# Chapter 22: Alternatives

## A. INTRODUCTION

As described in the 2021 *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," New York City Department of City Planning (DCP) is proposing land use actions (the Proposed Actions) to support and facilitate implementation of the Long Island City Neighborhood Plan, which is the subject of an ongoing community planning process to meet the long-term vision of Long Island City and its surrounding neighborhoods as a unique, transit-rich, and culturally vibrant neighborhood.

The Proposed Actions would affect an approximately 54-block area (the Project Area) focused on Long Island City's East River Waterfront and manufacturing zoned areas. The majority of the study area is located in Queens Community District 2, with a portion located north of Queens Plaza North to the mid-block between 39th Street and 40th Street, between 21st Street and 23rd Street, located in Community District 1. The Project Area is directly west of Long Island City's central business district, often referred to as the Core. Most of the Project Area is located south of Queens Plaza South, and west of Jackson Avenue, with its southern and eastern boundaries following an irregular pattern along streets and through midblocks.

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.
- An Alternative which considers an alternate development program of the Department of Education (DOE) site (Projected Development Site 67) which would result in the full demolition and redevelopment of the DOE site (DOE Site Development Alternative).

# B. PRINCIPAL CONCLUSIONS

## NO ACTION ALTERNATIVE

The No Action Alternative examines future conditions in the Project 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 2035. Twenty one of the 103 projected development sites are expected to be redeveloped in the No Action Alternative, resulting in a net increase of 2,802 dwelling units (DU), 113,519 gsf of commercial uses, 26,570 gsf of community facility uses, and a reduction of 105,862 gsf of industrial uses on the projected development sites, compared to existing conditions. The technical chapters of this EIS have described the No Action Alternative as “the Future Without the Proposed Actions.”

The significant adverse impacts anticipated to occur related to community facilities, open space, shadows, historic and cultural resources, transportation, mobile source air quality, noise and construction that would occur with 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 (MIH), delivering new waterfront open space, enhancing connectivity and facilitating pedestrian-friendly, improving the resilience and sustainability of Long Island City, and supporting existing businesses and the creative community and promoting local job growth — would not be realized under this alternative, and the No Action Alternative would fall short of the goals and 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 modified to avoid the unmitigated significant adverse impacts associated with the Proposed Actions, which include impacts related to community facilities (elementary schools, early childhood programs, and libraries), open space, shadows, historic and cultural resources, transportation (traffic, transit and pedestrians), mobile source air quality, noise, and construction (historic architectural resources, transportation and noise). This alternative considers a development scenario that would not result in any significant adverse impacts that could not be fully mitigated. However, to eliminate all identified unmitigated significant adverse impacts, the Proposed Actions would have to be modified to a point where the principal goals and objectives of the Proposed Actions would not be fully realized.

## DOE SITE DEVELOPMENT ALTERNATIVE

The DOE Site Development Alternative considers a development scenario on Projected Development Site 67 that would utilize public funding sources to provide a greater amount of affordable housing as compared to development projected in the With Action Condition. The Alternative is intended to provide more affordable housing on a City-owned site. Development under this scenario would result in an increase in affordable

DUs and retail space, but a decrease in total unit count, total floor area, and building height. This increment could worsen the significant adverse impacts to Community Facilities (Early Childhood Programs), Transportation, and Air Quality.

## C. NO ACTION ALTERNATIVE

The No Action Alternative examines future conditions within the Project Area but assumes the absence of the Proposed Actions. Under the No Action Alternative, there would be no zoning map or zoning text amendments, no changes to the City Map, no new waterfront open spaces, and MIH requirements would not apply to the Project Area. 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 26 out of the 52 projected development sites identified under the reasonable worst-case development scenario (RWCDS). This would result in a net increase of 2,299 dwelling units (DU), 1,299,964 square feet of commercial uses, and 463,027 square feet of industrial uses on the projected development sites, compared to existing conditions. In total on the 103 projected development sites, there would be 2,311 market-rate DUs, 2,203,134 gsf of commercial uses, 1,724,635 gsf of industrial uses, and no community facility uses in the 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 Project Area would experience limited growth. The Project Area would experience a net decrease in other commercial uses, with modest growth in residential, retail, and industrial uses, and no community facility uses would be introduced. Unlike the Proposed Actions, under the No Action Alternative there would be less residential, commercial, community facility, and manufacturing uses, and more warehouse, auto-related uses, and other commercial uses in the Project Area. The No Action Alternative would result in no new affordable DUs and no new waterfront open space.

Like the Proposed Actions, the No Action Alternative would not result in any significant adverse impacts to land use, zoning, or public policy.

The benefits expected to result from the Proposed Actions—including promoting affordable housing development by increasing residential density and establishing MIH, encouraging economic development by mapping new commercial and manufacturing districts and increasing density in a highly transit accessible area of the City, creating pedestrian-friendly streets through active ground floor retail uses, facilitating the development of new waterfront open spaces, and introducing new community resources—would not be realized under this alternative. Under this alternative, existing restrictive zoning would continue to prohibit residential uses from most of the Project Area while only permitting a narrow selection of light industrial and commercial uses.

## SOCIOECONOMIC CONDITIONS

Absent the Proposed Actions, it is anticipated that development would only occur on 26 of the 52 projected development sites. No-Action development on these 26 projected development sites would result in a net increase of 2,299 DUs, 1,299,964 square feet of commercial uses, and 463,027 square feet of industrial uses projected development sites, compared to existing conditions. 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 Alternative nor the Proposed Actions would result in significant adverse impacts due to direct residential displacement. No direct residential displacement would occur under the No Action Alternative, while the Proposed Actions could displace an estimated 23 residents occupying 10 DUs on two projected development sites, which falls well below the *CEQR Technical Manual* impact threshold of 500 displaced residents.

### *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 2,299 dwelling units would be constructed on 11 of the 52 projected development sites, housing a population that would be 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. Under the No Action Alternative, the existing trends of increasing rents and increasing household income in the study area would continue. Though housing would be created under the No Action Alternative, this housing creation would only slow these trends to a degree. 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 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 Project 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 displacement. As with the Proposed Actions, which could have the potential to displace 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 their

trade areas, nor do they serve a user base that is dependent on their location within the Project Area.

*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 0.5-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 manufacturing development than would otherwise occur. There would be comparably fewer new jobs under the No Action Alternative. The anticipated socioeconomic benefits of the Proposed Actions, including creating new centers of activity that will bring together housing, commercial uses, community services and street level activities, and promoting continuous active non-residential ground floor uses would not be realized under the No Action Alternative.

*ADVERSE EFFECTS ON SPECIFIC INDUSTRIES*

Neither the No Action Alternative nor the Proposed Actions 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 Project 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, or police, fire, and emergency medical services. Unlike the Proposed Actions, the No Action Alternative would not result in significant adverse impacts to public elementary schools, intermediate schools, library services, and publicly funded early childhood programs.

**OPEN SPACE**

The No Action Alternative would not have any direct impacts on any open space resources. While the Proposed Actions would result in the creation of 6 acres of waterfront open space, the No Action Alternative would produce no additional open space. Additionally, unlike the Proposed Actions, the No Action Alternative would not result in significant adverse shadows impacts on Gordon Triangle and the 44th Drive Pier.

In terms of indirect effects, the open space ratios for the non-residential (0.25-mile) study area for the No Action Alternative—like the Proposed Actions—would exceed the *CEQR Technical Manual* open space ratio guidelines. Therefore, daytime non-residential 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 (0.5-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 0.67, 0.43, and 0.24 acres per 1,000 residents, respectively (compared to 0.55, 0.36, and 0.19, respectively, under the Proposed Actions). As under the Proposed Actions, under the No Action Alternative the total, passive, and active open space ratios would be below the *CEQR Technical Manual* open space guidelines of 2.5 acres of total 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 be slightly higher than those under the Proposed Actions, although 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 under both the Proposed Actions and No Action Alternative. However, unlike the Proposed Actions, the No Action Alternative would not result in significant adverse indirect impacts to open space as no additional population would be introduced that would overburden existing open spaces in the residential open space study area.

