

# Jerome Avenue Rezoning

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## Draft Scope of Work for an Environmental Impact Statement

CEQR No. 17DCP019X

**Lead Agency: New York City Planning Commission**

**Prepared by: NYC Department of City Planning  
STV Incorporated**

**August 29, 2016**

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**JEROME AVENUE REZONING**  
**DRAFT**  
**SCOPE OF WORK FOR AN ENVIRONMENTAL IMPACT STATEMENT**

**CEQR NO. 17DCP019X**  
**ULURP NOS. pending**

**August 29, 2016**

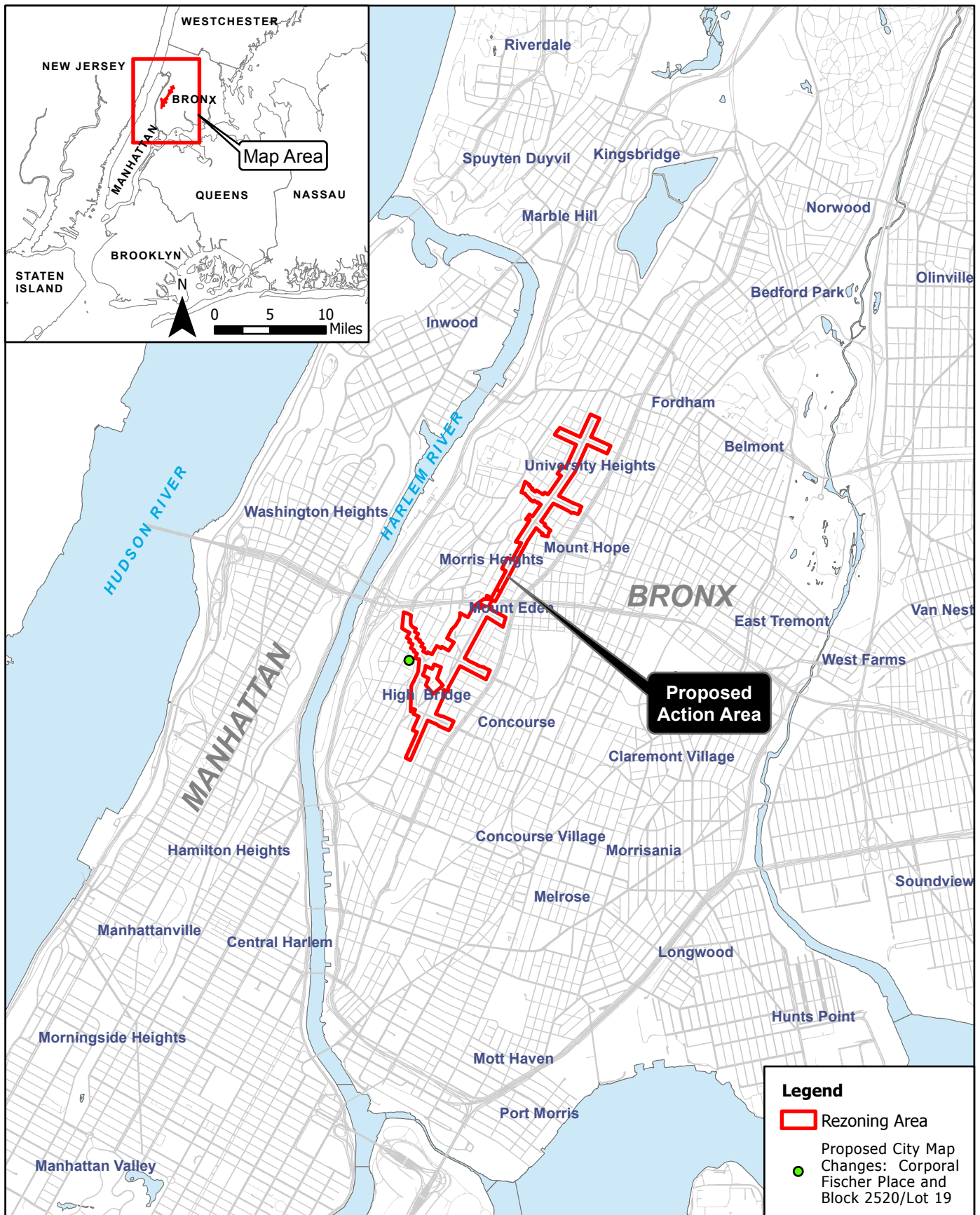
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**A. INTRODUCTION**

For more than a decade, residents and community stakeholders of the Southwest Bronx requested the City study the land use and zoning along the Jerome Avenue Corridor. It is clear that the existing zoning and land use patterns are not consistent with community goals, specifically its vision for Jerome Avenue as a vibrant activity center which supports and is the centerpiece of the surrounding neighborhoods. With the launch of the Mayor's Housing Plan in 2014, *Housing New York: A Five-Borough, Ten-Year Plan*, which seeks to build or preserve 200,000 units of affordable housing throughout the city, and the subsequent City Council adoption of a Citywide zoning text amendment to authorize a Mandatory Inclusionary Housing (MIH) program, a unique and welcomed opportunity was presented to the City to take close examination of several neighborhoods throughout the city, the Southwest Bronx included. Here, the Department of City Planning is undertaking, in close partnership with community stakeholders and city agencies, the Jerome Avenue Neighborhood Study (the "Study"). The Study has and continues to look comprehensively at several neighborhoods including Highbridge, Concourse, Mt. Eden, Mt. Hope, University Heights, and Fordham, with the Jerome Avenue Corridor as the central spine. The Study takes a broad look at the needs of the community and through a community outreach process has developed a vision for the study area which has resulted in the Jerome Avenue Neighborhood Plan (the "Plan"). The Plan provides a number of strategies to spur affordable housing, economic development, improve health and quality of life, investment in the public realm, in addition to proposed land use actions that accommodate the need for high quality affordable and retail uses.

The New York City Department of City Planning (DCP) is proposing a series of land use actions; including zoning map amendments, zoning text amendments and city map changes (collectively the "Proposed Actions") to support and implement the Plan, which is the subject of an on-going community engagement process, to create opportunities for new affordable housing and community facilities including new parkland, establish requirements that a share of housing remain permanently affordable, diversify area retail, support small businesses and entrepreneurs, and promote a safe and walkable pedestrian realm.

The proposed zoning text and map amendments would rezone an approximately 73-block area primarily along Jerome Avenue and its east west commercial corridors in Bronx Community Districts 4 and 5 and 7

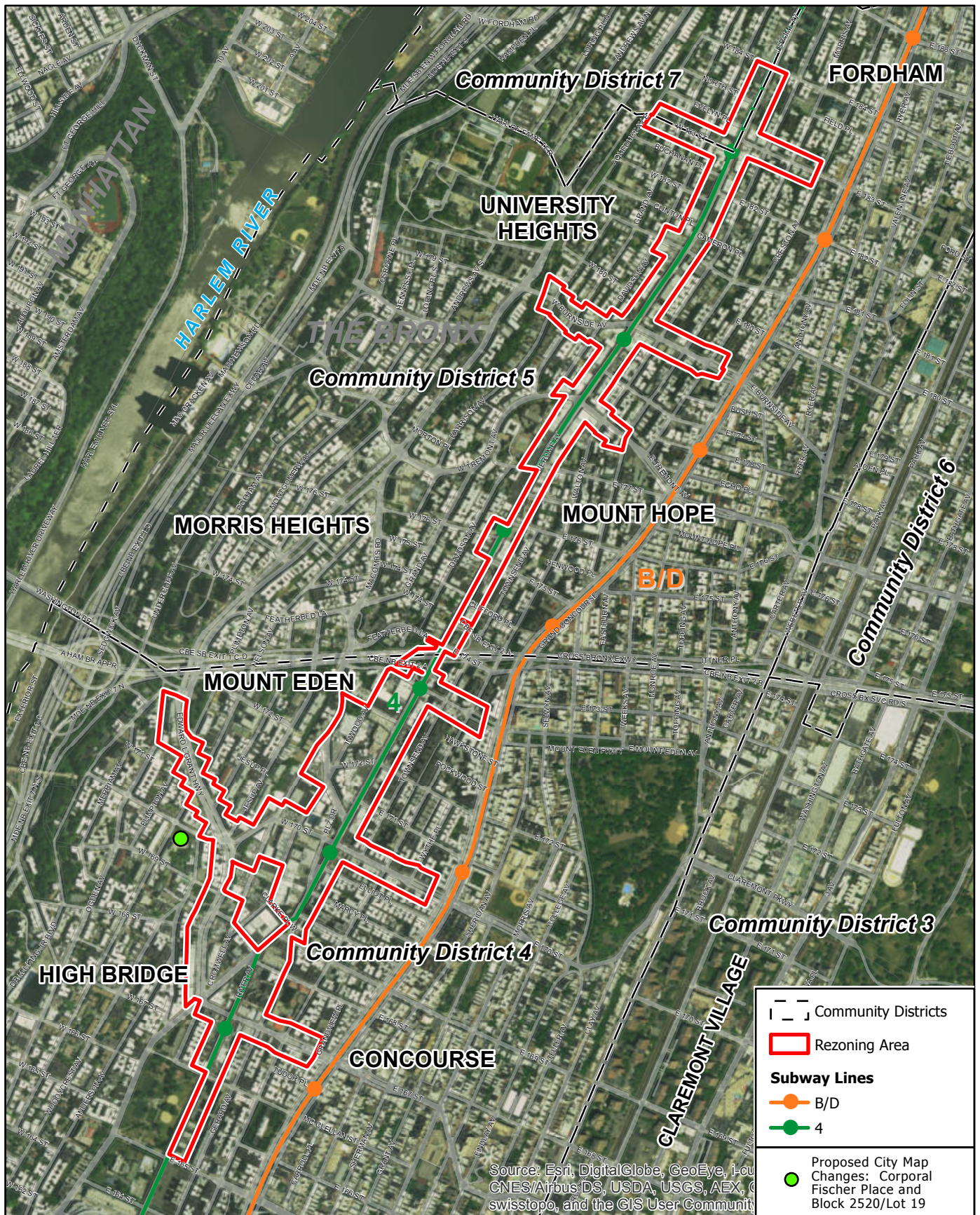


Source: NYS Office of Information Technology Services GIS Program Office (GPO), 2016; STV Incorporated, 2016.



Figure 1a



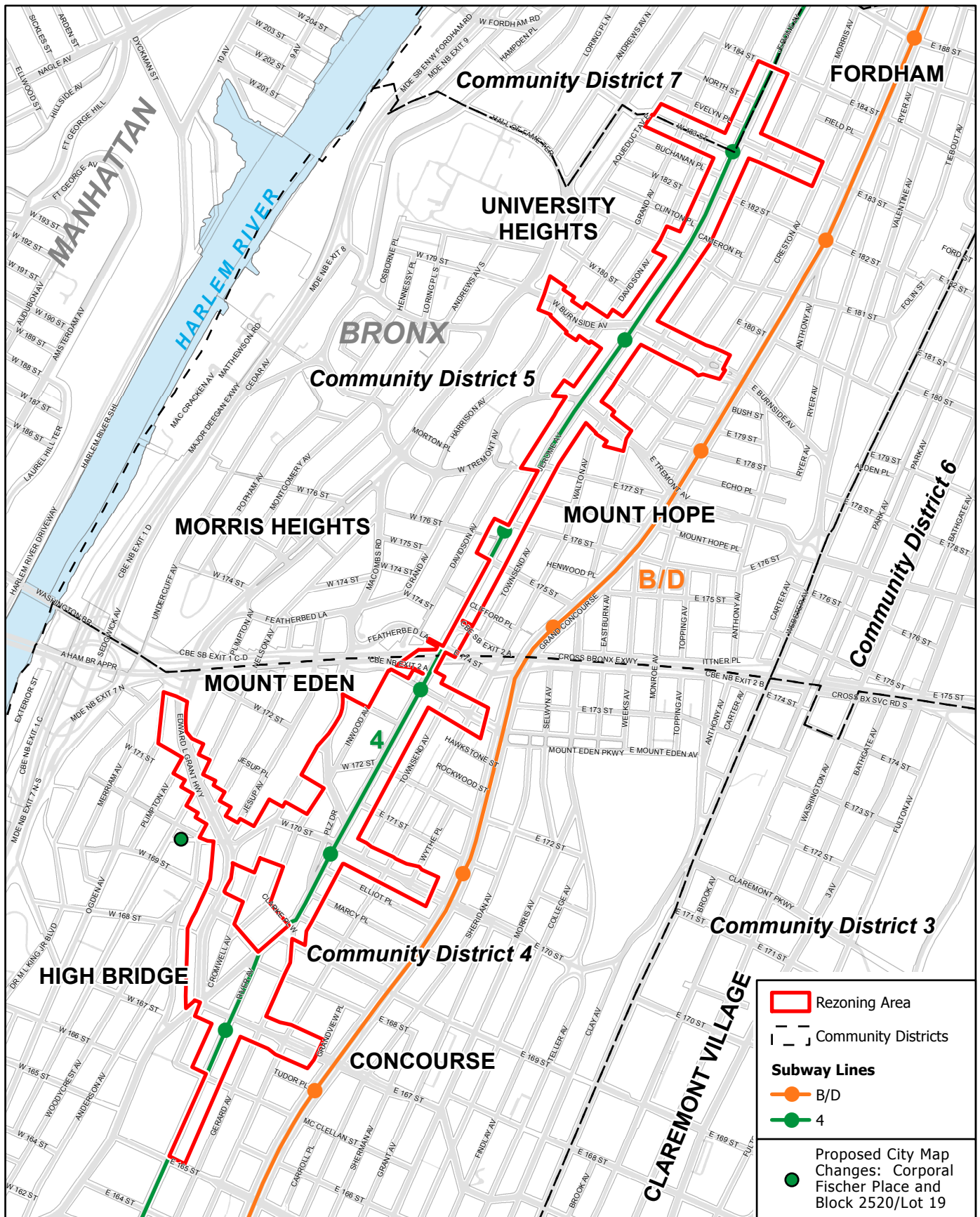


*Jerome Avenue Rezoning Proposal*

Figure 1b

**PROJECT AREA/LOCATION  
 - AERIAL VIEW**





Source: New York City Department of City Planning, 2016; STV Incorporated, 2016.

Figure 1c

(the “Rezoning Area”), and would establish the Special Jerome Avenue District coterminous with the Rezoning Area. The Rezoning Area is generally bounded by E.165th Street to the south and 184th street to the north; and also includes portions of Edward L. Grant Highway, E.170th Street, Mount Eden Avenue, Tremont Avenue, Burnside Avenue and E.183rd Street. The proposed city map changes are located a block outside of the Rezoning Area in the Highbridge neighborhood of the Bronx, Community District 4 (see Figure 1a, “Project Location”). The Proposed Actions are expected to result in a net increase of approximately 3,250 dwelling units, 72,273 square feet of community facility space, 35,575 square feet of commercial/retail space; and net decrease of 47,795 square feet of industrial space and 98,002 square feet of auto-related uses.

The Proposed Actions, described in “Purpose and Need for the Proposed Actions”, will facilitate the implementation of the recommendations designed to support the revitalization of the Jerome Avenue corridor and its associated east-west connections. The proposed actions will help realize the vision for the study area as an active, vibrant and inviting mixed-use corridor with opportunities for residents to not only live and work, but to meet their day to day needs within their own community.

The proposed actions are reflective of the comments and feedback received through DCP’s on-going community engagement process. The proposed actions seek to achieve the following land use objectives:

- Provide opportunities for high quality, permanent affordable housing with options for tenants at a wide range of income levels.
- Ensure that any new construction fits visually and architecturally into its surrounding neighborhood context.
- Increase the opportunities to diversify neighborhood retail and services.
- Permit more intensive uses in two nodes to anchor the corridor and surrounding neighborhoods.
- Create special rules for new development along the elevated rail line to provide light and air along the corridor and ensure adequate distance between residential uses and the train.
- Create a walkable inviting commercial corridor by promoting non-residential ground floor uses and diverse retail to support community needs.
- Preserve zoning for heavy commercial and light industrial uses in areas to support mixed uses and jobs.
- Establish controls for transient hotels to ensure consistency with the goals and objectives of the rezoning.

An overview of the rezoning area, the purpose and need for the Proposed Actions and their specific components are discussed below. Appendix 1 includes a full list of the blocks and lots that would be affected by the Proposed Actions, while Figures 4a through 4d in the EAS show all of the affected blocks and lots.

The New York City Planning Commission (CPC) has determined that an EIS for the Proposed Actions will be prepared in conformance with City Environmental Quality Review (CEQR) guidelines, with the Department of City Planning acting on behalf of the CPC as the lead agency. The environmental analyses in the EIS will assume a development period of ten years for the Reasonable Worst Case Development

Scenario (RWCDs) for the Proposed Actions (i.e., analysis year of 2026) and identify the cumulative impacts of other project in areas affected by the Proposed Actions. DCP will conduct a coordinated review of the Proposed Actions with involved and interested agencies.

## **B. REQUIRED APPROVALS AND REVIEW PROCEDURES**

The Proposed Actions includes discretionary actions that are subject to review under the Uniform Land Use Review Procedure (ULURP), Section 200 of the City Charter, and CEQR process, as follows:

1. Zoning map amendments to rezone portions of existing C4-4, M1-2, R8, C8-3, and R7-1 with R7A, R8A, R9A, R7D, and C4-4D districts and C2-4 commercial overlays.
2. Zoning text amendments to:
  - Establish the Special Jerome Avenue District, coterminous with the Rezoning Area. The proposed special district will include regulations that will add controls to the ground floors of buildings within mapped commercial overlays and districts, modify height and bulk regulations on lots fronting the elevated rail line, modify bulk regulations on irregular lots, and establish controls, such as discretionary review provisions, for transient hotels.
  - Establish proposed R7A, R7D, R8A, R9A, and C4-4D districts as Mandatory Inclusionary Housing areas, applying the Mandatory Inclusionary Housing program to require a share of new housing to be permanently affordable where significant new housing capacity would be created.
3. City Map changes to:
  - Map Block 2520, Lot 19 as parkland. This city-owned parcel is located one block outside of the rezoning area and is bounded by West 170th Street, Nelson Avenue, Shakespeare Avenue, and Corporal Fischer Place in the Highbridge neighborhood of the Bronx, Community District 4.
  - De-map Corporal Fischer Place (street) between Nelson Avenue and Shakespeare Avenue, which is adjacent to the parcel to be mapped as park land as described above (Block 2520, Lot 19), and map it as parkland.

## **City Environmental Quality Review (CEQR) and Scoping**

The Proposed Actions are classified as Type 1, as defined under 6 NYCRR 617.4 and 43 RCNY 6-15, subject to environmental review in accordance with CEQR guidelines. An Environmental Assessment Statement (EAS) was completed on August 26, 2016. A Positive Declaration, issued on August 29, 2016, established that the Proposed Actions may have a significant adverse impact on the environment, thus warranting the preparation of an EIS.

The CEQR scoping process is intended to focus the EIS on those issues that are most pertinent to the Proposed Actions. The process allows other agencies and the public a voice in framing the scope of the

EIS. The scoping document sets forth the analyses and methodologies that will be utilized to prepare the EIS. During the period for scoping, those interested in reviewing the Draft Scope may do so and give their comments to the lead agency. The public, interested agencies, Bronx Community Boards 4, 5 and 7, and elected officials, are invited to comment on the Draft Scope, either in writing or orally, at a public scoping meeting to be held on September 29, 2016 at Bronx Community College - Gould Memorial Library Auditorium, 2155 University Avenue, Bronx, NY, 10453, starting at 4:00 pm. Comments received during the Draft Scope's public meeting and written comments received up to ten days after the meeting (until 5:00 pm on October 10, 2016), will be considered and incorporated as appropriate into the Final Scope of Work (Final Scope). The lead agency will oversee preparation of the Final Scope, which will incorporate all relevant comments made on the Draft Scope and revise the extent or methodologies of the studies, as appropriate, in response to comments made during the scoping. The Draft EIS (DEIS) will be prepared in accordance with the Final Scope.

Once the lead agency is satisfied that the DEIS is complete, the document will be made available for public review and comment. A public hearing will be held on the DEIS in conjunction with the CPC hearing on the land use applications to afford all interested parties the opportunity to submit oral and written comments. The record will remain open for ten days after the public hearing to allow additional written comments on the DEIS. At the close of the public review period, a Final EIS (FEIS) will be prepared that will respond to all substantive comments made on the DEIS, along with any revisions to the technical analyses necessary to respond to those comments. The FEIS will then be used by the decision makers to evaluate CEQR findings, which address project impacts and proposed mitigation measures, in deciding whether to approve the requested discretionary actions, with or without modifications.

## **C. BACKGROUND**

### **Community Engagement and Interagency Participation**

In May 2014, Mayor Bill de Blasio 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. Jerome Avenue was selected as one of the first neighborhood studies based on the previous planning work in the area and numerous requests from local community boards and elected officials to study the area to leverage the neighborhoods' many assets and to identify opportunities for revitalization of the corridor and the surrounding neighborhoods.

The Jerome Avenue Neighborhood Plan is part of an on-going community engagement process that began in 2014. Along with residents and strong community partners, DCP has worked in coordination with key city agencies, including the Department of Housing Preservation and Development (HPD), Department of Transportation (CDOT), Department of Parks and Recreation (DPR), Department of Small Business Services (SBS), Department of Health and Mental Hygiene (DOHMH), the School Construction Authority (SCA), and

other capital and service agencies as appropriate. Together, the project team has conducted a series of informational sessions and workshops beginning in the fall 2014 and throughout the process to engage community stakeholders in identifying current and future needs and creating a clear and cohesive vision for their neighborhoods.

As part of the on-going community engagement process, the City has conducted a multi-faceted outreach approach including focus groups with youth and seniors, mobile office hours, informational interest meetings and outreach sessions with various community-based organizations. Among others this included: Highbridge Community Development Corporation, New Settlement, WHEDco, Yankasa, BronxWorks, and Davidson Community Center. Public events included Open Houses to educate community stakeholders on the roles and responsibilities of the various agencies, and begin a dialogue on community needs and assets. The Open Houses were followed by a Community Workshop where participants were invited to have a more detailed and meaningful discussion with agency representatives, resulting in the setting and prioritization of community goals. Finally, a Visioning Session was held in which the project team further refined the previously agreed-upon goals while establishing a future vision for the Jerome corridor. Local community boards, area residents, business owners, workers, elected officials and community-based organizations identified goals for *Housing, Community Resources, Jobs and Businesses and Access, Mobility & Circulation*. The community goals task the Plan to:

- Provide sustainable, high-quality, affordable housing with a range of options for residents at all income levels.
- Protect tenants and improve housing quality.
- Ensure every neighborhood has green streetscapes, quality parks and diverse recreation spaces.
- Create greater retail diversity to meet current and growing retail and service needs.
- Prepare residents for job and career growth through job training and skills development.
- Promote and support small businesses and entrepreneurship.
- Support auto-related businesses.
- Promote a safe, walkable area in and around the elevated train.

#### **D. THE JEROME AVENUE NEIGHBORHOOD STUDY AREA HISTORY**

The Jerome Avenue Neighborhood Study area includes the neighborhoods of *Highbridge, Mount Eden, Concourse, Mount Hope, University Heights and Morris Heights* located in the Southwest Bronx. Collectively, these neighborhoods represent very dense and stable residential communities that developed during periods of growth in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries.

The opening of the #4 elevated train, in 1917, running along Jerome Avenue and the B/D subway line, in 1940, running underneath the Grand Concourse reinforced and contributed to the population, economic and civic growth of the area. The combination of elevated and subway mass transit along with a sophisticated street car network in the early 20<sup>th</sup> century prompted large population growth, and mid-density buildings replaced one and two family homes. These dense corridors can still be seen these throughout these neighborhoods today.



Historically, housing in these neighborhoods did not allow for parking. As a result, the Jerome Avenue corridor, like similar parts of the city, developed as a service area for the dense surrounding residential neighborhoods characterized by surface parking lots, garages and auto-repair and service shops. The 1961 zoning resolution codified areas like Jerome Avenue corridor and similar areas around the city as auto-related, which remains in effect for much of the study area today. New uses in these areas have been limited to schools, gyms, low-scale commercial and auto-related sales and repair. This is due in large part to the zoning which has been in place since 1961, limits commercial and community facility development and does not permit residential development.

The physical character and image of the study area is largely defined by iconic infrastructure such as the Grand Concourse and Cross Bronx Expressway, the historic Bronx Community College, as well as the area's open spaces. The Grand Concourse serves as the western boundary of the study area and is home to dense neighborhoods. It is a wide, 180 feet, north-south thoroughfare which spans 4 miles of the Bronx and is one its defining features. Some of the finest examples of Art Deco and Arte Modern architecture in the country can be found along the Grand Concourse, and these buildings serve as a testament to the burgeoning upward mobility which could be found in the area in the early part of the 20<sup>th</sup> century. A majority of this growth, which occurred largely between the opening of the #4 subway service and the beginning of the Great Depression, was comprised of immigrant populations- namely Irish, Italian and Jewish Americans. This immigrant tradition continued on as Puerto Ricans, then Dominicans now West African and Mexican immigrants continue to populate the community.

Bronx Community College is located in the northwest portion study area and played an important role in the development of the surrounding neighborhood, University Heights. It is generally bound by 180<sup>th</sup> Street, University Avenue, Sedgwick Avenue and Hall of Fame Terrace. In 1894 New York University began moving their undergraduate school to the site on top of the heights overlooking the Harlem River, eventually becoming the namesake for the neighborhood itself. During its time in the Bronx the campus became known for its world-class architecture. Its first campus plan was designed by Stanford White, whose firm McKim, Meade and White, one of the most famous of the time, and modernist architect Marcel Breuer led the 1950's campus expansion. The University influenced the form and function of buildings many of which can be seen today around the campus along University Avenue. Today it has an enrollment of over 11,000 students, is part of the City University of New York (CUNY) system and is almost exclusively a commuter college.

Several important City parks helped define the development of the surrounding neighborhoods. Aqueduct Walk is a pedestrian trail along the right-of-way of the former Croton Aqueduct. It's located approximately a half block east of University Avenue, it extends northward through Kingsbridge Road where it connects to additional sections and southward to where it meets the High Bridge. The High Bridge originally carried water from the Croton Aqueduct and is the namesake for the Highbridge neighborhood. In 2014 it was reopened by the Department of Parks and provides pedestrian access from the Highbridge Neighborhood to Manhattan. Crotona Park is a thirty-eight acre park, originally part of the Morris estate, located east of the Grand Concourse and south of Mt. Eden Parkway and serves the southeastern study area.

One of the defining physical characteristics of the study area is the eight-lane, below grade Cross Bronx Expressway; an infrastructural chasm etched through the center of the study area, separating community Boards 4 and 5. Part of Robert Moses's massive urban renewal program in New York City, construction of the Expressway began in 1943 and was completed in 1963. Construction caused massive displacement, and bisected a number of tight knit, thriving communities. Decades later, the expressway remains a physical divider of neighborhoods. In the decades that followed, the Southwest Bronx experienced disinvestment and population loss. Only within the last few decades were these trends finally reversed. Today, the population of the study area's surrounding neighborhoods total more than 345,000 residents. This represents a larger population than many large U.S. cities including Pittsburgh, PA and St. Louis, MO.

### **Rezoning Area**

The Proposed Actions would rezone an approximately 73-block area which spans approximately 151 acres along Jerome Avenue and is generally bounded by E 165<sup>th</sup> Street to the south and 184<sup>th</sup> Street to the north; the affected area also includes portions of Edward L. Grant Highway, E 170<sup>th</sup> Street, Mount Eden Avenue, Tremont Avenue, Burnside Avenue and E 183rd. The area is defined by Jerome Avenue which runs north-south and from East 165<sup>th</sup> Street to East 184<sup>th</sup> Street and east-west connections which comprise the commercial corridors and provide key connections throughout the study area.

#### ***River Avenue, 165<sup>th</sup> Street – 168th Street***

Representing the southernmost portion of the study area, River Avenue between 165<sup>th</sup> and 168<sup>th</sup> sits beneath the elevated 4 train, before the track meets Jerome Avenue at 168<sup>th</sup> Street. The area is walking distance to Yankee Stadium to the south and contains the large, regionally-serving, Mullaly Park. The area is zoned as an R8 district, allowing the highest density of any existing designation in the study area. There are C2-4 commercial overlays mapped along River Ave. between McClellan Street and 167<sup>th</sup> street. Land uses in the area range from surface parking lots to large, mixed-use apartment buildings, to single-story retail buildings at 167<sup>th</sup> Street. There is an elevated rail station for the 4 train and 167<sup>th</sup> and River Avenue.

#### ***Edward L. Grant Highway***

Defining the western edge of the study area's southern portion, Edward L. Grant Highway runs north/south between 167<sup>th</sup> Street to the south, to the Cross Bronx Expressway to the north, at which point it turns into University Avenue. The wide, 4-lane boulevard cuts through three distinct zoning districts: C8-3, M1-2, and R7-1. A commercial overlay is mapped continuously along the winding street north of 170<sup>th</sup> Street.

Edward L. Grant Highway is home to a number of large apartment buildings, most recently a 130-unit project developed in conjunction with HPD just north of Plimpton Avenue. Additionally, there is a 10 story, 60-unit mixed-use residential and commercial development currently under construction at the southeast corner of the Edward L. Grant Highway and Plimpton Avenue. The BX35 bus runs along Edward L. Grant highway and provides connections west into Manhattan and east through Morrisania to the Foxhurst neighborhood.

***Jerome Avenue, 169<sup>th</sup> Street – Cross Bronx Expressway***

As Jerome Avenue runs between 169<sup>th</sup> to the south and Cross Bronx Expressway to the north, it is mapped with a variety of zoning districts, the most prominent of which include an M1-2 district to the west of Jerome below 170<sup>th</sup> Street and a C8-3 district north of 170<sup>th</sup> street, extending from the eastern frontage of Jerome Avenue to Macombs Road on the west. The M district contains a variety of uses including self-storage, an ironworks, a Department of Sanitation facility, as well as a number of warehouse and automotive uses. The C8-3 district includes a variety of automotive repair facilities, a livery service and parking uses as well as a number of large apartment buildings and a newly constructed Blink Fitness facility. There is also an R8 with a commercial overlay mapped on the east side of Jerome between 169<sup>th</sup> and 170<sup>th</sup> containing neighborhood-serving commercial uses such as small restaurants, a small market, beauty stores and a general goods store. Finally, there is a small portion of an R7-1 district mapped with a commercial overlay along Jerome Avenue at Mr. Eden Avenue which includes similar neighborhood-serving retail and commercial uses.

Major institutions within this portion of the study area include the NYPD 44<sup>th</sup> Precinct located at the southeast corner of 169<sup>th</sup> and Jerome, and the newly built New Settlement Community Campus (includes three schools and a community center) located at Jerome Avenue and Goble Place. Bronx Lebanon Hospital is located across east of the Grand Concourse between Mt. Eden Avenue and 173<sup>rd</sup> Street. The area is also served by four parks: Keltch Park at 170<sup>th</sup> and Jerome; Goble Playground, west of Jerome Avenue on Goble Place; Inwood Park, a hardscaped plaza located on Mount Eden Avenue; and Jerome Playground South, a handball court on Jerome Avenue, just south of the Expressway.

There is an elevated rail station for the 4 train and Jerome and Mt. Eden Ave. The Bx11 and BX18 serve as east/west bus connections. With exception of the buses running along the Grand Concourse, there is no north/south bus service within this portion of the study area.

***170<sup>th</sup> Street Commercial Corridor***

170<sup>th</sup> Street serves an important lateral connection through the study area between Edward L. Grant Highway on the west and the Grand Concourse on the east. A C4-4 District is mapped between the Grand Concourse and Jerome, and the street splits an existing M district on the south side and C8 district on the north side, where it eventually meets an R7-1 district mapped with a commercial overlay at from Cromwell Avenue to Edward L. Grant.

The 170<sup>th</sup> Street commercial corridor between the Concourse and Jerome Avenue is one of the most active commercial areas in the study area. Generally speaking, uses are locally-serving and located in low-scale, one- and two-story buildings. Along the northern frontage of 170<sup>th</sup> between Walton and Jerome are a number of larger, mixed-use apartment buildings with ground floor retail.

West of Jerome, to Edward L. Grant, 170<sup>th</sup> is characterized by uses more reflective of the limitations of the underlying C8-3 and M1-2 district which splits the street. These include a self-storage, surface parking lot, a livery cab service, interspersed automotive uses and the Volunteers of America.

There is an elevated rail station for the 4 train and Jerome and 170<sup>th</sup> Street, in addition to the Bx11 and BX18 bus lines, making this one of the study area's more transit-rich nodes.

### ***Jerome Avenue, Cross Bronx Expressway – Tremont***

North of the Cross Bronx Expressway, Jerome Avenue is lined with a mix of commercial uses including auto repair shops, gas stations, parking facilities and car washes. The corridor here also includes some neighborhood-serving retail such as hardware stores and general merchandise shops, as well as local restaurants. Two built, and one planned, supportive housing developments are located here. The area's land use mix is a result of the underlying, C8-3 zoning. The exception in this designation is between 176<sup>th</sup> street and 177<sup>th</sup> street (eastern block-frontage) where the zoning designation is R7-1 with a C2-4 overlay.

One of the overarching goals of the Plan has been to foster economic development and support local businesses, including automotive uses. Due to the density of automotive uses, access to the Cross Bronx Expressway and underlying site conditions, two discrete portions of the study area have been identified as logical for preserving their existing C8-3 zoning designations.

The dense residential neighborhoods of Morris Heights and Mt. Hope are located to the west, and east of Jerome Avenue, respectively. Several step streets connect these neighborhoods with the corridor including step streets at Davidson Avenue, Clifford Place and 176<sup>th</sup> Street. The area is not well-served by buses, but there is a 4-train stop at 176<sup>th</sup> Street.

### ***Tremont Avenue and Burnside Avenue Commercial Corridors***

Burnside Avenue is the most vibrant commercial corridor in the northern portion of the Study Area. An R7-1 district and an R8 district are mapped west and east of Jerome Avenue, respectively- each mapped with a C1-4 commercial overlay. Apparel stores, restaurants, banks, electronic stores, grocery stores, among other commercial uses are typical in this portion of the Study Area. Housing is also permitted, and a significant, affordable project is currently under construction at the corner of Burnside and Creston Avenues. The project will include a total of 113 units achieving a broad range of affordability (serving families making 30% AMI – 90% AMI).

The area is well-served by transit including the Bx32, BX40, BX42, and BX36. Additionally, the 4-train stops at Burnside Avenue. Open spaces include Mt. Hope Garden, Devanney Triangle and Aqueduct walk.

Major institutions here include educational, community and health facilities. PS 306/MS 331 located on Tremont Avenue, west of Jerome. The Davidson Community Center is located on Davidson Avenue, just off of Burnside. Additionally, the Morris Heights Health Center operates two facilities west on Burnside Avenue. Finally, Bronx Community College, one of the borough's more significant institutions of higher learning, is located just west of the Study Area.

### ***Jerome Avenue, 181<sup>st</sup> Street – 184<sup>th</sup> Street***

Jerome Avenue between 181<sup>st</sup> and 184<sup>th</sup> Street represents the northern-most portion of the study area. Today, it is mapped exclusively as a C8-3 zoning district, with the exception of the lateral portion of the

183<sup>rd</sup> street corridor which is mapped as R7-1 to the west and R8 to the east, each with C1-4 commercial overlays. Reflective of the zoning, automotive uses persist within this portion of the study area, along with various retail uses, two prominent self-storage facilities, and a number of legally non-conforming large mixed, residential buildings. There is also an FDNY EMS station and Public School 315.

This portion of the study area is served by the BX32 bus, running along Jerome Avenue, as well as the 4-train, with a stop at 183<sup>rd</sup> Street.

### **Previous Planning Efforts**

Over the last ten years, local Community Boards and various City agencies, including DCP, CDOT and New York City Mayor's Office of Environmental Remediation (OER) in collaboration with the community have developed a number of studies geared toward the revitalization of Jerome Avenue and the surrounding neighborhoods. These studies include: *Bronx Community Board 5 Section 197-a Plan Phase I Summary Report (2002)*, *Place-Based Community Brownfield Planning Foundation Report on Existing Conditions-Jerome Avenue Corridor 2013* and *The Jerome Avenue Transportation Study 2015*. Each of these studies described below support the Jerome Avenue Neighborhood Plan, however there has yet to be comprehensive planning process for the entire study area.

#### ***Bronx Community Board 5 Section 197-a Plan Phase I Summary Report (2002)***

In 2002, Community Board 5 established a framework to continue the revitalization of the district and build upon the goals established as part of their Development Plan in 2000. The scope included the continued development of housing to replenish the existing stock which had been depleted by years of neglect and abandonment, revitalization of the central business district, improvements to existing neighborhood parks, increased opportunities for youth and seniors, investments to improve the local street network including step streets, leverage city-owned property for housing and open space opportunities and improve access to the Harlem River. While the 197-A plan was never formally completed the key elements identified in the scoping document continue to guide discussions focused on planning and infrastructure investments throughout Community District 5.

#### ***Jerome Avenue Transportation Study (2013)***

At the request of Bronx Community Boards 4 and 5 in response to growing traffic congestion in the area and to address mobility and safety for all street users (motorists, cyclists, pedestrian, and transit In 2013, city DOT conducted a study of existing and future traffic conditions including demographics, zoning & land use, traffic, goods movement, pedestrians & bicycles, accidents & safety, parking and public transportation. The study area is bounded by 181<sup>st</sup> Street in the north 172<sup>nd</sup> Street in the south the Grand Concourse to the east and Martin Luther King Boulevard/University Avenue to the west. The goals of the study were to reduce traffic congestion, improve internal traffic circulation, streetscape, and enhance safety for all road uses with effective community participation. The study objectives are as follows:

- Assess the existing and future travel and traffic conditions;
- Identify constraints to internal vehicular and pedestrian circulation with specific emphasis on limited crossings over Cross Bronx Expressway;

- Develop a package of recommendations with improvement measures to reduce vehicular congestion, improve pedestrian access and circulation, enhance safety for all street users (vehicles, pedestrians, bicycles) and general streetscape; and
- Foster a sense of community support through extensive public participation.

Several of the proposed recommendations have been completed while others are still on-going.

It is important to note that while not part of the proposed actions the Plan builds upon the recommendations and goals identified in the 2013 transportation study and will include comprehensive strategies and significant investments to improve the public realm, pedestrian safety and walkability.

***Place-Based Community Brownfield Planning Foundation Report on Existing Conditions-Jerome Avenue Corridor (2015)***

In 2013 DCP in collaboration with the New York City Mayor's Office of Environmental Remediation (OER) completed an existing conditions report of area-wide brownfield sites. This existing conditions report, commissioned by OER provides an overview of the study area's geologic and natural features, historical development patterns, zoning, land use and infrastructure, demographic and economic profiles, a summary of environmental conditions and a preliminary evaluation of potential strategic properties. The study area is bounded by West Mt. Eden Avenue to the north, the intersection of Cromwell and Jerome Avenues to the south, Jerome Avenue to 170<sup>th</sup> Street to the Grand Concourse to the east and Edward L. Grant Highway and Jesup Avenue to the west.

This report was the result of on-going efforts by the DCP with support from local organizations, Community Board 4 and elected officials to study the Jerome Avenue Corridor with a focus on revitalization and economic development. Community Board 4 identified the Jerome Avenue Area as a priority area in their District Needs Statements from 2013-2016.

## **E. EXISTING ZONING**

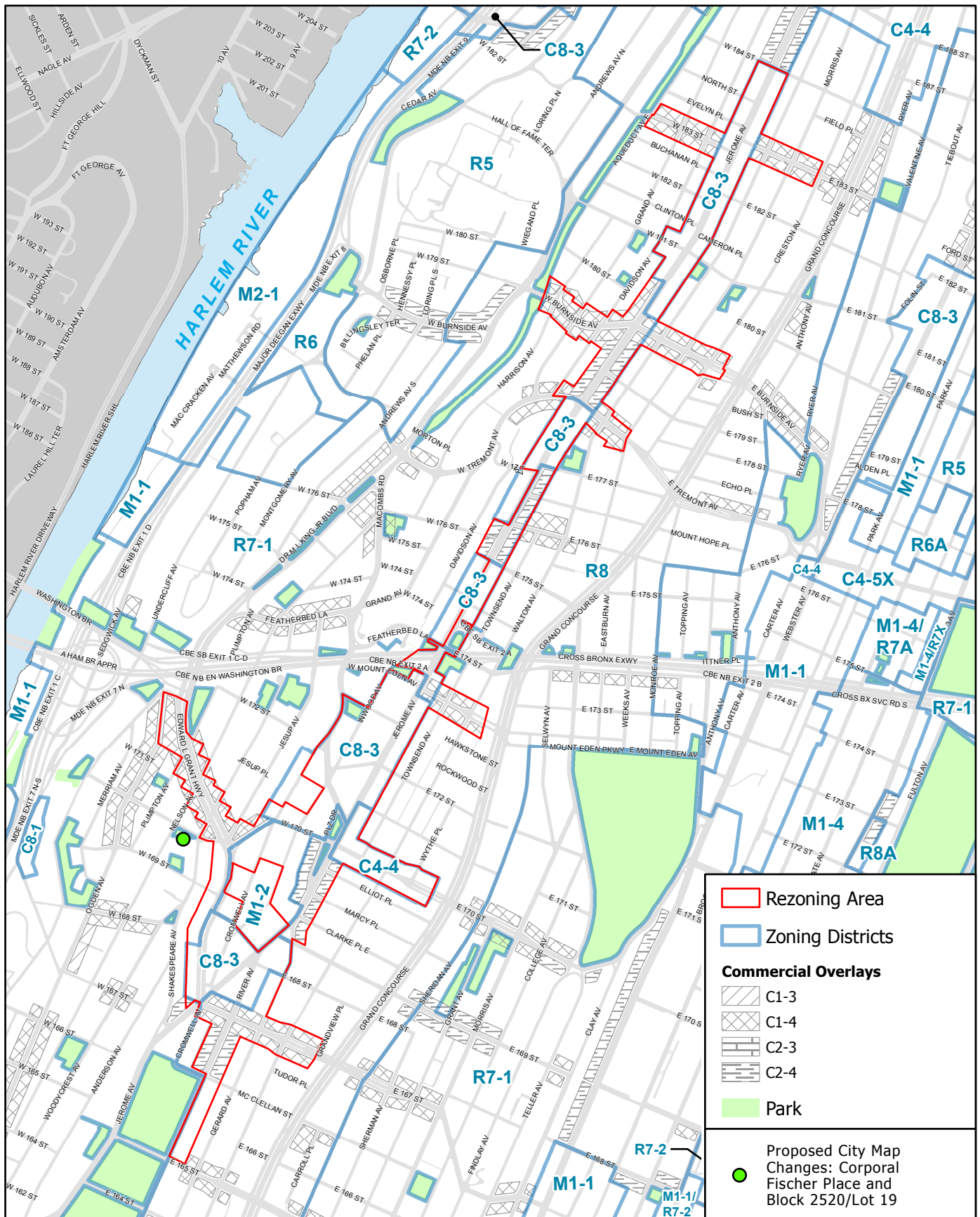
The existing zoning within the proposed rezoning is composed of seven zoning districts: C8-3, M1-2, C4-4, R7-1, R8 and C1-4 and C2-4 commercial overlays. (See Figure 2, "Existing Zoning.")

### **C8-3**

Approximately 33 full or partial blocks in five discrete areas are currently zoned C8-3:

- An area bounded by West 169<sup>th</sup> Street, Jerome Avenue and Edward L. Grant Highway
- An area bounded by West 170<sup>th</sup> Street, Mount Eden Avenue, Jerome Avenue and Cromwell Avenue
- An area bounded by East 175<sup>th</sup> Street, Featherbed Lane, Townsend Avenue and Davidson Avenue
- An area bounded West Tremont Avenue, East 176<sup>th</sup> Street, Davidson Avenue, Townsend Avenue and Walton Avenue
- An area bounded by East 184<sup>th</sup> Street, Burnside Avenue, Davidson Avenue and Walton Avenue





Source: New York City Department of City Planning, 2016; STV Incorporated, 2016.

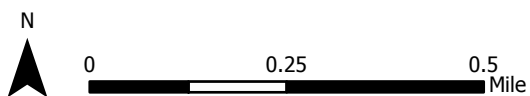


Figure 2

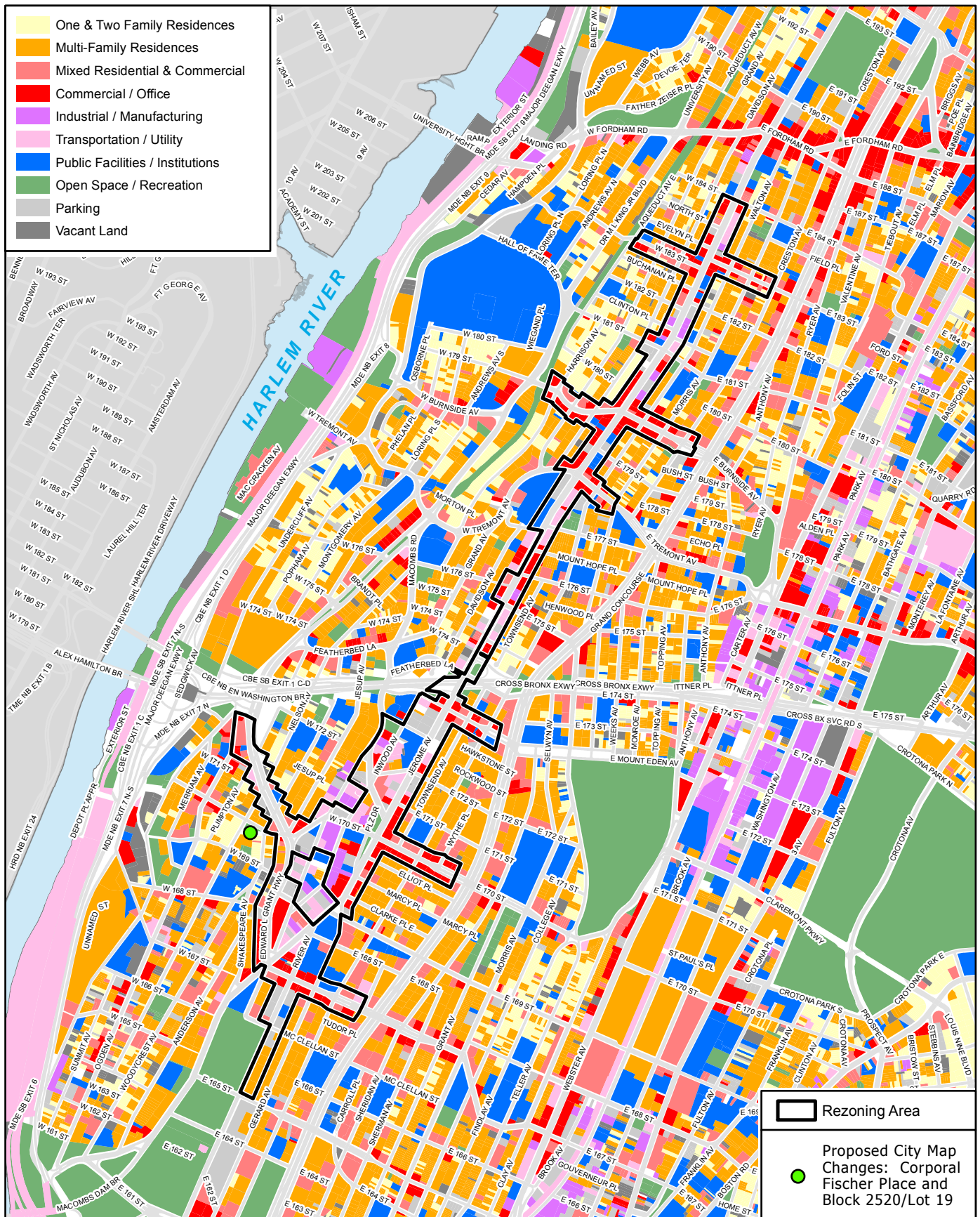


Figure 3

LAND USE

Jerome Avenue Rezoning Proposal



C8-3 districts are general service districts that allow community facility uses in Use Group 4 and commercial uses in Use Groups 5 through 14 and 16. The most prevalent uses in C8 districts are automotive and heavy commercial uses such as auto repair and showrooms, warehouses, gas stations and car washes. C8-3 districts permit commercial uses at a maximum permitted FAR of 2.0 and community facility uses at a maximum permitted FAR of 6.5. The maximum building height is determined by the sky exposure plane, which begins at a height of 60 feet, or 4 stories, whichever is less, above the street line. Towers are permitted to penetrate the sky exposure plane for community facility uses. Off-street parking requirements vary with the use, but typically require one accessory parking space per 1,000 square feet of commercial space. Residential uses are not permitted.

Existing uses in these areas include gas stations, livery companies, auto sales, auto repair, auto glass, audio sales, parking garages, surface parking lots, community facilities, single-story retail, 6-8 story residential buildings and mixed used buildings with ground floor retail with residences above. Recent developments include a school, two gyms and single story commercial.

### **M1-2**

Approximately four full and partial blocks are zoned M1-2 along the southern portion of the rezoning area bounded by West 170<sup>th</sup> Street, West 169<sup>th</sup> Street, Edward L. Grant Highway and Inwood Avenue. M1-2 districts permit some community facility uses in Use Group 4 such as hospitals, houses of worship and ambulatory health care facilities, commercial uses in use Groups 5 through 14 and 16, and manufacturing uses in Use Group 17. If the performance standards for noise, vibration, particulates, odors, and other noxious uses are met, then Use Group 18 use are permitted as well. Commercial and manufacturing uses are permitted a maximum FAR of 2.0 FAR and community facilities are permitted 4.8. The maximum building height is determined by the sky exposure plane, which begins at a height of 60 feet, or 4 stories, whichever is less, above the street line. Off-street parking requirements vary with the use, but typically require one parking space for every three employees or every 1,000 square feet of floor area, whichever requires more spaces for manufacturing uses and one accessory parking space per 300 square feet of commercial space. Residential uses are not permitted.

Existing uses include a mix of low-rise commercial, industrial, and community facility uses and low-scale residential buildings.

