East New York Rezoning Proposal
Executive Summary

A. INTRODUCTION

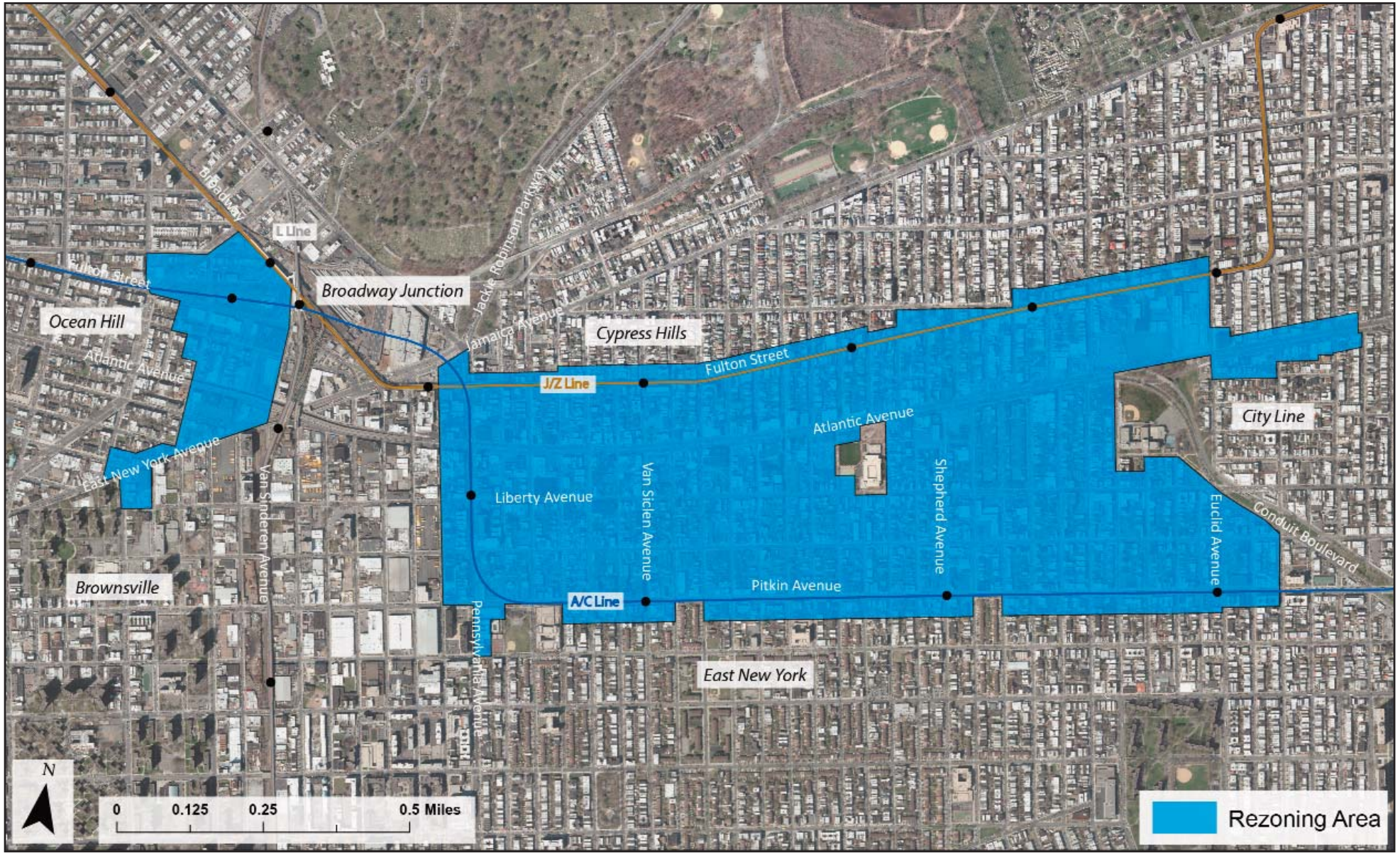
The New York City Department of City Planning (DCP), together with the Department of Housing Preservation and Development (HPD), is proposing a series of land use actions (collectively the "Proposed Actions") to implement recommendations of the East New York Community Plan (the "Plan"), which is the subject of an ongoing community process, to create opportunities for housing, including affordable housing, community facilities, including a new proposed public school facility, economic development and other services of an approximately 190-block area of East New York, Cypress Hills and Ocean Hill neighborhoods of Brooklyn, Community Districts 5 and 16, respectively. The affected area within East New York and Cypress Hills is generally bounded by Sheffield Avenue to the west, Lincoln Avenue to the East, Fulton Street to the north and Pitkin Avenue to the south. The affected area within Ocean Hill is generally bounded by Eastern Parkway Extension to the west, Van Sinderen Avenue to the east, Broadway to the north and East New York Avenue to the south (see Figure ES-1, "Project Location"). Within these areas, the Proposed Actions are anticipated to facilitate new residential, commercial, community facility, and manufacturing development. In total, the Proposed Actions are expected to result in a net increase of 6,312 dwelling units; 859,431 square feet of retail/supermarket/restaurant and office space; 457,870 square feet of community facility space; and net decreases of 27,035 square feet of industrial space; 128,365 square feet of auto-related space, 97,551 square feet of hotel space, 73,170 square feet of warehouse/storage space, and 3,055 square feet of garage space. The increment in community facility space includes an anticipated new public school facility to be located on projected development site 66, which would provide approximately 1,000 seats.

The Proposed Actions are intended to facilitate implementation of recommendations of the East New York Community Plan, a coordinated neighborhood plan developed with community residents, elected officials, Community Boards 5 and 16, and stakeholders, in coordination with City and other public agencies, to identify needs and opportunities to support a shared long-term vision for the future of the neighborhood. The Proposed Actions, detailed further below under "Purpose and Need for the Proposed Actions," seek to facilitate recommendations that support the Plan's goals and objectives to create more affordable housing and more diverse commercial, promote economic development and opportunity for residents, foster safer streets, and generate new community resources.

The Proposed Actions reflect DCP's on-going engagement with Community Boards 5 and 16, local elected officials and community residents and stakeholders to achieve the following land use objectives:

- Create opportunities for new residential development with significant amounts of permanently affordable housing and preserve existing affordability to ensure that the neighborhood continues to serve diverse housing needs;
- Encourage mixed-use development on key corridors;
- Enhance and revitalize major thoroughfares through new economic development; and
- Protect neighborhood character of residential core and ensure predictable future development.

An overview of the study area, the purpose and need for the Proposed Actions and their specific components are discussed below.



Source: NYC Department of City Planning

East New York Rezoning Proposal

Figure ES-1a
Project Location - Aerial View

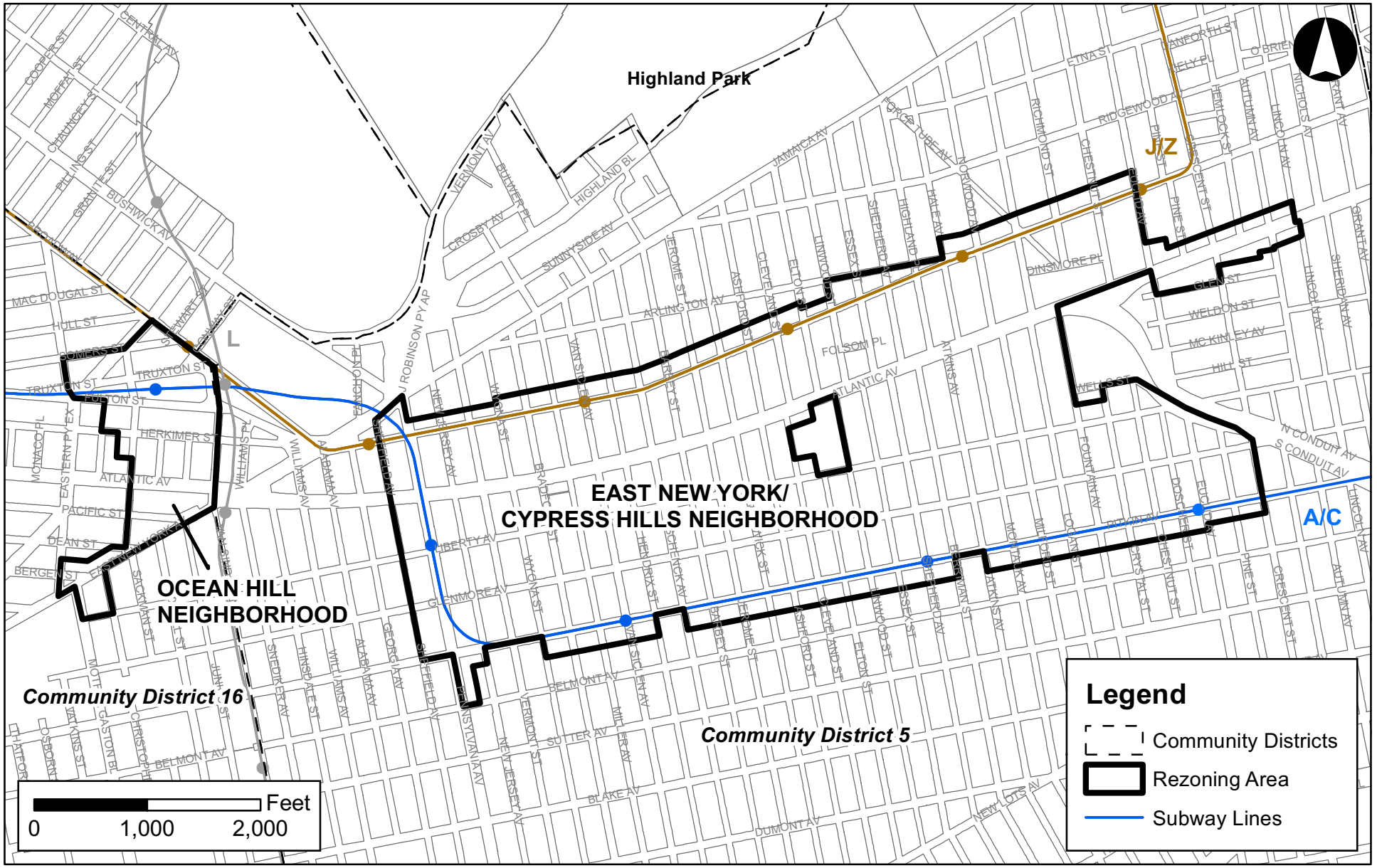


Figure ES-1b
Project Location

B. BACKGROUND

Sustainable Communities East New York

The East New York Community Plan builds on the work of the Sustainable Communities East New York (SCENY) study, a federally-funded collaborative planning effort led by DCP, together with community residents, stakeholders, elected officials and local organizations from 2011-2013. The SCENY planning initiative was funded under a regional planning grant awarded by the U.S. Department of Housing and Urban Development (HUD) to the New York-Connecticut Sustainable Communities Consortium, a collection of governmental and planning organizations in partnership to support the development of livable communities and growth centers around the region's most extensive commuter rail network.

Community Boards 5 and 16, which each cover portions of the study area, residents, stakeholders, elected officials and community organization were engaged throughout the process. The project team updated all stakeholders, including each of the Community Boards and their Land Use committees regularly and solicited input on plans. As part of the outreach effort, the project was also guided by a Community Advisory Committee (CAC), consisting of residents and representatives from local community-based organizations. Through this extensive outreach and public engagement, residents and other stakeholders identified key challenges and opportunities in East New York, as well as their vision for the future of the area. The full SCENY report can be accessed on DCP's website at the following address: http://www.nyc.gov/html/dcp/html/sustainable_communities/sustain_com2.shtml.

East New York Community Plan

Following the publication of the SCENY report in spring 2014, Mayor Bill de Blasio, in May, 2014, released *Housing New York*, the Mayor's plan to build and preserve affordable housing throughout New York City in coordination with strategic infrastructure investments to foster a more equitable and livable New York City through an extensive community engagement process. The Housing New York plan calls for fifteen neighborhood studies to be undertaken in communities across the five boroughs that offer opportunities for new affordable housing. East New York was selected as the first such neighborhood based on the previous DCP work in the area, including the community-identified opportunities of the SCENY report to develop housing, including significant amounts of affordable housing, new commercial, services, jobs and open space in an area with excellent transit access.

Following the Mayor's announcement, DCP held numerous workshops and events starting in the fall of 2014 through the spring of 2015 in partnership with other city agencies, including the Department of Transportation (DOT), School Construction Authority (SCA), Department of Education (DOE), Department of Parks and Recreation (DPR), Small Business Services (SBS), Economic Development Corporation (EDC), and the Department of Housing Preservation and Development (HPD) to identify current and future needs of the neighborhood built on the vision outlined in the SCENY report. This engagement process solicited community goals and objectives, which include:

- New affordable housing, including housing accessible to families at income levels currently living in the community;
- Protect low-income tenants in rent-regulated apartments;
- Safer and more active streets, and an improved streetscape, especially on Atlantic Avenue;
- More job opportunities and commercial and retail options;
- Better and more accessible parks and playgrounds; and
- New community centers offering recreation and youth programs.

Based on these community identified objectives, DCP, in collaboration with other City agencies, developed a plan to facilitate these goals through new zoning and other land use actions, expanded programs and services and capital investments (the "East New York Plan").

DCP and the other City agencies are continuing this public engagement process throughout 2015 to further refine and develop components of the Plan to better meet the existing and future needs of the community and the City at large and to capitalize on the proposed land use actions, when adopted. During this process, additional recommendations that do not relate directly to land use and zoning will be defined. In addition, the Proposed Actions, as described below, may be refined or modified within the scope outlined herein, as outreach and discussion continues.

Study Area History

East New York was largely farmland until 1835, when the Connecticut merchant Colonel John R. Pitkin bought a large portion of the farmland, laid out a township called East New York and established a shoe factory at the intersection of Williams and Pitkin Avenues. A year later, the Long Island Rail Road opened its first section running an elevated line along Atlantic Avenue between the Brooklyn waterfront and Jamaica, Queens. Small factories, including food-related businesses processing agricultural products from Long Island, railroad yards and other related uses, as well as mid- and low-rise residential buildings with stores on the ground floors, were built alongside the railroad on Atlantic Avenue. The building which housed the former Borden Dairy and the former Chloe Food facility are remaining examples of buildings from this agricultural past. Small apartment buildings and homes were built on either side of Atlantic Avenue in Cypress Hills to the north and in East New York to the south.

Cypress Hills and East New York grew further with the extension of elevated transit lines in the 1880's and 1890's that connected neighborhoods of Queens with Downtown Brooklyn and Manhattan. Residential construction followed the elevated lines and along Fulton Street and Pitkin Avenue retail corridors developed with stores on the ground floors of small apartment buildings to serve the emerging neighborhoods. Many residents were employed in the neighboring industrial district originally established by Colonel Pitkin which continued to thrive.

In the first half of the 20th century, significant public transportation infrastructure investments resulted in the relocation of two of the at-grade railroad lines and one of the elevated transit lines below ground. These large public construction projects, part of a citywide effort to improve conditions as well as safety within the city, removed significant sources of noise and impediments to light and air, and positioned Cypress Hills and East New York for further growth. One of the more significant of such projects was the Atlantic Avenue Improvement project, a public works project conducted under the auspices of Robert Moses between 1939 and 1942, which buried the Long Island Rail Road below Atlantic Avenue throughout most of Brooklyn, including East New York.

In the 1960s and 1970s, the population of Cypress Hills and East New York declined significantly, accompanied by disinvestment and abandonment of property. This change mirrored that of other working class neighborhoods around the city, including the South Bronx, Harlem and Brownsville. Between 1960 and 1970, African-American and Hispanic residents replaced white residents in Cypress Hills and East New York as the majority. During this time, foreclosure and vacancy rates rose sharply; formerly occupied blocks deteriorated as vacant homes burned and then were demolished for safety, leaving vacant land that depressed the value of other nearby homes, causing further deterioration to spread. Subsequently much of East New York between Liberty Avenue to the north and Linden Boulevard to the south was marked by blocks of vacant buildings and vacant land, much in City-ownership, with a corresponding steep decline in property values. As a result, between 1960 and 1980 the population of East New York decreased by a third (from approximately 66,000 to 40,000 residents in the study area), and the number of housing units was reduced by nearly half.

Beginning in the 1980s renewed public investment and grass-roots initiatives helped East New York and Cypress Hills to stem their decline and begin a recovery that continues to this day. With the stabilization of the City's finances after the fiscal crisis of the mid 1970s, the administration of Mayor Ed Koch embarked on an ambitious new City-sponsored housing plan that set as its goal the rehabilitation of every vacant City-owned residential building. This plan, led by HPD, and implemented by both HPD and local, not-for-profit organizations working directly in the affected communities, resulted in the return of empty building shells to permanent affordable housing managed by HPD and non-profits. HPD and the Cypress Hills Local Development Corporation (CHLDC), formed in 1983 to strengthen Cypress Hills and its Fulton Street retail strip, rehabilitated vacant buildings within these neighborhoods.

Further to the south, west of Pennsylvania Avenue, the East New York Urban Youth Corps, a group that formed initially to work with neighborhood youths, as well as the Mutual Housing Association of New York (MHANY) and other non-profits rehabilitated every City-owned vacant building in the area. The program resulted in the removal of physical blight from many blocks, stabilization of the many still-intact residential blocks and the beginning of the return of residents to the area.

In the East New York Core area south of Atlantic Avenue, at the urging of East Brooklyn Congregations (EBC), a faith-based organization founded in neighboring Brownsville, the City initiated the Nehemiah Housing Program for the large swaths of City-owned vacant land that had been created here largely by the demolition of homes earlier in the 1970s and 1980s. The Program developed small, two-story, single-family row houses and provided an affordable homeownership opportunity to moderate-income families in efficiently-built, modestly-sized homes. These new homes, which used up much of the vacant City-owned land in the area, were extremely sought-after for their low cost and amenities and helped reverse the tide of disinvestment in the community as well as rebuild some of its fabric. Building on its investment in the neighborhood and the success of the Nehemiah home construction, the City subsidized the redevelopment of much of its remaining smaller parcels of vacant land with new two-family row-housing under the New York City Housing Partnership program, as well as other programs, through a variety of non-profit sponsors, including the CHLDC. As a result, the population began to grow again after decades of decline and the amount of land in City ownership has diminished to a point where, today, there is very little City-owned vacant land remaining in the area.

In the 1990s small-scale, private-sector market-rate construction of one- and two-family homes returned to East New York, after the City-sponsored rehabilitation of all City-owned buildings and the redevelopment of most of the City's portfolio of vacant land with new housing. This wave of development was led by small building contractors taking advantage of low land prices and a rising demand for small homes and continues to this day, resulting in the addition of some 2,000 units of private market-rate housing throughout East New York and in the project area. This pace of construction slowed in the early 2000s and significantly so by the recession of 2008 and a dramatic rise in mortgage foreclosures in the area. The construction of new housing, albeit at a much slower pace, has resumed with an improving economy and increased demand due to a rising city population and the movement into East New York of residents from other costlier neighborhoods. As a result of the City's housing programs, together with the private market home construction, the population of the East New York project area has rebounded from its low-point in 1980 of approximately 40,000 residents to 48,000 today, but still remains below its 1960 peak of 66,000 residents.

Project Area

The Proposed Actions would affect two noncontiguous areas (see Figure ES-1). The first (referred to here as "East New York") is an approximately 175 block area covering portions of East New York and Cypress Hills, generally bounded by Fulton Street in the north, Pitkin Avenue to the south, Sheffield Avenue to the west, and Conduit Boulevard and Lincoln Avenue to the east. This area is defined by a series of east-west corridors, with Atlantic Avenue dividing the area into northern and southern sections; major corridors and areas of the neighborhood are described below. The second area (referred to here as "Ocean Hill") is an approximately 15 block portion of the Ocean Hill neighborhood, generally bounded by Broadway to the north, East New York Avenue to the south, Eastern Parkway Extension to the west, and Van Sinderen Avenue to the east (refer to Figure ES-1, "Project Location").

East New York - Fulton Street

Fulton Street has retained most of its historic character as an active local retail corridor and is an important shopping and dining destination for the surrounding Cypress Hills community. The J/Z line runs above grade along this corridor, with stations at Van Siclen Avenue, Cleveland Street, Norwood Avenue, and Crescent Street. This corridor is mainly lined with historic two- to four-story attached mixed-use buildings with ground floor retail and housing above. Three blocks immediately east of Pennsylvania Avenue contain gas stations, car sales lots and auto-repair shops. Residential uses at the ground floor can also be found intermittently along this section of the corridor.

East New York - Atlantic Avenue

At 120 feet wide, Atlantic Avenue is the largest corridor running through the area and one of the main thoroughfares in Brooklyn. The Long Island Railroad runs below Atlantic Avenue in East New York and has a stop at Van Sinderen Avenue in between the East New York and Ocean Hill Plan areas. Common land uses along the avenue include one-story semi-industrial uses including a large bakery, auto-related uses, such as gas stations, car washes and auto repair shops, self-storage facilities, interspersed with residential use, local retail shops and fast food restaurants. Most loft-style buildings that were originally built for industrial purposes have been converted to warehousing, self-storage facilities or are vacant. Atlantic Avenue also features a few large vacant and/or underutilized sites. New development along corridor has primarily included fast food drive-thru establishments and self-storage centers.

East New York - Liberty Avenue

Liberty Avenue is a corridor that runs east-west just south of Atlantic Avenue. The corridor today consists of auto repair shops, scrap metal yards and other light-industrial uses, such as warehouses and supply stores, mixed with primarily two- to four-story residential homes, small local retail shops, schools and houses of worship.

East New York - Pitkin Avenue

Pitkin Avenue is generally characterized by two- to four-story residential buildings or mixed-use buildings with neighborhood retail at the ground floor and residential units above. The A/C line runs below ground along Pitkin Avenue with stations at Van Siclen Avenue, Shepherd Avenue, and at Euclid Avenue, an express stop and the terminus of the C train. While Pitkin Avenue was once a thriving continuous commercial strip, today many of the ground floors of buildings are used for residential or community facility use. Ground-floor residential uses are found in over 40 percent of buildings as many former retail spaces have been converted to residential units. New construction is mostly residential and often sets back from the street line to allow for off-street parking or faces side-streets with blank building sides facing onto Pitkin Avenue. Commercial uses include one of the area's few full-service supermarkets, as well as delis, laundromats, salons and other small retail establishments. Fiorentino Plaza is a medium-density NYCHA development on the northern side of Pitkin Avenue. The CHLDC recently received approval for a zoning map change to increase the allowed density at Pitkin Avenue and Berriman Street adjacent to the Shepherd Avenue subway station to build an eight-story apartment building with ground-floor retail.

East New York - Residential Core

The residential blocks between the main commercial corridors of Fulton Street, Atlantic Avenue and Pitkin Avenue are characterized by two- to three-story row houses and small three- to four-story apartment buildings built in the early 1900's. Recent development includes low-scale rowhouses or semi-detached homes with deep setbacks and front-yard parking. This new construction conforms to the low-density zoning regulations which require off-street parking and front yards, producing developments that do not match the form and character of existing buildings. The Cypress Hills residential core lies to the north of Atlantic Avenue and is characterized by slightly lower-scale rowhouses and detached homes than are typically found south of Atlantic Avenue in East New York. Glenmore Avenue, just north of and running parallel to Pitkin Avenue, is characterized by low-scale homes interspersed with pockets of auto-related uses and open industrial uses, as well as a number of community gardens on vacant city-owned lots, once occupied by residential buildings.

Ocean Hill

The western portion of the study area, in the Ocean Hill neighborhood, contains a mix of longstanding residential buildings, light-industrial activities including warehouses/storage and distribution facilities, and institutional uses. The residential uses are comprised of a mix of one- and two-family homes, as well as three- to four-story apartment buildings. The existing low-scale warehouse buildings are typically occupied with low-intensity light industrial and auto-oriented uses, including storage and warehousing, and auto-repair shops. Recent construction consists of two recently completed and one proposed hotel and conversions of former loft buildings to homeless family shelters.

C. PURPOSE AND NEED FOR THE PROPOSED ACTIONS

DCP and HPD are proposing these land use actions in response to the community objectives identified during the Sustainable Communities East New York process and subsequent outreach and workshop events held in the fall, winter and summer of 2014/2015. DCP, together with other City agencies, developed a plan to achieve these goals through new zoning and other land use actions, expanded programs and services and capital investments.

Current zoning in the neighborhood does not permit the full implementation of the East New York Community Plan. New residential development in key areas and along major corridors is not permitted. In areas where residential use is permitted, the existing zoning restricts new development to low densities that limit the production of substantial amounts of housing, particularly affordable housing, which limits the potential of the major corridors to become vibrant pedestrian destinations.

The Proposed Actions seek to facilitate vibrant, inclusive residential neighborhoods with a wide variety of local and regional commercial options, job opportunities and attractive streets that are safe and inviting for residents, workers, and visitors. Opportunities for new housing, including affordable housing, along key corridors, particularly Atlantic Avenue, would provide more housing choices for current and future residents. A growing residential population would restore population lost during the neighborhood's decline in decades past, and also expand the customer base for existing and new businesses such as grocery stores, pharmacies, and other services to flourish. The Proposed Actions also seek to reinforce and enhance the existing character and context of the residential core by requiring new development in the primarily residential central blocks to better match the form of existing buildings.

Additionally, though not part of the proposed land use and zoning actions, which are described in more detail below, the East New York Plan calls for strategic infrastructure and community investments. These improvements and investments, such as possible streetscape improvements along Atlantic Avenue and other key corridors, which would support the envisioned new level of activity, are separate from the Proposed Actions. While the Proposed Actions are a key component to facilitate the implementation of the Plan, they are not dependent on these additional components and as such are not part of a coordinated environmental review. Moreover, there are components of the Plan, which are not yet known to a sufficient level of detail to include in this analysis.

The Proposed Actions reflect DCP's on-going engagement with Community Boards 5 and 16, local elected officials and community residents and stakeholders to achieve the following land use objectives:

- Create opportunities for new residential development with significant amounts of permanently affordable housing and preserve existing affordability to ensure that the neighborhood continues to serve diverse housing needs;
- Encourage mixed-use development on key corridors;
- Enhance and revitalize major thoroughfares through new economic development; and
- Protect neighborhood character of residential core and ensure predictable future development.

Create opportunities for new residential development with significant amounts of permanently affordable housing and preserve existing affordability to ensure that the neighborhood continues to serve diverse housing needs

Changing the zoning to allow for both mixed-use residential and/or commercial development at higher densities in more areas of the neighborhood and medium density development along key corridors served by transit is intended to significantly expand the supply of housing. The Proposed Actions would promote the development of permanently affordable housing and facilitate mixed-income communities by requiring affordable housing units to be included in any new residential development, which is not required by zoning today.

Atlantic Avenue presents the greatest opportunity for the development of affordable housing. The width of the street, access to transit, and presence of a number of significant sites with potential for redevelopment provide this corridor with the capacity to support significant growth. Zoning changes to allow residential development at higher densities would make possible the construction of affordable apartment buildings on the corridor and would expand the neighborhood's supply of affordable housing.

Pitkin Avenue and Fulton Street are transit corridors and established shopping strips with many vacant or underutilized lots or low-rise buildings. Changing the low-density zoning to medium-density would allow more affordable housing to be built along these corridors.