## HISTORIC AND CULTURAL RESOURCES

The No Action Alternative and the Proposed Actions would result in significant adverse impacts to architectural resources.

Under the No Action Alternative, 26 of the 52 projected development sites would be developed. Like the Proposed Actions, the No Action Alternative would result in direct significant adverse impacts to architectural resources. Under the No Action Alternative, it is anticipated that new construction would occur on Projected Development Site 54, which contains a S/NR-eligible industrial loft building at 42-61 24th Street that would be demolished for the site's redevelopment with a new mixed-use building. New construction would also occur on Projected Development Site 13, which contains the Fanie Shuman Building, a complex of three one-story industrial buildings designed by architect Jerome Perlstein that has been identified as a potential architectural resource. The development of Projected Development Site 13 with a new warehouse building in the No Action Alternative would necessitate the demolition of this potential architectural resource.

Additionally, there are 14 projected development sites in the Project Area where development in the No Action Alternative could possibly result in construction-related impacts to architectural resources located in close proximity (i.e., within 90 feet). There are three known architectural resources and seven potential architectural resources located within 90 feet of the projected development sites expected to be redeveloped in the No Action Alternative, that could experience construction-related impacts.

## SHADOWS

Unlike the Proposed Actions, the No Action Alternative would not result in any significant adverse shadows impacts. Under 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 three open space resources — several Greenstreets medians in Queens Plaza South between Vernon Boulevard and 13th Street, Gordon Triangle, and the 44th Drive Pier — 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.

## URBAN DESIGN AND VISUAL RESOURCES

Like the Proposed Actions, the No Action Alternative would not have significant adverse impacts on urban design and visual resources. Unlike the Proposed Actions however, the No Action Alternative would not facilitate the creation of new waterfront open space, mandate streetscape improvements and ground floor design standards to enhance the pedestrian experience, nor implement bulk controls to promote better urban design outcomes that respond to local context.

## 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 that would be placed on the projected and potential 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 2035.

## 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 38, 29, 38, and 28 intersections in the weekday AM, midday and PM and Saturday midday peak hours, respectively. The Proposed Actions' significant adverse impacts to eight stairs, two escalators and one fare array at Court Square – 23rd Street (E/G/M/7) station and one escalator at 21st Street Queensbridge (F) would not occur under the No Action Alternative. The Proposed Actions' significant adverse subway line haul impacts to southbound 7, southbound E, and northbound and southbound G trains, would not occur under the No Action Alternative. The Proposed Actions' significant adverse line haul impacts to the Q103 bus in the AM and PM peak hours would not occur under the No Action Alternative. The Proposed Actions' significant adverse ferry line haul impacts to the southbound Astoria ferry route as well as the significant adverse impact to the Long Island City ferry landing in the AM and PM peak hours would not occur under the No Action Alternative. Furthermore, the Proposed Actions' significant adverse impacts to 26 sidewalks, 16 crosswalks, and 10 corner areas in one or more peak hours would not occur under the No Action Alternative. Like the Proposed Actions, any potential parking shortfalls under the No Action Alternative would generally not be considered significant under 2021 *CEQR Technical Manual* guidance due to the magnitude of available alternative modes of transportation.

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*

In the No Action Alternative, traffic levels of service at many locations in the study area would experience congested conditions in the future. Under the No-Action Alternative, a total of 36 intersections (32 signalized and four unsignalized) would have at least one congested lane group in one or more peak hours; this is compared with a total of 51 intersections (42 signalized and nine unsignalized) with at least one congested lane group in one or more peak hours under the Proposed Actions. There would be no intersections with significant adverse traffic impacts under the No-Action alternative compared to 38, 29, 38, and 28 impacted intersections during the weekday AM, midday, and PM and Saturday midday peak hours, respectively, under the Proposed Actions.

*TRANSIT*

*SUBWAY*

*Subway Stations*

Under the No Action Alternative, the three 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 Project 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 with the exception of one stair in the AM and two stairs in the PM at the Court Sq – 23rd Street (E/G/M/7) subway station. By comparison, under the Proposed Actions, the Court Sq – 23rd Street (E/G/M/7) subway station would have eight stairs operating at LOS D or worse during the AM peak hour and seven stairs operating at LOS D or worse during the PM peak hour. Also under the Proposed Actions, one fare array at the Court Sq – 23rd Street (E/G/M/7) subway station would operate at LOS E during the AM and PM peak hours. All escalators at the analyzed stations would operate at an acceptable LOS C or better in the AM and PM peak hours. By comparison, under the Proposed Actions, the 21st St – Queensbridge (F) subway station would have one escalator operating at LOS D or worse during the AM peak hour and the Court Sq – 23rd Street (E/G/M/7) subway station would have both of its escalators operating at LOS D or worse during the AM and PM peak hours .

*Subway Line Haul*

Under the No-Action Alternative, subway trains serving stations in proximity to the Project Area would experience increased ridership through their maximum load points as a result of background growth and new development. Unlike the Proposed Actions, no subway route would experience significant adverse line haul impacts under this alternative. However, the southbound E, G, and N/W lines would operate overcapacity in the AM peak hour, and the northbound G would operate overcapacity in the PM peak hour.

*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 be sufficient to provide adequate supply to meet projected demand under the No-Action Alternative. Unlike the Proposed Actions, no bus route would experience significant adverse line haul impacts under this alternative. The Proposed Action's

significant adverse impact to northbound Q103 bus route in both the AM and PM peak hours would not occur under the No- Action Alternative.

*CITYWIDE FERRY SERVICE*

Under the No-Action Alternative, ferry service and the ferry landing in proximity to the Project Area would experience increased ridership through their maximum load points and departure points as a result of background growth and new development. Unlike the Proposed Actions, no ferry service would experience significant adverse line haul and landing impacts under this alternative. The Proposed Action's significant adverse impact to ferry line haul on the southbound ferries on the Astoria route in the AM peak hour at the maximum load point and point of departure from the Long Island City ferry landing and to the northbound ferries on the Astoria route in the PM peak hour at the point of departure from the Long Island City ferry landing would not occur under the No- Action Alternative. In addition, the Proposed Action's significant adverse impact to the Long Island City ferry landing in the AM and PM peak hours 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.

*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 seven sidewalks in one or more peak hours. The Proposed Actions' significant adverse impacts to 26 of the 55 analyzed sidewalks in one or more peak hours would not occur under this alternative.

*CROSSWALKS*

Under the No Action Alternative, all analyzed crosswalks are expected to operate at an uncongested LOS C or better in all peak hours with the exception of the north crosswalk of 11th Street and 46th Avenue during the AM peak hour, the north crosswalk of 21st Street and 44th Drive during the AM peak hour, and the south crosswalk of 21st Street and 44th Drive during the AM, midday, and PM peak hours. The Proposed Actions' significant adverse impacts to 16 of the 54 analyzed crosswalks in one or more peak hours would not occur under this alternative.

*CORNERS*

Under the No Action Alternative all analyzed corner areas are expected to operate at an uncongested LOS C or better in all peak hours with the exception of the southeast corner of Vernon Boulevard and 44th Drive during all peak hours. The Proposed Actions' significant adverse impacts to 10 of the 45 analyzed corners in one or more peak hours would not occur under this alternative.

