commissioner Marie Therese Dominguez

Dear friends,

Reimagine the Cross Bronx Expressway is a once in a lifetime opportunity to invest in a community that was divided by the construction of this highway over 50 years ago. With the support of Governor Kathy Hochul, and the engagement and input of the community, we can right the wrongs of decades past and build more resilient and sustainable infrastructure for future generations.

While the Cross Bronx Expressway is a vital connector for travel and commerce in the northeast, it is also one of the most congested American interstates with some of the highest rates of traffic and collisions in the nation. The toll it has taken and continues to take on local residents and businesses means that the time has come to find a better way.

From the beginning, Reimagine the Cross Bronx represented a collaboration between all branches of government to gain valuable insights on the future of the corridor. It's just a first step, and we will continue to collaborate with local residents to listen and understand their stories, concerns, and ideas in the coming weeks, months and years.

The New York State Department of Transportation has invested significant time and resources to improve the quality of life in the South Bronx, through projects such as the Sheridan Boulevard and the Hunts Point Access Improvement Projects, and the upcoming Cross Bronx Bridges project which will rehabilitate or replace five bridges along the Expressway.

Governor Hochul has set aside funding in the current state budget for a new Planning and Environment Linkages study, which will build upon the Reimagine the Cross Bronx study. With her support, and the guidance provided by community leaders, stakeholders and residents, the State Department of Transportation is committed to reimagining a better Cross Bronx Expressway for everyone.



Marie Therese Dominguez

Commissioner

New York State Department of Transportation

### Letter from NYC Deputy Mayor Meera Joshi

Constructed during the highway boom over half a century ago, the Cross Bronx Expressway is the highest trafficked freight corridor in the city. It connects people and goods across New Jersey, Long Island, and Upstate New York, and connects Hunt's Point, the largest food distribution center in the country, to the region.

At the same time, the highway has physically divided families and business owners from jobs and essential services such as schools, day care centers, pharmacies, and local banks over generations –stymieing economic growth and upward mobility. Thousands of homes were demolished and 60,000 residents and local businesses displaced. Yet, despite this displacement, the corridor remains residential in nature and the majority of households along this corridor today are families with children who must navigate dangerous and dark underpasses and face longer distances and travel times to access jobs and essential services.

The following proposals aim to alleviate these burdensome conditions for residents along the corridor, including nearly 60,000 school aged children. They set out to improve access to job opportunities and increase economic activity in the Bronx by reestablishing long-lost connections between communities to the highway's north and south. The potential results of realizing this vision include reduced commute times, improved safety for drivers and pedestrians, greater access to job opportunities, education, healthcare and space for family recreation, and a more cohesive borough and region.

Our efforts to build a more connected Bronx are grounded in the vision of the thousands of residents and stakeholders along the corridor whose decades-long advocacy precipitated this work. We are thankful for their continued partnership, as well as for Governor Kathy Hochul's office, for investing in the next phase of this important effort. We are one step closer to unlocking the Bronx as a more prosperous economic hub for the people who live there today and generations to come.



Meera Joshi Deputy Mayor for Operations City of New York

### **Letter from NYC DOT Commissioner Ydanis Rodriguez**

For decades since its construction in the middle of the last century, the Cross Bronx Expressway has served as a critical transportation corridor in the New York region, facilitating local, regional, and interstate travel. However, the creation of the Cross Bronx also remains a controversial blot on our city's history, as the highway created lasting physical and social divisions, displaced tens of thousands of residents and contributed to economic and environmental challenges that persist today.

That is why I am so pleased and proud to introduce the *Final Vision* for Reimagine the Cross Bronx, a comprehensive study that lays the foundation for reimagining the highway. Created by a coalition of city and state agencies in collaboration with community stakeholders, this study presents an historic vision for reconnecting neighborhoods, improving public health, and fostering long-term investment in the Bronx.

Conducted between December 2022 and March 2025, this study was made possible through a \$2 million grant from the U.S. Department of Transportation's Rebuilding American Infrastructure with Sustainability and Equity (RAISE) program. The study was conducted in partnership with the NYC Department of Transportation (NYC DOT), NYC Department of City Planning (NYC DCP), NYC Department of Health and Mental Hygiene, and New York State Department of Transportation (NYSDOT). This unprecedented collaboration — of state and city governments, working closely with and funded by federal partners — engaged Bronx residents to identify critical challenges and explore solutions.

Through extensive outreach (of the sort **never** done as the highway was constructed seventy years ago), we heard the clear voices of local communities. Residents of the Bronx have long lived with the the consequences of this road: highway congestion, limited access to open space, unsafe pedestrian and transit conditions as well as air and noise pollution, all contributing to some of the worst health outcomes in the state.

The final vision outlined in this report is centered on four key goals:

- Connectivity: Enhancing public transit, improving freight management, and addressing mobility gaps.
- **Health:** Expanding access to open spaces, addressing air and noise pollution, & reducing health disparities.
- Safety: Improving traffic safety, pedestrian infrastructure, and climate resilience.
- **Strength:** Preserving neighborhood identity, building community leadership, and fostering ongoing government-community collaboration.

This study presents a multi-phased approach to implementing meaningful change, from immediate interventions to long-term infrastructure investments. Short-term projects, slated for implementation as early as this year, target pedestrian safety improvements at high-traffic intersections, as well as enhancements to bus transit and expansion of asthma programs to address public health disparities. Mid-term investments focus on larger capital projects such as new pedestrian and cycling connections, safer bus stops under elevated subway tracks, and active traffic management solutions to reduce congestion and improve roadway efficiency.

Looking forward, the study also explores exciting and transformative long-term strategies: potential highway caps over trenches to reconnect divided neighborhoods, expanded green spaces, and mitigations of environmental harm. These infrastructure changes will require further feasibility assessments, engineering studies, and funding from federal, state, and city sources. However, the vision presented in this report marks a crucial step toward reimagining the Cross Bronx Expressway as a corridor that supports and no longer divides its surrounding communities.

I thank Mayor Eric Adams, Governor Kathy Hochul, Senator Charles Schumer, Senator Kirsten Gillibrand, Congress Member Ritchie Torries, Congress Member Alexandria Ocasio-Cortez, Congress Member Adriano Espaillat, and so many others for their direct and enthusiastic support of this effort. The success of this initiative will depend on continued collaboration among government agencies, elected leaders, and community organizations.

The support, expertise, and advocacy of those partners will be instrumental in our cooperative work to transform this study's concepts into tangible improvements that benefit the people who call the borough home. We look forward to working together with those residents to build a healthier, safer, and more connected Bronx.



**Ydanis Rodriguez** Commissioner New York City Department of Transportation



Figure 1.1 Community walking tour on Macombs Avenue over the Cross Bronx Expressway

### **Vision Statement**

The Cross Bronx Expressway (Cross Bronx or CBE) is a crucial connection for local, regional, and interstate travel within the northeast. However, its construction divided the borough in a way that displaced residents and separated vibrant and cohesive communities, resulting in economic disadvantage and disinvestment. Today, the CBE runs through predominantly Black and Latino working-class neighborhoods and continues to affect residents' health and quality of life. This study assesses the longstanding needs of these under-resourced communities and envisions short-, mid-, and long-term projects and programs that not only reimagine roadway infrastructure but also foster healthier, more resilient neighborhoods.

### **About the Cross Bronx Expressway**

The Cross Bronx Expressway, part of Interstate 95 (I-95), travels east-west across the borough of the Bronx, New York. It is owned and maintained by the New York State Department of Transportation (NYSDOT). Built between 1948 and 1972, its construction displaced thousands of people and created lasting barriers that separate communities. The Cross Bronx connects west to New Jersey via the George Washington Bridge, which consistently ranks as one of the highest volume crossings in the federal Interstate system. As a result, regional traffic travels through the neighborhoods of the South Bronx and northern Manhattan. The Cross Bronx Expressway is currently one of the most congested American interstates, with some of the highest rates of collisions. Residents of the area face some of the highest rates of health issues in the state.

### **About the Study**

From December 2022 to March 2025, New York led a community-driven effort to re-envision the Cross Bronx Expressway. The Study Area extends half a mile north and south of the Cross Bronx and spans 4.5 miles from the Harlem River to Westchester Creek. The Reimagine the Cross Bronx study focuses on reconnecting the communities divided by the Cross Bronx Expressway and reducing the negative effects it has on surrounding neighborhoods. To facilitate targeted outreach and communication, the Study Area was divided into the three sections (West, Central, and East) shown in Figure 1.2.

Reimagine the Cross Bronx was funded by a \$2 million grant from the United States Department of Transportation (US DOT) Rebuilding American Infrastructure with Sustainability and Equity (RAISE) program. The study was advanced through a partnership between NYC Department of Transportation (NYC DOT), NYC Department of City Planning (NYC DCP), NYC Department of Health and Mental Hygiene (the NYC Health Department), and New York State Department of Transportation (NYSDOT). Collectively the four partner agencies are referred to as the Study Team.

The study was guided by four central goals:

- Support local and citywide stakeholder participation.
- Understand the history and legacy of the Cross Bronx and how it impacts its future.
- Be transparent and accessible throughout the study.
- Incorporate community members' feedback into the study.

### **About the Final Vision**

This final report summarizes a vision for the future of the corridor and presents concepts based on a synthesis of community input, research and data analysis. These concepts identify strategies to increase more sustainable travel modes, improve and expand access to open space, enhance safety, and improve freight management activities. This vision will inform future planning decisions on and around the Cross Bronx Expressway.

The Final Vision demonstrates how agency partners will continue to collaborate to meet the goals of the study through the following strategies:

- Implement immediate place-based improvements and corridor-wide programs to respond to communityidentified needs.
- Pursue mid-term capital projects in partnership with federal, state, and local agencies.
- Advance long-term transformative infrastructure changes.
- Deepen partnerships with community leaders to implement short-, mid- and long-term improvements.

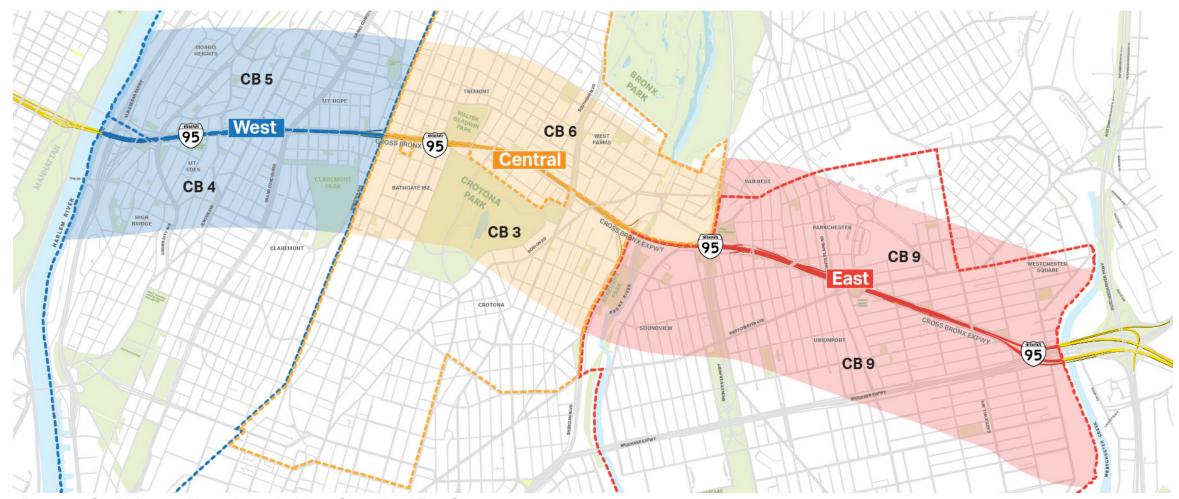


Figure 1.2 Study Area and boundaries for West, Central and East Sections

### A Community-Driven Methodology

Individuals' experiences living, working, and playing around the Cross Bronx neighborhoods are central to the study. Working with community-based partners, the Study Team listened to and learned from residents and other local stakeholders. Their input directly informed this report and proposals for future work in, on, and around the corridor.

### What We Heard: Community-Identified Issues

The Study Team summarized major issues identified by community members into four themes to help develop and refine a vision for the Cross Bronx:



### Connectivity

Improve public transit and freight management and address mobility gaps.



### Health

Expand access to open space and address health disparities and noise and air pollution.



### Safety

Enhance traffic safety and reduce climate hazards.



### **Strength**

Preserve history and culture and improve coordination between government and communities through public input and neighborhood planning.

Distinct issues related to transportation, mobility, and traffic safety arose as common themes through each round of engagement. These issues included improving east-west travel without a car, improving connections across the highway, separating local and through traffic to reduce highway traffic overflow into neighborhoods, and addressing intersection and corridor safety concerns throughout the Study Area. Other corridor-wide issues included expanding open space, addressing health disparities, and creating a real implementation mechanism for future investments.

This report includes short-, mid- and long-term concepts that directly address these community-identified issues, culminating in a corridor-wide vision and path towards implementation. As any potential improvements move forward, city and state agencies will continue to facilitate public engagement processes.









Figure 1.3 Community engagement at agency-led events and public workshops

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### A Reimagined Cross Bronx Expressway



# Immediate Improvements for Implementation

City and state agencies will continue to work together to carry out current programs and advance new strategic initiatives. This report includes details about upcoming projects and programs that aim to advance the goals of this study in the short-term.

### **Bronx Asthma Initiative**

Asthma disproportionately affects Bronx residents. The NYC Health Department has proposed the Bronx Asthma Initiative (BAI) to address inequities in asthma outcomes. The Health Department will receive funding through the Central Business District Tolling Program (CBDTP, or congestion pricing), and once funding is received, the BAI plans to expand the NYC Health Department's place-based community- and school-based asthma programming in the South Bronx. The BAI will have two components: the expansion of the school-based Asthma Case Management Program (ACMP) and the creation of a Bronx Asthma Program (BAP) to provide leadership, coordination, education, and community programming.

### Jerome Avenue at Cross Bronx Expressway

Through each round of engagement, residents have expressed concerns about a high concentration of pedestrian and vehicular conflicts where Cross Bronx on- and off-ramps intersect with Jerome Avenue. NYC DOT will study and implement Vision Zero street improvement projects to improve pedestrian safety in this area.

### **East Tremont Avenue Busway**

NYC DOT, in cooperation with the Metropolitan Transportation Authority (the MTA), is proposing a dedicated busway on East Tremont Avenue in the Bronx to improve travel speed and reliability for nearly 34,000 daily bus riders on the Bronx's 5th busiest bus route.

### West Farms: Connecting between the Bronx Zoo and Starlight Park

Responding to community input to improve connections between the West Farms and Tremont neighborhoods to Starlight Park, NYC DOT will evaluate potential new pedestrian, cycling, and public realm improvements between the Bronx Zoo and the Bronx River Greenway.

### Hugh J. Grant Circle

To address community concerns about pedestrian and traffic safety at Hugh J. Grant Circle, NYC DOT, in cooperation with the MTA, will assess and implement several street design strategies to improve connections around the Parkchester 6 train station.

### Study Bike Connections on Westchester Ave.

In response to community desire to improve cycling connections east of the Bronx River Greenway, NYC DOT will investigate cycling connections along Westchester Avenue between Bronx River Avenue and the Hutchinson River Greenway, potentially extending the existing protected bike lane installed in 2023 between Southern Boulevard and Whitlock Avenue.



# Mid-Term Capital Investments

In the mid-term, the Study Team will advance more complex project concepts through capital planning and design development while deepening neighborhood planning efforts. Mid-term project concepts and programs are intended to meet community needs for enhanced connectivity, safety, health, and strength while laying groundwork for potential long-term infrastructure investments.

### Jerome Capital Project: Pedestrian Safety Improvements

The Jerome Capital Project (PIN: HWXJerome) includes a suite of neighborhood-wide capital projects that will enhance pedestrian safety and the quality of the public realm in the Jerome Avenue corridor. Many of these improvements were proposed in the Jerome Avenue Neighborhood Plan, which was completed in 2017. Improvements include street design changes that create shorter, safer crossing and improve visibility for pedestrians.

### **Bus Stops Under the Elevated (BSUE)**

The streets underneath elevated subway structures pose unique challenges within the Study Area. At many locations, subway columns prevent buses from accessing the curb and bus riders are forced to wait for, board, and alight the bus in the middle of the street. This leaves bus riders vulnerable to collisions with vehicles and leads to bus stops that are inaccessible for people who may require the aid of a bus ramp or lift. Through the BSUE initiative, NYC DOT makes improvements at these locations by constructing bus boarding islands or curb extensions at existing bus stop locations under elevated trains. This creates safe spaces for bus riders and upgrades bus stops to meet physical accessibility standards as defined by the Americans with Disabilities Act (ADA). Through capital planning, design, and construction processes, NYC DOT is studying or implementing BSUE improvements at several locations within the Study Area.

#### Raised Crosswalks

NYC DOT is also studying the feasibility of installing raised crosswalks within the Study Area. Raised crosswalks are similar to speed humps, but they are designed for a pedestrian crossing. Like other speed reducers, raised crosswalks compel drivers to travel at safe speeds, in addition to improving pedestrian visibility by elevating the pedestrian to the height of the curb and increasing accessibility by providing a level crossing for parents with strollers and for older adults and those with ambulatory disabilities.

### **Cross Bronx Active Traffic Management**

The Cross Bronx Expressway Active Traffic Management System project aims to enhance mobility along the CBE corridor through active traffic demand management strategies, including Intelligent Transportation System (ITS) elements such as dynamic messaging signs, vehicle detection equipment, CCTV cameras and other related hardware systems. These strategies are designed to enhance safety, streamline traffic flow, and increase reliability by detecting incidents, reducing congestion-related crashes, predicting travel times and identifying best routes for travelers. Additionally, the project will support current and future transportation management systems to ensure the infrastructure functions efficiently.

# Long-Term Transformative Infrastructure Changes to be Advanced Further

A community-driven vision for reconnecting communities across the Cross Bronx includes concepts to expand open space and improve safe multimodal connections through a highway cap. A highway cap is also known as a deck, stitch, or highway lid, and would be a major potential infrastructure improvement that could cover a highway that runs below ground. Constructing a highway cap may be feasible in some locations along the Cross Bronx Expressway, but not everywhere. To determine where a highway cap could be potentially constructable, the Study Team evaluated various physical conditions, including elevation differences, highway widths, and vertical clearances. Further study would be required, including engineering and design work, traffic analyses, environmental review, cost estimation, public outreach, and multi-agency involvement to determine if the concept is feasible and practical for implementation. Funding would also need to be identified and secured.

The Study Team developed concepts that consider highway caps as a tool to reconnect the urban grid, expand open space and enhance traffic safety and mobility for all modes of transportation. These and other interventions are essential to promoting health and well-being throughout the Study Area.

### Potential Highway Cap: Macombs Road to Walton Avenue

The intersection of Jerome Avenue and the Cross Bronx Expressway is a hub of pedestrian and commercial activity. Closing key ramps and constructing a full highway cap on either side of Jerome Avenue could enhance safety and foster more seamless connectivity, especially for people walking and biking. These caps could also decrease noise pollution while creating new open space adjacent to the existing Inwood Park, Featherbenches Park, and Jennie Jerome Playground. However, this concept requires extensive study and modeling to confirm the feasibility of ramp closures.

### Potential Highway Cap: Walter Gladwin and Crotona Park

Reuniting Walter Gladwin and Crotona Parks would meet a community desire for expanded open space and safer north-south connections between adjacent neighborhoods. It could help correct the historical environmental and planning injustice of the parks' separation and improve infrastructure for residents in a densely populated and historically under-resourced community.

### Potential Highway Cap: Hugh J. Grant Circle

A vision for the future of Hugh J. Grant Circle incorporates short and mid-term concepts to enhance traffic safety and mobility while also building towards a long-term transformation that includes constructing caps on either side of the roundabout. Street closures and other traffic reconfigurations require thorough study, but this concept has the potential to expand existing open spaces, create new open space, and enhance traffic safety and connections around a critical neighborhood transportation hub.

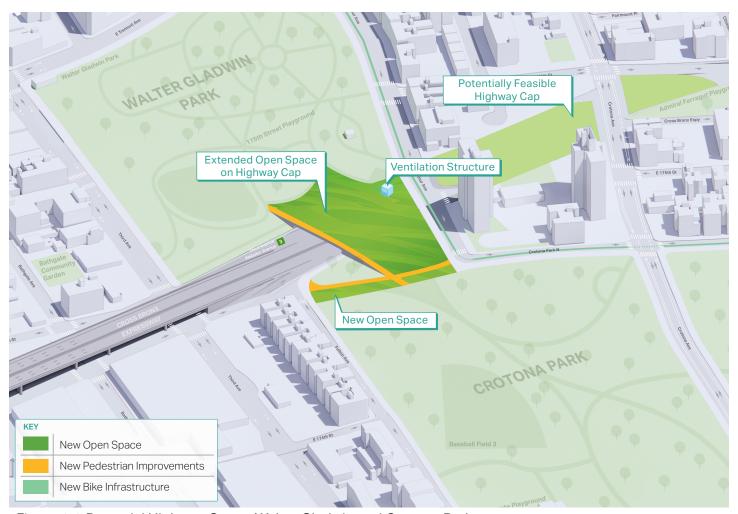


Figure 1.4 Potential Highway Cap at Walter Gladwin and Crotona Parks

### **Next Steps for Planning and Implementation**

Some short-term projects will be implemented as early as 2025. Capital projects will continue through planning and design development, and agency sponsors will engage with community members at major milestones. Meanwhile, several mitigations from the CBDTP (congestion pricing), will be advanced in the Bronx.<sup>1</sup> The MTA, with NYSDOT and city agencies, will engage with environmental justice and other community stakeholders to identify potential locations for site-specific projects and to implement CBDTP mitigations within the Study Area, including new asthma programming, and expanded Off-Hour Deliveries and Clean Trucks programs.

Long-term transformative project concepts, including potential highway caps, would require close collaboration and large amounts of city, state and federal funding to implement. As these concepts advance, potential funding sources will be identified.

Each long-term concept would require additional engineering evaluation, design, environmental review, and community engagement. In the interim, agency partners commit to continuing discussions regarding jurisdiction, ownership, and maintenance of the proposed new infrastructure.

Federal Highway Administration. (2023, June). Finding of no significant impact: Central Business District (CBD) Tolling Program. https://new.mta.info/document/114186



### **Study History**

### **History of the Construction of the Cross Bronx**

In 1929, Regional Plan Association (RPA) proposed the Metropolitan Loop Highway intended to improve travel in the metropolitan area and link the Hudson River Bridge (George Washington Bridge) with the Proposed East River Crossing (Bronx Whitestone Bridge) and other major routes. In 1940, the New York Planning Commission recommended the Bronx Crosstown Highway (Cross Bronx Expressway) as a route to connect Washington Bridge with Eastern Boulevard. Robert Moses proposed the six-lane Cross Bronx Expressway as a postwar improvement. The expressway was constructed from 1948 to 1972, splitting diverse, densely populated neighborhoods and causing substantial environmental and social effects. Construction of the Cross Bronx led to the demolition of thousands of homes, displacing residents and local businesses and altering the socioeconomic fabric of the Bronx. Despite tenant activism, approximately 60,000 people were displaced due to construction of the highway.

