East New York Rezoning Proposal
Chapter 21: Alternatives

A. INTRODUCTION

As described in the 2014 *City Environmental Quality Review* (CEQR) *Technical Manual*, alternatives selected for consideration in an environmental impact statement are generally those that are feasible and have the potential to reduce, eliminate, or avoid adverse impacts of a proposed action while meeting some or all of the goals and objectives of this action. As described in Chapter 1, "Project Description," the East New York Rezoning proposal consists of a series of land use actions (collectively, the "Proposed Actions") intended to facilitate the implementation of the objectives of the East New York Community Plan. The affected area comprises approximately 190 blocks of the East New York, Cypress Hills, and Ocean Hill neighborhoods in Brooklyn Community Districts (CDs) 5 and 16.

This chapter considers in detail the following three alternatives to the Proposed Actions:

- A No-Action Alternative, which is mandated by CEQR and the State Environmental Quality Review Act (SEQRA) and is intended to provide the lead and involved agencies with an assessment of the expected environmental impacts of no action on their part (i.e., no zoning changes).
- A No Unmitigated Significant Adverse Impacts Alternative, which considers a development scenario that would not result in any identified significant, unmitigated adverse impacts.
- A Lower Density Alternative, which considers lower density zoning districts that would result in reduced residential development.

B. PRINCIPAL CONCLUSIONS

No-Action Alternative

The No-Action Alternative examines future conditions within the rezoning area, but assumes the absence of the Proposed Actions (i.e., none of the discretionary approvals proposed as part of the Proposed Actions would be adopted). Under the No-Action Alternative, existing zoning would remain in the area affected by the Proposed Actions. It is anticipated that this area would experience moderate growth under the No-Action Alternative by 2030. Twenty seven of the 80 projected development sites are expected to be redeveloped, or undergo conversion, in the No-Action Alternative, resulting in a net 325,389 sf of market-rate residential floor area (428 dwelling units [DU]), 323,263 sf of commercial uses, 79,138 sf of community facility uses, and 81,175 sf of industrial uses on the projected development sites. The technical chapters of this EIS have described the No-Action Alternative as "the Future Without the Proposed Actions."

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

would not be realized under this alternative, and the No-Action Alternative would fall short of the objectives of the Proposed Actions.

No Unmitigated Significant Adverse Impacts Alternative

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

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

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

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

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

zoning map, leaving a pocket of M1-1 zoning adjacent to the proposed residential and special mixed-use districts. Such a modification would be impractical and inconsistent with the Proposed Actions' goal to establish Atlantic Avenue as a vibrant mixed-use corridor.

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

As presented in Chapter 16, "Noise," the Proposed Actions would result in significant adverse impacts on Richmond Street between Fulton Street and Dinsmore Place during the AM peak hour due largely to traffic level increases from the proposed school at projected development site 66. No reasonable or feasible alternative could be developed to completely avoid such an impact while still maintaining the Proposed Actions' stated goals in terms of siting a school at projected development site 66.

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

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

Lower Density Alternative

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

As with the Proposed Actions, the Lower Density Alternative would not result in significant adverse impacts with respect to land use, zoning, and public policy; socioeconomic conditions; urban design and visual resources; hazardous materials; water and sewer infrastructure; solid waste and sanitation services; energy; greenhouse gas

emissions and climate change; public health; and neighborhood character. The Lower Density Alternative would result in the same significant adverse shadows, historic resources, transit, pedestrian, and noise impacts as under the Proposed Actions, with slightly reduced impacts related to community facilities, open space, traffic, air quality, and construction.

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

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

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

C. NO-ACTION ALTERNATIVE

The No-Action Alternative assumes that the Proposed Actions are not implemented. This includes no zoning map and text changes, no amendments to the Dinsmore-Chestnut Urban Renewal Plan (URP), no disposition approval, and no approval and site selection from the New York City School Construction Authority (SCA) for the development of a new public school facility. Conditions under this alternative are similar to the "Future without the Proposed Actions" described in the preceding chapters, which are compared in the following sections to conditions under the Proposed Actions.

Under the No-Action Alternative, it is anticipated that new development would occur on 27 of the 80 projected development sites identified under the reasonable worst-case development scenario (RWCDS). In total on the 80 projected development sites, there would be 566,224 sf of market-rate residential floor area (550 DU), 653,099 sf of commercial uses, 125,886 sf of industrial uses, 156,972 sf of community facility uses, and 1,304 accessory parking spaces under the 2030 No-Action Alternative.

The effects of the No-Action Alternative in comparison to those of the Proposed Actions are provided below.

Land Use, Zoning, and Public Policy

In the No-Action Alternative, based on existing zoning and land use trends and general development patterns, it is anticipated that the rezoning area would experience limited overall growth. Under the No-Action Alternative, it is expected that the rezoning area would experience a net decrease in auto-related and parking uses, with modest growth in residential, industrial, community facility, and other commercial uses. In comparison to the future with the Proposed Actions, under the No-Action Alternative there would be less residential, retail, office, industrial, and community facility uses and more auto-related, hotel, storage, and garage uses in the rezoning area.

Like the Proposed Actions, the No-Action Alternative would not result in any significant adverse impacts to land use, zoning, or public policy. Development within the rezoning area would be consistent with existing uses in the area and is not expected to significantly affect the mix of existing land uses in the area. However, under the No-Action Alternative, significantly fewer residential units would be constructed, with no new affordable housing developed under this alternative.

Under the No-Action Alternative, no changes to zoning are anticipated. Development could occur throughout the rezoning area under the current mix of residential, commercial, and manufacturing zoning districts. New development within the existing manufacturing districts are expected to primarily comprise commercial uses (including hotel, storage, and office space) and community facility uses, with minimal light industrial uses introduced under the No-Action Alternative. Unlike the Proposed Actions, the No-Action Alternative would not expand development opportunities for portions of these existing manufacturing districts by creating MX districts.

New development under the Proposed Actions would occur at the densities and scale that are currently allowed under the existing zoning districts. Thus, the benefits of the Proposed Actions with respect to preservation of the residential core through the zoning of contextual districts would be foregone, as would the proposed Mandatory Inclusionary Housing zoning, which would target development along the rezoning area's major corridors.

The benefits expected to result from the Proposed Actions—including promoting affordable housing development by increasing residential density and establishing Mandatory Inclusionary Housing, encouraging economic development by mapping new commercial districts and increasing density in a highly transit accessible area of the City, creating pedestrian-friendly streets through active ground floor retail uses, and introducing new community resources—would not be realized under this alternative.

Socioeconomic Conditions

Absent the Proposed Actions, it is anticipated that development would only occur on 27 of the 80 projected development sites. No-Action development on these 27 projected development sites would result in a net increase of 325,389 sf of residential floor area (428 market-rate DU), 323,263 sf of commercial uses, 79,138 sf of community facility uses, and 81,175 sf of industrial uses on the projected development sites. The following summarizes the potential socioeconomic effects of the No-Action Alternative as compared to those of the Proposed Actions for the five issues of socioeconomic concern under CEQR.

Direct Residential Displacement

Neither the No-Action Action Alternative nor the Proposed Actions would result in significant adverse impacts due direct residential displacement. Both the Proposed Actions and the No-Action Alternative would result in some potential direct residential displacement, but the amount of potential direct residential displacement would not be substantial or significant, and would fall well below the *CEQR Technical Manual* threshold of 500 displaced residents. The No-Action Alternative could result in the direct displacement of approximately 42 dwelling units housing an estimated 126 residents from projected development site 46, while the Proposed Actions would result in the potential direct displacement of an additional 158 residents residing in 53 dwelling units on 19 of the 80 projected development sites. This amount of direct residential displacement would not be large enough to substantially alter the socioeconomic character of the neighborhood under either the Proposed Actions or the No-Action Alternative.

Indirect Residential Displacement

Neither the No-Action Alternative nor the Proposed Actions would be expected to have a significant adverse indirect residential displacement impact. Under the No-Action Alternative, approximately 428 dwelling units would be constructed on 27 of the 80 projected development sites, housing a population that would be well below the *CEQR Technical Manual* threshold of five percent of the existing study area population, indicating that the development would not be large enough to substantially alter the study area's socioeconomic character and demographic composition or real estate market conditions. However, given the trends experienced in the neighborhoods surrounding the study area, and the increased interest in and limited housing stock of the study area, it is likely that

rents within the study area would significantly increase under the No-Action Alternative. Demand for housing in the study area is expected to continue to increase given its relative affordability compared to the surrounding areas and its relatively convenient location and proximity to transit. Current real estate data show a trend towards higher property values and household incomes. Based on upward trends in income and real estate values near the study area and the limited stock of available apartments, it is likely that low-income households in unprotected units (at-risk households) would continue to experience indirect residential displacement pressures under the No-Action Alternative and could potentially decrease. The anticipated socioeconomic benefits of the Proposed Actions, including promoting the development of permanently affordable housing and facilitating mixed-income communities by requiring affordable housing units to be included in any new residential development, would not be realized under the No-Action Alternative. Unlike the Proposed Actions, the No-Action Alternative would not introduce any affordable housing to the proposed rezoning area, and therefore, would not further the City's goal of increasing affordable housing.

Direct Business Displacement

Like the Proposed Actions, the No-Action Alternative would not result in significant adverse impacts due to direct business displacement. Both the Proposed Actions and the No-Action Alternative would result in some direct business and institutional displacement. The No-Action Alternative could result in the direct displacement of approximately seven business firms affecting an estimated 24 workers in the retail and other services (automotive repair) sectors on five of the 80 projected development sites. As with the Proposed Actions, which could have the potential to displace significantly more businesses than the No-Action Alternative, the directly displaced businesses do not provide product or services that would no longer be available to local residents or businesses, nor are they the subject of regulations or publicly adopted plans aimed at preserving, enhancing, or otherwise protecting them in their current location. The businesses are not unique to the ½-mile study area, nor do they serve a user base that is dependent on their location within the study area. As with the Proposed Actions, it is expected that the potentially displaced businesses would be able to find comparable space within the study area or elsewhere in the city under the No-Action Alternative.

Indirect Business Displacement

Neither the No-Action Alternative nor the Proposed Actions are expected to result in significant adverse impacts due to indirect business displacement. Similar to the Proposed Actions, the No-Action Alternative would not introduce new economic activities that would substantially alter existing economic patterns in the study area, nor would it alter the land use character of the study area. The ½-mile study area already has well-established commercial, residential, and industrial markets, and neither the Proposed Actions nor the No-Action Alternative would substantially alter commercial real estate trends in the area.

Compared to the Proposed Actions, the No-Action Alternative would result in less commercial, residential and industrial development than would otherwise occur with the implementation of the Proposed Actions. There would be comparably fewer new jobs under the No-Action Alternative. The anticipated socioeconomic benefits of the Proposed Action, including creating new centers of activity that will bring together housing, commercial uses, community services and street level activities, promoting continuous active non-residential ground floor uses and minimizing curb cuts which disrupt the sidewalk, would not be realized under the No-Action Alternative. Key corridors in East New York such as Atlantic, Liberty and Pitkin Avenues are expected to continue to remain fragmented commercial corridors with a high number of non-commercial ground floor uses.

Adverse Effects on Specific Industries

Neither the Proposed Actions nor the No-Action Alterative would result in significant adverse impacts on specific industries. A significant adverse impact on a specific industry would generally occur only in the case of a regulatory change affecting the city as a whole or in the case of a local action that affects an area in which a substantial portion of that sector is concentrated, relative to the city as a whole. Like the Proposed Actions, the No-Action Alternative would not significantly affect business conditions in any industry or any category of business within or outside of the study area.

Community Facilities and Services

The No-Action Alternative would introduce fewer residents to the study area as compared to the Proposed Actions and, therefore, would result in a smaller increase in demand on area community facilities. Neither the Proposed Actions nor the No-Action Alternative would result in direct impacts to community facilities and services or indirect impacts to high schools, library services, or police, fire, and emergency medical services. Unlike the Proposed Actions, the No-Action Alternative would not result in significant adverse impacts to public schools or child care facilities.

Under the No-Action Alternative, there would be some new residential development on the projected development sites, with approximately 428 new residential dwelling units being added to the rezoning area (increment compared to existing conditions). All of the expected 428 DU would be market-rate units and would generate substantially less demand for community facilities than the net 3,447 affordable and 2,865 market-rate DUs generated by the Proposed Actions under the RWCDS. As with the Proposed Actions, it is expected that with the No-Action Alternative, there would continue to be adequate capacity for both elementary and intermediate level student in Sub-districts 1 and 2 of Community School District (CSD) 23. As under the Proposed Actions, CSD 19, Sub-district 1 elementary schools and CSD 19, Sub-district 2 intermediate schools would operate over capacity under the No-Action Alternative. However, unlike the Proposed Actions, CSD 19, Sub-district 2 elementary schools would operate below capacity under the No-Action Alternative, and no significant adverse public school impacts would occur under this alternative. However, unlike the Proposed Actions, a 1,000-seat PS/IS school would not be constructed on projected development site 66 under the No-Action Alternative.