New multifamily development in the vicinity of the study area has consisted of publicly supported affordable housing development. It is expected that a variety of City and State financing programs for affordable housing would result in the creation of a substantial amount of affordable housing within the project area under the Proposed Actions. In addition, the proposed application of a mandatory inclusionary housing program would require that residential development include an affordable component, ensuring that new development would facilitate mixed-income communities even in the event of future changes in the housing market that would make market-rate housing development for higher-income households feasible.

Encourage mixed-use development on key corridors

The low-density zoning found along key corridors today discourages mixed-use development by restricting the total allowed development. Changes to the zoning to allow medium- to higher-density development and a greater variety of uses along key corridors of Atlantic Avenue, Fulton Street, Pitkin Avenue, Pennsylvania Avenue and Liberty Avenue would promote mixed-use development with housing, commercial uses, and community facilities. Increased residential density will reinforce demand for a greater variety of local retail services such as grocery stores, pharmacies, banks, and restaurants, supporting the growth of existing and new businesses.

Atlantic Avenue has the potential to provide substantial new housing, retail, and other services. New housing is not currently permitted in the zoning districts found along most of Atlantic Avenue. Updating the zoning to allow residential uses would facilitate the construction of new housing and mixed-use development. Allowing higher residential density and a variety of job-generating uses on these sites would help bring a critical mass of residents to support a greater diversity of retail offerings and activate streetscapes and public spaces. In this way, Atlantic Avenue could transform into an urban boulevard offering a diversity of housing options, shopping, entertainment, jobs and services to the surrounding neighborhood as well as drawing visitors from the broader region.

Fulton Street, Pitkin Avenue, Liberty Avenue and Pennsylvania Avenue have the potential to see modest growth on underutilized sites, enabling new mixed-use developments with housing and ground-floor retail that are supported by the existing transit network. Specifically, on Liberty Avenue, allowing new residential development and local retail where a manufacturing district currently prohibits new housing and a scattered commercial overlay allows retail on only certain blocks, could strengthen this secondary neighborhood corridor. Modest densities and local retail could also support north-south connection to transit along Berriman Street.

With increased residential density, the neighborhood will see increased demand for more local services such as grocery stores, banks, and restaurants, supporting existing and new businesses while creating local job opportunities. City incentives for the development of grocery stores selling fresh food could be utilized to add to the neighborhood's healthy food options. The additional density proposed would create support for new and existing businesses, which would support the creation or expansion of Business Improvement Districts and/or merchants associations to further support retail growth along the major corridors.

Enhance and revitalize major thoroughfares

A vital component of the East New York Plan is the creation of new centers of activity that will bring together housing, commercial uses, community services and street level activities. Key corridors in East New York such as Atlantic,

Liberty and Pitkin Avenues are today fragmented commercial corridors with a high number of non-commercial ground floor uses. Proposed zoning changes would promote active non-residential ground floor uses with minimum levels of window coverage, and minimize curb cuts which disrupt the sidewalk to foster more dynamic commercial corridors that are inviting to pedestrians. The Proposed Actions respond to the needs of particular corridors by allowing buildings to minimize the impact of the elevated train on Fulton Street with additional flexibility for setbacks at the street level.

Protect neighborhood character of residential core and ensure predictable future development

The proposed zoning will preserve residential neighborhoods and promote contextual infill development. Residents have identified the residential blocks between the main transit corridors as areas to preserve. Side streets between the major commercial corridors feature established neighborhoods of rowhouses, duplexes and small apartment buildings. Contextual zoning would ensure that new infill development complements the existing residential character by promoting consistent building height and size.

D. DESCRIPTION OF THE PROPOSED ACTIONS

The Proposed Actions are intended to facilitate the implementation of the objectives of the East New York Plan, which identified a shared long-term vision for the future of the neighborhood to create more affordable housing and more diverse commercial and retail uses, spur economic development, foster safer streets, and generate new community resources. To accomplish these goals, DCP is proposing zoning map and text amendments that would affect a total of approximately 190 blocks in two areas, in East New York and Ocean Hill, described in detail above.

Additionally, HPD is proposing an amendment to the Dinsmore-Chestnut Urban Renewal Plan to conform land use restrictions to zoning, to refresh the urban renewal plan's general provisions, and to allow disposition of the urban renewal sites in accordance with the urban renewal plan.

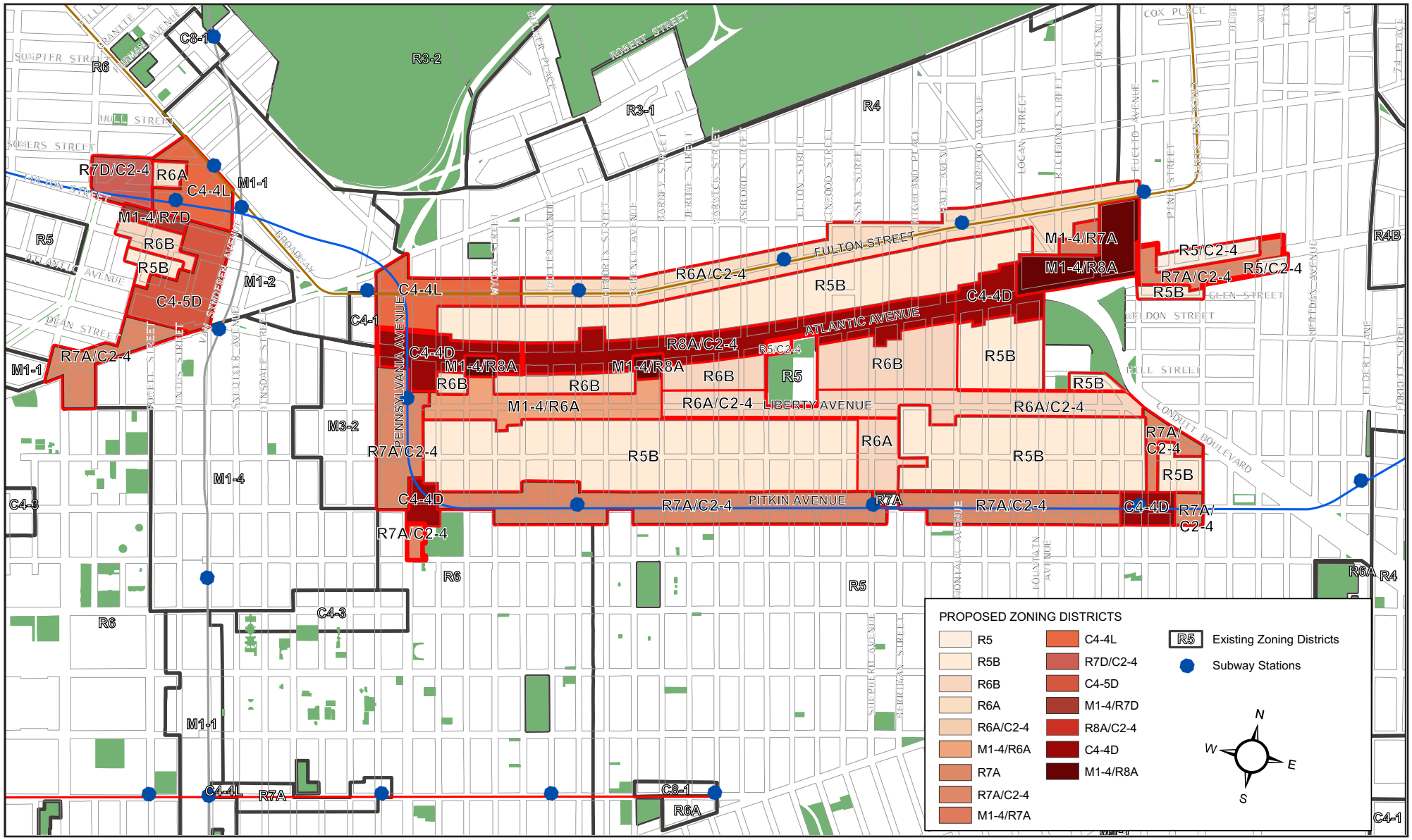
DCP will be acting as lead agency on behalf of the CPC and will conduct a coordinated environmental review. HPD will be the co-applicant for the Urban Renewal Plan amendment and, as the result, will serve as an involved agency under CEQR.

Each of these is a discretionary action subject to review under the Uniform Land Use Review Procedure (ULURP), Section 200 of the City Charter, and the City Environmental Quality Review (CEQR) process. These discretionary actions are described in more detailed below.

In addition, as noted above, as the proposed 1,000 seat school planned as part of the East New York Community Plan is intended to be a new public school facility, approval and site selection from the SCA would be required. The SCA approval and site selection is not subject to ULURP.

Proposed Zoning Districts

The proposed rezoning would replace all or portions of existing M1-1, M1-2, M1-4, C8-1, C8-2, R5, and R6 districts with M1-4/R6A, M1-4/R7A, M1-4/R8A, M1-4/R7D, R5, R5B, R6B, R6A, R7A, R7D, R8A, C4-4D, C4-4L and C4-5D districts. The proposed rezoning would also replace or eliminate portions of existing C1-2, C1-3, C2-2, and C2-3 overlays mapped within the existing R5 and R6 districts with C2-4 overlays and establish new C2-4 overlays. Figure ES-2, "Proposed Zoning" presents the proposed zoning map changes, which are discussed in greater detail below.



Source: NYC Department of City Planning

Proposed R5

(Existing C8-1 and C8-2 districts)

Three R5 districts are proposed for six partial blocks along Atlantic Avenue between Euclid and Lincoln Avenues currently zoned C8-1 and between Cleveland and Linwood Streets currently zoned C8-2.

R5 district permits all housing types at a maximum FAR of 1.25. A minimum lot width of 40 feet is required for detached houses and a minimum lot width of 18 feet is required for other housing types. A minimum lot area of 3,800 square feet is required for detached houses, and a minimum lot area of 1,700 square feet is required for other housing types. The perimeter wall of all housing types may rise to 30 feet before sloping or being set back to a maximum building height of 40 feet. Front yards must be exactly 10 feet deep or a minimum of 18 feet. One parking space is required for each dwelling unit, or 85% if grouped.

Proposed R5B

(Existing R5, C8-1, C8-2, M1-1, and M1-2 districts)

R5B is proposed in the core residential blocks between Fulton Street and Atlantic Avenue, between Atlantic Avenue and Liberty Avenue, between Liberty Avenue and Pitkin Avenue, and between Herkimer Street and Atlantic Avenue between Sherlock Place and Havens Place as follows:

- Between Fulton Street and Atlantic Avenue: 22 partial blocks between New Jersey Avenue and Richmond Street. These blocks are currently zoned C8-2, R5, R5/C2-3, and M1-1.
- Between Atlantic Avenue and Liberty Avenue: 3 partial blocks between Montauk Avenue and Fountain Avenue; 2 partial blocks between Crystal and Wells Streets; and 1 partial block between Euclid and Crescent Streets. These blocks are currently zoned M1-1 and R5.
- Between Liberty Avenue and Pitkin Avenue: 34 partial blocks between Pennsylvania Avenue and Shepherd Avenue that are currently zoned R5; 18 partial blocks between Berriman Street and Euclid Avenue that are currently zoned M1-1 and R5; and 3 partial blocks between Euclid Avenue and Crescent Street that are currently zoned R5.
- Between Sherlock Place and Havens Place: 3 partial blocks between Herkimer Street and Atlantic Avenue that are currently zoned M1-2

R5B permits detached and semi-detached residential buildings, but is primarily a three-story rowhouse district. The maximum FAR is 1.35 with a maximum street wall height of 30 feet, above which the building is set back to a maximum height of 33 feet. The front yard must be at least five feet deep and it must be at least as deep as one adjacent front yard and no deeper than the other, but it need not exceed a depth of 20 feet. Attached rowhouses do not require side yards but there must be at least eight feet between the end buildings in a row and buildings on adjacent zoning lots. Curb cuts are prohibited on zoning lot frontages less than 40 feet. On-site parking spaces must be provided for 66 percent of the dwelling units although parking can be waived when only one space is required. Front yard parking is prohibited.

Proposed R6B

(Existing M1-1, M1-2, C8-2, and R5 districts)

R6B is proposed in two areas:

- Along Herkimer Street between Sherlock Place and Havens Place (5 partial blocks currently zoned M1-2).
- Between Atlantic Avenue and Liberty Avenue between New Jersey Avenue and Vermont Street (1 partial block currently zoned C8-2), between Wyona Street and Schenck Avenue (5 partial blocks currently zoned

C8-2), between Barbey and Cleveland Streets (4 partial blocks currently zoned R5 and M1-1) and between Linwood Street and Montauk Avenue (5 partial blocks currently zoned R5 and M1-1).

R6B is a typical row house district that includes height limits and street wall lineup provisions to ensure that new buildings are consistent with the scale of the existing built context. R6B permits residential and community facility uses to a maximum FAR of 2.0 (2.2 residential FAR in areas designated as part of the Inclusionary Housing program). Building base heights must be between 30 and 40 feet, with a 50 foot maximum building height after the building set back to a depth of 10 feet on a wide street and 15 feet on a narrow. New development in the proposed R6B district would be required to line up with adjacent structures to maintain the continuous street wall character. New multifamily residences must provide one off-street parking space for 50% of dwelling units, which may be waived if 5 or fewer spaces would be required.

Proposed R6A

(Existing R5 and M1-1 districts)

R6A is proposed in three areas:

- Along Fulton Street between Bradford Street and Euclid Avenue (40 partial blocks currently zoned R5/C2-3).
- Along Liberty Avenue between Barbey Street and North Conduit Avenue and between Liberty Avenue and Pitkin Avenue between Essex and Atkins Streets (35 full or partial blocks currently zoned R5 and M1-1)
- And along Sackman Street between Somers and Truxton Streets on one partial block currently zoned M1-1.

R6A districts allow residential and community facility uses up to 3.0 FAR (3.6 FAR in areas designated as part of the Inclusionary Housing program per Zoning Resolution Section 23-90). The building form requires a street wall between 40 and 60 feet, a setback above the maximum base height of 60 feet, and a maximum building height of 70 feet. Off-street parking is required for 50 percent of the dwelling units, but this requirement is waived if 5 or fewer spaces are required.

Proposed R7A

(Existing R5, C8-1, C8-2, M1-1, and M1-4 districts)

R7A is proposed on approximately 65 full/partial blocks in five areas:

- Between Sheffield Avenue and midblock between Pennsylvania and New Jersey Avenues between Belmont Avenue and Atlantic Avenue (7 blocks currently zoned M1-1, C8-2 and R5).
- Along Pitkin Avenue between New Jersey Avenue to the west, and Doscher Street to the east; and between Pine Street and Crescent Street along Pitkin Avenue (47 partial blocks that are currently zoned R5).
- Between Liberty Avenue and Pitkin Avenue along Euclid Avenue (3 partial blocks that are currently zoned R5).
- Along Atlantic Avenue between Euclid Avenue and Lincoln Avenue (4 partial blocks currently zoned C8-1 and C8-2).
- Along East New York Avenue between Mother Gaston Boulevard and Pacific Street (4 partial blocks currently zoned M1-1 and M1-4).

R7A is a contextual district that allows for new medium-density residential development and community facilities. R7A districts allow for residential development up to 4.0 FAR (4.6 FAR in areas designated as part of the Inclusionary Housing program) and community facility uses up to 4.0 FAR. The building form requires a street wall of 40 to 65 feet, a setback above the maximum base height, and a maximum building height of 80 feet. New residences would

be required to provide one off-street parking space for 50% of the dwelling units, with reduced requirements for affordable housing.

Proposed R7D

(Existing M1-1 district)

R7D is proposed on two blocks along Eastern Parkway Extension between Mother Gaston Boulevard and Sackman Street that are currently zoned M1-1.

R7D allows medium-density apartment buildings at a maximum FAR of 4.2 for community facility uses and 5.60 for residential uses in areas designated as part of the Inclusionary Housing program. New structures in R7D districts are required to line up with adjacent structures to maintain the streetwall. Above a base height of 60 to 85 feet, the building must set back to a depth of 10 feet on a wide street and 15 feet on a narrow street before rising to its maximum height of 100 feet. In addition, where commercial overlays are mapped, active ground floor uses are required, and the related zoning text amendment would also require transparency on the ground floor (see below).

Proposed R8A

(Existing R5, C8-2, and M1-1 districts)

R8A is proposed on 29 partial blocks for portions along Atlantic Avenue between Bradford Street and Montauk Avenue. These blocks are currently zoned R5, C8-2, and M1-1.

R8A districts permit residential and community facility uses at a maximum FAR of 6.02 (7.20 in areas designated as part of the Inclusionary Housing program) and 6.50, respectively. The building form requires a base height between 60 and 85 feet and a maximum building height of 120 feet. The off-street parking requirement is one space per 1000 square feet of commercial use and health care facilities and one off-street parking space for 40% of the dwelling units.

Proposed C4-4L

(Existing R5, C8-2, and M1-1 districts)

C4-4L is proposed on 10 partial blocks along a section of Fulton Street between Sheffield Avenue and Bradford Street currently zoned C8-2 and R5 and two full or partial blocks in Ocean Hill along Broadway between Eastern Parkway and Van Sinderen Avenue currently zoned M1-1.

The proposed C4-4L is an existing zoning district created specifically for commercial corridors with elevated trains, similar to Fulton Street. The designation represents a contextual, regional commercial district that permits residential development at an R7A equivalent, as well as commercial and community facility. The proposed C4-4L district would allow for a wider range of uses and provide more building design along the elevated J/Z transit line.

C4-4L allows residential development up to 4.0 FAR (4.6 FAR in areas designated as part of the Inclusionary Housing program) and commercial and community facility uses up to 4.0 FAR. The proposed C4-4L district would allow two distinct building types depending on the location in relation to elevated train tracks:

- For lots not fronting on the elevated train, the proposed C4-4L district applies the height and setback regulations of a C4-4A district, requiring a street wall between 40 and 65 feet high and allowing a maximum building height of 80 feet.
- For lots fronting on the elevated train and within 125 feet of the streetline adjacent to the elevated train, buildings would be required to set back five feet from the streetline adjacent to the elevated train at the ground floor, and allowed to rise to a maximum height of 100 feet or ten stories, with a minimum base height of 30 feet and a maximum base height of 65 feet. Above the base height, buildings would be required to set back at least 15 feet. Certain corner lots and through lots, depending on size and configuration, would

also be subject to more generous lot coverage maximums, and some through lots would be permitted to waive the required rear yard equivalent.

Proposed C4-5D

(Existing M1-2 district)

A C4-5D district is proposed for all or parts of five blocks generally bounded by Fulton Street, Van Sinderen Avenue, Sackman Street and Pacific Street. These blocks are currently zoned M1-2.

C4-5D permits residential, commercial, and community facility buildings at a maximum FAR of 4.2 (5.6 FAR in areas designated as part of the Inclusionary Housing program). The building form requires a base height between 60 and 85 feet and a maximum building height of 100 feet. Active ground floor uses are required, and fifty percent of the building frontage on the ground floor between a height of 2 and 12 feet above curb level is required to be glazed with transparent materials that will enhance the pedestrian experience. The off-street parking requirement is one space per 1000 square feet of commercial use and one off-street parking space for 50% of the dwelling units.

Proposed C4-4D

(Existing R5, C8-2, and M1-1 districts)

C4-4D is proposed on 20 partial blocks along two sections of Atlantic Avenue, between Sheffield Avenue and Bradford Street; and between Montauk Avenue and Fountain Avenue; and two sections of either end of Pitkin Avenue in the study area, between Pennsylvania and New Jersey Avenues and between Doscher Street and Pine Street. These blocks are currently zoned R5, M1-1 and C8-2.

C4-4D is an R8A equivalent that permits residential development up to 6.02 FAR (7.20 FAR in areas designated as part of the Inclusionary Housing program), commercial uses up to 3.4 FAR, and community facilities up to 6.5 FAR. The building form requires a base height between 60 and 85 feet and a maximum building height of 120 feet. The off-street parking requirement is one space per 1000 square feet of commercial use and health care facilities and one off-street parking space for 40% of the dwelling units.

Proposed M1-4/R6A

(Existing R5, C8-2, and M1-1 districts)

An M1-4/R6A mixed use district is proposed for 18 partial blocks along Liberty Avenue between New Jersey Avenue and Barbey Street. These blocks are currently zoned R5, C8-2, and M1-1.

M1-4/R6A districts permit residential and community facility uses within Use Groups 1-4, and commercial and manufacturing uses within Use Groups 5-15 and 17 at a maximum FAR of 3.0 (3.6 with Inclusionary Housing) for residential, 3.0 for community facility, and 2.0 for commercial or manufacturing uses. For residential uses the building form requires a street wall of 40 to 60 feet, a setback above the street wall, 10 feet facing wide streets and 15 feet facing narrow streets, and a maximum building height of 70 feet. For industrial and commercial uses, the allowable FAR would remain at 2.0 resulting typically in two-story buildings.

Proposed M1-4/R7A

(Existing M1-1 district)

An M1-4/R7A mixed use district is proposed for a partial block between Chestnut Street and Richmond Street just south of Fulton Street that is currently zoned M1-1.

M1-4/R7A districts permit residential and community facility uses within Use Groups 1-4, and commercial and manufacturing uses within Use Groups 5-15 and 17 at a maximum FAR of 4.0 (4.6 with Inclusionary Housing) for residential, 4.0 for community facility, and 2.0 for commercial or manufacturing uses. For residential uses the

building form requires a street wall of 40 to 65 feet, a setback above the street wall, 10 feet facing wide streets and 15 feet facing narrow streets, and a maximum building height of 80 feet. For industrial and commercial uses, the allowable FAR would remain at 2.0 resulting typically in two-story buildings.

Proposed M1-4/R7D

(Existing M1-2 district)

An M1-4/R7D mixed use district is proposed for two partial blocks along Fulton Street between Eastern Parkway Extension and Havens Place that are currently zoned M1-2.

M1-4/R7D districts permit residential and community facility uses within Use Groups 1-4, and commercial and manufacturing uses within Use Groups 5-15 and 17 at a maximum FAR of 5.0 (5.6 with Inclusionary Housing) for residential, 4.2 for community facility, and 2.0 for commercial or manufacturing uses. For residential uses, above a base height of 60 to 85 feet, the building must set back to a depth of 10 feet on a wide street and 15 feet on a narrow street before rising to its maximum height of 100 feet. For industrial and commercial uses, the allowable FAR would remain at 2.0 resulting typically in two-story buildings.

Proposed M1-4/R8A

(Existing M1-1 and C8-2 districts)

The proposed M1-4/R8A mixed use district is proposed for two full blocks between Logan Avenue and Euclid Avenue along Atlantic Avenue (currently zoned M1-1) and two partial blocks along Atlantic Avenue between Barbey and Schenck Streets (currently zoned M1-1) and between Vermont and Wyona Streets (currently zoned C8-2).

The proposed M1-4/R8A district would allow residential and community facility uses within Use Groups 1-4, and commercial and manufacturing uses within Use Groups 5-15 and 17 at a maximum FAR of 6.02 (7.20 with Inclusionary Housing) for residential, 6.50 for community facility, and 2.0 for commercial or manufacturing uses. The proposed M1-4/R8A district requires new buildings to have a street wall height of 60 to 85 feet and a maximum building height of 120 feet. For industrial and commercial uses, the allowable FAR would remain at 2.0 resulting typically in two-story buildings.

Proposed Commercial Overlays

Existing C1 and C2 commercial overlays are mapped intermittently throughout the study area. C1 districts permit commercial Use Groups 5 and 6 while C2 districts permit Use Groups 5 through 9 and 14.

C2-4 commercial overlays are proposed to be mapped over portions of the proposed R5, R6A, R7A, R7D and R8A districts as detailed below. The proposed rezoning would also replace or eliminate portions of existing C1-2, C1-3, C2-2, and C2-3 overlays with C2-4 overlays and establish new C2-4 overlays. The affected area is as follows:

- Proposed R5: Five partial blocks along Atlantic Avenue between Pine Street and Lincoln Avenue currently zoned C8-1 and one partial block between Cleveland and Linwood Streets currently zoned C8-2.
- Proposed R6A: 40 full/partial blocks on Fulton Avenue between Bradford Avenue and Euclid Avenue that are currently zoned R5/C2-3; and 35 full/partial blocks on Liberty Avenue between Barbey Street and Conduit Avenue that are currently zoned R5 and M1-1.
- Proposed R7A: Four partial blocks on Atlantic Avenue between Euclid Avenue and Lincoln Avenue that are current zoned C8-1 and C8-2; 7 partial blocks on Pennsylvania between Liberty Avenue and Belmont Avenue that are currently zoned R5 and C8-2; 49 partial blocks along Pitkin Avenue between New Jersey Avenue and Crescent Street currently zoned R5 and R6; 3 full/partial blocks along East New York Avenue between Pacific Street and Bergen Street and Liberty Avenue.
- Proposed R7D: One partial block between Eastern Parkway and Mother Gatson Boulevard that is currently zoned M1-1.

- Proposed R8A: 29 full/partial blocks on Atlantic Avenue between Bradford and Montauk that are current zoned R5/C2-3, C8-2, M1-1, and R5.

C2-4 commercial overlays allow for local retail uses and commercial development up to 2.0 FAR. In these areas, the C2-4 commercial overlays will support the development of mixed residential/commercial uses. This proposal would map commercial overlays to a depth of 100 feet to reflect the typical depth of existing lots along these corridors and to prevent commercial uses from encroaching on residential side streets. Existing commercial overlays mapped at a depth of 150 feet would be removed on Fulton Street, Pitkin Avenue, and Liberty Avenue.

The Proposed Actions include amendments to the text of the Zoning Resolution to apply a new mandatory Inclusionary Housing program (see below) to portions of the proposed rezoning area where zoning changes are promoting new housing. Additionally, the Proposed Actions include amendments to Zoning Resolution including the establishment of an Enhanced Commercial District and a Special Mixed Use District within the rezoning area.

Mandatory Inclusionary Housing Program

DCP is proposing a citywide zoning text amendment to authorize a Mandatory Inclusionary Housing (MIH) program. The East New York Rezoning will be the first mapping of an MIH area and is the subject of a separate but concurrent land use review and environmental review process to the citywide MIH zoning text amendment. Since affordable housing guarantees are key component of the East New York Plan, the East New York rezoning includes a related action for a zoning text amendment to create an MIH program applicable only to East New York. This will provide a guarantee of an MIH program in East New York in the event that the citywide MIH zoning text is either not approved or is approved after the East New York rezoning is implemented. The East New York MIH zoning text mirrors the citywide MIH zoning text. Any changes to the Mandatory Inclusionary Housing text amendment would be expected to be made applicable to the East New York Rezoning, and duly reflected in this environmental review. For a full description of the MIH proposal.

Specifically, DCP is proposing a zoning text amendment to apply a mandatory Inclusionary Housing Program (MIH) to portions of the rezoning area, including where zoning changes are promoting new housing. The MIH would apply within the following districts: M1-4/R6A, M1-4/R7A, M1-4/R7D, M1-4/R8A, R6B, R6A, R7A, R7D, R8A, C4-4D, C4-4L, and C4-5D districts within the rezoning area (see Figure ES-3). This program would require permanently affordable housing within new residential developments, enlargements, and conversions from non-residential to residential use within the mapped “Mandatory Inclusionary Housing Areas” (MIHAs).