*PARKING*

Under the No Action Alternative, it is anticipated that demand for public parking would increase due to new development and general background growth. Under this alternative

and the Proposed Actions, the increase in parking demand not accommodated on-site would seek parking availability within a quarter-mile radius of the Project Area. Like the Proposed Actions, any potential parking shortfalls would generally not be considered significant under 2021 *CEQR Technical Manual* guidance due to the magnitude of available alternative modes of transportation.

## 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 Project Area. As reported in Chapter 15, "Air Quality," under the No Action Alternative, no exceedances of the national ambient air quality standards would occur for carbon monoxide or particulate matter less than 2.5 microns in diameter ($PM_{2.5}$). Significant adverse mobile source impacts are therefore not anticipated under this alternative.

### *STATIONARY SOURCES*

As outlined in Chapter 15, 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 26 of the 52 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 15 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

Unlike the Proposed Actions, the No Action Alternative would not result in significant adverse noise impacts. 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 generally result in small changes in noise levels compared to existing conditions but, at most locations and during most time periods, the increase in $L_{eq(1)}$ noise levels would be less than 3.3 dBA, which would be considered a barely perceptible change according to

*CEQR Technical Manual* guidance. Furthermore, as the No Action Alternative would not constitute receptors created by the Proposed Actions, an assessment of the potential for significant adverse noise impacts is not warranted.

## PUBLIC HEALTH

Under the No Action Alternative, no unmitigated significant adverse impacts would occur in the areas of hazardous materials, air quality, noise, or construction, and there would be no significant adverse public health impacts associated with air quality.

## NEIGHBORHOOD CHARACTER

New development that could occur under the No Action Alternative would only occur on 26 sites, as compared to 52 sites under the Proposed Actions. The overall neighborhood character of the Project Area would remain substantially the same as it is today in the No-Action Alternative. Like the Proposed Actions, the No Action Alternative would not result in any significant adverse impacts to neighborhood character. However, the benefits expected under the Proposed Actions, including streetscape improvements and the development of new waterfront open space, would not occur in the No Action Alternative.

## CONSTRUCTION

As the amount of new construction under the No Action Alternative would be considerably less as compared to the Proposed Actions, the No Action Alternative would not generate as much temporary construction disruption within the Project Area because substantially fewer sites would be under construction. It is anticipated that construction under the alternative would be smaller in scale and of a shorter duration than what would be undertaken for the Proposed Actions.

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, open space, or hazardous materials. 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 in proximity to historic architectural resources. Projected Development Site 54 contains a S/NR-eligible industrial loft building at 42-61 24th Street. It is anticipated that Projected Development Site 54 would be redeveloped in the No Action Alternative with a mixed-use building, necessitating the demolition of the S/NR-eligible building. Projected Development Site 13 contains the Fanie Schuman Building, a complex of three one-story industrial buildings designed by architect Jerome Perlstein that has been identified as a potential architectural resource. It is anticipated that Projected Development Site 13 would be redeveloped in the No Action Alternative with a warehouse, necessitating the demolition of this potential architectural resource.

Additionally, there are 14 projected development sites in the Project Area where development in the No Action Alternative could possibly result in construction-related effects to architectural resources located in close proximity (i.e., within 90 feet). There are three known architectural resources and seven potential architectural resources

located within 90 feet of the projected development sites expected to be redeveloped in the No Action Alternative, that could experience construction-related effects similar to those of the Proposed Actions.

## 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 (elementary schools, public libraries, early childhood programs), open space, shadows, historic and cultural resources (architectural resources), transportation (traffic, transit, and pedestrians), air quality (mobile source), noise, and construction (traffic, architectural resources, and noise). 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 realized.

### COMMUNITY FACILITIES

*PUBLIC SCHOOLS*

The Proposed Actions would result in significant adverse impacts on public elementary schools within CSD 30 Sub-districts 3. As discussed in Chapter 4, “Community Facilities,” the utilization rate for elementary school seats within CSD 30, Sub-district 3 would exceed 100 percent (143.8 percent) and the Proposed Actions would generate 100 or more students (1,300) past the 100 percent utilization rate. Possible mitigation measures will be explored by DCP, in coordination with the New York City Department of Education (DOE), and the New York City School Construction Authority (SCA) between the Draft and Final EIS (DEIS and FEIS). Should practical and feasible mitigation measures not be found, the significant adverse impact to public elementary schools would remain unmitigated.

In order to avoid the significant adverse elementary school impact in CSD 30, Sub-district 3, the number of incremental dwelling units that could be developed in the sub-district would have to be reduced to 1,125, generating 99 elementary school students, as compared to No Action conditions. This would represent a decrease of 13,574 DUs (approximately 92.3 percent). Reducing the number of incremental dwelling units developed in the Project Area would not be supportive of the goals and objectives of the Proposed Actions, which include the creation of housing, including needed affordable housing.

Alternately, based on the RWCDS for the Proposed Actions, the provision of an additional 1,201 elementary school seats in CSD 30, Sub-district 3, would avoid the unmitigated significant adverse impacts on public elementary schools.

*PUBLIC LIBRARIES*

The population added by the Proposed Actions would represent an increase of 79.44 percent over the No Action condition population at the Hunters Point Branch of the Queens Public Library (QPL) and an increase of 11.56 percent at the Long Island City Branch of the QPL. The increase at these library branches is greater than the 5 percent increase that CEQR defines as the threshold for a potential significant adverse impact. Although residents would have access to a new planned Court Square library branch near the Project Area and residents would have access to the entire QPL network through the inter-library loan system and could have volumes delivered directly to their nearest library branch, there would still be a significant adverse impact on library services in the study area as a result of the Proposed Actions. Potential mitigation measures are currently being explored in coordination with the lead agency and the QPL and will be refined between the DEIS and FEIS. Absent the identification and implementation of feasible mitigation measures, significant adverse impacts would be unmitigated.

In order to avoid the significant adverse impact to the Hunters Point Branch of the QPL, the number of incremental dwelling units that could be developed in its library catchment area would have to be reduced from 11,532 to 725 as compared to No Action condition. This would represent a decrease of 10,807 DUs (approximately 93.7 percent) in the Hunters Point Branch catchment area. In order to avoid the significant adverse impact to the Long Island City Branch of the QPL, the number of incremental dwelling units that could be developed in its library catchment area would have to be reduced from 3,167 to 1,369 as compared to No Action condition. This would represent a decrease of 1,798 DUs (approximately 56.8 percent) in the Long Island City Branch catchment area.

Reducing the number of incremental dwelling units developed in the Project Area would be less supportive of the goals and objectives of the Proposed Actions.

Alternatively, the mitigation of library impacts could be achieved through the provision of space for a new library of a size and at a location to be determined through additional coordination with the QPL and/or improvements to a branch facility to support the branch's programming and services year-round.

*EARLY CHILDHOOD PROGRAMS*

In the With Action condition, early childhood programs in the study area would operate over capacity by approximately 67 slots (102.7 percent utilization) and exhibit an increase in the utilization rate of approximately 27.3 percentage points over the No Action condition. Therefore, the Proposed Actions would result in a significant adverse impact on publicly funded early childhood programs. Potential mitigation measures are currently being explored in coordination with the lead agency and the DOE and will be refined between the DEIS and FEIS.

Should practical and feasible mitigation measures not be found, the significant adverse impact to public elementary schools would remain unmitigated.

In order to avoid the significant adverse impact on early childhood programs, the number of incremental affordable dwelling units that could be developed by the Proposed Project would have to be reduced to 4,385, generating 614 children eligible for publicly funded childcare programs, as compared to the no action. This would represent a decrease of 482 affordable DUs (approximately 9.9 percent). Reducing the number of incremental

affordable dwelling units developed in the Project Area would be less supportive of the goals and objectives of the Proposed Actions, which include the creation of housing, including needed affordable housing.