As no affordable housing (i.e., no affordable housing developed pursuant to Inclusionary Housing provisions) would be constructed in the No-Action Alternative, no additional publicly funded child care-eligible children would be added to the study area. As such, it is anticipated that publicly funded child care centers would operate below capacity in the No-Action Alternative and no significant adverse impacts on child care centers would occur under this alternative, unlike the Proposed Actions.

Open Space

Similar to the Proposed Actions, the No-Action Alternative would not have any direct impacts on any open space resources.

In terms of indirect effects, the open space ratios for the non-residential (¼-mile) study area for the No-Action Alternative—like the Proposed Actions—would exceed the *CEQR Technical Manual* open space ratio guidelines. Therefore, daytime users of passive open space will be well-served by the resources available, and there would be no significant adverse open space impacts in the non-residential study area as a result of either this alternative or the Proposed Actions.

With regard to the open space ratios for the residential (½-mile) study area, the No-Action Alternative would have slightly higher ratios with respect to overall open space, as well as passive and active open space. Under the No-Action Alternative, the total, passive, and active open space ratios for the residential study area would be 0.614, 0.304, and 0.310 per 1,000 residents, respectively (compared to 0.563, 0.279, and 0.284, respectively, under the Proposed Actions). The passive open space ratio for the combined residential and non-residential populations in the ½-mile study area would be 0.265 per 1,000 total users, compared to 0.242 under the Proposed Actions. As under the Proposed Actions, under the No-Action Alternative the total, passive, and active open space ratio's would be below the *CEQR Technical Manual* open space guidelines of 2.5 acres of open space per 1,000 residents, including 0.5 acres of passive open space and 2.0 acres of active open space.

The open space ratios for both the non-residential and residential study areas under the No-Action Alternative would, therefore, generally by slightly higher than those under the Proposed Actions. However, as with the Proposed Actions, the open space ratios for the residential study area would be below the *CEQR Technical Manual* open space guidelines for open space adequacy and citywide planning goals.

Shadows

Unlike the Proposed Actions, the No-Action Alternative would not result in any significant adverse shadows impacts. In the No-Action Alternative, incremental shadows identified with the Proposed Actions would not be cast on publicly accessible open spaces and sunlight-sensitive historic resources. As such, the No-Action Alternative would not result in the significant adverse shadows impact on the Holy Trinity Russian Orthodox Church that would occur with the Proposed Actions. Furthermore, similar to the Proposed Actions, no other publicly accessible open spaces or sunlight-sensitive historic resources would be significantly affected by shadows under the No-Action Alternative.

Historic and Cultural Resources

As with the Proposed Actions, the No-Action Alternative would not result in any significant adverse impacts to archaeological resources or any indirect impacts to architectural resources. Unlike the Proposed Actions, the No-Action Alternative would not result in direct or construction-related significant adverse impacts to architectural resources.

The No-Action Alternative assumes that development would occur on 27 of the 80 projected development sites in accordance with existing zoning. Development could also occur on nine of the 105 potential development sites as-of-right pursuant to existing zoning under the No-Action Alternative. The New York City Landmarks Preservation Commission (LPC) reviewed and identified projected and potential development sites that could experience new/additional in-ground disturbance and concluded that none of the lots comprising those sites have any archaeological significance. Therefore, like the Proposed Actions, the No-Action Alternative would not result in any significant adverse impacts to archaeological resources.

It is possible that some or all of the buildings identified as eligible for LPC or S/NR designation could become listed under the No-Action Alternative. Privately-owned properties that are New York City Landmarks (NYCL) or S/NR-listed, or are pending designation as landmarks, are protected under the New York City Landmarks Law, which requires LPC review and approval before any alteration or demolition can occur. In addition, the City has procedures for avoiding damage to historic resources from adjacent construction.

Under the No-Action Alternative, it is anticipated that new construction would occur on potential development site A73, which is adjacent to the S/NR- and NYCL-eligible Holy Trinity Russian Orthodox Church.[1] This eligible historic resource would be afforded standard protection under DOB regulations applicable to all buildings located adjacent to construction sites. However, protective measures afforded under DOB TPPN #10/88 would only become applicable if the church is designated a NYCL or listed on the S/NR in the future No-Action condition. If the historic resource is not designated, it would not be afforded special protections under DOB's TPPN #10/88. Additionally, the Holy Trinity Russian Orthodox Church has not been calendared for consideration for landmark status by the LPC, which would afford some measure of protection under the New York City Landmarks Law as detailed above. As an S/NR-eligible resource, the Holy Trinity Russian Orthodox Church is given the same protection afforded to S/NR-listed structures with regard to state or federally sponsored or assisted projects; however, it can be altered by private landowners using private funds without any review. Thus, this unlisted but eligible historic resource which is not subject to LPC oversight could experience indirect construction-related damage under the No-Action Alternative as a result of new construction anticipated on the adjacent site (potential development site A73). Unlike the Proposed Actions, no other eligible historic resources would experience significant adverse construction-related impacts under the No-Action Alternative

[1] Shortly before the completion of the DEIS, DCP became aware that the former East New York Savings Bank structure was being demolished. Except for the demolition permit, no other building permit appears to have been approved for this site. Changes to the circumstances of this building would not alter any of the conclusions of this EIS. DCP will continue to monitor the situation and, if warranted, revised the RWCDS for this site and incorporate the change into the EIS between the DEIS and FEIS.

In addition, as no development is anticipated on projected development site 37, which includes the S/NR and NYCL-designation eligible Empire State Dairy Building, no unavoidable significant adverse direct impact on this resources would occur under the No-Action Alternative, unlike under the Proposed Actions. Furthermore, unlike the Proposed Action, under the No-Action Alternative the Holy Trinity Russian Orthodox Church would not experience significant adverse shadow impacts due to incremental shadows cast by potential development site A25, A27, and A73.

Urban Design and Visual Resources

Like the Proposed Actions, the No-Action Alternative would not have significant adverse impacts on urban design, view corridors, and visual resources. Under the No-Action Alternative, urban design in the rezoning area is expected to continue existing trends. While existing vacant and underutilized lots would be redeveloped with new buildings, many of the anticipated No-Action buildings would be shorter than, and further set back from, the street than the older building stock found in the rezoning area. Many of the new developments anticipated along the primary study area's Fulton Street and Pitkin Avenue corridors are not expected to include ground floor retail under the No-Action Alternative, despite the corridors being mapped with commercial overlays, thus continuing the existing trends along these corridors of residential uses replacing ground floor retail. As such, the No-Action Alternative would not have the Proposed Actions' beneficial streetscape effects of facilitating high transparency active ground floor uses that would improve the pedestrian experience. In addition, while the No-Action Alternative developments would be significantly smaller in scale, and less noticeable of a change, than under the Proposed Actions, under the No-Action Alternative, no contextual zoning districts would be mapped along the rezoning area's core residential streets, and the ongoing trend of new residential development that is inconsistent with the streetwall of the area's older building stock would continue.

Hazardous Materials

The No-Action Alternative, like the Proposed Actions, would involve building construction, additions, and conversions. However, construction on new buildings for as-of-right uses under the current zoning may occur without regulatory oversight such that environmental conditions of these sites are not addressed, and residual contamination could be encountered by construction workers or the general public without their knowledge. It is assumed that all construction and required removal or handling of hazardous materials would be conducted in accordance with applicable state and federal requirements, thereby minimizing the potential for exposure.

A greater amount of ground disturbance in areas where soil is potentially contaminated from hazardous materials would occur under the Proposed Actions, as compared with the No-Action Alternative, since some projected development sites would be redeveloped under the Proposed Actions but not under the No-Action Alternative. However, development under the Proposed Actions would be conducted in accordance with the testing and remediation requirements required pursuant to the (E) designations or comparable measure that would be placed on the projected development sites under the Proposed Actions. As such, the No-Action Alternative would involve less soil disturbance, but potentially the controls on its performance would not be as stringent as under the Proposed Actions.

Water and Sewer Infrastructure

Neither the Proposed Actions nor the No-Action Alternative would result in significant adverse impacts on the City's water supply, wastewater treatment, or stormwater conveyance infrastructure. Compared with the Proposed Actions, the No-Action Alternative would generate less demand on the City's water supply and wastewater treatment infrastructure. Similar to the Proposed Actions, the incorporation of selected best management practices (BMPs) would be required as part of the New York City Department of Environmental Protection (DEP) site connection application process for new buildings.

Solid Waste and Sanitation Services

Neither the Proposed Actions nor the No-Action Alternative would adversely affect solid waste and sanitation services or place a significant burden on the City's solid waste management system. While solid waste generated by the projected development sites would increase under both the No-Action Alternative and the Proposed Actions, the No-Action Alternative would generate less demand on New York City's solid waste services and sanitation services.

Energy

Neither the Proposed Actions nor the No-Action Alternative would result in significant adverse impacts with respect to the transmission or generation of energy. Like the Proposed Actions, the No-Action Alternative would generate increased demands on New York City's energy services, but the demand generated under the No-Action Alternative would be considerably less than for the Proposed Actions. However, under both the Proposed Actions and the No-Action Alternative, the annual increase in demand would represent a negligible amount of the City's forecast annual energy requirements for 2030.

Transportation

As discussed below, unlike the Proposed Actions, the No-Action Alternative would not result in any significant adverse impacts with respect to transportation. Unlike the Proposed Actions, the No-Action Alternative would not result in significant adverse traffic impacts to 40, 23, 40, and 25 intersections in the weekday AM, midday and PM and Saturday midday peak hours, respectively. The Proposed Actions' significant adverse line haul impacts to southbound J/Z subway trains the AM peak hour and westbound Q8 buses in the PM peak hour would not occur under the No-Action Alternative. Furthermore, the Proposed Actions' significant adverse impacts to two sidewalks, one crosswalk, and one corner area in one or more peak hours would not occur under the No-Action Alternative. Like the Proposed Actions, within the parking study area, on-street parking spaces would remain available during the weekday and overnight peak periods.

In the No-Action Alternative, traffic, parking, transit, and pedestrian demand in the study area would increase as a result of background growth, development that could occur pursuant to existing zoning (i.e., as-of-right-development), and other development projects likely to occur within and in the vicinity of the rezoning area.

Traffic

Independent of the Proposed Actions, traffic levels of services at many locations in the study area would experience congested conditions in the future. As shown in Table 21-1, under the No-Action Alternative, the number of intersections operating at LOS E or F would total nine in the weekday AM peak hour, three in the midday, ten in the PM, and three in the Saturday midday peak hour, compared to 20, seven, 23, and eight during these same periods, respectively, under the Proposed Actions. The number of lane groups operating at LOS E or F out of the approximately 265 lane groups analyzed would total 53 in the weekday AM peak hour, 31 in the midday, 57 in the PM, and 28 in the Saturday midday peak hour, compared to 76, 42, 80, and 37 during these same periods, respectively, under the Proposed Actions. There would be no intersections with significant adverse traffic impacts under the No-Action alternative compared to 40, 23, 40, and 25 impacted intersections during the weekday AM, midday, and PM and Saturday midday peak hours, respectively, under the Proposed Actions.

TABLE 21-1
Intersection Level of Service Summary Comparison—No-Action Alternative vs. Proposed Actions

	No-Action Alternative				Proposed Actions			
	Weekday AM	Weekday Midday	Weekday PM	Saturday Midday	Weekday AM	Weekday Midday	Weekday PM	Saturday Midday
Overall LOS A/B/C	52	63	51	64	36	57	39	55
Overall LOS D	13	8	13	7	18	10	12	11
Overall LOS E	5	2	8	2	8	3	8	6
Overall LOS F	4	1	2	1	12	4	15	2
Total number of intersections with significant impacts	0	0	0	0	40	23	40	25
No. of lane groups at LOS E or F of the approximately 265 analyzed	53	31	57	28	77	45	81	38

Transit

SUBWAY

Subway Stations

Under the No-Action Alternative, the eight analyzed subway stations would experience an increase in demand as a result of background growth and future developments anticipated within and in the vicinity of the rezoning area. All analyzed stairs and fare arrays at these stations would operate at an acceptable LOS C or better in both the weekday AM and PM peak hours under this alternative. By comparison, under the Proposed Actions the Euclid Avenue station on the Fulton Street Line and the Norwood Avenue and Crescent Street stations on the Jamaica Line would each have one stair operating at LOS D in at least one peak hour, with all other analyzed stairs and fare arrays projected to operate at LOS C or better in both the AM and PM peak hours. Neither the No-Action Alternative nor the Proposed Actions are expected to result in significant adverse subway station impacts.