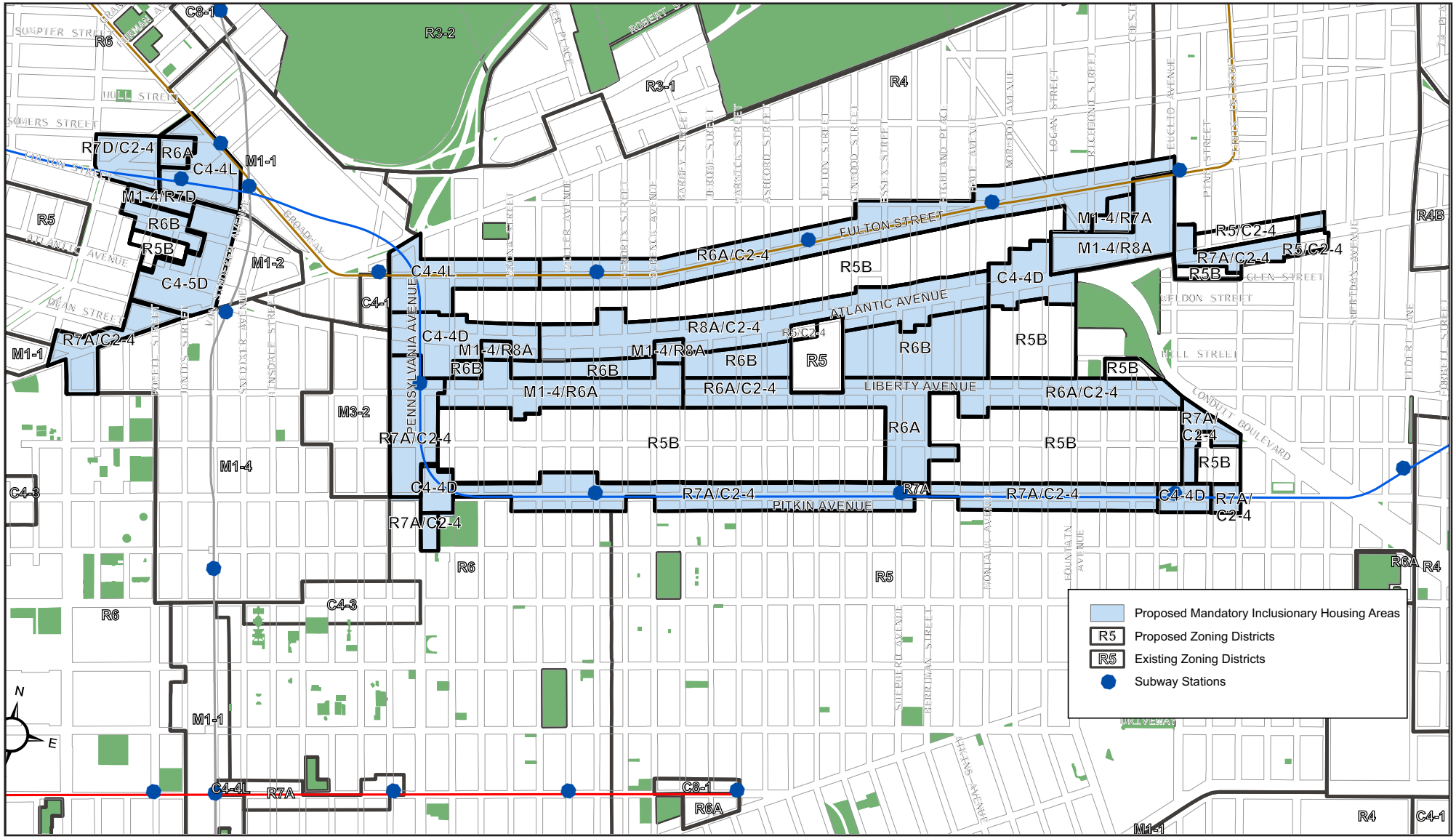
The program would require permanently affordable housing set-asides for all developments over 10 units or 12,500 zoning square feet within the MIH designated areas or, as an additional option for developments between 10 and 25 units, or 12,500 to 25,000 square feet, a payment into an Affordable Housing Fund. In cases of hardship, where these requirements would make development financially infeasible, developers may apply to the Board of Standards and Appeals (BSA) for a special permit to reduce or modify the requirements. Developments, enlargements or conversions that do not exceed either 10 units or 12,500 square feet of residential floor area will be exempt from the requirements of the program.

The proposed MIH program includes two primary options that pair set-aside percentages with different affordability levels to reach a range of low and moderate incomes while accounting for the financial feasibility tradeoff inherent between income levels and size of the affordable set-aside. For the East New York Rezoning, the designated MIH Areas will follow the requirements of option one, described below:

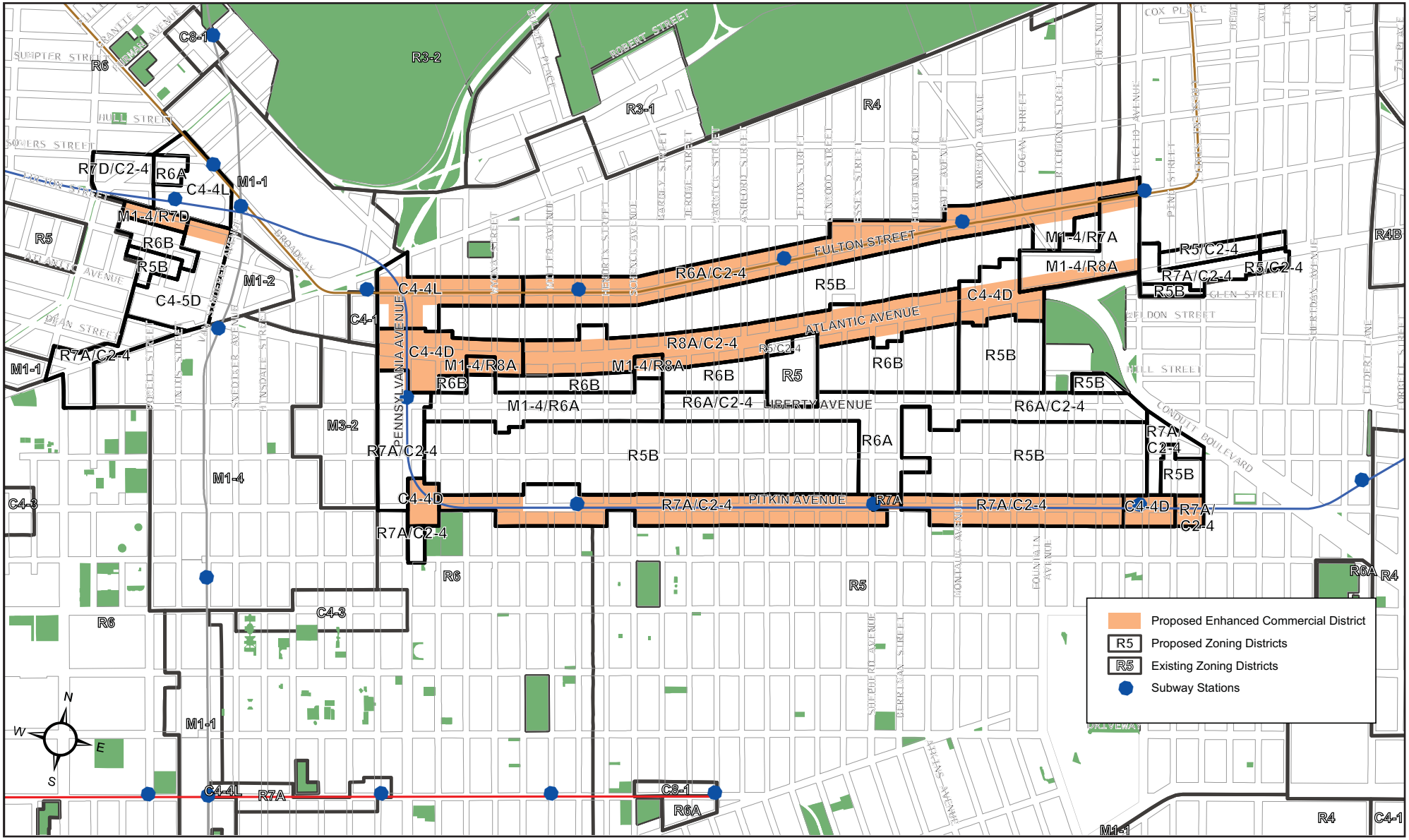
> **Option One:** 25 percent of the residential floor area shall be provided as housing affordable to households at an average of 60 percent of the Income Index (AMI), with no unit targeted at a level exceeding 130% of AMI. Qualifying households would be limited to no more than three income bands and at least 15 percent of the residential floor area must be provided to households with income at or below 40 percent of AMI.

Enhanced Commercial District

DCP proposes a Zoning Text amendment to establish Enhanced Commercial Districts in the rezoning area along portions of Atlantic Avenue, Pitkin Avenue, Fulton Street and Pennsylvania Avenue (refer to Figure ES-4). The



Source: NYC Department of City Planning



Source: NYC Department of City Planning

Enhanced Commercial Districts would foster a safe and engaging pedestrian experience along the these corridors by establishing regulations requiring non-residential ground floor use, requiring minimum levels of transparency on the ground floor, limiting curb cuts, and requiring setbacks along corridors with elevated trains.

Special Mixed Use District

The Special Mixed Use District (MX) is a special zoning district that is mapped in several locations throughout the city. It combines a light industrial (M1) district with a residential district, and permits a mix of selected light industrial, commercial, residential, and community facility uses under the applicable regulations. The MX district permits mixed-use buildings, and includes an expanded definition of "home occupations," permitting a broader variety of live-work accommodations than is allowed in standard zoning districts. The proposed MX districts is intended to retain existing light industrial businesses while encouraging the redevelopment of vacant and/or underutilized land and lofts with residential uses. The Proposed MX districts locations and regulations are described in more detail above under "Proposed Zoning."

Proposed Amendment to Dinsmore-Chestnut Urban Renewal Plan

Through its Urban Renewal Authority, HPD established the Dinsmore-Chestnut Urban Renewal Area (URA) in 2001 pursuant to the Uniform Land Use Review Procedure and the New York State General Municipal Law. The Dinsmore-Chestnut URA is comprised of Site A (Block 4142, Lot 32) and is generally bounded by Dinsmore Place on the north, Chestnut Street on the east, Atlantic Avenue on the south, and Logan Street on the west. HPD proposes an amendment to the Dinsmore-Chestnut Urban Renewal Plan (URP) to change the land use designation on Site A to reflect the proposed zoning changes. Site A is currently designated for manufacturing use. Under the proposed action, the land use designation would be changed to allow residential, community facility, commercial and light manufacturing uses, and other uses permitted under the proposed zoning. In addition, the proposed amendment would update the URP's general provisions and language to conform to current standards.

Disposition Approval

HPD is also seeking approval for the disposition of City-owned property associated with Site A (Block 4142, Lot 32) of the Dinsmore-Chestnut URA. The requested approval would permit the construction of a mixed-use development that could include housing, community facility, commercial, light manufacturing and other uses allowed under the proposed zoning, and in accordance with the uses permitted in the amended Dinsmore-Chestnut URP.

E-Designations

The Proposed Action includes the placement of (E) designations (or other measures comparable to such a designation) for hazardous materials on all 185 projected and potential development sites. In addition, an (E) designation would be placed on 110 projected and potential development sites (including 47 projected and 62 potential development sites) to ensure that there would be no significant adverse air quality impacts. These designations would specify the various restrictions, such as type of fuel to be used, the use of low NO_x burners, the distance that the vent stack on the building roof must be from its lot line(s), and/or the increase of the exhaust stack height. Furthermore, an (E) designation (or other measures comparable to such a designation) would be placed on 73 of the projected development sites and 94 of the potential development sites to ensure that there would be no significant adverse noise impacts. The (E) designation is a mechanism that ensures no significant adverse impacts would result from a proposed action because of steps that would be undertaken prior to the development of a rezoned site. For the City-owned parcel located within projected development site 66 (Block 4142, Lot 32), review of a Phase II testing protocol and development of any necessary remediation plan, as well as the requirement for façade attenuation and an alternate means of ventilation will be required through the Land Disposition Agreement (LDA) between HPD and a future selected developer with oversight provided by HPD and DEP. The (E) designation (or other measures comparable to such a designation) would ensure that these identified sites would not be developed unless necessary remedial measures are implemented.

Potential Future Actions

HPD may provide construction funding through any of its several financing programs intended to facilitate the development of new affordable housing and the preservation of existing affordable units for a range of incomes, including supportive housing and senior housing on privately-owned or City-owned land. HPD's financing programs would provide both for-profit and not-for-profit developers a wide range of opportunities to build or preserve rental and homeownership units within the Project Area. HPD works together with a variety of public and private partners to achieve the City's affordable housing goals. In addition to HPD financing, in conjunction with the issuance of tax-exempt bonds, the New York City Housing Development Corporation (HDC) may fund construction of new affordable multi-family apartment buildings and the rehabilitation of existing multi-family apartment buildings intended to upgrade existing developments and preserve affordability. Affordable housing developed and/or preserved within the Project Area may also utilize funding provided by New York State Homes and Community Renewal and HUD, which would be subject to separate future environmental reviews under SEQR and NEPA, respectively.

Actions Not Subject to Uniform Land Use Review Procedure (ULURP)

In addition to the Proposed Actions, as noted above, as the proposed 1,000-seat school planned as part of the East New York Community Plan is intended to be a new public school facility, approval and site selection from the SCA would be required. The SCA approval and site selection is not subject to ULURP.

Other Actions That Would Affect the Project Area

Independent of the Proposed Actions described above for East New York and Ocean Hill, DCP is proposing a series of text amendments to eliminate unnecessary obstacles to the creation of housing, especially affordable housing known as Zoning for Quality and Affordability (ZQA). These text amendments will to be in public review concurrent with the Proposed Actions in the East New York study area and when adopted will affect the proposed zoning districts. Since these zoning changes would affect districts described above, their effects on the project area will be analyzed as part of this environmental review in order to provide a conservative analysis.

Building Envelope Controls

The proposed ZQA zoning text amendments would modernize rules that shape buildings in the City through various updates and refinement to the Zoning Resolution of the City of New York, as follows:

- *General building envelope modifications*: In medium- and higher-density districts, the proposed ZQA zoning text amendment would allow additional flexibility to accommodate best practices for affordable construction and good design, while maintaining current maximum FARs.
- *Enhanced building envelope modifications for Inclusionary and affordable senior housing and care facilities*: Where zoning allows additional floor area for affordable housing for seniors or Inclusionary Housing, provide enough flexibility to fit all permitted floor area with good design.
- *Improved design flexibility:* Allow flexibility for the variation and texture that typify older buildings in many neighborhoods.
- *Modifications for constrained lots:* Most existing zoning controls are designed to work with flat, rectangular lots and do not work well on irregularly-shaped or slopes sites.

Senior and Supportive Housing

The proposed ZQA zoning text amendment would promote affordable senior housing and long-term care facilities through various updates and refinements to the Zoning Resolution of the City of New York, as follows:

- *Modernize zoning definitions:* Accommodate today's housing models and recognize regulated housing and facility types by removing obsolete definitions and updating definitions for affordable senior housing and long-term care facilities.
- *Rationalize FARs:* Establish consistent FARs and corresponding building heights for affordable senior housing and long-term care facilities to facilitate more and better housing for seniors.
- *Remove the specific open space ratios for non-contextual districts and lot coverages for contextual districts*: The senior bulk requirements would reference the lot coverage and open space provisions in the underlying bulk regulations.
- *Allow flexibility for different types of affordable senior housing and care facilities:* Relax density restrictions that may prevent the creation of appropriately sized units by removing the density factor and minimum unit size requirement.
- *Provide a framework for mixing of Use Group 2 residences with certain Use Group 3 community facilities:* Specify how density in mixed community facility and residential buildings would be calculated and remove existing restrictions in R6 and R7-1 that limit the portion of mixed building that can include community facility uses. In a building that combines Use Groups 2 and 3, the Quality Housing floor area deductions would be computed based on the combined floor area.
- *Reduce administrative obstacles:* Eliminate certifications and Special Permits for nursing homes.

Parking Requirements

The proposed ZQA zoning text amendment would eliminate off-street parking requirements for low-income housing or Inclusionary Housing within areas that fall within a "Transit Zone" encompassing areas well served by transit and with low car ownership and auto commutation rates. This would include the area affected by the Proposed Actions. ZQA would also allow new buildings, through discretionary review, to reduce required parking to enable mixed-income development or existing affordable buildings with underutilized parking to reduce or eliminate requirements. No parking would be required for new affordable senior housing existing affordable senior housing developments would be able to reduce or eliminate their parking.

E. ANALYSIS FRAMEWORK

Reasonable Worst-Case Development Scenario (RWCDS)

In order to assess the possible effects of the Proposed Actions, a RWCDS was developed for both the current (Future No-Action) and proposed zoning (Future With-Action) conditions for a 15-year period (build year 2030). The incremental difference between the Future No-Action and Future With-Action conditions will serve as the basis for the impact analyses of this Environmental Impact Statement (EIS). For area-wide rezonings not associated with a specific development, a ten-year period is typically the length of time over which developers would act on the area-wide zoning map changes such as those proposed. However, because current housing market conditions in the neighborhood are such that it may take longer for the full extent of development to occur under the Proposed Actions, a fifteen-year build year was selected for the time frame of the environmental analyses.

To determine the With-Action and No-Action conditions, standard methodologies have been used following the *CEQR Technical Manual* guidelines employing reasonable assumptions. These methodologies have been used to identify the amount and location of future development, as discussed below.

Development Site Criteria

In projecting the amount and location of new development, several factors have been considered in identifying likely development sites. These include known development proposals, past and current development trends, and the development site criteria described below. Generally, for area-wide rezonings that create a broad range of

development opportunities, new development can be expected to occur on selected, rather than all, sites within the rezoning area. The first step in establishing the development scenario was to identify those sites where new development could be reasonably expected to occur.

Development sites were initially identified based on the following criteria:

- Lots located in areas where a substantial increase in permitted FAR is proposed;
- Lots with a total size of 5,000 square feet (sf) or larger (may include potential assemblages totaling 5,000 sf, respectively, if assemblage seems probable[1]);
- Underutilized lots (defined as vacant or lots constructed to less than or equal to half of the proposed FAR under the proposed zoning); and
- Lots located in areas where changes in use would be permitted.

Certain lots that meet these criteria were excluded from the scenario based on the following conditions because they are very unlikely to be redeveloped as a result of the proposed rezoning:

- Lots where construction activity is actively occurring or has recently been completed;
- Sites of schools (public and private), municipal libraries, government offices, large medical centers, and houses of worship. These facilities may meet the development site criteria, because they are built to less than half of the permitted floor area under current zoning and are on larger lots. However, these facilities have not been redeveloped or expanded despite the ability to do so, and it is extremely unlikely that the increment of additional FAR permitted under the proposed zoning would induce redevelopment or expansion of these structures. Additionally, for government-owned properties, development and/or sale of these lots may require discretionary actions from the pertinent government agency;
- Multi-unit buildings (existing individual buildings with six or more residential units are unlikely to be redeveloped because of the required relocation of tenants in rent-stabilized units);
- Certain large commercial structures such as multi-story office buildings and hotels. Although these sites may meet the criteria for being built to less than half of the proposed permitted floor area, some of them are unlikely to be redeveloped due to their current or potential profitability, the cost of demolition and redevelopment, and their location.
- Lots whose location or highly irregular shape would preclude or greatly limit future as-of-right development. Generally, development on highly irregular lots does not produce marketable floor space.
- Lots utilized for public transportation and/or public utilities.

These criteria have been developed to reflect observed development patterns within the rezoning area. In recent years, these areas have seen few entirely new developments constructed despite being neighborhood shopping streets that are well served by public transportation. Accordingly, certain sites that might be considered a soft site under the above criteria within these areas have been excluded or determined to be less likely to be developed if they meet one or more of the following criteria:

- Sites smaller than 7,500 sf occupied by existing residential development and/or;
- Sites with multiple commercial and residential tenants and/or;
- Sites occupied by active businesses within significant structures or buildings; and/or
- Sites occupied by unique services or prominent and successful neighborhood businesses.

[1] Assemblages are defined as a combination of adjacent lots that satisfy one of the following conditions: (1) the lots share common ownership and, when combined, meet the Qualifying Site criteria; (2) at least one of the lots, or a combination of lots, meets the Qualifying Site criteria, and ownership of the assemblage is shared by no more than two distinct owners.

Definition of Projected and Potential Development Sites

To produce a reasonable, conservative estimate of future growth, the development sites have been divided into two categories: projected development sites and potential development sites. The projected development sites are considered more likely to be developed within the 15-year analysis period for the Proposed Actions (i.e., by the 2030 analysis year), while potential sites are considered less likely to be developed over the same period. Potential development sites were identified based on the following criteria:

- Slightly irregularly-shaped lots or otherwise encumbered parcels that would make as-of-right development difficult.
- Lots with ten or more commercial tenants, which may be difficult to dislodge due to long-term leases.
- Active businesses, which may provide unique services or are prominent and successful neighborhood businesses or organizations unlikely to move.
- Sites divided between disparate zoning districts.

Based on the above criteria, a total of 185 development sites (80 projected and 105 potential) have been identified in the rezoning area.[2] Figures ES-5a through ES-5d show these projected and potential development sites, and Table ES-1, below, provides a summary of the RWCDS for each analysis scenario.

The EIS will assess both density-related and site-specific potential impacts from development on all projected development site. Density-related impacts are dependent on the amount and type of development projected on a site and the resulting impacts on traffic, air quality, community facilities, and open space.

Site-specific impacts relate to individual site conditions and are not dependent on the density of projected development. Site-specific impacts include potential noise impacts from development, the effects on historic resources, and the possible presence of hazardous materials. Development is not anticipated on the potential development sites in the foreseeable future. Therefore, these sites have not been included in the density-related impact assessments. However, a number of potential development sites could be developed under the Proposed Action in lieu of one or more of the projected development sites in accommodating the development anticipated during the foreseeable future as the result of the Proposed Actions. The potential development sites are therefore addressed in the EIS for site-specific effects in order to ensure a conservative analysis.

Development Scenario Parameters

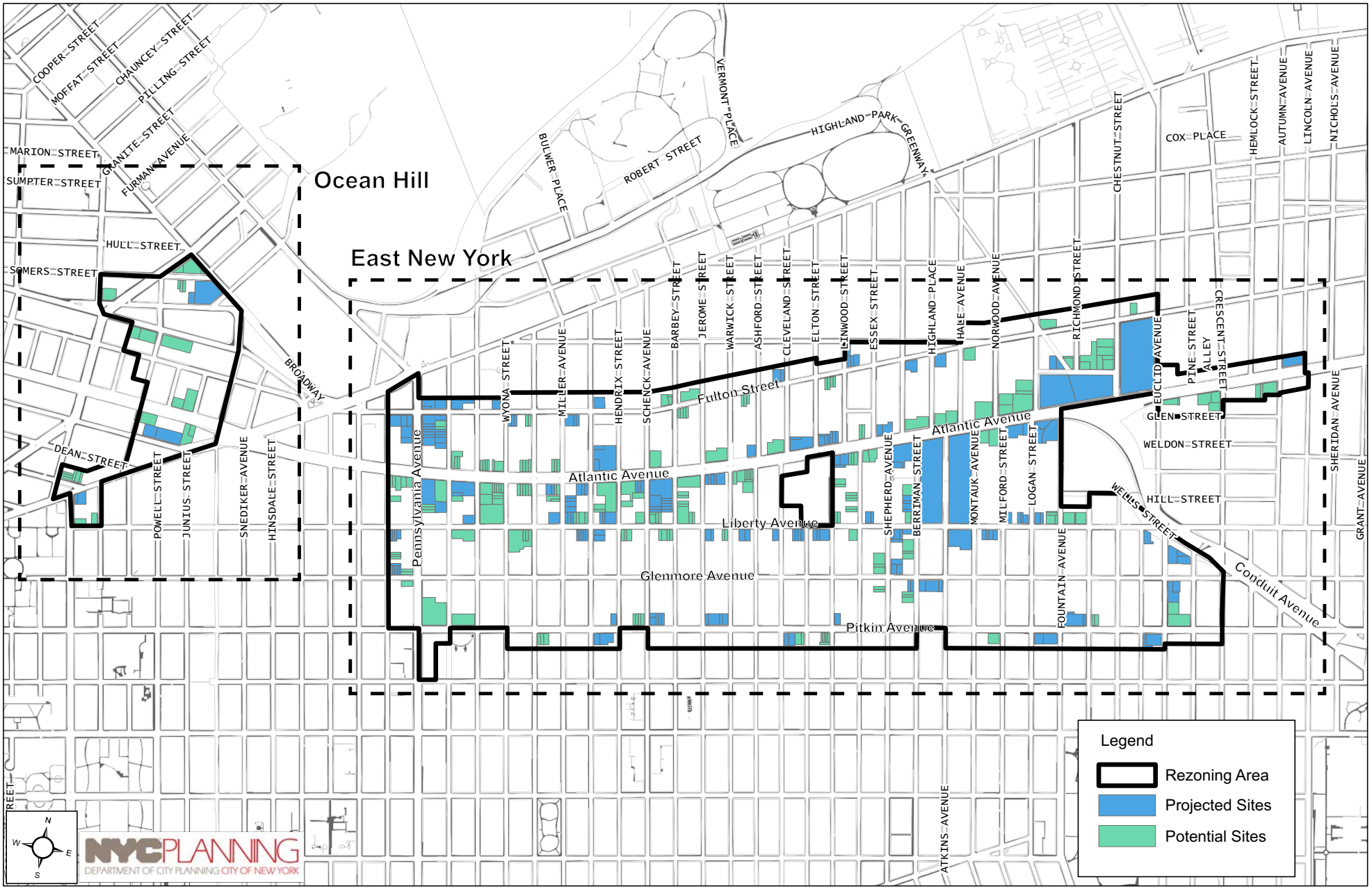
DWELLING UNIT FACTOR

The number of projected dwelling units in apartment buildings is determined by dividing the total amount of residential floor area by 1,000 and rounding to the nearest whole number.

AFFORDABLE HOUSING ASSUMPTIONS

Additionally, the number of affordable dwelling units assumed was estimated based on known development proposals, past and current development trends, the City, State, and Federal programs that support the construction of affordable housing, and the proposals in Housing New York, the Mayor's ten-year housing plan, that aim to significantly increase the amount of affordable housing created and preserved in the five boroughs.