Alternately, based on the RWCDS for the Proposed Actions, the provision of an additional 68 early childhood program slots under this alternative would avoid the unmitigated significant adverse impacts on public elementary schools.

## OPEN SPACE

As presented in Chapter 5, "Open Space," the Proposed Actions are expected to introduce approximately 33,808 residents to the 0.5-mile residential study area compared to No Action condition. 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, active, and passive open space resources in the residential study area. Potential mitigation measures are currently being explored in coordination with the lead agency and the New York City Department of Parks and Recreation (NYC Parks) 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 4,834 (or less than approximately 2,101 DUs). This would represent an approximately 86 percent reduction in the number of incremental residential units anticipated under the RWCDS. However, such a reduction would severely inhibit one of the primary goals of the Proposed Actions, to facilitate the development of housing, including affordable housing. Alternately, this alternative would have to provide approximately 16.33 acres of additional open space (including a minimum of 8.5 acres of passive open space and a minimum of 6.9 acres of active open space) to the study area to avoid the unmitigated significant adverse open space impact.

## SHADOWS

As detailed in Chapter 6, "Shadows," new shadows resulting from the Proposed Actions would be extensive enough to cause significant adverse impacts to three open space resources in Long Island City: several Greenstreets medians in Queens Plaza South between Vernon Boulevard and 13th Street; Gordon Triangle, a small public open space located on 44th Drive between Vernon Boulevard and 10th Street; and the 44th Drive Pier, a public open space located at the western end of 44th Drive. Specifically, the shadows cast on Gordon Triangle and the 44th Drive Pier would affect utilization and vegetation on the resources. DCP, as lead agency, will explore potential mitigation measures in coordination with NYC Parks between the DEIS and FEIS. Absent the identification and implementation of feasible mitigation measures that would mitigate the shadow impacts to the greatest extent practicable, the Proposed Actions would result in unmitigated significant adverse shadows impacts.

The specific modifications to the Proposed Actions that could eliminate significant adverse shadow impacts on the three open space resources are described below. In summary, eliminating unmitigable significant shadows impacts would require reducing, by half or more, the height of development on seven Projected Development Sites which would restrict these sites from achieving their full development potential. Constrained

development in this alternative scenario would hinder the Proposed Actions' goals to expand affordable housing and mixed-use development in the Project Area.

*GREENSTREETS MEDIANS, QUEENS PLAZA SOUTH*

Greenstreets medians containing trees (but no seating or other amenities) extend down the middle of Queens Plaza South for five blocks between Vernon Boulevard and 13th Street. These medians, in particular the three between 10th and 13th Streets, would receive between six and a half to seven and a half hours of new shadow throughout the growing season from the adjacent projected development sites located on Queens Plaza South between 10th and 13th Streets, which would range in height between nine and 13 stories. This extensive duration of new shadows would be expected to cause significant adverse impacts to any trees and plantings in the medians. Additional analysis showed that these projected development sites (Projected Development Sites 46, 49, and 51) would have to be limited to maximum heights of approximately five to seven stories, i.e., about half the size projected in the With Action condition, to avoid a significant adverse shadow impact on the Queens Plaza South Greenstreets medians.

*GORDON TRIANGLE*

Gordon Triangle is a small public open space located on 44th Drive between Vernon Boulevard and 10th Street. Sunlight-sensitive features include benches, trees, and other plantings.

This space is situated adjacent to and among many projected development sites, particularly to its southeast and southwest, and would receive substantial amounts of incremental shadow throughout the day in all seasons. Total durations of incremental shadow would range from nearly 5 hours in winter to nearly 8 hours in fall and early spring to between 10 and 11 hours in late spring and summer. The space would be partially or entirely in incremental shadow for periods of time occurring from midmorning to late afternoon. The Proposed Actions would therefore cause significant adverse impacts to both the use and the plantings of this space.

Additional sensitivity analyses concluded that at a minimum, to avoid a significant adverse shadow impact, Projected Development Sites 63, 65, and 66, located southeast and east of the triangle, would have to be reduced in height to less than half the size projected in the With Action condition, and the 10th Street frontage of Projected Development Site 13, located southeast of the triangle, would have to be reduced to approximately half the size projected in the With Action condition.

*44TH DRIVE PIER*

The 44th Drive Pier is a public open space located at the western end of 44th Drive that extends approximately 150 feet into the East River. The pier contains two rows of benches and does not contain any plantings or other vegetation.

The pier would be partially or entirely shaded by the projected development sites to its immediate east and south intermittently from early morning until midday. Total durations of morning incremental shadow would range from two and a half hours in winter to between four and five hours in the spring, summer, and fall. The Proposed Actions would

therefore cause significant adverse impacts to the use of the space in the spring, summer, and fall. The pier would remain in sun throughout the afternoon in all seasons.

Additional sensitivity analyses concluded that development occurring in the western half of Projected Development Site 63 would have to be limited in height to well under half the size projected for that site in the With Action condition.

## HISTORIC AND CULTURAL RESOURCES

### *ARCHITECTURAL RESOURCES*

As detailed in Chapter 7, "Historic and Cultural Resources," the Proposed Actions would result in significant adverse impacts to architectural resources as a result of demolition, and adjacent construction, and contextual changes. The Proposed Actions would result in significant direct adverse impacts to five S/NR-eligible buildings located on projected development sites, which would be demolished for redevelopment of these sites in the With Action condition. These resources are: the former New York and Queens Electric Light and Power Substation Number 4 (Resource No. 2); the Walter Lippmann Building at 43-42 10th Street (Resource No. 11); 43-50 10th Street (Resource No. 12); the M. Henry Chernay Building at 10-03 44th Avenue (Resource No. 15); and the Jerome Perlstein Building at 43-58 11th Street (Resource No. 16). In addition, the potential architectural resource at 21-23 43rd Avenue (potential Resource F), located on Potential Development Site G, would be demolished for the redevelopment of that site in the With Action condition.

These significant adverse impacts would be unavoidable, as the resources are privately owned and could be demolished and modified to allow for developments constructed as-of-right subsequent to approval of the Proposed Actions.

In order to entirely avoid the potential unmitigated adverse direct impacts specified above, this alternative would require that Projected Development Sites 40, 52, and 59 and Potential Development Site G be eliminated from rezoning under the proposed actions. However, these sites cannot be excluded on their own, as carving them out of the proposed zoning map would result in an irregular and impractical zoning map, leaving pockets of lower density manufacturing zoning in the middle of proposed higher density manufacturing and mixed-use districts. Moreover, it would reduce the amount of housing, community facility, commercial, and manufacturing space permitted in the Project Area and would be less supportive of the goals and objectives of the Proposed Actions.

Potential significant adverse impacts also could occur to 10 known and 8 potential architectural resources located within 90 feet of projected or potential development sites as a result of adjacent construction. The known architectural resources are: the S/NR-eligible former New York and Queens Electric Light and Power Substation Number 4 (Resource No. 2); the S/NR-eligible Steinway Van Storage building at 42-45 12th Street (Resource No. 3); the S/NR-eligible former Silvercup Bakery at 42-22 22nd Street (Resource No. 4); the Queensboro Bridge (Resource No. 7), which is a NYCL and S/NR-listed; the S/NR-eligible Walter Lippmann Building at 43-42 10th Street (Resource No. 11); the S/NR-eligible 43-50 10th Street (Resource No. 12); the S/NR-eligible building at 43-56 10th Street (Resource No. 13); the S/NR-eligible Tom Cat Bakery at 43-05 10th Street (Resource No. 14); the S/NR-eligible M. Henry Chernay Building at 10-03 44th Avenue (Resource No. 15); and the S/NR-eligible Jerome Perlstein Building at 43-58 11th

Street (Resource No. 16). The potential architectural resources are: 10-15 and 10-27 46th Avenue (Resource B); 40-18 22nd Street (Resource I); 40-15 22nd Street (Resource J); 44-02 23rd Street (Resource K); 44-01 21st Street (Resource M); 21-49 44th Drive (Resource N); 42-25 Vernon Boulevard (Resource S); and 45-32 to 43-44 11th Street (Resource Z).

