



AMTRAK®



City of New York

Planning a Public Future for Sunnyside Yard

March 2020

Planning a Public Future for Sunnyside Yard

Executive Summary

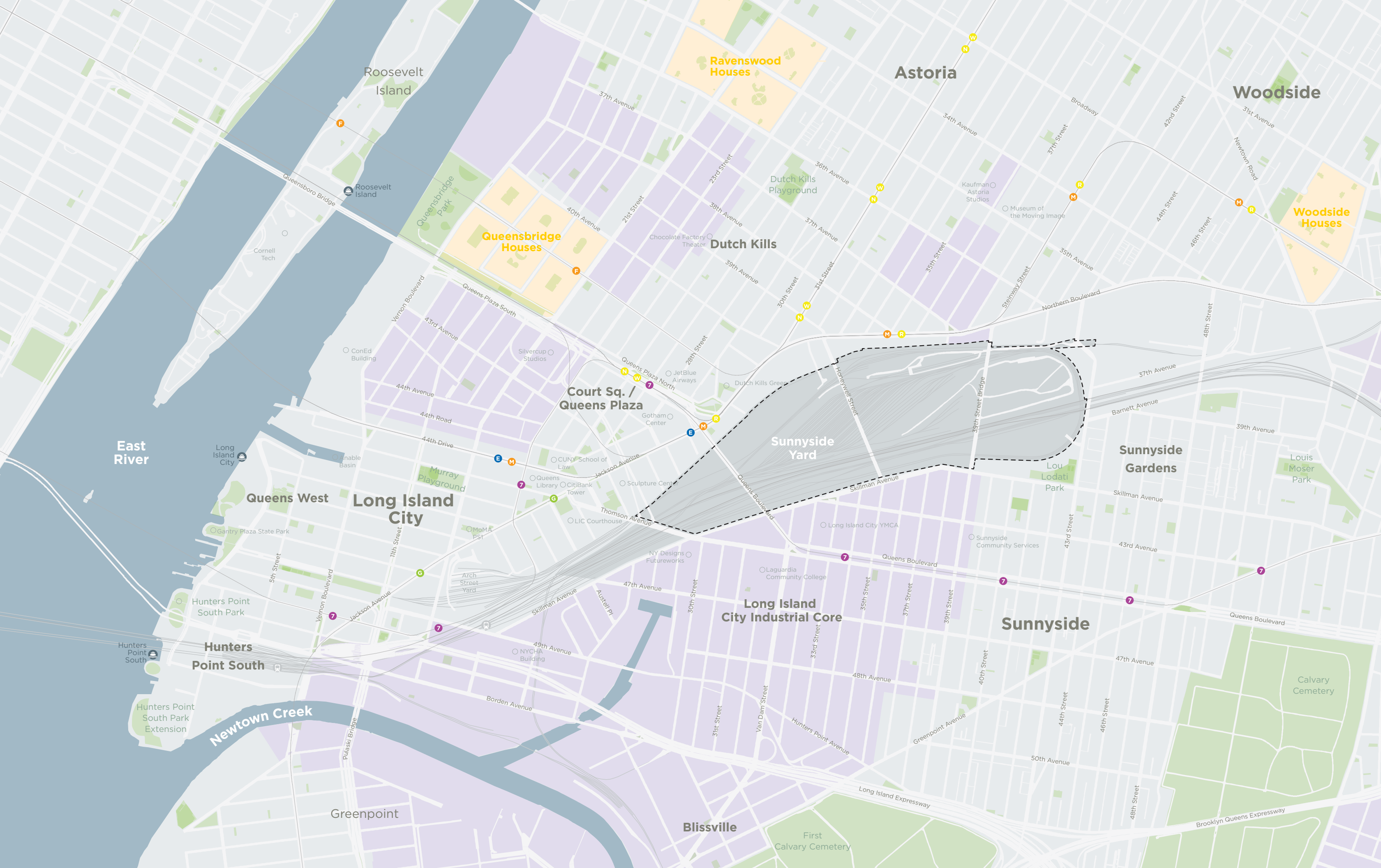
March 2020



AMTRAK®



City of New York



Introduction

March 3, 2020

We are proud to release the Sunnyside Yard Master Plan, a generational framework shaped by the voices of thousands of New Yorkers for a uniquely important site.

Across the country, Amtrak is partnering with local governments to envision how its assets in growing cities can serve multiple public needs while also furthering its core mission of intercity rail transportation. In 2014, Amtrak approached the City of New York seeking to plan collaboratively for one of its key assets on the Northeast Corridor, Sunnyside Yard.

Sunnyside Yard is critically important to Western Queens and the Greater New York City region. Its central location, sheer scale, public ownership, and the strong, diverse neighborhoods surrounding the Yard make it an unparalleled place to plan responsibly for the next generation. This Master Plan is a product of close collaboration between the City and

Amtrak and will serve as a guiding framework both for decking over the Yard and for our continuing partnership in the years to come.

The Sunnyside Yard Master Plan proposes bold action on the most pressing issues of our time. How do we create new models of affordable housing at scale to protect the diverse makeup of Queens and address our housing crisis? How should we rethink and invest in our regional and local transportation networks? How do we grow in an environmentally sustainable way while helping communities cope with the effects of climate change? Sunnyside Yard is the only centrally located, transit-accessible place of this size in New York City where we can leverage publicly controlled land to respond to these issues, and others.

Queens' history as a welcoming home for working- and middle-class families from across the globe is inseparable from the

neighborhoods we love, from Sunnyside and Woodside to Long Island City and Astoria.

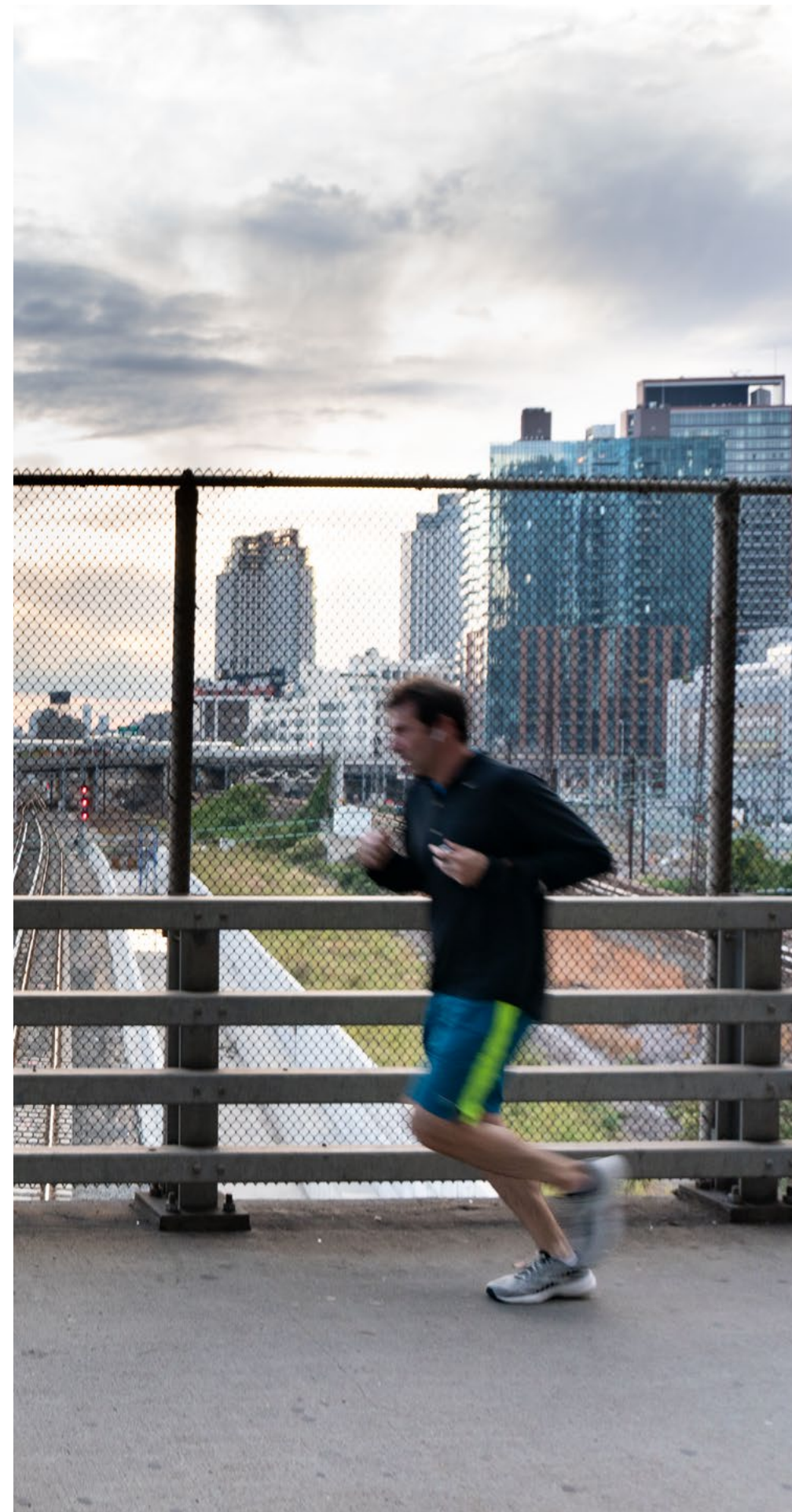
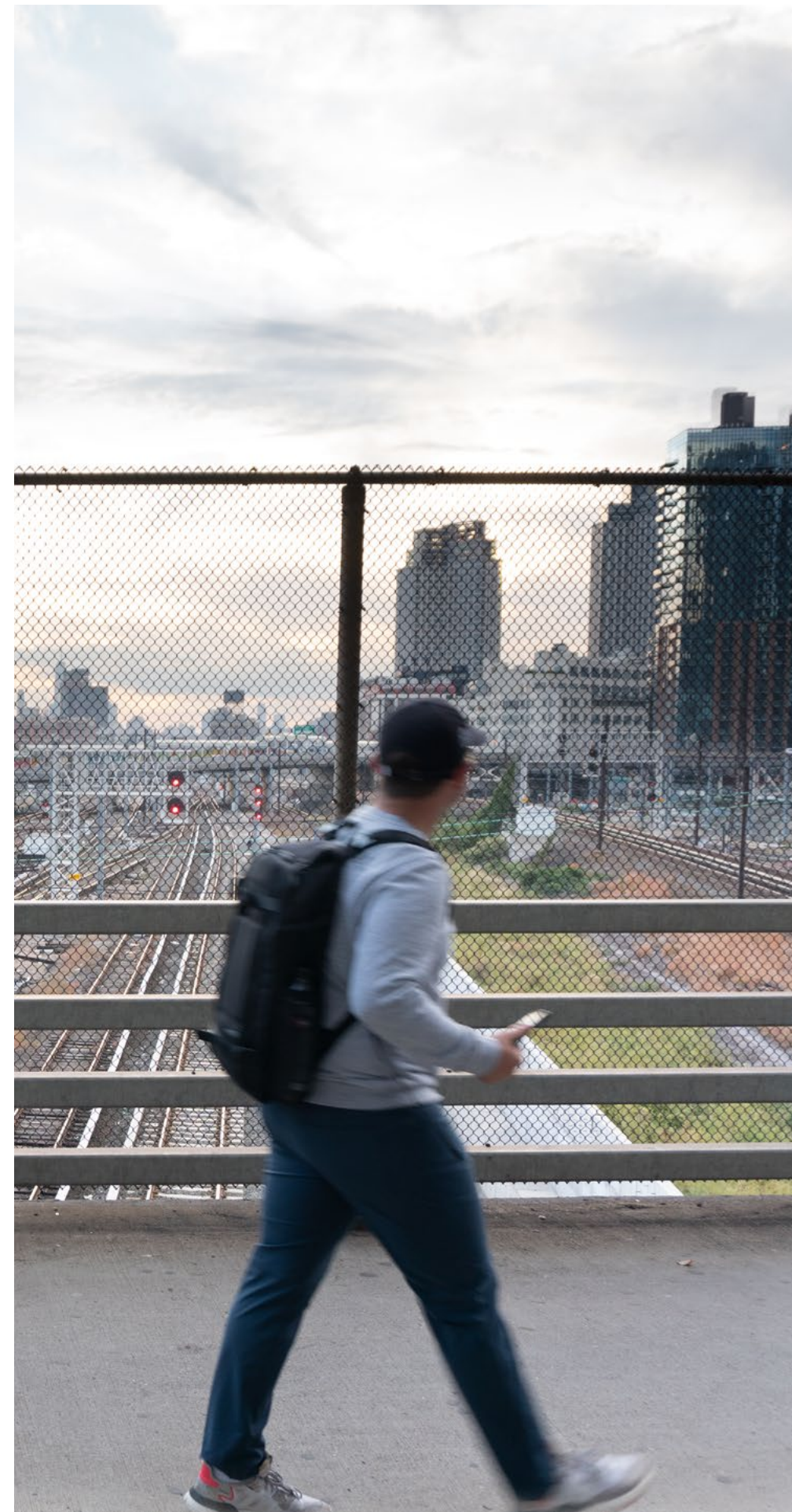
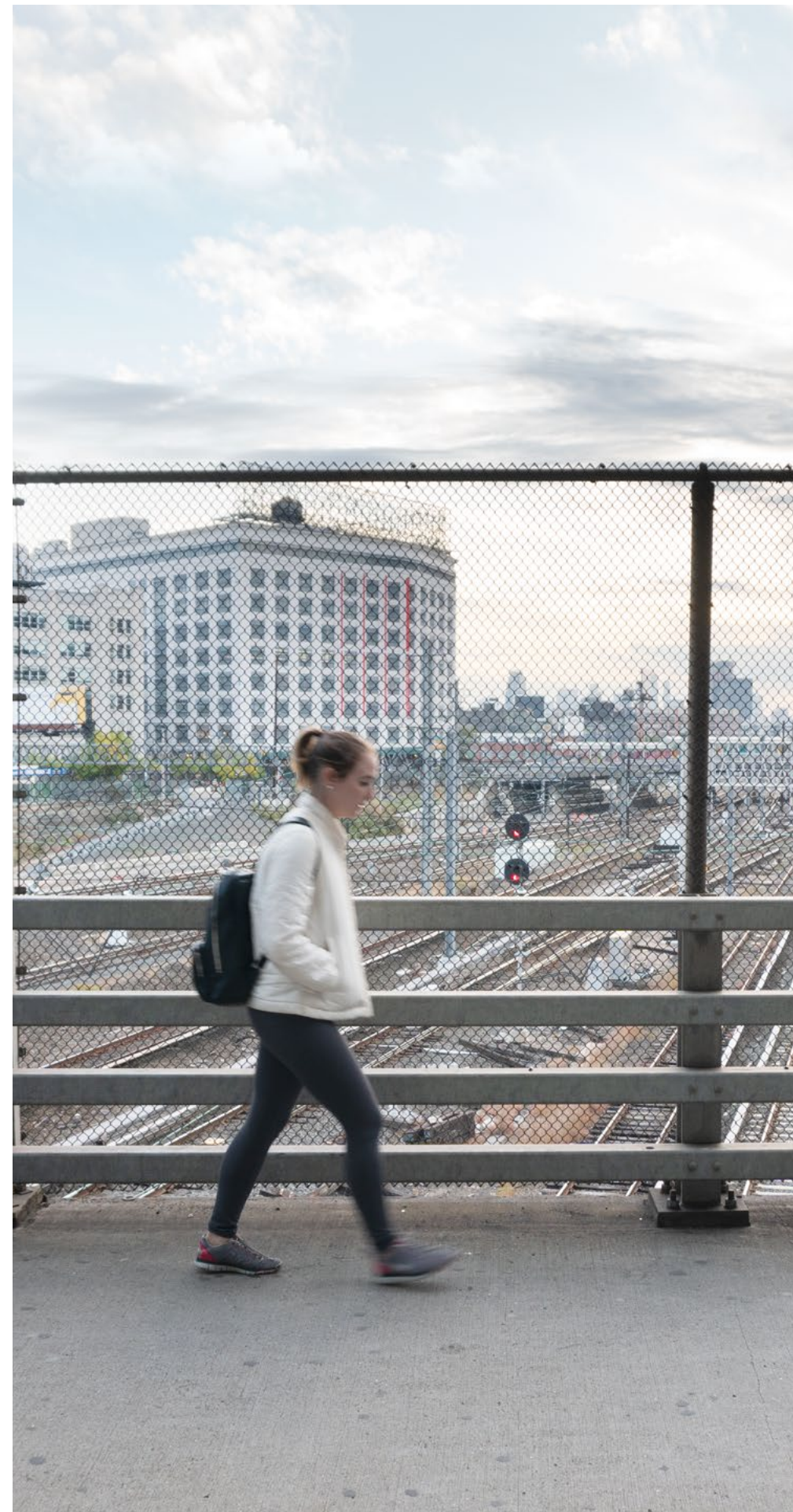
The Sunnyside Yard Master Plan is the product of a proactive, community-driven planning process that sought to take the qualities that make these neighborhoods great – their affordability, walkability, and diversity – and add to them with efficient public transit, beautiful parks, affordable homes, and access to education and high-quality jobs.

We thank the thousands of New Yorkers who gave their time and insights to help make this plan reflect the hopes and needs of a wide range of voices. We especially thank the Sunnyside Yard Steering Committee, whose guidance helped make this a truly inclusive process.

Sincerely,

Vicki Been
Deputy Mayor for Housing and Economic Development

Anthony Coscia
Chairman of the Board, Amtrak





The Sunnyside Yard Master Plan is **a once-in-a-century opportunity to bring 12,000 affordable homes and a regional rail hub to Western Queens** through the creation of new public land.

A Generational Opportunity

The Sunnyside Yard Master Plan tackles the **most pressing questions** facing New York City in the 21st century, **responding to local needs** on a **massive and regionally significant site**.

If ever a place called for long-term, **visionary planning**, it is this one.

Sunnyside Yard is the most important undeveloped public site in the heart of the most diverse region in the United States. Operated by Amtrak and the Metropolitan Transportation Authority (MTA), it is a complex of critical rail infrastructure on the nation’s busiest rail corridor surrounded by vibrant neighborhoods that have been a welcoming home to generations of working- and middle-class New Yorkers from all over the world.

Like the city, Western Queens faces major urban challenges, prompting calls for new approaches to equitable neighborhood planning. In order to protect existing neighborhoods, it is essential to plan for the next generation of Queens families with **affordable housing, support and protection for local industries and small business, schools, and crucial investments in infrastructure, public services, and open space.**

Informed by the input of thousands of residents, the City of New York and Amtrak took on the challenge of **reimagining Sunnyside Yard as an extension of the surrounding vibrant neighborhoods, while maintaining its rail operations.** Past generations, including the Regional Plan Association in 1931, explored the possibility of building over the Yard to allow for other uses in addition to rail – a process known as “decking” or “overbuild.” Today, 90 years after that initial proposal, the Sunnyside Yard Master Plan builds on that vision with a framework, grounded in engineering realities, that addresses existing and future needs for Western Queens, the city, and the region. The plan, and the process leading to it, have underscored the need for an approach that is shaped by the surrounding communities and driven by the public. This Master Plan is a first step; much more analysis will be needed to refine this framework and turn it into reality.

Among the most important of these priorities is the responsible management of growth. The City currently welcomes 30,000 new New Yorkers every year. Many are born here, while others come from other parts of the U.S. and all over the world. Queens, known as the **“World’s Borough”** and the **“Borough of Families”**, is the City’s

fastest growing borough. This growth drives the innovation that strengthens the economy and the diversity that makes the borough the inclusive place it is today. However, this growth also places constant pressure on the housing supply and infrastructure networks. Roughly the size of Governors Island or three times larger than Astoria Park, the 180 acres of the Yard offers a relief valve for these pressures by providing a plan for the infrastructure, homes, and jobs that sustain growth.



The city's challenges are compounded by **the reality of climate change and economic inequality**. Fortunately, the neighborhoods surrounding Sunnyside Yard are full of **engaged residents who want to be part of a larger conversation around planning for a more sustainable, affordable, and fair city**. Informed by these voices, the Master Plan outlines solutions to alleviate the impact of climate change while also improving housing affordability and economic mobility for all New Yorkers.

While tackling these structural challenges, the Master Plan will also **improve connections between the neighborhoods in Western Queens and within the greater New York City region**. The Yard's location on the transportation networks enables these wider and strategic connections. Currently, traversing the Yard is an unpleasant and cumbersome experience for locals. Building over Sunnyside Yard can provide better connections and unite the existing neighborhoods.

The Master Plan accounts for the rail yard's existing and future operational plans to ensure long-term coordination with the rail agencies. Putting the proposed plan in conversation with the on-the-ground technical requirements put forward by Amtrak and the MTA allows the two

rail entities to **make the investments necessary to sustain their operations while preserving the option of decking over the Yard**.

The Sunnyside Yard Master Plan is not a shovel-ready mega-development plan, but rather a long-term framework to guide decisions, ensuring that they are led by public priorities, and centered on human needs. Planning now rather than later enables the City and Amtrak to align this vision with the needs of the Yard and preserve the possibility of an overbuild for the future, when the time is right. **Through direct collaboration with New Yorkers, the Sunnyside Yard Master Plan seeks to answer our most urgent challenges and put the public interest first.** It does not aim to advance the most financially expedient development scenario possible; rather, **it sets a vision focused on investment in public goods to ensure the future of Queens and New York City remains inclusive, affordable, and environmentally responsible.**

The Master Plan Is:

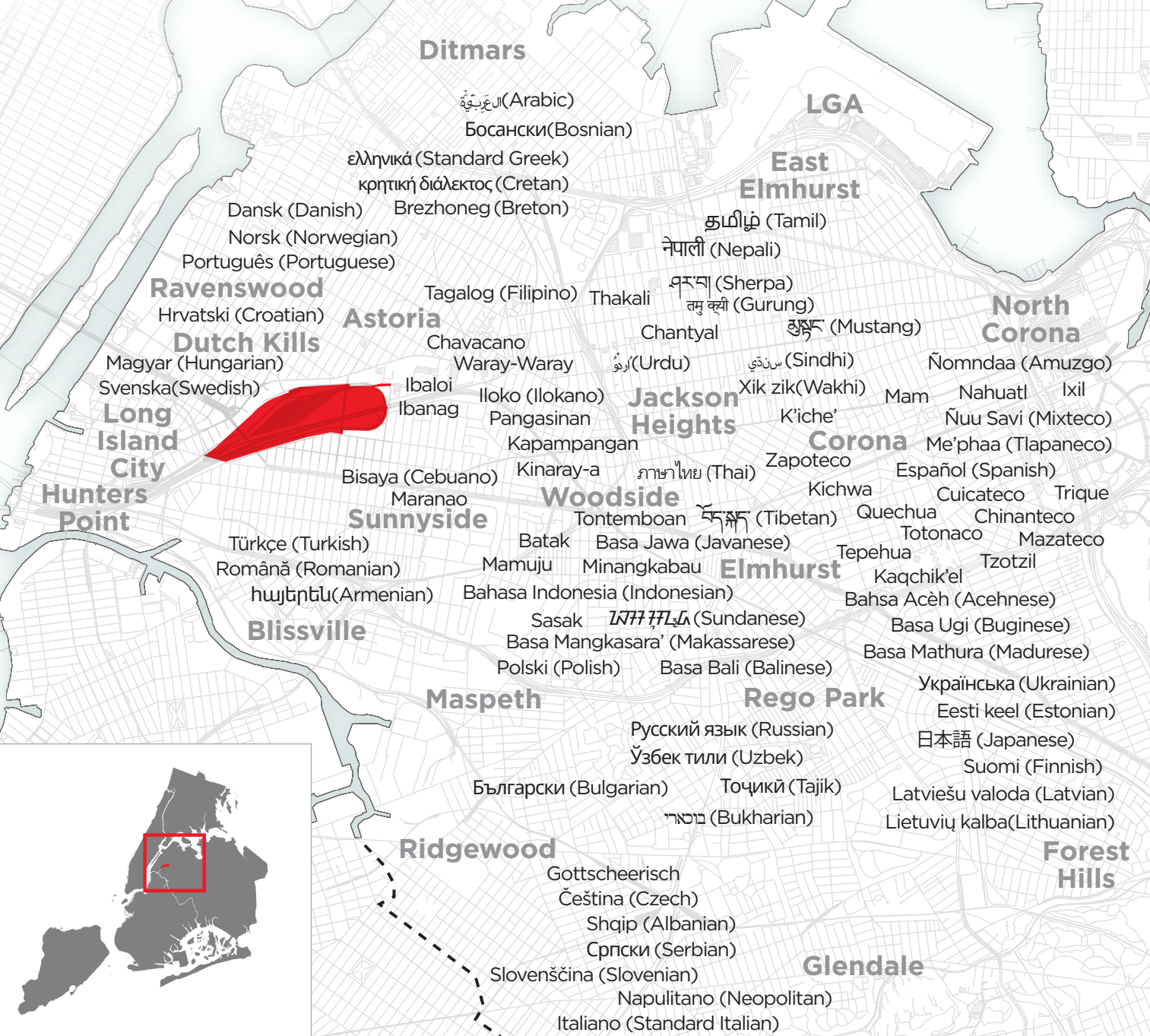
- 12,000 new affordable homes – half dedicated to homes for very low-income families, and half providing homeownership opportunities through a 21st century Mitchell-Lama Program
- A new regional rail hub, “Sunnyside Station”, connecting Western Queens to the Greater New York City region and Northeast Corridor
- 60 acres of new public open space serving Western Queens communities, alongside new schools, libraries, and other social infrastructure
- An infrastructure-first approach that includes meeting urban needs like resiliency, drainage, open space, and transportation
- A detailed technical guide for creating new publicly controlled land by building a “deck” over the rail yard that protect rail operations while connecting neighborhoods
- A plan focused on preserving Queens’ affordability and diversity for future generations rather than maximizing financial gain
- A framework to guide future decision-making and implementation over many decades with sustained public input

The Master Plan Is Not:

- A transaction with a developer
- A fixed plan that will be executed exactly as conceived
- Formal public approvals for development
- A replica of the overbuild projects of today



Queens by the Numbers:
2.4 Million current residents, of which **48%** are foreign-born from **120** countries of origin, speaking more than **135** different languages.



