1.0 EXECUTIVE SUMMARY

INTRODUCTION

This Draft Environmental Impact Statement (Draft EIS) analyzes the potential environmental impacts of the proposed Lower Concourse Rezoning and Related Actions ("the proposed action") in conformance with all applicable laws and regulations, including Executive Order No. 91, New York City Environmental Quality Review (CEQR) regulations, dated August 24, 1977, and follows the guidelines of the *CEQR Technical Manual*. The proposed action includes zoning map and text amendments and amendments to the City Map that have been proposed by the New York City Department of City Planning (DCP). The proposed action area is generally bounded by East 149th Street to the north, the Major Deegan Expressway to the south, Morris and Lincoln Avenues to the east, and the Harlem River to the west.

The proposed action would permit the continued development of light industrial uses in the proposed rezoning area, while also allowing for new mixed-use development, providing residential conversions and affordable housing. As a result, neighborhood vitality would be enlivened by the integration of mixed uses, much as similar recent residential development has revitalized the neighboring areas of Port Morris, Mott Haven, and the Grand Concourse. Improvements to the proposed rezoning area would be further realized with the future development of a much needed new public park south of East 149th Street. This park, which would be designated as parkland as part of the proposed action, would attract visitors to this area of the South Bronx, and would help connect areas of retail activity on the waterfront to the north to similar retail areas in the Port Morris district south of the proposed rezoning area, and to Hostos Community College and surrounding neighborhoods to the east.

The proposed rezoning area is currently zoned M1-2, M2-1, C4-4 and R6. The M1-2 zone applies to an extensive southern portion of the proposed rezoning area, inland of the waterfront M2-1 zone to the west. The C4-4 district extends inland from the waterfront north of the M2-1 district, reaching inland to a narrow band of M1-2 zoning along River and Gerard Avenues, just east of which is a smaller R6 zone along Walton Avenue. Manufacturing districts are currently mapped on the majority of the proposed rezoning area. Consequently, much of the rezoning area is characterized by light industry.

The proposed action would change the zoning map applicable to the proposed rezoning area to include commercial districts C4-4 and C6-2A; Special Mixed Use Districts MX (M1-4/R8A), MX (M1-4/R7X), MX (M1-4/R7A), and MX (M1-4/R6A); and conventional manufacturing districts M1-2 and M1-4. In addition, a new C2-4 commercial overlay would be mapped on waterfront lots within a proposed R7-2 district.

The Special Mixed Use District (MX) is already mapped at several locations throughout the city, though not within the proposed rezoning area. Therefore, the zoning text would be amended to establish two separate areas of contiguous MX districts, in accordance with proposed modifications to the zoning map, on all or portions of 25 blocks, including approximately ten blocks located between Exterior Street and Walton

Avenue, south of East 149th Street and north of East 138th Street; and approximately 15 blocks between Park and Morris Avenues, south of East 146th Street and north of the Major Deegan Expressway.

Proposed zoning text amendments would establish a Harlem River Waterfront Access Plan (WAP) and the Special Harlem River Waterfront District (SHRWD) for the area along the Harlem River waterfront between Exterior Street and the Harlem River, south of East 149th Street and north of the Metro-North Railroad Bridge at Park Avenue. Zoning text amendments would also modify food store regulations to allow food stores of any size as-of-right within M1-4 districts in Bronx Community District 1. Additionally, zoning text amendments would establish the Inclusionary Housing program within the proposed rezoning area.

Amendments to the City Map are proposed to designate 2.26 acres of land as parkland, located between the Harlem River and Exterior Street, south of the extension of East 146th Street and north of the extension of East 144th Street. Although the site is located within the boundaries of the proposed SHRWD, the special district regulations would not apply to the mapped park.

This Draft EIS has been prepared in conformance with all applicable laws and regulations, including Executive Order No. 91, New York City Environmental Quality Review (CEQR) regulations, dated August 24, 1977, and follows the guidelines of the *CEQR Technical Manual*. The Draft EIS includes review and analysis of all impact categories identified in the *CEQR Technical Manual* and contains a description and analysis of the proposed action and its environmental setting; the environmental impacts of the proposed action, including its short- and long-term effects, and typical associated environmental effects; identification of any significant adverse environmental effects that can be avoided through incorporation of corrective measures into the proposed action; a discussion of alternatives to the proposed action; the identification of any irreversible and irretrievable commitments of resources that would be involved in the proposed action should it be implemented; and a description of any necessary mitigation measures proposed to minimize significant adverse environmental impacts.

A ten-year period is typically considered the length of time necessary to allow for changes due to area-wide rezoning actions. Moreover, the proposed action would rezone a large area, encompassing 30 blocks. Therefore, the Draft EIS considers an analysis year of 2018.

PURPOSE AND NEED FOR PROPOSED ACTION

The proposed rezoning area is largely comprised of manufacturing districts, which host light industry and related uses, such as warehouses, automotive repair shops, storage facilities, and gas stations. There are limited residential, commercial and open space uses in the proposed rezoning area overall, as the existing M1-2 and M2-1 manufacturing zones preclude residential and mixed-use development. Because of this restrictiveness, the proposed rezoning area has not experienced the residential expansion and associated economic development that has led to improvement in the

surrounding neighborhoods of Port Morris to the south, Mott Haven to the east, and the Grand Concourse neighborhood to the north.

The proposed action would permit the integration of new mixed-use development amid a continued presence of light-industrial uses in the area. The proposed action would also encourage greater access to the Harlem River waterfront and promote new waterfront development, thus establishing the Lower Concourse as a new gateway district between Manhattan and the Downtown Bronx and northern Grand Concourse areas to the north.

Through zoning text and zoning map amendments, the rezoning proposal seeks to accomplish four fundamental goals, described below.

Goal: Foster new opportunities for mixed-use development and affordable housing, while retaining viable light industrial uses

The proposed rezoning area is surrounded by redeveloping neighborhoods and commercial districts. New opportunities for mixed-use development in the proposed rezoning area would enable similarly progressive development in the Lower Concourse. The vast majority of existing businesses, however, would remain conforming uses in the proposed mixed-use districts, thus light industry would be retained and viable within the proposed rezoning district.

The proposed mixed-use zoning would introduce opportunities for new residential construction as well as for the conversion of vacant warehouse space to residential lofts. Commercial uses would be located proximate to residential development, on the ground floors of new or existing buildings. The integration of residential population into the proposed rezoning area would enliven the area with after business hour activity that is now largely absent. The establishment of new commercial uses would further animate the area and improve the sense of security of area sidewalks.

The proposed rezoning would also address the need for affordable housing in the South Bronx and the city as a whole. A substantial portion of projected new residential development would consist of permanent affordable housing expected to be built under the Inclusionary Housing program. Mayor Bloomberg's New Housing Marketplace Plan has set a goal of creating over 165,000 units of affordable housing over ten years. Making the Lower Concourse area eligible for the Inclusionary Housing program's FAR bonus would encourage the provision of new, permanently affordable housing, thereby helping to fulfill mayoral objectives.

Goal: Encourage grocery store access

The South Bronx is underserved by grocery stores. This grocery store shortage is largely the result of existing M1 and M2 zoning, in which food stores larger than 10,000 square feet (sf) require a special permit. Given that the Lower Concourse proposal would bring more residents to the area and that existing residents are already underserved, the rezoning proposal includes lifting the special permit requirement so that grocery stores

of any size would be allowed as-of-right up to the maximum permitted Floor Area Ratio[1] (FAR) within M1-4 districts in South Bronx Community District 1. In addition to addressing the shortage of grocery stores, thereby improving the suitability of the neighborhood for existing and anticipated residential populations, the addition of new supermarkets would also create employment opportunities and stimulate economic activity in the Lower Concourse area as a whole.

Goal: Establish the Bronx as a new gateway to Manhattan and the northern Grand Concourse

The proposed rezoning area already serves as a crossroads for people moving through this portion of the South Bronx. Residents and workers in the surrounding neighborhoods currently cross through the Lower Concourse area in order to reach subway stations, places of employment, existing institutions, and bridges to Manhattan. The area's potential to become a dynamic neighborhood that strengthen connections to and between surrounding communities currently remains unrealized.

The proposed rezoning would also sustain and enhance this gateway area by expanding the extent and range of permitted uses. Subsequent redevelopment would make the proposed rezoning area a livelier and potentially safer destination and point of interconnection among South Bronx communities and between the Bronx and Manhattan. The proposed rezoning would promote a stable and active community with a mixed of land uses, improving quality of life for residents, visitors and workers in the proposed rezoning area and in neighborhoods nearby. Waterfront esplanade and mixed-use development would connect proximate neighborhoods and commercial destinations along the Harlem River and would constitute a new regional attraction enjoyed by area workers, residents, and visitors alike, including Hostos Community College students.

The proposed rezoning would also encourage high-profile redevelopment that would establish a visible symbol of the South Bronx's continued resurgence. Anticipated benefits from the proposed action in terms of urban design and neighborhood character would strengthen the character and identity of this gateway neighborhood. Proposed zoning along the Lower Concourse would encourage new development, which would be more consistent with the historic character of the Grand Concourse to the north. The proposed waterfront park would encourage redevelopment on the Harlem River in a manner more appropriate to this gateway entrance to the borough.

Goal: Improve waterfront access and provide new waterfront open space

South Bronx residents have long been disconnected from the Harlem River waterfront, particularly by highway and rail infrastructure in the proposed rezoning area. Future construction of a new waterfront park between approximately East 144th Street and East 146th Street facilitated by the proposed change in the City Map will change these

[1] The principal zoning bulk regulation controlling the size of buildings, FAR is the ratio of total building floor area to the area of its zoning lot.

predominant regional conditions to some extent. The proposed action aims to advance a trend in South Bronx waterfront accessibility already begun adjacent to the north of the study area with planned waterfront parkland resulting from the Gateway Center at Bronx Terminal Market retail development.

The proposed action would encourage new waterfront development with required publicly-accessible waterfront open space. Moreover, proposed esplanade requirements would facilitate the creation of a promenade along the Harlem River (subject to the full buildout of projected and potential RWCDS sites along the waterfront) that would connect the parkland to the north with the existing Port Morris community to the south.

Designated new open space amenities are also an important part of the proposed rezoning for the Lower Concourse area. Proposed zoning text amendments would create the Lower Concourse WAP and SHRWD. The proposed mapping of new waterfront parkland would encompass 2.26 acres of land between the Harlem River and Exterior Street, south of East 146th Street and north of East 144th Street. New open space initiatives would seek to provide a network of open spaces along the Harlem River waterfront, enhancing the pedestrian environment and providing a varied and attractive skyline along the Harlem River waterfront.

To this end, a new Special District, the SHRWD, would be established. Goals of the new district include maintaining and reestablishing physical and visual public access to, and along, the waterfront; preserving and strengthening the pedestrian orientation of ground floor uses in appropriate locations; encouraging well-designed new development that complements the built character of the neighborhood; providing flexibility of architectural design within limits established to assure adequate access of light and air to the street, and thus encouraging more attractive and economic building forms; and, promoting the most desirable use of land and building development for the Harlem River waterfront to conserve the value of land and buildings and thereby protect the City's tax revenues. Insofar as the SHRWD achieves its goals, it will ensure that waterfront open space is of an appropriate quality and helps to strengthen the character of this gateway neighborhood.

DESCRIPTION OF THE ACTION

The proposed zoning in the area would encourage the reuse of vacant land and loft buildings, while preserving existing light industrial and commercial uses in the area. The proposed action would also provide greater access to the waterfront while encouraging the improvement of underutilized parcels in that area, and the addition of new open space. Table 1.0-1 below provides a list of the blocks and lots affected by the proposed action.

Central to the proposed action is promoting mixed-use development while preserving existing light industrial and institutional uses. A mix of uses would physically enhance and economically activate the area, supporting future job creation and career opportunities in the proposed rezoning area.

The majority of the proposed rezoning area is currently zoned M1-2, M2-1, and C4-4, permitting low-to-medium-density manufacturing and commercial uses. A small portion of the rezoning area on its eastern side is zoned R6, permitting medium-density residential uses. The majority of the existing zoning districts within the Lower Concourse area have been in effect since the last major revision of the New York City Zoning Resolution in 1961. The proposed zoning includes changes to the existing manufacturing and commercial zoning districts within the rezoning area, and it includes the mapping of mixed-use zoning districts, along with industrial and commercial zones in the remaining areas.

A key principle of the Lower Concourse rezoning is the creation of a balanced rezoning approach that includes opportunities to catalyze future development and improve the existing waterfront area. The rezoning strategy balances encouraging growth with promoting preservation within select areas of the Lower Concourse rezoning area.

Table 1.0-1:
List of Blocks and Lots Affected by the
Proposed Lower Concourse Rezoning and Related Actions

Affected Blocks	Affected Lots
2349	15, 100, 112
2323	28
2351	1, 3, 12, 20, 22, 25, 35
2350	1, 5, 11, 16, 34, 63
2349	46, 47, 90
2344	1, 11, 17, 27, 52, 60, 75, 83, 110, 112
2345	1, 5, 10, 12, 14, 18, 22, 26, 49
2341	6, 10, 23, 28, 31, 34, 37, 40, 42
2340	1, 3, 8, 56, 58, 208, 209
2322	28, 81, 101
2333	1, 6, 10
2320	5, 6, 7, 8, 9 10, 11, 32, 33, 37, 41, 42, 43, 45, 46, 47, 50, 51, 53, 59, 66, 72, 7, 73, 74, 77, 79, 88, 164, 185
2318	5, 7, 9, 18, 19, 22
2335	57, 58
2340	11, 72, 186, 195, 204, 213, 215, 218, 221
2334	38, 39, 40, 41, 43, 45, 59, 61, 62, 63, 66
2333	12, 17, 31, 33, 50, 54
2355	6
2349	3, 38
2323	13, 43

Source: New York City Department of City Planning, 2008.

Proposed Zoning

Under the proposed action, existing manufacturing zoning designations in the proposed rezoning area would be changed to permit residential and commercial uses on the waterfront and along the Grand Concourse, and residential and mixed-use development in other areas, and would restrict certain areas currently zoned M2-1 to light manufacturing uses. A zoning text amendment would establish the Lower Concourse Special Mixed Use District (MX). Approximately 30 blocks of land currently zoned M1-2 and M2-1 would be rezoned to C4-4, C6-2A, R7-2, MX (M1-4/R8A), MX (M1-4/R7X), MX (M1-4/R7A), MX (M1-4/R6A) and M1-2. A new C2-4 commercial overlay would be mapped on waterfront lots zoned R7-2.

Table 1.0-2 summarizes the proposed density and bulk regulations for the rezoning area.

Table 1.0-2:
Summary of Proposed Allowed Density and Building Form

PROPOSED ZONING									
Use	**Residential**			**Commercial**	**Comm. Facility**	**Manu.**	**Building Form / Bulk Controls**		
Zoning District	**Base FAR**	**Incl. Housing Bonus**	**Max. FAR**	**Max. FAR**	**Max. FAR**	**Max. FAR**	**Building base (streetwall): min.**	**max.**	**Building height: max.**
R7-2	3.0	1.0	4.0	-	6.5	-	40′	60′	400′ *
C2-4 overlay	-	-	-	2.0	-	-	-		-
C4-4	3.0	1.0	4.0	3.4	6.5	-	40′	60′	400′ *
C6-2A	5.4	1.8	7.2	6.0	6.5	-	-	85′	120′
(M1-4/R6A)	2.7	0.9	3.6	2.0	3.0	2.0	-	60′	70′
(M1-4/R7A)	3.45	1.15	4.6	2.0	4.0	2.0	-	65′	80′
(M1-4/R7X)	3.75	1.25	5.0	2.0	5.0	2.0	-	85′	125′
(M1-4/R8A)	5.4	1.8	7.2	2.0	6.5	2.0	-	85′	120′
M1-2	-			2.0	4.8	2.0	not required		none
M1-4	-			2.0	6.5	2.0	not required		none

* on lots larger than 100,000 sf in the SHRWD.
Source: New York City Department of City Planning; STV Incorporated, 2008.

The proposed zoning changes are listed below.