In order to avoid the potential for construction-related impacts at these resources, implementation of New York City Department of Building's (DOB) *Technical Policy and Procedure Notice (TPPN) #10/88* or preparation of a Construction Protection Plan would be necessary. It is expected that TPPN #10/88 would be implemented for the With Action development on Projected Development Site 51, in relation to the New York City Landmark (NYCL) and S/NR-listed Queensboro Bridge (Resource No. 7). The other resources listed above would be afforded limited protection under DOB regulations applicable to all buildings located adjacent to construction sites (C26-112.4); however, since these resources are not S/NR-listed or designated NYCLs or New York City Historic Districts (NYCHD), they are not afforded special protections under TPPN #10/88. Since the projected and potential development sites within 90 feet of these resources are not City-owned and are not anticipated to be developed in accordance with City disposition or development agreements, there is no mechanism to require the implementation of TPPN #10/88 or preparation of a Construction Protection Plan. Additional protective measures afforded under TPPN #10/88 would only become applicable if the resources were listed on the S/NR or designated as NYCLs or NYCHDs in the future prior to the initiation of construction. In the absence of such protection, the construction related impacts would constitute an unavoidable impact of the Proposed Actions. In order to entirely avoid the potential unmitigated adverse construction-related impacts specified above, this alternative would require that sites within 90 feet of the above-referenced resources be eliminated from rezoning under the proposed actions. However, these sites cannot be excluded on their own, as carving them out of the proposed zoning map would result in an irregular and impractical zoning map, leaving pockets of lower density manufacturing zoning in the middle of proposed higher density manufacturing and mixed-use districts. Moreover, it would reduce the amount of housing, community facility, commercial, and manufacturing space permitted in the Project Area and would be less supportive of the goals and objectives of the Proposed Actions.

The Proposed Actions also have the potential to result in indirect significant adverse impacts to five individual historic architectural resources, with new buildings on the projected and potential development sites in close proximity to these resources that could adversely impact their setting. The affected resources are: the S/NR-eligible Steinway Van & Storage Company building at 42-45 12th Street (Resource No. 3); the S/NR-eligible Tom Cat Bakery at 43-05 10th Street (Resource No. 14); the S/NR-eligible building at 43-56 10th Street (Resource No. 13); and the S/NR-eligible Metropolitan Building at 44-01 11th Street (Resource No. 17). In addition, views of the "Silvercup" metal-frame sign above the S/NR-eligible former Silvercup Bakery (Resource No. 4) along Queens Plaza South and from the Queensboro Bridge would be obscured by the new development along Queens Plaza South west of 21st Street in the future with the Proposed Actions. Measures to partially mitigate these significant adverse impacts will be explored in consultation with LPC between the DEIS and FEIS. If no feasible mitigation is identified, these significant adverse impacts would be unavoidable. As noted in the Shadows section above, eliminating unmitigable significant shadows impacts would

require reducing, by half or more, the height of development on seven Projected Development Sites which would restrict these sites from achieving their full development potential. Constrained development in this alternative scenario would hinder the Proposed Actions' goals to expand affordable housing and mixed-use development in the Project Area.

## TRANSPORTATION

As presented in Chapter 20, "Mitigation," the Proposed Actions would result in significant adverse traffic impacts at 44 study area intersections during one or more analyzed peak hour; specifically, 38 intersections during the weekday AM peak hour, 29 intersections during the weekday midday peak hour, 38 intersections during the weekday PM peak hour, and 28 intersections during the Saturday peak hour. Implementation of traffic engineering improvements, such as signal timing changes, installation of new traffic controls, modification of lane striping, or modifications to curbside parking regulations would provide mitigation for some of the anticipated traffic impacts. Specifically, the significant adverse impacts would be fully mitigated at all but 68 lane groups at 38 intersections during the weekday AM peak hour, 48 lane groups at 29 intersections during the weekday midday peak hour, 72 lane groups at 38 intersections during the weekday PM peak hour, and 47 lane groups at 28 intersections during the Saturday 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, a total of 36 intersections would have at least one congested lane group in one or more peak hours, and a total of 13, four, 15 and 10 intersections would have one or more lane groups operating at or over capacity in the weekday AM, midday and PM, and Saturday peak hours, respectively. According to the *CEQR Technical Manual*, for a lane group that would operate at LOS E in the With Action condition, a projected No Action increase in delay of five or more seconds is considered a significant impact. For a lane group that would operate at LOS F in the With Action condition, a projected No Action increase in delay of four 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 proposed developments completed by the end of 2028 in the Project 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.

## AIR QUALITY

The Proposed Actions would result in a potential significant adverse air quality impact related to the CO 8-hour and $PM_{2.5}$ 24-hour National Ambient Air Quality Standard (NAAQS) at one of the intersection sites analyzed, the $PM_{2.5}$ 24-hour *de minimis* criterion at two of the intersection sites analyzed and the $PM_{2.5}$ annual *de minimis* criterion at each of the intersection sites analyzed. Based on the magnitude of the predicted $PM_{2.5}$ incremental concentrations, a substantial reduction in project-generated traffic would be required to eliminate the predicted impacts. This would require a significant reduction in density on the projected development sites. Therefore, no reasonable alternative could be developed to completely avoid such air quality impacts without substantially

compromising the Proposed Actions' stated goals. Between the Draft and Final EIS, additional review and evaluation will be performed which is expected to determine that the identified impacts related to mobile source annual average $PM_{2.5}$ increments will be avoided. Additional modeling of $PM_{2.5}$ concentrations (Grid Analysis) will be performed using more refined or comprehensive analysis procedures to determine the magnitude and extent of neighborhood-scale $PM_{2.5}$ impacts from mobile sources. Other updates may include the use of newer vehicle emissions model data and projections. It is anticipated that these additional measures will reduce $PM_{2.5}$ concentrations below the annual *de minimis* criterion threshold. If unmitigated air quality impacts remain, the FEIS will assess the levels of traffic associated with a reduced development that would not result in unmitigated significant adverse air quality impacts.

## NOISE

As presented in Chapter 17, "Noise," the Proposed Actions would result in significant noise increases (up to 3.6 dBA) at Monitoring Locations 5, 8, 13, and 16. Therefore, the Proposed Actions could result in significant adverse noise impacts at noise receptors other than the future projected and potential development sites. Between the DEIS and FEIS, further assessment and mitigation measures will be considered for these potential impacts. Potential mitigation measures include upgrades at the noise receptor with insulated windows and an alternate means of ventilation. If unmitigated noise impacts remain, the FEIS will assess the level of traffic associated with a reduced development that would not result in unmitigated significant adverse noise impacts.

## CONSTRUCTION

### *HISTORIC AND CULTURAL RESOURCES*

As described above, development under the Proposed Actions could result in inadvertent construction-related damage to 10 known and eight potential architectural resources located within 90 feet of projected and potential development sites as a result of adjacent construction.