Figures from the U.S. Census Borough Map of Languages in Queens, Source: Nonstop Metropolis: A New York City Atlas



Top: Street life under the 31st Street Elevated in Astoria
Bottom: A game of cricket at Ravenswood Playground

Queens, the “Borough of Families,” has historically benefited from proactive planning. The Master Plan seeks to continue this legacy into the future.

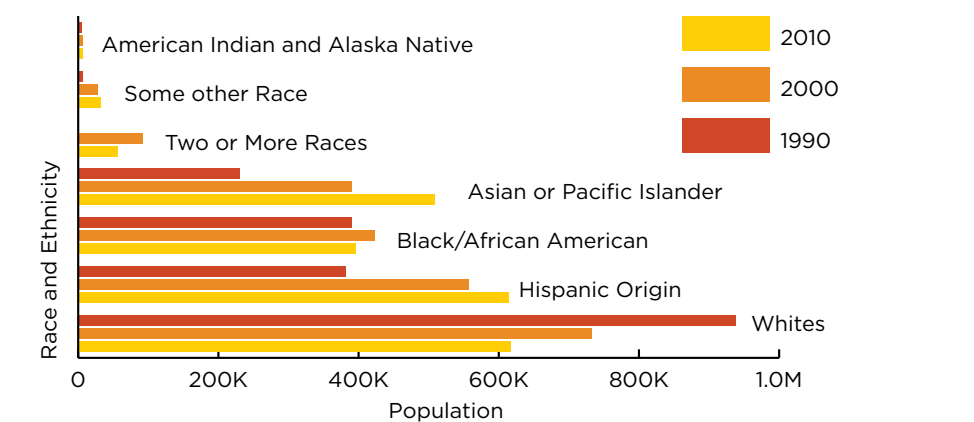
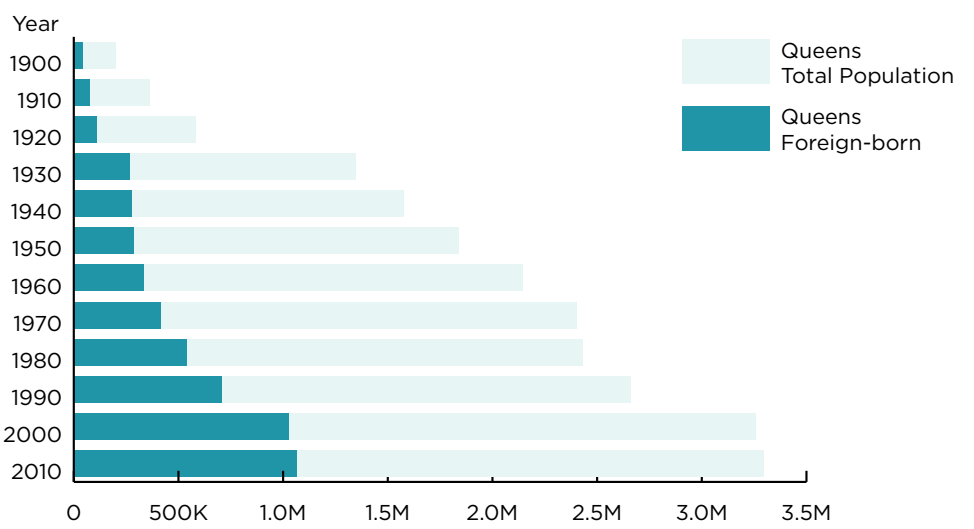
The Sunnyside Yard Master Plan is deeply rooted in its context. **Queens today is the most racially and ethnically diverse county in the nation, with a multicultural history spanning from 12,000 years ago**, when the ancestors of the Algonquin people began to explore the region¹. The Lenape tribes that settled Queens lived near the present site of Sunnyside Yard along the headwaters of Newtown Creek. **Dutch colonizers arrived in the 1630s**, living alongside the Lenape until **surrendering to the English in 1664, who named the area Queens County** and aggressively removed the remaining native inhabitants². For the next nearly 150 years, Queens County was a quiet collection of agrarian villages.

The history of modern Queens began when it became part of Greater New York City in 1898. Queens experienced its first major population boom with the completion of the Queensboro Bridge in 1909. The borough became home to Irish immigrants, followed by Italian and German immigrants as well as African-American migrants fleeing the Jim Crow South in the 1920s. **In 1900, there were 160,000 inhabitants; by 1930, there were over a million.**

¹ Barca, Christopher. “Native Americans Settled in Queens,” Queens Chronicle, November 11, 2015.
² Eng , Joanna. “The Native American history of Queens.” Brownstoner. November 22, 2012.

The second wave of migration began in 1965 with the passage of the Immigration and Nationality Act. Since then, **Queens has welcomed hundreds of thousands of immigrants** from Eastern Europe, Latin America, the Caribbean, the Indian subcontinent, and East Asia³.

Queens’ extraordinary 20th-century growth was planned at the neighborhood level, a constellation of neighborhoods that filled in the farmland of former old Dutch towns. **Over the last 15 years, Western Queens has experienced rapid growth, putting strains on infrastructure, transportation, and housing.** While the City has made significant investments, they have not always been proactively planned. **Sunnyside Yard is an opportunity to plan in a proactive and responsible way for future generations of Western Queens residents and workers.**





Sunnyside sign viewed from Bliss Plaza under 46th Street Subway Station



Volleyball in Queensbridge Park with the Ravenswood Generating Station in the background

The Master Plan comes at **a rare moment of opportunity** to plan responsibly for the future and **support the next generation of New Yorkers.**

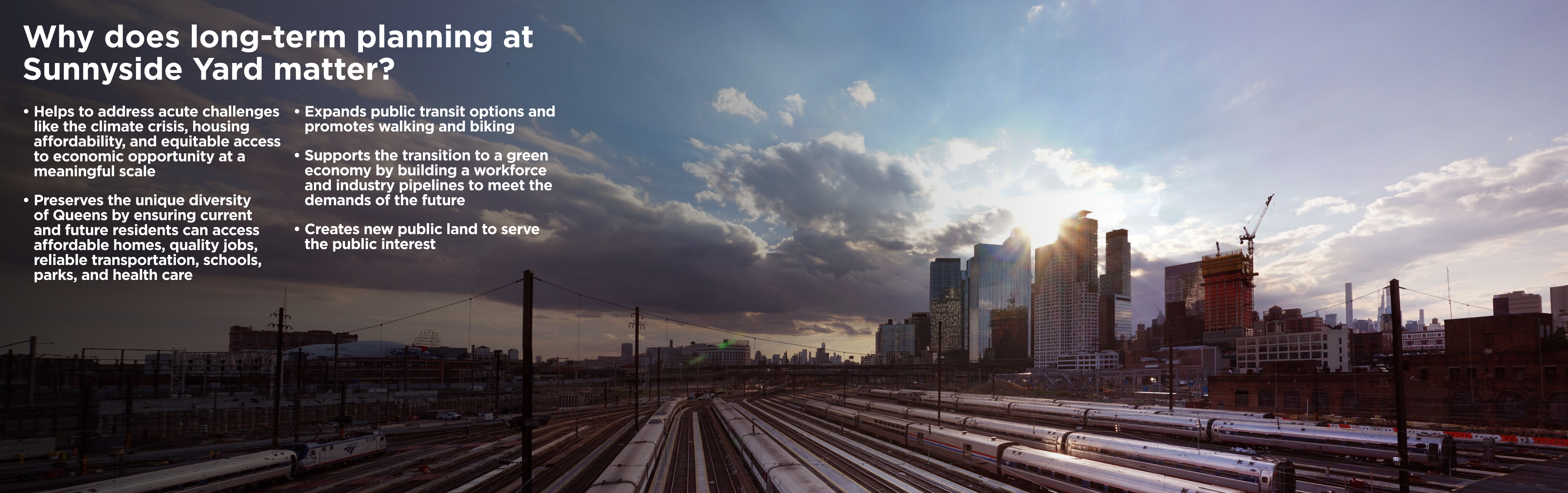
This is a pivotal time for the future of Sunnyside Yard.

The present moment is particularly important for the Yard. The current round of planning around Sunnyside Yard began in 2014, when **Amtrak approached the City of New York to gauge interest in coordinating planning efforts.** Amtrak had just completed a study to upgrade their facilities and tracks and recognized that this opened a window to plan for a potential overbuild. In response, in 2015, the City began to study the technical feasibility of decking over the Yard to create new buildable “land.”

Given the intensity and complexity of the rail yard, moments to plan for an overbuild project will not always be available. Understanding the positive impact that so much new land could bring to the public, Amtrak and the City decided to seize this window of opportunity by embarking on a master planning process.

Why does long-term planning at Sunnyside Yard matter?

- Helps to address acute challenges like the climate crisis, housing affordability, and equitable access to economic opportunity at a meaningful scale
- Preserves the unique diversity of Queens by ensuring current and future residents can access affordable homes, quality jobs, reliable transportation, schools, parks, and health care
- Expands public transit options and promotes walking and biking
- Supports the transition to a green economy by building a workforce and industry pipelines to meet the demands of the future
- Creates new public land to serve the public interest



Sunnyside Yard is the **largest site available** in one of the most important cities in the world, located at the **center** of the region.



The Sunnyside Yard Master Plan is a way to build for a more equitable and sustainable future while meeting the needs of all New Yorkers.

Borough importance

Queens is one of the most, if not the most, culturally diverse places in the United States. If the borough is to remain an inclusive home to New Yorkers of all backgrounds, then it is imperative to plan for its future growth. Queens is currently adding 4,000 new residents every year, and both current and future residents will need affordable homes, access to good-paying jobs, and major improvements to strained infrastructure, including drainage systems and transportation. **By putting housing affordability and infrastructure first, the Master Plan provides a vision of how to manage growth responsibly, meet the needs of existing and new residents, and maintain the diversity that makes Queens the vibrant borough it is today.**

Citywide importance

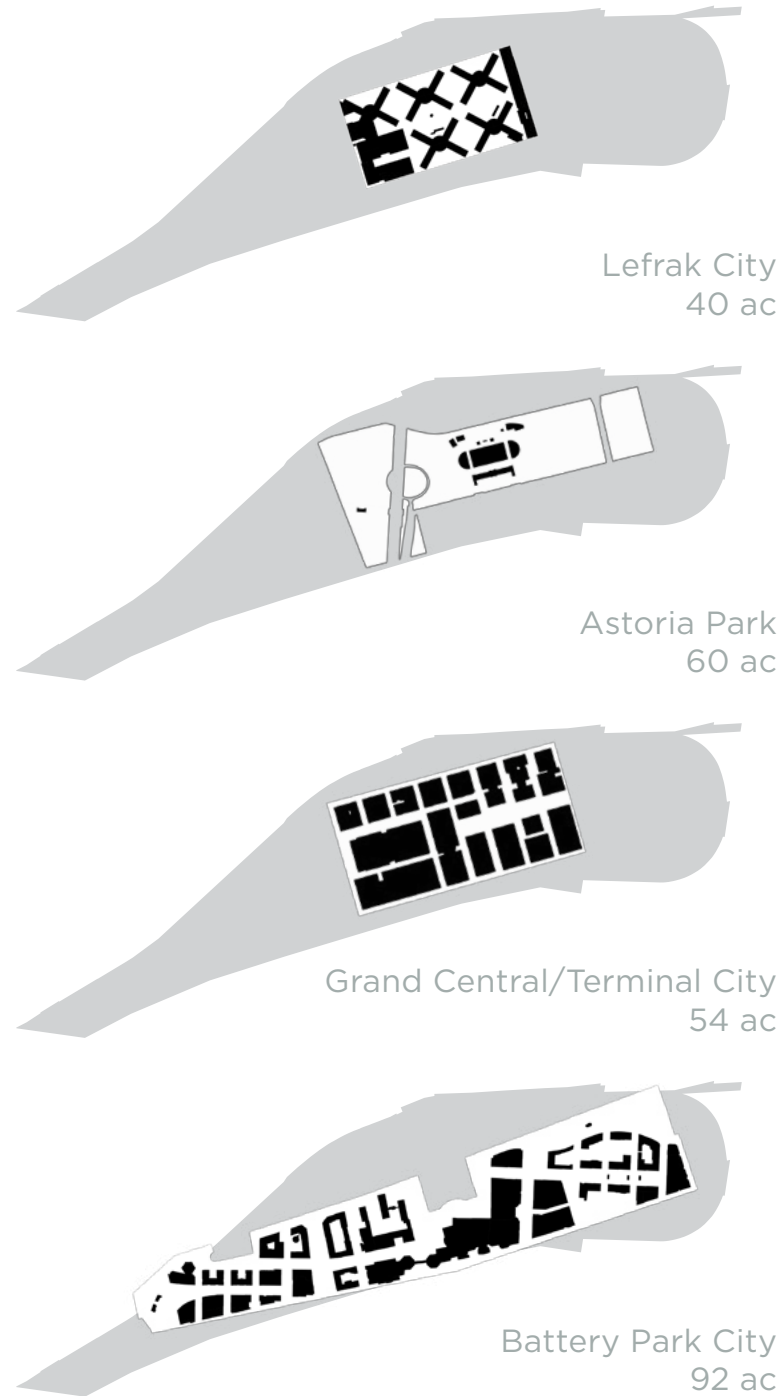
Like Queens, New York City as a whole is growing and facing acute crises like climate change, housing affordability, and **providing all New Yorkers with access to economic opportunity.** At the same time, the city is running out of land, especially publicly

controlled land, that can be used to address these challenges. The potential addition of publicly controlled land the size of an entire neighborhood gives the City a powerful tool to create a more sustainable, resilient, and equitable future. At over 180 acres, Sunnyside Yard is large enough that **new technologies and innovative planning concepts can be implemented at a meaningful scale.**

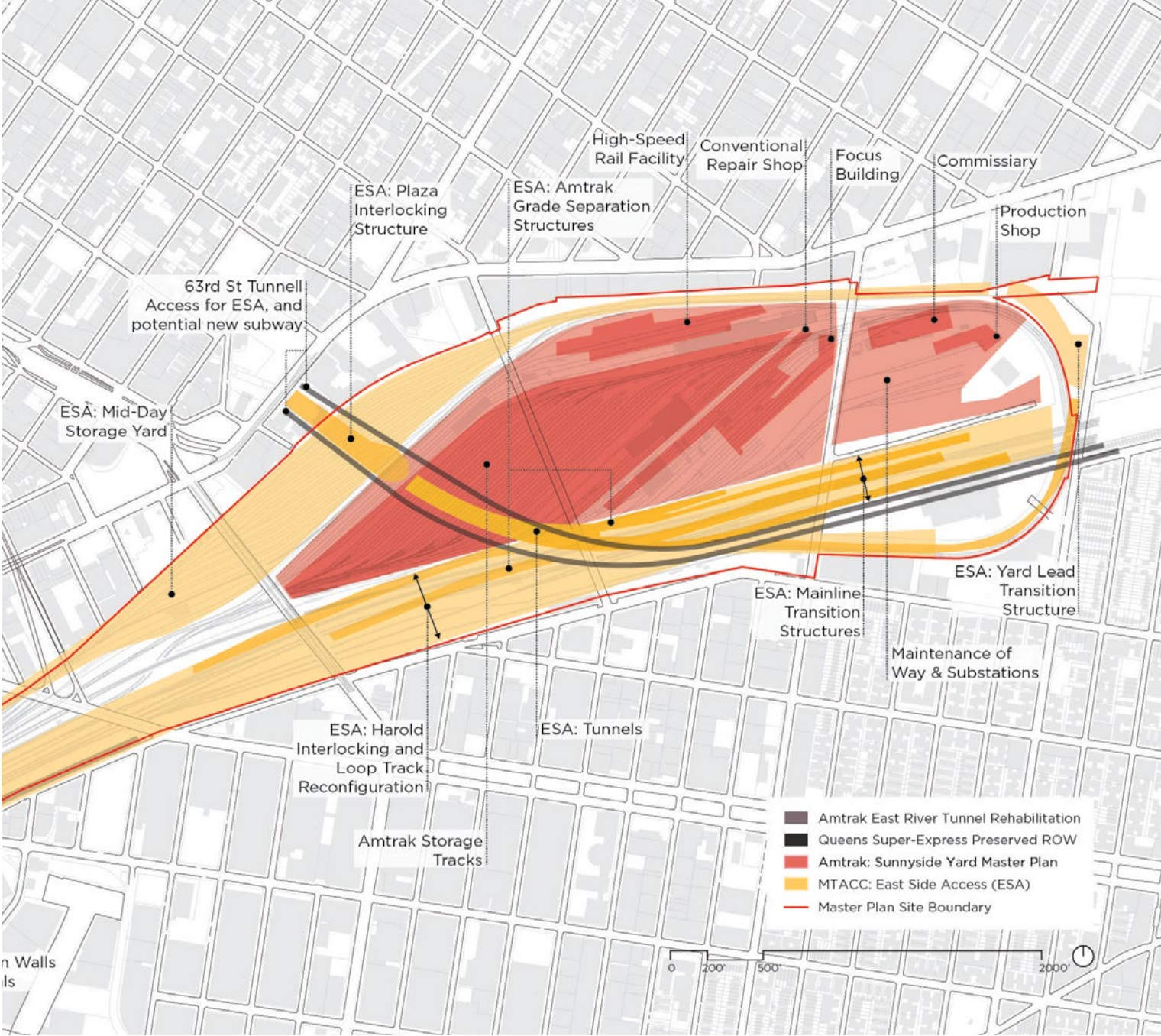
Regional importance

Given its unique location at the center of the regional rail network, **Sunnyside Yard has the potential to become a transit hub that could be served not only by the Long Island Rail Road (LIRR) but also Metro-North Railroad and eventually New Jersey Transit and Amtrak, creating connections to and from every part of the Greater New York City region as well as the other major cities of the Northeast.** This would substantially improve regional rail service and connect people to existing and emerging economic centers, **fueling job growth and access to opportunity.**

Scale Comparisons



The Yard is one of the busiest rail facilities in North America.



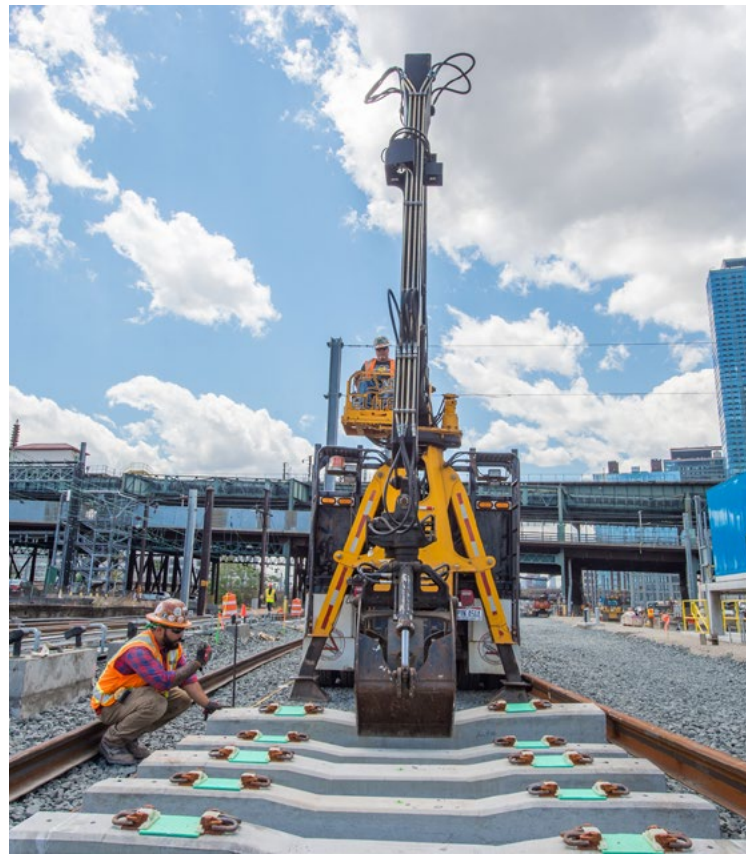
Current and future Yard conditions.



Amtrak Storage Yard



Train Wash



MTA's Midday Storage Yard (under construction)



The Main Line

In 2014, Amtrak completed a once-in-a-century plan for upgrading their rail operations, reaffirming the Yard's importance and creating an opportunity to coordinate with other planning efforts and stakeholders.

What Happens in the Yard (And Why Can't It Move)?

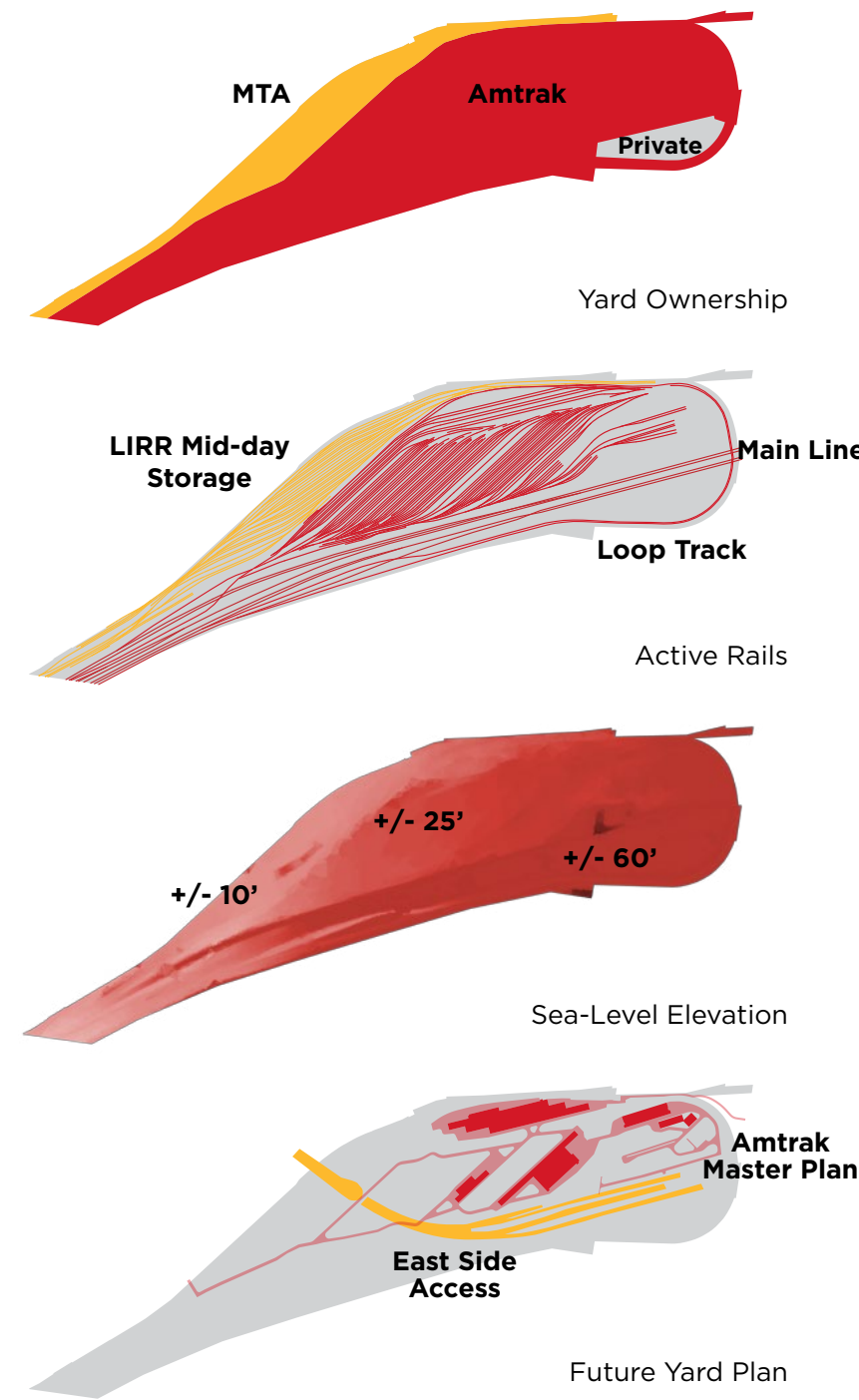
Given that the Yard's size and location make it an optimal place to build, this raises the question **why the Yard's operations cannot relocate** to make room for the extension of existing neighborhoods. **The Yard is a critical piece of passenger rail infrastructure with national importance.** It is one of the busiest rail yards in North America, and at 1.3 miles long from east to west, one of the largest.