- Change from **M1-2** to **C6-2A** all or portions of four blocks located along the Grand Concourse south of East 144th Street, north of East 138th Street, between Walton Avenue and the Metro-North Railroad right-of-way.

This zoning change would result in a change in uses allowed in this important section of the Grand Concourse corridor and would facilitate new residential and commercial development at a scale more appropriate to the more historic portions of the Grand Concourse to the north. This area is currently characterized by single-story automotive uses, surface parking, and self storage and moving facilities. The proposed C6-2A zoning district would allow taller buildings within a contextual envelope and is proposed here to reflect the width and prominence of the Grand Concourse.

The existing M1-2 district allows light industrial and some commercial uses with an FAR of 2.0. The proposed C6-2A district would allow new residential development with a maximum FAR of 7.2 and new commercial development with a maximum FAR of 6.0. All new development would be required to build along the street-wall within a contextual envelope, limited to a maximum height of 120 feet.

- Change from **M2-1** to **R7-2/ C2-4 overlay** and **C4-4** all or portions of two super-blocks along the Harlem River waterfront south of East 149th Street and north of the Metro-North Railroad bridge.

These zoning changes would result in a change in uses allowed along the Harlem River waterfront and would facilitate new residential and commercial development there. This area is currently characterized by open-air industrial uses, such as bus parking and concrete recycling, as well as single-story warehouses and personal self-storage facilities. New development would be required to provide publicly accessible waterfront open space areas in accordance with the proposed WAP. New development on the waterfront would also be subject to the special bulk and use requirements of the proposed SHRWD. (Both the WAP and the SHRWD are part of the proposed action; their application and effects are described in greater detail below.)

The existing M2-1 district allows medium-intensity industrial uses with an FAR of 2.0. The proposed R7-2 and C4-4 zoning districts would allow new residential development with a maximum FAR of 4.0, with bulk regulations controlled by the proposed SHRWD. The C2-4 commercial overlay would allow new commercial retail and office development with a maximum FAR of 2.0. The new C4-4 zoning district would allow new regional commercial retail and office development with a maximum FAR of 3.4.

Although the site of the proposed park is located within the proposed SHRWD, the special district regulations would not apply. The site would remain zoned M2-1 under the proposed actions, because it is anticipated that the New York City Department of Parks and Recreation (DPR) would acquire the site following the park mapping action and develop it for park use.

- Change from **M1-2** and **C4-4** to **MX (M1-4/R8A)** all or portions of six blocks located south of East 149th Street, north of East 140th Street, between Exterior Street and Walton Avenue.

These zoning changes would result in a change in allowed uses for those areas currently zoned M1-2 and would facilitate new residential and commercial development and conversions while also continuing to permit existing and new light industrial uses. Sites in the area proposed to change from C4-4 to MX (M1-4/R8A) would be allowed additional residential density, increasing from 3.44 to 7.2 FAR for residential uses. This area is currently characterized by single-story industrial buildings, multi-story loft buildings, and open-air industrial uses.

The current C4-4 zoning allows for medium density commercial development at an FAR of 3.44 and residential development at an FAR of 3.44. The existing M1-2 district allows light industrial uses with an FAR of 2.0. The proposed MX (M1-4/R8A) zoning district would allow new residential development with a maximum FAR of 7.2. New development would be required to build along the street-wall within a contextual envelope, limited to a maximum height of 120 feet. The M1-4 zoning district would allow new commercial retail and office and light industrial development with a maximum FAR of 2.0.

- Change from **M1-2** to **MX (M1-4/R6A)** all or portions of six blocks in two areas: one area generally located south of East 144th Street, north of East 138th Street, between Gerard and Walton Avenues; and the other area and located south of East 146th Street, north of approximately East 139th Street, between Canal Place and Rider Avenue.

This zoning change would result in a change in allowed uses and would facilitate new residential development and conversions while also continuing to permit existing and new light industrial uses. This area is characterized by single-story industrial buildings and multi-story loft buildings.

The existing M1-2 district allows light industrial uses with an FAR of 2.0. The proposed MX (M1-4/R6A) zoning district would allow new residential development with a maximum FAR of 3.6. New development would be required to build along the street-wall within a contextual envelope, limited to a maximum height of 70 feet. The M1-4 zoning district would allow new commercial retail and office and light industrial development with a maximum FAR of 2.0. The proposed R6A zoning district is intended to reflect the existing built context of four-to-six-story loft buildings.

- Change from **M1-2** and **M2-1** to **MX (M1-4/R7X)** all or portions of seven blocks located along East 138th Street between Park and Third Avenues.

These zoning changes would result in a change in allowed uses and would facilitate new residential development and conversions, while also continuing to permit existing and new light industrial uses. This area is currently characterized by vacant lots, single-story automotive uses, and open-air automotive uses.

The existing M1-2 district allows light industrial uses with an FAR of 2.0. The proposed MX (M1-4/R7X) zoning district would allow new residential development with a maximum FAR of 5.0. New development would be required to build within a contextual envelope, limited to a maximum height of 125 feet. The M1-4 zoning district would allow new commercial retail and office and light industrial development with a maximum FAR of 2.0. The proposed R7X zoning district allows taller buildings within a contextual envelope and is proposed here to reflect the width of East 138th Street and the street's mixed-use character to the east.

- Change from **M1-2** to **MX (M1-4/R7A)** all or portions of ten blocks generally located along Third, Morris, and Lincoln Avenues between East 144th Street and the Major Deegan Expressway.

This zoning change would result in a change in allowed uses and would facilitate new residential development and conversions, while also continuing to permit existing and new light industrial uses. This area is characterized by single-story automotive uses, vacant multi-story buildings, and residential buildings, some of which are in poor condition.

The existing M1-2 district allows light industrial uses with an FAR of 2.0. The proposed MX (M1-4/R7A) zoning district would allow new residential development with a maximum FAR of 4.6. New development would be required to build within a contextual envelope, limited to a maximum height of 80 feet. The M1-4 zoning district would allow new commercial retail and office and light industrial development with a maximum FAR of 2.0. The proposed R7A zoning district allows mid-size contextual buildings and is proposed here to reflect the height of buildings within the residential areas to the east.

- Change from **M1-2** and **M2-1** to **M1-4** portions of five blocks located south of East 138th Street and north of the Major Deegan Expressway, between Park and Third Avenues.

The zoning change from M2-1 to M1-4 would result in a change in intensity of industrial uses allowed for portions of three blocks located generally north of the Major Deegan Expressway, west of Park Avenue, south of East 138th Street, and east of Rider Avenue. This area is currently characterized by single-story and open air industrial uses such as storage and warehouses/distribution. Several large employers are located in this area. The expressway and elevated rail tracks detract from sidewalk conditions. Due to the employment activity and deteriorated streetscape and sidewalk conditions, allowance of residential use is not proposed here; however, this rezoning is proposed to ensure that only light industry and retail uses are allowed adjacent to potential new residences in proximate rezoned blocks.

The zoning change from M1-2 to M1-4 would result in changed requirements for public parking for portions of two blocks located south of East 138th Street and north of East 136th Street between Rider and Third Avenues: the change from M1-2 to M1-4 would require a special permit for new public parking garages.

The M2-1 district currently allows medium-intensity industrial uses with an FAR of 2.0. The M1-2 district allows low-intensity uses with an FAR of 2.0. The proposed M1-4 zoning district would allow light industrial uses and some retail uses with a maximum FAR of 2.0.

- Change from **M1-2** to **C4-4** one block located south of East 149th Street and north of East 144th Street, between Morris Avenue and the Metro-North Railroad right-of-way.

This zoning change would result in a change in allowed uses, bringing the existing Lincoln Hospital into use conformity.

The proposed action includes the following zoning text amendments (see Appendix B).

Harlem River Waterfront Access Plan and Special Harlem River Waterfront District

The proposed zoning text amendment would create the Harlem River Waterfront Access Plan (WAP) and the Special Harlem River Waterfront District (SHRWD). It would consist of two entire waterfront blocks extending between the Harlem River and Exterior Street, south of East 149th Street and north of the Metro-North Railroad Bridge over the Harlem River, and would encompass areas proposed to be rezoned to R7-2/ C2-4 and C4-4 from M2-1. Within the Special District, the zoning would change from M2-1 to R7-2/C2-4 and C4-4, which would facilitate new residential and commercial development. The proposed WAP would specify the location of public access areas and visual corridors. The proposed SHRWD would apply special bulk regulations to waterfront lots. The future park site would remain zoned M2-1 under the proposed actions. (Although the site of the proposed park is located within the proposed SHRWD, the special district regulations would not apply.)

The WAP and SHRWD would be guided by the following goals:

- Provide for a network of open spaces connecting along the Harlem River waterfront;
- Enhance the pedestrian environment along the waterfront public access areas; and,
- Provide a varied and pleasing skyline along the Harlem River waterfront.

A summary of the proposed special bulk provisions of the WAP and SHRWD follows:

- The maximum base and tower height limits would be modified in the R7-2 and C4-4 districts to allow a maximum tower height of 400 feet on lots larger than 100,000 sf, and 300 feet on lots smaller than 100,000 sf. Current regulations allow a maximum tower height of 135 feet. The minimum base height would be 40 feet and the maximum base height would be 60 feet. Current regulations allow a maximum base height of 60 feet, though there is no minimum base height.
- The maximum tower footprint and location of towers would be modified in the R7-2 and C4-4 districts. Current regulations allow a maximum tower footprint of 8,100 sf for lots larger than 1.5 acres and 7,000 sf for lots smaller than 1.5 acres. Under the proposed regulations, new tower construction would have a maximum footprint of 8,100 sf.
- Screening requirements would mandate usable floor area facing all waterfront public access areas, and usable floor area would be required for the ground floor facing streets.

- Restrictions in C2-4 commercial overlays on the location of commercial space in mixed-use buildings would be modified to allow flexibility in locating commercial areas.

Modify Food Store Regulations

The South Bronx is currently underserved by grocery stores and by stores providing fresh produce. Currently, food stores over 10,000 sf in size are allowed within M1 districts only by special permit from the City Planning Commission. In order to provide additional opportunities for new grocery store development, the proposed action would allow food stores of any size as-of-right within the M1-4 zoning districts in Bronx Community District 1.

The proposed zoning text amendment establishing the MX districts would define them in a manner such that they permit food stores of any size (up to the maximum permitted FAR) as-of-right within M1-4 Districts in Bronx Community District 1, including in the proposed rezoning area. Three parcels in the proposed rezoning area have been identified as potential food store sites, subject to height and bulk regulations and the proposed mixed-use zoning of the district. The projected sizes of food stores could range from approximately 18,000 gross square feet (gsf) to 50,000 gsf, including circulation and mechanical space.

Establish Inclusionary Zoning in the Rezoning Area

The proposed zoning text amendment would apply the Inclusionary Housing Program to new residential development within the rezoning area in Bronx Community District 1. The Inclusionary Housing Program would be implemented via Inclusionary Zoning. Inclusionary Zoning provides an opportunity for developers to be granted an increased FAR ("Bonused FAR") in exchange for providing affordable housing as part of their residential development; buildings that take full advantage of the program must develop one-fifth of the total new housing floor area as affordable residential floor area in accordance with the Inclusionary Housing Program, in which case the building is granted the fully bonused FAR. Base FARs apply to developments that do not use the Inclusionary Zoning bonus.

Base and bonused FARs are presented in Table 1.0-3.

Table 1.0-3:
Proposed Inclusionary Housing Zoning FARs in the Lower Concourse Rezoning Area

Zoning District	Base FAR	Fully Bonused FAR*
C6-2A	5.4	7.2
R6A	2.7	3.6
R7A	3.45	4.6
R7X	3.75	5.0
R8A	5.4	7.2
C4-4	3.0	4.0
R7-2	3.0	4.0

* Fully Bonused FAR assumes full participation in the Inclusionary Housing Program and development of 20 percent of total new housing floor area as affordable housing floor area according to program requirements.
Source: New York City Department of City Planning, 2008

Other proposed changes assessed in the Draft EIS and in the ULURP application include changes to the City Map. Specifically, DCP in conjunction with DPR is proposing changes to the City Map for the mapping of a new 2.26-acre park located along the Harlem River waterfront within the rezoning area. The park would be located between the Harlem River and Exterior Street, generally south of the prolongation of East 146th Street and north of the prolongation of East 144th Street. The proposed waterfront park would serve the following purposes:

- Provide new recreational green space for the substantial new residential population expected to result from the proposed rezoning;
- Provide waterfront access and a regional open space to serve existing South Bronx residents, workers, and students; and,
- Provide a catalyst for further waterfront redevelopment that would include additional waterfront access in parcels adjacent to the proposed new park.

REASONABLE WORST CASE DEVELOPMENT SCENARIO

Conditions in the future without the proposed action (future "No-Action") and in the future with the proposed action (future "With-Action") are analyzed in this Draft EIS according to a respective Reasonable Worst Case Development Scenario (RWCDS), in each case, for the 2018 analysis year.

CEQR considers the long-term and short-term effects of proposed actions. For area-wide rezonings not associated with a specific development, the foreseeable future effect is generally considered to occur within an approximately ten-year build-out period, the assumed length of time over which developers would be expected to act on the change in zoning.

The future With-Action scenario identifies the amount, type, and location of development expected to occur by 2018 as a result of the proposed action. The future No-Action scenario identifies similar development projections for 2018 absent the proposed action. The incremental differences between the With-Action and No-Action scenarios serve as the bases for the impact analyses.

To determine the development scenarios standard methodologies have been used, following *CEQR Technical Manual* guidelines and employing reasonable, worst-case assumptions. These methodologies have been used to identify the amount and location of future residential, commercial, and community facility development. In projecting the amount and location of new development, several factors have been considered, including known development proposals, current market demands, past development trends, and DCP's "soft site" criteria for identifying likely development sites.

Upon recognizing the array of soft sites with some degree of development potential, it is necessary to determine whether development on these "soft sites" is likely as part of the No-Action scenario and/or the With-Action scenario. 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 a rezoning area. A set of area-specific criteria was established to determine whether identified soft sites should be assumed in this Draft EIS to be developed by 2018 or not.

Criteria for Development Sites

The following criteria were used to further categorize certain identified soft sites as "Projected" development sites, sites which are assumed to be developed by 2018:

- Lots with a total size of 5,000 sf or larger (may include potential assemblages totaling 5,000 sf if assemblage seems probable) occupied by buildings with floor area ratios equal to or less than half the maximum permitted FAR under proposed zoning; and,
- Lots occupied by loft buildings or other buildings suitable for residential conversion.

The following criteria were employed to categorize remaining soft sites as "Potential" development sites, which are seen as less likely to develop in the foreseeable future:

- Lots containing active businesses operating within fully-enclosed structures that occupy most of their lot and active businesses occupying most of their respective buildings;
- Active businesses built on extensive investment and which either provide unique services or are prominent and successful neighborhood businesses or organizations that are unlikely to move;
- Lots with warehouse buildings that are less than 20 percent vacant or occupied by active uses or which are not suitable for conversion; and,
- Highly irregular lots or otherwise encumbered parcels that would make development difficult, or lots situated in a less-attractive location for new development.

Uses and types of buildings that met the following criterion were **excluded** from the RWCDSs because they are unlikely to be redeveloped in either No-Action conditions or in With-Action conditions as a result of the proposed rezoning:

- The sites of schools and colleges (public and private). Many schools that meet the development site criteria are built to less than half the permitted floor area of those sites under the current zoning. Therefore it is unlikely that the increment of additional FAR permitted under the proposed zoning would induce redevelopment or expansion of these sites.

Additional assumptions made in developing the RWCDS include the following:

- The average dwelling unit size is assumed to be 1,000 sf, reflecting the type of units currently being constructed in this area; and ,
- Ground-floor commercial totals assume that 15 percent of the floor area comprises circulation and mechanical space.

Future Without The Proposed Action Condition (No-Build Scenario)

Given the current zoning and area trends in commercial and residential development, it is anticipated that the proposed rezoning area would experience nominal growth in commercial and light manufacturing uses under No-Action conditions. Most of this growth is expected to comprise further development of self-storage facilities, drive-through restaurants, gasoline station/convenience stores, and warehouses, along with limited new office and retail space.