As detailed above, in order to avoid the potential for construction-related impacts at these resources, implementation of TPPN #10/88 or preparation of a Construction Protection Plan would be necessary. It is expected that TPPN #10/88 would be implemented for the With Action development on Projected Development Site 51, in relation to the New York City Landmark (NYCL) and S/NR-listed Queensboro Bridge (Resource No. 7). The other resources listed above would be afforded limited protection under DOB regulations applicable to all buildings located adjacent to construction sites (C26-112.4); however, since these resources are not S/NR-listed or designated NYCLs or New York City Historic Districts (NYCHD), they are not afforded special protections under TPPN #10/88. Since the projected and potential development sites within 90 feet of these resources are not City-owned and are not anticipated to be developed in accordance with City disposition or development agreements, there is no mechanism to require the implementation of TPPN #10/88 or preparation of a Construction Protection Plan. Additional protective measures afforded under TPPN #10/88 would only become applicable if the resources were listed on the S/NR or designated as NYCLs or NYCHDs in the future prior to the initiation of construction. In the absence of such protection, the construction-related impacts would constitute an unavoidable impact of the Proposed Actions. As noted in the

Historic and Cultural Resources section above, in order to entirely avoid the potential unmitigated adverse construction-related impacts, this alternative would require that sites within 90 feet of the above-referenced resources be eliminated from rezoning under the proposed actions. However, these sites cannot be excluded on their own, as carving them out of the proposed zoning map would result in an irregular and impractical zoning map, leaving pockets of lower density manufacturing zoning in the middle of proposed higher density manufacturing and mixed-use districts. Moreover, it would reduce the amount of housing, community facility, commercial, and manufacturing space permitted in the Project Area and would be less supportive of the goals and objectives of the Proposed Actions.

*TRANSPORTATION*

As presented in Chapter 21, "Mitigation," the Proposed Actions would result in significant adverse traffic impacts at 44 study area intersections (35 signalized and nine unsignalized) during one or more analyzed peak hours; specifically 68 lane groups at 38 intersections during the weekday AM peak hour, 48 lane groups at 29 intersections in the midday peak hour, 72 lane groups at 38 intersections in the PM peak hour, and 47 lane groups at 28 intersections during the Saturday peak hour. Implementation of traffic engineering improvements, such as signal timing changes, the installation of new traffic signals, and modifications to lane striping and curbside parking regulations would provide mitigation for many, but not all, of the anticipated traffic impacts.

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 construction 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 both construction analysis peak hours, and construction on almost any new development could result in unmitigated traffic impacts. Therefore, no reasonable alternative could be developed to completely avoid such impacts without substantially compromising the Proposed Actions' stated goals.

*NOISE*

As presented in Chapter 20, "Construction," noise level increases due to construction under the Proposed Actions that would be considered significant due to their magnitude and duration are predicted to occur at several locations throughout the Project Area. Specifically, significant adverse construction noise impacts were predicted to occur within 27 to 475 feet of the projected development sites depending on the size of development at each site. With the No Unmitigated Significant Adverse Impacts Alternative, no construction could occur within 27 to 475 feet of a receptor in the Project Area. No reasonable or feasible alternative could be developed to completely avoid such impacts at locations adjacent to development sites while still maintaining the Proposed Actions' stated goals.

## E. DOE SITE DEVELOPMENT ALTERNATIVE

The DOE Site Development Alternative considers a scenario in which the DOE Building, identified as Projected Development Site 67 (Block 489, Lots 1 and 35, and Block 488,

Lots 11 and 15), on the west side of Vernon Boulevard at 44th Drive, is demolished and redeveloped using City subsidy for affordable housing. Under the alternative, affordability would be achieved through a combination of MIH and funding through a New York City affordable housing subsidy program, which is intended to result in more affordable units as compared to the Proposed Actions.

Lots 1 and 11 currently contain a 580,000-square-foot, six-story commercial building serving as a central hub for DOE. Lots 23 and 15 are owned by the New York City Department of Small Business Services and are currently used for parking.

Like the Proposed Actions, the alternative requires the same zoning actions and City map changes. The alternative would result in a building with less floor area and shorter building height as compared to the Proposed Actions. Under the alternative, the development would contain 1,535,744 square feet of residential space (1,571 DUs), approximately 94,800 square feet of local retail, and 236 accessory parking spaces, and would be expected to reach 735 feet in height. The alternative would generate between 957 and 1,034 affordable units pursuant to MIH and through other funding mechanisms.

The alternative would include the same land uses as the Proposed Actions and would provide the same amount waterfront open space. As compared to the Proposed Actions, the alternative would result in a reduction in floor area of 171,949 square feet, 176 fewer DUs, and 24 fewer parking spaces. However, it would result in an increase of 74,800 square feet of local retail and between 433 and 685 additional affordable units. The alternative would result in the same significant adverse impacts related to Shadows and Historic and Cultural Resources. The overall reduction of building size and unit count would lessen the severity of significant adverse impacts in some technical areas as compared to the Proposed Actions, including Community Facilities (elementary schools and libraries), and Open Space. However, the increase in affordable units and retail space and reduction in building height requires further consideration of Community Facilities (early childhood programs), Transportation, and Air Quality.

## COMMUNITY FACILITIES

### *EARLY CHILDHOOD PROGRAMS*

For the purpose of the alternatives analysis, it is assumed that development under the Alternative scenario would utilize the 20 percent MIH option as well as additional funding sources that would result in a total of 957 affordable units on the site. The early childhood program assessment in Chapter 4, “Community Facilities” assumed that the site would be developed with the 30 percent MIH option, providing 524 affordable units. Development of the alternative scenario would result in 433 additional affordable units. In Queens, the minimum number of affordable units that triggers a detailed analysis is 139. The alternative would result in a shortfall of 128 slots, as compared to the Proposed Actions which would result in a deficit of 67 slots. While the alternative would result in greater demand for childcare slots, mitigation measures to address the impacts with alternative would be similar to the mitigation recommended for the Proposed Actions.

## TRANSPORTATION

As previously discussed, the incremental program of the DOE Site Development Alternative would result in the reduction in residential units, the removal of office space,

and an increase in retail space on Projected Development Site 67 compared to the incremental program of the Proposed Actions. This alternative program would generally result in different trip generation than the Proposed Actions due to the various trip planning factors detailed in Chapter 14, "Transportation" between the residential and retail uses. Overall, based on the transportation planning factors detailed in Chapter 14, "Transportation," the DOE Site Development Alternative would generate approximately 302 fewer incremental person trips in the weekday AM and approximately 230, 576, and 1,244 more trips in the weekday midday and PM, and Saturday peak hours, respectively (see **Table 22-1**), than the Proposed Actions. Depending on the peak hour, this represents an approximately 1.2 percent to 4.8 percent increase in action generated person trips compared with the Proposed Actions.

The DOE Site Development Alternative would generally result in fewer action generated vehicles during the weekday AM and PM commuter peak hours. In addition, the alternative would also generate fewer subway, rail, and ferry trips in all peak hours, and fewer bus trips during weekday peak hours compared with the Proposed Actions. However, there would also be a relatively slight increase in total pedestrian trips (as a result of walk-only trips plus pedestrians traveling to/from subway stations and bus stops) in all peak hours except the weekday AM peak hour compared with the Proposed Actions. The Saturday peak hour would experience the largest increase compared with the Proposed Actions.

Overall, the DOE Site Development Alternative would likely result in similar significant adverse impacts of greater magnitude to pedestrian elements during the weekday midday and PM, and Saturday peak hours, and traffic lane groups during the weekday midday and Saturday peak hours. These potential impacts will be fully evaluated with quantitative analysis in the FEIS based on the increase of vehicle and pedestrian trips in the study area under the DOE Site Development Alternative.