The Yard has been operational for more than 100 years. Originally built by the Pennsylvania Railroad in 1910 to service Penn Station's intercity and commuter trains, its vast central portion was transferred to Amtrak in the 1970s, and later the north side of the Yard to Long Island Rail Road (LIRR), leaving some smaller parcels in private ownership. **Around 780 trains run through the Yard each day, with more to come once the MTA's East Side Access and Penn Access projects are completed.** The Yard serves trains on Amtrak's Northeast Corridor, which connects Boston, New York City, Philadelphia, and Washington, D.C., as well as service on the Empire and Keystone Corridors and Amtrak's long-distance service. With the addition of a new regional rail hub, called "Sunnyside Station", New Yorkers will one day be able to easily access the cities within the Northeast region in just one trip.

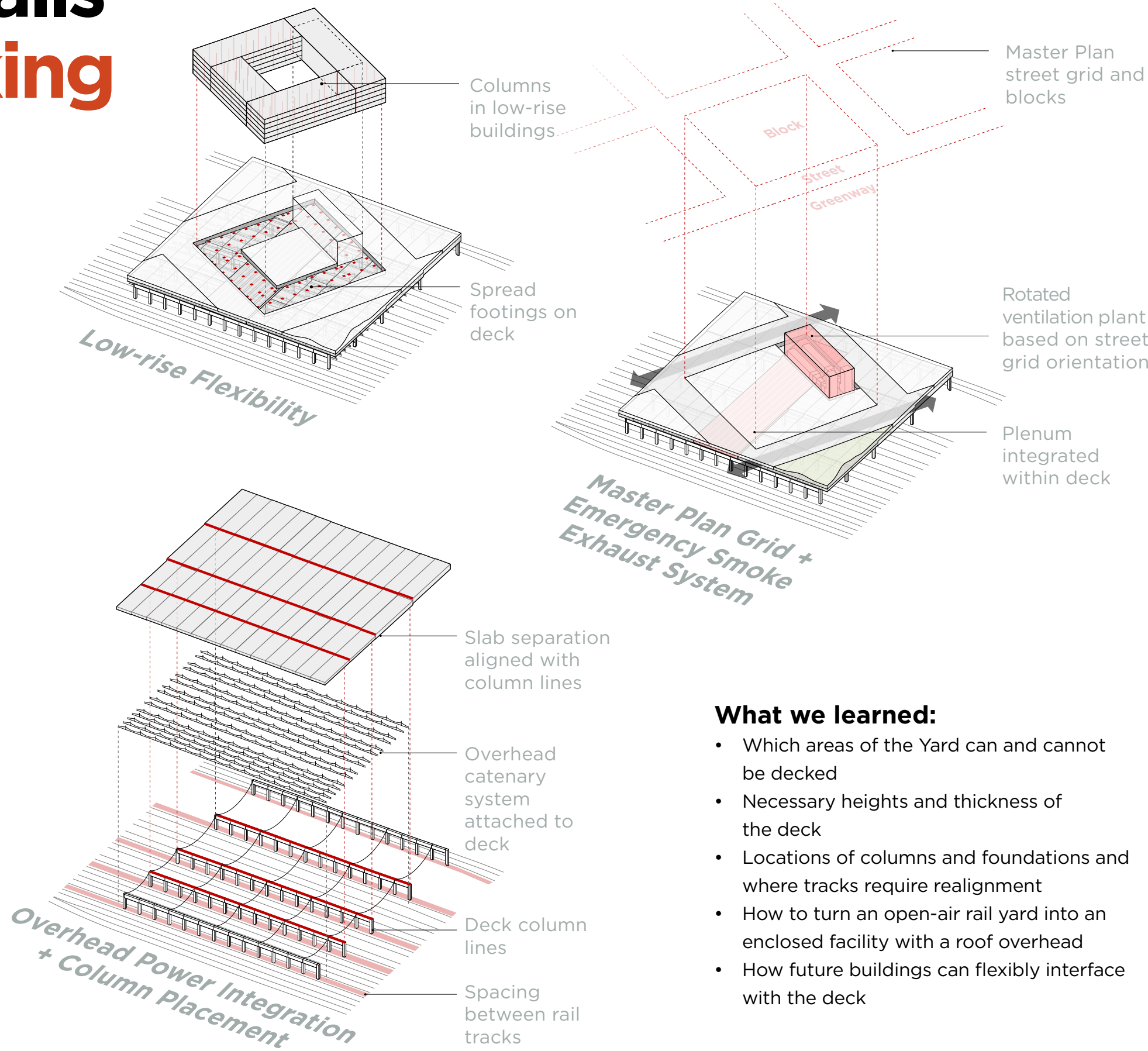
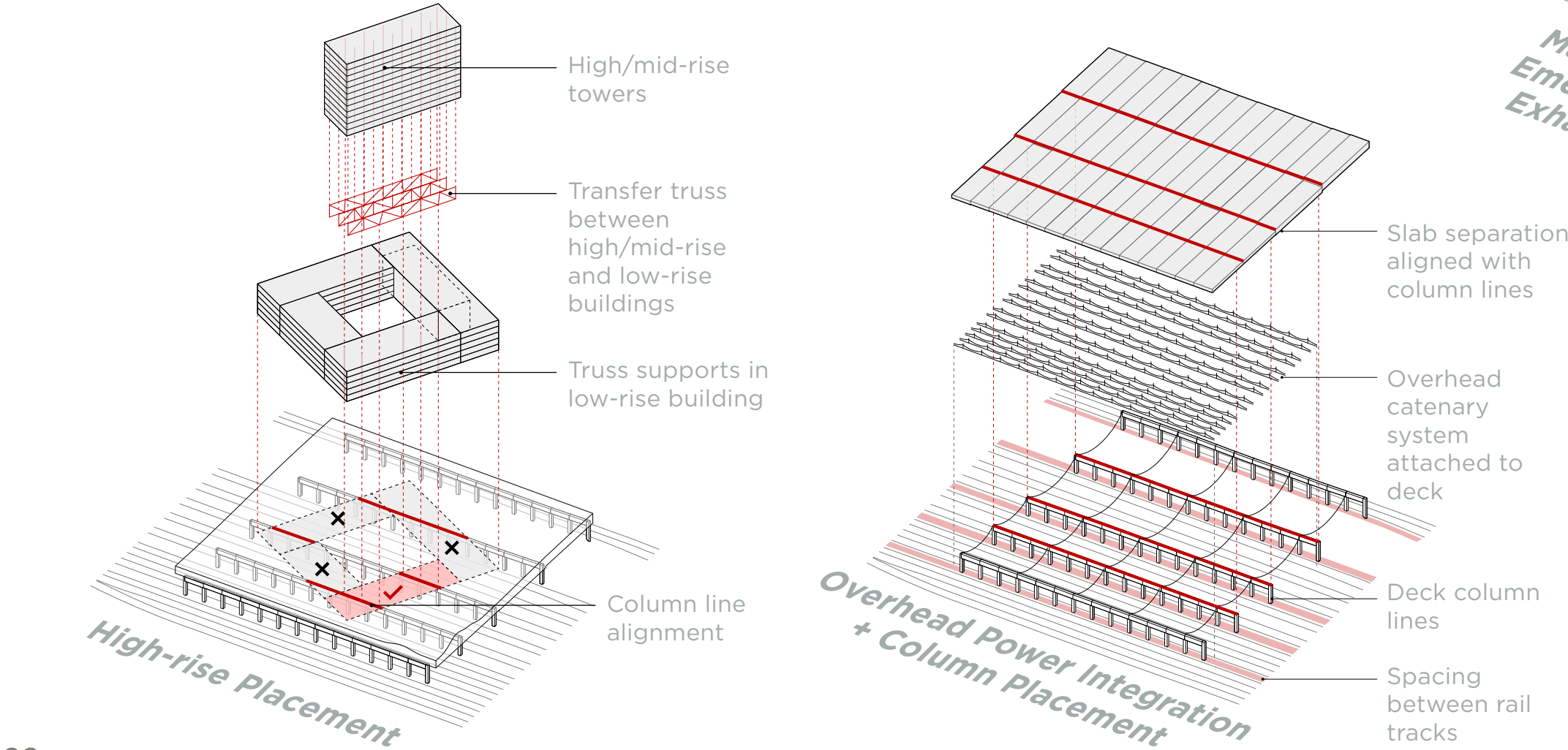
The LIRR's Main Line and Port Washington Branch also pass through the Yard via the Harold Interlocking, the busiest railroad junction in the country. During the day, New Jersey Transit (NJ TRANSIT) uses Sunnyside Yard to store trains between the morning and evening rush hours, as does the LIRR in their Mid-Day Storage Yard. The MTA's East Side Access project will bring LIRR trains bound for Grand Central Terminal through the site. When Penn Access is completed, Metro-North trains will pass through the Yard on the Main Line on their way to and from Penn Station.

- The Yard hosts trains serving thousands of daily Amtrak and NJ TRANSIT customers and provides critical operations, including:**
- Maintenance facilities and **32 active storage tracks** used throughout the day by NJ TRANSIT and Amtrak. Currently **92 trains Amtrak and NJ TRANSIT trains** are stored, serviced, or traverse Sunnyside Yard each day.
 - A Service and Inspection (S&I) facility for **storage and maintenance of Acela high-speed trains** operating on the Northeast Corridor.
 - A conventional train **S&I location** as well as **Engineering and Maintenance of Way operation** fixed facilities, a **Commissary building**, and a **train car wash building**.
 - A base of operations for **805 Amtrak employees**.

Unique Features of the Yard



The Master Plan calls for a flexible decking strategy that accommodates the rail yard below.



What we learned:

- Which areas of the Yard can and cannot be decked
- Necessary heights and thickness of the deck
- Locations of columns and foundations and where tracks require realignment
- How to turn an open-air rail yard into an enclosed facility with a roof overhead
- How future buildings can flexibly interface with the deck

Building a deck is like creating land.

The design of the deck must support the city above it while seamlessly integrating with the daily rail operations below. The deck must also be physically accessible from the areas around it, connecting the new “land” with existing neighborhoods.

Unlike the previous 2017 Feasibility Study, the Master Plan engaged directly in detailed and extensive discussions with Amtrak and MTA engineers to find engineering solutions to some of the most difficult technical challenges posed by decking. The resulting decking strategy can support a wide range of building types and locations, enabling the Master Plan to respond to the community engagement process and preserve flexibility for future needs.

The Master Plan proposes decking over 80 percent of the Yard, a total decked area of 115 acres. The rest of the Yard will remain uncovered due to rail activity and track layouts that make decking these areas infeasible.

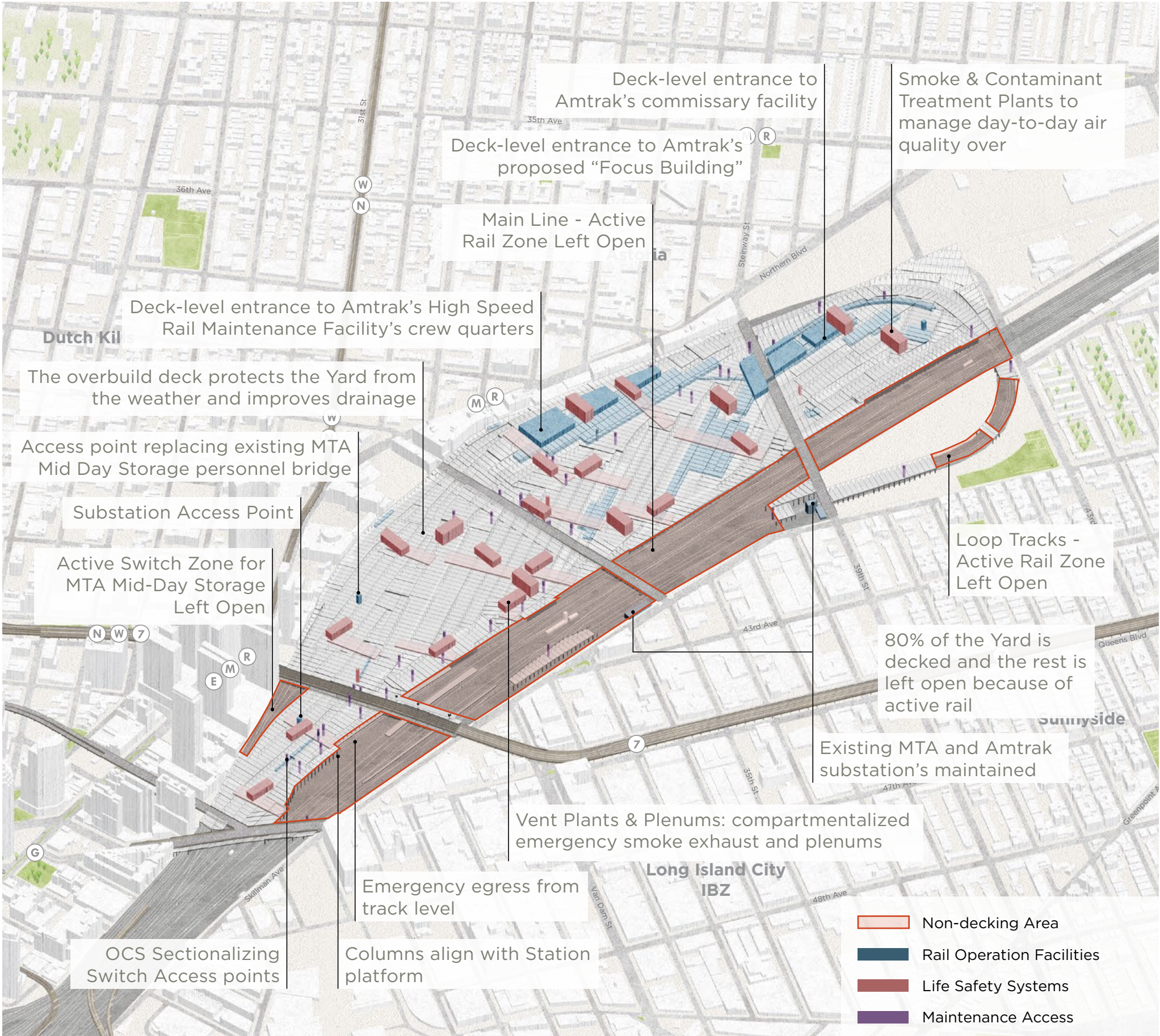


Diagram illustrating Deck and Yard Facilities

**Section Perspective at Honeywell Bridge
Looking North**

- 1 Rail Tracks Under Deck
- 2 Planting Pits Adapting to Depth of Structural Fills
- 3 Lowered Structural Deck to Meet Bridge
- 4 Existing Bridge Structure
- 5 Honeywell Bridge
- 6 New Building Frontage along Bridges
- 7 Structural Fill
- 8 Deck Beam
- 9 Deck Column
- 10 Proposed Street on Deck



The Plan emerged from robust engagement efforts in an inclusive, community-driven process.

Creating a plan informed by residents was a core tenet in drafting the vision for the future of the Yard. The community engagement efforts were led by an Urban Planning Team composed of urban planners and designers, structural, rail, and environmental engineers, and community engagement experts working on behalf of the City of New York. These many interactions provided rich qualitative data, and in combination with the technical analysis, informed **a plan that is based on and responds to the needs expressed by local communities and other interested New Yorkers.**

- Over 20 months, the Planning Team hosted:
- **Hundreds of conversations in interviews, workshops, meetings and written comments and feedback incorporated into the Plan**
 - **3** public meetings (ranging from 200+ to 400+ people)
 - **4** community workshops
 - **1** Digital Town Hall
 - Tours and information sessions
 - Group discussions with over **145** local organizations
 - **Quarterly** Steering Committee meetings

- Key themes emerged from stakeholder engagement that guided the focus of the Master Plan:
- Desire for **more open/green space**
 - Improved public transportation, circulation, and **accessibility**
 - More **affordable housing, in particular deeply affordable housing**
 - Community ownership as a tool for **equitable wealth generation**
 - **Jobs** for Western Queens residents
 - **Climate justice**
 - Maintaining the **diversity and character** of the surrounding neighborhoods
 - Concerns were also raised, such as:
 - Overcrowding and demands on aging infrastructure
 - High cost of a major project
 - Displacement

The Sunnyside Yard Master Plan Stakeholder Engagement Process



♦ Steering Committee

The Sunnyside Yard Steering Committee has served as advisors helping to guide a robust public process, representing various constituencies and community stakeholders, and providing the City and Amtrak with feedback on the Master Plan as it emerged. The Steering Committee is comprised of community leaders, elected officials, regional thought leaders, and technical experts. Starting in Summer 2018, the Committee convened seven meetings over the course of the master planning process, supporting the development of guiding principles and providing critical feedback on draft concepts and designs. The Steering Committee members are not the authors of the Plan; their participation does not itself constitute an endorsement of its content.



+ Public Meetings

Public meetings allowed large numbers of stakeholders and the general public to learn about and engage with the master planning process. Each meeting provided an introduction to Sunnyside Yard, a presentation of the most recent milestones in the technical analysis, and opportunities for participants to provide input and feedback.



+ Workshops

A series of interactive community workshops focused on developing in-depth insights on themes that emerged as critical to Western Queens communities. Focus topics selected by popular vote included open space, urban design, transportation, and sustainability.



▼ Stakeholder Interviews and Neighborhood Tours

The Planning Team conducted individual interviews to uncover the priorities and perspectives of a broad range of stakeholders in smaller settings. The process also included learning through walking tours with planners, residents, and people familiar with the Yard.



Small Group Discussions

The Planning Team convened small groups to gain a deeper understanding of specific interest areas in the context of a future Sunnyside Yard. Conversations included residents, advocates, faith-based organizations, businesses, cultural groups, local nonprofits and experts, including advocates for underrepresented stakeholder groups.



Community Events

The Planning Team engaged with residents by sharing information about the Plan at select community events like the Queens Pride Parade, Taste of Sunnyside Festival, NYCHA Family Days, and at various Queens Public Library branches. This provided alternative touch points with groups that have higher barriers to participation in workshops and public meetings.

Informed by the voices of Queens, this planning process identified six pressing needs that were reoccurring themes. The strategies below (not listed in order of importance) respond to each of these needs and form the backbone of the Master Plan.

The Sunnyside Yard Master Plan calls for delivering:



Need:
**Open Space
and Social Infrastructure**

Envisions 60 acres of parks and open space, including active recreation, in an area where this is severely lacking. Public social infrastructure like libraries, schools and educational institutions, health care facilities, and other publicly accessible services activate these spaces and serve the neighborhoods around the Yard.



Need:
Transportation

Reshapes transportation in Western Queens and the region with a roadmap to a dramatically better transportation network and a set of transformative investments including a new regional transit hub as well as planning for an eventual new Queens subway line.



Need:
Affordable Housing

Calls for 12,000 new affordable homes – over three times Hunter’s Point South and Woodside’s Big Six Towers combined – for very low-income families as well as homeownership opportunities, situated in a livable community that reflects the working- and middle-class character of Queens.



Need:
Jobs and Education

Features a research and education institution in first phases to grow the 21st century green economy and build on nearby institutions like LaGuardia Community College and Cornell Tech.



Need:
Sustainability and Resilience

Positioned as a center of sustainable and resilient growth that embraces innovative green building technologies toward a baseline goal of carbon neutrality, while providing community resources and affordable housing on new land away from future flood zones.



Need:
Keeping it Queens

Proposes a scale of buildings that reflects the existing character of Western Queens, and envisions high-quality, human-scale public spaces that feel like an extension of the surrounding neighborhoods.

Urban Design Vision

This Master Plan envisions Sunnyside Yard as a human-centric neighborhood with a robust mix of uses embodying the vibrancy of Queens. This vision embraces the density and variety that make urban neighborhoods walkable, lively, and environmentally sustainable.

Modeled after the dynamic neighborhoods that make up New York City, the streets and public spaces of Sunnyside Yard are designed for people. This means shorter, more walkable blocks, streets that prioritize pedestrians and cyclists, and access to 80 percent of one’s daily needs within a 20-minute walk.

The Plan looks to the fabric of surrounding neighborhoods to set a framework for building height and density. The predominant scale is mid-rise, in line with much of Western Queens; high-rise blocks are located to minimize negative effects on transportation and open spaces.

Finally, the urban design vision reflects the feedback of residents by making public open space a leading priority. Over 40 percent of the Plan is given over to neighborhood parks and greenways, interspersed throughout the Yard, that provide places to relax, gather, and play.



Weaving together the quilt of Queens



Sunnyside Yard Master Plan by the Numbers:¹

- **140 acres across the full Plan, including 115 acres** of new public land created by decking
- **60 acres** of new public open space - **over 40 percent** of the Plan
- **12,000** affordable homes
 - **6,000** affordable to very low-income families (3,000 affordable at extremely low incomes)
 - **6,000** affordable homeownership units affordable at moderate incomes
- **Up to 7,000** potential new permanent jobs
- **30,000** construction industry jobs
- **10-12** new schools, **2-3** new libraries, **30+** new child/health care centers
- **1** new regional rail station served by LIRR and Metro-North and in the future, potential Amtrak service and trains from New Jersey
- **1** new subway station on future new subway line
- **1** new bus rapid transit (BRT) line

Development Program

USES	SIZE	UNIT
Housing	10M - 12M	SF ²
	11,300 - 13,600	Homes
Office	1.5M - 1.7M	SF
Commercial/Industrial	1.2M - 1.4M	SF
Retail	0.9M - 1.1M	SF
Institutional	1.1M - 1.3M	SF
K-12 Schools	1.0M - 1.2M	SF
Child Care Centers	150K - 300K	SF
Health Care Facilities	300K - 450K	SF
Sunnyside Station	50K - 70K	SF
Totals	16.2M - 19.5M	SF
Open Space	59.8	Acres

¹All figures are estimates ²SF = Square Feet. Square Footages are given in gross square feet.

Open Space & Social Infrastructure

What We Heard: A Need for Public Open Space and Social Infrastructure

Throughout the engagement process, participants universally voiced the need to plan for essential public goods.

Participants spoke about:

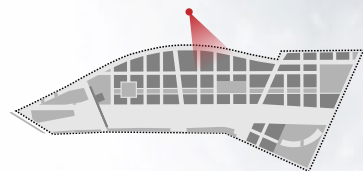
- The importance of planning ahead for **public infrastructure in advance of development**
- Enhancing quality of life through **parks, community facilities, public services, and cultural spaces**
- The desire for **abundant parks and green space**, distributed in a way that **connects** both ends of the Yard and adjacent neighborhoods
- **A variety of types of open space**, ranging from natural landscapes to sports fields
- **Equitable access** to new open space
- The importance of establishing **new community spaces, especially for supportive services, and cultural and educational opportunities for Western Queens residents**
- An **increase in quality K-12 public schools** to reduce overcrowding and support healthy learning environments

What the Plan does:

- Lowers the height of the deck from previous estimates and develops a street grid that **connects seamlessly to existing neighborhoods**
- Proposes **60 acres of parks and open space**, including several large parks immediately adjacent to Sunnyside, Woodside, and Downtown Long Island City (Court Square and Queens Plaza)
- Envisions **a network of social infrastructure** that prioritizes public services like libraries, schools, and health care facilities
- Uses open space and social infrastructure to draw in surrounding neighborhoods and reinforce that **Sunnyside Yard is a public place that belongs to everyone**

View from 36th St Station Access Point

- Existing Building
- Northern Boulevard Improvements
- Active Use/Retail
- Flexible Open Space
- Social Stairs (Access Point)
- Northern Corridor
- 36 Street Subway Entrance
- ADA accessible elevator



Lower deck heights allow for better connections

There are several precedents in New York City's history that have created land and connected neighborhoods by building over rail yards and rail tracks, including the East Side of Manhattan north of Grand Central Terminal. The streetscape and public spaces of Sunnyside Yard will be designed to feel like an extension of the city around it, not an island unto itself. However, **the variation in grade of the Yard relative to surrounding streets and blocks posed a significant engineering challenge to creating this kind of continuous urban surface.**

The Master Plan solves this challenge. The decking strategy, developed in collaboration with Amtrak and MTA engineers, permits under-deck clearances to be lower than previous concepts, **reducing differences in elevation between the deck and surrounding neighborhoods.** The lower deck heights would enable smooth transitions with the bridges that cross the Yard, allowing for easy pedestrian and vehicular access into and through the decked surface.

