

A. INTRODUCTION

In accordance with the State Environmental Quality Review Act (SEQRA), this chapter presents and analyzes alternatives to the Proposed Project. Alternatives selected for consideration in an EIS 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 the action.

In addition to a comparative impact analysis, the alternatives in this chapter are assessed to determine to what extent they would meet the goals and objectives of the Proposed Project, which include: (1) revitalizing the area surrounding Penn Station with new, sustainable, high-density commercial development; (2) improving passenger rail and transit facilities and pedestrian circulation, access, and safety; (3) supporting improvements to address substandard conditions in Penn Station, including by maximizing revenue generated by the new development to fund, in part, improvements to Penn Station by MTA, Amtrak, and NJT; and (4) supporting and accommodating future capacity increases at Penn Station (see Chapter 1, “Project Description” for the discussion of the Proposed Project’s goals and objectives).

This chapter considers the following four alternatives to the Proposed Project:

- A **No Action Alternative**, which is mandated by 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;
- A **No Unmitigated Significant Impact Alternative**, which considers development that would eliminate the Proposed Project’s unmitigated significant adverse impacts;
- A **Residential Alternative**, in which all sites would remain the same as in the Proposed Project, except for Sites 1, 4, and 8, which would include a residential program; and
- A **Lower Density Alternative**, which considers a project program that would include less total square footage of development, including less commercial office, retail, hotel rooms, parking square footage and spaces, and open space than the Proposed Project.

PRINCIPAL CONCLUSIONS

NO ACTION ALTERNATIVE

Consideration of the No Action Alternative is mandated by 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. Under the No Action Alternative, Sites 1, 2, 3, 6, and 8 would remain unchanged from existing conditions, and as-of-right development would occur on Sites 4, 5, and 7. The No Action Alternative assumes that Penn Station would not be expanded and most of the public transportation and public realm improvements would not be implemented.

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The potential for significant adverse impacts anticipated for the Proposed Project would not occur with the No Action Alternative, except in the areas of historic resources and construction noise. As with the Proposed Project, the No Action Alternative would result in the direct impact on Site 7 (the S/NR-eligible Hotel Pennsylvania) that would be demolished to allow for new commercial development on that site. Additionally, construction on Site 7 under the No Action Alternative would result in the same potential for impacts related to adjacent construction identified with respect to that site under the Proposed Project, specifically with respect to the S/NR-eligible and NYCL-eligible Former Equitable Life Assurance Company and the S/NR-eligible and NYCL-eligible St. Francis Roman Catholic Church Complex. These resources are located within 90 feet of proposed construction activities on Site 7. Unlike the Proposed Project, under the No Action Alternative, a CPP to protect these resources would not be required and implemented in coordination with OPRHP and LPC. However, these resources would be offered some protection through DOB controls governing the protection of adjacent properties from construction activities. Furthermore, although the No Action Alternative would not result in the Proposed Project's significant adverse transportation impacts, transportation conditions under this alternative would be characterized by increased roadway congestion, increasingly congested subway station elements, subway lines, and pedestrian elements.

Overall, the No Action Alternative would not meet the goals and objectives of the Proposed Project. Specifically, the No Action Alternative would not:

- revitalize the area surrounding Penn Station with a substantial amount of new, sustainable, high-density commercial development that would eliminate substandard and insanitary conditions in the Project Area and foster and support economic growth and tax revenue through the creation of jobs and economic activity;
- improve passenger rail and transit facilities and pedestrian circulation, access, and safety with the implementation of transportation and public realm improvements and the creation of new open space;
- support improvements to address substandard conditions in Penn Station; or
- support and accommodate future capacity increases at Penn Station.

NO UNMITIGATED SIGNIFICANT IMPACT ALTERNATIVE

The No Unmitigated Impact Alternative considers development that would eliminate the Proposed Project's unmitigated significant adverse impacts. The DEIS analyses identified significant adverse impacts for which no practicable mitigation has been identified to fully mitigate the impacts in the areas of: open space, shadows, historic and cultural resources, visual resources, transportation, noise, and construction-period traffic, noise, and neighborhood character.

There is no practicable alternative that could be developed to avoid the unmitigated significant adverse impacts of the Proposed Project. In order to eliminate the Proposed Project's unmitigated significant adverse impacts in the areas of open space, shadows, historic and cultural resources, visual resources, and noise, the Proposed Project would have to be reduced in size or modified to a point where it would not realize the goals and objectives of the Proposed Project, which include revitalizing the area surrounding Penn Station and eliminating substandard and insanitary conditions in the Project Area; and fostering and supporting economic growth and tax revenue through the creation of jobs and economic activity; improving passenger rail and transit facilities; creating new open space; supporting improvements to address substandard conditions in Penn

Station; and supporting and accommodating future capacity increases at Penn Station. Additionally, any level of development could result in the unmitigated significant adverse impacts in the areas of shadows, transportation, and construction. Therefore, there is no practicable alternative that could be developed to avoid the unmitigated significant adverse impacts of the Proposed Project.

RESIDENTIAL ALTERNATIVE

The Residential Alternative considers a development in which all sites would remain the same as in the Proposed Project, except for Sites 1, 4, and 8, which would include a residential program.

Like the Proposed Project, the Residential Alternative would not result in significant adverse impacts with respect to: land use, zoning, and public policy; socioeconomic conditions; urban design; hazardous materials; water and sewer infrastructure; solid waste and sanitation services; energy; air quality; greenhouse gas emissions; public health; and neighborhood character.

Under the Residential Alternative, significant adverse impacts in the areas of open space, shadows, historic resources, noise, and construction would be the same as or similar to those of the Proposed Project. The Residential Alternative would result in significant adverse transportation impacts, but to a lesser extent compared with the Proposed Project. With respect to visual resources, the Residential Alternative would result in the same significant adverse impacts as the Proposed Project, except with respect to the demolition of the copper skybridge spanning from Site 8 across West 32nd Street. If the owner of Site 8 retains the skybridge, the significant adverse impact that would occur with the Proposed Project would not occur.

With respect to community facilities, because the Residential Alternative would introduce a substantial residential population that would meet the financial and social eligibility criteria for publicly funded child care, the Residential Alternative would result in a significant adverse impact on early childhood programs that would not occur with the Proposed Project.

With respect to pedestrians, the Residential Alternative is expected to result in overall fewer impacted locations as compared to Phase 2 of the Proposed Project. However, because the existing Site 8 building and uses would remain under the Residential Alternative, it would not be accompanied by the building setbacks along the south side of West 33rd Street portion fronting Site 8 and the west side of Sixth Avenue that would otherwise accompany the Proposed Project's Site 8 development. Therefore, these two sidewalk segments, which are not impacted under the Proposed Project, could potentially be impacted under the Residential Alternative. Without the additional sidewalk circulation space afforded by the building setbacks, these impacts could potentially be unmitigated. Overall, accounting for these two additional potentially unmitigated sidewalk impacts and the potential reduction of unmitigated impacts at other pedestrian analysis elements due to the overall lower trip increments, the Residential Alternative could result in unmitigated pedestrian impacts at a similar number, or a slightly fewer number, of elements as compared to Phase 2 of the Proposed Project.

While the Residential Alternative would develop less overall commercial use than the Proposed Project, like the Proposed Project, it would address substandard conditions in the Project Area by facilitating redevelopment to create a cohesive, transit-oriented commercial district, foster and support economic growth and tax revenue through the creation of jobs and economic activity, and improve passenger rail and transit facilities and pedestrian circulation, access, and safety with the implementation of transportation and public realm improvements and the creation of new open space. Furthermore, the Residential Alternative would provide additional benefits by facilitating

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the development of new housing, including new affordable units, in the Project Area, which would not occur with the Proposed Project. The Residential Alternative would also contribute to enlivening the streetscape within the Project Area by extending the hours of street activity and creating a more vibrant mixed-use neighborhood. However, the Residential Alternative would do slightly less than the Proposed Project to improve the public realm, by not providing the sidewalk widenings along West 33rd Street and Sixth Avenue fronting Site 8. While this alternative would generate less revenue than the Proposed Project, it would still provide substantial support for the reconstruction and expansion of Penn Station. Overall, the Residential Alternative would not substantially avoid or reduce the significant adverse impacts that would occur with the Proposed Project and could result in unmitigated significant adverse impacts in the areas of early childhood programs and pedestrians that would not occur with the Proposed Project. However, the Residential Alternative would substantially meet the goals and objectives of the Proposed Project.

LOWER DENSITY ALTERNATIVE

The Lower Density Alternative considers a project program that would include less total square footage of development, including less commercial office, retail, hotel rooms, parking square footage and spaces, and open space than the Proposed Project. Under this alternative, Site 8 would not be redeveloped.

Like the Proposed Project, the Lower Density Alternative would not result in significant adverse impacts with respect to: land use, zoning, and public policy; socioeconomic conditions; community facilities and services; urban design; hazardous materials; water and sewer infrastructure; solid waste and sanitation services; energy; air quality; greenhouse gas emissions; public health; and neighborhood character.

Under the Lower Density Alternative, significant adverse impacts in the areas of open space, historic resources, noise, construction noise would be the same as or similar to those of the Proposed Project. The Lower Density Alternative would result in significant adverse transportation impacts (operational and during construction), but to a lesser extent than with the Proposed Project. With respect to shadows, the Lower Density Alternative would result in the same significant adverse impacts as the Proposed Project, with the exception of the impact to Herald Square Park. With no new development on Site 8, the Lower Density Alternative would cast less incremental shadow on Herald Square Park, and, unlike the Proposed Project, would not cause a significant adverse shadow impact to that park. With respect to visual resources, the Lower Density Alternative would result in the same significant adverse impacts as the Proposed Project, except with respect to the demolition of the copper skybridge spanning from Site 8 across West 32nd Street. If the owner of Site 8 retains the skybridge, the significant adverse impact that would occur with the Proposed Project would not occur.

With respect to pedestrians, the Lower Density Alternative is expected to result in fewer overall impacted locations as compared to Phase 2 of the Proposed Project. However, because the existing Site 8 building and uses would remain under the Lower Density Alternative, it would not provide the building setbacks along the south side of West 33rd Street portion fronting Site 8 and the west side of Sixth Avenue that would otherwise accompany the Proposed Project's Site 8 development. Therefore, these two sidewalk segments, which are not impacted under the Proposed Project, could potentially be impacted under the Lower Density Alternative. Without the additional sidewalk circulation space afforded by the building setbacks, these impacts could potentially be unmitigated. Accounting for these potential two additional unmitigated sidewalk impacts and the potential reduction of unmitigated impacts at other pedestrian analysis elements due to the overall

lower trip increments, the Lower Density Alternative could result in unmitigated pedestrian impacts at a similar or a slightly fewer number of elements as compared to Phase 2 of the Proposed Project.

Overall, the Lower Density Alternative would not substantially avoid or reduce the significant adverse impacts that would occur with the Proposed Project and could result in new unmitigated significant adverse impacts with respect to pedestrians that would not occur with the Proposed Project.

In general, although the Lower Density Alternative would meet a number of the Proposed Project's goals and objectives, it would do so to a lesser degree than the Proposed Project because it would introduce less new commercial office use and would not implement all of the public transportation and public realm improvements that would occur with the Proposed Project. As with the Proposed Project, the Lower Density Alternative would address substandard conditions in the Project Area by facilitating redevelopment to create a cohesive, transit-oriented commercial district, although the amount of commercial development under this alternative would be less than the Proposed Project and would not capitalize on the Project Area's unmatched transit access and would not be consistent with the maximum permitted densities of other transit-oriented districts in the City.

By providing for less overall development, the Lower Density Alternative would require land acquisition and other fixed costs to be amortized over less office space, which would offer less incentive for construction of the new office buildings, potentially delaying or forestalling their construction. Similarly, the Lower Density Alternative would foster and support economic growth to a lesser extent than the Proposed Project by creating fewer jobs and less economic activity. The Lower Density Alternative would be less supportive of the public policy goal of accommodating jobs and future economic growth in areas near transit hubs, and therefore a greater proportion of the City and state's future growth could be located in areas that are less transit-accessible than the Project Area under this alternative than with the Proposed Project.

Furthermore, the Lower Density Alternative would implement fewer public transportation and public realm improvements than the Proposed Project, as it would not provide the sidewalk widenings or public transportation improvements associated with Site 8, and it would generate substantially less revenue than the Proposed Project and would therefore be less successful at providing support for the reconstruction and expansion of Penn Station.

B. NO ACTION ALTERNATIVE

DESCRIPTION

Consideration of the No Action Alternative is mandated by 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. The technical chapters of this DEIS have described the No Action Alternative (referred to in preceding chapters as "the Future Without the Proposed Project") and have used it as the basis to assess the potential impacts and associated mitigation for the Proposed Project.

DEVELOPMENT PROGRAM

Under the No Action Alternative, Sites 1, 2, 3, 6, and 8 would remain unchanged from existing conditions, and as-of-right development would occur on Sites 4, 5, and 7. The No Action Alternative assumes that Penn Station would not be expanded and most of the public transportation and public realm improvements would not be implemented.

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By the 2028 analysis year, Site 7 would be developed with an approximately 1,590,725 gross-square-foot (gsf) commercial building consisting of 1,259,000 gsf of office space, 29,000 gsf of retail, and 302,725 gsf of non-program space (in comparison, the building on Site 7 with the Proposed Project would contain approximately 1.9 million gsf of office, 202,000 gsf of retail, and 25,000 gsf of accessory parking uses).¹

By the 2038 analysis year, Site 4 would be developed per previous approvals through the Moynihan Station Civic and Land Use Improvement Project General Project Plan (GPP), with an approximately 1,100,000-gsf mixed-use building consisting of approximately 120,000 gsf of retail, 310 hotel rooms, 630 residential units, and 40,000 gsf of non-program area (in comparison, the building on Site 4 with the Proposed Project would include 289,160 gsf of office space, 100,000 gsf of retail space, 734 hotel rooms, and 25,000 gsf of accessory parking uses).

Site 5 would be developed with an approximately 249,481 gsf commercial building, consisting of 172,525 gsf of office space, 11,021 gsf of retail, and 65,935 gsf of non-program space (in comparison, the building on Site 5 with the Proposed Project would include 1.4 million gsf of office space, 120,564 gsf of retail, and 361,000 gsf of non-program space). The Site 5 development under the No Action Alternative would be substantially smaller than with the Proposed Project, and would not require the displacement of the easternmost portion of the existing 1 Penn Plaza podium (which contains approximately 60,000 gsf of retail space and 60,000 gsf of office space), as would the Proposed Project.

SITE PLANNING, BULK, AND MASSING

Development under the No Action Alternative would be in accordance with existing zoning or previous approvals. The building on Site 4 would be slightly taller than that of the Proposed Project, and the buildings on Sites 5 and 7 would be substantially shorter. A comparison of illustrative building heights between the No Action Alternative and the Proposed Project is presented in **Table 21-1**.

Table 21-1
Project Area Illustrative Heights:
Comparison of the No Action Alternative and the Proposed Project

Site	Illustrative Height (feet)	
	No Action Alternative	Proposed Project
1	Same as existing conditions	235 (Midblock) 748 (Eighth Avenue)
2	Same as existing conditions	1,300 (Eighth Avenue) 1,052 (Seventh Avenue)
3	Same as existing conditions	936
4	675	664
5	330	1,018
6	Same as existing conditions	1,130
7	700	1,270
8	Same as existing conditions	975

¹ Non-program area includes space for building mechanicals, circulation space associated with transit improvements on the ground and sublevels, back-of-house areas (e.g., hallways and corridors to the building core), certain building core space, and lobby and loading space on the ground and sublevels.

Conditions under the No Action Alternative as compared with the future with the Proposed Project are summarized below.

LAND USE, ZONING, AND PUBLIC POLICY

Like the Proposed Project, the No Action Alternative would not result in significant adverse impacts related to land use, zoning, or public policy. Under the No Action Alternative, Sites 1, 2, 3, 6, and 8 would remain unchanged from existing conditions, and as-of-right development would occur on Sites 4, 5, and 7. The No Action Alternative also assumes that Penn Station would not be expanded and most of the public transportation and public realm improvements of the Proposed Project would not be implemented. The No Action Alternative would result in substantially less high-density commercial development than the Proposed Project and as a result the Project Area would not transform into a premier commercial office district with this alternative. The limited overall development within the Project Area under the No Action Alternative would not be consistent with broader land use trends for high density commercial development in areas of Manhattan adjacent to transit hubs, such as the areas adjacent to Grand Central Terminal. Furthermore, existing buildings in the Project Area not subject to redevelopment under this alternative are expected to remain in their current predominantly commercial uses, but would likely be of lower quality as the office stock and retail spaces continue to age, and the area may become less desirable as a commercial office district.

Neither the Proposed Project nor the No Action Alternative would adversely affect the land use character of the primary or secondary study area and would not result in significant adverse land use impacts in either the Phase 1 or Phase 2 analysis years. Additionally, neither the Proposed Project nor the No Action Alternative would directly displace any land uses so as to adversely affect surrounding land uses, nor would they generate land uses that would be incompatible with surrounding land uses, zoning, or public policies. However, under the No Action Alternative the Project Area would experience limited new development and the No Action Alternative would not address substandard and insanitary conditions on the sites not subject to redevelopment. The Project Area would continue to be characterized by outmoded office buildings, low quality retail offerings, congested sidewalks, and limited publicly accessible open space, and the public realm, both above- and below-grade would remain substandard and a deterrent to redevelopment. Unlike the Proposed Project, the No Action Alternative would not enhance the public realm and would not generate revenue for much-needed public transportation improvements at Penn Station and area subway stations. The No Action Alternative would also not support the planned expansion of Penn Station that is needed to serve New York's future transportation needs. Unlike the Proposed Project, the No Action Alternative would not reinvigorate the Project Area by creating a modern, transit-oriented commercial district centered around Penn Station that would help create a corridor of high-density, predominantly commercial uses linking the Midtown Central Business District, Penn Station, and Hudson Yards.

The No Action Alternative would not provide any new overrides of the existing zoning of the Project Area, which limits the development potential of the Project Area. The Project Area consists primarily of C6 and M1 zoning districts, and lacks a cohesive zoning framework to encourage high-density commercial development appropriate to its location surrounding Penn Station. Under the No Action Alternative, the existing zoning would not be overridden (except on Site 4, pursuant to the Moynihan Station Civic and Land Use Improvement Project GPP) and therefore the maximum permitted commercial density under the existing zoning (5.0 to 19.5 FAR in the Project Area) would remain substantially lower than the highest allowable commercial density in the adjacent Special Hudson Yard District (33 FAR) and in the Special Midtown District East

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Midtown Subdistrict (30 FAR). As a result, the No Action Alternative would not complement the long-term essential infrastructure investments in the Project Area (e.g., Moynihan Train Hall, East End Gateway, and the LIRR Concourse project) by failing to maximize development potential around these investments. In particular, with the No Action Alternative the existing M1-5 and M1-6 zoning (which permits a maximum commercial FAR of 5.0 and 10.0, respectively) in portions of the Project Area would remain, which would be reflective of historic land use in this area of Manhattan and inconsistent with the Project Area's location adjacent to Penn Station and the modern, high density commercial uses that are now typical in these areas.

With respect to public policy, the No Action Alternative would do far less than the Proposed Project to further public policies intended to promote sustainability, walkability, transit, employment, and economic development. As noted above, the No Action Alternative not address substandard and insanitary conditions on the sites not subject to redevelopment, nor would it be supportive of the City's policy of encouraging high-density development in areas with significant mass transit access.

SOCIOECONOMIC CONDITIONS

Neither the Proposed Project nor the No Action Alternative would result in significant adverse impacts due to direct residential displacement. However, unlike the Proposed Project, the No Action Alternative would not displace any residents on Sites 1, 2, and 3.

The No Action Alternative, unlike the Proposed Project, would not displace any businesses or institutional uses on Sites 1, 2, or 3. The No Action Alternative, like the Proposed Project, would result in the direct displacement of businesses located on Sites 4, and 5, and 7². As with the Proposed Project, the overall business and institutional displacement associated with the No Action Alternative would not cause a significant adverse direct business and institutional displacement impact because the potentially displaced businesses and institutions provide goods and services that would still be found within the study area and would continue to be available to local residents and businesses. None of the businesses or institutions serve a customer base that is uniquely dependent upon their location within the study area, nor are they subject to regulations or publicly adopted plans aimed at preserving, enhancing, or otherwise protecting them in their current location. As with the Proposed Project, the potentially displaced businesses under the No Action Alternative would be able to find comparable space within the study area or the City at large.³ For example, the new developments under the No Action Alternative would replace lost Accommodation and Food Services and Retail Trade employment with Site 4 development providing newer hotel and retail offerings. However, under the No Action Alternative, the amount of new commercial space would be substantially less than with the Proposed Project, creating fewer opportunities for new businesses within the Project Area.

The new office buildings on Sites 5 and 7 would attract a mix of businesses similar to those that exist in the Project Area today, including Professional, Scientific, and Technical service sector firms and Information and Technology sector firms. However, the No Action Alternative would result in substantially less overall development than the Proposed Project, with development

² Hotel Pennsylvania, located on Site 7, closed in May 2020 and it is unclear if it will reopen.. For the purposes of a conservative analysis, it is assumed that the Hotel could reopen prior to the development of the No Action Alternative.

³ According to CoStar Q4 2019, the office vacancy rates for Midtown Manhattan and Manhattan at large were both approximately 8.1 percent.

occurring only on Sites 4, 5, and 7. The remaining development sites (Sites 1, 2, 3, 6, and 8) would not be redeveloped. As such, the No Action Alternative would not provide as much modern office, retail, and hotel space as the Proposed Project in an area of the City where the commercial building stock is aging and in need of revitalization. The buildings on these sites would continue to age, and the office stock in the Project Area may become less desirable as a commercial office hub even with transportation improvements. Tenants seeking more updated office stock with amenities may opt for neighboring real estate markets with more updated offerings, such as Hudson Yards or Midtown East, or locate offices outside of New York City or New York State.

Unlike the Proposed Project, the No Action Alternative would result in new residential development—630 dwelling units, of which approximately 20 percent (126 units) would be affordable. Based on market-rate rents in the $\frac{1}{4}$ mile study area, the household incomes of residents in market-rate units would average \$183,747 (see **Table 21-13** below). Assuming the affordable units would be affordable to households earning an average of 80 percent of the Area Median Income (AMI), the average income of residents in affordable units would be approximately \$69,250.⁴ In total, the No Action Alternative would be expected to introduce a population with an average household income of \$160,850. This is similar to, but slightly higher than existing average household income in the $\frac{1}{4}$ -mile socioeconomic study area (\$144,615 in 2018) and would mirror existing neighborhood trends. Therefore, as with the Proposed Project, the No Action Alternative would not result in significant adverse impacts due to indirect residential displacement.

Like the Proposed Project, the No Action Alternative would not result in significant indirect business or institutional displacement impacts. In general, existing businesses would benefit from the larger customer base that would be created by the worker and visitor populations introduced by the No Action Alternative, but to a much smaller extent than with the Proposed Project. While the introduction of new workers and visitors could alter existing economic patterns in certain portions of the study area, these changes would not lead to a substantial amount of indirect business or institutional displacement. Although the No Action Alternative would directly displace employees, like the Proposed Project it would support new permanent jobs within the study area. Existing businesses could capitalize on new demand from the worker population such that an increase in sales and services rendered could offset potential increased rents. In addition, as with the Proposed Project, neighboring submarkets are either consistent in development trends with the No Action Alternative, or are well-established commercial districts that have remained relatively stable within the Midtown market.

Like the Proposed Project, the No Action Alternative would not result in a significant adverse impact on business conditions in any specific industry or any category of businesses. The No Action Alternative would support fewer new, permanent direct and indirect jobs in New York City and New York State that would produce ongoing fiscal benefits for both New York City and New York State, including income and sales tax revenues. Like the Proposed Project, the No Action

⁴ New York City AMIs are calculated yearly by the U.S. Department of Housing and Urban Development (HUD). The estimated income for a single person household at 80 percent of AMI is \$63,680; the estimated income for a two-person household at 80 percent AMI is \$72,800.⁴ HUD updates AMI annually. Given that the study area's household size averages between one and two persons per unit one could expect the incomes of households in the affordable units to be approximately \$69,250.

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Alternative would enable greater business activity for current and new establishments located in and around Penn Station, but less so than the Proposed Project.

As the No Action Alternative assumes the Penn Station expansion would not occur, the new direct and indirect construction-related employment in New York City and New York State that would be generated with the Proposed Project would not occur. Additionally, the construction-related employment that would generate wages and annual economic activity in New York City and New York State would not occur under this alternative. The No Action Alternative would not increase the rail capacity needed to accommodate projected future ridership levels and associated economic growth.

SHADOWS

Under the No Action Alternative, by the 2028 analysis year, Site 7 would be developed with a new commercial building with a height of approximately 700 feet. Development on Site 7 would cast limited incremental shadows (compared with existing conditions) on adjacent and nearby sunlight-sensitive resources, albeit less incremental shadow than the Proposed Development on Site 7, and, like Site 7 with the Proposed Project, would not result in significant adverse shadow impacts.

In 2038, the Proposed Project would result in significant adverse shadow impacts in 2038 to nine sunlight-sensitive open space and historic architectural resources. The No Action Alternative, with substantially less development (only on Sites 4, 5, and 7) would cast incremental shadows on adjacent and nearby sunlight-sensitive resources, primarily Plaza 33 and 1 Penn Plaza in the spring and fall. However, these incremental shadows would be more limited in extent and duration and, unlike the Proposed Project, would not result in any significant adverse shadow impacts.

COMMUNITY FACILITIES AND SERVICES

Like the Proposed Project, the No Action Alternative would not result in significant adverse impacts on public schools, libraries, early childhood programs outpatient health care facilities, and police and fire protection. Because the No Action Alternative would include residential development on Site 4, it would generate demand for public schools, libraries, and early childhood programs; however, this demand would not be expected to result in significant adverse impacts to these community facilities and services. Unlike the Proposed Project, the No Action Alternative would not result in the displacement of the existing Antonio Olivieri Drop-In Center, St. John the Baptist Roman Catholic Church, a branch of Touro College, and Campus Education (an English language training school) (see “Other Community Facilities” in Chapter 5, “Community Facilities”). As discussed in Chapter 5, the displacement of these other community facilities would not result in significant adverse impacts to community facilities under the Proposed Project as there are other facilities that provide similar services nearby, some of the facilities serve only a small local population, and that some of the facilities and services do not have unique locational needs and would likely be able to relocate.

In the No Action Alternative, traffic would increase in the vicinity of the Project Area from general background growth; other new development in the area; and the new development that would occur on Sites 4, 5, and 7 (refer to the discussion in “Transportation” below). Like the Proposed Project, the No Action Alternative would not result in adverse effects on the provision of emergency response services due to the geographic distribution of New York City Police Department (NYPD) and New York City Fire Department (FDNY) facilities in the vicinity of the Project Area and their respective coverage areas.

OPEN SPACE

Under the No Action Alternative, unlike the Proposed Project, the development of Site 5 would not result in the displacement of the east plaza on the 1 Penn Plaza privately owned public space (POPS). Therefore, the No Action Alternative would not result in the direct impact to open space that would occur with the Proposed Project. However, the No Action Alternative also would not introduce a new through-block public plaza on Site 2 nor would it provide the improvements to Plaza 33 that would occur with the Proposed Project. As a result, there would be less open space in the $\frac{1}{4}$ -mile worker study area with the No Action Alternative as compared to the Proposed Project.

Unlike the Proposed Project, the No Action Alternative would result in a substantial new residential population. Therefore, a residential open space analysis is presented below, reflecting a $\frac{1}{2}$ -mile residential study area, and accounting for 48 additional open space resources within that study area.

In terms of open space ratios, as shown in **Tables 21-2 and 21-3**, the open space ratios for the commercial ($\frac{1}{4}$ -mile) study area for the No Action Alternative—in contrast to the Proposed Project—would not result in significant adverse effects on the worker population, rather the ratios would be higher than conditions with the Proposed Project. Unlike the Proposed Project, the No Action Alternative would introduce a residential population that would generate demand for open space within a $\frac{1}{2}$ mile of the Project Area. The open space ratios for the residential ($\frac{1}{2}$ -mile) study area with the No Action Alternative would be below the guidelines for total and active open space (passive ratios would be above the guidelines). However, the additional population introduced under the No Action Alternative would result in only a small change in the residential study area open space ratios and therefore the No Action Alternative would not result in a significant adverse impact to open space.

Table 21-2
Comparison of No Action Alternative and
Proposed Project Open Space Ratios—2028

Ratio	DCP Open Space Guideline	Open Space Ratios	
		No Action Alternative	Proposed Project
Commercial ($\frac{1}{4}$-Mile) Study Area			
Passive/Workers	0.15	0.036	0.036
Passive/Total Population	Weighted 0.18	0.033	0.033
Residential ($\frac{1}{2}$-Mile) Study Area			
Total/Residents	2.5	0.913	N/A
Passive/Residents	0.5	0.666	N/A
Active/Residents	2.0	0.247	N/A

Notes: Ratios in acres per 1,000 people.
 * Weighted average combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents and varies between worker and residential study areas.

As described above, with the No Action Alternative, there would be no significant adverse impacts to open space in either the residential or commercial study areas in the 2028 or 2038 analysis years.

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Table 21-3
Comparison of No Action Alternative and
Proposed Project Open Space Ratios—2038

Ratio	DCP Open Space Guideline	Open Space Ratios	
		No Action Alternative	Proposed Project
Commercial (1/4-Mile) Study Area			
Passive/Workers	0.15	0.034	0.031
Passive/Total Population	Weighted 0.18	0.031	0.029
Residential (1/2-Mile) Study Area			
Total/Residents	2.5	0.882	N/A
Passive/Residents	0.5	0.650	N/A
Active/Residents	2.0	0.232	N/A

Notes: Ratios in acres per 1,000 people.

HISTORIC AND CULTURAL RESOURCES

ARCHAEOLOGICAL RESOURCES

There are no areas of archaeological sensitivity within the Project Area. Therefore, as with the Proposed Project, the No Action Alternative would not result in significant adverse impacts on archaeological resources in either the 2028 or 2038 analysis years.

ARCHITECTURAL RESOURCES

In the 2028 analysis year, as the No Action Alternative would not include the below-grade expansion of Penn Station, it would not result in the direct impacts on five architectural resources located on Sites 2 and 3 that would be removed for the expansion with the Proposed Project. As with the Proposed Project, the No Action Alternative would result in the direct impact on Site 7 (the S/NR-eligible Hotel Pennsylvania) that would be demolished to allow for new commercial development on that site. As this development would occur as of right, measures to mitigate this impact would not be required.

In the 2028 analysis year, development of the Proposed Project could have adverse physical impacts on six additional architectural resources that are located within 90 feet of proposed construction activities, close enough to potentially experience adverse construction-related impacts from ground-borne construction-period vibrations, falling debris, subsidence, collapse, or damage from construction machinery. The same six architectural resources could also be adversely affected by adjacent construction in the 2038 With Action condition. These impacts would occur as a result of construction on Sites 1, 2, 3, 7, and 8. As the No Action Alternative would not include construction on Sites 2, 3, and 8, the potential construction-related impacts of the Proposed Project due to construction on those sites would not occur. However, construction on Site 7 under the No Action Alternative would result in the same potential for impacts identified with the Proposed Project, specifically with respect to the S/NR-eligible and NYCL-eligible Former Equitable Life Assurance Company and the S/NR-eligible and NYCL-eligible St. Francis Roman Catholic Church Complex. Unlike the Proposed Project, under the No Action Alternative, a CPP to protect these resources would not be required or implemented in coordination with OPRHP and LPC. However, these resources would be offered some protection through DOB controls governing the protection of adjacent properties from construction activities.