### **C4-4**

Approximately six partial blocks are zoned C4-4 along East 170<sup>th</sup> Street bounded by the Grand Concourse and Jerome Avenue. C4-4 zoning districts are regional commercial districts, which permit uses such as specialty, and department stores that serve a larger area and generate more activity than local retail. The C4-4 district permits commercial uses with a maximum FAR of 3.4. Residential uses are permitted up to a maximum FAR of 3.44, or 4.0 for Quality Housing buildings on wide streets, and community facility uses are permitted a maximum FAR of 6.5. Height and setback regulations depend on the configuration of uses. Generally, buildings in C4-4 districts are governed by a sky exposure plane, which, for commercial or community facility uses, begins at a height of 60 feet, or 4 stories, whichever is less, above the street line. Towers are permitted to penetrate the sky exposure plane for community facility uses. Residential

uses are permitted to either be constructed pursuant to height factor regulations or pursuant to the Quality Housing Program under a residential equivalent of an R7-2 district. If the residential portion of the building is constructed pursuant to Quality Housing, the entire building must comply with the height limitations. On wide streets outside Manhattan Core, this would be a height limit of 85 feet for buildings with a qualifying ground floor (one with a height of at least 13 feet), and a height limit of 75 feet on narrow streets, when located outside of Inclusionary Housing areas. Off-street parking is required for 50% of the dwelling units, which may be reduced to 30% for lots less than 15,000 square feet and waived for lots less than 10,000 square feet. No parking is required for income-restricted housing units, and where the total residential parking required is less than 15 spaces, the requirements may be waived. Parking for commercial uses vary by use but typically requires one space per 1,000 square feet, and may be waived if the requirement is less than 40 spaces.

Existing uses include single story retail, community facility uses and 6-8 story apartment buildings with ground floor retail.

### **R7-1**

Approximately twenty eight full or partial blocks are zoned R7-1; along Edward L. Grant Highway between Jessup Avenue and University Avenue and along Jerome Avenue from East 170<sup>th</sup> Street to East 169<sup>th</sup> Street, from Mount Eden Avenue to East 174<sup>th</sup> Street and from East 76<sup>th</sup> Street to East 177<sup>th</sup> Street. An R7-1 is a mid-density residential district, which allows residential and community facility uses. There is no fixed height limit and building envelopes are governed by either height factor regulations or the Quality Housing Program. Residential developments using the optional Quality Housing program are allowed a maximum FAR of 3.44 on narrow streets and 4.0 on wide streets with maximum building heights of 75 and 85 feet (with a qualifying ground floor), respectively, outside of Inclusionary Housing areas. Residential developments using height factor regulations would maximize their FAR of 3.44 at a height factor of 13, and their height would be governed by a sky exposure plane beginning at a height of 60 feet, or 6 stories, whichever is less, above the street line. Community facility uses are permitted a maximum FAR of 4.8, but in buildings with mixed residential and community facility uses, is limited to 1 FAR. Off-street parking is required for 60% of the dwelling units or 50% of the dwelling units under the Quality Housing program. This can be further reduced to 30% on lots less than 10,000 square feet. No parking is required for income-restricted housing units, and where the total residential parking required is less than 5 spaces, the requirements may be waived.

Existing uses include a mix of low-rise commercial, industrial, and community facility uses and low-scale residential buildings.

### **R8**

Approximately 38 full and partial blocks are zoned R8; from McClellan Street to East 168<sup>th</sup> Street from Grandview Place to Jerome Avenue, from East 169<sup>th</sup> Street and West 170<sup>th</sup> Street along Jerome Avenue, Mount Eden Avenue from Walton Avenue to Jerome Avenue, East Tremont Avenue from Morris Avenue to Jerome Avenue, Burnside Avenue from Creston to Walton Avenue and East 183<sup>rd</sup> Street from Creston Avenue to Walton Avenue. An R8 district is a high-density residential district that allows residential and

community facility uses. Residential developments using the optional Quality Housing program are allowed a maximum FAR of 6.02 on narrow streets and 7.2 FAR on wide streets with maximum building heights of 115 and 135 feet outside the Manhattan Core, respectively. Residential developments using height factor regulations would maximize their FAR of 6.02 at a height factor of between 17 and 20, and their height would be governed by a sky exposure plane beginning at a height of 85 feet, or 9 stories, whichever is less, above the street line. Community facility developments are permitted a maximum FAR of 6.5, and are permitted a tower if they are not Quality Housing buildings. Off-street parking is required for 40% of the dwelling units, which may be reduced to 20% for lots less than 15,000 square feet, and waived for lots less than 10,000 square feet. No parking is required for income-restricted housing units, and where the total residential parking required is less than 15 spaces, the requirements may be waived.

Existing uses include a mix of low-rise commercial, industrial, and community facility uses and mixed use buildings.

#### **C1-4 and C2-4 Commercial Overlays**

C1-4 and C2-4 commercial overlays are mapped along portions of East 167<sup>th</sup> Street, Edward L. Grant Highway, Jerome Avenue, Mount Eden Avenue, East 176<sup>th</sup> Street, Burnside and Tremont Avenues and East 183<sup>rd</sup> Street. C1-4 and C2-4 districts allow for local retail uses and commercial development up to 2.0 FAR. C1-4 and C2-4 districts allow residential uses, community facility uses, and commercial uses listed in Use Groups 6 - 9 and 14, which includes uses such as plumbing and electrical shops, small bowling alleys and movie theaters, funeral homes, small repair shops, printers, and caterers. For general commercial uses, one off-street parking space is required for every 1,000 square feet of such use, and up to 40 spaces may be waived.

## **F. PURPOSE AND NEED FOR THE PROPOSED ACTIONS**

The Department of City Planning is proposing land use actions in response to the planning framework identified in the Jerome Avenue Neighborhood Plan. The Plan, part of a long standing request to study land use patterns in the area by community stakeholders, was the outcome of a comprehensive community engagement process. The Proposed Actions are intended to facilitate a development pattern which meets the long term community vision for the Jerome Avenue corridor as a mixed use residential and commercial activity center which supports the needs of the surrounding neighborhoods. These actions are intended to work in unison with the comprehensive set of strategies put forth in the Plan.

The current land use pattern along the Jerome Avenue corridor dates back almost a hundred years when the area was developed to accommodate parking for the nearby dense residential developments. At the time the residential communities were developed, parking was not permitted in residential buildings, and the Jerome Avenue corridor became a service district for these communities. The 1961 zoning helped freeze this land use pattern in place. Still today, much of this zoning does not permit the full range of options to fulfill the vision of the Jerome Avenue Neighborhood Plan. Residential development is currently not permitted in key nodes along the corridor and in areas that can accommodate growth and

density. Commercial and retail development is limited in many parts of the study area. The streetscape is inconsistent as it is interrupted by uses that illegally occupy the sidewalk and the street and do not promote pedestrian safety or walkability. Many areas where residential development is permitted are characterized by underutilized properties developed with single-story commercial uses.

Current zoning of C8-3 and M1-2 districts do not permit these types of uses along much of the corridor. Instead, the current zoning designations manifest in very heavy commercial uses that often block sidewalks, encourage vehicles to cross into auto shops and parking garages, operate in bays and behind heavy gates removing “eyes from the street”, and produce extreme levels of noise, all of which are generally incompatible with a strong pedestrian experience. The Proposed Actions will facilitate the development of vibrant, mixed-use buildings with active ground floors that promote retail continuity and a consistent streetscape, with a wide variety of local retail and services to support the surrounding neighborhoods. In addition they will support regional commercial uses in a targeted, transit-rich location and the facilitation of new open space to serve areas residents and workers. As the rezoning area is home to very few publically-owned sites, new opportunities for affordable housing along Jerome Avenue will only be unlocked through permitting housing as a legal use in zoning. Mapping residential districts where no housing was previously allowed, will provide quality housing options for current and future residents at a range of income levels.

Beyond the development that will be permitted as a result of the proposed actions, the Jerome Avenue Neighborhood Plan will protect existing tenants to preserve affordability; support small businesses and entrepreneurs; provide targeted public realm investments and service provisions that improve overall quality of life for residents. These benefits will be the direct result of the Jerome Avenue Neighborhood Plan. While they are not directly tied to the proposed land use actions and will not be analyzed as part of the environmental review, they will have immediate and significant benefits to the community and quality of life of its residents.

The Jerome Plan is more than a sum of its land use actions, but the actions drive the integration of all Plan elements and are integral to its implementation and success. They reflect DCP’s on-going community engagement process with local Community Boards, community residents, business owners, community-based-organizations, elected officials, and other stakeholders, to achieve the following land use objectives:

- Provide opportunities for high quality, permanent affordable housing with options for tenants at a wide range of income levels;
- Ensure that any new construction fits visually and architecturally into its surrounding neighborhood context;
- Anchor the Jerome corridor and surrounding neighborhoods by permitting more intensive uses in two nodes;
- Create special rules for new development along the elevated rail line to provide light and air along the corridor and ensure adequate distance between residential uses and the train;
- Promote active ground floor uses and diverse retail to support community needs and provide a consistent streetscape throughout the corridor;



- Preserve zoning for heavy commercial and light industrial uses in areas to support mixed uses and jobs; and
- Establish controls for transient hotels to ensure consistency with the goals and objectives of the rezoning.

**Provide opportunities for the creation of new, permanent affordable housing with options for low- and moderate-income residents, while preserving the character of existing residential neighborhoods**

Today, Community Districts 4 and 5 are characterized by stable housing. Eighty percent of the housing stock was built prior to 1947. Two-thirds of the housing in Community Districts 4 and 5 is government regulated. Currently, the median household income of the surrounding area is approximately \$25,900. Conversely, nearly 25% of households earn more than \$50,000 annually.

The proposed actions will support the development of new permanently affordable housing construction by mapping new zoning districts to permit residential development in areas where it is not permitted today and to increase residential density where it is permitted today. The Jerome Avenue corridor and surrounding streets are characterized by a significant number of underutilized sites with capacity for significant growth. Zoning changes, including the application of the new Mandatory Inclusionary Housing (MIH) program, to allow residential development where none is currently permitted, as well as permit residential development at higher densities where it is already permitted would facilitate expansion of the neighborhood's supply of affordable housing and the construction of new permanently affordable housing development along on the corridor.

The area's existing housing stock is predominantly rent-regulated. New multifamily development in the vicinity of the study area has consisted predominantly of publicly subsidized affordable housing development. While some unsubsidized construction has been observed in smaller buildings, past and recent development trends have been that the majority of housing developed in the area has been publicly subsidized, and this trend is expected to continue. Between 2005 and 2015, more than 80% of all new housing units in Community Districts 4 and 5 were subsidized affordable units. Between July 2003 and the end of 2015, HPD financed the new construction of almost 4,500 homes and preserved over 8,500 affordable homes in this area.

The zoning proposal has been crafted to promote new development specifically along major corridors that currently contain very few residential units. Residential areas in the surrounding neighborhood are not being rezoned to allow for greater density, in recognition of the existing character of these residential areas, and the rezoning will not promote additional development in these areas.

Within the rezoning area, it is expected that a variety of City and State financing programs for affordable housing would be utilized and result in the creation of a substantial amount of affordable housing under the Proposed Actions. In addition, as new housing is created to serve a range of incomes, the application of the MIH requirement will guarantee that a percentage of units developed remain permanently affordable and provides assurance that new development will address the needs of residents at lower income levels even in the event that local housing market conditions change.

**Ensure that new buildings fit into existing neighborhood contexts**

The predominant residential built form in the study area and surrounding blocks is six-to eight story apartment buildings. Ground floor commercial uses are common. The study area and surrounding neighborhoods contain a mix of zoning districts, none of which have a fixed street wall or height limit. The proposed actions will promote a consistent and predictable street wall and fixed height limits. The proposed zoning districts seek to match existing built character where feasible, and mandate through the mapping of contextual zoning districts, the incorporation of Quality Housing standards relating to recreation areas and landscaping within the building.

**Create special rules for new building along the elevated rail to provide light and air on the streets and maintain distance between residential units and the train**

The #4 elevated train along Jerome Avenue is at the heart of the study area. To facilitate development along and adjacent to the elevated rail, the proposed actions will include special zoning bulk provisions within the Special Jerome Avenue District for setbacks along the elevated rail line and require non-residential ground-floor uses in all commercial districts.

**Promoting active ground floor uses and diverse retail to support community needs and provide a consistent streetscape throughout the corridor**

The proposed actions includes commercial overlays that will facilitate local retail to serve the shopping and service needs of area residents and workers, allow for a greater range of commercial uses, and as well as provide continuity in the pedestrian realm. In addition, an Enhanced Commercial Districts (ECD) will be mapped along Jerome Avenue, 167<sup>th</sup> Street, 170<sup>th</sup> Street, Mt. Eden Avenue, Burnside Avenue, 183<sup>rd</sup> Street and Edward L. Grant Highway. In the ECD, all new developments in commercial districts will be required to provide non-residential uses on the ground floor and meet lighting, glazing, and transparency requirements. The ECD requirements will enhance the existing streetscape, match existing mixed-use buildings in the area, and provide an improved pedestrian experience.

**Anchor the Jerome corridor and surrounding neighborhoods by permitting more intensive uses in two nodes**

The areas of Burnside and Tremont Avenues are proposed to be designated as a full commercial district, permitting higher-density residential, community facility, and commercial uses. These areas will be permitted more commercial FAR than other parts of the rezoning area. The proposed zoning will help strengthen an existing active commercial node by permitting greater density and a wider range of uses. The proposed zoning will leverage transit access, surrounding institutions, and proposed infrastructure investments to support regional retail uses such as entertainment uses and office space.

The highest density residential districts are proposed for strategic locations at the southern end of the rezoning area, Edward L. Grant Highway and Jerome Avenue, as well as Burnside and Tremont Avenues in the northern portion of the rezoning area. These are wide streets and intersections where additional density and growth can be accommodated.

**Preserve zoning for heavy commercial and light industrial uses in targeted areas to support mixed uses and jobs**

The study area includes C8-3 and M1-2 zoning districts that have been in place since 1961. These areas include a number of auto-related businesses ranging from auto repair, auto glass, audio sales, tire shops and parking facilities both surface lots and structured garages. Many of these businesses have been in existence for decades and during the outreach process community stakeholders identified a goal to preserve areas for these businesses to remain and expand. The proposed actions identify areas for growth and development to facilitate new residential, commercial and community facility uses. Four areas within the study area boundary were designated for no changes to the existing zoning to support the preservation of these unique businesses in the study area. These areas were carefully selected based on the number and types of businesses, locations off major street and unique site conditions that would impede redevelopment. In support of this action the Department of Small Business Services (SBS) is concurrently developing strategies and programs specifically tailored to the unique desires and needs of the businesses in the study area including, compliance assistance, job training and business development. While not part of the proposed actions, these programs are an important component of the neighborhood plan.

The actions described here have been carefully developed to advance the specific goals of the proposal, identified through the Study's planning and engagement framework. The land use actions take strides in unlocking additional capacity for permanently affordable housing, responding to the elevated rail structure, maintaining existing zoning controls where appropriate and desired, shaping the commercial and retail landscape and surrounding public areas, and controlling the heights, bulks and quality of the interior spaces in buildings. However, it is the Plan's overarching strategies, coordinated investments, custom service delivery programs, among other elements, that all work with the land use actions and zoning changes to fulfill the neighborhood vision identified through the Jerome Avenue Neighborhood Plan.

**G. DESCRIPTION OF THE PROPOSED ACTIONS**

The Proposed Actions would implement the objectives of the Jerome Avenue Neighborhood Plan by creating opportunities for permanently affordable housing, ensuring that new buildings reflect existing neighborhood context, improving the public realm by encouraging non-residential ground floor uses and a consistent streetscape. To accomplish these goals, DPC is proposing zoning text amendments, zoning map amendments and city map changes (collectively the "Proposed Actions"). The proposed zoning text and map amendments would rezone an approximately 73-block area primarily along Jerome Avenue and its east west commercial corridors in Bronx Community Districts 4 and 5 and 7 (the "Rezoning Area"), and would establish the Special Jerome Avenue District coterminous with the Rezoning Area. The Rezoning Area is generally bounded by E.165th Street to the south and 184th street to the north; and also includes portions of Edward L. Grant Highway, E.170th Street, Mount Eden Avenue, Tremont Avenue, Burnside Avenue and E.183rd Street. The proposed city map changes are located a block outside of the Rezoning Area in the Highbridge neighborhood of the Bronx, Community District 4.

As discussed in detail below, the Proposed Actions consist of:

- Zoning map amendments to rezone portions of existing C4-4, M1-2, R8, C8-3, and R7-1 with R7A, R8A, R9A, R7D, and C4-4D districts and C2-4 commercial overlays.
- Zoning text amendments to:
  - Establish the Special Jerome Avenue District, coterminous with the Rezoning Area. The proposed special district will include regulations that will add controls to the ground floors of buildings within mapped commercial overlays and districts, modify height and bulk regulations on lots fronting the elevated rail line, modify bulk regulations on irregular lots, and establish controls, such as discretionary review provisions, for transient hotels.
  - Establish proposed R7A, R7D, R8A, R9A, and C4-4D districts as Mandatory Inclusionary Housing areas, applying the Mandatory Inclusionary Housing program to require a share of new housing to be permanently affordable where significant new housing capacity would be created.
- City Map changes to:
  - Map Block 2520, Lot 19 as parkland. This city-owned parcel is located one block outside of the rezoning area and is bounded by West 170th Street, Nelson Avenue, Shakespeare Avenue, and Corporal Fischer Place in the Highbridge neighborhood of the Bronx, Community District 4.
  - De-map Corporal Fischer Place (street) between Nelson Avenue and Shakespeare Avenue, which is adjacent to the parcel to be mapped as park land as described above (Block 2520, Lot 19), and map it as parkland.

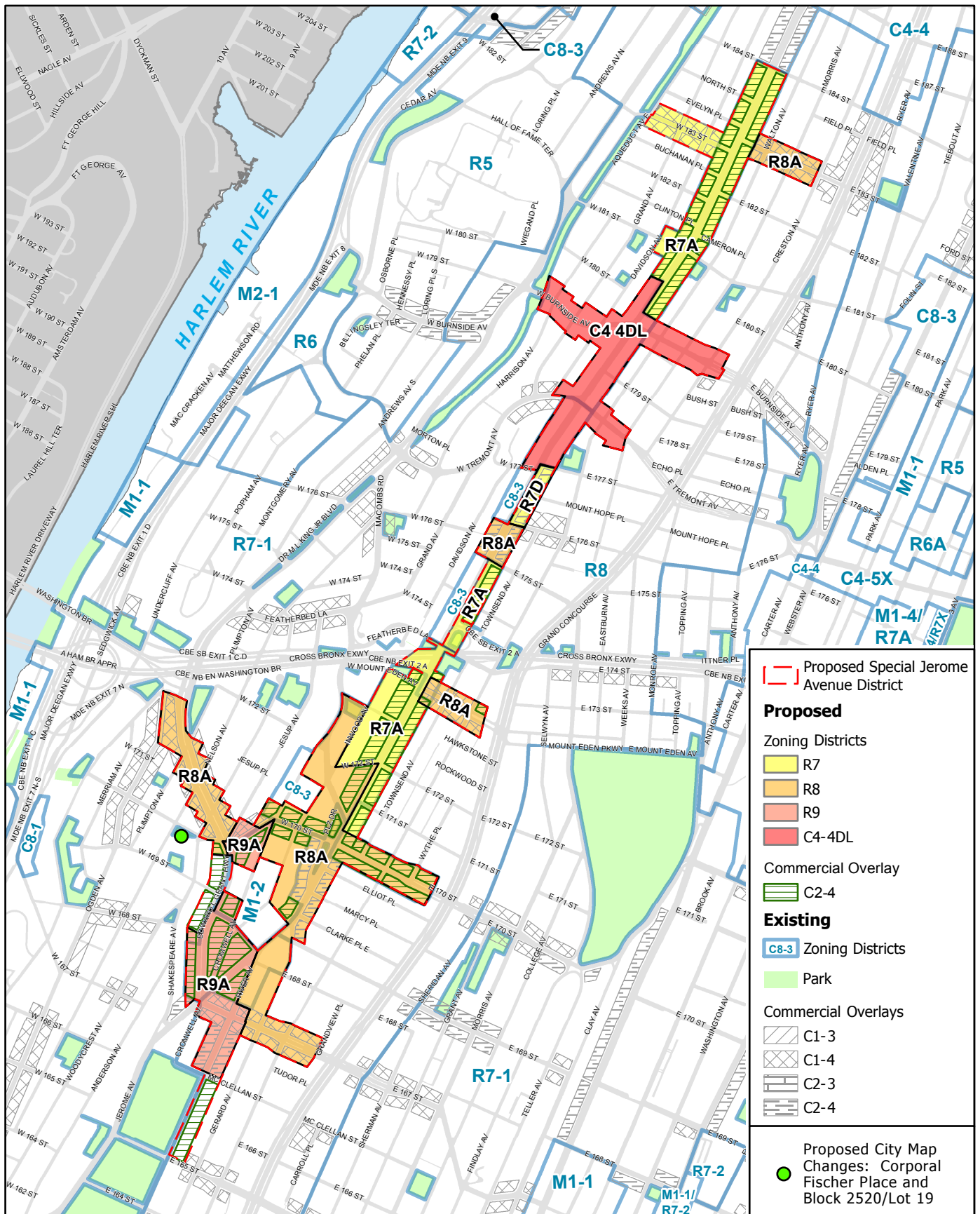
### **Proposed Zoning Map Changes**

#### **Proposed R7A (Existing C8-3, R7-1, and R7-1)**

*An R7A zoning district is proposed to cover portions of 2 full and 17 partial blocks in two areas:*

- *An area roughly bounded by East 175<sup>th</sup> Street to the north, East 171<sup>st</sup> Street to the south*
- *An area roughly bounded by Townsend Avenue to the east and Inwood and Davidson Avenues to the west*

R7A allows medium-density apartment buildings at a maximum FAR of 4.0 for residential uses and 4.6 for residential uses in areas mapped with Inclusionary Housing. R7A districts permit community facility FARs up to 4.0 and 4.6 in areas mapped with Inclusionary Housing. The R7A district allows base heights between 40'-65' and 40'-75' in areas mapped with inclusionary housing. Above the base height, buildings would be required to set back either 10' or 15' depending on if they have frontage on wide or narrow streets, respectively. After setting back, maximum building heights in the district are set at 95' in inclusionary housing zones, for buildings with qualifying ground floors. Alternate base height, setback, and overall building height rules, described in detail below, will apply to any lot fronting the elevated rail line along River Avenue and Jerome Avenue. New structures would be required to locate at least 70% of the street wall within eight feet of the street line. Interior lots that are not on the narrow end of the block or within 100 feet of a corner permit up to 65% lot coverage. Otherwise, up to 100% lot coverage is



Source: New York City Department of City Planning, 2016; STV Incorporated, 2016.



Figure 4a

permitted. R7A districts require a 30' rear yard for the residential portions of any building. R7A districts require a 30' rear yard for the residential portions of any building. Parking is required for residential uses at a ratio of .5 spaces per unit. No parking is required for income or age-restricted units.

**Proposed R7D (Existing R7-1)**

*R7D is proposed for 2 blocks bounded by East 177<sup>th</sup> Street to the north, East 176<sup>th</sup> Street to the south, Townsend Avenue to the East and Jerome Avenue to the west.*

R7D allows medium-density apartment buildings at a maximum FAR of 5.6 for residential uses in areas mapped with Inclusionary Housing. R7D districts permit community facility FARs up to 5.6 in areas mapped with Inclusionary Housing. The R7D district allows base heights between 60'-95' for areas mapped with inclusionary housing. Above the base height, buildings would be required to set back either 10' or 15' depending on if they front onto wide or narrow streets, respectively. After setting back, maximum building heights in the district are set at 125' in inclusionary housing zones, for buildings with qualifying ground floors. Alternate base height, setback and overall building height rules, described in detail below, will apply to any lot fronting the elevated rail line along River Avenue and Jerome Avenue. New structures would be required to locate at least 70% of the street wall within eight feet of the street line. Interior lots that are not on the narrow end of the block or within 100 feet of a corner permit up to 65% lot coverage. Otherwise, up to 100% lot coverage is permitted. R7D districts require a 30' rear yard for the residential portions of any building. Parking is required for residential uses at a ratio of .5 spaces per unit. No parking is required for income or age-restricted units.

**Proposed R8A (Existing M1-2, C8-3, C4-4, R7-1, R8)**

*A R8A zoning district is proposed along six partial blocks fronting on East Mt. Eden Avenue between Jerome Avenue and the Grand Concourse and 13 partial blocks fronting on Edward L. Grant Highway between West 170th Street and the Cross Bronx Expressway, along 1 full and two partial blocks at 176<sup>th</sup> street and Jerome Avenue, and along 5 full and 18 partial blocks bounded by Goble Place to the north, East 167th Street to the south, Grand Concourse to the east and Macombs Road to the west.*

R8A allows medium-density apartment buildings at a maximum FAR of 6.02 for residential uses and 7.2 for residential uses in areas mapped with Inclusionary Housing. R8A districts permit community facility FARs up to 6.5 and 7.2 in areas mapped with Inclusionary Housing. The R8A district allows base heights between 60'-95' for areas mapped with inclusionary housing. Above the base height, buildings would be required to set back either 10' or 15' depending on if they front onto wide or narrow streets, respectively. After setting back, maximum building heights in the district are set at 145' in inclusionary housing zones, for buildings with qualifying ground floors. Alternate base height, setback and overall building height rules, described in detail below, will apply to any lot fronting the elevated rail line along River Avenue and Jerome Avenue. New structures would be required to locate at least 70% of the street wall within eight feet of the street line. Interior lots that are not on the narrow end of the block or within 100 feet of a corner permit up to 70% lot coverage. Otherwise, up to 100% lot coverage is permitted. R8A districts require a 30' rear yard for the residential portions of any building. Parking is required for residential uses at a ratio of .4 spaces per unit. No parking is required for income or age-restricted units.



**Proposed R9A** *(Existing C8-3, M1-2, R7-1 and R8)*

*An R9A zoning district is proposed for three full and 6 partial blocks in two areas:*

- *An area bounded by West 169<sup>th</sup> Street to the north, McClellan Street to the south, River Avenue to the east and Edward L. Grant Highway to the west*
- *An area bounded by West 170<sup>th</sup> Street to the north, West 169<sup>th</sup> Street to the south, Cromwell Avenue to the east and Jesup Avenue to the west.*

R9A allows high-density apartment buildings at a maximum FAR of 8.5 for residential uses in areas mapped with Inclusionary Housing. R9A districts permit community facility FARs up to 7.5. The R9A district allows base heights between 60'-125' for areas mapped with inclusionary housing. Above the base height, buildings would be required to set back either 10' or 15' depending on if they front onto wide or narrow streets, respectively. After setting back, maximum building heights in the district are set at 175' on wide streets and 165' on narrow streets in inclusionary housing zones. Alternate base height, setback and overall building height rules, described in detail below, will apply to any lot fronting the elevated rail line along River Avenue and Jerome Avenue. New structures would be required to locate at least 70% of the street wall within eight feet of the street line. Interior lots that are not on the narrow end of the block or within 100 feet of a corner permit up to 70% lot coverage. Otherwise, up to 100% lot coverage is permitted. R9A districts require a 30' rear yard for the residential portions of any building. Parking is required for residential uses at a ratio of .4 spaces per unit. No parking is required for income or age-restricted units. Parking is required for residential uses at a ratio of .4 spaces per unit. No parking is required for income or age-restricted units.

**Proposed C4-4D** *(Existing C8-3, R7-1 and R8)*

*A C4-4D is proposed for 21 partial blocks bounded by East 181<sup>st</sup> Street to the north, East 177<sup>th</sup> Street to the south, Creston Avenue to the East and Aqueduct Avenue East to the west.*

C4-4D is an R8A equivalent, and is a mid-density commercial district that permits residential uses up to 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. Residential and mixed buildings developed within the district are subject to bulk regulations governed by the R8A district. The off-street parking requirement is one space per 1,000 square feet of commercial and community facility uses. Parking is required for residential uses at a ratio of .4 spaces per unit. No parking is required for income or age-restricted units.

**Proposed C2-4 Commercial Overlays**

C1-4 and C2-4 commercial overlays are mapped along portions of East 167<sup>th</sup> Street, Edward L. Grant Highway, Jerome Avenue, Mount Eden Avenue, East 176<sup>th</sup> Street, Burnside and Tremont Avenues and East 183<sup>rd</sup> Street. C2-4 commercial overlays are proposed to be mapped over portions of the proposed R7A, R7D, R8A, and R9A as detailed below. The affected areas is as follows:

- 13 blocks generally bound between 184<sup>th</sup> Street and Burnside Avenue, along the eastern and western frontages of Jerome Avenue;

- 2 blocks generally bound between 175<sup>th</sup> Street and the Cross Bronx Expressway, along the eastern frontage of Jerome Avenue;
- 8 blocks generally bound between the Cross Bronx Expressway and 170<sup>th</sup> Street, along the eastern and western frontages of Jerome Avenue;
- 12 blocks generally bound between the Grand Concourse and Edward L. Grant highway along the northern and southern frontages of 170<sup>th</sup> Street;
- 1 portion of 1 block generally bound to the western frontage of Jerome Avenue, north of West Clarke place;
- 6 blocks generally bound between 170<sup>th</sup> Street and 167<sup>th</sup> Street along the eastern and western frontages of Edward L. Grant highway;
- 2 blocks generally bound between 169<sup>th</sup> Street and 167<sup>th</sup> Street along the eastern and western frontages of Jerome Avenue; and
- 1 block generally bound between 165<sup>th</sup> Street and McClellan along the eastern frontage of Jerome Avenue.

C2-4 commercial overlays allow for local retail uses and commercial development up to 2.0 FAR and allow Use Groups 1-9 and 14, which include uses such as plumbing and electrical shops, small bowling alleys and movie theaters, funeral homes, small repair shops, printers, and caterers. For general commercial uses, one off-street parking space is required for every 1,000 square feet of such use, and up to 40 spaces may be waived.

### **Proposed Zoning Text Amendments**

The Department of City Planning proposes a series of text amendments to facilitate the land use objectives and the Jerome Avenue Neighborhood Plan. The following is a list and description of the proposed text amendments:

#### **Jerome Avenue Special District**

A special district known as the Jerome Avenue Special District will be mapped coterminous with the rezoning area. The special district will allow for special bulk modifications to be made for zoning lots fronting the elevated rail. On such lots, a minimum and maximum base height of 25 and 30 feet, respectively, will be established. Above the base height, a minimum set back of 10 feet will be required. On such lots, to provide architectural flexibility and encourage better design, an additional two stories would be permitted up to 20' in allowable height. Additionally, the special district will permit the waiver of street wall requirement on specifically identified irregular lots.

The proposed special district would also modify streetwall requirements and increase maximum permitted heights for irregular lots within R9A districts. These modifications will adjust for irregularities such as acute corner conditions, varied topography, and other site encumbrances. The modifications and waivers associated with the special district will not increase buildable floor area on any lot, rather create flexibility in building design to encourage desirable outcomes in the architectural quality of developments and the associated public realm.

The proposed special district would impose controls at the ground floor of all commercial overlay and full commercial districts: along Jerome Avenue from East 167th Street to East 183rd Street and the commercial corridors of East 167th Street, East 170th Street, Mount Eden Avenue, Burnside and Tremont Avenues and East 183rd and East 184th Street. The controls would foster a safe and walkable pedestrian experience along these corridors by establishing regulations requiring mandatory active, non-residential uses on the ground floor, minimum levels of transparency, and limiting curb cuts, where appropriate.

Finally, the proposed special district would impose appropriate controls on transient hotels to ensure consistency with the goals and objectives of the rezoning.

### **Mandatory Inclusionary Housing**

The proposed R7A, R7D, R8A, R9A and C4-4D, zoning districts will be mapped as Mandatory Inclusionary Housing Areas setting mandatory affordable housing requirements pursuant to the Mandatory Inclusionary Housing program.

Amendment to Appendix F adding the proposed R7A, R7D, R8A, R9A, and C4-4D to the list and maps of Mandatory Inclusionary Housing Areas.

Text amendment to permit legally required windows less than 30 feet from the lot line of Corporal Fischer Park.

### **Proposed City Map Changes**

To facilitate the development of Corporal Fischer Park, the Department of City Planning in collaboration with DPR and CDOT proposes the following changes to the City Map:

- Map Block 2520, Lot 19 as parkland. This city-owned parcel is located one block outside of the rezoning area and is bounded by West 170th Street, Nelson Avenue, Shakespeare Avenue, and Corporal Fischer Place in the Highbridge neighborhood of the Bronx, Community District 4.
- De-map Corporal Fischer Place (street) between Nelson Avenue and Shakespeare Avenue, which is adjacent to the parcel to be mapped as park land as described above (Block 2520, Lot 19), and map it as parkland.

## **H. ANALYSIS FRAMEWORK**

### **Reasonable Worst-Case Development Scenario (RWCDs)**

In order to assess the possible impacts of the components of the proposed action, a reasonable worst-case development scenario (RWCDs) was established for both the current (Future No-Action) and proposed zoning (Future With-Action) conditions for a 10-year period (build year 2026). The incremental difference between the Future No-Action and Future With-Action conditions will serve as the basis for the impact analyses of the Environmental Impact Statement (EIS). A ten-year period typically represents the amount of time developers would act on the proposed action for an area-wide rezoning not associated with a specific development.

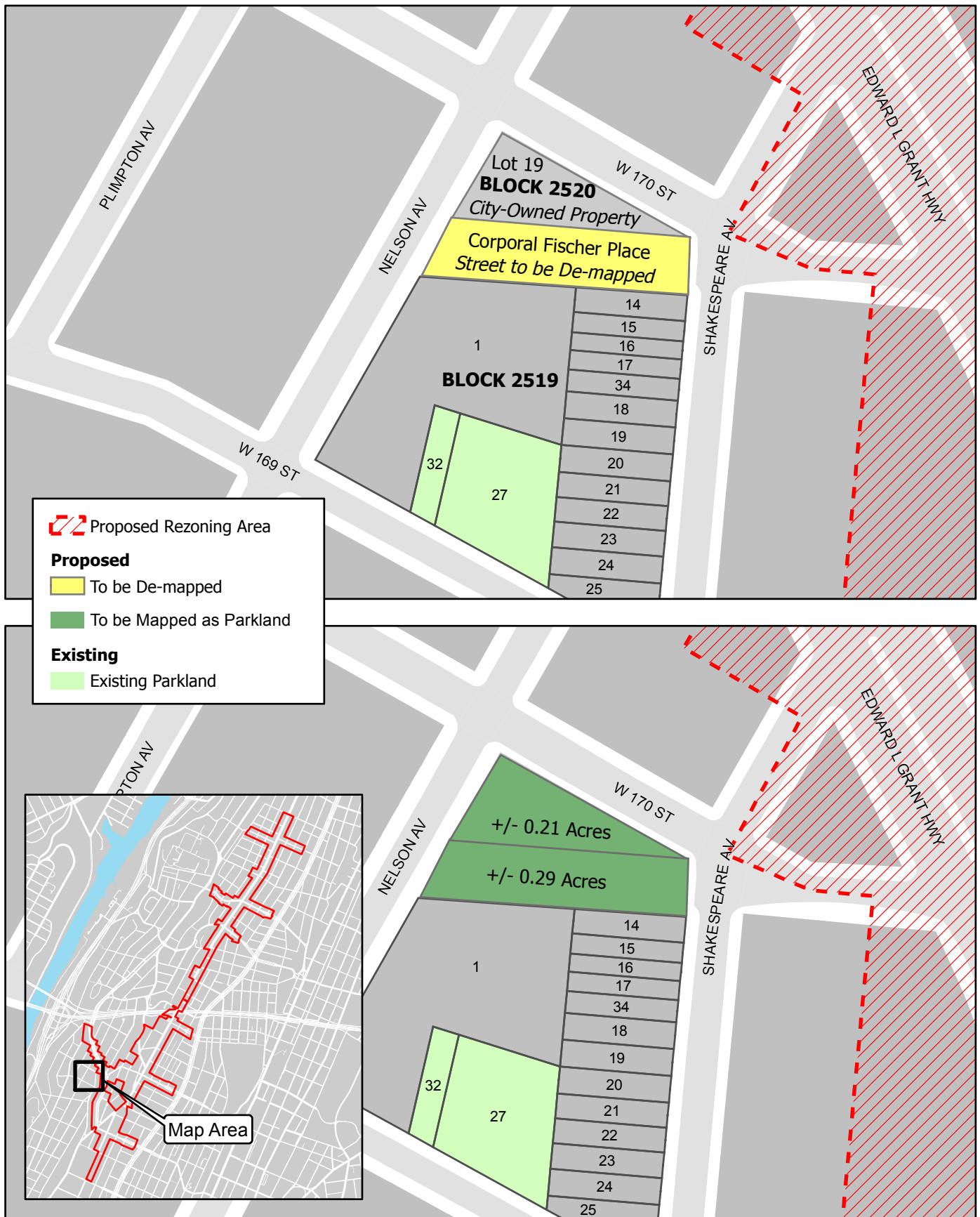


Figure 4b  
**PROPOSED CITY MAP CHANGES:  
 CORPORAL FISCHER PLACE  
 AND BLOCK 2520 / LOT 19**

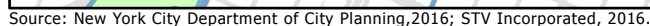


Figure 5

## PROPOSED MANDATORY INCLUSIONARY HOUSING AREAS

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

In projecting the amount and location of new development, several factors have been considered in identifying likely development sites; including known development proposals, past development trends, and the development site criteria described below. Generally, for area-wide rezonings which 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 Site Criteria***

Development sites were identified based on the following criteria:

- Lots utilizing less than half of the permitted Floor Area Ratio (FAR) under the proposed zoning
- Lots with a total size greater than or equal to 5,000 square feet (including potential assemblages totaling 5,000 square feet or more if assemblage seems probable<sup>1</sup>);
- Underutilized lots – (defined as vacant lots, surface parking lots, garages and single story structures built to less than or equal to half of 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:

- Lots where construction activity is actively occurring or has recently been completed;
- Schools (public and private), municipal libraries, government offices, hospitals, medical centers and houses of worship (stand-alone). These facilities may meet the development site criteria, because they are built to less than half of the permitted floor area ratio under current zoning and are on lots greater than 5,000 square feet. However, these facilities have not been redeveloped or expanded despite the ability to do so, and it is extremely unlikely that the incremental FAR permitted under the proposed zoning would induce development 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;
- Lots containing multi-family (6 or more dwelling unit) residential buildings; due to required relocation of tenants in rent-stabilized units;
- Certain large commercial or community facility uses;
- Lots utilized for public transportation and/or public utilities.

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<sup>1</sup> Assemblages are defined as a combination of adjacent lots, which satisfy one of the following conditions:

(1) lots share common ownership and, when combined, meet the Qualifying site criteria;

(2) At least one of the lots, or combination of lots, meets the Qualifying site criteria, and ownership of the assemblage is shared by no more than two distinct owners.

## **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 ten-year analysis period for the proposed actions (i.e. by the analysis year 2026) while potential sites are considered less likely to be developed over the approximately ten-year analysis period. Potential development sites were identified based on the following criteria:

- Lots upon which the majority of floor area is occupied by active businesses (3 or more);
- Lots with slightly irregular shapes, topographies, or encumbrances that would make them difficult to redevelop;
- Lots that have recently undergone significant investment;
- Lots where they have been recent significant improvements or investments;
- Structured parking garages;
- Lots that contain businesses that provide valuable and/or unique services to the community; and
- Lots that would produce less than 60 units of housing.

Based on the above criteria, a total of 143 development sites (45 projected and 98 potential) have been identified in the rezoning area. Figure 5a, "Projected and Potential Development Sites - Overview," shows these projected and potential development sites, and the detailed RWCDs tables provided in Appendix 2 to this document identify the uses expected to occur on each of these sites under Future No-Action and Future With-Action conditions. Table 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, review of site-specific impacts for these sites will be conducted 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.

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

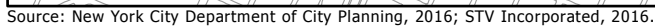
In the future without the Proposed Actions (No-Action), the identified projected development sites are assumed to either remain unchanged from existing conditions, or become occupied by uses that are as-of-right under existing zoning and reflect current trends if they are vacant, occupied by vacant buildings,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

As shown in Table 1 below, it is anticipated that, in the future without the Proposed Actions, there would be a total of approximately 1,558,083 sf of built floor area on the 45 projected development sites. Under the RWCDs, the total No-Action development would comprise approximately 780 residential units with no guarantees for affordability, 238,384 sf of retail, restaurant and grocery store uses, 145,797 sf of industrial and automotive uses, 82,919 sf of community facility uses, and 945 accessory parking spaces. The No-Action estimated population would include approximately 2,268 residents and 1,154 workers on these projected development sites.

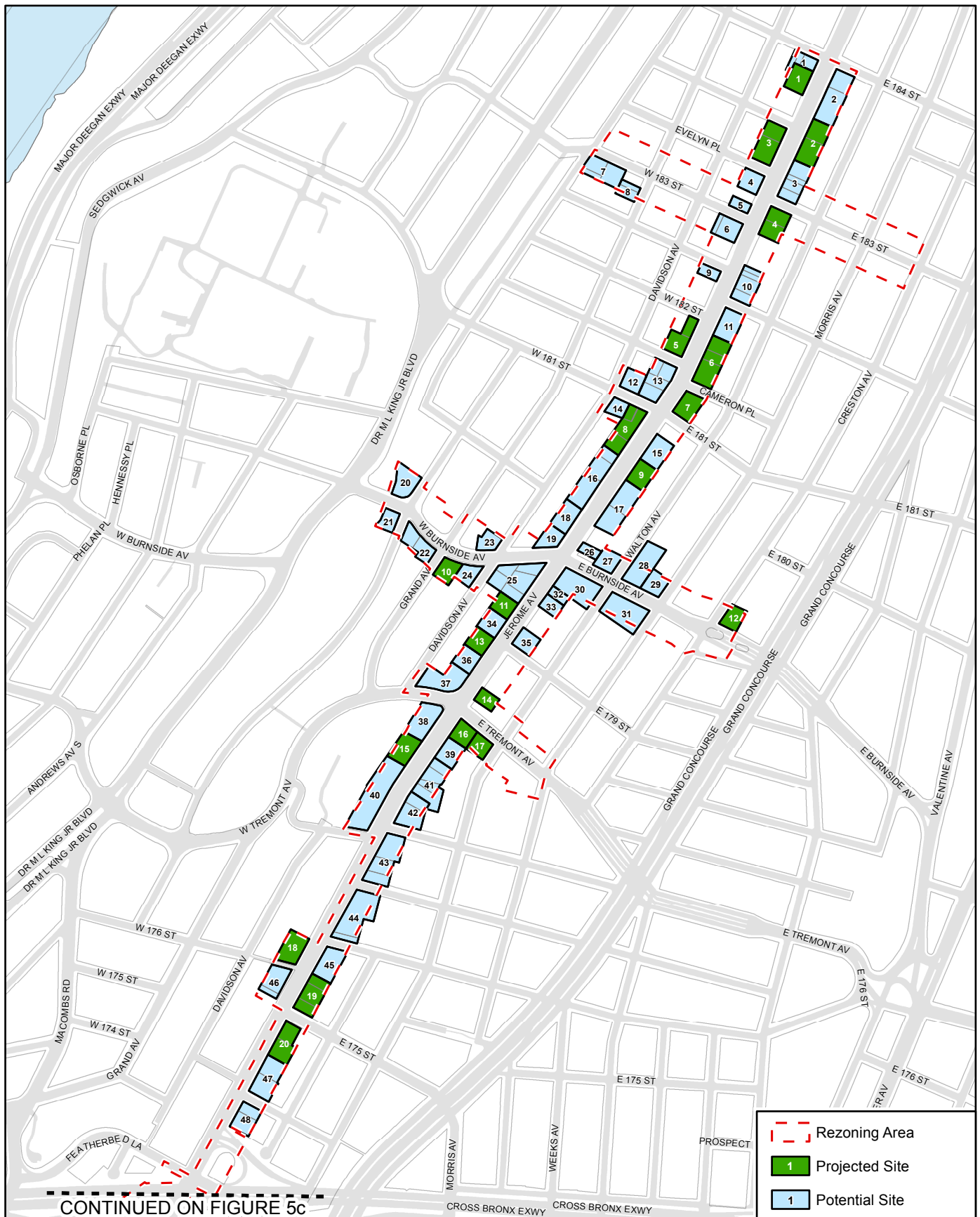
***The Future with the Proposed Actions (With-Action Condition)***

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 1, under the RWCDs, the total development expected to occur on the 45 projected development sites under the With-Action condition would consist of approximately 4,885,424 sf of floor area, including 4,162,049 sf of residential floor area (approximately 4,030 DU), a substantial proportion of which are expected to be affordable, 458,625 sf of retail restaurant and grocery store uses, 0 sf of industrial and automotive uses, and 155,192 sf of community facility uses, as well as 993 accessory parking spaces. The With-Action estimated population would include approximately 11,788 residents and 2,170 workers on these projected development sites. 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 3,267,287 sf of residential floor area (3,250 DU), 285,694 sf of retail, restaurant and grocery store space, 72,273 sf of community facility space, and 48 accessory parking spaces and a net decrease 145,797 sf of industrial and automotive uses on the projected development sites.

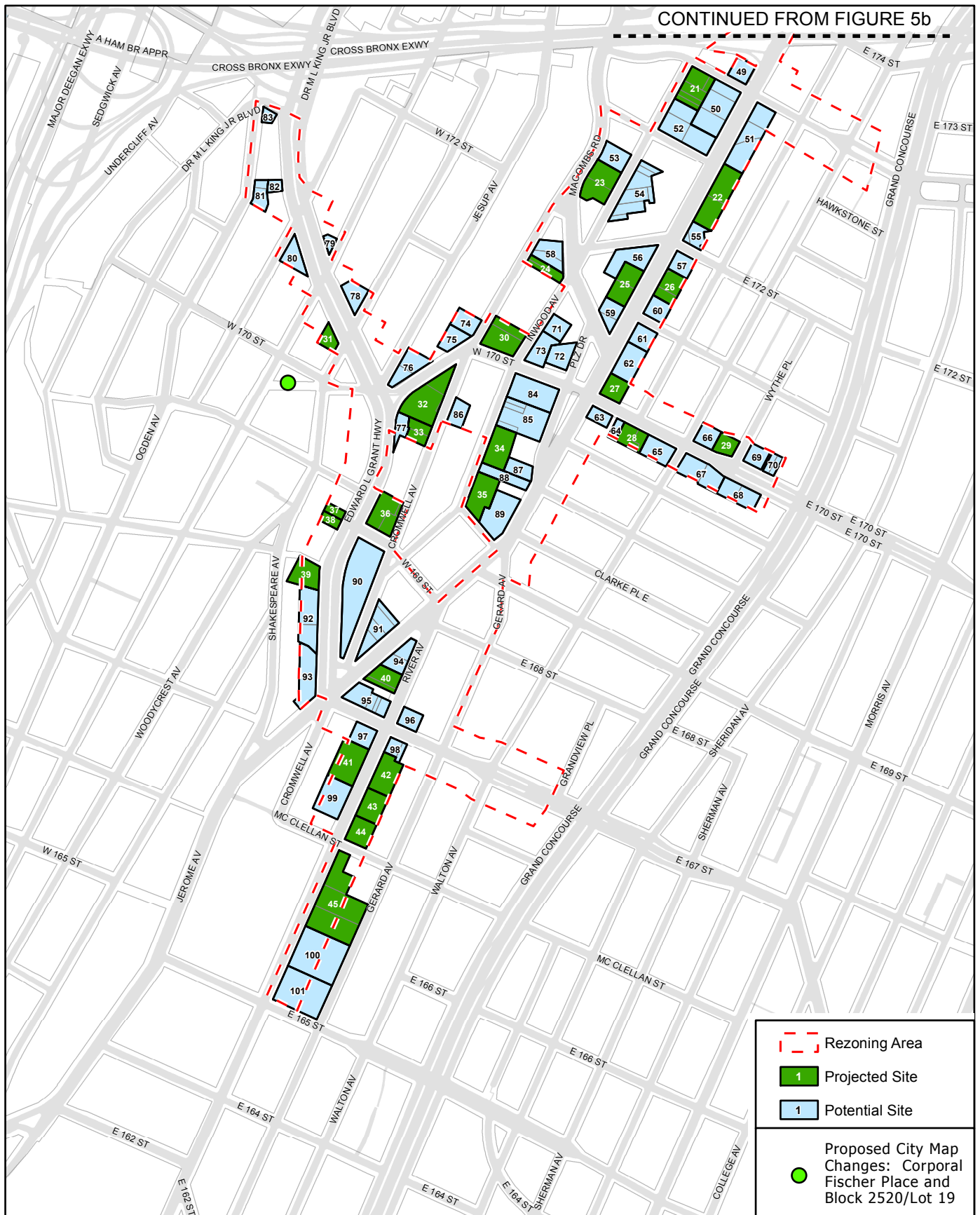




## PROJECTED AND POTENTIAL DEVELOPMENT SITES - OVERVIEW







# Jerome Avenue Rezoning Proposal

Figure 6c

## RWCDs PROJECTED & POTENTIAL DEVELOPMENT SITES - SOUTH

**TABLE 1**  
**2026 RWCDs No-Action and With-Action Land Uses**

Land Use	No-Action Conditions	With-Action Condition	No-Action to With-Action Increment
<b>Residential</b>			
<b>Total Residential</b>	<b>894,761 sf</b> (780 DU)	<b>4,162,049 sf</b> (4,030 DU)	<b>+3,267,287 sf</b> (3,250 DU)
<b>Commercial</b>			
Local Retail	207,719 sf	458,625 sf	250,907 sf
FRESH Supermarket	28,405 sf	51,562 sf	23,157 sf
Restaurant	2,260 sf	13,891 sf	11,630 sf
Auto-Related	98,002 sf	0 sf	-98,002 sf
Office	4,818 sf	44,105 sf	39,287 sf
Warehouse	168,650 sf	0 sf	-168,650 sf
Garage	22,154 sf	0 sf	-22,154 sf
Other Commercial	600 sf	0 sf	-600 sf
<b>Total Commercial</b>	<b>532,608 sf</b>	<b>568,183 sf</b>	<b>35,575 sf</b>
<b>Other Uses</b>			
Industrial	47,795 sf	0 sf	-47,795
Community Facility	82,919 sf <sup>1</sup>	155,192 sf <sup>2</sup>	72,273 sf
<b>Total Floor Area</b>	<b>1,558,083 sf</b>	<b>4,885,424 sf</b>	<b>3,327,341 sf</b>
<b>Parking</b>			
Parking Spaces	945	993	48
<b>Population<sup>3</sup></b>			
Residents	2,268	11,788	9,520
Workers	1,154	2,170	1,016

Notes:

1 Includes 36,120 sf of house of worship uses, 6,000 sf of medical office uses, 2,016 sf of day care center uses, 15,800 sf of Pre-K School uses and 22,983 sf of other community facility uses.

2 Includes 53,896 sf of house of worship uses, 8,500 sf of medical office uses, 15,800 sf of Pre-K school uses, 23,099 of day care center uses and 53,896 sf of community center uses.

3 Assumes 2.87 persons per DU for residential units in Bronx Community District 7, 3.06 persons per DU for residential units in Bronx Community District 5 and 2.92 persons per DU for residential units in Bronx Community District 4.

Based on 2010 Census data, the average household size for residential units in Bronx Community District 4 is 2.92, the average household size for residential units in Bronx Community District 5 is 3.06, and the average household size for residential units in Bronx Community District 7 is 2.87. Based on these ratios and standard ratios for estimating employment for commercial, community facility and industrial uses, Table 1 also provides an estimate of the number of residents and workers on the 45 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 9,520 residents and 1,016 workers.