DCP identified 31 projected development sites likely to be developed by 2018. The 31 projected development sites currently contain two dwelling units (DUs), 105,163 sf of commercial uses (including retail and office space), and 532,626 sf of industrial/manufacturing uses. Under No-Action conditions some as-of-right development is expected to occur on these sites. The No-Action scenario is expected to consist of two DUs, 704,709 sf of commercial space (office and retail), 404,372 sf of industrial space, and 90,589 sf of community facility space.

Fourteen of the 31 projected development sites in the rezoning area (less than 50 percent) are assumed to be developed as-of-right under No-Action conditions. In total, the development on the 14 sites is expected to consist of 2,195 sf of retail space; 598,351 sf of office space; 216,653 sf of industrial space; 78,065 sf of community facility space, and a total of 104 parking spaces. No new residential development is expected to occur within the rezoning area absent the proposed action.

In addition to the 31 projected development sites in the proposed rezoning area described above, there are ten known development sites in the primary study area. The development expected on the ten known development sites would occur by 2018 independent of the proposed action and is therefore assumed to occur under No-Action conditions. The ten development sites would include 479 DUs, a total of 1,000,000 sf of retail floor area, 280,000 sf of community facility space and 2,617 parking spaces.

Future With the Proposed Action Condition (Build Scenario)

The With-Action scenario is a further development of the No-Action scenario, with higher density commercial and residential development expected to occur throughout the rezoning area. In addition to the 24 development sites that would also be developed in No-Action conditions, there would be additional development attributable to the proposed action itself. The total development is described as the With-Action scenario.

The development assumed to occur under No-Action conditions would also occur under With-Action conditions. Thus, the 14 projected development sites in the rezoning area would be developed in the With-Action scenario, just as described above for the No-Action conditions. Likewise, the ten known development sites also would be developed in With-Action conditions as they would be otherwise in No-Action conditions.

The proposed action is expected to result in new development that, combined with No-Action development, comprises a With-Action scenario of 3,416 DUs, 841,535 sf of commercial space (589,250 local retail, 88,000 sf of grocery stores, 164,285 sf of hotel space), 95,500 sf of industrial space, and 154,289 sf of community facility space (educational facilities). No-Action development sites are generally assumed to remain developed in a manner under With-Action conditions, although a few such sites may be developed in a different manner under With-Action conditions.

The total development expected to occur on the projected development sites under Build conditions would consist of 3,416 DUs, 841,535 sf of commercial space (589,250 local retail, 88,000 sf of grocery store space, 164,285 sf of hotel space), 95,500 sf of industrial space, and 154,289 sf of community facility space (educational facilities).

New residential construction is projected throughout the proposed rezoning area as a result of the proposed rezoning, accounting for all residential development assumed under the With-Action scenario. The proposed rezoning would allow the introduction of residential uses, both as new residential development and also as industrial-to-residential loft conversion. The largest increases in residential growth are expected to occur along the waterfront and along the Grand Concourse, where fairly high residential density will be encouraged by the proposed rezoning.

Hotel and office growth is projected to occur primarily along the Grand Concourse in the proposed C6-2A zoning district. New local retail is projected at the base of all new residential construction, while regional retail is anticipated on large lots along the Grand Concourse and on large lots along the waterfront where proposed MX zoning districts would allow grocery stores. In addition, the proposed text amendment would allow grocery stores as-of-right within the M1-4 zoning districts in Bronx Community District 1, thus enabling the development of large and accessible lots within the proposed M1-4 zoning district as grocery stores as well.

As part of the proposed actions, a park would be mapped between the Harlem River and Exterior Street, south of the extension East 146th Street, and north of the extension of

East 144th Street; in the future DPR would develop 2.26 acres of parkland on the site, which is currently occupied by bus parking and warehouse uses.

Incremental Differences between Future With-Action and Future No-Action Scenarios

Within the area of the proposed action, DCP has identified 31 projected development sites where new development or conversions are likely to occur, and 48 potential development sites where new development or conversions could occur but are considered less likely. The projected incremental (net) change that would result on the sites from the proposed action by 2018 compared to the No-Build scenario is 3,414 DUs, 735,447 sf of commercial space, 63,700 sf of community facility space (educational facilities), a net reduction of 308,872 sf of industrial space, and a net reduction of 598,351 sf of office space.

Development data for the No-Build and Build scenarios are presented with incremental change (net change from No-Build to Build) in Table 1.0-4 below.

Table 1.0-4:
Summary of No-Build and Build Development

	2018 No-Action	2018 With-Action	Increment
Residential Dwelling Units	2 DUs	3,416 DUs (incl. 591 Affordable units)	3,414 DUs
Retail FA	106,358 sf	677,520 sf	571,162 sf
Office FA	598,351 sf	0 sf	- 598,351 sf
Hotel FA	0 sf	164,285 sf	164,285 sf
Storage/Manufacturing FA	404,372 sf	95,500 sf	- 308,872 sf
Community Facility FA	90,589 sf	154,289 sf	63,700 sf

REQUIRED APPROVALS AND REVIEW PROCEDURES

The proposed action requires CPC and City Council approvals through the ULURP and includes the following actions:

- **Zoning map amendment** to change approximately 30 blocks currently zoned R6, C4-4, M1-2 and M2-1 to C4-4, C6-2A, R7-2/C2-4, MX (M1-4/R8A), MX (M1-4/R7X), MX (M1-4/R7A), MX (M1-4/R6A), M1-2 and M1-4. Under the proposed action, new C2-4 commercial overlays would be mapped across the waterfront blocks, within the R7-2 district.
- **Zoning text amendment** to establish a Lower Concourse Special Mixed Use District (MX), extending over all or portions of 25 blocks between Exterior Street

and Walton Avenue, south of East 149th Street and north of East 138th Street, and between Park Avenue and Morris Avenue, south of East 146th Street and north of the Major Deegan Expressway. This area is currently zoned M1-2 and M2-1.

- **Zoning text amendments** in the form of a WAP and the SHRWD, located along two blocks on the Harlem River waterfront, between Exterior Street and the Harlem River, north of the Metro-North Railroad Bridge over the Harlem River and south of East 149th Street. The waterfront zoning text amendments would be implemented in order to provide for a coordinated network of waterfront open spaces. Within the special district, the zoning would change from M2-1 to R7-2/C2-4 and C4-4, and would facilitate new residential and commercial development. The WAP would identify specific locations for required shore public walkways, upland connections, supplemental public access areas, and visual corridors. In addition, the SHRWD would modify applicable use and bulk regulations to encourage varied building heights, control tower dimensions, and appropriately frame waterfront open spaces. Towers would be allowed to rise to a maximum height of 400 feet on lots larger than 100,000 sf, and 300 feet on lots smaller than 100,000 sf. For zoning lots that contain more than one tower, only one building would be allowed to rise to the maximum height limit, while all other buildings would not be allowed to exceed 260 feet in height. Within any building that includes a tower, the maximum coverage of the highest four stories or 40 feet, whichever is greater, would be restricted to a lot coverage of no greater than 80 percent of the story immediately below such stories. The maximum length of any tower wall would be allowed to be no greater than 135 feet. An authorization would be available to allow narrow or shallow lots to waive proposed height, bulk, and waterfront open space requirements. Maximum FAR regulations would not be available to this waiver. The level of the shore public walkway would be required to be raised at least to the height of the Oak Point Rail Line for all waterfront properties. Usable floor area, including ground floor space, would be required to face waterfront public access areas. Restrictions on the location of commercial space in mixed-use buildings would be modified to allow flexibility in locating commercial areas.
- **Zoning text amendment** to modify food store regulations within the rezoning area and in Bronx Community District 1. The proposed amendment would allow food stores of any size as-of-right within M1-4 districts in Bronx Community District 1 in order to encourage the location of new grocery stores in the South Bronx.
- **Zoning text amendment** to establish the Inclusionary Housing Program within the proposed rezoning area in Bronx Community District 1.
- **Amendments to the City Map** to establish a park on a parcel that is approximately 2.26 acres in size, located between the Harlem River and Exterior Street, south of a visual extension of East 146th Street, and north of a visual extension of East 144th Street. Although the site of the proposed park is located within the proposed SHRWD, the special district regulations would not apply. The site would remain zoned M2-1 under the proposed actions. It is anticipated that DPR would acquire the site following the park mapping action and develop

it for park use. The proposed site is currently occupied by bus parking and warehouse uses. Absent the proposed action, current uses are expected to continue.

An Environmental Assessment Statement (EAS) was submitted on May 14, 2008 and a draft scoping document that set forth the analyses and methodologies proposed for this Draft EIS was submitted to the public on June 19, 2008. The public, interested agencies, Bronx Community Board 1; adjacent Bronx Community Board 4; and elected officials were invited to comment on the scope, either in writing or orally, at a public scoping hearing held at 4:00 PM on June 19, 2008, at Hostos Community College, 450 Grand Concourse, Bronx, NY. Comments received during the draft scope's public hearing, and written comments received up to 30 days after the hearing, were considered and incorporated, as appropriate, into the final scope of work. The final scope of work was used as the framework for preparing this Draft EIS.

Once DCP has determined that the Draft EIS is complete, the document will be made available for public review and comment. The Draft EIS will accompany the ULURP application through the public hearings at the Community Board and City Planning Commission (CPC). A public hearing will be held on the Draft EIS in conjunction with the CPC hearing on the ULURP 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 Draft EIS. At the close of the public review period, a Final Environmental Impact Statement (Final EIS) will be prepared that will incorporate all substantive comments made on the Draft EIS, along with any revisions to the technical analysis necessary to respond to those comments. The Final EIS will then be used by decision makers to evaluate CEQR findings, which address project impacts and proposed mitigation measures, before deciding whether to approve the requested discretionary actions.

FUTURE WITH THE PROPOSED ACTION

Land Use, Zoning, and Public Policy

The proposed action would be consistent with zoning and public policies in the rezoning area and adjacent areas in the future with proposed action. No significant adverse impacts would result to land use, zoning, or public policy in the rezoning area or areas within ¼-mile of the rezoning area (primary study area).

Land Use

The proposed action would not result in significant adverse land use impacts in the rezoning or primary study areas. The proposed rezoning is expected to encourage mixed-use residential and commercial development and enhance the waterfront in this area of the South Bronx.

The proposed rezoning would allow new housing development (including affordable

housing) in an area where residential development is currently scarce. It would also allow commercial development at higher densities. This area is served by excellent transit and highway access, making it especially well suited to residential and commercial development, which would further expand upon investments being made in the areas surrounding the Lower Concourse.

The new park along the Harlem River waterfront and the connecting public walkway would enhance and upgrade the waterfront area in the South Bronx. The proposed action would map as parkland an approximately 2.26-acre site and facilitate the creation of a 2.08-acre esplanade along the Harlem River waterfront. The proposed park would complement the Lower Concourse's new residential and commercial development; the new esplanade would connect to new waterfront parks north and south of the rezoning area (subject to the buildout of RWCDS sites), providing public waterfront access along the Harlem River waterfront.

The proposed action would provide increased opportunities for new housing development in an area where there is underutilized and vacant land and a need for housing. Given the proposed developments' compatibility with residential and mixed-use development in the surrounding neighborhoods, the land uses generated by the proposed action would not result in significant adverse impacts to land use.

Zoning

The proposed action would change zoning designations within the proposed rezoning area to encourage new residential and commercial development, to restrict light manufacturing uses to certain areas, and to encourage the development of the Harlem River waterfront. The proposed zoning regulations would also provide opportunities for construction of new affordable housing and larger size grocery stores on an as-of-right basis.

The proposed Lower Concourse Special Mixed Use District zoning consists of four differently paired residential and manufacturing zoning designations in order to facilitate new residential development and new commercial retail and office development, while continuing to permit existing and new light industrial uses. The proposed Lower Concourse Special Mixed Use District includes maximum streetwall and height limits for all proposed districts ensuring that the scale of new development would respond to the particular characteristics of the individual sections of the rezoning area. Table 1.0-5 below summarizes the proposed allowable density and building form regulations.

The proposed SHRWD would enhance and upgrade the waterfront area by allowing new residential and commercial development. The special bulk and use requirements of the SHRWD would facilitate orderly waterfront development to fit existing sites. The proposed SHRWD, in conjunction with the WAP, would shape new development along the waterfront and the location of the new waterfront open space, including a shore public walkway along the Harlem River.

Table 1.0-5:
Summary of Proposed Allowed Density and Building Form within the Rezoning Area

PROPOSED ZONING									
Allowed Density (FAR):							**Building Form:**		
Use	**RESIDENTIAL**			**COMMERCIAL**	**COMM. FACILITY**	**MANU.**	**Bulk Controls**		
Underlying Zoning District	**Base FAR**	**Inclusionary Housing Bonus**	**Max. FAR**	**Max. FAR**	**Max. FAR**	**Max. FAR**	**Building base (streetwall): min.**	**max.**	**Building height: max.**
R7-2	3.0	1.0	4.0	-	6.5	-	40′	60′	400′ *
C2-4 overlay	-	-	-	2.0	-	-	-		-
C4-4	3.0	1.0	4.0	3.4	6.5	-	40′	60′	400′ *
C6-2A	5.4	1.8	7.2	6.0	6.5	-	-	85′	120′
MX (M1-4/R6A)	2.7	0.9	3.6	2.0	3.0	2.0	-	60′	70′
MX (M1-4/R7A)	3.45	1.15	4.6	2.0	4.0	2.0	-	65′	80′
MX (M1-4/R7X)	3.75	1.25	5.0	2.0	5.0	2.0	-	85′	125′
MX (M1-4/R8A)	5.4	1.8	7.2	2.0	6.5	2.0	-	85′	120′
M1-2	-			2.0	4.8	2.0	not required		none
M1-4	-			2.0	6.5	2.0	not required		none
							* on lots larger than 100,000 sq. ft. in the Special Harlem River Waterfront District		

Source: DCP, STV Incorporated, 2008.

The proposed action would create zoning that would be compatible with the zoning districts that surround the rezoning area. The proposed action would not alter zoning designations within the ¼-mile primary study area. Existing zoning designations for those portions of the surrounding Concourse Village neighborhood and The Hub commercial district adjacent to the proposed rezoning area would be maintained, and the proposed action would complement existing land use trends in the primary study area. The proposed rezoning, which allows for opportunities for new residential and commercial development in mixed-use districts while permitting the continuation of light industrial uses, is consistent with the recently expanded Port Morris Special Mixed Use District located to the south of the rezoning area. As such, the proposed action would have no direct impact upon zoning in the primary study area.

The proposed actions include creating a new City Planning Commission (CPC) Authorization for stand-alone retail use as an option for developers within the proposed

SHRWD. Without being granted this Authorization, developers would otherwise be required to include residential units in mixed-use developments that contain retail in the SHRWD. The environmental effects of single-use retail developments on the waterfront that could potentially be built pursuant to the new Authorization are evaluated and described in Appendix M of this Draft EIS (Conceptual Analysis of Stand-Alone Retail Use Through New Authorization), which examines as a case study the development of a five-story retail building on RWCDS site #1. RWCDS site #1 is located on the waterfront just south of the West 145th Street Bridge.

Given that there is no known development plan for RWCDS Site #1, a reasonable worst case assumption for stand-alone retail development was prepared. The retail-only development identified as the most likely scenario for RWCDS site #1 would include a five-story building with total floor area of 385,200 sf. The site's 90,000-square foot footprint would have a width and depth of 300 linear feet, with 25,200 sf of ground floor retail wrapping around a 64,800-square foot parking and loading area. Ground floor retail would have a depth of 30 feet. Requirements for the waterfront public walkway and an upland connection would still apply under the stand-alone retail authorization.