Unlike the Proposed Project, the No Action Alternative would not result in significant adverse shadows impacts on four architectural resources in the primary and secondary study areas and one architectural resource that is located north of the secondary study area. In addition, the No Action Alternative would not result in the significant adverse visual impacts of the Proposed Project's partial obstruction of views east and northeast towards the Empire State Building. With the Proposed Project, this impact would occur as a result of development on Sites 2 and 6, and these sites would not be redeveloped under the No Action Alternative.

Unlike the Proposed Project, the No Action Alternative would not include the expansion of Penn Station. Therefore, it would not involve separate actions and approvals by or for the involved transportation agencies, or be subject to review under the National Environmental Policy Act, Section 106 of the National Historic Preservation Act, or Section 4(f) of the U.S. Department of Transportation Act of 1966.

URBAN DESIGN AND VISUAL RESOURCES

Under the No Action Alternative, Sites 1, 2, 3, 6, and 8 would remain unchanged from existing conditions, and as-of-right development would occur on Sites 4, 5, and 7. The No Action Alternative assumes that Penn Station would not be expanded and most of the public transportation and public realm improvements would not be implemented. Development under the No Action Alternative would be in accordance with existing zoning or previous approvals. The building on Site 4 would be slightly taller than that of the Proposed Project, and the buildings on Sites 5 and 7 would be substantially shorter.

URBAN DESIGN

As with the Proposed Project, the No Action Alternative would not result in a significant adverse impact to urban design in either the 2028 or 2038 analysis years. In 2028, the development on Site 7 would occur and, like the Proposed Project, would be in keeping with the urban design of the secondary study area. Unlike the Proposed Project, under the No Action Alternative, Sites 1, 2, and 3 would not be cleared and devoid of buildings (except for the new service building for Penn Station and entrances to the Penn Station expansion) in the 2028 analysis year.

The No Action Alternative, like the Proposed Project, would also not result in significant adverse impacts related to urban design in the 2038 analysis year. The No Action Alternative would not alter the location and arrangement of streets, street hierarchy, or block shapes in the secondary study area. With the Proposed Project, the proposed widened sidewalks adjacent to the development sites and proposed landscaping at the sidewalks and on the proposed shared streets would provide plantings and publicly accessible spaces for pedestrians to utilize and enjoy. The No Action Alternative would not include widened sidewalks, shared streets, or the new public spaces of the Proposed Project.

As with the Proposed Project, under the No Action Alternative, the anticipated building massings, consisting of base and tower configurations, would be consistent with the urban design of the larger, taller, and more recent buildings constructed (i.e., in the second half of the 20th century or buildings recently built or under construction within the past 20 years in the secondary study area). As with the Proposed Project, the buildings developed under the No Action Alternative would be consistent with trends in the secondary study area that have included and continue to include the development of tall, large buildings. Like the Proposed Project, when viewed in context with other tall towers visible to pedestrians within and outside the primary and secondary study areas, the buildings developed under the No Action Alternative would not result in significant adverse

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impacts to the pedestrian experience. However, the No Action Alternative, unlike the Proposed Project, would perpetuate existing conditions that detract from the overall visual character and urban design of the Project Area. The Project Area would experience limited new development with the No Action Alternative and therefore would continue to be characterized by outmoded office buildings, low quality retail offerings, congested sidewalks, and limited publicly accessible open space. The No Action Alternative would not address substandard and insanitary conditions on the sites not subject to redevelopment, and the building stock on these sites would continue to age. The Project Area would continue to lack a cohesive zoning framework to encourage high-density commercial development appropriate to its location surrounding Penn Station. Furthermore, the No Action Alternative would not be as responsive to the design needs of modern commercial office buildings as the Proposed Project, as it would continue to be subject to the bulk and design controls of existing zoning. The bulk and design controls of the existing zoning, particularly the M1 districts in the Project Area, do not provide the flexibility found in other commercial districts and make it difficult to construct buildings that meet modern office standards.

VISUAL RESOURCES

As the No Action Alternative would not include development on Site 2, the demolition of the Church of St. John the Baptist on Site 2 would not occur. Therefore, the Proposed Project's significant adverse impact with respect to this resource would not occur with the No Action Alternative. Similarly, the Proposed Project's significant adverse impact with respect to the demolition of the copper skybridge spanning from Site 8 across West 32nd Street would not occur under this alternative, as Site 8 would remain as in existing conditions. In addition, the No Action Alternative would not result in the obstruction of certain views east and northeast towards the Empire State Building in the 2038 analysis year, which would constitute a significant adverse impact to visual resources with the Proposed Project. This impact would occur as a result of development on Sites 2 and 6, which is not anticipated under the No Action Alternative.

HAZARDOUS MATERIALS

Sites 4, 5, and 7 are expected to undergo redevelopment under the No Action Alternative, and there is the potential for exposure of construction workers and nearby residents to hazardous material contamination during demolition of the existing structures, excavation, and construction of the new buildings.

It is expected that any development on Site 4, which would occur in accordance with previous approvals through the Moynihan Station Civic and Land Use Improvement Project GPP, would be subject to the pre-construction surveys and Health and Safety Plans for demolition and construction specified in the SEQRA Findings Statement for that project. In the No Action Alternative, Sites 5 and 7 would not be subject to these requirements. Since no institutional controls (e.g., an E-designation or applicable Restrictive Declaration requiring the assessment of potential hazardous materials impacts prior to construction) currently exist on Sites 5 and 7, such disturbance would not necessarily be conducted in accordance with these procedures (e.g., testing before commencing excavation and implementing health and safety plans during construction). However, the local, state, and federal regulatory requirements pertaining to any identified petroleum tanks and/or spills, requirements for disturbance and handling of suspect lead-based paint (LBP) and asbestos-containing materials (ACMs), and requirements for off-site disposal of soil/fill would need to be followed.

Under the No Action Alternative, the amount of soil disturbance would be less than that associated with the proposed project, and controls would, at a minimum, comply with applicable legal requirements, but may potentially be less stringent than with the Proposed Project. As with the Proposed Project, the No Action Alternative would not result in significant adverse impacts with respect to hazardous materials.

WATER AND SEWER INFRASTRUCTURE

As with the Proposed Project, the No Action Alternative would not result in a significant adverse impact on the City's water supply, wastewater treatment, or stormwater management infrastructure in either analysis year. The No Action Alternative would include substantially less overall development than the Proposed Project, resulting in less overall water demand and sanitary flow to the combined sewer system. Under the No Action Alternative in the 2038 analysis year, the overall volume of stormwater runoff is anticipated to be substantially the same as with the Proposed Project. Additionally, like the Proposed Project, the new buildings in the No Action Alternative would implement DEP design standards, reducing the peak stormwater runoff rate from the development sites. With the incorporation of selected best management practices (BMPs) (specifically on-site detention), as well as any potential sewer improvements that would be required as part of the DEP site connection approval process, the peak stormwater runoff rates for the No Action Alternative are expected to be reduced as compared to existing conditions. In addition, with the use of low-flow plumbing fixtures, the sanitary sewer flow for the No Action Alternative is expected to be reduced as compared to existing conditions. Like the Proposed Project, the No Action Alternative is not expected to appreciably increase the frequency or volume of combined sewer overflow (CSO) events.

SOLID WASTE AND SANITATION SERVICES

Neither the Proposed Project nor the No Action Alternative would result in significant adverse impacts on solid waste and sanitation services in either the 2028 or 2038 analysis years. In addition, the No Action Alternative would not directly affect a solid waste management facility. With substantially less development than the Proposed Project, the No Action Alternative would result in less overall solid waste generated. The No Action Alternative would result in less commercial solid waste than the Proposed Project, but would include some residential waste that would not be generated by the Proposed Project. However, as with the Proposed Project, these increases in solid waste generation over existing conditions would be a negligible increase relative to the amount of solid waste handled by the City of New York Department of Sanitation (DSNY) or the by private carters per day.⁵ As such, the No Action Alternative would not result in an increase in solid waste that would overburden available waste management capacity and there would be no significant adverse impact to solid waste. The No Action Alternative would not conflict with, or require any amendment to, the City's solid waste management objectives as stated in the City's Solid Waste Management Plan (SWMP).

ENERGY

As with the Proposed Project, the No Action Alternative would not result in a significant adverse impact related to energy in either the 2028 or 2038 analysis year. With significantly less development than the Proposed Action, the No Action Alternative would result in less overall

⁵ About DSNY: <https://www1.nyc.gov/assets/dsny/site/about>, accessed July 2020.

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energy use. In addition, the No Action Alternative would be required to comply with the New York City Energy Conservation Code (NYCECC), which governs performance requirements of heating, ventilation, and air conditioning (HVAC) systems, as well as the exterior building envelope of new buildings. In compliance with this code, new development must meet standards for energy conservation, which include requirements relating to energy efficiency and combined thermal transmittance. Therefore, like the Proposed Project, the No Action Alternative would not result in a significant adverse impact related to energy.

TRANSPORTATION

Under the No Action Alternative, the significant adverse traffic, transit, and pedestrian impacts resulting from the Proposed Project would not occur and there would be no parking shortfalls within $\frac{1}{4}$ -mile of the Project Area. With this alternative, traffic and pedestrian volumes in the study area would increase due to the No Action developments on Sites 4, 5, and 7; general background growth; and other planned developments in the study area. Since the Project Area is centrally located in Manhattan and characterized by extremely high and often congested levels of activities including traffic and pedestrians, the traffic and pedestrian volume increases under this alternative are expected to further worsen congestion levels in the study area. The No Action Alternative assumes the transit improvements and public realm improvements would not be implemented except for the new Penn Station entrance as part of the Site 4 as-of-right development. This alternative would also not provide a potential source of funding for the Penn Station expansion and reconstruction.

As detailed in Chapter 14, “Transportation,” the 2038 No Action Alternative would have up to 164 congested lane groups (i.e., operating at LOS E or F) during any one analysis peak hour compared to up to 202 congested lane groups in the 2038 With Action condition for the Proposed Project. Even without project-generated trips with the Proposed Project, there would be a degradation of operations over existing conditions attributed to additional trips generated by other development projects within and surrounding the Project Area and changes to the roadway network. With the Proposed Project, there would not be any improvements that are expected to enhance roadway capacities. As a result, the overall operations at study area intersections are projected to be notably worse with the Proposed Project than under the No Action Alternative.

For transit, out of the 103 subway station analysis elements across the three 34th Street subway stations, there would be up to 26 analysis elements at congested levels of service (LOS D/E/F) during one or more analysis peak hour under the No Action Alternative, compared to up to 40 analysis elements under the Proposed Project. In terms of subway lines, two fewer subway lines would operate above capacity in the No Action Alternative as compared to the Proposed Project. Compared to existing conditions, the No Action Alternative can be characterized by an increase in congested subway station elements and subway lines, making the transit experience generally less comfortable and convenient than during existing conditions. Under the Proposed Project, some project improvements alleviate these congestion levels that would be experienced under the No Action Alternative, but overall, among all elements in the transit study area, the number of congested subway station elements and subway lines would be slightly greater. It should be noted that, as stated in Chapter 14, “Transportation,” NYCT may provide additional guidance on the anticipated distribution of future subway ridership along the various subway lines serving the study area. Accordingly, some of the subway line haul analysis results and potential mitigation measures identified may change for the Final EIS.

For pedestrians, out of the 245 pedestrian analysis elements, there would be up to 68 analysis elements operating at congested levels of service (LOS E/F) during one or more analysis peak hours under the No Action Alternative, compared to up to 78 analysis elements under the Proposed Project. Compared to existing conditions, the No Action Alternative can be characterized by an increase in congested pedestrian elements, making the pedestrian experience in the study area generally less comfortable and convenient than during existing conditions. Under the Proposed Project, some sidewalk widenings related to the redevelopment of the project sites would alleviate these congestion levels that would be experienced under the No Action alternative, but overall, among all elements in the pedestrian study area, the number of congested pedestrian elements would be slightly greater.

Overall, the No Action Alternative would not result in the incremental trips generated by the Proposed Project, and with lower overall traffic and pedestrian volumes than the Proposed Project, the No Action Alternative would not result in the significant adverse traffic, transit, and pedestrian impacts, which would occur with the Proposed Project.

AIR QUALITY

The No Action Alternative would result in fewer vehicle trips and lower mobile source emissions than the Proposed Project, and the parking garages on Sites 6 and 8 would not be constructed. Like the Proposed Project, the No Action Alternative would not result in the significant adverse air quality impacts due to mobile sources of emissions. The No Action Alternative also would not result in incremental emissions from new heat and hot water systems associated with Sites 1, 2, 3, 6, and 8, and would result in lower pollutant emissions at Sites 5 and 7 compared with the Proposed Project because these sites would be developed with smaller buildings under the No Action Alternative. Like the Proposed Project, there would be no potential for significant adverse air quality impacts from heating and hot water systems for the No Action Alternative; however, the air quality restrictions on air intakes on portions of Sites 5 and 7 due to emissions from the existing combined heat and power (CHP) plant at 1 Penn Plaza would not be required.

GREENHOUSE GAS EMISSIONS

As discussed in Chapter 16, “Greenhouse Gas Emissions,” the climate change analysis differs from most other technical areas in that it does not account for only the increment between the condition with and without the Proposed Project; instead, the focus is on the total emissions associated with the uses and on the effect of measures to reduce those emissions.

Similar to the Proposed Project, most buildings over 25,000 square feet under the No Action Alternative (existing and No Action Alternative buildings on Sites 1 through 8) would be required to comply with Local Law 97 (as it may be clarified or amended over time), or be subject to prescribed financial penalties (as further explained in Chapter 16, “Greenhouse Gas Emissions”). Since the existing and No Action Alternative buildings would be smaller than the development with the Proposed Project, the building greenhouse gas (GHG) emissions associated with the No Action Alternative would be less than the Proposed Project. However, as the No Action Alternative would result in less development than the Proposed Project, it is assumed that some of the region’s growth that would be accommodated under the Proposed Project would instead occur in areas outside of the Project Area under the No Action Alternative. Constructing high-density development near transit results in more efficient use of land—if most users of the high-density development are commuting by transit, less space is required for parking and less vehicular traffic is generated on a per capita basis. Locating high-density uses near transit also ensures that

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ridership will be high. Additionally, without the expansion of Penn Station the No Action Alternative would likely result in increased GHG emissions associated with regional transportation. In addition, under this alternative, smaller buildings (less than 25,000 square feet) existing in the Project Area would not be required to reduce greenhouse gas emissions from their current rates. Therefore, the No Action Alternative is anticipated to result in higher indirect GHG emissions than the Proposed Project.

NOISE

As with the Proposed Project, the No Action Alternative would not have the potential to result in significant adverse noise impacts in the 2028 analysis year. As described in Chapter 17, “Noise,” in the 2038 analysis year, the Proposed Project would result in significant adverse noise impacts at receptors along West 31st Street between Ninth and Tenth Avenues, along West 31st Street between Sixth and Seventh Avenues, and along West 30th Street between Sixth and Eighth Avenues. These operational noise impacts are projected to occur upon the completion and occupancy of approximately 4.75 million gsf of office space on the proposed development sites. As the No Action Alternative would only include the development of approximately 1.4 million gsf of office space, it is expected that the noise impacts of the Proposed Project would not occur under the No Action Alternative.

Under the No Action Alternative, up to 35 dBA window/wall attenuation at Site 4 would be required per previous approvals through the Moynihan Station Civic and Land Use Improvement Project GPP. Development at Sites 5 and 7, which would be developed with commercial uses, would not constitute introduction of a new noise-sensitive receptor and would not require window/wall attenuation. As with the Proposed Project, under the No Action Alternative, with the implementation of the attenuation levels outlined above, the No Action Alternative would not result in any significant adverse impacts at the newly introduced noise receptors.

PUBLIC HEALTH

Like the Proposed Project, the No Action Alternative would not result in significant adverse impacts related to public health.

As described in the relevant analyses in this chapter, the No Action Alternative would not result in unmitigated significant adverse impacts in the areas of hazardous materials, water quality, or air quality, and therefore would not have the potential for a public health impact related to these technical areas. As noted under “Construction,” like the Proposed Project, construction activities for the No Action Alternative would have the potential to result in unmitigated significant adverse noise impacts at several sensitive receptor locations, as defined by *CEQR Technical Manual* thresholds, during certain phases of project construction. As with the Proposed Project, under the No Action Alternative, the predicted noise exposure that would be experienced by people inhabiting affected areas would be comparable to existing noise exposure at other nearby areas, and it would not exceed the threshold that would be expected to result in health effects. Therefore, the No Action Alternative’s unmitigated noise impacts would not result in a significant adverse public health impact.

NEIGHBORHOOD CHARACTER

Like the Proposed Project, the No Action Alternative would not result in a significant adverse impact on neighborhood character. As discussed in Chapter 19, “Neighborhood Character,” the defining features of neighborhood character are a mixture of several high-density commercial

buildings and lower-scale (and, in some cases, historic) commercial buildings and transportation infrastructure; high levels of pedestrian and vehicular activity and associated noise; and a varied neighborhood context with smaller buildings interspersed among taller buildings and iconic New York City landmarks. Unlike the Proposed Project, the No Action Alternative would not enhance existing neighborhood character by reinforcing these defining features while improving pedestrian facilities and transit accessibility. The No Action Alternative would not include the public realm or transportation improvements associated with the Proposed Project. It would do little to address the substandard conditions in the Project Area, as it would not facilitate redevelopment to create a cohesive, transit-oriented commercial district, nor would it introduce much-needed public transportation and public realm improvements in the area, and/or support the reconstruction and expansion of Penn Station.

As with the Proposed Project, the No Action Alternative would not result in significant adverse impacts to land use, zoning, and public policy; socioeconomic conditions; or urban design. It would also not result in the Proposed Project' significant adverse with respect to shadows, visual resources, transportation and noise. The No Action Alternative would, however, result in significant adverse impacts to historic resources. As with the Proposed Project, these impacts would not result in a significant adverse impact to the defining elements of neighborhood character.

CONSTRUCTION

The amount of new construction under the No Action Alternative would be substantially less than that for the Proposed Project. Specifically, under the No Action Alternative, the development sizes at Sites 5 and 7 would be less than those for the Proposed Project and no construction would occur on Sites 1, 2, 3, 6, and 8, as the existing buildings on these sites would remain in their current condition.

With the No Action Alternative, it is anticipated that construction would be much smaller in scale and of a shorter duration than what would be undertaken for the Proposed Project. Therefore, the No Action Alternative would not generate as much temporary construction disruption as compared to the Proposed Project. However, construction activities associated with the No Action Alternative could still increase traffic congestion at a number of intersections near the Project Area. In addition, development at Sites 4, 5, and 7 under the No Action Alternative would require a comparable level of demolition, excavation, and foundation construction work to that of the Proposed Project, which would result in comparable maximum construction noise levels for a comparable duration at receptors near these development sites. Consequently, maximum interior noise levels at these receptors would be comparable to those predicted for the Proposed Project, i.e., up to approximately 17 dBA greater than the level considered acceptable according to *CEQR Technical Manual* noise exposure guidelines. Therefore, similar to the Proposed Project, the No Action Alternative would have the potential to result in significant adverse impacts with respect to construction noise. As construction of the No Action Alternative can occur as-of-right without any discretionary approvals, the mitigation measures proposed under the Proposed Project would not be implemented and potential effects would remain unmitigated.

Unlike the Proposed Project, the proposed expansion of Penn Station on Sites 1, 2, and 3 would not occur under the No Action Alternative. Sites 1, 2, and 3 would not be redeveloped or subject to long-term construction activity under this alternative. Therefore, the significant adverse localized neighborhood character impacts in the immediate vicinity of these sites that would occur with the Proposed Project would not occur with this alternative.

CONCLUSIONS REGARDING THE NO ACTION ALTERNATIVE

Consideration of the No Action Alternative is mandated by 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. Under the No Action Alternative, Sites 1, 2, 3, 6, and 8 would remain unchanged from existing conditions, and as-of-right development would occur on Sites 4, 5, and 7. The No Action Alternative assumes that Penn Station would not be expanded and most of the public transportation and public realm improvements would not be implemented.

The potential for significant adverse impacts anticipated for the Proposed Project would not occur with the No Action Alternative, except in the areas of historic resources and construction noise. As with the Proposed Project, the No Action Alternative would result in the direct impact on Site 7 (the S/NR-eligible Hotel Pennsylvania) that would be demolished to allow for new commercial development on that site. Additionally, construction on Site 7 under the No Action Alternative would result in the same potential for impacts related to adjacent construction identified with respect to that site under the Proposed Project, specifically with respect to the S/NR-eligible and NYCL-eligible Former Equitable Life Assurance Company and the S/NR-eligible and NYCL-eligible St. Francis Roman Catholic Church Complex. These resources are located within 90 feet of proposed construction activities on Site 7. Unlike the Proposed Project, under the No Action Alternative, a CPP to protect these resources would not be required and implemented in coordination with OPRHP and LPC. However, these resources would be offered some protection through DOB controls governing the protection of adjacent properties from construction activities. Furthermore, although the No Action Alternative would not result in the Proposed Project's significant adverse transportation impacts, transportation conditions under this alternative would be characterized by increased roadway congestion, increasingly congested subway station elements, subway lines, and pedestrian elements.

Overall, the No Action Alternative would not meet the goals and objectives of the Proposed Project. Specifically, the No Action Alternative would not:

- revitalize the area surrounding Penn Station with a substantial amount of new, sustainable, high-density commercial development that would eliminate substandard and insanitary conditions in the Project Area and foster and support economic growth and tax revenue through the creation of jobs and economic activity;
- improve passenger rail and transit facilities and pedestrian circulation, access, and safety with the implementation of transportation and public realm improvements and the creation of new open space;
- support improvements to address substandard conditions in Penn Station; or
- support and accommodate future capacity increases at Penn Station.

No Action Alternative on Site 1

The No Action Alternative assumptions described above are the same as those analyzed for the No Action condition in the preceding chapters of this DEIS. In accordance with the guidance of the *CEQR Technical Manual*, the No Action condition incorporates known development projects likely to be built by the analysis years, including developments currently under construction or that can be reasonably expected due to the current level of planning and applications for public approvals. The property owners for Block 754, Lots 51 (and potentially Lots 39 through 41 and 44) and 63 on Site 1 provided comments on the Draft Scope of Work discussing preliminary plans for the development of these lots. However, these potential developments were not included in the

No Action condition as they did not appear to be publicly announced, construction had not commenced, and no current building permit applications were on file with the New York City Department of Buildings (DOB) for the developments. Furthermore, the DEIS assumption that there would be no future development on Site 1 absent the Proposed Project provides for a more conservative analysis in the density-related technical areas (such as transportation, open space, water and sewer, etc.), as the increment of the Proposed Project would be greater under the DEIS assumption, resulting in the potential for greater environmental impacts.

If these developments were to move forward, Site 1 would include a seven-story enlargement over the existing 4-story building on Lot 51 with primarily commercial uses, (and a potential expansion into Lots 39 through 41 and 44), and a 16-story primarily residential mixed use building on Site 63. While these developments have not been included in the analyses below for the No Action Alternative for the reasons listed above, if developed, they would result in similar effects as the developments considered in the No Action Alternative. For example, residential development on Site 1 would introduce a residential population that would generate demand for open space within a $\frac{1}{2}$ mile of the Project Area. Any development on the west side of Site 1 over 150 feet in height would cast shadows on the Farley Building skylights over Moynihan Train Hall. Construction on these sites could have adverse physical impacts on the U.S. General Post Office (now the James A. Farley Building, S/NR, NYCL), as it is located within 90 feet of those sites, close enough to potentially experience adverse construction-related impacts from ground-borne construction-period vibrations, falling debris, subsidence, collapse, or damage from construction machinery. Unlike with the Proposed Project, a Construction Protection Plan to protect this resource would not be required and or implemented in coordination with OPRHP and LPC. However, this resource would be offered some protection through DOB controls governing the protection of adjacent properties from construction activities. Construction activities on Site 1 would also generate temporary construction disruption and noise, and would increase traffic congestion at a number of intersections near the Project Area. These developments would add to traffic, transit and pedestrian congestion in an area that is already characterized by extremely high and often congested levels of activities.

If these developments were assumed on Site 1 in the No Action Alternative, the overall conclusions regarding the No Action Alternative would not change. The alternative would not revitalize the area surrounding Penn Station, and while new development on Lots 51 and 63 may improve conditions on their specific sites, they would not eliminate substandard and insanitary conditions throughout the Project Area, nor would it support economic growth and tax revenue, provide public realm and transportation improvements, or support the reconstruction and expansion of Penn Station.

C. NO UNMITIGATED SIGNIFICANT IMPACT ALTERNATIVE

This alternative considers development that would not result in any identified significant adverse impacts that could not be fully mitigated. The DEIS analyses identify significant adverse impacts for which no practicable mitigation has been identified to fully mitigate the impacts. Specifically, unmitigated impacts were identified in the areas of open space, shadows, historic and cultural resources, visual resources, transportation, noise, construction traffic and noise, and neighborhood character. Alternatives to the Proposed Project that would eliminate these unmitigated significant impacts are examined below.

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The assessment focuses only on the technical analyses mentioned above. There are no summary comparative assessments for technical analyses where there were no significant adverse impacts or where such impacts were fully mitigated for the Proposed Project.

OPEN SPACE

Chapter 6, “Open Space,” identifies direct and indirect impacts on open space resources. Specifically, the Proposed Project would result in the following significant adverse impacts to open space:

- Direct impact due to the elimination of portion of the through-block east plaza on Site 5 that is part of the 1 Penn Plaza POPS. The elimination of the plaza represents a reduction of approximately 0.16 acres of passive open space as compared to the No Action condition.
- Indirect impact due to the introduction of a substantial new worker population, causing a decrease in the passive open space ratio of approximately 8.87 percent. Taking into account the combined residential and worker populations within the study area, there would be an 8.17 percent decrease in the combined open space ratio for workers and residents (see “Assessment of Open Space Adequacy” section of Chapter 6, “Open Space.”)

As discussed in Chapter 22, “Mitigation,” ESD is exploring possible measures to mitigate these open space impacts. If it is determined that there are no practicable mitigation measures that would reduce or eliminate the impacts, the significant adverse impact would remain unmitigated.

The direct impact would occur with the elimination of the through-block east plaza at the commencement of construction at Site 5. This impact could be addressed by excluding the through-block east plaza from the building footprint for Site 5. However, this would reduce the building footprint by approximately 48 percent. Reducing the size of the building footprint on Site 5 would constrain the ability of the new building to accommodate the new Penn Station entrance and new subway entrances, and would make it difficult to meet the various other ground floor programmatic needs of the site, which include appropriately sized lobbies for a Class A office building and retail space along Seventh Avenue. This would compromise the ability of the Proposed Project to meet the goal of implementing transit improvements at this site to better accommodate rail and subway passenger volumes. In addition, it would not be practicable to accommodate the proposed density on Site 5 within this smaller footprint. Therefore, the amount of floor area on Site 5 would be reduced to approximately 800,000 gsf or less (a 58 percent reduction compared to the Proposed Project). The resulting building would not contribute to the same degree as the Proposed Project to the goals of creating a cohesive, transit-oriented commercial district and maximizing revenue to support the reconstruction and expansion of Penn Station. Additionally, the quality of the through-block east plaza would be diminished by replacing a one-story storefront along the eastern face of the plaza to an approximately 600-foot tall tower wall with little activation at-grade.

The significant adverse open space impact due to indirect effects would occur with the completion and occupancy of approximately 7.8 million gsf of office floor area. The amount of office space in the Proposed Project would have to be reduced by approximately 51 percent (to 7.8 million gsf) to fully eliminate the indirect open space impact (or approximately 9.1 million gsf, if, as discussed above, the through-block east plaza on Site 5 is not eliminated). Limiting development to this level would greatly reduce the extent to which the Proposed Project could create a cohesive, transit-oriented district capitalizing on the Project Area’s transit-rich location and addressing substandard and insanitary conditions. Furthermore, a reduction of this scale would substantially reduce the

revenue that could be generated by development, limiting the ability of the Proposed Project to support the reconstruction and expansion of Penn Station. This level of development would not be a practicable alternative to the Proposed Project, as it would compromise the stated goals and objectives of the Proposed Project.

Conversely, the significant adverse indirect impact on open space could be fully mitigated with the addition of approximately 0.44 acres (or 19,160 square feet [sf]) of new passive open space. This amount of open space would be in addition to the open space introduced with the Proposed Project. This open space could be provided within the Project Area by increasing the size of the proposed public plaza on Site 2. However, the width of this open space has already been maximized in consideration of other site constraints. There are several competing demands for the ground floor space on Site 2, including public amenities, a vibrant pedestrian realm, and commercial office building function and marketability, all of which must be accommodated to achieve an optimized balance. The proposed 15 foot sidewalk widenings into the property lines on both the Seventh and Eighth Avenue frontages limit the available width of the proposed open space. In addition, the 5 foot sidewalk widenings on both West 31st and West 30th Streets further reduce the footprint available for the proposed buildings. Increasing the size of the public plaza would not be practicable because it would reduce the footprint for development on the site by approximately 15 percent. The buildings on Site 2 require large footprints, owing to several program elements including passenger and service elevators, transit easements, transit infrastructure service docks, ground floor lobbies that must access second floor elevator lobbies, office tenant needs, and retail. Reducing the footprint of the development make it difficult to accommodate the various ground floor programmatic needs of the site. Therefore, this alternative would compromise the ability of the Project to accommodate the proposed expansion of Penn Station, transit improvements, public realm improvements and marketable commercial space that would further the goals and objectives of the Proposed Project.

The Proposed Project would also result in significant adverse direct impacts to open space due to shadows. Potential alternatives to avoid these impacts are discussed under “Shadows,” below.

SHADOWS

As discussed in Chapter 7, “Shadows,” the completion of the Proposed Project in the 2038 analysis year would result in significant adverse shadow impacts to nine sunlight-sensitive open space and historic architectural resources: Madison Square Garden (MSG) POPS, Plaza 33, Herald Square Park, Chelsea Park, the Penn South open spaces, the Farley Building, St. Michael’s Roman Catholic Church, St. Francis of Assisi Church, and the former Greenwich Savings Bank.

As described in Chapter 22, “Mitigation,” to avoid these significant adverse impacts, the heights of the proposed developments would have to be substantially reduced. **Table 21-4** lists the building sites that would cause the significant shadow impacts and the height limits for each site that would have to be imposed to avoid most of those impacts. These reductions would avoid all the shadows except the impacts to the MSG POPS and Plaza 33 which, because they are located in the center of the Project Area, would require substantially greater reductions in height to the buildings on Sites 1, 2, 3, 5, 6, and 7.