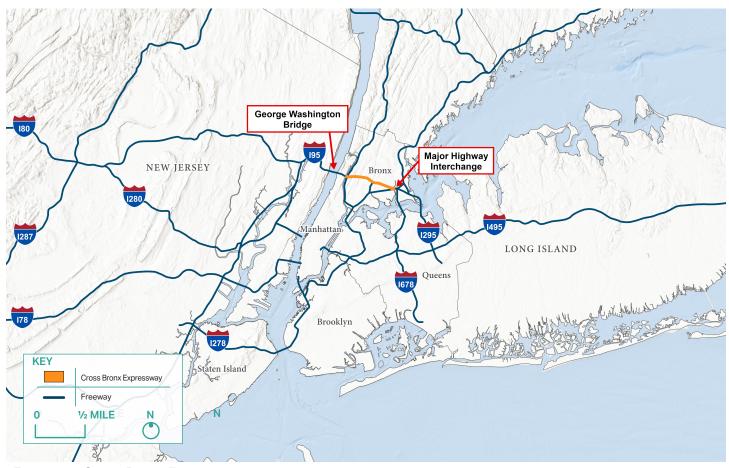


Figure 2.1 Cross Bronx Expressway in context

### **Historical Timeline of Cross Bronx Construction**

**1929** – Regional Plan Association (RPA) proposes the Metropolitan Loop Highway to improve travel in the metropolitan area.

**1936** – RPA proposes an extensive network of expressways and parkways covering the New York-New Jersey-Connecticut metropolitan area with the goal of solving New York's traffic problems.

1945 – Robert Moses proposes a six-lane Cross Bronx Expressway.

**1946** – Thirty-one civic, religious, and veteran organizations band together as the Cross-Bronx Citizens' Protective Association to oppose the highway and accompanying displacement of tens of thousands of families.

**1954** – Bronx residents lose fight when the Estimate Board affirms the route by voting to buy mid-section land.

1955-1961 - Construction of the Cross Bronx Expressway.

1955 – Major Deegan Expressway Opens.

1958 - Sheridan Expressway construction begins.

**1972** – Bruckner Interchange replaces the antiquated Bruckner Traffic Circle at the intersection of the Hutchinson River Parkway, Cross Bronx Expressway, and Bruckner Boulevard.

**2022** – The Reimagine the Cross Bronx Study is announced by Mayor Eric Adams.



Figure 2.2 Cross Bronx Expressway under construction in 1948. Source: Lehman College Library (CUNY)

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<sup>2</sup> Regional Plan Association. (n.d.). Regional plan of New York and its environs. RPA. https://rpa.org/work/reports/regional-plan-of-new-york-and-its-environs

New York Times. (1940, November 21). Pattern of Highways for the City as Proposed in Board's Master Plan.

https://www.nytimes.com/1940/11/21/archives/pattern-of-highways-for-the-city-as-proposed-in-boards-master-plan.html

<sup>4</sup> Regional Plan Association. (n.d.). The Constant Future. RPA. https://rpa.org/work/reports/the-constant-future#building-out-the-plan-1929-1945

### **History of Community Advocacy**

Bronx residents and community members have organized to oppose the Cross Bronx Expressway since its proposed design and construction. Lillian Edelstein led her working-class community in the Tremont neighborhood to fight displacement after receiving an order to vacate her building on the 800 block of 176 Street in December 1952.5 Edelstein organized her peers to petition Bronx Borough President James Lyons, whose staff engineer designed an alternative route, which became known as the 'kink,' to save 48 of the 54 apartment buildings from demolition.

When Robert Moses first rejected the suggestion, Edelstein launched a campaign to raise awareness and build a local coalition driven by self-taught organizing and canvassing activities. Despite consistent rejection, Edelstein persevered and recruited mayoral candidate Robert Wagner to oppose the Tremont demolition until each tenant had successfully relocated. Despite her efforts, Moses secured all necessary demolition permits in 1954, and Edelstein and her family moved first within the Bronx, then to Massachusetts before finally settling in New Jersey.

Decades later in the wake of the COVID-19 pandemic, several Bronx-based organizations, including Loving the Bronx, founded by Nilka Martell, and the Albert Einstein School of Medicine student organization, Bronx One Policy Group, coalesced to form the more recent campaign to 'Cap the Cross Bronx.' This effort has raised awareness of the link between emissions-related air pollution and respiratory health issues along the Cross Bronx, and advocates for highway caps as a potential infrastructural strategy to improve localized air quality and address high rates of asthma-related health issues. Their advocacy, along with a 2018 Columbia University Mailman School of Public research study on the benefits of capping the expressway, helped galvanize the campaign and gain broad support from local, state and federal elected officials. This coalition helped secure federal funding to advance community-led visioning efforts through this RAISE-funded Reimagine the Cross Bronx study.



Figure 2.3 Nilka Martell, Founder/Director of Loving The Bronx, speaking at a Press Conference in November 2021, announcing RAISE Grant Funding. Source: Ed Garcia Conde, Welcome 2 the Bronx.com

### **Existing Conditions**

Approximately 300,734 people live within the Study Area, which encompasses a diverse range of neighborhoods, communities, and cultures. The Cross Bronx Expressway serves to disrupt the connectivity of these communities, directly contributing to daily challenges and disparities faced by residents, workers, and travelers.6

A disconnected and irregular street grid creates unique mobility and traffic safety challenges and there are relatively few opportunities for people who travel by foot, bike, or transit to cross the highway. Overflow highway traffic regularly spills onto local streets, placing additional health and traffic safety burdens on residents. Highquality open spaces are unevenly distributed, which can affect exposure to flooding and heat risks.

The Study Area contains some of the most densely populated areas in New York City. Average population density in the Study Area is about 99 people per acre compared to an average of 55 people per acre in the rest of the Bronx, and 46 people per acre throughout New York City more broadly. Study Area neighborhoods are predominantly low-income where 45% of households make less than \$35,000 a year compared to only 28.5% of households citywide.8

The Existing Conditions Summary Report describes and analyzes current physical and social conditions throughout the Study Area. The report provides the Study Team, Cross Bronx stakeholders, and local communities with a foundation of shared knowledge. The complete Existing Conditions Summary Report can be found on the project website.



Figure 2.4 Aerial view of Cross Bronx Expressway

Roberts, S. (2022). The New Yorkers (pp. 286-302). Bloomsbury Publishing.

U.S. Census Bureau. (2021). "Demographic and Housing Estimates." American Community Survey 5-Year Estimates Selected Population Data Profiles, Table DP05.

U.S. Census Bureau. (2020). Decennial Census.

U.S. Census Bureau (2021). "Income in the Past 12 Months." American Community Survey 5-Year Estimates Subject Tables. Table S1901.



### **Connected Communities**

### **Multimodal Travel**

The Study Area is composed of dense neighborhoods whose residents rely on a variety of modes of transportation to move within the Study Area and around the city. Due to a disconnected local street grid and the north-south orientation of Bronx subway lines, moving east to west across the borough is challenging for all modes of travel. East-west movement is particularly difficult for public transit users because the bus routes that provide this service experience slow speeds despite high ridership. In the lower density eastern section of the Study Area, commuting by personal vehicle is more common than in the West and Central Sections, where up to 80% of workers commute by public transit.

Based on the NYC DOT Pedestrian Mobility Plan Design Guidelines, some sections of pedestrian infrastructure within the Study Area are inadequate to support current demand, particularly around key commercial corridors like Jerome Avenue and East Tremont Avenue.<sup>9</sup> Despite increased investments in the Bronx bike network, the Study Area lacks east-west routes that connect to key destinations, especially in the East Section. At the same time, City investments in micromobility systems such as Citi Bike and the E-Scooter Share Program have increased transportation options for residents and visitors alike.

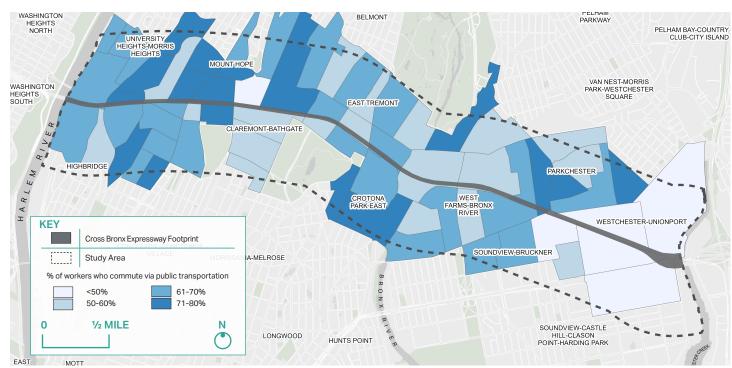


Figure 2.5 Commuter Travel Mode: Public Transportation

### **Vehicle Travel & Traffic Patterns**

Vehicle volumes on the Cross Bronx are similar to other major NYC highways. However, the Cross Bronx does have the highest proportion of freight traffic (around 18% of all vehicles). While the highway is frequently used for through trips that neither start nor end in the Bronx, the majority of trips (66%) have an origin or destination in the Bronx, including approximately 13% of trips that are Bronx-to-Bronx. Congestion is severe across the Cross Bronx mainline but is more extreme in westbound lanes and in the western half of the Study Area. Many local streets also experience heavily congested periods throughout the day.

### **Freight Movement**

Trucks are vital to the economy and to the delivery of goods throughout the borough, city, and region. However, they also contribute to traffic congestion, noise pollution, poor air quality, and have a negative impact on street safety. Most freight trips (around 72%) on the Cross Bronx start or end in the Bronx, indicating that the expressway is essential to freight movement that serves the borough. The Hunts Point Cooperative Market, located just to the south of the Study Area, is the world's largest food distribution center. The Market is the source of much of the Cross Bronx mainline and local road freight traffic.



Figure 2.6 Freeway and Local Roadway Average Weekday Morning Peak Speeds

<sup>9</sup> New York City Department of Transportation. (2022). NYC Pedestrian Mobility Plan. Pedestrians. https://www.nyc.gov/html/dot/html/pedestrians/pedestrian-mobility.shtml

These travel patterns were estimated using Replica, a platform that incorporates multiple third-party data sources such as de-identified mobile location data from vehicle GPS and location-based services data from phones.

<sup>11</sup> New York State Department of Transportation. (2019). Traffic Data Viewer. GIS Applications. https://nysdottrafficdata.drakewell.com/publicmultinodemap.asp



### Road Safety and Vision Zero

Large numbers of crashes occur on both the Cross Bronx mainline and surrounding local roads. Many sections of the highway experience injury crashes at more than twice the rate of state averages. Among arterial and local roads, the West Section of the Study Area has several intersections and areas that experience high rates of injury-causing crashes. Local streets in the west section of the study area experience nearly three times the injuries per mile compared to citywide averages. As part of the citywide Vision Zero initiative to eliminate serious crashes, NYC DOT has identified numerous traffic safety priority locations within the Study Area: five Priority Intersections and thirteen Priority Corridors.

### **Climate Change Effects**

Due to environmental conditions and socioeconomic inequality, climate change and issues like extreme heat disproportionately affect those living in the Study Area. <sup>12</sup> On average, the Study Area is hotter than the rest of NYC, with some locations two to seven degrees hotter than the citywide average. 13 Climate change causes sea-level rise and more frequent extreme weather events such as more intense rainfall and subsequent rainfallbased flooding. A lack of contiguous open space in the Study Area is detrimental to the area's ability to mitigate climate change events.

### Roadway Design

Built before modern federal standards, the Cross Bronx includes non-conforming features such as short acceleration and deceleration lane lengths and non-standard lane and shoulder widths. These factors can contribute to both congestion and safety concerns around the Cross Bronx mainline.

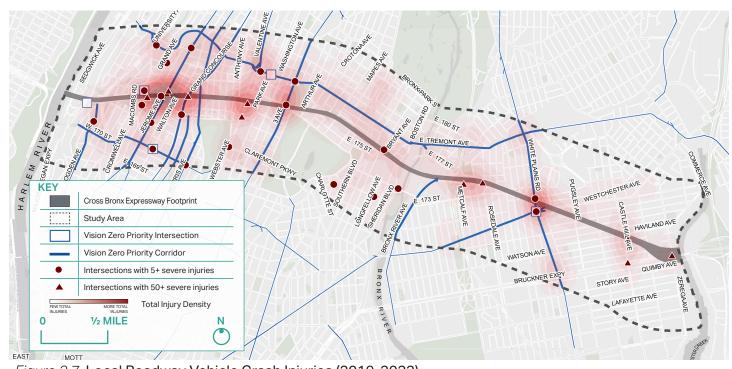


Figure 2.7 Local Roadway Vehicle Crash Injuries (2019-2023)

### **Healthy Communities**

### **Open Space**

Access to green and open spaces is important to physical and mental wellbeing. The NYC Department of Parks and Recreation's (NYC DPR) Walk to a Park initiative focuses on increasing access to parks and open spaces. 14 While most people living in the Study Area live within a quarter mile walking distance of small open spaces like playgrounds or seating areas, only around half of all residents live within half a mile of larger or higher amenity sites, defined by NYC DPR as parks that are six acres or larger, greenways, recreation centers, or parks with pools (Figure 2.8). Almost the entire East Section of the Study Area is not within walking distance of these larger or higher amenity sites, indicating a disparity in the quality of open spaces across the corridor.

### **Health Disparities**

People who live in the South Bronx, including those living near the Cross Bronx Expressway, have long suffered from living conditions that contribute to a wide range of health disparities. Rates of asthma-related emergency department visits due to exposure to outdoor pollutants are more than three times higher in the Study Area than in the rest of the city.<sup>15</sup> Other factors contributing to high rates of asthma emergency department visits include poor housing quality, lack of access to medical care and medication, and the prevalence of other chronic conditions that increase the severity of asthma. Adults in the area are more likely than those in the rest of the city to be hospitalized for heat stress, to not receive needed medical care, and to experience diabetes, hypertension, and obesity.<sup>17</sup>



Figure 2.8 Walk-to-a-Park Service Area for Study Area sites over 6 Acres. Source: NYC OpenData, Walk-to-a-Park Service Area, 2023

- New York City Department of Parks and Recreation. (2023). Walk to a Park Initiative.
- rcgovparks.org/planning-and-building/planning/walk-to-a-park
- New York City Department of Health and Mental Hygiene. (n.d.) Asthma. Environment and Health Data Portal.
- dohbesp.nvc.gov/IndicatorPublic/data-explorer/asthma/?id=2414#displav=summary
- New York City Department of Health and Mental Hygiene. (September 2021). Disparities among Children with Asthma in New York City. Epi Data Brief (No. 126). https://www.nyc.gov/assets/doh/downloads/pdf/epi/databrief126.pdf
- New York City Department of Health and Mental Hygiene. (n.d.) NYC Community Health Profiles https://a816-health.nyc.gov/hdi/profiles/

New York City Department of Health and Mental Hygiene. (n.d.). Interactive Heat Vulnerability Index. Environment and Health Data Portal.

New York City Council Data Team. (2022). Mapping Heat Inequality in NYC. Heat and Cooling Equity. https://council.nyc.gov/data/heat/

### Air and Noise Pollution

Vehicular traffic on highways contributes to both air and noise pollution in adjacent neighborhoods, although traffic is just one of many sources of air pollution. Near the Cross Bronx, approximately 15% of the air pollution originates from car and truck traffic. 18 Other major sources of air pollutants include building heating and hot water systems, unfiltered cooking emissions from restaurants, and out-of-state power plants. While policies regulating emissions from residual fuel oil, electric generating units, and motor vehicles has reduced air pollution substantially over the past several decades, poor air quality still poses health concerns.<sup>19</sup> In addition, a recent study conducted near the Cross Bronx found noise levels to be within a marginally unacceptable range and approaching clearly unacceptable during certain periods of the day.<sup>20</sup> Long term exposure to traffic noise is linked to adverse health effects including stress, increased risk of depressive symptoms, sleep deprivation, increased blood pressure and risk of heart disease, as well as impaired cognitive development in children.<sup>21</sup> If concepts on the Cross Bronx are advanced, existing and potential future traffic noise would be assessed consistent with NYSDOT's Noise Policy.<sup>22</sup>



Figure 2.9 View south from Washington Bridge

- Environmental Protection Agency. (2020). National Emissions Inventory. https://www.epa.gov/air-emissions-inventories/national-emissions-inventory-nei New York City Department of Health and Mental Hygiene. (n.d.) The New York City Community Air Survey Report: 2008-2021.
- https://a816-dohbesp.nyc.gov/IndicatorPublic/data-features/nyccas/
- 20 New York City Planning Commission. (2018). Chapter 14: Air Quality. Jerome Avenue – Final Environmental Impact Statement.
- Orban, E., McDonald, K., Sutcliffe, R., Hoffmann, B., Fuks, K. B., Dragano, N., Viehmann, A., Erbel, R., Jöckel, K.-H., Pundt, N., & Moebus, S. (2016). Residential road traffic noise and high depressive symptoms after five years of follow-up: Results from the Heinz Nixdorf Recall Study. Environmental Health Perspectives, 124(5), 578-585. https://doi.org/10.1289/ehp.1409400; Van Kempen, E., Casas, M., Pershagen, G., & Foraster, M. (2018). Who environmental noise guidelines for the European Region: A systematic review on environmental noise and cardiovascular and metabolic effects: A summary. International Journal of Environmental Research and Public Health, 15(2), 379. https://doi.org/10.3390/ijerph15020379
- New York State Department of Transportation. (2022). Noise Analysis Policy and Procedures.



Since its construction, the Cross Bronx Expressway has disrupted neighborhood connections and contributed to disproportionately worse health and socio-economic outcomes within nearby communities.

### **Demographics and Socio-Economic Conditions**

Neighborhoods surrounding the Cross Bronx Expressway are densely populated and ethnically diverse. The Study Area has over twice the average population density compared to the citywide average. <sup>23</sup> Within these communities, birth rates are between 22% and 61% higher than the national average.<sup>24</sup> Furthermore, 62% of residents are Hispanic or Latino (of any race). The next largest ethnic or racial group is Black or African American, and all other ethnicities and races make up the remaining 11% of residents. <sup>25</sup>

Most households in the Study Area have low incomes. The median household income of \$38,694 is roughly half the citywide median of \$67,997. In addition, the vast majority (88%) of households in the Study Area reside in rental units. All populated census tracts in the Study Area are designated as Environmental Justice Areas by New York City, and as Priority Investment Areas according to NYC DOT. 26

Communities living around the Cross Bronx have historically been underrepresented in planning investments. To ensure that these communities are better served now and in the future, there is a need to invest in infrastructure in their neighborhoods. Future potential infrastructure investments will require robust public engagement and coordination at the city, state, and federal levels to center the needs, history, and culture of residents who are overburdened, under-resourced and most likely to experience adverse health effects.



Figure 2.10 Study Area Population Density. Source: ASC 5-Year Estimates, 2021

- U.S. Census Bureau Decennial Census, 2020.
- U.S. Census Bureau. (2023). American Community Survey.
- New York City Department of City Planning. (2020). Population FactFinder. https://popfactfinder.planning.nyc.gov/#11.67/40.7198/-73.9515
- New York City Mayor's Office of Climate and Environmental Justice. (2023). Environmental Justice NYC Full Data Explorer.
  - https://experience.arcqis.com/experience/6a3da7b920f248af961554bdf01d668b/page/Data-Explorer/;

New York City Department of Transportation. (2021). NYC Streets Plan. https://www.nyc.gov/html/dot/downloads/pdf/nyc-streets-plan-spread.pdf

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Public engagement was central to the Reimagine the Cross Bronx study and was guided by four key goals:

- → Support local and citywide stakeholder participation.
- → Understand the history and legacy of the Cross Bronx and how it impacts its future.
- → Be transparent and accessible throughout the study.
- → Incorporate community members' feedback into the study.

The Study Team held four rounds of public engagement. Each occurred at an important decision point for the study, providing an opportunity for community feedback to shape priorities and outcomes throughout the process. The team provided Spanish and Bengali interpretation services at all public meetings and maintained its commitment to translating all study resources into Spanish to support inclusion of the many Spanishlanguage communities in the Study Area. The Study Team also attended thirteen community events to reach individuals who may not have known about or been able to attend formal engagement events.



Figure 3.1 Timeline of public engagement rounds

### **Community Engagement by the Numbers**



2,581



205

Individuals Engaged by Study Team Comments received by Study Team Study Team Workshops Community
Partner Activities







Figure 3.2 Public input gathered at open houses and community partner events

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### **Project Stakeholders and Outreach Groups**

The Study Team worked with numerous community-based stakeholders to facilitate community engagement and provide critical outreach to under-resourced communities in the Study Area. The Community Partner program supplemented overall engagement with direct connections to hard-to-reach populations, maximizing opportunities for people living and working in the Study Area to participate.

### **Community Working Group**

The Community Working Group (CWG), a collection of organizations and local leaders, helped represent the voices of communities in the Study Area. The CWG advised the Study Team, helped spread the word about upcoming events, gathered feedback, and shared information between community members and the Study Team. To follow up on study outcomes, the Study Team will continue engaging with local stakeholders after the release of this report. Please see *Appendix* (pg.113) for the list of all CWG invitees.

### **Technical Advisory Group**

The Technical Advisory Group brought subject matter expertise to critical issues for Reimagine the Cross Bronx. Introductory meetings were held in Fall 2023 and the Technical Advisory Group was officially convened in Fall 2024. Participants included academics, advocates, and members of relevant nonprofit and industry organizations. They provided insight on issues related to freight and commerce, transportation and mobility, health, the environment, and open space.



Figure 3.3 Study Team tabling at a community event in Study Area

### **Community Partners**

Community Partners serve a range of under-resourced communities and specialize in multilingual engagement. They were selected through an open application process and received financial support to lead engagement activities and collect feedback independent of the Study Team. This helped ensure that communities that have been historically left out of transportation planning conversations could participate in shaping the future of the Cross Bronx corridor. For example, during the Concept Refinement round, Community Partners engaged with groups like students and New York City Housing Authority (NYCHA) residents that were underrepresented in agency-led outreach efforts. Community Partners conducted their engagement after each round of Study Team outreach and together reached more than double the number of individuals engaged by the Study Team.

























Figure 3.4 Community partners hosting engagement events

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### **Engagement Process**

### **Open Houses**

In March and April 2023, Open Houses introduced the public to the study and provided opportunities for knowledge exchange between the Study Team and participants. The Study Team shared a historical timeline of the Cross Bronx, collected participant stories, and guided interactive family activities. Participants identified community assets, shared personal stories, pinpointed issues on a map of the Study Area, and described their future visions for the Cross Bronx.

This process helped the Study Team understand major categories of concern in neighborhoods around the Cross Bronx. The Study Team used these findings to shape survey questions and workshop content for the subsequent Issue Identification round. The main themes of participant comments included:

- · Open space and connections.
- · Air quality, noise, and traffic congestion.
- · Community wellbeing.
- · Public transit and safety.