Other strategies for knitting the Yard into adjacent neighborhoods include using new open spaces to create smooth, gradual transitions to the deck and creating access points along the north side of the Yard that incorporate ADA-accessible pedestrian connections, social spaces, and amenities. The drawing at right shows how the elevations of the deck allow for connections relative to the surrounding grades.

Planning a Public Future for Sunnyside Yard

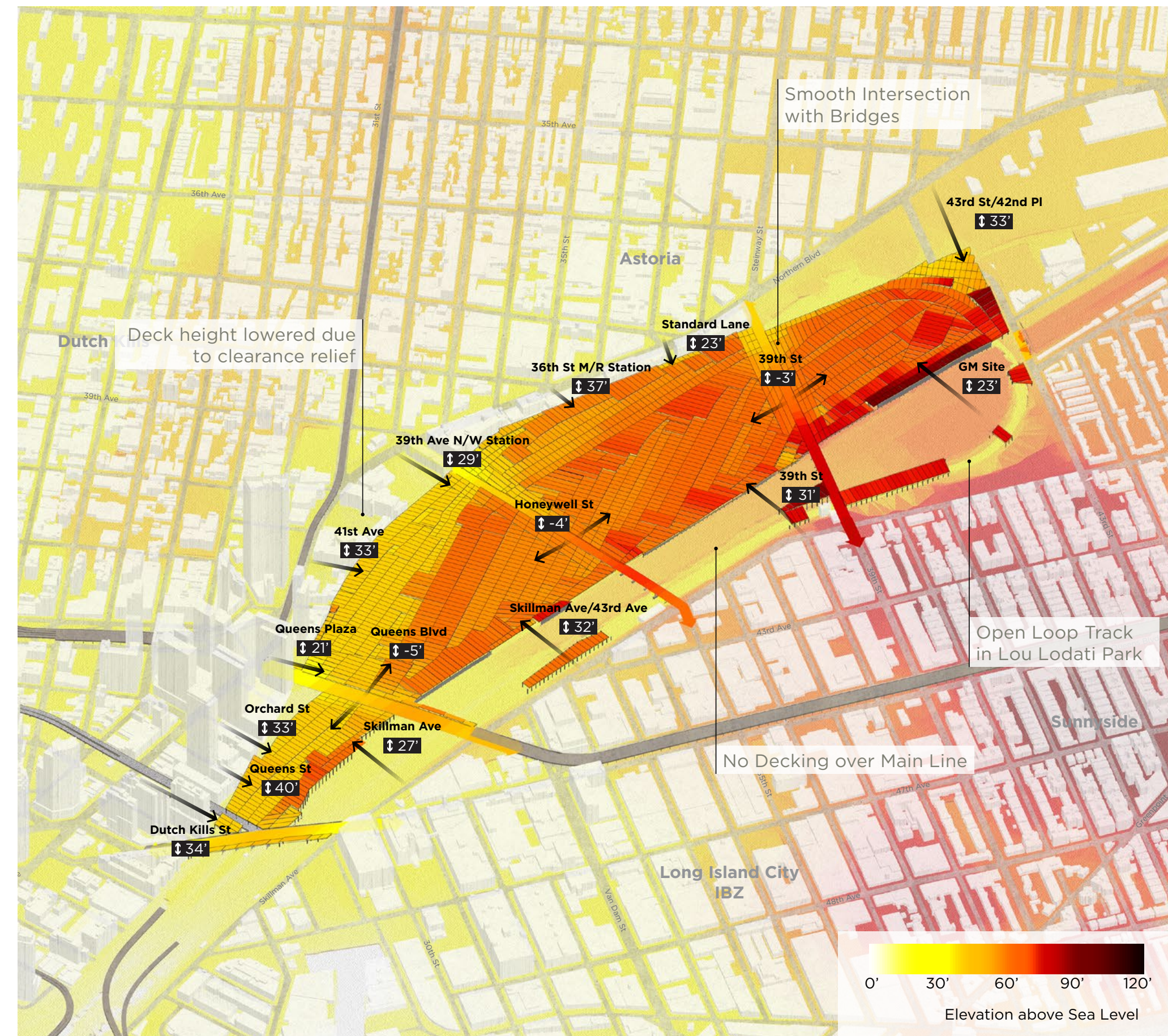


Diagram illustrating Deck Heights Established during the Master Plan

View of Proposed Northern Corridor

- 1 Active Use on Ground Floor
- 2 Two-Way Bike Lane
- 3 Pedestrian Crossing
- 4 Space Adaptation to New Grade
- 5 ADA Accessible Elevator
- 6 Public Stairs to Northern Corridor
- 7 Existing Building
- 8 Buildings under Construction



A robust street grid with small blocks

The proposed Sunnyside Yard street grid works hand-in-hand with the deck to seamlessly connect the new urban surface with surrounding neighborhoods. Two wide east-west streets, or “corridors,” on the north and south sides of the Yard would connect the existing bridges and ensure that access points are located flexibly and appropriately with respect to neighborhoods.

In between the bridges and the two corridors, **the Master Plan proposes a flexible network of inner streets that prioritize pedestrians and cyclists.** As Jane Jacobs observed, **small city blocks tend to improve walkability**; they provide a quicker rhythm as people walk through and allow for more possible routes. Smaller blocks also offer greater flexibility for evolving uses like open spaces of different sizes.

These advantages are reflected in the 240x240-foot blocks proposed for Sunnyside Yard, which offers a balanced ratio of streets to buildings. The dense network of 60-foot wide interior streets – a familiar street width found throughout New York City – promotes a vibrant street life experience. The drawing at right shows how the two corridors and the grid of interior streets relate to the existing bridges and the surrounding street grids that are a legacy of Queens’ history as a collection of villages and planned communities.

Planning a Public Future for Sunnyside Yard

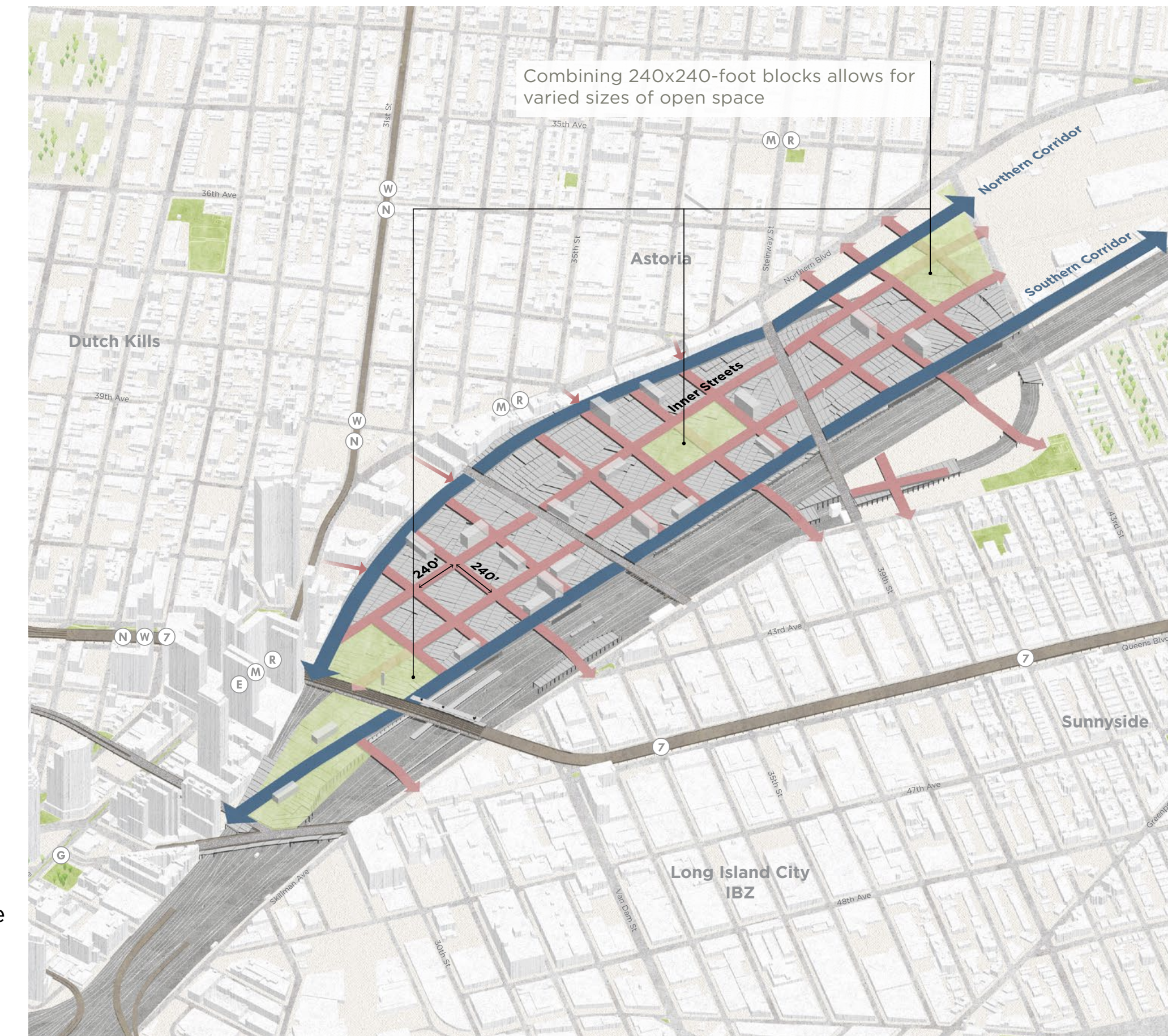


Diagram illustrating Street Grid

View from Proposed East Park

- 1 Pathways
- 2 Baseball Field
- 3 Slope Up to Deck with Bleachers
- 4 Skate Park
- 5 Climbing Walls



Public open space as a connected urban network

Many areas of Western Queens are not within walking distance to public parks, and therefore it is not surprising that **parks consistently ranked as one of the most important priorities for the surrounding communities.** In response, the Master Plan adds approximately 60 acres of open space throughout the Yard.

The central Greenway and Skillman Avenue Linear Park will form the east-west “spine” of the Yard, connecting the major parks and establishing a network of open space shared by communities in and around the Yard.

The drawing at right shows this new network relates to existing parks and neighborhoods.

Several large parks, mostly placed at the edge of the Yard, put new open space close to existing communities and create attractive, easy access to the decked area. This design creates destinations for surrounding communities, which today have little access to this type of park. Similar in size to Queensbridge Park, they are spatially flexible with the capacity to accommodate a wide range of programming, including sports facilities and other forms of active recreation.



Diagram illustrating Open Space and Park Network

View of Gateway Plaza & Sunnyside Station

- 1 Entry to the Greenway
- 2 Education and Research Hub
- 3 Urban Public Plaza
- 4 Sunnyside Station
- 5 Northern Corridor
- 6 Sunnyside Station Concourse
- 7 Queens Boulevard



A civic spine with social infrastructure

Social infrastructure, or the essential services like schools, health clinics, libraries, and other community facilities that build strong communities, will serve both the Yard and existing neighborhoods.

In response to the needs of existing neighborhoods, and factoring in proposed new housing, commercial, institutional, and community space, the Master Plan includes at least 10 Schools, two libraries, over thirty childcare centers, and five health care facilities.

Social infrastructure is organized around the central Greenway, activating the heart of the Yard and making it a useful daily destination for Western Queens while knitting it into the surrounding communities. The drawing to the right shows how these new public services relate to and activate the open spaces within the Master Plan.

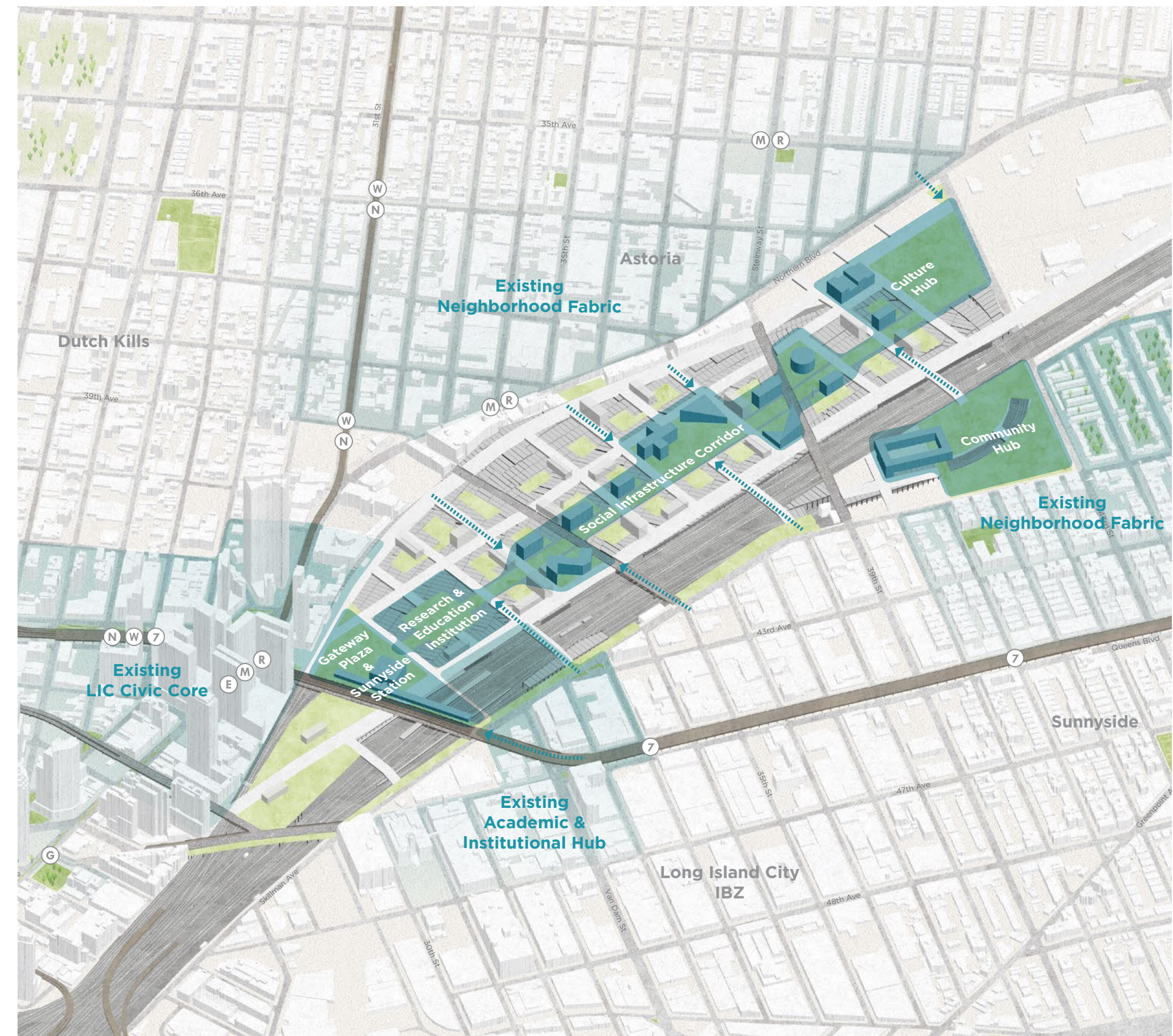


Diagram illustrating Social Infrastructure Network

Transportation

What We Heard: A Need for Improved Transportation

A common refrain from nearly every interaction was **the need to address immediate transportation concerns while outlining a smart approach for the future.**

Participants spoke about:

- **Improving aging and congested transportation infrastructure**, particularly the most heavily utilized subway lines
- **The challenge of traveling within the borough of Queens**
- **New subway and bus options**, in addition to MTA improvement plans already in progress
- A **potential transit hub at Sunnyside Yard**, allowing for more convenient regional and inter-borough travel
- **Connections to major airports** from Western Queens

What the Plan does:

- Integrates **Sunnyside Station, a new regional rail hub**, as the first element of the Plan to be built
- Lays forth a street network **prioritizing safe walking and biking and high-quality public space**
- Catalyzes additional transit capacity for Queens with **a new Bus Rapid Transit (BRT) line** and eventual station on **a new subway line through the Yard (to be examined as part of a comprehensive analysis of potential subway alignments)**

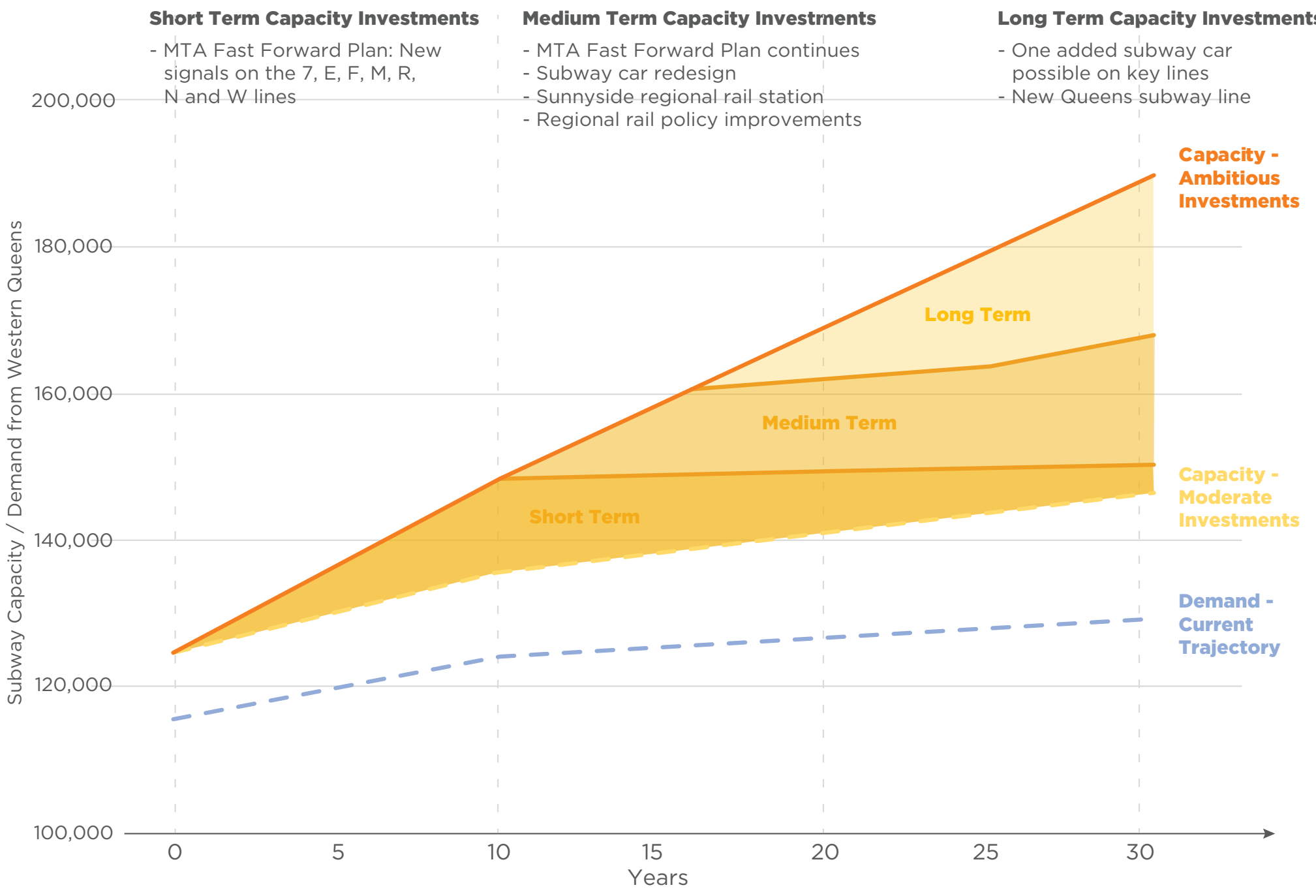


Diagram illustrating New York City's rail improvements around Western Queens over time.

Transportation Interventions Timeline

The proposed framework for transportation improvements was informed by public input, interagency collaboration, and transportation network modeling. **The Master Plan's transportation strategy is designed to be implemented over multiple decades to address current challenges and adapt to future needs.**

Short-term improvements focused on the next five years consist of existing commitments by the City and MTA that promise to transform bus and subway service, and the implementation of congestion pricing, which will generate revenue for those investments and promises to improve traffic in Western Queens. Medium-term improvements are focused five to 20 years in the future and include subway station improvements, car redesigns, and the continued implementation of modern train signaling and the MTA's Fast Forward plan, as well as **building Sunnyside Station**. The City is committing to help fund the station in order to advance this key element. Long-term improvements, like a new subway line, will likely take multiple decades to be realized. They address longer-term transit system opportunities at the borough and city level.

A Better Transportation System for Queens

The Master Plan shows that MTA and City investments in existing transportation infrastructure can substantially accommodate the transit needs of Western Queens in the coming decades. **Upgrading existing subway, bus, and regional rail networks in and around the Yard can unlock the transportation options necessary to support growth in Queens and the city more broadly.** Strategic decisions around land use and transportation infrastructure on the Yard itself will support a more mobile future for Western Queens.

In the coming years, the Fast Forward plan, Queens bus network redesign, bike network improvements, and the introduction of LIRR East Side Access will improve mobility and quality of life for residents and workers. In the medium and long term, **a new Sunnyside Station served initially by LIRR and eventually by other regional railroads and Amtrak could shift trips away from cars and better connect Western Queens to the region and Northeast.** Mobility could be further enhanced with fare payment integration and reduced fares for LIRR and Metro-North trips within the Five Boroughs. **A potential new subway line could both directly serve Sunnyside Yard and divert riders from other nearby lines.** The drawings to the right show existing and potential new transit options serving Western Queens and models results that demonstrate a possible future with less subway crowding.