The conclusions of the conceptual analysis find that, should any future application be submitted for the use of the authorization, there are several impact areas that would experience less environmental effects as compared to the proposed action, such as community facilities and shadows. Traffic impacts would worsen as result of the authorization, as compared to the proposed actions. Traffic volumes would be increased as compared to the proposed actions, and given that unmitigated significant traffic impacts were identified under the proposed action at the adjacent intersection of East 149th Street, River Avenue and Exterior Street, it can be assumed that these unmitigated impacts would grow worse under this stand-alone retail scenario as higher levels of traffic would proceed through this intersection. It is also reasonable to anticipate that the appreciably higher levels of traffic generated by stand-alone retail development would exacerbate certain other significant traffic impacts identified under the proposed action. In addition, a screening analysis shows that a detailed PM2.5 analysis would be required at the 149th Street & Exterior Street intersection for the peak periods if RWCDS site #1 was developed as a stand-alone retail development. However, in the event that an authorization was pursued, the environmental review will analyze the site and surrounding future conditions in the context of the SHRWD as a whole, and would determine if there would be any additional significant adverse impacts and how, if at all, the mitigation measures identified under the proposed actions would be affected or require revision as result of the new retail development.

Based on the expected additional traffic that would generated by a stand-alone retail development on RWCDS site #1 , a qualitative evaluation of potential mobile source air quality impacts indicates that stand-alone retail development would not be expected to result in exceedances of the 8-hour carbon monoxide standard at the locations modeled for the proposed action. However, should any future application be submitted for the use of the authorization for RWCDS site #1, the application should be accompanied by a detailed analysis for the peak periods at the intersections identified under the traffic analysis described in the Appendix M above to ensure that significant adverse impacts

to mobile source air quality would not result. For mobile source PM2.5, the screening analysis shows that a detailed PM2.5 analysis would be required at the 149th Street & Exterior Street intersection for the peak periods if RWCDS site #1 was developed as a stand-alone retail development as described in the Conceptual Analysis of Stand-Alone Retail Use Through New Authorization Appendix M. Therefore, should any future application be submitted for the use of the authorization, the application should be accompanied by a screening analysis and, if necessary, a detailed mobile source PM2.5 analysis for the peak periods where increases in traffic volumes are substantial enough to change the mobile air quality predicted for the proposed action.

For stationary source air quality, boiler emissions could potentially affect the adjacent proposed residential development at RWCDS site # 2. Restrictions specifying fuel type and stack setbacks would likely be required at RWCDS site # 1 in order not to cause any violations of the NAAQS or have any significant adverse environmental impacts on air quality, however the exact conditions would be determined during the subsequent environmental review, should any future application be submitted for the use of the authorization. At all other potential and projected development sites, the air quality impact issues would be the same as those that were addressed for the proposed action.

With regard to noise impacts, although use of the retail Authorization for stand-alone retail development could result in noticeable increases in traffic volume at some noise locations during peak periods, it is not expected that the additional traffic would result in a doubling of passenger car-equivalents. Therefore, significant adverse impacts due to mobile source noise would not result. With respect to window/wall attenuation for potential and projected development sites, should any future application be submitted for the use of the Authorization, the application should be accompanied by a detailed noise attenuation analysis for the peak periods at locations where increases in traffic volumes are substantial enough to change the attenuation predicted for the proposed action.

Environmental impacts related to other specific areas of assessment for a stand-alone retail development on RWCDS site #1 would be generally lower than those of the proposed action. Elimination of future residential development in particular would eliminate impacts related to community facilities as they relate to RWCDS site #1, and would slightly lower the degree of such impacts overall. Infrastructure and other population-related impacts would be lower compared to the proposed action.

Similar waterfront amenities would be required for stand-alone retail use developed pursuant to the new Authorization, resulting in Shore Public Walkway and Upland Connections on this site, promoting LWRP goals. Although round-the-clock activity along this segment would not be expected with retail-only development, a five-story retail building would still attract visitors to the waterfront and would enhance the perception of security for users of the Shore Public Walkway and the future waterfront park. The mid-rise scale of development would be compatible with the existing mid-rise context to the north and in upland areas, and would create a transitionary scale between areas to the north and the future anticipated high-rise development on RWCDS sites to the south.

Public Policy

The rezoning is consistent with the overall goal of providing new opportunities for redevelopment and economic growth within the South Bronx. The resulting changes in the future with the proposed action are not anticipated to create significant adverse impacts to public policy. The proposed action would be consistent with the public policy set forth to guide the development of the rezoning and primary study areas.

Socioeconomics

No significant adverse impacts on socioeconomic conditions are anticipated as a result of the proposed action. The proposed action would have the beneficial socioeconomic effect of expanding the housing supply to address strong local and citywide housing demand.

With regard to ***direct residential displacement*** it is estimated that the proposed action would directly displace only five residents. Based on the guidelines in the *CEQR Technical Manual*, the direct displacement of these residents would not result in a significant adverse impact because they do not represent a significant proportion of the proposed action area population and they are not likely to have socioeconomic characteristics that differ markedly from the study area population as a whole.

With regard to ***direct business displacement*** it is estimated that approximately 15 firms and 126 employees could be directly displaced under the With-Action scenario, not including those that might also leave under the No-Action scenario. Under CEQR, displacement of a business or group of businesses does not, in and of itself, constitute a significant adverse environmental impact. While all businesses contribute to neighborhood character and provide value to the city's economy, CEQR seeks to determine whether displacement of a single business or group of businesses would rise to a level of significance in terms of impact on the city's or the area's economy or the character of the affected neighborhood. Although the potentially displaced firms each contribute to the city's economy and therefore have economic value, the products and services they provide are widely available in the area and the city; the locational needs of these firms could be accommodated in the area and in other manufacturing districts, which are widely mapped throughout the borough and the city. Given the large quantity of underutilized industrial land and building space in the surrounding neighborhoods and the Bronx as a whole, there would be sufficient opportunities for displaced businesses to relocate nearby.

The proposed actions would potentially displace 126 employees, representing approximately 0.55 percent of jobs in the study area and approximately 0.06 percent of jobs in The Bronx, according to 2008 estimates based on Census projections and the Bureau of Labor Statistics' Quarterly Census of Employment and Wages. The potentially displaced businesses are primarily involved in manufacturing and auto storage – products and services that will continue to be available in the surrounding area after redevelopment. Although each business adds to the commercial fabric of Lower

Concourse area, none of the businesses that may be displaced in the proposed action area individually define the character of the neighborhood.

According to the guidelines of the *CEQR Technical Manual*, the proposed action would not have an ***adverse effect on a specific industry*** because it would not significantly impact the business conditions for any industry or category of businesses within or outside of the study area, nor would it indirectly reduce employment or impair the economic viability of a specific industrial sector or business category. Businesses that are anticipated to be subject to direct displacement vary in type and size and are not limited to a particular industry (e.g., manufacturing) or industry subset (e.g., furniture manufacturing).

According to the guidelines of the *CEQR Technical Manual*, the proposed action would not result in significant adverse impacts related to ***indirect residential displacement***. The action would increase the population of the study area by more than five percent and introduce residents with socioeconomic characteristics that are significantly different from the characteristics of residents in parts of the study area; however, an in-depth analysis reveals that the study area contains a population that is unlikely to be vulnerable to displacement pressures.

The *CEQR Technical Manual* suggests that a population increase of five percent or more could be large enough to trigger a socioeconomic change that would negatively affect a population at risk of displacement. The proposed action would introduce 6,377 residents to the area, approximately 4,968 more than anticipated under No-Action conditions. This would represent a population increase of 8.94 percent in primary study area over the 2008 population estimate of 64,957. This increase exceeds the five percent threshold laid out in the *CEQR Technical Manual*. However, high increases are expected in the proposed action area, which has almost no residential zoning, and in the primary study area, which is dominated by underutilized industrial property. Some new market rate residential development has already occurred within the primary study area since 2000, and population continues to grow in areas of the Bronx further from the proposed action area. An influx of residents with higher-incomes to other neighborhoods in the South Bronx indicates a continued demand for additional market rate housing in neighborhoods that have historically been non-residential. As a whole, the socioeconomic characteristics of the population living in the proposed action area has not changed much in recent years and is not likely to continue to change over the next several years under No-Action conditions. Current zoning has not encouraged new residential development, but borough-wide and citywide trends indicate existing demand. As such, low-and moderate- income residents living in unprotected housing units in several census tracts within the proposed action and primary study area constitute a "population at risk" that is potentially subject to indirect displacement under the proposed action.

In total, it is estimated that approximately 1,766 residents in 577 households in Tracts 17, 25, 39, 43, 49 and 69 in the Lower Concourse study area could be subject to indirect displacement pressures under the proposed action. These people are living in approximately seven housing units located in the proposed action area, and 577

households in the primary study area. The largest concentration of vulnerable residents likely live in 513 unprotected units in Census Tracts 39 and 41, at the far eastern portion of the primary study area. The proposed action area contains just fewer than 20 people – a number estimated based on the average household size and the seven vulnerable units in the area - who may be at risk of displacement under the proposed action. These residents are concentrated in Census Tract 49. These are estimates of the general size and location of a vulnerable population based on currently available data.

Although the *CEQR Technical Manual* does not suggest thresholds for determining the significance of indirect residential displacement impacts, it does state that an impact could generally be considered significant and adverse if "households or individuals would be displaced by legal means…they would not be likely to receive relocation assistance, and, given the trend created or accelerated by the proposed action, they would not be likely to find comparable replacement housing in their neighborhood." There is the potential for this to be true for low- and moderate-income residents living in unprotected housing units in certain census tracts within the proposed action and primary study areas – a population estimated to be about 1,766 individuals or 577 households, according to currently available data and conditions.

As stated earlier, the total population estimated to be vulnerable to direct and indirect displacement represents only 2.93 percent of the primary study area's population. These residents are dispersed throughout the primary study area, and many can be expected to occupy some of the 591 affordable housing units projected to be developed under the proposed action.

HPD has been very active in the primary study area and wider surrounding area in constructing affordable and market-rate housing targeted for low- and moderate-income residents. Between 1995 and 2007, 816 new housing units were built by HPD within the primary study area, indicating an ongoing commitment to providing housing for existing residents.

Nearly 600 of the new units projected in the proposed action area are expected to be affordable, providing some mitigation to the potentially displaced residents. Further, many of the residents living in unprotected housing may not be at high risk of indirect displacement as a result of the proposed action. Migration rates are fairly high in the proposed study area, and residents have a tendency to move frequently.

For these reasons, it has been determined that the proposed action would not result in a significant adverse indirect residential displacement impact.

According to the guidelines presented in the *CEQR Technical Manual*, the proposed action would not cause significant ***indirect business displacement impacts***. While regional retail is anticipated on large lots along the Grand Concourse and on large lots along the waterfront where proposed zoning districts would allow grocery stores, the proposed action would not significantly alter existing regional economic patterns. The amount of retail and commercial square footage in the surrounding neighborhoods is already drawing customers from the greater area.

Any development projected to occur in the Lower Concourse proposed action area would augment existing retail in nearby areas. Further, excellent transit access and the neighborhood's proximity to several highways make this a desirable location for supporting additional regional retail. The proposed text amendment would also allow grocery stores as-of-right within the proposed M1-4 zoning district in Bronx Community District 1, primarily created to serve the local community and new residents. New local retail is projected at the base of all new residential construction.

The proposed action would not alter existing regional economic patterns or add to the concentration of a particular sector enough to alter trends. It would directly displace "blighted" uses or properties enough so that commercial rents would increase; however, there is a dearth of commercial property in the proposed action and primary study areas currently, and the proposed rezoning is intended to attract new commercial and retail businesses. The proposed action would not directly or indirectly displace uses or people that support businesses in the area or form the customer bases for existing businesses. In addition, it would not introduce a land use that would offset positive trends in the study area or impede efforts to attract investment. On the contrary, the proposed action is expected to attract new investment by providing retail and commercial facilities to meet projected residential development.

New households expected to locate in the proposed action area under the proposed action would bring spending power that would be available for capture by proposed retail and service establishments. Because the anticipated growth in number of households and household spending is large and the amount of commercial development expected under the proposed action is modest, it can be assumed that household demand for retail and neighborhood services would reasonably support new neighborhood goods and service shops expected under the proposed action.

Community Facilities

The assessment of potential impacts on community facilities and services is based on the number of net new potential users of community facilities and services that would be generated by the development expected to be induced by the proposed action, as detailed in the RWCDS. Based on the RWCDS, there would be a net increase of 3,414 dwelling units in the future with the proposed action, compared to the future without the proposed action. These would consist of 2,823 market rate units and 591 affordable housing units to be occupied by low- and moderate-income households.

The analysis concludes that no significant adverse impacts on public elementary and intermediate schools, public high schools, health care, libraries, police services, or fire services would occur as a result of the proposed action. Significant adverse impacts would occur with respect to publicly funded day care facilities.

Public Schools

It is expected that the proposed action would result in an incremental increase of 2,823

market rate housing units and 591 low- to moderate-income housing units, all of which would be in CSD 7. Using the ratios set forth in Table 3C-2 of the *CEQR Technical Manual*, an estimated 798 elementary, 142 intermediate, and 148 high school students would be introduced into the half-mile study area by 2018.

The approximately 1,331 elementary school students that would be introduced into the half-mile study area as a result of the proposed action would cause total enrollment in elementary schools to rise to 9,060, with a utilization rate of 104 percent, less than a five percent increase over the existing study area capacity. Since the proposed action would not cause a five percent or greater deficit of seats over the existing study area capacity (assuming full capacity at 100% utilization), no significant adverse impact on elementary schools is expected. Overall, elementary schools in CSD 7 would also operate below capacity with an estimated utilization rate of 93 percent.

The approximately 546 intermediate school students that would be introduced into the half-mile study area as a result of the proposed action would cause total enrollment in intermediate schools to rise to 2,434, leaving 1,533 seats still available, for a utilization rate of 61 percent. The overall utilization rate for CSD 7 would increase to 51 percent. Significant adverse impacts to intermediate schools would not result.

With the proposed action, high schools in the Bronx are expected to operate at 69 percent capacity in 2018 absent the proposed action, with 18,537 available seats. Therefore, no significant adverse impact is expected for high schools as a result of the proposed action.

Libraries

Approximately 10,174 residents housed in 3,414 new dwelling units would be generated by the proposed action in the rezoning area by 2018, increasing the population in the study area to 99,961, a 10 percent increase over the No-Action population of 89,787. According to the *CEQR Technical Manual*, if a proposed action would increase the catchment area population by 5 percent or more over No-Action levels, a significant impact could occur if this increase would impair the delivery of library services. With the proposed action the increased population would reduce the volumes-to-resident ratio somewhat, from 0.99 to 1 in the No-Action, to 0.89 to 1 with the Proposed Action. The reduction in the volumes-to-residents ratio is quite small. Therefore, no significant adverse impact on the delivery of library services is expected to occur.

Publicly Funded Day Care Centers

The proposed action would introduce 591 new low- to moderate-income DUs to the rezoning area by 2018. These are expected to generate up to 254 children under age 6 who would be eligible for publicly funded day care, per Table 3C-4 of the *CEQR Technical Manual*, and 124 children between the ages of 6 and 12.

Because the older children are expected to be attending school during most of the day, their need would be for after-school care. The 124 school-aged eligible children

generated by the proposed action who qualify for Administration for Children's Services (ACS) vouchers or other programming for after school care could be served by Family Child Care Networks or school-age slots in ACS contracted day care facilities, DYCD's Out of School Time programs, and/or DOE approved after school programs.

In the future without the proposed action publicly funded day care and Head Start centers within one mile of the study area would continue to operate above capacity, as they do in the existing conditions. The additional 254 children under six potentially eligible for public day care would exacerbate the shortfall of available slots described in the future without the proposed action, increasing the collective utilization rate of the publicly funded day care centers and Head Start programs to 123 percent.

According to *CEQR Technical Manual* guidelines, a significant adverse impact on publicly funded day care services may result if a proposed action would result in: 1) a demand for day care slots greater than remaining capacity of day care centers; and 2) demand that constitutes an increase of five percent or more of the collective capacity of the day care centers serving the study area.

The introduction of day care eligible children associated with the RWCDS would cause an 11.3 percent increase in demand over the existing capacity of day care facilities in the study area. The projected deficit of available slots over the Future No-Action is well about the *CEQR* threshold of five percent. Therefore the proposed action is expected to have a significant adverse impact on publicly funded day care facilities in the study area, warranting consideration of mitigation measures.