A total of 101 sites were considered less likely to be developed within the foreseeable future and were thus considered potential development sites (see Appendix 2). 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 recognized 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 development sites 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.

## **I. PROPOSED SCOPE OF WORK FOR THE EIS**

Because the Proposed Actions would affect various areas of environmental concern and were found to have the potential for significant adverse impacts in a number of impact categories, pursuant to the EAS and Positive Declaration, an EIS will be prepared for the Proposed Actions that will analyze all technical areas of concern. The EIS will be prepared in conformance with all applicable laws and regulations, including the State Environmental Quality Review Act (SEQRA) (Article 8 of the New York State Environmental Conservation Law) and its implementing regulations found at 6 NYCRR Part 617, New York City Executive Order No. 91 of 1977, as amended, and the Rules and Procedure for CEQR, found at Title 62, Chapter 5 of the Rules of the City of New York.

The EIS will include:

- A description of the Proposed Actions and their environmental setting;
- A statement of the environmental impacts of the Proposed Actions, including short- and long-term effects and typical associated environmental effects;
- An identification of any adverse environmental effects that cannot be avoided if the Proposed Actions are implemented;
- A discussion of reasonable alternatives to the Proposed Actions;
- An identification of irreversible and irretrievable commitments of resources that would be involved in the Proposed Actions, should they be implemented; and
- A description of mitigation proposed to eliminate or minimize any significant adverse environmental impacts.

As noted above, the EIS will analyze the projected development sites for all technical areas of concern and also evaluate the effects of the potential development sites for site-specific effects such as archaeology, shadows, hazardous materials, air quality, and noise. The analyses in the EIS will examine the RWCDs with the greater potential environmental impact for each impact area. The specific technical areas to be included in the EIS, as well as their respective tasks and methodologies, are described below.

### **TASK 1. PROJECT DESCRIPTION**

The first chapter of the EIS introduces the reader to the Proposed Actions and sets the context in which to assess impacts. This chapter contains a description of the Proposed Actions: their location; the background and/or history of the project; a statement of the purpose and need; key planning considerations that have shaped the current proposal; a detailed description of the Proposed Actions;

and discussion of the approvals required, procedures to be followed, and the role of the EIS in the process. This chapter is the key to understanding the Proposed Actions and their impact and gives the public and decision makers a base from which to evaluate the Proposed Actions.

In addition, the project description chapter will present the planning background and rationale for the actions being proposed and summarize the RWCDs for analysis in the EIS. The section on approval procedure will explain the ULURP and changes to the City Map, zoning text amendment, and zoning map amendment processes, their timing, and hearings before the Community Boards, the Borough President's Office, the CPC, and the New York City Council. The role of the EIS as a full disclosure document to aid in decision-making will be identified and its relationship to the discretionary approvals and the public hearings described.

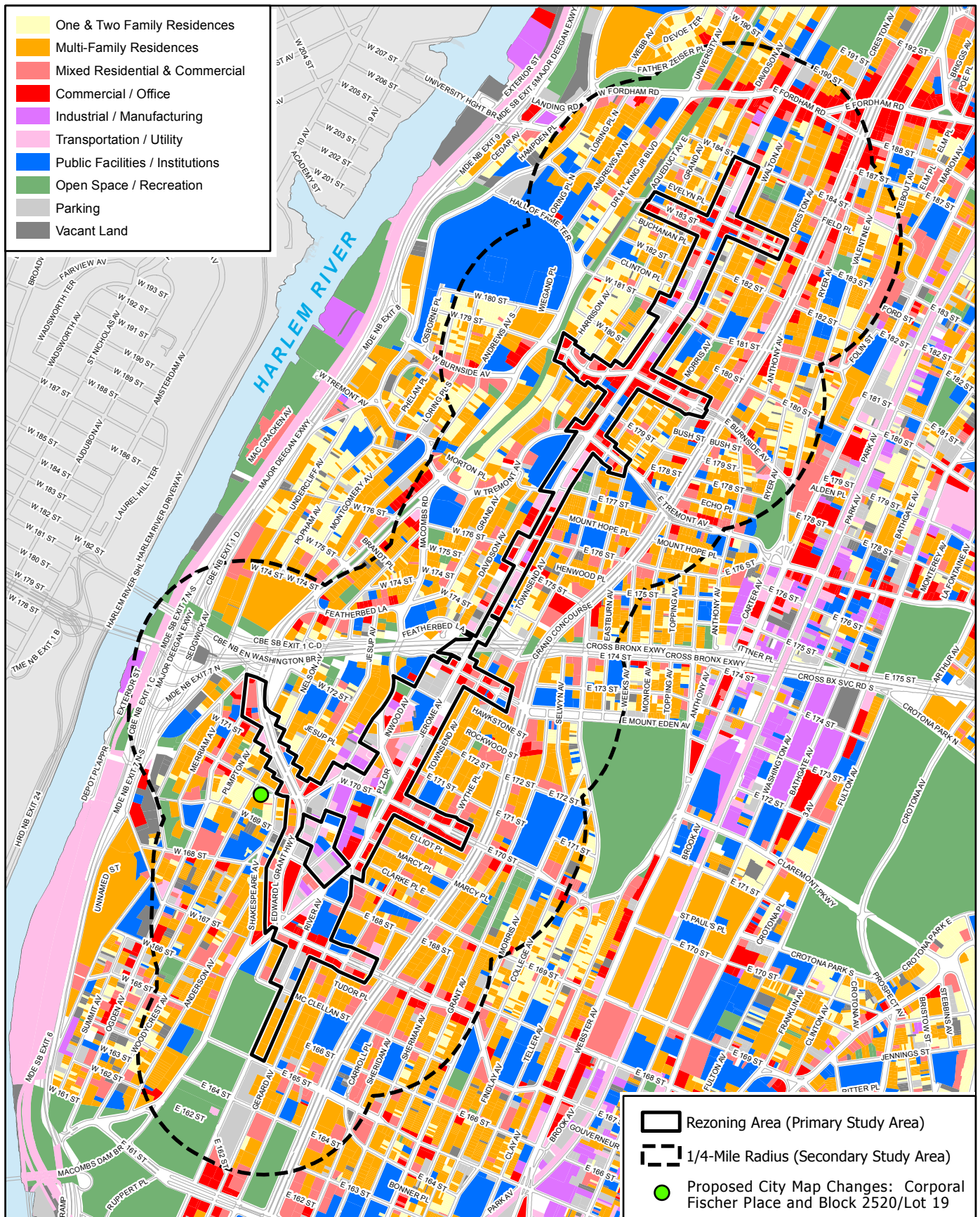
## **TASK 2. LAND USE, ZONING, AND PUBLIC POLICY**

A land use analysis characterizes the uses and development trends in the area that may be affected by a proposed action, and determines whether a proposed action is either compatible with those conditions or whether it may affect them. Similarly, the analysis considers the action's compliance with, and effect on, the area's zoning and other applicable public policies. This chapter will analyze the potential impacts of the Proposed Actions on land use, zoning, and public policy. The land use, zoning, and public policy analysis will follow the guidance of the *CEQR Technical Manual*; specific methodologies are described herein.

The primary land use study area will consist of the rezoning area, where the potential effects of the Proposed Actions will be directly experienced (reflecting the proposed rezoning and resultant RWCDs). The secondary land use study area would include the neighboring areas within a ¼-mile boundary from the rezoning area, as shown on Figure 6, which could experience indirect impacts. Subtasks will include the following:

- Provide a brief development history of the primary (i.e., rezoning area) and secondary study areas.
- Provide a description of land use, zoning, and public policy in the study areas discussed above (a more detailed analysis will be conducted for the rezoning area). This task will be closely coordinated with Task 3, "Socioeconomic Conditions," which will provide a qualitative analysis of the project's effect on businesses and employment in the rezoning area. Recent trends in the rezoning area will be noted. Other public policies that apply to the study areas will also be described, including: the FRESH Program, Housing New York, Vision Zero, and OneNYC policies. The directly affected area is not within the boundaries of the City's Coastal Zone. Therefore, an assessment of the Proposed Actions' consistency with the City's Waterfront Revitalization Program is not required.
- Based on field surveys and prior studies, identify, describe, and graphically portray predominant land use patterns for the balance of the study areas. Describe recent land use trends in the study areas and identify major factors influencing land use trends.
- Describe and map existing zoning and recent zoning actions in the study areas.





Source: New York City Department of City Planning, MapPLUTO, 2015 March-June; STV Incorporated, 2016.



Figure 7



- Prepare a list of future development projects in the study areas that are expected to be constructed by the 2026 analysis year and may influence future land use trends. Also, identify pending zoning actions or other public policy actions that could affect land use patterns and trends in the study areas. Based on these planned projects and initiatives, assess future land use and zoning conditions without the Proposed Actions (No-Action condition).
- Describe proposed zoning changes, and the potential land use changes based on the Proposed Actions' RWCDs (With-Action condition).
- Discuss the Proposed Actions' potential effects related to issues of compatibility with surrounding land use, the consistency with zoning and other public policies, and the effect of the Proposed Actions on ongoing development trends and conditions in the study areas.
- If necessary, mitigation measures to avoid or reduce potential significant adverse land use, zoning, and/or public policy impacts will be identified.

### TASK 3. SOCIOECONOMIC CONDITIONS

The socioeconomic character of an area includes its population, housing, and economic activity. Socioeconomic changes may occur when a project directly or indirectly changes any of these elements. Although socioeconomic changes may not result in impacts, they are disclosed if they would affect land use patterns, low-income populations, the availability of goods and services, or economic investment in a way that changes the socioeconomic character of the area. This chapter will assess the Proposed Actions' potential effects on the socioeconomic character of the study area, which is expected to conform to the ¼-mile land use study area described in Task 2. The socioeconomic conditions analysis will follow the guidance of the *CEQR Technical Manual*; specific methodologies are described herein.

The socioeconomic study area boundaries are expected to be similar to those of the land use study area, and will be dependent on the size and characteristics of the RWCDs associated with the Proposed Actions. A socioeconomic assessment seeks to assess the potential to change socioeconomic character relative to the study area population. The Proposed Actions are expected to generate a net increase of 3,250 residential units. For projects or actions that result in an increase in population, the scale of the relative change is typically represented as a percent increase in population (i.e., a project that would result in a relatively large increase in population may be expected to affect a larger study area). Therefore, the socioeconomic study area would be expanded to a 0.5 mile radius, if the RWCDs associated with the Proposed Actions would increase the population by 5 percent compared to the expected No-Action population in a quarter-mile (0.25 mile) study area.

As the Proposed Actions would affect a two-mile stretch of Jerome Avenue in portions of six communities, it may be appropriate to create subareas for analysis if the actions could affect different portions of the study area in different ways. For example, if an action concentrates development opportunities in one portion of the study area, and would result in a higher increase in population in that portion, it may be appropriate to analyze the subarea most likely to be affected by the concentrated development. Distinct sub-areas will be determined based on recognizable neighborhoods or communities in an effort to disclose whether the Proposed Actions may have differing effects on distinct populations that would otherwise be masked or overlooked within the larger study area.

The five principal issues of concern with respect to socioeconomic conditions are whether a proposed action would result in significant adverse impacts due to: (1) direct residential displacement; (2) direct business and institutional displacement; (3) indirect residential displacement; (4) indirect business and institutional displacement; and (5) adverse effects on specific industries. As detailed below, the Proposed Actions warrant an assessment of socioeconomic conditions with respect to all but one of these principal issues of concern—direct residential displacement. Direct displacement of fewer than 500 residents would not typically be expected to alter the socioeconomic characteristics of a neighborhood. The Proposed Actions would not exceed the threshold of 500 displaced residents, and therefore, are not expected to result in significant adverse impacts due to direct residential displacement. The EIS will disclose the number of residential units and estimated number of residents to be directly displaced by the Proposed Actions, and will determine the amount of displacement relative to study area population.

The assessment of the four remaining areas of concern will begin with a preliminary assessment to determine whether a detailed analysis is necessary. Detailed analyses will be conducted for those areas in which the preliminary assessment cannot definitively rule out the potential for significant adverse impacts. The detailed assessments will be framed in the context of existing conditions and evaluations of

the Future No-Action and With-Action conditions in 2026, including any population and employment changes anticipated to take place by the analysis year of the Proposed Actions.

## **Direct Business Displacement**

For direct business displacement, the type and extent of businesses and workers to be directly displaced by the RWCDs associated with the Proposed Actions will be disclosed. If a project would directly displace more than 100 employees, an assessment of direct business displacement is appropriate. The Proposed Actions have the potential to exceed the threshold of 100 displaced employees, and therefore, a preliminary assessment will be provided in the EIS.

The analysis of direct business and institutional displacement will estimate the number of employees and the number and types of businesses that would be displaced by the Proposed Actions, and characterize the economic profile of the study area using current employment and business data from the New York State Department of Labor or U.S. Census Bureau. This information will be used in determining the potential for significant adverse impacts: (1) whether the businesses to be displaced provide products or services essential to the local economy that would no longer be available in its “trade area” to local residents or businesses due to the difficulty of either relocating the businesses or establishing new, comparable businesses; and (2) whether a category of businesses is the subject of other regulations or publicly adopted plans to preserve, enhance, or otherwise protect it.

## **Indirect Residential Displacement**

Indirect residential displacement is the involuntary displacement of residents that results from a change in socioeconomic conditions created by a proposed action. Indirect residential displacement could occur if a proposed project either introduces a trend or accelerates a trend of changing socioeconomic conditions that may potentially displace a vulnerable population to the extent that the socioeconomic character of the neighborhood would change. To assess this potential impact, the analysis will address a series of threshold questions in terms of whether the project substantially alters the demographic character of an area through population change or introduction of more costly housing.

The indirect residential displacement analysis will use the most recent available U.S. Census data, New York City Department of Finance’s Real Property Assessment Data (RPAD) database, as well as current real estate market data, to present demographic and residential market trends and conditions for the study area. The presentation of study area characteristics will include population estimates, housing tenure and vacancy status, median value and rent, estimates of the number of housing units not subject to rent protection, and median household income. The preliminary assessment will carry out the following step-by-step evaluation:

- Step 1: Determine if the Proposed Actions would add substantial new population with different income as compared with the income of the study area population. If the expected average incomes of the new population would be similar to the average incomes of the study area populations, no further analysis is necessary. If the expected average incomes of the new population would exceed the average incomes of the study area populations, then Step 2 of the analysis will be conducted.

- Step 2: Determine if the Proposed Actions' population is large enough to affect real estate market conditions in the study area. If the population increase may potentially affect real estate market conditions, then Step 3 will be conducted.
- Step 3: Determine whether the study area has already experienced a readily observable trend toward increasing rents and the likely effect of the action on such trends and whether the study area potentially contains a population at risk of indirect displacement resulting from rent increases due to changes in the real estate market caused by the new population.

A detailed analysis, if warranted, would utilize more in-depth demographic analysis and field surveys to characterize existing conditions of residents and housing, identify populations at risk of displacement, assess current and future socioeconomic trends that may affect these populations, and examine the effects of the Proposed Actions on prevailing socioeconomic trends and, thus, impacts on the identified populations at risk.

### **Indirect Business Displacement**

The indirect business displacement analysis is to determine whether the Proposed Actions may introduce trends that make it difficult for those businesses that provide products or services essential to the local economy, or those subject to regulations or publicly adopted plans to preserve, enhance, or otherwise protect them, to remain in the area. The purpose of the preliminary assessment is to determine whether a proposed action has potential to introduce such a trend. The Proposed Actions would not introduce more than 200,000 sf of new commercial uses to the area; however, it could displace more than 100 employees. Therefore, an assessment of potential indirect business displacement will be performed.

### **Adverse Effects on Specific Industries**

The analyses of direct business displacement will provide sufficient information to determine whether the Proposed Actions could have any adverse effects on a specific industry, compared with the Future without the Proposed Action. The analysis will determine:

- Whether the Proposed Actions would significantly affect business conditions in any industry or category of businesses within or outside the study areas.
- Whether the Proposed Actions would substantially reduce employment or impair viability in a specific industry or category of businesses.

## **TASK 4. COMMUNITY FACILITIES AND SERVICES**

The demand for community facilities and services is directly related to the type and size of the new population generated by the development resulting from the proposed action. The RWCDs associated with the Proposed Actions would add 3,250 new residential units to the area. This level of development would trigger a detailed analysis of elementary, intermediate, and high schools, libraries, and child care centers, as presented in the EAS document. While the RWCDs would not

trigger detailed analyses of potential impacts on police/fire stations and health care services, for informational purposes, a description of existing police, fire, and health care facilities serving the rezoning area will be provided in the EIS. The community facilities and services analysis will follow the guidance of the *CEQR Technical Manual*; specific methodologies are described herein.

## Public Schools

- The primary study area for the analysis of elementary and intermediate schools should be the school districts' "sub-district" in which the project is located. As the rezoning area encompasses parts of Community School District (CSD) 9, Sub-districts 1, 2, and 3, and CSD 10, Sub-district 4; the elementary and intermediate school analyses will be conducted separately for each sub-district. The Proposed Actions also trigger an analysis of high schools, which are assessed on a borough-wide basis.
- Public elementary and intermediate schools serving CSD 9, Sub-districts 1, 2, and 3, and CSD 10, Sub-district 4 will be identified and located. Existing capacity, enrollment, and utilization data for all public elementary and intermediate schools within the affected sub-districts will be provided for the current (or most recent) school year, noting any specific shortages of school capacity. Similar data will be provided for Bronx high schools. Utilization will be presented using the "Target Calculation Method," which is used by the New York City Department of Education (DOE) for capital planning purposes.
- Conditions that would exist in the No-Action condition for both the sub-districts (for elementary and intermediate school analyses) and the borough (for the high school analysis) will be identified, taking into consideration projected changes in future enrollments, including those associated with other developments in the affected sub-districts, using the SCA's *Projected New Housing Starts*. The Bronx school districts will be aggregated into a borough total, which will be used for the No-Action borough high school analysis. Plans to alter school capacity, either through administrative actions on the part of the DOE or as a result of the construction of new school space prior to the 2026 analysis year, will also be identified and incorporated into the analyses. Planned new capacity projects from the DOE's *2015-2019 Five Year Capital Plan* will not be included in the quantitative analysis unless the projects have commenced site preparation and/or construction. They may, however, be included in a qualitative discussion. The capacity of transportable classrooms, mini-schools, and annexes will not be included in the future conditions analysis.
- Future conditions with the Proposed Actions will be analyzed, adding students likely to be generated under the RWCDs to the projections for the future No-Action condition. Impacts will be assessed based on the difference between the future With-Action projections and the future No-Action projections (at the sub-district level for elementary and intermediate schools and at the borough level for high schools) for enrollment, capacity, and utilization in 2026.
- A determination of whether the Proposed Actions would result in significant adverse impacts to elementary, intermediate, and/or high schools will be made. A significant adverse impact may result, warranting consideration of mitigation, if the Proposed Actions would result in: (1) a collective utilization rate of the elementary and/or intermediate schools in the sub-district study



area that is equal to or greater than 100 percent in the With-Action condition (a determination of impact significance for high schools is conducted at the borough level); and (2) an increase of five percent or more in the collective utilization rate between the No-Action and With-Action conditions. If impacts are identified, mitigation will be developed in consultation with the New York City School Construction Authority (SCA) and DOE. The number of school seats needed to mitigate any identified impacts, as well as the timing when impacts would occur will be provided.

## Libraries

- The local public library branch(es) serving the area within approximately ¼-mile of the rezoning area, which is the distance that one might be expected to travel for such services, will be identified and presented on a map.
- Existing libraries within the study area and their respective information services and user populations will be described. Information regarding services provided by branch(es) within the study area will include holdings and other relevant existing conditions. Details on library operations will be based on publicly available information and/or consultation with Bronx Public Library officials. If applicable, holdings per resident may be estimated to provide a quantitative gauge of available resources in the applicable branch libraries in order to form a baseline for the analysis.
- For No-Action conditions, projections of population change in the area and information on any planned changes in library services or facilities will be described, and the effects of these changes on library services will be assessed. Using the information gathered for existing conditions, holdings per resident in the No-Action condition will be estimated.
- The effects of the addition of the population resulting from the Proposed Actions on the library's ability to provide information services to its users will be assessed. Holdings per resident in the With-Action condition will be estimated and compared to the No-Action holdings estimate.
- If the Proposed Actions would increase a branch library's ¼-mile study area population by five percent or more over No-Action levels, and it is determined, in consultation with the Bronx Public Library, that this increase would impair the delivery of library services in the study area, a significant adverse impact may occur, warranting consideration of mitigation.

## Child Care Centers

- Existing publicly funded child care centers within approximately two miles of the rezoning area will be identified. Each facility will be described in terms of its location, number of slots (capacity), enrollment, and utilization in consultation with the Administration of Children's Services (ACS).
- For No-Action conditions, information will be obtained for any changes planned for child care programs or facilities in the area, including the closing or expansion of existing facilities and the establishment of new facilities. Any expected increase in the population of children under age six within the eligibility income limitations, using the No-Action RWCDs (see "Analysis

Framework”), will be discussed as potential additional demand, and the potential effect of any population increases on demand for child care services in the study area will be assessed. The available capacity or resulting deficiency in slots and the utilization rate for the study area will be calculated for the No-Action condition.

- The potential effects of the additional eligible children resulting from the Proposed Actions will be assessed by comparing the estimated net demand over capacity to a net demand over capacity in the No-Action analysis.
- A determination of whether the Proposed Actions would result in significant adverse impacts to child care centers will be made. A significant adverse impact may result, warranting consideration of mitigation, if the Proposed Actions would result in both of the following: (1) a collective utilization rate of the group child care centers in the study area that is greater than 100 percent in the With-Action condition; and (2) an increase of five percent or more in the collective utilization rate of child care centers in the study area between the No-Action and With-Action conditions.

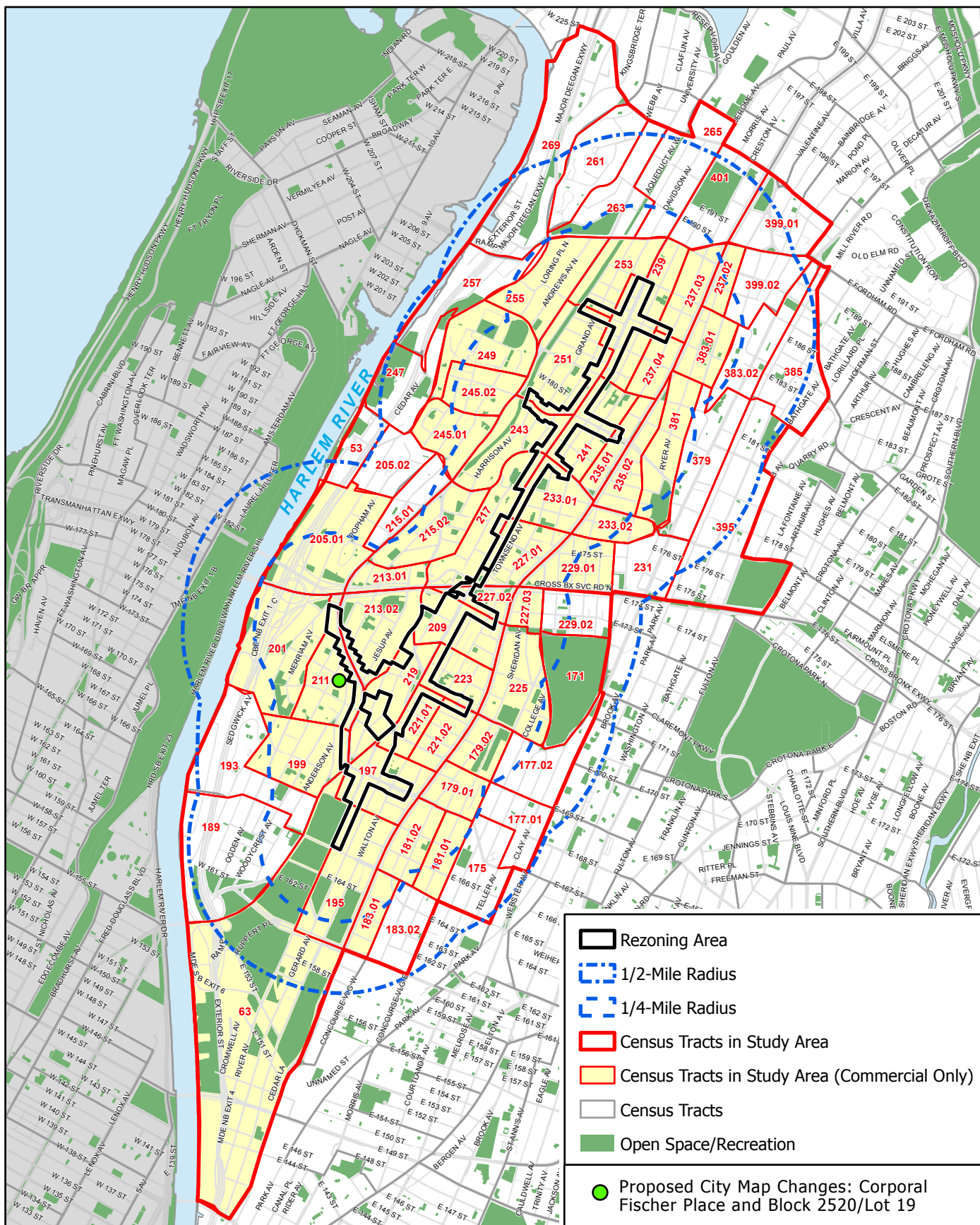
## **TASK 5. OPEN SPACE**

If a project may add population to an area, demand for existing open space facilities would typically increase. Indirect effects may occur when the population generated by the proposed project would be sufficiently large to noticeably diminish the ability of an area’s open space to serve the future population. For the majority of projects, an assessment is conducted if the proposed project would generate more than 200 residents or 500 employees, or a similar number of other uses. However, the need for an open space assessment may vary in certain areas of the City that are considered either underserved or well-served by open space; if a project is located in an underserved area, an open space assessment should be conducted if that project would generate more than 50 residents or 125 workers. The proposed Special Jerome Avenue District encompasses areas that are neither underserved nor well-served, as well as an underserved area in the Fordham neighborhood, and exceeds the respective residential and worker analysis thresholds. Therefore, an assessment of both residential and nonresidential open space is warranted and will be provided in the EIS. The open space analysis will follow the guidance of the *CEQR Technical Manual*; specific methodologies are described herein.

The open space analysis will consider both passive and active open space resources. Passive open space ratios will be assessed within a nonresidential (¼-mile radius) study area and a residential (½-mile radius) study area. Active open space ratios will be assessed for the ½-mile residential study area. Both study areas would generally comprise those census tracts that have 50 percent or more of their area located within the ¼-mile radius and ½-mile radius of the rezoning area, respectively.<sup>2</sup> The resultant open space study area is shown on Figure 7.

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<sup>2</sup> ¼-mile and ½-mile radii adjusted to be coterminous with the boundaries of census tracts with existing populations that have 50 percent of their area within the radii; the ¼-mile and ½-mile radii were not adjusted to be coterminous with census tracts without existing populations (e.g., census tracts entirely comprised of open space).



Source: New York City Department of City Planning, 2016; STV Incorporated, 2016.



Figure 8

The detailed open space analysis in the EIS will include the following subtasks:

- Characteristics of the two open space user groups (residents and workers/daytime users) will be determined. To determine the number of residents in the study areas, 2010 Census data will be compiled for census tracts comprising the nonresidential and residential open space study areas. As the study areas may include a workforce and daytime population that may also use open spaces, the number of employees and daytime workers in the study areas will also be calculated, based on reverse journey-to-work census data.
- Existing active and passive open spaces within the ¼-mile and ½-mile open space study areas will be inventoried and mapped. The condition and usage of existing facilities will be described based on the inventory and field visits. In accordance with guidelines, field surveys of the ¼-mile and ½-mile study area open space resources will be conducted during peak hours of use and in good weather. Passively programmed open spaces will be visited during peak weekday midday hours and actively programmed open spaces (or actively programmed portions of open spaces that have both active and passive open space resources) will be visited during both weekday midday and peak weekend hours. Acreages of these facilities will be determined and the total study area acreages will be calculated. The percentage of active and passive open space will also be calculated.
- Based on the inventory of facilities and study area populations, total, active, and passive open space ratios will be calculated for the residential and worker populations and compared to City guidelines to assess adequacy. Open space ratios are expressed as the amount of open space acreage (total, passive, and active) per 1,000 user population.
- Expected changes in future levels of open space supply and demand in the 2026 analysis year will be assessed, based on other planned development projects within the open space study areas. Any new open space or recreational facilities that are anticipated to be operational by the analysis year will also be accounted for. Open space ratios will be calculated for future No-Action conditions and compared with existing ratios to determine changes in future levels of adequacy.
- Effects on open space supply and demand resulting from increased residential and worker populations added under the RWCDs associated with the Proposed Actions will be assessed. The assessment of the Proposed Action's impacts will be based on a comparison of open space ratios for the future No-Action versus future With-Action conditions. In addition to the quantitative analysis, a qualitative analysis will be performed to determine if the changes resulting from the Proposed Actions constitute a substantial change (positive or negative) or an adverse effect to open space conditions. The qualitative analysis will assess whether or not the study areas are sufficiently served by open space, given the type (active vs. passive), capacity, condition, and distribution of open space, and the profile of the study area populations.

## TASK 6. SHADOWS

A shadows analysis assesses whether new structures resulting from a proposed action would cast shadows on sunlight sensitive publicly accessible resources or other resources of concern, such as natural resources, and to assess the significance of their impact. This chapter will examine the Proposed Actions' potential for significant and adverse shadow impacts. Generally, the potential for shadow impacts exists if an action would result in new structures or additions to buildings resulting in structures over 50 feet in height that could cast shadows on important natural features, publicly accessible open space, or on historic features that are dependent on sunlight. New construction or building additions resulting in incremental height changes of less than 50 feet can also potentially result in shadow impacts if they are located adjacent to, or across the street from, a sunlight-sensitive resource. The shadows analysis will follow the guidance of the *CEQR Technical Manual*; specific methodologies are described herein.

The Proposed Actions would permit development of buildings greater than 50 feet in height and therefore has the potential to result in shadow impacts in the areas to be rezoned. The EIS will assess the RWCDs on a site-specific basis for potential shadowing effects of new developments at both the projected and potential development sites on sunlight-sensitive uses and disclose the range of shadow impacts, if any, which are likely to result from the Proposed Actions. The shadows analysis in the EIS will include the following subtasks:

- A preliminary shadows screening assessment will be prepared to ascertain whether the projected and potential developments' shadows may potentially reach any sunlight-sensitive resources at any time of year.
  - A Tier 1 Screening Assessment will be conducted to determine the longest shadow study area for the projected and potential developments, which is defined as 4.3 times the height of a structure (the longest shadow that would occur on December 21, the winter solstice). A base map that illustrates the locations of the projected and potential developments in relation to the sunlight-sensitive resources will be developed.
  - A Tier 2 Screening Assessment will be conducted if any portion of a sunlight-sensitive resource lies within the longest shadow study area. The Tier 2 assessment will determine the triangular area that cannot be shaded by the projected and potential developments, which in New York City is the area that lies between -108 and +108 degrees from true north.
  - If any portion of a sunlight-sensitive resource is within the area that could be potentially shaded by the projected or potential developments, a Tier 3 Screening Assessment will be conducted. The Tier 3 Screening Assessment will determine if shadows resulting from the projected and potential developments can reach a sunlight-sensitive resource through the use of three-dimensional computer modeling software with the capacity to accurately calculate shadow patterns. The model will include a three-dimensional representation of the sunlight-sensitive resource(s), a three-dimensional representation of the projected and potential development sites identified in the RWCDs, and a three-dimensional representation of the topographical information within the area to determine the extent and duration of new shadows that would be cast on sunlight-sensitive resources as a result of the Proposed Actions.



- If the screening analysis does not rule out the possibility that action-generated shadows would reach any sunlight-sensitive resources, a detailed analysis of potential shadow impacts on publicly-accessible open spaces or sunlight-sensitive historic resources resulting from development in the RWCDs (both projected and potential development sites) will be provided in the EIS. The detailed shadow analysis will establish a baseline condition (No-Action), which will be compared to the future condition resulting from the Proposed Actions (With-Action) to illustrate the shadows cast by existing or future buildings and distinguish the additional (incremental) shadow cast by the projected and potential developments. The detailed analysis will include the following tasks:
  - The analysis will be documented with graphics comparing shadows resulting from the No-Action condition with shadows resulting from the Proposed Actions, with incremental shadow highlighted in a contrasting color.
  - A summary table listing the entry and exit times and total duration of incremental shadow on each applicable representative day for each affected resource will be provided.
  - The significance of any shadow impacts on sunlight-sensitive resources will be assessed.

## **TASK 7. HISTORIC AND CULTURAL RESOURCES**

Historic resources are identified as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. This includes designated New York City Landmarks; properties calendared for consideration as landmarks by the New York City Landmarks Preservation Commission (LPC); properties listed on the State/National Register of Historic Places (S/NR) or contained within a district listed on or formally determined eligible for S/NR listing; properties recommended by the New York State Board for Listing on the S/NR; National Historic Landmarks; and properties not identified by one of the programs listed above, but that meet their eligibility requirements. As the Proposed Actions would induce development that could result in new in-ground disturbance and construction of a building type(s) that could compromise the historic context of the area, it has the potential to result in impacts to archaeological and architectural resources. The historic and cultural resources analysis will follow the guidance of the *CEQR Technical Manual*; specific methodologies are described herein.

Impacts on historic resources are considered on the affected site and in the area surrounding identified development sites. The historic resources study area is therefore defined as the proposed Special Jerome Avenue District, plus a 400-foot radius. Archaeological resources are considered only for projected and potential development sites where new in-ground disturbance would occur compared to No-Action conditions. Impacts to historic resources may result from both temporary (e.g., related to construction process) and permanent (e.g., related to long-term or permanent result of the proposed project or construction project) activities.

This chapter will include an overview of the study area's history and land development. Subtasks will include:

- Land use in the study area will be researched and described.
- In consultation with LPC, those areas thought to be potentially archaeologically sensitive will be identified.
- Projected and potential development sites where new in-ground disturbance is expected to occur as a result of the Proposed Actions will be identified.
- A Phase 1A Archaeological Documentary Report will be prepared for projected and potential developments sites identified as archaeologically sensitive where new in-ground disturbance is expected to occur as a result of the Proposed Actions and will be submitted to LPC for review. The Phase 1A will include an evaluation of archaeological resources within each of the development sites of concern documenting the site history, its development and use, and the potential to host significant archaeological resources. The EIS will summarize the results of the Phase 1A report.
- If any development sites are identified as having archaeological potential in the Phase 1A report and LPC concurs, the Proposed Actions' effect on those resources will be evaluated to determine if a significant adverse impact would result due to the Proposed Actions. If it is found that a significant adverse impact to archaeological resources would occur, LPC will be consulted on what, if any, mitigation measures may be available to address those impacts.
- In consultation with LPC, known and eligible architectural resources in the study area were identified. There is one designated historic district, Morris Avenue Historic District, within the rezoning area and there is one designated historic district, Grand Concourse Historic District, within approximately 400 feet of the proposed Special Jerome Avenue District; these historic districts will be identified, mapped, and described.
- Probable impacts of the developments resulting from the Proposed Actions on architectural resources will be assessed. The assessment would address the following: (a) would there be a physical change to the property; or (b) would there be a physical change to its setting, such as context or visual prominence ("indirect impacts"), and, if so, is the change likely to alter or eliminate the significant characteristics of the resource that make it important.

## **TASK 8. URBAN DESIGN AND VISUAL RESOURCES**

Urban design is the totality of components that may affect a pedestrian's experience of public space. An assessment of urban design and visual resources is appropriate when there is the potential for a pedestrian to observe, from the street level, a physical alteration beyond that allowed by existing zoning. When an action would potentially obstruct view corridors, compete with icons in the skyline, or would result in substantial alterations to the streetscape of the neighborhood by noticeably changing

the scale of buildings, a more detailed analysis of urban design and visual resources would be appropriate. The urban design and visual resources analysis will follow the guidance of the *CEQR Technical Manual*; specific methodologies are described herein.

As the Proposed Actions would rezone some areas to allow higher density and create new zoning districts to be mapped within the study area, a preliminary assessment of urban design and visual resources will be provided in the EIS.

The urban design study area will be the same as that used for the land use analysis (delineated by a ¼-mile radius from the proposed Special Jerome Avenue District boundary). For visual resources, the view corridors within the study area from which such resources are publicly viewable should be identified. The preliminary assessment will consist of the following:

- Based on field visits, the urban design and visual resources of the directly affected area and adjacent study area will be described using text, photographs, and other graphic material, as necessary, to identify critical features, use, bulk, form, and scale.
- In coordination with Task 2, Land Use, the changes expected in the urban design and visual character of the study area due to known development projects in the future No-Action condition will be described.
- Potential changes that could occur in the urban design character of the study area as a result of the Proposed Actions will be described. For the projected and potential development sites, the analysis will focus on general building types for the sites that are assumed for development, as well as elements such as street wall height, setback, and building envelope. Photographs and/or other graphic material will be utilized, where applicable, to assess the potential effects on urban design and visual resources, including view of/to resources of visual or historic significance.

A detailed analysis will be prepared if warranted based on the preliminary assessment. Examples of projects that may require a detailed analysis are those that would make substantial alterations to the streetscape of a neighborhood by noticeably changing the scale of buildings, potentially obstruct view corridors, or compete with icons in the skyline. The detailed analysis would describe the projected and potential development sites and the urban design and visual resources of the surrounding area. The analysis would describe the potential changes that could occur to urban design and visual resources in the future with the Proposed Actions condition, in comparison to the future without the Proposed Actions condition, focusing on the changes that could negatively affect a pedestrian's experience of the area. If necessary, mitigation measures to avoid or reduce potential significant adverse impacts will be identified.

## **TASK 9. HAZARDOUS MATERIALS**

A hazardous materials assessment determines whether a proposed action may increase the exposure of people or the environment to hazardous materials, and, if so, whether this increased exposure would result in potential significant public health or environmental impacts. The potential for significant impacts related to hazardous materials can occur when: (a) elevated levels of hazardous materials exist on a site and the project would increase pathways to human or environmental exposures; (b) a project

would introduce new activities or processes using hazardous materials and the risk of human or environmental exposure is increased; or (c) the project would introduce a population to potential human or environmental exposure from off-site sources. The hazardous materials analysis will follow the guidance of the *CEQR Technical Manual*; specific methodologies are described herein.

The hazardous materials assessment will determine which, if any, of the Proposed Action's projected and potential development sites may have been adversely affected by present or historical uses at or adjacent to the sites. For some proposed projects (e.g., area-wide rezonings), portions of the typical scope for a Phase I Environmental Site Assessment (ESA), such as site inspections, may not be possible. The Proposed Actions include an area-wide rezoning, and only a portion of one of the identified projected and potential development sites is in City ownership. As such, a preliminary screening assessment will be conducted for the projected and potential development sites to determine which sites warrant an institutional control, such as an (E) designation, in accordance with Section 11-15 (Environmental Requirements) of the Zoning Resolution of the City of New York and Chapter 24 of Title 15 of the Rules of the City of New York governing the placement of (E) designations<sup>3</sup>.

The hazardous materials assessment will include the following tasks:

- Perform exterior site inspections of each parcel to identify any possible monitoring wells, vent pipes, and/or manufacturing/commercial/industrial uses that could indicate environmental impact.
- Review existing information sources such as Sanborn Fire Insurance Maps and City directories for the projected and potential development sites and the surrounding area, to develop a profile of the historical uses of properties.
- Review and evaluate relevant existing data to assess the potential for environmental concerns on the subject sites.
- Prepare a summary of findings and conclusions for inclusion in the EIS to determine where (E) designations may be appropriate.

## **TASK 10. WATER AND SEWER INFRASTRUCTURE**

The water and sewer infrastructure assessment determines whether a proposed action may adversely affect the City's water distribution or sewer system and, if so, assess the effects of such actions to determine whether their impact is significant. As shown in the EAS, an analysis of water supply is not warranted, as the RWCDs associated with the Proposed Actions is not expected to result in an incremental water demand of more than one million gallons per day (gpd) compared to No-Action conditions. A

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<sup>3</sup> A hazardous materials (E) designation is an institutional control that can be placed as a result of the review of a zoning map or zoning text amendment or action pursuant to the Zoning Resolution. It provides a mechanism to ensure that testing for and mitigation and/or remediation of hazardous materials, if necessary, are completed prior to, or as part of, future development of the affected site, thereby eliminating the potential for a hazardous materials impact.

preliminary assessment of the Proposed Actions' effects on wastewater and stormwater infrastructure is warranted as the RWCDs for the Proposed Actions would result in the development of more than 400 dwelling units. Therefore, this chapter will analyze the Proposed Actions' potential effects on the wastewater and stormwater infrastructure. The sewer infrastructure analysis will consider the potential for significant adverse impacts resulting from the RWCDs for the Proposed Actions. The New York City Department of Environmental Protection (DEP) will be consulted in preparation of this assessment. The water and sewer infrastructure analysis will follow the guidance of the *CEQR Technical Manual*; specific methodologies are described herein.

## Wastewater and Stormwater Infrastructure

- The appropriate study area for the assessment will be established in consultation with DEP. The Proposed Actions' directly affected area is primarily located within the service area of the Wards Island Wastewater Treatment Plant (WWTP).
- The existing stormwater drainage system and surfaces (pervious or impervious) on the projected development sites will be described, and the amount of stormwater generated on those sites will be estimated using DEP's volume calculation worksheet.
- The existing sewer system serving the rezoning area will be described based on records obtained from DEP. The existing flows to the Wards Island WWTP, which serves the directly affected area, will be obtained for the latest twelve-month period, and the average dry weather monthly flow will be presented.
- Any changes to the stormwater drainage plan, sewer system, and surface area expected in the future without the Proposed Actions will be described, as warranted.
- Future stormwater generation from the projected development sites will be assessed to determine the Proposed Actions' potential to result in impacts. Changes to the projected development sites' surface area will be described, runoff coefficients and runoff for each surface type/area will be presented, and volume and peak discharge rates from the sites will be determined based on the DEP volume calculation worksheet.
- Sanitary sewage generation for the projected development sites identified in the RWCDs will also be estimated. The effects of the incremental demand on the system will be assessed to determine if there will be any impact on operations of the Wards Island WWTP.

A more detailed assessment may be required if increased sanitary or stormwater discharges from the RWCDs associated with the Proposed Actions are predicted to affect the capacity of portions of the existing sewer system, exacerbate combined sewer overflow (CSO) volumes/frequencies, or contribute greater pollutant loadings in stormwater discharged to receiving water bodies. The scope of a more detailed analysis, if necessary, will be developed based on conclusions from the preliminary infrastructure assessment and coordinated with DEP.

## TASK 11. SOLID WASTE AND SANITATION SERVICES

A solid waste assessment determines whether an action has the potential to cause a substantial increase in solid waste production that may overburden available waste management capacity or otherwise be inconsistent with the City's Solid Waste Management Plan or with State policy related to the City's integrated solid waste management system. The Proposed Actions would induce new development that would require sanitation services. If a project's generation of solid waste in the With-Action condition would not exceed 50 tons per week, it may be assumed that there would be sufficient public or private carting and transfer station capacity in the metropolitan area to absorb the increment, and further analysis generally would not be required. As the Proposed Actions are expected to result in a net increase of more than 50 tons per week, compared to No-Action conditions, an assessment of solid waste and sanitation services is warranted. The solid waste and sanitation services analysis will follow the guidance of the *CEQR Technical Manual*; specific methodologies are described herein.

This chapter will provide an estimate of the additional solid waste expected to be generated by the projected development sites under the RWCDs and assesses its effects on the City's solid waste and sanitation services. This assessment will:

- Describe existing and future New York City solid waste disposal practices.
- Estimate solid waste generation by the RWCDs projected development sites for existing, No-Action, and With-Action conditions.
- Assess the impacts of the Proposed Actions' solid waste generation (projected developments) on the City's collection needs and disposal capacity. The Proposed Actions' consistency with the City's Solid Waste Management Plan will also be assessed.

## TASK 12. ENERGY

In most cases, an action does not need a detailed energy assessment, but its operational energy is projected. A detailed energy assessment is limited to actions that may significantly affect the transmission or generation of energy. For other actions, in lieu of a detailed assessment, the estimated amount of energy that would be consumed annually as a result of the day-to-day operation of the buildings and uses resulting from an action is disclosed. The energy analysis will follow the guidance of the *CEQR Technical Manual*; specific methodologies are described herein.

An analysis of the anticipated additional demand from the Proposed Actions' RWCDs will be provided in the EIS. The power utility serving the area, Consolidated Edison (Con Edison) of New York, will be consulted in preparation of the energy impact analysis. The EIS will disclose the projected amount of energy consumption during long-term operation resulting from the Proposed Actions. The projected amount of energy consumption during long-term operation (for projected development sites) will be estimated based on the average and annual whole-building energy use rates for New York City. If warranted, the Mayor's Office of Sustainability (MOS) and/or Con Edison will be consulted.



## **TASK 13. TRANSPORTATION**

The objective of a transportation analysis is to determine whether a proposed action may have a potential significant impact on traffic operations and mobility, public transportation facilities and services, pedestrian elements and flow, the safety of all roadway users (pedestrians, bicyclists and motorists), on-and off-street parking, or goods movement. The Proposed Actions are expected to induce new residential and commercial uses, which would generate additional vehicular travel and demand for parking, as well as additional subway and bus riders and pedestrian traffic. These new trips have the potential to affect the area's transportation systems. Therefore, the transportation studies will be a key focus of the EIS. The transportation analysis will follow the guidance of the *CEQR Technical Manual*; specific methodologies are described herein.

### **Travel Demand and Screening Assessment**

A detailed travel demand forecast has been prepared using standard sources, including U.S. census data, previously-approved studies, and other references. The travel demand forecast (a Level-1 screening assessment) is summarized by peak hour, mode of travel, as well as person and vehicle trips. The travel demand forecast also identifies the number of peak hour person trips made by transit and the numbers of walk trips that would use the area's sidewalks, corner areas, and crosswalks. The results of this forecast have been summarized in a Transportation Planning Factors and Travel Demand Forecast (TPF/TDF) technical memorandum (refer to Appendix 3). In addition to the travel demand forecast, detailed vehicle, pedestrian and transit trip assignments (a Level-2 screening assessment) will be prepared to validate the intersections and pedestrian/transit elements selected for quantified analysis.

### **Traffic**

The EIS will provide a detailed traffic analysis focusing on those peak hours and street network intersections where the highest concentrations of action-generated demand would occur. The peak hours for analysis will be selected, and the specific intersections to be included in the traffic study area will be determined based upon the assignment of project-generated traffic and the threshold of 50 additional vehicle trips per hour.

The RWCDs exceeds the minimum development density screening thresholds. Therefore, a travel demand forecast is required to determine if the Proposed Actions would generate 50 or more vehicle trips in any peak hour. Based on a preliminary forecast, the Proposed Actions are expected to generate more than 50 additional vehicular trips in the weekday AM, midday, and PM peak hours, as well as the Saturday midday.

Based on a preliminary vehicle trip assignment, it is anticipated that the traffic study area will include 37 intersections for analysis and includes:

1. Jerome Avenue at Kingsbridge Road
2. Jerome Avenue at Fordham Road
3. Jerome Avenue at 184<sup>th</sup> Street
4. Jerome Avenue at East 183<sup>rd</sup> Street
5. Jerome Avenue at West 183<sup>rd</sup> Street
6. Jerome Avenue at West 182<sup>nd</sup> Street
7. Jerome Avenue at West 181<sup>st</sup> Street
8. Jerome Avenue at Burnside Avenue
9. Jerome Avenue at Tremont Avenue
10. Jerome Avenue at West 176<sup>th</sup> Street
11. Jerome Avenue at East 176<sup>th</sup> Street
12. Jerome Avenue at 175<sup>th</sup> Street
13. Jerome Avenue at I-95 Westbound Ramps
14. Jerome Avenue at Featherbed Lane
15. Jerome Avenue at I-95 Eastbound Ramps
16. Jerome Avenue at Mt. Eden Avenue
17. Jerome Avenue at Macombs Road
18. Jerome Avenue at 172<sup>nd</sup> Street
19. Jerome Avenue at 170<sup>th</sup> Street
20. Jerome Avenue at 167<sup>th</sup> Street/Edward L Grant Hwy
21. Jerome Avenue at 165<sup>th</sup> Street
22. Jerome Avenue at 164<sup>th</sup> Street
23. Jerome Avenue at Macombs Dam Bridge
24. Grand Concourse at Burnside Avenue
25. Grand Concourse at Tremont Avenue
26. Grand Concourse at 176<sup>th</sup> Street
27. Grand Concourse at Mt. Eden Avenue
28. Grand Concourse at 170<sup>th</sup> Street
29. Grand Concourse at 167<sup>th</sup> Street
30. Inwood Avenue at West 170<sup>th</sup> Street
31. Cromwell Avenue at West 170<sup>th</sup> Street
32. University Avenue at Washington Bridge On-Ramps
33. University Avenue at Washington Bridge Off-Ramps
34. Edward L. Grant Highway at 170<sup>th</sup> Street
35. Edward L. Grant Highway at West 169<sup>th</sup> Street
36. River Avenue at 167<sup>th</sup> Street
37. Macombs Road at West 172<sup>nd</sup> Street

The following outlines the anticipated scope of work for conducting a traffic impact analysis for the Proposed Actions' RWCDs:

- Select peak hours for analysis and define a traffic study area consisting of intersections to be analyzed within and in proximity to the rezoning area and along key routes leading to and from the rezoning area.
- Conduct a count program for traffic analysis locations that includes a mix of automatic traffic recorder (ATR) machine counts and intersection turning movement counts, along with vehicle classification counts and travel time studies (speed runs) as support data for air quality and noise analyses. Turning movement count data will be collected at each analyzed intersection during the weekday and Saturday peak hours, and will be supplemented by nine days of continuous ATR counts. Vehicle classification count data will be collected during each peak hour at several representative intersections along each of the principal corridors in the study area. The turning movement counts, vehicle classification counts and travel time studies will be conducted concurrently with the ATR counts. The count program will be adequate to address input parameters for MOVES. Where applicable, available information from recent studies in the vicinity of the study area will be compiled, including data from such agencies as the New York City Department of Transportation (DOT) and DCP.
- Inventory physical data at each of the analysis intersections, including street widths, number of traffic lanes and lane widths, pavement markings, turn prohibitions, bicycle routes and curbside parking regulations. Signal phasing and timing data for each signalized intersection included in the analysis will be obtained from DOT and will be field verified.
- Determine existing traffic operating characteristics at each analysis intersection including capacities, volume-to-capacity (v/c) ratios, average vehicle delays, and levels of service (LOS) per lane group and per overall intersection. 85<sup>th</sup> percentile queues will also be determined by lane group at all signalized intersections. This analysis will be conducted using the 2000 *Highway Capacity Manual* (HCM) methodology with the latest approved Highway Capacity Software (HCS).
- Based on available sources, Census data and standard references, estimate the travel demand from projected development sites in the future without the Proposed Actions (the No-Action condition), as well as the demand from other major developments planned in the vicinity of the study area by the 2026 analysis year. This will include total daily and peak hour person and vehicular trips, and the distribution of trips by auto, taxi, and other modes. A truck trip generation forecast will also be prepared based on data from previous relevant studies. Mitigation measures accepted for all No-Action projects as well as other DOT initiatives will be included in the future No-Action network, as applicable.
- Compute the future 2026 No-Action traffic volumes based on approved background traffic growth rates for the study area (0.25 percent per year for years one through five, 0.125 percent for years six through ten) and demand from major development projects expected to be completed in the future without the Proposed Action. Incorporate any planned changes to the roadway system anticipated by 2026, and determine the No-Action v/c ratios, delays, and levels of services at analyzed intersections.