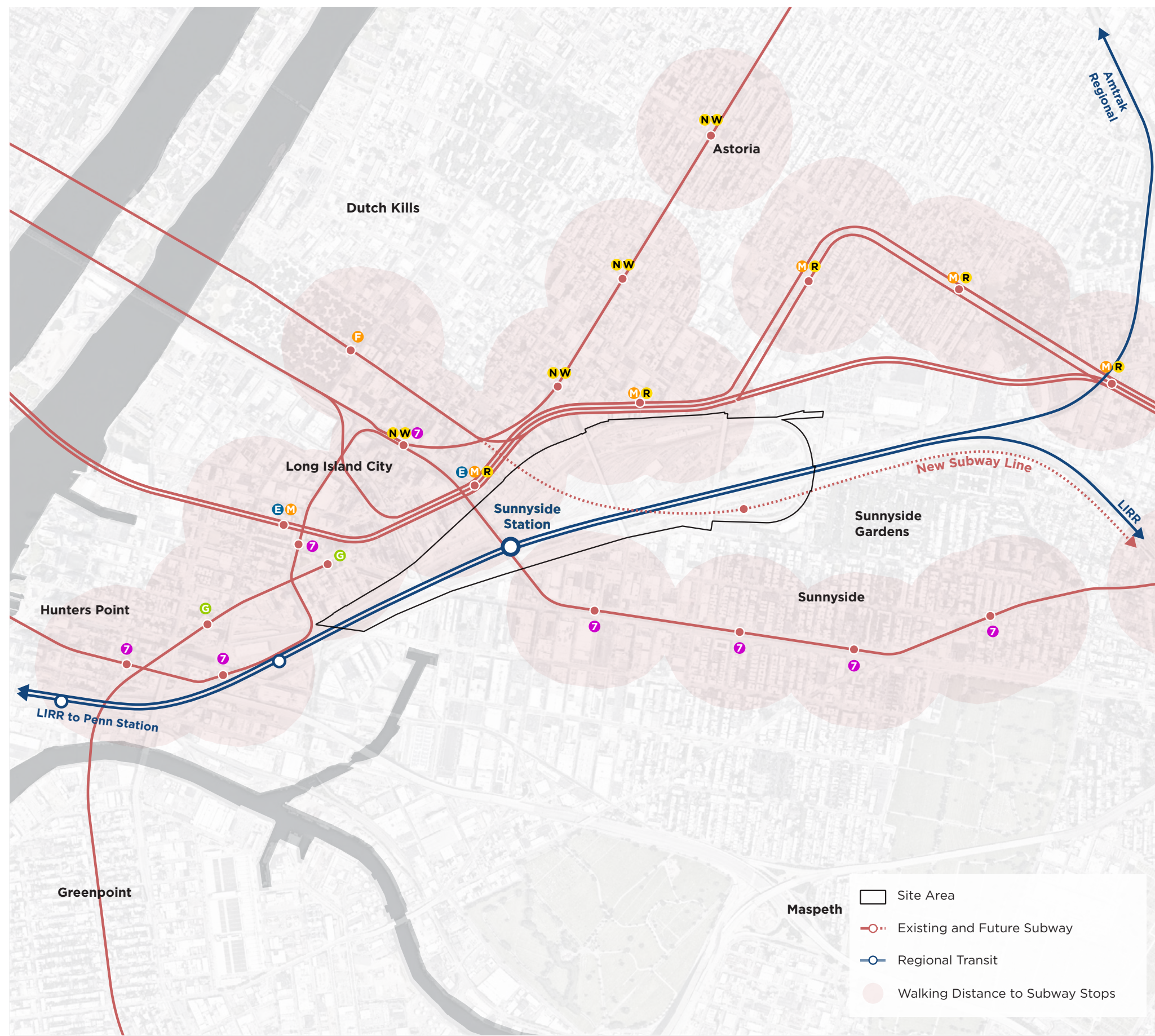


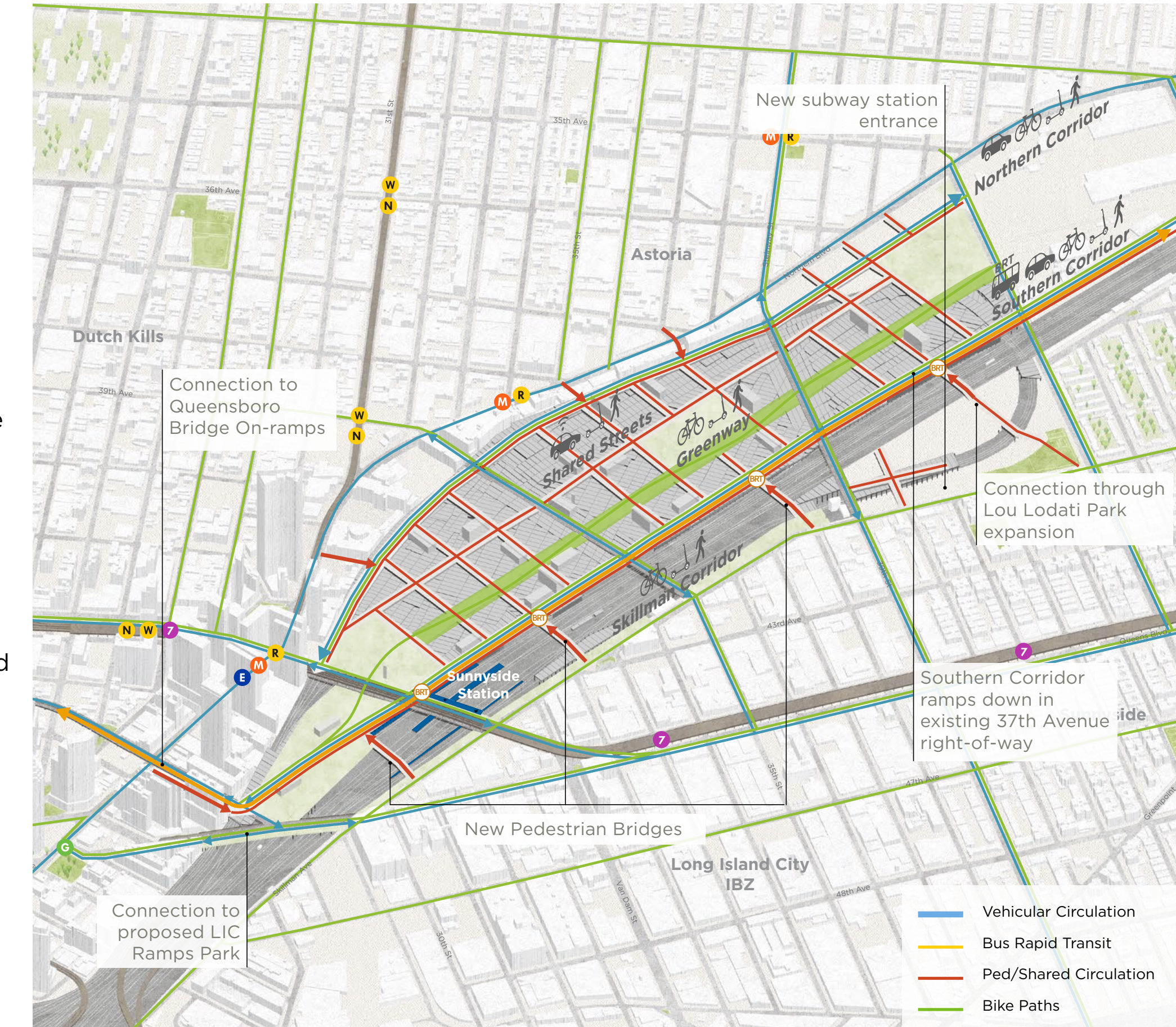
Diagram illustrating Connections to Broader Current and Planned Transportation Network



People-first streets, a Transit-first community

The Master Plan features a **street network that accommodates a variety of transportation modes**. Two new arterial streets intersect with the bridges and bind a network of smaller interior streets. This “Northern Corridor” and “Southern Corridor” are designed with features like wide sidewalks and separated bus and bike lanes, in addition to lanes for cars and trucks. The interior streets are arranged in small blocks to **emphasize human scale and increase pedestrian route choices**. The wide Greenway through the center of the Yard provides east-west connectivity.

Along with walking and biking, Sunnyside Yard will support the use of “micro-mobility” such as scooters and e-bikes to provide a range of convenient transportation options reducing the need for auto trips. Bus Rapid Transit (BRT) service between Sunnyside Yard and Midtown can make buses service more convenient and appealing, thereby offering drivers a new option. These strategies **will create a network of people-first streets and encourage a transit-first community**.



Affordable Housing

What We Heard: A Need for Affordable Housing

The vast majority of participants articulated a demand for new models of affordable housing and the need for an integrated and intergenerational neighborhood, where residents of all incomes can live affordably and create community side-by-side.

Participants spoke about:

- Deep concern over low-income and working-class New Yorkers being pushed out of Western Queens
- Making robust affordability and anti-displacement strategies a central part of the overall approach
- Generating as much housing as possible to meet growing demand – with the important caveat that housing be affordable based on household incomes representative of Western Queens
- The need for affordable homeownership opportunities and right-sized family housing
- Exploring models of public and community ownership
- Intergenerational and senior housing

What the Plan does:

- Calls for all future housing at Sunnyside Yard – approximately 12,000 homes – to be 100 percent affordable
- Proposes 6,000 homes affordable to very low-income New Yorkers, half of which would be affordable to extremely low-income families
- Proposes 6,000 affordable homeownership units – a 21st century renewal of the Mitchell-Lama Housing Program to provide wealth-building opportunities for families
- Envisions complete, integrated communities with access to housing for different incomes, racial and ethnic backgrounds, generations, lifestyles, and abilities
- Gives priority to M/W/DBE and community-oriented developers, in particular nonprofits
- Prioritizes alternative land ownership models such as Community Land Trusts as a way to ensure long-term affordability and stewardship



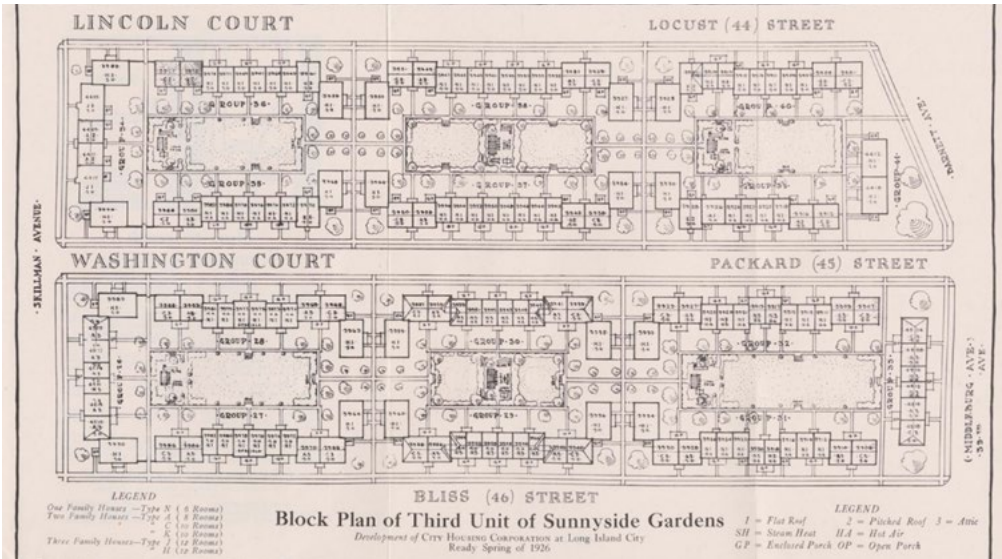
Forest Hills Gardens
1917

This enclave of Tudor-style houses and apartment buildings sits on 142 acres and was one of the first master-planned neighborhoods in the United States.



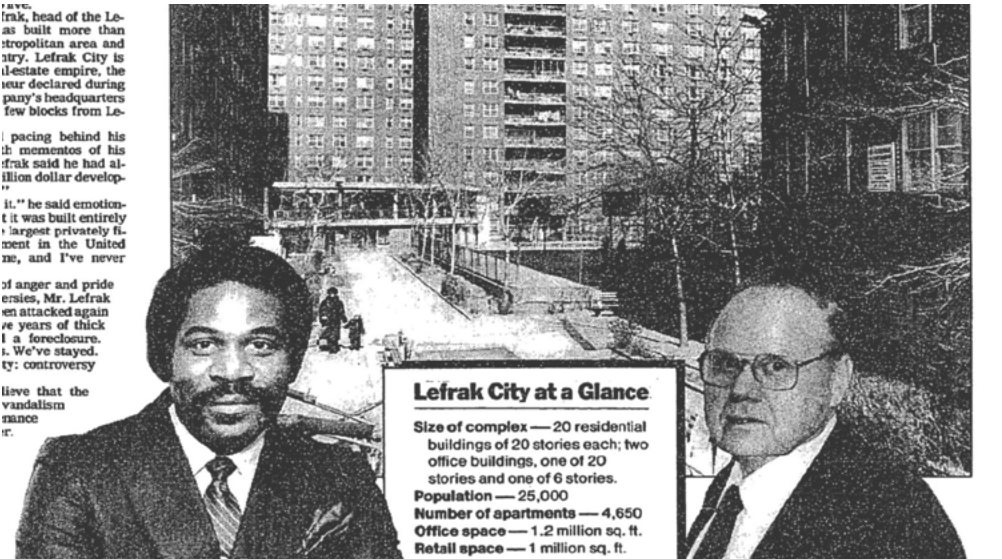
Rochdale Village
1963

This Mitchell-Lama co-op complex in Jamaica has almost 6,000 homes along with schools, a community center, and shops. It is the largest owner-occupied, Black-majority housing complex in the world.



Sunnyside Gardens
1924

Sunnyside Gardens aimed to set a new standard for high-quality urban housing. It is famous for its private, communal green spaces and footpaths.



LeFrak City
1971

LeFrak City is a 40-acre complex of rental housing and offices with its own public library, post office, and sports facilities. A recent renovation installed solar panels on the roofs of 20 apartment towers.



Queensbridge Houses
1940

Queensbridge Houses is the largest public housing complex in the nation and was created through the Federal Housing Act of 1937. It replaced an industrial area on the East River waterfront.



Hunter's Point South
2013 – Present

Queens' latest master-planned community includes approximately 5,000 homes, more than half of which will be affordable. It also features a signature waterfront park, a new elementary school, and a state-of-the-art library.

A New Generation of Affordable Housing

Driving Factors for Housing in Sunnyside Yard

In line with the City's mission to promote strong, diverse, and affordable neighborhoods, **the Master Plan calls for building 100 percent affordable housing at an almost unprecedented scale – 6,000 homes for very low-income New Yorkers and another 6,000 homes through a renewed Mitchell-Lama Program for moderate-income homeownership.** Building an affordable community at this scale harkens back to the most ambitious housing developments of the mid-20th century, such as Stuyvesant Town / Peter Cooper Village in Manhattan and Co-op City in the Bronx. It must be noted, however, that many of these projects were explicitly racially exclusionary when they opened and held practices that must never be repeated. The Master Plan incorporates the lessons learned from past injustices in order to create an intentionally diverse and integrated community. This includes **space for many different housing types that serve the highly diverse communities of New York City of today and future generations.**

In order to address one of the city's most pressing needs, affordable housing at the Yard will be deeply affordable. The **Master Plan proposes creating approximately 6,000 rental units affordable to very low-income families**, currently defined by the federal

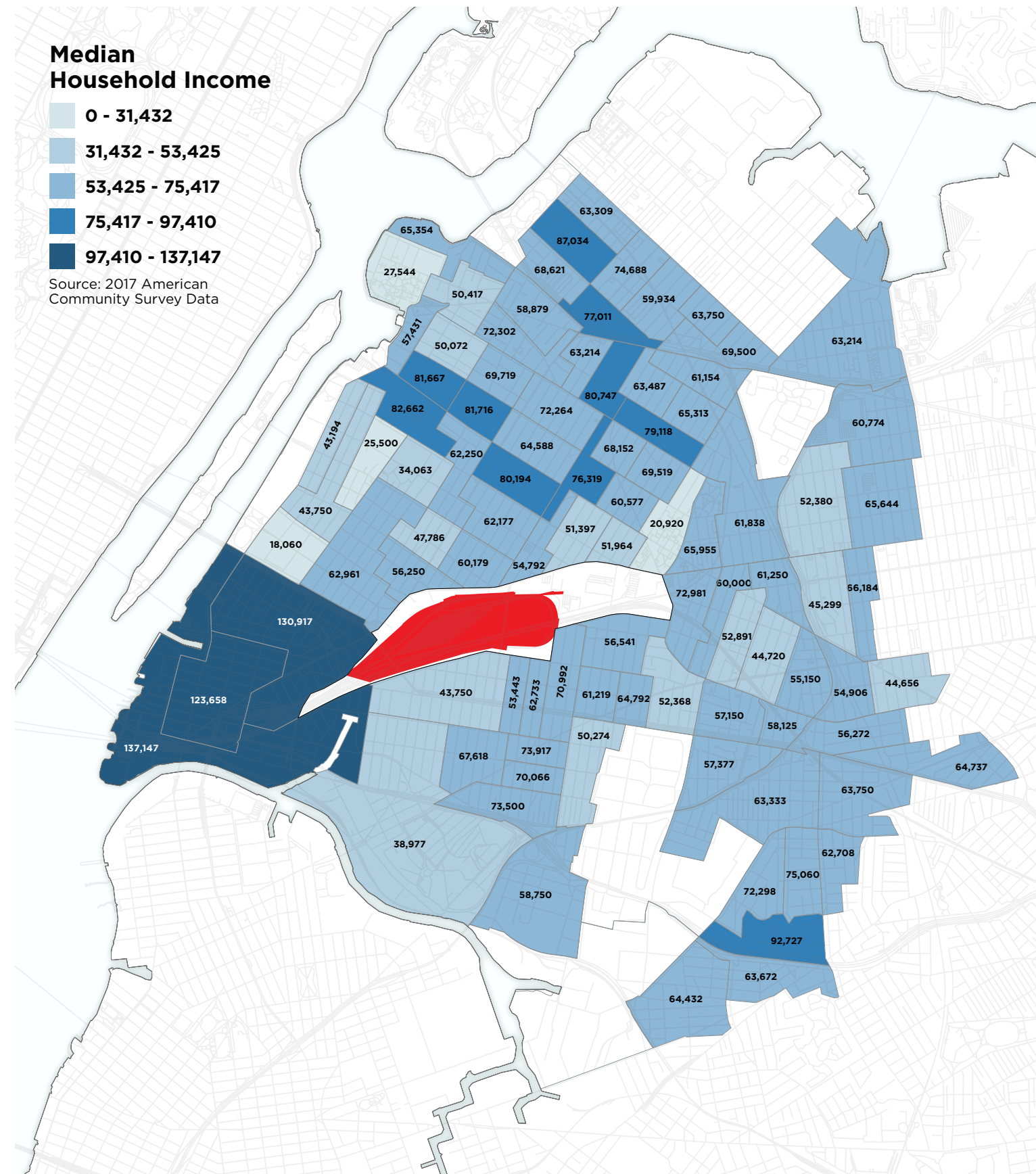
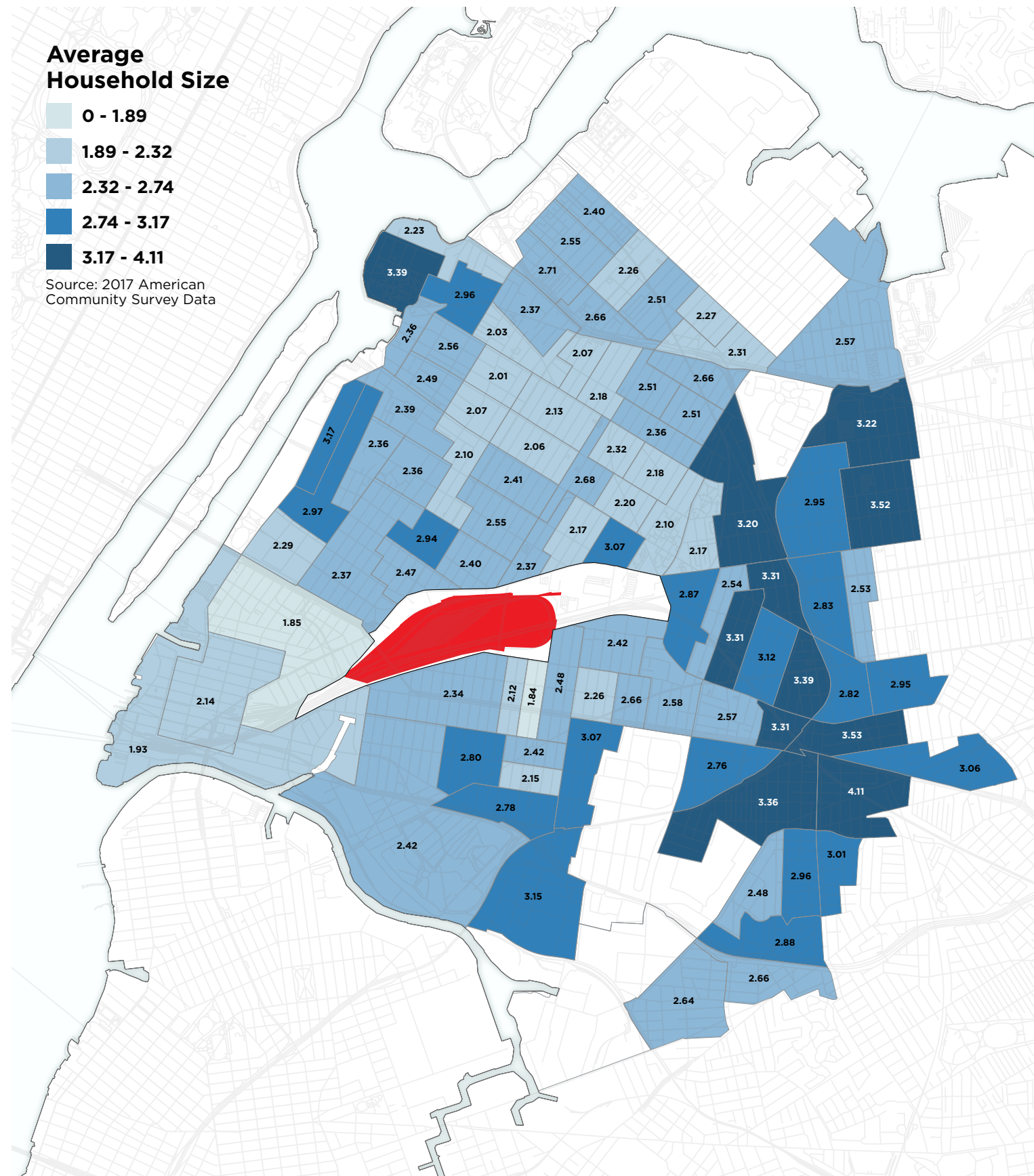
government as earning below 50 percent of Area Median Income (AMI) for the Greater New York City region (approximately \$48,000 per year for a family of three in 2019). **Of these 6,000 homes, half will be restricted to extremely low-income families** earning below 30 percent of AMI (about \$29,000 per year for a family of three in 2019). Housing is generally considered “affordable” if it costs 30 percent or less of a household's annual earnings, and households are said to be “rent-burdened” if their housing costs exceed this threshold. For additional assurance, all rental units will be brought into rent stabilization to ensure long-term affordability.

The remaining 6,000 homes at Sunnyside Yard will be affordable homeownership units, facilitated through a new 21st century version of the Mitchell-Lama Housing Program. For decades, Mitchell-Lama has created opportunity for thousands of New Yorkers, including developments like Rochdale Village in Jamaica and Woodside's Big Six Towers. These homes will provide accessible wealth-building opportunities for new generations of Queens residents. **The homeownership units at the Yard will be affordable**, on average, for households earning 100 percent of AMI, which falls within the income band currently defined as “moderate-income.”

Diagram illustrating Proposed Housing Zones on the Deck

In contrast to 20th century large-scale affordable housing efforts that concentrated housing of one income level in isolated settings, **Sunnyside Yard will be an economically and racially integrated community modeled after the historic diversity and values of Queens.** Homes for low-income families and homeownership units serving moderate-income families should be mixed to promote a sense of inclusion and shared community among New Yorkers with different incomes.

The size of the Master Plan allows for a wide range of different housing types to suit different needs. The Master Plan envisions intergenerational housing for raising a family, senior housing for aging in place, and homes for individuals and families experiencing homelessness or who are in transition. For a sense of scale, if 10 percent of rental units at Sunnyside Yard were reserved for such supportive and/or transitional housing, that would generate approximately 600 homes for New Yorkers experiencing homelessness.



Current Housing Market in Western Queens

The Master Plan's affordable housing strategy consider the character and needs of the surrounding neighborhoods as well as the city at large. The following is a brief snapshot of Western Queens demographics and housing characteristics today.

Household Size

There are on average 2.5 people per household in the area, slightly lower than the city average of 2.7.

Neighborhoods to the west of the Yard have somewhat larger average household sizes than the neighborhoods to the north and east.

Household Income

Median household income for Western Queens is around \$64,000, higher than the city median of \$58,000. Looking closer, median income varies greatly in the neighborhoods surrounding the Yard: As high as \$137,000 in parts of Long Island City, and close to \$20,000 in other locations. Areas to the north and east of the Yard tend to align more closely with the citywide median.

Looking at income distribution in Western Queens, almost 60 percent of residents fall into the extremely-low, very-low, and low-income categories, in line with the city overall.