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Table 21-4
Height Limits to Avoid Impacts

Site	Illustrative Building Height (feet)*	Height Limit to Avoid Impact (feet)	Reduction from Illustrative Building Height	
			In Feet	Percent
1 (West / West 31st St Building)	235	150	-85	-36
1 (East / Eighth Ave Building)	748	200	-548	-73
2 (West / Eighth Ave Building)	1,300	150	-1,150	-88
2 (East / Seventh Ave Building)	1,052	400	-652	-62
3	936	345	-591	-63
4	664	No Reduction Needed		
5	1,018	820	-198	-19
6	1,130	880	-250	-22
7	1,270	720	-550	-43
8	975	675**	-300	-31

Notes:

- * The analysis heights presented in Chapter 7, “Shadows,” account for the maximum illustrative building height (as shown in this table), plus an additional 150 feet to provide for future design flexibility, rooftop mechanical space, and other potential rooftop structures, such as spires.
- ** In addition to height limit, upper portion of Site 8 would have to maintain the 70-foot setback from Sixth Avenue as currently included in the illustrative building

These reductions to the height of the proposed developments would substantially compromise the goals and objectives of the Proposed Project. As discussed in Chapter 1, “Project Description,” a goal of the Proposed Project is to provide a substantial amount of new commercial development to create a cohesive, transit-oriented district that would capitalize on the Project Area’s central Manhattan location and maximize revenue generated by the new development to fund, in part, improvements to Penn Station and the proposed expansion of Penn Station. The substantial reductions in building height would result in smaller buildings with less floor area that would be less successful in creating a transit-oriented commercial district and would generate substantially less revenue than the Proposed Project. Therefore, this alternative is considered impracticable because it would hinder the realization of the Proposed Project’s goals of revitalizing the area surrounding Penn Station with new, sustainable, high-density transit-oriented commercial development, fostering and supporting economic growth and tax revenue through the creation of jobs and economic activity, accommodating New York City’s long-term growth targeting the modern needs of commercial tenants at a transit-accessible location, and generating significant revenues to support the work needed to improve and expand Penn Station.

HISTORIC AND CULTURAL RESOURCES

In the No Unmitigated Significant Adverse Impact Alternative, the Hotel Pennsylvania building on Site 7, which is S/NR-eligible, would not be demolished and would be retained. As described in greater detail in the Alternatives Analysis for the Hotel Pennsylvania building prepared for OPRHP on January 20, 2021, ESD and Vornado evaluated alternatives to the demolition of the Hotel Pennsylvania building to avoid the significant adverse impact (see **Appendix H**). These included retaining and renovating the building for continued hotel use, retaining and adaptively reusing the building for office use, and retaining and adaptively reusing the building for residential use. That analysis concluded that it is not feasible to retain and reuse the Hotel Pennsylvania building as part of the Proposed Project. ESD is undertaking continuing consultation with OPRHP regarding the development of mitigation for this significant adverse direct impact and the

evaluation of alternatives that may avoid or fully or partially mitigate this significant adverse impact.

The hotel building, including its mechanical, electric, plumbing, and other systems, has more than reached the end of its useful life, and rehabilitating the 101-year-old building for modern hotel use would cost significantly more than constructing a new hotel. A renovation of the building for continued hotel use would need to address the building envelope, building structure (e.g., the existing floor-to-floor heights are too short for contemporary hotel construction, contemporary hotel rooms would not fit well within the existing structural bays, and standard hotel rooms could not fit on both sides of a central corridor within the existing hotel wings), fire and life safety systems, and the mechanical electrical and plumbing systems, upgrades to meet ADA accessibility, and hazardous materials remediation. In addition to being cost-prohibitive and impractical, retaining and renovating the Hotel Pennsylvania building for continued hotel use would not introduce new commercial office space on the site, and thus would be expected to generate much less essential revenue than the proposed commercial office building for substantial improvements at Penn Station, subway stations and other transit facilities in the Project Area, as well as the proposed expansion of Penn Station. Retaining and renovating the building for continued hotel use would also make it impossible to widen the sidewalk as part of the building construction along the south side of West 33rd Street between Sixth and Seventh Avenues and the sidewalk along the east side of Seventh Avenue between West 32nd and West 33rd Streets and compromise the project objective of replacing the West 32nd Street subway entrance just east of Seventh Avenue, replacing the West 33rd Street subway entrance just east of Seventh Avenue, and adding a new ADA-compliant elevator adjacent to West 33rd Street entrance as the new subway entrances and elevator would be constructed as part of the new building on Site 7 and integrated with its foundation and ground floor.

Similarly, adaptively reusing the Hotel Pennsylvania building for office use presents too many challenges to make such an adaptive reuse a feasible alternative. In addition to the needed renovations to the building envelope, fire and life safety systems; mechanical, electrical, and plumbing systems; upgrades to meet ADA accessibility; and hazardous materials remediation, the building's structural configuration creates a floorplan (arranged as four parallel wings separated by light courts and connected by a perpendicular core), ceiling heights, and column spacing that do not meet modern standards for office space. The building also has an unworkable column grid for providing modern office interiors, and the configuration of the floorplates into four narrow wings produces unmarketable office configurations for Class A tenants. Any interior renovations to convert the building to office use would require modifications to its layout and circulation, potentially removing original design elements and resulting in a further loss of integrity. In addition, adaptively reusing the existing building for commercial office use would require a comprehensive survey and testing of the steel and concrete materials, and may require reinforcing of floors, columns, and foundations. Areas with public assembly, dense storage, or IT programs would also likely require reinforcing. While this alternative could hypothetically provide new commercial office space to meet the purpose and need of the Proposed Project, it would not meet the modern needs of commercial tenants (i.e., generous column spacing and tall ceiling heights). In addition, the existing approximately 1.2-million-gsf building would only provide half of the office floor area that would be provided on the site with new construction and, therefore, would contribute much less to the generation of essential revenue for substantial improvements at Penn Station, subway stations and other transit facilities in the Project Area, as well as the proposed expansion of Penn Station. Like the hotel alternative, this alternative would also hinder the

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implementation of the full scope of proposed public realm improvements in the Project Area that would be required through the GPP in conjunction with the proposed developments.

Retaining and adaptively reusing the Hotel Pennsylvania building for residential use would not be feasible for the same reasons that it could not be adaptively reused as an office building. The existing floor heights are too short, and the narrow widths of the four wings could only be laid out for apartments along a single-loaded corridor making the efficiency of the apartment floors significantly less than those of a purpose-build new apartment building. Like the office alternative, any interior renovations to convert the building to residential use would require modifications to its layout and circulation, potentially removing original design elements and resulting in a loss of integrity. In addition, the existing window openings are too small for a modern residential building. To meet industry standards for windows in residential buildings, the existing windows would have to be removed and replaced with windows that are significantly larger, insulated, and appropriate to a residential building. While efforts could be made to match the existing windows, conversion to residential would necessitate new windows, which could affect the historic appearance of the building. This residential alternative would not provide new commercial office space and would instead adaptively reuse the existing building. The approximately 1.2-million-gsf building would only provide half of the floor area that would be provided on the site with new construction and, therefore, would be expected to generate much less essential revenue than the proposed commercial office building for substantial improvements at Penn Station, subway stations and other transit facilities in the Project Area, as well as the proposed expansion of Penn Station. Like the hotel and office alternatives, this alternative would also hinder the implementation of the full scope of proposed public realm improvements in the Project Area that would be required through the GPP in conjunction with the proposed developments.

Overall, no reasonable alternative could be developed to avoid the direct impact to the Hotel Pennsylvania building on Site 7 without compromising the Proposed Project's stated goals and objectives.

With respect to the architectural resources located on Sites 2 and 3, retaining these buildings would substantially compromise the goals and objectives of the Proposed Project. Retaining these buildings would preclude the redevelopment of Sites 2 and 3, which would prevent achievement of the project goal of revitalizing the area around Penn Station with new, sustainable, high-density commercial development, eliminating substandard and insanitary conditions in the Project Area, fostering and supporting economic growth and tax revenue through the creation of jobs and economic activity, and accommodating New York City's long-term growth targeting the modern needs of commercial tenants at a transit-accessible location. Retaining these buildings would also be less supportive of the project objective of maximizing revenue generated by the new development to fund, in part, improvement and expansion of Penn Station, and would preclude the development of new open space on Site 2, which would not fulfill the project objective of creating new publicly accessible passive open space.

The retention of the architectural resources located on Sites 2 and 3 would also greatly complicate—or perhaps preclude altogether—the proposed expansion of Penn Station beneath Sites 2 and 3. Further analysis of this issue is expected to be developed during the federal environmental review process under the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act.

In addition, the obstruction of views east and northeast from the west portion of the secondary study area towards the Empire State Building in the 2038 With Action condition would constitute a significant adverse visual impact to the Empire State Building. In particular, the developments on Sites

2 and 6 would obstruct views of the Empire State Building in views east on West 34th Street, in views northeast from the south side of the Ninth Avenue and West 28th Street intersection, along the western portion of West 28th Street between Eighth and Ninth Avenues, and in views northeast from the passive recreation area in the eastern portion of Chelsea Park along Ninth Avenue. As described more fully below under “Visual Resources,” an alternative that would eliminate the visual impact on the Empire State Building through reductions in the size of the buildings on Sites 2 and 6, either generated by reduced heights or reconfigured bulk, would not meet the goals and objectives of the Proposed Project. Therefore, there is no practicable alternative that would eliminate the unmitigated significant adverse visual impact to the Empire State Building.

VISUAL RESOURCES

As discussed in Chapter 22, “Mitigation,” the Proposed Project would result in a significant adverse impact to visual resources in the 2028 and 2038 analysis years. Demolition of the St. John the Baptist Roman Catholic Church Complex on Site 2 is projected to occur with the start of construction on Site 2 and demolition of the copper skybridge spanning from Site 8 across West 32nd Street is projected to occur during construction of Site 8. Demolition of these visual resources would constitute a direct significant adverse impact on visual resources.

In addition, the obstruction of views east and northeast from the west portion of the secondary study area towards the Empire State Building in the 2038 With Action condition would constitute a significant adverse impact to visual resources. In particular, the developments on Sites 2 and 6 would obstruct views of the Empire State Building in views east on West 34th Street, in views northeast from the south side of the Ninth Avenue and West 28th Street intersection, along the western portion of West 28th Street between Eighth and Ninth Avenues, and in views northeast from the passive recreation area in the eastern portion of Chelsea Park along Ninth Avenue.

The impact to visual resources related to the demolition of the St. John the Baptist Roman Catholic Church Complex could be avoided by retaining this building. However, as discussed above in “Historic and Cultural Resources,” retaining this building on Site 2 would substantially compromise the goals and objectives of the Proposed Project.

The significant adverse impact that would occur with the demolition of the copper skybridge could be avoided by retaining the existing building on Site 8. However, retaining the building on Site 8 would preclude the inclusion of building setbacks that would allow for widened sidewalks along West 33rd Street and Sixth Avenue fronting Site 8, and it is expected that the transit improvements associated with Site 8 would not be undertaken if Site 8 is not redeveloped or expanded. Therefore, this alternative would hinder the achievement of the goal of improving passenger rail and transit facilities and pedestrian circulation and access. In addition, the removal of Site 8 as a development site would result in an alternative that would be less successful than the Proposed Project at revitalizing the area around Penn Station, eliminating substandard and insanitary conditions in the Project Area, fostering and supporting economic growth and tax revenue through the creation of jobs and economic activity, and accommodating New York City’s long-term growth at a transit-accessible location.

The proposed development on Site 6 would block views of the Empire State Building along the West 34th Street corridor. In views northeast from the east portion of Chelsea Park along Ninth Avenue, from the south side of the Ninth Avenue and West 28th Street intersection, and along the western portion of West 28th Street between Eighth and Ninth Avenues, the proposed development on Site 2 (on the eastern portion of the site along Seventh Avenue) would block views of the Empire State Building.

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In order to avoid the significant adverse unmitigated impacts to views of the Empire State Building, the proposed building on Site 6 would need to be limited to a height of approximately 530 feet, resulting in a building that is approximately 53 percent shorter than the current illustrative building for the site, or reconfiguring its bulk such that the initial setback from West 34th Street would be 55 feet—an additional 40 feet beyond the 15-foot setback assumed under the With Action condition. However, a setback of this size would reduce usable building floorplate by about 50 percent, which would require a much taller and more slender tower to provide the same amount of floor area. Furthermore, the smaller floorplate would not allow for efficient and flexible layout of office interiors necessary to accommodate the needs of modern commercial tenants. In order to preserve views of the Empire State Building from the passive recreation area in the eastern portion of Chelsea Park along Ninth Avenue, from the south side of the Ninth Avenue and West 28th Street intersection, and along the western portion of West 28th Street between Eighth and Ninth Avenues, the proposed building on the east portion of Site 2 would need to be limited to a height of approximately 340 feet, resulting in a building that is approximately 67 percent shorter than the current illustrative building for the site.

An alternative that would eliminate the impacts to visual resources related to views of the Empire State Building through reductions in the size of the buildings on Sites 2 and 6, either generated by reduced heights or reconfigured bulk, would not meet the goals and objectives of the Proposed Project. Substantially reducing the floor area that could be generated at the development sites and creating inefficient office layouts would limit the creation of a high-density, transit-oriented commercial district. Furthermore, this alternative would be less supportive of the project objective of maximizing revenue generated by the new development to fund, in part, improvement and expansion of Penn Station. Therefore, there is no practicable alternative that would eliminate all of the unmitigated significant adverse impacts to visual resources and meet the stated goals and objectives of the Proposed Project.

TRANSPORTATION

As discussed in Chapter 22, “Mitigation,” the Proposed Project would result in unmitigated significant adverse transportation impacts. Therefore, alternatives were developed to explore modifications to the Proposed Project that would allow for the mitigation of these impacts.

In the 2028 With Action condition, the Proposed Project would result in significant adverse traffic impacts that could not be fully mitigated at 15, 11, and 14 intersections during the weekday AM, midday, and PM peak hours, respectively. For transit, the Proposed Project would result in significant adverse subway station element impacts that could not be fully mitigated at two and one analysis elements during the weekday AM and PM peak hours, respectively. For pedestrians, the Proposed Project would result in significant adverse pedestrian impacts that could not be fully mitigated at one, one, and zero analysis elements during the weekday AM, midday, and PM peak hours, respectively.

In the 2038 With Action condition, the Proposed Project would result in significant adverse traffic impacts that could not be fully mitigated at 69, 43, and 65 intersections during the weekday AM, midday, and PM peak hours, respectively. For transit, the Proposed Project would result in significant adverse subway station element impacts that could not be fully mitigated at 12 and 13 analysis elements during the weekday AM and PM peak hours, respectively. For pedestrians, the Proposed Project would result in significant adverse pedestrian impacts that could not be fully mitigated at 38, 15, and 41 analysis elements during the weekday AM, midday, and PM peak hours, respectively.

The Proposed Project is centrally located in Manhattan, near Hudson Yards and the Midtown Central Business District, proximate to passenger rail service at Penn Station and subway service at three major stations. Due to this, the Project Area is characterized by extremely high and often congested levels of activities including traffic and pedestrians. Even small increases in incremental volumes could result in significant adverse transportation impacts that could not be fully mitigated during one or more analysis peak hours. Correspondingly, any amount of development could result in unmitigated transportation impacts. Therefore, no reasonable alternative could be developed to avoid such impacts without substantially compromising the goals and objectives of the Proposed Project.

NOISE

As discussed in Chapter 22, “Mitigation,” by the 2038 analysis year, traffic generated by the Proposed Project would produce significant increases in noise levels at receptors along West 31st Street between Ninth and Tenth Avenues, along West 31st Street between Sixth and Seventh Avenues, and along West 30th Street between Sixth and Eighth Avenues. The increases would occur primarily due to project-generated trucks travelling along the New York City Department of Transportation (DOT)-designated truck route on these streets. The increases would constitute a significant adverse impact at the receptors along these roadway segments. In order to avoid these impacts, the amount of office space in the Proposed Project would have to be reduced to approximately 4.75 million gsf. This alternative is considered impracticable because it would hinder the realization of the Proposed Project’s goals of revitalizing the area surrounding Penn Station with new, sustainable, high-density commercial development, fostering and supporting economic growth and tax revenue through the creation of jobs and economic activity, accommodating New York City’s long-term growth targeting the modern needs of commercial tenants at a transit-accessible location, and generating significant revenues to support the work needed to improve and expand Penn Station.

CONSTRUCTION

TRANSPORTATION

Construction of the Proposed Project would result in temporary significant adverse traffic impacts during the peak construction periods for both Phase 1 and Phase 2 construction. The same or similar traffic mitigation measures identified to mitigate the operational impacts could be implemented early at the discretion of DOT to mitigate the temporary traffic impacts during construction. However, as discussed in Chapter 22, “Mitigation,” the Proposed Project would result in unmitigated significant adverse construction-related transportation impacts. As described above, the Proposed Project is centrally located in Manhattan and any small increases in incremental volumes could result in significant adverse transportation impacts that could not be fully mitigated during one or more analysis peak hours. Correspondingly, any development could result in unmitigated transportation impacts. Therefore, no reasonable alternative could be developed to avoid such impacts without substantially compromising the Proposed Project’s stated goals.

NOISE

Significant adverse noise impacts are predicted to occur at multiple sensitive locations as a result of construction of the proposed developments associated with the Proposed Project. As detailed in Chapter 22, “Mitigation,” construction of the proposed buildings at the development sites would

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be required to follow the requirements of the New York City Noise Control Code for construction noise control measures. Specific noise control measures would be incorporated in noise mitigation plan(s) required under the New York City Noise Code, including a variety of source and path controls. In addition, where feasible and practicable, construction would use drilled piles or caissons instead of impact-driven piles. This pile installation method is approximately 10 dBA quieter than impact-driven piles. Since impact-driven piles were the dominant noise source for most construction sites, this would reduce maximum noise levels at most impacted receptors. However, it is not possible at this time to confirm that drilled piles would be feasible and practicable for all pile installation work.

Many of the buildings where impacts have been identified feature modern façade construction, including insulated glass windows and an alternative means of ventilation that would allow for the maintenance of a closed-window condition. At façades of impacted buildings that do not already have one or both of these features, ESD would require project developers to make mitigation measures (i.e., storm windows and/or alternative means of ventilation in the form of window air conditioners) available on façades that face construction at no cost for purchase and installation. Building façades with insulated glass windows or storm windows and alternative ventilation would provide sound attenuation such that even during warm weather conditions, interior noise levels would be approximately 25 dBA less than exterior noise levels. However, construction of the Proposed Project during the most noise-intensive construction activity nearest a receptor would result in interior noise levels during certain construction hours of up to 62 dBA L₁₀, which is 17 dBA greater than the level considered acceptable according to *CEQR Technical Manual* noise exposure guidelines. Consequently, significant adverse noise impacts predicted to occur at the impacted residences would be only partially mitigated.

Source or path controls beyond those already identified for the construction of the Proposed Project would not be effective in reducing the level of construction noise at the receptors that have the potential to experience significant adverse construction noise impacts. Even accounting for the types of measures incorporated into the Proposed Project to reduce construction noise, any development comparable in scale to the Proposed Project (i.e., substantial below-grade excavation, multi-year construction at any one location) would have the potential to result in unmitigated significant adverse noise impacts at the locations mentioned above during construction activities. Therefore, no practicable alternative could be developed to avoid temporary construction noise impacts without substantially compromising the Proposed Project's stated goals.

NEIGHBORHOOD CHARACTER

Construction activity associated with the proposed expansion of Penn Station and new buildings on Sites 1, 2, and 3 would result in significant adverse localized neighborhood character impacts in the immediate vicinity of these development sites during construction. This impact could be eliminated by substantially reducing the construction duration on these sites. This could be accomplished in a variety of ways, either by foregoing (1) the expansion of Penn Station; (2) one or more of the new buildings on Sites 1, 2, and 3; or (3) both the expansion and the new buildings on the development sites above. Any of these alternatives would be inconsistent with meeting the goals and objectives of the Proposed Project.

CONCLUSION REGARDING THE NO UNMITGATED IMPACT ALTERNATIVE

The No Unmitigated Impact Alternative considers development that would eliminate the Proposed Project's unmitigated significant adverse impacts. The DEIS analyses identified significant

adverse impacts for which no practicable mitigation has been identified to fully mitigate the impacts in the areas of: open space, shadows, historic and cultural resources, visual resources, transportation, noise, and construction-period traffic, noise, and neighborhood character.

There is no practicable alternative that could be developed to avoid the unmitigated significant adverse impacts of the Proposed Project. In order to eliminate the Proposed Project's unmitigated significant adverse impacts in the areas of open space, shadows, historic and cultural resources, visual resources, and noise, the Proposed Project would have to be reduced in size or modified to a point where it would not realize the goals and objectives of the Proposed Project, which include revitalizing the area surrounding Penn Station and eliminating substandard and insanitary conditions in the Project Area; and fostering and supporting economic growth and tax revenue through the creation of jobs and economic activity; improving passenger rail and transit facilities; creating new open space; supporting improvements to address substandard conditions in Penn Station; and supporting and accommodating future capacity increases at Penn Station. Additionally, any level of development could result in the unmitigated significant adverse impacts in the areas of shadows, transportation, and construction. Therefore, there is no practicable alternative that could be developed to avoid the unmitigated significant adverse impacts of the Proposed Project.

D. RESIDENTIAL ALTERNATIVE

DESCRIPTION

DEVELOPMENT PROGRAM

Under the Residential Alternative, all sites would remain the same as in the Proposed Project except for Sites 1, 4, and 8, which would include residential development. At Site 8, the existing Manhattan Mall building would remain and a new building expansion containing residential uses would be constructed above it. This alternative would introduce a total of 1,798 dwelling units across the three sites; 30 percent of the residential floor area would be affordable to households with incomes averaging 80 percent AMI, for a total of 540 affordable units. Compared to the No Action condition, this alternative would introduce an incremental residential development of 1,040 dwelling units including 414 affordable units. The same open space improvements included in the Proposed Project would occur under the Residential Alternative. Specifically, the new public plaza on Site 2 would be constructed and the Plaza 33 open space would be enhanced and improved with new public amenities. The development phasing in the Residential Alternative would be the same as in the Proposed Project.

Table 21-5 presents the development program for the Residential Alternative by site, and a comparison of the Residential Alternative increments with the Proposed Project increments.⁶

⁶ The development program by site for the Proposed Project is presented in Table 1-1 in Chapter 1, “Project Description.”

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Table 21-5
Residential Alternative Development Program

Site	Total GSF*	Office GSF	Retail GSF	Hotel (Rooms)	Residential (DUs)	Affordable Units	Community Facility GSF	Parking Spaces
1	1,283,760	610,617	6,000	0	518	156	0	0
2	6,292,118	5,060,615	36,000	0	0	0	0	0
3	1,769,598	1,421,375	12,000	0	0	0	0	0
4	1,100,000	0	100,000	547	630	189	0	100
5	1,900,000	1,418,436	120,564	0	0	0	0	0
6	2,100,000	1,554,500	121,500	0	0	0	0	100
7	2,600,000	1,879,000	202,000	0	0	0	0	100
8**	1,458,033	667,033	243,000	0	650	195	0	0
Residential Alternative Total	17,593,476	11,944,543	598,064	547	1,798	540	0	300
Residential Alternative Increment From the No Action Alternative	12,325,608	9,548,208	177,639	-414	1,040	414	-190,710	-1,543
Proposed Project Increment From the No Action Alternative	13,467,275	11,186,717	140,639	336	-758***	-126	-190,710	-1,443

Notes: Grey indicates that the program does not differ from the Proposed Project. Increments are based on a comparison to the No Action Condition defined in Chapter 2, "Analytical Framework."

* In addition to the program area shown in this table, each development includes a certain amount of non-program area, or space for building mechanicals, circulation space associated with transit improvements on the ground and sublevels, back-of-house areas (e.g., hallways and corridors to the building core), certain building core space, and lobby and loading space on the ground and sublevels.

** Under the Residential Alternative, the existing Manhattan Mall building would remain on Site 8 and a new building expansion containing residential uses would be constructed above it. Therefore, the program shown in the table for Site 8 includes 910,033 gsf of commercial use (office and retail) associated with the existing Manhattan Mall building, and 548,000 gsf of residential use to be constructed as part of the Residential Alternative.

*** This includes 128 existing dwelling units that would be displaced by the Proposed Project, and 630 new dwelling units that are assumed to be constructed in the No Action condition.

SITE PLANNING, BULK, AND MASSING

Like the Proposed Project, under the Residential Alternative, development would occur on Sites 1 through 8, with the bulk and massing the same as the Proposed Project except for on Sites 1, 4, and 8. The Residential Alternative would include the same site-specific public realm and transportation improvements as the Proposed Project, except for the proposed sidewalk widenings at Site 8. As discussed above, the existing Manhattan Mall building (which includes retail and office space) would remain on Site 8, with the new residential program constructed above the commercial uses. Therefore, the building setbacks allowing for widened sidewalks along the south side of the West 33rd Street fronting Site 8, and the west side of Sixth Avenue that would occur with the Proposed Project, would not occur under the Residential Alternative. Additionally at Site 8, the existing Port Authority Trans-Hudson (PATH)-related elevator within the building would be maintained under the Residential Alternative, rather than replaced, as it would be with the Proposed Project.

A comparison of illustrative building heights between the Residential Alternative and the Proposed Project is presented in **Table 21-6**. **Figure 21-1** presents the illustrative building massings for each development site.



Table 21-6
Project Area Illustrative Heights:
Comparison of the Residential Alternative
and the Proposed Project

Site	Illustrative Height (feet)	
	Residential Alternative	Proposed Project
1	300 (Midblock)	235 (Midblock)
	617 (Eighth Avenue)	748 (Eighth Avenue)
2	1,300 (Eighth Avenue)	1,300 (Eighth Avenue)
	1,052(Seventh Avenue)	1,052(Seventh Avenue)
3	936	936
4	915	664
5	1,018	1,018
6	1,130	1,130
7	1,270	1,270
8	715	975

Notes: Grey indicates that the program does not differ from the Proposed Project.

Conditions under the Residential Alternative as compared with the future with the Proposed Project are summarized below. Because Phase 1 would be the same under both the Proposed Project and the Residential Alternative, the analyses below generally focus on the 2038 Phase 2 analysis year.

LAND USE, ZONING, AND PUBLIC POLICY

Like the Proposed Project, the Residential Alternative would not result in significant adverse impacts related to land use, zoning, and public policy. The Residential Alternative would result in development on the same eight sites with the Proposed Project, but would not result in as much high-density commercial development containing a mix of Class A office space, retail space, and hotel space as the Proposed Project. Under the Residential Alternative, all sites would remain the same as in the Proposed Project except for Sites 1, 4, and 8, which would include residential development under this alternative. At Site 8, the existing Manhattan Mall building would remain and a new building expansion containing residential uses would be constructed above it. This alternative would introduce a total of 1,798 dwelling units across the three sites; 30 percent of the residential floor area would be affordable to households with incomes averaging 80 percent AMI, for a total of 540 affordable units.

Site 1 is located on the northern and eastern portion of Block 754, a block characterized by residential use along West 30th Street, and a mix of uses, including parking, office, hotel, institutional, and mixed residential with ground-floor retail space on the remainder of the block. Block 754 serves as a transition between the residential uses to the south and southwest in the Chelsea section of the study area, and the largely commercial, institutional, and transportation-related uses to the north—such as the Farley Office Building and Moynihan Train Hall, Penn Station, and MSG. With the Residential Alternative, Block 754 would continue to include a mix of uses, including residential, and would continue to serve as a transition between the residential uses to the south and the largely commercial, institutional, and transportation-related uses to the north. As with the Proposed Project, the juxtaposition of smaller residential buildings abutting larger buildings, such as the Residential Alternative’s mixed-use building on Site 1, would be consistent with development on the western portion of Block 754.

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Under the Residential Alternative, Site 4 would be developed with a building containing the same overall density as approved through the Moynihan Station Civic and Land Use Improvement Project GPP, with a similar mix of uses, including retail, hotel, and residential. As described above, at Site 8, residential uses would be developed above the existing commercial uses in the Manhattan Mall building. These mixed-use buildings under the Residential Alternative would be consistent with the similar commercial and residential buildings that occur within the secondary study area to the west of Site 4 and to the east and south of Site 8.

The increase in commercial density with either the Proposed Project or the Residential Alternative would be consistent with broader land use trends of high-density commercial development in adjacent areas of Manhattan (including the area adjacent to Grand Central Terminal) and capitalize on the Project Area's unparalleled transit access. The Proposed Project would enhance the public realm and generate revenue for much-needed public transportation improvements at Penn Station and area subway stations. The Proposed Project would also support the planned expansion of Penn Station, which would serve New York's future transportation needs. In comparison, the Residential Alternative would result in less overall development than the Proposed Project, and would not maximize the revenue to the same degree as the Proposed Project. Therefore, the Residential Alternative would be somewhat less effective at supporting the reconstruction and expansion of Penn Station than the Proposed Project. Additionally, the Residential Alternative would not include the site-specific public realm and transportation improvements as the Proposed Project at Site 8. As discussed above, the existing Manhattan Mall building would remain on Site 8, with the new residential program constructed above the mall. Therefore, the building setbacks allowing for widened sidewalks along the south side of the West 33rd Street fronting Site 8, and the west side of Sixth Avenue that would occur with the Proposed Project, would not occur under the Residential Alternative.

Both the Proposed Project and Residential Alternative would reinvigorate the Project Area by creating a modern, transit-oriented commercial district centered around Penn Station and would help create a corridor of high-density, predominantly commercial uses linking the Midtown Central Business District, Penn Station, and Hudson Yards. With the Residential Alternative, the predominance of commercial uses in the Project Area would be lessened as compared to the Proposed Project with the introduction of more residential uses. Therefore, like the Proposed Project, the Residential Alternative would not adversely affect the land use character of the primary or secondary study area and would not result in significant adverse land use impacts in either the Phase 1 or Phase 2 analysis years. Neither the Proposed Project nor the Residential Alternative would directly displace land uses whose displacement would adversely affect surrounding land uses, nor would they result in land uses that would be incompatible with surrounding land uses, zoning, or public policies.

With respect to zoning, as with the Proposed Project, the Residential Alternative would require the override of use, bulk, and density provisions of the New York City Zoning Resolution, and the GPP would include design guidelines to address these elements. The override of existing zoning use, bulk, and density regulations would be necessary to achieve the goals and objectives of the Proposed Project, as discussed in Chapter 1, "Project Description." However, with less overall density than the Proposed Project, the Residential Alternative would be somewhat less successful at achieving the Proposed Project's stated goals and objectives, as it would generate less revenue to support the reconstruction and expansion of Penn Station. As with the Proposed Project, the Residential Alternative would permit densities and bulk that would further public policies to support high-density development in areas well-served by public transit would be consistent with the densities allowed in some of the nearby areas of Hudson Yards and Midtown. Overall, the

GPP and zoning overrides with the Residential Alternative would foster high-density development appropriate for the Project Area's central location in Midtown Manhattan and unmatched transit connectivity. Therefore, like the Proposed Project, the Residential Alternative would not result in a significant adverse impact to zoning. Additionally, both the Proposed Project and Residential Alternative would result in development that is consistent with land use and zoning and furthers several stated public policies intended to promote sustainability, walkability, transit, employment, and economic development. Furthermore, the Residential Alternative would provide additional benefits by facilitating the development of new housing, including new affordable units, in the Project Area, which would not occur with the Proposed Project, and would support City policies with respect to housing, such as Housing New York 2.0.