- Based on available sources, Census data, and standard references, develop a travel demand forecast for projected development sites based on the net change in uses compared to the No-Action condition as defined in the RWCDs. Determine the net change in vehicle trips expected to be generated by projected development sites under the Proposed Actions as described in the Transportation Planning Factors (TPF) technical memorandum and approved by DCP in consultation with DOT. Assign the net project-generated trips in each analysis period to likely approach and departure routes, and prepare traffic volume networks for the 2026 future with the Proposed Actions condition for each analyzed peak hour.
- Determine the v/c ratios, delays, and LOS at analyzed intersections for the With-Action condition, and identify significant adverse traffic impacts.
- Identify and evaluate potential traffic mitigation measures, as appropriate, for all significantly impacted locations in the study area in consultation with the lead agency and DOT. Potential traffic mitigation could include both operational and physical measures such as changes to lane striping, curbside parking regulations and traffic signal timing and phasing, roadway widening, and the installation of new traffic signals. Where impacts cannot be mitigated, they will be described as unavoidable adverse impacts.

## **Transit**

Detailed transit analyses are generally not required if a proposed action is projected to result in fewer than 200 peak hour rail or bus transit trips according to the general thresholds used by the Metropolitan Transportation Authority (MTA). If a proposed action would result in 50 or more bus trips being assigned to a single bus line (in one direction), or if it would result in an increase of 200 or more trips at a single subway station or on a single subway line, a detailed bus or subway analysis would be warranted. Transit (both subway and bus) analyses generally examine conditions during the weekday AM and PM commuter peak periods, as it is during these times that overall transit demand (and the potential for significant adverse impacts) is typically greatest.

The Proposed Actions' RWCDs is expected to generate a net increase of more than 200 additional subway trips and bus trips in one or more peak hours, and would therefore require detailed transit analyses.

## **Subway**

There are a total of 12 subway stations located in the rezoning area or within close proximity that would potentially be utilized by action-generated trips. Transit analyses typically focus on the weekday AM and PM commuter peak hours when overall demand on the subway and bus systems is usually highest. The detailed transit analyses will include the following subtasks:

- Identify for analysis, in consultation with New York City Transit Authority, those subway stations expected to be utilized by 200 or more action-generated trips in one or more peak hours. At each of these stations, analyze those stairway, door, and fare entrance control elements expected to be used by significant concentrations of action-generated demand in the weekday AM and PM peak hours.

- Conduct counts of existing weekday AM and PM peak hour demand at analyzed subway station elements and determine existing v/c ratios and levels of service.
- Determine volumes and conditions at analyzed subway station elements in the future without the Proposed Actions using approved background growth rates and accounting for any trips expected to be generated by No-Action development on projected development sites or other major projects in the vicinity of the study area.
- Add project-generated demand to the No-Action volumes at analyzed subway station elements and determine AM and PM peak hour volumes and conditions in the future with the Proposed Actions.
- Identify potential significant adverse impacts at subway station stairways and fare control elements.
- As the Proposed Actions are expected to generate 200 or more new subway trips in one direction on one or more of the three subway routes serving the rezoning area, subway line haul conditions will also be assessed in the EIS.
- Mitigation needs and potential subway station improvements will be identified, as appropriate, in conjunction with the lead agency and NYC Transit.

### ***Bus***

The area of the Proposed Actions is served by approximately 11 local bus routes operated by Metropolitan Transportation Authority-New York City Transit (MTA-NYCT) and MTA Bus that connect the area with other parts of the Bronx. A detailed analysis of bus conditions is generally required if a proposed action is projected to result in 50 or more peak hour trips being assigned to a single bus route (in one direction) based on the general thresholds used by the MTA. As the incremental person-trips by bus generated by the Proposed Actions would exceed 50 peak hour trips in one direction on one or more of the nine routes serving the rezoning area, the EIS will include a quantitative analysis of local bus conditions. For that analysis, trips will be assigned to each route based on proximity to the projected development sites and current ridership patterns. The analysis will include documenting existing peak hour bus service levels and maximum load point ridership, determining conditions in the future No-Action condition, and assessing the effects of new action-generated peak hour trips. Bus transit mitigation, if warranted, will be identified in consultation with the lead agency and the MTA.

### ***Pedestrians***

Projected pedestrian volumes of less than 200 persons per hour at any pedestrian element (sidewalks, corner areas, and crosswalks) would not typically be considered significant, since the level of increase would not generally be noticeable and therefore would not require further analysis. Based on the level of new pedestrian demand generated by the Proposed Actions' RWCDs, it is anticipated that project-generated pedestrian trips would exceed the 200-trip threshold at one or more locations in one or more peak hours. A detailed pedestrian analysis will therefore be prepared for the EIS focusing on selected sidewalks, corner areas, and crosswalks along corridors that would experience more than 200 additional

peak hour pedestrian trips for the weekday AM, midday, PM, and Saturday midday peak periods. Pedestrian counts will be conducted at each analysis location and used to determine existing levels of service. No-Action and With-Action pedestrian volumes and levels of service will be determined based on approved background growth rates, trips expected to be generated by No-Action development on projected development sites and other major projects in the vicinity of the study area, and action-generated demand. The specific pedestrian facilities to be analyzed will be determined in consultation with the lead agency once the assignment of action-generated pedestrian trips has been finalized. The analysis will evaluate the potential for incremental demand from the Proposed Actions to result in significant adverse impacts. Potential measures to mitigate any significant adverse pedestrian impacts will be identified and evaluated, as warranted, in consultation with the lead agency and DOT.

## **Vehicular and Pedestrian Safety**

Data on traffic accidents involving vehicles, pedestrians, and/or cyclists at study area intersections will be obtained from DOT for the most recent three-year period available. These data will be analyzed to determine if any of the studied locations may be classified as high crash locations and whether vehicle and/or pedestrian trips and any street network changes resulting from the Proposed Actions would adversely affect vehicular and pedestrian safety in the area. If any high crash locations are identified, feasible improvement measures will be explored to alleviate potential safety issues in consultation with the lead agency and DOT.

## **Parking**

Parking demand from commercial and retail uses typically peaks in the midday period and declines during the afternoon and evening. By contrast, residential demand typically peaks in the overnight period.

It is anticipated that the on-site required accessory parking for projected development sites may not be sufficient to accommodate overall incremental demand that would be generated by the Proposed Actions. As such, detailed existing on-street parking and off-street parking inventories will be conducted for the weekday overnight period (when residential parking demand typically peaks) and the weekday midday and Saturday midday periods (when parking in a business area is frequently at peak occupancy) to document the existing supply and demand for each period. The parking analyses will document changes in the parking supply and utilization in the rezoning area and within a ¼-mile radius of the rezoning area under the No-Action and With-Action conditions based on accepted background growth rates and projected demand from No-Action and With-Action development on projected development sites and other major projects in the vicinity of the study area. Given the large size of the parking study area, localized parking conditions during the weekday midday and overnight periods will also be assessed for a sub-area encompassing a ¼-mile radius around the three largest projected development sites.

Parking demand generated by the projected residential component of the Proposed Actions' RWCDs will be forecasted based on auto ownership data for the rezoning area and the surrounding area. Parking demand from all other uses will be derived from forecasts of the daily auto trips that would be generated by these uses. Estimates of future parking utilization will account for net reductions in demand associated with No-Action land use displaced from projected development sites under the RWCDs.



The forecast of new parking supply under the RWCDs will be based on the net change in parking spaces on projected development sites. As currently contemplated, no accessory parking would be required for affordable units that may be developed in the With-Action condition. The forecast of future supply will also account for accessory parking spaces associated with the With-Action commercial uses, which have lower commercial demand in the overnight hours.

## **TASK 14. AIR QUALITY**

An air quality assessment is required for actions that could have potential to result in significant air quality impacts. There are mobile source impacts that could arise when an action increases or causes a redistribution of traffic, creates any other mobile sources of pollutants, or adds new uses near existing mobile sources. There are mobile source impacts that could be produced by parking facilities, parking lots, or garages. Stationary source impacts could occur with actions that facilitate new development when new stationary sources, such as boiler stacks, are introduced or when a proposed development is situated near industrial sources, major or large sources. The air quality analysis will follow the guidance of the *CEQR Technical Manual*; specific methodologies are described herein.

### **Mobile Source Analysis**

The increased traffic associated with the RWCDs projected development sites would have the potential to affect local air quality levels. Emissions generated by the increased traffic at congested intersections have the potential to significantly increase air quality levels at nearby sensitive land uses. Carbon monoxide (CO) and particulate matter (PM) are the primary pollutants of concern for microscale mobile source air quality analyses, including assessments of roadways intersections and parking garages.

The specific work program for the mobile source air quality study will include the following tasks:

- Existing ambient air quality data for the study area (published by the New York State Department of Environmental Conservation (NYSDEC)) will be compiled for the analysis of existing and future conditions.
- An analysis of traffic forecasts in terms of vehicular trips from auto, bus, and truck would be conducted at each intersection analyzed within the traffic network established for the EIS. Based on the comparisons with the city CO and PM<sub>2.5</sub> screening threshold levels, if exceedances of either the CO or the PM<sub>2.5</sub> screening thresholds occur, microscale dispersion modeling at the worst-case intersections experiencing the highest traffic volumes (Level of Service (LOS) condition of “D” or worse) would be conducted using the dispersion methods described in the Air Quality Analysis Methodology and Assumptions memorandum provided in Appendix 4.
- An analysis of CO and PM emissions will be performed for no more than two parking facilities that would have the greatest potential for impact on air quality. Cumulative impacts from on-street sources and emissions from parking garages will be calculated, where appropriate.
- Future pollutant levels with and without the Proposed Actions will be compared with the CO and PM<sub>10</sub> National Ambient Air Quality Standards (NAAQS) and the City’s CO and PM<sub>2.5</sub> *de*

*minimis* guidance criteria to determine the impacts of the Proposed Actions. It is assumed that no more than one (1) location will be assessed for CO. It is also assumed that no more than three (3) locations will be assessed for PM<sub>2.5</sub> and PM<sub>10</sub>.

- The consistency of the Proposed Actions with the strategies contained in the State Implementation Plan (SIP) for the area will be determined. At any receptor sites where violations of standards occur, analyses will be performed to determine what mitigation measures would be required to attain standards.

## **Stationary Source Analysis**

The stationary source air quality analysis will determine the effects of emissions from projected and potential development sites' fossil-fuel fired heating and hot water systems to significantly impact existing land uses or to significantly impact any of the other projected or potential development sites (i.e., project-on-project impacts). In addition, since portions of the rezoning area are located within or near manufacturing zoned districts, an analysis of emissions from industrial sources must be performed. An examination of large and major sources of emissions within 1,000 feet of the study area will also be conducted.

### ***Heat and Hot Water Systems Analysis***

- A screening level analysis will be performed to determine the potential for air quality impacts from heating and hot water systems of the projected and potential development sites.
- If the screening analysis for any site demonstrates a potential for air quality impacts, a refined modeling analysis will be performed for that development site using the AERMOD model. For this analysis, five recent years (2011-2015) of meteorological data from La Guardia Airport and concurrent upper air data from Brookhaven, New York will be utilized for the simulation program. Concentrations of nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) will be determined at off-site receptor sites, as well as on projected and potential development site receptors. Predicted values will be compared with NAAQS and other relevant standards. If warranted by the analysis, requirements related to fuel type and/or exhaust stack locations will be memorialized by (E) designations placed on the blocks and lots pursuant to Section 11-15 of the New York City Zoning Resolution and the (E) Rules.
- A cumulative impact analysis will be performed for development sites with similar height located in close proximity to one another (i.e., site clusters). Impacts will be determined using the EPA AERSCREEN and or AERMOD model. In the event that violations of standards are predicted, measures to reduce pollutant levels to within standards will be examined.

### ***Industrial Source Analysis***

- A field survey will be performed to identify processing or manufacturing facilities within 400 feet of the projected and potential development sites. A copy of the air permits for each of these facilities will be requested from DEP's Bureau of Environmental Compliance.

- Facilities with sources of industrial emissions located within 400 feet of the projected or potential development sites will be considered for analysis.
- For potential development sites with identified industrial sources of air emissions, the industrial sources analysis will be performed assuming that development does take place, as well as assuming that it does not take place.
- A cumulative impact analysis will be performed for multiple source permits that emit the same air contaminant. Predicted concentrations of these compounds will be compared to NYDEC DAR-1 guideline values for short-term (SGC) and annual (AGC) averaging periods. In the event that violations of standards are predicted, measures to reduce pollutant levels to within standards will be examined.
- Potential cumulative impacts of multiple air contaminants will be determined based on the EPA's Hazard Index Approach for non-carcinogenic compounds and using the EPA's Unit Risk Factors for carcinogenic compounds. Both methods are based on equations that use EPA health risk information (established for individual compounds with known health effects) to determine the level of health risk posed by specific ambient concentrations of that compound. The derived values of health risk are additive and can be used to determine the total risk posed by multiple air contaminants.

### ***Large and Major Source Analysis***

- An analysis of existing large and major sources of emissions (such as NYSDEC Title V permits and the EPA Envirofacts database permits) identified within 1,000 feet of the development sites will be performed to assess their potential effects of the projected and potential development sites. Predicted criteria pollutant concentrations will be predicted using the AERMOD model compared with NAAQS for NO<sub>2</sub>, SO<sub>2</sub>, and PM<sub>10</sub>, as well as applicable criteria for PM<sub>2.5</sub>. As appropriate, a cumulative analysis will also be performed with industrial sources identified in the study area.

Further details on the air quality analysis approach for the Proposed Actions is provided in the Air Quality Analysis Methodology and Assumptions memorandum provided in Appendix 4 to this document.

## **TASK 15. GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE**

Increased greenhouse (GHG) emissions are changing the global climate, which is predicted to lead to wide-ranging effects on the environment, including rising sea levels, increases in temperature, and changes in precipitation levels. Although this is occurring on a global scale, the environmental effects of climate change are also likely to be felt at the local level. As the RWCDs associated with the Proposed Actions exceeds the 350,000 sf development threshold, GHG emissions generated by the Proposed Actions will be quantified and an assessment of consistency with the City's established GHG reduction goal will be performed as part of the EIS. The GHG emissions and climate change analysis will follow the guidance of the *CEQR Technical Manual*; specific methodologies are described herein.

The assessment will examine GHG emissions from the Proposed Action's operations, mobile sources, and construction, as outlined below.

- Sources of GHG from the development projected as part of the Proposed Actions will be identified. The pollutants for analysis will be discussed, as well as various City, State, and Federal goals, policies, regulations, standards, and benchmarks for GHG emissions.
- Fuel consumption will be estimated for the projected developments based on the calculations of energy use estimated as part of Task 12, Energy.
- GHG emissions associated with the action-related traffic will be estimated for the Proposed Actions using data from Task 13, Transportation. A calculation of vehicle miles traveled (VMT) will be prepared.
- The types of construction materials and equipment proposed will be discussed along with opportunities for alternative approaches that may serve to reduce GHG emissions associated with construction.
- A qualitative discussion of stationary and mobile sources of GHG emissions will be provided in conjunction with a discussion of goals for reducing GHG emissions to determine if the Proposed Actions are consistent with GHG reduction goals, including building efficient buildings, using clean power, transit-oriented development and sustainable transportation, reducing construction operations emissions, and using building materials with low carbon intensity.

## **TASK 16. NOISE**

The noise analysis will examine both the Proposed Actions' potential effects on sensitive noise receptors (including residences, health care facilities, schools, open space, etc.) and the potential noise exposure at new sensitive uses introduced by the actions. If significant adverse impacts are identified, impacts would be mitigated or avoided to the greatest extent practicable. The Proposed Actions would result in new residential, commercial, and community facility and also would alter traffic conditions in the area. Noise, which is a general term used to describe unwanted sound, will likely be affected by these development changes. The noise analysis will follow the guidance of the *CEQR Technical Manual*; specific methodologies are described herein.

It is assumed that outdoor mechanical equipment would be designed to meet applicable regulations and no detailed analysis of potential noise impacts due to outdoor mechanical equipment will be performed. Consequently, the noise analysis will examine the level of building attenuation necessary to meet interior noise level requirements. The following tasks will be performed:

- Based on the traffic studies conducted for Task 13, Transportation, a noise PCE screening analysis will be conducted to determine whether there are any locations where there is the potential for the RWCDs associated with the Proposed Actions to result in significant noise impacts (i.e., doubling Noise Passenger Car Equivalents (PCEs) due to action-generated traffic.

- Noise survey locations will be selected to represent sites of future sensitive uses in the RWCDs With-Action condition. These noise survey locations will be placed in areas to be analyzed for building attenuation and would focus on areas of potentially high ambient noise where residential and community facility uses are proposed.
- At the identified locations, noise measurements will be conducted during typical weekday AM, midday, and PM peak periods (coinciding with the traffic peak periods). Additional noise measurements will also be conducted during the early PM period near school locations and during the midday Saturday period. Noise measurements will be recorded in units of “A” weighted decibel scale (dBA) as well as one-third octave bands. The measured noise level descriptors will include equivalent noise level (Leq), maximum level (Lmax), minimum level (Lmin), and statistical percentile levels such as L1, L10, L50, and L90. A summary table of existing measured noise levels will be provided as part of the EIS.
- Future No-Action and With-Action noise levels will be estimated at the noise receptor locations based on acoustical fundamentals. All projections will be made utilizing the Leq and L10 noise descriptors.
- The level of building attenuation necessary (a function of the exterior noise levels) will be determined based on the highest With-Action L10 noise level estimated at each monitoring site. The building attenuation requirements will be memorialized by (E) designations placed on the blocks and lots requiring specific levels of attenuation pursuant to Section 11-15 of the New York City Zoning Resolution and the (E) Rules. The EIS would include (E) designation language describing the requirements for each of the blocks and lots to which they would apply.

Further details on the noise analysis methodology and assumptions for the Proposed Actions are provided in the Noise Analysis and Methodology and Assumptions memorandum provided in Appendix 5 to this document.

## **TASK 17. PUBLIC HEALTH**

Public health is the organized effort of society to protect and improve the health and well-being of the population through monitoring; assessment and surveillance; health promotion; prevention of disease, injury, disorder, disability, and premature death; and reducing inequalities in health status. The goal of the public health analysis is to determine whether adverse impacts on public health may occur as a result of a proposed project, and, if so, to identify measures to mitigate such effects. The public health analysis will follow the guidance of the *CEQR Technical Manual*; specific methodologies are described herein.

A public health assessment may be warranted if an unmitigated significant adverse impact is identified in other analysis areas, such as air quality, hazardous materials, or noise. If unmitigated significant adverse impacts are identified for the Proposed Actions in any of these technical areas and DCP determines that a public health assessment is warranted, an analysis will be provided for the specific technical area or areas.

## **TASK 18. NEIGHBORHOOD CHARACTER**

The character of a neighborhood is established by numerous factors, including land use patterns, the scale of its development, the design of its buildings, the presence of notable landmarks, and a variety of other physical features that include traffic and pedestrian patterns, noise, etc. The Proposed Actions have the potential to alter certain elements contributing to the affected area's neighborhood character. Therefore, a neighborhood character analysis will be provided in the EIS. The neighborhood character analysis will follow the guidance of the *CEQR Technical Manual*; specific methodologies are described herein.

A preliminary assessment of neighborhood character will be provided in the EIS to determine whether changes expected in other technical analysis areas—land use, zoning, and public policy; socioeconomic conditions; open space; historic and cultural resources; urban design and visual resources; transportation; and noise—may affect a defining feature of neighborhood character. The preliminary assessment will:

- Identify the defining features of the existing neighborhood character.
- Summarize changes in the character of the neighborhood that can be expected in the future With-Action condition and compare to the future No-Action condition.
- Evaluate whether the Proposed Actions have the potential to affect these defining features, either through the potential for a significant adverse impact or a combination of moderate effects in the relevant technical areas.

If the preliminary assessment determines that the Proposed Actions could affect the defining features of neighborhood character, a detailed analysis will be conducted.

## **TASK 19. CONSTRUCTION**

Construction impacts, though temporary, can have a disruptive and noticeable effect on the adjacent community, as well as people passing through the area. Construction impacts are usually important when construction activity has the potential to affect transportation conditions, archaeological resources and the integrity of historic resources, community noise patterns, air quality conditions, and mitigation of hazardous materials. Multi-sited projects with overall construction periods lasting longer than two years and that are near to sensitive receptors should undergo a preliminary impact assessment. This chapter of the EIS will provide a preliminary impact assessment based on a conceptual construction schedule with anticipated RWCDs construction timelines for each of the projected development sites. The preliminary assessment will evaluate the duration and intensity of the disruption or inconvenience to nearby sensitive uses. The construction analysis will follow the guidance of the *CEQR Technical Manual*; specific methodologies are described herein.



If the preliminary assessment indicates the potential for a significant impact during construction, a detailed construction impact analysis will be undertaken and reported in the EIS. Technical areas to be assessed include the following:

- *Transportation Systems:* The assessment will quantitatively consider losses in lanes, sidewalks, and other transportation services on the adjacent streets during the various phases of construction and identify the increase in vehicle trips from construction workers and equipment. A travel demand forecast for the RWCDs peak construction and construction/operation period(s) will be prepared.
- *Air Quality:* The construction air quality impact section will include a quantitative discussion of both mobile air source emissions from construction equipment and worker and delivery vehicles, as well as fugitive dust emissions. It will provide measures to reduce impacts.
- *Noise:* The construction noise impact section will contain a quantitative discussion of noise from construction activity.
- *Other Technical Areas:* As appropriate, other areas of environmental assessment—such as historic resources, hazardous materials, socioeconomic conditions, and neighborhood character—will be analyzed for potential construction-related impacts. The construction analysis will include an assessment of whether construction of the projected development sites would potentially physically impact, or inhibit access to, adjacent land uses, including community facilities.

## **TASK 20. MITIGATION**

Where significant adverse impacts have been identified in Tasks 2 through 19, measures to mitigate those impacts will be described. The chapter will also consider when mitigation measures will need to be implemented. These measures will be developed and coordinated with the responsible City/State agencies, as necessary, including the LPC, DOT, New York City Department of Parks and Recreation (DPR), and DEP. Where impacts cannot be fully mitigated, they will be described as unavoidable adverse impacts.

## **TASK 21. ALTERNATIVES**

The purpose of an alternatives section in an EIS is to examine development options that would tend to reduce action-related impacts. The alternatives will be better defined once the full extent of the Proposed Actions' impacts have been identified. Typically for area-wide actions, such as the Proposed Actions, the alternatives will include a No-Action Alternative, a no impact or no unmitigated significant adverse impact alternative, and a lesser density alternative. The alternatives analysis will follow the guidance of the *CEQR Technical Manual*; specific methodologies are described herein.

The alternatives analysis will be qualitative, except in those technical areas where significant adverse impacts for the Proposed Actions have been identified. The level of analysis provided will depend on an assessment of project impacts determined by the analysis connected with the appropriate tasks.

## **TASK 22. EIS SUMMARY CHAPTERS**

The EIS will include the following three summary chapters, where appropriate to the Proposed Action:

- *Unavoidable Adverse Impacts*: which summarizes any significant adverse impacts that are unavoidable if the Proposed Actions are implemented regardless of the mitigation employed (or if mitigation is not feasible).
- *Growth-Inducing Aspects of the Proposed Action*: which generally refer to “secondary” impacts of the Proposed Actions that trigger further development.
- *Irreversible and Irretrievable Commitments of Resources*: which summarizes the Proposed Actions and its impact in terms of the loss of environmental resources (loss of vegetation, use of fossil fuels and materials for construction, etc.), both in the immediate future and in the long term.

## **TASK 23. EXECUTIVE SUMMARY**

The executive summary will utilize relevant material from the body of the EIS to describe the Proposed Actions, their environmental impacts, measures to mitigate those impacts, and alternatives to the Proposed Actions. The executive summary will be written in enough detail to facilitate drafting of a notice of completion by the lead agency.

## **Appendix 1**

### **List of Blocks and Lots Included in Proposed Special Jerome Avenue District**

Block	Lots
2463	34 (p/o), 40, 46 (p/o)
2465	1 (p/o) , 50 (p/o)
2479	19, 24
2480	8 (p/o)
2487	10, 20, 30, 32, 38, 42
2488	1, 12, 14, 20, 23, 25 (p/o)
2489	1, 5, 6, 8, 11, 14, 25, 26, 27, 29, 30, 33, 54, 60, 71, 77
2496	52, 58, 64 (p/o), 73(p/o), 81 (p/o)
2506	40 (p/o), 44, 54, 62, 87, 89, 91, 94, 98, 100, 102, 104, 125, 127, 129, 132, 133, 134, 136, 138, 147, 164
2520	1, 12, 32, 45
2521	15, 24,
2522	65, 68, 70, 81, 96, 98, 101, 102, 103,
2807	52 (p/o), 56, 59, 62 (p/o)
2828	11, 13, 16, 17, 20, 22, 24
2829	1, 23, 24, 26, 45 (p/o)
2833	1, 28, 30, 35, 37, 38
2837	9 (p/o), 11, 18
2838	1 (p/o)
2839	1, 5, 10
2840	1, 5, 8 (p/o), 38 (p/o)
2841	1 (p/o), 5
2842	1, 6, 10, 13, 15, 18, 42, 47, 51, 55, 59 (p/o)
2843	1, 5, 12, 31, 35, 65, 69, 74 (p/o), 93 (p/o), 98
2844	1, 5, 9, 12, 116, 117
2845	34, 40, 45 (p/o), 55 (p/o)
2846	1, 2, 4, 6, 14, 21, 27, 32, 37 (p/o), 41 (p/o), 74 (p/o)
2847	1, 5, 8 (p/o), 29, 35, 36, 69 (p/o)
2848	1, 12, 16, 24
2849	1, 5, 9, 13, 24 (p/o)
2850	1, 3, 7, 9
2851	1 (p/o), 2 (p/o), 42
2852	1 (p/o), 4 (p/o), 9 (p/o), 14
2853	1 (p/o), 6 (p/o), 9 (p/o), 11, 12, 15, 17, 22, 27, 32, 41
2854	1, 3, 6, 8, 10, 14, 15, 18, 21, 24 (p/o), 26, 30, 36, 39, 42, 44 (p/o), 56, 62, 63, 64
2855	1, 8, 12, 15, 16, 20, 25, 27, 28
2856	1, 11, 19, 20, 23, 24, 29, 45, 49, 51, 53, 65, 141
2857	1, 6, 21, 22, 23, 24, 28, 43, 48, 51, 64, 71, 77, 81, 90, 94, 95
2858	1, 9, 15, 19, 23, 28
2859	1, 4, 5, 8, 10, 17, 18, 26, 30, 33, 34, 35, 38, 41, 44, 46, 50, 51, 77, 89, 92, 97
2860	1, 20, 34
2861	74, 79, 80, 163
2862	90, 97, 103
2863	1, 7, 16, 17 (p/o), 28 (p/o), 30, 32, 35, 40, 42, 46, 50, 54

2864	7, 35
2865	1, 15, 19, 23, 88
2868	139
2869	122, 127, 130, 136
2870	20, 26 (p/o), 31 (p/o), 35
2871	2, 61, 69, 78 (p/o), 85, 94, 106, 110, 112 (p/o), 115, 133, 140
2872	1, 40, 46, 50, 78, 82, 86, 92, 93
2873	1, 8, 10
2874	1, 3, 6, 8, 10, 58, 59, 154
3160	1
3169	1, 59, 66, 71
3171	17, 18, 19, 21, 23, 25, 26, 27, 59
3172	1, 3, 39, 40, 43, 44
3178	1 (p/o), 60
3179	1, 2, 4, 8, 13, 20, 30, 31, 63
3182	19 (p/o), 28, 31, 35
3183	1, 4, 74, 76
3185	1
3186	1, 10, 12, 17, 41, 44, 47, 48, 49, 55, 59, 63, 65, 67
3187	1, 3, 5, 7, 9, 14, 18, 25, 56
3192	1, 34, 37, 39, 42, 50, 55, 56, 60, 66, 75, 144
3193	1, 30 (p/o), 33
3195	40, 61 (p/o), 66, 69, 74, 83, 84, 90, 92
3196	36, 38, 53 (p/o), 55, 56, 58, 74, 77, 79, 81, 86, 91
3197	1, 14, 16, 17, 21, 29, 33, 35
3198	76, 77, 78, 81, 87, 88, 89, 90, 91, 102, 105, 148, 149, 150
3206	1, 5, 31
3208	35, 36, 39, 43, 45, 46 (p/o)
3209	1 (p/o), 14, 15, 16, 17, 79
3210	65

## **Appendix 2**

### **Detailed RWCDs Tables**

					TABLE 1: PROJECTED DEVELOPMENT SITE SUMMARY										
Site #		Site Info			Existing Conditions										
		Tax Block	Tax Lot	Lot Area (SF)	Existing Zoning	Existing Overlay	Built FAR	Maximum Res FAR	Maximum Comm FAR	Maximum Facility FAR	Comm1 SF+	Auto Rel.	Office (SF)	Total SF	Total DU's
1	a	3198	81	12,800	C8-3		0.98	0	2	6.5	12,500	0	0	12,500	0
2	a	3187	9	12,500	C8-3		0.64	0	2	6.5	8,000	8,000	0	8,000	0
	b	3187	14	10,000	C8-3		0.1	0	2	6.5	1,000	1,000	0	1,000	0
3	a	3198	102	7,500	C8-3		1	0	2	6.5	7,500	4,950	0	7,500	0
	a	3198	105	12,500	C8-3		2	0	2	6.5	25,000	0	0	25,000	0
4	a	3186	59	6,800	C8-3		1	0	2	6.5	6,802	0	0	6,802	0
	b	3186	55	8,300	C8-3		1	0	2	6.5	8,300	0	0	8,300	0
5	a	3195	66	5,000	C8-3		1	0	2	6.5	5,000	5,000	0	5,000	0
	b	3195	69	10,000	C8-3		2	0	2	6.5	20,000	0	0	20,000	0
6	a	3186	10	5,000	C8-3		1	0	2	6.5	5,000	0	0	5,000	0
	b	3186	12	7,500	C8-3		1	0	2	6.5	7,500	0	0	7,500	0
	c	3186	1	12,202	C8-3		2	0	2	6.5	24,400	0	0	24,400	0
7	a	3185	1	12,988	C8-3		0.15	0	2	6.5	2,000	2,000	0	2,000	0
8	a	3192	42	9,688	C8-3		0.12	0	2	6.5	1,168	1,168	0	1,168	0
	b	3192	39	188	C8-3		0	0	2	6.5	0	0	0	0	0
	c	3192	37	3,422	C8-3		0	0	2	6.5	0	0	0	0	0
	d	3192	50	7,403	C8-3		0.36	0	2	6.5	2,700	2,700	0	2,700	0
9	a	3179	20	12,500	C8-3		2	0	2	6.5	25,000	0	0	25,000	0
10	a	2870	26	10,500	R7-1	C1-4	1.77	4	0	4.8	18,600	0	0	18,600	0
11	a	2863	42	10,000	R7-1	C2-4	0.6	4	0	4.8	6,000	0	6,000	6,000	0
12	a	3160	1	9,796	R8	C1-4	1	7.2	0	6.5	9,788	0	0	9,788	0
13	a	2863	50	10,834	R7-1	C2-4	0	4	0	4.8	0	0	0	0	0
14	a	2854	3	7,500	R7-1	C2-4	0.58	3.44	0	4.8	4,375	0	0	4,375	0
15	a	2862	97	15,039	C8-3		1.99	0	2	6.5	30,000	15,000	0	30,000	0
16	a	2853	22	10,369	C8-3		1.99	0	2	6.5	20,600	0	0	20,600	0
17	a	2853	27	9,631	R8	C1-4	1	7.2	0	6.5	9,631	0	0	9,631	0



					TABLE 1: PROJECTED DEVELOPMENT SITE SUMMARY										
Site #		Site Info			Existing Conditions										
		Tax Block	Tax Lot	Lot Area (SF)	Existing Zoning	Existing Overlay	Built FAR	Maximum Res FAR	Maximum Comm FAR	Maximum Facility FAR	Comm/ SF+	Auto Rel.	Office (SF)	Total SF	Total DU's
18	a	2861	163	15,635	R7-1	C2-4	1.15	3.44	0	4.8	800	0	0	18,000	40
19	a	2850	7	5,000	R7-1	C2-4	0.9	4	0	4.8	4,500	0	0	4,500	0
	b	2850	3	9,000	R7-1	C2-4	2	4	0	4.8	18,000	0	0	18,000	0
	c	2850	1	5,000	R7-1	C2-4	1	4	0	4.8	5,000	0	0	5,000	0
20	c	2849	13	7,200	C8-3		0.08	0	2	6.5	600	0	0	600	0
	a	2849	9	10,002	C8-3		0.05	0	2	6.5	500	0	0	500	0
21	a	2859	33	3250	C8-3		0.85	0	2	6.5	0	0	0	2772	3
	b	2859	38	7500	C8-3		0.77	0	2	6.5	5800	5800	0	5800	0
	c	2859	35	6500	C8-3		0	0	2	6.5	0		0	0	0
	d	2859	41	2250	C8-3		1	0	2	6.5	2250	0	0	2250	0
	e	2859	34	3250	C8-3		0	0	2	6.5	3,250	3,250	0	3,250	0
22	a	2846	14	17,500	C8-3		0	0	2	6.5	0	0	0	0	0
	b	2846	6	15,000	C8-3		0.11	0	2	6.5	1,700	1,700	0	1,700	0
23	a	2865	88	11,057	C8-3		0.27	0	2	6.5	3,028	3,028	0	3,028	0
	b	2865	15	12,656	C8-3		2.05	0	2	6.5	26,000	0	0	26,000	0
24	b	2857	22	2,775	C8-3		0	0	2	6.5	0	0	0	0	0
	c	2857	21	2,750	C8-3		0	0	2	6.5	0	0	0	0	0
	e	2857	43	3,929	C8-3		0.89	0	2	6.5	3,500	3,500	0	3,500	0
25	a	2858	15	10,000	C8-3		1	0	2	6.5	10,000	10,000	0	10,000	0
	b	2858	19	10,000	C8-3		1	0	2	6.5	10,000	10,000	0	10,000	0
26	a	2844	9	9,723	C8-3		0.51	0	2	6.5	5,000	5,000	0	5,000	0
	b	2844	5	5,000	C8-3		1	0	2	6.5	5,000	2,500	0	5,000	0
	c	2844	117	260	R8		0	6.02	0	6.5	0	0	0	0	0
	d	2844	116	27	R8		0	6.02	0	6.5	0	0	0	0	0
27	a	2843	1	11,300	C4-4		1.44	3.44	3.4	6.5	16,235	0	0	16,235	0
28	a	2842	13	8,875	C4-4		1	3.44	3.4	6.5	8,841	0	0	8,841	0
	b	2842	15	4,171	C4-4		1.3	3.44	3.4	6.5	5,421	0	0	5,421	0
29	a	2843	98	8,842	C4-4		1.96	4	3.4	6.5	17,354	0	0	17,354	0
30	a	2857	6	8,669	C8-3		0	0	2	6.5	0	0	0	0	0
	b	2857	1	18,066	C8-3		0	0	2	6.5	0	0	0	0	0

					TABLE 1: PROJECTED DEVELOPMENT SITE SUMMARY										
Site #	Site Info				Existing Conditions										
	Tax Block	Tax Lot	Lot Area (SF)		Existing Zoning	Existing Overlay	Built FAR	Maximum Res FAR	Maximum Comm FAR	Maximum Facility FAR	Comm/ SF+	Auto Rel.	Office (SF)	Total SF	Total DU's
31	a	2520	45	7,525	R7-1	C1-4	0	4	0	4.8	0	0	0	0	0
32	a	2871	85	25,654	M1-2		0.19	0	2	4.8	5,000	5,000	0	5,000	0
	b	2871	106	417	M1-2		0	0	2	4.8	0		0	0	0
	c	2871	115	15	M1-2		0	0	2	4.8	0	0	0	0	0
	d	2871	94	7,686	M1-2		2.99	0	2	4.8	22,983		0	22,983	0
33	a	2871	112	5,005	M1-2		1	0	2	4.8	5,000	5,000	0	5,000	0
	b	2871	110	5,894	M1-2		0.82	0	2	4.8	4,814	0	0	4,814	0
34	a	2856	11	22,885	M1-2		2.46	0	2	4.8	56,250	0	0	56,250	0
35	a	2856	1	21,544	M1-2		1	0	2	4.8	21,500	0	0	21,500	0
36	a	2871	61	14,543	M1-2		0	0	2	4.8	0	0	0	0	0
	b	2871	133	1,365	M1-2		0	0	2	4.8	0	0	0	0	0
	c	2871	140	6,973	M1-2		0.73	0	2	4.8	3,043	0	0	5,059	0
37	a	2506	98	5,013	R7-1		0.57	3.44	0	4.8	0	0	0	2,856	3
38	a	2506	100	5,001	R7-1		0	3.44	0	4.8	0	0	0	0	0
39	a	2506	40	17,635	R7-1		0	4	0	4.8	0	0	0	0	0
40	a	2489	6	3,931	C8-3		1.73	0	2	6.5	6,812	3,406	0	6,812	0
	b	2489	8	10,045	C8-3		1	0	2	6.5	10,045	0	4,818	10,045	0
41	a	2496	64	27,000	R8	C2-4	0	6.02	0	6.5	0	0	0	0	0
42	a	2488	14	21,425	R8	C2-4	0	6.02	0	6.5	0	0	0	0	0
43	a	2488	12	17250	R8	C2-4	0.87	6.02	0	6.5	15,000	0	15,000	15,000	0
44	a	2488	1	14,835	R8	C2-4	0	6.02	0	6.5	0	0	0	0	0
45	a	2487	38	17,272	R8	C2-4	0	6.02	0	6.5	0	0	0	0	0
	b	2487	32	25,650	R8	C2-4	1.12	6.02	0	6.5	0	0	0	28,800	30
	c	2487	30	25,650	R8	C2-4	1.12	6.02	0	6.5	0	0	0	28,800	30
TOTAL											564,090	98,002	25,818	646,534	106

TABLE 1: PROJECTED DEVELOPMENT SITE SUMMARY																			
Site #	Site Info				Future Without-Action Conditions														
	Tax Block	Tax Lot	Lot Area (SF)		Residential SF	Total commercial SF	Total Restaurant SF	Supermarket (FRESH)	Retail SF	Auto-Related SF	Office SF	Storage SF	Garage SF	Industrial SF	TOTAL C Fac SF	Total SF	NO ACTION Total DU's	Total Parking	Bldg Height
1	a	3198	81	12,800	Retail	0	12,500	0	0	12,500	0	0	0	0	0	12,500	0	13	10
2	a	3187	9	12,500	Transportation and Utility	0	9,000	0	0	9,000	0	0	0	0	0	9,000	0	9	10
	b	3187	14	10,000	Transportation and Utility														
3	a	3198	102	7,500	Auto-Related Commercial	0	32,500	0	0	27,550	4,950	0	0	0	0	32,500	0	33	10
	a	3198	105	12,500	Retail, Entertainment														20
4	a	3186	59	6,800	Retail	0	15,102	1,360	8,980	4,761	0	0	0	0	0	15,102	0	17	15
	b	3186	55	8,300	Retail														10
5	a	3195	66	5,000	Auto-Related Commercial	0	25,000	0	0	5,000	0	20,000	0	0	0	25,000	0	25	10
	b	3195	69	10,000	Storage														20
6	a	3186	10	5,000	Vacant	0	36,900	0	0	0	0	36,900	0	0	0	36,900	0	37	10
	b	3186	12	7,500	Parking Facilities														10
	c	3186	1	12,202	Commercial														20
7	a	3185	1	12,988	Auto-Related Commercial	0	2,000	0	0	0	2,000	0	0	0	0	2,000	0	2	10
8	a	3192	42	9,688	Surface Parking	0	3,868	0	0	3,868	0	0	0	0	0	3,868	0	4	10
	b	3192	39	188	Surface Parking														0
	c	3192	37	3,422	Surface Parking														0
	d	3192	50	7,403	Auto-Related Commercial														10
9	a	3179	20	12,500	Industrial and Manufacturing Building	0	25,000	0	0	0	0	25,000	0	0	0	25,000	0	25	20
10	a	2870	26	10,500	Supermarket, residential	22,575	19,425	0	19,425	0	0	0	0	0	0	42,000	23	53	20
11	a	2863	42	10,000	Community Facility	0	6,000	0	0	0	0	0	0	0	6,000	6,000	0	12	10
12	a	3160	1	9,796	Retail	0	9,788	0	0	9,788	0	0	0	0	0	9,788	0	0	10
13	a	2863	50	10,834	Retail, Residential	36,836	6,500	0	0	6,500	0	0	0	0	0	43,336	37	29	85
14	a	2854	3	7,500	Commercial	0	4,375	0	0	4,375	0	0	0	0	0	4,375	0	0	15
15	a	2862	97	15,039	Auto-Related Commercial, Parking Facilities	0	30,000	0	0	0	15,000	0	15,000	0	0	30,000	0	30	20
16	a	2853	22	10,369	Retail, Industrial and Manufacturing Building	0	20,600	0	0	12,305	0	0	0	8,295	0	20,600	0	0	25
17	a	2853	27	9,631	Retail, Residential	59,712	9,631	0	0	9,631	0	0	0	0	0	69,343	60	0	15

TABLE 1: PROJECTED DEVELOPMENT SITE SUMMARY																				
Site #		Site Info			Future Without-Action Conditions															
		Tax Block	Tax Lot	Lot Area (SF)		Residential SF	Total commercial SF	Total Restaurant SF	Supermarket (FRESH)	Retail SF	Auto-Related SF	Office SF	Storage SF	Garage SF	Industrial SF	TOTAL C Fac SF	Total SF	NO ACTION Total DU's	Total Parking	Bldg Height
18	a	2861	163	15,635	Community Facility	17,200	800	0	0	0	0	0	0	0	0	800	18,000	40	0	20
19	a	2850	7	5,000	Parking Facilities	0	27,500	0	0	5,000	0	0	4,500	0	18,000	0	27,500	0	28	15
	b	2850	3	9,000	Industrial and Manufacturing Building															30
	c	2850	1	5,000	Retail															15
20	c	2849	13	7,200	Auto-Related Commercial	0	1,100	0	0	0	0	0	0	500	0	0	1,100	0	7	15
	a	2849	9	10,002	Surface Parking															10
21	a	2859	33	3250	Multi-Family Walk-up Residential	2,772	11,300	900	0	1,350	9,050	0	0	0	0	0	14,072	3	6	25
	b	2859	38	7500	Auto-Related Commercial															0
	c	2859	35	6500	Auto-Related Commercial															0
	d	2859	41	2250	Retail, Restaurant															15
	e	2859	34	3250	Auto-Related Commercial															0
22	a	2846	14	17,500	Parking Facilities	0	1,700	0	0	0	1,700	0	0	0	0	0	1,700	0	2	10
	b	2846	6	15,000	Auto-Related Commercial															
23	a	2865	88	11,057	Auto-Related Commercial	0	29,028	0	0	0	3,028	0	26,000	0	0	0	29,028	0	29	10
	b	2865	15	12,656	Commercial															20
24	b	2857	22	2,775	Parking Facilities	0	3,500	0	0	0	3,500	0	0	0	0	0	3,500	0	4	0
	c	2857	21	2,750	Parking Facilities															0
	e	2857	43	3,929	Industrial and Manufacturing Building															10
25	a	2858	15	10,000	Auto-Related Commercial	0	20,000	0	0	0	20,000	0	0	0	0	0	20,000	0	20	10
	b	2858	19	10,000	Auto-Related Commercial															
26	a	2844	9	9,723	Auto-Related Commercial	0	10,000	0	0	2,500	7,500	0	0	0	0	0	10,000	0	10	10
	b	2844	5	5,000	Auto-Related Commercial, Commercial Service															10
	c	2844	117	260	n/a															0
	d	2844	116	27	n/a															0
27	a	2843	1	11,300	Retail	0	16,235	0	0	16,235	0	0	0	0	0	0	16,235	0	0	15
28	a	2842	13	8,875	Retail	0	14,262	0	0	14,262	0	0	0	0	0	0	14,262	0	0	20
	b	2842	15	4,171	Retail															25
29	a	2843	98	8,842	Retail	0	17,354	0	0	17,354	0	0	0	0	0	0	17,354	0	17	20
30	a	2857	6	8,669	Surface Parking	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	b	2857	1	18,066	Surface Parking															

TABLE 1: PROJECTED DEVELOPMENT SITE SUMMARY																				
Site #		Site Info			Future Without-Action Conditions															
		Tax Block	Tax Lot	Lot Area (SF)		Residential SF	Total commercial SF	Total Restaurant SF	Supermarket (FRESH)	Retail SF	Auto-Related SF	Office SF	Storage SF	Garage SF	Industrial SF	TOTAL C Fac SF	Total SF	NO ACTION Total DU's	Total Parking	Bldg Height
31	a	2520	45	7,525	House of Worship	0	36,120	0	0	0	0	0	0	0	0	36,120	72,240	0	36	85
32	a	2871	85	25,654	Auto-Related Commercial, Surface Parking	0	27,983	0	0	0	5,000	0	0	0	0	22,983	27,983	0	28	10
	b	2871	106	417	Vacant															0
	c	2871	115	15	Vacant															0
	d	2871	94	7,686	Community Facility															30
33	a	2871	112	5,005	Auto-Related Commercial	0	9,814	0	0	1,203	5,000	0	0	3,611	0	0	9,814	0	10	10
	b	2871	110	5,894	Auto-Related Commercial															
34	a	2856	11	22,885	Warehouse, Self-storage	0	56,250	0	0	0	0	0	56,250	0	0	0	56,250	0	56	25
35	a	2856	1	21,544	Manufacturing	0	21,500	0	0	0	0	0	0	0	21,500	0	21,500	0	22	10
36	a	2871	61	14,543	Parking Facilities	0	5,059	0	0	0	0	0	3,043	0	2,016	5,059	0	7	0	
	b	2871	133	1,365	vacant														0	
	c	2871	140	6,973	Parking Facilities, Community Facility														70	
37	a	2506	98	5,013	Residential	2,856	0	0	0	0	0	0	0	0	0	0	2,856	3	0	40
38	a	2506	100	5,001	Residential	12,953	0	0	0	0	0	0	0	0	0	0	12,953	13	0	85
39	a	2506	40	17,635	Parking Facility	0	0	0	0	0	0	0	0	0	0	0	0	0	23	0
40	a	2489	6	3,931	Commercial	0	16,857	0	0	8,633	3,406	4,818	0	0	0	0	16,857	0	0	25
	b	2489	8	10,045	Retail, Office															15
41	a	2496	64	27,000	Retail, Residential	139,590	22,950	0	0	22,950	0	0	0	0	0	0	162,540	140	79	125
42	a	2488	14	21,425	Retail, Residential	110,767	18,211	0	0	18,211	0	0	0	0	0	0	128,979	111	63	125
43	a	2488	12	17250	Vacant	0	15,000	0	0	0	0	0	0	0	0	15,000	15,000	0	0	15
44	a	2488	1	14,835	Retail, Residential	76,697	12,610	0	0	12,610	0	0	0	0	0	0	89,307	77	28	125
45	a	2487	38	17,272	Residential	412,803	0	0	0	0	0	0	0	0	0	0	412,803	273	185	125
	b	2487	32	25,650	Residential															
	c	2487	30	25,650	Residential															
TOTAL						894,761	663,322	2,260	28,405	207,719	98,002	4,818	168,650	22,154	47,795	82,919	1,594,204	780	945	

TABLE 1: PROJECTED DEVELOPMENT SITE SUMMARY																					
Site #		Site Info			Future With-Action Conditions																
		Tax Block	Tax Lot	Lot Area (SF)	Prop. Zoning	Prop. Max. Residential FAR	Proposed Max Commercial FAR	Proposed Max C. Facility FAR	Prop. Overlay		Total Residential SF	Total Commercial SF+	Total Restaurant SF	Total Supermarket (FRESH)	Total Retail	Total Office SF	TOTAL C Fac SF	Total SF	WITH ACTION Total DU's	Total Parking	Max Bldg Height
1	a	3198	81	12,800	R7A	4.6	2	4.6	C2-4	House of Worship, Community Center	0	58,880	0	0	0	0	58,880	58,880	0	59	115
2	a	3187	9	12,500	R7A	4.6	2	4.6	C2-4	Ground Floor Retail (1), Residential	91,875	11,625	0	0	11,625	0	0	103,500	92	12	115
	b	3187	14	10,000	R7A	4.6	2	4.6	C2-4												
3	a	3198	102	7,500	R7A	4.6	2	4.6	C2-4	GF Restaurant, Fresh(1), Residential	96,250	17,000	6,375	10,625	0	0	0	113,250	96	6	115
	a	3198	105	12,500	R7A	4.6	2	4.6	C2-4												
4	a	3186	59	6,800	R7A	4.6	2	4.6	C2-4	Retail, DayCare (1), Residential	55,380	14,080	0	0	5,780	0	8,300	69,460	56	34	115
	b	3186	55	8,300	R7A	4.6	2	4.6	C2-4												
5	a	3195	66	5,000	R7A	4.6	2	4.6	C2-4	Retail (1), Residential	56,250	12,750	0	0	12,750	0	0	69,000	57	33	115
	b	3195	69	10,000	R7A	4.6	2	4.6	C2-4												
6	a	3186	10	5,000	R7A	4.6	2	4.6	C2-4	Retail (1), Residential	92,633	20,997	0	0	20,997	0	0	113,629	93	20	115
	b	3186	12	7,500	R7A	4.6	2	4.6	C2-4												
	c	3186	1	12,202	R7A	4.6	2	4.6	C2-4												
7	a	3185	1	12,988	R7A	4.6	2	4.6	C2-4	Retail (1), Residential	48,705	11,040	0	0	11,040	0	0	59,745	49	28	115
8	a	3192	42	9,688	R7A	4.6	2	4.6	C2-4	Retail (1), Residential	77,629	17,596	0	0	17,596	0	0	95,225	78	17	115
	b	3192	39	188	R7A	4.6	2	4.6	C2-4												
	c	3192	37	3,422	R7A	4.6	2	4.6	C2-4												
	d	3192	50	7,403	R7A	4.6	2	4.6	C2-4												
9	a	3179	20	12,500	R7A	4.6	2	4.6	C2-4	Retail (1), Residential	46,875	10,625	0	0	10,625	0	0	57,500	47	27	115
10	a	2870	26	10,500	C4 4D	7.2	3.4	6.5	N/A	Anchor Retail (2), residential	56,175	19,425	0	0	19,425	0	0	75,600	56	19	145
11	a	2863	42	10,000	C4 4D	7.2	3.4	6.5	N/A	Medical Office (1), Residential	63,500	8,500	0	0	0	0	8,500	72,000	64	9	165
12	a	3160	1	9,796	C4 4D	7.2	3.4	6.5	N/A	Retail (1), Office	0	33,306	0	0	8,327	24,980	0	33,306	0	33	145
13	a	2863	50	10,834	C4 4D	7.2	3.4	6.5	N/A	Anchor Retail (2), Residential	54,603	23,401	0	0	23,401	0	0	78,005	55	23	165
14	a	2854	3	7,500	C4 4D	7.2	3.4	6.5	#N/A	Retail (1), Office	0	25,500	0	0	6,375	19,125	0	25,500	0	26	165
15	a	2862	97	15,039	C4 4D	7.2	3.4	6.5	N/A	Day Care (1), Residential	95,498	12,783	0	0	0	0	12,783	108,281	95	13	165
16	a	2853	22	10,369	C4 4D	7.2	3.4	6.5	N/A	Retail (1), Residential	65,843	8,814	0	0	8,814	0	0	74,657	66	27	165
17	a	2853	27	9,631	C4 4D	7.2	3.4	6.5	N/A	GF Fresh (2), residential	87,161	17,817	0	17,817	0	0	0	104,978	60	0	145