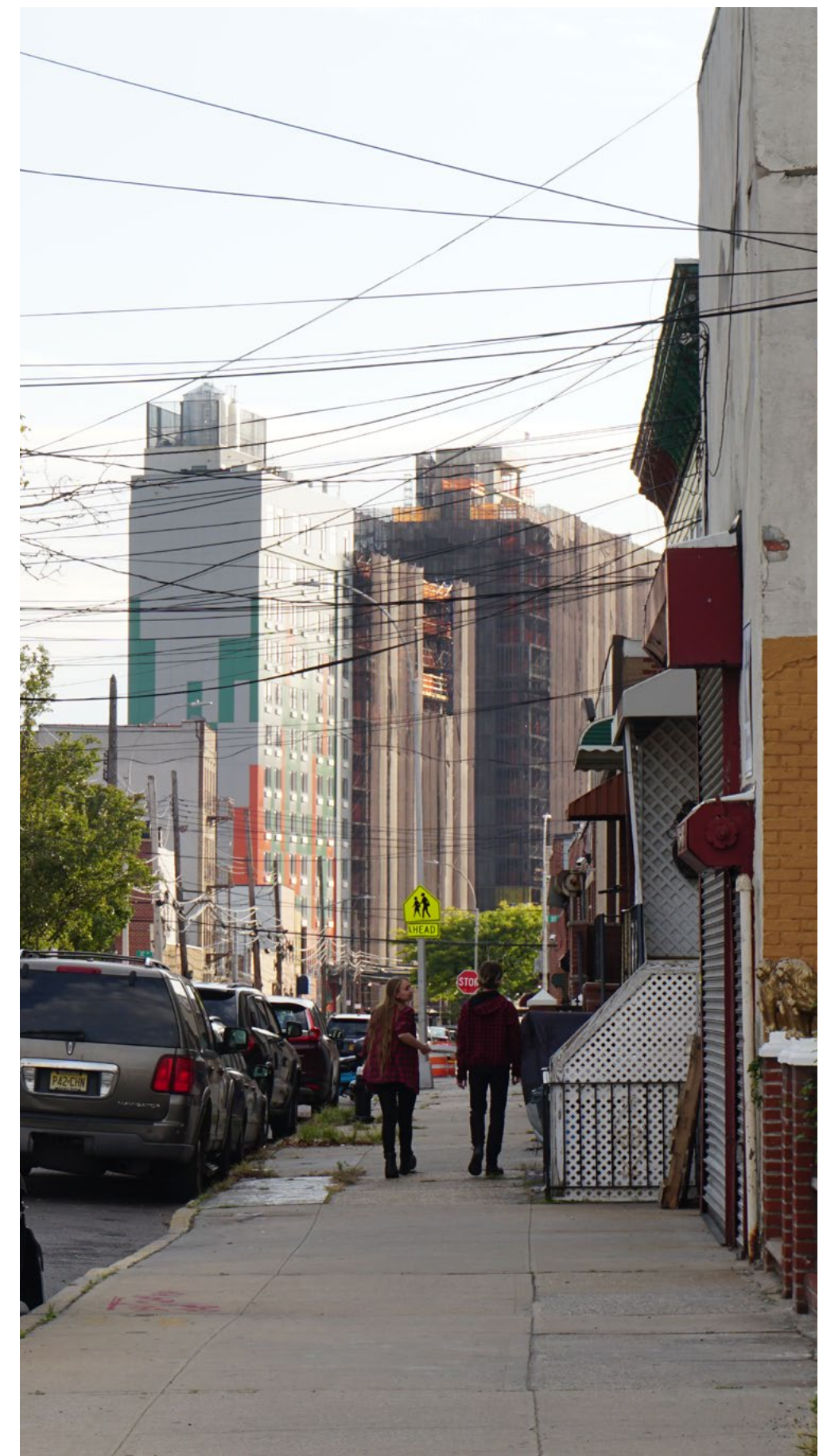
Around 30 percent of households are in the middle- to moderate-income bands, a higher proportion than the City. These percentages are roughly in line with Queens as a whole.

Age

Western Queens has a higher proportion of households with young and middle-aged adults than the city overall, and lower proportions of households with children or adults over 65.

Housing Vacancy & Tenure

Housing in Western Queens is about three-quarters rental units and one-quarter owner-occupied, a higher percentage of rentals than across New York City. **At 2.6 percent, vacancy among rental units is even lower than citywide, pointing to an urgent need for more housing at a range of income levels.**





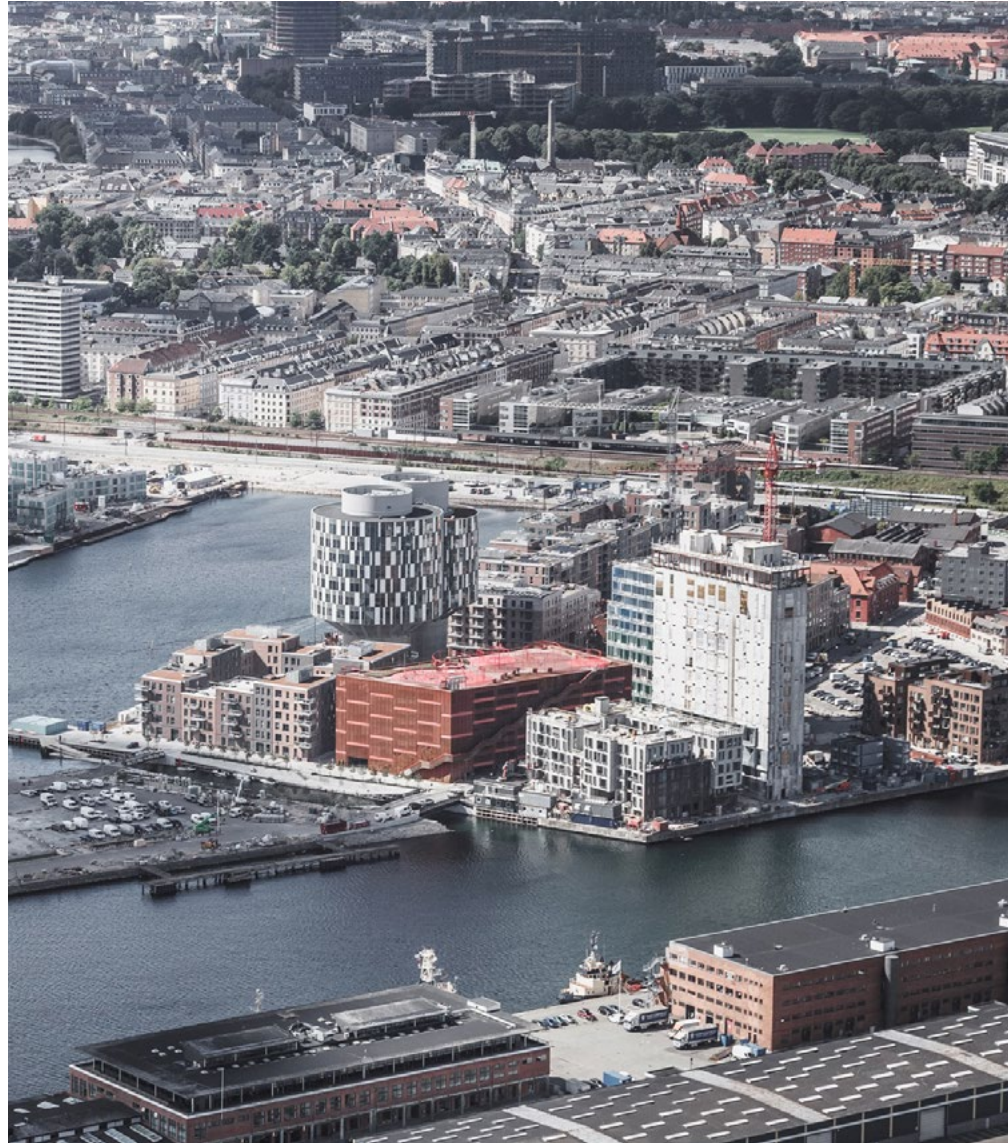
Dockside Green Vancouver, British Columbia

- Innovation Economy Hub
- Sustainable Buildings and Open Space



Hafencity Hamburg, Germany

- High Density with Mid-Scale Development
- Mix of Housing, Commercial and Community Uses
- Major Cultural Institution
- Public Transit Connection



Nordhaven Copenhagen, Denmark

- High Density with Mid-Scale Development
- High-Quality Public Transport Route
- Variety Of Urban Spaces

Affordable Housing Characteristics

Given its nearly unprecedented scale, combined with its unique position as new public land not already home to an existing community but still adjacent to vibrant neighborhoods, **the Sunnyside Yard Master Plan presents an opportunity to adopt the most successful elements of past planned neighborhoods and establish new equitable models for housing in the 21st century.**

Across all of these factors, **the Master Plan’s approach to housing is dedicated to equitable and inclusive planning.** Affordable housing policy is not just a question of the provision of units; it also requires vigilance to ensure equal access to new affordable homes.

Throughout the community engagement process, participants frequently brought up public ownership models. The Master Plan recommends exploring and, where feasible, prioritizing different models of community ownership. **Community Land Trust (CLT) is defined as a diverse constellation of nonprofit entities that own land and hold it in trust for the benefit of the surrounding community.** The City, with or without a formal land trust, can leverage the public ownership of the newly created land through ground leases to retain long-term public control of the development. The proposed volume of affordable housing, and the decades it will take to build, will necessitate multiple

funding sources as well as well-capitalized development and management entities to oversee construction and maintenance.

The Master Plan also calls for equitable contracting and building practices. Public investment in affordable housing on the scale contemplated by the Master Plan has the potential to level the opportunity gap for development firms owned by women and minority groups, who have traditionally been disadvantaged and underrepresented in the field. Affordable housing built at Sunnyside Yard should give priority to developers that qualify as Minority, Women, and Disadvantaged Business Enterprises (M/W/DBE). In addition, nonprofit and community-oriented developers who focus on building affordable and supportive housing should receive priority

Spatial & Density Considerations

The allocation of housing types responds to the built character of adjacent neighborhoods and transit capacity. High-rise residential developments on the north side of the Yard relate to the existing high-rise building context of Downtown Long Island City. This higher-density portion of the Yard is directly served by the M and R subway lines along Northern Boulevard, which has unutilized rush-hour capacity. Mid-rise

residential areas, which make up most of the Plan, line the central Greenway and give the Yard a familiar scale that characterizes much of Western Queens. Low-rise residential areas would be adjacent to the existing Sunnyside Gardens community.

While the Master Plan must be flexible and responsive to account for changing needs, the **recommended locations for housing are also based on considerations for maximum access to sunlight.** The locations allow abundant sunlight penetration from the south, ensuring open spaces on the Yard receive sunlight. High-density areas are buffered from the low- and mid-rise Dutch Kills neighborhood by two wide streets (existing Northern Boulevard and the new Northern Corridor), minimizing shadows cast to the north.

The Plan seeks to achieve a balance between providing enough affordable homes to keep Western Queens affordable while also creating a human-scale place. The non-high-rise areas of the Yard will contribute a significant number of homes through a high-density, mid-rise typology. **The scale of blocks and the number of development sites will also allow for a diverse range of entities to build on the Yard,** offering a broader range housing types and affordability options as well as architectural variety.

Jobs & Education

What We Heard: A Need for Jobs, Schools, and Workforce Development

Most participants imagined a compelling role for Sunnyside Yard in **strengthening the economic future of Western Queens and the upward mobility of its residents.**

Participants spoke about:

- **More institutions of higher learning**, including expansions of existing colleges and universities such as LaGuardia Community College
- Locating sector clusters at Sunnyside Yard, making it **an employment destination as well as an educational destination**
- In anticipation of the automation in the future, **establishing seamless job training-to-employment pipelines** in advanced manufacturing, technology, and other emerging sectors
- Making room for **light manufacturing and maker spaces as well as incubators**
- **Preserving and supporting small businesses** and creating main streets that **prioritize independent local business**
- Focusing on **youth education and job training, and connecting to the testing of new sustainable technologies and systems**

What the Plan does:

- Proposes approximately **five million square feet of new space to grow jobs** in Western Queens over the coming decades
- Envisions **a new research and education institution**, which could include a public educational institution and/or research and development center
- Positions the Yard for **innovation in industries** important for the future of the city such as green building technologies
- **Enables over 6,000 new permanent jobs and over 30,000 construction industry jobs**
- Recommends **workforce initiatives and policy measures to help ensure many of these jobs directly benefit the local community**, while strengthening the region’s economy and access to economic opportunity



The JetBlue Building
Office example in LIC



Greendesk
Office example in Astoria



The Falchi Building
Office example in LIC IBZ



Standard Motor Products
Industrial example in Astoria



The Factory, LIC
Industrial example in LIC IBZ



Spaceworks
Office example in LIC IBZ

Growing the Innovation Economy of Western Queens

Western Queens is a prime example of New York City's rapidly diversifying economy, which is shifting away from dependence on the financial industry and opening up new industries outside the Manhattan Central Business District.

Long Island City has always been a commercial corridor of creative industries and is fast becoming a center of the innovation economy, attracting companies in growing sectors like technology, advanced manufacturing, and life sciences. The area's growth as a commercial and job center is **driven in part by its strong regional connections and transit access, proximity to Manhattan, cultural vitality, and walkable, mixed-use character.** From 2010 to 2015, the number of jobs in Long Island City increased at more than twice the rate of New York City overall.

The Master Plan recognizes that a sustainable future entails an economic transformation. The Plan features a new anchor institution dedicated to research and development of clean technologies and industries, and partnerships with trade and schools to provide the resources, training, and high-quality education needed to mobilize a workforce - positioning Sunnyside Yard, and Western Queens, as a focal point of a just transition to a green economy for New York City. The plan itself would also provide large-scale opportunities in sustainable construction, which, paired with robust workforce development initiatives and regulatory frameworks could spur green jobs in all related industries across the city and region.



Diagram illustrating Proposed Commercial Zones in the Master Plan



Innovative Work Space

- Overlapping commercial and light-manufacturing uses
- Flexibly integrated workspace and manufacturing programs



Forward-thinking Jobs

- Mixed industries with various uses
- Innovative manufacturing business
- Potential partnership with anchor institutions
- Institutional space dedicated to research and development to innovate for a green economy
- Large-scale green construction opportunity that will spur new jobs in all related industries



Local Resources

- Connection to LaGuardia Community College and other nearby institutions
- A fertile ground for existing manufacturing industries to grow and experiment
- Robust workforce initiatives, educational pipelines, and social protections to ensure a just transition

Western Queens continues to be one of the city's most productive places for making things, from elevators and donuts to movies and wireless communications systems.

Increasingly, the lines between traditional white-collar and blue-collar work are blurring, with office and light industrial uses mingling within the same buildings and often within the same businesses. **The extensive industrial building stock and strong base of manufacturers in the Long Island City Industrial Business Zone (IBZ) makes for a fertile economic ecosystem.**

Major educational institutions like LaGuardia Community College, CUNY School of Law, and Cornell Tech **provide a ready source of talent, spin-off businesses, and opportunities for New Yorkers to access the jobs of the future.**

Sunnyside Yard's location between Downtown Long Island City and the IBZ areas, proximity to transit and retail, and connections to diverse neighborhoods, make it a logical place for the economy of Western Queens to expand over the course of the 21st century. The Master Plan proposes the following to capitalize on these strengths:

- **Several million square feet of new job-generating office, retail, industrial, and institutional space** over full build-out, much of it along the new Northern Corridor
- **A research and education institution** anchoring the western Civic Commons district of the Yard, focused on innovation and workforce development to power the transition to a sustainable, green economy
- **Green construction technologies applied at a massive scale**, generating jobs and opportunities for labor unions to train workers
- **Flexible “commdustrial” buildings** that integrate commercial and light manufacturing uses and promote innovation through their interaction



Sustainability & Resilience

What We Heard: A Need for Sustainability and Resilience

Throughout the engagement process, “**sustainability in everything**” emerged as a major theme and goal the Plan should strive to achieve.

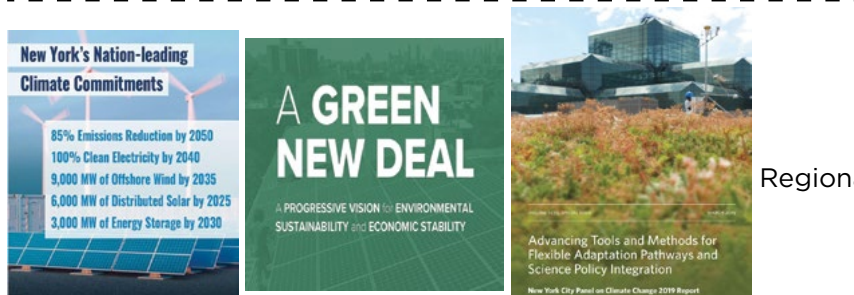
Participants spoke about:

- Sustainability and resiliency in both **social and environmental terms**
- How **a diverse and well-connected resident base with ample social capital is critical for resiliency**
- **Redundancy in infrastructure** in order to prevent overreliance or strain on one area
- That **future buildings at Sunnyside Yard be designed and built as carbon-neutral or carbon-negative** and able to offset other carbon emissions
- The **need to generate clean energy** at the Yard to power Western Queens
- Interest in **testing new technology and systems** for energy, food production, waste management, and more

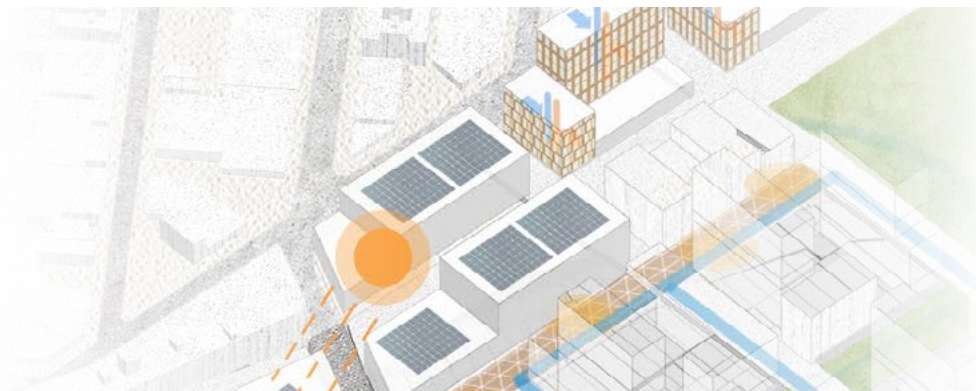
What the Plan does:

- Embraces cutting-edge building technologies such as mass timber that **greatly reduces the carbon footprint of development**
- Equips Western Queens to **adapt to the adverse effects of climate change** by creating resilient and decentralized systems
- **Embraces circular systems for Queens**, establishing a built environment that produces, consumes and reuses the resources it needs.
- Positions Western Queens at the center of **a just transition to a green economy**

Sustainability and Resilience Drivers

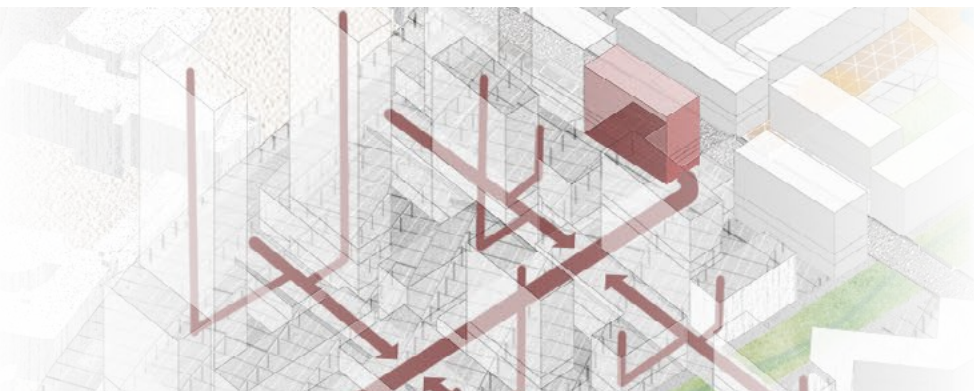


Sustainability & Resilience Principles for Sunnyside Yard



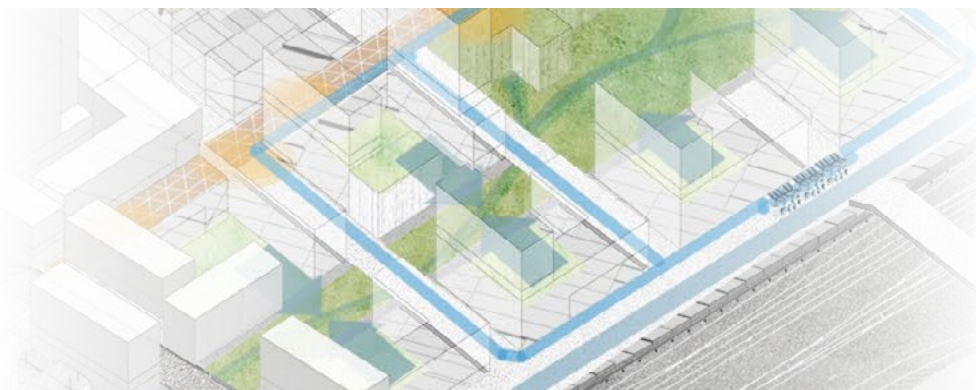
Sunnyside Yard must be a carbon neutral neighborhood

- Cross-laminated timber to minimize embodied carbon and be a carbon sink
- Passive and highly efficient buildings without combustion-based systems
- On-site renewables and energy storage to support New York's renewable energy future



Sunnyside Yard embraces circularity in urban systems

- Rainwater capture and harvesting for uses on site and in buildings
- Minimizing food waste and creating a resilient food system with urban agriculture
- Enabling circular supply chains for construction and manufacturing materials



Sunnyside Yard can help Western Queens adapt to the extreme effects of climate change

- New land safe from future floodplains that houses social infrastructure & affordable housing
- Buildings designed to withstand climate-intensified weather
- Layering hard and soft site infrastructure to create redundancies and minimize impacts



Sunnyside Yard can grow the green economy in the New York City region

- Strategies for jobs and education that prioritize green industries and a just transition for the local workforce
- Institutional space dedicated to research and development that will be needed to keep Sunnyside Yard carbon neutral
- Sustainable and resilient design and construction at a scale that can stimulate industries

Enabling a Sustainable and Resilient Future for Western Queens and the City

New, elevated land away from the floodplain is a massive opportunity to accommodate citywide needs in sustainable and resilient ways. Infrastructure designed for climate-intensified weather, pollution- and heat-mitigating urban design, and critical social amenities make communities more resilient to the physical and economic impacts of extreme heat vulnerability and flooding from sea-level rise and precipitation. These benefits can extend to neighborhoods around Sunnyside Yard, some of which are (unlike the Yard) vulnerable to flooding caused by sea level rise and storm surge.

In line with the City's commitments and global calls to action from the scientific community, the Master Plan calls for Sunnyside Yard to be a carbon neutral neighborhood. In addition to leveraging new renewable energy and energy storage on-site to ensure a fossil fuel-free future, the Master Plan employs mass timber building construction and other cutting-edge material innovations to push the boundaries of building efficiency and mitigate both operational and embodied carbon impacts. Going beyond carbon, the Master Plan embraces circularity – proposing ways to responsibly and efficiently use precious resources and rethink urban systems. The drawing on the right demonstrates how these strategies can be employed in the Master Plan.