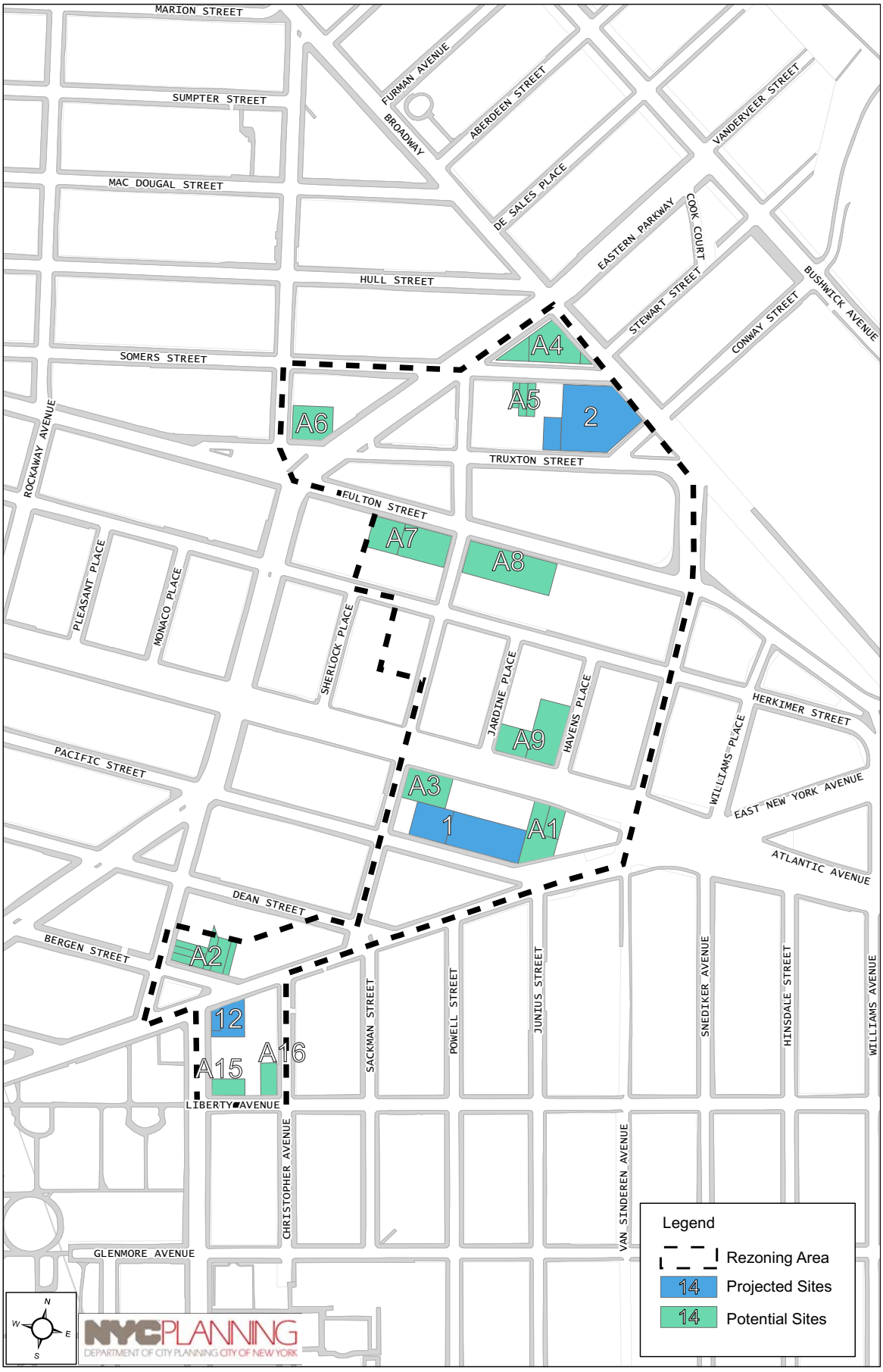
[2] Shortly before the completion of the DEIS, DCP became aware of the sale of a property located at 1459 Herkimer Street. While no plans for redevelopment have been made public, DCP believes that this site due to development interest plus proximity to transit should now be considered a development site under the RWCDS. A preliminary analysis was conducted and it was found that it's potential to affect the DEIS analyses would be primarily limited to certain transportation elements. Therefore its inclusion into the RWCDS would not result in any new or different significant adverse environmental impacts that are not already identified in this DEIS. The site will be fully evaluated and incorporated into the EIS between the DEIS and FEIS.

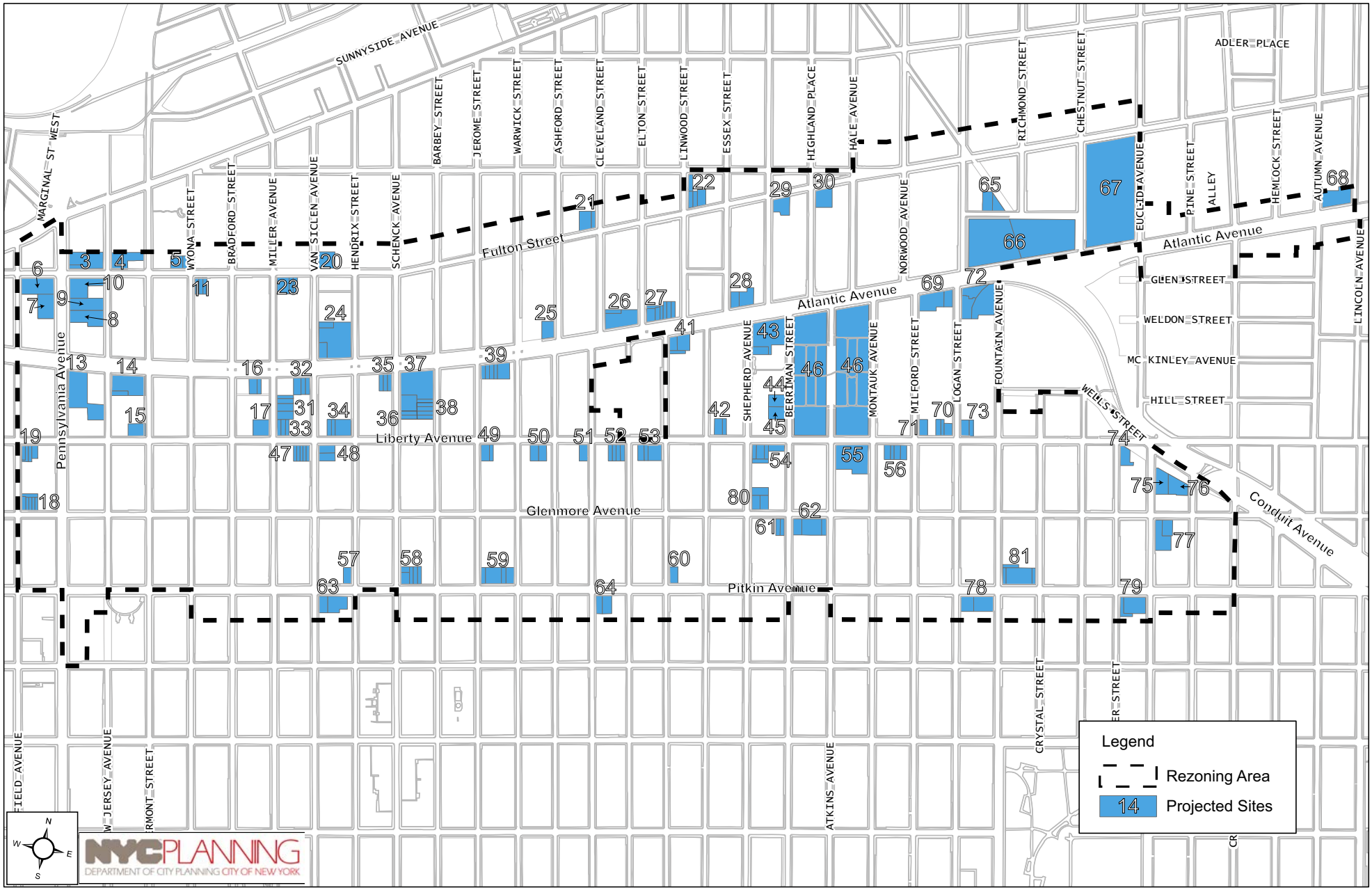


East New York Rezoning Proposal

Figure ES-5a
RWCDS Projected and Potential Development Sites - Overview

RWCDS - Ocean Hill Projected and Potential Development Sites

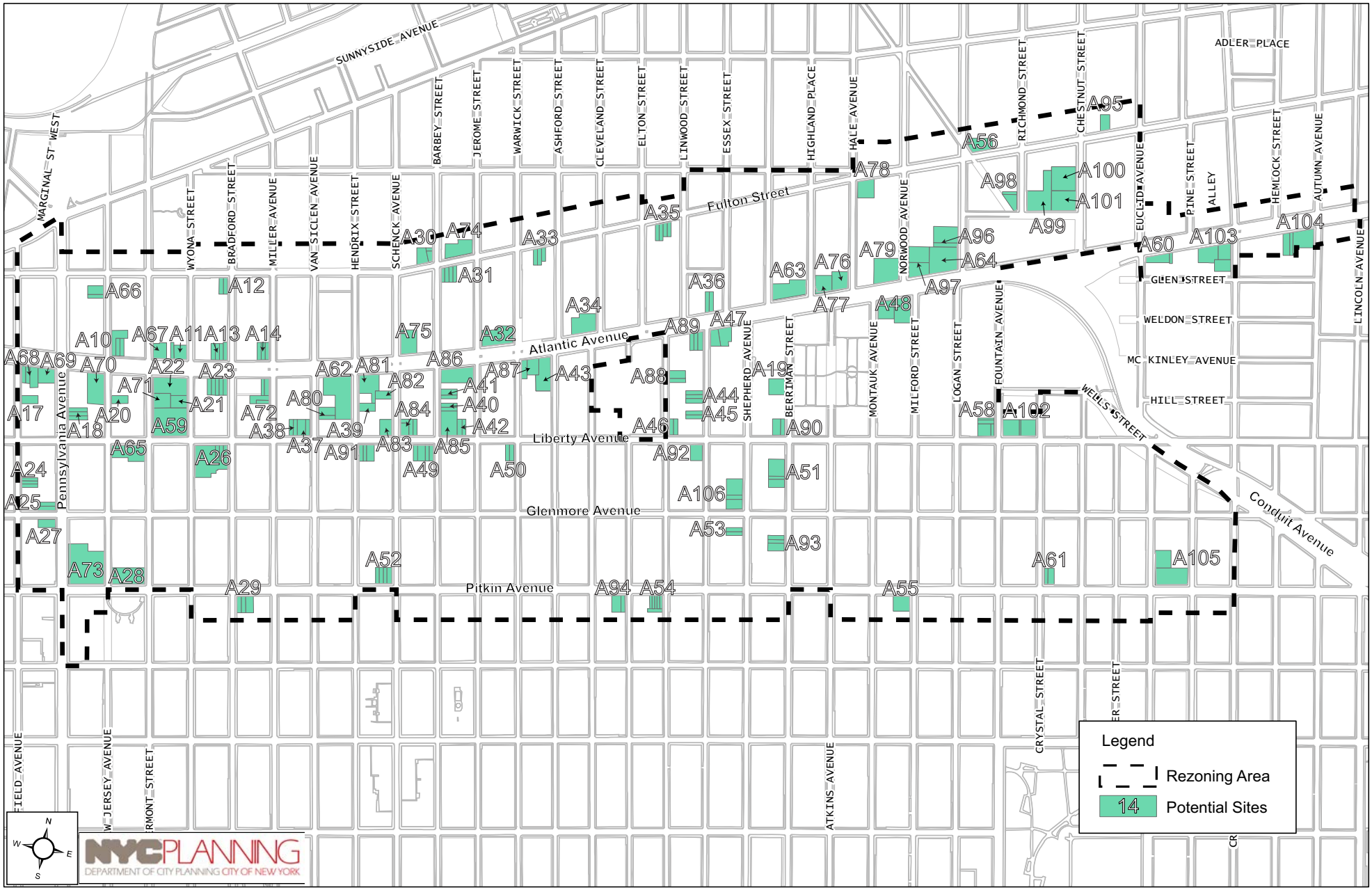




East New York Rezoning Proposal

Figure ES-5c

RWCDS - East New York/Cypress Hills Projected Development Sites



East New York Rezoning Proposal

Figure ES-5d

RWCDS - East New York/Cypress Hills Potential Development Sites

East New York has not experienced market-rate multifamily construction in recent years. It is possible that by the time of the analysis year, changes in the housing market may result in this type of construction occurring. In this event, the proposed MIH program as discussed above will ensure that a share of new housing is affordable. However, for the immediate future, it is anticipated that new multifamily development will resemble recent multifamily development in the broader area, which has utilized public subsidy and been affordable to low-income households. While a new MIH program would set a minimum affordability requirement that promotes economic diversity while supporting feasible development, the actual amount of affordable housing created in the East New York Rezoning will be determined by the interaction among housing subsidy programs, the local housing market, zoning requirements, and broader economic conditions; including a recent commitment by the City (through HPD) to subsidize 1,200 affordable dwelling units in the first two years of the East New York Community Plan.

Overall, it is estimated that about half of the projected dwelling units would be affordable to lower income households. The environmental review will assume that 50 percent of all units created, in the aggregate, will be affordable to low-income households, with the remaining housing affordable to moderate- or middle-income households, or higher-income households.

OTHER ACTIONS THAT WOULD AFFECT THE DEVELOPMENT PARAMETERS

As noted above, a 1,000 seat school is being proposed as part of the East New York Community Plan. This would be a new public school facility requiring approval and site selection from the SCA. The new school is proposed to be located on Projected Development Site 66 (Block 4142, Lot 32). Since specific elements of the school are yet to be determined, certain assumptions as to the programming, orientation and building form, and other parameters are being made for purposes of the environmental review in order to provide a conservative analysis. Specifically, a mixed-use school and residential development will be analyzed to provide a conservative analysis despite the economic realities and construction difficulties of building residential on top of a school. As further information is made known, the appropriate analyses will be updated where warranted.

As discussed above, DCP has proposed a series of text amendments to eliminate unnecessary obstacles to the creation of housing, especially affordable housing. These text amendments are expected to be in public review concurrent with the Proposed Actions in the East New York study area and when adopted will affect the proposed zoning districts. Since these zoning changes would affect the districts described below their effects on the project area will be analyzed as part of this environmental review in order to provide a conservative analysis. These changes include increases to the maximum base and height regulations and parking regulations for affordable housing units, which would not be required. For the purposes of this environmental analysis, it is assumed that the changes to the maximum base and total height regulations would result in buildings with maximum base and total heights ranging up to six and eight stories, respectively, in R6A districts; seven to ten stories, respectively, in R7A districts; nine and 12 stories, respectively, in R7D districts; and ten and 14 stories, respectively, in R8A districts.

The Future without the Proposed Actions (No-Action Condition)

In the future without the Proposed Actions (No-Action), the identified projected development sites are assumed to either remain unchanged from existing conditions, or become occupied by uses that are as-of-right under existing zoning and reflect current trends if they are vacant, occupied by vacant buildings, or occupied by low intensity uses that are deemed likely to support more active uses. Table ES-1 shows the No-Action conditions for the projected development sites.

As shown in Table ES-1, below, it is anticipated that, in the future without the Proposed Actions, there would be a total of approximately 1,502,180 sf of built floor area on the 80 projected development sites. Under the RWCDS, the total No-Action development would comprise 550 market-rate residential units, 653,099 sf of commercial uses, 125,886 sf of industrial uses, 156,972 sf of community facility uses, and 1,304 accessory parking spaces. The No-Action estimated population would include approximately 1,646 residents and 1,998 workers on these projected development sites.

The Future with the Proposed Actions (With-Action Condition)

The Proposed Actions would allow for the development of new uses and higher densities at the projected and potential development sites. As shown in Table ES-1, under the RWCDS, the total development expected to occur on the 80 projected development sites under the With-Action condition would consist of approximately 8,825,138 sf of floor area, including 6,901,057 sf of residential floor area (6,862 DU), 1,210,389 sf of commercial uses, 98,851 sf of industrial uses, and 614,842 sf of community facility uses, as well as 2,442 accessory parking spaces. The projected incremental (net) change between the No-Action and With-Action conditions that would result from the Proposed Actions would be an increase of 6,334,833 sf of residential floor area (6,312 DU), 557,290 sf of commercial space, 457,870 sf of community facility space, and 1,138 accessory parking spaces, and a net decrease of 27,035 sf of industrial space. The total difference between the built square footage in the No-Action and With-Action conditions is approximately 7,322,958 sf.

TABLE ES-1
2030 RWCDS No-Action and With-Action Land Uses

Land Use	No-Action Condition	With-Action Condition	No-Action to With-Action Increment
Residential			
Market-Rate Residential	550 DU	3,415 DU	+ 2,865 DU
Affordable Residential	0 DU	3,447 DU	+ 3,447 DU
Total Residential	***566,224 sf (550 DU)***	***6,901,057 sf (6,862 DU)***	***+ 6,334,833 sf (6,312 DU)***
Commercial			
Local Retail	239,316 sf	893,952 sf	+ 654,636 sf
FRESH Supermarket	30,000 sf	60,000 sf	+ 30,000 sf
Restaurant	5,650 sf	64,550 sf	+ 58,900 sf
Auto-Related	128,365 sf	0 sf	- 128,365 sf
Hotel	97,551 sf	0 sf	- 97,551 sf
Office	75,992 sf	191,887 sf	+ 115,895 sf
Warehouse/Storage/Garage	76,225 sf	0 sf	-76,225 sf
Total Commercial	***653,099 sf***	***1,210,389 sf***	***+ 557,290 sf***
Other Uses			
Industrial	125,886 sf	98,851 sf	- 27,035
Community Facility	156,972 sf[1]	614,842 sf[2]	+ 457,870 sf
Total Floor Area	**1,502,180 sf**	**8,825,138 sf**	**+ 7,322,958 sf**
Parking			
Parking Spaces	1,304	2,442	+ 1,138
Population[3]			
Residents	1,646	20,447	+ 18,801
Workers	1,998	5,708	+ 3,710

Notes:

[1] Includes 69,720 sf of house of worship uses, 49,138 sf of medical office uses, 28,302 sf of day care center uses, and 9,812 sf of community center uses.

[2] Includes 77,593 sf of house of worship uses, 141,119 sf of medical office uses, 163,000 sf of school uses, and 233,130 sf of community center uses.

[3] Assumes 2.99 persons per DU for residential units in Brooklyn Community District 5 and 2.75 persons per DU for residential units in Brooklyn Community District 16. Estimate of workers based on standard rates used in prior EIS documents, including the *East Midtown Rezoning FEIS*, *Atlantic Yards FEIS*, *Western Rail Yards FEIS*, *Brownsville Ascend Charter School EA*, *Coliseum Redevelopment FSEIS*, *125th Street Corridor Rezoning FEIS*, *West 57th Street Rezoning FEIS*, and others. Employee rates used are as follows: one employee per 250 sf of office, three employees per 1,000 sf of retail/supermarket/restaurant uses, one employee per 25 DU, one employee per 2.67 hotel rooms (and 400 sf per hotel room), one employee per 1,000 sf of auto-related and industrial uses, one employee per 15,000 sf of warehouse uses, one employee per 11.4 students in school uses, three employees per 1,000 sf of all other community facility uses, and one employee per 50 parking spaces.

Based on 2010 Census data, the average household size for residential units in Brooklyn Community District 5 is 2.99 and the average household size for residential units in Brooklyn Community District 16 is 2.75. Based on these ratios

and standard ratios for estimating employment for commercial, community facility, and industrial uses, Table ES-1 also provides an estimate of the number of residents and workers on the 80 projected development sites in the No-Action and With-Action conditions. As indicated in the table, under the RWCDS, the Proposed Actions would result in a net increment of 18,801 residents and 3,710 workers.

A total of 105 sites were considered less likely to be developed within the foreseeable future and were thus considered potential development sites. As noted earlier, the potential sites are deemed less likely to be developed because they did not closely meet the criteria listed above. However, as discussed above, the analysis recognizes that a number of potential development sites could be developed under the Proposed Actions in lieu of one or more of the projected development sites in accommodating the development anticipated in the RWCDS. The potential development sites are therefore also analyzed in the EIS for site-specific effects.

As such, the EIS will analyze the projected developments for all technical areas of concern and also evaluate the effects of the potential developments for site-specific effects such as archaeology, shadows, hazardous materials, stationary air quality, and noise.

F. PROBABLE IMPACTS OF THE PROPOSED ACTIONS

Land Use, Zoning, and Public Policy

No significant adverse impacts on land use, zoning, or public policy are anticipated in the future with the Proposed Actions in the primary study area (generally coterminous with the rezoning area) or ¼-mile (secondary) study area in the 2030 analysis year. The Proposed Actions would not directly displace any land uses so as to adversely affect surrounding land uses, nor would it generate land uses that would be incompatible with land uses, zoning, or public policy in the secondary study area. The Proposed Actions would not create land uses or structures that would be incompatible with the underlying zoning or conflict with public policies applicable to the primary or secondary study areas.

The Proposed Actions would result in an overall increase in residential, commercial, and community facility uses throughout the primary study area, when compared to conditions in the future without the Proposed Actions. The Proposed Actions would change zoning designations within the primary study area in a manner that is intended to promote affordable housing development, encourage economic development, create pedestrian-friendly streets, and introduce new community resources to foster a more equitable East New York. The Proposed Actions include mapping contextual zoning districts that would better protect the existing built context of East New York by requiring new development in the residential core to better match the form of existing buildings. The Proposed Actions also include increases in density along selected corridors to expand opportunities for housing, including significant amounts of permanently affordable housing, as well as directing higher densities to areas that can accommodate future growth, such as those close to subway lines and other transit resources. The Proposed Actions would also map new commercial overlays and new mixed-use (MX) districts to incentivize mixed-use development, permit industrial uses to expand in select areas, facilitate active streetscapes, and encourage new retail development to support the anticipated residential development in the area.

Socioeconomic Conditions

This analysis finds that the Proposed Actions would not result in any significant adverse impacts to the five socioeconomic areas of concern, including direct residential displacement, direct business/ institutional displacement, indirect residential displacement, indirect business/institutional displacement, and adverse effects on specific industries.

Direct Residential Displacement

The initial assessment did not warrant further analysis of direct residential displacement. According to the *CEQR Technical Manual*, direct displacement of fewer than 500 residents would not typically be expected to alter socioeconomic characteristics of a neighborhood. The Proposed Actions could potentially directly displace approximately 158 residents residing in 53 dwelling units on 19 of the 80 projected development sites, which would constitute less than five percent of the primary study area population. Based on the guidelines in the *CEQR Technical Manual*, the direct displacement of these residents would not result in a significant adverse impact as they do not represent a substantial or significant proportion of the study area population. Although this amount of displacement would not have the potential to cause a significant adverse direct residential impact, any displaced residents could apply for new affordable housing developed as a result of the Proposed Actions. Through existing or proposed City programs, HPD would offer appropriate assistance to displaced residents, including working with the local community to counsel displaced tenants and connect them to affordable housing resources in the area. See www.nyc.gov/housingconnect. Further, a newly created Tenant Harassment Prevention Task Force, which could assist tenants in rent-regulated units in bringing enforcement actions against landlords who harass tenants in East New York, would protect tenants from displacement. The City is committed to providing approximately $36 million for free legal representation in housing court to such tenants in rezoned neighborhoods facing harassment, building neglect, or eviction proceedings.

Direct Business/Institutional Displacement

A preliminary assessment found that the Proposed Actions would not result in significant adverse impacts related to direct business and institutional displacement. Potential direct business/institutional displacement would be limited to 88 businesses and institutions located on 42 of the 80 identified projected development sites, subject to lease terms and agreements between private firms and property owners existing at the time of redevelopment in the With-Action condition.

These 88 businesses and institutions provide jobs for an estimated 584 employees, accounting for approximately 13 percent of the total employment (4,415 workers) in the primary study area and approximately four percent of employment (16,306 workers) in the secondary study area. Such potential direct displacement is expected to occur over an approximate 15-year period on a site-by-site basis. These 88 businesses/institutions that could be directly displaced conduct a variety of business activities, including automotive and transportation-related services, manufacturing, retail, wholesale, accommodation and food service, construction, professional and technical services, health care and social assistance services, fitness-related uses, and personal services (laundromats, drycleaner, masseuse etc.). The 88 businesses/institutions that are expected to be directly displaced in the study area do not represent a substantial amount of study area employment and would likely be able to find alternative properties that are appropriately zoned in the surrounding area, Brooklyn and in greater New York City.

The Proposed Actions and associated RWCDS would not result in the direct displacement of any businesses that provide products or services essential to the local economy that would no longer be available in its trade area, nor would it result in the displacement of any business that is the subject of regulations in the publicly adopted plans to preserve, enhance or otherwise protect it. It is the intent of the Proposed Actions to expand development opportunities.

While the Proposed Actions have the potential to result in the potential direct business and institutional displacement of 86 businesses and two institutions from 42 projected development sites, the Proposed Actions would introduce retail, supermarket, restaurant, office, and community facility space that would add 3,710 workers over the No-Action condition. As part of the East New York Community Plan, the Department of Small Business Services would be offering business assistance programs targeted to the needs of this community and conducting a commercial district needs assessment to identify ways to strengthen existing businesses and commercial corridors. It is expected that some businesses that would be directly displaced would be able to relocate to new spaces in the study area. The Proposed Actions are consistent with, and intended to implement, principal goals and objectives of the East New York Community Plan, including creating more affordable housing and more diverse commercial uses, promoting economic development and opportunity for residents, fostering safer streets, and generating new

community resources. The proposed zoning map and zoning text amendments would set the stage for the further growth and development of East New York, encouraging a vibrant mix of residential, commercial, community facility, and light industrial uses and taking advantage of the area's status as a neighborhood with excellent transit accessibility. The proposed zoning districts would reinforce East New York's role as a transit hub and expand the opportunities for residential, commercial, and community facility development, which is expected to enliven the area and produce economic growth and further the community's goal of creating a stable climate for investment, employment retention, and new job creation.

Indirect Residential Displacement

In accordance with *CEQR Technical Manual* methodology, the Proposed Actions have the potential to substantially change the demographic composition and/or alter the real estate market conditions in both the primary and secondary study areas, as they would increase the study area population by greater than five percent over the future without the Proposed Actions. The Proposed Actions would result in the development of 6,862 DUs (a net increase of 6,312 DUs compared to No-Action conditions) in the study area in the 2030 With-Action condition, of which approximately half would be affordable. Assuming that all new units would be occupied and have an average household size of 2.99 persons per housing unit for Brooklyn CD5 and 2.75 persons per housing unit for Brooklyn CD16 (the 2010 Census average household sizes), the Proposed Actions would introduce a net increase of up to 18,801 residents in the study area. This amount of new residential development would represent an approximately nine percent increase in the housing stock and about ten percent increase in the residential population within the overall study area, as compared to the No-Action condition. This development would be gradual and is expected to occur over a 15-year period by private developers on a site-by-site basis, rather than all at once with the full effects being reached in 2030.

The detailed analysis of the potential for indirect residential displacement impacts estimates that there is a substantial number of low-and moderate-income residents living in unprotected housing units in a number of census tracts within the overall study area. The primary study area is estimated to contain approximately 5,172 such units (approximately 12,635 residents), and the secondary study area contains approximately 16,616 such units (approximately 36,361 residents) that could be vulnerable to rent increases in the future with or without the Proposed Actions**.**

As a whole, the socioeconomic characteristics of the population living in the study area is already changing and is likely to continue to change over the next several years under the No-Action condition by 2030. At-risk households are already experiencing rent pressures and the current average asking rents are not affordable to many of existing residents in the primary and secondary study areas. Given current market trends, it is very likely that demand for housing in the study area would continue to escalate in the future with or without the Proposed Actions, and that rents within the study area would significantly increase in the future without the Proposed Actions. Irrespective of the Proposed Actions, unprotected low- and moderate-income rental households would likely continue to experience indirect residential displacement pressures and could potentially move out of the area and therefore decrease in proportion to other households.