Subway Line Haul

Under the No-Action Alternative, subway trains serving stations in proximity to the rezoning area would experience increased ridership through their maximum load points as a result of background growth and new development. Under this alternative, northbound L trains are projected to operate above capacity in the AM peak hour. Southbound L trains would operate essentially at capacity in the PM peak hour. By comparison, under the Proposed Actions, northbound L trains and southbound J/Z trains would operate over capacity in the AM peak hour, and southbound L trains would operate at capacity in the PM peak hour. The Proposed Action's significant adverse line haul impact to southbound J/Z trains in the AM peak hour would not occur under the No-Action Alternative.

BUS

Under the No-Action Alternative, demands on the local bus services operating in the vicinity of the rezoning area are expected to increase compared to existing ridership as a result of background growth and new development. The existing level of bus service would not be sufficient to provide adequate supply to meet projected demand under the No-Action Alternative on the eastbound Q8 route in the AM peak hour. Based on a loading guideline of 54 passengers per standard bus, an additional three standard buses per hour would need to be added in the eastbound direction in the AM peak hour to accommodate projected demand under the No-Action Alternative. The Proposed Action's significant adverse impact to westbound Q8 service in the PM peak hour would not occur under the No-Action Alternative.

Pedestrians

Under the No-Action Alternative, pedestrian volumes along analyzed sidewalks, crosswalks and corner areas are expected to increase compared to existing levels as a result of background growth as well as demand from new

development. The Proposed Actions' zoning regulations mandating that new buildings along Fulton Street be set back five feet (thereby providing for wider sidewalks) would not occur under the No-Action Alternative.

SIDEWALKS

Under the No-Action Alternative, all analyzed sidewalks are expected to operate at an acceptable LOS C or better in all peak hours with the exception of one sidewalk, which would operate at a marginal LOS D in the weekday PM peak hour and LOS C in the weekday AM and midday peak hours. This compares to significant adverse impacts to two sidewalks in one or more peak hours under the Proposed Actions, which would not occur under the No-Action Alternative.

CROSSWALKS

Under the No-Action Alternative, all analyzed crosswalks are expected to operate at an uncongested LOS A in all peak hours. This compares to a maximum of three congested locations during any peak hour, under the Proposed Actions. The Proposed Actions' significant adverse impacts to one crosswalk in one or more peak hours would not occur under the No-Action Alternative.

CORNERS

Under the No-Action Alternative all analyzed corner areas are expected to operate at an uncongested LOS A in all peak hours. This compares to a maximum of one congested location in any peak hour, under the Proposed Actions. The Proposed Actions' significant adverse impacts to one corner in one or more peak hours would not occur under the No-Action Alternative.

Parking

Under the No-Action Alternative, it is anticipated that demand for both off-street and on-street parking would increase due to new development and general background growth.

OFF-STREET PARKING

The existing 142-space public parking lot on projected development site 77 that would be displaced by new development under the Proposed Actions would be similarly displaced under the No-Action Alternative. However, the existing 90-space public parking lot on projected development site 79 that would be displaced under the Proposed Actions would remain under this alternative. Demand for public off-street parking would exceed the available supply at the four public parking lots remaining in proximity to the rezoning area in the No-Action Alternative by approximately 88 spaces in the weekday midday period. This compares to a deficit of approximately 163 spaces in the weekday midday at the three public parking lots remaining under the Proposed Actions. Under both the No-Action Alternative and the Proposed Actions, this excess off-street parking demand would need to be accommodated on-street. The one public parking lot in proximity to the rezoning area that is open during the overnight period would continue to operate with available capacity during this period under both the No-Action Alternative and the Proposed Actions.

ON-STREET PARKING

Changes to curbside regulations would result in a net decrease of nine on-street parking spaces in proximity to the rezoning area in the weekday midday and overnight periods under both the No-Action Alternative and the Proposed Actions. The demand for on-street parking in the weekday midday and overnight periods would not exceed the available capacity during these periods under either the No-Action Alternative or the Proposed Actions. Significant adverse parking impacts are therefore not anticipated under this alternative or the Proposed Actions.

Air Quality

Mobile Sources

In the No-Action Alternative, emissions from traffic demand in the study area would increase as a result of background growth, development that could occur pursuant to existing zoning (i.e., as-of-right-development), and other development projects likely to occur within and in the vicinity of the rezoning area. As reported in Chapter 14, "Air Quality," under the No Action Alternative, no exceedances of the national ambient air quality standards for carbon monoxide or particulate matter less than ten micron in diameter. Significant adverse mobile source impacts are therefore not anticipated under this alternative.

Stationary Sources

As outlined in Chapter 14, while some development within the study area would occur under the No-Action Alternative, the Proposed Actions would result in more development and therefore the emissions from heat and hot water systems associated with the Proposed Actions would cumulatively be greater than the emissions from heat and hot water systems in the No-Action Alternative. However, unlike the Proposed Actions, the as-of-right development on 27 of the 80 projected development sites would not have an environmental assessment of air quality exposure as conducted for the Proposed Actions, and thus, such development would not be subject to any air quality (E) designations. Specifically, they would not have the restrictions specified in Chapter 14 for the control of emissions for fossil fuel-fired heating, ventilation, and air conditioning (HVAC) systems, which would be designed to ensure that there would be no significant adverse air quality impacts at nearby receptor locations.

Greenhouse Gas Emissions and Climate Change

With less development than under the Proposed Actions, the No-Action Alternative would have less energy use and would therefore result in fewer carbon dioxide equivalent (CO_2e) emissions per year. Neither the Proposed Actions nor the No-Action Alternative would result in significant greenhouse gas (GHG) emission or climate change impacts.

Noise

In the No-Action Alternative, traffic volumes would increase in the area due to general background growth and trips associated with new development that would be independent of the Proposed Actions. These increases in traffic would in general result in small changes in noise levels but, at most locations and during most time periods, the increase in $L_{eq(1)}$ noise levels would be less than 1.0 dBA—an imperceptible change. However, at receptor site 16 (Schenck Avenue between Atlantic and Liberty Avenues), the maximum increase in $L_{eq(1)}$ noise levels as compared with existing noise levels, would be above three dBA due to planned traffic diversions resulting from the removal of the left turning movement on Berriman Street and Atlantic Avenue. A change of this magnitude would be perceptible and would be an exceedance of the *CEQR Technical Manual* impact criteria.

While the Proposed Actions would result in a significant adverse impact along Richmond Street between Fulton Street and Dinsmore Place, the No-Action Alternative would not result in a substantial increase in traffic along this area. Therefore, the No-Action Alternative would not result in a significant adverse noise impact.

Public Health

Neither the Proposed Actions nor the Lower Density Alternative would not result in significant adverse public health impacts. Under the No-Action Alternative, no unmitigated significant adverse impacts would occur in the areas of hazardous materials, air quality, noise, or construction, and thus there would be no significant adverse public health impacts associated with construction or operation of the new development anticipated under the No-Action Alternative.

Neighborhood Character

According to the *CEQR Technical Manual*, a proposed action could have a significant adverse neighborhood character impact if it would have the potential to affect the defining features of the neighborhood, either through the potential for a significant adverse impact in any relevant technical area, or through a combination of moderate effects in those technical areas. The Proposed Actions would not cause significant adverse impacts in the areas of land use, zoning, and public policy; socioeconomic conditions; or urban design and visual resources. The significant adverse open space, historic resources, shadows, traffic, and noise impacts would not affect any defining feature of neighborhood character, nor would a combination of moderately adverse effects affect such a defining feature. New development that could occur under the No-Action Alternative would be moderate, as compared to the Proposed Actions, and the overall neighborhood character of the area would remain substantially the same as it is today under the No-Action Alternative. The East New York study area would continue to be characterized by the presence of multiple disconnected neighborhoods, physically separated by the presence of vehicle-dominated major roadways and major transportation infrastructure. A variety of uses would continue to be found along the neighborhood's major roadways, and the disjointed streetscape with pockets of industrial and auto-related uses would remain under the No-Action Alternative. Neither the Proposed Actions nor the No-Action Alternative would result in significant adverse impacts to neighborhood character, however, the improvements to neighborhood character that would occur under the Proposed Actions would not occur under this alternative.

Construction

As the amount of new construction under the No-Action Alternative would be less as compared to the Proposed Actions, the No-Action Alternative would not generate as much temporary construction disruption. The No-Action Alternative would result in shorter durations of construction-related noise and traffic than the Proposed Actions, and may also result in less potential construction-related impacts to non-designated historic resources in the area.

Neither the Proposed Actions nor the No-Action Alternative would result in significant adverse construction impacts with respect to land use and neighborhood character, socioeconomic conditions, community facilities, ore open space, hazardous materials, or air quality. The No-Action Alternative would involve less soil disturbance, but potentially the controls on its performance would not be as stringent as under the Proposed Actions.

Under both the No-Action Alternative and the Proposed Actions, new construction would occur on potential development site A73, which is adjacent to the S/NR- and NYCL-eligible Holy Trinity Russian Orthodox Church. As the historic resource is not designated, it would not be afforded special protections under DOB's TPPN #10/88. Thus, this unlisted but eligible historic resource which is not subject to LPC oversight could experience indirect construction-related damage in the No-Action Alternative as a result of new construction anticipated on the adjacent site (potential development site A73). However, unlike the Proposed Actions, as less development is anticipated to occur under the No-Action Alternative, the potential construction-related impacts would not occur on the following S/NR and/or NCYL-eligible resources: the Empire State Dairy Building, St. Michael's R.C. Church, Our Lady of Loreto R.C. Church, the Former East New York Savings Bank, Grace Baptist Church, the Magistrates Court, the Church of the Blessed Sacrament, 1431 Herkimer Street, Prince Hall Temple, and Firehouse Engine 236.[2] As such, while construction-related impacts on historic resources would occur under both scenarios, the impacts would be lesser under the No-Action Alternative.

With the No-Action Alternative, there could be new construction if parcels within the rezoning area are developed independent of the Proposed Actions. It is anticipated that this construction, if it would occur, would be smaller in

[2] Shortly before the completion of the DEIS, DCP became aware that the former East New York Savings Bank structure was being demolished. Except for the demolition permit, no other building permit appears to have been approved for this site. Changes to the circumstances of this building would not alter any of the conclusions of this EIS. DCP will continue to monitor the situation and, if warranted, revised the RWCDS for this site and incorporate the change into the EIS between the DEIS and FEIS.

scale and of a shorter duration than what would be undertaken for the Proposed Actions. Therefore, construction noise impacts would not be expected at locations in close proximity to development sites.

D. NO UNMITIGATED SIGNIFICANT ADVERSE IMPACTS ALTERNATIVE

Based on the analyses presented in other chapters of this EIS, there is the potential for the Proposed Actions to result in a number of significant adverse impacts for which no practicable mitigation has been identified. Specifically, unmitigated impacts were identified with respect to community facilities (child care services), open space, shadows, historic and cultural resources (architectural resources only), transportation (traffic only), noise, and construction. This alternative considers development that would not result in any significant adverse impacts that could not be fully mitigated. However, to eliminate all unmitigated significant adverse impacts, the Proposed Actions would have to be modified to a point where their principal goals and objectives would not be fully realized.

Community Facilities

Child Care Services

Under the RWCDS, the Proposed Actions would result in a significant adverse impact on publicly funded child care facilities. The RWCDS for the Proposed Actions are expected to introduce approximately 614 children under the age of six eligible for publicly funded child care programs. With the addition of these children, the combined utilization rate of child care facilities within the two-mile child care study area would increase to 103.1 percent, a 10.3 percentage point increase over the No-Action condition. Child care services mitigation measures are currently being explored in coordination with the lead agency, DCP, and the New York City Administration of Children's Services (ACS) between the DEIS and FEIS. Should practical and feasible mitigation measures not be found, the significant adverse child care impact would be unmitigated.

To avoid the identified significant adverse child care center impact, the number of affordable DU that could be developed on the projected development sites would have to be reduced to 2,401, a 30 percent (1,046 DU) reduction in the number of affordable units anticipated under the RWCDS. Reducing the number of affordable housing units developed in the rezoning area would be less supportive of the goals and objectives of the Proposed Actions. Alternately, the provision of 187 child care slots under this alternative would avoid the unmitigated significant adverse child care impact.

Open Space

As presented in Chapter 5, "Open Space," the Proposed Actions are expected to introduce 18,801 residents to the ½-mile residential study area under the RWCDS. Given the anticipated decrease in the total, active, and passive open space ratios in the residential study area and the fact that open space ratios in the study area would remain below the City guideline ratios, the Proposed Actions would result in a significant adverse indirect impact to the total open space resources in the residential study area. Potential partial mitigation measures are currently being explored in coordination with the lead agency and the New York City Department of Parks and Recreation (DPR) and will be refined between the DEIS and FEIS.

To avoid the identified significant adverse residential study area open space impact, the number of residents that could be introduced on the projected development sites would have to be reduced to less than 10,747 (or less than approximately 3,608 residential units). This would represent an approximately 42.8 percent reduction in the number of residential units anticipated under the RWCDS and would, therefore, be less supportive of the Proposed Actions' goal of promoting affordable housing development. Alternately, this alternative would have to provide approximately 4.69 acres of additional open space (including a minimum of 2.18 acres of passive open space and a minimum of 2.4 acres of active open space) to the study area to avoid the unmitigated significant adverse open space impact.