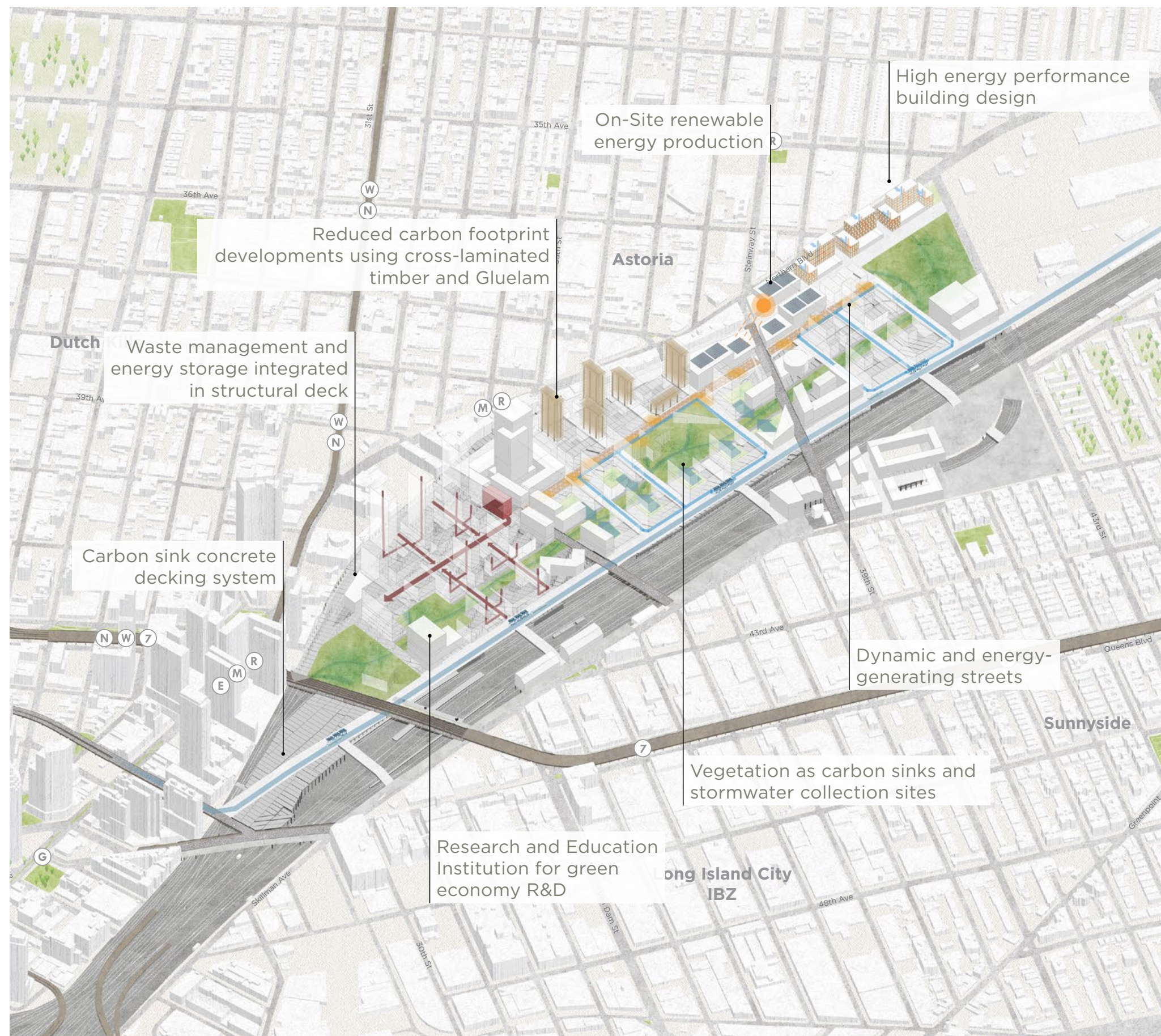
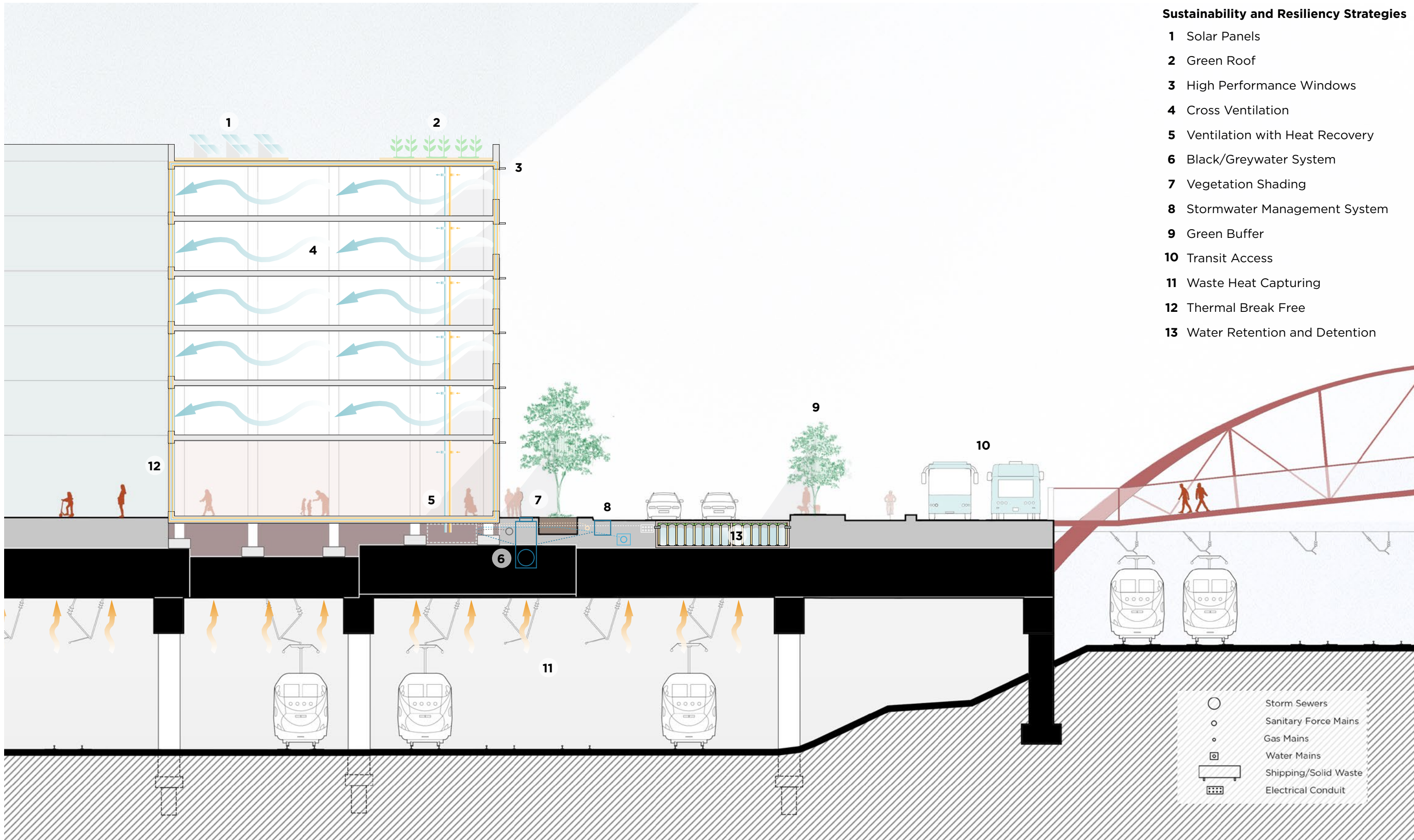


Diagram illustrating Proposed Sustainability and Resilience Strategies in the Master Plan



Sectional diagram showing Proposed Sustainability and Resilience Strategies for Sunnyside Yard.

The policy landscape at the City and State levels is rapidly evolving in support of drastic reductions in greenhouse gases from buildings, the largest-emitting sector in the city.

New buildings at Sunnyside Yard will be designed and constructed to stringent environmental standards. These green buildings will not only support public health and carbon neutrality goals; they will also generate economic opportunity and **create thousands of good-paying jobs for working-class New Yorkers.**



Example of adapting to extreme climate
Proctor Creek Greenway Trail in Atlanta, Georgia



Example of growing green economy
Brooklyn Grange's New Greenhouse, Sunset Park, Brooklyn



Example of developing carbon neutrality community
Dockside Green Development, Vancouver, British Columbia



Example of capturing rail system waste heat
Islington Waste Heat Power, London, England

Keeping it Queens

What We Heard: The Need to Keep it Queens

A consistent theme throughout the process emphasized **Queens' uniqueness as a borough of families, immigrants, and unmatched ethnic, racial, and linguistic diversity.**

Participants spoke about:

- **The opportunity for the Yard to serve as an extension of each surrounding neighborhood**, reflecting the existing context, building density, and height
- **Preference for low- to mid-rise heights**
- High- density and higher building heights should **coalesce around public transit**
- Preference for high-rise buildings to be located near Downtown Long Island City, with a gradual **decrease in height moving east**
- A vision for a **deep mix of residential, commercial, and light industrial uses**
- **Integration of uses** that allows advanced manufacturing and maker spaces to be mixed
- **More pedestrian friendly connections between neighborhoods** surrounding Sunnyside Yard

What the Plan does:

- Balances **the needs of a growing city** with **the existing character of Western Queens neighborhoods**
- Envisions most of the Yard as **a mid-rise neighborhood** with taller buildings located where they are most appropriate
- Provides a **flexible design, allowing for changes to be made as needs evolve**



Hunters Point



Long Island City



Dutch Kills



Ravenswood



Astoria



Woodside



LIC IBZ



Sunnyside



Sunnyside Gardens

Keeping it Queens

The Plan is designed to extend the built context of surrounding communities into Sunnyside Yard and complement existing uses.

This means blending the high-rise typologies of Long Island City and the mid-rise scale that characterizes much of Western Queens, while strategically locating new open space and pedestrian bridges to **connect and merge with surrounding neighborhoods.**

As shown in the diagram on the right, **the Master Plan strives to accommodate all the different uses that make up a dynamic**, well-balanced neighborhood while extending the fabric of surrounding Queens neighborhoods into the Yard. By defining the character of different parts of the Yard as they relate to adjacent neighborhoods and micro-neighborhoods – for example, Astoria’s arts and studio district – **the Plan seeks to ensure development at the Yard will feel like it belongs in the borough of Queens.**

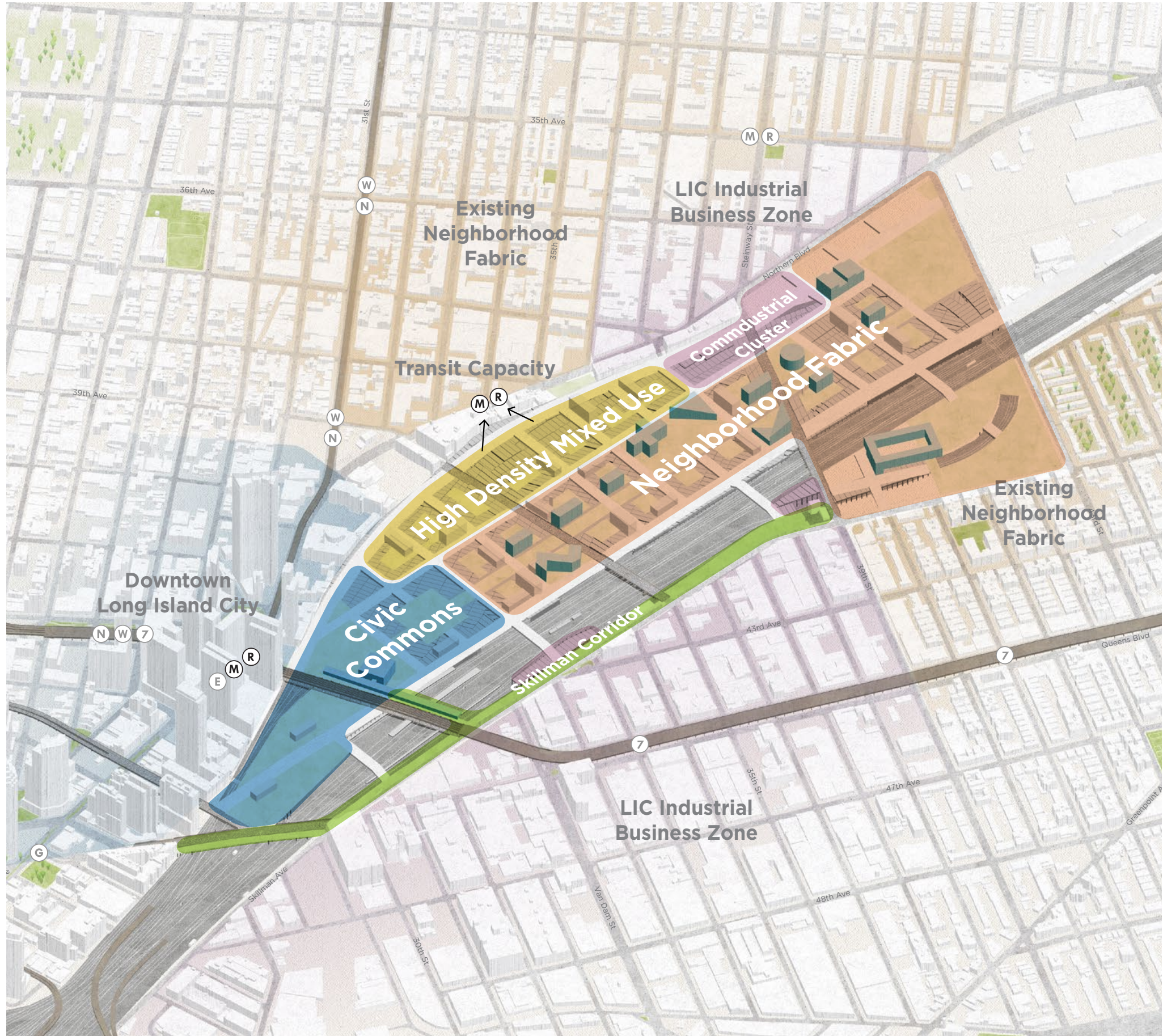
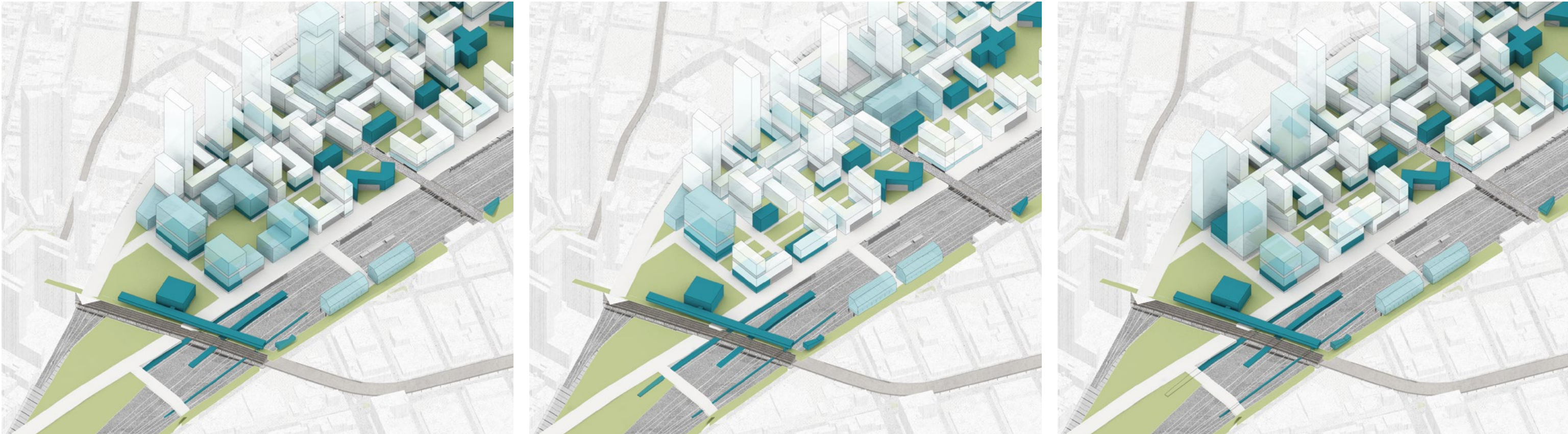


Diagram Program Cluster Character in relation to Context

Illustration of How the Same Grid
Accommodates Different Types of Buildings



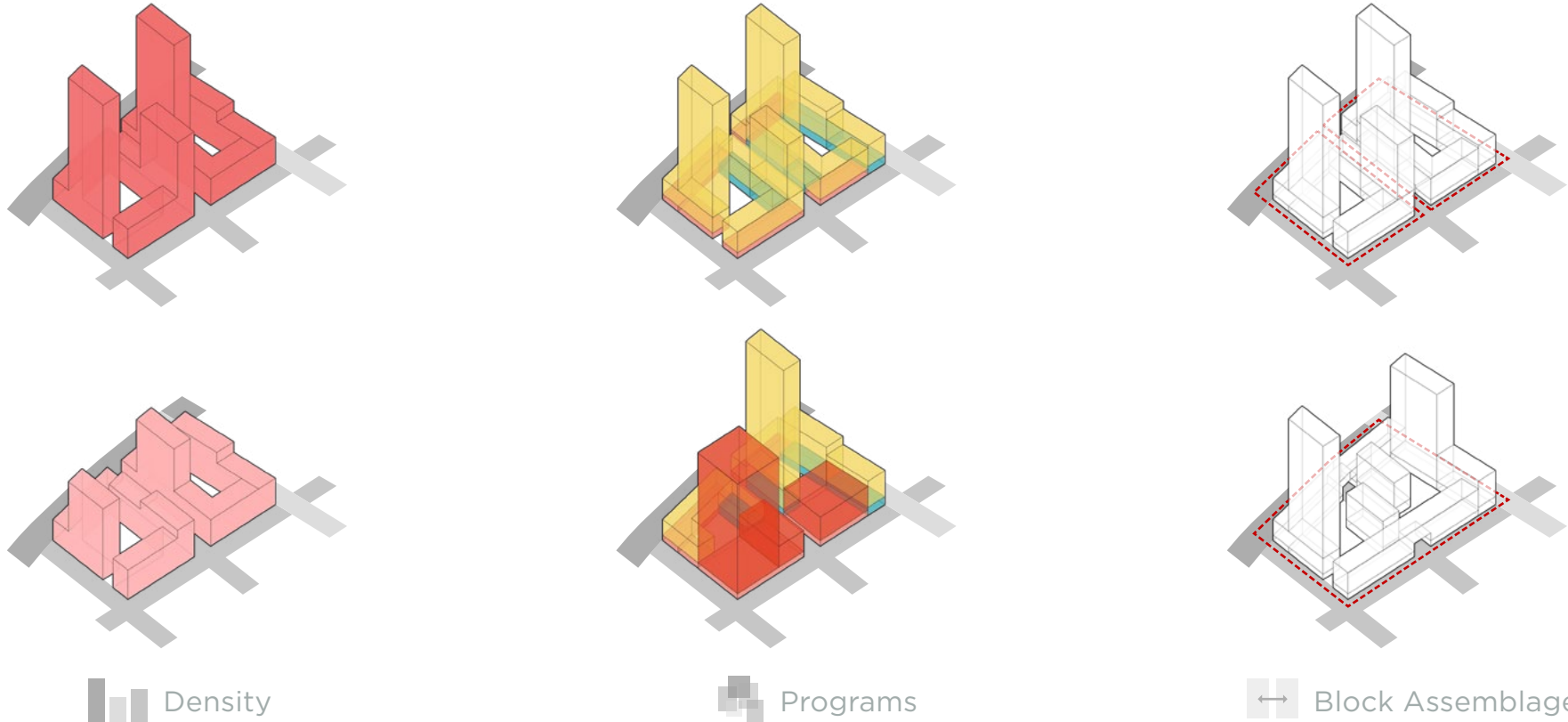
- Social Infrastructure
- Institutional and Commercial
- Office
- Housing
- Open Space

A Dynamic Plan for the Future

To remain as relevant to the Queens of the future as the Queens we know today, **the Plan must be flexible enough to adapt to the changing needs of its surroundings, but solid in its commitment to public benefits.**

Structured through a street grid integrated with the open space and social infrastructure network, the Master Plan prioritizes the public realm and ensures public goods are the foundation moving forward. The flexible 240x240-foot **blocks are compatible with varied building types, making possible multiple variations on density and development program.** In addition, these small-scale blocks can be combined in the east-west direction to enable uses that require larger sites and building footprints. The drawing at right shows how the flexible framework of the Plan can accommodate different elements.

Flexible Elements



Public Armature



How much will this
cost and how will it
be built?

How the Plan Becomes Reality

The Sunnyside Yard Master Plan takes a fundamentally different approach than other decking projects of the past by first addressing critical issues voiced by stakeholder groups and then assessing cost. It is about creating a community-driven plan that benefits neighborhoods and the city by delivering public goods.



Engagement

Given the unique scale and long-term nature of planning for Sunnyside Yard, **the Master Plan seeks to deliver key resources to strengthen neighborhoods** based on lessons learned through extensive public engagement, as opposed to creating a plan that maximizes financial gain. For example, the proposed densities of new development respond to feedback from residents that buildings should be in context with adjacent neighborhoods, rather than as high as a deck could structurally allow. This approach to the process, and the high cost of decking over a complex rail yard, underscore the need for **public investment to realize the long-term public benefits of the Plan**. As planning and implementation progresses, there will be continued public engagement, mandated by the Sunnyside Yard planning entity and carried out in partnership with local community groups.

The Sunnyside Yard Master Plan is the beginning of a generational effort to responsibly utilize publicly controlled land and model a community-driven, inclusive approach to long-term planning. **The Master Plan is not set in stone, nor is it a shovel-ready project. Instead, it will guide future decisions, ensuring that they are led by public priorities and centered on human needs.** Planning now enables this vision to be aligned with the railroads' long-term plans for their facilities. This coordination puts the public in a strong position to shape the future of the Yard and build a stronger, more equitable New York City.

The Master Plan begins a generational process to guarantee public benefits

For several reasons, including pressing public investment needs and availability of regular “terra firma” land that is cheaper and less challenging to build on, large-scale deck construction and overbuild development is not expected to begin for some time. A critical output of the Master Plan is **the definitive technical guide to facilitate continued close coordination with the railroads** so that the opportunity to realize the Plan is not jeopardized. A potential first phase will require public approvals including environmental review and land use actions.

The Master Plan emphasizes an infrastructure-first approach that ensures drainage, transportation, and other critical systems have capacity to support growth at Sunnyside Yard. This involves coordinating with government agencies that are implementing infrastructure improvements, such as the NYC Department of Environmental Protection (DEP)'s Amended Drainage Plan for Long Island City, which will account for improved stormwater detention enabled by the deck. As DEP and other agencies implement their plans, the growth projections they use will factor in potential development at the Yard in order to account for future needs.

Making the Plan Permanent

A key goal of the Master Plan is that its **extensive technical findings and recommendations are preserved**, and that going forward, **key decisions about its implementation are always made in consultation with the public.**

To preserve the vision and priorities of the Master Plan, the City of New York and Amtrak are formalizing an agreement to recognize the Master Plan as the primary planning document for decking over the Yard and creating a process to ensure future changes to the rail yard facilities and infrastructure are consistent with the Plan.

Part of this agreement entails **establishing a nonprofit planning entity** composed of the City, Amtrak, community representatives, elected officials, and other key public stakeholders to oversee future efforts to realize this Master Plan. The **mission of this entity** will be to uphold the integrity of the Master Plan by ensuring that **strong public process** informs future decision-making and **core commitments are maintained** in any future overbuild project.

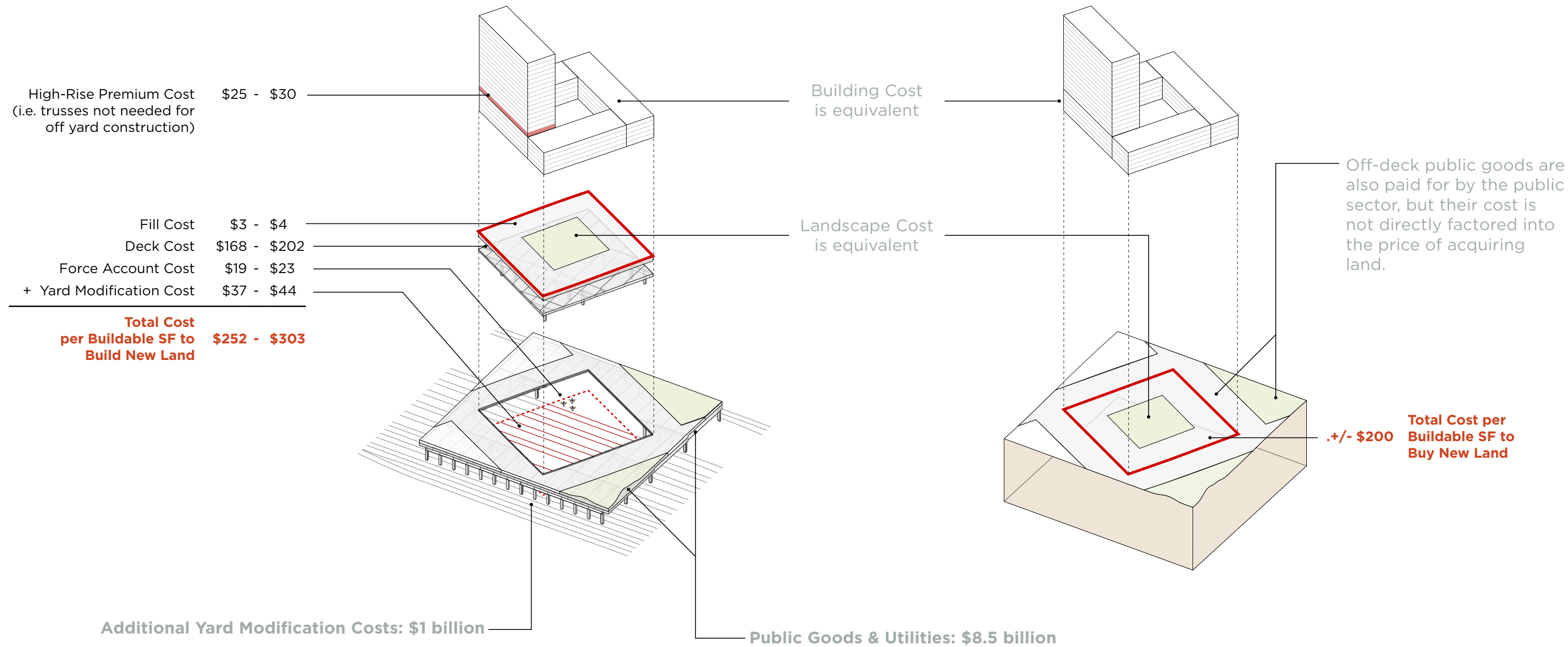
The precise role of the planning entity will likely evolve as overbuild moves forward and new functions, such as infrastructure financing and open space management, are needed. The mission and

function of future entities formed to implement the Master Plan should similarly be established through an inclusive and transparent process.