Additional details on the Open House activities and findings are in the Open Houses Summary Report.



Figure 3.5 Public Open House on April 4th, 2023

### Issue Identification

The Issue Identification Round was a five-month outreach process that took place between June and November 2023. The goal of this effort was to understand the most pressing issues and needs in communities around the Cross Bronx. The Study Team engaged individuals through workshops, walking tours, youth engagement activities, surveys, and community events. The Study Team simultaneously developed an Existing Conditions report and analyzed Issue Identification comments alongside research findings to highlight study priorities in the <a href="Identified Issues Report">Identified Issues Report</a>. This assessment allowed the Study Team to generate targeted toolkit proposals in the Concept Development round, and these themes were used to organize feedback and priorities into the following areas:



**Connected Communities** 



Safe Communities



**Healthy Communities** 



**Strong Communities** 

A comprehensive description of Issue Identification activities and findings is in the <u>Engagement Summary:</u> Issue Identification Report.



Figure 3.6 Issue Identification Workshop on June 26th, 2023

### **Concept Development**

During the Concept Development round in Summer 2024, in-person and virtual workshops introduced the <u>Study Team's Toolkit</u> to address issues identified in the previous round of engagement. The Study Team shared findings from Issue Identification, provided educational materials about highway capping feasibility and used a 3D model of the Study Area to facilitate discussions of where to apply different Toolkit items. Participants suggested specific locations for applying these interventions, providing the basis for the Draft

Vision brought to the public in the Concept Refinement

round.

Participants focused on issues affecting their daily lives, such as traffic, safety, accessibility, noise, and air quality. Location-specific comments helped the Study Team decide where to focus on short- and mid-term efforts to enhance mobility and street safety. Participants also emphasized the importance of exploring capping opportunities in key locations such as Hugh J. Grant Circle and between Walter Gladwin and Crotona Parks.



Figure 3.8 Concept Toolkit Cards used at the Concept Development Workshop



Figure 3.7 Concept Development Workshop on June 8th, 2024

### **Concept Refinement**

Relying on insights from the Concept Development round, the Study Team created a <u>Draft Vision</u> for the Study Area. During one virtual and two in-person workshops in October 2024, participants explored short-, mid-, and long-term concepts for the Study Area. These included corridor-wide and programmatic concepts in addition to many location-specific ideas. The workshops provided opportunities for participants to ask questions, learn about the reasons behind decisions, and identify any critical issues with the Draft Vision. This round was supported by an online portal that mapped the location-specific concepts, giving members of the public a chance to explore these concepts on their own time.

Through both agency and Community Partner-led outreach, participants provided feedback on draft concepts and shared additional ideas to address issues in neighborhoods around the Cross Bronx. Some stressed the need for a more comprehensive bike network while others stated that the study should address areas under elevated sections of the highway. In response to that feedback, the Study Team developed additional bike and pedestrian infrastructure projects, revised existing proposals and developed new potential mid- and long-term infrastructure projects. Community Partner outreach during this round also found support for the potential new connections and open spaces provided by capping concepts. Participants also identified the need for improved east-west connections in the Morris Heights and Mt. Eden neighborhoods, leading to a revised continuous capping concept that could create a new urban street as well as new open spaces.



Figure 3.9 Concept Refinement Workshop on October 26th, 2024

### **Community Priorities**

Each round of engagement provided crucial information about community priorities and concerns. Holding four different rounds facilitated a collaborative relationship in which the Study Team responded to community reactions throughout the process. While the specific insights differed across rounds, community members expressed a consistent set of priorities:



# **Connected Communities**

- Increase access to and connection between parks and other open spaces.
- Improve east-west and north-south connectivity, especially around highway ramps that create challenging local road conditions.
- Enhance public transit reliability and connectivity.
- Address freight movement to better manage traffic congestion and noise and air pollution.
- Improve sidewalks, bike lanes, and intersections for pedestrians and cyclists.



# Safe Communities

- Reduce unsafe vehicle behaviors through road design, signage, regulation, and enforcement.
- Improve walking and biking infrastructure to enhance safety and accessibility, particularly around schools and parks.
- Ensure residents' parking demands can be met or diverted.
- Create dedicated freight parking locations to reduce incidents of illegal parking.
- Provide street lighting to ensure safe conditions at night and in dark locations.
- Address flooding by using drainage systems and permeable materials to better manage stormwater runoff.



# **Healthy Communities**

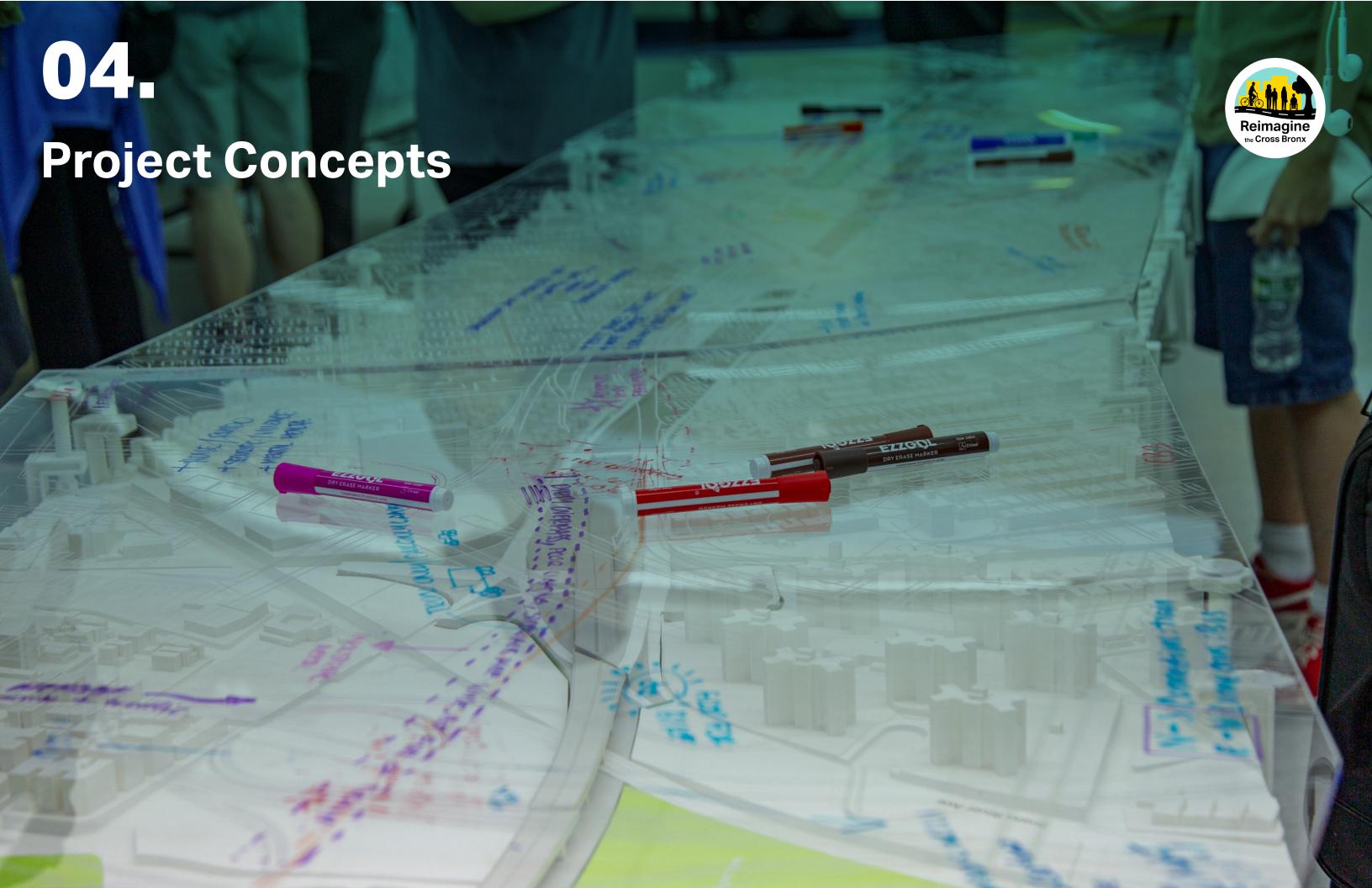
- Create and improve green and open spaces throughout the Study Area.
- Make existing and newly installed infrastructure universally accessible.
- Address existing environmental issues around noise and air pollution, extreme heat, and illegal dumping.



# Strong Communities

- Preserve the history and legacies of communities around the Cross Bronx.
- Coordinate with other government agencies and keep the community involved in all ongoing and future transformations of the Study Area.
- Address fears of displacement and limited economic opportunities.
- Support and celebrate local landmarks, cultures, and art.
- Explore capping and capping alternatives wherever possible, ensuring that any actions taken do not intensify existing issues.





### **Guiding Principles**

To refine the proposed short-, mid- and potential long-term projects, concepts, and programs and to best meet community needs, the Study Team used the community-identified priorities (Connected, Safe, Healthy, and Strong Communities) as a starting point to develop guiding principles for the Final Vision. This chapter organizes project concepts into corridor-wide strategies, short-term project and programs, mid-term projects and studies, and long-term concepts. The following guiding principles are reflected throughout the chapter.



# **Improving Connections**

A disconnected and irregular street grid complicates both north-south connections across the Cross Bronx and east-west routes throughout the borough. This Vision presents opportunities to address connectivity for pedestrians, cyclists, and transit riders by:

- Improving east-west travel for cyclists and transit riders.
- Providing better connections across the highway, with a focus on creating new open spaces.
- Better managing local and through traffic patterns to reduce highway overflow into neighborhoods.



# **Enhancing Traffic Safety**

There are five Vision Zero Priority Intersections and thirteen Vision Zero Priority Corridors within the Study Area.<sup>27</sup> NYC DOT prioritizes safety projects and automated enforcement interventions on streets that experience high crash and severe pedestrian injury rates. This vision includes several short- and mid-term street infrastructure projects to enhance traffic safety for all road users and explores how long-term infrastructure investments could provide new pedestrian and cycling connections.



# Improving Access to Open Space

Most Study Area residents have access to small open spaces like playgrounds and seating areas, but only half of all residents live in walking distance to large parks. Open spaces create opportunities for play and exercise. They provide respite from urban heat, decrease flooding risks, and create habitats for local wildlife. This vision considers how major infrastructural changes like highway caps could create new, continuous, and larger open spaces. The vision also outlines future agencyled studies to explore strategies to repurpose underutilized spaces in the Study Area.



# Improving Freight Management

Freight vehicles are essential for economic vitality and the distribution of goods across the borough, city, and region. However, they also contribute to traffic congestion, noise pollution, unsafe streets, and foster poor air quality. Since freight movement accounts for close to one fifth of vehicles on the Cross Bronx, this vision includes innovative strategies to reduce freight emissions and enhance traffic safety along truck routes while prioritizing efficient and sustainable delivery practices.

### **Corridor-Wide Concepts**



In the Study Area, all subway lines are oriented north-south. This means that buses are the only existing option for east-west travel via transit. On east-west Study Area routes, buses experience ridership up to three times higher and speeds 25% slower than city-wide averages.

NYC DOT improvements on East Tremont Avenue, an important east-west connector that runs parallel to the Cross Bronx corridor, aim to improve connections for buses, trucks, cyclists, and pedestrians (see details below). Other short-, mid- and long-term transit concepts include improving mobility through highway caps and using NYC DOT's full toolbox of transit priority treatments to improve bus service and reliability. *Figure 4.2* on the next page illustrates a conceptual interpretation of these connections.



Figure 4.1 Bx36 bus on Edward L Grant Highway

### 1 East Tremont Avenue Busway

In 2025, NYC DOT, in cooperation with the MTA, will install a busway on East Tremont Avenue, between Third Avenue and Southern Boulevard. Combined with an eastbound offset bus-only lane between Webster Avenue and Third Avenue, the busway aims to improve travel speed and reliability for the nearly 34,000 daily bus riders on the Bx36, the Bronx's fifth busiest bus route. Busways implemented in Manhattan, Queens, and Brooklyn have successfully sped up buses. On the 181st Street Busway in Northern Manhattan, bus speeds improved by up to 28%, and pedestrian and cyclist crashes decreased by up to 32%. This treatment improved travel times for bus riders along the entire route and improved traffic safety for everyone. The East Tremont Avenue proposal aligns with the goal of this study to improve options for traveling east-west without a car.

### **Bus Stop Improvements**

Each year, NYC DOT, in partnership with the MTA, makes physical accessibility and bus passenger experience improvements at bus stops throughout the city. In 2024, NYC DOT completed construction updates to make six bus stops in the Study Area fully ADA compliant and physically accessible: East 180 Street at Arthur Avenue, East 180 Street at Devoe Avenue, Bruckner Boulevard at Havemeyer Avenue, Bruckner Boulevard at Zerega Avenue, Cross Bronx Service Road at Zerega Avenue, and Southern Boulevard at East Tremont Avenue. In 2025, NYC DOT will evaluate additional bus stops in the Study Area for physical accessibility and other upgrades.

In 2024, NYC DOT installed over 40 new bus stop shelters across the city. In the Study Area, 20 bus stops have already been installed or approved for upcoming installation. In 2025, the agency plans to install additional shelters in the Study Area. Bus stop shelters provide shade and seating and are sited at bus stops that have sufficient space for an accessible path around the shelter. Shelter installations are prioritized to serve high-ridership routes and NYC DOT Priority Investment Areas. Overall, the agency plans to install 100 new bus stop shelters at bus stops across the city in 2025.

### Bus Stops Under the Elevated (BSUE)

The streets underneath elevated subway structures pose unique challenges within the Study Area. At many locations, subway columns prevent buses from accessing the curb and bus riders are forced to wait for, board, and alight the bus in the roadway. This leaves bus riders vulnerable to collisions with vehicles and leads to bus stops that are inaccessible for people who may require the aid of a bus ramp or lift.

Through the BSUE initiative, NYC DOT enhances physical accessibility to meet standards defined by the Americans with Disabilities Act (ADA) and traffic safety by constructing boarding islands or curb extensions, providing bus riders with a safe space to wait for the bus and the ability to board using a ramp or lift. The improvements also enhance bus operations by increasing visibility, expediting pick up and drop off, and improving bus drivers' ability to navigate around the columns of elevated structures. NYC DOT will implement or study the feasibility of installing BSUE improvements at the following locations:

- Jerome Avenue and West 177th Street, improving access to the Bx32 and the 176th Street 4 train station.
- 3 Jerome Avenue and East Tremont Avenue, improving access to the Bx32, Bx36 and 176<sup>th</sup> Street 4 train station.
- 4 Southern Boulevard and East 172<sup>nd</sup> Street, improving access to the Bx19.
- 5 Southern Boulevard, Boston Road, and East 174<sup>th</sup> Street, improving access to the Bx11, Bx19, Bx21 and the 174<sup>th</sup> Street 2 and 5 train station.
- 6 Westchester Avenue and White Plains Road, improving access to the Bx4, the Bx36, the Bx39 and the Parkchester 6 train station.



Figure 4.2 Bus Transit Improvements

In addition to these locations, NYC DOT is planning several additional street improvement projects to upgrade pedestrian infrastructure and improve physical accessibility in the vicinity of transit stations throughout the Study Area. A full list of these projects can be found in the *Appendix* (pg. 112).

### **Bus Service Improvements**

The MTA, in partnership with NYC DOT and the NYC Department of Finance (NYC DOF), administers an Automated Camera Enforcement (ACE) program which captures vehicles violating bus lane, double parking and bus stop rules. The ACE program improves bus speeds while reducing crashes and vehicle emissions. It also ensures that buses can access the curb for safe and accessible boarding and disembarking. ACE is currently active on the Bx41, Bx36, and Bx35 routes, and NYC DOT will work with the MTA to explore potential future ACE routes within the Study Area.

Additionally, NYC DOT has installed Transit Signal Priority (TSP) to improve bus speeds and reliability along 10 routes in the Study Area (BX1/2, BX3, BX15, BX17, BX21, BX32, BX35, BX36, BX40/42, and BX41). TSP works with the traffic signal system to hold a green signal longer or end a red signal early to reduce bus delays at intersections. NYC DOT calibrates the system to ensure that street traffic and pedestrians still have sufficient time to cross the intersections. In 2025, NYC DOT will study three additional routes (the Bx11, Bx 22 and Bx39) within the Study Area for future TSP installations.

NYC DOT has received Strengthening Mobility and Revolutionizing Transportation (SMART) funding to pilot an adaptive TSP system that more accurately tracks buses as they approach traffic signals. Beginning in Summer 2026, NYC DOT will pilot this updated system along several major Bronx routes, including the Bx1 and Bx2.



Figure 4.3 BSUE improvements on Broadway along the Bx9



NYC DOT is developing short-, mid- and long-term term concepts to provide continuous east-west cycling connections from the Harlem River Greenway to the Bronx River Greenway to the Hutchinson River Greenway. Future bike connections may be included in some of the long-term highway capping projects as well. In the interim, NYC DOT will explore continuous connections north of the expressway along East Tremont Avenue and south of the expressway along Westchester Avenue and between Claremont and Crotona Parks. These proposals to support safe and efficient biking will expand the existing cycling network, reduce cycling travel time, and improve traffic safety for all road users. Bike infrastructure also supports NYC's robust micromobility services through Citi Bike and the E-Scooter Share Program.



Figure 4.4 Protected bike lane on University Avenue

### 1 Connecting to the Harlem River Greenway

NYC DOT will continue ongoing community-based planning processes to develop a seven-mile Harlem River Greenway, creating a continuous walking and cycling connection between Van Cortlandt Park and Randall's Island Park. The greenway implementation plan aims to better connect Bronxites to their waterfront and provide a critical north-south biking and walking corridor. Within the Study Area, NYC DOT will study new cycling connections to Roberto Clemente State Park (RCSP) and to the Harlem River Greenway via East Tremont Avenue and Sedgwick Avenue NYC DOT will also explore an on-street greenway path along Sedgwick Avenue to complement the in-park path through RCSP. Together, these would provide a "low route" along the waterfront and a complementary "high route" through the Morris Park neighborhood.

### 2

### **Bronx River Greenway Connections**

NYC DOT and NYC Departments of Design and Construction (NYC DDC) and Environmental Protection (NYC DEP) are preparing to implement bike network and pedestrian safety enhancements at intersections between Devoe Avenue, East 177<sup>th</sup> Street, and East Tremont Avenue. This project will fill a critical cycling gap in the Bronx River Greenway by connecting Starlight Park to Bronx River Park. The street redesign will also shorten pedestrian crossings and improve intersections that are currently challenging for all roadway users to safely navigate. The proposal includes expanded landscaping, new trees, and upgraded infrastructure.

In 2025, NYC DOT will also design new bike facilities along Bronx Park South and Boston Road to the Bronx River Greenway. This new cycling route would expand the existing bike network in the West Farms and Crotona neighborhoods, creating a new continuous connection between Starlight Park and the Bronx Zoo.

### Rosedale Avenue Underpass

NYC DOT installed protected bike lanes on Rosedale Avenue between Lafayette Avenue and Watson Avenue in 2024. This new facility provides connections to the protected bike lane network and includes pedestrian safety and accessibility improvements. NYC DOT also coordinated with NYSDOT to establish off-street bike connections on Rosedale Avenue at Bruckner Boulevard. As part of their efforts to rehabilitate the Bruckner Expressway and make sidewalk improvements under the bridge, NYSDOT will construct dedicated asphalt paths and ramps for pedestrians and cyclists in Spring 2025.

### 4

### **Westchester Avenue Bike Connections**

In response to community requests to improve cycling connections east of the Bronx River Greenway, NYC DOT will investigate possible cycling connections along Westchester Avenue, between Bronx River Avenue and the Hutchinson River Greenway, potentially extending the existing protected bike lane installed in 2023 between Southern Boulevard and Whitlock Avenue. This assessment will also consider how to extend the Soundview Bike Network north across the highway to access a potential east-west connection on Westchester Avenue.

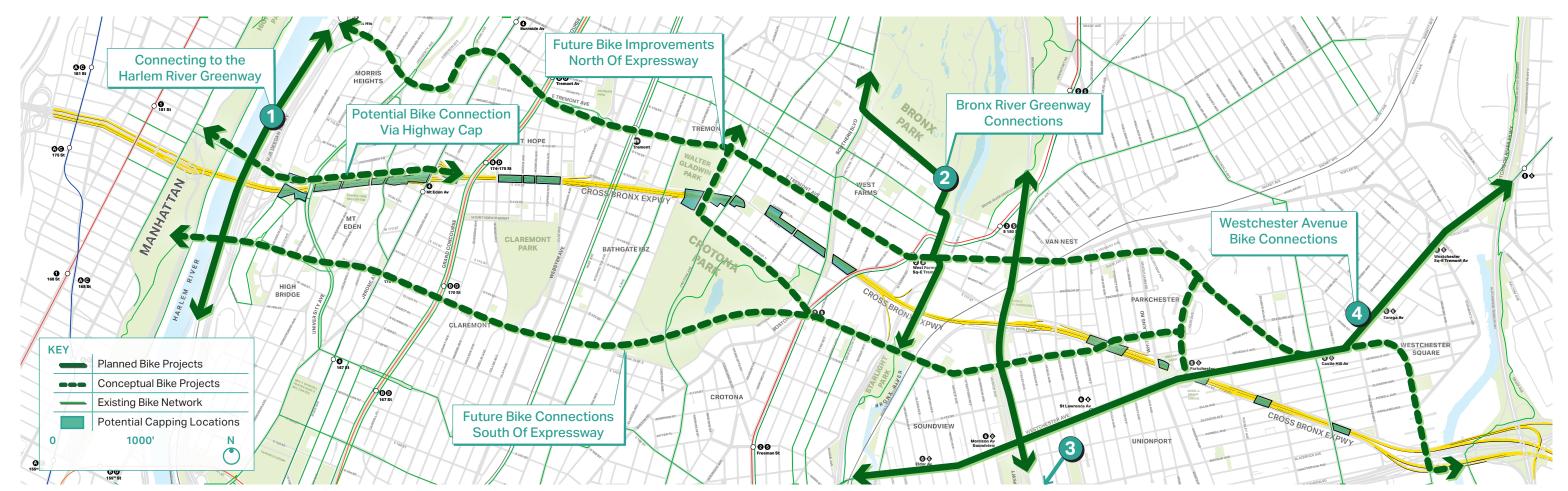


Figure 4.5 Bike Network Improvements



### **Strategies for Traffic Management**

During peak travel hours, highway traffic overflows onto local streets, creating health and safety burdens for residents. Traffic management strategies help the highway serve as a reliable long-distance connector. Future efforts will evaluate how roadway management changes could improve traffic flow on the highway.

### **Cross Bronx Expressway Active Traffic Management**

NYSDOT is advancing the Cross Bronx Expressway Active Traffic Management System project, which will implement strategies including lane control, variable speed limit advisory, queue detection and warning systems. These aim to enhance safety and mobility along the Cross Bronx Expressway (I-95) and the Cross Bronx Expressway Extension (I-295) corridors. The project includes Intelligent Transportation System (ITS) elements such as dynamic message signs, vehicle detection equipment, CCTV cameras and other related hardware and systems. The project is under construction and is expected to be completed by September 2026.