Shadows

As discussed in Chapter 6, "Shadows," and Chapter 7, "Historic and Cultural Resources," the Proposed Actions would result in a significant shadows impact (and shadow-related historic resource impact) on the NYCL-eligible and S/NR-eligible Holy Trinity Russian Orthodox Church. The central octagonal pillar of the Holy Trinity Russian Orthodox Church contains 22 stained-glass windows that are considered sunlight-sensitive features. Under RWCDS With-Action conditions, incremental shadows would be cast on a maximum of two of the 22 stained-glass windows for durations of approximately 36 minutes on March 21, 45 minutes of May 6, and 49 total minutes on June 21, and shadows would be cast on a maximum of eight of the stained-glass windows for a duration of one hour and 59 minutes on December 21. As project-generated incremental shadows would only affect a maximum of eight of the 22 stained-glass windows on the church, they would therefore not result in the complete elimination of direct sunlight on all sunlight-sensitive features of the Holy Trinity Russian Orthodox Church. However, as these incremental shadows may have the potential to affect the public's enjoyment of this feature, albeit for a brief duration on one analysis day, this is considered a significant adverse shadows impact. It should be noted that the sites that would cast incremental shadows on this historic resources are potential, rather than a projected, development sites. As described in Chapter 1, "Project Description," potential development sites are considered less likely to be developed than projected development sites. Consequently, the likelihood of this impact occurring is less than if it were to result from development on a projected development site.

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

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

Historic and Cultural Resources

Architectural Resources

As discussed in Chapter 7, "Historic and Cultural Resources," The Proposed Actions could result in significant adverse historic resources impacts to one resource that is eligible for S/NR-listing and NYCL-designation. Projected development site 37, which is expected to be developed under RWCDS With-Action conditions, contains the S/NR- and NYCL-eligible Empire State Dairy Building. As the maximum permitted With-Action FAR on site 37 could be constructed without the demolition or enlargement of the Empire State Dairy Building, the structure is not projected to be demolished, either partially or entirely, or substantially altered under the RWCDS. However, the Proposed Actions do not include any measures that would prevent the demolition or alteration of the Empire State Dairy Building.

In the event that the structure was designated as a landmark by the LPC, the significant adverse impact would be fully mitigated. However, as the designation process is subject to LPC approval, and not CPC approval, it cannot be assumed or predicted with any certainty. The possibility of potential designation of this resource will be explored, in consultation with the LPC, between the DEIS and FEIS. Absent LPC's designation of the Empire State Dairy Building, the implementation of measures such as photographically documenting the eligible structure in accordance with the

standards of the Historic American Buildings Surveys (HABS) could partially mitigate the identified significant adverse direct impact to the historic architectural resources. However, a mechanism to require such measures is not available. Accordingly, this impact would not be completely eliminated, and, if the Empire State Dairy Building is not designated as a landmark, it would constitute an unavoidable significant adverse impact as a result of the Proposed Actions.

In order to entirely avoid the potential unmitigated adverse direct impact specified above, this alternative would require that projected development site 37 be eliminated from the rezoning proposal by eliminating the site from the rezoning area. However, this site cannot be excluded on its own, as carving them out of the proposed zoning map would result in a highly irregular and impractical zoning map, leaving a pocket of M1-1 zoning adjacent to the residential and special mixed-use districts. Such a modification would be impractical and inconsistent with the Proposed Actions' goal to establish Atlantic Avenue as a vibrant mixed-use corridor.

Transportation

As presented in Chapter 20, "Mitigation," the Proposed Actions would result in significant adverse traffic impacts at 47 study area intersections during one or more analyzed peak hour; specifically, 40 intersections during the weekday AM peak hour, 23 intersections during the weekday midday peak hour, 40 intersections during the weekday PM peak hour, and 25 intersections during the Saturday midday peak hour. Implementation of traffic engineering improvements, such as signal timing changes or modifications to curbside parking regulations would provide mitigation for many of the anticipated traffic impacts. Specifically, the significant adverse impacts would be fully mitigated at all but 15 lane groups at nine intersections during the weekday AM peak hour, ten lane groups at two intersections during the weekday midday peak hour, 18 lane groups at nine intersections during the weekday PM peak hour, and ten lane groups at four intersections during the Saturday midday peak hour.

Because of existing congestion at a number of these intersections, even a minimal increase in traffic would result in unmitigated impacts. Specifically, in the No-Action condition, the number of lane groups operating at LOS E or F out of the approximately 265 lane groups analyzed would total 53 in the weekday AM peak hour, 31 in the midday, 57 in the PM, and 28 in the Saturday midday peak hour. According to the *CEQR Technical Manual*, for a lane group that would operate at LOS F in the No-Action condition, a projected delay of three or more seconds is considered a significant impact. As such, small increases in incremental project-generated traffic volumes at some of the congested intersection approach movements would result in significant adverse impacts that could not be fully mitigated during one or more analysis peak hour, and almost any new development in the rezoning area could result in unmitigated traffic impacts. Therefore, no reasonable alternative could be developed to completely avoid such impacts without substantially compromising the Proposes Actions' stated goals.

Noise

As presented in Chapter 16, "Noise," the Proposed Actions would result in significant adverse impacts on Richmond Street between Fulton Street and Dinsmore Place during the AM and PM peak hours due largely to traffic level increases from the proposed school at projected development site 66. No reasonable or feasible alternative could be developed to completely avoid such an impact while still maintaining the Proposed Actions' stated goals in terms of siting a school at projected development site 66.

Construction

Historic and Cultural Resources

As described in Chapter 7, "Historic and Cultural Resources," development under the Proposed Actions—specifically, on projected development sites 7, 13, 35, 38, 39, 49, and 74 and potential development sites A3, A7, A8, A18, A40, A41, A50, A65, A70, A82, A86, A87, and A95—could result in inadvertent construction-related damage to ten NYCL-

and/or S/NR-eligible historic resources, as they are located within 90 feet of one or more of the aforementioned projected and potential development sites.

As discussed in Chapter 7, the New York City Building Code provides some measure of protection for all properties against accidental damage from adjacent construction by requiring that all buildings, lots, and service facilities adjacent to foundation and earthwork areas be protected and supported. Additional protective measures apply to NYCL-designated and S/NR-listed historic resources located within 90 linear feet of a proposed construction site. For these structures, DOB's TPPN #10/88 applies. TPPN #10/88 supplements the standard building protections afforded by the Building Code by requiring, among other things, a monitoring program to reduce the likelihood of construction damage to adjacent LPC-designated or S/NR-listed resources (within 90 feet) and to detect at an early stage the beginnings of damage so that construction procedures can be changed. However, for the seven non-designated resources that are within 90 feet of one or more projected and/or potential development site, construction under the Proposed Actions could potentially result in construction-related impacts to these resources, and the projective measures under TPPN #10/88 would only apply if the resources become designated.

In order to entirely avoid potential unmitigated adverse construction-related impacts to historic resources, this alternative would require that projected development sites 7, 13, 35, 38, 39, 49, and 74 and potential development sites A3, A7, A8, A18, A40, A41, A50, A65, A70, A82, A86, A87, and A95 be eliminated from the rezoning proposal. However, this would result in a substantial reduction in the amount of affordable housing developed in the rezoning area and, therefore, would satisfy to a lesser degree the goals and objectives of the Proposed Actions.

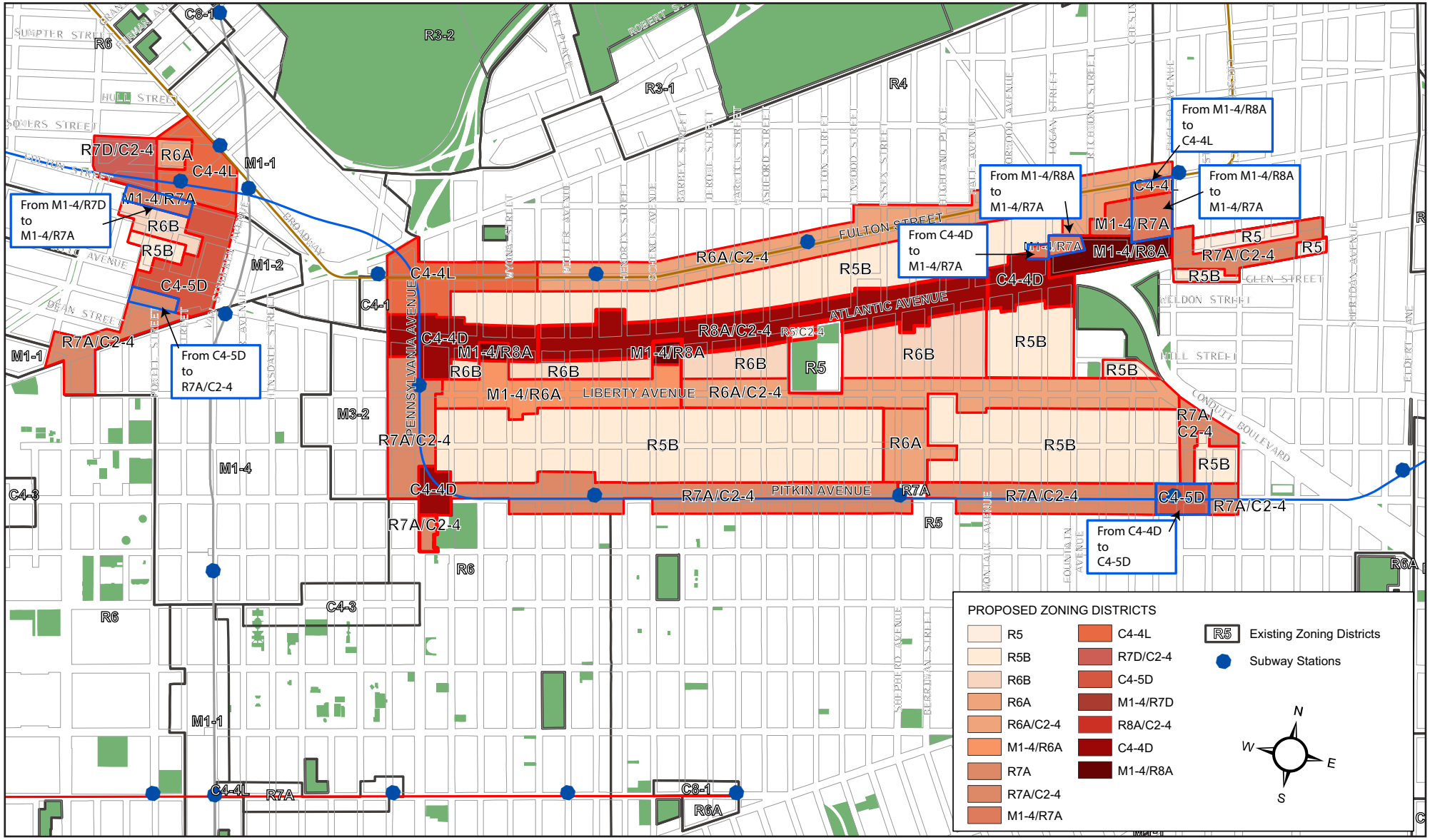
Noise

As presented in Chapter 19, "Construction," noise level increases due to the Proposed Actions that could exceed the *CEQR Technical Manual* impact criteria would occur throughout the rezoning area and the potential for construction noise impacts would exist where a given receptor has line-of-sight to two or more projected development sites. With the No Unmitigated Significant Adverse Impacts Alternative, no receptor in the rezoning area could have line-of-sight to two or more projected development sites. No reasonable or feasible alternative could be developed to completely avoid such impacts at locations adjacent to development sites while still maintaining the Proposed Action's stated goals.

E. LOWER DENSITY ALTERNATIVE

The Lower Density Alternative was developed for the purposes of assessing whether lower density residential development in some portions of the rezoning area would eliminate or reduce the significant, adverse impacts of the Proposed Actions while also meeting the goals and objectives of the Proposed Actions. Under the Lower Density Alternative, the proposal analyzed is the same as the Proposed Actions except for a few locations, as shown in Figure 21-1. As shown in the figure, some of the proposed M1-4/R8A districts would be replaced with M1-4/R7A and C4-4L districts, two areas that are proposed for C4-4D would be replaced with M1-4/R7A and C4-5D, one area proposed for M1-4/R7D would be mapped with M1-4/R7A, and one block proposed for C4-5D would be mapped with R7A/C2-4. Specifically:

- The block bounded by Fulton and Chestnut Streets and Euclid and Atlantic Avenues, which is proposed to be mapped with M1-4/R8A under the Proposed Actions, would instead by mapped with C4-4L along the Fulton Street frontage and M1-4/R7A on the midblock portions under the Lower Density Alternative. The Atlantic Avenue frontage would be mapped with M1-4/R8A, as under the Proposed Actions.
- A portion of one block located on the south side of Dinsmore Place between Logan and Richmond Streets, which is proposed to be mapped with M1-4/R8A under the Proposed Actions, would instead by mapped with M1-4/R7A under the Lower Density Alternative.
- A small midblock area on the west side of Logan Street between Fulton Street and Atlantic Avenue, which is proposed to be mapped as C4-4D under the Proposed Actions, would instead by mapped with M1-4/R7A mixed-use district under the Lower Density Alternative.