Although the population living in those unprotected units and therefore potentially subject to indirect displacement over time exceeds five percent of the study area, it is anticipated that through a combination of public land, private sites, the City's proposed Mandatory Inclusionary Housing (MIH) program, and the availability of financing by HPD, over half of all new residential units that are expected to developed within the rezoning area over the next 15 years would be affordable. This would ensure that a substantial amount of protected affordable units would be provided in the study area, which would help retain the low- and moderate-income renters now living in unprotected units and would help ensure that the neighborhoods continue to serve diverse housing needs.

The Proposed Actions' contributions to rent pressures in the study areas would be limited by the supply of market-rate and affordable housing resulting from the Proposed Actions, which could serve to offset existing housing demand and rent pressures. The Proposed Actions are, therefore, not expected to result in a significant adverse impact with respect to indirect residential displacement.

Indirect Business/Institutional Displacement

The assessment finds that the Proposed Actions would not result in significant adverse impacts due to indirect business and institutional displacement. The Proposed Actions would encourage compatible land uses that are expected to strengthen existing commercial and industrial areas and provide direction and flexibility for growth in areas with long-term potential. The types of uses to be introduced include a mix of housing, retail, office, community facilities, and light industrial uses, which would be distributed throughout the 190-block rezoning area on 80 projected development sites.

It is the intent of the Proposed Actions to balance preservation and growth in the primary study area. The proposed zoning changes are intended to promote affordable housing development, encourage economic development, create pedestrian-friendly streets, and introduce new community resources to foster a more equitable East New York. The Proposed Actions would support the Sustainable Communities East New York (SCENY) study by facilitating the development of affordable housing units, activating the streetscape through the establishment of a Special Enhanced Commercial (EC) District along select corridors and the mapping of commercial overlays, improving the streetscape through tree planting required for new construction pursuant to the Zoning Resolution of the City of New York, introducing a net 859,431sf of commercial uses, including local retail, restaurant, supermarket, and office uses and a net 457,870 sf of community facility uses that are expected to generate approximately 3,710 new jobs, under the RWCDS.

While the Proposed Actions would facilitate substantial redevelopment within the primary study area, they would not introduce new uses or economic activities to the study area that could change existing economic trends, and the Proposed Actions would not add to the concentration of a particular sector of the local economy enough to alter or accelerate an ongoing trend to alter existing economic patterns. The Proposed Actions include increases in permitted density along selected corridors to expand opportunities for housing, including significant amounts of protected affordable housing, as well as mapping commercial overlays along streets where existing ground-floor retail uses exist, in order to provide support for existing retail uses and encourage the growth of local-scale commercial activity to support anticipated residential development in the area.

The study area has well-established residential market and supports a mix of commercial, retail, light industrial, and institutional uses. The new land uses that would result in the future with the Proposed Actions are foreseen as a continuation of current established land use trends in a manner sensitive to the surrounding land uses and built form. The area would retain its mixed-use character and create opportunities for new investment on underutilized sites. Additionally, businesses and institutional uses that could be directly displaced by the Proposed Actions do not provide products or services essential to the local economy that would no longer be available to local residents and businesses due to the difficulty of relocating, nor are they the subject of regulations or publicly adopted plans to preserve, enhance, or protect them. Therefore, according to *CEQR Technical Manual* criteria, the displacement of these businesses would not have adverse indirect effects on the remaining businesses or consumers in the study area. Although the employees of the directly displaced businesses form a portion of the customer base of neighborhood service establishments, the Proposed Actions would increase the overall employment in the rezoning area compared to the No-Action condition. The influx of residents and employees to the study area would add to the customer base of existing study area businesses compared to the No-Action condition.

The Proposed Actions would require in certain areas along established retail shopping corridors that only non-residential space such as stores or community facilities be provided on ground floors of new buildings, ensuring that the area would have a robust supply of retail and community facility space. The addition of this new retail and community facility space would serve to increase the overall supply of such space in the study area and, thus, limit rent pressures on existing business and community facility occupants.

The retail space resulting from the Proposed Actions is expected to be primarily local retail that would largely support the local resident and worker populations and strengthen the existing commercial corridors of Fulton Street, and Atlantic, Pitkin, and Liberty Avenues. It is not anticipated to be destination retail, which would draw consumers from a larger area. The new commercial uses would be dispersed throughout the primary study area on 60 of the 80 projected development sites, and the types of commercial uses expected under the Proposed Actions—primarily

neighborhood goods and services—would not be new to the study area. The expanded commercial space would provide local goods and services for both the existing residents and the new population that would move into the area under the Proposed Actions. Therefore, as the commercial retail uses would serve the added demand from the future new resident populations, and there are established existing retail corridors throughout the study area, it is not expected that the Proposed Actions would result in significant adverse impacts. Moreover, the added income from the new residents to the area would be expected to support the existing businesses and retail corridors in addition to the new establishments introduced under the Proposed Actions. The City's Department of Small Business Services has committed to work with existing business and local organizations to help them meet increased retail demand in the area.

Adverse Effects on Specific Industries

The Proposed Actions would not result in significant adverse impacts on specific industries within the study area or in the city more broadly. The 88 businesses and institutional uses that could be potentially directly displaced from projected development sites conduct a variety of business activities and are not concentrated within a business sector. Nor are the businesses subject to displacement essential to the survival of other industries outside of the study area, as they do not serve as the sole provider of goods and services to an entire industry or category of business in the City. Collectively, these 88 businesses and institutional uses account for only a fraction of the total employment and economic activities in the secondary study area and their products and services would continue to be available in the trade area to local residents and businesses. Furthermore, while the Proposed Actions are not expected to cause indirect displacement, any indirect displacement that may occur would not be concentrated in a particular industry. Therefore, the Proposed Actions would not result in an adverse impact on a particular industry or category of businesses within or outside the study area, and would not substantially reduce employment or impair the economic viability in an industry or category of business.

Community Facilities and Services

Pursuant to *CEQR Technical Manual* guidelines, detailed analyses of potential indirect impacts on public elementary, intermediate, and high schools, public libraries, and publicly funded child care centers were conducted for the Proposed Actions. Based on the *CEQR Technical Manual* screening methodology, detailed analyses of outpatient health care facilities and police and fire protection services are not warranted, although they are discussed qualitatively. As described in the following analysis and summarized below, the Proposed Actions would result in a significant adverse impact on elementary and intermediate schools and child care centers. No significant adverse high school impacts or library impacts would result.

Public Schools

The rezoning area falls within the boundaries of four New York City Community School District (CSD) sub-districts: Sub-districts 1 and 2 of CSD 19 and Sub-districts 1 and 2 of CSD 23 compared to No-Action conditions. The RWCDS associated with the Proposed Actions would introduce a net increment of 3,471 total students, with approximately 1,830 elementary school students, 757 intermediate school students, and 884 high school students; the majority of these action-generated students would be generated by projected development sites located within CSD 19. In addition, in the future with the Proposed Actions, it is assumed that projected development site 66 would include a 1,000 seat PS/IS school with 682 PK-5 seats and 318 IS (6^{th} to 8^{th} grade) seats. The site 66 PS/IS school is expected to be operational by the 2020-2021 academic year.

In the 2030 future with the Proposed Actions, CSD 19 Sub-district 2 would experience significant adverse elementary and intermediate school impacts. CSD 19, Sub-district 2 elementary schools would increase from a No-Action utilization rate of 98.8 percent to 110.1 percent in the With-Action condition (an 11.2 percentage point increase), with a deficit of 761 elementary school seats. CSD 19, Sub-district 2 intermediate schools would increase from a No-Action utilization rate of 101.7 percent to 112.9 percent in the With-Action condition (an 11.3 percentage point increase), with a deficit of 404 elementary school seats. As elementary and intermediate schools within this sub-district would operate over capacity in the With-Action condition, with an increase of five percentage points or more

in the collective utilization rate between the No-Action and With-Action conditions (the CEQR impact threshold), a significant adverse impact to this sub-district would result.

Although the CSD 19, Sub-district 1 elementary school utilization rate would exceed 100 percent in the future with the Proposed Actions, as the Proposed Actions would result in a 1.5 percent increase in the utilization rate between No-Action and With-Action conditions, less than the five percent impact threshold, no significant adverse impact would occur within this sub-district. However, as the With-Action PS/IS school is not expected to be completed until the 2020-2021 academic year, the net 457 elementary students anticipated in CSD 19 Sub-district 1 prior to the With-Action school's development would result in an elementary school utilization rate of 135.7 percent in 2020 (Q2). With an increase of 14.4 percent over No-Action conditions anticipated in 2020 (Q2), this would constitute a significant adverse impact, but because the impact would last only until 2020 (Q3), the impact is considered to be temporary. As CSD 19, Sub-district 1 intermediate schools would continue to operate below capacity (96.3 percent utilization) in the 2020 (Q2) temporary impact analysis year and the 2030 With-Action condition, no significant adverse intermediate school impacts would result.

CSD 23, Sub-districts 1 and 2 elementary and intermediate schools would continue to operate with available capacities in the future With-Action condition and, therefore, would not experience significant adverse impacts.

According to the *CEQR Technical Manual*, the determination of impact significance for high schools is conducted at the borough level. In the future With-Action condition, the Brooklyn high school utilization rate is expected to increase by 1.1 percentage points over the No-Action condition, for a With-Action utilization rate of 112.8 percent and a shortfall of 10,807 seats. As the increase in the collective high school utilization rate would be less than the five percentage point impact threshold, no significant adverse impacts to Brooklyn high schools are anticipated.

Libraries

The Proposed Actions would not result in significant adverse impacts to libraries. Six BPL branches are located within a ¾-mile radius of the rezoning area: the Saratoga, Brownsville, Stone Avenue, Arlington, New Lots, and Cypress Hill Branches. The Proposed Actions would introduce an estimated 18,801 additional residents to the libraries' combined catchment area (compared to No-Action conditions). For the Saratoga, Brownsville, Stone Avenue, and New Lots Branches, the catchment area population increases resulting from the Proposed Actions would be less than five percent, which would not result in a noticeable change in the delivery of library services. The Arlington and Cypress Hill Branches' catchment area population are both expected to increase by more than five percent in the future with the Proposed Actions, which may represent a significant adverse impact on library services according to the *CEQR Technical Manual*. However, many of the residents in the catchment areas for the Arlington and Cypress Hills Branch libraries also reside in the catchment areas for other nearby libraries and would also be served by these libraries, such as the New Lots Branch, which is expected to have the highest holdings-per-resident ratio in the future With-Action condition. Residents in the study area would have access to the entire BPL system through the interlibrary loan system and could have volumes delivered directly to their nearest library branch. In addition, residents would also have access to libraries near their place of work. Therefore, the population introduced by the Proposed Actions is not expected to result in a significant adverse impact on public libraries.

Child Care Services

The Proposed Actions would result in a significant adverse impact on publicly funded child care facilities. The RWCDS for the Proposed Actions is expected to introduce approximately 3,447 low- to moderate-income units by 2030. Based on the most recent child care multipliers in the *CEQR Technical Manual*, this development would generate approximately 614 children under the age of six who could be eligible for publicly funded child care programs. With the addition of these children, there would be a deficit of 187 slots in the study area by 2030 (103.1 percent utilization), and the Proposed Actions would result in an increase in the utilization rate of approximately 10.3 percentage points over the No-Action condition.

According to the *CEQR Technical Manual*, a significant adverse child care impact may result, warranting consideration of mitigation, if a proposed action would increase the study area's utilization rate by at least five

percentage points and the resulting utilization rate would be 100 percent or more. As the Proposed Actions would result in a 10.3 percentage point increase in the study area child care facility utilization rate and child care centers would operate over capacity in the future With-Action condition the Proposed Actions would result in a significant adverse impact to publicly funded group child care.

Police, Fire, and Health Care Services

The *CEQR Technical Manual* recommends a detailed analysis of indirect impacts on police, fire, and health care services in cases where a proposed action would create a sizeable new neighborhood where none existed before. The rezoning area is a developed area with an existing and well-established community that is served by existing police, fire, and health care services. Therefore, the Proposed Actions would not create a neighborhood where none existed before, and a detailed analysis of indirect effects on these community facilities is not warranted.

Open Space

According to the *CEQR Technical Manual,* a proposed action may result in a significant impact on open space resources if (a) there would be direct displacement/alteration of existing open space within the study area that would have a significant adverse effect on existing users; or (b) it would reduce the open space ratio and consequently result in the overburdening of existing facilities or further exacerbating a deficiency in open space. The Proposed Actions would not have a direct impact on open space resources in the study area. The Proposed Actions would not result in the physical loss of existing public open space resources, and would not result in any adverse shadow, air, noise, or other environmental impacts that would affect the usefulness of any study area open space. As the Proposed Actions are expected to introduce 18,801 residents and 3,710 workers under the RWCDS, compared to the No-Action condition, a detailed open space analysis for both a non-residential (¼-mile) study area and residential (½-mile) study area was conducted, pursuant to the *CEQR Technical Manual*. The detailed analysis determined that the Proposed Actions would result in a significant adverse indirect impact to both passive and active open space in the residential study area.

According to the *CEQR Technical Manual*, a portion of the rezoning area is located in an area that is considered underserved by open space. In addition, both the non-residential and residential study areas do not currently meet the *CEQR Technical Manual* guidelines for open space. The *CEQR Technical Manual* indicates that a decrease in the open space ratio of five percent or more is generally considered significant. For areas that are extremely lacking in open space, a decrease of as little as one percent may be considered significant. An open space impact assessment also considers qualitative factors.

In the future with the Proposed Actions, while the non-residential study area's passive open space ratio would decrease by more than five percent from No-Action conditions (15.29 percent), it would remain well above the City's guideline ratio of 0.15 acres per 1,000 workers, at 0.4 acres per 1,000 workers. Therefore, workers in the ¼-mile study area would continue to be well-served by passive open space resources, and there would be no significant adverse impact in the non-residential study area as a result of the Proposed Actions.

Within the residential study area, the total active and passive open space ratios would remain below the City's guideline ratios of 2.5 acres, which includes 2.0 acres of active and 0.5 acres of passive space per 1,000 residents, respectively, in the future with the Proposed Actions. The total residential study area open space ratio would decline by 8.31 percent to 0.563 acres per 1,000 residents; the active residential study area open space ratio would decline by 8.39 percent to 0.279 acres per 1,000 residents; and the passive residential study area open space ratio would decline by 8.22 percent to 0.279 acres per 1,000 residents. As these decreases would exceed the five percent impact threshold and the residential study area would continue to be underserved by open space in the future with the Proposed Actions, the Proposed Actions would result in a significant adverse indirect impact on total, active, and passive open space in the residential study area.

Shadows

The Proposed Actions would result in incremental shadow coverage on 25 total resources, including: 20 open space resource and five historic resources. With the exception of the Holy Trinity Russian Orthodox Church, project-generated shadows would not affect the utilization or enjoyment of any sunlight-sensitive resources and all open spaces would continue to receive a minimum of four hours of direct sunlight throughout the growing season.

As project-generated incremental shadows would reach a maximum of eight of the church's twenty-two stained glass windows at any one time, incremental shadows would not result in the complete elimination of direct sunlight on all sunlight-sensitive features of this historic resource. However, as these incremental shadows may have the potential to affect the public's enjoyment of this feature, albeit for a brief duration of approximately 36 minutes on March 21, 45 minutes on May 6, 49 total minutes on June 21, and one hour and 59 minutes on December 21, this is being considered a significant adverse shadow impact. Measures to mitigate this impact (e.g., special lighting features) will be considered between the DEIS and FEIS. Absent the identification and implementation of feasible and practicable measures, the Proposed Actions could have an unmitigated significant adverse shadows impact on the Holy Trinity Russian Orthodox Church.

Historic and Cultural Resources

Archaeological Resources

The Proposed Actions would not result in any significant adverse impacts to archaeological resources. LPC reviewed the identified projected and potential development sites that could experience new/additional in-ground disturbance as a result of the Proposed Actions, and concluded that none of the lots comprising those sites have any archaeological significance. As such, the Proposed Actions are not expected to result in any significant adverse impacts to archaeological resources.

Architectural Resources

DIRECT (PHYSICAL) IMPACTS

The Proposed Actions could result in a significant adverse historic resources impact to a resource that is eligible for S/NR-listing and NYCL-designation. Projected development site 37, which is expected to be developed under RWCDS With-Action conditions, contains the S/NR- and NYCL-eligible Empire State Dairy Building. As the maximum permitted With-Action FAR on site 37 could be constructed without the demolition or enlargement of the Empire State Dairy Building, the structure is not projected to be demolished, either partially or entirely, or substantially altered under the RWCDS. However, the Proposed Actions do not include any measures that would prevent the demolition or alteration of the Empire State Dairy Building. Additionally, although the building was determined eligible for listing on the S/NR and designation as a NYCL, it has not been calendared by LPC for consideration for landmark status or designated a NYCL or S/NR landmark to date. Therefore, the historic resources assessment conservatively assumes that the Empire State Dairy Building could be demolished or substantially altered as a consequence of the Proposed Actions, resulting in a potential significant adverse direct impact to the S/NR- and NYCL-eligible resource.

In the event that the structure was designated as a landmark by the LPC, the significant adverse impact would be fully mitigated. However, as the designation process is subject to LPC approval, and not CPC approval, it cannot be assumed or predicted with any certainty. The possibility of potential designation of this resource will be explored, in consultation with the LPC, between the DEIS and FEIS. Absent LPC's designation of the Empire State Dairy Building, the implementation of measures such as photographically documenting the eligible structure in accordance with the standards of the Historic American Buildings Survey (HABS) could partially mitigate the identified significant adverse direct impact to this historic architectural resource. However, a mechanism to require such measures is not available. Accordingly, this impact could not be completely eliminated and, if the Empire State Dairy Building is not designated as a landmark, an unavoidable significant adverse impact on this historic resource would occur.

INDIRECT (CONTEXTUAL) IMPACTS

There are 12 historic resources located in close proximity to (i.e., within 400 feet of) projected/potential development sites. Although the developments resulting from the Proposed Actions could alter the setting or visual context of several of these historic resources, none of the alterations would be significant adverse impacts. The Proposed Actions would not alter the relationship of any identified historic resources to the streetscape, since all streets in the study area would remain open and each resource's relationship with the street would remain unchanged in the future with the Proposed Actions. No projected/potential developments would eliminate or substantially obstruct important public views of architectural resources, as all significant elements of these historic resources would remain visible in view corridors on public streets. Additionally, no incompatible visual, audible, or atmospheric elements would be introduced by the Proposed Actions to any historic resource's setting under reasonable worst-case development scenario (RWCDS) With-Action conditions. As such, the Proposed Actions are not expected to result in any significant adverse indirect or contextual impacts on historic architectural resources.

CONSTRUCTION IMPACTS

As any designated NYCL or S/NR-listed historic buildings located within 90 linear feet of a projected or potential new construction site are subject to the protections of the New York City Department of Building's (DOB's) Technical Policy and Procedure Notice (TPPN) #10/88, development resulting from the Proposed Actions would not cause any significant adverse construction-related impacts to designated historic resources. This would apply to projected development site 17 which is located less than 90 feet away from the S/NR-designated 75th Police Precinct Station House.

There are 20 projected/potential development sites where construction under the Proposed Actions could potentially result in construction-related impacts to ten non-designated historic resources located in close proximity (i.e., within 90 feet). The eligible historic resources would be afforded standard protection under DOB regulations applicable to all buildings located adjacent to construction sites; however, since the resources are not S/NR-listed or NYCL-designated, they are not afforded the added special protections under DOB's TPPN #10/88. Additional protective measures afforded under DOB TPPN #10/88, which include a monitoring program to reduce the likelihood of construction damage to adjacent S/NR-listed or NYCL-designated resources, would only become applicable if the eligible resources are designated in the future prior to the initiation of construction. If the eligible resources listed above are not designated, however, they would not be subject to DOB TTPN #10/88, and may therefore be adversely impacted by construction of adjacent development resulting from the Proposed Actions.

SHADOWS IMPACTS

The Proposed Actions would result in incremental shadows being cast on sunlight-sensitive features of one historic resource, the Holy Trinity Russian Orthodox Church, which contains 22 sunlight-sensitive stained-glass windows. It is anticipated that in the future with the Proposed Actions, three potential development sites (sites A25, A27, and A73) would cast incremental shadows on the Holy Trinity Russian Orthodox Church. As project-generated incremental shadows would reach a maximum of eight of the church's 22 stained glass windows at any one time, incremental shadows would not result in the complete elimination of direct sunlight on all sunlight-sensitive features of this historic resource. However, as these incremental shadows may have the potential to affect the public's enjoyment of this feature, albeit for a brief duration of approximately 36 minutes on March 21, 45 minutes on May 6, 49 total minutes on June 21, and one hour and 59 minutes on December 21, this is considered a significant adverse shadow impact. It should be noted that development sites A25, A27, and A73 are potential, rather than a projected, development sites. Potential development sites are considered less likely to be developed than projected development sites. Consequently, the likelihood of this impact occurring is less than if it were to result from development on a projected development site. Absent the identification and implementation of feasible and practical mitigation measures, the Proposed Actions could have an unmitigated significant adverse shadows impact on the Holy Trinity Russian Orthodox Church.

Urban Design and Visual Resources

The Proposed Actions would result in development at a greater density than currently permitted as-of-right in the rezoning area and would represent a notable change in the urban design character of the primary study area. Compared to the future without the Proposed Actions, the visual appearance, and thus the pedestrian experience of the primary study area, would change considerably. However, this change would not constitute a significant adverse urban design impact in that it would not alter the arrangement, appearance, or functionality of the primary study area such that the alteration would negatively affect a pedestrian's experience of the area. Rather, development anticipated in the With-Action condition would improve the pedestrian experience along designated commercial corridors by replacing underutilized and vacant lots with new buildings with active ground floor uses and transparency requirements that promote a more vibrant and walkable neighborhood character. The proposed contextual zoning districts require streetwalls that are consistent with surrounding context and restrict curb cut and parking locations, all of which would contribute to an enhanced pedestrian environment that would include improved sidewalk conditions with street tree planting requirements on both residential and commercial streets within the study area.

The scale of the future development would be appropriate for the scale of the streets comprising the primary study area street network. The nuanced zoning would focus higher density buildings along major corridors (primarily Atlantic Avenue), with buildings on secondary corridors serving as a transition from this primary rezoning area corridors. New development is generally expected to replace vacant lots and underbuilt buildings along these corridors that currently detract from desirable street-level activity and safe pedestrian experiences. Many lots currently surrounded by fencing or accessed by multiple curb cuts would be replaced by buildings that prioritize the pedestrian experience and safety over vehicles and inactive ground floor uses. The new buildings are expected to increase pedestrian activity and create a safer and more vibrant experience that enhances walkability along these corridors.

Development on the north-south residential side streets would be lower than along the rezoning area's east-west streets and would be compatible with the scale and character of the residential side streets. With-Action development along the residential side streets would also be built to the existing streetwall line, precluding the continuation of the existing trend in new construction towards buildings set back significantly from the lot line with large front parking spaces.

While the With-Action developments would modify existing views of some visual resources located within, or visible from, the primary study area, no primary views would be blocked, and the modification of the resources' visual context would not be considered a significant adverse impact.

While the Proposed Actions would not result in any new development in the secondary study area, many of the primary study area projected and potential development site buildings located at, or near, the edge of the rezoning area would be visible from the secondary study area. The With-Action developments in the primary study area would add vibrancy to the secondary study area by introducing residential and retail uses along its borders and drawing pedestrians to the area. Views of the primary study area With-Action condition buildings would be limited to the portions of these secondary study area subareas that are most proximate to the rezoning area. By focusing the highest density development along the central corridor of the primary study area (Atlantic Avenue), the building heights along the rezoning area's border would serve as a visual transition to this primary corridor. In addition, the With-Action developments in the primary study area would add vibrancy to the secondary study area by introducing residential and retail uses along its borders with the primary study area that would both activate the streetscape and draw pedestrians to the area.

Hazardous Materials

The Proposed Actions are not expected to result in significant adverse impacts for hazardous materials. An assessment of potential hazardous materials impacts was performed for all of the 80 projected and 105 potential development sites. The hazardous materials assessment identified that each of the projected and potential

development sites has some associated concern regarding environmental conditions. As a result, the proposed zoning map actions include (E) designations (E-366) for all privately-held projected and potential development sites. For the City-owned parcel located within projected development site 66 (Block 4142, Lot 32), review of a Phase II testing protocol and development of any necessary remediation plan would be required through the Land Disposition Agreement between HPD and a future selected developer with oversight provided through HPD and DEP. With the requirements of the (E) designation or comparable measure on all 185 projected and potential development sites, there would be no impact from the potential presence of contaminated materials. The implementation of the preventative and remedial measures outlined in the (E) designation would reduce or avoid the potential of significant adverse hazardous materials impacts from potential construction in the rezoning area resulting from the Proposed Actions. Following such construction, there would be no potential for significant adverse impacts.

Water and Sewer Infrastructure

Water Supply

The Proposed Actions would not result in significant adverse impacts on the City's water supply system. The 80 projected development sites are expected to generate a water supply demand of approximately 2,715,351gallons per day (gpd) in the 2030 With-Action condition, an increase of 2,168,163 gpd, or approximately 2.2 million gallons per day (mgd), compared to demand in the future without the Proposed Actions. Future incremental demand from the projected development sites in the With-Action condition would be dispersed throughout the 190-block rezoning area and would represent approximately 0.2 percent of the City's average daily water supply of approximately one billion gpd.

Wastewater Treatment

In the future with the Proposed Actions, wastewater from the projected development sites would continue to be treated by the 26th Ward Water Pollution Control Plant (WPCP). Under the RWCDS, development on the 80 projected development sites are expected generate a total of approximately 2,388,257 gallons per day (gpd) of sanitary sewage, an increase of 2,000,182 gpd over No-Action conditions. With an existing average dry weather flow of 47 mgd to the 26th Ward WPCP and the addition of approximately 2,000,182 gallons per day (gpd) (2.0 mgd) on the 80 projected development sites in the 2030 With-Action condition (compared to the No-Action condition), the 26th Ward WPCP would continue to have ample reserve capacity. Therefore, no significant adverse impacts to wastewater treatment would occur as a result of the Proposed Actions.

Stormwater and Drainage Management

The 80 projected development sites identified in the RWCDS are located within three subcatchment areas of the 26th Ward WPCP: 26W-003, 26W-004, and 26W-005. Depending on rainfall volume and duration, the total volumes to the 26W-003, 26W-004, and 26W-005 combined sewer systems would range from 0.03 to 0.35 million gallons, 0.03 to 0.44 million gallons, and 0.32 to 3.74 million gallons, respectively. Compared to existing volumes to the combined sewer system from the 80 projected development sites, subcatchment area 26W-003 flows would increase by 0.03 to 0.18 million gallons, subcatchment area 26W-004 flows would increase by 0.03 to 0.22 million gallons, and subcatchment area 26W-005 flows would increase by 0.30 to 1.96 million gallons during storm events with up to 2.5 inches of rainfall. These increased flows to the City's combined sewer system may be discharged as CSOs into Hendrix Creek, the Fresh Creek Basin, and/or Spring Creek during rain events.