SOCIOECONOMIC CONDITIONS

The analysis of potential adverse socioeconomic effects applied the methodologies of the State Environmental Quality Review (SEQR) Handbook and the 2020 *CEQR Technical Manual*. According to the *CEQR Technical Manual*, the five principal issues of concern with respect to socioeconomic conditions are whether a project would result in significant impacts due to: (1) direct residential displacement; (2) direct business displacement; (3) indirect residential displacement due to increased rents; (4) indirect business displacement due to increased rents or due to retail market saturation; and (5) adverse effects on specific industries.

With the exception of indirect residential displacement, the socioeconomic effects for these issues of concern would be lesser or no different than those of the Proposed Project:

- (1) Direct residential displacement** - the number of residents that would be displaced in the Residential Alternative is the same as in the Proposed Actions.
- (2) Direct business displacement** - because the existing Manhattan Mall building on Site 8 would not be displaced in the Residential Alternative, fewer businesses would be displaced.
- (3) Indirect residential displacement** - the Residential Alternative would introduce more than 200 residential units to the Project Area, which is the *CEQR Technical Manual*'s suggested threshold for analysis of potential indirect residential displacement (see assessment below).
- (4) Indirect business displacement** - like the Proposed Project, the Residential Alternative would not result in significant indirect business or institutional displacement impacts and, in general, existing businesses would benefit from the larger customer base that would be created by the worker, visitor, and resident populations introduced by the Residential Alternative.
- (5) Adverse effects on specific industries** - like the Proposed Project, the Residential Alternative is not anticipated to have adverse impacts on specific industries. The directly displaced businesses would not differ from the Proposed Project, and those businesses are not unique to the study area and would be able to relocate within the trade area. The Residential Alternative differs from the Proposed Project in that the Residential Alternative would bring new residents to the Project Area. These residents would support economic activity in the Project Area and substantial employment would still be created in the Project Area.

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INDIRECT RESIDENTIAL DISPLACEMENT

Preliminary Assessment

As described in the *CEQR Technical Manual*, indirect residential displacement usually occurs when a project results in a substantial new development that is markedly different from existing uses and activities within a neighborhood. This can contribute to increased property values and increased rents, which can make it difficult for some existing residents to remain in their homes. Generally, an indirect residential displacement analysis is conducted only in cases in which the potential impact may be experienced by renters living in privately held residential units unprotected by rent control, rent stabilization, or other government regulations restricting rents, and whose income status indicates that they may not be able to afford substantial rent increases. Residents who are homeowners, or who are renters living in rent-protected units are not considered potentially vulnerable populations under the *CEQR Technical Manual* methodology.

Methodology

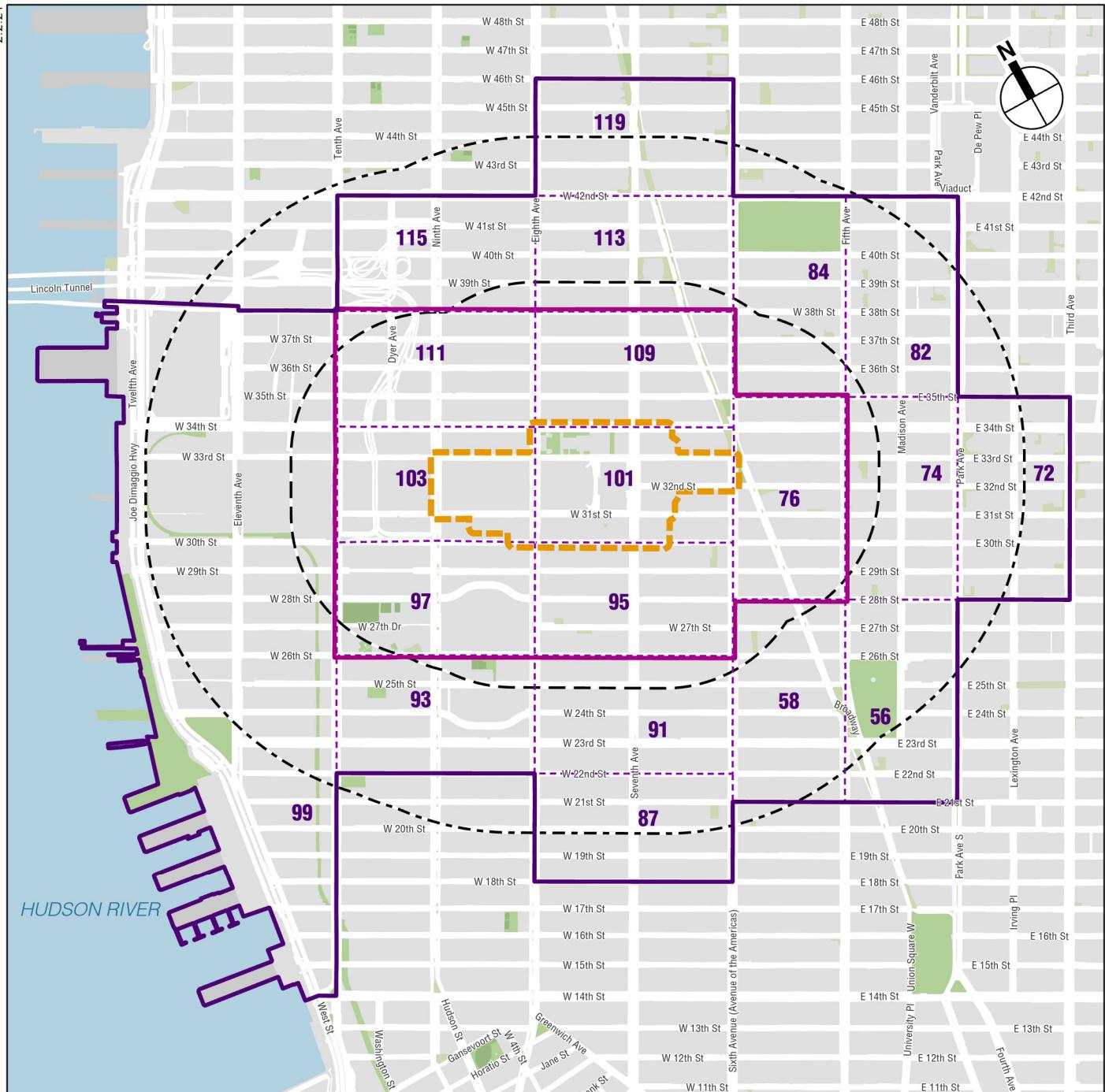
Study Area

A study area is the area within which a project has the greatest potential to affect change. As detailed in Chapter 4, “Socioeconomic Conditions,” the socioeconomic study area is an approximately $\frac{1}{4}$ -mile area surrounding the Project Area. For analyses of potential indirect residential displacement, the *CEQR Technical Manual* suggests that a $\frac{1}{4}$ -mile socioeconomic study area is appropriate so long as the project produces a small (below five percent) increase to the population within the $\frac{1}{4}$ -mile area. The Residential Alternative would increase the $\frac{1}{4}$ -mile area population by an estimated 1,674 people, which based on the existing $\frac{1}{4}$ -mile area population represents an approximately 9.1 percent increase, warranting additional consideration of a larger, approximately $\frac{1}{2}$ -mile study area.

Because this analysis depends on demographic data, it is appropriate to adjust the study area boundary to conform to the census tract delineation that most closely approximates the desired radius (in this case, the $\frac{1}{4}$ -mile and $\frac{1}{2}$ -mile radii surrounding the Project Area). The census tracts that constitute the $\frac{1}{4}$ -mile “primary study area” and the $\frac{1}{2}$ -mile “secondary study area” are shown in **Figure 21-2**. The primary study area is the same as the $\frac{1}{4}$ -mile study area utilized for the socioeconomic conditions analyses in Chapter 4; it includes Census Tracts 76, 95, 97, 101, 103, 109, and 111, and is roughly bounded by West 39th Street to the north, Fifth Avenue to the east, West 25th Street to the south, and Tenth Avenue to the west. The secondary study area includes the census tracts within the primary study area as well as Census Tracts 56, 58, 72, 74, 82, 84, 87, 91, 93, 99, 113, 115, and 119, and is roughly bounded by West 46th Street to the north, Third Avenue to the east, West 18th Street to the south, and the Hudson River to the west.

Data Sources and Analysis Format

Information used in the analysis of indirect residential displacement—including population, housing, rents, and incomes—were gathered from the U.S. Census Bureau’s 2006–2010 and 2014–2018 American Community Survey (ACS) using Social Explorer and the New York City Department of City Planning (DCP) Population FactFinder. Social Explorer is a demographic data visualization and research website that agglomerates a variety of data including data from the U.S. Census and ACS. The DCP Population FactFinder online mapping tool was used to provide comparative census data between geographies and to determine the margin of error (MOE) for



- Project Area
- 1/4-mile Radius Around Project Area
- 1/2-mile Radius Around Project Area
- Primary Socioeconomic Study Area
- Secondary Socioeconomic Study Area
- Census Tract

0 2,000 FEET

Residential Alternative - Socioeconomic Study Areas for
Indirect Residential Displacement Assessment

single variable ACS estimates presented for the study areas.⁷ Study area market-rate asking rents were researched using online real estate listing sites, including StreetEasy. StreetEasy is a searchable online database that uses web data extraction to compile an aggregated list of residential property listings from most of New York City's largest brokerage firm and hundreds of small-scale brokers. Dollar estimates have been adjusted to 2019 dollars using the U.S. Department of Labor Consumer Price Index (CPI) for the New York-New Jersey-Pennsylvania region to allow for comparison between data sources.

The assessment begins with a presentation of existing conditions and trends, followed by the *CEQR Technical Manual*'s preliminary assessment criteria.

Existing Conditions

Based on the 2014–2018 ACS 5-Year Estimates data, the primary study area contains 18,407 residents and 10,015 households, while the secondary study area contains 76,007 residents and 43,232 households. As shown in **Table 21-7**, both the primary and secondary study area's populations have increased since 2006-2010. Manhattan and New York City's residential populations also increased over the same time period (by approximately 3.1 percent and 4.5 percent, respectively).

Table 21-7
Residential Population Trends
(2006-2010, 2014-2018 ACS)

Area	2006–2010 ACS	2014–2018 ACS	Change or Direction of Change
Primary Study Area	16,168	18,407	Increase ¹
Secondary Study Area	67,252	76,007	Increase ¹
Manhattan	1,583,345	1,632,480	3.1%
New York City	8,078,471	8,443,713	4.5%

Notes:

1. The margin of error (MOE) of the difference is greater than one third of the difference, so the percentage change cannot be estimated with confidence and only the direction of the change can be reported (i.e., Increase/Decrease).

Sources: U.S. Census Bureau, 2006-2010 and 2014-2018 ACS 5-Year Estimates; DCP's NYC Population Factfinder.

This analysis uses average and median household incomes to describe the household income characteristics of the study areas' populations. As reported in the 2014–2018 ACS and shown in **Table 21-8**, in 2018 the average annual household income within the primary study area was \$144,615 (in 2019 dollars) which is similar to the household income of Manhattan (\$154,515), but about \$45,000 higher than the average annual household income for New York City as a whole (\$99,261).

⁷ MOEs describe the precision of an estimate within a 90-percent confidence interval and provide an idea of how much variability (i.e., sampling error) is associated with the estimate. The larger the MOE relative to the size of the estimate, the greater potential for variability within the data. The MOE is partially dependent on the sample size, because larger sample sizes result in a greater amount of information that more closely approximates the population.

Table 21-8
Average Annual Household Income Trends
(2006-2010, 2014-2018 ACS)

Area	2006–2010 ACS ¹	2014–2018 ACS ¹	Change or Direction of Change
Primary Study Area	\$126,973	\$144,615	-- ²
Secondary Study Area	\$170,209	\$183,189	-- ²
Manhattan	\$143,865	\$154,515	7.4%
New York City	\$91,393	\$99,261	8.6%

Notes:

1. All dollar figures have been adjusted to 2019 dollars based on the U.S. Department of Labor Consumer Price Index.
2. The margin of error (MOE) of the difference is greater than the difference, so neither the direction of change (i.e., increase/decrease) nor the percentage change can be estimated with statistical confidence.

Sources: U.S. Census Bureau, 2006-2010 and 2014-2018 ACS 5-Year Estimates; DCP's NYC Population Factfinder

In 2018 the average annual household income within the secondary study area was \$183,189, substantially higher than the average household incomes in the primary study area, Manhattan, and New York City.

The change in average household income within the primary and secondary study areas since 2010 cannot be reported with statistical confidence. Between 2010 and 2018, the average household incomes increased in Manhattan (by 7.4 percent) and in New York City (by 8.6 percent).

As average income can be heavily influenced by outliers (both high and low) within the data, the median household income is also presented. As shown in **Table 21-9**, in 2018 the median annual household income within the primary study area was \$93,593. This is similar to the median income for Manhattan (\$83,822), and greater than the median income for New York City (\$61,766). The primary study area's median income has increased since 2010 (ACS data is not robust enough to predict within statistical confidence the percentage increase in median household income since 2010).

In 2018 the secondary study area's median household income was \$111,474, which is greater than the median household income for the primary study area, Manhattan, and New York City. The change in median household income within the secondary study area since 2010 cannot be reported with statistical confidence. Since 2010, the median household income increased by 10.0 percent in Manhattan, and 4.7 percent in New York City as a whole.

As shown in **Table 21-10**, within the primary study area, average gross rent in 2018 was an estimated \$2,323 per month, which was greater than the average gross rent in Manhattan as a whole (\$1,833) and in New York City overall (\$1,494). The average gross rent in the secondary study area was virtually the same as the primary study area.

Table 21-9
Median Annual Household Income Trends
(2006-2010, 2014-2018 ACS)

Area	2006–2010 ACS ¹	2014–2018 ACS ¹	Change or Direction of Change
Primary Study Area	\$74,279	\$93,593	Increase ²
Secondary Study Area	\$100,526	\$111,474	__ ³
Manhattan	\$76,228	\$83,822	10.0%
New York City	\$58,997	\$61,766	4.7%

Notes:

1. All dollar figures have been adjusted to 2019 dollars based on the U.S. Department of Labor Consumer Price Index.
2. The margin of error (MOE) of the difference is greater than one third of the difference, so the percentage change cannot be estimated with confidence and only the direction of the change can be reported (i.e. Increase/Decrease).
3. The margin of error (MOE) of the difference is greater than the difference, so neither the direction of change (i.e., increase/decrease) nor the percentage change can be estimated with statistical confidence.

Sources: U.S. Census Bureau, 2006-2010 and 2014-2018 ACS 5-Year Estimates; DCP's NYC Population Factfinder

Table 21-10
Average and Median Gross Rent

Area	2006-2010 ACS		2014-2018 ACS		Change or Percent Change	
	Average ¹	Median ¹	Average ¹	Median ¹	Average	Median
Primary Study Area	\$1,837	\$1,744	\$2,323	\$2,431	- ²	Increase ³
Secondary Study Area	\$2,162	\$2,147	\$2,332	\$2,498	- ²	Increase ³
Manhattan	\$1,668	\$1,448	\$1,833	\$1,710	9.9%	18.1%
New York City	\$1,343	\$1,256	\$1,494	\$1,419	11.3%	12.9%

Notes:

1. All dollar figures have been adjusted to 2019 dollars based on the U.S. Department of Labor Consumer Price Index.
2. As MOE for average gross rent is not reported, the percent change cannot be reported with statistical confidence.
3. The MOE of the difference between 2006-2010 ACS and 2014-2018 ACS data for the study areas is greater than one third of the estimated difference. Therefore, a change cannot be estimated with statistical confidence and only the direction of the change can be reported.

Sources: U.S. Census Bureau, 2006-2010 and 2013-2018 ACS 5-Year Estimates; DCP's NYC Population Factfinder; Social Explorer.

Median gross rent within the primary study area was an estimated \$2,431 per month in 2018, which was greater than the median gross rent in Manhattan as a whole (\$1,710) and in New York City overall (\$1,419). Median gross rents have increased in the primary and secondary study area since 2010. Over the same time period, median gross rents also increased in Manhattan (by approximately 18.1 percent) and in New York City (by 12.9 percent).

U.S. Census data paints a general picture about whether housing costs are changing in a neighborhood, but the data does not provide specific rent information according to regulation status or unit size. Market comparables were therefore used to provide a fuller understanding of where the study area market is today. **Table 21-11** summarizes online listings for apartments in the primary study area from StreetEasy.com. The median monthly asking rents in the primary study area ranged from \$2,250 for studio units to \$7,750 for three-or-more-bedroom units. Based on historic asking rent data from StreetEasy.com, median asking rents in Chelsea have increased

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by approximately 10 percent since 2010, while median asking rents in Midtown South have increased by approximately 4.3 percent since 2010.⁸

Table 21-11
Monthly Rental Asking Rates within the Primary Study Area

Unit Type	Number of Listings	Median Monthly Asking Rent
Studio	110	\$2,250
One Bedroom	158	\$3,200
Two Bedroom	90	\$4,248
Three+ bedroom	31	\$7,750

Source: StreetEasy.com accessed October, 2020.

The median monthly asking rents in the secondary study area ranged from \$2,395 for studio units to \$5,495 for three-or-more-bedroom units (see **Table 21-12**). Based on historic asking rent data from StreetEasy.com, median asking rents in all the submarkets in the secondary study area for which trend data are available have increased since 2010.⁹

Table 21-12
Monthly Rental Asking Rates within the Secondary Study Area

Unit Type	Number of Listings	Median Monthly Asking Rent
Studio	294	\$2,395
One Bedroom	440	\$3,344
Two Bedroom	264	\$4,680
Three+ bedroom	105	\$5,495

Source: StreetEasy.com accessed October, 2020.

No Action Condition

Project Area

In the No Action condition, it is assumed that Sites 4, 5, and 7 will be redeveloped in phases, and the remaining development sites (Sites 1, 2, 3, 6, and 8) would not be redeveloped. By 2028, Site 7 (the current Hotel Pennsylvania) will be redeveloped into a new office building with ground-floor local retail. By 2038, Site 4 (1 Penn West) will be redeveloped into a 310-room hotel with 630 residential units while Site 5 (1 Penn East) will be redeveloped with 172,525 gsf of office and 11,000 gsf of retail. In total, by 2038, the sites will contain an estimated 3.1 million gsf of office space, 243,000 gsf of destination retail space, 420,000 gsf of local retail, 758 residential units, and 961 hotel rooms. By 2028, three additional projects are expected to be completed in the Project

⁸ Median asking rent trends available from StreetEasy.com are for a Chelsea market area, which is roughly bounded by the Hudson River to the west, 30th Street to the north, Sixth Avenue to the east, and 14th Street to the south. The Midtown South market area is roughly bounded by Eighth Avenue to the west, 42nd Street to the north, Madison Avenue to the east, and 30th Street to the south. The remainder of the primary study area is part of the Hudson Yards market area for which trend data were not available. The percent increases cited are based on 2010-2019 data, adjusted for inflation.

⁹ In addition to the Chelsea, Midtown South, and Hudson Yards subareas that overlap with the primary study area, the secondary study area overlaps with the Flatiron market area, which has experienced an estimated 10.5 percent increase in asking rents between 2010 and 2019. StreetEasy defines the Flatiron market as an area bounded by Sixth Avenue to the west, 31st Street to the north, Lexington Avenue to the east, and 14th Street to the south.

Area irrespective of the Residential Alternative: the Farley Office Building, 1 Penn Plaza lobby expansion and plaza modification, and the 2 Penn Plaza office expansion.

Primary Study Area

Outside of the Project Area but within the primary study area there are 28 known projects that will be completed by 2028. Collectively, these projects will develop an estimated 2,800 dwelling units, 2,700 hotel rooms, 4.9 million gsf of office, and 171,000 gsf of retail. No additional projects are assumed to be completed in the primary study area by the 2038 analysis year.

Secondary Study Area

Outside of the primary study area within the secondary study area there are 39 known projects that will be completed by 2028, and an additional five projects that will be completed by 2038. Collectively (when accounting for planned projects within the primary study area, as well as No Action development on the Project Area's development sites), by 2038 there will be an additional 11,638 residential dwelling units built in the secondary study area.

CEQR Technical Manual Preliminary Assessment Criteria

The following assessment of the Residential Alternative utilizes the *CEQR Technical Manual's* three-step preliminary assessment criteria (in bold italics).

Step 1: Determine if the Residential Alternative would add new population with higher average incomes compared to the average incomes of the existing populations and any new population expected to reside in the study area without the Alternative.

The Residential Alternative would introduce a combination of market rate and permanently affordable residential units. It is therefore necessary to estimate incomes for the residents of both housing types.

Incomes of Market-Rate Unit Households

As a new housing product, the market-rate DUs would be expected to rent on the higher end of the range of market-rate asking rents in the primary study area. For purposes of a conservative analysis, the average asking rent for the upper quartile of listings was utilized to estimate market-rate renters' incomes, and it was assumed that households would pay 30 percent of their income toward rent.¹⁰ The resulting projected household incomes, shown in **Table 21-13**, range from nearly \$120,000 for households residing in studio units to over \$400,000 for households in three-bedroom units.

The overall average income for market-rate households would depend on the unit mixes on the development sites, which are not currently known. For purposes of analysis a weighted average was calculated based on the proportional rental unit mix found within the primary study area, resulting in an average household income of \$183,747 for households in market rate units, which is higher than the primary study area's average household income in 2018 (\$144,615), and similar to the secondary study area's income of \$183,189.

¹⁰ Based on U.S. Housing and Urban Development (HUD) affordability guidance where rent is estimated to be approximately 30 percent of total income.

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Table 21-13
Annual Household Income Projections for the Residential Alternative's
Market-Rate DUs

Unit Type	Projected Monthly Rent	Projected Annual Household Income
Studio	\$2,976	\$119,040
One Bedroom	\$4,057	\$162,280
Two Bedroom	\$6,238	\$249,520
Three bedroom	\$10,238	\$409,520
Weighted Average Total¹	\$4,594	\$183,747

Note:
1. Total average monthly rent is a weighted total based on the current rental unit mix in the primary study area.
Sources: AKRF, Inc. based on rental data from StreetEasy.com, accessed October, 2020.
U.S. Census Bureau, 2013-2018 ACS 5-Year Estimates; Social Explorer.

Incomes for Permanently Affordable Unit Households

The Residential Alternative would include the requirement that 30 percent of residential units in each building would be affordable to households with incomes averaging 80 percent AMI, which is consistent with Option 2 of the City's Mandatory Inclusionary Housing program.

New York City AMIs are calculated yearly by the U.S. Department of Housing and Urban Development (HUD). The estimated income for a single person household at 80 percent of AMI is \$63,680; the estimated income for a two-person household at 80 percent AMI is \$72,800.¹¹ HUD updates AMI annually. This analysis uses the most recent estimates of AMI and current market rents to provide a snapshot of the housing market in 2020.

The Residential Alternative would introduce an estimated 540 permanently affordable units that would be available to households with incomes averaging 80 percent of AMI. Given that the study area's household size averages between one and two persons per unit one could expect the incomes of households in the affordable units to be approximately \$69,250, which is below the primary study area's average household income in 2018 (\$144,615) and the secondary study area's average household income in 2018 (\$183,189).

Average Household Income for the Residential Alternative

Table 21-14 shows the projected average household income for the residents introduced as a result of the Proposed Project, when considering both the affordable and market-rate units. To derive this estimate, the average income of market rate units was multiplied by the total number of market rate units, and the average income of affordable units was multiplied by the total number of affordable units. These two numbers were then added together to determine the aggregate income for all the units, and the result was divided by the total number of units to determine an estimated average income for all units of \$149,360, with is within the margin of error, (+/-) \$14,009, of the average income of the primary study area and is less than the average income of the secondary study area population.

¹¹ For more information and AMI tables, please visit New York City Housing Preservation and Development (HPD)'s website <https://www1.nyc.gov/site/hpd/services-and-information/area-median-income.page>

Table 21-14
Weighted Average Income of Total Residential Alternative Population

	Income	Units	Aggregate Income (Income x Units)
Market rate	\$183,747	1,258	\$231,153,877
Affordable ¹	\$69,250	540	\$37,395,000
Total		1,798	\$268,548,877
Weighted Average Income of the Residential Alternative Population (Aggregate Income ÷ Total Units)			\$149,360

Note: 1. Affordable income is based on 80 percent AMI for one- to two- person families.

The Residential Alternative is not anticipated to result in a new population with higher incomes than the existing population or the No Action population. Therefore, the analysis of indirect residential displacement is concluded at Step 1, and no significant adverse impacts would occur as a result of the Residential Alternative. The projected income of the new population would be comparable to the average income of the existing population in the primary study area and lower than that of the secondary study area. Absent the proposed project, the primary and secondary study area is expected to continue to the existing trend of increasing rents and household incomes. The affordability requirement of the Residential Alternative would also result in more affordable units in the Project Area than in the No Action condition. Therefore, the Residential Alternative would not result in significant adverse impacts due to indirect residential displacement, and no further assessment of this concern is warranted.

COMMUNITY FACILITIES AND SERVICES

Like the Proposed Project, the Residential Alternative would result in the displacement of the existing Antonio Olivieri Drop-In Center, St. John the Baptist Roman Catholic Church, a branch of Touro College, and Campus Education (an English language training school) (see “Other Community Facilities” in Chapter 5, “Community Facilities”). As discussed in Chapter 5, the displacement of these other community facilities would not result in significant adverse impacts to community facilities under the Proposed Project or this alternative as there are other facilities that provide similar services nearby, some of the facilities serve only a small local population, and some of the facilities and services do not have unique locational needs and would likely be able to relocate.

Unlike the Proposed Project, the Residential Alternative would introduce a new residential population and would result in a demand for community facilities and services. The Residential Alternative would not meet the *CEQR Technical Manual* thresholds for detailed analysis of public schools, healthcare facilities, and police and fire protection (see Table 5-1 in Chapter 5, “Community Facilities.”) Therefore, as with the Proposed Project, the Residential Alternative would not result in significant adverse impacts in these areas. However, based on the *CEQR Technical Manual* screening thresholds, detailed analyses of libraries and early childhood programs is warranted under the Residential Alternative.

PUBLIC LIBRARIES

Methodology

According to the *CEQR Technical Manual*, a libraries analysis should focus principally on branch libraries and not on the major research or specialty libraries that may fall within the study area.

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Service areas for neighborhood branch libraries are based on the distance that residents would travel to use library services, typically not more than three-quarters of a mile (the library's catchment area). This libraries analysis compares the population generated by the Residential Alternative with the catchment area population of libraries available within an approximately $\frac{3}{4}$ -mile radius around the Project Area.

To determine the existing population of each library catchment area, 2015–2019 American Community Survey 5-Year Estimates data were assembled for all census tracts that fall primarily within $\frac{3}{4}$ -mile of each library. The catchment area population in the No Action condition was estimated by multiplying the number of new residential units in projects expected to be complete by 2038 that are located within the library's $\frac{3}{4}$ -mile catchment areas by an average household size of 1.61 persons (the average household size for Manhattan Community District 5 according to 2010 U.S. Census data), and adding the new population to the existing population in that catchment area. The catchment area population in the With Action condition was estimated by adding the anticipated population that would result from the Residential Alternative to each library catchment area.

New population in the No Action and With Action conditions was added to the existing catchment area population. According to the *CEQR Technical Manual*, if a project would increase the libraries' catchment area population by five percent or more, and this increase would impair the delivery of library services in the study area, a significant impact could occur.

Existing Conditions

The Project Area is served by the New York Public Library (NYPL) system, which includes 92 locations and houses approximately 53 million physical items and 900,345 digital materials. Three NYPL neighborhood libraries are located within three-quarters of a mile of the Project Area. These libraries serve a catchment area population of 461,711, and have approximately 747,466 total holdings (see **Table 21-15**). Each public library serving the study area is described in more detail below.

The Kips Bay Library Branch is located at 466 Third Avenue on the corner of East 32nd Street and Third Avenue, and has served the neighborhood since March 1972. This branch is ADA-accessible and offers a multitude of online classes and events such as teen art hour, information sessions on library collections, and children's book discussions. During the current COVID-19 pandemic, the Kips Bay Library Branch offers grab-and-go service, which allows patrons to access a limited area of the branch to return materials and pick up holdings. The library has approximately 52,633 holdings.

The Stephen A. Schwarzman Building/Mid-Manhattan Library at 42nd Street Branch, often referred to as the "main branch," is located at 476 Fifth Avenue between Sixth and Fifth Avenues and 40th and 42nd Streets, adjacent to Bryant Park, and has served the neighborhood since 1901. As NYPL's flagship location, the Stephen A. Schwarzman building houses approximately 15 million items as well as research collections in the humanities and social sciences, non-circulating graduate-level collections, and a circulating children's collection. The library is ADA-accessible and has approximately 625,160 holdings.

Table 21-15
Public Libraries Serving the Study Area

Library Name	Address	Holdings	Catchment Area Population ²
Kips Bay Library	466 Third Avenue	52,633	161,030
Stephen A. Schwarzman Building/Mid-Manhattan Library at 42nd Street	476 Fifth Avenue	625,160	154,236
Muhlenberg Library	209 West 23rd Street	69,673	146,445
	TOTAL	747,466	461,711

Notes:

¹ Holdings include books, CD-ROMS, DVDs, and videotapes.

² 2015–2019 American Community Survey 5-Year Estimates data were assembled for all census tracts that fall primarily within $\frac{3}{4}$ -mile of each library, then totaled for the study area.

Sources: New York Public Library (NYPL); 2015–2019 American Community Survey 5-Year Estimates; NYC Department of City Planning Selected Facilities and Program Sites.

The Muhlenberg Library Branch is located at 209 West 23rd Street on the corner of West 23rd Street and Seventh Avenue and has served the neighborhood since 1906. As part of the NYPL Adopt-a-Branch program, the branch underwent a complete renovation and interior remodel in 2000. The branch contains an adult area on the main floor, a young adult section and a children's room on the second floor, and a community room for public programs and meetings on the third floor. During the current COVID-19 pandemic, the library offers grab-and-go service, which allows patrons to access a limited area of the branch to return materials and pick up holdings and online classes and events such as online book discussions. The library is ADA-accessible with approximately 69,673 holdings.

Residents can go to any NYPL branch and order books from any other library branch. During the current COVID-19 pandemic, the NYPL website includes a collection of community support resource links for food security, housing and tenant rights, personal finance, business and career, as well as health and wellness.

No Action Condition

In the No Action condition, the existing libraries will continue to serve the Project Area. No changes to the holdings of the facilities are expected for the purpose of this analysis. In addition, the catchment area population of the libraries will increase as a result of new development projects completed by the 2038 analysis year (see Table 21-16).

Table 21-16
Catchment Area Population: No Action Condition

Library Name	Existing Catchment Area Population ¹	New Residents ²	New Catchment Area Population
Kips Bay Library	161,030	874	161,904
Stephen A. Schwarzman Building/Mid-Manhattan Library at 42nd Street	154,236	3,801	158,037
Muhlenberg Library	146,445	14,605	161,050

Notes:

¹ 2015–2019 American Community Survey 5-Year Estimates data were assembled for all census tracts that fall primarily within $\frac{3}{4}$ -mile of each library.

² Based on an average household size of 1.61 persons (the average household size for Manhattan Community District 5 according to 2010 U.S. Census data). Developments located within more than one library catchment area have been assigned to the most proximate library.

Sources: NYPL; 2015–2019 American Community Survey 5-Year Estimates; NYC Department of City Planning Selected Facilities and Program Sites; AKRF, Inc.