Source: NYC Department of City Planning

- The proposed C4-4D district along Pitkin Avenue between Doscher and Pine Streets would be mapped as C4-5D under the Lower Density Alternative.
- The M1-4/R7D mixed-use district proposed for two partial blocks along Fulton Street between Eastern Parkway Extension and Havens Place would be mapped as M1-4/R7A under the Lower Density Alternative.
- A portion of one block located on the north side of Pacific Street between Van Sinderen Avenue and Sackman Street, which is proposed to be mapped with C4-5D under the Proposed Actions, would instead by mapped as R7A/C2-4 under the Lower Density Alternative

The table below summarized the zoning changes that would occur under this alternative, and provided a comparison of the maximum FAR that would be allowed in the affected portions of the rezoning area under the Lower Density Alternative.

TABLE 21-2
Comparison of Zoning Changes Under the Lower Density Alternative

Proposed Zoning – With-Action			Proposed Zoning – Lower Density Alternative			RWCDS Projected and Potential Development Sites Affected
District	Maximum FAR	Max. Bldg. Height (ft) [1]	District	Maximum FAR	Max. Bldg. Height (ft) [1]	
M1-4/R8A	R: 6.02 (7.2 with IH); C: 2.0; CF: 6.5; M: 2.0	145	M1-4/R7A	R: 4.0 (4.6 with IH); C: 2.0; CF: 4.0; M: 2.0	105	66 (partial), 67 (partial)
M1-4/R8A	R: 6.02 (7.2 with IH); C: 2.0; CF: 6.5; M: 2.0	145	C4-4L	R: 4.0 (4.6 with IH); C: 4.0; CF: 4.0	105	67 (Fulton Street frontage)
C4-4D	R: 6.02 (7.2 with IH); C: 3.4; CF: 6.5	145	M1-4/R7A	R: 4.0 (4.6 with IH); C: 2.0; CF: 4.0; M: 2.0	105	A96
C4-4D	R: 6.02 (7.2 with IH); C: 3.4; CF: 6.5	145	C4-5D	R: 4.2 (5.6 with IH); C: 4.2; CF: 4.2	125	79, A105
M1-4/R7D	R: 5.0 (5.6 with IH); C: 2.0; CF: 4.2; M: 2.0	125	M1-4/R7A	R: 4.0 (4.6 with IH); C: 2.0; CF: 4.0; M: 2.0	105	A7, A8
C4-5D	R: 4.2 (5.6 with IH); C: 4.2; CF: 4.2	125	R7A/C2-4	R: 4.0 (4.6 with IH); C: 2.0; CF: 4.0	105	1

Notes:
R=Residential; C=Commercial; CF=Community Facility; M=Manufacturing
[1] Based on maximum heights for Inclusionary and Senior Housing proposed under *Housing New York: Zoning for Quality and Affordability* (CEQR NO. 15DCP104Y)

Under the Lower Density Alternative, development would occur on the same 80 projected and 105 potential development sites. However, as the Lower Density Alternative would reduce the maximum permitted residential density on some portions of the rezoning area, as compared to the Proposed Actions (see Table 21-2), the RWCDS assumptions for eight of the development sites in those affected areas (projected development sites 1, 66, 67, and 79 and potential development sites A7, A8, A96 and A105) would change. Table 21-3, below, shows the change in program for the four projected development sites, whereas Table 21-4 shows the effect of those changes on the overall RWCDS analyzed for the Proposed Actions. As shown in Table 21-4, compared to the Proposed Actions, the Lower Density Alternative would result in 629 fewer residential units, 35,328 sf less of commercial uses, 22,041 sf less of community facility uses, and 43 additional accessory parking spaces; the industrial floor area would remain the same as under the Proposed Actions.

TABLE 21-3
Comparison of RWCDS for Projected Sites 1, 66, 67, and 79 – With-Action and Lower Density Alternative

	Residential (DU)		Retail/Restaurant		Supermarket		Office		Industrial		Comm. Facility	
Site	With-Action	LDA	With-Action	LDA	With-Action	LDA	With-Action	LDA	With-Action	LDA	With-Action	LDA
Site 1	133	98	31,033	31,033							31,033	31,033
Site 66	720	619	70,734	70,734					53,134	53,134	186,134	186,134
Site 67	1,054	588	102,085	88,153	30,000	30,000	78,454	57,058			177,935	155,895
Site 79	109	82	15,709	15,709								

TABLE 21-4
Comparison of RWCDS for All Projected Development Sites Under With-Action Conditions and Lower Density Alternative

Land Use	No-Action Condition	With-Action Condition	Lower Density Alternative	No-Action to With-Action Increment	No-Action to Lower Density Alternative Increment	Difference
Residential						
Market-Rate Residential	550 DU	3,415 DU	3,101 DU	2,865 DU	2,551 DU	- 314 DU
Affordable Residential	0 DU	3,447 DU	3,132 DU	3,447 DU	3,132 DU	- 315 DU
Total Residential DU	***550 DU***	***6,862 DU***	***6,233 DU***	***6,312 DU***	***5,683 DU***	***- 629 DU***
Commercial						
Local Retail	239,316 sf	893,952 sf	880,020 sf	654,636	640,704	-13,932
FRESH Supermarket	30,000 sf	60,000 sf	60,000 sf	30,000	30,000	0
Restaurant	5,650 sf	64,550 sf	64,550 sf	58,900	58,900	0
Auto-Related	128,365 sf	0 sf	0 sf	-128,365	-128,365	0
Hotel	97,551 sf	0 sf	0 sf	-97,551	-97,551	0
Office	75,992 sf	191,887 sf	170,491 sf	115,895	94,499	-21,396
Warehouse/Storage	76,225 sf	0 sf	0 sf	-76,225	-76,225	0
Total Commercial SF	***653,099 sf***	***1,210,389 sf***	***1,175,061 sf***	***557,290***	***521,962***	***-35,328***
Other Uses						
Industrial	125,886 sf	98,851 sf	98,851 sf	-27,035	-27,035	0
Community Facility	156,972 sf	614,842 sf	592,801 sf	457,870	435,829	-22,041
Parking						
Parking Spaces	1,304	2,442	2,485	1,138	1,181	+ 43
Population[1]						
Residents	1,646	20,447	18,575	18,801	16,969	-1,872
Workers	1,998	5,708	5,489	3,710	3,491	-219

Notes:
[1] Assumes 2.99 persons per DU for residential units in Brooklyn Community District 5 and 2.75 persons per DU for residential units in Brooklyn Community District 16. Employee rates used are as follows: one employee per 250 sf of office, three employees per 1,000 sf of retail/supermarket/restaurant uses, one employee per 25 DU, one employee per 2.67 hotel rooms (and 400 sf per hotel room), one employee per 1,000 sf of auto-related and industrial uses, one employee per 15,000 sf of warehouse uses, one employee per 11.4 students in school uses, three employees per 1,000 sf of all other community facility uses, and one employee per 50 parking spaces.

The Lower Density Alternative would result in the same mix of uses as the Proposed Actions, and the same amount of industrial development (refer to Table 21-4). As shown in Table 21-4, the total amount of residential development as well as the number of affordable housing units would be reduced by about 9.1 percent under the Lower Density Alternative. As shown in the comparison table above, compared to the Proposed Actions, the Lower Density Alternative would result in about 629 fewer incremental dwelling units compared to the No-Action conditions, which would represent a reduction of approximately 1,872 incremental residents. Under the assumptions of the Lower Density Alternative, there would be 315 fewer affordable housing units as compared to the Proposed Actions. In addition, the Lower Density Alternative would result in 13,932 sf less incremental local retail use and 21,396 sf less incremental office uses compared to the No-Action conditions, which would represent a combined 6.3 percent decrease in the commercial floor area increment. The Lower Density Alternative would also result in a 4.8 percent lesser community facility floor area increment over No-Action conditions, as compared to the Proposed Actions. In total, the number of workers introduced in the rezoning area under the Lower Density Alternative would be approximately 219 fewer than under the Proposed Actions.

In terms of bulk, new development on projected development site 1 and potential development sites A7 and A8 would have maximum heights of 105 under the Lower Density Alternative, as compared to maximum heights of 125 feet under the Proposed Actions. New development on projected development site 79 and potential development site A105 would have maximum heights of 125 feet under the Lower Density Alternative, as compared to maximum heights of 145 feet under the Proposed Actions. New development on potential development site A96 would have a maximum height of 105 feet under the Lower Density Alternative, as compared to a maximum height of 145 under

the Proposed Actions. While the maximum heights of the buildings on projected development sites 66 and 67's Atlantic Avenue frontages (145 feet) would be the same under both the Proposed Actions and the Lower Density Alternative, other buildings on these sites would be lower in height than under the Proposed Actions (105 feet maximum height, compared to 145 feet).

A comparison of conditions under this alternative with conditions under the Proposed Actions is presented below. It is noted that for CEQR impact areas that are density-related (e.g., community facilities, open space, traffic, etc.), the effects of this alternative are reduced in magnitude since there are fewer dwelling units, and therefore, fewer residents than under the Proposed Actions. However, since the projected and potential development sites for the Lower Density Alternative are the same as for the Proposed Actions, site-specific impacts (e.g., hazardous materials) would be the same under both scenarios.

Land Use, Zoning, and Public Policy

As under the Proposed Actions, no significant adverse impacts on land use, zoning, or public policy are anticipated under the Lower Density Alternative.

Both the Proposed Actions and the Lower Density Alternative would result in an overall increase in residential, commercial, community facility, and industrial uses, when compared to conditions in the future without the Proposed Actions. As noted above, the Lower Density Alternative would result in the same amount of industrial development as the Proposed Actions. However, this alternative would lead to the production of fewer housing units, including fewer affordable housing units, and less commercial and community facility development, as compared to the Proposed Actions.

The Lower Density Alternative would include similar zoning actions as the Proposed Actions (zoning map amendments and zoning text changes) that would affect the same area. As noted above, under the Lower Density Alternative, some of the proposed M1-4/R8A districts would be replaced with M1-4/R7A and C4-4L districts, two areas that are proposed for C4-4D would be replaced with M1-4/R7A and C4-5D, one area proposed for M1-4/R7D would be mapped with M1-4/R7A, and one block proposed for C4-5D would be mapped with R7A/C2-4, which would reduce the maximum permitted FAR in these areas (refer to Table 21-2). The Lower Density Alternative, like the Proposed Actions, would increase density along selected corridors; as under the Proposed Actions, the highest permitted FAR under the Lower Density Alternative would generally be along Atlantic Avenue, with up to 7.2 FAR permitted for residential uses. The Lower Density Alternative, like the Proposed Actions, would include mapping contextual zoning districts that would protect the existing built context of East New York by requiring new development in the residential core to better match the form of existing buildings. Both the Proposed Actions and the Lower Density Alternative would also map new commercial overlays and new mixed-use (MX) districts to incentivize mixed-use development, permit industrial uses to expand in select areas, facilitate active streetscapes, and encourage new retail development to support the anticipated residential development in the area.

The Lower Density Alternative would support, to a slightly lesser degree, the goals of the Proposed Actions. Like the Proposed Actions, this alternative would change zoning designations within the rezoning area in a manner that is intended to promote affordable housing development, encourage economic development, create pedestrian-friendly streets, and introduce new community resources to foster a more equitable East New York. Although this alternative would increase the supply of housing available in East New York and increase the supply of affordable housing, which is consistent with City housing policy, that additional housing would not be as extensive as under the Proposed Actions, nor would this alternative introduce as much affordable housing as under the Proposed Actions. Therefore, as this alternative would lead to the production of fewer housing units compared to the Proposed Actions, the beneficial effects of the Proposed Actions would not be as great under this alternative.

Socioeconomic Conditions

The Lower Density Alternative would result in the same general socioeconomic effects as the Proposed Actions. Under this alternative, 629 (9.2 percent) fewer housing units and 315 (9.1 percent) fewer affordable housing units would be added to the proposed rezoning area than under the Proposed Actions. Thus, the Lower Density Alternative would introduce approximately 5,683 housing units, including 3,312 affordable housing units, compared to No-Action conditions. In addition, the Lower Density Alternative would result in 13,932 sf less incremental local retail use and 21,396 sf less incremental office uses compared to the No-Action conditions, which would represent a combined6.3 percent decrease in the commercial floor area increment. The Lower Density Alternative would also result in 4.8 percent less community facility floor area increment over No-Action conditions, as compared to the Proposed Actions. In total, the number of workers introduced in the rezoning area under the Lower Density Alternative would be approximately 219 fewer than under the Proposed Actions.