TABLE 1: PROJECTED DEVELOPMENT SITE SUMMARY																					
Site #		Site Info			Future With-Action Conditions																
		Tax Block	Tax Lot	Lot Area (SF)	Prop. Zoning	Prop. Max. Residential FAR	Proposed Max Commercial FAR	Proposed Max C. Facility FAR	Prop. Overlay		Total Residential SF	Total Commercial SF+	Total Restaurant SF	Total Supermarket (FRESH)	Total Retail	Total Office SF	TOTAL C Fac SF	Total SF	WITH ACTION Total DU's	Total Parking	Max Bldg Height
31	a	2520	45	7,525	R8A	7.2	2	6.5	C1-4	House of Worship / Community Center	0	48,913	0	0	0	0	48,913	48,913	0	49	145
32	a	2871	85	25,654	R9A	8.5	2	7.5	C2-4	Retail (1), Residential	258,356	28,706	0	0	28,706	0	0	287,063	258	101	225
	b	2871	106	417	R9A	8.5	2	7.5	C2-4												
	c	2871	115	15	R9A	8.5	2	7.5	C2-4												
	d	2871	94	7,686	R9A	8.5	2	7.5	C2-4												
33	a	2871	112	5,005	R9A	8.5	0	7.5	N/A	Residential	83,377	0	0	0	0	0	83,377	83	0	175	
	b	2871	110	5,894	R9A	8.5	0	7.5	N/A												
34	a	2856	11	22,885	R8A	7.2	0	6.5	N/A	Residential	145,320	0	0	0	0	0	145,320	145	0	165 / 145	
35	a	2856	1	21,544	R8A	7.2	0	6.5	N/A	Residential	136,804	0	0	0	0	0	136,804	137	0	165 / 145	
36	a	2871	61	14,543	R9A	8.5	2	7.5	C2-4	Day Care, Retail (1), Residential	175,040	19,449	0	0	17,433	0	2,016	194,490	174	19	175
	b	2871	133	1,365	R9A	8.5	2	7.5	C2-4												
	c	2871	140	6,973	R9A	8.5	2	7.5	C2-4												
37	a	2506	98	5,013	R8/C2-2	6	2	6.5	C2-4	Retail (1), Small Residential	2,856	4,261	0	0	4,261	0	0	7,117	3	4	175
38	a	2506	100	5,001	R8/C2-2	6	2	6.5	C2-4	Retail (1), Residential	12,953	4,251	0	0	4,251	0	0	17,204	13	4	175
39	a	2506	40	17,635	R9A	8.5	2	7.5	C2-4	Retail (1), Residential	134,908	14,990	0	0	14,990	0	0	149,898	135	15	175
40	a	2489	6	3,931	R9A	8.5	2	7.5	C2-4	Retail (1), Residential	106,916	11,880	0	0	11,880	0	0	118,796	107	42	225
	b	2489	8	10,045	R9A	8.5	2	7.5	C2-4												
41	a	2496	64	27,000	R9A	8.5	2	7.5	C2-4	Retail (1), Residential	206,550	22,950	0	0	22,950	0	0	229,500	207	23	195
42	a	2488	14	21,425	R9A	8.5	2	7.5	C2-4	Retail (1), Residential	163,901	18,211	0	0	18,211	0	0	182,113	164	18	195
43	a	2488	12	17250	R9A	8.5	2	7.5	C2-4	Pre K School (1)	0	15,000	0	0	0	0	15,000	15,000	0	15	15
44	a	2488	1	14,835	R9A	8.5	2	7.5	C2-4	Retail (1), Residential	113,488	12,610	0	0	12,610	0	0	126,098	113	13	195
45	a	2487	38	17,272	R8	6.02	2	6.5	C2-4	Retail (1), Residential	378,517	34,286	0	0	34,286	0	0	412,803	273	35	205
	b	2487	32	25,650	R8	6.02	2	6.5	C2-4												
	c	2487	30	25,650	R8	6.02	2	6.5	C2-4												
TOTAL											4,162,049	723,375	13,891	51,562	458,625	44,105	155,192	4,885,427	4,030	993	

TABLE 1: PROJECTED DEVELOPMENT SITE SUMMARY																											
Site #		Site Info			Increment																						
		Tax Block	Tax Lot	Lot Area (SF)	Residential SF	Total Commercial SF (includes CF)	Comm (retail, restaurant, grocery, auto)	Retail	Supermarket FRESH SF SF	Restaurant SF	Auto-Related SF	Hotel SF	Office SF	Storage SF	Garage SF	Other Comm SF	Industrial SF	Medical Office	House of Worship	Day Care Center	Pre-K School	Community Center	C Fac SF	Total SF	Total DU's	Total Prking	
1	a	3198	81	12,800	0	46,380	(12,500)	(12,500)	0	0	0	0	0	0	0	0	0	0	29,440	0	0	29,440	58,880	46,380	0	46	
2	a	3187	9	12,500	91,875	2,625	2,625	11,625	0	0	(9,000)	0	0	0	0	0	0	0	0	0	0	0	0	94,500	92	3	
	b	3187	14	10,000																							
3	a	3198	102	7,500	96,250	(15,500)	(15,500)	(27,550)	10,625	6,375	(4,950)	0	0	0	0	0	0	0	0	0	0	0	0	80,750	96	(27)	
	a	3198	105	12,500																							
4	a	3186	59	6,800	55,380	(1,022)	(9,322)	1,019	(8,980)	(1,360)	0	0	0	0	0	0	0	0	0	8,300	0	0	8,300	54,358	56	17	
	b	3186	55	8,300																							
5	a	3195	66	5,000	56,250	(12,250)	7,750	12,750	0	0	(5,000)	0	0	(20,000)	0	0	0	0	0	0	0	0	0	44,000	57	8	
	b	3195	69	10,000																							
6	a	3186	10	5,000	92,633	(15,903)	20,997	20,997	0	0	0	0	0	(36,900)	0	0	0	0	0	0	0	0	0	76,729	93	(17)	
	b	3186	12	7,500																							
	c	3186	1	12,202																							
7	a	3185	1	12,988	48,705	9,040	9,040	11,040	0	0	(2,000)	0	0	0	0	0	0	0	0	0	0	0	0	57,745	49	26	
8	a	3192	42	9,688	77,629	13,728	13,728	17,596	0	0	(3,868)	0	0	0	0	0	0	0	0	0	0	0	0	91,357	78	13	
	b	3192	39	188																							
	c	3192	37	3,422																							
	d	3192	50	7,403																							
9	a	3179	20	12,500	46,875	(14,375)	10,625	10,625	0	0	0	0	0	(25,000)	0	0	0	0	0	0	0	0	0	32,500	47	2	
10	a	2870	26	10,500	33,600	0	0	19,425	(19,425)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33,600	33	(34)	
11	a	2863	42	10,000	63,500	2,500	0	0	0	0	0	0	0	0	0	0	0	2,500	0	0	0	0	2,500	66,000	64	(4)	
12	a	3160	1	9,796	0	23,518	(1,461)	(1,461)	0	0	0	0	24,980	0	0	0	0	0	0	0	0	0	0	23,518	0	33	
13	a	2863	50	10,834	17,768	16,901	16,901	16,901	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34,669	18	(6)	
14	a	2854	3	7,500	0	21,125	2,000	2,000	0	0	0	0	19,125	0	0	0	0	0	0	0	0	0	0	21,125	0	26	
15	a	2862	97	15,039	95,498	(17,217)	(15,000)	0	0	0	(15,000)	0	0	0	(15,000)	0	0	0	0	12,783	0	0	12,783	78,281	95	(17)	
16	a	2853	22	10,369	65,843	(11,786)	(3,491)	(3,491)	0	0	0	0	0	0	0	0	(8,295)	0	0	0	0	0	0	54,057	66	27	
17	a	2853	27	9,631	27,448	8,186	8,186	(9,631)	17,817	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35,635	0	0	

TABLE 1: PROJECTED DEVELOPMENT SITE SUMMARY																										
Site #		Site Info			Increment																					
		Tax Block	Tax Lot	Lot Area (SF)	Residential SF	Total Commercial SF (includes CF)	Comm (retail, restaurant, grocery, auto)	Retail	Supermarket FRESH SF SF	Restaurant SF	Auto-Related SF	Hotel SF	Office SF	Storage SF	Garage SF	Other Comm SF	Industrial SF	Medical Office	House of Worship	Day Care Center	Pre-K School	Community Center	C Fac SF	Total SF	Total DU's	Total Prking
18	a	2861	163	15,635	82,082	12,490	12,490	12,490	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94,572	59	12
19	a	2850	7	5,000	109,300	0	22,500	22,500	0	0	0	0	(4,500)	0	0	(18,000)	0	0	0	0	0	0	0	109,300	109	1
	b	2850	3	9,000																						
	c	2850	1	5,000																						
20	c	2849	13	7,200	64,508	13,522	14,622	8,502	6,120	0	0	0	0	0	(500)	(600)	0	0	0	0	0	0	0	78,029	65	9
	a	2849	9	10,002																						
21	a	2859	33	3250	82,541	(11,300)	(11,300)	(1,350)	0	(900)	(9,050)	0	0	0	0	0	0	0	0	0	0	0	0	71,241	82	24
	b	2859	38	7500																						
	c	2859	35	6500																						
	d	2859	41	2250																						
	e	2859	34	3250																						
22	a	2846	14	17,500	121,875	25,925	25,925	27,625	0	0	(1,700)	0	0	0	0	0	0	0	0	0	0	0	0	147,800	122	69
	b	2846	6	15,000																						
23	a	2865	88	11,057	150,578	(29,028)	(3,028)	0	0	0	(3,028)	0	0	(26,000)	0	0	0	0	0	0	0	0	0	121,550	150	(29)
	b	2865	15	12,656																						
24	b	2857	22	2,775	60,033	(3,500)	(3,500)	0	0	0	(3,500)	0	0	0	0	0	0	0	0	0	0	0	0	56,533	60	(4)
	c	2857	21	2,750																						
	e	2857	43	3,929																						
25	a	2858	15	10,000	127,000	(3,000)	(3,000)	0	17,000	0	(20,000)	0	0	0	0	0	0	0	0	0	0	0	0	124,000	128	(20)
	b	2858	19	10,000																						
26	a	2844	9	9,723	56,288	2,759	2,759	10,259	0	0	(7,500)	0	0	0	0	0	0	0	0	0	0	0	0	59,046	56	2
	b	2844	5	5,000																						
	c	2844	117	260																						
	d	2844	116	27																						
27	a	2843	1	11,300	71,755	(6,630)	(6,630)	(6,630)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65,125	72	20
28	a	2842	13	8,875	82,842	(3,173)	(3,173)	(3,173)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79,669	83	35
	b	2842	15	4,171																						
29	a	2843	98	8,842	56,147	(9,838)	(9,838)	(17,354)	0	7,516	0	0	0	0	0	0	0	0	0	0	0	0	0	46,308	56	6
30	a	2857	6	8,669	169,767	22,725	22,725	22,725	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	192,492	170	22
	b	2857	1	18,066																						

TABLE 1: PROJECTED DEVELOPMENT SITE SUMMARY																										
Site #		Site Info			Increment																					
		Tax Block	Tax Lot	Lot Area (SF)	Residential SF	Total Commercial SF (includes CF)	Comm (retail, restaurant, grocery, auto)	Retail	Supermarket FRESH SF SF	Restaurant SF	Auto-Related SF	Hotel SF	Office SF	Storage SF	Garage SF	Other Comm SF	Industrial SF	Medical Office	House of Worship	Day Care Center	Pre-K School	Community Center	C Fac SF	Total SF	Total DU's	Total Prking
31	a	2520	45	7,525	0	12,793	0	0	0	0	0	0	0	0	0	0	0	(11,664)	0	0	24,456	12,793	(23,328)	0	13	
32	a	2871	85	25,654	258,356	723	23,706	28,706	0	0	(5,000)	0	0	0	0	0	0	0	0	0	0	(22,983)	259,080	258	73	
	b	2871	106	417																						
	c	2871	115	15																						
	d	2871	94	7,686																						
33	a	2871	112	5,005	83,377	(9,814)	(6,203)	(1,203)	0	0	(5,000)	0	0	0	(3,611)	0	0	0	0	0	0	0	0	73,563	83	(10)
	b	2871	110	5,894																						
34	a	2856	11	22,885	145,320	(56,250)	0	0	0	0	0	0	(56,250)	0	0	0	0	0	0	0	0	0	0	89,070	145	(56)
35	a	2856	1	21,544	136,804	(21,500)	0	0	0	0	0	0	0	0	0	(21,500)	0	0	0	0	0	0	0	115,304	137	(22)
36	a	2871	61	14,543	175,040	14,390	17,433	17,433	0	0	0	0	0	(3,043)	0	0	0	0	0	0	0	0	0	189,431	174	12
	b	2871	133	1,365																						
	c	2871	140	6,973																						
37	a	2506	98	5,013	0	4,261	4,261	4,261	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,261	0	4
38	a	2506	100	5,001	0	4,251	4,251	4,251	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,251	0	4
39	a	2506	40	17,635	134,908	14,990	14,990	14,990	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149,898	135	(8)
40	a	2489	6	3,931	106,916	(4,977)	(159)	3,247	0	0	(3,406)	0	(4,818)	0	0	0	0	0	0	0	0	0	0	101,939	107	42
	b	2489	8	10,045																						
41	a	2496	64	27,000	66,960	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66,960	67	(56)
42	a	2488	14	21,425	53,134	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53,134	53	(45)
43	a	2488	12	17250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
44	a	2488	1	14,835	36,791	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36,791	36	(15)
45	a	2487	38	17,272	(34,286)	34,286	34,286	34,286	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(150)
	b	2487	32	25,650																						
	c	2487	30	25,650																						
TOTAL					3,267,287	60,052	187,692	250,907	23,157	11,630	(98,002)	0	39,287	(168,650)	(22,154)	(600)	(47,795)	2,500	17,776	21,083	0	53,896	72,273	3,291,222	3,250	48

					TABLE 1: POTENTIAL DEVELOPMENT SITE SUMMARY										
Site #	Site Info				Existing Conditions										
	Tax Block	Tax Lot	Lot Area (SF)		Existing Zoning	Existing Overlay	Built FAR	Maximum Res FAR	Maximum Comm FAR	Maximum Facility FAR	Comm1 SF+	Auto Rel.	Office (SF)	Total SF	Total DU's
1	a	3198	77	1745	C8-3		1.22	0	2	6.5	0	0	0	2,136	2
	b	3198	78	4278	C8-3		1	0	2	6.5	4,268	0	0	4,268	0
	c	3198	76	2779	R7-1		0.97	3.44	0	4.8	0	0	0	2,700	1
2	a	3187	25	9120	C8-3		1	0	2	6.5	9,120	0	0	9,120	0
	b	3187	18	17500	C8-3		0.12	0	2	6.5	2,100	2,100	0	2,100	0
3	a	3187	5	2500	C8-3		0	0	2	6.5	0	0	0	0	0
	b	3187	3	4579	C8-3		0.98	0	2	6.5	4,465	0	0	4,465	0
	c	3187	7	7500	C8-3		4.43	0	2	6.5	33,250	0	0	33,250	0
	d	3187	1	4875	C8-3		1	0	2	6.5	4,875	0	2,437	4,875	0
4	a	3197	29	10000	C8-3		2	0	2	6.5	20,000	0	0	20,000	0
5	a	3197	35	5000	C8-3		1	0	2	6.5	5,000	0	0	5,000	0
6	a	3196	81	10000	C8-3		0.83	0	2	6.5	8,340	0	0	8,340	0
	b	3196	79	2500	R7-1	C1-4/R7-1	1.6	3.44	0	4.8	2,000	0	0	4,000	1
7	a	3208	36	6947	R7-1	C1-4	0.78	3.44	0	4.8	5,397	0	0	5,397	0
	b	3208	39	10000	R7-1	C1-4	0.98	3.44	0	4.8	9,750	0	0	9,750	0
	c	3208	35	2528	R7-1	C1-4	0	3.44	0	4.8	0	0	0	0	0
8	a	3208	45	2500	R7-1	C1-4	0.64	3.44	0	4.8	0	0	0	1,608	2
	b	3208	46	5000	R7-1	C1-4	0.3	3.44	0	4.8	748	0	0	1,496	1
9	a	3196	36	5000	C8-3		1.13	0	2	6.5	5,672	0	0	5,672	0
10	a	3186	47	2500	C8-3		0.9	0	2	6.5	2,250	0	0	2,250	0
	B	3186	41	4700	C8-3		1.22	0	2	6.5	5,738	0	0	5,738	0
	C	3186	44	7500	C8-3		0.8	0	2	6.5	6,000	0	0	6,000	0
	D	3186	48	2500	C8-3		0.06	0	2	6.5	150	0	0	150	0
11	a	3186	17	14800	C8-3		2	0	2	6.5	29,600	0	0	29,600	0
12	a	3195	40	10000	C8-3		1	0	2	6.5	10,000	0	10,000	10,000	0
13	a	3195	90	5479	C8-3		8.17	0	2	6.5	44,748	44,748	0	44,748	0
	b	3195	92	7498	C8-3		1.84	0	2	6.5	13,760	0	0	13,760	0
	c	3195	84	5410	C8-3		0.99	0	2	6.5	5,329	0	0	5,329	0
	d	3195	83	3063	C8-3		0.92	0	2	6.5	2,821	0	2,821	2,821	0
14	a	3192	34	8245	C8-3		1.69	0	2	6.5	13,900	13,900	0	13,900	0
15	a	3179	30	15000	C8-3		0.51	0	2	6.5	7,622	7,622	0	7,622	0

[illegible]

					TABLE 1: POTENTIAL DEVELOPMENT SITE SUMMARY										
Site #		Site Info			Existing Conditions										
		Tax Block	Tax Lot	Lot Area (SF)	Existing Zoning	Existing Overlay	Built FAR	Maximum Res FAR	Maximum Comm FAR	Maximum Facility FAR	Comm'l SF+	Auto Rel.	Office (SF)	Total SF	Total DU's
34	a	2863	46	10833	R7-1	C2-4	1.5	4	0	4.8	16,200	0	4,100	16,200	0
35	a	2854	30	10,000	R7-1	C2-4	0	3.44	0	4.8	0	0	0	0	0
36	a	2863	54	10833	R7-1	C2-4/R7-1	1.5	4	0	4.8	16,200	0	0	16,200	0
37	a	2863	1	20800	R7-1	C2-4/R7-1	1.51	4	0	4.8	31,460	0	0	31,460	0
38	a	2862	90	18874	C8-3		1.96	0	2	6.5	37,000	16,613	0	37,000	0
39	a	2853	17	12500	C8-3		1	0	2	6.5	12,500	12,500	0	12,500	0
40	a	2862	103	40038	C8-3		1.14	0	2	6.5	45,800	0	0	45,800	0
41	a	2853	11	4350	C8-3		1.96	0	2	6.5	8,510	0	0	8,510	0
	b	2853	9	10325	C8-3		1	0	2	6.5	10,300	10,300	0	10,300	0
	c	2853	12	5852	C8-3		1	0	2	6.5	5,852	5,852	0	5,852	0
	d	2853	15	5000	C8-3		0.58	0	2	6.5	2,900	2,900	0	2,900	0
42	a	2853	6	5774	C8-3		2.25	0	2	6.5	13,000	6,500	0	13,000	0
	b	2853	1	12420	C8-3		2	0	2	6.5	24,840	9,936	0	24,840	0
43	a	2852	9	12994	R7-1	C2-4/R7-1	0.7	4	0	4.8	9,089	3,030	0	9,089	0
	b	2852	4	7767	R7-1	C2-4/R7-1	0.67	4	0	4.8	5,175	5,175	0	5,175	0
	c	2852	1	5947	R7-1	C2-4	1	4	0	4.8	5,933	0	0	5,933	0
44	a	2851	1	3,082	R7-1	C2-4	1	4	0	4.8	3,070	0	0	3,070	0
	b	2851	2	12,528	R7-1	C2-4	1.16	4	0	4.8	14,478	0	0	14,478	0
45	a	2850	9	15831	R7-1	C2-4/R7-1	0.7	4	0	4.8	11,150	0	0	11,150	0
46	a	2861	74	12514	R7-1	C2-4/R7-1	1.03	4	0	4.8	12,830	10,264	0	12,830	0
	b	2861	79	2500	R7-1	C2-4	0.7	4	0	4.8	1,750		0	1,750	0
47	a	2849	5	10000	C8-3		1	0	2	6.5	10,000	5,000	0	10,000	0
	b	2849	1	11000	C8-3		2	0	2	6.5	22,000	22,000	0	22,000	0
48	a	2848	12	9000	C8-3		1.89	0	2	6.5	17,000	14,000	0	17,000	0
	b	2848	16	5000	C8-3		1.11	0	2	6.5	5,538	2,769	538	5,538	0
49	a	2860	34	10,542	C8-3		0.27	0	2	6.5	2,800	0	0	2,800	0
50	a	2859	44	7314	C8-3		1	0	2	6.5	7,300	0	0	7,300	0
	b	2859	46	13860	C8-3		1	0	2	6.5	13,860	13,860	0	13,860	0
	c	2859	50	13698	C8-3		1	0	2	6.5	13,698	13,698	0	13,698	0



					TABLE 1: POTENTIAL DEVELOPMENT SITE SUMMARY										
Site #		Site Info			Existing Conditions										
		Tax Block	Tax Lot	Lot Area (SF)	Existing Zoning	Existing Overlay	Built FAR	Maximum Res FAR	Maximum Comm FAR	Maximum Facility FAR	Comm1 SF+	Auto Rel.	Office (SF)	Total SF	Total DU's
51	a	2846	27	8964	C8-3		1.96	0	2	6.5	17,526	17,526	0	17,526	0
	b	2846	32	10000	C8-3		1	0	2	6.5	10,000	2,500	0	10,000	0
	c	2846	21	15500	C8-3		0.85	0	2	6.5	13,250	13,250	0	13,250	0
52	a	2859	26	12350	C8-3		2	0	2	6.5	24,700	0	0	24,700	0
	b	2859	51	14000	C8-3		0.79	0	2	6.5	11,000	0	0	11,000	0
	c	2859	30	10400	C8-3		1	0	2	6.5	10,400	10,400	0	10,400	0
53	a	2865	19	12200	C8-3		1.97	0	2	6.5	24,000	0	0	24,000	0
54	a	2859	18	2746	C8-3		0.49	0	2	6.5	1,350	1,350	0	1,350	0
	b	2859	17	2690	C8-3		0	0	2	6.5	0	0	0	0	0
	c	2859	5	7546	C8-3		0.99	0	2	6.5	7,500	7,500	0	7,500	0
	d	2859	8	9328	C8-3		0.8	0	2	6.5	7,496	7,496	0	7,496	0
	e	2859	4	2197	C8-3		0.91	0	2	6.5	2,000	2,000	0	2,000	0
	f	2859	89	2060	C8-3		0	0	2	6.5	0	0	0	0	0
	g	2859	10	6870	C8-3		0.84	0	2	6.5	5,800	5,800	0	5,800	0
55	a	2846	4	7555	C8-3		0.57	0	2	6.5	4,315	0	0	4,315	0
	b	2846	1	1100	C8-3		1	0	2	6.5	1,095	0	0	1,095	0
56	a	2858	9	12691	C8-3		1.68	0	2	6.5	21,330	21,330	0	21,330	0
57	a	2844	12	6850	C8-3		2.92	0	2	6.5	20,000	17,500	0	20,000	0
58	a	2857	23	6998	C8-3		0	0	2	6.5	0	0	0	0	0
	b	2857	24	7300	C8-3		0	0	2	6.5	0	0	0	0	0
59	a	2858	23	7487	C8-3		2	0	2	6.5	15,000	0	0	15,000	0
	b	2858	28	3467	C8-3		0.36	0	2	6.5	1,233	1,233	0	1,233	0
60	a	2844	1	10000	C8-3		1	0	2	6.5	10,000	0	0	10,000	0
61	a	2843	12	10000	C4-4		1	3.44	3.4	6.5	10,000	0	0	10,000	0
62	a	2843	5	17500	C4-4		0.97	3.44	3.4	6.5	17,000	0	0	17,000	0
63	a	2842	6	6362	C4-4	C4-4	1	3.44	3.4	6.5	6,362	0	0	6,362	0
64	a	2842	10	4424	C4-4		2.93	3.44	3.4	6.5	12,960	0	8,540	12,960	0
65	a	2842	18	14675	C4-4		0.99	3.44	3.4	6.5	14,500	0	0	14,500	0
66	a	2843	69	9691	C4-4		1.94	3.44	3.4	6.5	18,757	0	6,378	18,757	0
67	a	2842	42	12447	C4-4		2.94	4	3.4	6.5	36,605	0	0	36,605	0
	b	2842	47	9875	C4-4		0.99	3.44	4	6.5	9,800	0	0	9,800	0

					TABLE 1: POTENTIAL DEVELOPMENT SITE SUMMARY										
Site #	Site Info				Existing Conditions										
	Tax Block	Tax Lot	Lot Area (SF)		Existing Zoning	Existing Overlay	Built FAR	Maximum Res FAR	Maximum Comm FAR	Maximum Facility FAR	Comm/ SF+	Auto Rel.	Office (SF)	Total SF	Total DU's
68	a	2842	51	9000	C4-4		0.72	3.44	4	6.5	6,500	0	0	6,500	0
	a	2842	55	9000	C4-4		0.97	4	3.4	6.5	8,743	0	0	8,743	0
69	a	2833	1	9703	C4-4		1	4	3.4	6.5	9,700	0	0	9,700	0
70	a	2833	37	3025	C4-4		0.63	3.44	3.4	7.2	1,894	0	0	1,894	0
	b	2833	35	3025	C4-4		0.58	3.44	3.4	7.2	1,755	0	0	1,755	0
71	a	2857	71	10000	C8-3		2	0	2	6.5	20,000	10,000	0	28,000	0
72	a	2857	90	13879	C8-3		7.96	0	2	6.5	110,430	0	0	110,430	0
73	a	2857	64	14168	C8-3		1.91	0	2	6.5	27,000	26,500	0	27,000	0
74	a	2872	82	12474	C8-3/R7-1		0.8	0	2	6.5	10,000	10,000	0	10,000	0
75	a	2872	86	10913	R7-1	C1-4/R7-1	0.19	3.44	0	4.8	2,100	2,100	0	2,100	0
76	a	2872	50	10488	R7-1	C1-4/R7-1	1.35	3.44	0	4.8	14,200	6,000	0	14,200	0
	b	2872	46	5440	R7-1	C1-4/R7-1	2	3.44	0	4.8	10,880	0	0	10,880	0
77	a	2871	78	7434	M1-2		0	0	2	4.8	0	0	0	0	0
78	a	2873	1	11215	R7-1	C1-4	0.87	4	0	4.8	9,800	0	0	9,800	0
79	a	2874	1	2983	R7-1	C1-4/R7-1	0	4	0	4.8	0	0	0	0	0
80	a	2521	15	11655	R7-1	C1-4	0.14	4	0	4.8	1,679	0	0	1,679	0
81	a	2522	65	7490	R7-1	C1-4/R7-1	0.68	3.44	0	4.8	5,128	3,384	0	5,128	0
	b	2522	68	2379	R7-1	C1-4	0.88	3.44	0	4.8	2,100	0	0	2,100	0
82	a	2522	96	3900	R7-1	C1-4	1.59	4	0	4.8	6,196	0	0	6,196	0
83	a	2522	81	3600	R7-1	C1-4	1.94	3.44	0	4.8	7,000	0	3,500	7,000	0
84	a	2856	29	27000	M1-2	C2-4	1.56	0	2	4.8	42,192	0	42,192	42,192	0
85	a	2856	19	2625	M1-2		0.95	0	2	4.8	2,500	0	0	2,500	0
	b	2856	23	2500	M1-2		1.48	0	2	4.8	0	0	0	3,694	3
	c	2856	24	2500	M1-2		1.45	0	2	4.8	0	0	0	3,622	3
	d	2856	20	26063	R8/M1-2	C2-4	2	6.02	0	6.5	52,250	0	19,100	52,250	0

					TABLE 1: POTENTIAL DEVELOPMENT SITE SUMMARY										
Site #		Site Info			Existing Conditions										
		Tax Block	Tax Lot	Lot Area (SF)	Existing Zoning	Existing Overlay	Built FAR	Maximum Res FAR	Maximum Comm FAR	Maximum Facility FAR	Comm/ SF+	Auto Rel.	Office (SF)	Total SF	Total DU's
86	a	2864	27	9977	M1-2	M1-2	2	0	2	4.8	20,000	19,000	0	20,000	0
87	a	2856	45	9963	R8/M1-2	C2-4	1.09	6.02	0	6.5	10,828		10,828	10,828	0
88	b	2856	49	12,474	M1-2		1.45	0	2	4.8	18,100	9,050	0	18,100	0
89	a	2856	53	22914	M1-2	C2-4	0.51	0	2	4.8	11,751	8,800	0	11,751	0
90	a	2871	2	59050	C8-3		0.44	0	2	6.5	26,000	0	0	26,000	0
91	a	2855	1	5516	C8-3		0.03	0	2	6.5	142	0	0	142	0
	b	2855	12	3685	C8-3		0.54	0	2	6.5	1,975	1,975	0	1,975	0
	c	2855	8	4514	C8-3		1	0	2	6.5	4,500	4,500	0	4,500	0
	d	2855	15	3797	C8-3		0.84	0	2	6.5	3,180	3,180	0	3,180	0
92	a	2506	54	10350	C8-3		0.86	0	2	6.5	8,930	0	0	8,930	0
	a	2506	44	16858	C8-3		1.62	0	2	6.5	27,256	0	0	27,256	0
93	a	2506	62	25375	C8-3	C2-4/C8-3	0.5	0	2	6.5	12,765	0	0	12,765	0
94	a	2489	11	7421	C8-3		0.28	0	2	6.5	2,093	2,093	0	2,093	0
	b	2489	14	5825	C8-3		0.5	0	2	6.5	2,890	2,890	0	2,890	0
95	a	2489	1	9807	R8	C1-4/R8	2	7.2	0	6.5	19,600	0	0	19,600	0
	a	2489	29	1500	R8	C1-4/R8	1	7.2	0	6.5	1,500	0	0	1,500	0
	b	2489	27	3480	R8	C1-4/R8	0.93	7.2	0	6.5	3,240	0	0	3,240	0
	b	2489	30	3020	R8	C1-4/R8	1	7.2	0	6.5	3,020	0	0	3,020	0
96	a	2489	33	9409	R8	C1-4/R8	0.96	7.2	0	6.5	8,989	0	0	8,989	0
97	a	2496	58	11000	R8	C1-4/R8	0.9	7.2	0	6.5	9,900	0	0	9,900	0
98	a	2488	23	2500	R8	C1-4	1	7.2	0	6.5	2,500	0	0	2,500	0
	b	2488	20	5200	R8	C1-4	0.88	7.2	0	6.5	4,550	0	0	4,550	0
99	a	2496	73	24165	R8	C2-4/R8	0.67	6.02	0	6.5	16,200	16,200	0	16,200	0
100	a	2487	20	51,301	R8		1.89	6.02	0	6.5	0	0	0	96,774	126
101	a	2487	10	42,550	R8		2.27	6.02	0	6.5	0	0	0	96,774	126
Totals															



TABLE 1: POTENTIAL DEVELOPMENT SITE SUMMARY																					
Site #		Site Info			Future Without-Action Conditions																
		Tax Block	Tax Lot	Lot Area (SF)		Residential SF	Total Comm'l SF+	Restaurant SF	Supermarket (FRESH)	Auto-Related SF	Office SF	Retail ONLY	Storage SF	Garage SF	Other Comm SF	Industrial SF	Total Community Facility	Total SF	NO ACTION Total DU's	Total Parking	Bldg Height
16	a	3192	55	5071	Auto-Related Commercial	0	16,005	0	0	0	0	9,500	0	0	500	0	6,005	16,005	0	0	0
	b	3192	56	8962	Day Care Center																15
	c	3192	60	15037	Retail																15
17	a	3179	8	11625	Auto-Related Commercial, Retail	0	41,600	0	0	18,470	1,080	1,790	0	15,000	0	5,260	0	41,600	0	70	15
	b	3179	13	15000	Auto-Related Commercial, Parking Facilities																25
18	a	3192	66	13,500	Retail	0	5,000	0	0	0	0	5,000	0	0	0	0	0	5,000	0	5	15
19	a	3192	75	9895	Retail, Community Facility	0	25,425	0	0	0	0	8,475	0	0	0	0	16,950	25,425	0	0	35
20	a	3210	65	14145	Community Facility	0	37,185	0	0	0	0	0	0	0	0	0	37,185	37,185	0	0	25
21	a	2868	139	7751	Medical Office	0	7,600	0	0	0	0	0	0	0	0	0	7,600	7,600	0	0	15
22	a	2869	130	7285	Retail	0	12,658	0	1,600	0	0	11,058	0	0	0	0	0	12,658	0	0	15
	a	2869	127	6600	Retail, Grocery																15
23	a	3193	33	8141	Retail, Restaurant	0	8,000	1,600	0	0	0	6,400	0	0	0	0	0	8,000	0	0	15
24	a	2870	31	9196	Retail	0	9,000	0	900	0	0	8,100	0	0	0	0	0	9,000	0	0	15
25	a	2863	32	5652	Retail	0	38,099	3,261	1,624	0	0	13,964	0	0	0	0	19,250	38,099	0	0	15
	b	2863	28	6000	Community Facility																25
	c	2863	30	4275	Retail, Restaurant																15
	D	2863	40	5000	House of Worship																35
	e	2863	35	9181	Retail																15
26	a	3179	2	5,071	Retail	0	3,000	0	0	0	0	3,000	0	0	0	0	0	3,000	0	0	15
27	a	3179	63	10,095	Retail	0	13,731	0	0	0	0	10,661	0	0	3,070	0	0	13,731	0	0	15
28	a	3178	1	23,000	Retail, Storage	0	46,000	0	0	0	0	0	46,000	0	0	0	0	46,000	0	0	45
29	a	3178	60	10,209	Retail	0	9,404	0	0	0	0	9,404	0	0	0	0	0	9,404	0	0	15
30	a	2854	44	24,120	Retail	0	22,728	0	0	0	0	22,728	0	0	0	0	0	22,728	0	0	15
31	a	2829	45	26,174	Retail	0	15,800	0	0	0	0	15,800	0	0	0	0	0	15,800	0	0	15
32	a	2854	42	5,000	Retail	0	5,000	0	0	0	0	5,000	0	0	0	0	0	5,000	0	0	15
33	a	2854	39	7,500	Commercial	0	5,000	5,000	0	0	0	0	0	0	0	0	0	5,000	0	0	15







TABLE 1: POTENTIAL DEVELOPMENT SITE SUMMARY																					
Site #		Site Info			Future Without-Action Conditions																
		Tax Block	Tax Lot	Lot Area (SF)		Residential SF	Total Comm/ SF+	Restaurant SF	Supermarket (FRESH)	Auto-Related SF	Office SF	Retail ONLY	Storage SF	Garage SF	Other Comm SF	Industrial SF	Total Community Facility	Total SF	NO ACTION Total DU's	Total Parking	Bldg Height
68	a	2842	51	9000	Retail	0	15,243	0	5,022	0	0	10,222	0	0	0	0	0	15,243	0	0	15
	a	2842	55	9000	Retail																
69	a	2833	1	9703	Retail	0	9,700	0	0	0	0	9,700	0	0	0	0	0	9,700	0	0	15
70	a	2833	37	3025	Retail	0	3,649	0	0	0	0	3,649	0	0	0	0	0	3,649	0	0	15
	b	2833	35	3025	Retail																
71	a	2857	71	10000	Parking Facilities, Auto-Related Commercial	0	20,000	0	0	10,000	0	0	0	10,000	0	0	0	20,000	0	140	35
72	a	2857	90	13879	Warehouse	0	110,430	0	0	0	0	0	110,430	0	0	0	0	110,430	0	0	105
73	a	2857	64	14168	Auto-Related Commercial	0	27,000	0	0	26,500	0	500	0	0	0	0	0	27,000	0	0	25
74	a	2872	82	12474	Auto-Related Commercial	0	10,000	0	0	5,000	0	0	0	5,000	0	0	0	10,000	0	0	25
75	a	2872	86	10913	Auto-Related Commercial	0	2,100	0	0	2,100	0	0	0	0	0	0	0	2,100	0	29	15
76	a	2872	50	10488	Commercial	0	25,080	0	0	0	0	10,800	6,000	0	5,440	0	2,840	25,080	0	0	25
	b	2872	46	5440	Commercial																
77	a	2871	78	7434	Auto-Related Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0
78	a	2873	1	11215	House of worship	0	9,800	0	0	0	0	0	0	0	0	0	9,800	9,800	0	0	30
79	a	2874	1	2983	Vacant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80	a	2521	15	11655	Retail, Residential	36,713	9,907	0	0	0	0	9,907	0	0	0	0	0	46,620	37	10	10
81	a	2522	65	7490	Auto-Related Commercial, Retail	0	7,228	0	0	3,384	0	3,844	0	0	0	0	0	7,228	0	0	15
	b	2522	68	2379	Retail																
82	a	2522	96	3900	Mixed Residential and Commercial Building	0	6,196	0	0	0	0	0	0	0	6,196	0	0	6,196	0	0	35
83	a	2522	81	3600	Restaurant	0	7,000	7,000	0	0	0	0	0	0	0	0	0	7,000	0	0	30
84	a	2856	29	27000	Community Facility	0	42,192	0	0	0	0	0	0	0	0	0	42,192	42,192	0	0	20
85	a	2856	19	2625	Light Industrial	7,316	54,750	0	0	0	52,250	2,500	0	0	0	0	0	62,066	6	2	15
	b	2856	23	2500	Multi-Family Walk-up Residential																35
	c	2856	24	2500	Multi-Family Walk-up Residential																35
	d	2856	20	26063	Office																30

TABLE 1: POTENTIAL DEVELOPMENT SITE SUMMARY																					
Site #		Site Info			Future Without-Action Conditions																
		Tax Block	Tax Lot	Lot Area (SF)		Residential SF	Total Comm SF+	Restaurant SF	Supermarket (FRESH)	Auto-Related SF	Office SF	Retail ONLY	Storage SF	Garage SF	Other Comm SF	Industrial SF	Total Community Facility	Total SF	NO ACTION Total DU's	Total Parking	Bldg Height
86	a	2864	27	9977	Auto-Related Commercial, Retail	0	20,000	0	0	19,000	0	1,000	0	0	0	0	0	20,000	0	0	25
87	a	2856	45	9963	House of Worship	0	10,828	0	0	0	0	0	0	0	0	0	10,828	10,828	0	0	25
88	b	2856	49	12,474	Retail, Storage	0	18,100	0	9,050	0	0	0	9,050	0	0	0	0	18,100	0	9	15
89	a	2856	53	22914	Auto-Related Commercial, Retail	0	11,751	0	0	8,800	0	2,951	0	0	0	0	0	11,751	0	0	15
90	a	2871	2	59050	Office, Community Facility, Commercial Service	0	26,000	0	0	0	8,684	4,316	0	0	0	0	13,000	26,000	0	26	10
91	a	2855	1	5516	Auto-Related Commercial	0	9,797	0	0	9,655	0	0	0	0	142	0	0	9,797	0	0	10
	b	2855	12	3685	Parking Facilities																15
	c	2855	8	4514	Transportation and Utility																15
	d	2855	15	3797	Transportation and Utility																15
92	a	2506	54	10350	Retail	0	36,186	2,726	11,656	0	0	8,177	0	0	0	0	13,628	36,186	0	18	10
	a	2506	44	16858	Retail, Community Facility																25
93	a	2506	62	25375	Retail, Surface Parking	0	12,765	0	0	0	0	12,765	0	0	0	0	0	12,765	0	0	15
94	a	2489	11	7421	Auto-Related Commercial	0	4,983	0	0	4,983	0	0	0	0	0	0	0	4,983	0	2	10
	b	2489	14	5825	Auto-Related Commercial																15
95	a	2489	1	9807	Retail	0	27,360	0	0	0	0	27,360	0	0	0	0	0	27,360	0	0	25
	a	2489	29	1500	Retail																15
	b	2489	27	3480	Retail																15
	b	2489	30	3020	Retail																15
96	a	2489	33	9409	Retail	0	8,989	0	0	0	0	8,989	0	0	0	0	0	8,989	0	0	15
97	a	2496	58	11000	Retail, Restaurant	0	9,900	3,267	0	0	0	6,633	0	0	0	0	0	9,900	0	0	15
98	a	2488	23	2500	Retail	0	7,050	0	1,138	0	0	5,913	0	0	0	0	0	7,050	0	6	15
	b	2488	20	5200	Retail																10
99	a	2496	73	24165	Parking Facilities, Auto-Related Commercial	0	16,200	0	0	16,200	0	0	0	0	0	0	0	16,200	0	0	15
100	a	2487	20	51,301	Residential	308,831	0	0	0	0	0	0	0	0	0	0	0	308,831	309	124	125
101	a	2487	10	42,550	Residential	256,150	0	0	0	0	0	0	0	0	0	0	0	256,150	256	102	125
Totals						618,202	1,872,534	47,274	82,512	376,200	81,570	494,212	267,898	190,361	82,591	5,260	244,657	2,490,736	612	1,594	

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Site #		Site Info			Future With-Action Conditions																	
		Tax Block	Tax Lot	Lot Area (SF)	Prop. Zoning	Proposed Max Res. FAR	Proposed Max Commercial FAR	Proposed Max C. Facility FAR	Prop. Overlay		TOT Residential SF	Total Commercial SF+	Total Comm'l SF (minus restaurant)	Restaurant SF	Supermarket (FRESH)	Retail (ONLY)	Office SF	C Fac SF	Total SF	WITH ACTION Total DU's	Total Parking	Max Bldg Height
1	a	3198	77	1745	R7A	4.6	2	4.6	C2-4	Retail (1), Residential	33,007.50	7,482	7,482	0	0	7,482	0	0	40,489	33	7	115
	b	3198	78	4278	R7A	4.6	2	4.6	C2-4													
	c	3198	76	2779	R7A	4.6	2	4.6	C2-4													
2	a	3187	25	9120	R7A	4.6	2	4.6	C2-4	Retail (1), Residential	99,825	22,627	22,627	0	0	22,627	0	0	122,452	100	23	115
	b	3187	18	17500	R7A	4.6	2	4.6	C2-4													
3	a	3187	5	2500	R7A	4.6	2	4.6	C2-4	Retail, Restaurant (1), Residential Conversion (6), Residential	77,246.25	10,161	8,942	1,219	0	8,942	0	0	87,407	77	10	115
	b	3187	3	4579	R7A	4.6	2	4.6	C2-4													
	c	3187	7	7500	R7A	4.6	2	4.6	C2-4													
	d	3187	1	4875	R7A	4.6	2	4.6	C2-4													
4	a	3197	29	10000	R7A	4.6	2	4.6	C2-4	FRESH (1) Community Center (1), Residential	36,000	20,000	20,000	0	10,000	0	0	10,000	56,000	36	10	115
5	a	3197	35	5000	R7A	4.6	2	4.6	C2-4	Restaurant, Retail (1), Residential	18,750	4,250	1,750	2,500	0	1,750	0	0	23,000	19	4	115
6	a	3196	81	10000	R7A	4.6	2	4.6	C2-4	Retail (1), Residential	46,875	10,625	10,625	0	0	10,625	0	0	57,500	47	11	115
	b	3196	79	2500	R7A	4.6	2	4.6	C2-4													
7	a	3208	36	6947	R7A	4.6	2	4.6	C2-4	Retail, FRESH (1), Residential	91,281.25	17,804	17,804	0	9,750	8,054	0	0	109,085	91	8	95
	b	3208	39	10000	R7A	4.6	2	4.6	C2-4													
	c	3208	35	2528	R7A	4.6	2	4.6	C2-4													
8	a	3208	45	2500	R7A	4.6	2	4.6	C2-4	Retail, House of Worship (1), Residential	28,125	6,375	6,375	0	0	2,125	0	4,250	34,500	28	6	95
	b	3208	46	5000	R7A	4.6	2	4.6	C2-4													
9	a	3196	36	5000	R7A	4.6	2	4.6	C2-4	Retail (1), Residential	18,750	4,250	4,250	0	0	4,250	0	0	23,000	19	4	115
10	a	3186	47	2500	R7A	4.6	2	4.6	C2-4	Retail, House of Worship (1), Residential	64,875	14,245	14,245	0	1,438	6,807	0	6,000	79,120	65	14	115
	B	3186	41	4700	R7A	4.6	2	4.6	C2-4													
	C	3186	44	7500	R7A	4.6	2	4.6	C2-4													
	D	3186	48	2500	R7A	4.6	2	4.6	C2-4													
11	a	3186	17	14800	R7A	4.6	2	4.6	C2-4	Retail (1), Residential	55,500	12,580	12,580	0	0	12,580	0	0	68,080	56	13	115
12	a	3195	40	10000	R7A	4.6	2	4.6	C2-4	Retail (1), Residential	37,500	8,500	8,500	0	0	8,500	0	0	46,000	38	9	95
13	a	3195	90	5479	R7A	4.6	2	4.6	C2-4	Retail, House of Worship, Medical Office (1), Residential	79,713.35	18,957	18,957	0	0	9,256	0	9,701	98,670	80	19	115
	b	3195	92	7498	R7A	4.6	2	4.6	C2-4													
	c	3195	84	5410	R7A	4.6	2	4.6	C2-4													
	d	3195	83	3063	R7A	4.6	2	4.6	C2-4													
14	a	3192	34	8245	R7A	4.6	0	4.6	N/A	Retail (1), Residential	30,918.75	0	0	0	0	0	0	0	30,919	31	0	95
15	a	3179	30	15000	R7A	4.6	2	4.6	C2-4	Retail (1), Residential	56,250	12,750	12,750	0	0	12,750	0	0	69,000	56	13	115

TABLE 1: PROJECTED DEVELOPMENT SITE SUMMARY																						
Site #		Site Info			Future With-Action Conditions																	
		Tax Block	Tax Lot	Lot Area (SF)	Prop. Zoning	Proposed Max Res. FAR	Proposed Max Commercial FAR	Proposed Max C. Facility FAR	Prop. Overlay		TOT Residential SF	Total Commercial SF+	Total Comm'l SF (minus restaurant)	Restaurant SF	Supermarket (FRESH)	Retail (ONLY)	Office SF	C Fac SF	Total SF	WITH ACTION Total DU's	Total Parking	Max Bldg Height
16	a	3192	55	5071	R7A	4.6	2	4.6	C2-4	Retail, Day Care Center (1), Residential	19,016.25	24,710	24,710	0	0	17,092	0	6,005	196,119	171	23	115
	b	3192	56	8962	C4 4D	7.2	3.4	6.5	N/A		152,393.65											165
	c	3192	60	15037	C4 4D	7.2	3.4	6.5	N/A													
17	a	3179	8	11625	R7A	4.6	2	4.6	C2-4	Retail (1), Residential	99,843.75	22,631	22,631	0	0	22,631	0	0	122,475	100	23	115
	b	3179	13	15000	R7A	4.6	2	4.6	C2-4													
18	a	3192	66	13,500	C4 4D	7.2	3.4	6.5	N/A	Retail (1), Residential	85,725	11,475	11,475	0	0	11,475	0	0	97,200	86	35	165
19	a	3192	75	9895	C4 4D	7.2	3.4	6.5	N/A	Community Center (1), Residential	54,294	16,950	16,950	0	0	0	0	16,950	71,244	54	17	165
20	a	3210	65	14145	C4 4D	7.2	3.4	6.5	N/A	Medical Office (2), Residential	64,659	37,185	37,185	0	0	0	0	37,185	101,844	65	37	145
21	a	2868	139	7751	C4 4D	7.2	3.4	6.5	N/A	Medical Office (1), Residential	48,207.20	7,600	7,600	0	0	0	0	7,600	55,807	48	8	145
22	a	2869	130	7285	C4 4D	7.2	3.4	6.5	N/A	Retail (1), Residential	88,169.75	11,802	11,802	0	0	11,802	0	0	99,972	88	12	145
	a	2869	127	6600	C4 4D	7.2	3.4	6.5	N/A													
23	a	3193	33	8141	C4 4D	7.2	3.4	6.5	N/A	Retail (1), Residential	51,695.35	6,920	6,920	0	0	6,920	0	0	58,615	52	7	145
24	a	2870	31	9196	C4 4D	7.2	3.4	6.5	N/A	Retail (1), Residential	58,394.60	7,817	7,817	0	0	7,817	0	0	66,211	58	8	145
25	a	2863	32	5652	C4 4D	7.2	3.4	6.5	N/A	Retail, Restaurant, Grocery, (1), Community Center, House of Worship (2), Residential	181,285.80	25,742	24,343	1,399	1,060	13,783	0	19,250	207,028	181	35	165
	b	2863	28	6000	C4 4D	7.2	3.4	6.5	N/A													
	c	2863	30	4275	C4 4D	7.2	3.4	6.5	N/A													
	D	2863	40	5000	C4 4D	7.2	3.4	6.5	N/A													
	e	2863	35	9181	C4 4D	7.2	3.4	6.5	N/A													
26	a	3179	2	5,071	C4 4D	7.2	3.4	6.5	#N/A	Retail (2), residential	27,129.85	9,381	9,381	0	0	9,381	0	0	36,511	27	9	165
27	a	3179	63	10,095	C4 4D	7.2	3.4	6.5	#N/A	Retail (2), residential	54,008.25	18,676	18,676	0	0	18,676	0	0	72,684	54	19	145
28	a	3178	1	23,000	C4 4D	7.2	3.4	6.5	#N/A	Retail (2), residential	123,050.0	42,550	42,550	0	0	42,550	0	0	165,600	123	43	145
29	a	3178	60	10,209	C4 4D	7.2	3.4	6.5	#N/A	Retail (2), residential	54,618.15	18,887	18,887	0	0	18,887	0	0	73,505	55	19	145
30	a	2854	44	24,120	C4 4D	7.2	3.4	6.5	#N/A	Retail (2), residential	129,042.0	44,622	44,622	0	0	44,622	0	0	173,664	129	45	145
31	a	2829	45	26,174	C4 4D	7.2	3.4	6.5	#N/A	Retail (2), residential	140,030.90	48,422	48,422	0	0	48,422	0	0	188,453	140	48	145
32	a	2854	42	5,000	C4 4D	7.2	3.4	6.5	#N/A	Retail (2), residential	26,750	9,250	9,250	0	0	9,250	0	0	36,000	27	9	165
33	a	2854	39	7,500	C4 4D	7.2	3.4	6.5	#N/A	Restaurant (2), residential	40,125	13,875	0	13,875	0	0	0	0	54,000	40	14	165