Because of the available assimilative capacity of the 26th Ward WPCP, the projected increased flows to the combined sewer system would not have a significant adverse impact on water quality. Based on the analysis and the required best management practices (BMP) measures that would be implemented on each projected development site by their respective developer in accordance with the City's site connection requirements, it is concluded that the Proposed Actions would not result in significant adverse impacts to local water supply or wastewater and stormwater conveyance and treatment infrastructure.

Solid Waste and Sanitation Services

The Proposed Actions would not result in a significant adverse impact on solid waste and sanitation services. The Proposed Actions would generate an increment above the No-Action condition of approximately 241.3 tons per week of solid waste, but would not directly affect a solid waste management facility. Approximately 47 percent of the additional solid waste generated by the Proposed Actions would be handled by the New York City Department of Sanitation (DSNY), and 53 percent would be handled by private carters. Overall, the uses facilitated by the Proposed Actions would be expected to generate solid waste equivalent to approximately 11 DSNY truck loads per week and up to nine commercial carter truck loads per week. Although this would be an increase compared with conditions in the future without the Proposed Actions, the additional solid waste resulting from the Proposed Actions would be a negligible increase relative to the approximately 13,000 tons of waste handled by commercial carters every day or the 12,260 tons per day handled by DSNY, and it would also represent approximately 0.13 percent of the City's anticipated future weekly commercial and DSNY-managed waste generation in 2025, as projected in the Solid Waste Management Plan (SWMP). As such, the Proposed Actions would not result in an increase in solid waste that would overburden available waste management capacity. The Proposed Actions would also not conflict with, or require any amendments to, the city's solid waste management objectives as stated in the SWMP. Therefore, the Proposed Actions would not result in a significant adverse impact on solid waste and sanitation services.

Energy

The Proposed Actions would not result in a significant adverse impact on energy systems. Development facilitated by the Proposed Actions is expected to create an increased demand on energy systems, including electricity and gas. It is estimated that With-Action development on the 80 projected development sites would result in an increase of approximately one trillion British thermal units (BTUs) over No-Action conditions. This increase in annual demand would represent approximately 0.6 percent of the City's forecasted future annual energy requirement of 179 trillion BTU and, therefore, is not expected to result in a significant adverse impact on energy systems. Moreover, any new developments resulting from the proposed actions would be required to comply with the NYCECC, which governs performance requirements of heating, ventilation, and air conditioning systems, as well as the exterior building envelope of new buildings. In compliance with this code, new developments must meet standards for energy conservation, which include requirements relating to energy efficiency and combined thermal transmittance.

Transportation

Traffic

Traffic conditions were evaluated for the weekday 7:30-8:30 AM, 1-2 PM and 5-6 PM and Saturday 1-2 PM peak hours at 74 intersections in the traffic study area where additional traffic resulting from the Proposed Actions would be most heavily concentrated. As summarized in Table ES-2 and Table ES-3, the traffic impact analysis indicates the potential for significant adverse impacts at 47 intersections during one or more analyzed peak hours. Significant adverse impacts were identified to 58 lane groups at 40 intersections during the weekday AM peak hour, 36 lane groups at 23 intersections in the weekday midday peak hour, 63 lane groups at 40 intersections in the weekday PM peak hour and 37 lane groups at 25 intersections during the Saturday midday peak hour.

TABLE ES-2
Number of Impacted Intersections and Lane Groups by Peak Hour

	Peak Hour			
	Weekday AM	**Weekday Midday**	**Weekday PM**	**Saturday Midday**
Impacted Lane Groups	58	36	63	37
Impacted Intersections	40	23	40	25

TABLE ES-3
Summary of Significantly Impacted Intersections

Signalized Intersection	Peak Hour			
	Weekday AM	Weekday Midday	Weekday PM	Saturday Midday
Atlantic Ave & Rockaway Ave	X	X	X	
Atlantic Avenue & Eastern Pkwy	X		X	
Atlantic Ave & Georgia Ave	X	X	X	
Atlantic Ave & Pennsylvania Ave	X	X	X	X
Atlantic Ave & Miller Ave	X		X	
Atlantic Ave & Schenck Ave	X	X	X	X
Atlantic Ave & Warwick St	X	X	X	
Atlantic Ave & Elton St	X		X	
Atlantic Ave & Highland Pl	X	X	X	X
Atlantic Ave & Logan St	X	X	X	X
Atlantic Ave & Euclid Ave			X	
Altanitc Ave & Crescent St			X	
Atlantic Ave & Rockaway Blvd		X	X	X
Broadway & Rockaway Ave	X		X	X
Broadway & Eastern Pkwy	X	X	X	X
Bushwick Ave & Eastern Pkwy	X		X	
Fulton St & Van Sinderen Ave			X	
Fulton St & Pennsylvania Ave	X	X	X	
Fulton St & Miller Ave	X		X	
Fulton St & Highland Pl				X
Fulton St & Logan St	X	X	X	X
Fulton St & Euclid Ave	X		X	
Glenmore Ave & Pennsylvania Ave	X			
Bushwick Ave/Jamaica Ave & Pennsylvania Ave/Jackie Robinson Pkwy	X	X	X	X
Jamaica Ave & Highland Pl/Force Tube Ave	X	X	X	X
Jamaica Ave & Euclid Ave/Cypress Hill St	X	X	X	X
Liberty Ave & Pennsylvania Ave	X	X	X	X
Liberty Ave & Miller Ave	X	X	X	X
Liberty Ave & Schenck Ave	X			
Liberty Ave & Warwick St	X		X	X
Liberty Ave & Shepherd Ave	X		X	
Liberty Ave & Montauk Ave	X	X	X	X
Liberty Ave & Milford St	X		X	
Liberty Ave & Logan St	X	X	X	X
Liberty Ave & South Conduit Blvd	X	X	X	X
Liberty Ave & North Conduit Blvd		X	X	X
Pitkin Ave & Mother Gaston Blvd	X			
Pitkin Ave & Pennsylvania Ave	X	X	X	X
Pitkin Ave & South Conduit Blvd	X			X
Sutter Ave & Pennsylvania Ave	X			
Sutter Ave & Fountain Ave	X		X	
Unsignalized Intersection				
Arlington Ave & Jamaica Ave				X
Dinsmore Pl & Logan St	X	X	X	X
Fulton St & Elton St	X		X	X
Fulton St & Chestnut St	X	X	X	X
Glenmore Ave & Miller Ave	X		X	
Pitkin Ave & Elton St	X		X	
Total Impacted Intersections	**40**	**23**	**40**	**25**

X - denotes intersection significantly impacted in peak hour.

Transit

SUBWAY

Subway Stations

The Proposed Actions would generate a net increment of approximately 3,246 and 3,946 new subway trips during the weekday AM and PM commuter peak hours. The analysis of subway station conditions focuses on a total of eight New York City Transit (NYCT) subway stations in proximity to the rezoning area where incremental demand from the Proposed Actions would exceed the 200-trip *CEQR Technical Manual* analysis threshold in one or both peak hours. These include the Alabama Avenue, Cleveland Street, Norwood Avenue and Crescent Street stations served by J/Z trains operating on the Jamaica Line, and the Liberty Avenue, Van Siclen Avenue, Shepherd Avenue and Euclid Avenue stations served by A/C trains operating on the Fulton Street Line.

In the future with the Proposed Actions, the Euclid Avenue station on the Fulton Street Line and the Crescent Street station on the Jamaica Line would each have one stair operating at a marginal LOS D in at least one peak hour. However, none of these stairs would be considered significantly adversely impacted by incremental demand from the Proposed Actions based on *CEQR Technical Manual* criteria. All other stairs and fare arrays that would be used by new project-generated demand at the eight analyzed subway stations are projected to operate at acceptable levels of service (LOS C or better) in both the AM and PM peak hours in the With-Action condition. Therefore, the Proposed Actions are not expected to result in significant adverse subway station impacts.

Subway Line Haul

Line haul is the volume of transit riders passing a defined point on a given transit route. Line haul is typically measured in the peak direction at the point where the trains carry the greatest number of passengers during the peak hour (the maximum load point) on each subway route. The rezoning area is served by a total of five NYCT subway routes, including A (express) and C (local) trains operating on the Fulton Street Line, J and Z trains operating on the Jamaica Line, and L trains operating on the Canarsie Line. The peak direction of travel on these lines is typically Manhattan-bound in the AM peak hour and Brooklyn or Queens-bound in the PM peak hour.

The greatest increases in incremental trips per subway car would occur on the J/Z trains, with an average of 9.15 southbound trips in the AM peak hour and 10.63 northbound trips in the PM. As southbound J/Z trains are also projected to exceed guideline capacity in the AM peak hour, they would be considered significantly adversely impacted in the AM based on *CEQR Technical Manual* impact criteria (refer to Table ES-4). Incremental increases in A-train ridership would average 5.58 northbound trips per car in the AM and 6.96 southbound trips in the PM. Since this route is not projected to exceed guideline capacity in the peak direction in either peak hour in the future with the Proposed Actions, these increases would not be considered significant. All other routes are expected to experience fewer than five incremental trips per car in the peak direction in each peak hour as a result of the Proposed Actions, and therefore would not be considered significantly impacted based on *CEQR Technical Manual* criteria.

TABLE ES-4
Summary of Significant Subway Line Haul Impacts

Route	Direction	Impacted Time Period
J/Z	Southbound	AM

Bus

The rezoning area is served by a total of ten MTA local bus routes—the B12, B13, B14, B20, B25, B83, Q24 and Q56 operated by NYCT, and the Q7 and Q8 operated by MTA Bus. The Proposed Actions would generate a total of approximately 983 and 1,445 incremental bus trips on these routes during the weekday AM and PM peak hours, respectively. A preliminary screening assessment concluded that new demand from the Proposed Actions would

exceed the 50-trip *CEQR Technical Manual* analysis threshold in the AM and/or PM peak hour at the maximum load points along the NYCT B13 and Q24 routes and the MTA Bus Q8 route.

Based on projected levels of bus service in the No-Action condition, the Proposed Actions would result in a capacity shortfall of 17 spaces on the westbound Q8 service in the PM peak hour. The B13 and Q24 routes would continue to operate with available capacity in both the AM and PM peak hours. Therefore, westbound Q8 service would be significantly adversely impacted in the PM peak hour based on *CEQR Technical Manual* criteria (refer to Table ES-5). The significant impact to Q8 service could be mitigated by increasing the number of westbound buses from 9 to 10 in the PM peak hour. The general policy of the MTA is to provide additional bus service where demand warrants, taking into account financial and operational constraints.

TABLE ES-5
Summary of Significant Local Bus Impacts

Route	Direction	Impacted Time Period
Q8	Westbound	PM

PEDESTRIANS

The Proposed Actions would generate a net increment of approximately 2,448 walk/other trips in the weekday AM peak hour, 8,517 in the weekday midday, and 4,870 in the weekday PM. Persons en route to and from subway station entrances, bus stops and public parking lots would add approximately 4,279, 3,627, and 5,467 additional pedestrian trips to rezoning area sidewalks and crosswalks during these same periods, respectively. Weekday peak period pedestrian conditions were evaluated at a total of 204 representative pedestrian elements where new trips generated by projected developments are expected to be most concentrated. These elements—79 sidewalks, 58 corner areas and 67 crosswalks—are primarily located in the vicinity of major projected development sites and corridors connecting these sites to area subway station entrances and bus routes. As shown in Table ES-6, based on *CEQR Technical Manual* criteria, a total of four pedestrian elements would be significantly adversely impacted by the Proposed Actions, including one corner area in the weekday AM peak hour, one sidewalk and one crosswalk in the midday peak hour, and one sidewalk in the PM peak hour.

TABLE ES-6
Summary of Significant Pedestrian Impacts

Corridor/Intersection	Impacted Element	Peak Hour		
		Weekday AM	Weekday Midday	Weekday PM
Atlantic Ave, Logan St to Chestnut St	North Sidewalk		X	
Van Siclen Ave, Pitkin Ave to Glenmore Ave	East Sidewalk			X
Atlantic Ave/Euclid Ave	West Crosswalk		X	
Liberty Ave/Berriman St	Northeast Corner	X		

VEHICULAR AND PEDESTRIAN SAFETY

Portions of the East New York Rezoning Proposal traffic study area were identified in the *Vision Zero Brooklyn Pedestrian Safety Action Plan* as Priority Areas where safety issues were found to occur systematically at an area-wide level. Study area roadways identified as Priority Corridors include the following:

- Atlantic Avenue
- Broadway
- Bushwick Avenue
- Eastern Parkway Extension
- Fulton Street (west of Broadway)

- Liberty Avenue
- Livonia Avenue
- Pennsylvania Avenue
- Pitkin Avenue
- Rockaway Avenue

In addition, three study area intersections are identified as Priority Intersections:

- Pitkin Avenue and Pennsylvania Avenue
- Liberty Avenue and Wells Street/Euclid Avenue
- Sutter Avenue and Fountain Avenue

Accident data for the traffic and pedestrian study area intersections were obtained from DOT for the three-year reporting period between January 1, 2011, and December 31, 2013. During this period, a total of 1,415 reportable and non-reportable accidents, seven fatalities, and 215 pedestrian/bicyclist-related injury accidents occurred at study area intersections. A review of the accident data identified seven intersections as high accident locations (defined as those with 48 or more total reportable and non-reportable crashes or five or more pedestrian/bicyclist injury crashes occurring in any consecutive 12 months of the most recent 3-year period for which data are available). These intersections are listed in Table ES-7.

TABLE ES-7
Summary of High Pedestrian/Bicycle Accident Locations

Intersection	Total Pedestrian/Bicycle Injury Crashes			Total Crashes (Reportable +Non-Reportable)		
	2011	2012	2013	2011	2012	2013
Atlantic Ave/Pennsylvania Ave	5	1	0	38	44	37
Atlantic Ave/Logan St	5	8	1	38	35	20
Atlantic Ave/Rockaway Blvd/79th St/80th St	2	4	5	11	9	9
Fulton St/Pennsylvania Ave	4	6	4	13	13	16
Fulton St/Logan St/Force Tube Ave	2	1	5	4	2	7
Pennsylvania Ave/J. Robinson Pkwy/Bushwick Ave	2	1	1	58	56	46
Livonia Ave/Pennsylvania Ave	4	5	2	11	12	9

DOT's planned capital improvements to intersections along Atlantic Avenue are expected to include measures to improve pedestrian safety, such as the installation of high visibility crosswalks, new school crossing pavement markings and new sidewalk extensions, and the implementation of new turn prohibitions. Additional improvements that could be employed to increase pedestrian/bicyclist safety at high accident locations could include installation of pedestrian countdown signals, advance stop bars, and supplemental advance-warning signage (i.e., "Turning Vehicles Yield to Pedestrians").

PARKING

The parking analyses document changes in the parking supply and utilization in the rezoning area and within a ¼-mile radius of the rezoning area under both No-Action and With-Action conditions. Given the large size of this parking study area, parking conditions are also assessed within a sub-area encompassing a ¼-mile radius around the three largest projected development sites—sites 46, 66 and 67—to identify the potential for a localized parking shortfall where project-generated parking demand is expected to be most concentrated.

There are a total of five public parking lots within ¼-mile of the rezoning area including one municipal parking lot and four privately-operated public parking lots. All are located on the periphery of the rezoning area and are not within a convenient walking distance of most projected development sites. However, two of the privately-operated

public parking lots are located on projected development sites 77 and 79 and would be displaced in both the No-Action and With-Action conditions (site 77), or only in the With-Action condition (site 79).

Under the With-Action RWCDS, it is assumed that up to 2,442 accessory parking spaces would be developed on projected development sites compared to the estimated 1,304 accessory spaces (including 355 spaces from existing uses and 949 spaces from new development) that would be present on projected development sites under the No-Action RWCDS. However, it is conservatively assumed that under the Proposed Actions, accessory parking would be waived for every development site where the number of required spaces would fall below the minimum number specified under zoning. Therefore, the parking analysis reflects the potential development of a total of 2,304 accessory parking spaces under the With-Action RWCDS.

After accounting for new parking demand and the number of required accessory spaces provided on a site-by-site basis under the RWCDS, it is estimated that compared to the No-Action condition, incremental parking demand from new development associated with the Proposed Actions would total approximately 245 spaces at off-street public parking facilities and on-street in the weekday midday period, and 713 spaces during the overnight period. The net incremental parking demand from projected development within the ¼-mile sub-area around sites 46, 66 and 67 would total approximately 192 spaces and 456 spaces during these same periods, respectively.

Under the Proposed Actions there would be sufficient on-street parking capacity within the overall parking study area in both the weekday midday and overnight periods to accommodate all new parking demand from projected development along with demand displaced from the existing parking lots on sites 77 and 79. There would also be sufficient on-street parking capacity within the ¼-mile sub-area around sites 46, 66 and 67 to accommodate projected overnight demand. During the weekday midday period, however, this sub-area would experience a localized parking shortfall of approximately 63 spaces. Although some drivers destined for locations in proximity to sites 46, 66, and 67 might have to travel a greater distance (i.e., between ¼-mile and ½-mile) to find available parking, this shortfall would not be considered a significant adverse impact based on *CEQR Technical Manual* criteria. Therefore, the Proposed Actions are not expected to result in significant adverse parking impacts during the weekday midday peak period for commercial and retail parking demand, nor during the overnight peak period for residential demand.

Air Quality

The analyses conclude that the Proposed Actions would not result in any significant adverse air quality impacts on sensitive uses in the surrounding community, and the Proposed Actions would not be adversely affected by existing sources of air emissions in the rezoning area. A summary of the general findings is presented below.

The stationary source analyses determined that there would be no potential significant adverse air quality impacts from fossil fuel-fired heat and hot water systems at the projected and potential development sites. At certain sites, an (E) designation (E-366) would be mapped as part of the zoning proposal to ensure the developments would not result in any significant air quality impacts from fossil fuel-fired heat and hot water systems emissions due to individual or groups of development sites.

An analysis of the cumulative impacts of industrial sources on projected and potential development sites was performed. Maximum concentration levels at projected and potential development sites were below the air toxic guideline levels and health risk criteria established by regulatory agencies, and below National Ambient Air Quality Standards (NAAQS). Large and major emissions sources within 1,000 feet of a projected or potential development site were also analyzed.

The mobile source analyses determined that concentrations of CO and fine particulate matter less than ten microns in diameter (PM_{10}) due to project-generated traffic at intersections would not result in any violations of NAAQS, and furthermore, CO concentrations were predicted to be below CEQR de minimis criteria. The results show that the daily (24-hour) $PM_{2.5}$ increments are predicted to be below the *de minimis* criteria. At three of the four intersection sites analyzed, the maximum annual incremental $PM_{2.5}$ concentration is below the *de minimis* criteria; however, the annual

$PM_{2.5}$ maximum annual incremental concentration is predicted to exceed the *de minimis* criteria at the intersection of Atlantic Avenue and Logan Street. This would be considered a significant adverse air quality impact. Therefore, traffic mitigation measures were examined to avoid a potential significant impact at this intersection location.

The parking facilities assumed to be developed as a result of the Proposed Actions would not result in any significant adverse air quality impacts.

Greenhouse Gas Emissions and Climate Change

It is estimated that the RWCDS associated with the Proposed Actions would result in approximately 66,205 total metric tons carbon dioxide equivalent (CO_2e) of annual emissions from building operations and 38,241 metric tons of CO_2e emissions from mobile sources annually, for an annual total of approximately 104,446 metric tons of CO_2e emissions. This represents less than 0.22 percent of the City's overall 2013 GHG emissions of approximately 48.02 million metric tons. It should also be noted that the estimated GHG emissions for the Proposed Actions conservatively do not account for any energy efficiency measures that may be implemented by individual developments on projected development sites.

The Proposed Actions would advance New York City's GHG reduction goals by virtue of their nature and location. By revitalizing and reinforcing the rezoning area, which is served by 13 New York City Transit (NYCT) subway stations, ten local bus routes, and one commuter rail station, the Proposed Actions support transit-oriented development in New York City. Further, the new buildings facilitated by the Proposed Actions, which would replace existing structures or vacant lots, would be subject to the New York City Energy Conservation Code (NYCECC), which governs performance requirements of heating, ventilation, and air conditioning systems, as well as the exterior building envelope of new buildings. In compliance with this code, new development resulting from the Proposed Actions must meet standards for energy efficiency. Therefore, the Proposed Actions would be consistent with the applicable City's emissions reduction goals of transit-oriented development and construction of new resource- and energy-efficient buildings.

The rezoning area is located beyond the 100- and 500-year flood zones, and therefore is not susceptible to storm surge and coastal flooding. It is also located beyond the 100- and 500-year projections developed by the New York City Panel on Climate Change (NPCC) for the 2020s and 2050s. Accordingly, an assessment of the effects of climate change on the Proposed Actions is not warranted.

Noise

The noise analysis concludes that noise level increases of up to 4.9 dBA would be experienced on Richmond Street between Fulton Street and Dinsmore Place as a result of increased traffic on that block, which constitutes a significant adverse impact with respect to mobile source noise associated with operations of the Proposed Actions for this location. At all other noise receptor sites, the maximum noise level increase would be 2.1 dBA, which would not be considered a significant adverse noise impact.

The school playground analysis concludes that noise associated with the proposed school playground on projected development site 66's Building B would not meaningfully contribute to noise level increases at any nearby existing noise receptors. Therefore, there would be no significant adverse noise impact to existing noise receptors due to the school playground. At projected development site 66's Buildings A and B, the school playground would be the dominant noise source. Window wall attenuation would be required to result in acceptable interior noise levels at these buildings. Consequently, the buildings would not experience a significant adverse noise impact.

The building attenuation analysis concludes that in order to meet CEQR interior noise level requirements, up to 40 dBA of building attenuation would be required for project buildings and in order to meet HUD interior noise level guidelines, 31 dBA of building attenuation would be required for project buildings. The requirement for these levels of façade attenuation as well as the requirement for an alternate means of ventilation will be included in an (E)

designation (E-366) for all privately-held projected and potential development sites. For the City-owned parcel located within projected development site 66 (Block 4142, Lot 32), the requirement for façade attenuation as well as the requirement for an alternate means of ventilation will be required through the LDA between HPD and DEP. Therefore, there would be no significant adverse noise impact with respect to building attenuation.

Public Health

The Proposed Actions would not result in unmitigated significant adverse impacts in the following technical areas that contribute to public health: air quality, water quality, or hazardous materials.

The Proposed Actions could potentially result in significant adverse noise impacts at 12 existing sensitive receptors (receptor site 10 at the Richmond Street between Fulton Street and Dinsmore Place). However, the predicted noise levels are significantly lower than the public health-based *CEQR Technical Manual* noise threshold of 85 dBA. The Proposed Actions are not anticipated to cause excessively high chronic noise exposure and, therefore, are not expected to result in a significant adverse public health impact related to noise. In addition, while during some periods of construction the Proposed Actions could potentially result in significant adverse impacts related to noise, as defined by *CEQR Technical Manual* thresholds, the predicted overall changes in noise levels would not be large enough to significantly affect public health. Therefore, the Proposed Actions would not result in significant adverse public health impacts during construction.

Neighborhood Character

The rezoning area and surrounding study area include parts of the following neighborhoods: Ocean Hill; East New York; Cypress Hills; City Line; Brownsville; and Broadway Junction/East New York Industrial Business Zone (IBZ). The East New York study area is characterized by the presence of multiple disconnected neighborhoods, physically separated by the presence of vehicle-dominated major roadways and major transportation infrastructure. While the majority of the study area is characterized by residential uses, particularly on the side streets, a variety of uses are found along the major roadways that often create a disjointed streetscape, and pockets of industrial and auto-related uses. East New York is also characterized by its transit accessibility, with multiple subway stations located within the study area. As described elsewhere in this EIS, the Proposed Actions would not result in significant adverse impacts in the areas of land use, zoning, and public policy; socioeconomic conditions; or urban design and visual resources. The significant adverse open space, historic resources, shadows, traffic, and noise impacts would not affect any defining feature of neighborhood character, nor would a combination of moderately adverse effects affect such a defining feature.

The Proposed Actions would facilitate the development of a mix of residential, commercial, community facility, and light-industrial uses that would be consistent with the mixed-use character of the neighborhoods. With the Proposed Actions, new residential development anticipated on vacant and underutilized land along the rezoning area's side streets would be required to complement the existing built residential character under the proposed contextual zoning districts through strict height and street wall regulations. In addition, the affordable housing units would help to ensure that a considerable portion of the new households would have incomes that would more closely reflect existing incomes in the study area and help ensure that the neighborhoods continue to serve diverse housing needs.

While the Proposed Actions would result in significant adverse open space impacts, as the residential study area is currently underserved by open space and would remain so in both the No-Action and With-Action conditions, open space is not a critical defining feature of the area, and any resultant impacts to open space would not have a significant adverse impact on neighborhood character. In addition, although the Proposed Actions would result in a significant adverse shadow impact on the Holy Trinity Russian Orthodox Church, it would not affect the church's exterior façade nor its essential functions and visual status in the community, nor would the identified significant adverse direct impacts on the S/NR- and NYCL-eligible Empire State Dairy Building alter the overall character of the neighborhood. While the Proposed Actions would result in increased transportation activities and significant adverse transportation impacts, the resulting conditions would be similar to those seen in the urban neighborhoods defining

the study area and would not result in density of activity or service conditions that would be out of character with the surrounding neighborhoods. Development facilitated by the Proposed Actions is expected to result in increased noise levels in the rezoning area and surrounding neighborhoods, and would also be expected to result in significant adverse noise impacts on Richmond Street between Fulton Street and Dinsmore Place. Increased noise levels would not be out of context with the neighborhood, as many roadways in the area are currently characterized by elevated noise levels. Thus, the changes in transportation and noise due to the Proposed Actions would not result in significant adverse impacts on neighborhood character.

Construction

Transportation

Construction travel demand is expected to peak in the first quarter of 2018, and the third quarter of 2023 was selected as a reasonable worst-case analysis period for assessing potential cumulative transportation impacts from operational trips from completed portions of the project and construction trips associated with construction activities. Both of these periods are therefore analyzed for potential transportation impacts during construction.

TRAFFIC

During construction, traffic would be generated by construction workers commuting via autos and by trucks making deliveries to projected development sites. In both 2018(Q1) and 2023(Q3), traffic conditions during the 6-7 AM and 3-4 PM construction peak hours are expected to be generally better than during the analyzed operational peak hours with full build-out of the Proposed Actions in 2030. Consequently, there would be less likelihood of significant adverse traffic impacts during both the 2018(Q1) peak construction period and the 2023(Q3) cumulative analysis period than with full build-out of the Proposed Actions in 2030. Any significant adverse traffic impacts during peak construction activity in 2018(Q1) would be most likely to occur at intersections in the immediate proximity of projected development sites 66 and 67 which are two of the largest proposed developments and would generate the majority of construction traffic during this period. It is expected that the mitigation measures identified for 2030 operational traffic impacts would also be effective at mitigating any potential impacts from construction traffic during both the 2018(Q1) period for peak construction activity and the 2023(Q3) construction and operational cumulative analysis period.