### New Decision Support System for Regional Intelligent Transportation Systems

NYSDOT is developing a Decision Support System (DSS) (PIN X807.44) to improve how the agency operates highway corridors. A DSS is used to automatically analyze data to facilitate informed decisions during different situations: routine congestion, heavy traffic due to major events (sports events, concerts, etc.) severe weather, accidents, or emergencies. It helps vehicles on the highway to travel in an orderly way with enhanced safety and fewer delays.

By assessing datapoints such as vehicle speed and the number of vehicles which are on the highway at different locations, the DSS will help to manage traffic flow on the highway during varying conditions. The DSS will provide information to the Active Traffic Management system and to traffic control centers. It can detect blocked lanes and crashes as they happen. The DSS can also predict expected travel-times, provide the best routes in response to current conditions, help reduce delays, and enhance safety. The DSS also provides the information seen on the overhead electronic signs on highways, and will help the various agencies which operate different parts of a corridor (such as highways, bridges, tunnels, and local streets) receive information and coordinate actions regarding how to best operate the transportation corridor.

### Transportation Demand Management (TDM)

TDM strategies can include efforts to reduce traffic on the Cross Bronx Expressway. The strategies promote sustainable commuting, improve traffic management, and enhance cycling safety. NYSDOT currently manages several TDM initiatives that aim to address congestion, safety, and accessibility for residents and commuters, including:

- Carpool and Vanpool Campaigns: Organize carpool and vanpool programs alongside educational promotional initiatives to reduce single-occupancy vehicles.
- Transit and Bicycle Promotions: Encourage the use of transit and bikes throughout the corridor through enhanced outreach.
- Telework Initiatives: Encourage flexible work-from-home policies for employers in Long Island, New Jersey, and New York City to alleviate peak-hour traffic.

### Ramp Closures and Reconfigurations

Altering highway access to local streets could enhance traffic efficiency and safety. The Cross Bronx was built before modern federal highway design standards were established. This means that the access ramps are more frequent than contemporary standards recommend and do not always support efficient traffic flow.

For example, one of the long-term capping concepts in this report involves reconfiguring the on- and off-ramps near the East 174<sup>th</sup> Street Bridge (*details on pg.86*). Currently, merging traffic on the highway produces conflicts and delays, contributing to diversions onto local streets. By reversing the direction of the two existing ramps (turning the current on-ramp into an off-ramp and vice versa), it could be possible to improve the flow of traffic on the Cross Bronx and reduce traffic spillover onto local streets. Redesigning the ramps could alleviate friction, improve travel times, and enhance traffic safety at a single controlled intersection. Additionally, this reconfiguration could alleviate physical constraints around the East 174<sup>th</sup> Street Bridge and make it possible to place a highway cap in this location.

Another long-term concept involves a highway cap on either side of Jerome Avenue (details on pg.80). Around the westbound on-ramp and eastbound off-ramp at this location, pedestrians experience high exposure to vehicular traffic. This produces conflicts that contribute to the high rate of injury-causing crashes in this area. The current westbound on-ramp at this location also allows motorists to enter the highway to make short trips or try to bypass congestion. This causes unnecessary friction between through and local traffic, creating congestion and limiting reliable east-west travel for longer trips on the Cross Bronx. Removing these two ramps could not only separate local and through traffic to improve traffic flow, but it could also make it possible to create a highway cap that adds new open space adjacent to the existing Jennie Jerome Playground on Jerome Avenue and Inwood Park on West Mount Eden Avenue.

Ramp closures and configurations would create implications for traffic rerouting and would require extensive study and modeling. NYSDOT, through the upcoming Cross Bronx Expressway Planning and Environmental Linkages (PEL) process, will explore feasibility for closing or reconfiguring key ramps to improve traffic flows on the expressway and local streets. The PEL will also investigate whether highway ramp closures or reconfigurations could support new open spaces on potential future highway caps.



Figure 4.6 Protected bike lane on Edward L. Grant Highway



### **Managing Freight Travel**

The Cross Bronx is a critical freight route for transporting goods to and within NYC. However, high rates of freight traffic can have negative effects on surrounding communities. NYC DOT is identifying ways to increase the sustainability and safety of freight movement throughout the city, including in neighborhoods around the Cross Bronx.

The following projects and programs will be advanced within the Bronx, with the intention of improving freight management along the Cross Bronx Expressway and other corridors. Future freight management strategies may be developed to address land use changes and evolving delivery needs. Additional freight management tools and strategies can be found in the *Appendix* (pg.109).

#### Locker NYC

Locker NYC is a pilot program that allows New Yorkers to securely receive and send packages using a free public delivery locker program. The pilot aims to reduce truck trips on local streets and congested corridors, improve air quality, consolidate deliveries, and reduce instances of package theft. To enhance delivery access and reduce congestion in Bronx neighborhoods, NYC DOT will work with program partners and community stakeholders to explore feasibility for new smart locker locations in high-density residential areas and commercial hubs within the Study Area.



Figure 4.7 GoLocker in Sunnyside, Queens

#### **Off-Hour Deliveries**

This program encourages goods delivery during the off-peak hours of 7 pm to 6 am. Off-Hour Delivery provides financial incentives for businesses to reduce deliveries during the busiest hours of the day. This enhances traffic safety, reduces emissions, and combats daytime congestion and double-parking. This program has already been implemented in some parts of the city, and the CBDTP (congestion pricing) will provide funding for NYC DOT to expand this work to dense commercial areas in the Bronx.



Figure 4.8 Off-Hour Delivery

#### Microhubs

Microhubs are local delivery hubs that provide designated curbside or off-street locations for delivery trucks to unload items onto smaller, low-emissions vehicles or human powered modes of transportation, like cargo bikes or hand carts, for the final leg of deliveries. With the significant increase in home deliveries following the COVID-19 pandemic, microhubs are an important strategy to reduce the number of large delivery trucks on the road and make deliveries cleaner, safer, and more efficient. NYC DOT announced its rules for microhubs earlier in 2025, and the agency will investigate the feasibility of siting a microhub pilot location within the Study Area.

#### **Truck Route Network**

NYC DOT is reassessing the city's truck route network to enhance safety, reduce congestion and emissions, and decrease truck vehicle miles traveled. The goal is to create a safer, more efficient network that improves freight movement while ensuring reliable and predictable travel for commercial vehicle and truck operators. Clear and strategically placed regulatory and wayfinding signage helps drivers navigate designated truck routes. As a part of the Truck Network redesign, NYC DOT will examine network enhancements and update signage and wayfinding along East Tremont Avenue and the Cross Bronx Service Road. These streets support the only east-west local truck routes in the Study Area. Keeping freight vehicles on their official routes will reduce congestion on local streets and minimize effects on communities that surround the Cross Bronx and other through truck routes.

### **Bridge Strike Reduction**

Bridge strikes are a regional concern that cause costly damage to infrastructure, increased travel time, economic losses (delays in deliveries, loss of productivity etc.), increased emissions, and heightened noise pollution. More importantly, these events can imperil human life and result in severe injury or even death. The city's parkways along with some highways and local streets have been plagued by bridge strike incidents due to the many low-clearance structures that currently exist.

In the Bronx, the Cross Bronx Expressway and surrounding roads are focus areas for preventative bridge strike reduction measures. Along the mainline, trucks have recently struck overpass points at Grand Concourse and Boston Road, and these locations are currently being assessed for mitigative measures. NYC DOT is also working closely with the MTA to address strike incidents recorded along the elevated subway structure (number 4 train service line) on Jerome Avenue.

### **Curb Management**

Strategically designed loading zones support smoother freight and goods delivery, reduce double-parking, and improve traffic flow. As outlined in NYC DOT's <u>Curb Management Action Plan</u>, these zones enhance safety, reduce emissions from idling vehicles, and prioritize efficient use of limited curb space. By integrating dedicated loading zones into corridor planning, NYC DOT ensures that curb management solutions align with broader goals for equity, livability, and economic growth. In 2024, DOT implemented 9 new loading zones around the Cross Bronx, contributing to the total of approximately 100 Neighborhood Loading Zones and 186 Truck Loading Zones within the Study Area. Participants in Curb Management outreach efforts have identified numerous potential future loading zone locations. In 2025, NYC DOT will continue to explore opportunities for loading expansion and enhancements in the Study Area.

Other curb management tools include updating outdated curb regulations to reflect current land uses and respond to changes in curb demand and parking profiles. Updates to curb regulations could also include time-limited parking and metering to better manage turnover, allowing more people to access the curb along busy corridors. These improvements enhance physical accessibility and traffic safety and promote vibrant commercial environments.



Figure 4.9 Neighborhood Loading Zone Sign



### **Red Light Camera Expansion**

In October 2024, New York State Governor Kathy Hochul signed legislation to increase road safety by expanding the red-light camera program within New York City. This data-driven program places cameras at high-crash intersections to take photos when drivers violate red lights. This is a powerful traffic safety tool to combat dangerous driving and save lives. In the next phase of this program, NYC DOT will install additional red-light cameras at locations throughout the city, including within the Study Area.

### Air Pollution and Emissions Reduction Policies

Reducing highway traffic emissions relies heavily on strategies like transitioning to cleaner fuels, expanding electrification, and encouraging public transit to reduce personal vehicle use. However, over one-third of the air pollution along the CBE is attributed to building heating and restaurant charbroiling, highlighting the need for interventions beyond transportation. The NYC Air Code, which is enforced by NYC DEP, would greatly reduce pollution from those sources if followed. The City also supports implementation of the 2019 Local Law 97 (Greenhouse Gas Emissions Reduction from Large Buildings) and DEP's rules requiring restaurants with commercial char-broilers to install emissions control devices. Cooperation across public agencies, Community Based Organizations (CBOs) and building and restaurant owners is needed to support compliance with these rules. Additionally, the Adams Administration supports legislation establishing an indirect source rule aimed at regulating emissions from warehouse operations.

The NYC Health Department's Air Quality Program will continue monitoring pollution levels throughout NYC neighborhoods, including those in the Study Area, and analyzing the data to understand which policies are most effective. The CBDTP (congestion pricing) also includes funding for roadside greenery to help mitigate air pollution.

### **Municipal EV Charging**

Transportation is responsible for almost 30% of NYC's greenhouse gas emissions (GHGs), and most of these emissions come from passenger cars. New York City is developing PlugNYC, a comprehensive network of publicly accessible Level 2 and DC fast chargers. NYC DOT recently opened a new fast charging hub, consisting of four fast chargers, at the White Plains Road Municipal Parking Field, and is partnering with the New York Power Authority to open a charging hub at Jerome-190th Street Municipal Parking Garage, subject to final feasibility.

Additionally, following a successful pilot program that installed 100 Level 2 charging ports for public use at curbside locations across the city, including in the Bronx, NYC DOT won a \$15 million federal grant to build the nation's largest curbside electric vehicle charging program. At least 50% of the new charging locations will serve disadvantaged and low-income neighborhoods. NYC DOT is currently evaluating locations to site expanded curbside Level 2 charging and will consider locations near the Cross Bronx.



Figure 4.10 Curbside EV Charger

### **Truck Electrification**

Conventional, diesel-fueled trucks have a considerable effect on the environment, producing both greenhouse gas emissions and fine particulate matter, which are contributors to respiratory disease. NYC DOT and NYC EDC are developing a citywide strategy for medium- and heavy-duty charging infrastructure to support transition to electric trucks and to achieve NYC's carbon neutrality goal by 2050. This collaborative effort involves exploring the feasibility of integrating charging solutions in Industrial Business Areas citywide, including the Bathgate and Zerega Industrial Business Zones (IBZs) near the study area. These efforts aim to facilitate efficient and reliable freight operations while reducing emissions and improving air quality.

### **Housing Safety Policy**

To address the health effects of rising summer temperatures and protect tenants from dangerous levels of heat in their homes, NYC agencies have a goal to develop a maximum summer indoor temperature policy by 2030. The NYC Health Department's Climate and Health Program will continue to produce annual reports on the health effects of summer temperatures to support efforts to implement this policy.<sup>29</sup>

### **Clean Truck Program**

The NYC Clean Trucks Program promotes sustainable transportation by providing rebate incentive funding to qualified fleets to reduce diesel exhaust emissions. Fleets replace older, polluting diesel trucks with new trucks that are battery electric or use Environmental Protection Agency (EPA) emission compliant alternative fuel. The NYC Clean Trucks Program works with local businesses that move goods and commercial truck owners operating within the program-approved New York City IBZ areas. This program helps to reduce transportation-related emissions in nearby communities and improve air quality citywide. From June 2020 through June 2023, NYC Clean Trucks funded a total of 80 truck replacements.

This citywide program built on the Hunts Point Clean Trucks Program (HPCTP), which was in effect from 2012 to 2020. HPCTP funded a total of 622 trucks, including 592 truck replacements, six exhaust retrofits, and the voluntary scrappage of 24 trucks. Between the two programs, the total number of truck replacements from 2012 to 2023 is 672. The NYC Clean Trucks Program and the HPCTP reduced annual levels of Nox, PM2.5, HC and CO emissions. Approximately 50% of all trucks in both programs use the Cross Bronx Expressway to move goods throughout the Bronx and surrounding tri-state area. At Hunts Point, NYC DOT is advancing additional efforts to decrease road congestion and improve air quality through Blue Highways, a program that promotes the use of NYC's waterways to move goods into and around the city. In 2025, NYC DOT will expand the Clean Trucks Program, which includes Transport Refrigeration Unit (TRU) replacements at Hunts Point, as a CBDTP (congestion pricing) mitigation. Meanwhile, the agency will advance the Blue Highways initiative, extending clean air benefits in the Bronx and throughout the Study Area.



Figure 4.11 NYC Clean Truck Program

<sup>9</sup> New York City Department of Health. (2024). 2024 Heat-Related Mortality Report. https://a816-dohbesp.nyc.gov/IndicatorPublic/data-features/heat-report/



Asthma is a chronic lung disease that makes it hard to breathe and affects both children and adults. A combination of the environment, family history, and individual factors contribute to asthma. While it cannot be cured, it can be controlled. Best practices for reducing the burden of asthma include improving access to health care to ensure accurate diagnosis, treatment, and regular monitoring; expanding asthma selfmanagement education; providing home visits for asthma trigger reduction; and care coordination.

The NYC Health Department will soon receive funding through the CBDTP (congestion pricing) to support the Bronx Asthma Initiative (BAI), which aims to address inequities in asthma outcomes. The BAI would expand the NYC Health Department's community- and school-based asthma programming in the South Bronx. The BAI will have two components: the expansion of the school-based Asthma Case Management Program (ACMP) and the creation of a Bronx Asthma Program (BAP) to provide leadership, coordination, education, and community programming.

As a result of the CBE Study and mitigation program planning around congestion pricing, there are renewed efforts and support for community asthma programming. Listed below are initiatives that the NYC Health Department leads and that could potentially expand with additional funding.

### Home Environmental Asthma Trigger Remediation

The NYC Health Department currently offers integrated pest management programs to address home environmental asthma triggers such as such as cockroaches and mice. The Healthy Homes Program (HHP) provides pest and mold enforcement for tenants with diagnosed moderate or severe persistent asthma. The New York Health Equity Reform (NYHER) 1115 Medicaid Waiver provides various asthma and home environmental remediation services. The NYC Health Department will support the implementation of this waiver and share messaging about its services with community partners beginning in 2025.

### Stakeholder Engagement and Partnerships

Developing and strengthening partnerships is essential to effectively reach children, their caregivers, and adults with vital asthma programming and resources. The NYC Asthma Network (NYCAN) is one avenue for strengthening existing partnerships. As a next step, and contingent upon CBDTP (congestion pricing) funding, the NYC Health Department will establish the South Bronx Asthma Partnership. This will consist of community and clinical asthma stakeholders along with Environmental Justice leaders and will foster collaboration and drive policies. This initiative aims to improve asthma outcomes and eliminate asthma-related health inequities in the Bronx.

### Asthma Self-Management Education

Asthma self-management education (AS-ME) is one critical component of effective asthma management strategies. AS-ME programs teach basic facts about asthma, the role of medications, the correct way of using asthma medications, how to respond when asthma symptoms get worse, and how to reduce exposure to asthma triggers. There is considerable evidence that AS-ME programs improve asthma control and medication adherence, and reduced emergency department visits, hospitalizations, and missed work or school days. However, factors like the availability of AS-ME providers or appropriate mechanisms for reimbursing providers can limit access to and the delivery of AS-ME. With funding from the CBDTP (congestion pricing), the NYC Health Department will contract with Bronx-based CBOs to increase access to asthma selfmanagement education and care coordination. Work to implement CBDTP-funded asthma programming in the South Bronx is underway and will continue through 2025.



### **Short-Term Projects and Programs**

Throughout the outreach process for this study, participants highlighted placebased issues and challenges in their neighborhoods. The Study Team is committed to advancing transformative projects and programs that improve these conditions in the short-term. Safety and connectivity were the top priorities for many engagement participants. NYC DOT projects can help improve public transit reliability, create new biking connections, and enhance safety for all roadway users.

Potential projects include physical street improvements to enhance connectivity and traffic safety, Open Streets programming to support healthy and strong communities, and ongoing and proposed programs that enhance quality of life for residents. The following projects are planned for implementation in 2025-2026.



Figure 4.12 Open Street on Jackson Avenue

### **Short-Term Projects and Programs:**

### West

### Jerome Avenue at Cross Bronx Expressway

Through each round of engagement, community input affirmed NYC DOT traffic safety analyses that identify Jerome Avenue between East 176<sup>th</sup> Street and Mount Eden Avenue as a Vision Zero Priority Corridor. Participants expressed concerns about a high concentration of pedestrian and vehicular conflicts where the Cross Bronx on- and off-ramps intersect with Jerome Avenue. As a result, NYC DOT will enhance pedestrian safety in this area through the following Vision Zero street improvement projects:

- Investigate feasibility of a raised crosswalk at East Mount Eden Avenue and Townsend Avenue to slow traffic and improve visibility for pedestrians and motorists.
- 2 Construct intersection safety enhancements, including safer, shorter crossings and improved visibility for pedestrians, along Jerome Avenue between Gerard Avenue and Macombs Avenue.
- Ollect qualitative and quantitative data to understand possibilities for enhancements to street safety around the Mount Eden Avenue 4 train station. Explore opportunities to expand pedestrian infrastructure, shorten pedestrian crossing distances, slow turns, and clarify traffic movements under the elevated train structure.

### **Step Street Improvements**

Step Streets are steps that were built on a mapped street that has a significant grade difference. This infrastructure was built to avoid very steep roadways and provide increased connectivity for pedestrians. These steps are generally block-long, open-air staircases that connect two streets at different elevations. In partnership with NYC DOT, the NYC DDC will complete capital improvements for the following Step Streets:

- Davidson Step Street, between Featherbed Lane and West 174<sup>th</sup> Street. Improvements include a reconstructed landing, approach, and side slopes; distinctive railings with infill panel art; tree plantings and greenery; drainage inlets, a bike channel, and pedestrian lighting.
- 5 Henwood Place Step Street, between Morris and Walton avenues. Improvements include staircase redesign and reconstruction to increase visibility and provide new ADA-compliant ramps with handrails; tree plantings and greenery; seating, wayfinding and pedestrian lighting, and a bike channel.

## NYC DOT will complete additional street safety and quality-of-life enhancements throughout the West Section:

- 6 Sustain existing Open Streets on Palisade Place, Goble Place, East 176th Street, and Morris Avenue.
- Install a new bench at West Tremont and Grand avenues.
- 8 Implement pedestrian safety enhancements at East 170<sup>th</sup> Street and Teller Avenue.
- 9 Assess possible street safety enhancements in Claremont Village.



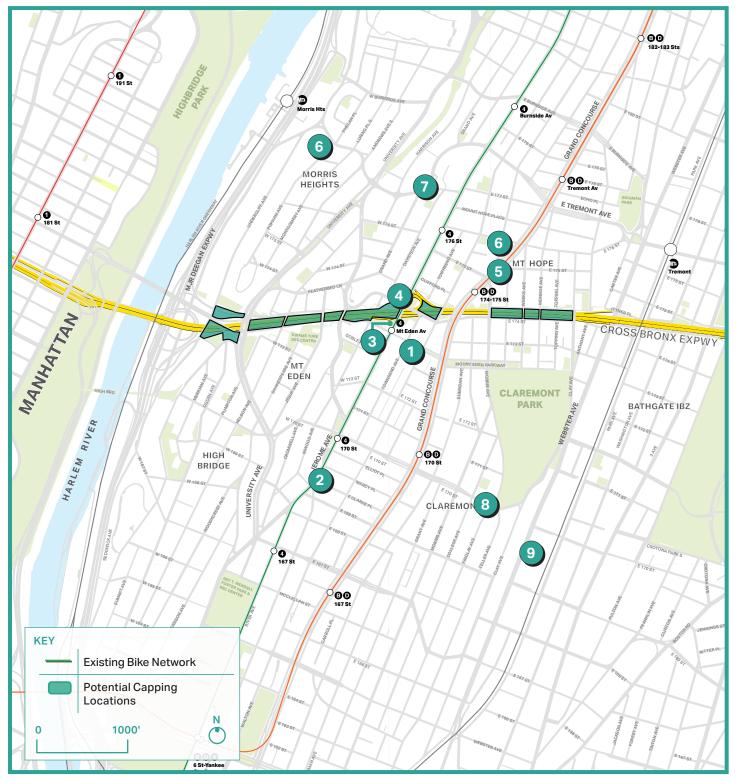


Figure 4.13 Short Term Projects and Programs Map, West Section

### **Short-Term Projects and Programs:**

### **Central**

### West Farms: Connecting between the Bronx Zoo and Starlight Park

Outreach participants recommended better connections between the West Farms and Tremont neighborhoods and Starlight Park. As a result, NYC DOT will develop pedestrian, cycling, and public realm improvements between the Bronx Zoo and the Bronx River Greenway:

- Design new bike network connections along Bronx Park South and Boston Road to connect to the River Park entrance at Boston Road and East 180<sup>th</sup> Street.
- 2 Explore opportunities and potential public space projects along Boston Road between Bronx Park South and East Tremont Avenue.
- 3 Install a busway on East Tremont Avenue between Third and Southern avenues.

### NYC DOT will complete additional improvements throughout the Central Section:

- 4 Explore pedestrian network improvements between the Crotona Park East neighborhood and Starlight Park.
- 5 Develop intersection safety and accessibility enhancements at intersections along Southern Boulevard at Freeman Street, Marmion Avenue/East 179<sup>th</sup> Street, and Crotona and East 182<sup>nd</sup> Street.
- 6 Construct capital improvements at East 177<sup>th</sup> Street, Devoe Avenue, and East Tremont Avenue to expand the cycling network and enhance intersection safety (HWXP2007).
- 7 Sustain the existing Open Street on Harrod Place.
- 8 Install new benches at:
  - East 174th Street and Bryant Avenue
  - East 174<sup>th</sup> Street and Bronx River Avenue
  - Westchester Avenue and Morrison Avenue
  - Vyse Avenue and Boston Road
- 9 Install new bike parking at Southern Boulevard between East 180<sup>th</sup> Street and Marmion Avenue.
- Study traffic patterns in the Tremont neighborhood to enhance safety and traffic flow on East Tremont and Webster avenues.
- Investigate existing conditions along Third Avenue north of the Cross Bronx Expressway for potential corridor and intersection safety enhancements.