**Table 22-1**
**Comparison of Incremental Peak Hour Person Trips by Mode**
**Proposed Actions vs. DOT Site Development Alternative**

| Scenario | Auto | Taxi | Subway | Rail | Bus | Ferry | Walk/ Other | Total |
|---|---|---|---|---|---|---|---|---|
| **Weekday AM** | | | | | | | | |
| Proposed Actions | 2,630 | 163 | 11,722 | 504 | 1,129 | 676 | 6,338 | 23,162 |
| DOE Site Development Alternative | 2,576 | 147 | 11,260 | 463 | 1,069 | 640 | 6,705 | 22,860 |
| ***Net Difference*** | (54) | (16) | (462) | (41) | (60) | (36) | 367 | (302) |
| **Weekday Midday** | | | | | | | | |
| Proposed Actions | 1,689 | 86 | 5,649 | 128 | 638 | 271 | 11,475 | 19,936 |
| DOE Site Development Alternative | 1,774 | 78 | 5,587 | 126 | 631 | 267 | 11,703 | 20,166 |
| ***Difference*** | 85 | (8) | (62) | (2) | (7) | (4) | 228 | 230 |
| **Weekday PM** | | | | | | | | |
| Proposed Actions | 2,934 | 139 | 10,403 | 442 | 1,027 | 601 | 10,640 | 26,186 |
| DOE Site Development Alternative | 2,980 | 125 | 10,039 | 408 | 1,002 | 571 | 11,637 | 26,762 |
| ***Difference*** | 46 | (14) | (364) | (34) | (25) | (30) | 997 | 576 |
| **Saturday** | | | | | | | | |
| Proposed Actions | 2,380 | 62 | 9,794 | 295 | 862 | 503 | 11,748 | 25,644 |
| DOE Site Development Alternative | 2,464 | 58 | 9,710 | 282 | 904 | 491 | 12,979 | 26,888 |
| ***Difference*** | 84 | (4) | (84) | (13) | 42 | (12) | 1,231 | 1,244 |

*TRAFFIC*

As presented in **Table 22-2**, compared with the Proposed Actions, the DOE Site Development Alternative would generate approximately 89 and six fewer incremental vehicle trips during the weekday AM and PM commuter peak hours, respectively, and approximately 35 and 44 more incremental vehicle trips during the weekday midday and Saturday peak hours, respectively. Depending on the peak hour, the represents an increase of up to approximately 2.2 percent as compared with the incremental vehicle trips that would be generated under the Proposed Actions. Consequently, the number of lane groups and intersections with significant adverse traffic impacts under the DOE Site Development Alternative would likely be comparable to or less than the number under the Proposed Actions during the weekday AM and PM peak hours. The number of lane groups and intersections with significant adverse traffic impacts and the magnitude of those impacts under the DOE Site Development Alternative would likely be similar to or slightly greater than those under the Proposed Actions during the weekday midday and Saturday peak hours. These potential impacts will be fully evaluated through quantitative traffic analyses in the FEIS based on the increase of vehicle trips in the study area under the DOE Site Development Alternative during the weekday midday and Saturday peak hours. For reference, as discussed in Chapter 14, "Transportation," under the Proposed Actions there would be a total of 68 lane groups at 38 intersections during the weekday AM peak hour, 48 lane groups at 29 intersections in the midday peak hour, 72 lane groups at 38 intersections in the PM peak hour, 47 42 lane groups at 28 intersections during the Saturday peak hour.

**Table 22-2**
**Comparison of Incremental Peak Hour Vehicle Trips by Mode Proposed Actions vs. DOE Site Development Alternative**

| Scenario | Auto | Taxi | Truck | Total |
|---|---|---|---|---|
| Weekday AM | | | | |
| Proposed Actions | 2,166 | 166 | 141 | 2,473 |
| DOE Site Development Alternative | 2,103 | 148 | 133 | 2,384 |
| ***Net Difference*** | (63) | (18) | (8) | (89) |
| Weekday Midday | | | | |
| Proposed Actions | 1,340 | 98 | 140 | 1,578 |
| DOE Site Development Alternative | 1,395 | 88 | 130 | 1,613 |
| ***Net Difference*** | 55 | (10) | (10) | 35 |
| Weekday PM | | | | |
| Proposed Actions | 2,400 | 172 | (14) | 2,558 |
| DOE Site Development Alternative | 2,412 | 156 | (16) | 2,552 |
| ***Net Difference*** | 12 | (16) | (2) | (6) |
| Saturday | | | | |
| Proposed Actions | 1,990 | 108 | 8 | 2,106 |
| DOE Site Development Alternative | 2,040 | 104 | 6 | 2,150 |
| ***Net Difference*** | 50 | (4) | (2) | 44 |

*TRANSIT*

*Subway and Rail*

*Stations*

As shown in **Table 22-1**, the DOE Site Development Alternative would generate 462 and 364 fewer incremental subway trips during the weekday AM and PM peak hours, respectively, than would the Proposed Actions. Consequently, there would likely be fewer trips at all three subway stations analyzed. As discussed in Chapter 14, "Transportation," under the Proposed Actions, eight street stairs, three escalators, and one fare array at two analyzed subway stations would be significantly adversely impacted by incremental demand in either the AM or PM peak hour. As the DOE Site Development Alternative is expected to generate fewer subway trips at this station, the number of impacted station elements would likely be comparable to or less than the number under the Proposed Actions.

*Subway Line Haul*

Under the Proposed Actions, the southbound E, F, G, and 7 lines would be considered significantly adversely impacted in the AM peak hour, and the northbound G line would be considered significantly adversely impacted in the PM peak hour under *CEQR Technical Manual* impact criteria. As the DOE Site Development Alternative is expected to generate fewer subway trips, the number of impacted lines would likely be comparable to or less than the number under the Proposed Actions.

*Bus*

As presented in **Table 22-1**, the DOE Site Development Alternative would generate 60 and 25 fewer incremental bus trips during the weekday AM and PM peak hours, respectively, than would the Proposed Actions. Consequently, there would likely be fewer trips on the six bus lines analyzed. As discussed in Chapter 14, "Transportation," under the Proposed Actions, one (Q103) bus line would be significantly adversely impacted by incremental demand in the AM and PM peak hours. As the DOE Site Development Alternative is expected to generate fewer bus trips, the number of impacted lines would likely be comparable to or fewer than the number under the Proposed Actions.

*Ferry Service*

As presented in **Table 22-1**, the DOE Site Development Alternative would generate 60 and 25 fewer incremental ferry trips during the weekday AM and PM peak hours, respectively, than would the Proposed Actions. Consequently, there would likely be fewer trips on the analyzed Astoria ferry line and the Long Island City ferry landing. As discussed in Chapter 14, "Transportation," under the Proposed Actions, the Astoria ferry line would be significantly adversely impacted by incremental demand in the AM and PM peak hours in the southbound and northbound directions, respectively, and the long Island City ferry land would be significantly adversely impacted by incremental demand in the same periods. As the DOE Site Development Alternative is expected to generate fewer ferry trips, the number of impacts would likely be comparable to or fewer than the number under the Proposed Actions.

*PEDESTRIANS*

As discussed above, under the DOE Site Development Alternative there would be greater total pedestrian trips (walk-only trips plus pedestrians traveling to/from subway stations and bus stops) in all peak hours except the weekday AM peak hour. As shown in **Table 22-3**, compared to the Proposed Actions, the DOE Site Development Alternative is expected to generate approximately 199 fewer incremental pedestrian trips (including walk-only trips and trips to/from area public transportation services) during the weekday AM peak hour, and approximately 168, 572, and 1,173 more incremental vehicle trips during the weekday midday and Saturday peak hours, respectively. Depending on the peak hour, the represents an increase of up to approximately 5.1 percent as compared with the incremental vehicle trips that would be generated under the Proposed Actions.