[illegible]

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Site #		Site Info			Future With-Action Conditions																	
		Tax Block	Tax Lot	Lot Area (SF)	Prop. Zoning	Proposed Max Res. FAR	Proposed Max Commercial FAR	Proposed Max C. Facility FAR	Prop. Overlay		TOT Residential SF	Total Commercial SF+	Total Comm'l SF (minus restaurant)	Restaurant SF	Supermarket (FRESH)	Retail (ONLY)	Office SF	C Fac SF	Total SF	WITH ACTION Total DU's	Total Parking	Max Bldg Height
51	a	2846	27	8964	R7A	4.6	2	4.6	C2-4	Retail (1), Residential	155,240	29,294	29,294	0	0	29,294	0	0	184,534	155	29	115
	b	2846	32	10000	R8A	7.2	2	6.5	C2-4													
	c	2846	21	15500	R7A	4.6	2	4.6	C2-4													
52	a	2859	26	12350	R7A	4.6	0	4.6	N/A	Retail (1), Residential	137,812.50	11,900	11,900	0	0	0	0	0	149,713	138	0	115
	b	2859	51	14000	R7A	4.6	2	4.6	C2-4													
	c	2859	30	10400	R7A	4.6	0	4.6	N/A													
53	a	2865	19	12200	R8A	7.2	0	6.5	#N/A	Residential	77,470	0	0	0	0	0	0	0	77,470	77	0	145
54	a	2859	18	2746	R7A	4.6	0	4.6	#N/A	Residential	125,388.75	0	0	0	0	0	0	0	125,389	125	0	95
	b	2859	17	2690	R7A	4.6	0	4.6	#N/A													
	c	2859	5	7546	R7A	4.6	0	4.6	#N/A													
	d	2859	8	9328	R7A	4.6	0	4.6	#N/A													
	e	2859	4	2197	R7A	4.6	0	4.6	#N/A													
	f	2859	89	2060	R7A	4.6	0	4.6	#N/A													
	g	2859	10	6870	R7A	4.6	0	4.6	#N/A													
55	a	2846	4	7555	R7A	4.6	2	4.6	C2-4	Retail (1), Residential	32,456.25	7,357	7,357	0	0	7,357	0	0	39,813	32	7	115
	b	2846	1	1100	R7A	4.6	2	4.6	C2-4													
56	a	2858	9	12691	R8A	7.2	2	6.5	C2-4	Retail (1), residential	80,587.85	10,787	10,787	0	0	10,787	0	0	91,375	81	11	165
57	a	2844	12	6850	R7A	4.6	2	4.6	C2-4	Retail (1), Residential	25,687.50	5,823	5,823	0	0	5,823	0	0	31,510	26	6	115
58	a	2857	23	6998	R8A	7.2	0	6.5	N/A	Residential	90,792.30	0	0	0	0	0	0	0	90,792	90	0	145
	b	2857	24	7300	R8A	7.2	0	6.5	N/A													
59	a	2858	23	7487	R8A	7.2	2	6.5	C2-4	Retail (1), Residential	69,557.90	9,311	9,311	0	0	9,311	0	0	78,869	70	9	165
	b	2858	28	3467	R8A	7.2	2	6.5	C2-4													
60	a	2844	1	10000	R7A	4.6	2	4.6	C2-4	Restaurant, Residential	36,000	10,000	0	10,000	0	0	0	0	46,000	36	10	115
61	a	2843	12	10000	R7A	4.6	2	4.6	C2-4	FRESH (1), Residential	56,000	10,000	10,000	0	10,000	0	0	0	66,000	56	0	115
62	a	2843	5	17500	R7A	4.6	2	4.6	C2-4	FRESH (1), Retail (1), Residential	72,000	17,000	17,000	0	8,500	8,500	0	0	89,000	72	9	115
63	a	2842	6	6362	R8A	7.2	2	6.5	C2-4	Retail (1), Residential	40,398.70	5,408	5,408	0	0	5,408	0	0	45,806	40	5	165
64	a	2842	10	4424	R8A	7.2	2	6.5	C2-4	Retail (1), Residential	28,092.40	3,760	3,760	0	0	3,760	0	0	31,853	28	4	145
65	a	2842	18	14675	R8A	7.2	2	6.5	C2-4	Retail (1), Residential	93,186.25	12,474	12,474	0	0	12,474	0	0	105,660	93	12	145
66	a	2843	69	9691	R8A	7.2	2	6.5	C2-4	Retail (1), Residential	61,537.85	8,237	8,237	0	0	8,237	0	0	69,775	62	8	145
67	a	2842	42	12447	R8A	7.2	2	6.5	C2-4	Retail (1), medical office, Residential	141,744.70	18,974	18,974	0	0	17,014	0	1,960	160,718	142	19	145
	b	2842	47	9875	R8A	7.2	2	6.5	C2-4													

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68	a	2842	51	9000	R8A	7.2	2	6.5	C2-4	Retail, Grocery Store (1), Residential	114,300	15,300	15,300	0	7,650	7,650	0	0	129,600	114	15	145
	a	2842	55	9000	R8A	7.2	2	6.5	C2-4													
69	a	2833	1	9703	R8A	7.2	2	6.5	C2-4	Retail (1), Residential	61,614.05	8,248	8,248	0	0	8,248	0	0	69,862	62	8	145
70	a	2833	37	3025	R8A	7.2	2	6.5	C2-4	Retail (1), Residential	38,417.50	5,143	5,143	0	0	5,143	0	0	43,560	38	5	145
	b	2833	35	3025	R8A	7.2	2	6.5	C2-4													
71	a	2857	71	10000	R8A	7.2	0	6.5	N/A	Residential	63,500	0	0	0	0	0	0	0	63,500	64	0	145
72	a	2857	90	13879	R8A	7.2	2	6.5	C2-4	Retail (1), Residential	88,131.65	11,797	11,797	0	0	0	0	0	99,929	88	0	145
73	a	2857	64	14168	R8A	7.2	2	6.5	C2-4	Retail (1), Residential	89,966.80	12,043	12,043	0	0	12,043	0	0	102,010	90	12	145
74	a	2872	82	12474	R8A	7.2	2	6.5	C2-4	Retail (1), Residential	79,209.90	10,603	10,603	0	0	10,603	0	0	89,813	79	11	145
75	a	2872	86	10913	R8A	7.2	2	6.5	C2-4	Retail (1), Residential	69,297.55	9,276	9,276	0	0	9,276	0	0	78,574	69	9	145
76	a	2872	50	10488	R9A	8.5	2	7.5	C2-4	Retail, Restaurant (1), Residential	121,849.20	13,539	11,939	1,600	0	9,099	0	2,840	135,388	122	14	225
	b	2872	46	5440	R9A	8.5	2	7.5	C2-4													
77	a	2871	78	7434	R9A	8.5	2	7.5	C2-4	Retail (1), Residential	56,870.10	6,319	6,319	0	0	6,319	0	0	63,189	57	6	175
78	a	2873	1	11215	R8A	7.2	2	6.5	C2-4	House of Worship (1), Residential	70,948	9,800	9,800	0	0	0	0	9,800	80,748	71	10	145
79	a	2874	1	2983	R8A	7.2	2	6.5	C2-4	Retail (1), Residential	18,942.05	2,536	2,536	0	0	2,536	0	0	21,478	19	3	145
80	a	2521	15	11655	R8A	7.2	2	6.5	C2-4	Retail (1), Residential	74,009.25	9,907	9,907	0	0	9,907	0	0	83,916	74	10	145
81	a	2522	65	7490	R8A	7.2	2	6.5	C2-4	Retail (1), Residential	62,668.15	8,389	8,389	0	0	8,389	0	0	71,057	63	8	145
	b	2522	68	2379	R8A	7.2	2	6.5														
82	a	2522	96	3900	R8A	7.2	2	6.5	C2-4	Retail (1), Residential	24,765	3,315	3,315	0	0	3,315	0	0	28,080	25	3	145
83	a	2522	81	3600	R8A	7.2	2	6.5	C2-4	Restaurant (1), Residential	18,920	7,000	0	7,000	0	0	0	0	25,920	19	7	145
84	a	2856	29	27000	R8A	7.2	2	6.5	C2-4	Community Center/School (1), Residential	152,208	42,192	42,192	0	0	0	0	42,192	194,400	152	42	145
85	a	2856	19	2625	R8A	7		6.5	N/A	Office, Retail, Residential	183,553.60	54,750	54,750	0	0	0	54,750	0	238,304	183	55	145
	b	2856	23	2500	R8A	7.2	0	6.5	N/A													
	c	2856	24	2500	R8A	7.2	0	6.5	N/A													
	d	2856	20	26063	R8A	7.2	2	6.5	Jerome Fro													



TABLE 1: PROJECTED DEVELOPMENT SITE SUMMARY																						
Site #		Site Info			Future With-Action Conditions																	
		Tax Block	Tax Lot	Lot Area (SF)	Prop. Zoning	Proposed Max Res. FAR	Proposed Max Commercial FAR	Proposed Max C. Facility FAR	Prop. Overlay		TOT Residential SF	Total Commercial SF+	Total Comm/ SF (minus restaurant)	Restaurant SF	Supermarket (FRESH)	Retail (ONLY)	Office SF	C Fac SF	Total SF	WITH ACTION Total DU's	Total Parking	Max Bldg Height
86	a	2864	27	9977	R8A	7.2	0	6.5	N/A	Residential	63,353.95	0	0	0	0	0	0	0	63,354	63	0	145
87	a	2856	45	9963	R8A	7.2	2	6.5	C2-4	House of Worship (1), Residential	60,905.60	10,828	10,828	0	0	0	0	10,828	71,734	61	11	165
88	b	2856	49	12,474	R8A	7.2	2	6.5	Jerome from	FRESH (1), Residential	98,862.80	9,050	9,050	0	9,050	0	0	0	107,913	99	0	165 / 145
89	a	2856	53	22914	R8A	7.2	2	6.5	C2-4	Retail (1), Residential	145,503.90	19,477	19,477	0	0	19,477	0	0	164,981	146	19	165
90	a	2871	2	59050	R9A	8.5	2	7.5	C2-4	FRESH (1), medical office, residential	488,925	50,193	50,193	0	37,193	0	0	13,000	539,118	489	13	225
91	a	2855	1	5516	R9A	8.5	2	7.5	C2-4	Retail (1), Residential	133,966.80	14,885	14,885	0	0	14,885	0	0	148,852	134	15	225
	b	2855	12	3685	R9A	8.5	2	7.5	C2-4													
	c	2855	8	4514	R9A	8.5	2	7.5	C2-4													
	d	2855	15	3797	R9A	8.5	2	7.5	C2-4													
92	a	2506	54	10350	R9A	8.5	2	7.5	C2-4	FRESH, Community Center (1), Residential	226,437.50	22,426	22,426	0	8,798	0	0	13,628	248,863	227	14	175
	a	2506	44	16858	R9A	8.5			C2-4													
93	a	2506	62	25375	R9A	8.5	2	7.5	C2-4	Retail (1), Residential	194,118.75	21,569	21,569	0	0	21,569	0	0	215,688	194	22	175
94	a	2489	11	7421	R9A	8.5	2	7.5	C2-4	Retail (1), Residential	101,331.90	11,259	11,259	0	0	11,259	0	0	112,591	102	11	225
	b	2489	14	5825	R9A	8.5	2	7.5	C2-4													
95	a	2489	1	9807	R9A	8.5	2	7.5	C2-4	Retail (1), Residential	136,223.55	15,136	15,136	0	0	15,136	0	0	151,360	136	15	225
	a	2489	29	1500	R9A	8.5	2	7.5	C2-4													
	b	2489	27	3480	R9A	8.5	2	7.5	C2-4													
	b	2489	30	3020	R9A	8.5	2	7.5														
96	a	2489	33	9409	R9A	8.5	2	7.5	C2-4	Retail (1), Residential	71,978.85	7,998	7,998	0	0	7,998	0	0	79,977	72	8	195
97	a	2496	58	11000	R9A	8.5	2	7.5	C2-4	Retail (1), Residential	84,150	9,350	9,350	0	0	9,350	0	0	93,500	84	9	195
98	a	2488	23	2500	R9A	8.5	2	7.5	C2-4	Retail, Restaurant (1), Residential	58,905	6,545	2,125	4,420	0	0	0	0	65,450	59	4	195
	b	2488	20	5200	R9A	8.5	2	7.5	C2-4													
99	a	2496	73	24165	R9A	8.5	2	7.5	C2-4	Retail (1), Residential	184,862.25	20,540	20,540	0	0	20,540	0	0	205,403	185	21	195
100	a	2487	20	51,301	R8	6.02	2	6.5	C2-4	Retail (1), Residential	283,181.52	25,651	25,651	0	0	25,651	0	0	308,832	283	26	205
101	a	2487	10	42,550	R8	6.02	2	6.5	C2-4	Retail (1), Residential	234,876	21,275	21,275	0	0	21,275	0	0	256,151	235	21	205
Totals											9,305,575	1,508,328	1,440,886	67,442	112,788	961,704	54,750	248,159	10,813,904	9,308	1,366	

					TABLE 1: PROJECTED DEVELOPMENT SITE SUMMARY																											
Site #	Site Info				Increment																											
	Tax Block	Tax Lot	Lot Area (SF)		Residential SF	Commercial SF+	Comm (retail, restaurant, grocery, auto)	Retail (with other commercial)	Supermarket FRESH SF SF	Restaurant SF	Auto-Related SF	Hotel SF	Office SF	Storage SF	Garage SF	Other Comm SF	Industrial SF	Medical Office	House of Worship	Day Care Center	Pre-K School	Community Center	C.Fac SF	Total SF	INCREMENT Total DU's	Total Parking						
1	a	3198	77	1745	28,172	3,214	3,214	3,214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31,385	30	7						
	b	3198	78	4278																												
	c	3198	76	2779																												
2	a	3187	25	9120	99,825	11,407	(1,368)	(1,368)	0	0	0	0	0	0	(2,100)	0	0	0	0	0	0	0	0	111,232	100	(17)						
	b	3187	18	17500																												
3	a	3187	5	2500	77,246	(32,429)	5,286	5,286	0	0	0	0	(33,250)	0	(4,465)	0	0	0	0	0	0	0	0	44,817	77	2						
	b	3187	3	4579																												
	c	3187	7	7500																												
	d	3187	1	4875																												
4	a	3197	29	10000	36,000	0	0	(4,000)	4,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36,000	36	10						
5	a	3197	35	5000	18,750	(750)	(750)	(750)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18,000	19	4						
6	a	3196	81	10000	44,875	285	285	285	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45,160	46	11						
	b	3196	79	2500																												
7	a	3208	36	6947	91,281	2,657	2,657	2,657	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	93,938	91	(17)						
	b	3208	39	10000																												
	c	3208	35	2528																												
8	a	3208	45	2500	25,769	5,627	2,125	2,125	0	0	0	0	0	0	0	0	0	0	3,502	0	0	0	3,502	31,396	28	6						
	b	3208	46	5000																												
9	a	3196	36	5000	18,750	(1,422)	(1,422)	(1,422)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17,328	19	(1)						
10	a	3186	47	2500	64,875	107	3,945	3,945	0	0	0	0	0	0	(400)	(3,438)	0	0	0	0	0	0	0	64,982	65	8						
	B	3186	41	4700																												
	C	3186	44	7500																												
	D	3186	48	2500																												
11	a	3186	17	14800	55,500	(17,020)	12,580	12,580	0	0	0	0	0	0	(29,600)	0	0	0	0	0	0	0	0	38,480	56	(116)						
12	a	3195	40	10000	37,500	(1,500)	8,500	8,500	0	0	0	0	0	(10,000)	0	0	0	0	0	0	0	0	0	36,000	38	(2)						
13	a	3195	90	5479	79,713	(47,701)	(2,953)	3,927	0	(800)	(6,080)	0	0	(44,748)	0	0	0	0	0	0	0	0	0	32,012	80	19						
	b	3195	92	7498																												
	c	3195	84	5410																												
	d	3195	83	3063																												
14	a	3192	34	8245	30,919	(13,900)	(13,900)	0	0	0	(13,900)	0	0	0	0	0	0	0	0	0	0	0	0	17,019	31	(14)						
15	a	3179	30	15000	56,250	5,128	5,128	12,750	0	0	(7,622)	0	0	0	0	0	0	0	0	0	0	0	0	61,378	56	(12)						

TABLE 1: PROJECTED DEVELOPMENT SITE SUMMARY																										
Site #	Site Info				Increment																					
	Tax Block	Tax Lot	Lot Area (SF)		Residential SF	Commercial SF+	Comm (retail, restaurant, grocery, auto)	Retail (with other commercial)	Supermarket FRESH SF SF	Restaurant SF	Auto-Related SF	Hotel SF	Office SF	Storage SF	Garage SF	Other Comm SF	Industrial SF	Medical Office	House of Worship	Day Care Center	Pre-K School	Community Center	C Fac SF	Total SF	INCREMENT Total DU's	Tot Parking
16	a	3192	55	5071	19,016	8,705	7,592	7,592	0	0	0	0	0	0	(500)	0	0	0	0	0	0	0	0	180,114	171	95
	b	3192	56	8962																						
	c	3192	60	15037																						
17	a	3179	8	11625	99,844	(18,969)	2,371	20,841	0	0	(18,470)	0	(1,080)	0	(15,000)	0	(5,260)	0	0	0	0	0	0	80,875	100	(47)
	b	3179	13	15000																						
18	a	3192	66	13,500	85,725	6,475	6,475	6,475	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	92,200	86	30
19	a	3192	75	9895	54,294	(8,475)	(8,475)	(8,475)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45,819	54	17
20	a	3210	65	14145	64,659	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64,659	65	37
21	a	2868	139	7751	48,207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48,207	48	8
22	a	2869	130	7285	88,170	(856)	(856)	744	(1,600)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87,314	88	12
	a	2869	127	6600																						
23	a	3193	33	8141	51,695	(1,080)	(1,080)	520	0	(1,600)	0	0	0	0	0	0	0	0	0	0	0	0	0	50,615	52	7
24	a	2870	31	9196	58,395	(1,183)	(1,183)	(283)	(900)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57,211	58	8
25	a	2863	32	5652	181,286	(12,357)	(2,607)	(181)	(564)	(1,862)	0	0	0	0	0	0	0	0	0	0	0	0	0	168,929	181	35
	b	2863	28	6000																						
	c	2863	30	4275																						
	D	2863	40	5000																						
	e	2863	35	9181																						
26	a	3179	2	5,071	27,130	6,381	6,381	6,381	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33,511	27	9
27	a	3179	63	10,095	54,008	4,945	8,015	8,015	0	0	0	0	0	0	0	(3,070)	0	0	0	0	0	0	0	58,953	54	19
28	a	3178	1	23,000	123,050	(3,450)	42,550	42,550	0	0	0	0	0	(46,000)	0	0	0	0	0	0	0	0	0	119,600	123	43
29	a	3178	60	10,209	54,618	9,483	9,483	9,483	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64,101	55	19
30	a	2854	44	24,120	129,042	21,894	21,894	21,894	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	150,936	129	45
31	a	2829	45	26,174	140,031	32,622	32,622	32,622	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	172,653	140	48
32	a	2854	42	5,000	26,750	4,250	4,250	4,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31,000	27	9
33	a	2854	39	7,500	40,125	8,875	8,875	0	0	8,875	0	0	0	0	0	0	0	0	0	0	0	0	0	49,000	40	14

[illegible]

[illegible]

[illegible]

					TABLE 1: PROJECTED DEVELOPMENT SITE SUMMARY																											
Site #		Site Info			Increment																											
		Tax Block	Tax Lot	Lot Area (SF)	Residential SF	Commercial SF+	Comm (retail, restaurant, grocery, auto)	Retail (with other commercial)	Supermarket FRESH SF SF	Restaurant SF	Auto-Related SF	Hotel SF	Office SF	Storage SF	Garage SF	Other Comm SF	Industrial SF	Medical Office	House of Worship	Day Care Center	Pre-K School	Community Center	C Fac SF	Total SF	INCREMENT Total DU's	Tot Parking						
86	a	2864	27	9977	63,354	(20,000)	(20,000)	(1,000)	0	0	(19,000)	0	0	0	0	0	0	0	0	0	0	0	0	43,354	63	0						
87	a	2856	45	9963	60,906	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60,906	61	11						
88	b	2856	49	12,474	98,863	(9,050)	0	0	0	0	0	0	(9,050)	0	0	0	0	0	0	0	0	0	0	89,813	99	(9)						
89	a	2856	53	22914	145,504	7,726	7,726	16,526	0	0	(8,800)	0	0	0	0	0	0	0	0	0	0	0	0	153,230	146	19						
90	a	2871	2	59050	488,925	24,193	32,877	(4,316)	37,193	0	0	(8,684)	0	0	0	0	0	0	0	0	0	0	0	513,118	489	(13)						
91	a	2855	1	5516	133,967	5,088	5,230	14,885	0	0	(9,655)	0	0	0	0	(142)	0	0	0	0	0	0	0	139,055	134	15						
	b	2855	12	3685																												
	c	2855	8	4514																												
	d	2855	15	3797																												
92	a	2506	54	10350	226,438	(13,761)	(13,761)	(8,177)	(2,858)	(2,726)	0	0	0	0	0	0	0	0	0	0	0	0	0	212,677	227	(4)						
	a	2506	44	16858																												
93	a	2506	62	25375	194,119	8,804	8,804	8,804	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	202,923	194	22						
94	a	2489	11	7421	101,332	6,276	6,276	11,259	0	0	(4,983)	0	0	0	0	0	0	0	0	0	0	0	0	107,608	102	9						
	b	2489	14	5825																												
95	a	2489	1	9807	136,224	(12,224)	(12,224)	(12,224)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	124,000	136	15						
	a	2489	29	1500																												
	b	2489	27	3480																												
	b	2489	30	3020																												
96	a	2489	33	9409	71,979	(991)	(991)	(991)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70,988	72	8						
97	a	2496	58	11000	84,150	(550)	(550)	2,717	0	(3,267)	0	0	0	0	0	0	0	0	0	0	0	0	0	83,600	84	9						
98	a	2488	23	2500	58,905	(505)	(2,630)	(5,913)	(1,138)	4,420	0	0	0	0	0	0	0	0	0	0	0	0	0	58,400	59	(1)						
	b	2488	20	5200																												
99	a	2496	73	24165	184,862	4,340	4,340	20,540	0	0	(16,200)	0	0	0	0	0	0	0	0	0	0	0	0	189,203	185	21						
100	a	2487	20	51,301	(25,650)	25,651	25,651	25,651	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	(26)	(98)						
101	a	2487	10	42,550	(21,274)	21,275	21,275	21,275	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	(21)	(81)						
Totals					8,534,979	(364,206)	126,862	452,618	30,276	20,168	(374,967)	0	(26,820)	(267,898)	(190,361)	(82,591)	(5,260)	0	3,502	0	0	0	3,502	8,323,168	8,696	(177)						

## **Appendix 3**

# **Transportation Planning Factors and Travel Demand Forecast Memorandum**



**To:** NYCDP  
**From:** STV Incorporated  
**Date:** August 29, 2016  
**Project:** Jerome Avenue Rezoning EIS  
**Reference:** Transportation Planning Factors and Travel Demand Forecast

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This memorandum summarizes the transportation planning factors to be considered for analyses of traffic, parking, transit, and pedestrian conditions for the *Jerome Avenue Rezoning EIS*. Estimates of the peak travel demand for the Proposed Actions' reasonable worst-case development scenario (RWCDs) are provided, along with a discussion of trip assignment methodologies and study area definitions.

## **PROPOSED ACTIONS**

The Proposed Actions include zoning map amendments and zoning text amendments affecting approximately 73 blocks in the Bronx. The rezoning area includes portions of the University Heights, Fordham, Morris Heights, Mount Hope, Mount Eden, and Highbridge neighborhoods in Community Districts 4, 5, and 7, along an approximately two-mile street of Jerome Avenue between Fordham Road to the north and Mullaly Park to the south (see **Figure 1**). The rezoning area is currently zoned with a mix of residential, commercial, and light manufacturing zoning districts.

## **THE REASONABLE WORST CASE DEVELOPMENT SCENARIO (RWCDs)**

A RWCDs for both "future without the proposed actions" (No-Action) and "future with the proposed actions" (With-Action) conditions is analyzed for an analysis year of 2026 in order to assess the potential effects of the Proposed Actions. Likely development sites were identified and divided into two categories: projected development sites and potential development sites to develop a reasonable estimate of future growth. The projected development sites are those considered more likely to be developed within the ten-year analysis period for the Proposed Actions (i.e., by the 2026 analysis year), while potential sites are considered less likely to be developed over the same period. Only projected development sites are considered for the purposes of the transportation analyses. **Table 1** lists the total anticipated No-Action and With-Action land uses on projected development sites in 2026 under the RWCDs.

Overall, the rezoning area encompasses approximately 73 blocks and includes a total of 45 projected development sites (see **Figure 1**). The projected development sites were grouped into a total of five "clusters" for travel demand forecasting and trip assignment purposes. These clusters were defined based on the rezoning area roadway network characteristics and the likely travel routes of vehicle trips to and from the development sites. The location of each cluster is shown on **Figure 1**, and the projected development sites included in each cluster are listed in **Table 2**.



**Table 1: 2026 RWCDs No-Action and With-Action Land Uses**

Land Use	No-Action Condition	With-Action Condition	No-Action to With-Action Increment
<b>Residential</b>			
<b>Total Residential</b>	<b>894,761 sf (780 DU)</b>	<b>4,162,049 sf (4,030 DU)</b>	<b>+ 3,267,288 sf (+ 3,250 DU)</b>
<b>Commercial</b>			
Local Retail	207,719 sf	415,799 sf	+ 208,080 sf
Regional Retail	0 sf	42,826 sf	+ 42,826 sf
FRESH Supermarket	28,405 sf	51,562 sf	+ 23,157 sf
Restaurant	2,260 sf	13,891 sf	+ 11,631 sf
Auto Repair	86,784 sf	0 sf	- 86,784 sf
Auto Dealership	11,218 sf	0 sf	- 11,218 sf
Office	4,818 sf	44,105 sf	+ 39,287 sf
Warehouse	168,650 sf	0 sf	- 168,650 sf
Garage	22,154 sf	0 sf	- 22,154 sf
Gas Station	600 sf	0 sf	- 600 sf
<b>Total Commercial</b>	<b>532,608 sf</b>	<b>568,183 sf</b>	<b>+ 35,575 sf</b>
<b>Community Facility</b>			
Medical Office	6,000 sf	8,500 sf	+ 2,500 sf
House of Worship	36,120 sf	53,896 sf	+ 17,776 sf
Day Care Center	2,016 sf	23,099 sf	+ 21,083 sf
Pre-K School	15,800 sf	15,800 sf	0 sf
Community Center	0 sf	53,896 sf	+ 53,896 sf
Transitional Housing	22,983 sf	0 sf	-22,983 sf
<b>Total Community Facility</b>	<b>82,919 sf</b>	<b>155,191 sf</b>	<b>+ 72,272 sf</b>
<b>Other Uses</b>			
Light Industrial	47,795 sf	0 sf	- 47,795 sf
<b>Total Floor Area</b>	<b>1,558,083 sf</b>	<b>4,885,423 sf</b>	<b>+3,327,340 sf</b>
<b>Parking</b>			
Parking Spaces	99	0	-99

**Table 2: Transportation Analysis Development Clusters**

Cluster	Projected Development Sites
1	1-9
2	10-19
3	20-21
4	22-36
5	37-45

## PRELIMINARY TRANSPORTATION PLANNING FACTORS

The transportation planning factors proposed for use in forecasting travel demand for the Proposed Actions (expressed as land uses) are summarized in **Table 3** and discussed below<sup>1</sup>. The trip generation rates, temporal distributions, modal splits, vehicle occupancies, and truck trip factors for each of the land uses were based on those cited in the 2014 *CEQR Technical Manual*, factors developed for recent environmental reviews, 2010-2014 American Community Survey ("ACS") journey-to-work data, and American Association of State Highway and Transportation Officials Census Transportation Planning Products (AASHTO CTPP) data. Factors are shown for the weekday AM and PM peak hours (typical peak periods for commuter travel demand) and the weekday and Saturday midday peak hours (typical peak periods for retail demand).

### *Residential*

The residential travel demand forecasts are based on person trip and truck trip generation rates and temporal distributions cited in the *CEQR Technical Manual* and approved for use. The directional in/out splits are based on data from the *Webster Avenue Rezoning EIS*, which relates to a nearby rezoning.

It is noted that ACS vehicle occupancy data reflect the average vehicle occupancy for personal auto trips to and from work, and therefore do not present the complete picture of average vehicle occupancy for other purposes (e.g., shopping, errands, social and recreational activities, school trips, etc.). In general, vehicle occupancy rates for non-work-related trips have been found to be higher than vehicle occupancy rates for work-related trips. As documented in the *East New York Rezoning EIS*, both national data from USDOT-FHWA's *Summary of Travel Trends: 2009 National Household Travel Survey* and regional data from the *Regional Travel-Household Interview Survey* prepared for the New York Metropolitan Transportation Council and the North Jersey Transportation Planning Authority indicate that average vehicle occupancy rates for all auto trips are more than 1.4 times the average vehicle occupancy rates for auto trips to and from work. As such, the weekday AM/PM peak hour vehicle occupancy rates derived from the ACS data

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<sup>1</sup> The No-Action garage floor area is an accessory to other uses and is not expected to generate additional vehicle trips independent of these uses. It is, therefore, not reflected in the travel demand forecast as an independent use.

**Table 3: Transportation Planning Factors**

Land Use	Local Retail	Regional Retail	Office	Residential	Restaurant (sit-down)	Light Industrial	Auto Repair	Auto Dealership	Warehouse
Size/Units	gsf	gsf	gsf	DU	gsf	gsf	gsf	gsf	gsf
<b>Trip Generation</b>	(1)	(1)	(1)	(1)	(17)	(10, 11)	(2)	(18)	(19)
Weekday	205	78.2	18	8.075	173	11.5	19.42	45.6	4.9
Saturday	240	92.5	3.9	9.6	181	1.7	19.42	28.8	1.7
	per 1,000 sf	per 1,000 sf	per 1,000 sf	per DU	per 1,000 sf	per 1,000 sf	per 1,000 sf	per 1,000 sf	per 1,000 sf
<b>Temporal Distribution</b>	(1)	(1)	(1)	(1)	(17)	(10, 12)	(2)	(7,18)	(9,19)
AM	3.0%	3.0%	12.0%	10.0%	0.9%	13.0%	13.2%	6.1%	8.4%
MD	19.0%	9.0%	15.0%	5.0%	6.2%	10.0%	11.0%	12.0%	14.0%
PM	10.0%	9.0%	14.0%	11.0%	8.3%	14.0%	14.2%	7.8%	8.9%
Sat MD	10.0%	11.0%	17.0%	8.0%	11.0%	10.0%	11.0%	14.1%	10.6%
<b>Modal Splits</b>	(2)	(4)	(4)	(5)	(17)	(4)	(2)	(7)	(4)
Auto	3.0%	37.0%	37.0%	19.3%	25.0%	37.0%	85.0%	100.0%	37.0%
Taxi	2.0%	2.0%	2.0%	1.8%	20.0%	2.0%	5.0%	0.0%	2.0%
Bus	10.0%	21.0%	21.0%	15.4%	5.0%	21.0%	1.0%	0.0%	21.0%
Subway	5.0%	21.0%	21.0%	49.2%	30.0%	21.0%	1.0%	0.0%	21.0%
Railroad	0.0%	1.0%	1.0%	2.9%	0.0%	1.0%	0.0%	0.0%	1.0%
Walk/Other	80.0%	18.0%	18.0%	11.4%	20.0%	18.0%	8.0%	0.0%	18.0%
<b>In/Out Splits</b>	(2)	(3)	(2)	(2)	(2,17)	(10, 12)	(2)	(7,18)	(9,19)
AM	In 50% Out 50%	In 52% Out 48%	In 96% Out 4%	In 15% Out 85%	In 94% Out 6%	In 88% Out 12%	In 65% Out 35%	In 74% Out 26%	In 79% Out 21%
MD	In 50% Out 50%	In 52% Out 48%	In 39% Out 61%	In 50% Out 50%	In 50% Out 50%	In 50% Out 50%	In 50% Out 50%	In 50% Out 50%	In 50% Out 50%
PM	In 50% Out 50%	In 52% Out 48%	In 5% Out 95%	In 70% Out 30%	In 67% Out 33%	In 12% Out 88%	In 50% Out 50%	In 39% Out 61%	In 25% Out 75%
Sat MD	In 50% Out 50%	In 52% Out 48%	In 60% Out 40%	In 50% Out 50%	In 50% Out 50%	In 50% Out 50%	In 50% Out 50%	In 51% Out 49%	In 64% Out 36%
<b>Vehicle Occupancy</b>	(2)	(3)	(2,4)	AM/PM MD/Sat	(17)	(10)	(2)	(7)	(9,19)
Auto	1.60	2.20	1.13	1.21 1.69	2.20	1.65	1.30	1.30	1.30
Taxi	1.20	2.00	1.40	1.4 1.4	2.30	1.40	1.30	1.50	2.00
<b>Truck Trip Generation</b>	(1)	(3)	(1)	(1)	(17)	(10, 13)	(2)	(7)	(9)
Weekday	0.35	0.35	0.32	0.06	3.60	0.52	0.89	0.15	0.67
Saturday	0.04	0.35	0.01	0.02	3.60	0.03	0.05	0.15	0.03
<b>Temporal Distribution</b>	(1)	(3)	(1)	(1)	(2,17)	(10, 12)	(2)	(7)	(9)
AM	8.0%	8.0%	10.0%	12.0%	6.0%	12.0%	14.0%	9.6%	14.0%
MD	11.0%	11.0%	11.0%	9.0%	6.0%	9.0%	9.0%	11.0%	9.0%
PM	2.0%	2.0%	2.0%	2.0%	1.0%	2.0%	1.0%	1.0%	1.0%
Saturday	11.0%	11.0%	11.0%	9.0%	6.0%	9.0%	9.0%	11.0%	9.0%
<b>In/Out Splits</b>	In 50.0% Out 50.0%	In 50.0% Out 50.0%	In 50.0% Out 50.0%	In 50.0% Out 50.0%	In 50.0% Out 50.0%	In 50.0% Out 50.0%	In 50.0% Out 50.0%	In 50.0% Out 50.0%	In 50.0% Out 50.0%

(1) Based on data from City Environmental Quality Review (CEQR) Technical Manual, 2014.

(2) Based on data from Webster Avenue Rezoning EIS, 2011.

(3) Based on data from East Fordham Road Rezoning EIS, 2013.

(4) RJTW based on CTPP 2006-2010 data for census tracts 197, 199, 209, 211, 213.02, 217, 219, 221.01, 223, 227.01, 227.02, 233.01, 239, 241, 243, and 251.

(5) JTW based on CTPP 2010-2014 data for census tracts 197, 199, 209, 211, 213.02, 217, 219, 221.01, 223, 227.01, 227.02, 233.01, 239, 241, 243, and 251.

(6) Midday and Saturday auto occupancy determined by applying a multiplier (1.4) to the AM/PM rate based on East New York Rezoning EIS, 2015.

(7) Based on data from East New York Rezoning EIS, 2015.

(8) Based on ITE's Trip Generation Manual rate for High-Turnover (Sit-Down) Restaurant (932) & Fast-Food Restaurant with Drive-Through (934).

(9) Based on data from Lower Concourse Rezoning EIS, 2009.

(10) Crotona Park East / West Farms Rezoning EIS, 2011.

(11) Saturday rate based on ITE's Trip Generation Manual (8<sup>th</sup> Edition) average rate proportion between weekday and Saturday

(12) Assumes weekday midday temporal distribution and in/out splits for Saturday midday.

(13) Assumes 5 percent of weekday truck trip generation rate (consistent with Lower Concourse Rezoning EIS assumptions for Manufacturing and Warehousing land uses).

(14) Assumed to be the same as Restaurant land use for Webster Avenue Rezoning EIS, 2011.

(15) Based on data for Covenant House from NYCT - Number 7 Extension Project EIS, 2003.

(16) Saturday trip rate based on ratio between Saturday and weekday rates for Residential land use. Similarly, Saturday temporal distribution based on weekday versus Saturday midday Residential proportion.

(17) Based on data from Pier 57 Redevelopment Project EIS, 2013.

(18) Based on ITE's Trip Generation Manual rate for Auto Dealership (841).

(19) Based on ITE's Trip Generation Manual rate for Warehousing (150).



**Table 3 (continued): Transportation Planning Factors**

Land Use	FRESH (Supermarket)	Pre-K (Student)	Pre-K (Staff)	Pre-K (Parent)	Day Care Center	Community Center	Medical Office (Clinic)	Gas Station (With Store)	Transitional Housing (Shelter)	House of Worship
Size/Units	gsf	students	staff	parents	gsf	gsf	gsf	gsf	beds	gsf
<b>Trip Generation</b>	(7)	(7)	(7)	(7)	(7)	(2)	(7)	(9)	(15, 16)	(7)
Weekday	205	2	2	4	33	48	127	90	4.75	19.18
Saturday	271	0	0	0	2	19	127	90	5.65	21.83
	per 1,000 sf	per student	per staff	per parent	per 1,000 sf	per 1,000 sf	per 1,000 sf	per 1,000 sf	per 1,000 sf	per 1,000 sf
<b>Temporal Distribution</b>	(7)	(7)	(7)	(7)	(7)	(2)	(7)	(9)	(15, 16)	(7)
AM	3.0%	50.0%	50.0%	50.0%	16.0%	7.1%	4.0%	6.2%	7.0%	7.9%
MD	12.0%	0.0%	0.0%	0.0%	5.0%	10.0%	11.0%	5.5%	3.0%	4.0%
PM	10.0%	5.0%	5.0%	5.0%	19.0%	7.2%	12.0%	8.2%	10.0%	7.2%
Sat MD	12.0%	0.0%	0.0%	0.0%	12.0%	14.2%	11.0%	5.5%	4.8%	15.8%
<b>Modal Splits</b>	(7)	(5)	(4)	(5)	(7)	(2)	(7)	(9)	(15)	(7)
Auto	4.0%	18.6%	37.0%	18.6%	5.0%	5.0%	30.0%	100.0%	2.0%	5.0%
Taxi	3.0%	1.6%	2.0%	1.6%	1.0%	1.0%	2.0%	0.0%	1.0%	1.0%
Bus	5.0%	15.3%	21.0%	15.3%	6.0%	6.0%	18.0%	0.0%	1.0%	3.0%
Subway	5.0%	50.7%	21.0%	50.7%	3.0%	3.0%	33.0%	0.0%	2.0%	6.0%
Railroad	0.0%	2.5%	1.0%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Walk/Other	83.0%	11.3%	18.0%	11.3%	85.0%	85.0%	17.0%	0.0%	94.0%	85.0%
<b>In/Out Splits</b>	(7)	(7)	(7)	(7)	(7)	(2)	(7)	(9)	(15)	(7)
AM	In 45% Out 55%	In 100% Out 0%	In 100% Out 0%	In 50% Out 50%	In 53% Out 47%	In 61% Out 39%	In 89% Out 11%	In 50% Out 50%	In 15% Out 85%	In 54% Out 46%
MD	In 46% Out 54%	In 0% Out 100%	In 0% Out 100%	In 0% Out 100%	In 50% Out 50%	In 55% Out 45%	In 51% Out 49%	In 50% Out 50%	In 50% Out 50%	In 50% Out 50%
PM	In 47% Out 53%	In 0% Out 100%	In 0% Out 100%	In 50% Out 50%	In 47% Out 53%	In 29% Out 71%	In 48% Out 52%	In 50% Out 50%	In 70% Out 30%	In 52% Out 48%
Sat MD	In 46% Out 54%	In 0% Out 0%	In 0% Out 0%	In 0% Out 0%	In 47% Out 53%	In 49% Out 51%	In 41% Out 59%	In 50% Out 50%	In 50% Out 50%	In 71% Out 29%
<b>Vehicle Occupancy</b>	(7)	(5, 7)	(4, 7)		(7)	(2)	(7)	(9)	(9)	(7)
Auto	1.65	1.22	1.13	N/A	1.65	1.65	Weekday 1.50 Sat 1.50	Weekday 1.00 Sat 1.00	Weekday 1.50 Sat 1.50	Weekday 1.65 Sat 1.65
Taxi	1.40	1.30	1.40	N/A	1.40	1.40	1.50 1.50	1.00 1.00	1.50 1.50	1.40 1.40
<b>Truck Trip Generation</b>	(7)	(7)			(7)	(2)	(7)	(9)	(9)	(7)
Weekday	0.35	0.03	N/A	N/A	0.07	0.29	0.29	0.35	0.06	0.29
Saturday	0.04	0.03	N/A	N/A	0.00	0.01	0.29	0.02	0	0.29
<b>Temporal Distribution</b>	(7)	(7)			(7)	(2)	(7)	(9)	(9)	(7)
AM	10.0%	9.6%	N/A	N/A	9.6%	9.6%	3.0%	7.7%	12.2%	9.6%
MD	8.0%	11.0%	N/A	N/A	11.0%	11.0%	11.0%	11.0%	8.7%	11.0%
PM	5.0%	1.0%	N/A	N/A	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Saturday	10.0%	0.0%	N/A	N/A	0.0%	11.0%	0.0%	11.0%	0.0%	0.0%
<b>In/Out Splits</b>	(7)	(7)			(7)	(2)	(7)	(9)	(9)	(7)
AM/MD/PM/Sat	In 50.0% Out 50.0%	In 50.0% Out 50.0%	In N/A Out N/A	In N/A Out N/A	In 50.0% Out 50.0%	In 50.0% Out 50.0%	In 50.0% Out 50.0%	In 50.0% Out 50.0%	In 50.0% Out 50.0%	In 50.0% Out 50.0%

(1) Based on data from *City Environmental Quality Review (CEQR) Technical Manual*, 2014.

(2) Based on data from *Webster Avenue Rezoning EIS*, 2011.

(3) Based on data from *East Fordham Road Rezoning EIS*, 2013.

(4) RJTW based on CTPP 2006-2010 data for census tracts 197, 199, 209, 211, 213.02, 217, 219, 221.01, 223, 227.01, 227.02, 233.01, 239, 241, 243, and 251.

(5) JTW based on CTPP 2010-2014 data for census tracts 197, 199, 209, 211, 213.02, 217, 219, 221.01, 223, 227.01, 227.02, 233.01, 239, 241, 243, and 251.

(6) Midday and Saturday auto occupancy determined by applying a multiplier (1.4) to the AM/PM rate based on *East New York Rezoning EIS*, 2015.

(7) Based on data from *East New York Rezoning EIS*, 2015.

(8) Based on ITE's *Trip Generation Manual* rate for High-Turnover (Sit-Down) Restaurant (932) & Fast-Food Restaurant with Drive-Through (934).

(9) Based on data from *Lower Concourse Rezoning EIS*, 2009.

(10) *Crotona Park East / West Farms Rezoning EIS*, 2011.

(11) Saturday rate based on ITE's *Trip Generation Manual* (8<sup>th</sup> Edition) average rate proportion between weekday and Saturday

(12) Assumes weekday midday temporal distribution and In/Out splits for Saturday midday.

(13) Assumes 5 percent of weekday truck trip generation rate (consistent with Lower Concourse Rezoning EIS assumptions for Manufacturing and Warehousing land uses).

(14) Assumed to be the same as Restaurant land use for *Webster Avenue Rezoning EIS*, 2011.

(15) Based on data from *Covenant House from NYCT - Number 7 Extension Project EIS*, 2003.

(16) Saturday trip rate based on ratio between Saturday and weekday rates for Residential lane use. Similarly, Saturday temporal distribution based on weekday versus Saturday midday Residential proportion.

(17) Based on data from *Pier 57 Redevelopment Project EIS*, 2013.

(18) Based on ITE's *Trip Generation Manual* rate for Auto Dealership (841).

(19) Based on ITE's *Trip Generation Manual* rate for Warehousing (150).

are adjusted by a multiplicative factor of 1.4 for the weekday midday peak hour to reflect the predominance of non-work-related trips during these periods. While not all AM and PM peak hour trips are work-related, the lower vehicle occupancy rates for trips to and from work are conservatively applied to all auto trips in these peak travel hours.

Residential-based trips in the weekday midday peak hour more likely would be local, compared to non-local trips made during the commuter peak hours (and local trips would be expected to have a higher walk share, for example). However, modal splits based on the ACS journey-to-work data are conservatively assumed for all periods.

### *Local Retail*

The trip generation rates and temporal distributions for local retail uses are based on data from the *CEQR Technical Manual*. The modal and directional in/out splits and vehicle occupancy rates are based on data from the *Webster Avenue Rezoning EIS*. Truck trip generation rates and temporal distributions are based on data from the *CEQR Technical Manual*. For the purposes of the travel demand forecast, it is assumed that ten percent of all local retail trips would be linked trips, with multiple destinations within the rezoning area, as permitted according to the *CEQR Technical Manual*. FRESH supermarkets are proposed for the rezoning area and the trip generator factors were based on the *East New York Rezoning EIS*. The gas station trip generator factors were based on the *Lower Concourse Rezoning EIS*.

### *Regional Retail*

The trip generation rates and temporal distributions for regional retail uses are based on data from the *CEQR Technical Manual*. The modal splits are based on reverse journey-to-work data and directional in/out splits, and vehicle occupancy rates are based on data from the *East Fordham Road Rezoning EIS*. Truck trip generation rates and temporal distributions were also based on data from the *East Fordham Road Rezoning EIS*.

### *Non-Retail Commercial Uses*

Non-retail commercial land uses within the rezoning area in the No-Action and/or With-Action conditions include office, restaurant, and auto-related uses (auto repair, auto sales, gas station). As shown in **Table 3**, the factors used to forecast travel demand from these uses were developed from a variety of sources, including the *CEQR Technical Manual*, ITE's *Trip Generation Manual* (8<sup>th</sup> Edition), the *Webster Avenue Rezoning EIS*, *East New York Rezoning EIS*, *Lower Concourse Rezoning EIS*, and AASHTO CTPP reverse journey-to-work data for workers in the census tracts in the study area (Bronx Census Tracts 195, 197, 199, 209, 211, 213.02, 217, 219, 221.01, 221.02, 223, 227.01, 227.02, 233.01, 235.01, 237.03, 237.04, 239, 241, 243, 251, 253.) A 25-percent linked-trip "credit" is assumed for the restaurant use, consistent with the *Webster Avenue Rezoning EIS*.



## Community Facility

The types of community facility uses that would be considered within the rezoning area for the RWCDs in the No-Action and With-Action conditions include medical office, pre-K school, day care center, community center, transitional housing, and religious uses. The factors used to forecast travel demand from these land uses were developed from a variety of sources, including the *CEQR Technical Manual*, the *Webster Avenue Rezoning EIS*, *East New York Rezoning EIS*, *Number 7 Extension Project EIS*, and journey-to-work/reverse journey-to-work census data.

## Light Industrial / Warehouse

The trip generation rates, temporal distributions, in/out splits, and vehicle occupancies for light industrial lane uses were primarily based on data from the *Crotona Park East / West Farms Rezoning EIS*. Saturday trip generation rates were estimated based on ITE *Trip Generation Manual* data. The trip generation rates, temporal distributions, in/out splits, and vehicle occupancies for warehouse lane uses were primarily based on data from the *Lower Concourse Rezoning EIS* and ITE's *Trip Generation Manual*.

### TRIP GENERATION

The person and vehicle trips expected to result from the Proposed Actions are expressed as an “incremental change” or “net change” in trips. This incremental change is calculated by comparing the estimated numbers of trips resulting from the Proposed Actions (in the 2026 analysis year) to the numbers of trips estimated to be occurring in the vicinity of the rezoning area without the Proposed Actions. Trips are calculated based on the transportation planning factors shown previously in **Table 3**.

**Table 4**, “Travel Demand Forecast,” lists the estimate of the net incremental change in peak-hour person trips and vehicle trips, respectively (as compared to conditions in the area without the Proposed Actions) that would occur in 2026 with implementation of the Proposed Actions.

The Proposed Actions would be expected to generate a net increase of approximately 4,055 person trips in the weekday AM peak hour, 9,600 person trips in the weekday midday, 7,674 person trips in the weekday PM peak hour, and 8,354 person trips in the Saturday midday peak hour. These person trips can be translated into modal trip “types” for the entire study area as follows:

- Peak hour vehicle trips (including auto, truck, and taxi trips balanced to reflect that some taxis arrive or depart empty) would be expected to result in additional trips – approximately 405, 524, 671, and 617 vehicle trips (“in” and “out” trips, combined) in the weekday AM, midday, PM, and Saturday midday peak hours, respectively.
- Peak hour subway trips would increase by a net total of approximately 1,382, 1,136, 1,748, and 1,649 in the weekday AM, midday, PM, and Saturday midday peak hours, respectively.
- Peak hour bus trips would increase by a net total of approximately 555, 1,037, 935, and 985 in the weekday AM, midday, PM, and Saturday midday peak hours, respectively.

- Walk trips would increase by approximately 1,607, 6,772, 4,143, and 4,787 trips during the respective weekday AM, midday, PM, and Saturday midday peak hours.

The Proposed Actions are not expected to generate substantial numbers of trips by Metro-North Railroad (MNR). MNR's Morris Heights station is located more than ½-mile from the project corridor and the projected development sites (and therefore not within a convenient walking distance). Commuter rail trips generated by the Proposed Actions would likely start or end as on another mode of transit (i.e., subway or bus) and are assumed to be reflected in the forecast for these modes.