TRANSIT

The construction sites are located in an area that is well served by public transportation, with a total of 13 subway stations, ten bus routes, and one commuter rail station located in the vicinity of the rezoning area. In both 2018(Q1) and 2023(Q3), transit conditions during the 6-7 AM and 3-4 PM construction peak hours are expected to be generally better than during the analyzed operational peak hours with full build-out of the Proposed Actions in 2030. As the Proposed Actions are not expected to result in any significant subway station impacts, no subway station impacts are expected during construction. The Proposed Actions' significant adverse subway and bus line haul impacts would also be less likely to occur during construction than with full build-out of the Proposed Actions in 2030 as incremental demand would be lower during construction and would not occur during the peak hours of commuter demand. It is expected that the mitigation measures identified for 2030 operational transit impacts would also be effective at mitigating any potential impacts from construction transit trips during both the 2018(Q1) and the 2023(Q3) construction periods.

PEDESTRIANS

In 2018(Q1), pedestrian trips by construction workers would be widely distributed among the 14 projected development sites that would be under construction in this period and would primarily occur outside of the weekday AM and PM commuter peak periods and weekday midday peak period when area pedestrian facilities typically experience their greatest demand. No single sidewalk, corner or crosswalk is expected to experience 200 or more peak-hour trips (the threshold below which significant adverse pedestrian impacts are considered unlikely to occur based on *CEQR Technical Manual* guidelines). Consequently, significant adverse pedestrian impacts in the 2018(Q1) peak construction period are not anticipated.

In 2023(Q3), pedestrian conditions during the 6-7 AM and 3-4 PM construction peak hours are expected to be generally better than during the analyzed operational peak hours with full build-out of the Proposed Actions in 2030. The Proposed Actions' significant adverse sidewalk, corner area and crosswalk impacts would therefore be less likely to occur during this construction period than with full build-out of the Proposed Actions in 2030. It is expected that mitigation measures identified for 2030 operational pedestrian impacts would also be effective at mitigating any potential impacts from construction pedestrian trips during the 2023(Q3) construction period.

PARKING

Based on the extent of available on-street parking spaces within ¼-mile of the rezoning area, there would be sufficient on-street parking capacity to accommodate all of the projected construction worker parking demand during the 2018(Q1) peak construction period. There would also be sufficient on-street parking capacity to accommodate the cumulative construction and operational parking demand during the 2023(Q3) period. Therefore, significant adverse parking impacts during construction are not anticipated.

Air Quality

Measures would be taken to reduce pollutant emissions during construction in accordance with all applicable laws, regulations, and building codes. These include dust suppression measures, idling restriction, and the use of ULSD. In addition to the required laws and regulations, an emissions reduction program, including the use of best available tailpipe reduction technologies and utilization of newer equipment would be implemented for projected development sites with construction durations of more than two years and construction start times of 2022 or earlier. Construction under the Proposed Actions in future years (i.e., past 2022) is expected to meet these emissions reduction requirements as there would be an increasing percentage of newer and cleaner engines, irrespective of any project specific commitments. With the implementation of these emission reduction measures, the dispersion modeling analysis of construction-related air emissions for both on-site and off-site sources determined that $PM_{2.5,}$ $PM_{10,}$ annual-average NO_2, and CO concentrations would be below their corresponding *de minimis* thresholds or NAAQS, respectively. Therefore, construction under the Proposed Actions would not result in significant adverse air quality impacts due to construction sources.

Noise and Vibration

NOISE

A detailed construction noise analysis was performed to quantify the magnitude of construction-related noise exposure. Two analysis periods representing worst-case construction noise condition for any single period were evaluated: February 2018 (when projected development 66 and 67 is assumed to be under construction) and August 2023 (when projected development site 46 is assumed to be under construction). An additional analysis period was selected to determine noise level increases from a smaller construction site more typical of most of the projected and potential development sites in the rezoning area. Construction noise resulting from this single representative construction site (projected development site 61) was analyzed for three construction stages (excavation and foundation work, superstructure work, and interior fit-out work). For impact determination purposes, the significance of adverse noise impacts due to construction activities is determined based on whether predicted incremental noise levels at sensitive receptor locations would be greater than the noise impact threshold criteria for two consecutive years or more.

Based on the detailed construction noise analysis, it is anticipated that predicted noise levels due to construction-related activities during the February 2018 and August 2013 peak periods would result in increases in noise levels that would exceed the noise impact threshold criteria throughout the surrounding area. The noise analysis results show that the predicted noise levels would exceed the noise impact threshold criteria within several blocks of these projected development sites, with noise level increases of up to 16.5 dBA L_{eq} and total construction noise levels of 79.0 dBA L_{eq} are expected at the locations near projected development sites 66 and 67 and noise level increases of up to 25.3 dBA L_{eq} and total construction noise levels of up to 83.6 dBA L_{eq} are expected at the locations near projected development site 46. The analysis assumed the worst-case month during the construction period of these three projected development sites. Noise level increases of this magnitude are not expected to occur for the entire

duration of construction activities. An evaluation of construction noise during a representative two-year time period for these large development sites will be completed between DEIS and FEIS. If that analysis finds that a significant adverse construction noise impact would occur, mitigation measures will be explored and presented in the Final EIS.

For projected development site 61, and consequently for all of the smaller individual projected development sites throughout the rezoning area, cumulative noise analyses determined that maximum $L_{eq(1)}$ noise levels would exceed noise impact threshold criteria within three blocks, with noise level increases up to 26.0 dBA and total construction noise levels of 82.2 dBA L_{eq} during the excavation and foundation stage of construction. The analysis also found that maximum $L_{eq(1)}$ noise levels would exceed noise impact threshold criteria within two blocks with noise level increases up to 11.8 dBA and total construction noise levels of 73.0 dBA L_{eq} during the superstructure stage of construction, and maximum $L_{eq(1)}$ noise levels would exceed noise impact threshold criteria within one block with noise level increases up to 10.4 dBA and total construction noise levels of 73.0 dBA L_{eq} during the interior fit-out stage of construction. The noise analysis conservatively assumed that any two projected development sites adjacent to a receptor would be constructed consecutively. However, adjacent projected development sites may not be constructed consecutively, which would result in periods where there would be lower or no construction noise followed by periods of higher construction noise, but with a duration of less than two years.

VIBRATION

The buildings and structures of most concern with regard to the potential for structural or architectural damage due to vibration would be buildings immediately adjacent to a projected development site. Vibration levels at all of these buildings and structures would be expected to be below the 0.50 inches/second PPV limit. At locations further from projected development sites, the distance between construction equipment and receiving buildings or structures is large enough to avoid vibratory levels that would approach the levels that would have the potential to result in architectural or structural damage.

In terms of potential vibration levels that would be perceptible and annoying, the pieces of equipment that would have the most potential for producing levels that exceed the 65 VdB limit are pile drivers. They would produce perceptible vibration levels (i.e., vibration levels exceeding 65 VdB) at receptor locations within a distance of approximately 230 feet. However, the operation would only occur for limited periods of time at a particular location and, therefore, would not result in any significant adverse impacts. In no case are significant adverse impacts from vibrations expected to occur.

Other Analysis Areas

Construction of the 80 projected development sites would not result in significant adverse impacts in the areas of land use and neighborhood character, socioeconomic conditions, open space, historic and cultural resources, or hazardous materials. Based on the RWCDS construction schedule, construction activities would be spread out over a period of approximately 15 years, throughout an approximately 190-block rezoning area, and construction of most of the projected development sites would be short-term (i.e., lasting up to 24 months), with the exceptions of sites 46, 66, and 67, which are assumed to include multiple buildings. While construction of the projected development sites would result in temporary increases in traffic during the construction period, access to residences, businesses, and institutions in the area surrounding the development sites would be maintained throughout the construction period (as required by City regulations). No open space resources would be located on any of the projected development construction sites, nor would any access to publically accessible open space be impeded during construction within the proposed rezoning area. In addition, measures would be implemented to control noise, vibration, emissions, and dust on construction sites, including the erection of construction fencing incorporating sound reducing measures. While construction of the new buildings due to the Proposed Actions would cause temporary impacts, particularly related to noise, it is expected that such impacts in any given area would be relatively short term, even under the worst-case construction sequencing, and therefore would not create an open space or neighborhood character impact.

None of the lots comprising projected and potential development sites expected to be developed as a result of the Proposed Actions have any archaeological significance. As such, the Proposed Actions are not expected to result in any significant adverse impacts to archaeological resources during construction, and a detailed analysis is not

warranted. Construction period impacts on any designated historic resources would be minimized, and the historic structures would be protected, by ensuring that adjacent development projected as a result of the Proposed Actions adheres to all applicable construction guidelines and follows the requirements laid out in TPPN #10/88. This would apply to construction activities on one projected development site: site 17, which is located within 90 feet of the S/NR-listed 75th Police Precinct Station House. In addition, there are ten eligible historic resources located within 90 feet of one or more projected or potential development sites: the Empire State Dairy Building, St. Michael's R.C. Church, Our Lady of Loreto R.C. Church, the Former East New York Savings Bank, Grace Baptist Church, the Magistrates Court, the Church of the Blessed Sacrament, 1431 Herkimer Street, Prince Hall Temple, and Firehouse Engine 236.[3] Development under the Proposed Actions could potentially result in construction-related impacts to these non-designated resources, as these resources are not afforded the added special protections under DOB's TPPN #10/88. Additional protective measures afforded under DOB's TPPN #10/88 would only become applicable if the eligible resources are designated in the future prior to the initiation of construction. If the eligible resources listed above are not designated, however, they would not be subject to TPPN #10/88, and may therefore be adversely impacted by the adjacent and nearby developments resulting from the Proposed Actions.

Any potential construction-related hazardous materials would be avoided by the inclusion of (E) designations for all RWCDS development sites. In addition, demolition of interiors, portions of buildings, or entire buildings are regulated by DOB and require abatement of asbestos prior to any intrusive construction activities, including demolition. OSHA regulates construction activities to prevent excessive exposure of workers to contaminants in the building materials, including lead paint. New York State Solid Waste regulations control where demolition debris and contaminated materials associated with construction are handled and disposed of. Adherence to these existing regulations would prevent impacts from construction activities at any of the projected development sites in the rezoning area.

G. MITIGATION

Community Facilities

Public Schools

Under the RWCDS, 2,925 incremental DU would be developed within CSD 19, Sub-district 2 (compared to the No-Action condition), which would result in significant adverse impacts on elementary and intermediate schools within the sub-district that are projected to occur in year 2024. To avoid the significant adverse elementary school impact, the number of incremental dwelling units that could be developed in the sub-district would have to be reduced to 1,301, generating 377 elementary school students, as compared to No-Action conditions. This would represent a decrease of 1,624 DU (55.5 percent) in CSD 19, Sub-district 2. To avoid the identified significant adverse intermediate school impacts in Sub-district 2 of CSD 19, the number of incremental dwelling units that could be developed in the sub-district would have to be reduced to 1,295, generating 155 intermediate school students, as compared to No-Action conditions. This would represent a decrease of 1,630 DU (55.7 percent) in CSD 19, Sub-district 2. Alternately, based on the RWCDS for the Proposed Actions, an additional 454 elementary school seats and 183 intermediate school seats would be needed in order to reduce the incremental increase in utilization rates to less than the *CEQR Technical Manual* impact threshold of five percent.

To eliminate these impacts in CSD 19, Sub-district 2 (projected to occur in year 2024), the following mitigation measures could be applied in conjunction with the City's monitoring of capacity: a) restructure or reprogram existing school space under DOE's control in order to make available more capacity in existing school buildings located within CSD 19, Sub-district 2; b) relocate administrative functions to another site, thereby freeing up space for classrooms; and/or c) create additional capacity in the area by constructing a new school(s), building additional capacity at

[3] While potential development site A73 is adjacent to the S/NR- and NYCL-eligible Holy Trinity Russian Orthodox Church, the site is anticipated to be redeveloped in the future without the Proposed Actions, and therefore, any redevelopment of this site under With-Action conditions would not result in significant adverse construction-related impacts as a consequence of the Proposed Actions.

existing schools, or leasing additional school space constructed as part of projected development within CSD 19, Sub-district 2. These preliminary mitigation options will continue to be explored between the DEIS and FEIS.

The Proposed Actions would not result in a significant adverse impact on CSD 19, Sub-district 1 elementary schools in the 2030 With-Action condition, as 682 elementary school seats would be introduced on projected development site 66 under the RWCDS. However, as the With-Action school is not expected to be completed until the 2020-2021 academic year, the elementary school utilization rate that would occur in 2020 (Q2) would constitute a significant adverse impact, but because the impact would last only until the school's anticipated 2020 (Q3) completion, the impact is considered to be temporary.

Child Care Services

To avoid the identified significant adverse child care center impact, the number of affordable DU that could be developed on the projected development sites would have to be reduced to 2,401, a 30 percent (1,046 DU) reduction in the number of affordable units anticipated under the RWCDS. The 2,401 affordable DU would generate 427 children under age six eligible for publicly funded child care and study area child care facilities would operate at capacity with no child care slot shortfall. Alternately, the provision of an additional 187 child care slots would mitigate the significant adverse child care center impact. With 187 additional child care slots, study area child care facilities would operate at capacity, with no child care slot shortfall.

Possible mitigation measures for this significant adverse impact will be developed in consultation with the New York City Administration for Children's Services (ACS). Mitigation for a significant child care impact may include provision of suitable space(s) for a child care center within new or existing buildings and within a reasonable distance (leased at a rate affordable to ACS or ACS providers) or funding, or making program improvements to support additional capacity.

Measures to mitigate the identified significant adverse impact on publicly funded child care centers will continue to be explored between the DEIS and FEIS in coordination with the lead agency, DCP, and ACS. However, a potential exists that sufficient measures may not be available to fully mitigate the identified adverse impacts. If after exploring all possible mitigation measures, it is determined that the significant adverse impact on publicly funded child care facilities would not be completely eliminated, an unavoidable significant adverse impact would result.

Open Space

To avoid the identified significant adverse residential study area open space impact, the number of residents that could be introduced on the projected development sites would have to be reduced to less than 10,747 (or less than approximately 3,608 residential units). This would represent an approximately 42.8 percent reduction in the number of residential units anticipated under the RWCDS. Alternately, in order to avoid a significant adverse open space impact, the Proposed Actions would have to provide approximately 4.69 acres of additional open space (including a minimum of 2.18 acres of passive open space and a minimum of 2.40 acres of active open space) to the study area.

Measures being considered to mitigate the Proposed Actions' significant adverse open space impact include: expanding existing parks; creating new open space on publicly-owned sites; pursuing opportunities to encourage owners of large privately-owned sites to create new open space as part of their redevelopment; making playgrounds accessible to the community after school hours through the Schoolyards to Playgrounds program, establishing new pedestrian plazas in streets through the City's Plaza Program, and/or improving existing parks to allow for more diverse programming and enhanced usability. These potential mitigation measures are currently being explored in coordination with the lead agency, DCP, and DPR and will be refined between the DEIS and FEIS.

Although many of the mitigation measures being considered would substantially increase the amount and usability of open space resources for the additional population introduced by the Proposed Actions, opportunities to create new publically-accessible open space resources in sufficient amounts within the study area to fully mitigate the identified significant adverse open space impact are very limited. As a consequence, the Proposed Actions'

significant adverse open space impact may not be completely eliminated and, as a result, an unavoidable significant adverse open space impact would occur.

Shadows

The Proposed Actions would result in a significant shadows impact (and shadow-related historic resource impact) on the NYCL-eligible and S/NR-eligible Holy Trinity Russian Orthodox Church. It should be noted that the sites that would cast incremental shadows on this historic resources are potential, rather than a projected, development sites. Potential development sites are considered less likely to be developed than projected development sites. Consequently, the likelihood of this impact occurring is less than if it were to result from development on a projected development site.

A potential mitigation measure for the identified impact on this resource may include the use of artificial lighting to simulate the sunlit conditions. The provision of indirectly mounted lighting could simulate lost sunlight conditions at the affected stained glass windows of this resource. This and other feasible and practicable mitigation measures for this potential significant adverse impact will be explored by the lead agency, DCP, in consultation with the New York City Landmarks Preservation Commission (LPC) between the DEIS and FEIS. Absent the identification and implementation of feasible and practicable measures, the Proposed Actions could have an unmitigated significant adverse shadows impact on the Holy Trinity Russian Orthodox Church.

Historic and Cultural Resources

The Proposed Actions could result in significant adverse historic resources impacts to one resource that is eligible for S/NR-listing and NYCL-designation. Projected development site 37, which is expected to be developed under RWCDS With-Action conditions, contains the S/NR- and NYCL-eligible Empire State Dairy Building. As the maximum permitted With-Action FAR on site 37 could be constructed without the demolition or enlargement of the Empire State Dairy Building, the structure is not projected to be demolished, either partially or entirely, or substantially altered under the RWCDS. However, the Proposed Actions do not include any measures that would prevent the demolition or alteration of the Empire State Dairy Building.

In the event that the structure was designated as a landmark by the LPC, the significant adverse impact would be fully mitigated. However, as the designation process is subject to LPC approval, and not CPC approval, it cannot be assumed or predicted with any certainty. The possibility of potential designation of this resource will be explored, in consultation with the LPC, between the DEIS and FEIS. Absent LPC's designation of the Empire State Dairy Building, the implementation of measures such as photographically documenting the eligible structure in accordance with the standards of the Historic American Buildings Survey (HABS) could partially mitigate the identified significant adverse direct impact to this historic architectural resource. However, a mechanism to require such measures is not available. Accordingly, this impact would not be completely eliminated, and, if the Empire State Dairy Building is not designated as a landmark, an unavoidable significant adverse impact on this historic resource would occur.

Transportation

Traffic

The Proposed Actions would result in significant adverse traffic impacts at 47 study area intersections during one or more analyzed peak hours; specifically 58 lane groups at 40 intersections during the weekday AM peak hour, 36 lane groups at 23 intersections during the midday peak hour, 63 lane groups at 40 intersections during the PM peak hour, and 37 lane groups at 25 intersections during the Saturday midday peak hour. Implementation of traffic engineering improvements such as signal timing changes or modifications to curbside parking regulations would provide mitigation for many of the anticipated traffic impacts. Implementation of the recommended traffic engineering improvements is subject to review and approval by DOT. If, prior to implementation, DOT determines that an identified mitigation measure is infeasible, an alternative and equivalent mitigation measure will be identified.

Table ES-8 shows that significant adverse impacts would be fully mitigated at all but 15 lane groups at nine intersections during the weekday AM peak hour, ten lane groups at two intersections during the midday peak hour, 18 lane groups at nine intersections during the PM peak hour, and ten lane groups at four intersections during the Saturday midday peak hour. Table ES-9 provides a more detailed summary of the intersections and lane groups that would have significant adverse traffic impacts and indicates whether the impacts would be fully mitigated. No practicable mitigation was identified for one or more lane groups at 14 impacted intersections, and impacts in one or more peak hours at these locations would remain unmitigated.

TABLE ES-8
Summary of Lane Groups/Intersections With Significant Adverse Traffic Impacts

Peak Hour	Lane Groups/ Intersections Analyzed	Lane Groups/ Intersections With No Significant Impacts	Lane Groups/ Intersections With Significant Impacts	Mitigated Lane Groups/ Intersections	Unmitigated Lane Groups/ Intersections
Weekday AM	269/74	211/34	58/40	43/31	15/9
Weekday Midday	267/74	231/51	36/23	26/21	10/2
Weekday PM	273/74	210/34	63/40	45/31	18/9
Saturday Midday	266/74	229/49	37/25	27/21	10/4

TABLE ES-9
Lane Groups With Unmitigated Significant Adverse Traffic Impacts

Intersection	Peak Hour			
	Weekday AM	Weekday Midday	Weekday PM	Saturday Midday
Signalized Intersections				
Atlantic Ave & Eastern Pkwy	WB-T (main)	---	---	---
Atlantic Ave & Pennsylvania Ave	WB-TR, NB-TR, SB-L	EB-TR, WB-TR, NB-L, NB-TR, SB-L, SB-TR	EB-T, WB-TR, NB-TR, SB-L	EB-TR, WB-TR, NB-L, NB-TR, SB-L
Atlantic Ave & Logan St	SB-LTR	---	SB-LTR	SB-LTR
Broadway & Eastern Pkwy	EB-TR, WB-LT	---	EB-L, EB-TR, WB-LT	---
Fulton St & Pennsylvania Ave	---	---	NB-TR, SB-L	---
Fulton St & Miller Ave	---	---	EB-TR	---
Fulton Street & Logan St	WB-LTR	---	WB-LTR	---
Bushwick Ave/Jamaica Ave & Pennsylvania Ave/Jackie Robinson Pkwy	EB-Jamaica-TR, WB-L, WB-T, NB-L	EB-Bushwick-R, WB-L, WB-T, NB-L	EB-Bushwick-R, WB-L, WB-T, NB-L	WB-LT, NB-L
Jamaica Ave & Highland Pl/Force Tube Ave	---	---	SB-TR	---
Pitkin Ave & Mother Gaston Blvd	WB-LTR	---	---	---
Pitkin Ave & Pennsylvania Ave	WB-LTR	---	---	---
Unsignalized Intersections				
Arlington Ave & Jamaica Ave	---	---	---	NB-LR
Fulton St & Elton St	NB-TR	---	---	---
Pitkin Ave & Elton St	---	---	NB-LTR	---

Notes:
NB – northbound, SB – southbound, EB – eastbound, WB – westbound
L – left-turn, T – through, R – right-turn, DefL – defacto left-turn

Transit

SUBWAY LINE HAUL

In the 2030 future with the Proposed Actions, AM peak hour demand on southbound J/Z trains would exceed practical capacity, and the Proposed Actions would increase this demand by an average of more than five passengers

per car. Southbound J/Z trains would therefore be significantly impacted by the Proposed Actions based on *CEQR Technical Manual* criteria. This significant adverse impact could be fully mitigated by the addition of one southbound J or Z train during the AM peak hour. As standard practice, New York City Transit (NYCT) routinely conducts periodic ridership counts and adjusts subway frequency to meet its service criteria, within fiscal and operating constraints.

BUS

The Proposed Actions would result in a capacity shortfall of 17 spaces on westbound Q8 service in the PM peak hour. This significant adverse impact to Q8 local bus service could be fully mitigated by the addition of one standard bus in the westbound direction in the PM peak hour. The general policy of NYCT is to provide additional bus service where demand warrants, taking into account financial and operational constraints.

Pedestrians

Incremental demand from the Proposed Actions would significantly adversely impact a total of two sidewalks, one crosswalk and one corner area in one or more peak hours. Recommended mitigation measures to address these impacts are discussed below. Implementation of these measures would be subject to review and approval by DOT. If, prior to implementation, DOT determines that an identified mitigation measure is infeasible, an alternative and equivalent mitigation measure will be identified.

SIDEWALKS

Two of the 79 analyzed sidewalks are expected to be significantly adversely impacted by the Proposed Actions—the north sidewalk on Atlantic Avenue between Logan and Chestnut streets in the weekday midday peak hour and the east sidewalk on Van Siclen Avenue between Pitkin and Glenmore avenues in the PM peak hour. Widening the north sidewalk on Atlantic Avenue between Logan and Chestnut streets by 0.5-foot in conjunction with the development of the adjacent site (projected development site 66) would fully mitigate the significant adverse impact to this sidewalk in the midday. Removing a tree pit at the most constrained point on the east sidewalk on Van Siclen Avenue between Pitkin and Glenmore avenues would fully mitigate the significant adverse impact to this sidewalk in the PM peak hour. No unmitigated significant adverse sidewalk impacts would remain upon incorporation of the recommended mitigation measures.

CROSSWALKS

One of the 67 analyzed crosswalks would be significantly adversely impacted by the Proposed Actions—the west crosswalk on Atlantic Avenue at Euclid Avenue in the weekday midday peak hour. This impact would be fully mitigated by shifting four seconds of green time from the eastbound/westbound traffic signal phase to the northbound/southbound phase. No unmitigated significant adverse crosswalk impacts would remain with implementation of the recommended mitigation measures.

CORNER AREAS

One of the 58 analyzed corner areas would be significantly adversely impacted by the Proposed Actions—the northeast corner at Liberty Avenue at Berriman Street in the weekday AM peak hour. To address this impact, it is proposed to widen one of the adjoining sidewalks by 0.5 feet in conjunction with the development of the adjacent site (projected development site 46). No unmitigated significant adverse corner impacts would remain with implementation of the recommended mitigation measure.

Air Quality

Concentrations of particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) related to traffic generated by the Proposed Actions could result in a significant adverse air quality impact at the intersection of Atlantic Avenue and Logan Street. Traffic mitigation measures were developed to reduce congestion and increase speeds along Logan Street which would mitigate these impacts. No unmitigated significant adverse air quality impacts would remain upon incorporation of the mitigation measures.

Noise

The Proposed Actions would result in a significant adverse noise impact on Richmond Street between Fulton Street and Dinsmore Place, with predicted noise level increases of 4.9 dBA at this location. According to field observations, all of the residences at this location appear to have double-glazed windows, and most of the residences appear to have through-wall air conditioners or window air conditioners (i.e., an alternate means of ventilation). With respect to upgrades at the residential units with double-glazed windows and an alternate means of ventilation, there are no further practical or feasible mitigation measures that would fully or partially mitigate the significant adverse noise impact at these locations. Window air conditioners potentially could be installed at residential units with double-glazed windows and no alternate means of ventilation to provide an alternate means of ventilation, which would partially mitigate the significant adverse noise impact at these locations. With respect to upgrades at the residential units, there are no further practical or feasible mitigation measures that would fully mitigate the significant adverse noise impact at these locations. Other potential measures to fully mitigate the noise impact at these locations may be examined between the DEIS and FEIS. Potential mitigation measures may include rerouting traffic where feasible.

Construction

Historic and Cultural Resources

Development under the Proposed Actions—specifically, on projected development sites 7, 13, 35, 38, 39, 49, and 74 and potential development sites A3, A7, A8, A18, A40, A41, A50, A65, A70, A82, A86, A87, and A95—could result in inadvertent construction-related damage to ten NYCL- and/or S/NR-eligible historic resources, as they are located within 90 feet of one or more of the aforementioned projected and potential development sites. If these eligible resources are designated in the future prior to the initiation of construction, the protective measures of the DOB's TPPN #10/88 would apply and indirect significant adverse impact from construction would be avoided. Should they remain undesignated, however, the additional protective measures of TPPN #10/88 would not apply, and the potential for significant adverse construction-related impacts would not be mitigated.

In order to make TPPN #10/88 or similar measures applicable to historic resources in the absence of site-specific approval, a mechanism would have to be developed to ensure implementation and compliance, since it is not known and cannot be assumed that owners of these properties would voluntarily implement this mitigation. DCP, as lead agency, will explore the viability of this mitigation measure between the DEIS and FEIS.