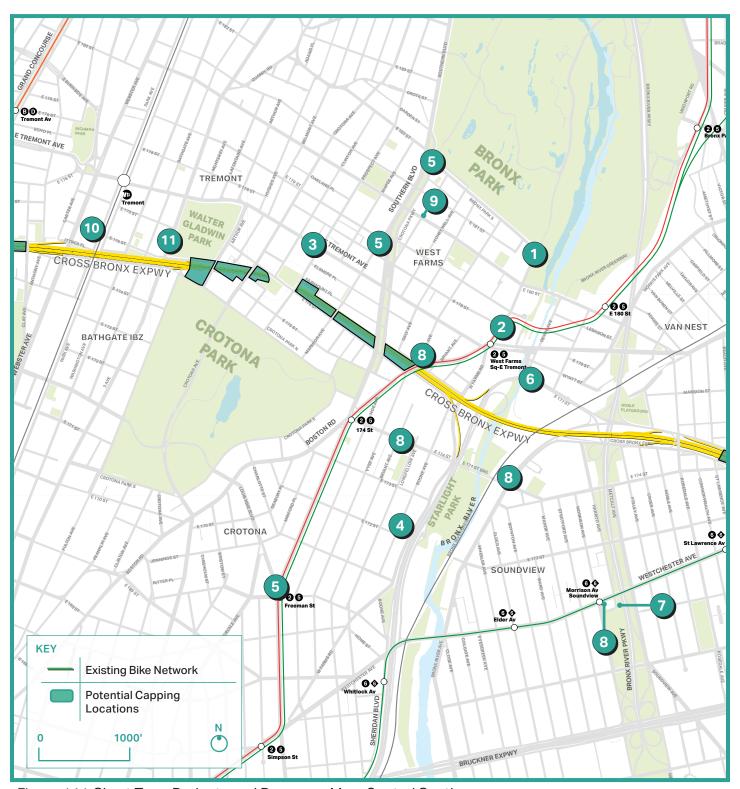


Figure 4.14 Short Term Projects and Programs Map, Central Section

### **Short-Term Projects and Programs:**

### **East**

### **Hugh J. Grant Circle**

NYC DOT will study and implement several street design strategies to address community concerns about pedestrian and traffic safety at Hugh J. Grant Circle. Projects to improve connections around the Parkchester 6 train station include:

- 1 Implement Vision Zero traffic safety enhancements at White Plains Road and Westchester Avenue.
- 2 Explore pedestrian connection enhancements between Virginia Park and Virginia Playground.
- Partner with one or more community organizations to program an Open Street on Virginia Avenue between McGraw Avenue and the westbound Cross Bronx Service Road.
- Develop options for new bike facilities within the circle, in coordination with the Westchester Avenue bike study proposed on <u>pg. 51</u>.



Figure 4.15 Hugh J. Grant Circle

### NYC DOT will complete additional improvements throughout the East Section:

- 5 Install new benches at:
  - Westchester Avenue and Castle Hill Avenue
  - Westchester Avenue and Saint Lawrence Avenue
  - Castle Hill Avenue between Hermany Avenue and Turnbull Avenue



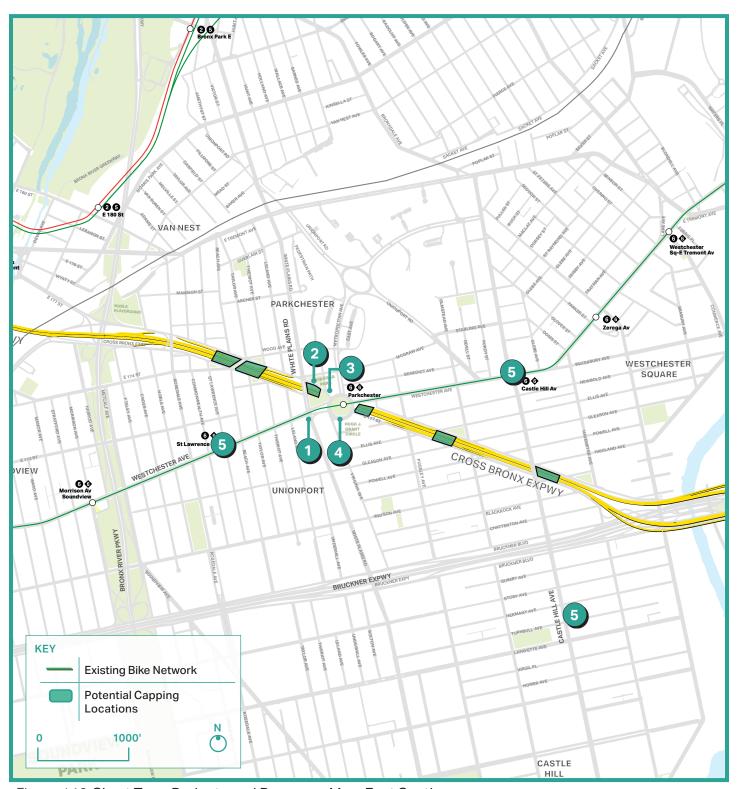


Figure 4.16 Short Term Projects and Programs Map, East Section



### **Mid-Term Projects and Programs**

In the mid-term, the Study Team will advance more complex project concepts through capital planning and design development while deepening neighborhood planning efforts. Mid-term project concepts and programs are intended to meet community needs for enhanced connectivity, health, safety, and strength while laying groundwork for long-term infrastructure investments.



Figure 4.17 Raised Crosswalk

### Jerome Capital Project: Pedestrian Safety Enhancements

NYC DOT and DDC will advance the Jerome Capital Project (PIN: HWXJerome). This suite of neighborhoodwide capital projects will enhance pedestrian safety and the quality of the public realm in the Jerome Avenue area. The agencies will implement improvements such as street design changes that create shorter, safer crossings and improve visibility for pedestrians.

#### Raised Crosswalks

Raised crosswalks are like speed humps, but they are designed with a flat top for the pedestrian crossing. They help calm traffic, improve pedestrian visibility, and enhance physical accessibility at an intersection or mid-block crossing for all users of the roadway, but specifically for those with mobility issues and challenges. Through the capital planning, design, and construction process, NYC DOT is currently analyzing the feasibility of raised crosswalk installations at these intersections:

- East Mount Eden Avenue and Townsend Avenue
- Webster Avenue and East 167th Street
- Webster Avenue and East 168th Street
- Webster Avenue and East 173rd Street
- Webster Avenue and East 180th Street
- East 173rd Street and Boston Road
- Mohegan Avenue and East 180th Street
- Watson Avenue and White Plains Road

### 10 Parkchester Cloudburst Program

A "cloudburst" is a sudden, heavy downpour where a lot of rain falls in a short amount of time. Cloudburst management includes a combination of methods that absorb, store, and transfer stormwater to minimize flooding from these events. Combining grey infrastructure like sewer pipes and underground storage tanks with green infrastructure like trees and rain gardens, cloudburst management can minimize damage to property and infrastructure by reducing strain on the sewer system. In January 2023, the Mayor and the NYC DEP announced four initial Cloudburst Hubs, one of which is located within the Study Area in the Parkchester and Morris Park neighborhoods. Additionally, NYC DEP will work to identify flooding hot spots within the Study Area for future capital drainage improvement projects.

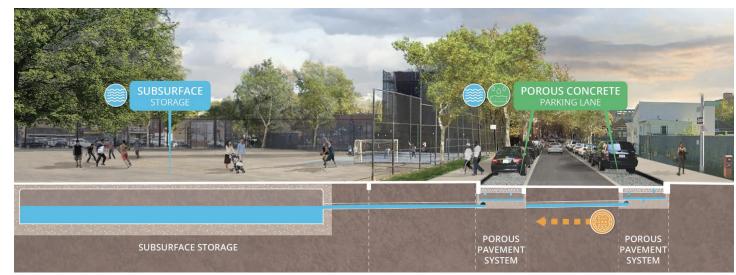


Figure 4.18 Rendering of Cloudburst Hub Infrastructure

### 11 Reconstruction of East 174th Street Bridge

The East 174<sup>th</sup> Street bridge over Sheridan Boulevard, Amtrak, and the Bronx River is included in the current NYC DOT Capital Plan. This structure will be designed to current American Association of State Highway and Transportation Officials (AASHTO) Load and Resistance Factor Design (LRFD), NYC DOT and NYSDOT standards, including seismic loading, eliminating fracture critical members by providing structural redundancy, minimizing the number of bridge expansion joints, improving bridge aesthetics, and ensuring a minimum 75-year life span. The new bridge structure will also include improved pedestrian and new cycling facilities along an important east-west bike network connection. Construction is anticipated to start in 2028 and the estimated time of completion is 2031.

### Other Pedestrian Safety, Accessibility and Wayfinding Capital Improvements

- HWPLZ006X: Westchester Square Plaza: NYC DOT will build out pedestrian public space in addition to other safety enhancements in Westchester Square.
- 13 HWX404: Castle Hill location of South Bronx Multisite: NYC DOT will build out pedestrian safety enhancements at Castle Hill Avenue and Haviland Avenue.
- Capital corridor enhancements along East Tremont Avenue: NYC DOT may implement safety enhancements related to the Parkchester/Morris Park rezoning around the new Bronx Metro North station.
- East 169<sup>th</sup> Street Step Street: This project will reconstruct the East 169<sup>th</sup> Street Step Street to enhance pedestrian and cyclist connectivity. The project is expected to include ADA accessible ramps, a bike channel, and stairs. It will include curb extensions and "top of the T" treatment to enhance pedestrian safety.

- New Wayfinding Installations: Wayfinding maps and signs are installed on sidewalks and in plazas and may be included in capital project scopes. NYC DOT is planning wayfinding installations at the following locations:
- 16 Grand Concourse at Echo Place and East 179th Street
- 17 Westchester Avenue and Morrison Avenue
- 18 Westchester Avenue and St Lawrence Avenue

## 19 Rehabilitation/Replacement of Five Cross Bronx Expressway Bridges Between Boston Road and Rosedale Avenue

NYSDOT is progressing this project (PIN X727.07) to address geometric and structural deficiencies and prolong the service life of five bridges between Boston Road and Rosedale Avenue. It will also address identified safety deficiencies and improve community multimodal connectivity within the project limits.

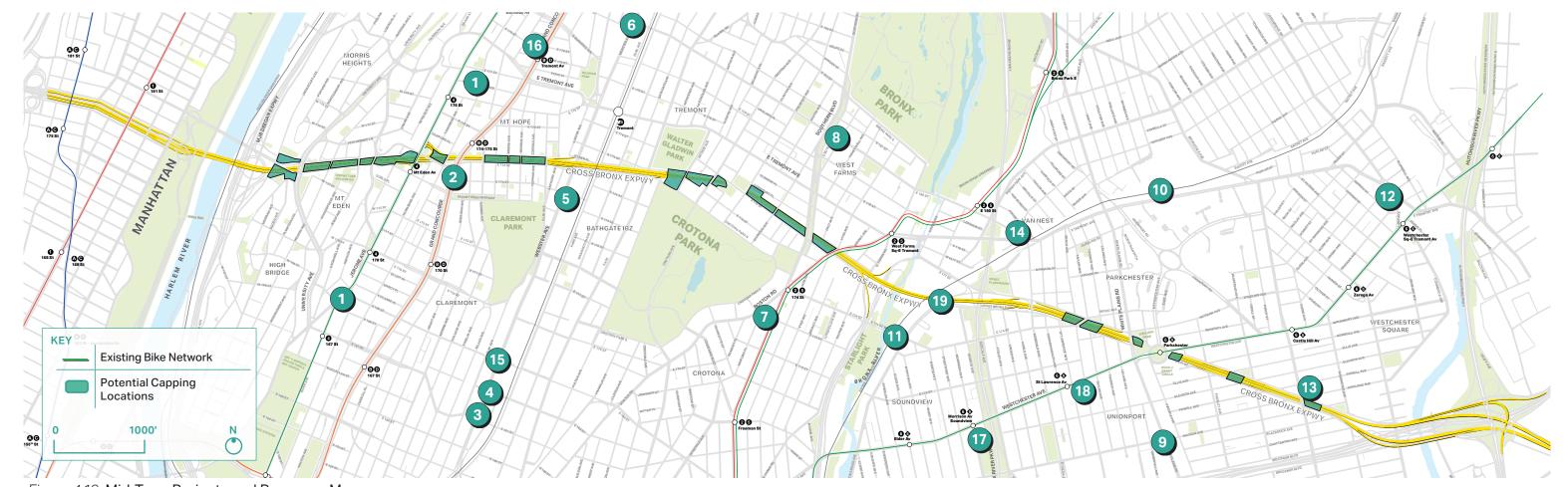


Figure 4.19 Mid-Term Projects and Programs Map

### **Neighborhood Planning Studies**

In addition to the location-specific issues that this study aims to address, community members also drew attention to opportunities and concerns that exist at the neighborhood throughout the Study Area. Future neighborhood planning will engage communities, promote sustainability and resilience against climate change, encourage diverse housing growth, and enhance economic opportunities. NYC Planning and partner agencies are currently developing a Citywide Industrial Plan that will explore how the City can best support the development of a modern and growing sustainable industrial economy, including neighborhoods within the Cross Bronx corridor such as Bathgate IBZ. Potential neighborhood planning efforts could also focus on the Bronx and Harlem Rivers.

In response to findings from the Reimagine the Cross Bronx Study, other future neighborhood planning efforts include:



### **Zoning and Land Use**

New York City's zoning code regulates the shape and size of buildings as well as the types of land uses that can be developed. Future neighborhood plans will gather additional data about how land is currently being used as well as community priorities for the future growth of the neighborhoods along the Cross Bronx.



#### Waterfront Framework

DCP's 2021 Comprehensive Waterfront Plan created a citywide public access area framework that seeks to increase coastal flood resiliency, environmental sustainability, and accessibility for all waterfront communities, including those along the Harlem and Bronx Rivers. Future neighborhood planning could use the Comprehensive Waterfront Plan as well as community input to make it easier to access these areas.



#### **Public Realm**

When land was acquired to build the Cross Bronx Expressway, dozens of small pieces of land were left over along the sides of the road, under overpasses, alongside on ramps, and elsewhere. These are largely inaccessible and unused, presenting littered and unsafe marginal spaces throughout the community. Future neighborhood planning could survey these parcels and work with communities to develop tactical interventions to activate them to improve the public realm.



### **Long-Term Projects and Programs**

In addition to short- and mid- term action items, the Study Team initiated Reimagine the Cross Bronx to identify long-term solutions to alleviate some of the issues created by the Cross Bronx Expressway. Throughout the two years of outreach conducted for this study, a diverse range of community members expressed their desire for transformative investments in their neighborhoods. The Study Team heard from individuals eager for better connections within and between their communities, and many were frustrated by noise and air pollution that produces unwelcoming environments along the Cross Bronx and wished to see increased open spaces.

In response to these and other concerns, the Study Team developed a series of long-term concepts that could add new north-south connections across the Cross Bronx, provide new east-west transportation options, enhance traffic flow and safety, and create new public spaces. These concepts include highway caps, new or improved pedestrian bridges, ramp redesigns, and repurposing underutilized space.

Each long-term concept would require extensive further study, including engineering and design work, traffic analyses, environmental review, cost estimation, public outreach, and agency involvement to determine if the concept is feasible and practical for implementation. Funding would also need to be identified and secured.

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# **Highway Capping Overview**

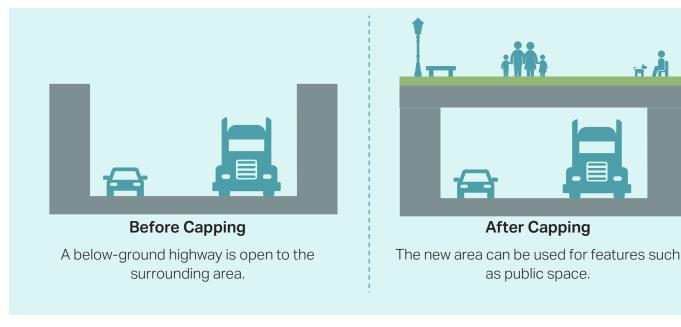
This study includes concepts for expanding open space and providing new connections through potential highway caps. A highway cap is also known as a deck, stitch, or highway lid, and would be a major infrastructure improvement that could cover a highway that runs below ground. Some notable examples of highway caps include Klyde Warren Park built over the Woodall Rogers Freeway in downtown Dallas, Texas, and Jim Ellis Freeway Park, built over Interstate 5 in Seattle, Washington. Constructing highway caps may be physically feasible in some locations along the Cross Bronx Expressway, but not everywhere. Several conditions, including elevation differences, highway widths, and vertical clearances, were considered to determine where highway caps could potentially be constructable. Note that each location would require extensive further study, including engineering and design work, traffic analyses, environmental review, cost estimation, public outreach, and agency involvement to determine if the concept is feasible and practical for implementation. Funding would also need to be identified and secured.

Long-term concepts treat highway caps as a tool to reconnect the urban grid, promote wellness through expanded open space, and enhance traffic safety. In the future, concepts at locations that maximize the potential relative benefit of expanded open space and improved connections could be further assessed.

#### Minimum Requirements for Potential Engineering Feasibility

The potential highway caps discussed in this report all meet the general physical criteria presented below, which are minimum requirements for a location to be recommended for further, more extensive analysis. There are additional site-specific limitations not listed below that can make capping infeasible.

- The highway must be below-ground.
- There must be room for at least 14.5 feet of space between the surface of the road and anything that goes above it, such as signs, ventilation, or the cap itself.
- The highway must be wide enough to fit columns that would support the cap (without reducing the number of lanes or the width of shoulders).
- The cap and its connections must comply with ADA requirements.
- Adequate physical space must be provided for Fire and Life Safety elements.
- Any adjacent tunnels or underpasses must be updated to meet current Fire and Life Safety standards.



#### **Engineering Complexity and Cost**

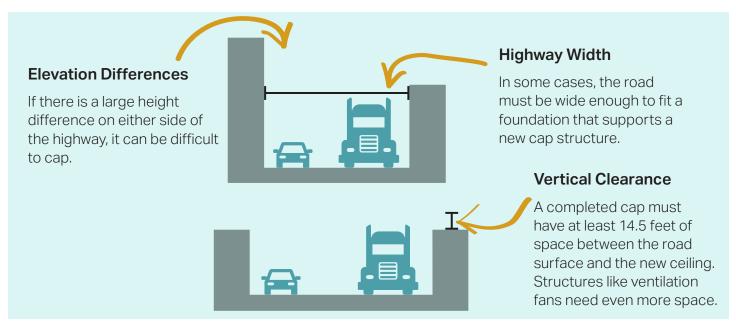
Creating a new highway cap is a major engineering and construction project. It involves designing, funding, and construction. There are many constraints on where a highway cap can go and what it can look like. This report initiates the first stage of planning for potential highway capping concepts. While engineers have established the basic parameters of feasibility, each potential cap would require its own design and environmental review process.

Constructing a highway cap presents a high level of engineering complexity. Design, engineering, and construction costs for a potential a highway cap may cost billions of dollars. The ultimate cost of a major construction project such as a potential highway cap depends on many factors, which makes it challenging to provide a realistic cost estimate at this early stage. For example, just because a highway cap is smaller does not mean it will cost less or take less time to build. Some highway caps may cost more or take longer to construct due to constrained staging areas, topography, and existing infrastructure.

Each potential highway cap in this report includes a very rough estimate of engineering complexity and cost based on the following criteria:

- Duration of process from planning to opening.
- · Level of difficulty to construct.
- The size of the cap.
- Any temporary structures necessary to maintain traffic flow during construction.
- Whether the existing Cross Bronx roadway would need to be expanded to fit new structures to support a cap.

These criteria are summarized by relative order of magnitude for each of the potentially feasible highway caps in this report. For example, potential highway caps with the highest-level engineering complexity could indicate major anticipated design and engineering challenges, while those with the highest-level construction costs could indicate major anticipated construction challenges. Even potential highway caps with the relatively lowest-level engineering complexity or cost still present higher-than-average design, engineering, and construction challenges than other major transportation infrastructure projects.



### Potentially Feasible Highway Capping Locations

Based on the engineering feasibility criteria described above, the Study Team identified thirteen locations where a full or partial highway cap could be potentially feasible. Further study would be needed to determine whether a highway cap is feasible and practical for implementation. Funding would also need to be identified and secured.

- 1 Undercliff Avenue to University Avenue
- 2 University Avenue to Macombs Road
- 3 Macombs Road to Walton Avenue (Jerome Avenue)
- 4 Morris Avenue to Clay Avenue
- 5 Walter Gladwin and Crotona Parks
- 6 Arthur Avenue to Clinton Avenue (Admiral Farragut Playground)
- Prospect Avenue to East edge of Fairmount Playground
- 8 Marmion Avenue to Southern Boulevard
- 9 Crotona Parkway to Boston Road
- 10 East 174<sup>th</sup> Street
- 11 Hugh Grant Circle/Virginia Park
- 12 Olmstead Avenue Footbridge
- 13 Castle Hill Avenue to Footbridge

### **Engineering Considerations Where Highway Caps are Not Feasible**

The locations below do not meet the minimum requirements for potential engineering feasibility.

- 14 Alexander Hamilton Bridge to Undercliff Avenue (Highway is above-ground.)
- 15 Undercliff Avenue to University Avenue (Potential partial cap could be possible but a full cap would not be feasible due to the Washington Bridge exchange.)
- **Walton Avenue to Morris Avenue** (Potential partial cap could be possible but a full cap would not be feasible due to the Washington Bridge exchange.)
- 17 Clay Avenue to Fulton Avenue (Highway is above-ground.)
- 18 Boston Road to Rosedale Avenue (Highway is above-ground.)
- 19 Rosedale Avenue to Saint Lawrence Avenue (Not enough space above road surface.)
- Thieriot Avenue to White Plains Road (Not enough space above road surface.)
- Pugsley Avenue to Ellis Avenue (Not enough space above road surface.)
- Gleason Avenue to Haviland Avenue (Not enough space above road surface.)
- 23 Watson Avenue to Unionport Bridge (Highway is above-ground.)