This potential increase in demand for publicly funded day care slots generated by the proposed Lower Concourse Rezoning and Related Actions could be offset by a number of factors. Private day care facilities and day care centers outside of the study area (e.g., closer to parent's place of work) are not included in this analysis. Some of the increased day care demand would likely be offset by parents who choose to take their children to day care centers outside of the study area (e.g., closer to work). Some of the Family Day Care Networks serve children residing in the study area could potentially absorb some of the demand. This new demand would also be considered in future ACS solicitations for contracted services. Finally, new capacity could potentially be developed as part of ACS's public-private partnership initiatives.

As development occurs over the next ten years as a result of the proposed action, ACS will monitor the need for publicly funded day care services in the area and identify the appropriate measures to mitigate the impact of an increase in the number of children eligible for publicly funded day care services in this area of the Bronx.

Open Space

The open space study area has a significant amount of existing open space in comparison to many other areas of the Bronx and should continue to have sufficient open space resources in the future. As part of the proposed action, several new open spaces would be created, resulting from the WAP and the SHRWD. The total added

open space would total 3.43 acres; of this, 1.70 acres would be active and 1.73 acres would be passive. Significant adverse impacts to open space would not result from the proposed action.

The Lower Concourse Rezoning and Related Actions includes zoning amendments which would create the WAP, providing for a coordinated network of waterfront open spaces. Ultimately, the new WAP would establish a 2.26-acre park located between the Harlem River and Exterior Street, south of the extension of East 146th Street, and north of the extension of East 144th Street, with a change in the City Map required to map the parkland. In addition, the WAP would identify specific locations to create public esplanades along the Harlem River shoreline, upland connections, supplemental public access areas, and a visual corridor through requirements for future waterfront developments. Additional open spaces established under future conditions through the WAP would total 1.17 acres, bringing the total additional open space mapped as parkland or created under future conditions with the proposed action to 3.43 acres. With the WAP, the proposed action would encourage the development of the underutilized Harlem River waterfront, by establishing waterfront access areas along the shoreline between the Gateway Center area, to the north of the rezoning area, and the Port Morris community located to the south of the rezoning area.

Additional open space proposed in the Future With the Proposed Action would include three small supplemental public access areas, which would all be passive in nature, and shore public walkways, which would also be passive open spaces.

Visual corridors would be extended between projected development sites, as an extension of East 140th Street, and East 146th Street; a third visual corridor would be provided from Exterior Street to the waterfront between projected development site 4 and potential development site 32.

With a residential population of 79,933 and 49.00 total acres of open space, the residential study area total (active and passive) open space ratio would be 0.61 acres per 1,000 residents under the 2018 Future With the Proposed Action condition. This would be 0.1 acres lower than under the Future Without the Proposed Action condition, but would remain substantially below the DCP guideline of 2.5 acres per 1,000 residents. The active open space ratio would be 0.34 acres per 1,000 residents, a slight decrease from the future No-Action ratio of 0.36 acres per 1,000 residents. The passive open space ratio would be 0.27 acres per 1,000 residents, or a slight decrease of 0.01 acres from the future No-Action condition. The active open space ratio of 0.34 is lower than DCP's guideline of 2.0 active acres per 1,000 residents and the passive open space ratio of 0.27 is lower than the guideline of 0.5 acres per 1,000 residents.

The passive open space ratio for the combined (residential and worker) population in the With-Action condition would remain virtually unchanged from 0.20 acres per 1,000 combined workers and residents under the future No-Action condition; however, it remains below the recommended weighted average ratio of 0.41 acres per 1,000 workers and residents.

The non-residential study area passive open space ratio would be 0.31 acres per 1,000 workers under 2018 Future With the Proposed Action condition. This would be an increase of 0.09 acres per 1,000 workers compared to the future No-Action ratio of 0.22 acres per 1,000 workers, and exceeding the DCP guideline of 0.15 acres per 1,000 non-residents.

The passive open space ratio for the combined (residential and worker) population would increase from 0.11 acres per 1,000 combined workers and residents under future No-Action conditions, to 0.13 acres per 1,000 combined workers and residents and is below the recommended weighted average ratio of 0.36 acres per 1,000 workers and residents.

With the proposed action, the percent changes in open space ratios vary from a slight percentage decrease in the residential study area to an approximate 40.91 percent increase of passive open space in the non-residential study area. DCP's guideline is still exceeded for the non-residential study area passive open space ratio, while the total population ratio in the non-residential study area would increase. Projected increases in population would be supported by the quantity and quality of new open spaces developed in the Future With the Proposed Action.

The proposed action would not result in significant adverse impacts to open space. While open space resources in the study area are, and would continue to be, deficient in comparison to DCP guidelines, qualitative analysis of open space indicates that no significant adverse impacts would result from the proposed action. Rather, the quality and availability of regional open space resources within and near the residential study area would be improved by the proposed action and other development occurring nearby. The future residential and worker populations in the study area and South Bronx overall would be provided a greater opportunity to enjoy a network of open space and recreational resources that would not be fully realized in the future without the proposed action.

Shadows

The proposed action would not result in significant adverse impacts related to shadows. According to the *CEQR Technical Manual*, a shadow is defined as the circumstance in which a building or other built structure blocks the sun from the land. An adverse shadow impact is considered to occur when the shadow from the projected or potential development falls on a publicly accessible open space, historic landscape, or other historic resource if the features that make the resource significant depend on sunlight, or if a shadow falls on an important natural feature and adversely affects its use and/or important landscaping and vegetation. The uses and vegetation in an open space establish its sensitivity to shadows. Uses that rely on sunlight include passive use, such as sitting or sunning, and such activities such as gardening, or children's wading pools and sprinklers. Vegetation requiring sunlight includes tree canopy and flowering plants. Where lawns, natural or artificial, are actively used, the turf also requires extensive sunlight. For these activities and plants, four to six hours a day of sunlight, particularly in the growing season, is often a minimum requirement. In general, shadows on city

streets and sidewalks and on other buildings are not considered significant under CEQR.

Twelve open space resources would receive shadows cast by the projected and potential development -- including Franz Sigel Park, Colonel Charles Young Playground, Garrison Playground, Harlem River Driveway, Deegan Rock, Ryan Triangle, Borinquen Court Senior Center plaza facing Third Avenue, Graham Triangle, Esplanade Gardens, Bronx Terminal Market Waterfront Park - Gateway Center Parkland, and the Harlem River Greenway – that would not constitute significant adverse shadow impacts.

The new 2.26-acre park that is proposed within the Lower Concourse rezoning area along the Harlem River generally south of the East 146th Street and north of East 144th Street is located in the midst of the tallest of the projected and potential RWCDS sites, resulting in considerable shadowing effects on the future proposed park. However, because the creation of the proposed Lower Concourse Park is part of the proposed action, and because the natural resources in the Harlem River would not be sensitive to this degree of shading, the effects of project-generated shadows are not considered to be a significant adverse impact regardless of coverage or duration.

The Harlem River itself is a significant natural feature in the study area. Shadows from potential and projected new buildings would reach the Harlem River throughout the year in the morning hours.

Of the nine potential historic resources identified, none contain light-sensitive architectural details and, therefore, did not warrant any further analysis for potential shadow impacts.

Each of the other public open space resources analyzed would continue to receive sufficient sunlight during the growing season and the proposed action would not result in a substantial reduction in sunlight to any sun-sensitive uses or features of either open space or historic resources. As such, the proposed action would not result in significant adverse shadow impacts on those historic and open space resources.

Historic Resources

The proposed action would not result in direct significant adverse impacts to resources on projected development sites. No demolition of listed, eligible or potentially eligible historic resources is anticipated. One potentially eligible historic resource, the North Side Board of Trade building, located at 2514 Third Avenue, may be impacted due to potential conversion of the existing structure. In addition, one potential development site is located adjacent to the south of the North Side Board of Trade. Any significant adverse impacts from such a conversion would be unmitigated other than through limited protection under DOB regulations applicable to all buildings located adjacent to construction sites, since this resource is not a designated New York City landmark and has not been calendared for designation. Mitigation could include calendaring the North Side Board of Trade building for consideration as a New York City Landmark by the New York City Landmarks Preservation Commission; if this resource were deemed

to be landmark eligible, then further protection for redevelopment of this site would be afforded.

In addition to the North Side Board of Trade, inadvertent construction-related damage could potentially occur to one listed resource, Public School 31, located at 425 Grand Concourse**.** However, with the protections afforded by the New York City Building Departments' *TPPN 10/88* to listed historic resources, in addition to other Building Code protections, significant adverse impacts to Public School 31 are not expected.

Projected and potential development anticipated as a result of the proposed rezoning is not expected to result in adverse shadow impacts or indirect impacts on historic resources within the proposed rezoning area, or 400-foot study area. The visual context of area historic resources would not be expected to experience significant adverse impacts as a result of such development facilitated by the proposed action. Physical upgrading of adjacent and nearby parcels with new contextual development would provide a more suitable visual environment for these structures, without impacting views of them. The urban design context of the area's historic resources would be improved with new mixed-use development, enhancing streetscape conditions in the vicinity of resources in the rezoning area.

Urban Design and Visual Resources

No significant adverse impacts to urban design or visual resources would result from the proposed action. The proposed action is expected to result in positive changes and improvements to urban design conditions within the proposed rezoning area. Views to visual resources would be enhanced; their settings would be improved and there would be new opportunities to view the Harlem River waterfront. Waterfront public access and the creation of new waterfront parkland would enhance urban design conditions and attract visitors to the area.

Changes to building bulk, use, and type would occur throughout the proposed rezoning area as new residential and mixed-use development is introduced, and as vacant and underutilized sites and buildings are replaced or converted. Open lots and substantially underutilized parcels would be replaced with mixed-use buildings appropriate in massing and scale to their surrounding context.

For instance, in the Grand Concourse subarea, the proposed zoning would result in buildings that would more closely match the built character of the Grand Concourse to the north. The proposed zoning would also more closely match the bulk and massing of the existing multi-story loft buildings. In the Waterfront subarea, proposed regulations are intended to create buildings of varied height and bulk with consistent streetwall heights, ample open space between buildings and towers massed to minimize impacts on views. The creation of the park and waterfront public access along with the high density buildings would bring activity to a now desolate waterfront. The varied tower heights along the waterfront coupled with the consistent base would create visual interest. In the Canal/Rider subarea, new buildings in the area would be contextual with existing loft buildings. The bulk of the buildings are expected to be massed along

Rider Avenue, away from the lower scale industrial uses on Canal Place. The proposed MX (M1-4/R7X) would allow taller buildings along East 138th Street than are currently allowed. However, East 138th Street is a wide street and the nearby public housing developments are taller than those on the projected sites. Contextual base heights of the projected buildings would be similar to the streetwall heights of existing buildings. The proposed MX (M1-4/R7A) along Morris Avenue would provide a transition from existing taller buildings to the existing lower scale industrial buildings. With the proposed rezoning, the built form would gradually step down from the public housing to the projected development along Morris Avenue, then to the smaller loft buildings on Rider Avenue, and then to the lower scale industrial buildings on Canal Place.

The proposed action will not affect street hierarchy, street patterns, block form, natural features, or topography in the study area, with the exception of the reconfiguration of a waterfront block into three block portions south of East 149th Street, with the middle portion containing the proposed waterfront park. Building arrangement is anticipated to become more homogeneous, given the opportunities to consolidate individual lots into single developments, and the requirements for sympathetic streetwall buildings, with upper stories set back to frame the street and the pedestrian environment.

The urban design strategy that has been developed as part of the proposed action would ensure that new development relates to the characteristic built conditions of the different subareas of the study area. Proposed building form controls would guide new development to either complement existing areas with a strong contextual built character such as along Rider Avenue, or would ensure an appropriate scale and massing for new higher-density development, such as along the waterfront.

The proposed action would complement the urban design of areas within ¼-mile of the rezoning area (referred to as the primary study area) as well, and would not result in significant adverse impacts on urban design conditions. The new development would further integrate the rezoning and primary study areas with the broader South Bronx context, particularly with the areas to the north, south, and east of the rezoning area.

The proposed action would not result in direct significant adverse impacts to visual resources within either the rezoning study area or the primary study area.

Visual resources present in the study area include three designated landmarks, Harlem River views, and area parks and playgrounds. Enhanced visual conditions through the replacement of underutilized and vacant land would improve the surrounding context of these visual resources. Significant views of these resources would not be adversely affected by changes in building height or form resulting from the proposed action.

Neighborhood Character

The principal effects of the proposed action related to neighborhood character would be the introduction of mixed-use development in an area that is now characterized by industrial, institutional and commercial land uses and a high degree of vacant building

space. The resultant development associated with the proposed action would be better suited than existing conditions to the area's transit accessibility and proximity to Manhattan, major commercial centers, and the waterfront. Development facilitated by the proposed action would bring new activity, increases in traffic, and increases in the built density of the area. With the proposed action the neighborhood character of the study area would markedly improve, and no significant adverse impacts to neighborhood character would result.

The proposed action would result in a general change to the character of the study area in general; however, were the proposed action not to change the character of the area, it would fail to achieve project goals. The proposed action would provide opportunities for new mixed-use development, while preserving light-industrial uses in the area, encouraging greater access and new waterfront development along the Harlem River, and establishing the Lower Concourse as a new gateway to both Manhattan and the northern Grand Concourse.

The Lower Concourse area is surrounded by redeveloping neighborhoods and commercial districts. Redevelopment would make this area a livelier and potentially safer destination, and would improve connections between adjacent communities. New residential and commercial uses would create an active community for neighborhood residents and workers in the area. Waterfront development would connect adjacent neighborhoods and commercial destinations along the Harlem River. New mixed-use development -- including the conversion of vacant space in warehouses to lofts and new commercial and residential opportunities while preserving light industrial uses -- would help to provide street vitality. Increasing the residential population would enliven the area after business hours as well.

A significant portion of projected new residential development would consist of permanent affordable housing under the Inclusionary Zoning program, thus addressing the need for affordable housing in the South Bronx and the city as a whole. At the same time, the proposed rezoning would also encourage high-profile redevelopment, which would ultimately create a visible symbol of the South Bronx's continued resurgence. Proposed zoning along the Lower Concourse would encourage new development, which would be more consistent with the historic character of the Grand Concourse to the north. The proposed waterfront park would encourage redevelopment on the Harlem River in a manner more appropriate to this gateway entrance to the borough.

South Bronx residents have long been cut off from the Harlem River waterfront in the rezoning area by industrial development on the waterfront and highway and rail infrastructure. This is beginning to change with the construction of a new waterfront park directly north of the proposed rezoning area. The Lower Concourse Rezoning and Related Actions aims to link this new parkland to areas to the south by encouraging new waterfront development with required publicly-accessible waterfront open space. Proposed esplanade requirements would facilitate the creation of a continuous promenade along the Harlem River that would connect the parkland to the north with the existing Port Morris community to the south.

Proposed new waterfront parkland would consist of two Harlem River waterfront blocks extending between the Harlem River and Exterior Street, south of East 149th Street and north of the Metro-North Railroad Bridge over the Harlem River. New open space initiatives would seek to provide a network of open spaces along the Harlem River waterfront, enhancing the pedestrian environment and providing a varied and attractive skyline along the Harlem River waterfront.

A summary of improvements to neighborhood character parallels the aims of the new SHRWD. Goals of the new Special District include maintaining and reestablishing physical and visual public access to, and along, the waterfront; preserving and strengthening the pedestrian orientation of ground floor uses in appropriate locations; encouraging well-designed new development that complements the built character of the neighborhood; providing flexibility of architectural design within limits established to assure adequate access of light and air to the street, and thus encouraging more attractive and economic building forms; and, promoting the most desirable use of land and building development for the Harlem River waterfront to conserve the value of land and buildings and thereby protect the City's tax revenues.