The Proposed Actions and Lower Density Alternative would result in the same direct residential and business/institutional displacement. As with the Proposed Actions, the direct displacement of these uses would not constitute a significant adverse impact. The Proposed Actions and Lower Density Alternative would not displace a substantial or significant portion of the study area population, nor would they result in the direct displacement of businesses/institutions that provide products or services essential to the local economy that would no longer be available to local residents and businesses due to the difficulty of relocating, or the subject of regulations or publicly adopted plans to preserve, enhance, or protect them.

Like the Proposed Actions, the Lower Density Alternative would expand the opportunity for additional housing and promote the development of affordable housing within the proposed rezoning area, although the total number of housing units as compared with the Proposed Actions would be less. Like the Proposed Actions, this alternative would serve to support housing growth and affordable housing in the project area. The additional housing units would provide added supply to meet the increasing housing demands in New York City, although there would be fewer affordable units than under the Proposed Action (refer to Table 21-4). With fewer residential units, the market may be less likely to meet the long-term demand for new housing in the area. However, the overall effects of this alternative with respect to direct and indirect impacts on residents and businesses would be comparable to the Proposed Action.

Community Facilities and Services

The Lower Density Alternative would introduce fewer residents to the study area as compared to the Proposed Actions and, therefore, would result in a smaller increase in demand on area community facilities. Neither the Proposed Actions nor the Lower Density Alternative would result in direct impacts to community facilities and services or indirect impacts to high schools, library services, or police, fire, and emergency medical services. Both the Proposed Actions and the Lower Density Alternative would result in significant adverse impacts to public schools and child care facilities.

Under the Lower Density Alternative, there would be new residential development on the projected development sites, with approximately 5,683 incremental residential dwelling units being added to the rezoning area over No-Action conditions, including approximately 3,132 incremental affordable units. The Lower Density Alternative residential development would introduce an estimated 1,648 elementary school students, 682 intermediate school students, and 796 high school students. Also under the Lower Density Alternative (as under the Proposed Actions), a 1,000-seat PS/IS seat would be developed on projected development site 66. As with the Proposed Actions, it is expected that under the Lower Density Alternative, there would continue to be adequate capacity for both elementary and intermediate level student in Sub-districts 1 and 2 of Community School District (CSD) 23 and for intermediate level students in Sub-district 1 of CSD 19 in the 2030 analysis year.

As under the Proposed Actions, CSD 19, Sub-district 2 elementary and intermediate schools would experience significant adverse impacts under the Lower Density Alternative, operating over capacity with utilization increases from the No-Action condition of more than five percent (the *CEQR Technical Manual* impact threshold). However,

the significant adverse impacts under the Lower Density Alternative would be slightly less than under the Proposed Actions, with an increase in the CSD 19, Sub-district 2 elementary and intermediate school utilization rates of 11.1 percent and 11.2 percent, respectively (compared to 11.2 percent and 11.3 percent increases, respectively, under the Proposed Actions), and therefore, would require lesser mitigation.

In addition, similar to the Proposed Actions, while the Lower Density Alternative would not result in significant adverse elementary school impacts in CSD 19, Sub-district 1 in the 2030 Build Year, as 682 elementary school seats would be constructed on projected development site 66 under both alternatives, both the Proposed Actions and the Lower Density Alternative could result in significant adverse temporary elementary school impacts in the sub-district prior to the school's anticipated 2020(Q3) completion.

As noted above, the number of affordable housing units would be reduced by about 9.1 percent under the Lower Density Alternative, as compared to the Proposed Actions. It is anticipated that the Lower Density Alternative affordable residential units would introduce 557 children under age six eligible for publicly funded child care. As under the Proposed Actions, the Lower Density Alternative would result in a significant adverse impact to child care facilities. Study area child care centers would operate at a utilization rate of 102.2 percent under the Lower Density Alternative (compared to 103.1 percent with the Proposed Actions), which represents a 9.3 percent increase over No-Action conditions (compared to an increase of 10.3 percent with the Proposed Actions). As the Lower Density Alternative would result in slightly lesser impacts than under the Proposed Actions, lesser mitigation would be needed to mitigate the impact than under the Proposed Actions.

As the Lower Density Alternative would introduce fewer incremental residents to the rezoning area, as compared to the Proposed Actions, the Lower Density Alternative would similarly not result in significant adverse indirect impacts on high schools, libraries, or police, fire, and emergency medical services.

Open Space

Similar to the Proposed Actions, the Lower Density Alternative would not have any direct impacts on any open space resources. Both the Proposed Actions and the Lower Density Alternative would result in significant adverse indirect impacts on open space resources in the ½-mile residential study area.

As the Lower Density Alternative would introduce fewer residents and workers than the Proposed Actions, in terms of indirect effects, the open space ratios for both the non-residential and residential study areas under the Lower Density Alternative would, therefore, generally by slightly higher than those under the Proposed Actions. The open space ratios for the non-residential (¼-mile) study area for the Lower Density Alternative—like the Proposed Actions—would exceed the *CEQR Technical Manual* open space ratio guidelines at 0.15 acres per 1,000 non-residents in both scenarios. Therefore, daytime users of passive open space will be well-served by the resources available, and there would be no significant adverse open space impacts in the non-residential study area as a result of either this alternative or the Proposed Actions.

With regard to the open space ratios for the residential (½-mile) study area, the Lower Density Alternative would have slightly higher total, passive, and active open space ratios (0.568, 0.281, and 0.286, respectively, under the Lower Density Alternative, compared to 0.563, 0.279, and 0.284, respectively, under the Proposed Actions). As under the Proposed Actions, the change in the residential study area open space ratios from No-Action conditions to the future under the Lower Density Alternative would exceed five percent and would therefore exacerbate an existing deficiency in open space for residents in the study area. As such, both the Proposed Actions and the Lower Density Alternative would result in significant adverse impacts to open space in the residential study area.

Shadows

As with the Proposed Actions, the Lower Density Alternative would not result in any significant adverse shadows impacts to open spaces. Both the Proposed Actions and the Lower Density Alternative would result in significant adverse impacts to the NYCL-eligible and S/NR-eligible Holy Trinity Russian Orthodox Church.

As noted previously, in terms of bulk, new development on projected development sites 1, 66, 67, and 79 and potential development sites A7, A8, A96, and A105 would have lower maximum heights under the Lower Density Alternative than under the Proposed Actions. Compared to the Proposed Actions, the maximum shadows cast by these development sites would be somewhat shorter than under the Proposed Actions. This would result in somewhat shorter shadow durations and/or extents being cast under this alternative on open space and sunlight-sensitive historic resources in the vicinity of the modified sites, including Callahan-Kelly Playground, the P.S. 155 open space, the Our Lady of Loreto Church Complex, and the Church of the Blessed Sacrament.

As all other projected and potential development sites in the remainder of the rezoning area would remain the same under this alternative, the shadow effects of the projected and potential developments in the rest of the rezoning area would be essentially the same as with the Proposed Actions. Therefore, as with the Proposed Actions, the Lower Density Alternative would not result in any significant adverse impacts on any open space resources. However, both the Proposed Actions and the Lower Density Alternative would result in significant adverse shadows being cast on eight of the Holy Trinity Russian Orthodox Church's 22 stained-glass windows for durations of approximately 36 minutes on March 21, 45 minutes on May 6, 49 total minutes on June 21, and one hour and 59 minutes on December 21. Absent the identification and implementation of feasible and practicable measures, the Lower Density Alternative, like the Proposed Actions, could have an unmitigated significant adverse shadows impact on the Holy Trinity Russian Orthodox Church.

Historic and Cultural Resources

As under the Proposed Actions, the Lower Density Alternative would not result in any significant adverse impacts to archaeological resources or indirect impacts to architectural resources. Both the Proposed Actions and the Lower Density Alternative would result in direct or construction-related significant adverse impacts to architectural resources.

While this alternative would result in a decrease in development bulk on eight of the RWCDS development sites (projected development sites 1, 66, 67, and 79 and potential development sites A7, A8, A96 and A105), development would occur on the same 80 projected and 105 potential development sites as under the Proposed Actions. As noted above, the LPC reviewed and identified projected and potential development sites that could experience new/additional in-ground disturbance and concluded that none of the lots comprising those sites have any archaeological significance. Therefore, like the Proposed Actions, the Lower Density Alternative would not result in any significant adverse impacts to archaeological resources.

As noted in Chapter 7, "Historic and Cultural Resources," with the exception of projected development site 37, no significant adverse direct impacts would result from development under the Proposed Actions. As the Lower Density Alternative would not change the RWCDS development anticipated on that site, the conclusion would remain unchanged and both the Proposed Actions and the Lower Density Alternative could result in significant adverse historic resources impacts to the S/NR-listing and NYCL-designation eligible Empire State Dairy Building. While the identified significant adverse direct impact to this eligible architectural resource could be partially mitigated, as it would not be completely eliminated, it would constitute an unavoidable significant adverse impact on this eligible historic resource under both the Proposed Actions and the Lower Density Alternative.

As development under this alternative would occur on the same 80 projected development sites and 105 potential development sites, similar to the Proposed Actions, there are 20 projected/potential development sites where construction under the Lower Density Alternative could potentially result in construction-related impacts to ten non-designated historic resources located in close proximity. The eligible historic resources would be afforded standard

protection under DOB regulations applicable to all buildings located adjacent to construction sites; however, as the resources are not S/NR-listed or NYCL-designated, they are not afforded the added special protections under DOB's TPPN #10/88.

There are 12 historic resources located in close proximity to projected/potential development sites. Although the developments resulting from the Proposed Actions and the Lower Density Alternative could alter the setting or visual context of several of these historic resources, none of the changes would be considered significant adverse impacts. The developments resulting from either the Proposed Actions or the Lower Density Alternative would not alter the setting or visual context of any historic resources in the area, nor would they eliminate or screen publicly accessible views of any resources.

As development on potential development sites A25, A27, and A73 would be the same under the Proposed Actions and Lower Density Alternative, both alternatives would result in significant adverse shadow impacts on the Holy Trinity Russian Orthodox Church. The incremental shadows would be cast on a maximum of eight of the church's 22 stained glass windows (sunlight-sensitive features) at any one time. As these incremental shadows may have the potential to affect the public's enjoyment of this feature, albeit for a brief duration of approximately 36 minutes on March 21, 45 minutes on May 6, 49 total minutes on June 21, and one hour and 59 minutes on December 21, this is being considered a significant adverse impact. Absent the identification and implementation of feasible and practical mitigation measures, the Lower Density Alternative, like the Proposed Actions, could have an unmitigated significant adverse shadows impact on the Holy Trinity Russian Orthodox Church.

Urban Design and Visual Resources

Like the Proposed Actions, the Lower Density Alternative would not have significant adverse impacts on urban design, view corridors, and visual resources. Both the Lower Density Alternative and the Proposed Actions would result in development at a greater density than currently permitted as-of-right in the rezoning area and would represent a notable change in the urban design character of the primary study area. As noted above, the only differences between the Proposed Actions and the Lower Density Alternative would be on projected development sites 1, 66, 67, and 79 and potential development sites A7, A8, A96, and A105. New development on projected development site 1 and potential development sites A7 and A8 would have maximum heights of 105 under the Lower Density Alternative, as compared to maximum heights of 125 feet under the Proposed Actions. New development on projected development site 79 and potential development site A105 would have maximum heights of 125 feet under the Lower Density Alternative, as compared to maximum heights of 145 feet under the Proposed Actions. New development on potential development site A96 would have a maximum height of 105 feet under the Lower Density Alternative, as compared to a maximum height of 145 under the Proposed Actions. While the maximum heights of the buildings on projected development sites 66 and 67's Atlantic Avenue frontages (145 feet) would be the same under both the Proposed Actions and the Lower Density Alternative, other buildings on these sites would be lower in height than under the Proposed Actions (105 feet maximum height, compared to 145 feet). As under the Proposed Actions, these new developments under the Lower Density Alternative would be taller than existing buildings in the rezoning area. The maximum permitted FARs for portions of projected development sites 66 and 67 and potential development site A96 would be 4.6 (compared to 7.2 under the Proposed Actions), the maximum permitted FAR for projected development site 79 and potential development site A105 would be 5.6 (compared to 7.2 under the Proposed Actions), and the maximum permitted FAR for projected development site 1 and potential development sites A7 and A8 would be 4.6 (compared to 5.6 under the Proposed Actions).