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In the No Action condition, approximately 874; 3,801; and 14,605 new residents will be added to the Kips Bay Library, Stephen A. Schwarzman Building/Mid-Manhattan Library at 42nd Street, and the Muhlenberg Library Branch catchment areas, respectively.

The Future With the Residential Alternative

According to the *CEQR Technical Manual*, if a project increases the study area population by five percent or more as compared with the No Action condition, this increase may impair the delivery of library services in the study area, and a significant adverse impact could occur.

The Residential Alternative would result in an increment of approximately 1,040 dwelling units (1,674 residents) over the No Action Condition. As a conservative assumption, the entire Residential Alternative population was added to each of the three libraries' catchment areas (rather than being distributed among the three).

As shown in **Table 21-17**, for each of the study area libraries, the catchment area population increase attributable to the population generated by the Residential Alternative would be below the five percent threshold and would not result in a noticeable change in delivery of library services. Therefore, the Residential Alternative would not result in a significant adverse impact to public libraries.

Table 21-17
Catchment Area Population Increase: Residential Alternative

Library Name	Catchment Area Population—No Action Condition	Population Increase due to the Residential Alternative	Catchment Area Population with the Residential Alternative	Population Increase
Kips Bay Library	161,904	1,674	163,578	1.03%
Stephen A. Schwarzman Building/Mid-Manhattan Library at 42nd Street	158,037	1,674	159,711	1.06%
Muhlenberg Library	161,050	1,674	162,724	1.04%

Sources: NYPL; 2015–2019 American Community Survey 5-Year Estimates; AKRF, Inc.

EARLY CHILDHOOD PROGRAMS

Methodology

Publicly financed early childhood programs are under the auspices of the New York City Department of Education's (DOE) Early Childhood Education Services division. Early childhood programs are comprised of EarlyLearn NYC (Child Care and Head Start programs), 3-K, and Pre-K for All. While 3-K and Pre-K programs are free for all three- and four-year-old children in New York City, there are eligibility requirements for children to enroll in EarlyLearn Child Care and Early Head Start programs. Publicly financed child care services are available for income-eligible children up to the age of 13. In order for a family to receive subsidized child care services, the family must meet specific financial and social eligibility criteria that are determined by federal, state, and local regulations. In general, children in families that have incomes at or below 200 percent of the Federal Poverty Level (FPL), depending on family size, are financially eligible, although in some cases eligibility can go up to 275 percent of the FPL. ACS has also noted that 60 percent of the population utilizing subsidized child care services are in receipt of cash assistance and have incomes below 100 percent FPL. The family must also have an approved “reason for

care,” such as participation in an eligible program. Head Start is a federally funded child care program that provides children with half-day or full-day early childhood education; program eligibility is limited to families with incomes 130 percent or less of FPL.

As described in the *CEQR Technical Manual*, the City’s affordable housing market is pegged to AMI rather than FPL. In the Residential Alternative, the affordable units would be affordable to households averaging 80 percent AMI. Because family incomes at or below 200 percent FPL fall under 80 percent AMI, for the purposes of the early childhood care analysis, the number of affordable housing units were used as a conservative proxy of the number of dwelling units that may contain families whose children would be eligible for publicly funded child care services in the Residential Alternative.

Children in publicly funded child care are served through enrollment in contracted EarlyLearn NYC programs or by vouchers for private and nonprofit organizations that operate child care programs throughout the City. Additionally, registered or licensed providers can offer family-based child care in their homes. Informal child care can be provided by a relative or neighbor for no more than two children. Children between the ages of six weeks and 13 years can be cared for either in group early childhood programs licensed by the Department of Health or in the homes of registered child care providers. ACS also issues vouchers to eligible families, which may be used by parents to pay for child care from any legal child care provider in the City.

Consistent with the methodologies of the *CEQR Technical Manual*, this analysis of early childhood programs focuses on services for children under age six, as older eligible children are expected to be in school for most of the day. Publicly funded early childhood programs, which provide care for children of income-eligible households, are under the auspices of the Division of Early Childhood Education within DOE, after a recent contract transfer from ACS. Space for one child in such early childhood programs is termed a “slot.” These slots may be in group child care or Head Start centers, or they may be in the form of family-based child care in which up to 16 children are placed under the care of a licensed provider and an assistant in a home setting.

Because there are no locational requirements for enrollment in early childhood programs, and some parents or guardians choose a child care center close to their employment rather than their residence, the service areas of these facilities can be quite large and are not subject to strict delineation in order to identify a study area. According to the current methodology for early childhood program analyses in the *CEQR Technical Manual*, in general the locations of publicly funded group early childhood programs within 1½ miles of a project site should be shown, reflecting the fact that the centers closest to a given site are more likely to be subject to increased demand. However, the size of the study area in transit-rich areas may be somewhat larger than 1½ miles. Because much of the Project Area is a transit-rich area (containing several transit hubs and subway stations within Midtown Manhattan), the locations of publicly funded group early childhood programs within two miles of the Project Area have been shown. Current enrollment data for the early childhood programs closest to the Project Area were gathered from ACS, the most recent update of the enrollment data.

The child care enrollment in the No Action condition was estimated by multiplying the number of new affordable housing units expected in the study area by the *CEQR Technical Manual* multipliers for estimating the number of children under age six eligible for publicly funded child care services. For Manhattan, the multiplier estimates 0.115 public child care-eligible children under age six per affordable housing unit.

Empire Station Complex Civic and Land Use Improvement Project

The child care-eligible population introduced by the Residential Alternative was also estimated using the *CEQR Technical Manual* child care multipliers. The population of public child care-eligible children under age six was then added to the child care enrollment calculated in the No Action condition. According to the *CEQR Technical Manual*, if an action would result in a demand for slots greater than remaining capacity of early childhood programs, and if that demand constitutes an increase of five percent or more of the collective capacity of the early childhood programs serving the respective study area, a significant adverse impact may result.

Existing Conditions

There are four publicly funded early childhood programs within the study area (see **Figure 21-3**). The group child care and Head Start facilities have a total capacity of 164 slots and have a surplus of 28 available slots (83 percent utilization). **Table 21-18** shows the current capacity and enrollment for these facilities. Family-based early childhood programs and informal care arrangements provide additional slots in the study area, but these slots are not included in the quantitative analysis.

Table 21-18
Publicly Funded Early Childhood Programs Serving the Study Area

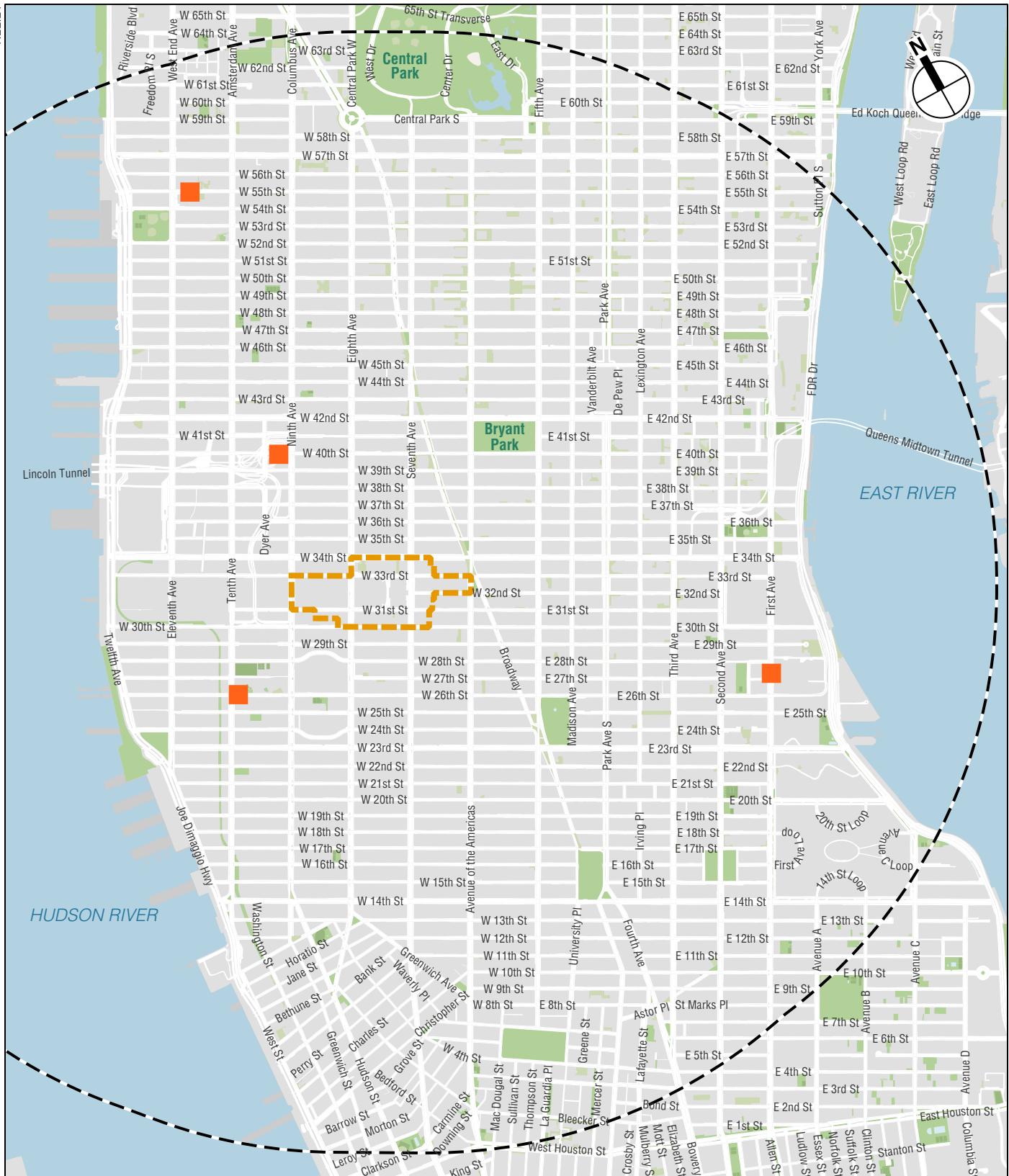
Contractor Name	Address	Enrollment	Capacity	Available Slots	Utilization Rate
Bellevue Day Care Inc.	462 First Avenue	26	29	3	90%
Hudson Guild Inc.	459 West 26th Street	56	73	17	77%
Hudson Guild Inc.	410 West 40th Street	11	12	1	92%
YWCA of the City of NY	538 West 55th Street	43	50	7	86%
	Total	136	164	28	83%

Note: See Figure 21-3.

Source: NYC DOE Division of Early Childhood Education, April 2019.

No Action Condition

Planned or proposed development projects in the child care study area (2 miles from the Project Area), including but not limited to No Action development associated with the Residential Alternative, will introduce approximately 2,674 new affordable housing units (including the 126 affordable units generated by the future Site 4 development assumed in the No Action condition). Based on the recommended generation rates for the projection of children eligible for publicly funded day care multipliers (discussed above), this amount of development will introduce approximately 308 new children under the age of six who will be eligible for publicly funded child care programs. Based on these assumptions, the number of available slots will decrease. As shown in **Table 21-19**, when the estimated 308 children under age six introduced by planned development projects in the No Action condition are added to this total, early childhood programs in the study area will operate with a deficit of 280 slots (271 percent utilization) by the 2038 analysis year. This projection conservatively assumes that, notwithstanding the projected increase in the population, there will be no new early childcare facilities in the study area by 2038.



Project Area

Study Area (1.5-mile perimeter)

Early Childhood Programs

EMPIRE STATION COMPLEX CIVIC AND LAND USE IMPROVEMENT PROJECT

Residential Alternative -
Early Childhood Programs

Figure 21-3

0 2,000 FEET

Table 21-19
Estimated Public Early Childhood Program Enrollment, Capacity, and Utilization

	Enrollment	Capacity	Available Slots	Utilization Rate	Change in Utilization
No Action Condition	444	164	-280	271%	-
With Action Condition	492	164	-328	300%	29.27%

Note: Affordable units reflect units between extremely low income to moderate income (80 percent AMI or below). If income rate was not able to be determined, all units were considered affordable.

Sources: NYC DOE Division of Early Childhood Education, April 2019; AKRF, Inc.

The Future With the Residential Alternative

The Residential Alternative is estimated to introduce an increment of up to approximately 414 affordable housing units. As explained above, it is conservatively assumed that all of these units would meet the eligibility criteria for publicly funded child care, even though some of the households in the affordable housing units are likely to have incomes exceeding the eligible criteria for publicly funded child care services. Based on the *CEQR Technical Manual* child care multipliers, the development of an additional 414 affordable housing units would result in approximately 48 additional children under the age of six who would be eligible for publicly funded child care programs.

With the addition of these children, early childhood programs in the study area would operate at 300 percent utilization with a deficit of 328 slots (see **Table 21-19**). Total enrollment in the study area would increase to 492 children, compared with a capacity of 164 slots, which represents an increase in the utilization rate of approximately 29.27 percentage points over the No Action condition.

As noted above, the *CEQR Technical Manual* guidelines indicate that a demand for slots greater than the remaining capacity of early childhood programs and an increase in demand of five percentage points of the study area capacity could result in a significant adverse impact. In the With Action condition, early childhood programs in the study area would operate over capacity by approximately 328 slots and the utilization rate would increase by 29.27 percentage points as compared with the No Action condition. Therefore, the Residential Alternative would result in a significant adverse impact on early childhood programs.

Several factors may reduce the number of children in need of publicly funded child care slots in early childhood programs. Families in the study area could make use of alternatives to publicly funded early childhood programs. There are slots at homes licensed to provide family-based child care that families of eligible children could elect to use instead of public center child care. As noted above, these facilities provide additional slots in the study area but are not included in the quantitative analysis. Parents of eligible children are also not restricted to enrolling their children in early childhood programs in a specific geographical area and could use public early childhood programs outside of the study area. Furthermore, as noted above, the analysis conservatively assumes that, notwithstanding the projected increase in the population, there will be no new early childcare facilities in the study area by 2038.

Approximately 15 additional slots would be needed in order for the increase in utilization rate to be less than five percentage points of the study area capacity and therefore, mitigate the significant adverse impact on early childhood programs.

If the Residential Alternative were to be selected, possible mitigation measures for this significant adverse impact would be developed by ESD, as lead agency, in consultation with the DOE's

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Division of Early Childhood Education and could include provision of suitable space in one or more of the development sites for early childhood programs, provision of suitable locations off-site and within a reasonable distance (at a rate affordable to DOE providers), or funding for making program or physical improvements to support additional capacity at existing facilities if determined feasible through consultation with DOE's Division of Early Childhood Education. If the Residential Alternative is to be selected, ESD would explore the practicability of implementing mitigation measures.

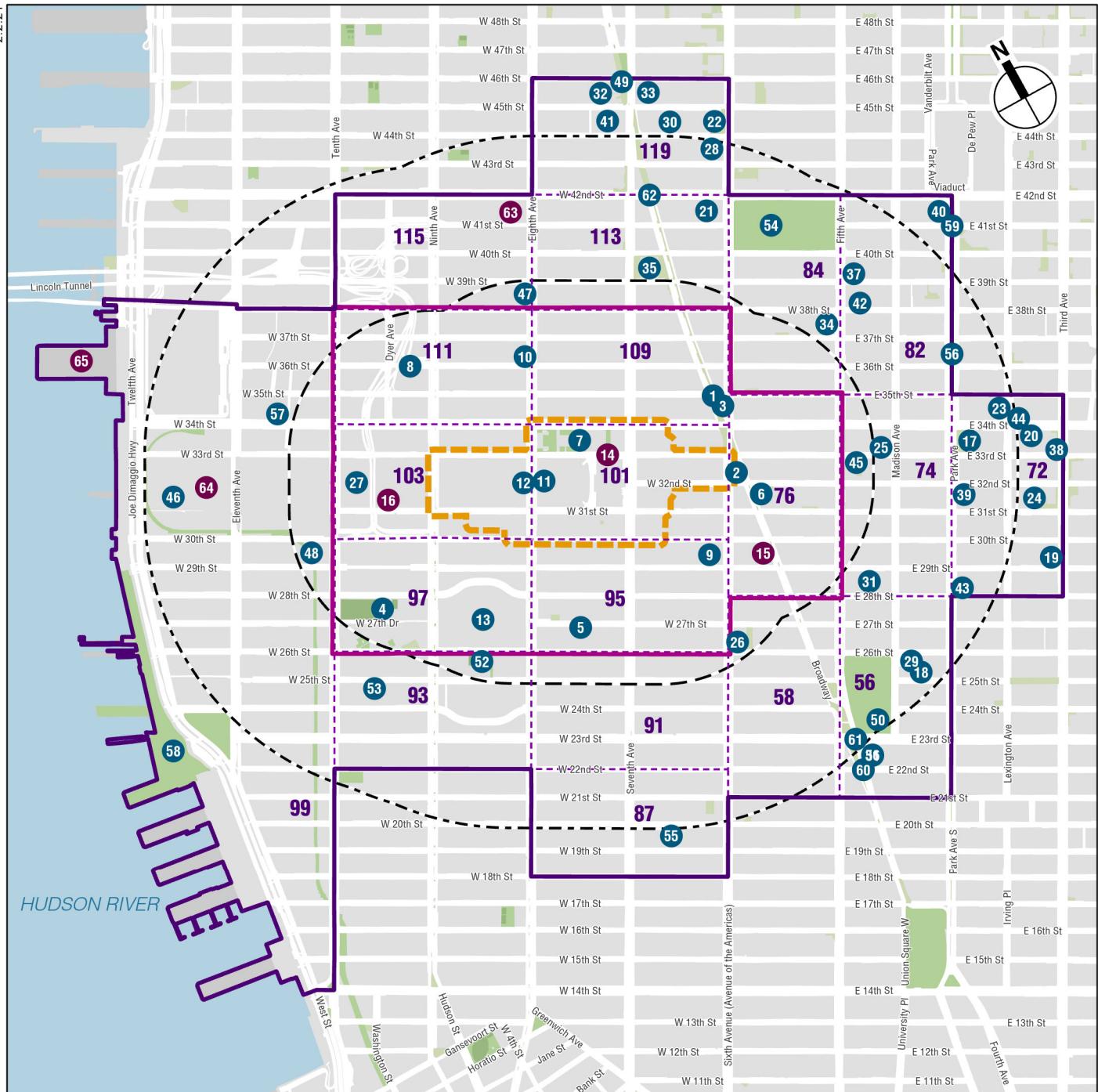
OPEN SPACE

With the Residential Alternative, like the Proposed Project, the development of Site 5 would result in the displacement of the east plaza on the 1 Penn Plaza POPS. Therefore, the Residential Alternative would result in the same direct impact to open space that would occur with the Proposed Project. The Residential Alternative would also introduce the same through-block public plaza on Site 2, and it would provide the same improvements to Plaza 33 that would occur with the Proposed Project.

Unlike the Proposed Project, the Residential Alternative would result in a substantial new residential population. Therefore, a residential open space analysis is presented below. In accordance with *CEQR Technical Manual* guidance, this analysis uses a ½-mile study area (the residential study area) and incorporating 49 additional open space resources within the study area beyond those presented in Chapter 6, “Open Space” Consistent with *CEQR* guidance, the study area was adjusted to include all census tracts with at least 50 percent of their area within a ½-mile of the Project Area (see **Figure 21-4** and **Table 21-20**).

Table 21-20
Study Area Open Space Inventory

Map ID No.1	Name	Location	Acres	Active	Passive
1	Broadway Boulevard Plazas	Broadway between West 32nd and 41st Streets	1.05	0.00	1.05
2	Greeley Square	Intersection of Sixth Avenue and Broadway, between West 32nd and 33rd Streets	0.14	0.00	0.14
3	Herald Square	Intersection of Sixth Avenue, Broadway, and West 34th Street	0.21	0.00	0.21
4	Chelsea Park	West 28th Street between Ninth and Tenth Avenues	3.91	2.93	0.98
5	230 West 27th Street POPS	West 27th Street between Seventh and Eighth Avenues	0.11	0.00	0.11
6	1250 Broadway POPS	Broadway between West 31st and 32nd Streets	0.23	0.00	0.23
7	One Penn Plaza POPS	Block between Seventh and Eighth Avenues, West 33rd and 34th Streets	1.24	0.00	1.24
8	Dyer Avenue/37th Street Plaza	Dyer Avenue between 35th and 37th Streets	0.21	0.00	0.21
9	835 Sixth Avenue POPS	West side of Sixth Avenue between West 29th and 30th Streets	0.24	0.00	0.24
10	525 Eighth Avenue POPS	Northwest Corner of Eighth Avenue and West 36th Street	0.06	0.00	0.06
11	Madison Square Garden POPS	East side of Eighth Avenue between West 31st and West 33rd Streets	0.41	0.00	0.41
12	James A. Farley Post Office Building Steps	West side of Eighth Avenue between West 31st and West 33rd Streets	0.33	0.00	0.33
13	Penn South	West 26th Street to West 29th Street between Eighth and Ninth Avenues	2.87	0.50	2.37
17	3 Park Avenue POPS	East side of Park Avenue between East 33rd and 34th Streets	0.20	0.00	0.20
18	45 East 25th Street POPS	North side of East 25th Street between Park Avenue South and Madison Avenue	0.05	0.00	0.05
19	155 East 29th Street POPS	Northwest Corner of East 29th Street and Third Avenue	0.14	0.00	0.14
20	150 East 34th Street POPS	South side of East 34th Street between Third and Lexington Avenues	0.08	0.00	0.08



- Project Area
- 1/4-mile Radius Around Project Area
- 1/2-mile Radius Around Project Area
- Commercial Study Area
- Residential Study Area
- 101 Census Tract
- Existing Open Space
- No Action Open Space

Table 21-20 (cont'd)
Study Area Open Space Inventory

Map ID No.1	Name	Location	Acres	Active	Passive
21	1095 Sixth Avenue POPS	West side of Sixth Avenue between West 41st and 42nd Streets	0.40	0.00	0.40
22	1155 Sixth Avenue POPS	West side of Sixth Avenue between West 44th and 45th Streets	0.13	0.00	0.13
23	132 East 35th Street POPS	West side of Lexington Avenue between East 34th and 35th Streets	0.07	0.00	0.07
24	155 East 31st Street POPS	North side of East 31st Street between Third and Lexington Avenues	0.14	0.00	0.14
25	172 Madison Avenue POPS	Northwest corner of East 33rd Street and Madison Avenue	0.08	0.00	0.08
26	776 Sixth Avenue POPS	East side of Sixth Avenue between West 26th and 27th Streets	0.23	0.00	0.23
27	450 West 33rd Street POPS/The Vessel	Hudson Boulevard between Tenth and Eleventh Avenues	3.72	0.00	3.72
28	1133 Sixth Avenue POPS	West side of Sixth Avenue between West 33rd and 34th Streets	0.12	0.00	0.12
29	41 Madison Avenue POPS	Southeast corner of East 26th Street and Madison Avenue	0.12	0.00	0.12
30	145 West 44th Street POPS	North side of West 44th Street between Sixth Avenue and Broadway	0.07	0.00	0.07
31	10 East 29th Street	South side of East 29th Street between Madison and Fifth Avenues	0.29	0.00	0.29
32	1535 Broadway POPS	West side of Broadway between West 45th and 46th Streets	0.78	0.00	0.78
33	1545 Broadwey POPS	East side of Broadway between West 45th and West 46th Streets	0.07	0.00	0.07
34	420 Fifth Avenue POPS	West side of Fifth Avenue between West 37th and 38th Streets	0.09	0.00	0.09
35	1411 Broadway POPS	Block bounded by Broadway and Seventh Avenue and West 39th and 40th Streets	0.37	0.00	0.37
36	5 East 22nd Street POPS	East side of Broadway between East 22nd and 23rd Streets	0.29	0.00	0.29
37	445 Fifth Avenue POPS	Northeast corner of East 39th Street and Fifth Avenue	0.05	0.00	0.05
38	166 East 34th Street POPS	West side of Third Avenue between East 33rd and 34th Streets	0.10	0.00	0.10
39	475 Park Avenue South POPS	Southeast corner of East 32nd Street and Park Avenue South	0.18	0.00	0.18
40	120 Park Avenue POPS	Southwest corner of East 42nd Street and Park Avenue	0.21	0.00	0.21
41	1515 Broadway POPS/Shubert Alley	West side of Broadway between West 44th and 45th Streets	0.28	0.00	0.28
42	425 Fifth Avenue POPS	Northeast corner of East 38th Street and Fifth Avenue.	0.08	0.00	0.08
43	407 Fifth Avenue South POPS	Northeast corner of East 28th Street and Park Avenue South	0.07	0.00	0.07
44	243 Lexington Avenue POPS	Northeast corner of Lexington Avenue and East 34th Street	0.02	0.00	0.02
45	325 Fifth Avenue POPS	East side of Fifth Avenue between 32nd and 33rd Streets	0.19	0.00	0.19
46	500 West 30th Street POPS	West side of Tenth Avenue between West 29th and 30th Streets	0.34	0.00	0.34
47	585 Eighth Avenue POPS	West side of Eighth Avenue between West 38th and West 39th Streets	0.05	0.00	0.05
48	The High Line	Gansevoort Street to West 30th Street between Washington Street and Eleventh Avenue	6.73	0.00	6.73
49	Father Duffy Square	Triangle between 45th and 47th Streets, Broadway and Seventh Avenue	0.08	0.00	0.08
50	Madison Square Park	Block between Broadway and Madison Avenue, East 23rd and East 26th Streets	6.24	3.12	3.12
51	Worth Square	Square between Broadway and Fifth Avenue, West 24th and West 25th Streets	0.27	0.00	0.27
52	Penn South Playground	West 26th Street, between Eighth and Ninth Avenues	0.60	0.60	0.00
53	Chelsea Recreation Center	430 West 25th Street between Ninth and Tenth Avenues	1.30	1.00	0.30
54	Bryant Park	Block between Fifth and Sixth Avenues, West 40th and West 42nd Streets	9.60	0.00	9.60
55	Chelsea Green	West 20th Street between Avenue of the Americas and Seventh Avenue	0.24	0.12	0.12
56	Park Avenue Malls	Park Avenue between East 34th and East 39th Street	0.46	0.00	0.46

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Table 21-20 (cont'd)
Study Area Open Space Inventory

Map ID No.1	Name	Location	Acres	Active	Passive
57	Bella Abzug Park	Hudson Boulevard between West 33rd Street and West 36th Street	2.15	2.00	0.15
58	Hudson River Park and Route 9A Bikeway	Twelfth Avenue from West 22nd Street to West 38th Street	20.64	11.41	9.23
59	Pershing Square Plaza	Park Avenue between East 41st and 42nd Streets	0.26	0.00	0.26
60	Flatiron Plaza	Intersection of Broadway, Fifth Avenue and East 23rd Street	0.90	0.00	0.90
61	Madison/Worth Square Plazas	Broadway between East 21st and 23rd Streets	0.46	0.00	0.46
62	Times Square Plaza	Broadway and Seventh Avenue between West 42nd and West 45th Streets	2.09	0.00	2.09
			Totals	72.04	21.68
Notes:	In addition to the above resources, approximately 11.31 acres of open space (1.43 active and 9.88 passive) would be added to the residential open space study area through No Build projects at: Port Authority Bus Terminal, the Western Rail Yards, and Pier 76 by the analysis year of 2038 (numbered as sites 63-65, respectively, on Figure 21-4).				
Sources:	NYC Parks; Municipal Arts Society POPS Mapper; 1 Penn Plaza EAS, 15 Penn Plaza EIS, and Western Rail Yard EIS, NearMap imagery service.				

Tables 21-21 and 21-22 present a comparison of the open space ratios between the Residential Alternative and the Proposed Project for the Commercial ($\frac{1}{4}$ -mile) and Residential ($\frac{1}{2}$ -mile) study areas.

Table 21-21
Comparison of Residential Alternative and Proposed Project Open Space Ratios—2028

Ratio	DCP Open Space Guideline	Open Space Ratios		
		Residential Alternative	Percent Change from No Action Condition	Proposed Project
Commercial (1/4-Mile) Study Area				
Passive/Workers	0.15	0.036	0.58%	0.036
Passive/Total Population	Weighted 0.18	0.033	0.59%	0.033
Residential (1/2-Mile) Study Area				
Total/Residents	2.5	0.878	0.24%	N/A
Passive/Residents	0.5	0.622	0.24%	N/A
Active/Residents	2.0	0.256	0.24%	N/A

Notes: Ratios in acres per 1,000 people.
* Weighted average combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents and varies between worker and residential study areas.

Table 21-22
Comparison of Residential Alternative and
Proposed Project Open Space Ratios—2038

Ratio	DCP Open Space Guideline	Open Space Ratios			
		Residential Alternative	Percent Change from No Action Condition	Proposed Project	Percent Change from No Action Condition
Commercial (1/4-Mile) Study Area					
Passive/Workers	0.15	0.032	-6.93%	0.031	-8.87%
Passive/Total Population	Weighted 0.19 (Alt) / 0.18 (Project)	0.028	-6.48%	0.029	-8.17%
Residential (1/2-Mile) Study Area					
Total/Residents	2.5	0.902	-1.13%	N/A	N/A
Passive/Residents	0.5	0.659	-0.89%	N/A	N/A
Active/Residents	2.0	0.243	-1.76%	N/A	N/A

Notes: Ratios in acres per 1,000 people.
 * Weighted average combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents and varies between worker and residential study areas.

COMMERCIAL STUDY AREA

As shown in **Tables 21-21 and 21-22**, the open space ratios for the commercial ($\frac{1}{4}$ -mile) study area for the Residential Alternative—similar to the Proposed Project—would be less than the recommended open space guideline ratios. Like the Proposed Project, the Residential Alternative would result in decreases to the open space ratios of more than five percent compared to the No Action condition in the commercial study area.

As with the Proposed Project, the Residential Alternative would introduce new and enhanced open spaces and other public realm improvements that would benefit workers and residents of the surrounding neighborhoods. However, like the Proposed Project, it would also introduce a substantial new worker population that would overburden existing and proposed passive open spaces, particularly during the midday hours when the open spaces would be most heavily utilized by a multitude of users in addition to workers. Therefore, as with the Proposed Project, the Residential Alternative would result in a significant adverse indirect impact to open space. Potential mitigation measures for the significant adverse open space impacts are described in Chapter 22, “Mitigation,” and would also be applicable to the Residential Alternative.

RESIDENTIAL STUDY AREA

Quantitative Assessment

With regard to the open space ratios for the residential ($\frac{1}{2}$ -mile) study area, the Residential Alternative would result in open space ratios below the guidelines for total and active open space (passive ratios would be above the guidelines), but the percent change for each ratio would be less than five percent compared to the No Action Condition.

Qualitative Assessment

Within the residential study area, the demand for active recreational opportunities is served by several playgrounds and parks such as Chelsea Park (good condition/moderate utilization, with playground, basketball courts and ball fields), Penn South open spaces (good condition/moderate

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utilization, with playground), Madison Square Park (excellent condition/high utilization, with playground), Chelsea Green (excellent condition/high utilization with playground), Bella Abzug Park (excellent condition/high utilization, with playground), Chelsea Recreation Center (good condition/moderate utilization, with gym, pool dance facilities, sports courts and fitness center), and a portion of Hudson River Park (excellent condition/high utilization, with playground, skate park, sports courts and bikeway), including new open space and recreational uses planned at Pier 76.