Natural Resources

No impacts to natural resources would result from the proposed action. The rezoning area is urbanized and has low natural resource sensitivity, though new development is projected adjacent to the Harlem River, which is a natural resource. The anticipated redevelopment of a number of parcels on the waterfront that are also located in the Coastal Zone, however, would not substantially change the permeability of the overall land area along the waterfront or result in significant adverse impacts on surface water resources. It would not increase storm water discharges to the river, nor increase the frequency or duration of Combined Sewer Overflow (CSO) events. Significant adverse impacts related to development within the floodplain would not occur as a result of the proposed zoning amendments. Development that may result from the proposed zoning amendments is unlikely to affect the floodplain characteristics of the substantial Hudson/Harlem/East River system as construction in the floodplain would be dictated by FEMA requirements and the New York City Building Code.

With regard to threatened and endangered species, the peregrine falcon and the shortnose sturgeon are the only endangered species that have been identified in the vicinity of the study area waterfront. The New York State Department of Environmental Conservation (NYSDEC) has determined that the falcons are not in close proximity to the development area and that the proposed rezoning and associated development would not result in a significant adverse impact to the falcons. Significant adverse impacts to the shortnose sturgeon would not result from the proposed action because the physical improvements associated with the development that may result from the rezoning action would be limited to short term disturbances for replacement of bulkhead segments. This activity would be regulated by permits issued by the U.S. Army Corps of Engineers and NYSDEC. Furthermore, the shortnose sturgeon is a transient species in the Harlem River and does not rely on the bulkhead for habitat.

Therefore, the proposed action would result in no significant impacts to threatened or endangered species.

There are no designated Significant Coastal Fish and Wildlife Habitats in the vicinity of the rezoning area and the proposed action would not result in significant adverse impacts on the condition of coastal resources. Significant adverse impacts to wildlife would not occur as a result of the proposed zoning amendments.

Regarding wetlands, the existing poor condition of the area's shoreline bulkhead makes it likely that future development would require modification/or replacement of the bulkhead along shoreline segments bordering development sites. These bulkhead repairs would be subject to NYSDEC tidal wetland regulations and U.S. Army Corps of Engineers permit requirements under the Clean Water Act; consequently, there would be no significant adverse impacts to the tidal wetlands associated with the edge of the rezoning area.

Potential development identified in the RWCDS would result an increase in shadows cast on the Harlem River during the morning hours. The extent to which the shadows would increase has been assessed in detail within the shadows chapter of this Draft EIS. Shadows cast by buildings would be short-lived, transitory and diffuse. Diffuse shadows are not considered a significant change to habitat conditions, as they are temporary and unlikely to change the habitat condition. In addition, the aquatic life of the river is continuously carried by strong and tidal currents and would be exposed to these shadows for short periods of time. The building shadows on the river would not create adverse impacts on transient fish and wildlife species within the river.

Hazardous Materials

An assessment of potential hazardous materials impacts was performed for the projected and potential development sites, since rezoning of manufacturing lots to allow residential development potentially could result in exposure of future residents to hazardous materials if any exist. Therefore, as part of the process of rezoning a manufacturing zone to allow commercial or residential uses, or allowing such uses to take place adjacent to a manufacturing zone, a hazardous materials assessment is appropriate.

Based on the results of the land use survey and site history investigations, it is evident that the rezoning area was developed as an industrial area early in its history and has remained primarily industrial in use. In the future with the proposed action, there would be 32 projected and 46 potential privately-owned sites that would be developed. Hazardous materials impacts associated with their development could include the potential for impacts to the health and safety of workers during construction, the potential for the transport of contaminated soil, or the potential for impact on future residents or employees of individual buildings on these sites.

An additional consideration for the development sites included determining whether an (E) designation is necessary at privately-held sites that are projected or potential

development sites under the proposed actions. An (E) is designated on the appropriate Zoning Map (by block and lot) and to indicate that on such a designated site no change of use or development requiring a New York City Department of Buildings (NYCDOB) permit may be issued without approval of the New York City Department of Environmental Protection (NYCDEP). Consequently, (E) designations are recommended as part of the proposed action for all 78 privately owned sites.

By placing (E) designations on sites where there is a known or suspect environmental concern, the potential for an adverse impact to human health and the environment resulting from the proposed action is avoided. The (E) designation provides NYCDEP with a mechanism for addressing environmental conditions so that significant adverse impacts do not occur as a result of site development; the (E) designation requires that pre-development activities at each site include a Phase I environmental site investigation, and, if necessary, a sampling protocol and remediation to the satisfaction of NYCDEP before the issuance of a building permit.

In addition to the 78 privately owned sites, the proposed action would allow the reuse of a 2.26-acre parcel adjacent to the north of RWCDS projected site #2 as a public park. A Phase I analysis was prepared to address potential contamination on the site. The results of this evaluation indicated that contamination may be present and that a sampling program should be undertaken to determine the nature and degree of the contaminations as part of a subsequent Phase II investigation. The City is committed to completion of Phase II Environmental Site Assessments (ESAs) for the park site. The Phase II ESA and testing protocols will be submitted for review and approval to the NYCDEP. Once the approved testing is completed, the City will complete the recommended remediation at the park site prior to the initiation of work. With these provisions in place, no significant adverse impacts related to hazardous materials would result from the proposed action.

Waterfront Revitalization

A portion of the project area for the proposed action lies within New York City's Coastal Zone, as defined by DCP. The portion of the project area within the Coastal Zone lies west of Exterior Street between East 140th Street and approximately East 135th Street/Park Avenue, and west of Gerard Avenue between East 140th Street and East 149th Street.

The proposed action would be consistent with the City's ten Waterfront Revitalization Program (WRP) policies. With the creation of the public esplanade and the establishment of view corridors from inland blocks, the WRP goals of enlivening the waterfront, providing connection and attracting the public to the waterfront would be accomplished. The mapping of a new waterfront park would create the opportunity for a significant new public resource on the waterfront. Establishment of the SHRWD and zoning revisions would allow for a marked increase in residential, commercial, and community facility land uses, along with a new waterfront park, an esplanade, and visual connections to the Harlem River. Design features established as part of the SHRWD would improve and activate building frontages leading to the waterfront,

establishing active pedestrian corridors. Streetscape features and enlarged sidewalks would improve pedestrian corridors. Landscaping would be required along pedestrian pathways. New buildings would be substantially taller than the existing condition, but bird strikes would not be expected to result in increased loss of migrating birds from building collisions. The redevelopment of the proposed rezoning area in conjunction with the proposed action would be consistent with the City's WRP; no significant adverse impacts to waterfront revitalization program policies would result from the proposed action.

Infrastructure

In the future with the proposed action, the existing water supply, wastewater treatment and stormwater management systems are expected to support the proposed action without incurring significant adverse impacts. The proposed action would not result in significant adverse impacts on the City's water supply system. Projected development would represent a water supply demand of approximately 1,410,300 gallons per day (gpd), or 1.41 million gallons per day (mgd), an increase of approximately 968,400 gpd (0.97 mgd) from the No-Action condition demand. This demand represents less than 0.1 percent of the City's water supply demand. The project increment would therefore be unlikely to adversely impact the City's water supply or water pressure.

In the future with the proposed action wastewater from the study area would continue to be treated by the Wards Island WPCP. The capacity of the plant would not change as a result of the proposed action and the facility would retain its SPDES permitted capacity of 275 mgd. The proposed action would generate approximately 1,224,800 gpd of sanitary sewage, an increase of approximately 944,900 gpd (0.94 mgd) from the No-Action condition, equivalent to 2.3 percent of the reserve capacity of the Wards Island WPCP. Since the demand associated with the proposed action is well within the capacity of the treatment plant, no significant impacts to the City's wastewater treatment services would occur as a result of the rezoning.

Related to stormwater management, in the future with the proposed action the projected development sites total 1,010,332 sf of land, 98,446 sf of which would be parkland. Twenty percent of the 98,446 sf of parkland would be developed with impervious surface and the remaining 80 percent of the proposed parkland would be permeable. A portion of the waterfront esplanade would also consist of permeable surface. The remaining land in the rezoning area in the future with the proposed action would consist of commercial, industrial and residential uses.

The proposed action is anticipated to generate approximately 9.6 cubic feet per second (cfs) of stormwater runoff over the No Action conditions. Although there may not be a specified requirement for increased detention associated with the proposed action itself, stormwater Best Management Practices and sustainable design features could be incorporated into future development. These would serve to decrease the potential for an increase to CSO frequency or duration to the Harlem River. Therefore, it is expected that there would be some reduction in uncontrolled runoff from private development sites in the future with the proposed actions.

Based on the analysis pursuant to the *CEQR Technical Manual*, it is concluded that the proposed actions would not result in significant adverse impacts to the local water supply, sanitary wastewater treatment, or stormwater management infrastructure systems.

Solid Waste

The proposed action would not result in significant adverse impacts to solid waste. Development pursuant to the proposed action would occur in an area which is currently served by the City of New York Department of Sanitation (DSNY) residential trash and recycling pick-ups. The proposed action would not affect the delivery of these services or place a significant burden on the City's solid waste management system. The resulting net increase in solid waste to be picked up by DSNY is relatively small (about ten tons per day) when compared to the estimated 12,000 tons of residential and institutional refuse and recyclables collected by DSNY per day. Non-residential waste serviced by private carters would increase by about three tons per day, as a result of the proposed action, an insignificant amount compared to the estimated 13,000 tons of commercial/industrial waste currently removed by private carters.

In the future with the proposed action there would be no significant adverse impacts on residential or commercial solid waste collection and disposal services, nor would the proposed project conflict with, or require any amendments to, the City's solid waste management objectives as stated in the City's Solid Waste Management Plan.

Energy

The proposed action is not anticipated to result in significant adverse energy impacts. Consumption of electrical energy on the projected development sites would experience a net increase of approximately 507.48 billion British Thermal Units (BTUs) in annual energy use compared to No-Action conditions. This incremental increase in annual demand on an hourly basis would represent a small fraction of the City's forecasted peak summer load of 13,085 Mega Watts (MW) in 2018, and an infinitesimal amount of the City's forecasted annual energy requirements for 2018. This incremental increase in demand would not be large enough to impinge on the ability of the City's energy system to deliver electricity and would not constitute a significant adverse impact.

Traffic and Parking

In total, the number of additional peak hour person trips that would be generated in 2018 by the proposed action ranges from a minimum of approximately 2,800 during the AM peak hour to nearly 8,200 during the weekday midday peak hour. The proposed action would generate a maximum of approximately 1,320 additional subway trips during the PM peak hour, and a maximum of approximately 800 additional bus trips during the midday peak hour. The maximum weekday increment of approximately 290 vehicle trips would occur during the PM peak hour, but the highest net increase in vehicle trips above No-Action levels would occur during the Saturday peak hour when

approximately 944 additional vehicle trips would be generated. The maximum increment in vehicle trips occurs on Saturday due to the relative low level of travel generated on Saturday by the displaced land uses in the rezoning area under No-Action conditions and the projected Saturday trip patterns of the residential and retail components of the proposed action.

Since the land use characteristics of the rezoning area would change under the proposed action from primarily office/manufacturing to residential, inbound trips during the weekday morning and outbound trips in the evening would remain approximately the same as in the No Action condition or decrease, reflecting the daily trip pattern between home and work either into or from the rezoning area. Therefore, a reduction in net vehicle trips is indicated on certain roadways during certain time periods. The greatest net changes in vehicle trips, either positive or negative, are projected to occur on the Major Deegan/Bruckner Expressway, the four Harlem River bridges (e.g., the two-way 145th Street and Madison Avenue Bridges, the one-way Bronx-bound Willis Avenue Bridge and one-way Manhattan-bound Third Avenue Bridge), on the Grand Concourse and along East 149th Street.

Regarding 2018 Build condition traffic volumes, peak hour traffic volumes would increase or decrease relative to No Build levels. Based on CEQR criteria, significantly impacted locations were identified and summarized by peak analysis period. During the AM peak hour, the proposed future action would result in nine significantly impacted lane groups at eight intersections; in the midday, nine lane groups at seven intersections would experience significant adverse impacts; during the PM peak hour, there would be 20 significantly impacted lane groups at 12 intersections; and on Saturday, there would be 14 significantly impacted lane groups at nine intersections.

Regarding parking, implementation of the proposed action would, in comparison to the No-Action condition, primarily generate residential development in place of additional manufacturing, warehouse and office development, as well as displacing existing similar non-residential land uses. The character of future parking demand in the study area would therefore change relative to the No-Action condition, with reduced midday demand and increased overnight demand. Work place land uses generate daytime parking demand but little overnight demand. Residential land uses generate maximum parking demand overnight and some demand during the daytime. Overnight, it is assumed that all the resident-owned vehicles would be parked and that, beginning in the early morning, the residential based parking accumulation would begin to decrease as some residents leave for work. The resident based parking accumulation would begin to increase again in the afternoon.

It is proposed as part of the RWCDS that 1,147 accessory parking spaces would be provided as part of the projected residential development by 2018. However, applying auto ownership rates derived for areas of the Bronx with income levels, transit accessibility and densities comparable to that expected to occur in the study area indicates that a residential parking demand exceeding that provided as accessory parking would occur. Also, some projected sites are not anticipated to provide any accessory parking. It is projected that 667 resident owned vehicles would either park on-

street or in nearby off-street parking facilities. The 2018 midday parking shortfall would be reduced by approximately 350 spaces under the proposed action. Overnight demand would increase by 785 spaces, but it is projected that approximately 225 spaces would be available. Thus, the analysis indicates that additional off-street parking supply is needed in the study area with or without the proposed action.

Regarding safety, four intersections in the study area experienced between 20 and 25 accidents over the most recent three year period and two intersections experienced five pedestrian related accidents. While it is not apparent from this accident history that significant safety related issues are present in the study area, certain pedestrian safety and traffic control measures will need to be considered in the future. Increased pedestrian levels in the study area that would be generated by the proposed action, especially in areas that today exhibit little or no pedestrian activity, such as along Exterior Street, will require crosswalks and consideration of the installation of traffic signals as may be appropriate. Also, as pedestrian levels increase in existing commercial areas, such as along East 149th Street, pedestrian safety measures such as lead pedestrian intervals will also need to be considered.

In order to assess traffic conditions at those study locations where operations may be affected by traffic volumes associated with New York Yankee home games, a separate focused study area analysis was performed. The six study intersections along East 149th Street and the study intersection of East 153rd Street with the Grand Concourse were identified as those study locations that could most likely be affected by game day traffic, given their location in the northern portion of the study area in closest proximity to Yankee Stadium and also their location along primary access corridors to the stadium. The weekday PM peak hour (5:00–6:00 PM) and a Saturday midday hour (12:15–1:15 PM) were selected for game day analysis, coinciding with the presence of pre-game traffic traveling to the stadium.

Based on CEQR criteria, significantly impacted locations were identified and summarized under pre-game PM peak hour and pre-game Saturday midday conditions, for the seven intersections analyzed within the focused game-day study area as follows: during the pre-game PM peak hour, the proposed future action would result in nine significantly impacted lane groups at four intersections; and, on Saturday, there would be five significantly impacted lane groups at three intersections.

Transit and Pedestrians

The future with the proposed action would result in an increase in pedestrian and transit trips as compared to the no action condition. With regard to the operations of subway station elements at the 138th Street/Grand Concourse and 149th Street/Grand Concourse stations under 2018 Build conditions, Peak 15 minute incremental passenger volumes in 2018 with the proposed action would increase minimally at the 138th Street/Grand Concourse station, but appreciably in percentage levels given the low usage levels of the station under existing and no action conditions. Turnstile operations would decline from LOS A to LOS B and all stairways would continue to operate at LOS A.

Most incremental subway trips generated by the proposed action would use the 149th Street/Grand Concourse station. Peak 15 minute passenger volumes are projected to increase overall at the station approximately 17 percent and 27 percent during the AM and PM peak hours, respectively. However, most new passengers would use the southwest stairways and southwest station fare control area and enter and exit via the high entry/exit turnstiles. Operationally, stairway level of service would mostly remain at LOS A except for the southwest stairway (S3), which would decline to LOS B. Operations of the high entry/exit turnstiles at the southwest station fare control area would deteriorate to LOS E during both the AM and PM peak hours. Although this deterioration in level of service is not considered a significant impact, these turnstiles are projected to be approaching SVCD capacity and will require monitoring in the future.