**Table 4: Travel Demand Forecast**

Land Use	Local Retail <sup>1</sup>		Regional Retail		Office		Residential		Restaurant <sup>2</sup> (sit-down)		Light Industrial		Auto Repair		Auto Dealership		Warehouse		Fresh (Supermarket)	
Size/Units	208.1 ksf		42.8 ksf		39.3 ksf		3,250.0 DU		11.6 ksf		-47.8 ksf		-86.8 ksf		-11.2 ksf		-168.7 ksf		23.2 ksf	
Peak Hour Trips:																				
AM	1152		100		85		2624		14		-71		-222		-31		-69		142	
MD	7294		301		106		1312		94		-55		-185		-61		-115		570	
PM	3839		301		99		2887		126		-77		-239		-40		-73		475	
Sat MD	4495		436		26		2496		174		-8		-185		-46		-30		753	
Person Trips:																				
AM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	17	17	19	18	30	1	76	431	3	0	-23	-3	-123	-66	-23	-8	-20	-5	3	3
Taxi	12	12	1	1	2	0	7	40	3	0	-1	0	-7	-4	0	0	-1	0	2	2
Bus	58	58	11	10	17	1	61	344	1	0	-13	-2	-1	-1	0	0	-11	-3	3	4
Subway	29	29	11	10	17	1	194	1,098	4	0	-13	-2	-1	-1	0	0	-11	-3	3	4
Railroad	0	0	1	0	1	0	11	65	0	0	-1	0	0	0	0	0	-1	0	0	0
Walk/Other	461	461	9	9	15	1	45	254	3	0	-11	-2	-12	-6	0	0	-10	-3	53	65
Total	576	576	52	48	81	3	394	2,231	13	1	-63	-9	-145	-78	-23	-8	-54	-14	64	78
MD	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	109	109	58	54	15	24	127	127	12	12	-10	-10	-79	-79	-31	-31	-21	-21	10	12
Taxi	73	73	3	3	1	1	12	12	9	9	-1	-1	-5	-5	0	0	-1	-1	8	9
Bus	365	365	33	30	9	14	101	101	2	2	-6	-6	-1	-1	0	0	-12	-12	13	15
Subway	182	182	33	30	9	14	323	323	14	14	-6	-6	-1	-1	0	0	-12	-12	13	15
Railroad	0	0	2	1	0	1	19	19	0	0	0	0	0	0	0	0	-1	-1	0	0
Walk/Other	2,918	2,918	28	26	7	12	75	75	9	9	-5	-5	-7	-7	0	0	-10	-10	217	255
Total	3,647	3,647	157	145	41	65	656	656	47	47	-27	-27	-93	-93	-31	-31	-58	-58	262	308
PM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	58	58	58	54	2	35	390	167	21	10	-3	-25	-102	-102	-16	-24	-7	-20	9	10
Taxi	38	38	3	3	0	2	36	16	17	8	0	-1	-6	-6	0	0	0	-1	7	8
Bus	192	192	33	30	1	20	311	133	4	2	-2	-14	-1	-1	0	0	-4	-12	11	13
Subway	96	96	33	30	1	20	994	426	25	12	-2	-14	-1	-1	0	0	-4	-12	11	13
Railroad	0	0	2	1	0	1	59	25	0	0	0	-1	0	0	0	0	0	-1	0	0
Walk/Other	1,536	1,536	28	26	1	17	230	99	17	8	-2	-12	-10	-10	0	0	-3	-10	185	209
Total	1,920	1,920	157	145	5	94	2,021	866	84	41	-9	-68	-120	-120	-16	-24	-18	-55	223	252
Saturday	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	67	67	84	77	6	4	241	241	22	22	-2	-2	-79	-79	-23	-22	-7	-4	14	16
Taxi	45	45	5	4	0	0	22	22	17	17	0	0	-5	-5	0	0	0	0	10	12
Bus	225	225	48	44	3	2	192	192	4	4	-1	-1	-1	-1	0	0	-4	-2	17	20
Subway	112	112	48	44	3	2	614	614	26	26	-1	-1	-1	-1	0	0	-4	-2	17	20
Railroad	0	0	2	2	0	0	36	36	0	0	0	0	0	0	0	0	0	0	0	0
Walk/Other	1,798	1,798	41	38	3	2	142	142	17	17	-1	-1	-7	-7	0	0	-3	-2	288	338
Total	2,247	2,247	227	209	16	10	1,248	1,248	87	87	-4	-4	-93	-93	-23	-22	-19	-11	346	407
Vehicle Trips:																				
AM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	11	11	9	8	27	1	63	356	1	0	-14	-2	-95	-51	-18	-6	-15	-4	2	2
Taxi	10	10	1	0	1	0	5	29	1	0	-1	0	-6	-3	0	0	-1	0	1	2
Taxi Balanced	19	19	1	1	1	1	34	34	1	1	-1	-1	-9	-9	0	0	-1	-1	3	3
Truck	3	3	1	1	1	1	12	12	1	1	-1	-1	-5	-5	0	0	-8	-8	0	0
Total	33	33	10	10	29	3	108	401	4	3	-17	-4	-109	-65	-18	-6	-24	-13	5	5
MD	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	68	68	26	24	14	21	75	75	5	5	-6	-6	-61	-61	-24	-24	-16	-16	6	7
Taxi	61	61	2	1	1	1	8	8	4	4	0	0	-4	-4	0	0	-1	-1	6	7
Taxi Balanced	122	122	3	3	2	2	17	17	8	8	-1	-1	-7	-7	0	0	-1	-1	12	12
Truck	4	4	1	1	1	1	9	9	1	1	-1	-1	-3	-3	0	0	-5	-5	0	0
Total	194	194	30	28	16	23	100	100	15	15	-8	-8	-71	-71	-24	-24	-23	-23	19	20
PM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	36	36	26	24	2	31	322	138	10	5	-2	-15	-78	-78	-12	-19	-5	-16	5	6
Taxi	32	32	2	1	0	1	26	11	7	4	0	-1	-5	-5	0	0	0	-1	5	5
Taxi Balanced	64	64	3	3	1	1	37	37	11	11	-1	-1	-9	-9	0	0	-1	-1	10	10
Truck	1	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	-1	-1	0	0
Total	101	101	30	27	3	32	361	177	21	16	-3	-17	-88	-88	-12	-19	-7	-17	16	16
Saturday	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	42	42	38	35	5	3	142	142	10	10	-1	-1	-61	-61	-18	-17	-5	-3	8	10
Taxi	37	37	2	2	0	0	16	16	8	8	0	0	-4	-4	0	0	0	0	7	9
Taxi Balanced	75	75	4	4	0	0	32	32	15	15	0	0	-7	-7	0	0	0	0	16	16
Truck	0	0	1	1	0	0	3	3	1	1	0	0	0	0	0	0	0	0	0	0
Total	118	118	43	40	6	4	177	177	26	26	-1	-1	-68	-68	-18	-17	-6	-4	25	29

(1) Ten-percent linked trips for local retail.  
(2) Twenty-five-percent linked trips for restaurant.

**Table 4 (continued): Travel Demand Forecast**

Land Use	Pre-K (Student)		Pre-K (Staff)		Pre-K (Parent)		Day Care Center		Community Center		Medical Office (Clinic)		Gas Station (With Store)		Transitional Housing (Shelter)		House of Worship		Total	
Size/Units	0.0 students		0.0 staff		0.0 parents		21.1 ksf		53.9 ksf		2.5 ksf		-0.6 ksf		-80.0 beds		17.8 ksf			
Peak Hour Trips:																				
AM	0	0	0	0	0	0	111	35	184	259	13	35	-3	-3	-27	-11	27	14		
MD	0	0	0	0	0	0	132	1	186	186	38	38	-4	-4	-38	-38	25	25		
PM	0	0	0	0	0	0														
Sat MD	0	0	0	0	0	0	5		145		35		-3	-3	-22	-22	61			
Person Trips:																				
AM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	0	0	0	0	0	0	3	3	6	4	3	0	-2	-2	0	0	1	1	-30	393
Taxi	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	18	52
Bus	0	0	0	0	0	0	4	3	7	4	2	0	0	0	0	0	0	0	137	418
Subway	0	0	0	0	0	0	2	2	3	2	4	0	0	0	0	0	1	1	241	1,141
Railroad	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	65
Walk/Other	0	0	0	0	0	0	50	44	95	61	2	0	0	0	-4	-21	12	11	712	895
Total	0	0	0	0	0	0	59	52	112	72	11	1	-2	-2	-4	-23	15	12	1,091	2,964
MD	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	0	0	0	0	0	0	1	1	7	6	5	5	-1	-1	0	0	0	0	203	207
Taxi	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	102	103
Bus	0	0	0	0	0	0	1	1	9	7	3	3	0	0	0	0	0	0	517	520
Subway	0	0	0	0	0	0	1	1	4	3	6	6	0	0	0	0	0	0	566	570
Railroad	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20
Walk/Other	0	0	0	0	0	0	15	15	121	99	3	3	0	0	-5	-5	6	6	3,377	3,395
Total	0	0	0	0	0	0	17	17	142	116	18	17	-1	-1	-6	-6	7	7	4,785	4,815
PM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	0	0	0	0	0	0	3	4	3	7	5	6	-2	-2	-1	0	1	1	420	177
Taxi	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	97	69
Bus	0	0	0	0	0	0	4	4	3	8	3	4	0	0	0	0	0	0	556	379
Subway	0	0	0	0	0	0	2	2	2	4	6	7	0	0	-1	0	1	1	1,164	584
Railroad	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	26
Walk/Other	0	0	0	0	0	0	53	60	46	112	3	3	0	0	-25	-11	11	10	2,095	2,048
Total	0	0	0	0	0	0	62	70	54	132	18	20	-2	-2	-27	-11	13	12	4,392	3,283
Saturday	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	0	0	0	0	0	0	0	0	4	4	4	6	-1	-1	0	0	2	1	331	330
Taxi	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	96	98
Bus	0	0	0	0	0	0	0	0	4	4	3	4	0	0	0	0	1	1	492	493
Subway	0	0	0	0	0	0	0	0	2	2	5	7	0	0	0	0	3	1	824	825
Railroad	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	38
Walk/Other	0	0	0	0	0	0	2	2	61	63	2	4	0	0	-10	-10	37	15	2,379	2,408
Total	0	0	0	0	0	0	2	3	71	74	14	21	-1	-1	-11	-11	44	18	4,162	4,192
Vehicle Trips:																				
AM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	0	0	0	0	N/A	N/A	2	2	3	2	2	0	-2	-2	0	0	0	0	-24	317
Taxi	0	0	0	0	N/A	N/A	0	0	1	1	0	0	0	0	0	0	0	0	13	38
Taxi Balanced	0	0	0	0	N/A	N/A	1	1	1	1	0	0	0	0	0	0	0	0	52	52
Truck	0	0	N/A	N/A	N/A	N/A	0	0	1	1	0	0	0	0	0	0	0	0	4	4
Total	0	0	N/A	N/A	N/A	N/A	3	2	5	4	2	0	-2	-2	-1	-1	1	1	32	373
MD	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	0	0	0	0	N/A	N/A	1	1	4	4	4	3	-1	-1	0	0	0	0	95	101
Taxi	0	0	0	0	N/A	N/A	0	0	1	1	0	0	0	0	0	0	0	0	78	79
Taxi Balanced	0	0	0	0	N/A	N/A	0	0	2	2	0	0	0	0	0	0	0	0	157	157
Truck	0	0	N/A	N/A	N/A	N/A	0	0	1	1	0	0	0	0	0	0	0	0	7	7
Total	0	0	N/A	N/A	N/A	N/A	1	1	7	6	4	4	-1	-1	0	0	1	1	259	265
PM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	0	0	0	0	N/A	N/A	2	2	2	4	4	4	-2	-2	0	0	0	0	309	121
Taxi	0	0	0	0	N/A	N/A	0	0	1	0	0	0	0	0	0	0	0	0	68	51
Taxi Balanced	0	0	0	0	N/A	N/A	1	1	1	1	1	1	0	0	0	0	0	0	119	119
Truck	0	0	N/A	N/A	N/A	N/A	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Total	0	0	N/A	N/A	N/A	N/A	3	3	3	5	4	4	-2	-2	-1	0	1	1	430	241
Saturday	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	0	0	0	0	N/A	N/A	0	0	2	2	3	4	-1	-1	0	0	1	1	166	166
Taxi	0	0	0	0	N/A	N/A	0	0	1	1	0	0	0	0	0	0	0	0	68	69
Taxi Balanced	0	0	0	0	N/A	N/A	0	0	1	1	0	0	0	0	0	0	0	0	137	137
Truck	0	0	N/A	N/A	N/A	N/A	0	0	0	0	0	0	0	0	0	0	0	0	5	5
Total	0	0	N/A	N/A	N/A	N/A	0	0	3	3	3	5	-1	-1	0	0	2	1	308	309

**Table 5** presents the net incremental change in peak hour vehicle trips (auto, taxi, and truck) that would be generated by five identified development clusters during the weekday AM, midday, PM, and Saturday midday peak hours. As shown in **Table 5**, Cluster 4, the projected developments centered around 170<sup>th</sup> Street, would account for approximately 40 percent of the total vehicle trips generated in all peak hours.

**Table 5: Incremental Vehicle Trips**

Cluster	Weekday			Saturday Midday
	AM	Midday	PM	
1	49	77	101	100
2	93	131	154	140
3	5	-11	7	1
4	187	199	294	269
5	71	128	114	106
<b>Total</b>	<b>405</b>	<b>524</b>	<b>671</b>	<b>617</b>

## Analysis Periods

According to *CEQR Technical Manual* guidelines, a quantified traffic analysis is typically required if a proposed action would result in more than 50 peak-hour vehicle trip ends. As listed in **Table 4**, the Proposed Actions are expected to result in more than 50 total vehicle trips during each weekday analysis hour; therefore, all of these periods will be included in the quantified analysis of traffic conditions. The specific hours to be analyzed in each peak period will be determined based on traffic count data collected along the street network in the study area.

Transit analyses generally examine conditions during the weekday AM and PM commuter peak periods, as it is during these times that overall transit demand (and the potential for significant adverse impacts) is typically greatest. Therefore, the quantitative analyses of transit conditions with the Proposed Actions will focus on these two periods.

According to *CEQR Technical Manual* guidelines, a quantified analysis of pedestrian conditions is typically required if a proposed action would result in 200 or more peak hour pedestrian trips. The net increase in pedestrian trips resulting from the Proposed Actions would exceed the 200-trip *CEQR Technical Manual* analysis threshold during the weekday AM and PM commuter peak hours and the weekday midday peak hour for retail demand. Therefore, all three of these peak hours will be included in the analysis of pedestrian conditions. The specific analysis peak hours will be determined based on pedestrian count data in the study area.

## TRAFFIC STUDY AREA

### *Area Street Network*

As previously shown on **Figure 1**, the rezoning area consists of approximately 35 blocks along a two-mile corridor surrounding Jerome Avenue in the Bronx, and the street network is an irregular grid system. The primary streets providing access to the rezoning area include Jerome, Sedgwick, Tremont, and Burnside avenues, the Grand Concourse, East 167<sup>th</sup> Street, and Fordham Road. Regional Access is provided by I-95 (Cross-Bronx Expressway) and I-87 (Major Deegan Expressway).

The primary arterial within the rezoning area is Jerome Avenue, which runs north-south within the Bronx from Van Cortlandt Park to the north to the Macombs Dam Bridge at the south end.

The rezoning area is generally bounded by 184<sup>th</sup> Street to the north, Grand Concourse on the East, McClellan Street to the south, and University Avenue to the west. I-95 (Cross-Bronx Expressway) bisects the area, with exit and entrance ramps at Jerome Avenue adjacent to Featherbed Lane and Mt. Eden Avenue. I-87 (Major Deegan Expressway) runs parallel to the site and is approximately half a mile to the west.

### **Primary East-West Corridors**

East 167<sup>th</sup> Street is a major collector that runs east-west through the Bronx, starting at Edward L. Grant Highway to the west, and provides connections to the Grand Concourse, Webster and Third avenues, and Edward A. Stevenson Boulevard to the east. In the project vicinity, there is one travel lane in each direction, bike lanes, and curbside parking on both sides of the road. The segment of East 167<sup>th</sup> Street between River Avenue and Edward L. Grant Highway is a NYCDOT-designated local truck route.

Fordham Road is a principal arterial road that connects Manhattan and the Bronx via the University Heights Bridge and runs east-west through the Bronx until it reaches the Bronx River Parkway, where it transitions to Pelham Parkway. In the vicinity of Jerome Avenue, Fordham Road has two travel lanes and one bus lane per direction. There is no curbside parking while the bus-only lane restrictions are in effect. Fordham Road is a NYCDOT-designated local truck route.

Tremont Avenue is a principal arterial that runs east-west, originating at Sedgwick Avenue to the west and spans the borough to the Throgs Neck section in the southeast corner of the Bronx. In the project vicinity, Tremont Avenue has one travel lane in each direction and curbside parking on both sides.

Burnside Avenue is a minor arterial that runs east-west from University Avenue to the west to Valentine Avenue east of the Grand Concourse. In the project vicinity, Burnside Avenue is a NYCDOT-designated local truck route, has one travel lane in each direction, with curbside parking on both sides of the street.

Cross-Bronx Expressway (I-95) spans the Bronx, originating at I-295 (Throgs Neck) to the east and continuing west across the George Washington Bridge to the New Jersey Turnpike. The expressway has three travel lanes in each direction, provides connections to the Bruckner Expressway (I-278), Hutchinson River Parkway, (I-678), New England Thruway, Sheridan Expressway (I-895), Major Deegan Expressway (I-87), Harlem River Drive, and Henry Hudson Parkway. There are two exits – Exit 2, Jerome Avenue, and Exit 3, Webster Avenue, in the vicinity of the rezoning area. The Cross-Bronx Expressway is a NYCDOT-designated through truck route (i.e., a through route for trucks who do not have a trip origin or destination within the Bronx).

## **Primary North-South Corridors**

Jerome Avenue is a north-south arterial through the Bronx within the rezoning area. The elevated NYCT 4 subway line runs above Jerome Avenue from East 168<sup>th</sup> Street to the north end of the study corridor at East 184<sup>th</sup> Street. Within the project limits, Jerome Avenue has one travel lane in each direction in the center of the roadway between the subway support columns. Along most of the corridor's length, an auxiliary travel lane is provided in each direction between the subway support columns and curbside parking. At some locations, such as at the Burnside Avenue Station, the curbside parking and travel lanes are closed for pedestrian safety purposes. Jerome Avenue is a designated NYCDOT local truck route.

The Grand Concourse is a major arterial that runs north-south through the Bronx and generally provides two mainline travel lanes, one service road lane, and one bike lane within the service roadways in each direction. The mainline roadway is separated from the service roadway by a raised median and curbside parking is provided along the service road.

Bounding the study area to the west is Dr. Martin Luther King Jr. Boulevard, which is also signed as University Avenue in the vicinity of the Bronx Community College and Edward L. Grant Highway below West 174<sup>th</sup> Street. The boulevard is a principal arterial roadway that has two moving lanes and a curbside lane in each direction and runs approximately parallel to Jerome Avenue for its length. South of Tremont Avenue, a raised median divides the travel directions. University Avenue is a NYCDOT-designated local truck route and provides a combination of bike lanes and shared bike lanes.

Sedgwick Avenue runs parallel to Jerome Avenue, from Mosholu Parkway in the north to the Macombs Dam Bridge in the south. Sedgwick Avenue is a minor arterial that serves as a service road for the Major Deegan Expressway for the majority of its length in the study area, and becomes a primary thoroughfare for the area near the Bronx Community College.

The Major Deegan Expressway (I-87) is an interstate highway that parallels the Harlem River on the west side of the Bronx. The expressway is a NYCDOT-designated through truck route and connects the Bruckner Expressway in the southeastern portion of the Bronx to Westchester and destinations north and west. The expressway has five access points within the vicinity of the rezoning area – Exit 5 - East 161<sup>st</sup> Street,

Exit 6 - East 153<sup>rd</sup> Street, Exit 7 - I-95 to the Cross Bronx Expressway and George Washington Bridge, Exit 8 - West 179<sup>th</sup> Street and Exit 9 - West Fordham Road.

### *Traffic Assignment and Analysis Locations*

The assignments of vehicle trips will be based on the location of the projected development and the anticipated origins and destinations of vehicle trips associated with the different uses projected for the rezoning area (e.g., commercial, residential, etc.). The origins/destinations of residential and non-retail commercial trips used for the assignments are based on 2006-2010 US Census journey-to-work and reverse journey-to-work data, respectively. Retail trip origins/destinations are based on population density in proximity to the rezoning area. **Table 6** presents the directional distributions of auto and taxi trips by land use based on the origin/destination data. Using these distributions, auto and taxi trips were first assigned to various portals on the perimeter of the rezoning area and then assigned via the most direct route to trip nodes located within each cluster or in proximity to an outlier development site.

Truck trips en route to and from each cluster/outlier site were assigned to designated through and local truck routes and then to the most direct paths to and from trip nodes. The majority of truck trips were assigned to the through truck route along the Cross Bronx Expressway and to local truck routes along Jerome Avenue, Fordham Road, and Burnside Avenue.



**Table 6: Directional Distributions of Auto/Taxi Trips by Land Use**

Land Use	Bronx				Manhattan	Brooklyn	Queens	Long Island	Upstate/CT	Staten Island/NJ/PA
	North	East	South	West						
Non-Retail Commercial	509	2,198	469	274	334	164	666	371	1,552	649
Non-Retail Commercial <sup>1</sup>	7%	31%	7%	4%	5%	2%	9%	5%	22%	9%
Residential	498	1,783	956	280	2,197	213	704	30	1,339	798
Residential <sup>2</sup>	6%	20%	11%	3%	25%	2%	8%	0%	15%	9%
Local Retail/Community Uses	66,680	93,365	62,675	51,800	-	-	-	-	-	-
Local Retail/Community Uses <sup>3</sup>	24%	34%	23%	19%	-	-	-	-	-	-

**Notes:**

1. Vehicle (auto/taxi) trip distribution for office and light industrial trips for the proposed rezoning area.

This distribution was based on reverse journey-to-work trips using 2006-2010 US Census data for tracts 195, 197, 199, 209, 211, 213.02, 217, 219, 221.01, 221.02, 223, 227.01, 227.02, 233.01, 235.01, 237.03, 237.04, 239, 241, 243, 251 and 253.

2. Vehicle (auto/taxi) trip distribution for market-rate and affordable residential.

This distribution was based on reverse journey-to-work trips using 2006-2010 US Census data for tracts 195, 197, 199, 209, 211, 213.02, 217, 219, 221.01, 221.02, 223, 227.01, 227.02, 233.01, 235.01, 237.03, 237.04, 239, 241, 243, 251 and 253.

3. Trip distribution for all other uses in the proposed rezoning area (local retail, destination retail, restaurant, auto repair, auto dealership, warehouse, supermarket, pre-K school, day care center, community center, and medical office).

This distribution was based population density for census tracts within an approximate 1/2-mile distance of the proposed rezoning area.

As noted previously, the Proposed Actions would be expected to generate a net increase of 405 vehicle trips during the weekday AM peak hour, 524 vehicle trips during the weekday midday peak hour, 671 vehicle trips during the weekday PM peak hour, and 617 vehicle trips during the Saturday midday peak hour. As these traffic volumes would exceed 50 trips in each peak hour (the *CEQR Technical Manual* Level 1 screening threshold for a detailed analysis), a preliminary assignment of net increment traffic volumes has been prepared to identify critical intersections that would potentially exceed 50 trips per hour (a Level 2 screening assessment). **Figure 2** shows the locations of the 37 that were selected for detailed analysis. Net incremental peak hour vehicle trips are assigned to intersections to be analyzed within the traffic study area, as summarized in **Table 7**.

## TRANSIT

The rezoning area is served by three subway lines – the elevated 4 (IRT) line on Jerome Avenue and the B/D (IND) lines along the Grand Concourse to the east.

According to the general thresholds used by the MTA and specified in the *CEQR Technical Manual*, detailed transit analyses are required if a proposed action is projected to result in greater than 200 peak hour rail or bus transit riders. If a proposed action would result in 50 or more bus passengers being assigned to a single bus line (in one direction), or if it would result in an increase of 200 or more passengers at a single subway station or on a single subway line, a detailed bus or subway analysis would be warranted.

The Proposed Actions are expected to generate over 200 peak hour rail on a single line, and likely will also result in greater than 50 bus passengers being assigned to a single bus line in one direction. Therefore, a detailed bus and subway analysis is warranted.

## Subway Analysis

### Subway Stations

There are a total of eleven NYCT subway stations within, or in close proximity to, the rezoning area. These stations are presented on **Figure 3** along with the subway routes serving each facility. The 4 line operating along Jerome Avenue serves six elevated stations above Jerome Avenue within the rezoning area, including, 183<sup>rd</sup> Street, Burnside Avenue, 176<sup>th</sup> Street, Mt. Eden Avenue, 170<sup>th</sup> Street, and 167<sup>th</sup> Street. Five underground stations (182<sup>nd</sup>-183<sup>rd</sup> Streets, Tremont Avenue, 174<sup>th</sup>-175<sup>th</sup> Streets, 170<sup>th</sup> Street, and 167<sup>th</sup> Street) are served by the B/D subway lines operating on the Grand Concourse to the east of the rezoning area. Nearly all the projected development sites are closer to the Jerome Avenue 4 stations than the Grand Concourse B/D stations; consequently, all subway trips were assigned to Jerome Avenue stations except for one projected development site that was closer to the 170<sup>th</sup> Street B/D station.

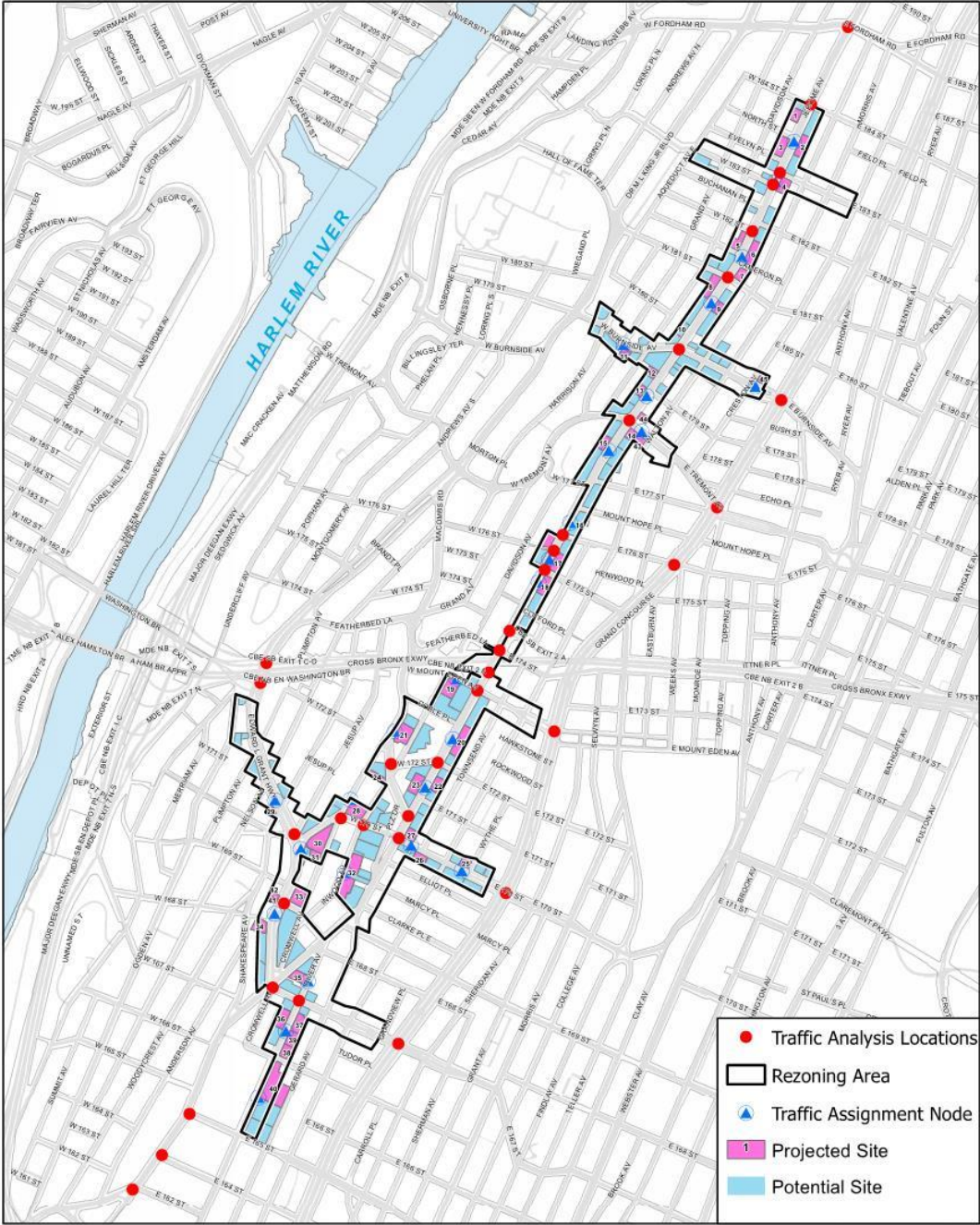


Figure 2

Jerome Avenue Rezoning Proposal

TRAFFIC ANALYSIS LOCATIONS

**Table 7: RWCDs Net Incremental Peak Hour Vehicle Trips by Intersection**

Intersection	Incremental Peak Hour Trips			
	AM	Midday	PM	Sat MD
Jerome Avenue at Kingsbridge Road	-3	+ 79	+ 58	+ 82
Jerome Avenue at Fordham Road	+ 42	+ 103	+ 113	+ 116
Jerome Avenue at 184 <sup>th</sup> Street	+ 41	+ 89	+ 114	+ 125
Jerome Avenue at East 183 <sup>rd</sup> Street	+ 35	+ 93	+ 98	+ 100
Jerome Avenue at West 183 <sup>rd</sup> Street	+ 37	+ 89	+ 98	+ 99
Jerome Avenue at West 182 <sup>nd</sup> Street	+ 31	+102	+ 103	+ 111
Jerome Avenue at West 181 <sup>st</sup> Street	+ 28	+ 123	+ 107	+ 119
Jerome Avenue at Burnside Avenue	+ 29	+ 133	+ 118	+ 121
Jerome Avenue at Tremont Avenue	+ 35	+ 93	+ 112	+ 125
Jerome Avenue at West 176 <sup>th</sup> Street	+ 65	+ 145	+ 132	+ 138
Jerome Avenue at East 176 <sup>th</sup> Street	+ 49	+ 121	+ 107	+ 116
Jerome Avenue at 175 <sup>th</sup> Street	+ 51	+ 100	+ 101	+ 101
Jerome Avenue at I-95 Westbound Ramps	+ 110	+ 112	+ 140	+ 128
Jerome Avenue at Featherbed Lane	+ 88	+ 100	+ 120	+ 114
Jerome Avenue at I-95 Eastbound Ramps	+ 100	+ 83	+ 110	+ 108
Jerome Avenue at Mt. Eden Avenue	+ 93	+ 115	+ 158	+ 149
Jerome Avenue at Macombs Road	+ 72	+ 68	+ 86	+ 95
Jerome Avenue at 172 <sup>nd</sup> Street	+ 61	+ 64	+ 117	+ 110
Jerome Avenue at 170 <sup>th</sup> Street	+ 65	+ 107	+ 132	+ 127
Jerome Avenue at 167 <sup>th</sup> Street/Edward L Grant Hwy	+ 80	+ 93	+ 105	+ 93
Jerome Avenue at East 165 <sup>th</sup> Street	+ 62	+ 28	+ 69	+ 48
Jerome Avenue at East 164 <sup>th</sup> Street	+ 61	+ 23	+ 64	+ 44

Jerome Avenue at Macombs Dam Bridge	<b>+ 52</b>	+ 25	+ 36	+ 44
Grand Concourse at East Burnside Avenue	+ 13	<b>+ 53</b>	+ 43	+ 45
Grand Concourse at East Tremont Avenue	+ 15	+ 29	+ 42	<b>+ 64</b>
Grand Concourse at East 176 <sup>th</sup> Street	+ 19	<b>+ 58</b>	+ 49	<b>+ 73</b>
Grand Concourse at Mt. Eden Avenue	+ 3	<b>+ 55</b>	+ 47	<b>+ 65</b>
Grand Concourse at East 170 <sup>th</sup> Street	+ 28	<b>+ 90</b>	<b>+ 103</b>	<b>+ 109</b>
Grand Concourse at East 167 <sup>th</sup> Street	+ 38	<b>+ 99</b>	<b>+ 86</b>	<b>+ 104</b>
Inwood Avenue at West 170 <sup>th</sup> Street	+ 15	<b>+ 58</b>	<b>+ 84</b>	<b>+ 62</b>
Cromwell Avenue at West 170 <sup>th</sup> Street	+ 11	<b>+ 66</b>	<b>+ 113</b>	<b>+ 76</b>
University Avenue at Washington Bridge On-Ramps	+ 37	<b>+ 83</b>	<b>+ 60</b>	<b>+ 77</b>
University Avenue at Washington Bridge Off-Ramps	+ 14	<b>+ 77</b>	<b>+ 74</b>	<b>+ 83</b>
Edward L Grant Hwy at West 170 <sup>th</sup> Street	+ 35	<b>+ 64</b>	<b>+ 79</b>	<b>+ 64</b>
Edward L Grant Hwy at West 169 <sup>th</sup> Street	+ 46	<b>+ 74</b>	<b>+ 69</b>	<b>+ 65</b>
River Avenue at East 167 <sup>th</sup> Street	+ 32	<b>+ 56</b>	+ 40	+ 46
Macombs Road at West 172 <sup>nd</sup> Street	+ 32	+31	+41	+33



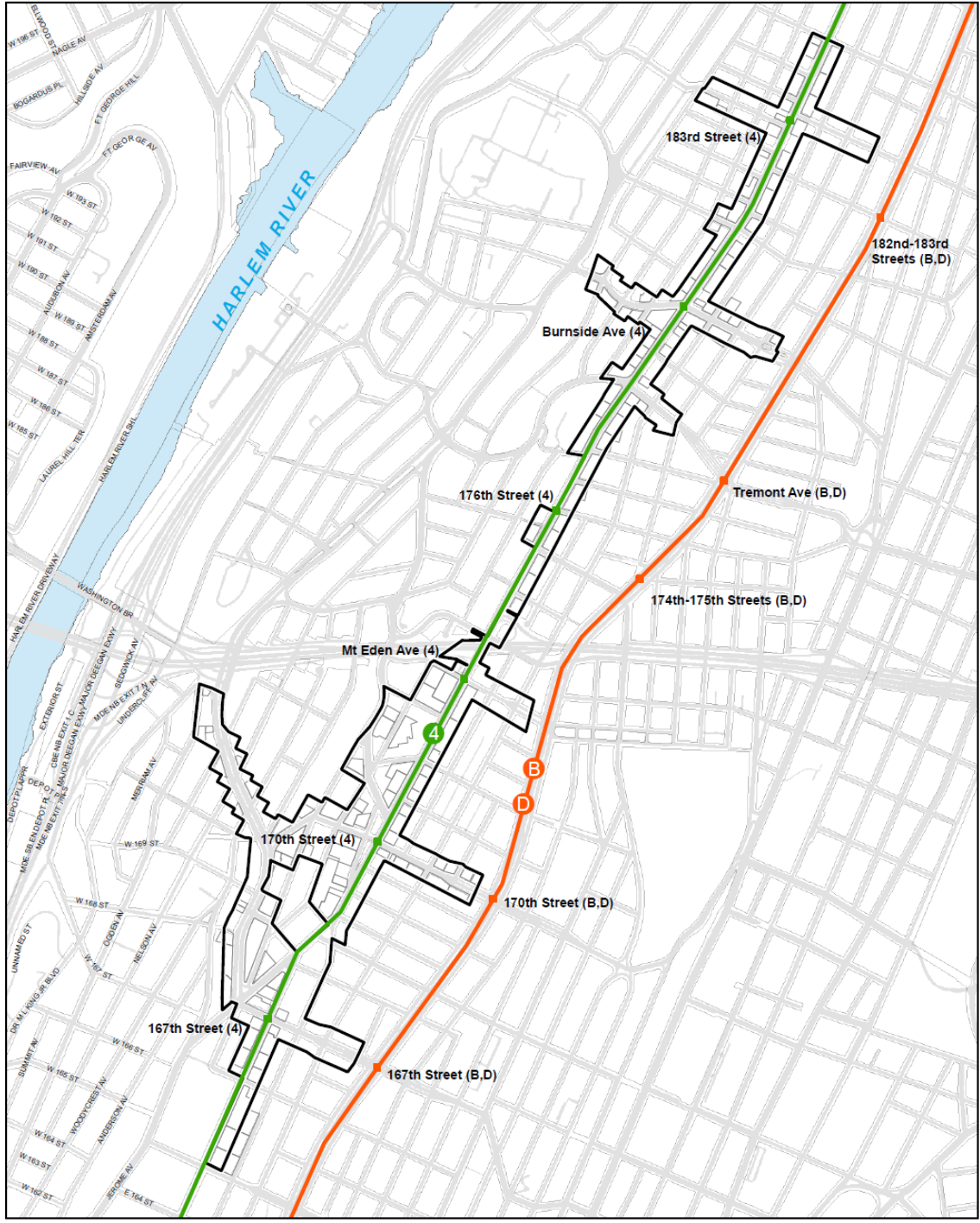


Figure 3  
NYCT Subway Lines in  
the Rezoning Area

## Subway Assignment and Analyzed Stations

As shown in **Table 4**, under the RWCDs, the Proposed Actions would generate a net increment of approximately 1,382 and 1,748 subway trips during the weekday AM and PM commuter peak hours, respectively. Trips from each development cluster or outlier site were assigned to the individual stations serving the rezoning area based on proximity to projected development sites. **Table 8** shows the estimated net incremental subway trips generated by the Proposed Actions during the weekday AM and PM peak hours at each of the subway stations serving the rezoning area. As shown in **Table 8**, the highest number of peak hour subway trips are expected to occur at the 170<sup>th</sup> Street station on the Jerome Avenue 4 Line, which would experience approximately 613 incremental trips (in and out combined) in the AM peak hour and 728 in the PM peak hour.

**Table 8: RWCDs Net Incremental Peak Hour Subway Trips by Station**

Subway Station (Line)	AM Peak Hour Trips			PM Peak Hour Trips		
	Boarding	Alighting	Total	Boarding	Alighting	Total
167 <sup>th</sup> Street (4)	143	30	173	78	150	<b>228</b>
170 <sup>th</sup> Street (4)	522	91	<b>613</b>	228	500	<b>728</b>
Mt. Eden Avenue (4)	72	15	87	38	72	110
176 <sup>th</sup> Street (4)	118	22	140	62	124	186
Burnside Avenue (4)	115	49	164	98	136	<b>234</b>
183 <sup>rd</sup> Street (4)	154	30	184	72	157	<b>229</b>
170 <sup>th</sup> Street (B, D)	17	3	20	7	25	32

The analysis of subway station conditions focuses on a total of four subway stations at which incremental demand from the Proposed Actions would exceed the 200-trip CEQR Technical Manual analysis threshold in one or both peak hours. As shown in **Table 8**, these subway stations include:

- 167<sup>th</sup> Street (4)
- 170<sup>th</sup> Street (4)
- Burnside Avenue (4)
- 183<sup>rd</sup> Street (4)

For each of these facilities, key circulation elements (e.g., street stairs and fare arrays) expected to be used by concentrations of new demand from the Proposed Actions are analyzed.

## Subway Line Haul

As discussed above, the rezoning area is served by three NYCT subway routes, including the 4, B, and D lines. As the Proposed Actions are expected to generate 200 or more new subway trips in one direction on one or more of these routes, an analysis of subway line haul conditions is included in the EIS. The analysis uses existing maximum load point subway service and ridership data provided by NYCT to assess existing, future No-Action, and future With-Action conditions at the peak load points of the respective subway lines during the weekday AM and PM peak hours.

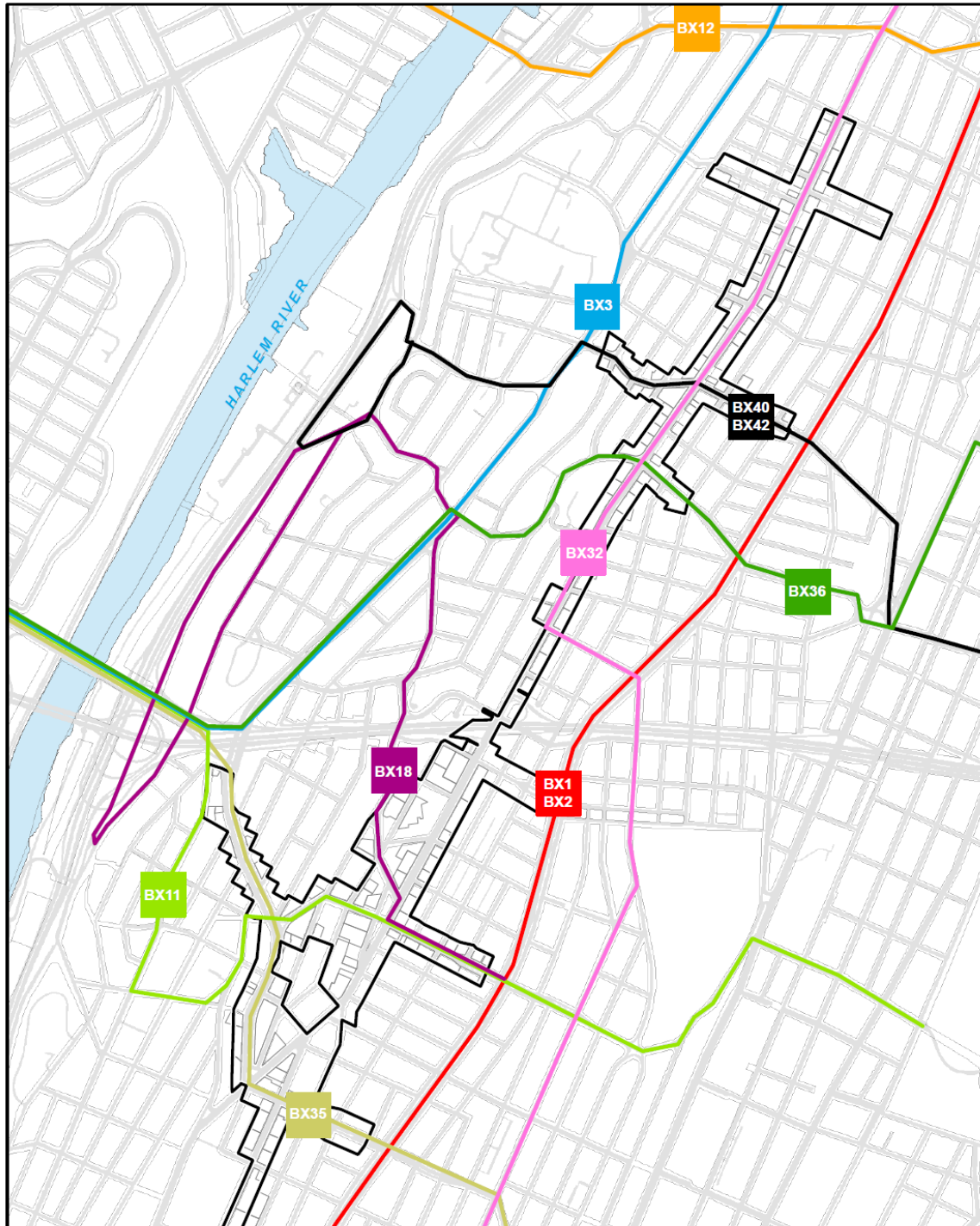
## Bus Analysis

### Bus Routes

The rezoning area is served by nine local NYCT bus routes (see **Figure 4**) and include the following:

- Bx1 connects Riverdale to Mott Haven along the Grand Concourse adjacent to the site
- Bx2 connects Kingsbridge to Mott Haven along the Grand Concourse adjacent to the site
- Bx11 operates between Longwood in the Bronx and the George Washington Bridge Bus Terminal in Manhattan via Claremont Parkway and 170<sup>th</sup> Street
- Bx18 operates between Morris Heights and Morrisania via Macombs Road. The Bx18 primarily serves as a connection between the Morris Heights neighborhood and the 4 Line subway station at Jerome Avenue and 170<sup>th</sup> Street within the rezoning area. The Bx18 has the lowest peak hour ridership and service frequency of the bus routes within the rezoning area and would not likely be used by new bus trips generated by the rezoning project; therefore, no new trips were assigned to this route.
- Bx32 operates between the Bronx VA Medical Center and Mott Haven via Morris and Jerome avenues
- Bx35 connects Hunts Point in the Bronx to Washington Heights via East 167<sup>th</sup> and West 181<sup>st</sup> streets
- Bx36 connects Soundview in the Bronx to Washington Heights in Manhattan via East 174<sup>th</sup> and East 180<sup>th</sup> streets
- Bx40 operates between Morris Heights and Fort Schuyler via East Tremont Avenue
- Bx42 operates between Morris Heights and Throgs Neck via East Tremont Avenue





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*Jerome Avenue Rezoning Proposal*

Figure 4  
**NYCT Bus Routes in  
the Rezoning Area**

## Bus Assignment and Analyzed Routes

As presented in **Table 4**, the projected development sites are expected to generate a net total of approximately 555 and 935 incremental trips by bus during the weekday AM and PM peak hours, respectively. These local bus trips were assigned to each route based on proximity to individual projected development sites or clusters and current ridership patterns. **Table 9** presents the anticipated number of new riders expected on each bus route in the AM and PM peak hours. According to the general thresholds used by the MTA and specified in the *CEQR Technical Manual*, a detailed analysis of bus conditions is generally not required if a proposed action is projected to result in fewer than 50 peak hour trips being assigned to a single bus route (in one direction), as this level of new demand is considered unlikely to result in significant adverse impacts. As listed in **Table 9**, several of these bus routes are expected to carry 50 or more new trips in one direction in at least one peak hour and will be analyzed in the EIS.

**Table 9: RWCDS Net Incremental Peak Hour Bus Trips by Route and Direction**

Route	Direction	AM Peak Hour			PM Peak Hour		
		Alighting	Boarding	Total	Alighting	Boarding	Total
BX1	NB	2	0	2	-3	0	-3
	SB	2	1	3	-2	-1	-3
BX2	NB	2	0	2	-3	0	-3
	SB	1	0	1	-1	0	-1
BX11	EB	22	<b>93</b>	115	<b>114</b>	<b>69</b>	183
	WB	22	<b>93</b>	115	<b>114</b>	<b>69</b>	183
BX32	NB	26	36	62	<b>108</b>	34	142
	SB	12	<b>72</b>	84	<b>50</b>	<b>69</b>	119
BX35	EB	15	41	56	<b>61</b>	45	106
	WB	15	41	56	<b>61</b>	45	106
BX36	EB	1	1	2	1	2	3
	WB	0	11	11	8	0	8
BX40	EB	9	1	10	3	21	24
	WB	1	13	14	24	2	26
BX42	EB	9	1	10	3	21	24
	WB	1	13	14	24	2	26

Notes:

**Bold** - denotes greater than 50 incremental trips per direction

## PEDESTRIANS

Per the *CEQR Technical Manual*, detailed pedestrian analyses are generally warranted if a proposed action is projected to result in 200 or more new peak hour pedestrians at any sidewalk, corner reservoir area, or crosswalk. As shown previously in **Table 4**, the proposed project is expected to generate approximately 1,607 walk-only trips in the weekday AM peak hour, 6,772 in the midday peak hour, 4,143 in the PM peak hour, and 4,787 in the Saturday midday peak hour. Persons en route to and from subway station

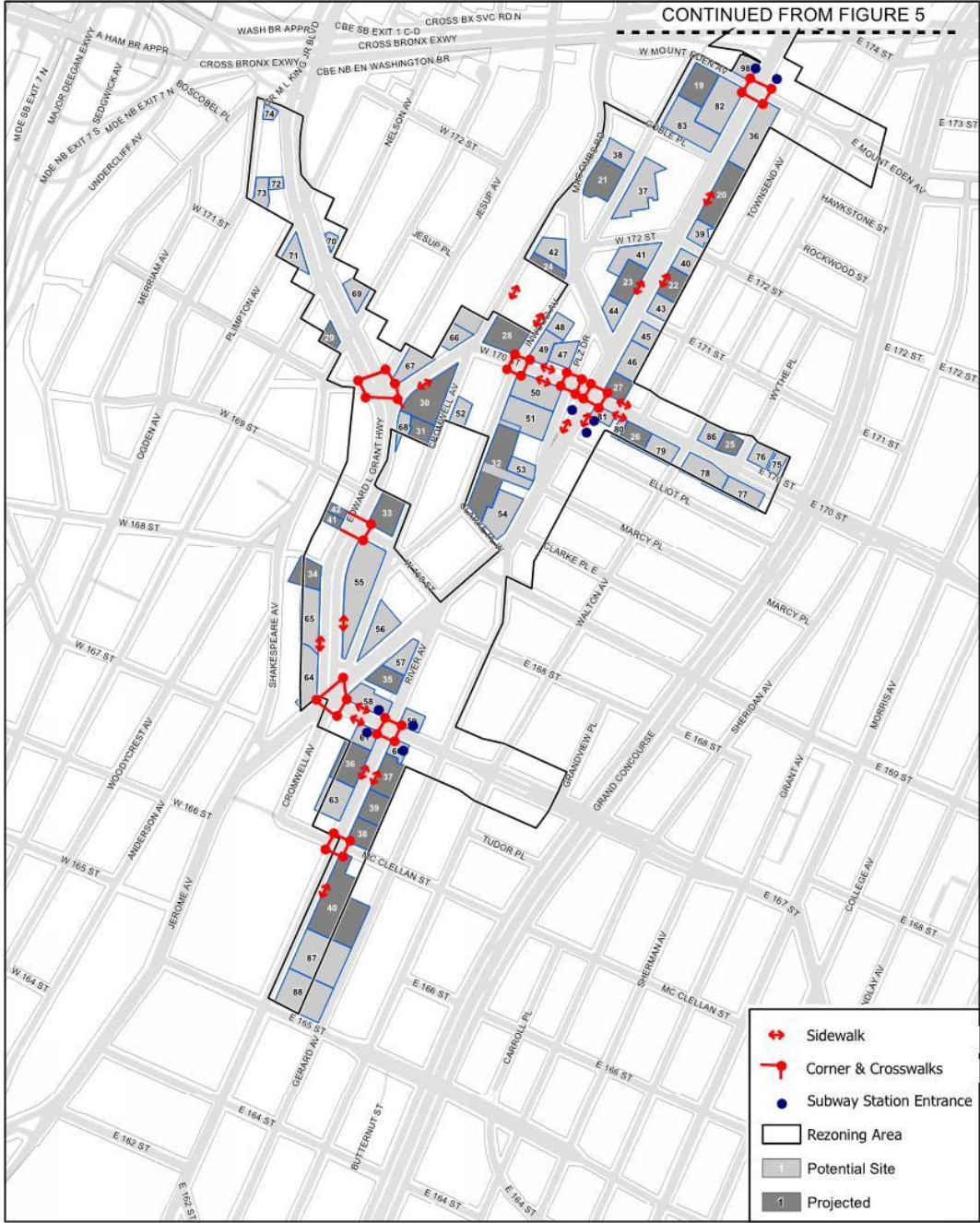
entrances and bus stops would add approximately 1,937, 2,137, 2,683, and 2,634 additional pedestrian trips to rezoning area sidewalks and crosswalks during these same periods, respectively.