The new Sunnyside Yard planning entity will ensure these core commitments are honored:

- Following an infrastructure-first approach that ensures drainage, transportation, energy, and other critical systems have capacity to support growth at the Yard
- Ensuring that all new housing is based on affordability goals, including deeply affordable and homeownership housing, and other needs to be defined in collaboration with local communities
- Building Sunnyside Station and making other key transit investments outlined in the Master Plan
- Generating jobs by growing the green economy at Sunnyside Yard, facilitated by an anchor research and education institution and other local partners
- Delivering the proposed open space and social infrastructure network
- Pursuing carbon neutrality and minimal embodied carbon in the construction and operations
- Continuing a community-driven approach in shaping future decisions, including when to proceed with specific phases

The Difference in Cost per Buildable Square Foot of New Construction of Building New Land v. Buying New Land



Investment Over Time

The cost of building a deck at Sunnyside Yard is the cost of **creating a large amount of centrally-located public land - a proposition that is near-impossible anywhere else in the City.**

Planning for Sunnyside Yard is planning for the future of our city. Nowhere else in the five boroughs is there such a large, centrally located, and mostly publicly controlled site well-connected to local and regional transit networks. We must plan responsibly for a future in which this vital resource of public land is scarce: New Yorkers, in increasing numbers, will continue to need places to live that provide access to work, schools, and life's other necessities. Like earlier generational initiatives of its kind, such as the creation of Battery Park City and Roosevelt Island and the ongoing development of Hunter's Point South, this plan is complex and comes with a cost. But **New York has always risen to meet these tests, and it can do so again through smart planning and by leveraging innovative financing structures that allocate costs between the public and private sectors over time.**

The costs of creating public land at Sunnyside are, in large part, the costs of building a deck over a complex and active rail yard and providing necessary infrastructure. On average, **the cost to deck over Sunnyside Yard to support housing and other development**

is estimated at approximately \$5 billion, which when spread across the full proposed development program (including 12,000 affordable new homes) amounts to **\$250 to \$300 per buildable square foot** - slightly higher than the cost of buildable land in Long Island City today.

Providing infrastructure to support strong communities, deliver amenities for Western Queens, and facilitate development is also essential. During the engagement process, the public clearly expressed that this plan must address human needs and take an infrastructure-first approach. To that end, the Master Plan proposes five miles of new streets, 60 acres of open space, new sewers and other utilities, and the deck to support these critical uses. The cost for each of these are as follows:

- **Deck to support streets and open space: \$5.4 billion**
- **Streets and fill (to create surface level): \$1.1 billion**
- **Open Space: \$240 million**
- **Utilities (electrical, gas, telecom, and renewable energy): \$1.8 billion**

Additionally, building a deck structure above the busiest rail yard in the nation requires some modifications to tracks and other existing infrastructure as well as new mechanical systems for lighting and ventilation. These costs are estimated at \$1 billion.

Together, **these costs reflect the plan's focus on delivering community priorities and creating a successful, highly livable new piece of New York City.** The amounts are, like those associated with any major infrastructure project, substantial, but the alternatives are virtually nonexistent, and inaction is not an option. Purchasing land and assembling such a site by other means is and will remain practically impossible. To continue to grow as an equitable, inclusive city, New York must invest in a future in which New Yorkers of all backgrounds can continue to live with dignity and in close proximity to all that New York City has to offer. The time to begin planning for these multi-generational investments is now.



Early Investments

Beyond its great utility as infrastructure and as a major employer — and perhaps its niche appeal to train enthusiasts — **today's Sunnyside Yard is an obstacle in the day-to-day life of Western Queens.** The Yard must be navigated daily by thousands of students, workers, and residents often crossing on foot over daunting bridges or in cars and buses crawling through traffic. **Before the Master Plan can be realized, New Yorkers must come to see the Yard differently** – as an essential part of our transportation network, and as a long-term, potentially transformational opportunity.

A fundamental element of the Master Plan is the new regional rail hub known as Sunnyside Station. **The Plan proposes to build Sunnyside Station first** to improve transportation options for Western Queens and the region and unlock the Yard's enormous long-term potential. To advance this key goal, the City commits to make a substantial funding contribution toward the cost of building the station. Investing in Sunnyside Station and open space first will help shift the public's perception of the Yard, making it not just easier to cross, but also a civic gateway and gathering place.

In addition to Sunnyside Station, the Master Plan identifies other potential early actions

Planning a Public Future for Sunnyside Yard

that could be taken to address needs highlighted through community engagement.

The team explored a range of options that would:

- Have independent utility from the rest of the Master Plan
- Be feasible within the near term (+/- 10 years)
- Align with the vision and goals of the Master Plan
- Respond directly to community needs and interests
- Help integrate the Yard into surrounding neighborhoods

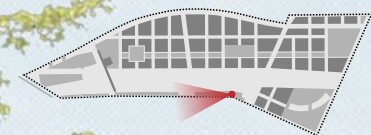
The Master Plan also recommends a series of public realm improvements to create a network of public open spaces that weave together existing community visions and City initiatives on both sides of the Yard, while also beginning to address needs for more open space and better pedestrian and bike connections. Outlined below are actionable public realm investments that could be advanced as **first steps toward the larger open space network.**

The outcome of this exploration was a recommended set of infrastructure and public realm improvements that could complement Sunnyside Station.



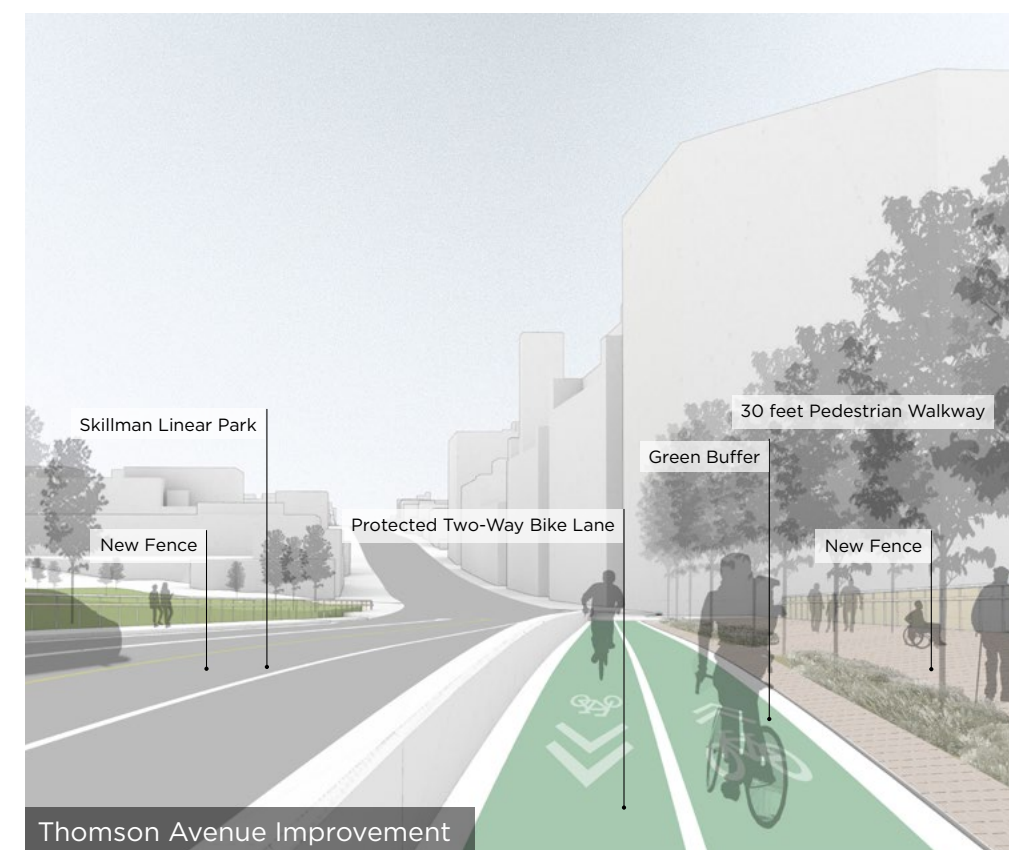
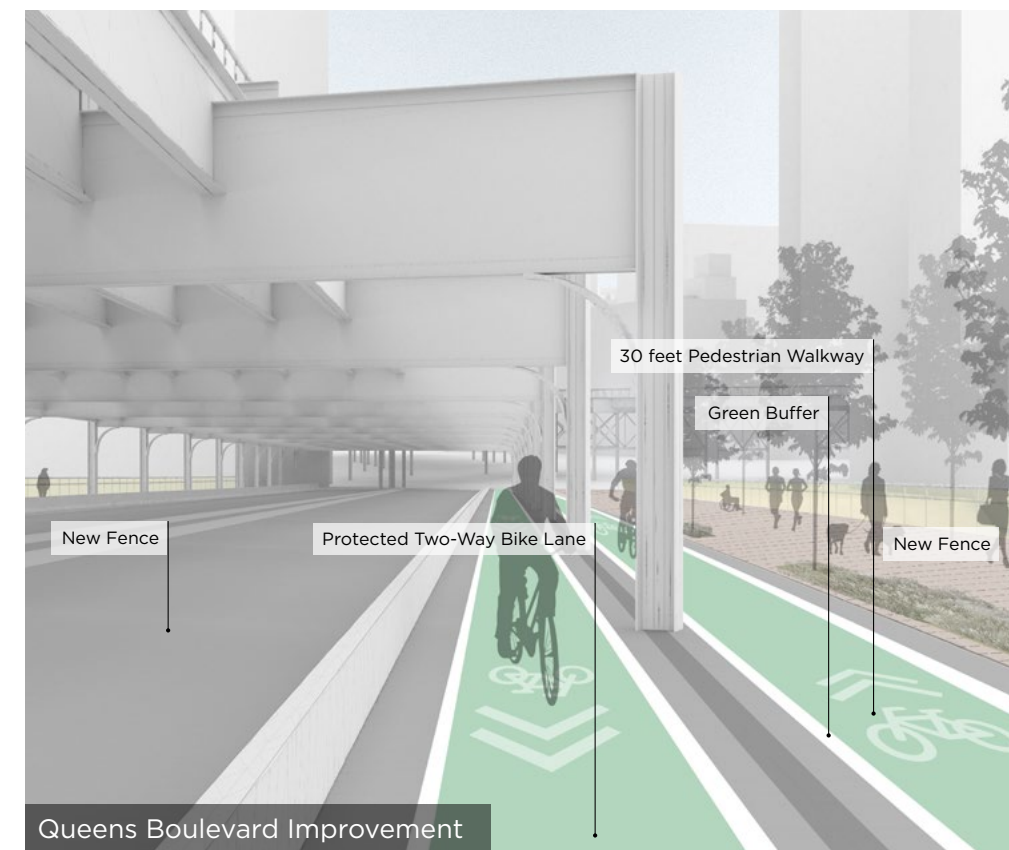
View of Proposed Skillman Linear Park

- 1 Skillman Avenue Improvement
- 2 Park Support Buildings
- 3 Lawn
- 4 Honeywell Bridge
- 5 Meandering Path/Connector
- 6 Promenade along Yard



Potential Early Phases Public Realm Improvements Include:

- **Gateway Plaza** – a public plaza adjacent to Sunnyside Station. Provides a welcoming “front door” for the Station and gives Downtown Long Island City a new civic gathering space well-suited for programming. Can itself be built in phases to allow open space to be delivered earlier and at lower cost.
- **Over-Yard Greenways** –enhancing the pedestrian and cyclist experience along the Queens Boulevard and Thomson Avenue Bridges, a first step in changing public perception of the Yard and improving mobility for current residents, workers, and students.
- **Skillman Linear Park** – an open space along Skillman Avenue. This linear park will transform the southern perimeter of the Yard into a wide embankment with pedestrian and bike paths, green infrastructure, and recreation spaces. The park will also reserve space for future pedestrian/bike bridges across the Main Line into the Yard. The Linear Park alignment would link Lou Lodati Park to LaGuardia Community College and Thomson Avenue.
- **World’s Park** – a new 6.5-acre park at the western end of the Yard between Thomson Avenue and Queens Boulevard adjacent to the Court Square neighborhood of Long Island City. Converging rail lines below necessitate longer deck spans and a lightweight structure, making this open space more costly and therefore likely to be the last of these open spaces to be built.



Before construction of these open spaces, a maintenance partner that aligns with the values and mission of the Plan would need to be identified to provide essential stewardship, programming, and operational costs.



The first phases of Sunnyside Yard – located on the western side of the Yard – incorporate key public goods, including Sunnyside Station, a large amount of open space, a new research and education institution, and significant affordable housing. **The decision as to when to begin these first phases will be determined by a number of factors, including availability of alternative development sites and competing needs.** An enterprise of this ambition and timescale should not be undertaken simply for the sake of decking over a rail yard.

The Plan identifies a **set of early actions, including investments in public transit and open space**, that have value independent of large-scale decking and should be advanced before development as funding is identified. Looking further ahead, the most ambitious goals for Sunnyside Yard will require public funding sources beyond city government, such as renewed federal investment in affordable housing, green energy and buildings, and transportation infrastructure.

First Phases of Sunnyside Yard

Goals of the First Phases:

- Build Sunnyside Station
- Improve connections between neighborhoods and access to the station
- Create substantial new open space
- Build affordable homes
- Establish a new research and education institution

First Phases by the Numbers

- 1 new regional rail station served by LIRR and Metro-North and in the future, potential Amtrak service and trains from New Jersey
- 1.9 million square feet (approx. 42 acres) of new land via decking
- 3,800 affordable homes
- 1.3 million-SF research and education institution
- 750,000 SF of office space
- 600,000 SF of social infrastructure
- 7.2 acres of open space

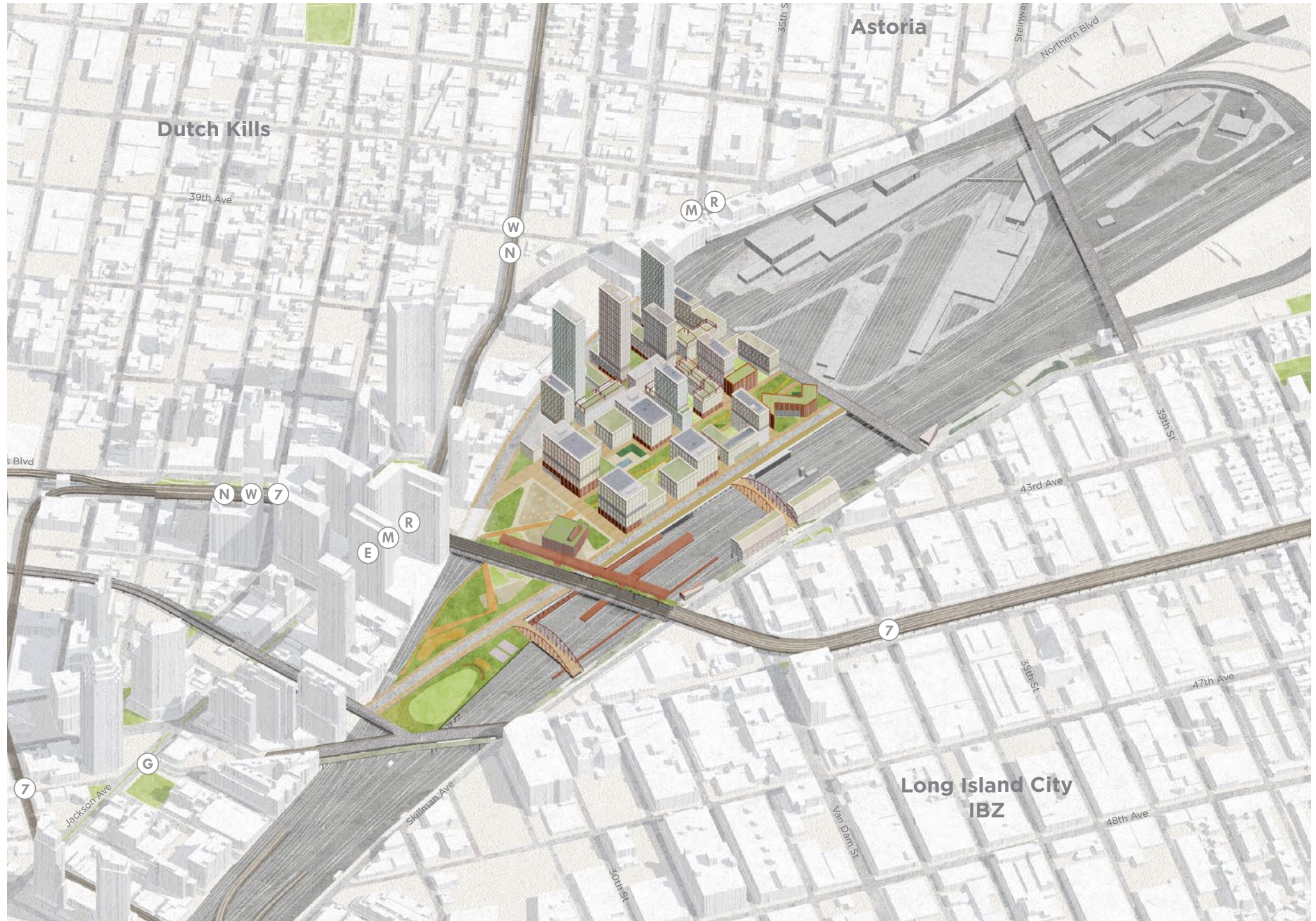


Illustration of the full build-out of Early Phases.

Early 2020
Master Plan
Completion

Step 1
Form non-profit governance entity
including Amtrak, MTA, City of New
York, and local representatives

Step 2
Community engagement
around planning for early
phases, led by entity

Potential Near-term Public
Realm Improvements

Detailed Planning and
Public Approvals

Phase 1

Phase 2

Phase 3

Construction of each phase anticipated to take approximately 10 years
Phasing sequences relative to the current Master Plan



What Comes Next?

Driven by these values and priorities, the Sunnyside Yard Master Plan calls for bold action to prepare for the future and meet the needs of future generations of Queens families. The City and Amtrak are taking steps to solidify the Master Plan and move key elements forward. This includes:

- **Forming a nonprofit planning entity to steward implementation of the Plan** and provide a vehicle for long-term public participation
- **Coordinating with city agencies on areawide infrastructure improvements**, such as sewers, so that they are designed to accommodate development at Sunnyside Yard
- **Working to advance transformative infrastructure investments like Sunnyside Station**
- **Advocating for key policies** needed at the city, state, and federal levels **to meet the ambitious housing and sustainability visions** in the Plan

This Master Plan tackles some of the most challenging and persistent issues facing urban areas today. From creating affordable housing, to mitigating the increased risks of climate change, to preserving the aspects that make neighborhoods unique, the Plan outlines a framework for how New York City can take bold action for its future. Perhaps most significantly, the planning process turned to New Yorkers and Queens communities for their ideas about how to face these complex problems.

This Plan is the product of many conversations with engaged community members and stakeholders and could not have been completed without their input. The City and Amtrak would like to express their sincere appreciation to these New Yorkers for giving their time and feedback to shape a framework for responsible, inclusive, long-term planning for Western Queens. **The master planning process started with a strong public engagement process and, going forward, will continue to heavily rely on input from communities for advancement of the Master Plan.**

Throughout this process, New Yorkers expressed concerns and fears about the climate crisis, affordable housing shortage, aging infrastructure, and strained transportation system. They also spoke of creating a place that embodies the spirit and diverse people of Queens. The Master Plan is not a panacea that can solve all these challenges, and it will not be realized overnight. With time and commitment, however, **Sunnyside Yard can help create a stronger, more equitable borough, city, and region.**

Sunnyside Yard Master Plan Steering Committee

The Steering Committee is a group of independent advisors who represent a wide range of perspectives, including communities and organizations from across Western Queens as well as citywide groups. Their role has been to share those perspectives, provide candid feedback to the planning team, and advise so that the engagement process was as broad and inclusive as possible. Their participation in the Steering Committee does not constitute an endorsement of the Master Plan.

Hosts

Vicki Been
Deputy Mayor for Housing and Economic Development,
City of New York

Anthony Coscia
Chairman of the Board, Amtrak

Co-chairs

Elizabeth Lusskin
President, Long Island City Partnership

Sharon Greenberger
President and CEO, YMCA of Greater New York

Elected Officials Invited to Participate

Senior United States Senator for New York

Junior United States Senator for New York

U.S. Representative for the 12th Congressional District of New York

U.S Representative for the 14th Congressional District of New York

New York State Senator for the 12th District

New York State Assemblymember for the 37th District

New York City Council Member for the 26th District

Queens Borough President

Members

Angela Pinsky
Executive Director, Association for a Better New York

Annie Cotton Morris
Chair, NYCHA Citywide Council of Presidents

Antonios Benetatos
President, Dutch Kills Civic Association

Carlo Scissura
President and CEO, New York Building Congress

Dean Devita
Secretary-Treasurer, National Conference of Firemen & Oilers

Denise Keehan-Smith
Chair, Queens Community Board 2

Elizabeth Erion and Gerry Caliendo
Land Use Committee Co-Chairs, Queens Community Board 1

Felix Ciampa
Executive Director,Urban Land Institute New York

Frank Wu
President, Court Square Civic Association

Assuanta Howard
Interim Assistant Dean, LaGuardia Community College

Gary LaBarbera
President, Building and Construction Trades Council

George L. Stamatiades
President, Central Astoria Local Development Coalition

Holly Leicht
Executive Vice President, Empire State Development

Jaime-Faye Bean
Executive Director, Sunnyside Business Improvement District

Janno Lieber
Chief Development Officer, Metropolitan Transportation
Authority

Jonathan Bowles
Executive Director, Center for an Urban Future

Judith Zangwill
Executive Director, Sunnyside Community Services

Lisa Deller
Land Use Committee Chair, Queens Community Board 2

Lynne Sagalyn
Professor, Columbia University Graduate School of Business

Marie Torniali
President, Steinway Business Improvement District

Melissa Orlando
Executive Director and Founder, Access Queens

Mitchell Moss
Director of Rudin Center for Transportation, New York University

Nuala O’Doherty
Director of Policy, Community Education Council for District 30

Sheila Lewandowski
Executive Director, The Chocolate Factory Theater

Sylvia White (no longer participating as of 02/14/20)
Co-Chair, Justice for All Coalition

Thomas J. Grech
President & CEO, Queens Chamber of Commerce

Tom Wright
President & CEO, Regional Plan Association

Tomoko Kawamoto
Director of Public Information, Museum of the Moving Image

Acknowledgments

Sunnyside Yard Master Plan Project Team

Lead Agencies

New York City Economic Development
Corporation
NYCEDC

Amtrak

Urban Planning Team

Practice for Architecture and Urbanism
Team Lead, Urban Planning, & Architecture

Thornton Tomasetti
Structural Engineering, Sustainability, & Resiliency Strategy

HNTB
Rail Engineering

Langan
Civil, Geo-technical, & Environmental Engineering

Nelson Byrd Woltz Landscape Architects
Landscape Architecture

Sam Schwartz Engineering
Mobility Planning & Engineering

Carlo Ratti Associati
Technology Advisors

Dharam Consulting
Costing

CBRE
Market & Economic Analysis

BJH Advisors
Financial Modeling

MuniCap
Public Finance

Urbane Development
Community Engagement

Kasirer
Stakeholder Outreach

Consulted Agencies

New York City Department of Cultural Affairs
DCLA

New York City Department of City Planning
DCP

New York City Department of Environmental
Protection
DEP

New York City Department of Education
DOE

New York City Department of Transportation
DOT

New York City Department of Parks and
Recreation
DPR

New York City Department of Hosing
Preservation and Development
HPD

New York City Department of Health and
Mental Hygiene
DOHMH

New York City Department of Sanitation
DSNY

New York City Mayor’s Office of Resiliency
MOR

New York City Mayor’s Office of Sustainability
MOS

New York City Public Design Commission
PDC

New York City Office of Environmental Coordination
OEC

New York City Housing Authority
NYCHA

New York City Department of Youth and
Community Development
DYDC

New York City Police Department
NYPD

New York City Fire Department
NYFD

Metropolitan Transit Authority
MTA

New York City Transit Authority
NYCT

Long Island Rail Road
LIRR

New Jersey Transit Corporation
NJ TRANSIT