Beyond the residential study area boundary to the west (not included in the quantitative analysis) are additional active recreational amenities associated with Hudson River Park. Hudson River Park is considered a “destination park,” and residents would typically travel farther than the $\frac{1}{2}$ -mile extent of the residential study area to enjoy the open space and recreational amenities within it (and many of the residents in the residential study area live within $\frac{1}{2}$ -mile of this resource). Residents utilizing the portions of Hudson River Park within the study area have the opportunity to connect to other areas of the park that lie beyond the study area boundaries. For example, a running and biking path runs along the west side of Manhattan from Battery Place at the southern tip of Manhattan, through the study area, and continues to West 59th Street where Hudson River Park connects with Riverside Park South.

DETERMINING IMPACT SIGNIFICANCE

As discussed above, the Residential Alternative would introduce a substantial new residential population that would result in demand for open spaces within the residential study area. While open space ratios would be below the guidelines for total and active open space (passive ratios would be above the guidelines), the percent change for each ratio would be less than five percent compared to the No Action Condition. The study area offers several open spaces with active recreational amenities, and opportunities to connect to other active amenities that lie just beyond the study area boundaries. Therefore, the Residential Alternative would not result in significant adverse impacts to open space in the residential ($\frac{1}{2}$ -mile) study area in either the 2028 or 2038 analysis years.

SHADOWS

With the Residential Alternative, development on Sites 2, 3, 5, 6, and 7 would be the same height and massing as with the Proposed Project. Development on Site 1 would be approximately 65 feet taller on its West 31st Street midblock component and approximately 130 feet shorter on its Eighth Avenue component, compared with the Proposed Project. Developments on Sites 4 and 8 would be approximately 250 feet taller and 260 feet shorter, respectively, with the Residential Alternative, compared to the Proposed Project.

In 2028, neither the Proposed Project nor the Residential Alternative would result in significant adverse shadow impacts. In 2038, the full build-out of the Proposed Project would result in significant adverse shadow impacts to nine sunlight-sensitive open space and historic architectural resources. The Residential Alternative would result in similar incremental shadows as the Proposed Project in 2038, and would result in significant adverse shadow impacts to the same nine sunlight-sensitive resources identified with the Proposed Project. Potential mitigation measures for the significant adverse shadows impacts are described in Chapter 22, “Mitigation,” and would also be applicable to the Residential Alternative.

HISTORIC AND CULTURAL RESOURCES

ARCHAEOLOGICAL RESOURCES

There are no areas of archaeological sensitivity within the Project Area. Therefore, as with the Proposed Project, the Residential Alternative would not result in significant adverse impacts on archaeological resources in either the 2028 or 2038 analysis years.

ARCHITECTURAL RESOURCES

As with the Proposed Project, the Residential Alternative would result in redevelopment on Sites 1 through 8. Therefore, in the 2028 analysis year, the Residential Alternative would result in the same significant adverse direct impacts on five architectural resources located on Sites 2 and 3 that would be removed for the proposed below-grade expansion of Penn Station, and one architectural resource on Site 7 that would be demolished to allow for new commercial development on Site 7. Measures that could partially mitigate these significant adverse impacts are described in Chapter 22, “Mitigation;” consultation with OPRHP regarding these potential measures is ongoing.

In addition, as with the Proposed Project in 2028, the Residential Alternative could have adverse physical impacts on six additional architectural resources that are located within 90 feet of proposed construction activities, close enough to potentially experience adverse construction-related impacts from ground-borne construction-period vibrations, falling debris, subsidence, collapse, or damage from construction machinery. The same six architectural resources could also be adversely affected by adjacent construction in the 2038 analysis year. Therefore, like the Proposed Project, CPPs to protect the six architectural resources within 90 feet of construction would be required to be developed and implemented in coordination with OPRHP under the Residential Alternative. For the NYCL and NYCL-eligible properties potentially affected by construction impacts, the construction protection plans would also be submitted to LPC for review and comment as with the Proposed Project.

Similar to the Proposed Project in 2038, the Residential Alternative would result in significant adverse shadows impacts on four architectural resources in the primary and secondary study areas and one architectural resource that is located north of the secondary study area. For the Proposed Project, ESD is undertaking continuing consultation with OPRHP regarding the development of mitigation measures that could partially mitigate certain of these significant adverse impacts. Those measures are described in Chapter 22, “Mitigation,” and would also be applicable to the Residential Alternative.

In 2038, the Proposed Project would result in significant adverse visual impacts to the Empire State Building by obstructing certain views east and northeast towards the architectural resource. This impact would occur as a result of development on Sites 2 and 6, and as these buildings would be the same in massing and heights under the Residential Alternative, the same visual impacts to the Empire State Building would occur. Potential measures to mitigate the significant adverse impacts to visual resources have been evaluated and are discussed in Chapter 22, “Mitigation.”

As with the Proposed Project, the Residential Alternative would include the expansion of Penn Station. Therefore, the siting, planning, property acquisition, and construction of the Penn Station expansion on Sites 1, 2, and 3 would be subject to separate actions and approvals by or for the involved public transportation agencies and would be subject to environmental review under NEPA and Section 106 of the National Historic Preservation Act.

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In addition, under the Proposed Project and the Residential Alternative, it is expected that the involved public transportation agencies would need to comply with Section 4(f) of the U.S. Department of Transportation Act of 1966.

As with the Proposed Project, under the Residential Alternative, potential measures to mitigate the adverse impacts resulting from construction on Sites 4 through 8 would likely be stipulated in a Letter of Resolution among ESD, the Metropolitan Transportation Authority (MTA), the developer, and OPRHP in accordance with Section 14.09 of the State Historic Preservation Act. It is anticipated that potential measures to mitigate the adverse effects resulting from the expansion of Penn Station on Sites 1, 2, and 3 would be stipulated in a Memorandum of Agreement or Programmatic Agreement among the lead federal agency, OPRHP acting in its capacity as the State Historic Preservation Office (SHPO), and other applicable parties in accordance with Section 106 regulations.

URBAN DESIGN AND VISUAL RESOURCES

Under the Residential Alternative, all sites would remain the same as in the Proposed Project except for Sites 1, 4, and 8, which would include residential development. Additionally, the existing Manhattan Mall building would remain on Site 8, with the residential program constructed above it.

URBAN DESIGN

As with the Proposed Project, the Residential Alternative would not result in a significant adverse impact to urban design in either the 2028 or 2038 analysis years. In 2028, the development on Site 7 would be the same as that of the Proposed Project and would be in keeping with the urban design of the secondary study area. As with the Proposed Project, under the Residential Alternative, it is anticipated that Sites 1, 2, and 3 would be cleared and devoid of buildings (except for the new service building for Penn Station and entrances to the Penn Station expansion) in the 2028 analysis year. The sites would not have any ground-floor amenities or elements of visual interest to the pedestrian and are expected to be surrounded by construction fencing except for construction-related access points to the proposed Penn Station expansion. As with the Proposed Project, under the Residential Alternative, this condition would have a negative effect on the pedestrian experience until the completion of the new buildings on the site in the 2038 analysis year .

The Residential Alternative, like the Proposed Project, would also not result in significant adverse impacts related to urban design in the 2038 analysis year. The Residential Alternative would not alter the location and arrangement of streets, street hierarchy, or block shapes in the secondary study area. With the Proposed Project, the proposed widened sidewalks adjacent to the development sites and proposed landscaping at the sidewalks and on the proposed shared streets would provide plantings and publicly accessible spaces for pedestrians to utilize and enjoy. Widened sidewalks would still occur under the Residential Alternative, except for adjacent to Site 8, as the Manhattan Mall building would remain in place and would not include the building setbacks of the Proposed Project at that Site. The pedestrian experience adjacent to Site 8 would remain as in existing conditions.

As with the Proposed Project, under the Residential Alternative, the anticipated building massings, consisting of base and tower configurations, would be consistent with the urban design of the larger and taller more recent buildings constructed in the second half of the 20th century and the buildings recently built or under construction within the past 20 years in the secondary study area. All the buildings under the Residential Alternative would be the same as the Proposed Project

except at Sites 1, 4, and 8. The buildings on Site 1 would be of similar height as with the Proposed Project, the building on Site 4 would be approximately 250 feet taller than that of the Proposed Project and the building on Site 8—to be constructed above the existing Manhattan Mall building—would be approximately 260 feet shorter than that of the Proposed Project. The buildings developed under the Residential Alternative would all be within the range of the illustrative heights of the Proposed Project, and would be consistent with trends in the secondary study area that have included and continue to include the development of very tall, large buildings. Like the Proposed Project, though most of the new buildings under the Residential Alternative would be among the tallest in the secondary study area, the height of the new buildings, when viewed in context with other tall towers visible to pedestrians within and outside the primary and secondary study areas, would not result in significant adverse impacts to the pedestrian experience.

VISUAL RESOURCES

Like the Proposed Project, the Residential Alternative would result in significant adverse impacts to visual resources in the 2028 analysis year. Demolition of the Church of St. John the Baptist on Site 2 is projected to occur as of the 2028 analysis year. As the base of Site 8 (the Manhattan Mall building) would remain as in existing conditions, the significant adverse impact resulting from the demolition of the copper skybridge spanning from Site 8 across West 32nd Street that would occur with the Proposed Project would not occur under the Residential Alternative (if the owner of Site 8 retains the skybridge). In addition, the obstruction of views east and northeast from certain vantage points within the western portion of the secondary study area towards the Empire State Building in the 2038 analysis year would constitute a significant adverse impact to visual resources. This impact would occur as a result of development on Sites 2 and 6, and as these building would be the same in massing and heights under the Residential Alternative, the same visual impacts with respect to the Empire State Building would occur. Potential measures to mitigate the significant adverse impacts to visual resources have been evaluated and are discussed in Chapter 22, “Mitigation.”

HAZARDOUS MATERIALS

Neither the Residential Alternative nor the Proposed Project would result in significant adverse impacts with respect to hazardous materials.

As with the Proposed Project, the Residential Alternative would involve redevelopment on Sites 1 through 8. However, under the Residential Alternative, the existing building on Site 8 would remain, and a new residential tower would be constructed above it. As with the Proposed Project, under the Residential Alternative, potential contamination may be present in both the subsurface (related primarily to localized former gas stations, historic fill, current and abandoned heating oil underground storage tanks [USTs], and historical operations) and inside buildings (primarily related to asbestos, LBP, and polychlorinated biphenyls [PCBs]). The Residential Alternative would be subject to the same standard precautionary measures required for the Proposed Project. With the implementation of those measures (e.g., identification of hazardous materials as part of Phase I and Phase II investigations,¹² and handling/disposal of hazardous materials in accordance with applicable regulations and under the direction of material management plans and health and

¹² Phase I Environmental Site Assessments (ESAs) and any subsequent subsurface investigations (Phase II Environmental Site Investigations), which may be required based on the conclusions of the Phase I ESA, as well as any necessary remedial plans would be required by ESD and prepared prior to site development.

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safety plans), no significant adverse impacts related to hazardous materials would be expected to occur as a result of construction of the Residential Alternative. Following construction of the Residential Alternative, with the proposed measures, there would be no further potential for significant adverse impacts.

WATER AND SEWER INFRASTRUCTURE

As with the Proposed Project, the Residential Alternative would not result in a significant adverse impact on the City's water supply, wastewater treatment, or stormwater management infrastructure in the 2038 analysis year. The Residential Alternative would include less overall development than the Proposed Project, resulting in less overall water demand and sanitary flow to the combined sewer system. Under the Residential Alternative, the overall volume of stormwater runoff is anticipated to remain the same as the roof coverage of each site would remain substantially the same as in the Proposed Project. Additionally, similar to the Proposed Project, the Residential Alternative would be required to conform to DEP design standards, reducing the peak stormwater runoff rate from the development sites. Additionally, with the incorporation of selected BMPs (specifically on-site detention), as well as any potential sewer improvements that would be required as part of the DEP site connection approval process, the peak stormwater runoff rates are expected to be reduced as compared to existing conditions. In addition, with the use of low-flow plumbing fixtures, the sanitary sewer flow is expected to be reduced as compared to existing conditions. Like the Proposed Project, the Residential Alternative is not expected to appreciably increase the frequency or volume of CSO events.

SOLID WASTE AND SANITATION SERVICES

As with the Proposed Project, the Residential Alternative would not result in a significant adverse impact on solid waste and sanitation services in either the 2028 or 2038 analysis years. In addition, the Residential Alternative, like the Proposed Project, would not directly affect a solid waste management facility.

The Residential Alternative would result in less overall development than the Proposed Project, and less total solid waste generated. While the Residential Alternative would result in less commercial solid waste than the Proposed Project, it would include residential waste that would not be generated by the Proposed Project. However, as with the Proposed Project, the increases in solid waste generation over the No Action condition would be negligible relative to the amount of solid waste handled by DSNY or private carters per day.¹³ As such, the Residential Alternative would not result in an increase in solid waste that would overburden available waste management capacity and there would be no significant adverse impact to solid waste. The Residential Alternative, like the Proposed Project, would not conflict with, or require any amendment to, the City's solid waste management objectives as stated in the SWMP.

ENERGY

As with the Proposed Project, the Residential Alternative would not result in a significant adverse impact related to energy in either the 2028 or 2038 analysis year. The Residential Alternative would result in less overall development than the Proposed Project, and include residential uses that result in less energy use than commercial uses. In addition, the Residential Alternative would be required to comply with the NYCECC, which governs performance requirements of HVAC

¹³ About DSNY: <https://www1.nyc.gov/assets/dsny/site/about>, accessed July 2020.

systems, as well as the exterior building envelope of new buildings. In compliance with this code, new development must meet standards for energy conservation, which include requirements relating to energy efficiency and combined thermal transmittance. Therefore, like the Proposed Project, the Residential Alternative would not result in a significant adverse impact related to energy.

TRANSPORTATION

Phase 1 of the Residential Alternative would result in the same Site 7 development as Phase 1 of the Proposed Project. Therefore, the potential transportation impacts would be the same as the significant adverse transportation impacts identified for Phase 1 of the Proposed Project in Chapter 14, “Transportation,” and unmitigated impacts would occur at the same locations under the Residential Alternative.

For Phase 2 full build-out of the Residential Alternative, peak hour trip estimates were developed based on the trip generation assumptions detailed in Chapter 14, “Transportation.” The full build-out of the Residential Alternative would generate 20,855; 19,939; and 19,865 incremental person trips and 1,844; 1,079; and 1,498 incremental vehicle trips during the weekday AM, midday, and PM peak hours, respectively. In comparison, the Phase 2 full build-out of the Proposed Project would generate 23,551; 23,028; and 22,586 incremental person trips and 2,157; 1,396; and 1,830 incremental vehicle trips during the weekday AM, midday, and PM peak hours, respectively. As summarized in **Table 21-23**, compared with the Phase 2 full build-out of the Proposed Project, the full build-out of the Residential Alternative would yield up to approximately 3,100 fewer peak hour person trips and 330 fewer peak hour vehicle trips.

Table 21-23
Comparison of Phase 2 Full Build-Out with Residential Alternative

Program	Peak Hour	In/Out	Person Trip							Vehicle Trip				
			Auto	Taxi	Subway	Railroad	PATH	Bus	Walk	Total	Auto	Taxi	Delivery	Total
Residential Alternative	AM	In	766	556	10,112	3,884	582	2,525	1,047	19,472	671	405	159	1,235
		Out	54	-13	676	183	37	126	320	1,383	45	405	159	609
		Total	820	543	10,788	4,067	619	2,651	1,367	20,855	716	810	318	1,844
	Midday	In	173	198	613	121	5	476	8,030	9,616	146	220	172	538
		Out	181	234	639	130	2	506	8,631	10,323	149	220	172	541
		Total	354	432	1,252	251	7	982	16,661	19,939	295	440	344	1,079
	PM	In	73	-53	702	204	36	151	423	1,536	64	361	30	455
		Out	745	499	9,390	3,576	540	2,343	1,236	18,329	652	361	30	1,043
		Total	818	446	10,092	3,780	576	2,494	1,659	19,865	716	722	60	1,498
Proposed Project Phase 2 Full Build-out	AM	In	903	722	11,821	4,559	684	2,960	1,195	22,844	786	494	182	1,462
		Out	32	67	326	172	22	114	-26	707	19	494	182	695
		Total	935	789	12,147	4,731	706	3,074	1,169	23,551	805	988	364	2,157
	Midday	In	198	395	585	137	0	539	9,266	11,120	159	339	197	695
		Out	207	410	611	148	-4	577	9,959	11,908	165	339	197	701
		Total	405	805	1,196	285	-4	1,116	19,225	23,028	324	678	394	1,396
	PM	In	71	113	512	214	29	150	261	1,350	52	480	35	567
		Out	861	677	10,864	4,181	627	2,727	1,299	21,236	748	480	35	1,263
		Total	932	790	11,376	4,395	656	2,877	1,560	22,586	800	960	70	1,830
Net Difference	AM	In	-137	-166	-1,709	-675	-102	-435	-148	-3,372	-115	-89	-23	-227
		Out	22	-80	350	11	15	12	346	676	26	-89	-23	-86
		Total	-115	-246	-1,359	-664	-87	-423	198	-2,696	-89	-178	-46	-313
	Midday	In	-25	-197	28	-16	5	-63	-1,236	-1,504	-13	-119	-25	-157
		Out	-26	-176	28	-18	6	-71	-1,328	-1,585	-16	-119	-25	-160
		Total	-51	-373	56	-34	11	-134	-2,564	-3,089	-29	-238	-50	-317
	PM	In	2	-166	190	-10	7	1	162	186	12	-119	-5	-112
		Out	-116	-178	-1,474	-605	-87	-384	-63	-2,907	-96	-119	-5	-220
		Total	-114	-344	-1,284	-615	-80	-383	99	-2,721	-84	-238	-10	-332

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It should be noted that this alternative would also support and accommodate the implementation of the Penn Station expansion. Therefore, the increased commuter rail ridership into Penn Station is also a part of this alternative. However, consistent with the analysis framework described in Chapter 14, “Transportation,” the incremental trip summaries presented above are only for the new development (either with the Residential Alternative or Proposed Project) that is expected to occur on the development sites within the Project Area.

Since the Residential Alternative incremental trips would be lower than those the Phase 2 full build-out of the Proposed Project would generate, the potential transportation impacts would be within the envelope of significant adverse transportation impacts identified for the Proposed Project in Chapter 14, “Transportation.”

As noted in Chapter 14, “Transportation,” Phase 1 of the Proposed Project would result in 71 intersections with significant adverse impacts during any analysis peak hour, with 26 of them could not be fully mitigated, while Phase 2 of the Proposed Project would result in 102 intersections with significant adverse impacts during any analysis peak hour, with 81 of them could not be fully mitigated. Therefore, since the Residential Alternative’s incremental trips would fall between the incremental trips associated with Phase 1 and Phase 2 of the Proposed Project, it can be expected that the number of intersections with significant adverse impacts under the full build-out of the Residential Alternative would fall between 71 and 102 impacted intersections during any analysis peak hour. Furthermore, since incremental trips for full build-out of the Residential Alternative are approximately 85 percent of those of Phase 2 of the Proposed Project, the number of impacted intersections during any analysis peak hour would likely fall closer to the higher end of that range. Some of these impacts could be mitigated with the same types of mitigation measures as with the Proposed Project. Compared with Phase 2 of the Proposed Project, the number of unmitigated intersections under the full build-out of the Residential Alternative would be expected to fall near the higher end of the range of 26 to 81 intersections, which would be fewer than the 81 unmitigated intersections for Phase 2 of the Proposed Project.

As discussed in Chapter 14, “Transportation,” Phase 1 of the Proposed Project would result in four subway station elements with significant adverse impacts during any analysis peak hour, with two of them could not be fully mitigated, while Phase 2 of the Proposed Project would result in 33 elements with significant adverse impacts during any analysis peak hour, with 17 of them could not be fully mitigated. Since the commuter rail ridership increments would still materialize under this alternative in addition to the Proposed Project development incremental trips, the Residential Alternative is expected to result in slightly fewer overall impacted locations as compared to Phase 2 of the Proposed Project. Specifically, as stated in Chapter 14, “Transportation,” under the 2038 Phase 2 With Action condition, virtually all the impacts identified for the Herald Square Station could be attributed to the additional density in the Proposed Project development. Most of those at the Seventh Avenue Station could also be attributed to the Proposed Project development but ridership growth from the various regional rail improvements and the expanded Penn Station would also contribute to some of the impacts at this station. For the Eighth Avenue Station, the Proposed Project development alone would only yield about half of the impacts, with the ridership growth alone capable of causing all but one of the impacts identified at this station. Therefore, as incremental trips for full build-out of the Residential Alternative are approximately 85 percent of those of Phase 2 of the Proposed Project, it is likely that impacts at the Herald Square Station would be slightly less and impacts at the Seventh Avenue and Eighth Avenue Stations would remain the same under this alternative as compared to Phase 2 of the Proposed Project. Some of these impacts could be mitigated with the same types of mitigation measures as with the Proposed Project. Compared with Phase 2 of the Proposed Project, unmitigated station analysis element

impacts could also occur under the Residential Alternative at the same or slightly fewer locations. As with Phase 2 of the Proposed Project, the Residential Alternative would not result in any bus line-haul impacts.

As discussed in Chapter 14, “Transportation,” Phase 1 of the Proposed Project would result in 12 pedestrian elements with significant adverse impacts during any analysis peak hour, with two of them could not be fully mitigated, while Phase 2 of the Proposed Project would result in 102 pedestrian elements with significant adverse impacts during any analysis peak hour, with 51 of them could not be fully mitigated. Since the commuter rail ridership increments would still materialize under this alternative, in addition to the development sites’ incremental trips, and since incremental trips for full build-out of the Residential Alternative are approximately 85 percent of those of Phase 2 of the Proposed Project, the Residential Alternative is expected to result in slightly fewer overall impacted locations as compared to Phase 2 of the Proposed Project. Some of these impacts could be mitigated with the same types of mitigation measures as with the Proposed Project. Because the existing Site 8 building and uses would remain under the Residential Alternative, it would not be accompanied by the building setbacks along the south side of West 33rd Street portion fronting Site 8 and the west side of Sixth Avenue that would otherwise accompany the Proposed Project’s Site 8 With Action development. Therefore, these two sidewalk segments, which are not impacted under the Proposed Project, could potentially be impacted under the Residential Alternative. Without the additional sidewalk circulation space afforded by the Site 8 building setbacks, these impacts could potentially be unmitigated. Overall, accounting for these potential two additional unmitigated sidewalk impacts and the potential reduction of unmitigated impacts at other pedestrian analysis elements due to the overall lower trip increments, the Residential Alternative could result in unmitigated pedestrian impacts at a similar number, or a slightly fewer number, of elements as compared to Phase 2 of the Proposed Project.

The Residential Alternative would result in higher overnight parking demand and reduced daytime parking demand as compared to Phase 2 of the Proposed Project. However, the Residential Alternative is expected to similarly result in a parking shortfall within the ¼-mile off-street parking study area as the Proposed Project. As with the Proposed Project, this parking shortfall would not be considered a significant adverse parking impact due to the magnitude of available alternative modes of transportation.

Lastly, the required post approval transportation monitoring plan (TMP) described in Chapter 22, “Mitigation,” for the Proposed Project would also apply to the Residential Alternative.

AIR QUALITY

MOBILE SOURCES

The Residential Alternative would result in reduced project-generated trips as compared to the Proposed Project for both Phase 1 and Phase 2. Like the Proposed Project, no significant adverse air quality impacts are predicted under the Residential Alternative.

STATIONARY SOURCES

Under the Residential Alternative, the illustrative building on the midblock portion of Site 1 and the illustrative building on Site 4, would be taller than the illustrative buildings on these sites under the Proposed Project, while the illustrative building on the Eighth Avenue portion of Site 1 and the illustrative building on Site 8 would be shorter in height. As the illustrative building on the midblock portion of Site 1 would contain more floor area than this building under the Proposed

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Project, an increased setback distance for fossil fuel-fired equipment exhausts would be required to avoid impacts on the proposed building on the Eighth Avenue portion of the development site. No new or additional air quality restrictions are anticipated for the other sites, because under the Residential Alternative, emissions from fossil fuel-fired equipment from the residential buildings would be assumed to be same or less than the Proposed Project, and potential impacts from buildings of a lower height on nearby buildings of a greater height would be similar in nature. The development sites under the Residential Alternative would not result in potential air quality impacts on nearby existing buildings or planned developments in the No Action condition, as they would be taller in height. Like the Proposed Project, the Residential Alternative would not result in any significant adverse air quality impacts.

GREENHOUSE GAS EMISSIONS

Similar to the Proposed Project, the new buildings under the Residential Alternative would be required to comply with Local Law 97 (as it may be clarified or amended over time). The Residential Alternative would result in less overall floor area than the Proposed Project and this alternative would include a greater proportion of residential uses than the Proposed Project, which would have potentially lower energy/emission intensities. Therefore, the building GHG emissions associated with the Residential Alternative may be similar or lower than the Proposed Project.

NOISE

As with the Proposed Project, the Residential Alternative would not have the potential to result in significant impacts with respect to noise in the 2028 analysis year. In the 2038 analysis year, the Proposed Project would result in significant adverse noise impacts at receptors along West 31st Street between Ninth and Tenth Avenues, along West 31st Street between Sixth and Seventh Avenues, and along West 30th Street between Sixth and Eighth Avenues. These operational noise impacts are projected to occur upon the completion and occupancy of approximately 4.75 million gsf of office space on the proposed development sites. As the Residential Alternative would include the development of approximately 12 million gsf of office space, it is expected that the same noise impacts would occur under the Residential Alternative. Potential mitigation measures for the significant adverse noise impact are described in Chapter 22, “Mitigation,” and would also be applicable to the Residential Alternative.

As with the Proposed Project, it is expected that the Residential Alternative would also result in noise levels at the newly introduced open space at Site 2 that would exceed the 55 dBA L₁₀₍₁₎ noise level for outdoor areas requiring serenity and quiet recommended by the *CEQR Technical Manual* noise exposure guidelines. However, the existing noise levels at these locations are currently in the low-to-mid 70s dBA, exceeding the acceptable threshold, and the predicted levels at this open space are comparable to those at many open spaces in New York City. Consequently, the predicted noise exposure at the newly introduced open space would not constitute a significant adverse impact.

Under the Residential Alternative, window/wall attenuation greater than or equal to the values shown in **Table 21-24** would be required to achieve acceptable interior noise levels per the *CEQR Technical Manual* noise exposure guideline at Sites 1, 4, and 8, based on the projected noise levels at newly introduced residential, hotel guestroom and community facility receptors. If the Residential Alternative is selected, ESD would include provisions specifying the appropriate window/wall attenuation applicable to each development site in project documents with the future developers of each site to implement the attenuation requirements. By meeting the requirements

specified in the project documents, buildings developed as a result of the Residential Alternative would provide sufficient attenuation to achieve the *CEQR Technical Manual* interior noise level guidelines of 45 dBA L₁₀ for residential, hotel guestroom or community facility uses. As with the Proposed Project, under the Residential Alternative, implementation of the attenuation levels outlined above, the Residential Alternative would not result in any significant adverse impacts at the newly introduced noise receptors.

Table 21-24
Minimum Required Attenuation Under the Residential Alternative (in dBA)

Development Site ¹	Block	Lot(s)	Façade(s)	Associated Noise Measurement Site(s)	Required Attenuation ²
1	754	34-41, 44, 51, and 63	North	4	35
			East	6	33
			South, West	5	33
4	783	1 and part of 70	North	1	37
			East	6	33
			South	2	31
			West	1,2	37
8	808	40	North, West, South	3	33
			East	3, 6	33

Note:

¹ The remaining development sites have been omitted intentionally because the proposed uses are not considered noise-sensitive receptors per *CEQR Technical Manual* section 124.

² The attenuation requirements shown are for residential and community facility uses; retail/commercial uses would require 5 dBA less attenuation.

PUBLIC HEALTH

Like the Proposed Actions, the Residential Alternative would not result in significant adverse impacts related to public health.

As described in the relevant analyses in this chapter, the Residential Alternative would not result in unmitigated significant adverse impacts in the areas of hazardous materials, water quality, or air quality, and therefore would not have the potential for a public health impact related to these technical areas. As described below under “Noise,” the Residential Alternative would result in a significant adverse noise impact at sensitive receptors along West 30th and West 31st Streets due to noise increases from project-generated trucks traveling on these streets, which, as with the Proposed Project, would be unmitigated or only partially mitigated (see Chapter 22, “Mitigation”). In addition, as noted under “Construction,” like the Proposed Project, construction activities for the Residential Alternative would result in unmitigated significant adverse noise impacts at several sensitive receptor locations, as defined by *CEQR Technical Manual* thresholds, during certain phases of project construction. As with the Proposed Project, under the Residential Alternative, the predicted noise exposure that would be experienced by people inhabiting affected areas would be comparable to existing noise exposure at other nearby areas, and it would not exceed the threshold that would be expected to result in health effects. Therefore, like the Proposed Project, the Residential Alternative’s unmitigated noise impacts would not result in a significant adverse public health impact.

NEIGHBORHOOD CHARACTER

Like the Proposed Project, the Residential Alternative would not result in a significant adverse impact on neighborhood character. As discussed in Chapter 19, “Neighborhood Character,” the

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defining features of neighborhood character are a mixture of several high-density commercial buildings and lower-scale (and, in some cases, historic) commercial buildings and transportation infrastructure; high levels of pedestrian and vehicular activity and associated noise; and a varied neighborhood context with smaller buildings interspersed among taller buildings and iconic New York City landmarks. As with the Proposed Project, the Residential Alternative would enhance existing neighborhood character by reinforcing these defining features while improving pedestrian facilities and transit accessibility. The Residential Alternative would also contribute to enlivening the streetscape within the Project Area by extending the hours of street activity and creating a more vibrant mixed-use neighborhood. While the Residential Alternative would develop less overall commercial use than the Proposed Project, like the Proposed Project, it would address substandard conditions in the Project Area by facilitating redevelopment to create a cohesive, transit-oriented commercial district, introducing much-needed public transportation and public realm improvements in the area, and supporting the reconstruction and expansion of Penn Station.

As with the Proposed Project, the Residential Alternative would not result in significant adverse impacts to land use, zoning, and public policy; socioeconomic conditions; or urban design. Although there would be significant adverse impacts with respect to historic resources, shadows, visual resources, transportation, and noise, these impacts would not result in a significant adverse impact to the defining elements of neighborhood character. Overall, like the Proposed Project, the Residential Alternative is expected to result in positive effects to neighborhood character.

CONSTRUCTION

The amount of new construction under the Residential Alternative would be similar to those identified for the Proposed Project. Specifically, the development programs at Sites 2, 3, 5, 6, and 7 for the Proposed Project would remain the same under the Residential Alternative and the development program at Site 8 would be reduced under the Residential Alternative. Although the development heights for Sites 1 and 4 under the Residential Alternative would be different from those for the Proposed Project, the development sizes at these sites would remain the same under the Residential Alternative, and the construction activities at these sites are expected to be similar to those for the Proposed Project. As with the Proposed Project, the Residential Alternative would not result in significant adverse construction impacts with respect to land use, socioeconomic conditions, hazardous materials, water and sewer infrastructure, air quality, or vibration.

With the Residential Alternative, overall, it is anticipated that construction would be similar to the construction that would be undertaken for the Proposed Project. Therefore, the potential for construction transportation and noise impacts under the Residential Alternative would be similar to the construction impacts identified for the Proposed Project.