Noise

The Proposed Actions would have the potential to result in significant adverse construction noise impacts at several locations throughout the rezoning area. For all the smaller individual projected development sites throughout the rezoning area, significant adverse construction noise impacts were determined to potentially occur at receptors that are adjacent to two or more projected development sites. However, adjacent projected development sites may not be constructed consecutively, which would result in periods where there would be lower or no construction noise followed by periods of higher construction noise, but with a duration of less than two years. Construction of all buildings on projected development sites 66 and 67 is expected to occur over 67 months and construction of all buildings on projected development site 46 is expected to occur over 41 months. The worst-case month during the construction period was analyzed. Although the duration of construction activities would occur for two consecutive years or more, the type of activity occurring on a development site would progress through the major construction stages and noise generated during each of these construction stages could vary substantially and, as a consequence, noise levels which exceed the noise impact threshold criteria may not be sustained for the entirety of two consecutive years or more. An evaluation of construction noise during a representative two-year time period for these large development sites will be completed between the DEIS and FEIS. If that analysis finds that a significant adverse construction noise impact would occur, mitigation measures will be explored and presented in the FEIS.

H. ALTERNATIVES

No-Action Alternative

The No-Action Alternative examines future conditions within the rezoning area, but assumes the absence of the Proposed Actions (i.e., none of the discretionary approvals proposed as part of the Proposed Actions would be adopted). Under the No-Action Alternative, existing zoning would remain in the area affected by the Proposed Actions. It is anticipated that this area would experience moderate growth under the No-Action Alternative by 2030. Twenty seven of the 80 projected development sites are expected to be redeveloped, or undergo conversion, in the No-Action Alternative, resulting in a net 325,389 sf of market-rate residential floor area (428 DU), 323,263 sf of commercial uses, 79,138 sf of community facility uses, and 81,175 sf of industrial uses on the projected development sites.

The significant adverse impacts anticipated for the Proposed Actions would not occur under the No-Action Alternative. However, the No-Action Alternative would not meet the goals of the Proposed Actions. The benefits expected to result from the Proposed Actions—including promoting affordable housing development by increasing residential density and establishing Mandatory Inclusionary Housing, encouraging economic development by mapping new commercial districts and increasing density in a highly transit accessible area of the City, creating pedestrian-friendly streets through active ground floor retail uses, and introducing new community resources—would not be realized under this alternative, and the No-Action Alternative would fall short of the objectives of the Proposed Actions.

No Unmitigated Significant Adverse Impacts Alternative

The No Unmitigated Significant Adverse Impacts Alternative examines a scenario in which the density and other components of the Proposed Actions are changed specifically to avoid the unmitigated significant adverse impacts associated with the Proposed Actions. There is the potential for the Proposed Actions to result in unmitigated significant adverse impacts related to community facilities (child care services), open space, shadows, historic and cultural resources (architectural resources only), transportation (traffic only), noise, and construction.

Under the RWCDS, the Proposed Actions would result in a significant adverse impact on publicly funded child care facilities. Should practical and feasible mitigation measures not be found, the significant adverse child care impact would be unmitigated. To avoid the identified significant adverse child care center impact, the number of affordable DUs that could be developed on the projected development sites would have to be reduced to 2,401, a 30 percent (1,046 DU) reduction in the number of affordable units anticipated under the RWCDS. Reducing the number of affordable housing units developed in the rezoning area would be less supportive of the goals and objectives of the Proposed Actions. Alternately, the provision of 187 child care slots under this alternative would avoid the unmitigated significant adverse child care impact.

The Proposed Actions would result in a significant adverse indirect impact to the total open space resources in the residential study area. To avoid the identified significant adverse residential study area open space impact, the number of residents that could be introduced on the projected development sites would have to be reduced to less than 10,747 (or less than approximately 3,608 residential units). This would represent an approximately 42.8 percent reduction in the number of residential units anticipated under the RWCDS and would, therefore, be less supportive of the Proposed Actions' goal of promoting affordable housing development. Alternately, this alternative would have to provide approximately 4.69 acres of additional open space (including a minimum of 2.18 acres of passive open space and a minimum of 2.40 acres of active open space) to the study area to avoid the unmitigated significant adverse open space impact.

The Proposed Actions would result in a significant shadows impact (and shadow-related historic resource impact) on the NYCL-eligible and S/NR-eligible Holy Trinity Russian Orthodox Church. Absent the identification and implementation of feasible and practicable mitigation measures, the Proposed Actions could have an unmitigated

significant adverse shadows impact on the Holy Trinity Russian Orthodox Church. Given the location of the sites relative to this resource and the limited number of intervening buildings, to eliminate these incremental shadows on the Holy Trinity Russian Orthodox Church, the maximum building heights of potential development sites A25, A27, and A73 would have to be reduced to 50, 55, and 75 feet, respectively (compared to maximum heights of 105, 105, and 145 feet, respectively, under the Proposed Actions). Such a reduction in height would substantially limit the development potential on these three potential development sites. Furthermore, reducing the height of potential development sites A25, A27, and A73 (located along Pennsylvania Avenue) would be inconsistent with the urban design goals of the Proposed Actions of locating higher bulk along the rezoning area's primary corridors and preserving lower-scale side streets.

The Proposed Actions could result in significant adverse historic resources impacts to one resource that is eligible for S/NR-listing and NYCL-designation. Projected development site 37, which is expected to be developed under RWCDS With-Action conditions, contains the S/NR- and NYCL-eligible Empire State Dairy Building. As the maximum permitted With-Action FAR on site 37 could be constructed without the demolition or enlargement of the Empire State Dairy Building, the structure is not projected to be demolished, either partially or entirely, or substantially altered under the RWCDS. However, the Proposed Actions do not include any measures that would prevent the demolition or alteration of the Empire State Dairy Building. In order to entirely avoid the potential unmitigated adverse direct architectural resources impact, this alternative would require that projected development site 37 be eliminated from the rezoning proposal by eliminating the site from the rezoning area. However, this site cannot be excluded on its own, as carving it out of the proposed zoning map would result in a highly irregular and impractical zoning map, leaving a pocket of M1-1 zoning adjacent to the proposed residential and special mixed-use districts. Such a modification would be impractical and inconsistent with the Proposed Actions' goal to establish Atlantic Avenue as a vibrant mixed-use corridor.

In addition, the Proposed Actions would result in significant adverse traffic impacts at 47 intersections. Because of existing congestion at a number of these intersections, even small increases in incremental project-generated traffic volumes at some of the congested intersection approach movements would result in significant adverse impacts that could not be fully mitigated during one or more analysis peak hour, and almost any new development in the rezoning area could result in unmitigated traffic impacts. Therefore, no reasonable alternative could be developed to completely avoid such impacts without substantially compromising the Proposes Actions' stated goals.

The Proposed Actions would result in significant adverse impacts on Richmond Street between Fulton Street and Dinsmore Place during the AM peak hour due largely to traffic level increases from the proposed school at projected development site 66. No reasonable or feasible alternative could be developed to completely avoid such an impact while still maintaining the Proposed Actions' stated goals in terms of siting a school at projected development site 66.

In regards to construction impacts, development under the Proposed Actions—specifically, on projected development sites 7, 13, 35, 38, 39, 49, and 74 and potential development sites A3, A7, A8, A18, A40, A41, A50, A65, A70, A82, A86, A87, and A95—could result in inadvertent construction-related damage to ten NYCL- and/or S/NR-eligible historic resources, as they are located within 90 feet of one or more of the aforementioned projected and potential development sites. In order to entirely avoid potential unmitigated adverse construction-related impacts to historic resources, this alternative would require that the aforementioned projected and potential development sites be eliminated from the rezoning proposal. However, this would result in a reduction in the amount of affordable housing developed in the rezoning area and, therefore, would satisfy to a lesser degree the goals and objectives of the Proposed Actions. In addition, no reasonable or feasible alternative could be developed to completely avoid the identified unmitigated significant adverse construction noise impacts at locations adjacent to development sites while still maintaining the Proposed Action's stated goals.

Overall, in order to eliminate all unmitigated significant adverse impacts, the Proposed Actions would have to be modified to a point where their principal goals and objectives would not be realized.

Lower Density Alternative

The Lower Density Alternative was developed for the purpose of assessing whether lower density residential development in some portions of the rezoning area would eliminate or reduce the significant, adverse impacts of the Proposed Actions while also meeting the goals and objectives of the Proposed Actions. Under the Lower Density Alternative, the proposal analyzed is the same as the Proposed Actions except for a few locations: some of the proposed M1-4/R8A districts would be replaced with M1-4/R7A and C4-4L districts, two areas that are proposed for C4-4D would be replaced with M1-4/R7A and C4-5D, one area proposed for M1-4/R7D would be mapped with M1-4/R7A, and one block proposed for C4-5D would be mapped with R7A/C2-4. Under the Lower Density Alternative, development would occur on the same 80 projected and 105 potential development sites. However, as the Lower Density Alternative would reduce the maximum permitted residential density on some portions of the rezoning area, as compared to the Proposed Actions, the RWCDS assumptions for eight of the development sites in those affected areas (projected development sites 1, 66, 67, and 79 and potential development sites A7, A8, A96, and A105) would change. Compared to the Proposed Actions, the Lower Density Alternative would result in 629 fewer residential units on the identified projected development sites, 35,328 sf less of commercial uses, 22,041 sf less of community facility uses, and 44 additional accessory parking spaces; the industrial floor area would remain the same as under the Proposed Actions.

As with the Proposed Actions, the Lower Density Alternative would not result in significant adverse impacts with respect to land use, zoning, and public policy; socioeconomic conditions; urban design and visual resources; hazardous materials; water and sewer infrastructure; solid waste and sanitation services; energy; greenhouse gas emissions and climate change; public health; and neighborhood character. The Lower Density Alternative would result in the same significant adverse shadows, historic resources, transit, pedestrian, and noise impacts as under the Proposed Actions, with slightly reduced impacts related to community facilities, open space, traffic, air quality, and construction.

As under the Proposed Actions, the identified significant adverse school, transit, pedestrian, and air quality impacts could be fully mitigated under the Lower Density Alternative. The same mitigation needed to fully mitigate the identified significant adverse transit, pedestrian, and air quality impacts under the Proposed Actions would fully mitigate these impacts under the Lower Density Alternative; lesser mitigation would be needed to fully mitigate the significant adverse school impact under this alternative.

Both the Lower Density Alternative and the Proposed Actions would result in potential unmitigated significant adverse impacts in the areas of child care services, open space, shadows, historic resources, traffic, noise, and construction. However, in terms of traffic impacts, there would be two fewer unmitigated intersections under the Lower Density Alternative, compared to the Proposed Actions (12 unmitigated intersections under the Lower Density Alternative, compared to 14 unmitigated intersections with the Proposed Actions).

The Lower Density Alternative would support, to a lesser degree, the Proposed Actions' goals of promoting affordable housing development by increasing residential density and establishing Mandatory Inclusionary Housing, encouraging economic development by mapping new commercial districts and increasing density in a highly transit accessible area of the City, creating pedestrian-friendly streets through active ground floor retail uses, and introducing new community resources. However, as the Lower Density Alternative would result in fewer residential units, it would be less supportive of the Proposed Action's objectives while continuing to result in significant adverse impacts related to community facilities, open space, transportation, air quality, noise, and construction.

I. UNAVOIDABLE ADVERSE IMPACTS

According to the *CEQR Technical Manual*, unavoidable significant adverse impacts are those that would occur if a proposed project or action is implemented regardless of the mitigation employed, or if mitigation is infeasible. The Proposed Actions would result in significant adverse impacts with respect to community facilities, open space, shadows, historic and cultural resources, transportation, air quality, noise, and construction. To the extent

practicable, mitigation has been proposed for these identified significant adverse impacts. However, in some instances no practicable mitigation was identified to fully mitigate significant adverse impacts, and there are no reasonable alternatives to the Proposed Actions that would meet their purpose and need, eliminate their impacts, and not cause other or similar significant adverse impacts. In other cases, mitigation has been proposed, but absent a commitment to implement the mitigation, the impacts may not be eliminated.

Community Facilities

Child Care Centers

The Proposed Actions are expected to result in significant adverse impacts to publicly funded child care centers. The Proposed Actions could introduce approximately 3,665 affordable residential units, generating an estimated 614 children under age six eligible for publicly funded child care programs. With the addition of these children, child care facilities in the study area would operate at 103.1 percent of capacity, which represents an increase in the utilization rate of 10.3 percentage points over the future No-Action condition. This increase exceeds the five percent threshold in the *CEQR Technical Manual* for a significant adverse impact.

Mitigation measures for this significant adverse impact may include provision of suitable space(s) for a child care center within new or existing buildings and within a reasonable walking distance (leased at a rate affordable to the New York City Administration of Children's Services [ACS] or ACS providers) or funding, or making program improvements to support additional capacity. Measures to mitigate the identified significant adverse impact on publicly funded child care centers will continue to be explored between the DEIS and FEIS in coordination with the lead agency, DCP, and ACS. However, a potential exists that sufficient measures may not be available to fully mitigate the identified adverse impacts. If after exploring all possible mitigation measures, it is determined that the significant adverse impact on publicly funded child care facilities would not be completely eliminated, an unmitigated significant adverse impact would result.

Open Space

Given the anticipated decrease in the total, active, and passive open space ratios in the residential study in the future with the Proposed Actions, a significant adverse open space impact would result. Measures being considered to mitigate the Proposed Actions' significant adverse open space impact include: expanding existing parks; creating new open space on publicly-owned sites; pursuing opportunities to encourage owners of large privately-owned sites to create new open space as part of their redevelopment; making playgrounds accessible to the community after school hours through the Schoolyards to Playgrounds program, establishing new pedestrian plazas in streets through the City's Plaza Program, and/or improving existing parks to allow for more diverse programming and enhanced usability. These potential mitigation measures are currently being explored in coordination with the lead agency, DCP, and DPR and will be refined between the DEIS and FEIS.

Although many of the mitigation measures being considered would substantially increase the amount and usability of open space resources for the additional population introduced by the Proposed Actions, opportunities to create new publically-accessible open space resources in sufficient amounts (i.e., approximately 4.69 acres) within the study area to fully mitigate the identified significant adverse open space impact are very limited. As a consequence, the Proposed Actions' significant adverse open space impact may not be completely eliminated and, as a result, an unavoidable significant adverse open space impact would occur.

Shadows

The Proposed Actions would result in a significant adverse shadow impact (and shadow-related historic resource impact) on the NYCL-eligible and S/NR-eligible Holy Trinity Russian Orthodox Church. Incremental shadows on sunlight-sensitive features of the Holy Trinity Russian Orthodox Church would occur on all four representative analysis days, with durations ranging from 36 minutes to one hour and 48 minutes, which may have the potential to

affect the enjoyment of this feature from the interior of the church. It should be noted that the sites that would cast incremental shadows on this historic resources are potential, rather than a projected, development sites. Potential development sites are considered less likely to be developed than projected development sites. Consequently, the likelihood of this impact occurring is less than if it were to result from development on a projected development site.

The *CEQR Technical Manual* identifies potential mitigation strategies for incremental shadow impacts on historic resources which may include, but are not limited, the use of artificial lighting to simulate the effect of sun-light on features such as stained glass windows. This and other feasible and practical measures to reduce or eliminate the project's shadow impacts will be explored in consultation with the New York City Landmarks Preservation Commission (LPC) between the DEIS and FEIS. Absent the identification and implementation of feasible and practicable measures, the Proposed Actions could have an unmitigated significant adverse shadows impact on the Holy Trinity Russian Orthodox Church.

Historic and Cultural Resources

The Proposed Actions could result in significant adverse historic resources impacts to one resource that is eligible for S/NR-listing and NYCL-designation. Projected development site 37, which is expected to be developed under RWCDS With-Action conditions, contains the S/NR- and NYCL-eligible Empire State Dairy Building. As the maximum permitted With-Action FAR on site 37 could be constructed without the demolition or enlargement of the Empire State Dairy Building, the structure is not projected to be demolished, either partially or entirely, or substantially altered under the RWCDS. However, the Proposed Actions do not include any measures that would prevent the demolition or alteration of the Empire State Dairy Building.

In the event that the structure was designated as a landmark by the LPC, the significant adverse impact would be fully mitigated. However, as the designation process is subject to LPC approval, and not CPC approval, it cannot be assumed or predicted with any certainty. The possibility of potential designation of this resource will be explored, in consultation with the LPC, between the DEIS and FEIS. Absent LPC's designation of the Empire State Dairy Building, the implementation of measures such as photographically documenting the eligible structure in accordance with the standards of the Historic American Buildings Survey (HABS) could partially mitigate the identified significant adverse direct impact to this historic architectural resource. However, a mechanism to require such measures is not available. Accordingly, this impact would not be completely eliminated, and, if the Empire State Dairy Building is not designated as a landmark, an unavoidable significant adverse impact on this historic resource would result.

Transportation

Traffic

The Proposed Actions would result in significant adverse traffic impacts at 47 study area intersections during one or more analyzed peak hour; specifically, 58 lane groups at 40 intersections during the weekday AM peak hour, 36 lane groups at 23 intersections during the weekday midday peak hour, 63 lane groups at 40 intersections during the weekday PM peak hour, and 37 lane groups at 25 intersections during the Saturday midday peak hour. Implementation of traffic engineering improvements, such as signal timing changes or modifications to curbside parking regulations would provide mitigation for many of the anticipated traffic impacts. Specifically, the significant adverse impacts would be fully mitigated at all but 15 lane groups at nine intersections during the weekday AM peak hour, ten lane groups at two intersections during the weekday midday peak hour, 18 lane groups at nine intersections during the weekday PM peak hour, and ten lane groups at four intersections during the Saturday midday peak hour. Implementation of the recommended traffic engineering movements is subject to review and approval by DOT. If, prior to implementation, DOT determines that an identified mitigation measure is infeasible, an alternative and equivalent mitigation measure may be identified. In the absence of the application of mitigation measures, the impacts would remain unmitigated. In addition, and as summarized in Table ES-9, above, no practicable mitigation was identified for one or more lane groups at 14 impacts intersections, and impacts in one or more peak hours at these locations would remain unmitigated.

Between the DEIS and FEIS, the specific measures proposed for each intersection will continue to be reviewed to confirm adequacy and feasibility of their implementation and recommend changes as necessary. If it is determined that a specific measure is not feasible at a particular location, other mitigation measures would be explored to mitigate impacts. However if it is determined that other measures are not available to mitigate the identified impacts, either in part of in whole, the impact would be identified in the FEIS as unmitigable.

Transit

SUBWAY LINE HAUL

In the 2030 future with the Proposed Actions, AM peak hour demand on southbound J/Z trains would exceed practical capacity, and the Proposed Actions would increase this demand by an average of more than five passengers per car. Southbound J/Z trains would therefore be significantly impacted by the Proposed Actions based on *CEQR Technical Manual* criteria. This significant adverse impact could be fully mitigated by the addition of one southbound J or Z train during the AM peak hour. If this adjustment is not made, this subway line haul impact would be considered unavoidable.

BUS

The Proposed Actions would result in a capacity shortfall of 17 spaces on westbound Q8 service in the PM peak hour. This significant adverse impact to Q8 local bus service could be fully mitigated by the addition of one standard bus in the westbound direction in the PM peak hour. If these changes are not made, these impacts would be considered unavoidable.

Pedestrians

Incremental demand from the Proposed Actions would significantly adversely impact a total of two sidewalks, one crosswalk, and one corner area in one or more peak hour. Specifically, two of the 79 analyzed sidewalks, one of the 67 analyzed crosswalks, and one of the 58 analyzed corner areas would experience significant adverse impacts in one or more peak hour. The identified pedestrian impacts would be fully mitigated through sidewalk widenings, tree pit removal, and crosswalk widenings. Implementation of these measures would be subject to review and approval by DOT. If, prior to implementation, DOT determines that an identified mitigation measure is infeasible, an alternative and equivalent mitigation measure will be identified. If no feasible measures can be identified, the projected impacts would remain unmitigated and would therefore be considered unavoidable adverse impacts.

Noise

The Proposed Actions would result in significant adverse impacts on Richmond Street between Fulton Street and Dinsmore Place, with predicted noise level increases of 4.9 dBA at this location. According to field observations, all of the residences at this location appear to have double-glazed windows, and most of the residences appear to have through-wall air conditioners or window air conditioners (i.e., an alternate means of ventilation).

Residential units with double-glazed windows and an alternate means of ventilation would be expected to achieve approximately 25 dBA of attenuation resulting in interior $L_{10(1)}$ values of approximately 50 dBA during the AM peak hour and approximately 47 dBA during the PM peak hour. With respect to upgrades at the residential units, there are no further practical or feasible mitigation measures that would fully or partially mitigate the significant adverse noise impact at these locations.

Residential units with double-glazed windows and no alternate means of ventilation would be expected to achieve approximately five dBA of attenuation resulting in interior $L_{10(1)}$ values of approximately 70 dBA during the AM peak hour and approximately 67 dBA during the PM peak hour. Window air conditioners potentially could be installed at these residential units to provide an alternate means of ventilation. With the window air conditioners and a closed-window condition, interior $L_{10(1)}$ values would be approximately 50 dBA during the AM peak hour and approximately 47 during the PM peak hour, which would partially mitigate the significant adverse noise impact at these locations.

With respect to upgrades at the residential units, there are no further practical or feasible mitigation measures that would fully mitigate the significant adverse noise impact at these locations.

Other potential measures to fully mitigate the noise impact at these locations may be examined between the DEIS and FEIS. Potential mitigation measures may include rerouting traffic where feasible. If no feasible measures can be identified, the projected impacts would not be fully or partially mitigated and would therefore be considered unavoidable adverse impacts.

Construction

Historic and Cultural Resources

Development under the Proposed Actions—specifically, on projected development sites 7, 13, 35, 38, 39, 49, and 74 and potential development sites A3, A7, A8, A18, A40, A41, A50, A65, A70, A82, A86, A87, and A95—could result in inadvertent construction-related damage to ten NYCL- and/or S/NR-eligible historic resources, as they are located within 90 feet of one or more of the aforementioned projected and potential development sites. If these eligible resources are designated in the future prior to the initiation of construction, the protective measures of DOB's TPPN #10/88 would apply and indirect significant adverse impact from construction would be avoided. Should they remain undesignated, however, the additional protective measures of TPPN #10/88 would not apply, and the potential for significant adverse construction-related impacts would be unmitigated.

In order to make TPPN #10/88 or similar measures applicable to historic resources in the absence of site-specific approval, a mechanism would have to be developed to ensure implementation and compliance, since it is not known and cannot be assumed that owners of these properties would voluntarily implement this mitigation. DCP, as lead agency, will explore the viability of this mitigation measure between the DEIS and FEIS. Should no feasible mitigation be identified, the significant adverse construction impact on historic and cultural resources would remain unmitigated.

Noise

The Proposed Actions would have the potential to result in significant adverse construction noise impacts at several locations throughout the rezoning area. For all the smaller individual projected development sites throughout the rezoning area, significant adverse construction noise impacts were determined to potentially occur at receptors that are adjacent to two or more projected development sites. However, adjacent projected development sites may not be constructed consecutively, which would result in periods where there would be lower or no construction noise followed by periods of higher construction noise, but with a duration of less than two years. Construction of all buildings on projected development sites 66 and 67 is expected to occur over 67 months and construction of all buildings on projected development site 46 is expected to occur over 41 months. The worst-case month during the construction period was analyzed. Although the duration of construction activities would occur for two consecutive years or more, the type of activity occurring on a development site would progress through the major construction stages and noise generated during each of these construction stages could vary substantially and, as a consequence, noise levels which exceed the noise impact threshold criteria may not be sustained for the entirety of two consecutive years or more. An evaluation of construction noise during a representative two-year time period for these large development sites will be completed between the DEIS and FEIS. If that analysis finds that a significant adverse construction noise impact would occur, mitigation measures will be explored and presented in the FEIS. Absent the identification of a mitigation measure for this potential construction noise impact, an unmitigated significant adverse construction noise impact would result.

J. GROWTH-INDUCING ASPECTS OF THE PROPOSED ACTIONS

The term "growth-inducing aspects" generally refers to "secondary" impacts of a proposed action that trigger further development outside the directly affected area. The *CEQR Technical Manual* indicates that an analysis of the growth-

inducing aspects of a proposed action is appropriate when the project: (1) adds substantial new land use, residents, or new employment that could induce additional development of a similar kind or of support uses, such as retail establishments to serve new residential uses; and/or (2) introduces or greatly expands infrastructure capacity (e.g., sewers, central water supply).

The goal of the Proposed Actions is to create opportunities for new residential development with significant amounts of permanently affordable housing and preserve existing affordability to ensure that the neighborhood continues to serve diverse housing needs; encourage mixed-use development on key corridors; enhance and revitalize major thoroughfares through new economic development; and protect neighborhood character of residential core and ensure predictable future development.

The projected increase in residential population is likely to increase the demand for neighborhood services in the 190-block rezoning area, ranging from community facilities to local goods and services retail. This would enhance the growth of local commercial corridors in the rezoning area. However, the Proposed Actions take this potential growth into account as part of the RWCDS under the assumed commercial, retail, and community facility components. The Proposed Actions could also lead to additional growth in the City and State economies, primarily due to employment and fiscal effects during construction on the projected and/or potential development sites and operation of these developments after their completion. However, this secondary growth would be expected to occur incrementally throughout the region and is not expected to result in any significant impacts in any particular area or at any particular site.

The Proposed Actions would result in more intensive land uses within the rezoning area. However, it is not anticipated that the Proposed Actions would generate significant secondary impacts resulting in substantial new development in nearby areas. The Proposed Actions would not introduce a new economic activity that would alter existing economic patterns in the study area. As the study area already has a well-established residential market and a critical mass of non-residential uses, including retail, industrial and community facility uses, the Proposed Actions would not create the critical mass of uses or populations that would induce additional development outside the rezoning area. Moreover, the Proposed Actions do not include the introduction of new infrastructure or an expansion of infrastructure capacity that would result in indirect development. Therefore, the Proposed Actions would not induce significant new growth in the surrounding area.

K. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Resources, both natural and man-made, would be expended in the construction and operation of developments projected to occur as a result of the Proposed Actions. These resources include the building materials used in construction; energy in the form of gas and electricity consumed during construction and operation of project-generated development by various mechanical and processing systems; and the human effort (time and labor) required to develop, construct, and operate various components of project-generated development. These are considered irretrievably committed because their reuse for some other purpose would be highly unlikely.

The projected and/or potential development under the Proposed Actions also constitutes a long-term commitment of land resources, thereby rendering land use for other purposes highly unlikely in the foreseeable future. However, the land use change that would occur as a result of the Proposed Actions would be compatible in terms of use and scale with existing conditions and trends in the area as a whole. None of the projected or potential development sites possess any natural resource values, and the sites are in large part developed or have been previously developed. It is noted that funds committed to the design, construction/renovation, and operation of projected or potential developments under the Proposed Actions would not be available for other projects. However, this is not a significant adverse fiscal impact or a significant adverse impact on City resources.

In addition, the public services provided in connection with the projected and/or potential developments under the Proposed Actions (e.g., police and fire protection, public education, open space, and other city resources) also constitute resource commitments that might otherwise be used for other programs or projects. However, the

Proposed Actions would enliven the area and produce economic growth that would generate substantial tax revenues providing a new source of public funds that would offset these expenditures.

The commitments of resources and materials are weighed against the benefits of the Proposed Actions. The Proposed Actions would promote new residential development with significant amounts of permanently affordable housing and preserve existing affordability, encourage mixed-use development on key corridors, enhance and revitalize major thoroughfares through new economic development, and protect neighborhood character of residential core and ensure predictable future development.