The analysis will focus on sidewalks, corner areas, and crosswalks where new pedestrian demand would be most concentrated and most likely to result in significant adverse impacts. It is expected that during the AM and PM peak periods, pedestrian trips attributable to the Proposed Actions would be concentrated on sidewalks and crosswalks adjacent to the development sites within the rezoning area and along routes to and from the bus stops and subway stations. During the midday period, pedestrian trips would be expected to be dispersed, as people travel throughout the area for lunch, shopping, or errands. As shown in **Figures 5 and 6**, the analysis locations include a total of 33 sidewalks, 37 corner reservoir areas, and 41 crosswalks.









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**Jerome Avenue Rezoning Proposal**

Figure 6  
**PEDESTRIAN ANALYSIS LOCATIONS  
- SOUTH**

## **PARKING**

Peak parking demand from commercial and retail uses typically occurs in the weekday midday period and declines during the afternoon and evening. In contrast, peak parking demand associated with residential uses typically occurs during the overnight period.

On- and off-street parking inventory and utilization surveys will be conducted for the weekday overnight period (when residential parking demand typically peaks), the weekday midday period (when parking in a business area is frequently at peak occupancy), and the Saturday midday peak period to document the existing supply and demand for each period. The parking analyses will document the parking supply and utilization within a quarter-mile radius (an acceptable walking distance) of the rezoning area, both with and without the Proposed Actions.

Parking demand generated by the residential component of the Proposed Actions would be forecasted based on 2010-2014 five-year ACS data on average vehicles per household for units. Parking demand generated from all other uses will be derived from the forecasts of daily auto trips from these uses. The forecast of new parking supply with the Proposed Actions will be based on the net change in parking spaces on projected development sites.

## **Appendix 4**

### **Air Quality Analysis Methodology and Assumptions Memorandum**

**To:** NYCDP  
**From:** STV Incorporated  
**Date:** August 29, 2016  
**Project:** Jerome Avenue Rezoning EIS  
**Reference:** Air Quality Analysis Methodology and Assumptions

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## INTRODUCTION

The Proposed Actions, located in the Bronx, New York, would alter traffic volumes and patterns as well as land usage in the study area. As a result of these changes, air quality conditions in terms of localized pollutant levels, could also be affected. To determine the extent of these changes, an air quality analysis will be conducted for the Jerome Avenue Rezoning Environmental Impact Statement (EIS) for both mobile and stationary sources.

The purpose of this memorandum is to describe the air quality analysis approach for the proposed development sites for the Jerome Avenue Rezoning EIS. A total of 146 development sites (45 projected and 101 potential) have been identified within the rezoning area. Under the reasonable worst case development scenario (RWCDs) for the Proposed Actions, the total development expected to occur on the 45 projected development sites under the With-Action condition would consist of a net increase of approximately 3,327,340 sf of total floor area, including net increases of 3,267,288 sf of residential floor area (3,250 dwelling units), 35,575 sf of commercial uses, and 72,272 sf of community facility uses, and net decreases of 47,795 sf of industrial uses and 99 accessory parking spaces. The analysis year is 2026. In addition, based on permit data obtained from the New York City Department of City Planning (NYCDP), numerous industrial source permits in the area are assumed to be active (see **Table 1**) and may need to be analyzed for their potential impact on future residents of the Proposed Actions.

The following outline of methodology and assumptions is based on guidelines contained in the 2014 *CEQR Technical Manual*. The key issues that will be addressed in the air quality study regarding the potential impacts of the Proposed Actions are:

- The potential for significant air quality impacts from increases in the number of project-generated vehicle trips on the already congested local traffic network, and the accompanying reduction in vehicular speeds;
- The potential for emissions from the heating, ventilation and air conditioning (HVAC) systems of the proposed development buildings to significantly impact other proposed development buildings (project-on-project impacts);
- The potential for emissions from the HVAC systems of the proposed development buildings to significantly impact existing land uses;



- The potential combined impacts from HVAC emissions of proposed developments that are of similar height and located in close enough proximity to one another (clusters) to significantly impact existing land uses and other proposed development sites;
- The potential for significant air quality impacts from the emissions of existing large and major emission sources on the proposed residential/commercial developments located in areas that are within 1,000 feet of areas being rezoned to allow new residential/commercial uses;
- The potential for significant air quality impacts on the proposed residential/commercial developments located in areas that are being rezoned to allow new residential/commercial uses from air toxic emissions generated by nearby existing manufacturing and industrial sources; and
- Potential impacts associated with proposed parking facilities on nearby sensitive uses.

This memorandum presents a summary of the methodology and assumptions to be used for both the mobile and stationary source air quality analyses of the Proposed Actions.

## **MOBILE SOURCE ANALYSIS**

### **Pollutants of Concern**

The microscale analysis will evaluate the potential impact that the proposed rezoning will have on localized CO, PM<sub>10</sub> and PM<sub>2.5</sub> levels in the study area as a result of adding project-generated vehicles to currently congested intersections. Selected sites will be analyzed based on the RWCDs. The RWCDs is defined as the full build out of the Proposed Actions that includes both projected and potential development sites.

### **Dispersion and Emissions Modeling for Microscale Analyses**

#### *Dispersion Modeling*

The CO mobile source analysis will be conducted using the Tier 1 CAL3QHC model Version 2.0<sup>1</sup> at all intersections identified. The CAL3QHC model employs a Gaussian (normal distribution) dispersion assumption and includes an algorithm for estimating vehicular queue lengths at signalized intersections. CAL3QHC calculates emissions and dispersion of CO from idling and moving vehicles. The queuing algorithm includes site-specific traffic parameters, such as signal timing and delay, saturation flow rate, vehicle arrival type, and signal actuation characteristics to project the number of idling vehicles.

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<sup>1</sup> EPA, User's Guide to CAL3QHC, A Modeling Methodology for Predicted Pollutant Concentrations Near Roadway Intersections, Office of Air Quality, Planning Standards, Research Triangle Park, North Carolina, EPA-454/R-92-006.

Following the Environmental Protection Agency (EPA) guidelines<sup>2</sup>, CAL3QHC computations will be performed using a wind speed of 1 meter per second, and the neutral stability class D. In order to ensure that reasonable worst-case meteorology will be used in estimating impacts, concentrations will be calculated for all wind directions and will use an assumed surface roughness of 3.21 meters. The 8-hour average CO concentrations will be estimated from the predicted 1-hour average CO concentrations using a factor of 0.7 to account for the persistence of meteorological conditions and fluctuations in traffic volumes.

If maximum predicted CO concentrations result in a potential impact, a refined (Tier 2) version of the model, CAL3QHCR, will be used at affected intersections. CAL3QHCR is an extended module of the CAL3QHC model which allows for the incorporation of hourly traffic and meteorological data. Five years of meteorological data from LaGuardia Airport and concurrent upper air data from Brookhaven, New York will be used in the refined modeling. Off-peak traffic volumes will be determined by adjusting the peak period volumes by the 24-hour distributions of actual vehicle counts collected at appropriate locations. Off-peak will be determined by adjusting the peak period volumes into the appropriate 24-hour distributions as applicable. Current EPA guidance<sup>3</sup> requires the use of CAL3QHCR (Tier 2) for microscale analysis of PM<sub>2.5</sub>.

Multiple receptors will be modeled at each of the selected sites; receptors will be placed along approach and departure links at spaced intervals at a pedestrian height of 1.8 meters. Based on the City's guidance for neighborhood-scale corridor PM<sub>2.5</sub> modeling, receptors in that analysis will be placed at a distance of 15 meters from the nearest moving lane at each analysis location.

#### Emission Factors

Vehicular cruise and idle CO and PM emission factors to be utilized in the dispersion modeling will be computed using EPA's mobile source emissions model, Motor Vehicle Emission Simulator, or MOVES.<sup>4</sup> This emissions model is capable of calculating engine emission factors for various vehicle types, based on the fuel type (gasoline, diesel, or natural gas), meteorological conditions, vehicle speeds, vehicle age, roadway types, number of starts per day, engine soak time, and various other factors that influence emissions, such as inspection maintenance programs. Project specific traffic data obtained through field studies as well as county-specific hourly temperature and relative humidity data obtained from the New York State Department of Environmental Conservation (NYSDEC) will be used.

In order to account for the suspension of fugitive road dust in the air from vehicular traffic in the local microscale analysis, PM<sub>2.5</sub> emission rates will include fugitive road dust. However, since the New York City

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<sup>2</sup> *Guidelines for Modeling Carbon Monoxide from Roadway Intersections*, EPA Office of Air Quality Planning and Standards, Publication EPA-454/R-92-005.

<sup>3</sup> EPA, *Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas*, EPA-420/B-10-040.

<sup>4</sup> EPA, *MOVES Model, User Guide for MOVES2014*, July 2014.

Department of Environmental Protection (NYCDEP) considers fugitive road dust to have an insignificant contribution on a neighborhood scale, fugitive road dust will not be included in the neighborhood scale PM<sub>2.5</sub> microscale analyses. Road dust emission factors will be calculated according to the latest procedure delineated by EPA<sup>5</sup> and the *CEQR Technical Manual*.

Maximum PM<sub>2.5</sub> concentrations will be predicted using CAL3QHCR Tier 1 analysis. If this analysis results in a potential impact, refinements to the analysis will be implemented using CAL3QHCR Tier 2 analysis. Both Tier 1 and Tier 2 analyses use project specific meteorological data to predict pollutant concentrations, but Tier 1 analysis uses peak-hour traffic to model emissions for the entire day, while Tier 2 analysis uses 24 hours of traffic data to predict pollutant concentrations. The EPA protocol for determining maximum PM<sub>2.5</sub> concentrations requires producing quarterly emissions factors for five consecutive years of meteorological data. Quarterly (seasonal) and off-peak emission factors can be prepared using additional runs of the MOVES model. This involves creating season-specific meteorological data files for each PM<sub>2.5</sub> MOVES run. Peak traffic volumes will be used as a worst case scenario to conservatively predict emissions factors for the entire year. If further refinements are necessary, the potential for additional and/or more detailed traffic data to be used within the air quality analysis will be discussed with NYCDP. Speed data used within the MOVES model will be obtained from information gathered during the traffic data collection program.

## **Analysis Locations**

### Carbon Monoxide

It is anticipated that the CAL3QHC model will be used to predict CO concentrations at up to four (4) intersections. Preliminary locations that have been selected based on other studies and historic observations (which identify high levels of congestion at these locations) include:

## **Background Concentrations**

Background concentrations for all pollutants used in the analyses will be determined using the most recent data available from NYSDEC and NYCDEP. Data will be from monitoring stations representative of the county or from the nearest available monitoring station. Applicable averaging times will be determined from referencing the *CEQR Technical Manual* for CO, PM<sub>2.5</sub>, PM<sub>10</sub>, NO<sub>2</sub>, and SO<sub>2</sub>.

### CO

The final selection of analysis sites will be completed when trip generation and assignment information is finalized and made available. If the traffic study results in intersections that would surpass the screening limit of 170 vehicle trips, justification for their inclusion will be provided to NYCDP for review and approval. It is assumed that no more than one (1) intersection in total will be analyzed for CO. The site

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<sup>5</sup> EPA, Compilations of Air Pollutant Emission Factors AP-42, Fifth Edition, Volume I: Stationary Point and Area Sources, Ch. 13.2.1, NC, <http://www.epa.gov/ttn/chief/ap42>, January 2011.

selection will be based on the CEQR intersection screening analysis and the assumption that the selected intersections would surpass the CEQR 170 trip screening limit for this area of the city. The site selection will also take into account existing level of service (LOS), overall Build vehicular volumes, and vehicle classification (% heavy vehicles) during the project's peak hours. The CO analysis will predict one-hour and eight-hour concentrations and compare them to the NAAQS and CEQR CO *de minimis* criteria.

#### PM<sub>2.5</sub> and PM<sub>10</sub>

Jerome Avenue is a very congested traffic corridor and is considered to be a local truck route; therefore, Jerome Avenue may experience high volumes of heavy duty diesel vehicles. The addition of project-generated heavy-duty diesel vehicles (HDDV) and to a lesser degree light-duty gasoline vehicles (LDGV) could impact localized PM emissions. As a result, it is anticipated that an analysis of PM<sub>2.5</sub> and PM<sub>10</sub> will be conducted at up to three (3) "worst case" intersections. The selection will be based on project-generated trip data using the CEQR screening procedure for PM<sub>2.5</sub> (for conservative purposes, all autos will be considered as LDGT1 in the screening analysis). Should the screening procedure show that the number of project-generated HDDVs will not surpass the screening thresholds, no further analysis of mobile source PM<sub>2.5</sub> will be conducted. However, it is anticipated that at least three (3) locations will fail the screening procedure. If more than three intersections fail the screening, the selected three worst case locations that result in the highest number of project-generated HDDVs or combination of HDDVs and passenger cars will be selected for analysis. The CAL3QHCR model will be used to predict PM<sub>2.5</sub> concentrations and an analysis will be conducted to assess whether microscale 24-hour and neighborhood scale annual concentration levels are below CEQR PM<sub>2.5</sub> *de minimis* criteria and the National Ambient Air Quality Standards (NAAQS). The PM<sub>10</sub> intersection analysis will utilize CAL3QHC to determine whether microscale 24-hour concentration levels are below the NAAQS.

#### **Parking Facilities Analysis**

No more than the two worst case parking facilities, in terms of size, location, and traffic "ins/outs," will be selected for the analysis of CO and PM<sub>2.5</sub>. Once each facility is selected for analysis, the peak period with the greatest number of vehicular ins/outs will be studied. Vehicular emissions considered would be from the movement of vehicles within the parking facility and any vehicles idling before exiting. If any of the analyzed intersections are in close proximity to a studied parking facility, the cumulative effect of both sources will be reported. Both ground level and elevated receptors will be considered for locations both outside and inside of proposed buildings, as necessary.

## **STATIONARY SOURCE ANALYSIS**

### **HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) SYSTEMS**

#### **Projected and Potential Development Sites**

The potential for emissions from the HVAC systems of individual proposed buildings to result in stationary source pollutants that would significantly impact existing land uses (project on existing impacts) and other proposed buildings (project-on-project impacts) will be conducted utilizing a stepped analysis procedure.

1. Impacts would be initially analyzed using the CEQR nomographic procedures assuming the use of No. 2 fuel oil.
2. If the nomographic screening results fail with the use of No. 2 fuel oil, a more detailed analysis will be conducted utilizing the EPA AERMOD model.
3. If the HVAC systems of the analyzed development sites still show violations of the NAAQS after conducting a dispersion analysis using AERMOD, the nomographic screening procedure will be utilized assuming a cleaner burning fuel (natural gas).
4. If the nomographic screening results fail with natural gas, a more detailed analysis will be conducted utilizing the EPA AERMOD model.
5. In the event that violations of standards are still predicted, an air quality E-designation would be proposed for the site, providing the fuel and/or HVAC exhaust stack restrictions that would be required to avoid a significant adverse air quality impact. Cleaner low NO<sub>x</sub> gas burners with emissions concentrations of no more than 30 parts per million (PPM) will be considered, if necessary.

For project-on-project assessments, the nearest existing building and/or proposed building of a similar or greater height will be analyzed as the potential receptor. Since information on the HVAC systems' design is not available, it will be assumed that exhaust stacks would be located three feet above roof height, and are assumed to be located 10 feet from the wall of the adjacent taller building. Where exceedances of thresholds are predicted to occur under this scenario, additional iterations of the analysis are conducted utilizing subsequent setback distances from the wall of the adjacent building. Once the maximum distance is reached (i.e., the edge of the subject rooftop directly opposite the adjacent building property line), then the analysis is run assuming interval increases in stack height. Building receptor locations will be located on every floor and spaced 25 feet (horizontally). The model will be run with and without downwash.

#### **HVAC Cluster Analysis**

A cumulative HVAC impact analysis will be performed for projected and/or potential sites with buildings at a similar height located in close proximity to one another (i.e., site clusters). The proposed rezoning

area will be studied to determine the cluster selection. Development cluster sites will be grouped based on the following criteria:

- Density and scale of development;
- Similarity of building height; and
- Proximity to other nearby buildings of a similar height.

Recommendations for the specific cluster locations to be analyzed will be submitted to NYCDCP for approval, after a review of the selected RWCDs. It is assumed that up to three clusters in total will be analyzed.

The HVAC cluster analysis will be first performed using the most recent version of the AERSCREEN Model.

The AERSCREEN model is a screening version of the AERMOD refined model and will be used for determining the maximum concentrations from a single source using predefined meteorological conditions. The AERSCREEN analysis will be performed to identify potential impacts of SO<sub>2</sub>, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions. An estimate of the emissions from the HVAC systems will be made based on the proposed development size under the RWCDs, type of fuel used, and type of construction with fuel consumption rates shown below:

- For residential developments, 58.5 ft<sup>3</sup>/ft<sup>2</sup>-year and 0.43 gal/ft<sup>2</sup>-year would be used for natural gas and fuel oil, respectively; and
- For commercial developments, 45.2 ft<sup>3</sup>/ft<sup>2</sup>-year and 0.21 gal/ft<sup>2</sup>-year would be used for natural gas and fuel oil, respectively.

Short-term factors will be determined by using peak hourly fuel consumption estimates for heating, hot water, and cooling systems.

Emission factors for each fuel would be obtained from the EPA Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume I: Stationary Point and Area Sources. The SO<sub>2</sub> emissions rates will be calculated based on a maximum fuel oil sulfur content of 0.0015 percent (based on use of ultra-low sulfur No. 2 oil) using the appropriate AP-42 formula.

The AERSCREEN model will be used to predict impacts over a 1-hour average using default meteorology assuming stability class D. In order to predict pollutant concentrations over longer periods of time, EPA-referenced persistence factors would be used consisting of 0.6 and 0.1 for the 24-hour and annual average periods, respectively.

The distance from the source clusters to the nearest buildings will be used in the modeling analysis. The analysis will examine existing buildings or other projected or potential development sites which are of a similar or greater height than the source cluster.

The results of the analysis will be added to background concentrations to determine whether impacts are below ambient air quality standards. The maximum concentrations from a cluster will be predicted for both fuel oil and natural gas types. In the event that an exceedance of a standard for a specific pollutant is predicted with either No. 2 fuel oil or natural gas, a refined modeling analysis using the AERMOD model will be performed. Since the AERMOD model is capable of analyzing impacts from multiple pollutant sources, one model run will be conducted assuming that all buildings within the cluster would impact the nearest building. In the event that violations of standards are predicted, an air quality E-designation would be proposed for the site, describing the fuel and/or HVAC exhaust stack restrictions that would be required to avoid a significant adverse air quality impact.

### **Large and Major Sources**

A review of NYSDEC Title V permits and the EPA Envirofacts database will be performed to identify any federal or state-permitted facilities. Existing large and major sources of emissions (i.e., sources having a Title V or State Facility Air Permit) within 1,000 feet of the development sites will be identified. An analysis of these sources will be performed to assess their potential effects on projected and potential development sites. Predicted criteria pollutant concentrations will be predicted using the EPA AERMOD model. Results will be compared with NAAQS for NO<sub>2</sub>, SO<sub>2</sub>, and PM<sub>10</sub>, as well as the *de minimis* criteria for PM<sub>2.5</sub>. The latest five years of meteorology (assumed to currently be 2011-2015) will be utilized.

### **Industrial Source Analysis**

NYCDDCP has recently identified potential process and manufacturing sources that are potentially located within a radius of 400 feet of the Jerome Avenue Rezoning development sites. As shown in **Table 1**, several industrial source permits have been identified. It is anticipated that NYCDDCP will identify additional sources that will be included in the analysis. As per the scope of work, STV will review the DEP permit data received from NYCDDCP to determine which industrial sources are within 400 feet of a projected or potential development site. Any industrial sources beyond 400 feet of a projected or potential development site will be excluded from the analysis. In addition, the analysis excludes industrial sources located at projected development sites since the Proposed Actions assume that all such sites would be redeveloped. However, for potential development sites, the industrial analysis will be performed using two methods, as follows:

1. Assuming the site is developed, in which case the industrial source is not assumed to be operating in the Build Condition. In this case, potential air quality impacts from other industrial sources in the study area will be analyzed to evaluate their potential effects on the development site.
2. Assuming the site is not developed, in which case the industrial source is assumed to be operating in the Build Condition, its potential effects on other proposed development sites will be determined.

Once industrial source locations are confirmed to be within 400 feet of the Proposed Actions, a field survey will be performed to confirm the operational status of the sites identified in the permit search, and to identify if any additional sites have sources of emissions that would warrant an analysis. If any such sources are identified, further consultation will be made with NYCDP to determine specific generic procedures for estimating emissions from these sources.

Cumulative analysis for each toxic pollutant from these auto and truck facilities will be conducted from all sources. NYSDEC Annual Guideline Concentration (AGC) and Short-term Guideline Concentration (SGC) will be used as the thresholds to determine impact significance. If an initial screening assessment predicts exceedances of an AGC or SGC, a refined modeling analysis using the AERMOD model will be performed in association with the five-year meteorological data to determine if significant air quality impacts on proposed sensitive development sites would result from existing toxic emissions sources.

Potential cumulative impacts of multiple air contaminants will be determined based on the EPA's Hazard Index Approach for non-carcinogenic compounds and using the EPA's Unit Risk Factors for carcinogenic compounds. Both methods are based on equations that use EPA health risk information (established for individual compounds with known health effects) to determine the level of health risk posed by specific ambient concentrations of that compound. The derived values of health risk are additive and can be used to determine the total risk posed by multiple air contaminants.



**Table 1: Received Industrial Source Permits**

	Permit ID	Block	Lot	Address	Analysis Required (Y/N)
1	PA000277P	02864	00021	1349 Inwood Avenue	Y
2	PA007599J	02864	00001	1297 Inwood Avenue	Y
3	PA021775K	02864	00021	1349 Inwood Avenue	Y
4	PA025988M	02465	00050	117 East 167th Street	N
5	PA026088L	02465	00050	118 East 167th Street	N
6	PA052591H	02861	00140	1829 Jerome Avenue	Y
7	PA052691P	02861	00140	1829 Jerome Avenue	Y
8	PA090288M	02862	00097	1941 Jerome Avenue	N
9	PA090388J	02862	00097	1941 Jerome Avenue	N
10	PB004507R	02872	00170	1455 Cromwell Avenue	Y
11	PB014113Y	02855	00065	1271 Jerome Street	Y
12	PB017814L	03197	00033	2285 Jerome Avenue	Y
13	PB025810R	02857	00045	1439 Inwood Avenue	Y
14	PB026210R	02857	00064	25 West 170th Street	Y
15	PB026710H	02864	00027	1368 Cromwell Avenue	Y
16	PB038003P	02846	00021	1552 Jerome Avenue	Y
17	PB038113J	02465	00050	117 East 167th Street	N
18	PB039611Y	03187	00007	2314 Jerome Avenue	Y
19	PB031403	02842	0051	130 East 170 <sup>th</sup> Street	Y
20	PA063586	03216	0064	1987 Dr. M L King, Jr. Boulevard	N
21	PA058598	03182	0028	58 East 183rd Street	Y
22	PB042602	02863	0032	8 West Burnside Avenue	Y
24	PA006997	02506	0001	1177 Jerome Avenue	Y

## **Appendix 5**

### **Noise Analysis Methodology and Assumptions Memorandum**

**To:** NYCDP  
**From:** STV Incorporated  
**Date:** August 29, 2016  
**Project:** Jerome Avenue Rezoning EIS  
**Reference:** Noise Analysis Methodology and Assumptions

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A noise analysis will be conducted for the Jerome Avenue Rezoning Environmental Impact Statement (EIS), and will primarily involve the assessment of project-related mobile sources. The purpose of this memorandum is to describe the noise analysis approach for the proposed development sites for the Jerome Avenue Rezoning EIS. A total of 146 development sites (45 projected and 101 potential) have been identified within the rezoning area. Under the reasonable worst case development scenario (RWCDs) for the Proposed Actions, the total development expected to occur on the 45 projected development sites under the With-Action condition would consist of a net increase of approximately 3,327,340 sf of total floor area, including net increases of 3,267,288 sf of residential floor area (3,250 dwelling units), 35,575 sf of commercial uses, and 72,272 sf of community facility uses, and net decreases of 47,795 sf of industrial uses and 99 accessory parking spaces. The analysis year is 2026.

The following outline of procedures and assumptions is based on guidelines contained in the 2014 *CEQR Technical Manual*.

It is assumed that noise impacts could result primarily from one of two sources:

1. Vehicular noise from project-generated traffic on sensitive receptors in the community
2. Ambient noise impacts (from existing local and highway traffic, ventilation equipment, trains, stationary sources, etc.) on proposed uses (projected and potential development sites).

Given the high ambient noise levels from existing sources including Jerome Avenue, the Major Deegan Expressway, the elevated IRT train line along Jerome Avenue, as well as high vehicular volumes on many of the major streets (e.g., East Tremont Avenue, Edward L. Grant Highway, and East 170<sup>th</sup> Street), the trip generation resulting from the incremental development of the Proposed Actions would likely result in a low level of additional noise. The exceptions to this may occur on other less traveled streets in the project area. While these sites will be examined, it is assumed that the greatest concern for project-generated impacts would be related to the impact of existing and future noise generators on future residents.

## Noise Monitoring

### *Mobile Sources*

To determine baseline noise levels within the study area, noise monitoring is proposed. Once the RWCDs is available, locations will be selected based on their proximity to projected and potential development sites as well as their potential to experience a doubling in traffic volume, or Passenger Car Equivalents (PCEs), from project-induced traffic. Care will also be taken to select sites that would result in the most representative assessment of the existing noise environment. Monitoring will be conducted during the peak Weekday AM (7-9 AM), Midday (11:30-12:30 PM), early PM (2:30-3:30 PM) for receptors near school locations, PM (5-6 PM), and Saturday midday (12-5 PM) for locations near destination retail stores. For the Saturday midday period, noise monitoring will only be conducted for the peak hour identified between the 12 PM and 5 PM traffic data collection hours. Noise monitoring will be conducted for 20-minute intervals. For elevated receptor locations, noise monitoring will be conducted for an entire one-hour period. No more than two sites will be monitored for a 24-hour period assuming access and security is available. Noise monitoring will include the use of A-weighted sound levels, and the L1, L10, L50, L90, Lmin, Lmax and LEQ noise descriptors. It is also proposed that the aircraft flight noise would not be removed from the noise measurements. As a result, acceptable building interior noise levels to be recommended would take the aircraft noise component into account. Furthermore, publicly available LaGuardia Airport future noise contours (FAA contour maps) developed in terms of day and night average noise levels will also be referenced in evaluating potential aircraft noise impacts on the proposed development sites.

The instruments used for the monitoring will be Type I Sound Level Meters (SLM) according to ANSI Standard S1.4-1983 (R2006). Each SLM will have a valid laboratory calibration certificate when measurements occur. All measurement procedures will be based on the guidelines outlined in ANSI Standard S1.13-2005.

The proposed noise monitoring sites are listed below in **Table 1** and **Table 2**. Noise locations were selected based on potential and proposed locations on the RWCDs and existing field conditions. They represent approximate locations where field personnel will conduct monitoring.

**Table 1: Proposed Street Level Noise Monitoring Locations**

Receptor	Location
1	River Avenue and East 167 <sup>th</sup> Street
2	River Avenue and East 165 <sup>th</sup> Street
3	Edward L. Grant Highway between Jerome Avenue and West 169 <sup>th</sup> Street
4	Jerome Avenue (west side) and West 168 <sup>th</sup> Street
5	Corner of Jerome Ave and E. Clark Place, north of Jerome Avenue, Gerard Avenue and E. Clark Place Triangle
6	Edward L. Grant Highway between Jesup Avenue and Shakespeare Avenue
7	Cromwell Avenue between West 169 <sup>th</sup> Street and West 170 <sup>th</sup> Street
8	East 170 <sup>th</sup> Street between Townsend Avenue and Walton Avenue
9	Inwood Avenue between West 170 <sup>th</sup> Street and Macombs Road
10	Jerome Avenue and West 172 <sup>nd</sup> Street. (northwest corner)
11	West Mount Eden Avenue between Jerome Avenue and Inwood Avenue
12	Jerome Avenue between Clifford Place East and East 175 <sup>th</sup> Street
13	Jerome Avenue between East 177 <sup>th</sup> Street and East Tremont Avenue
14	East Burnside Avenue between Walton Avenue and Morris Avenue
15	Jerome Avenue and East 182 <sup>nd</sup> Street
16	West 183 <sup>rd</sup> Street between Grand Avenue and Davidson Avenue
17	East Tremont Avenue between Jerome Avenue and Walton Avenue
18	East Tremont Avenue between Creston Avenue and Grand Concourse

**Table 2: Proposed Elevated Noise Monitoring Sites (assuming access is available)**

Receptor	Location
19	River Avenue between East 167 <sup>th</sup> Street and East 168 <sup>th</sup> Street (Elevated)
20	Jerome Avenue between East 172 <sup>nd</sup> Street and East 171 <sup>st</sup> Street (Elevated)
21	Jerome Avenue and Goble Place (24-Hour Elevated Location)

### *Rail Sources*

The existing elevated IRT train line along Jerome Avenue is within close proximity to many of the proposed development sites. Where possible, elevated receptors may be examined near the elevated train line **assuming that a secure and accessible location is available, otherwise street level locations will be utilized.** As noise levels in the area of Jerome Avenue are dominated by the elevated IRT train line, it is anticipated that measurements from one or two monitoring locations would be applicable to multiple

sites along the Jerome Avenue corridor as well as other roadway corridors similarly affected. Monitoring locations, measuring train noise specifically, will be measured for a full one-hour period.

### *Stationary Sources*

It is not anticipated that a significant singular source of stationary noise will be identified and, therefore, no monitoring of stationary sources will be conducted. In addition, it is assumed that building mechanical systems (i.e., HVAC systems) for all buildings associated with the project will be designed to meet all applicable noise regulations (i.e., Subchapter 5, Sec. 24-227 of the New York City Noise Control Code and the New York City Department of Buildings Code).

## **Detailed Analysis Procedures**

### *Vehicular Noise*

The selected noise monitoring locations will be used to assess the noise impacts of project-induced vehicles. For traffic-induced noise impacts, projected increases in noise will be based on the *CEQR Technical Manual*, depending on the traffic noise levels projected for the No-Action condition. A screening analysis will be conducted to demonstrate that the Proposed Actions will not result in any exceedances of noise guidelines.

### *Ambient Noise Analysis*

Based on predicted With-Action  $L_{10}$  noise levels, the noise analysis will result in a determination of the required attenuation values for each of the proposed development sites.

- Initially, the selected noise monitoring locations will be assessed to determine what their future  $L_{10}$  noise levels will be.
- Future noise from traffic will be calculated by converting traffic into PCEs for existing, No-Action and With-Action conditions, using logarithmic calculations and PCE traffic volumes.
- Predicted  $L_{eq}$  noise levels will be converted to  $L_{10}$  noise levels. The conversion assumes the difference in decibels between the  $L_{eq}$  and  $L_{10}$  for monitored noise levels will be the same relative to future noise levels. The calculation to determine the decibel difference will be conducted between existing and No-Action traffic conditions and between No-Action and With-Action traffic conditions.
- Each projected and potential development site will then be assigned a future noise level based on their proximity to one of the worst case monitored noise sites.
- Based on future With-Action noise levels, the window/wall attenuation category would be selected to provide acceptable interior noise levels.

## **Models for Analysis**

The logarithmic proportional modeling procedure will be used to predict future  $L_{eq}$  noise levels. No modeling with the FHWA's TNM model is anticipated. For the proposed development sites, it is assumed that outdoor mechanical equipment would be designed to meet applicable regulations and no detailed analysis of potential stationary source noise impacts due to outdoor mechanical equipment will be performed. However, if stationary source analyses are required for existing loud sources, sound levels at nearby sensitive receptors will be predicted using the distance attenuation equation provided in the *CEQR Technical Manual*.

## **Analysis Periods**

The analyses of mobile sources will predict future noise levels for the existing, No-Action condition, and With-Action condition. One build year will be studied, which has been tentatively identified by the New York City Department of City Planning as 2026. The peak hours will be weekday AM, Midday, early PM, PM, and Saturday midday.

## **Mitigation**

If the analysis of future noise results in any of the studied locations exceeding the CEQR thresholds, mitigation measures in the form of window/wall attenuation will be proposed. Mitigation measures will be based on the required level of attenuation.

**Appendix 6**

**Construction-Related Transportation Analysis Methodology**

**Memorandum**



**To:** NYCDP  
**From:** STV Incorporated  
**Date:** August 29, 2016  
**Project:** Jerome Avenue Rezoning EIS  
**Reference:** Construction-Related Transportation Analysis Methodology

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## **Construction-Related Transportation**

This memorandum describes the methodology used to evaluate the transportation effects associated with the Proposed Actions' construction-related activities. The Proposed Actions would result in construction within the rezoning area over a ten-year period, replacing existing and anticipated No-Action uses on projected development sites. During construction periods, construction at projected development sites ("construction sites") would generate trips by workers traveling to/from the construction sites, as well as trips associated with the movement of materials and equipment. Given typical construction hours, it is expected that worker trips would be concentrated in the early morning and mid-afternoon periods on weekdays, and so these worker trips would not be expected to represent a substantial increment during the area's peak travel periods.

### *Traffic*

The average daily on-site construction workers and trucks would be forecasted for each projected development site under both the No-Action and With-Action condition.<sup>1</sup> The net incremental demand attributable to construction associated with the Proposed Actions is determined by comparing the With-Action estimates to the No-Action estimates. The "peak period" (of a particular year) for generated construction trips would be selected for analysis; similarly, a "reasonable worst-case" analysis period (of a particular year) would be selected to assess the cumulative traffic impacts associated with construction trips occurring when operational trips (from completed portions of the rezoning area) would also be occurring.

The modal split and vehicle occupancy rates for construction workers would be based on available survey data from recent construction sites. A forecast of hourly trips during the peak construction period would be determined from a temporal distribution based on typical work shift allocations and conventional arrival/departure patterns for construction workers. Each worker vehicle would be assumed to arrive in the morning and depart in the afternoon or early evening; whereas, truck deliveries would occur throughout the construction day. To avoid congestion and ensure that materials are on-site for the start

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<sup>1</sup> NYCDP will provide a reasonable worst-case schedule of construction activities and phases for No-Action and With-Action conditions. STV will develop worker and truck projections based on detailed construction workforce and delivery projections described in Appendix F of NYCDP's *East New York Rezoning FEIS*.

of each shift, it is expected that construction truck deliveries would typically peak during the hour before the regular day shift, overlapping with construction worker arrival traffic. Each truck delivery would result in two truck trips during the same hour (one inbound and one outbound). For analysis purposes, truck trips would be converted into Passenger Car Equivalents (PCEs) based on one truck being equivalent to an average of two PCEs.

The year selected for peak construction vehicle trips would be compared to the proposed operational trips that would be generated with full build-out of the rezoning area in 2026. The AM and PM peak hours of construction trips may differ from the AM and PM study area peak hours. The vehicle trips during the AM and PM peak hours for both construction and operational traffic would be compared. If the trips generated in the peak construction year are less than the trips generated by the full build-out, it is expected that traffic conditions will generally be better than the Proposed Actions and, consequently, there would be no significant adverse traffic impacts. If the generated construction traffic is similar to or greater than the full build-out project generated traffic (operational traffic), mitigation measures identified for operational traffic impacts would be expected to be effective at mitigating any potential impacts from construction trips. The same comparison would be performed for the cumulative construction and operational traffic year to the full build-out.

The number of construction-related vehicle trips is assumed to be less than the full-Build operational trip increment. Therefore, no detailed intersection capacity analyses were assumed to be required.

Temporary street lane and sidewalk closures would be anticipated adjacent to construction sites, similar to other construction projects in New York City. No re-routing of traffic is anticipated during construction activities and all moving lanes on streets are expected to be available.

#### *Transit and Pedestrians*

The estimated number of transit and walk trips would be based on the modal split for the average daily on-site construction workers forecast for each development site under both the No-Action and With-Action conditions. Similarly, the transit and pedestrian trips generated in the peak construction travel demand year and the reasonable worst-case analysis period would be compared to the full build-out of the Proposed Actions. The construction sites are located in an area that is well served by public transportation, with three subway routes and nine local NYCT bus routes. It would be expected that the majority of the construction workers would arrive and depart in the peak hour before and after each shift. Given that these transit trips would be distributed among multiple subway stations and bus routes in proximity to projected development sites throughout the rezoning area, it is unlikely that this number of incremental trips would exceed the 200-trip *CEQR Technical Manual* analysis threshold for a subway station or the 50-trip threshold for a bus analysis (per route, per direction) in either construction peak hour.

Construction pedestrian trips would be widely distributed among the projected development sites that would be under construction 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. It is therefore unlikely that any single sidewalk, corner or crosswalk would 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). As such, significant adverse transit or pedestrian impacts are not anticipated in the peak construction period or the worst-case analysis period. In the instance where the construction transit or pedestrian trips generated would be greater than the full-build out, it is expected that the mitigation measures identified for operational impacts would also be effective at mitigating any potential impacts from construction trips; therefore, no detailed transit and pedestrian analyses are anticipated.

#### *Parking*

The maximum daily parking demand from project site construction workers would be based on the number of expected construction workers on-site daily who travel to the area by private auto, with an average vehicle occupancy rate applied. The majority of construction workers would be expected to park on-street. The number of available on-street parking spaces identified within a ¼-mile radius of the rezoning area would be compared to the construction parking demand to determine if a significant adverse parking impact would occur.

**Appendix 7**

**Construction-Related Air Quality Analysis Methodology**

**Memorandum**

**To:** NYCDP  
**From:** STV Incorporated  
**Date:** August 29, 2016  
**Project:** Jerome Avenue Rezoning EIS  
**Reference:** Construction-Related Air Quality Analysis Methodology

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### **Construction-Related Air Quality**

Construction activities for the proposed project would last for more than two years, and so a quantitative assessment of construction-related air quality will be conducted for the Jerome Avenue Rezoning EIS. Emissions of air quality pollutants from construction would result from on-site construction machinery and activity as well as the movement of construction-related vehicles (i.e., worker trips, and material and equipment trips) on the surrounding roadways. The analysis will be based on the anticipated schedule of construction activities and phases which will be provided by the New York City Department of City Planning (DCP). The general methodology for stationary source modeling (regarding model selection, receptor placement, and meteorological data) presented in the "Air Quality Analysis Methodology and Assumptions" memo was followed for modeling dispersion of pollutants from on-site sources during the construction period. Additional details relevant only to the construction air quality analysis methodology are presented in the following section.

Pollutants of concern with respect to construction emissions include nitrogen oxides (NO<sub>x</sub>), particulate matter (PM) and CO. Most heavy equipment used in construction is powered by diesel engines that have the potential to produce relatively high levels of nitrogen oxides (NO<sub>x</sub>) and particulate matter (PM). Fugitive dust generated by construction activities is also a source of PM. Gasoline engines produce high levels of carbon monoxide (CO). Since ultra-low-sulfur diesel (ULSD) fuel would be used for all diesel engines used in the construction under the Proposed Actions, sulfur oxides (SO<sub>x</sub>) emitted from those construction activities would be negligible.

#### *Construction Periods for Study*

The pollutant PM<sub>2.5</sub> will be utilized for determining the worst-case periods, because the ratio of predicted PM<sub>2.5</sub> incremental concentrations to impact criteria due to construction activities is higher than for other pollutants. Generally, emission patterns of PM<sub>10</sub> and NO<sub>2</sub> would follow PM<sub>2.5</sub> emissions, since their emission rates are related to the sizes of diesel engines. CO emissions may have a somewhat different pattern but generally would also be highest during periods when the most construction activity would occur. To determine which construction years constitute the worst-case periods for the pollutants of concern, construction-related emissions will be calculated throughout the duration of construction from all of the projected development sites on an annual average and peak day average basis for PM<sub>2.5</sub>.

### *Selection of Sites for Study*

Emissions profiles were generated for those projected development sites with construction durations of more than two years. In addition, to determine cumulative effects of sites with less than two years, emissions profiles will also be generated for all projected development sites to determine the highest cumulative emission potential.

Based on the resulting multi-year profiles of annual average and peak day average emissions of PM<sub>2.5</sub>, and the proximity of the construction activities at each projected development site to each other and to nearby sensitive receptor locations (i.e., residences, publicly accessible open spaces, etc.), worst-case short-term and annual periods for construction will be identified for dispersion modeling of annual and short-term (i.e., 24-hour, eight-hour, and one-hour) averaging periods, including annual and 24-hour PM<sub>2.5</sub>, 24-hour PM<sub>10</sub>, one-hour and eight-hour CO, and annual NO<sub>2</sub> average periods.

The construction-related air quality assessment will be conducted for two peak short-term periods and one peak annual period. Only one worst-case location will be analyzed for each of the peak periods identified.

### *Dispersion Modeling*

Dispersion modeling for construction emissions at selected locations will be conducted utilizing the USEPA AERMOD model. In general, parameters governing the use of the model will be similar to those described in the "Air Quality Analysis Methodology and Assumptions" memo. Specific assumptions tailored for the construction-related dispersion modeling of the relevant air pollutants are listed below:

- Emission rates of each pollutant from relevant sources will be estimated for each type of construction activity. Short-term emission estimates were based on peak period activity levels at each site. These emission estimates will be used to estimate short-term (i.e., 24-hour, eight-hour, and one-hour) pollutant concentrations (for comparison to short-term NAAQS). Annual average activity levels would be used to estimate annual concentrations (for comparison to annual NAAQS). Engine emissions profiles would be prepared by multiplying the emission rates for each piece of equipment by the number of engines, the work hours per day, and fraction of the day each engine would be expected to work during each month of construction;
- For the short-term model scenarios (predicting concentration averages for periods of 24 hours or less), all stationary sources, such as cranes, concrete pumps, or generators, which would idle in a single known location while unloading, will be simulated as point sources. However, if their specific locations are not known, they will be modeled as area sources. Other engines, which would move around the site on any given day, will be simulated as area sources. For periods of eight hours or less (less than the length of a shift), it was assumed that all engines would be active simultaneously. For the annual emissions analysis, all sources would move around the site throughout the year and will therefore be modeled as area sources;

- Sensitive receptors identified for analysis will include locations where the maximum concentration is likely to occur and where the general public is likely to have access. As a result, receptors were distributed along sidewalks spaced 25 feet apart with a height of 1.8 meters (6 feet) and at elevated building façade locations representative of intake vents, operable windows and/or balconies;
- The most recent five year period (2011 to 2015) available of representative hourly meteorological data from LaGuardia Airport (LGA) was used in the analysis along with upper air data from Brookhaven;
- Fugitive dust emission factors for demolition, excavation, truck loading, and re-entrained dust were based on the equations and factors recommended in EPA's AP-42 Report "Compilation of Air Pollutant Emission Factors" Sections 13.2.3.1/2/3, and it will be assumed that the planned control of fugitive emissions would reduce PM emissions from such operations by 50 percent;
- Small equipment, such as lifts, compressors, welders, and pumps, will use electric engines that operate on grid power instead of diesel power engines (i.e, no emissions);
- During construction, the Proposed Actions may result in off-site mobile source emissions resulting from increases in and/or the redistributions of traffic. On-road emissions from traffic related operations adjacent to the construction sites will be included with the on-site dispersion analysis in order to address all local project-related emissions cumulatively;
- Applicable background concentrations are added to the modeling results to obtain the total pollutant concentrations at each receptor site.
- The sites cluster selection for dispersion modeling will be based on the construction schedule and the proximity of the sites relative to the nearest sensitive receptors.

#### *Emission Reductions Assumptions*

In accordance with all applicable laws, regulations, and building codes, several emissions reduction measures would be applied to reduce pollutant emissions during construction. These include the following dust suppression measures and the idling restriction for on-road vehicles:

- **Dust Control.** All necessary measures will be implemented to ensure that the New York City Air Pollution Control Code regulating construction-related dust emissions is followed. For example, truck routes within the site would be watered as needed to avoid the re-suspension of dust. All trucks hauling loose material will be equipped with tight-fitting tailgates and their loads securely covered prior to leaving the construction site. Water sprays will be used to ensure that materials are dampened as necessary to avoid the suspension of dust into the air.
- **Idling Restriction.** In addition to adhering to the local law restricting unnecessary idling on roadways, on-site vehicle idle time will also be restricted to three minutes for all equipment and vehicles that are not using their engines to operate a loading, unloading, or processing device (e.g., concrete mixing trucks) or otherwise required for the proper operation of the engine. Additional emissions reduction measures are available to minimize air pollutant emissions during construction. In addition to the required laws and regulations, for projected development sites with construction durations of more

than two years and construction start times of 2022 or earlier, an emissions reduction program for all construction activities would be implemented to the extent practicable, consisting of the following components (commitments relating to the items set forth below will be included as part of construction contract specifications):

- **Utilization of Newer Equipment.** The United States Environmental Protection Agency (EPA)'s Tier 1 through 4 standards for non-road engines regulate the emission of criteria pollutants from new engines, including PM, CO, NO<sub>x</sub>, and hydrocarbons (HC). All non-road construction equipment with a power rating of 50 hp or greater would meet at least the Tier 3 emissions standards and the use of Diesel Particulate Filters (DPFs). Tier 3 NO<sub>x</sub> emissions range from 40 to 60 percent lower than Tier 1 emissions and considerably lower than uncontrolled engines. Given the timeframe of the construction of the Proposed Actions, equipment meeting the more restrictive Tier 4 (model year 2008–2015 or newer) would be common and in wide use, and expected to be part of the contractors fleet. The combination of Tier 4 and Tier 3 engines with DPFs, required in all publicly funded projects, will achieve DPM reduction of at least 90% when compared to older uncontrolled engines.
- **Best Available Tailpipe Reduction Technologies.** Non-road diesel engines with a power rating of 50 horsepower (hp) or greater and controlled truck fleets (i.e., truck fleets under long-term contract with the project), including but not limited to concrete mixing and pumping trucks, would utilize the best available tailpipe (BAT) technology for reducing DPM emissions. DPFs have been identified as being the tailpipe technology currently proven to have the highest reduction capability. Construction contracts would specify that all diesel non-road engines rated at 50 hp or greater would utilize DPFs, either installed by the original equipment manufacturer (OEM) or retrofitted. Retrofitted DPFs must be verified by EPA or the California Air Resources Board (CARB). Active DPFs or other technologies proven to achieve an equivalent reduction may also be assumed.



**Appendix 8**

**Construction-Related Noise and Vibration Analysis**  
**Methodology Memorandum**

**To:** NYCDP  
**From:** STV Incorporated  
**Date:** August 29, 2016  
**Project:** Jerome Avenue Rezoning EIS  
**Reference:** Construction-Related Noise and Vibration Analysis Methodology

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## **Construction-Related Noise and Vibration**

Construction activities for the proposed project would last for more than two years, and so a quantitative construction noise and vibration assessment will be conducted as part of the Jerome Avenue Rezoning EIS. Noise and vibration from construction would result from on-site construction machinery and activity as well as the movement of construction-related vehicles (i.e., worker trips, and material and equipment trips) on the surrounding roadways. It is assumed that the analysis will be based on the reasonable worst-case for the anticipated schedule of construction activities and phases which will be provided by the New York City Department of City Planning (DCP).

### *Noise*

Construction noise analyses for the Jerome Avenue Rezoning EIS will be conducted in a manner that is generally consistent with the construction noise analyses conducted for the *East New York Rezoning FEIS*. Below is a list of relevant procedures and assumptions applicable to the Jerome Avenue Rezoning analysis:

- The peak construction years utilized for all analyses will be based on quarterly estimates of project truck trips and construction workers on site per day;
- The two largest projected development sites will be selected for assessment. Two peak periods and two off-peak periods will be utilized for the assessment.
- One typically sized “projected” development sites will be assessed as representative. One peak period and one off-peak period will be utilized for the assessment of the three major construction stages (i.e., excavation/foundation work, superstructure/façade work, and interior finishing work)
- Construction impacts will be determined based on the following *CEQR Technical Manual* criteria:
  - If the No-Action noise level is less than 60 dBA Leq(1), a 5 dBA Leq(1) or greater increase would be considered significant;
  - If the No-Action noise level is between 60 dBA Leq(1) and 62 dBA Leq(1), a resultant Leq(1) of 65 dBA or greater would be considered a significant increase;
  - If the No-Action noise level is equal to or greater than 62 dBA Leq(1), or if the analysis period is a nighttime period (defined in the CEQR criteria as being between 10:00 p.m. and 7:00 a.m.), the incremental significant impact threshold would be three dBA Leq(1);

- Based on the impact results of the construction analysis for the “typical” representative analysis location (i.e. distance to impact), impacts to receptors nearby other projected sites will be determined.
- For the purposes of the construction analyses, peak hour noise monitoring collected for the operational noise analysis will be used to determine existing conditions. The applicable monitoring site locations will be selected for approval by DCP once construction details regarding schedule, activity and phasing are made available. For the sites selected for assessment (two largest sites and one typical site), representative peak hour noise monitoring will be conducted during the 6AM – 7AM peak construction hour. Monitoring will be conducted for a 20-minute time period.
- Noise analysis will include a model validation procedure at selected noise monitoring sites for the prediction of existing noise levels using existing traffic. Adjustments will be incorporated into the model for prediction at nearby receptor locations associated with each noise monitoring site.
- Analysis results will include DCP approved noise reduction measures and path controls.
- The Cadna A Model will be utilized to determine noise equipment source levels and to assess the potential for noise impact at sensitive ground level, and elevated receptors nearby the project construction site. Noise equipment sound power levels for each of the studied pieces of equipment will be derived within Cadna A utilizing Lmax reference sound levels and distances (see CEQR TM Table 22-1) as a basis for conversion. Construction noise emissions from trucks will be modeled using the TNM module within Cadna A. Modeled receptors would be representative of both ground level and elevated locations.

#### *Vibration*

Potential impacts from construction-related vibration will also be assessed with respect to human annoyance and structural building damage. Properties of greatest concern would be those buildings located immediately adjacent or across the street from projected development sites. The Federal Transit Administration (FTA) general assessment methodology and criteria will be used for the analyses. It is assumed that construction schedule, phasing, activity and equipment data will be utilized for the assessment, in particular with respect to activities such as impact pile driving and demolition, if applicable, which represent the two most severe vibration causing activities.