Like the Proposed Project, the proposed expansion of Penn Station on Sites 1, 2, and 3 would occur with the Residential Alternative. Sites 1, 2, and 3 would be redeveloped and subject to long-term construction activity under this alternative. Therefore, the significant adverse localized neighborhood character impacts in the immediate vicinity of these sites that would occur with the Proposed Project would also occur with this alternative.

As with the Proposed Project, the Residential Alternative would result in the same significant adverse direct impacts on five architectural resources located on Sites 2 and 3 that would be removed for the proposed below-grade expansion of Penn Station, and one architectural resource on Site 7 that would be demolished to allow for new commercial development on Site 7. Measures that could partially mitigate these significant adverse impacts are described in Chapter 22, “Mitigation.”

In addition, as with the Proposed Project in 2028, the Residential Alternative could have adverse physical impacts on six additional architectural resources that are located within 90 feet of proposed construction activities, close enough to potentially experience adverse construction-related impacts from ground-borne construction-period vibrations, falling debris, subsidence, collapse, or damage from construction machinery. The same six architectural resources could also be adversely affected by adjacent construction in the 2038 analysis year. Therefore, like the Proposed Project, CPPs to protect the six architectural resources within 90 feet of construction would be required to be developed and implemented in coordination with OPRHP under the Residential Alternative. For the NYCL and NYCL-eligible properties potentially affected by construction impacts, the construction protection plans would also be submitted to LPC for review and comment as with the Proposed Project.

Potential mitigation measures for the significant adverse construction impacts are described in Chapter 22, “Mitigation,” and would also be applicable to the Residential Alternative.

CONCLUSIONS REGARDING THE RESIDENTIAL ALTERNATIVE

The Residential Alternative considers a development in which all sites would remain the same as in the Proposed Project, except for Sites 1, 4, and 8, which would include a residential program.

Like the Proposed Project, the Residential Alternative would not result in significant adverse impacts with respect to: land use, zoning, and public policy; socioeconomic conditions; urban design; hazardous materials; water and sewer infrastructure; solid waste and sanitation services; energy; air quality; greenhouse gas emissions; public health; and neighborhood character.

Under the Residential Alternative, significant adverse impacts in the areas of open space, shadows, historic resources, noise, and construction would be the same as or similar to those of the Proposed Project. The Residential Alternative would result in significant adverse transportation impacts, but to a lesser extent compared with the Proposed Project. With respect to visual resources, the Residential Alternative would result in the same significant adverse impacts as the Proposed Project, except with respect to the demolition of the copper skybridge spanning from Site 8 across West 32nd Street. If the owner of Site 8 retains the skybridge, the significant adverse impact that would occur with the Proposed Project would not occur.

With respect to community facilities, because the Residential Alternative would introduce a substantial residential population that would meet the financial and social eligibility criteria for publicly funded child care, the Residential Alternative would result in a significant adverse impact on early childhood programs that would not occur with the Proposed Project.

With respect to pedestrians, the Residential Alternative is expected to result in overall fewer impacted locations as compared to Phase 2 of the Proposed Project. However, because the existing Site 8 building and uses would remain under the Residential Alternative, it would not be accompanied by the building setbacks along the south side of West 33rd Street portion fronting Site 8 and the west side of Sixth Avenue that would otherwise accompany the Proposed Project’s Site 8 development. Therefore, these two sidewalk segments, which are not impacted under the Proposed Project, could potentially be impacted under the Residential Alternative. Without the additional sidewalk circulation space afforded by the building setbacks, these impacts could potentially be unmitigated. Overall, accounting for these two additional potentially unmitigated sidewalk impacts and the potential reduction of unmitigated impacts at other pedestrian analysis elements due to the overall lower trip increments, the Residential Alternative could result in

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unmitigated pedestrian impacts at a similar number, or a slightly fewer number, of elements as compared to Phase 2 of the Proposed Project.

While the Residential Alternative would develop less overall commercial use than the Proposed Project, like the Proposed Project, it would address substandard conditions in the Project Area by facilitating redevelopment to create a cohesive, transit-oriented commercial district, foster and support economic growth and tax revenue through the creation of jobs and economic activity, and improve passenger rail and transit facilities and pedestrian circulation, access, and safety with the implementation of transportation and public realm improvements and the creation of new open space. Furthermore, the Residential Alternative would provide additional benefits by facilitating the development of new housing, including new affordable units, in the Project Area, which would not occur with the Proposed Project. The Residential Alternative would also contribute to enlivening the streetscape within the Project Area by extending the hours of street activity and creating a more vibrant mixed-use neighborhood. However, the Residential Alternative would do slightly less than the Proposed Project to improve the public realm, by not providing the sidewalk widenings along West 33rd Street and Sixth Avenue fronting Site 8. While this alternative would generate less revenue than the Proposed Project, it would still provide substantial support for the reconstruction and expansion of Penn Station. Overall, the Residential Alternative would not substantially avoid or reduce the significant adverse impacts that would occur with the Proposed Project and could result in unmitigated significant adverse impacts in the areas of early childhood programs and pedestrians that would not occur with the Proposed Project. However, the Residential Alternative would substantially meet the goals and objectives of the Proposed Project.

E. LOWER DENSITY ALTERNATIVE

DESCRIPTION

DEVELOPMENT PROGRAM

The Lower Density Alternative assumes redevelopment of Sites 1 through 7 with approximately 13,097,000 gsf of development, and the same mix of uses as in the Proposed Project. However, unlike the Proposed Project, Site 8 would not be developed and would remain as in existing conditions. The Lower Density Alternative represents a reduction in program density of approximately 34 percent compared to the Proposed Project. The same open space improvements included in the Proposed Project would occur under the Lower Density Alternative. Specifically, the new public plaza on Site 2 would be constructed and the Plaza 33 open space would be enhanced and improved with new public amenities. The development phasing of the Lower Density Alternative would be the same as in the Proposed Project.

Table 21-25 presents the development program for the Lower Density Alternative by site, and a comparison of the Lower Density Alternative increments with the Proposed Project increments.¹⁴

¹⁴ The development program by site for the Proposed Project is presented in Table 1-1 in Chapter 1, “Project Description.”

Table 21-25
Lower Density Alternative Development Program

Site	Total GSF*	Office GSF	Retail GSF	Hotel (Rooms)	Residential (DUs)	Affordable Units	Community Facility GSF	Parking Spaces
1	917,504	455,575	6,000	563	0		0	0
2	4,451,882	3,570,024	36,000	0	0		0	0
3	1,252,050	1,002,161	12,000	0	0		0	0
4	1,100,000	289,160	100,000	734	0		0	100
5	1,371,241	990,141	120,564	0	0		0	0
6	1,536,566	1,098,118	121,500	0	0		0	100
7	2,467,588	1,771,746	202,000	0	0		0	100
8	N/A	N/A	N/A	N/A	N/A		N/A	N/A
Lower Density Total	13,096,831	9,176,925	598,064	1,297	0	0	0	300
Lower Density Increment From the No Action Alternative	7,828,963	6,780,590	177,639	336	-758**	-126	-190,710	-1,543
Proposed Project Increment From the No Action Alternative	13,467,275	11,186,717	140,639	336	-758**	-126	-190,710	-1,443

Note: Grey indicates that the program does not differ from the Proposed Project.

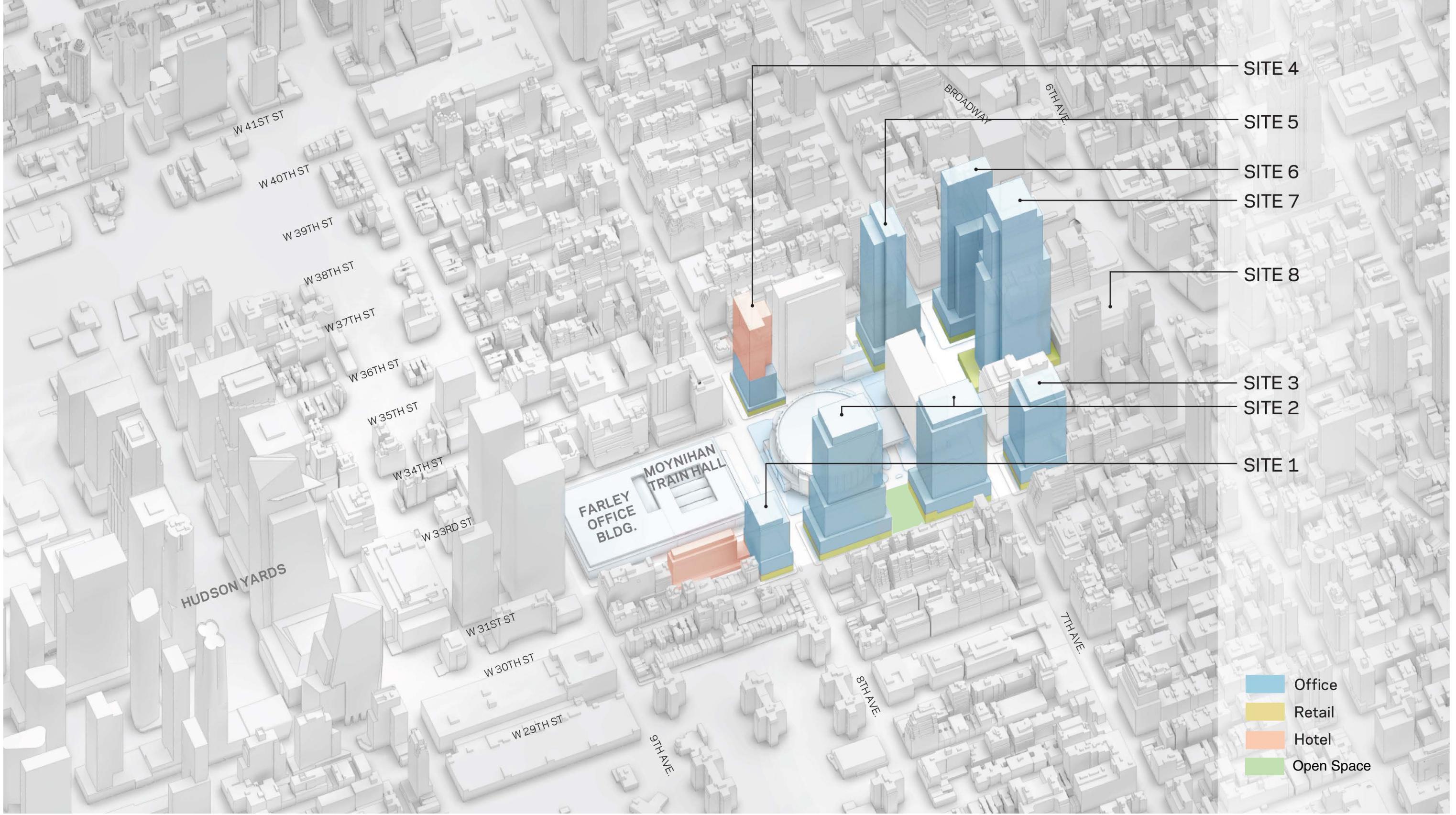
* In addition to the program area shown in this table, each development includes a certain amount of non-program area, or space for building mechanicals, circulation space associated with transit improvements on the ground and sublevels, back-of-house areas (e.g., hallways and corridors to the building core), certain building core space, and lobby and loading space on the ground and sublevels.

** This includes 128 existing dwelling units that would be displaced by either the Lower Density Alternative or Proposed Project, and 630 new dwelling units that are assumed to be constructed in the No Action condition.

SITE PLANNING, BULK, AND MASSING

Like the Proposed Project, the Lower Density Alternative would include development on Sites 1 through 7 and the related public realm and transportation improvements on these sites would be the same as the Proposed Project. Under the Lower Density Alternative, Site 8 would remain as in existing conditions, and the transportation and public realm and improvements associated with this site generally would not occur. Specifically, the Lower Density Alternative would not: reconstruct the street level stairs at West 32nd Street and Sixth Avenue and add new street level stairs at West 33rd Street and Sixth Avenue; reconstruct two mezzanine stairs connecting the N/Q/R/W and B/D/F/M; reconfigure the fare control area at the B/D/F/M mezzanine level; and replace the PATH-related elevator in the current building on Site 8. In addition, as the existing building on Site 8 would remain, the building setbacks allowing for widened sidewalks along the south side of West 33rd Street fronting Site 8, and the west side of Sixth Avenue between West 32nd and West 33rd Streets would not occur under the Lower Density Alternative. The Lower Density Alternative would establish an east-west underground corridor connecting the 34th Street-Herald Square and the 34th Street-Penn Station-Seventh Avenue Subway Stations and providing direct access to Sites 7 and 8. In this alternative, the east-west underground corridor would follow the route of the existing Gimbel's passageway under the south sidewalk of West 33rd Street. **Figure 21-5** presents the illustrative building massings for each development site. As shown in the table, Under the Lower Density Alternative, the midblock building on Site 1 and the building on Site 4 would be the same height as with the Proposed Project. All other buildings on Sites 1 through 3, and 5 through 7, would be shorter in height than with the Proposed Project.

Conditions under the Lower Density Alternative as compared with the future with the Proposed Project are summarized in **Table 21-26**.



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Table 21-26
Project Area Illustrative Heights:
Comparison of the Lower Density Alternative
and the Proposed Project

Site	Illustrative Height (feet)	
	Lower Density Alternative	Proposed Project
1	235 (Midblock) 422 (Eighth Avenue)	235 (Midblock) 748 (Eighth Avenue)
	912 (Eighth Avenue) 722 (Seventh Avenue)	1,300 (Eighth Avenue) 1,052 (Seventh Avenue)
3	636	936
4	664	664
5	738	1,018
6	820	1,130
7	1,200	1,270
8	N/A	975

Notes: Grey indicates that the program does not differ from the Proposed Project.

LAND USE, ZONING, AND PUBLIC POLICY

Like the Proposed Project, the Lower Density Alternative would not result in significant adverse impacts related to land use, zoning, and public policy. The Lower Density Alternative would result in the development of seven sites in the Project Area compared to eight sites with the Proposed Project. Additionally, the Lower Density Alternative would not result in as much high-density commercial development containing a mix of Class A office space, retail space, and hotel space as the Proposed Project.

The increase in commercial density with either the Proposed Project or the Lower Density Alternative would be consistent with broader land use trends of high-density commercial development in adjacent areas of Manhattan (including the area adjacent to Grand Central Terminal) but, unlike the Proposed Project, the Lower Density Alternative would not capitalize on the Project Area's unparalleled transit access. Specifically, the Lower Density Alternative would reduce the permitted density of the development sites in the Project Area as compared to the Proposed Project, and would not be consistent with the maximum permitted commercial density in other transit-oriented districts in the City. For instance, in East Midtown, within a one to two block radius of the superblock containing Grand Central Terminal (an area known as the Grand Central Transit Improvement Zone Subarea), applicable zoning allows FARs of 30 FAR (27 FAR as-of-right and 30 FAR with improvements to transit or the public realm). In contrast, the Lower Density Alternative would permit FAR equivalents of approximately 22 to 25 FAR on Sites 2, 3, 4, 5, 6, and 7. In addition, the Lower Density Alternative would be less effective than the Proposed Project at addressing the limited development potential in the Project Area (due to the current maximum permitted FARs). By providing for less overall development, the Lower Density Alternative would require land acquisition and other fixed costs to be amortized over less office space, which would offer less incentive for construction of the new office buildings, potentially delaying or forestalling their construction. Therefore, the Lower Density Alternative would not maximize the revenue that could be generated by higher-density development, and would therefore be less effective at supporting the reconstruction and expansion of Penn Station than the Proposed Project. The Lower Density Alternative also would not be as supportive of the long-term infrastructure investments in the Project Area as the Proposed Project.

Nonetheless, the Proposed Project and to a lesser extent, the Lower Density Alternative, would reinvigorate the Project Area by creating a transit-oriented commercial district centered around Penn Station and would help create a corridor of high-density, predominantly commercial uses linking the Midtown Central Business District, Penn Station, and Hudson Yards. Therefore, like the Proposed Project, the Lower Density Alternative would not adversely affect the land use character of the primary or secondary study area and would not result in significant adverse land use impacts in either the Phase 1 or Phase 2 analysis years. Neither the Proposed Project nor the Lower Density Alternative would directly displace any land uses whose displacement would adversely affect surrounding land uses, nor would they generate land uses that would be incompatible with surrounding land uses, zoning, or public policies.

With respect to zoning, as with the Proposed Project, the Lower Density Alternative would require the override use, bulk, and density provisions of the New York City Zoning Resolution. However, these overrides would be less successful at achieving the Proposed Project's goals and objectives compared to the Proposed Project, as discussed in Chapter 1, "Project Description." The densities and bulk of the Lower Density Alternative would further public policies to support high-density development in areas well-served by public transit, although to a lesser extent than the Proposed Project. This alternative would not foster as much high-density development as the Proposed Project, and would not capitalize on the Project Area's central location in Midtown Manhattan and unmatched transit connectivity to the same extent as the Proposed Project. However, as with the Proposed Project, the Lower Density Alternative would result in development that is consistent with land use and zoning and would further several stated public policies intended to promote sustainability, walkability, transit, employment, and economic development.

SOCIOECONOMIC CONDITIONS

The Lower Density Alternative would redevelop Sites 1 through 7; Site 8 would remain as in existing conditions. As with the Proposed Project, the Lower Density Alternative would directly displace residents on Sites 1, 2, and 3 during Phase 1 (by 2028). Like the Proposed Project, this would not result in a significant adverse impact under the Lower Density Alternative because the potentially displaced residents do not represent a significant portion of the study area population, and they do not have socioeconomic characteristics that differ markedly from the study area population as a whole.

The Lower Density Alternative, like the Proposed Project, would also result in the direct displacement of businesses located on Sites 1 through 7. However, as the Lower Density Alternative would not redevelop Site 8, the businesses associated with Site 8 would not be displaced under this alternative. As with the Proposed Project, the overall business and institutional displacement associated with the Lower Density Alternative would not cause a significant adverse direct business and institutional displacement impact because the potentially displaced businesses and institutions provide goods and services that would still be found within the study area and that would continue to be available to local residents and businesses. None of the businesses or institutions serve a customer base that is uniquely dependent upon their location within the study area, nor are they subject to regulations or publicly adopted plans aimed at preserving, enhancing, or otherwise protecting them in their current location.

While the potentially displaced businesses and jobs are valuable individually and collectively to the City, the Lower Density Alternative, like the Proposed Project, would provide modern office, retail, and hotel space in an area of the City where the commercial building stock is aging and in need of revitalization. As with the Proposed Project, the potentially displaced businesses under

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the Lower Density Alternative would be able to find comparable space within the study area or the City at large.¹⁵ However, under the Lower Density Alternative, the amount of new commercial space would be less than with the Proposed Project, creating fewer opportunities for new businesses and jobs within the Project Area.

As with the Proposed Project, the Lower Density Alternative would not result in significant adverse impacts due to indirect residential displacement. Neither the Proposed Project nor the Lower Density Alternative would introduce new residential space, and therefore would not have the potential to alter neighborhood demographics and residential market trends.

Like the Proposed Project, the Lower Density Alternative would not result in significant indirect business or institutional displacement impacts and, in general, existing businesses would benefit from the larger customer base that would be created by the worker and visitor populations introduced by the Lower Density Alternative. While the introduction of new workers and visitors could alter existing economic patterns in certain portions of the study area, these changes would not lead to a substantial amount of indirect business or institutional displacement. Although the Lower Density Alternative would directly displace employees, like the Proposed Project it would support new permanent jobs within the study area. Existing businesses could capitalize on new demand from the worker population such that an increase in sales and services rendered could offset potential increased rents. In addition, as with the Proposed Project, neighboring submarkets are either consistent in development trends with the Lower Density Alternative, or are well-established commercial districts that have remained relatively stable within the Midtown market.

Like the Proposed Project, the Lower Density Alternative would not result in a significant adverse impact on business conditions in any specific industry or any category of businesses. In addition, the Lower Density Alternative would not indirectly substantially reduce employment or impair the economic viability in any specific industry or category of business.

ECONOMIC BENEFITS

Transit-oriented developments have the potential to create economic benefits for the local and regional economies. As with the Proposed Project, under the Lower Density Alternative, building construction, as well as the Penn Station expansion would generate new direct and indirect construction-related employment in New York City and New York State. In turn, the construction-related employment would generate wages and annual economic activity in New York City and New York State. Increased rail and transit capacity could also lead to an increase in economic activity for businesses located in and around the station. The new construction and economic activity would also generate fiscal benefits for both New York City and New York State, including income and sales tax revenues and transit fare revenues.

The projected employment and economic benefits of the Lower Density Alternative are shown in **Table 21-27**. Based on the Lower Density Alternative's development program and estimates of construction costs per square foot, the total investment for the construction of this alternative is an estimated \$7.8 billion¹⁶ or almost one-third less than the Proposed Project construction cost of

¹⁵ According to CoStar Q4 2019, the office vacancy rates for Midtown Manhattan and Manhattan at large were both approximately 8.1 percent.

¹⁶ The construction cost for the Proposed Project includes 10.5 million gsf of office space; 598,000 gsf of retail space; 758,000 gsf of hotel space; 300 parking spaces; and 2.5 million gsf non-program-area space. Non-program area space includes space for building mechanicals, circulation space associated with

\$11.7 billion. Similarly, the Lower Density Alternative would generate approximately 66 percent the amount of jobs and wages that the Proposed Project would generate. In applying the \$7.8 billion cost estimate to the Regional Input-Output Modelling System II (RIMS II), the construction of the Lower Density Alternative would generate approximately 50,200 jobs (\$5.0 billion in wages) in New York City and 59,800 jobs (\$5.8 billion in wages) in New York State. Furthermore, the total economic output—including direct, indirect, and induced—from the construction of the Lower Density Alternative would be \$11.1 billion in New York City and \$14.6 billion in New York State compared to \$16.7 billion in New York City and \$21.9 billion in New York State in the Proposed Project.

Table 21-27
Summary of Total Employment and Economic Benefits from the Construction of the Lower Density Alternative as Compared to the Proposed Project

	Proposed Project		Lower Density Alternative	
	New York City	New York State	New York City	New York State
Total Employment (Person-Years)*				
Direct (Construction)	53,800	53,800	35,800	35,800
Indirect (Secondary and Induced)	21,500	36,000	14,300	24,000
Rounded Totals	75,300	89,800	50,200	59,800
Total Wages and Salaries (2020 Dollars, Millions)				
Direct (Construction)	\$5,868	\$5,868	\$3,910	\$3,910
Indirect (Secondary and Induced)	\$1,675	\$2,868	\$1,116	\$1,911
Rounded Totals	\$7,543	\$8,736	\$5,026	\$5,821
Total Economic Output or Demand (2020 Dollars, Millions)**				
Direct (Construction)	\$11,736	\$11,736	\$7,820	\$7,820
Indirect (Secondary and Induced)	\$4,978	\$10,181	\$3,317	\$6,783
Rounded Totals	\$16,714	\$21,916	\$11,137	\$14,603
Notes:				
* A person-year is the equivalent of one person working full time for one year.				
** The economic output or total effect on the local economy derived from the direct construction spending.				
Source: Project estimates regarding characteristics and construction cost of the development; RIMS II Multipliers 2018; NYS Department of Labor, 2020.				

The estimated worker count and annual wages from the ongoing operations of the Lower Density Alternative are presented in **Table 21-28**. Overall, it is estimated that the Lower Density Alternative would support approximately 38,800 new direct jobs compared to 59,300 in the Proposed Project. The Lower Density Alternative would generate 36,700 office jobs, 1,608 retail jobs, 6 parking jobs, and 432 hotel jobs. The jobs generated by the Lower Density Alternative would generate \$5.9 billion in direct wages or approximately \$3.2 billion less than the Proposed Project.

transit improvements, back-of-house areas (e.g. hallways and corridors to the building core), certain building core space, and lobby and loading space on the ground and sublevels.

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Table 21-28
Estimated Direct Annual Employment and Wages Generated by the Lower Density Alternative at Completion (2038) as Compared to the Proposed Project

	Estimated Workers			Estimated Annual Wages (2020 Dollars, Millions)		
	Proposed Project	Lower Density Alternative	Increment	Proposed Project	Lower Density Alternative	Increment
Office	57,000	36,700	-20,300	\$9,045	\$5,825	-\$3,220
Retail (includes Dining)	1,840	1,608	-232	\$94	\$82	-\$12
Parking	10	6	-4	\$0.5	\$0.3	-\$0.1
Hotel	432	432	0	\$32	\$32	0
Community Facility	0	0	0	0	0	0
Residential Units	0	0	0	0	0	0
Rounded Totals	59,300	38,800	-20,500	\$9,171	\$5,939	-\$3,232

Note: For purposes of the economic impacts analysis, sector wages are derived from the U.S. Bureau of Labor Statistics and New York State Department of Labor survey data for New York County.

Source: AKRF, Inc., 2020; Bureau of Labor Statistics, 2020; New York State Department of Labor, 2020.

Table 21-29 summarizes the estimated direct and indirect effects on the New York City and New York State economies from the operation of the Lower Density Alternative. The Lower Density Alternative would generate 78,300 direct and indirect jobs in New York City and 91,200 direct and indirect jobs in New York State. In terms of direct and indirect wages, there would be \$9.3 billion generated in New York City and \$10.4 billion generated in New York State. These wages are approximately 35 percent less compared to the Proposed Project which would generate approximately \$14.3 billion in New York City and \$16.6 billion in New York State. Overall, the total economic output into the local economy from the Lower Density Alternative's operation would be \$41.4 billion in New York City and \$47.4 in New York State.

Table 21-29
Summary of Total Employment and Economic Benefits from the Operations of the Lower Density Alternative by 2038 as Compared to the Proposed Project

	Proposed Project		Lower Density Alternative	
	New York City	New York State	New York City	New York State
Total Employment (Full-Time Equivalent)				
Direct (Business Activity)	59,300	59,300	38,800	38,800
Indirect (Secondary and Induced)	61,200	81,000	39,600	52,400
Rounded Totals	120,500	140,300	78,300	91,200
Total Wages and Salaries (2020 Dollars, Millions)				
Direct (Business Activity)	\$9,171	\$9,171	\$5,939	\$5,939
Indirect (Secondary and Induced)	\$5,148	\$5,148	\$3,331	\$4,465
Rounded Totals	\$14,320	\$14,320	\$9,270	\$10,404
Total Economic Output or Demand (2020 Dollars, Millions)				
Direct (Business Activity)	\$41,483	\$41,483	\$26,832	\$26,832
Indirect (Secondary and Induced)	\$22,482	\$22,482	\$14,554	\$20,594
Rounded Totals	\$63,965	\$63,965	\$41,386	\$47,426

Source: Project estimates regarding characteristics and construction cost of the development; RIMS II Multipliers 2018; New York State Department of Labor, 2020.

While the Lower Density Alternative would provide substantial, new high-density and commercial development proximate to Penn Station, it would result in less density and capacity for additional businesses and firms through new commercial spaces within the Project Area than the Proposed Project. The Lower Density Alternative would support fewer new, permanent direct and indirect jobs in New York City and New York State that would produce ongoing fiscal benefits for both New York City and New York State, including income and sales tax revenues. Like the Proposed Project, the Lower Density Alternative would enable greater business activity for current and new establishments located in and around Penn Station, but less so than the Proposed Project.

COMMUNITY FACILITIES AND SERVICES

Like the Proposed Project, the Lower Density Alternative would not have significant adverse impacts on public schools, libraries, early childhood programs outpatient health care facilities, and police and fire protection. Like the Proposed Project, the Lower Density Alternative would result in the displacement of the existing Antonio Olivieri Drop-In Center, St. John the Baptist RC Church, a branch of Touro College, and Campus Education (an English language training school) (see “Other Community Facilities” in Chapter 5, “Community Facilities”). As discussed in Chapter 5, the displacement of these other community facilities, would not result in significant adverse impacts to community facilities under the Proposed Project or this alternative as there are other facilities that provide similar services nearby, some of the facilities serve only a small local population, and some of the facilities and services do not have unique locational needs and would likely be able to relocate.

OPEN SPACE

The Lower Density Alternative would result in the same significant adverse impacts to open space as the Proposed Project. With the Lower Density Alternative, like the Proposed Project, the development of Site 5 would result in the displacement of the east plaza on the 1 Penn Plaza POPS. Therefore, the Lower Density Alternative would result in the same direct impact to open space that would occur with the Proposed Project. The Lower Density Alternative would also introduce the same through-block public plaza on Site 2, and it would provide the same improvements to Plaza 33 that would occur with the Proposed Project. Both the Proposed Project and the Lower Density Alternative would introduce substantial new worker populations to the study area, and both the Proposed Project and this alternative would result in decreases in the passive open space ratio of more than five percent. Therefore, the Lower Density Alternative, like the Proposed Project, would overburden existing and proposed passive open spaces and would result in a significant adverse indirect impact to open space in the 2038 Phase 2 analysis year.

SHADOWS

Under the Lower Density Alternative, the buildings on Sites 1, 2, 3, 5, 6, and 7 would be shorter in comparison with the Proposed Project. Site 4 would be the same height under both this alternative and the Proposed Project, and Site 8 would remain unchanged from existing conditions under this alternative.

In 2028, the Proposed Project would not result in significant adverse shadow impacts. In 2038, the full build-out of the Proposed Project would result in significant adverse shadow impacts to nine sunlight-sensitive open space and historic architectural resources: MSG POPS, Plaza 33, Herald Square Park, Chelsea Park, the Penn South open spaces, the Farley Building, St. Michael’s Roman Catholic Church, St. Francis of Assisi Church, and the former Greenwich Savings Bank.

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With the Lower Density Alternative, the extent and duration of incremental shadows on these nine sunlight-sensitive resources would be generally reduced. With regard to Chelsea Park, incremental shadows primarily from the Lower Density Alternative developments on Sites 1 and 2 would exit the park approximately 20 minutes earlier in the late spring and summer months, but would still last for an hour and a half to two hours and cover large areas of the park during that period, causing a significant adverse impact. With respect to the Farley Building (the skylights, Eighth Avenue colonnade, and Eighth Avenue steps), incremental shadow durations would be virtually the same with the Lower Density alternative, and the coverage would be nearly as much, causing a significant adverse impact similar to the Proposed Project. With regard to the Penn South open spaces, incremental shadows primarily from the Lower Density Alternative development on Site 2 would exit the park approximately 10 to 20 minutes earlier in the late spring and summer months, but would still last for an hour and a half to two and a half hours and cover large areas of the park during that period, causing a significant adverse impact. With respect to St. Michael's Roman Catholic Church, incremental shadow would be reduced compared to the Proposed Project, but development on Sites 1 and 2 would be tall enough to cause significant adverse shadow impacts. With regard to the MSG POPS and Plaza 33, Sites 1, 2, 3, 5, 6, and 7 would still cast substantial incremental shadows on these resources with the Lower Density Alternative and, as with the Proposed Project, would result in significant adverse shadow impacts. With the Lower Density Alternative, development on Site 3 would cast similar incremental shadows on St. Francis of Assisi Church compared with the Proposed Project, resulting in a similar significant adverse shadow impact. With regard to the former Greenwich Savings Bank, incremental shadow would be reduced compared to the Proposed Project, but development on Sites 5, 6, and 7 would be tall enough to cause significant adverse shadow impacts.