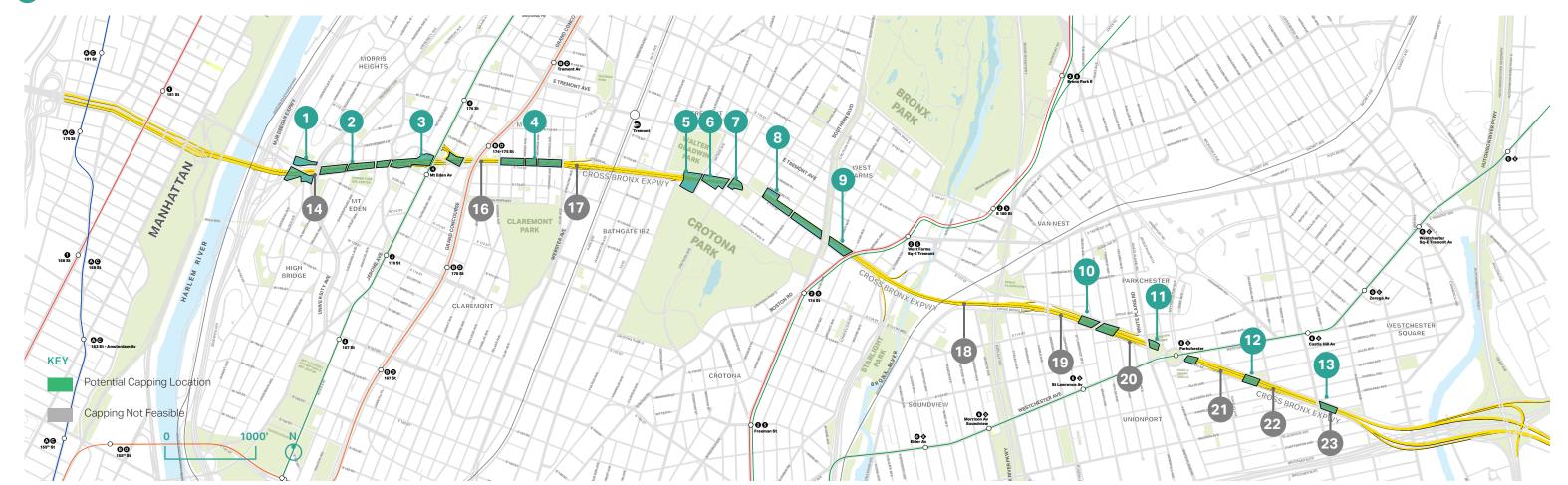


Figure 4.20 Potentially Feasible Capping Locations on the Cross Bronx



# **Reconnecting the Urban Grid: Potential Highway Caps** between University Avenue and Jerome Avenue.

Interruptions in the urban grid limit reliable connections to transit and other critical services. Frequent highway ramps increase the potential for vehicle-pedestrian conflicts while incomplete pedestrian and bicycle networks limit mobility.

In the West Section, connecting to the 4, B and D trains is further complicated by an irregular street grid with limited east-west connections. Constructing a potential highway cap between University Avenue/Edward L Grant Highway and Macombs Avenue could greatly improve connections to the subway.



Figure 4.21 Existing Condition



Figure 4.22 Potential Future Condition

# University Avenue/Edward L Grant Highway to **Macombs Road**

Throughout public engagement processes, participants highlighted the lack of east-west routes in the Morris Heights and Mount Eden neighborhoods and articulated a desire for greater connectivity between these communities. Many expressed concern that Nelson Road is currently the only north-south connection in this area.

The hilly topography in these neighborhoods increases the difficulty of getting around and presents challenges for designing and constructing high-quality open spaces on a potential highway cap. However, community members emphasized that a full, continuous highway cap should be considered at this location to meet a desire for new open space and reduced localized air



Figure 4.23 View South from Plimpton Avenue

and noise pollution. There are several options for mitigating the complex grade changes on the potential highway cap, and these options need to be studied and refined in the context of community and agency input.

A potential highway cap at this location could also support a new urban street network that restores east-west and north-south connections across the highway. It could also foster new connections to the 4, B, and D trains, and fulfill a community desire for better connections to the Washington Bridge and the Harlem River Greenway.

#### → Potential Benefits

- Introduce new east-west connections within a disconnected street grid.
- Restore north-south connections across the highway through pedestrian bridges at Plimpton Avenue and Shakespeare Avenue.
- Enhance pedestrian safety along University Avenue, Nelson Avenue, Jesup Avenue, and Macombs Road.

- The potential cap would need to accommodate elevation changes in both north-south and eastwest directions, requiring additional study to design and construct a potential full highway cap that supports high-quality accessible open space. Potential options include ADA-accessible terraces that incorporate ramps and stairs to mitigate steep elevations.
- This concept involves medium-level engineering complexity and high-level estimated construction costs due to construction duration and relative size of the cap (330,000 square feet or about 5.75 football fields).



Figure 4.24 Existing Conditions

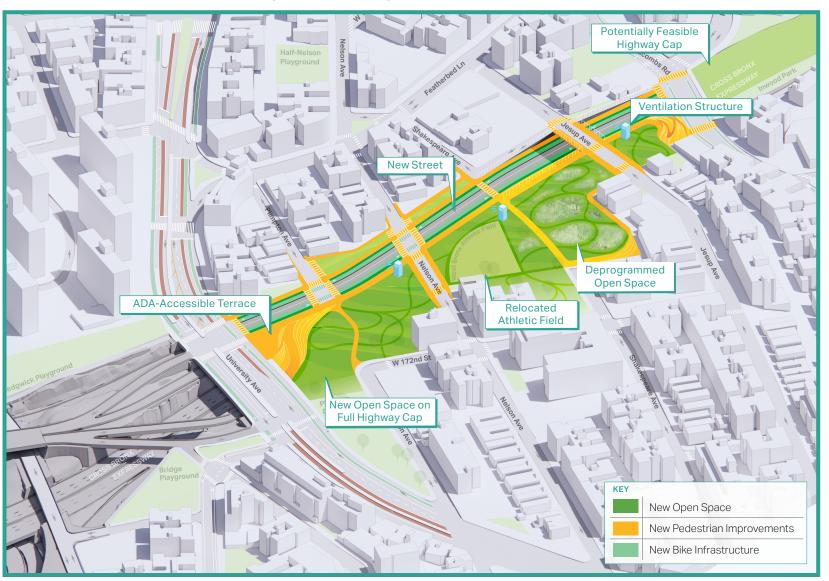


Figure 4.25 Potential Highway Capping Concept between University Avenue/Edward L Grant Highway and Macombs Road

### **Macombs Road to Walton Avenue**

Community feedback identified the area between Macombs Road and Walton Avenue as a critical neighborhood hub. However, participants currently find it difficult to access Jennie Jerome Playground and Inwood Park due to the irregular and disconnected street grid, a concentration of Expressway on- and off-ramps that introduce potential vehicle conflicts, and other pedestrian safety concerns. Community members also described these spaces as unpleasant as a result of high levels of noise pollution and direct exposure to the Cross Bronx.

The West Mount Eden 4 subway station and existing commercial establishments make this area an important hub of pedestrian activity. The revitalization of Jerome Avenue has brought new homes and increased demand for improvements to the pedestrian infrastructure. Closing key ramps and constructing a potential highway cap on either side of Jerome Avenue could enhance safety and increase connections, especially for people walking and biking, as well as continue Jerome Avenue's economic and quality-of-life revitalization into the future. These potential caps could also decrease noise pollution and add open space adjacent to Inwood Park, Featherbenches Park, and Jennie Jerome Playground. In addition, a potential new step street connecting Walton Avenue to Grand Concourse could create a continuous connection between the cap and Grand Concourse, which sits at a higher elevation than Walton Avenue.

#### → Potential Benefits

- Ramp closures present an opportunity to add open space next to three parks, Inwood Park, Featherbenches Park, and Jennie Jerome Playground, through a potential highway cap.
- Provide relatively large new open space (spanning more than four blocks east-to-west) for
  residents within a densely populated and under-resourced community who experience health
  disparities.
- Decrease noise pollution in a dense residential area.
- Restore pedestrian north-south connections at Inwood Avenue and Townsend Avenue.
- Create a new east-west connection for pedestrians, cyclists, and transit riders.
- Improve access to major transit nodes, including the Mount Eden Avenue 4 train station, the 174-175 streets B-D station, and several bus routes on Macombs Road, Jerome Avenue, and Grand Concourse.
- Reduce vehicle-pedestrian conflicts by closing ramps and creating safer crossings at a major transit hub.

- This concept involves high-level engineering complexity and estimated construction costs due to construction duration, its relative size (145,000 square feet or about 2.5 football fields), and elevation changes.
- Ramp closures would create implications for traffic rerouting. For example, alternative access routes to Manhattan or the expressway could include the Washington Bridge and on- and off-ramps at Webster Avenue. This proposal would require extensive study and modeling.

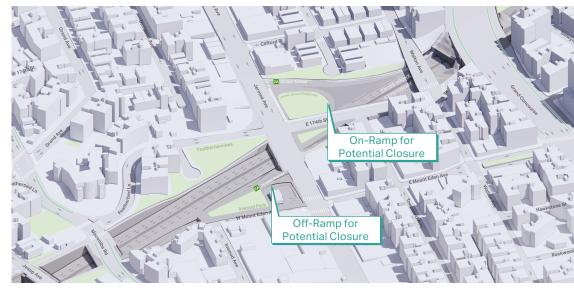


Figure 4.26 Existing Conditions

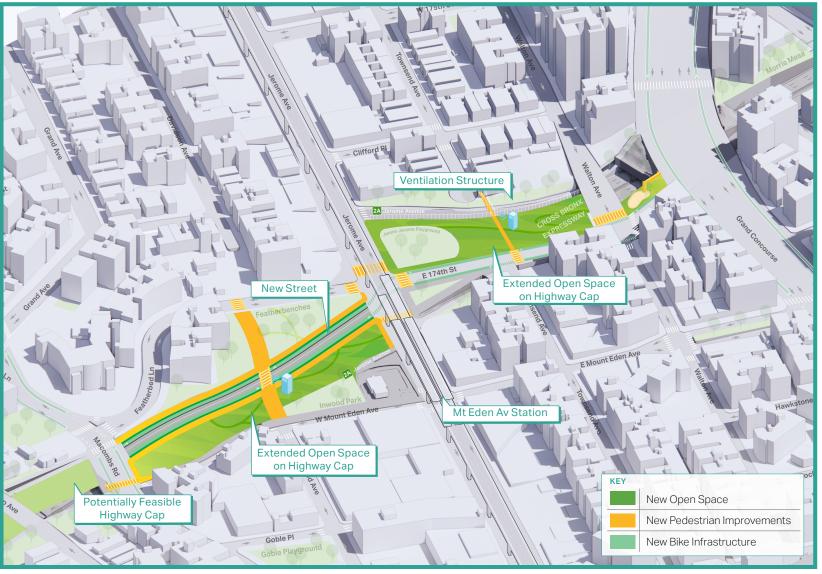


Figure 4.27 Potential Highway Capping Concept between Macombs Road and Walton Avenue

# **Walter Gladwin and Crotona Parks**

Walter Gladwin and Crotona Parks were originally a single continuous park. Construction of the Cross Bronx divided the parks, but they remain some of the largest and most important open spaces in the Study Area. Community members cited this as one of their top priority locations for reconnection. Many find the current street design difficult and unsafe to navigate. Narrow sidewalks and limited crosswalks in the area often don't have signals or stop signs to protect pedestrians from oncoming traffic. After seeing a first draft of this concept, many participants favored the idea of reuniting the parks and having new opportunities for hosting community events and creating connections between the adjacent neighborhoods.



Figure 4.28 Existing Conditions

#### → Potential Benefits

- Opportunity to create new open space between the existing Walter Gladwin and Crotona Parks, which are currently separated by the expressway.
- Improve infrastructure for residents within a densely populated, historically under-resourced community who experience health disparities.
- Restore north-south connections between parks and along Arthur Avenue.
- Responsiveness to public input indicating a need for improved park space.

- Constructing the proposed highway cap would require permanently closing East 175<sup>th</sup> Street between Arthur Avenue and the west-bound off-ramp.
- This concept involves low-level engineering complexity and estimated construction costs due to its smaller size (90,000 square feet or about 1.5 football fields) and relatively shorter construction duration.
- The potential cap would need to accommodate elevation changes between the above-ground section of the expressway west of Third Avenue and the below-ground section east of Arthur Avenue.



Figure 4.29 Existing Conditions



Figure 4.30 Potential Highway Capping Concept between Walter Gladwin and Crotona Parks

# **Crotona Parkway to Boston Road**

Crotona Parkway and Boston Road are important Bronx corridors. However, engagement participants found the intersections around these roads challenging. Participants also identified high levels of noise pollution and a lack of green space and expressed a desire for improved pedestrian infrastructure between Crotona Parkway and Boston Road. Adding a potential cap with new pedestrian and cycling connections and changing the direction of East 176th Street to be two-way could improve mobility for all roadway users and provide an inviting open space to support local community needs.

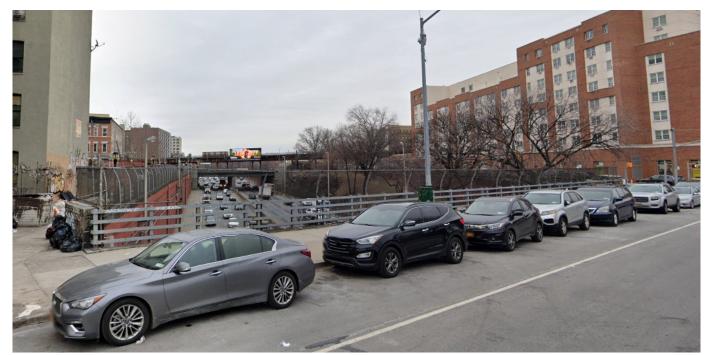


Figure 4.31 Existing Conditions

#### → Potential Benefits

- Improve existing pedestrian connections between Daly Avenue and Crotona Parkway.
- Improve intersection safety at Vyse Avenue, Boston Road and the Cross Bronx Service Road by repurposing the Service Road between Daly Avenue and Vyse Avenue.
- Introduce new westbound vehicular connection between Crotona Parkway and Boston Road along East 176th Street.
- Introduce new cycling connections between the crucial arteries of Southern Boulevard, Crotona Parkway, and Boston Road.

- This concept involves medium-level engineering complexity and estimated construction costs due to existing roadway infrastructure.
- This potential cap would be 65,000 square feet or about 1.25 football fields.

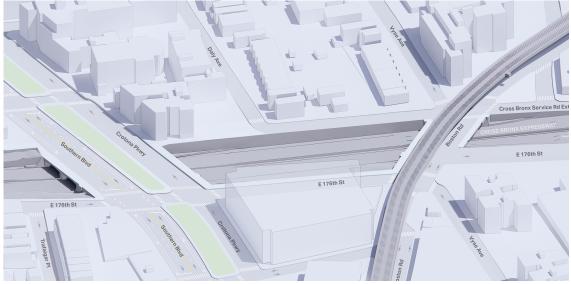


Figure 4.32 Existing Conditions



Figure 4.33 Potential Highway Capping Concept between Crotona Parkway and Boston Road

# **Potential Highway Cap and Ramp Reconfiguration:**

# East 174<sup>th</sup> Street

At East 174<sup>th</sup> Street, merging traffic on the highway produces use conflicts, delays, and diversions onto local streets. Reversing the ramps would prevent exiting vehicles from unsafely weaving into merging vehicles. This change could improve travel times and increase traffic safety both on and off the highway by alleviating that conflict. Currently, the elevation of the on- and off-ramps makes it infeasible to place a potential cap in this location, but redesigning the ramps could make it possible to build potential caps on either side of bridge at East 174<sup>th</sup> Street. This is an area where community members have requested more dedicated green space and bike infrastructure and expanding the bridge at East 174th Street through a potential highway cap could maximize open space while introducing safer pedestrian and cycling connections across the highway.



Figure 4.34 Existing Conditions

#### → Potential Benefits

- Reduce vehicle-pedestrian conflicts and create safer crossings at a controlled intersection.
- Expand open space and reduce noise pollution by reconfiguring the ramps to allow for a potential cap.

- This concept involves medium-level engineering complexity and estimated construction costs due to construction duration and its relative size (110,000 square feet or about 2 football fields).
- This cap would require ramp reconfigurations that create implications for highway and local traffic, requiring extensive study and modeling.

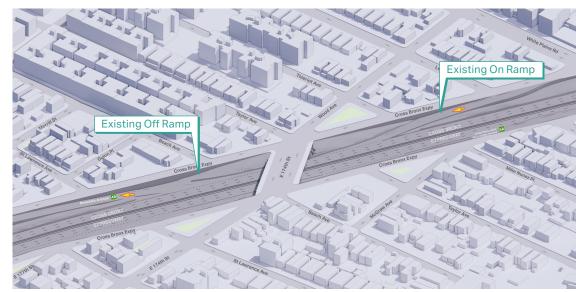


Figure 4.35 Existing Conditions

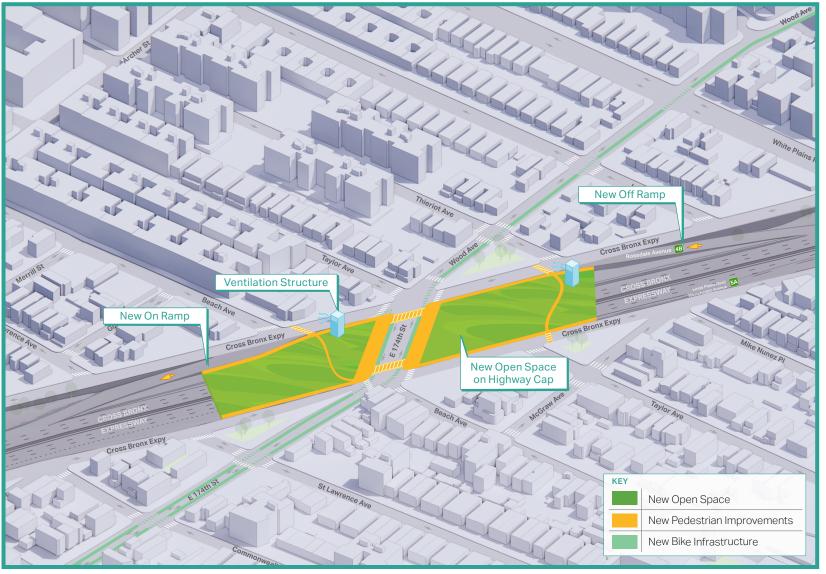


Figure 4.36 Potential Highway Capping Concept at East 174th Street

# **Potential Highway Cap and Ramp Reconfiguration:**

# **Hugh J. Grant Circle and Virginia Park**

Hugh J. Grant Circle is another location that emerged as a top community priority. Participants described Virginia Park and Parkchester Circle as local assets but expressed that the roundabout and surrounding roadways feel unsafe. Participants also suggested that the study focus on creating a safer walking environment, decreasing noise pollution, and expanding Virgina Park. Some also suggested creating an Open Street to further enhance pedestrian accessibility.

Short and mid-term concepts for this area could enhance traffic safety and mobility by creatively reallocating street space for people and transit (see p.65) in Short-Term Projects and Programs for more detail). Long-term concepts to place potential caps on either side of Hugh J. Grant Circle could expand the Virginia Playground and Park and create new open spaces to the east of Hugh Grant Circle.



Figure 4.37 Existing Conditions

#### → Potential Benefits

- Expand two open spaces: Virginia Playground (through the NYC DOT Open Street and Plaza programs) and Virginia Park (through a potential highway cap).
- Introduce new open space on the east side of the circle for residents within the densely populated Parkchester neighborhood, an under-resourced community.
- Restore north-south connection between Virginia Avenue and Virginia Playground.
- Enhance connectivity and public space near a major transit hub which includes the Parkchester 6 train station, the Q44 SBS bus, and several nearby bus routes.
- Improve experience for pedestrians, cyclists and transit riders through safer, shorter connections, new greenery, and reduced noise pollution.
- Meet strong community desire for major infrastructure investments.
- Build on short- and mid-term improvements with a potential long-term capping concept.

- Street closures and other traffic reconfigurations would need to be extensively studied and modeled.
- This concept involves high-level engineering complexity and estimated construction costs due to its larger size (130,000 square feet or about 2.25 football fields), the extensive existing elevated subway infrastructure, and limited vertical clearance beneath the Parkchester station.

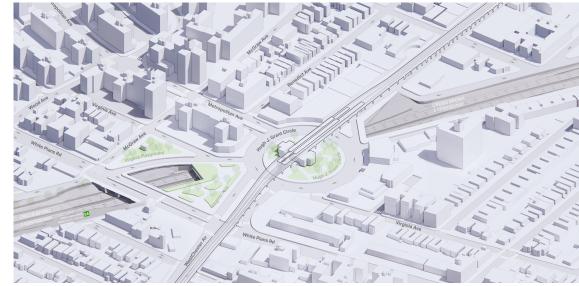


Figure 4.38 Existing Conditions

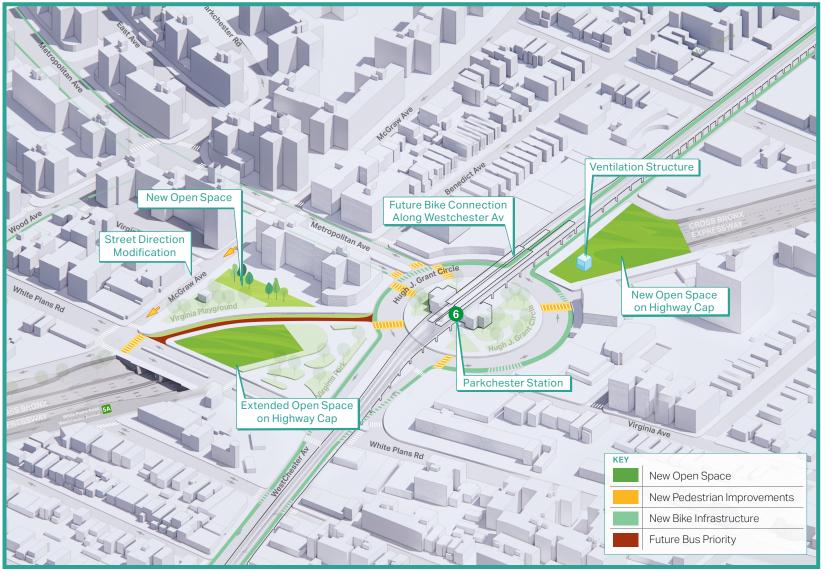


Figure 4.39 Potential Highway Capping Concept at Hugh J. Grant Circle and Virginia Park

# **Highway Capping Considerations**

#### Air Quality and Ventilation

Capping can lower pollutant at specific locations along the cap along the cap. However, it does not reduce air pollution from vehicles. Ventilation is needed to provide fresh air for vehicles driving through tunnels. The type of ventilation used can affect traffic-related air pollution in surrounding neighborhoods.

There are many strategies to manage vehicle emissions. For a full highway cap, vent structures designed to meet federal highway standards could be built. The length of each potential cap would be determined during the design process. Ventilation would likely be required for any tunnel greater than 300 feet long. Considerations for capping also include federal, state, and city regulations for Fire and Life Safety standards.

### **Ventilation Examples**

#### **Passive Ventilation**

For shorter tunnels, it may not be necessary to include mechanical ventilation. Air from inside the tunnels would be emitted from the tunnel portals (entries and exits) and/or from additional ventilation grates, as seen in *Figure 4.40*. These are the easiest types of ventilation systems to build and maintain, but they do not work for all situations.