With regard to transit bus line haul operations and passenger loads at the peak load points projected for 2018 Build conditions on the transit bus routes serving the study area, the project generated incremental passengers that would be on board at the peak load point of each route would mostly affect the Bx1/2, Bx19 and Bx21 routes. However, all routes would operate below capacity at the peak load point. Passenger volumes on the Bx21 would be at approximately 90 per cent of capacity under build conditions.

With regard to street level pedestrian operations and sidewalk, corner and crosswalk analyses for future conditions with the proposed action, all sidewalks will continue to operate at LOS A or LOS B. However, the projected increase in pedestrian activity at the southwest corner of the intersection of East 149th Street with the Grand Concourse, which is largely due to trips to and from the subway station, would cause pedestrian space levels to deteriorate from LOS D in the future without the proposed action to LOS E during the midday peak hour and from LOS C to LOS D during the PM peak hour. Likewise, operations of the west and south crosswalk would also operate at LOS D during the midday peak hour. As noted in Section 3.16.1, the *CEQR Technical Manual* specifies that for corner reservoirs and crosswalks, impacts may be considered significant for decreases of one SFP when the no action condition has occupancies under 20 SFP (mid-LOS D). The weekday midday occupancy of this corner in the future without the proposed action is projected to be 23 SFP. Therefore, this deterioration in level of service under build conditions would not be considered a significant impact. Operations on the north crosswalk at the intersection of East 138th Street with the Grand Concourse are projected to decline from LOS A under no action conditions to LOS C during the weekday midday, PM and Saturday peak hours and decline form LOS C to LOS D on the south crosswalk at the intersection of East 149th Street with the Grand Concourse during the midday peak hour, but none of these changes in levels of service represent significant impacts.

With regard to safety, two intersections in the traffic study area experienced five pedestrian related accidents in one or more years during the most recent three year period- East 149th Street with Courtlandt Avenue and East 149th Street with Morris Avenue. Courtland Avenue is located along East 149th Street east of the rezoning area and Morris Avenue forms the eastern boundary of the rezoning area to the south of East

149th Street. Pedestrian activity would be expected to increase at both intersections as a result of the proposed action, more so at Morris Avenue with East 149th Street. However, these intersections are well outside the area where most significant increases in pedestrian levels of activity would be expected to occur under the proposed action, and hence, pedestrian exposure to unsafe conditions as it may relate to these two intersections would not be expected to increase significantly. Nevertheless, as pedestrian levels increase in the future along the commercial areas of East 149th Street, both with and without the proposed action, implementation of pedestrian safety measures by NYCDOT, such as pedestrian lead intervals and exclusive pedestrian phases, may be necessary. Likewise, as pedestrian activity increases significantly under the proposed action along East 138th Street, Exterior Street and on other street segments of the rezoning area with very little pedestrian activity today, measures will be required to be implemented by NYCDOT to provide for the level of pedestrian protection and control necessary.

Air Quality

Increases in mobile source emissions related to increases in project-induced traffic would not result in any exceedences of the National Ambient Air Quality Standards (NAAQS) or the NYCDEP/NYSDEC New York City interim guideline impact criteria at existing or future project-related sensitive receptors. Pollutant emissions related to the proposed development sites HVAC systems would not result in any violations of applicable NAAQS standards or exceed the NYCDEP/NYSDEC NYC interim guideline incremental impact criteria. Existing pollutant sources would not result in any air quality related impacts at the proposed development sites. Existing large scale pollutant sources, in addition to industrial sources that would emit air toxics, would not result in any significant adverse impacts at any of the sensitive land uses that would be created by the proposed action.

Air quality issues associated with the proposed action relate to:

- Potential for increases and/or changes in vehicular travel associated with the action-generated development to result in significant mobile source air quality impacts;
- Potential for the emissions from the heating systems of the action-generated developments to significantly impact existing land uses and/or other action-generated developments;
- Potential of existing commercial, institutional or large-scale residential developments to impact action-generated residential/commercial uses on projected and potential development sites; and,
- Potential for action-generated residential/commercial uses on projected and potential development sites to be adversely affected by air toxic emissions generated by existing nearby industrial and commercial uses.

Heating Systems: Impacts from HVAC System Emissions

Emissions from the HVAC systems of the proposed and potential developments may affect air quality levels at nearby existing land uses as well as the other proposed developments. The impacts of these emissions would be a function of fuel type, stack height, building size (gross floor area), and location of each emission source relative to a nearby sensitive receptor site.

Following the DCP recommended procedure, only developments that would increase existing building sizes by 30 percent or more were considered as new emission sources in the HVAC analysis. Twenty-three of the 31 projected sites and 36 of the 48 potential sites meet this criterion. Emissions from the remaining projected and potential sites were not evaluated as new potential emission sources but rather as part of the area's background emissions. All of the projected and potential buildings, however, were considered as sensitive receptor sites.

A survey of existing land uses within 400 feet of the proposed rezoning area was conducted to identify residential land uses and other sensitive receptor sites. The survey showed that there are numerous existing buildings within and near the rezoning area, mostly commercial and industrial establishments, and a few residential buildings. The following are sensitive sites (e.g., residences, schools, parks, etc.) that were considered in the screening-level analysis of the HVAC emissions of the proposed and potential development sites:

- Block 2349, which would include a park (Lower Concourse Park);
- Eight blocks (2309, 2311, 2314, 2317, 2324, 2325, 2338, and 2352), which currently contain multi-family residential buildings;
- Blocks 2343, 2346, and Block 2350, which contain Hostos College;
- Block 2335, which contains Lincoln Hospital;
- Block 2344, which contains Health Opportunities High School; and,
- Block 2325, which contains New York City Housing Authority's Paterson Houses.

The proposed action also includes projected and potential buildings that are located in close proximity to one another and that are projected to have the same heights (or close to the same heights). In these cases, emissions from these buildings were considered as "clusters" of emission sources, and the potential impacts of these buildings could not be evaluated using *CEQR Technical Manual* screening procedures.

The result of the screening-level analysis is that no significant air quality impacts from the emissions of the HVAC systems of the proposed and potential developments that are not adjacent to each other or part of a cluster on the surrounding existing land uses are predicted to occur.

Because *CEQR Technical Manual* screening procedures are not applicable to buildings less than 30 feet apart, the potential impacts of the HVAC emissions from these buildings were estimated using detailed dispersion analyses. The results of the project-

on-project and cluster analysis for all applicable pollutants indicate that total estimated 24-hour and annual SO_2 concentrations, 24-hour PM_{10} concentrations, and annual NO_2 concentrations are all below the applicable NAAQS; therefore, no exceedances of the NAAQS for all applicable pollutants are predicted as a result of the project-on-project or clusters impacts.

Detailed dispersion analyses were also conducted using the USEPA AERMOD model and procedures described above to estimate potential impacts of the project buildings (projected and potential sites) and cluster emissions combined on existing residential uses within 400 feet of the proposed rezoning area. Because the maximum 24-hr SO_2 impact indicates that these are the critical pollutant and time period of determining potential project impacts, only 24-hr SO_2 concentrations were considered for this analysis. The highest 24-hour SO_2 concentration at any of the selected receptor sites considered was estimated to be 18 ug/m^3, which is below the 24-hour SO_2 standard of 365 ug/m^3. This concentration was found at an elevated receptor within the Paterson Houses Complex. As such, the cumulative air quality impacts of the HVAC emissions of the project-induced buildings on existing residential land uses are not significant. Therefore, the HVAC emissions of the proposed action do not have the potential to significantly impact existing nearby land uses.

Impacts from "Major" Existing Emission Sources

Following *CEQR Technical Manual* guidelines, a survey of land uses and building heights was conducted to determine whether there are any existing "major" sources of boiler emissions (i.e., emissions from boiler facilities with heat inputs 20 million BTU per hour or greater) located within 1,000 feet of the proposed residential development sites. As a result of this survey, four major HVAC emission sources were identified. These are the 14-story Lincoln Hospital building, the 14-story Paterson Houses complex, and two other residential buildings on blocks 2298 and 2311 that are 19 and 20 stories tall, respectively. Therefore, detailed dispersion analyses were conducted using the AERMOD model and the procedures described above to determine whether the emissions from these sources have the potential to significantly impact the proposed developments.

The result of this analysis is that the maximum estimated 24-hour SO_2 impact of 5 ug/m3, which was found at the RWCDS potential site 66 receptors near Lincoln Hospital, is below the 24-hour SO_2 standard of 365 ug/m^3. Therefore, no exceedances of the NAAQS are predicted as a result of the "major" existing emission source impacts.

An additional examination was conducted to determine if there is any "large" combustion emission source (e.g., power plant, co-generation facility, etc.) located within 1,000 feet of any of the proposed development sites. The result of this survey is that no large boiler emission sources are located within 1,000 feet of the proposed developments. Therefore, no further analysis is required.

Mobile Source Emissions: CO Impacts under Yankee Game Day Conditions

A microscale modeling analysis was conducted to estimate CO levels at heavily congested intersections (i.e., analysis sites) in the study area that would be most affected by Yankee Game Day (YGD) traffic. The following scenarios were analyzed: existing conditions and future conditions (2018), with and without the proposed action. These intersections were chosen based on their proximity to the East 145th Street Bridge and the East 149th Street corridor. Based on this proximity, these sites could potentially be affected by the greatest volume of YGD traffic.

The highest project-generated CO increment would occur at the intersection of East 149th Street and Exterior Street during the PM peak period (increase of 0.1 ppm). The NYCDEP CO *de minimis* values would not be exceeded at this site or any other analysis site, indicating that the proposed action does not have the potential to cause significant adverse CO impacts.

For both the existing and future conditions (2018 with and without the proposed action) the YGD scenario would not result in significant increases of CO emissions over the non-YGD scenario. As a result, mobile source air quality impacts are not anticipated under both the YGD and non-YGD scenarios.

Air Toxic Emissions

The proposed rezoning action would allow development of residential uses within existing manufacturing and industrial zones. As such, emissions of toxic pollutants from the operation of existing industrial emission sources might affect proposed residential uses. An analysis was therefore conducted to determine whether the impacts of these emissions would be significant. Data necessary to perform this analysis, which include facility type, source identification and location, pollutant emission rates, and exhaust stack parameters, were obtained from regulatory agencies (e.g., from existing air permits). All existing industrial facilities located within 400 feet of the rezoning area that are permitted to exhaust toxic pollutants were considered in this analysis. The result of this analysis is that no exceedance of either NYSDEC SGC or AGC acceptable limits and USEPA's incremental risk threshold limit are predicted under the With-Action RWCDS.

Noise

The proposed action would generate new residential, commercial and community facility uses in an area that is already characterized by medium to high density residential and commercial development. Consequently, the proposed action would not result in significant adverse impacts related to noise.

As part of the proposed action, (E) designations would be placed on the zoning map for all of the projected and potential development sites to avoid the potential for significant adverse noise impacts. Residential, commercial and community facility development on lots mapped with an (E) designation would be required to provide sufficient noise

attenuation to maintain interior noise levels of 45 dBA or lower, and the proposed action would not result in significant adverse noise impacts.

Daytime noise levels at all of the receptor sites are fairly typical of noise levels in the study area. A steady background noise exists at all locations due to consistent traffic movement on streets in and around the proposed action area. The monitoring results at the 24-hour sites show high levels of existing noise. Peak noise levels are very comparable to levels recorded during peak-traffic hours for the short-term monitoring program.

In order to predict noise levels in the future with the proposed action, the additional increase in traffic noise associated with the proposed action was added to the existing traffic noise condition. Future proposed action traffic volumes utilized in the mobile source noise analyses were based on unmitigated traffic conditions. There would be no perceptible increases in traffic noise levels at the RWCDS projected and potential development sites as a result of increases in traffic associated with the proposed action.

At noise monitoring sites S2-S5, S8-S16, S18 and S20-S23, the increase in noise level conditions in the future with the proposed action compared to the future no action condition noise levels is predicted to be in the range of 0.1 dB to 2.5 dB. This increase at these locations would be considered insignificant and imperceptible. At the remaining four monitoring sites (S1, S6, S7 and S17), the increase in future traffic volume would result in actual reductions in noise levels over the future no action condition. This is due to changes in vehicle mix (e.g., the shift from truck to car). As a result of the proposed action, the increase in the proposed action noise level over the no action noise level would not exceed the 3 dBA CEQR threshold at any of the receptor sites. Therefore, significant adverse noise impacts from mobile sources are not predicted to occur.

The existing L_{10} noise levels at 20 of the 23 monitoring sites and the future noise levels at 75 of the 79 projected and potential development sites would exceed 70 dBA. These sites would be made suitable for residential, commercial and community facility uses by providing window-wall attenuation ranging from 30 dBA to 40 dBA for the exterior facade of the affected development in order to achieve a 45 dBA interior noise level. An (E) designation for these sites would preclude the potential for significant adverse noise impacts. The closed window condition at these sites can be maintained only by providing an alternate means of ventilation for the interior spaces.

The required noise attenuation values under the YGD scenario for proposed and projected sites would be identical to those predicted for the non-YGD scenario.

Construction

Construction-related activities resulting from the proposed action would not result in significant adverse impacts on natural resources, traffic, air quality, noise, or hazardous materials conditions. Inadvertent construction-related damage could potentially occur to one potentially eligible historic resource, the North Side Board of Trade (see Chapter 3.7, "Historic Resources").

Development activity on development sites nearby or adjacent to this potentially eligible resource would occur as-of-right, and therefore any resultant adverse impact would not be mitigated. Since the resource is not S/NR-listed or NYCLPC-designated, it would not be afforded special protections under DOB's *TPPN 10/88* unless the eligible resource is designated in the future prior to the initiation of construction. With respect to construction-related impacts, this resource would be afforded limited protection under DOB regulations applicable to all buildings located adjacent to construction sites. The resource would be provided a measure of protection from construction as New York City Building Code Section 27-166 (C26-112.4), which requires that all lots, buildings, and service facilities adjacent to foundation and earthwork areas be protected and supported in accordance with the requirements of Building Construction Subchapter 7 and Building Code Subchapters 11 and 19. Additional protective measures afforded under DOB *TPPN 10/88*, which apply to designated historic resources, would not be applicable in this case.

The proposed action would result in the construction of new residential buildings and commercial buildings, as well as the conversion of some existing buildings that are primarily vacant or occupied with industrial and commercial uses to residential use. Construction on the 31 projected development sites is assumed to be completed in the 10 years following the adoption of the proposed action. New construction is projected on 20 of these sites; nine sites are expected to have an existing building converted but not expanded; and two sites are expected to have existing buildings converted and expanded. In addition, there are 48 potential development sites considered less likely to be developed over the 10-year analysis period, but which are considered potential sites for future development.

The reasonable worst case development scenario presented in Chapter 2.0, "Project Description," does not describe which of the sites would be developed first or assume a particular sequence of development. However, it is assumed that construction of all projected development sites would likely be completed by 2018. While market considerations will determine the demand for new residential and commercial development, it is reasonable to assume that a number of projected development sites may be under construction at the same time. However, given the wide geographic distribution of the projected development sites, this is not expected to result in a clustering of construction activities at any given location at any one time within the proposed action area.

Public Health

The *City Environmental Quality Review (CEQR) Technical Manual* states that a public health assessment may not be necessary for many proposed actions, but a thorough consideration of health issues should be documented.

No activities are proposed that would exceed accepted City, State, or federal standards with respect to public health or result in activities which result in significant public health concerns. Therefore, a full assessment of potential impacts on public health is not

necessary and no significant adverse impacts are expected as a result of the proposed action. The proposed action would not result in significant adverse impacts to public health.

Air Quality analyses summarized above indicate no potential impacts to existing or future sensitive receptors as a result of project generated traffic or development and no potential impacts to projected or potential development would result from existing major emissions sources; likewise there would be no significant impact related to air toxics.