**Table 22-3**
**Comparison of Incremental Peak Hour Pedestrian Trips Proposed Actions vs. DOE Site Development Alternative**

| Scenario | Total |
|---|---|
| **Weekday AM** | |
| Proposed Actions | 20,007 |
| DOE Site Development Alternative | 19,808 |
| ***Net Difference*** | (199) |
| **Weekday Midday** | |
| Proposed Actions | 17,981 |
| DOE Site Development Alternative | 18,149 |
| ***Net Difference*** | 168 |
| **Weekday PM** | |
| Proposed Actions | 22,798 |
| DOE Site Development Alternative | 23,370 |
| ***Net Difference*** | 572 |
| **Saturday** | |
| Proposed Actions | 23,012 |
| DOE Site Development Alternative | 24,185 |
| ***Net Difference*** | 1,173 |
| **Notes:** Includes walk-only trips and trips traveling to/from area transit services. | |

Consequently, the number of pedestrian elements with significant adverse pedestrian impacts under the DOE Site Development Alternative would likely be comparable to or fewer than the number under the Proposed Actions during the weekday AM peak hour. The number of pedestrian elements with significant adverse traffic impacts and the magnitude of those impacts under the DOE Site Development Alternative would likely be similar to or slightly greater than those under the Proposed Actions during the weekday midday, PM, and Saturday peak hours. These potential impacts will be fully evaluated through quantitative pedestrian analyses in the FEIS based on the increase of pedestrian trips in the study area under the DOE Site Development Alternative during the weekday midday, PM, and Saturday peak hours. For reference, as discussed in Chapter 14, "Transportation," based on *CEQR Technical Manual* criteria, 25 sidewalks, 16 crosswalks, and 10 corners, would be significantly adversely impacted by the Proposed Actions in one or more of the analyzed peak hours.

*VEHICULAR AND PEDESTRIAN SAFETY EVALUATION*

As discussed in Chapter 14, "Transportation," a review of DOT crash data for the 3-year reporting period between January 1, 2017, and December 31, 2019 identified six intersections in the traffic and pedestrian study areas as high crash. These intersections include: Jackson Avenue at Queens Boulevard, Queens Plaza South at Ed Koch Queensboro Bridge Off-Ramp / Crescent Street, 21st St at Queens Plaza North/South, 21st Street at 41st Avenue, Van Dam Street at 47th Avenue, and Van Dam Street at Queens Boulevard / Thomson Avenue.

Bike lane and signal timing improvement measures implemented by DOT along Queens Boulevard in the vicinity of the Jackson Avenue and Queens Boulevard were completed in 2024. The intersection of Queens Plaza South at Ed Koch Queensboro Bridge Off-Ramp / Crescent Street was referenced in DOT's "Crescent Street" safety improvement plan for additional improvements in the Queensboro Bridge South Outer Roadway Street Improvements plan, including building a pedestrian landing, sidewalk, and median extension, as well as a crossing point across Queens Plaza. The intersection of 21st Street at Queens Plaza North/South, referenced in Vision Zero and the DOT's "21st Street" safety improvement plan, now features a Leading Pedestrian Interval (LPI), and additional street lighting improvements under the Proposed Actions and this alternative may be warranted due to a history of crashes occurring in the dark. At 21st Street at 41st Avenue, which was referenced in Vision Zero and DOT's "21st Street" safety improvement plan, an LPI was installed but improvements to street lighting may warrant consideration under the Proposed Actions and this alternative as a potential safety improvement measure due to a history of crashes occurring in the dark. Van Dam Street at 47th Avenue was also referenced in Vision Zero and DOT's "Long Island City - Phase I" safety improvement plan but Installation of a "slippery when wet" road warning signage may warrant consideration as a potential safety improvement measure at this intersection under the Proposed Actions and this alternative. Lastly, at Van Dam Street and Queens Boulevard / Thomson Avenue, measures along Queens Boulevard related to bike lane and signal timing improvements were implemented in the vicinity of this intersection, but improvements to street lighting may warrant consideration under the Proposed Actions and this alternative as a potential safety improvement measure due to a history of crashes occurring in the dark.

*PARKING*

Under both the Proposed Actions and the DOE Site Development Alternative, a total of approximately 236 accessory parking spaces would be developed on the DOE Site under this alternative compared to 262 under the Proposed Actions (Projected Development 67), and no other changes in parking would occur on other projected development sites. This is a reduction of 26 parking spaces between the Proposed Actions and the DOE Site Development Alternative. The reduction in dwelling units (as well as office space) under the DOE Site Development Alternative would also result in less demand for parking compared with the Proposed Actions, particularly in the overnight period, when residents' parking demand peaks.

The DOE Site Development Alternative would generate a peak parking demand of approximately 5,924 spaces in the weekday midday (3:00 PM to 4:00 PM) period and 4,849 spaces in the weekday overnight period (from 4:00 AM to 5:00 AM), and

approximately 5,037 spaces in the overnight period (from 5:00 AM to 6:00 AM). In comparison, as discussed in Chapter 14, "Transportation," the Proposed Actions would generate a peak parking demand of approximately 6,086 spaces in the weekday midday (3:00 PM to 4:00 PM) period and 4,901 spaces in the overnight period, and approximately 5,092 spaces (from 4:00 AM to 5:00 AM), in the Saturday overnight period (from 5:00 AM to 6:00 AM).

Similar to the Proposed Actions' RWCDS, the DOE Site Development Alternative would not be fully accommodated on-site and excess demand would seek parking availability within a ¼-mile radius of the Project Area. These projected demand as well as any demand displaced from existing parking facilities on projected development sites would have seek available on-street and off-street parking within a ¼ mile of the Project Area. Further, some drivers destined for the Project Area would potentially have to travel a greater distance (e.g., between ¼ and ½-mile) to find available parking. Under the DOE Site Development Alternative, with the reduction on accessory parking and programmatic changes compared to the Proposed Actions, it is anticipated that there would also be potential for parking shortfalls under the DOE Site Development Alternative as well. Any potential deficit or shortfall in parking would not be considered a significant adverse impact based on 2021 *CEQR Technical Manual* criteria due to the magnitude of available alternative modes of transportation.

## AIR QUALITY

### *MOBILE SOURCES*

Compared to the Proposed Actions, the alternative development program for Site 67 would result in net reduction of 89 and six vehicle trips in the AM and PM periods, respectively, and a net increase of 359 and 44 vehicle trips in the MD and Saturday periods, respectively. Overall, mobile source air quality impacts would be expected to be very similar to the Proposed Actions. Therefore, the significant adverse air quality impacts identified for mobile sources identified in Chapter 15 under the Proposed Actions would be anticipated with the alternative development program, and the mitigation measures identified in Chapter 21 would be sufficient to fully mitigate the CO impacts and partially mitigate the $PM_{2.5}$ impacts that were identified.

### *STATIONARY SOURCES*

Compared to the Proposed Actions, the alternative development program for Site 67 would result in slightly less potential emissions from fossil fuel-fired heating and hot water systems. However, the maximum height of the proposed development would be lower. Similar to the Proposed Actions, the alternative would include measures that require electric for HVAC purposes. It is expected that the restrictions, like the restrictions under the Proposed Actions, would be required through provisions in the Land Disposition Agreement or comparable mechanism between the City and the selected developer.

## NOISE

Compared to the Proposed Actions, the alternative development program for Projected Development Site 67 would result in a net reduction of 89 and six vehicle trips in the AM and PM periods, respectively, and a net increase of 35 and 44 vehicle trips, but a net

reduction of 10 and two truck trips in the MD and Saturday periods, respectively. Overall, mobile source noise impacts would be expected to be very similar to the Proposed Actions. Therefore, while noise attenuation proposed in Chapter 17 would be sufficient to fully mitigate the noise impacts at the Projected and Potential Development Sties, the potential significant adverse noise impacts identified for noise receptors other than future projected and potential development sites identified in Chapter 17 under the Proposed Actions could be anticipated with the alternative development program. Between the DEIS and FEIS, further assessment and mitigation measures will be considered for these potential impacts. Potential mitigation measures include upgrades at the noise receptor with insulated windows and an alternate means of ventilation. ✴