While development under the Lower Density Alternative would be slightly smaller on the eight aforementioned sites, compared to conditions under the Proposed Actions, the visual appearance, and thus the pedestrian experience of the primary study area would change considerably under the Lower Density Alternative, compared to the No-Action condition. As under the Proposed Actions, this change would not constitute a significant adverse urban design impact in that it would not alter the arrangement, appearance, or functionality of the primary study area such that the alteration would negatively affect a pedestrian's experience of the area. Under both scenarios, higher density buildings would be focused along major corridors (primarily Atlantic Avenue), with buildings on secondary corridors serving as a transition from this primary rezoning area corridors. New development under the Lower Density

Alternative, like the Proposed Actions, would replace vacant lots and underbuilt buildings along these corridors that currently detract from consistent pedestrian experiences. Under both the Lower Density Alternative and the Proposed Actions, existing views of some visual resources located within, or visible from, the primary study area would be modified, but no primary views would be blocked. The modification of the resources' visual context would not be considered a significant adverse impact under either the Proposed Actions or the Lower Density Alternative.

Hazardous Materials

The effects of the Lower Density Alternative with respect to hazardous materials is expected to be similar to those of the Proposed Actions. While this alternative would result in a decrease in development bulk on eight of the RWCDS development sites (projected development sites 1, 66, 67, and 79 and potential development sites A7, A8, A96 and A105), the potential for site-specific hazardous materials impacts still remains for all projected and potential development sites identified in the RWCDS. As with the Proposed Actions, all of the projected and potential development sites would receive an (E) designation or comparable measure under the Lower Density Alternative. The placement of (E) designations or comparable measure would ensure that no significant adverse impacts related to hazardous materials would occur as a result of the Proposed Actions or the Lower Density Alternative.

Water and Sewer Infrastructure

Under this alternative, demands on water and sewer infrastructure would be somewhat less than under the Proposed Actions. However, neither this alternative nor the Proposed Actions would cause significant adverse impacts to water and sewer infrastructure.

The incremental additional water usage as a result of the Lower Density Alternative is expected to total 1,986,122 gpd (compared to 2,168,163 gpd with the Proposed Actions). As with the Proposed Actions, this incremental demand would represent approximately 0.2 percent of the City's average daily water supply, and changes of this magnitude would not be large enough to have a significant adverse impact on the City's water system.

Based on rates in the *CEQR Technical Manual,* the Lower Density Alternative has the potential to result in an incremental sanitary sewage discharge of approximately 1,827,894 gpd over the No-Action condition (compared to approximately 2,000,182 gpd for the Proposed Actions). The decreased sanitary flows under this alternative would only affect subcatchment area 26W-003 (within which projected development site 1 is located) and subcatchment area 26W-005 (within which projected development sites 66, 67, and 79 are located); sanitary flows generated by projected development sites located within subcatchment area 26W-004 would be the same under both scenarios. As with the Proposed Actions, with this incremental increase in sanitary flows, the 26th Ward WPCP would continue to have ample reserve capacity, and no significant adverse impacts to wastewater treatment would occur as a result of the Lower Density Alternative.

The same development sites would be developed under the Lower Density Alternative, with no significant changes in the sites' surface areas, as compared to the Proposed Actions. As such, for storm events with up to 2.5 inches of rainfall, the total runoff volumes to the 26W-003, 26W-004, and 26W-005 combined sewer systems would range up to 0.21 million gallons, 0.27 million gallons, and 2.11 million gallons, respectively. As slightly lower sanitary flows would be generated in subcatchment areas 26W-003 and 26W-005, the combined sewer volumes in these subcatchment areas would similarly be slightly lesser than under the Proposed Actions. As the projected developments within subcatchment area 26W-004 would be the same under both the Proposed Actions and the Lower Density Alternative, the combined flows handled by the sewer system would be the same under both scenarios. Because of the available assimilative capacity of the 26th Ward WPCP, the projected increased flows to the combined sewer system would not have a significant adverse impact on water quality. As under the Proposed Actions, and in consideration of the required best management practices (BMP) measures that would be implemented on each projected development site by their respective developer in accordance with the City's site connection requirements, the Lower Density Alternative would not result in significant adverse impacts to local water supply or wastewater and stormwater conveyance and treatment infrastructure.

Solid Waste and Sanitation Services

Solid waste generation would increase under both the Proposed Actions and the Lower Density Alterative, with a slightly lower incremental increase under the Lower Density Alternative. However, neither this alternative, nor the Proposed Actions, would cause significant adverse impacts to the City's solid waste and sanitation services. As the Lower Density Alternative would result in the incremental development of 629 fewer residential units and approximately 22,041 sf less community facility floor area than under the Proposed Actions, this alternative would result in slightly lower volumes of solid waste that would be handled by DSNY (136.7 tons per week, or an increment of 123.1 tons per week over No-Action conditions) than the Proposed Actions (149.9 tons per week, or an increment of 136.3 tons per week over No-Action conditions). Based on the typical DSNY collection truck capacity of approximately 12.5 tons, the Lower Density Alternative's incremental residential and community facility uses would be expected to generate solid waste equivalent to approximately ten truckloads per week, as compared to 11 truckloads under the Proposed Actions. As under the Proposed Actions, this increase is not expected to overburden the DSNY's solid waste handling services.

As the Lower Density Alternative would result in the incremental development of approximately 35,328 sf less commercial floor area than under the Proposed Actions, this alternative would also result in slightly lower volumes of solid waste that would be handled by private carters (167.7 tons per week, or an increment of 102.9 tons per week over No-Action condition) than the Proposed Actions (169.9 tons per week, or an increment of 105 tons per week over No-Action conditions). Based on the typical commercial carter capacity of between 12 and 15 tons of waste material per truck, both the Lower Density Alternative and the Proposed Actions would require between seven and nine additional collection trucks per week compared to the No-Action condition. The net increment in commercial solid waste handled by private carters under both scenarios would not overburden the City's waste management system.

Energy

While neither the Proposed Actions nor the Lower Density Alternative would result in significant adverse energy impacts, the Lower Density Alternative would result in a slightly lower incremental increase in energy usage compared to the No-Action condition.

Future uses on the 80 projected development sites under the Lower Density Alternative would use approximately 1.25 trillion British thermal units (BTU) annually, which would represent an approximately 931 million BTU increase over the No-Action condition, per year. In comparison, under the Proposed Actions the 80 project development sites would result in an incremental annual increase of approximately 1.02 BTU over the No-Action condition.

The incremental increase in annual energy consumption under the Proposed Actions would represent approximately 0.6 percent of the City's forecasted annual energy requirement of 179 trillion BTU, with a slightly lower percentage (0.5 percent) under the Lower Density Alternative. Increases of this magnitude would result in a significant adverse impact on energy systems.

Transportation

As a direct result of the reduction in the size of projected development sites 1, 66, 67, and 79 under the Lower Density Alternative, fewer action-generated traffic, transit, and pedestrian trips are projected to occur, compared to those projected under the Proposed Actions. Based on the trip generation assumptions detailed in Chapter 13, "Transportation," in the weekday AM, midday, and PM and Saturday midday peak hours, the Lower Density Alternative would generate 7,898, 12,996, 11,428, and 11,736 incremental person trips (see Table 21-5). This would represent a 4.6 to 7.5 percent decrease in action-generated person trips, as compared to the Proposed Actions. As under the Proposed Actions, it is anticipated that the Lower Density Alternative would result in significant adverse traffic, subway line haul, bus, and pedestrian impacts. Neither the Proposed Actions nor the Lower Density Alternative would result in significant adverse parking impacts. For both the Proposed Actions and the Lower Density

Alternative the identified subway line haul, bus, and pedestrian impacts could be fully mitigated. Due to the existing congested conditions at many study area intersections, it is anticipated that, as under the Proposed Actions, a number of the significant adverse traffic impacts under the Lower Density Alternative would not be fully mitigated through standard traffic improvement measures. As discussed in greater detail below, fewer study area lane groups would be unmitigated under the Lower Density Alternative, as compared to the Proposed Actions.

Traffic

As presented in Table 21-5, under the Lower Density Alternative, 1,340, 943, 1,545, and 975 incremental vehicle trips would be generated in the weekday AM, midday, and PM and Saturday midday peak hours, respectively. This represents a decrease of 7.4 percent to 10.5 percent, as compared to the incremental vehicle trips generated under the Proposed Actions.

TABLE 21-5
Comparison of Peak Hour Incremental Trips by Mode—Proposed Actions vs. Lower Density Alternative

Scenario	Person Trips	Auto/Taxi/Truck/ School Bus Trips	Subway/ Railroad Trips	Local Bus Trips	Walk/Other Trips
Weekday AM					
Proposed Actions	8,538	1,489	3,246	983	2,448
Lower Density Alternative	7,898	1,340	2,931	899	2,359
Difference	***(640) (7.5%)***	***(149) (10.0%)***	***(315) (9.7%)***	***(84) (8.5%)***	***(89) (3.6%)***
Weekday Midday					
Proposed Actions	13,620	1,018	2,281	1,283	8,517
Lower Density Alternative	12,996	943	2,096	1,215	8,250
Difference	***(624) (4.6%)***	***(75) (7.4%)***	***(185) (8.1%)***	***(68) (5.3%)***	***(267) (3.1%)***
Weekday PM					
Proposed Actions	12,254	1,727	3,946	1,445	4,870
Lower Density Alternative	11,428	1,545	3,582	1,339	4,712
Difference	***(826) (6.7%)***	***(182) (10.5%)***	***(364) (9.2%)***	***(106) (7.3%)***	***(158) (3.2%)***
Saturday Midday					
Proposed Actions	12,456	1,081	3,446	1,361	5,780
Lower Density Alternative	11,736	975	3,154	1,270	5,619
Difference	***(720) (5.8%)***	***(106) (9.8%)***	***(292) (8.5%)***	***(91) (6.7%)***	***(161) (2.8%)***

While significant adverse traffic impacts would occur under both the Proposed Actions and the Lower Density Alternative, as presented in Table 21-6, the Lower Density Alternative would result in fewer unmitigated significant adverse impacts. Specifically, under the Lower Density Alternative, 13 lane groups at seven intersections (compared to 15 lane groups at nine intersections with the Proposed Actions) during the weekday AM peak hour, nine lane groups at two intersections (compared to 10 lane groups at two intersections with the Proposed Actions) during the weekday midday peak hour, 17 lane groups at eight intersections (compared to 18 lane groups at nine intersections with the Proposed Actions) during the weekday PM peak hour, and ten lane groups at four intersections (same as with the Proposed Actions) during the Saturday midday peak hour would remain unmitigated. The following lane groups, which would be unmitigated under the Proposed Actions, would either be mitigated or would not be impacted under the Lower Density Alternative: the westbound through lane group at Atlantic Avenue and Eastern Parkway in the weekday AM peak hour; the westbound shared left-through-right lane group at Fulton and Logan Streets in the weekday AM and PM peak hours; and the eastbound right-turn lane group at the intersection of Bushwick/Jamaica Avenue and Pennsylvania Avenue/Jackie Robinson Parkway in the weekday midday peak hour. The two (2) intersections of Atlantic Avenue and Eastern Parkway and Fulton and Logan Streets would be able to be

mitigated under the Lower Density Alternative as summarized in Table 21-6 and would reduce the number of unmitigated intersections to 12 under the Lower Density Alternative from 14 with the Proposed Actions.

TABLE 21-6
Lane Groups with Unmitigated Significant Adverse Traffic Impacts—Lower Density Alternative vs. Proposed Actions

Intersection	Weekday AM		Weekday Midday		Weekday PM		Saturday Midday	
	Proposed Actions	Lower Density Alternative	Proposed Actions	Lower Density Alternative	Proposed Actions	Lower Density Alternative	Proposed Actions	Lower Density Alternative
Signalized Intersections								
Atlantic Avenue & Eastern Parkway	WB-T (main)	--	--	--	--	--	--	--
Atlantic Avenue & Pennsylvania Avenue	WB-TR, NB-TR, SB-L	WB-TR, NB-TR, SB-L	EB-TR, WB-TR, NB-L, NB-TR, SB-L, SB-TR	EB-TR, WB-TR, NB-L, NB-TR, SB-L, SB-TR	EB-T, WB-TR, NB-TR, SB-L	EB-T, WB-TR, NB-TR, SB-L	EB-TR, WB-TR, NB-L, NB-TR, SB-L	EB-TR, WB-TR, NB-L, NB-TR, SB-L
Atlantic Avenue & Logan Street	SB-LTR	SB-LTR	--	--	SB-LTR	SB-LTR	SB-LTR	SB-LTR
Broadway & Eastern Parkway	EB-TR, WB-LT	EB-TR, WB-LT	--	--	EB-L, EB-TR, WB-LT	EB-L, EB-TR, WB-LT	--	--
Fulton Street & Pennsylvania Avenue	--	--	--	--	NB-TR, SB-L	NB-TR, SB-L	--	--
Fulton Street & Miller Avenue	--	--	--	--	EB-TR	EB-TR	--	--
Fulton Street & Logan Street	WB-LTR	--	--	--	WB-LTR	--	--	--
Bushwick/Jamaica Avenue & Pennsylvania Avenue/Jackie Robinson Parkway	EB-Jamaica-TR, WB-L, WB-T, NB-L	EB-Jamaica-TR, WB-L, WB-T, NB-L	EB-Bushwick-R, WB-L, WB-T, NB-L	WB-L, WB-T, NB-L	EB-Bushwick-R, WB-L, WB-T, NB-L	EB- Bushwick-R, WB-L, WB-T, NB-L	WB-L, WB-T, NB-L	WB-L, WB-T, NB-L
Jamaica Avenue & Highland Place/Force Tube Avenue	--	--	--		SB-TR	SB-TR	--	--
Pitkin Avenue & Mother Gaston Boulevard	WB-LTR	WB-LTR	--		--	--	--	--
Pitkin Avenue & Pennsylvania Avenue	WB-LTR	WB-LTR	--		--	--	--	--
Unsignalized Intersections								
Arlington Avenue & Jamaica Avenue	--	--	--	--	--	--	NB-LR	NB-LR
Fulton Street & Elton Street	NB-TR	NB-TR	--	--	--	--	--	--
Pitkin Avenue & Elton Street	--	--	--	--	NB-LTR	NB-LTR	--	--

Transit

During the weekday AM and PM peak hours, the Lower Density Alternative would generate 2,931 and 3,582 incremental subway trips (compared to 3,246 and 3,946 trips under the Proposed Actions). As under the Proposed Actions, incremental subway trips generated under the Lower Density Alternative would not result in significant adverse impacts to any area subway stations. As presented in Table 21-7, more than five additional passengers would be added to the southbound J/Z trains in the weekday AM peak hour under both the Lower Density Alterative and the Proposed Actions. Southbound J/Z trains would be operating at capacity (a v/c ratio of 1.0) under the Lower Density Alternative, compared to a v/c ratio of 1.01 under the Proposed Actions. As such, the Proposed Actions' significant adverse subway line haul impact to the southbound J/Z trains in the weekday AM peak hour would also occur under the Lower Density Alternative.