Prior to construction, further investigation would be performed on each development site to determine the presence and nature of contamination of concern and the proper remedial and/or health and safety measures that would be employed during redevelopment (see Chapter 3.10). For all privately-owned projected and potential development sites (E) designations are recommended as part of the proposed rezoning and related actions. By placing (E) designations on sites where there is a known or suspect environmental concern, the potential for an adverse impact to human health and the environment resulting from the proposed action is avoided. The (E) designation requires that pre-development activities at each site include a Phase I environmental site investigation and, if necessary, a sampling protocol and remediation to the satisfaction of NYCDEP before the issuance of a building permit.

In addition to the sites receiving (E) designations, the proposed action would provide for the reuse of a 2.26-acre parcel adjacent to the north of project development site #2 as a public park. A Phase I analysis was prepared and results indicated that contamination may be present. Therefore, prior to the redevelopment of the site as a park, the City is committed to completion of a Phase II Environmental Site Assessment (ESA). The Phase II EAS and testing protocols will be submitted for review and approval to the NYCDEP. Once the approved testing is completed, the City will complete the recommended remediation at the park site prior to the initiation of work. With these provisions in place, no significant adverse impacts are expected.

No solid waste management practices are proposed beyond those which occur at most residential and commercial uses found in the City; no impacts related to solid waste management would result, and there would likewise be no increase in pest populations (see Chapter 3.13).

No new significant sources of noise would be generated by the proposed action (see Chapter 3.18). Traffic generated by the proposed action would not produce any significant adverse noise impacts. The existing noise levels at 18 of the 23 monitoring sites and the future noise levels at 74 of the 78 projected and potential development sites with residential and commercial uses would exceed 70 dBA. These sites would be suitable for residential and commercial uses by providing window-wall attenuation ranging from 30 dBA to 40 dBA for the exterior façade of the affected developments in order to achieve a 45 dBA interior noise level or lower. (The closed window condition at these sites can be maintained only by providing an alternate means of ventilation for the interior spaces.) An (E) designation for these sites would preclude the potential for significant adverse noise impacts.

No new odor sources would be created as a result of the proposed action; there would be no significant adverse impacts related to odor.

Alternatives to the Proposed Action

The purpose of the alternatives analysis is to examine reasonable alternatives to the proposed action that avoid or reduce action-related significant adverse impacts and may still allow for the achievement of the stated goals and objectives of the proposed action. For this Draft EIS, the following alternative planning and development scenarios were considered: a No-Action (As-of-Right) Alternative, a No-Impact Alternative, and a Lower Density Alternative.

No-Action (As-of-Right) Alternative
Under CEQRA, consideration of a No-Action Alternative is required. The No-Action (As-of- Right) Alternative examines future conditions within the proposed rezoning area assuming the absence of the proposed action. This alternative provides a baseline for the evaluation of impacts associated with the proposed action.

No-Impact Alternative
The No-Impact Alternative examines a scenario in which there is a change in density or program design in order to avoid the potential significant adverse impacts associated with the proposed action that have been identified in Chapters 3.1 to 3.20. Potential significant impacts have been identified for the proposed action related to traffic, and transit & pedestrians. A considerable reduction in future area residential and non-residential development would occur in the No-Impact Alternative, which would not be expected to meet the objectives of the proposed action; therefore, the No-Impact Alternative is not a feasible alternative to the proposed action.

Lower Density Alternative
Comments received during the public scoping process requested analysis of an alternative that would have additional commercial rezoning options along the Grand Concourse and retains, to a greater extent than the proposed action, the industrial character of blocks east of Park Avenue that would host mixed-use development under the proposed action. In response, a Lower Density Alternative has been identified that would replace the proposed C6-2A District on the Grand Concourse with a C4-4D District, maintain M1-2 zoning on three RWCDS projected sites east of Park Avenue, and allow an industrial use (Use Group 16C) on one waterfront site. This Lower Density Alternative would result in a lower commercial floor area ratio (FAR) on the Grand Concourse than the proposed action, with the same allowable FAR for residential and community facility development as the proposed action. Lastly, the Lower Density Alternative would not permit residential development or conversions on the area between Canal Place and Rider Avenue between East 140th Street and East 142nd Street, which would otherwise be zoned for mixed-use development under the proposed action. This area would remain zoned M1-2. The Lower Density Alternative would result in 276 fewer units than the proposed action.

The full benefits of establishing a new mixed-use community with affordable housing and promoting contextual development on waterfront and upland blocks in the rezoning area would not be realized under the Lower Density Alternative to the extent that it would be under the proposed action. Under the Lower Density Alternative, only three of four projected reasonable worst-case development scenario sites facing the waterfront would be developed with mixed-use development.

The development scenario implications of each alternative are summarized in Table 1.0-6 below and compared to the No-Action condition of the RWCDS for the 31 projected development sites identified in the proposed action. As shown in the table, the total net number of dwelling units and amount of projected development would vary with each of the identified alternatives.

Table 1.0-6: Alternatives Comparison of RWCDS Projected Development Site Development Increment by Use

Alternative	Use/Intensity								
	Total DUs	**Affordable DUs**	**Retail**	**Office**	**Hotel**	**Storage/ Manu-facturing**	**Park-land**	**Community Facility**	**Vacant Land/ Building Area**
Proposed Action	3,414	591	571,162	-598,351	164,285	-308,872	98,446	63,700	0
No-Action Alternative	2	0	106,358	598,351	0	404,372	0	90,589	93,142
No Impact Alternative	———	———	———	———	———	———	———	———	———
Lower Density Alternative	3,138	547	477,808	-494,351	108,460	-228,886*	98,446	63,700	0

*Not including a Consolidated Edison Muster Center/Workout Station on RWCDS site #4.

Mitigation

The proposed action would result in mitigatable impacts related to community facilities, traffic and parking, and pedestrians. Changes to signal timing would mitigate potential pedestrian impacts and all but the unmitigatable traffic impacts at three intersections (see Chapter 3.15, "Traffic and Parking," and Chapter 3.23, "Unavoidable Adverse Impacts," for discussion of unmitigatable traffic impacts).

All potential for impacts related to hazardous materials, air quality and noise would be effectively offset through the assignment pursuant to the proposed action of appropriate (E) designations to properties that could potentially be susceptible to such impacts. An (E) is designated on the appropriate Zoning Map (by block and lot) and indicates that on that site no change of use or development requiring a New York City Department of Buildings permit may be issued without approval of the New York City Department of Environmental Protection (NYCDEP).

As described in Chapter 3.3, "Community Facilities and Services," the introduction of day care-eligible children associated with the reasonable worst-case development scenario (RWCDS) would cause an 11.3 percent increase in demand over the existing capacity of day care facilities in the study area. Therefore the proposed action would result in a significant adverse impact on publicly funded day care facilities in the study area, warranting consideration of mitigation measures. This potential increase in demand could be offset by a number of factors. Private day care facilities and day care centers outside of the study area (e.g., closer to parent's place of work) are not included in this analysis. Some of the increased day care demand would likely be offset by parents who choose to take their children to day care centers outside of the study area (e.g., closer to work). Some of the Family Day Care Networks serve children residing in the study area and could potentially absorb some of the demand. This new demand would also be considered in future planning for contracted services. Finally, new capacity could potentially be developed as part of the New York City Administration for Children's Services' public-private partnership initiatives. Children's Services will monitor the demand and need for additional capacity and implement change to the extent practicable.

As discussed in Chapter 3.15, "Traffic and Parking," a total of 33 signalized intersections and five unsignalized intersections were analyzed for typical day conditions and seven signalized intersections were analyzed under PM peak hour and Saturday midday New York Yankee pre-game conditions within a focused game day study area. Significant adverse impacts were identified under typical day conditions for the full traffic study area at eight intersections during the AM peak hour, seven intersections during the midday peak hour, 12 intersections during the PM peak hour, and nine intersections during the Saturday midday peak hour. Within the game day focused study area, significant adverse impacts were identified at three intersections during the pre-game PM peak and pre-game Saturday midday hours. Significant adverse impacts were also identified at these intersections during typical day conditions.

As outlined in Chapter 3.15, most traffic impacts on the local street network can be mitigated by standard traffic engineering improvements such as signal phasing and timing modifications, parking prohibitions, lane re-striping, and changes in pavement markings. These proposed mitigation measures for typical day and game day conditions are consistent with the range of traffic capacity improvements that have been proposed and implemented for other projects in the city.

Chapter 3.16, "Transit and Pedestrians," notes that pedestrian activity would be expected to increase as a result of the proposed action. As pedestrian levels increase in the future along the commercial areas of East 149th Street, both with and without the proposed action, implementation of pedestrian safety measures by NYCDOT, such as pedestrian lead intervals and exclusive pedestrian phases, may be necessary. As pedestrian activity increases significantly under the proposed action along East 138th Street, Exterior Street and on other street segments of the rezoning area with very little pedestrian activity today, measures will be required to be implemented by NYCDOT to provide for the level of pedestrian protection and control necessary.

Unavoidable Adverse Impacts

According to the *CEQR Technical Manual*, unavoidable adverse impacts are disclosed when a proposed action is expected to result in significant adverse impacts for which there are no reasonable or practical mitigation measures. As described in Chapter 3.22, "Mitigation," most of the potential significant adverse impacts of the proposed actions could be avoided or mitigated by implementing a number of measures. However, there are also unavoidable adverse impacts for which there is no mitigation. These unavoidable adverse impacts, associated with community facilities, historic resources and traffic, are described below.

No significant adverse impacts on public elementary and intermediate schools, public high schools, health care, libraries, police services, or fire services would occur as a result of the proposed action; however, significant adverse impacts would occur with respect to publicly funded day care facilities. The introduction of day care-eligible children associated with the RWCDS would cause an 11.3 percent increase in demand over the existing capacity of day care facilities in the study area. The projected deficit of available slots over the Future No-Action is well above the CEQR threshold of five percent. Therefore, the proposed action was projected to result in a significant adverse impact on publicly funded day care facilities in the study area, warranting consideration of mitigation measures.

This potential increase in demand for publicly funded day care slots generated by the proposed Lower Concourse Rezoning and Related Actions could be offset by a number of factors. Private day care facilities and day care centers outside of the study area (e.g., closer to a parent's place of work) are not included in this analysis. Some of the increased day care demand would likely be offset by parents who choose to take their children to day care centers outside of the study area (e.g., closer to work). Some of the Family Day Care Networks that serve children residing in the study area could potentially absorb some of the demand. This new demand would also be considered in future ACS solicitations for contracted services. Finally, new capacity could potentially be developed as part of other ACS public-private partnership initiatives.

As development occurs over the next ten years as a result of the proposed action, ACS will monitor the need for publicly funded day care services in the area and identify the appropriate measures to mitigate the impact of an increase in the number of children eligible for publicly funded day care services in this area of the Bronx.

As noted in Chapter 3.6, "Historic Resources," the proposed action could result in a significant adverse impact due to the conversion of one potentially eligible resource, the North Side Board of Trade (#1), which occupies Potential Conversion Site 63. This significant adverse impact would be unmitigated as this resource is not a designated New York City landmark and has not been calendared for designation. Likewise, inadvertent construction-related damage could potentially occur to one potentially eligible resource, the North Side Board of Trade (#1) and to one designated historic resource, Public School 31 (#2). For the non-designated resource, the North Side Board of Trade,

construction under the proposed action could potentially result in construction-related impacts to this resource, as the additional construction protections of *TPPN 10/88* would not apply. Any significant adverse impact would be unmitigated, other than through limited protection under DOB regulations applicable to all buildings located adjacent to construction sites, since this resource is not a designated New York City landmark and has not been calendared for designation.

The City has procedures for avoidance of damage to structures from adjacent construction with added protection for designated historic resources, which would be afforded to Public School 31. Building Code section 27-166 (C26-112.4) serves to protect buildings by requiring that all lots, buildings, and service facilities adjacent to foundation and earthwork areas be protected and supported in accordance with the requirements of Building Construction Subchapter 7 and Building Code Subchapters 11 and 19. In addition, the New York City Department of Buildings' *Technical Policy and Procedure Notice (TPPN) # 10/88*, supplements these procedures by requiring a monitoring program to reduce the likelihood of construction damage to adjacent LPC-designated or NR-listed resources (within 90 feet) and to detect at an early stage the beginnings of damage so that construction procedures can be changed. In the case of the North Side Board of Trade, any significant adverse impact would be unmitigated as this resource is not a designated historic resource. Without the protective measures described above, significant adverse construction-related impacts to this eligible resource would not be mitigated.

Traffic

As noted in Chapter 3.15, the findings of the traffic analysis indicate that the additional traffic demand generated by the proposed action would generate significant adverse traffic impacts on nine lane groups at seven intersections during the typical weekday AM peak hour, nine lane groups at eight intersections during the typical weekday midday peak hour, 20 lane groups at 12 intersections during the typical weekday PM peak hour, and 14 lane groups at nine intersections during the typical Saturday midday peak hour. Also as discussed in Chapter 3.15, a separate focused study area analysis was performed in order to assess traffic conditions at those study locations where operations may be affected by traffic volumes associated with New York Yankee home games. The six study intersections along East 149th Street and the study intersection of East 153rd Street with the Grand Concourse were analyzed for the weekday PM peak hour (5:00-6:00 PM) and a Saturday midday hour (12:15-1:15 PM).

The proposed mitigation measures described in Chapter 3.15 would mitigate all of the operational impacts associated under both typical and game day conditions with the proposed action, with the exception of impacts at the following three intersections where unmitigated impacts would remain under the Proposed Action condition:

- East 149th Street/Exterior Street and River Avenue (typical weekday AM, typical weekday MD, typical weekday PM, and typical Saturday midday peak hours as well as game day PM peak hour and Saturday midday hour);

- East 138th Street/Exterior Street (typical weekday AM and typical Saturday midday peak hours); and,
- East 135th Street/Madison Avenue (typical weekday PM and typical Saturday midday peak hours).

Growth-Inducing Aspects of the Proposed Action

The proposed action would result in more intensive land uses (generating new residents, daily workers, and visitors). However, there would not be spillover or secondary effects resulting in substantial new development in nearby areas as the proposed rezoning has been developed to be responsive to observed and projected land use trends and would result in sufficient available density to meet all projected demands for projected residential and commercial development in the rezoning area. Moreover, the revitalization of the South Bronx and the rezoning area necessitates a strategic planning and development framework for the Lower Concourse area, and by providing a significant new supply of housing and local commercial space within this rezoning framework, the proposed action would support new development and changes in land use in areas adjoining the rezoning area. Therefore, while there would be no growth-inducing aspects associated with the proposed action, the proposed action would complement recent development activity that has already occurred and future development that may otherwise occur in nearby areas.

Irreversible and Irretrievable Commitment of Resources

The proposed action would require the irreversible and irretrievable commitment of land, energy, construction materials, human effort, and funds.

Projected and potential development under the proposed action constitutes a long-term commitment of sites as land resources, thereby rendering land use for other purposes infeasible. The proposed action constitutes an irreversible and irretrievable commitment of the project sites as a land resource. For example, the proposed action would result in a net increase in open space, establishment of a significant visual connection to the Harlem River along the length of the waterfront, and a wider variety of land uses; these land use changes may be considered a resource loss. Further, funds committed to the design, construction/renovation, and operation of projected or potential developments under the proposed action are not available for other projects.

These commitments of land resources and materials are weighed against the public purpose and benefits of the proposed action, which are to provide a substantial amount of open space, residential, and commercial development in an area with significant transportation infrastructure to support development. It would replace uses consisting of storage/manufacturing space, vacant parcels, and generally underutilized land, and revitalize the surrounding community with new residential and commercial development that would be compatible with residential and mixed-use development in surrounding neighborhoods.

It is estimated that the projected development sites would generate a net increase in energy consumption of approximately 507.48 billion BTUs in annual energy use compared to Future No-Action conditions.

The public services provided in connection with the projected and potential developments under the proposed action (e.g., police and fire protection and public school seats) also constitute resource commitments that might otherwise be used for other programs or projects, although the proposed action would also generate tax revenues to provide additional public funds for such activities. Further, funds committed to the design, construction/renovation, and operation of projected or potential developments under the proposed action would not be available for other projects.