Figure 4.40 Passive ventilation structures for a short tunnel near Prospect Playground in the Bronx.

#### **Active Ventilation**

Ventilation buildings such as the structure in *Figure 4.41* contain fans and additional mechanical elements necessary to keep air within the tunnel safe for drivers. These are often required for longer tunnels. The size and location of such structures depends on the final tunnel design process. Engineers follow regulatory guidelines and conduct analyses to determine how much air movement is needed to achieve safe air quality within the tunnel.

Taller structures like those in *Figure 4.42* can be necessary to contain the larger mechanical elements needed for particularly long or busy tunnels.<sup>30</sup> They might also be used in situations where emissions are released in a densely populated area. The windspeeds at higher altitudes help disperse emissions above where people are located and over a much larger area than ground-level ventilation systems. However, these structures are expensive to construct and maintain and can be visually disruptive.

#### **Noise Pollution Considerations**

Capping can help reduce localized noise pollution by adding a physical barrier between the highway and surrounding areas, blocking the direct path of sound waves. The public has expressed an interest in using tree cover and plantings to combat noise pollution and improve the quality of the built environment around the expressway.

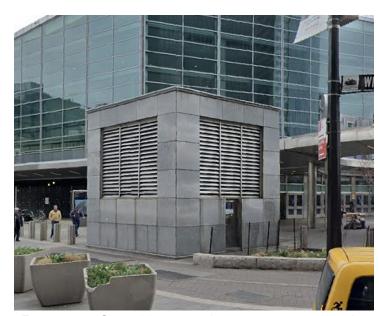


Figure 4.41 One of four ventilation structures for the Battery Park Underpass



Figure 4.42 Ventilation Building No. 6 for the Central Artery in Boston

# **Activating Under the Elevated between Webster Avenue and Third Avenue**

Areas where the expressway is elevated above the surface streets, as is the current condition between Webster Avenue and Third Avenue, present potential opportunities to reimagine underutilized space to meet community-identified needs.

Between Clay and Arthur avenues, the Cross Bronx Expressway emerges from below ground to become an elevated roadway as it passes over the Metro-North Railroad tracks. This elevated structure creates an area beneath the highway from Webster Avenue to Park Avenue South and from Park Avenue North to Third Avenue. During walking tours held as part of the Issue Identification round of engagement, participants described areas under the elevated structures as



Figure 4.43 Municipal EV Charging Infrastructure

feeling isolated, unsafe, and underutilized. Many believe that with some investment and care, these spaces could instead contribute positively to the nearby communities.

In particular, the space under the highway between Webster Avenue and Third Avenue presents unique opportunities to program the area with services that complement nearby commercial land uses and activate a currently vacant area. The space could host freight-related uses such as microhubs and public delivery lockers. These features support freight vehicle management by centralizing delivery activities. Additionally, adding electric vehicle charging infrastructure under the elevated structure could increase the number of charging stations in the area and encourage the transition of freight and personal vehicles to sustainable, lowemission energy sources.

#### → Potential Benefits

- Improves freight management along the expressway and along local truck routes.
- Provides new electric vehicle charging infrastructure to support low-emissions vehicular adoption and improve surrounding air quality.
- Supports nearby commercial land uses.
- Creates new civic and public realm space by activating underutilized areas.

- Additional study is needed to understand existing conditions, ensure there is adequate space for freight vehicles to enter, deliver, and exit, and to interact with existing bus priority infrastructure.
- Proposals would require additional study and consideration to ensure that safety requirements like overhead protection could be met. Any new uses must not interfere with the safe and secure operation and maintenance of the highway. Potentially flammable or explosive elements, such as EV charging infrastructure, that pose a safety hazard must be mitigated by following the appropriate federal regulations.



Figure 4.44 Existing Conditions

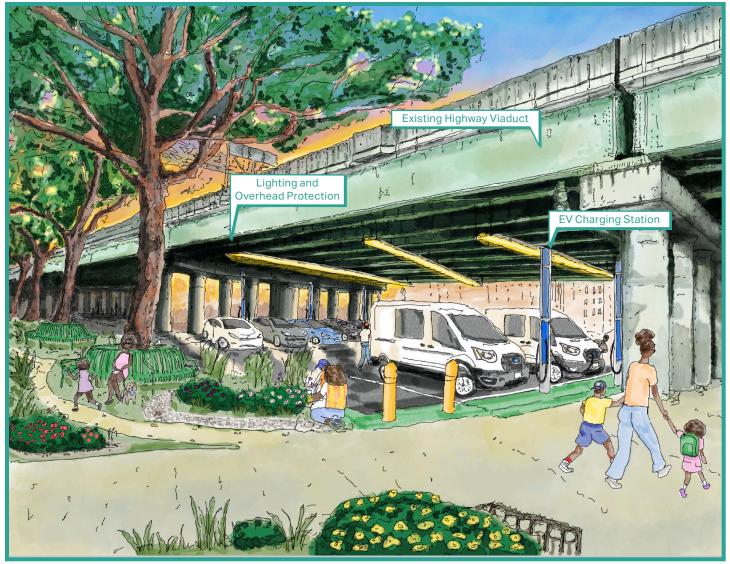


Figure 4.45 Existing Conditions Illustration for activation under the elevated between Webster Avenue and 3rd Avenue

# Connecting where a Potential Highway Cap is Not Feasible:

# **Olmstead Avenue Footbridge**

While a highway cap is potentially feasible at several locations, other infrastructure investments may also be explored to improve connections across the expressway, including upgrading existing pedestrian crossings to be fully accessible and incorporate cycling infrastructure. One such example involves the existing Olmstead Avenue Footbridge, where engagement participants shared safety concerns about the current structure and expressed a desire to improve sidewalk quality and accessibility for this important north-south pedestrian connection across the highway. Potential improvements could include an expansion of the crossing to a width of 25 feet or more, improving visibility and providing dedicated space for cyclists.



Figure 4.46 Existing Condition of Olmstead Avenue Footbridge

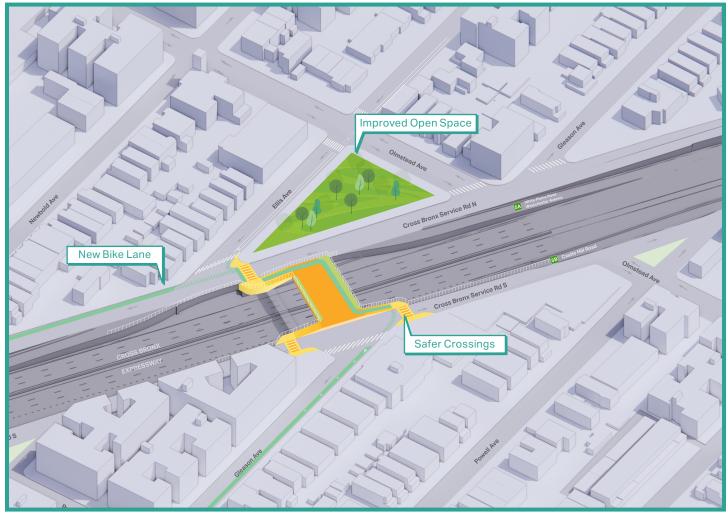


Figure 4.47 Potential Concept for Improved Olmstead Avenue Footbridge

### **Priorities for Future Investment**

Future study work will consider the potential relative benefit of each feasible highway cap. The following metrics could be used to evaluate how major infrastructural changes could create new open spaces for recreation or housing and provide new opportunities to improve quality of life around the Cross Bronx Expressway:

#### → Connections

Restore pedestrian and cycling access and improve access to public transit across and along the highway.

#### → Destinations

Improve connections to civic resources like schools, pools, libraries, and community centers.

### → Engineering Complexity

Consider the relative effort to design and build each potential cap.

#### → Environmental Justice

Mitigate hazards like flooding, noise pollution, and extreme heat.

### → Equity

Invest in historically under-resourced communities.

### → Funding & Cost

Relative cost of building each potential cap and availability of funding.

#### → Health

Improve infrastructure within communities that experience disproportionate health disparities.

#### → Open Space

Expand existing open spaces or introduce new open space in areas currently lacking it.

### → Public Input

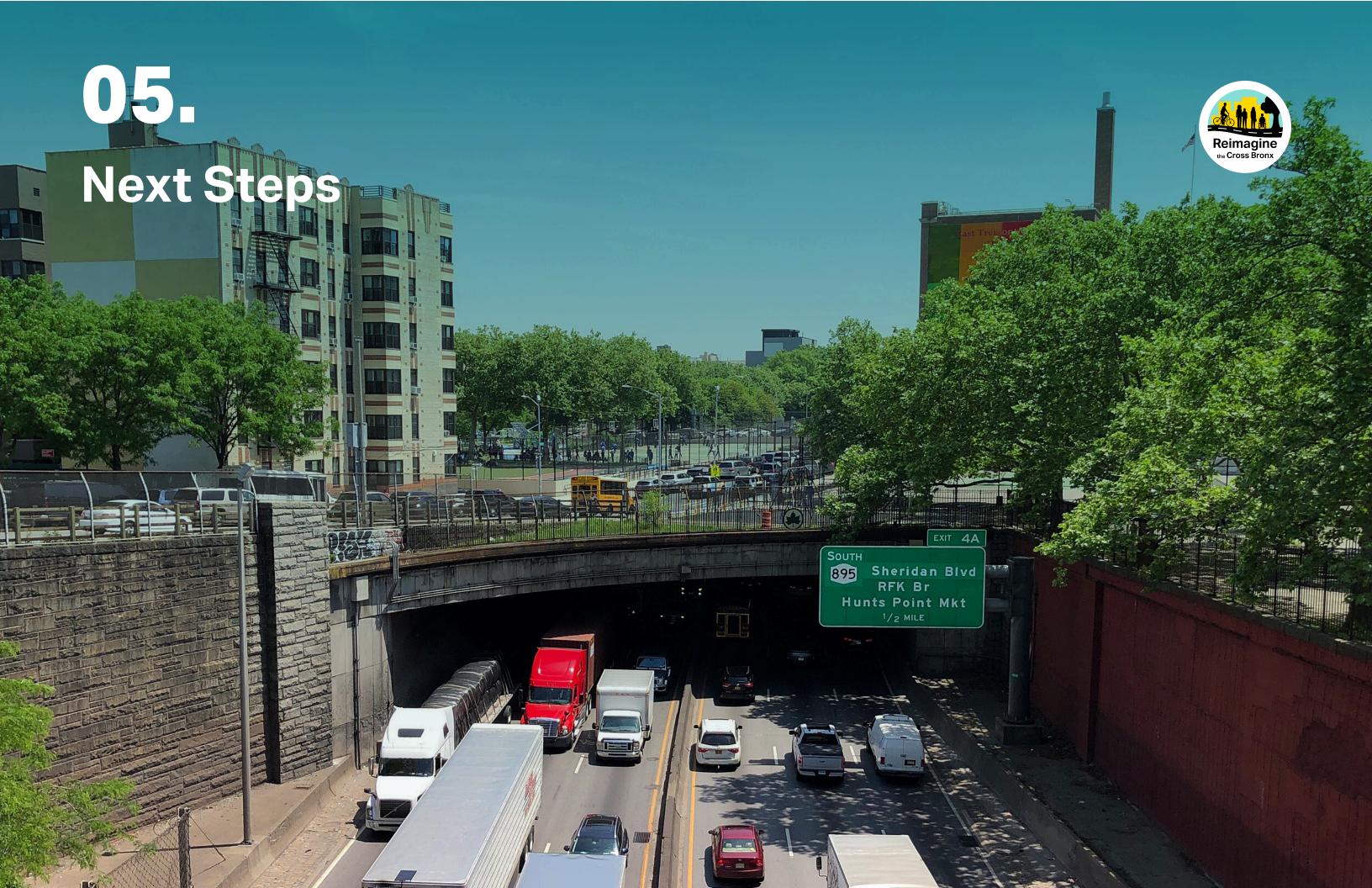
Align plans with comments, suggestions, and concerns received from community members, partners, working groups, and elected officials.

#### → Residential Density

Ensure highway cap benefits and improves quality of life for the maximum number of people.

### → Traffic Safety

Reduce vehicular conflicts and provide dedicated spaces for pedestrians and cyclists.



# **Immediate Improvements for Implementation**

Many short-term projects and programs will be advanced as early as 2025. Implementation processes for street improvement projects and neighborhood-wide programs may vary and will require ongoing coordination with partner agencies and community members. Work to implement programming funded by the CBDTP (congestion pricing), including new asthma programming and expanded Off-Hour Delivery and Clean Trucks programming in the South Bronx, is underway and will continue through 2025.

#### **Street Design Projects: Implementation Process**

Street improvement projects generally follow a three-phase approach of planning, design, and implementation activities, with engagement processes ongoing through each phase.



#### **Planning**

If not already underway or complete, short-term street design projects will begin planning in 2025. Planning activities include conducting site visits, talking to stakeholders, and collecting information about traffic patterns and existing street geometries. This process also includes conducting studies to better understand existing conditions and analyze feasibility for potential design concepts. Through analyses and community conversations, NYC DOT will refine the goals and design options for each street design proposal.



#### Design

Following the planning phase, agency staff will design street improvements that meet project goals, present design options for public discussion, and consult with relevant government agencies. Through an iterative design and outreach process, NYC DOT will continuously analyze how a design might affect future conditions and adjust the design as needed.



### **Implementation**

Once a project design is complete, NYC DOT and/or contractors will implement the project. The construction season is usually between mid-April and mid-November. After a project is constructed, NYC DOT staff monitor implementation by analyzing crash data, comparing relevant pre- and post-implementation mobility data, and making modifications if issues arise.

### **Corridor-wide Initiatives**

Each agency in the Study Team has their own city or statewide goals and initiatives. The corridor-wide initiatives outlined here represent targeted efforts to expand such initiatives into neighborhoods around the Cross Bronx. Each initiative has its own path to implementation.

### **Freight Management**

NYC DOT will continue working closely with industry and local partners to explore opportunities to expand Off-Hour Deliveries, microhubs, and storage lockers in the Study Area. To advance truck electrification programs and policies, NYC DOT will seek to identify potential sites for truck electrification infrastructure in the Bathgate and Zerega Industrial Business Zones (IBZs). DOT is also actively working to expand the Clean Truck Program to IBZs citywide by offering incentives to truck owners to replace their old polluting vehicles with cleaner new ones.

# **Strategies for Traffic Management**

NYSDOT will continue efforts to advance ongoing projects and initiatives to improve traffic congestion on the expressway and prevent overflow onto local streets. The new Decision Support System is in development, while the Cross Bronx Expressway Active Traffic Management project is currently under construction with anticipated completion by September 2026. Other site-specific strategies like ramp closures and reconfigurations would also require extensive future study and modeling to understand potential implications for traffic rerouting.

NYSDOT will also advance key Transportation Demand Management initiatives through the following next steps:

### Carpool and Vanpool Campaigns:

- Establish a "community pool", e.g., an employer, housing community, or religious group, to match riders with carpool or vanpool opportunities.
- Partner with local organizations to promote awareness and participation in ride-sharing initiatives.
- Host workshops or community events to educate residents on the environmental and economic benefits of carpooling and vanpooling.

### **Transit and Bicycle Promotions:**

- Engage employers along the corridor to promote commuter benefits and various bus routes.
- Collaborate with regional employers to create telework programs and offer incentives.
- Develop a toolkit for employers, including sample policies and technology recommendations.

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### **Land Use Surveys**

NYC DCP will gather data about how land is currently being used through observation, recording and categorization of the different land uses. These surveys will assess existing zoning and land use against the backdrop of needs and opportunities for access to essential services, housing, and economic development. Priority will be given to areas such as the Bronx River and Harlem River waterfronts, as well as commercial and industrial zones like Bathgate, with the goal of creating more vibrant, equitable, and environmentally sustainable urban spaces.

# **Community Storybank**

NYC DCP will work with local high school students to convene conversations among community members who grew up during the Cross Bronx's construction and those who live with it today. Conversations will be recorded, transcribed, and shared through an online portal and serve as a key resource for ongoing neighborhood and corridor planning.

# **Brownfield Opportunity Areas**

New York City Planning and partners from the Mayor's Office of Environmental Remediation (MOER) and NYS Department of State (NYS DOS) will convene an information session about the State Brownfield Opportunity Area Planning Grant. This grant could support future community-led planning for future development in the Cross Bronx Corridor.

# **Mid-Term Capital Projects**

Mid-term capital projects can be implemented through existing planning processes and funding sources. City agencies have already advanced these projects through initial planning stages and are currently undertaking more detailed design and location-selection work. Some of these projects also help establish first steps for longer-term infrastructure investments.



Figure 5.1 Cross Bronx Expressway at Arthur Avenue and East 175th Street

# **Transformative Infrastructure Changes**

Planning, design, and implementation for long-term project concepts, including potential highway caps, would require large amounts of city, state, and federal funding. Once funding is awarded, planning, design, and eventual construction processes could proceed. Each long-term concept would require additional engineering study, design work, environmental review, and community engagement. Major infrastructure projects are inherently complex and require both community and inter-agency coordination. To advance these concepts and meet the study's goals of enhanced connectivity, safety, and health, it will be necessary to strengthen community relationships throughout agency planning processes.

At the State of the State address, Governor Hochul announced plans to build on this visioning study by committing resources to conduct a Planning and Environmental Linkage (PEL) study. NYSDOT will lead the PEL Study in coordination with New York City and local stakeholders to further advance options, including capping portions of the Cross Bronx Expressway. The Federal Highway Administration's (FHWA) Planning and Environmental Linkages PEL provides a framework for a collaborative and integrated approach to transportation decision-making. PEL uses the information, analysis, or products developed during planning to inform the environmental review process, including the National Environmental Policy Act of 1969 (NEPA). PEL can prevent the need to duplicate efforts and can expedite environmental review processes, shortening the timeline between planning for and construction of a project.

# **Investing in the Cross Bronx Expressway**

Long-term transformative project concepts, including proposed highway caps, would require large amounts of City, State and Federal funding.

### **Federal Funding Resources**

To secure federal funding resources to implement long-term concepts identified in the study, the Study Team will pursue a comprehensive funding strategy that considers the full scope of formula and discretionary programs available through USDOT, FHWA, and FTA, and including federal funding that is managed by both the New York Metropolitan Transportation Council (NYMTC) and NYSDOT, to the extent such funds are available for this type of work. The Reimagine the Cross Bronx Study was funded through a USDOT Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Planning Grant. Other communities have successfully used these funds for construction projects that create transformative community connections.

Bipartisan Infrastructure Law (BIL) programs may also provide opportunities to fund the long-term concepts envisioned in this study. Advancing long-term project concepts will require a sustained strategy combining formula and discretionary federal funds, and non-federal funding resources. A long-term strategy for funding improvements should take into account that formula FHWA funds continue to be the most reliable source of federal funding.

Additionally, NYMTC directs federal funds for transportation planning in the NYC metropolitan area through the Unified Planning Work Program (UPWP). This annual work plan defines planning priorities for the 10-county area represented by NYMTC. Three members of the Study Team (NYC DOT, NYSDOT, and NYC DCP) are NYMTC members and regularly use UPWP funding to complete transportation planning work. Concepts such as ramp closures would require detailed traffic analysis to fully understand the concept's potential effects. UPWP could potentially be leveraged to complete these and other studies, further refining the concepts and preparing them for subsequent stages of planning.

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### **Ongoing Interagency Coordination**

All future planning, design and construction activities will require ongoing coordination across each level of government. This will be achieved through consistent communication between all the stakeholders as we move forward with a developed plan of engagement.

As the short-, mid-, and long-term concepts advance, close collaboration will be necessary to align long-term goals for this critical regional corridor and coordinate agency processes to maximize the effect of infrastructure investments.

Plans for areas around the Cross Bronx will also advance the goals of NYMTC's regional transportation plan, Moving Forward 2050. Updated approximately every four years, this document guides transportation planning activities throughout the region. Many of the Reimagine the Cross Bronx Study's proposed concepts align with the central goals of the current plan.

### → Safety and Security

Across short-, mid-, and long-term concepts, many of the proposals aim to improve roadway safety for all users by redesigning streets and increasing bike and pedestrian infrastructure.

### → Reliable and Easy Travel

Concepts that involve ramp removal and reconfiguration could reduce highway spillover onto local streets and improve traffic flow both on and off the highway.

### → Planning for Changing Demand

Creating new north-south connections and new east-west routes could encourage walking and biking in neighborhoods around the Cross Bronx, while several short- and mid-term concepts will improve access to subway stations and make public buses more reliable.

### → Reducing Enivronmental Effects

Many of the concepts will improve infrastructure that supports non-vehicular travel or promotes vehicle electrification. Improvements to traffic flow on the highway could decrease congestion and therefore reduce emissions.

### → Resiliency

Any projects built on Cross Bronx would incorporate upgrades to the original infrastructure to ensure that it is fortified against current and anticipated future risks.





### **NYC DOT Toolboxes**

### **Street Improvement Projects**

#### **Bike Network Improvements**

NYC DOT's goal is to accelerate the growth of safe cycling by providing a system of bicycle routes that traverse and connect all five boroughs while also creating a dense network of bike lanes in communities where cycling is already a popular mode of transportation. This can include adding new bike infrastructure or improving existing bike infrastructure, such as turning a shared use lane into a protected bike lane.



Figure 6.1 Bike Network

#### Seating

Public seating provides resting places that make New York City's streets more comfortable for all New Yorkers, especially pedestrians and transit riders. NYC DOT installs and maintains benches and leaning bars on sidewalks and plazas and manages the placement of bus shelters. This seating may be used by all NYC residents, workers, and visitors. With places to rest, people can take longer journeys. This empowers bus riders, seniors, and people with disabilities.



Figure 6.2 Seating

### Wayfinding

WalkNYC is New York City's wayfinding system. The system is a collection of maps and signs to help people find their way around the city. These are installed on sidewalks and in plazas. Maps provide neighborhood information, such as street names, mass transit, museums and other neighborhood amenities. At other locations, fingerpost signs point in the direction of key destinations.



Figure 6.3 WalkNYC Wayfinding

### **Pedestrian Safety Enhancements**

NYC DOT's Street Improvement Projects (SIPs) typically focus on safety treatments to reduce risk to pedestrians and other roadway users. These treatments can include:

- **Road Diets:** Strategies to narrow the roadway to encourage safer driving speeds.
- Pedestrian Islands: Concrete and painted islands placed between traffic lanes to break up long intersection crossings for pedestrians.
- Curb and Sidewalk Extensions: Paint or concrete used to lengthen the curb or sidewalk and shorten pedestrian crossings.
- Turn Calming: Markings, bollards and/or rubber speed bumps that slow and control turns.
- Leading Pedestrian Intervals: Intersection signals that provide pedestrian crossings with a "head start" before vehicles receive the green light.



Figure 6.4 Road Diet on East 180th Street



Figure 6.5 Curb Extension

### **Transit Improvements**

NYC DOT is committed to working with the MTA and the New York City Police Department (NYPD) to improve bus service citywide, ensuring that New Yorkers have service that they can depend on. This can be accomplished through NYC DOT projects using the Bus Priority Toolkit, increased camera and NYPD enforcement of bus lanes, and service management initiatives and bus network redesigns by the MTA. Bus Priority Toolkit elements include features like new bus lanes, bus stop accessibility, and curb management.