TABLE 21-7
Subway Line Haul Analysis—No-Action, Future with the Proposed Actions, and Future under the Lower Density Alternative

Peak Hour	Route	Direction	2030 No-Action Condition			2030 Future with the Proposed Actions				2030 Future under the Lower Density Alternative			
			Average Passengers per Hour[1]	Average Passengers per Car	V/C Ratio[3]	Average Passengers per Hour	Average Passengers per Car	V/C Ratio[3]	Average Additional Passengers per Car	Average Passengers per Hour	Average Passengers per Car	V/C Ratio[3]	Average Additional Passengers per Car
AM	A	NB	19,262	135	0.77	20,061	140	0.80	5.58	20,016	140	0.80	5.27
	C	NB	7,848	124	0.86	8,106	128	0.88	4.08	8,099	128	0.88	3.99
	J/Z	SB	12,396	127	0.94	13,289	136	1.01	9.15*	13,143	135	1.00	7.77*
	L	NB	23,447	151	1.04	23,676	153	1.05	1.48	23,652	152	1.05	1.33
PM	A	SB	14,291	116	0.66	15,148	123	0.70	6.96	15,109	123	0.70	6.64
	C	SB	4,460	87	0.76	4,676	91	0.79	4.22	4,672	91	0.79	4.14
	J/Z	NB	7,202	82	0.61	8,137	92	0.68	10.63	7,995	91	0.67	9.13
	L	SB	18,050	144	0.99	18,280	146	1.00	1.83	18,259	145	1.00	1.66

Notes:
[1] No-Action passenger volumes reflect demand from No-Action development plus background growth rates of 0.5 percent per year for the 2015-2020 period and 0.25% per year for the 2020-2030 period as per *CEQR Technical Manual* guidelines.
[2] Guideline capacities are based on NYCT rush hour loading guidelines, which vary by car type, line, and location based on frequency and type of service.
[3] Volume to guideline capacity ratio.
***** denotes a significant adverse impact based on *CEQR Technical Manual* criteria.

As presented in Table 21-5, weekday AM and PM peak hour incremental bus trips would total 899 and 1,339 under the Lower Density Alternative (compared to 983 and 1,445 trips under the Proposed Actions). Both the Proposed Actions and the Lower Density Alternative would result in significant adverse bus impacts to the westbound Q8 service in the PM peak hour, with a shortfall of 17 spaces. As under the Proposed Actions, the significant adverse impact to Q8 service could be mitigated by increasing the number of westbound buses from nine to ten in the weekday PM peak hour. The general policy of the MTA is to provide additional bus service where demand warrants, taking into account financial and operational constraints.

Pedestrians

The Lower Density Alternative is expected to generate 2,359, 8,350, 4,712, and 5,619 incremental walk/other trips in the weekday AM, midday, and PM and Saturday midday peak hours, respectively, compared to 2,448, 8,517, 4,870, and 5,780 peak hour walk/other trips under the Proposed Actions (refer to Table 21-5). This represents a decrease of 2.8 percent to 3.6 percent, as compared to the incremental pedestrian trips generated under the Proposed Actions. Given this level of change, it is anticipated that the Lower Density Alternative, like the Proposed Actions would likely result in one or more significant adverse pedestrian impacts in one or more peak hours, with slightly lesser impacts under this alternative. As under the Proposed Actions, any significant adverse pedestrian impacts under the Lower Density Alternative could be fully mitigated with corner/sidewalk extensions, removal of street furniture, and/or widening crosswalks.

Parking

Neither the Proposed Actions nor the Lower Density Alternative would result in significant adverse parking impacts. Compared to the Proposed Actions, the Lower Density Alternative would result in a reduction in parking demand, while increasing the number of accessory parking spaces (refer to Table 21-4).

Air Quality

Mobile Sources

Under the Lower Density Alternative, fewer generated vehicle trips are projected to occur, compared to those projected under the Proposed Actions. However, traffic volumes would be the same at most transportation analysis locations. Therefore, the significant mobile source air quality impact predicted at the intersection of Atlantic Avenue and Logan Street under the Proposed Actions may also occur under the Lesser Density Alternative. However, since the air quality impact was found to be fully mitigated under the Proposed Actions with the implementation of traffic

mitigation measures (see Chapter 20, "Mitigation"), it is anticipated that traffic mitigation measures would fully mitigate any predicted significant mobile source air quality impact at this intersection location.

Stationary Sources

Under the Lower Density Alternative, the maximum building heights of projected development site 1 and potential development sites A7 and A8 would be reduced from 125 feet under the Proposed Actions to 105 feet under the Lower Density Alternative. New development on projected development site 79 and potential development site A105 would have maximum heights of 125 feet under the Lower Density Alternative, as compared to maximum heights of 145 feet under the Proposed Actions, and new development on potential development site A96 would have a maximum height of 105 feet under the Lower Density Alternative, as compared to a maximum height of 145 under the Proposed Actions. While the maximum heights of the buildings on projected development sites 66 and 67's Atlantic Avenue frontages (145 feet) would be the same under both the Proposed Actions and the Lower Density Alternative, other buildings on these sites would be lower in height than under the Proposed Actions (105 feet maximum height, compared to 145 feet).

For most of the affected projected and potential development sites, air quality impacts from heating and hot water systems would be anticipated to be similar or lesser than under the Proposed Actions (i.e., projected development sites 66, 67, and 79, and potential development sites A7, A8, and A105). At projected development site 1, a stack set back and a restriction to utilize low NOx burners (less than 30 ppm NOx) would be required, in addition to the natural gas fuel restriction under the Proposed Actions. For potential development site A96, natural gas restriction, a stack set back and a requirement to utilize low NO_x burners (less than 30 ppm NO_x) would be required compared with a natural gas restriction and stack height requirement under the Proposed Actions. With these requirements in place, there would be no significant adverse air quality impacts under the Lower Density Alternative.

Greenhouse Gas Emissions and Climate Change

With less development than under the Proposed Actions, the Lower Density Alternative would have less energy use and would therefore result in fewer CO_2e emissions per year. Neither the Proposed Actions nor the Lower Density Alternative would result in significant GHG emission or climate change impacts.

Noise

With the Lower Density Alternative, fewer generated vehicle trips are projected to occur, compared to those projected under the Proposed Actions. However, traffic volumes would be similar at most mobile source noise analysis locations, including on Richmond Street between Fulton Street and Dinsmore Place, where a significant adverse noise impact is predicted with the Proposed Actions (see Chapter 16, "Noise"). The total traffic volumes with the Lower Density Alternative are predicted to result in approximately 188 vehicles on Richmond Street during the AM peak period, compared with 193 vehicles on Richmond Street under the Proposed Actions. Based on these projections, predicted noise levels under the Lower Density Alternative are not expected to change as compared to the Proposed Actions. Therefore, the significant adverse mobile source noise impact predicted on Richmond Street between Fulton Street and Dinsmore Place with the Proposed Actions would also be expected to occur under the Lower Density Alternative.

Public Health

As under the Proposed Actions, the Lower Density Alternative would not result in significant adverse public health impacts. Neither the Proposed Actions nor the Lower Density Alternative would result in unmitigated significant adverse impacts related to air quality, water quality, or hazardous materials. While during some periods of construction, both the Lower Density Alternative and the Proposed Actions could potentially result in significant adverse impacts related to noise, as defined by *CEQR Technical Manual* thresholds, the predicted overall changes in noise levels would not be large enough to significantly affect public health. In addition, as noted above, both the

Proposed Actions and the Lower Density Alternative could potentially result in significant adverse noise impacts on Richmond Street between Fulton Street and Dinsmore Place. However, the predicted noise levels are significantly lower than the *CEQR Technical Manual* public health impact threshold of 85 dBA. Therefore, like the Proposed Actions, the Lower Density Alternative would not result in significant adverse public health impacts.

Neighborhood Character

As with the Proposed Actions, the Lower Density Alternative would not result in significant adverse impacts on neighborhood character. Because the Lower Density Alternative would result in similar impacts in the technical areas of open space, shadows, historic and cultural resources, transportation, and noise, it would result in similar effects on the neighborhood character as the Proposed Actions. The Lower Density Alternative would result in a slightly smaller increase in the residential population, as compared to the Proposed Actions, but would still facilitate the development of a mix of residential, commercial, community facility, and light-industrial uses that would be consistent with the mixed-use character of the neighborhoods. As under the Proposed Actions, new residential development anticipated on vacant and underutilized land along the rezoning area's side streets under the Lower Density Alternative would be required to complement the existing built residential character under the proposed contextual zoning districts through strict height and street wall regulations. In addition, under both scenarios the affordable housing units would help to ensure that a considerable portion of the new households would have incomes that would more closely reflect existing incomes in the study area and help ensure that the neighborhoods continue to serve diverse housing needs.

While the Lower Density Alternative would result in significant adverse open space impacts, as under the Proposed Actions, as the residential study area is currently underserved by open space and would remain so in both the No-Action and With-Action conditions, open space is not a critical defining feature of the area, and any resultant impacts to open space would not have a significant adverse impact on neighborhood character. In addition, although the Lower Density Alternative would result in a significant adverse shadow impact on the Holy Trinity Russian Orthodox Church, as under the Proposed Actions, it would not affect the church's exterior façade nor its essential functions and visual status in the community. Nor would the identified significant adverse direct impacts on the S/NR- and NYCL-eligible Empire State Dairy Building alter the overall character of the neighborhood. While both the Lower Density Alternative and the Proposed Actions would result in increased traffic activity and significant adverse traffic impacts, the resulting conditions would be similar to those seen in the urban neighborhoods defining the study area and would not result in density of activity or service conditions that would be out of character with the surrounding neighborhoods. Development facilitated by the Lower Density Alternative is expected to result in increased noise levels in the rezoning area and surrounding neighborhoods, and, as under the Proposed Actions, would also be expected to result in significant adverse noise impacts on Richmond Street between Fulton Street and Dinsmore Place. Increased noise levels under both scenarios would not be out of context with the neighborhood, as many roadways in the area are currently characterized by elevated noise levels. Thus, as with the Proposed Actions, the changes in transportation due to the Lower Density Alternative would not result in significant adverse impacts on neighborhood character.

Construction

Under the Lower Density Alternative, construction activities would occur on the same 80 projected development sites as under the Proposed Actions; development on 76 of these 80 sites would be expected to follow the same reasonable worst-case construction schedule as that assumed for the Proposed Actions. As the total development on projected development sites 1, 66, 67, and 79 would be slightly lesser under this alternative, as compared to the Proposed Actions, construction on these sites would be expected to take modestly less time than under the Proposed Actions. The same construction-related impacts to non-designated historic resources in the area would occur under either the Proposed Actions or the Lower Density Alternative, and, as under the Proposed Actions, it is anticipated that predicted noise levels due to peak construction-related activities would exceed *CEQR Technical Manual* impact criteria, and similar but slightly lesser construction-related traffic impacts could occur. As under the Proposed Actions, construction associated with the Lower Density Alternative is not expected to result in significant

adverse construction impacts with respect to land use and neighborhood character, socioeconomic conditions, community facilities, ore open space, hazardous materials, or air quality.