Figure 6.6 Transit Improvements

### **Bus Priority Improvements**



Bus lanes separate buses from general traffic, improving speed and reliability. Preventing others from using bus lanes is a challenge in New York City. This makes enforcement crucial to ensuring that bus lanes are effective.



Dedicated bus signal phases use traffic signals to give buses priority through an intersection. Queue jump signals provide buses with a dedicated signal phase that allows them to get a head start by bypassing congested traffic.



Fixed, street-mounted bus lane enforcement cameras capture bus lane violations. The MTA's Automated Camera Enforcement (ACE) program records violations from on-bus cameras.



Improvements include upgrades to make bus stops more comfortable, functional, and accessible with weather protection, seating, and rider information.



This traffic signal system holds a green signal longer or ends a red signal early to reduce bus delays at intersections. This improves bus travel while ensuring that pedestrians and other vehicle traffic still has sufficient time to cross the intersection.



Busways prioritize travel for buses and often trucks, with other motorized vehicles limited to local access. This treatment substantially reduces traffic volumes and congestion, improving bus speed and reliability, while improving safety for all roadway users.

# **Bus Stops Under the Elevated (BSUE)**

The streets underneath elevated subway structures pose unique challenges within the Study Area. At many locations, subway columns prevent buses from accessing the curb and bus riders are forced to wait for, board, and alight the bus in the middle of the street. This leaves bus riders vulnerable to collisions with vehicles and leads to bus stops that are inaccessible for people who may require the aid of a bus ramp or lift.

Through the BSUE initiative, NYC DOT makes improvements at these locations by constructing bus boarding islands or curb extensions at existing bus stop locations under elevated trains. These improvements provide bus riders with a safe space to wait for the bus and the ability to board without crossing through traffic. The improvements also enhance bus operations by increasing visibility, expediting pick up and drop off, and improving bus drivers' ability to navigate around the columns. Given the complex conditions of the roadway under elevated subway structures, implementing BSUE improvements often requires capital planning, design, and construction.

# **Additional Freight Management Tools and Strategies**

#### Blue Highways Initiative:

Blue Highways promotes the use of NYC's waterways to move goods into and around the city. This program leverages public-private partnerships to reduce truck dependency. Blue Highways aims to decrease road congestion, improve air quality, and advance the city's greenhouse gas emission reduction goals. The city is upgrading piers in Manhattan, Brooklyn, and the Bronx, upgrading the Red Hook Container Terminal at the Brooklyn Marine Terminal, and studying how to leverage its current ferry system for deliveries.

#### Commercial Cargo Bike Program:

This program encourages companies to use cargo bikes for local deliveries. The program aims to boost cargo bike use among major delivery companies and small businesses, with the goals of reducing double parking, enhancing traffic safety, and lowering greenhouse gas emissions.

#### Partnerships:

Freight partnerships involve efforts to engage the freight community and collaborate on innovative solutions to local and regional issues. The Freight Mobility Unit at NYC DOT leads and is involved with numerous task forces and working groups dedicated to resolving different urban freight challenges, from bridge strike reduction to truck parking. For example, the unit has developed a Freight Advisory Committee that includes representatives from industry, city and regional agencies, non-profits and academic institutions. These groups may also participate in the Urban Freight Mobility Collaborative (UFC) that NYC DOT is establishing to support freight transportation innovation. UFC will focus on innovation that can help communities most negatively affected by freight transportation.

### Truck Smart Outreach Program:

Provides targeted programming to enhance safety for truck operators and all roadway users. Industry-targeted programming helps truck operators learn safety precautions they should take on NYC streets, including how to interact with bicycle and public bus infrastructure. Meanwhile, programs like Truck's Eye View provide education to the public on the hazards of obstructed vision areas around large trucks and inform the public about lifesaving truck features like side guards. Safety programs like these can be strategically deployed in both the residential neighborhoods and Industrial Business Zones surrounding the Cross Bronx Expressway.

### Weigh-In-Motion:

Sensors identify overweight trucks and can help roads and bridges operate safely when partnered with enforcement technology. Weight limits are important because excessive overloads reduce the lifespan of highway infrastructure and contribute to severe injury crashes. In 2014, WIM sensors were installed on the Alexander Hamilton Bridge, just west of the Study Area, to detect but not enforce overweight trucks. WIM automated enforcement is currently employed on the Brooklyn-Queens Expressway (BQE), and the Metropolitan Transit Authority (MTA) 2025-2029 Capital Plan includes plans to install WIM sensors on the Whitestone and Throgs Neck Bridges, which may extend positive effects to the Cross Bronx Expressway. WIM continues to be a priority for NYC DOT as is outlined in the 2016 Strategic Plan.

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### **Shared Micromobility Programs**

Shared micromobility services provide sustainable travel opportunities for residents of and visitors to neighborhoods around the Cross Bronx. Bike and e-scooter share services bolster mobility by enabling users to travel the "last mile" to and from transit or complete short trips not served by transit options. It provides an option that is fast, active, and affordable relative to other shared mobility options like rideshare and car share.

### East Bronx shared E-Scooter Program

In 2021, NYC DOT launched an e-scooter share pilot in the East Bronx. The pilot ended in August 2023 and was replaced by a long-term contract that runs until 2029. Three companies provide e-scooter share service in the East Bronx: Bird, Lime, and Veo. Unlike Citi Bike, these e-scooters are dockless, meaning that they do not need to be parked at a station or fixed location. However, to prevent parked e-scooters from blocking sidewalks, NYC DOT has established designated parking corrals along certain commercial corridors where users can safely park e-scooters.

#### Citi Bike

Citi Bike, which was expanded to the Bronx in 2019, is a docked bikeshare system. It is operated by Lyft through a contract with the City of New York. Citi Bike, which includes both manual and electric bikes, can be rented from and returned to fixed docking stations throughout the service area. The program offers annual memberships and pay-per-ride options, with a reduced fare membership program for NYCHA residents and SNAP recipients. Citywide, Citi Bike has seen growing ridership numbers, with a high of 34 million trips in 2023.



Figure 6.7 East Bronx shared E-Scooter Coverage Area

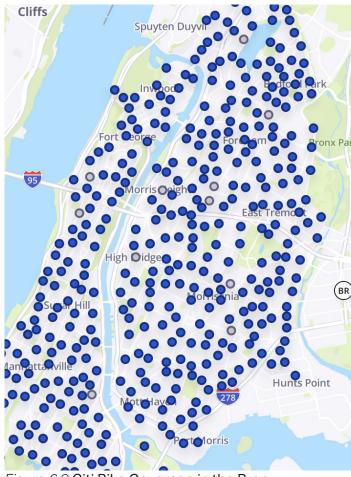


Figure 6.8 Citi Bike Coverage in the Bronx

### **Open Streets**

NYC DOT's Open Streets program transforms streets into public spaces open to all. These transformations allow for a range of activities that promote economic development, support schools, facilitate pedestrian and bike mobility, and provide new ways for New Yorkers to enjoy cultural programming and build community. Current Open Streets within the Study Area are:

- Palisade Place Open Street
- Goble Place Open Street
- E 176<sup>th</sup> Street Open Street
- Morris Avenue Open Street
- Harrod Place Open Street

#### Raised Crosswalks

NYC DOT is studying the feasibility of installing raised crosswalks throughout the Study Area. Raised crosswalks are like speed humps, but they are designed with a flat top for the pedestrian crossing. A raised crosswalk can be installed at any legal crosswalk at an intersection or a mid-block location that is not located on a bus or truck route, a street with more than one lane in each direction, and/or on the same block as a Fire House, hospital emergency entrance, or any other emergency route.

Like other speed reducers, raised crosswalks compel drivers to travel at safe speeds, in addition to improving pedestrian visibility by elevating the pedestrian to the height of the curb and increasing accessibility by providing a level crossing for those with ambulatory disabilities and seniors. The treatment can also be used to alert drivers when entering a pedestrian-oriented street environment.

At some locations, raised crosswalk construction may affect street drainage and require catch basin relocations. As a result, many raised crosswalks are advanced through a capital planning, design, and construction process.



Figure 6.9 Goble Place Open Street



Figure 6.10 Raised Crosswalk

### **Short and Mid-Term Projects: Transit Access**

NYC DOT is developing proposals to improve transit access to the following transit stations within the Study Area:



#### 176th Street Station

- Henwood Place Step Street capital improvements.
- Study feasibility of Bus Stop Under the EI (BSUE) improvements at Jerome Avenue and East 177th Street.
- Study feasibility of BSUE improvements at Jerome Avenue and East Tremont Avenue.

#### **Mount Eden Avenue Station**

- Davidson Avenue Step Street Capital Improvements.
- Jerome Capital Project at West Mount Eden Avenue and Inwood Avenue.
- Investigate feasibility of a raised crosswalk at East Mount Eden Avenue and Jerome Avenue.

#### 170th Street Station

 Capital corridor safety improvements along Jerome Avenue.



#### **East Tremont Avenue Station**

- New wayfinding elements along Grand Concourse at Echo Place and East 179th Street.
- Study feasibility of BSUE improvements at Jerome Avenue and East 177th Street.

#### 174th-175th Street Station

- Henwood Place Step Street capital improvements.
- Study feasibility of BSUE improvements at Jerome Avenue and East Tremont Avenue.

#### 170<sup>th</sup> Street Station

 Pedestrian safety improvements at East 170<sup>th</sup> Street and Teller Avenue.





#### 174th Street Station

- Investigate feasibility of a raised crosswalk at East 173rd Street and Boston Road.
- · Study feasibility of BSUE improvements at Southern Boulevard, Boston Road, and East 174th Street.

### **West Farms Square Station**

- Planned busway along East Tremont Avenue.
- Capital intersection improvements at Boston Road and East Tremont Avenue.



#### **Elder Avenue Station**

- New benches at Westchester Avenue and Morrison Avenue.
- New wayfinding elements at Westchester Avenue and Morrison Avenue.

#### St. Lawrence Avenue Station

- New wayfinding elements at Westchester Avenue and Saint Lawrence Avenue.
- New benches at Westchester Avenue and Saint Lawrence Avenue.

#### **Parkchester Station**

 Intersection safety enhancements at Westchester Avenue and White Plains Road.

#### Castle Hill Avenue Station

 New benches at Westchester Avenue and Castle Hill Avenue.

# **Engagement Details**

# **Community Working Group Invitees**

- Barretto Bay
- Bronx Council for Environmental Quality
- Bronx Care
- Bronx Health Link
- Bronx One Policy Group
- Bronx River Alliance
- Children Aid Society
- Colombia School of Health
- Friends of Crotona Park
- Friends of Tremont Park
- Harlem River Working Group
- Institute for Family Health
- Loving the Bronx
- Montefiore
- Morris Park BID
- Mothers On the Move
- Nos Quedamos
- NYC Environmental Justice Alliance
- SoBro
- South Bronx Unite
- The Point
- Urban Health Plan
- Youth Ministries for Peace and Justice
- New Settlement
- Women's Housing & Economic Development Co.
- Fordham in Community
- Bronx Cooperative Development Initiative
- Mary Mitchell Family Youth Center
- Northwest Bronx Community and Clergy Coalition
- School Local Superintendent
- PS 70
- Burnside Jerome Tremont Commercial District
- Bronx Overall Economic Development Co.
- St. Helena's Roman Catholic Church

- Chamber of Commerce
- · Rocking the Boat
- Wildlife Conservation Society (Bronx Zoo)
- Sedgwick Houses TA
- Jerome Avenue Revitalization Collaborative
- Hunts Point Produce Market
- Great Hunts Point Economic Development Co.
- Casita Maria
- Bronx Community Board 3
- Bronx Community Board 4
- Bronx Community Board 5
- Bronx Community Board 6
- Bronx Community Board 9

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#### Workshops

In-person workshops were held at different locations throughout the Study Area. Each round of workshops was supplemented with a virtual version of the workshop to provide a more flexible and accessible option. Maps, drawings, and 3D models were used to illustrate the Study Area. Participants provided feedback, posed questions to subject-matter experts, shared personal experiences, and participated in exercises to visualize a different future for neighborhoods around the Cross Bronx.

#### Walking Tours, or "Walkshops"

The Study Team led guided "walkshop" walking tours to demonstrate the varied and challenging conditions around the Cross Bronx. "Walkshops" were held in all three sections of the Study Area, including a supported tour for people with disabilities, a Spanish-language walk, and a guided bike ride. These activities provided an opportunity for Study Team members and participants to experience the Study Area together and discuss issues and opportunities as participants encountered them.

#### **Engagement Events**

To lower the burden for community members to participate in engagement processes, the Study Team found opportunities to meet people in the places they already spend time. The Study Team shared engagement materials and activities at festivals, parades, and other local events throughout neighborhoods along the Cross Bronx.

### **Online Survey and Portals**

The Issue Identification Round included an online survey and mapping portal to provide an additional opportunity for public input. This allowed individuals who were unable to attend an event to share their priorities and helped the Study Team better identify top issues for the Study Area.

The Concept Refinement Round included an online mapping portal that allowed users to view the locations and descriptions for all draft short- and mid- term concepts. These interactive maps made it possible for users to zoom into specific areas and understand the types of concepts proposed in the Draft Vision.









Figure 6.11 Community Walkshop Events

### **Events Hosted and Attended by Study Team**

DATE	EVENTS
March 30, 2023	Virtual Open House
April 1, 2023	Central Open House
April 3, 2023	West Open House
April 4, 2023	East Open House
April 10, 2023	Virtual Open House
April 22, 2023	Bronx Alliance River Open House
June 6, 2023	Highbridge Festival
June 14, 2023	West Issue Identification Workshop
June 17, 2023	Fish Parade
June 20, 2023	Central Issue Identification Workshop
June 26, 2023	East Issue Identification Workshop
June 24, 2023	Central Community Working Group Walkshop
July 6, 2023	Congresswoman AOC Town Hall
July 8, 2023	West Community Working Group Walkshop
July 12, 2023	Virtual Issue Identification Workshop
July 15, 2023	Bronx River Living Festival
July 15, 2023	East Community Working Group Walkshop
July 22, 2023	NYCHA Family Day – Sedgwick
July 29, 2023	Bike the Block
August 1, 2023	National Night Out
August 26, 2023	Summer Streets
September 9, 2023	West Public Walkshop
October-November, 2023	Online Survey and Portal Map
October 27, 2023	Supported Public Walkshop
November 4, 2023	East Public Walkshop
November 4, 2023	Central Public Walkshop
November 4, 2023	Central Public Walkshop (Spanish)
November 11, 2023	Bike Tour
November 11, 2023	CM Sanchez Fall Festival
June 4, 2024	Concept Development Workshop
June 13, 2024	Virtual Concept Development Workshop
July 27, 2024	NYCHA Sedgwick Family Day
July 27, 2024	NYCHA Bronx River Family Day
August 6, 2024	National Night Out (Prospect Playground)
October 23, 2024	Concept Refinement Workshop
October 26, 2024	Concept Refinement Workshop
October 28, 2024	Concept Refinement Virtual Workshop

Community Event

Agency-Led Event

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# **Community Partner Profiles**



### **Health People**

A community health agency based in the South Bronx, Health People uses peer-to-peer education, innovative program curricula, workshops, and referral relationships to empower program participants to lead healthier, safer and more productive lives. Health People has achieved extraordinary success in demonstrating that community members in the South Bronx—including those with HIV, chronic disease, mental health issues, recovering from substance abuse or lacking a high school education—can become effective peer health educators.



### Morris Park BID and Loving the Bronx

The Morris Park Business Improvement District is a non-profit organization with the mission of enhancing the Morris Park Avenue commercial corridor community by providing supplementary sanitation, beautification, safety and district marketing services to support a vibrant Morris Park neighborhood.

Loving the Bronx is a grassroots group advocating for community-building and development. It organizes around social and environmental issues related to parks, open spaces and waterways throughout the Bronx.



#### **Bridge Builders**

Bridge Builders Community Partnership (BBCP) was formed in 2003 with the mission of partnering with community residents, service providers, educators, businesses, non-profits, government agencies, and other stakeholders to form effective community

networks. These networks and services strengthen and increase the well-being of families in the Highbridge Community (HC). BBCP's vision is to build a networking infrastructure to enhance the quality of life for all residents of the HC. As a storefront, BBCP encourages neighborhood residents to drop in, seek advice, and gain access to community and government services.



### I Challenge Myself

Since 2005 I Challenge Myself has provided fitness and cycling programs in NYC public schools with the goals of strengthening minds and bodies while connecting students with civic engagement, college access, and career opportunities. I Challenge Myself has partnered with NYC DOT for the past six years to engage students in upgrading their built environments and elevating their school and communities.



### Fordham in Community

Fordham in Community (FIC) is a robust collective comprised of over 30 community-based organizations, cultural institutions, service providers, and grassroots initiatives that operate in the Fordham area. They meet regularly to discuss local needs and potential collaboration areas, with the goal of enhancing community outreach and attracting additional resources for the benefit of local communities. FIC's mission, guided by the Center for Community Engaged Learning at Fordham University, is to bridge Fordham University with neighboring communities and global partners through experiential learning, research, and civic engagement.



#### **Bronx River Alliance**

The Bronx River Alliance serves as a coordinated voice for the river. It works in harmonious partnership to protect, improve and restore the Bronx River corridor. The Alliance's goal is to foster a healthy ecological, recreational, educational, and economic resource for all communities through which the river flows. The Alliance works in close partnership with the NYC Department of Parks and Recreation as well as dozens of community-based partners, regional nonprofits, and businesses.



The mission of Youth Ministries for Peace and Justice (YMPJ) is to rebuild the neighborhoods of Bronx River and Soundview/Bruckner Boulevard in the South Bronx by preparing community members to become prophetic voices for peace and justice. YMPJ accomplishes this through political education, spiritual formation, youth development, community development and organizing. YMPJ currently offers direct services to individuals and families seeking entitlement benefits or immigration-related services. They also offer programming and run campaigns that tie into all aspects of their mission and goals.



#### **BronxWorks**

BronxWorks helps individuals and families improve their economic and social well-being. From toddlers to seniors, they feed, shelter, teach, and support neighbors to build a stronger Bronx community. In all aspects of their work, BronxWorks strives for the highest ethical and performance standards. They are guided by the belief that people must be treated with dignity and respect, regardless of their present situation or past experiences.



#### **Mexican Coalition**

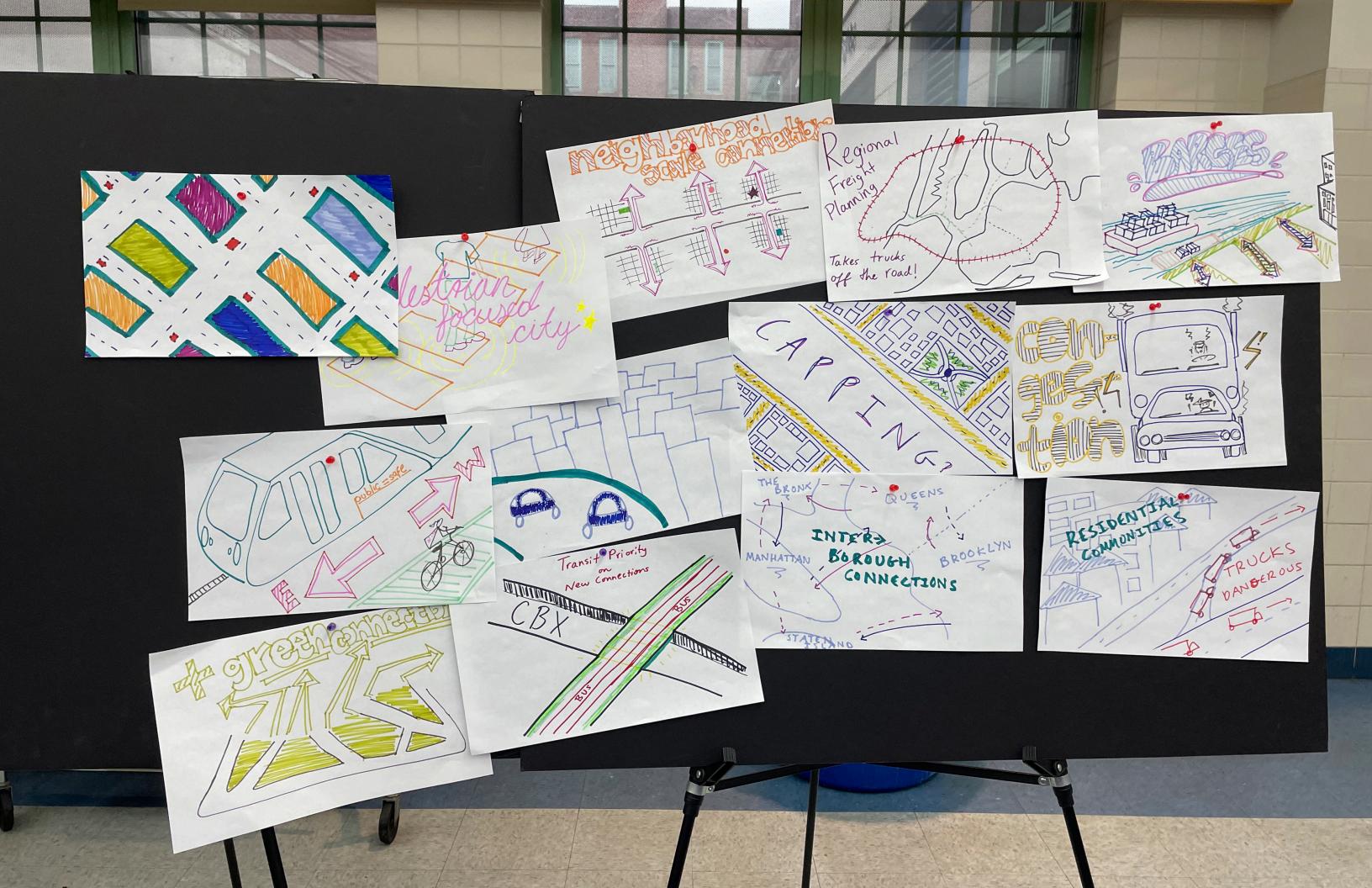
The Mexican Coalition for the Empowerment of Youth and Families supports the Latina community in New York. Each year they help more than 18,000 families, most of whom are immigrants and essential workers. The Mexican Coalition's mission is to develop the individual, organizational, and community capacities that will enable Latinos and Mexican Americans to realize their full civic, cultural, and political integration into American society.



#### **New Settlement**

New Settlement is a community-led, mission driven Settlement House. For more than 30 years they have worked together to build the resilience and aspirations of the youth and families of the Southwest Bronx by delivering award-winning programs. These include after-school education, workforce development, college readiness, health and fitness, and member-driven community organizing for better housing and safer schools. Rooted in the Bronx, New Settlement stands with community members to break systemic barriers, advance justice, promote leadership and strengthen neighborhoods.

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# Learn more on www.crossbronx.info