With no new development on Site 8, the Lower Density Alternative would cast less incremental shadow on Herald Square Park, and, unlike the Proposed Project, would not cause a significant adverse shadow impact to that park.

HISTORIC AND CULTURAL RESOURCES

ARCHAEOLOGICAL RESOURCES

There are no areas of archaeological sensitivity within the Project Area. Therefore, as with the Proposed Project, the Lower Density Alternative would not result in significant adverse impacts on archaeological resources in either the 2028 or 2038 analysis years.

ARCHITECTURAL RESOURCES

As with the Proposed Project, the Lower Density Alternative would result in redevelopment on Sites 1 through 7. However, no redevelopment would occur on Site 8 under this Alternative. In the 2028 analysis year, the Lower Density Alternative would result in the same significant adverse direct impacts on five architectural resources located on Sites 2 and 3 that would be removed for the proposed below-grade expansion of Penn Station, and one architectural resource on Site 7 that would be demolished to allow for new commercial development on Site 7. Measures that could partially mitigate these significant adverse impacts are described in Chapter 22, "Mitigation."

In addition, as with the Proposed Project in 2028, the Lower Density Alternative could have adverse physical impacts on six additional architectural resources that are located within 90 feet of proposed construction activities, close enough to potentially experience adverse construction-related impacts from ground-borne construction-period vibrations, falling debris, subsidence,

collapse, or damage from construction machinery. With the Proposed Project, these impacts would occur as a result of construction on Sites 1, 2, 3, 7, and 8. The Lower Density Alternative would include construction on Sites 1, 2, 3, and 7, and the same potential construction-related impacts of the Proposed Project due to construction on those sites would occur. The same six architectural resources could also be adversely affected by adjacent construction in the 2038 analysis year. Therefore, like the Proposed Project, Construction Protection Plans to protect the six architectural resources within 90 feet of construction would be required to be developed and implemented in coordination with OPRHP under the Lower Density Alternative. For the NYCL and NYCL-eligible properties potentially affected by construction impacts, the construction protection plans would also be submitted to LPC for review and comment as with the Proposed Project.

Similar to the Proposed Project in 2038, the Lower Density Alternative would result in significant adverse shadows impacts on four architectural resources in the primary and secondary study areas and one architectural resource that is located north of the secondary study area (see discussion under “Shadows” above). Of particular note, the Lower Density Alternative would not avoid or lessen shadow impacts to the Farley Building (the skylights, Eighth Avenue colonnade, and Eighth Avenue steps), as incremental shadow durations would be virtually the same with the Lower Density Alternative, and the coverage would be nearly as much. For the Proposed Project, ESD is undertaking continuing consultation with OPRHP regarding the development of mitigation measures that could partially mitigate certain of these significant adverse impacts. Those measures are described in Chapter 22, “Mitigation,” and would also be applicable to the Lower Density Alternative.

In 2038, the Proposed Project would result in significant adverse visual impacts with respect to the Empire State Building by obstructing certain views east and northeast towards the architectural resource. This impact would occur as a result of development on Sites 2 and 6 with the Proposed Project. As discussed in Chapter 22, “Mitigation,” this impact would occur with any new building on the east side of Site 2 greater than 340 feet in height, and any new building on Site 6 greater than 530 feet. Under the Lower Density Alternative, the illustrative buildings on Sites 2 and 6 would be taller than these heights (the illustrative building on the east side of Site 2 would be 722 feet tall and the illustrative building on Site 6 would be 820 feet tall). Therefore, the same visual impacts of the Proposed Project to the Empire State Building would occur under the Lower Density Alternative. Potential measures to mitigate the significant adverse impact to visual resources have been evaluated and are discussed in Chapter 22, “Mitigation.”

As with the Proposed Project, the Lower Density Alternative would include the expansion of Penn Station. Therefore, the siting, planning, property acquisition, and construction of the Penn Station expansion on Sites 1, 2, and 3 would be subject to separate actions and approvals by or for the involved public transportation agencies and would be subject to environmental review under the National Environmental Policy Act and Section 106 of the National Historic Preservation Act. In addition, it is expected that the involved public transportation agencies would need to comply with Section 4(f) of the U.S. Department of Transportation Act of 1966.

As with the Proposed Project, under the Lower Density Alternative, potential measures to mitigate the adverse impacts resulting from construction on Sites 4 through 8 would likely be stipulated in a Letter of Resolution among ESD, MTA, the developer, and OPRHP in accordance with Section 14.09 of the State Historic Preservation Act. It is anticipated that potential measures to mitigate the adverse effects resulting from the expansion of Penn Station on Sites 1, 2, and 3 would be stipulated in a Memorandum of Agreement or Programmatic Agreement among the lead federal agency, SHPO, and other applicable parties in accordance with Section 106 regulations.

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URBAN DESIGN AND VISUAL RESOURCES

Like the Proposed Project, the Lower Density Alternative would include development on Sites 1 through 7, and the related public realm and transportation improvements would be the same as the Proposed Project. Under the Lower Density Alternative, Site 8 would remain as in existing conditions, and the transportation and public realm and improvements associated with this site would not occur. The Lower Density Alternative would result in less development than the Proposed Project, with building heights similar to, or shorter than with the Proposed Project.

URBAN DESIGN

As with the Proposed Project, the Lower Density Alternative would not result in a significant adverse impact to urban design in either the 2028 or 2038 analysis years. In 2028, the development on Site 7 would be similar to that of the Proposed Project and would be in keeping with the urban design of the secondary study area. As with the Proposed Project, under the Lower Density Alternative, it is anticipated that Sites 1, 2, and 3 would be cleared and devoid of buildings (except for the new service building for Penn Station and entrances to the Penn Station expansion) in the 2028 analysis year. The sites would not have any ground-floor amenities or elements of visual interest to the pedestrian, and are expected to be surrounded by construction fencing except for construction-related access points to the proposed Penn Station expansion. As with the Proposed Project, under the Lower Density Alternative, this condition would have a negative effect on the pedestrian experience but would be temporary and would not constitute a significant adverse impact to urban design.

The Lower Density Alternative, like the Proposed Project, would also not result in significant adverse impacts related to urban design in the 2038 analysis year. The Lower Density Alternative would not alter the location and arrangement of streets, street hierarchy, or block shapes in the secondary study area. With the Proposed Project, the proposed widened sidewalks adjacent to the development sites and proposed landscaping at the sidewalks and on the proposed shared streets would provide plantings and publicly accessible spaces for pedestrians to utilize and enjoy. Widened sidewalks would still occur under the Lower Density Alternative, except for adjacent to Site 8, as the Manhattan Mall building would remain in place and would not include the building setbacks of the Proposed Project at that site. The pedestrian experience adjacent to Site 8 would remain as in existing conditions.

As with the Proposed Project, under the Lower Density Alternative, the anticipated building massings, consisting of base and tower configurations, would be consistent with the urban design of the larger and taller more recent buildings constructed in the second half of the 20th century and the buildings recently built or under construction within the past 20 years in the secondary study area. All the buildings under the Lower Density Alternative would be of similar height or shorter than as with the Proposed Project. As with the Proposed Project, the buildings developed under the Lower Density Alternative would be consistent with trends in the secondary study area that have included and continue to include the development of tall, large buildings. While some of the buildings under the Lower Density Alternative would be shorter than those of the Proposed Project, they would still be among the tallest in the secondary study area, and like the Proposed Project, when viewed in context with other tall towers visible to pedestrians within and outside the primary and secondary study areas, would not result in significant adverse impacts to the pedestrian experience. As with the Proposed Project, the Lower Density Alternative would add to the diversity of the Manhattan skyline, which includes a variety of shorter and taller buildings of different massings, designs and materials. Prominent views of the Manhattan skyline and Empire

State Building from outside the secondary study area (such as from the Brooklyn Bridge Walkway and Hunter's Point South Park) would not be substantially altered with either the Proposed Project or this alternative.

VISUAL RESOURCES

Like the Proposed Project, the Lower Density Alternative would result in significant adverse impacts to visual resources in the 2028, as the demolition of the Church of St. John the Baptist on Site 2 is projected to occur as of the 2028 analysis year. As Site 8 would remain as in existing conditions the significant adverse impact resulting from the demolition of the copper skybridge spanning from Site 8 across West 32nd Street that would occur with the Proposed Project would not occur under the Lower Density Alternative (if the owner of Site 8 retains the skybridge). In addition, the obstruction of views east and northeast from certain vantage points within the western portion of the secondary study area towards the Empire State Building in the 2038 analysis year would constitute a significant adverse impact to visual resources. This impact would occur as a result of development on Sites 2 and 6. As discussed in Chapter 22, "Mitigation," this impact would occur with any new building on the east side of Site 2 greater than 340 feet in height, and any new building on Site 6 greater than 530 feet. Under the Lower Density Alternative, the buildings on Sites 2 and 6 would be taller than these heights (the illustrative building on the east side of Site 2 would be 722 feet tall and the illustrative building on Site 6 would be 820 feet tall). Therefore, the same visual impacts of the Proposed Project with respect to the Empire State Building would occur under the Lower Density Alternative. Potential measures to mitigate the significant adverse impact to visual resources have been evaluated and are discussed in Chapter 22, "Mitigation."

HAZARDOUS MATERIALS

Neither the Lower Density Alternative nor the Proposed Project would result in significant adverse impacts with respect to hazardous materials.

Unlike the Proposed Project, the Lower Density Alternative would only involve redevelopment on Sites 1 through 7. Site 8 would remain as in existing conditions. As with the Proposed Project, under the Lower Density Alternative, potential contamination may be present in both the subsurface (related primarily to localized former gas stations, historic fill, current and abandoned heating oil underground storage tanks [USTs], and historical operations) and inside buildings (primarily related to asbestos, LBP, and PCBs). The Lower Density Alternative would be subject to the same standard precautionary measures required for the Proposed Project. With the implementation of those measures (e.g., identification of hazardous materials as part of Phase I and Phase II investigations,¹⁷ and handling/disposal of hazardous materials in accordance with applicable regulations and under the direction of material management plans and health and safety plans), no significant adverse impacts related to hazardous materials would be expected to occur as a result of construction of the Lower Density Alternative. Following construction of the Lower Density Alternative, with the proposed measures, there would be no further potential for significant adverse impacts.

¹⁷ Phase I Environmental Site Assessments (ESAs) and any subsequent subsurface investigations (Phase II Environmental Site Investigations), which may be required based on the conclusions of the Phase I ESA, as well as any necessary remedial plans would be required by ESD and prepared prior to site development.

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WATER AND SEWER INFRASTRUCTURE

As with the Proposed Project, the Lower Density Alternative would not result in a significant adverse impact on the City's water supply, wastewater treatment, or stormwater management infrastructure in either analysis year. The Lower Density Alternative would include less overall development than the Proposed Project, resulting in less overall water demand and sanitary flow to the combined sewer system. As with the Proposed Project, under the Lower Density Alternative, the overall volume of stormwater runoff is anticipated to increase due to the replacement of some existing paved areas with roof coverage, which is more impervious than pavement and walkways; however, with the implementation of DEP's design standards, the peak stormwater runoff rate from the development sites is anticipated to decrease. Additionally, with the incorporation of selected BMPs (specifically on-site detention), as well as any potential sewer improvements that would be required as part of the DEP site connection approval process, the peak stormwater runoff rates are expected to be reduced as compared to existing conditions. In addition, with the use of low-flow plumbing fixtures, the sanitary flow is expected to be reduced as compared to existing conditions. Like the Proposed Project, the Lower Density Alternative is not expected to appreciably increase the frequency or volume of CSO events.

SOLID WASTE AND SANITATION SERVICES

As with the Proposed Project, the Lower Density Alternative would not result in a significant adverse impact on solid waste and sanitation services in either the 2028 or 2038 analysis years. In addition, the Lower Density Alternative would not directly affect a solid waste management facility.

The Lower Density Alternative would result in less overall development than the Proposed Project, and generate less total solid waste. As with the Proposed Project, the increase in solid waste generation from the Lower Density Alternative would be a negligible increase relative to the amount of solid waste handled by DSNY or the by private carters per day.¹⁸ As such, the Lower Density Alternative would not result in an increase in solid waste that would overburden available waste management capacity and there would be no significant adverse impact to solid waste. The Lower Density Alternative would not conflict with, or require any amendment to, the City's solid waste management objectives as stated in the SWMP.

ENERGY

As with the Proposed Project, the Lower Density Alternative would not result in a significant adverse impact related to energy in either the 2028 or 2038 analysis year. The Lower Density Alternative would result in less overall development than the Proposed Project, and result in less overall energy use. In addition, the Lower Density Alternative would be required to comply with the NYCECC, which governs performance requirements of HVAC systems, as well as the exterior building envelope of new buildings. In compliance with this code, new development must meet standards for energy conservation, which include requirements relating to energy efficiency and combined thermal transmittance. Therefore, like the Proposed Project, the Lower Density Alternative would not result in a significant adverse impact related to energy.

¹⁸ About DSNY: <https://www1.nyc.gov/assets/dsny/site/about>, accessed July 2020.

TRANSPORTATION

Phase 1 of the Lower Density Alternative would result in a slightly smaller Site 7 development (approximately 110,000 gsf office space reduction) as compared to Phase 1 of the Proposed Project. Given this small program difference, the potential transportation impacts are expected to be the same as the significant adverse transportation impacts identified for Phase 1 of the Proposed Project in Chapter 14, “Transportation,” and unmitigated impacts are expected to occur at the same locations under Phase 1 of the Lower Density Alternative as with the Proposed Project.

For Phase 2 full build-out of the Lower Density Alternative, peak hour trip estimates were developed based on the trip generation assumptions detailed in Chapter 14, “Transportation.” The full build-out of the Lower Density Alternative would generate 14,116; 14,560; and 14,121 incremental person trips and 1,310; 916; and 1,160 incremental vehicle trips during the weekday AM, midday, and PM peak hours, respectively. In comparison, the Phase 2 full build-out of the Proposed Project would generate 23,551; 23,028; and 22,586 incremental person trips and 2,157; 1,396; and 1,830 incremental vehicle trips during the weekday AM, midday, and PM peak hours, respectively. As summarized in **Table 21-30**, compared with the Phase 2 full build-out of the Proposed Project, the full build-out of the Lower Density Alternative would yield up to approximately 9,400 fewer peak hour person trips and 850 fewer peak hour vehicle trips.

Table 21-30
Comparison of Phase 2 Full Build-Out with Lower Density Alternative

Program	Peak Hour	In/Out	Person Trip							Vehicle Trip			Total	
			Auto	Taxi	Subway	Railroad	PATH	Bus	Walk	Total	Auto	Taxi	Delivery	
Lower Density Alternative	AM	In	540	448	7,083	2,734	408	1,777	766	13,756	467	305	111	883
		Out	20	57	136	97	11	67	-28	360	11	305	111	427
		Total	560	505	7,219	2,831	419	1,844	738	14,116	478	610	222	1,310
	Midday	In	148	277	360	74	1	342	5,876	7,078	112	225	121	458
		Out	147	280	360	78	-3	359	6,261	7,482	112	225	121	458
		Total	295	557	720	152	-2	701	12,137	14,560	224	450	242	916
	PM	In	65	104	315	130	16	104	301	1,035	46	304	20	370
		Out	541	434	6,589	2,525	380	1,662	955	13,086	466	304	20	790
		Total	606	538	6,904	2,655	396	1,766	1,256	14,121	512	608	40	1,160
Proposed Project Phase 2 Full Build-out	AM	In	903	722	11,821	4,559	684	2,960	1,195	22,844	786	494	182	1,462
		Out	32	67	326	172	22	114	-26	707	19	494	182	695
		Total	935	789	12,147	4,731	706	3,074	1,169	23,551	805	988	364	2,157
	Midday	In	198	395	585	137	0	539	9,266	11,120	159	339	197	695
		Out	207	410	611	148	-4	577	9,959	11,908	165	339	197	701
		Total	405	805	1,196	285	-4	1,116	19,225	23,028	324	678	394	1,396
	PM	In	71	113	512	214	29	150	261	1,350	52	480	35	567
		Out	861	677	10,864	4,181	627	2,727	1,299	21,236	748	480	35	1,263
		Total	932	790	11,376	4,395	656	2,877	1,560	22,586	800	960	70	1,830
Net Difference	AM	In	-363	-274	-4,738	-1,825	-276	-1,183	-429	-9,088	-319	-189	-71	-579
		Out	-12	-10	-190	-75	-11	-47	-2	-347	-8	-189	-71	-268
		Total	-375	-284	-4,928	-1,900	-287	-1,230	-431	-9,435	-327	-378	-142	-847
	Midday	In	-50	-118	-225	-63	1	-197	-3,390	-4,042	-47	-114	-76	-237
		Out	-60	-130	-251	-70	1	-218	-3,698	-4,426	-53	-114	-76	-243
		Total	-110	-248	-476	-133	2	-415	-7,088	-8,468	-100	-228	-152	-480
	PM	In	-6	-9	-197	-84	-13	-46	40	-315	-6	-176	-15	-197
		Out	-320	-243	-4,275	-1,656	-247	-1,065	-344	-8,150	-282	-176	-15	-473
		Total	-326	-252	-4,472	-1,740	-260	-1,111	-304	-8,465	-288	-352	-30	-670

It should be noted that this alternative would also support and accommodate the implementation of the Penn Station expansion. Therefore, the increased commuter rail ridership into Penn Station are also a part of this alternative. However, consistent with the analysis framework described in Chapter 14, “Transportation,” the incremental trip summaries presented above are only for the

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new development (with either the Lower Density Alternative or Proposed Project) that is expected to occur on the development sites within the Project Area.

As discussed in Chapter 14, “Transportation,” Phase 1 of the Proposed Project would result in 71 intersections with significant adverse impacts during any analysis peak hour, with 26 of them could not be fully mitigated, while Phase 2 of the Proposed Project would result in 102 intersections with significant adverse impacts during any analysis peak hour, with 81 of them could not be fully mitigated. Therefore, since the incremental trips for full build-out of the Lower Density Alternative would fall between the incremental trips associated with Phase 1 and Phase 2 of the Proposed Project, it can be expected that the number of intersections with significant adverse impacts resulting from full build-out of the Lower Density Alternative would fall between 71 and 102 intersections during any analysis peak hour. Some of these impacts could be mitigated with the same types of mitigation measures as with the Proposed Project. Compared with Phase 2 of the Proposed Project, the number of unmitigated intersections under full build-out of the Lower Density Alternative would be expected to fall within the range of 26 to 81 intersections, which would be fewer than the 81 unmitigated intersections for Phase 2 of the Proposed Project.

As discussed in Chapter 14, “Transportation,” Phase 1 of the Proposed Project would result in four subway station elements with significant adverse impacts during any analysis peak hour, with two of them could not be fully mitigated, while Phase 2 of the Proposed Project would result in 33 elements with significant adverse impacts during any analysis peak hour, with 17 of them could not be fully mitigated. Similar to the transit impact discussions presented above under the Residential Alternative, the Lower Density Alternative is expected to result in moderately fewer overall impacted locations as compared to Phase 2 of the Proposed Project. Specifically, based on the attribution of Project development incremental trips vs. Penn Station commuter rail ridership incremental trips to the identified station element impacts under Phase 2 of the Proposed Project, it is likely that impacts at the Herald Square Station would be moderately less and impacts at the Seventh Avenue and Eighth Avenue Stations would remain the same or slightly less under this alternative as compared to Phase 2 of the Proposed Project. Some of these impacts could be mitigated with the same types of mitigation measures as with the Proposed Project. Because Site 8 under the Lower Density Alternative would remain the same as existing conditions and would not be accompanied by the transit improvements that would otherwise accompany the Proposed Project’s Site 8 development, some of the 34th Street–Herald Square Subway Station analysis element impacts could be worse under the Lower Density Alternative. In addition, some of the existing analysis elements that would otherwise be replaced or eliminated by the Proposed Project’s Site 8 transit improvement could also be impacted under the Lower Density Alternative and be potentially unmitigated. Overall, accounting for these potential additional 34th Street–Herald Square Subway Station unmitigated analysis element impacts and the potential reduction of unmitigated impacts at other station analysis elements due to the overall lower trip increments, the Lower Density Alternative could result in unmitigated transit impacts at the same or slightly fewer subway station analysis elements as compared to Phase 2 of the Proposed Project. As with Phase 2 of the Proposed Project, the Lower Density Alternative would not result in any bus line-haul impacts. As discussed in Chapter 22, “Mitigation,” a potential mitigation measure for the Proposed Project’s transit impacts is shifting the east-west underground corridor between Sixth and Seventh Avenues southward to a location under Sites 7 and 8. Under this alternative, this potential shift in the location of the east-west underground corridor would not be accommodated. Accordingly, this potential mitigation measure would not be possible with this alternative.

As discussed in Chapter 14, “Transportation,” Phase 1 of the Proposed Project would result in 12 pedestrian elements with significant adverse impacts during any analysis peak hour, with two of

them could not be fully mitigated, while Phase 2 of the Proposed Project would result in 102 pedestrian elements with significant adverse impacts during any analysis peak hour, with 51 of them could not be fully mitigated. Similar to the pedestrian impact discussions presented above under the Residential Alternative, since the commuter rail ridership increments would still materialize under this alternative in addition to the development sites' incremental trips, the Lower Density Alternative is expected to result in moderately fewer overall impacted locations as compared to Phase 2 of the Proposed Project. Some of these impacts could be mitigated with the same types of mitigation measures as with the Proposed Project. Because Site 8 under the Lower Density Alternative would remain the same as existing conditions, it would not be accompanied by the building setbacks along the south side of West 33rd Street portion fronting Site 8 and the west side of Sixth Avenue that would otherwise accompany the Proposed Project's Site 8 With Action development. Therefore, these two sidewalk segments, which are not impacted under the Proposed Project, could potentially be impacted under the Lower Density Alternative. Without the additional sidewalk circulation space afforded by the building setbacks, these impacts could potentially be unmitigated. Overall, accounting for these potential two additional unmitigated sidewalk impacts and the potential reduction of unmitigated impacts at other pedestrian analysis elements due to the overall lower trip increments, the Lower Density Alternative could result in unmitigated pedestrian impacts at the same or slightly fewer elements as compared to Phase 2 of the Proposed Project.

For parking, the Lower Density Alternative is expected to similarly result in a parking shortfall within the $\frac{1}{4}$ -mile off-street parking study area as the Proposed Project. As with the Proposed Project, this parking shortfall would not be considered a significant adverse parking impact due to the magnitude of available alternative modes of transportation.

Lastly, the required post-approval TMP described in Chapter 22, "Mitigation," for the Proposed Project would also apply to the Lower Density Alternative.

AIR QUALITY

MOBILE SOURCES

The Lower Density Alternative would result in reduced project-generated trips as compared to the Proposed Project for both Phase 1 and Phase 2. Like the Proposed Project, no significant adverse air quality impacts are predicted under the Lower Density Alternative.

STATIONARY SOURCES

Under the Lower Density Alternative, Site 8 would not be developed and would remain as in existing conditions. Consequently, the proposed restrictions to avoid potential air quality impacts associated with development on Site 8 would not be needed. For the other sites, the Lower Density Alternative would result in a lesser density of development and a shorter building (with the exception of Site 4, which is assumed to be same development potential as the Proposed Project). No new or additional air quality restrictions are anticipated, since under the Lower Density Alternative, emissions from fossil fuel-fired equipment are assumed to be less than the Proposed Project (with the exception of the hotel development on the midblock portion of Site 1, which would be the same size under this alternative), and potential impacts from buildings of a lower height on nearby buildings of a greater height would be similar in nature. The development sites under the Lower Density Alternative would not result in potential air quality impacts on nearby

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existing buildings or planned developments in the No Action condition, as they would be taller in height, like the Proposed Project.

The proposed restrictions on operable windows and air intakes on portions of Site 5 and Site 7 due to emissions from the existing combined heat and power (CHP) plant at 1 Penn Plaza would remain the same under the Lower Density Alternative, since these buildings would still be taller in height than the CHP exhaust stack.

Overall, the Lower Density Alternative would not result in any significant adverse air quality impacts, like the Proposed Project.

GREENHOUSE GAS EMISSIONS

As discussed in Chapter 16, “Greenhouse Gas Emissions,” the climate change analysis differs from most other technical areas in that it does not account for only the increment between the condition with and without the Proposed Project, in that the focus is on the total emissions associated with the uses, and on the effect of measures to reduce those emissions.

Similar to the Proposed Project, the new buildings included under the Lower Density Alternative (as well as the existing building on Site 8 which would not be developed and would remain as in existing conditions) would be required to comply with Local Law 97 (as it may be clarified or amended over time). Since the Lower Density Alternative represents a reduction in program density of approximately 34 percent compared to the Proposed Project and the same mix of uses as in the Proposed Project (excluding Site 8), the GHG emissions associated with building operations would be less than the Proposed Project. However, as the Lower Density Alternative would result in less development than the Proposed Project, it is assumed that some of the region’s growth that would be accommodated under the Proposed Project would instead occur in areas outside of the Project Area under the Lower Density Alternative. Constructing high-density development near transit results in more efficient use of land—if most users of the high-density development are commuting by transit, less space is required for parking and less vehicular traffic is generated on a per capita basis. Locating high-density uses near transit also ensures that ridership will be high. Therefore, the Lower Density Alternative would not be as efficient a use of land as the Proposed Project, and may result in similar or higher overall GHG emissions as the Proposed Project.

NOISE

As with the Proposed Project, the Lower Density Alternative would not have the potential to result in any significant impacts with respect to noise in the 2028 analysis year. As described in Chapter 17, “Noise,” in the 2038 analysis year, the Proposed Project would result in significant adverse noise impacts at receptors along West 31st Street between Ninth and Tenth Avenues, along West 31st Street between Sixth and Seventh Avenues, and along West 30th Street between Sixth and Eighth Avenues. These operational noise impacts are projected to occur upon the completion and occupancy of approximately 4.75 million gsf of office space on the proposed development sites. As the Lower Density Alternative would include the development of approximately 9.4 million gsf of office space, it is expected that the same noise impacts would occur under the Lower Density Alternative.

As with the Proposed Project, it is expected that the Lower Density Alternative would also result in noise levels at the newly introduced open space at Site 2 that would exceed the 55 dBA L₁₀₍₁₎ noise level for outdoor areas requiring serenity and quiet recommended by the *CEQR Technical*

Manual noise exposure guidelines. However, the existing noise levels at these locations are currently in the low- to-mid-70s dBA, exceeding the acceptable threshold, and the predicted levels at this open space are comparable to those at many open spaces in New York City. Consequently, the predicted noise exposure at the newly introduced open space would not constitute a significant adverse impact.

As with the Proposed Project, under the Lower Density Alternative, up to 35 dBA window/wall attenuation would be required to achieve acceptable interior noise levels per the *CEQR Technical Manual* noise exposure guideline at Site 1. This is based on the projected noise levels at newly introduced hotel guestroom receptors. To implement the attenuation requirements, ESD would include provisions specifying the appropriate window/wall attenuation applicable to each development site in project documents with the future developers of each site. By meeting the design guidelines specified in the project documents, buildings developed as a result of the Lower Density Alternative would provide sufficient attenuation to achieve the *CEQR Technical Manual* interior noise level guidelines of 45 dBA L₁₀ for residential, hotel guestroom, or community facility uses. As with the Proposed Project, under the Lower Density Alternative, implementation of the attenuation levels outlined above, the Lower Density Alternative would not result in any significant adverse impacts at the newly introduced noise receptors.

PUBLIC HEALTH

Like the Proposed Actions, the Lower Density Alternative would not result in significant adverse impacts related to public health.

As described in the relevant analyses in this chapter, the Lower Density Alternative would not result in unmitigated significant adverse impacts in the areas of hazardous materials, water quality, or air quality, and therefore would not have the potential for a public health impact related to these technical areas. As described above under “Noise,” the Lower Density Alternative would result in a significant adverse noise impact at sensitive receptors along West 30th and West 31st Streets due to noise increases from project-generated trucks traveling on these streets, which, as with the Proposed Project, would be unmitigated or only partially mitigated (see Chapter 22, “Mitigation”). In addition, as noted under “Construction,” like the Proposed Project, construction activities for the Lower Density Alternative would result in unmitigated significant adverse noise impacts at several sensitive receptor locations, as defined by *CEQR Technical Manual* thresholds, during certain phases of project construction. As with the Proposed Project, under the Lower Density Alternative, the predicted noise exposure that would be experienced by people inhabiting affected areas would be comparable to existing noise exposure at other nearby areas, and it would not exceed the threshold that would be expected to result in health effects. Therefore, the Lower Density Alternative’s unmitigated noise impacts would not result in a significant adverse public health impact.

NEIGHBORHOOD CHARACTER

The Proposed Project would not result in a significant adverse impact on neighborhood character. As discussed in Chapter 19, “Neighborhood Character,” the defining features of neighborhood character are a mixture of several high-density commercial buildings and lower-scale (and, in some cases, historic) commercial buildings and transportation infrastructure; high levels of pedestrian and vehicular activity and associated noise; and a varied neighborhood context with smaller buildings interspersed among taller buildings and iconic New York City landmarks. Like the Proposed Project, the Lower Density Alternative would enhance existing neighborhood character by reinforcing these

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defining features while improving pedestrian facilities and transit accessibility. As with the Proposed Project, the Lower Density Alternative would address substandard conditions in the Project Area by facilitating redevelopment to create a cohesive, transit-oriented commercial district and introducing much-needed public transportation and public realm improvements in the area. However, the Lower Density Alternative would result in less development than the Proposed Project, would not maximize the revenue that could be generated by higher-density development, and would therefore be less effective at supporting the reconstruction and expansion of Penn Station.

As with the Proposed Project, the Lower Density Alternative would not result in significant adverse impacts to land use, zoning, and public policy; socioeconomic conditions; or urban design. Although there would be significant adverse impacts with respect to historic resources, shadows, visual resources, transportation, and noise, these impacts would not result in a significant adverse impact to the defining elements of neighborhood character. Overall, like the Proposed Project, the Lower Density Alternative is expected to result in positive effects to neighborhood character.

CONSTRUCTION

The total amount of development would be reduced under the Lower Density Alternative. In addition, since Site 8 would not be developed under the Lower Density Alternative, the construction disruption that was identified due to construction activities at this site would not occur under the Lower Density Alternative. Neither the Proposed Project nor the Lower Density Alternative would result in significant adverse construction impacts with respect to land use, socioeconomic conditions, hazardous materials, and water and sewer infrastructure, air quality, or vibration.

With regards to transportation, since Phase 1 under the Lower Density Alternative would result in the construction of only a slightly smaller Site 7 development as compared to Phase 1 of the Proposed Project, the potential construction transportation impacts under the Lower Density Alternative are expected to be comparable to the significant adverse transportation impacts identified for Phase 1 construction of the Proposed Project. However, Phase 2 of the Lower Density Alternative would be approximately two-thirds the size of Phase 2 of the Proposed Project, and potential significant adverse construction traffic impacts would be expected to occur at fewer locations and at lesser magnitudes than the Proposed Project.

As with the Proposed Project, the most noise-intensive construction activity (i.e., pile driving) would occur at all sites with the exception of Site 8 under the Lower Density Alternative. Additionally, the duration of below-grade and at-grade construction activity under the Lower Density Alternative would be comparable to that with the Proposed Project, except at Site 8. Therefore, at most of the analyzed sensitive receptors, the potential construction noise impacts identified with the Proposed Project would occur under the Lower Density Alternative.

Like the Proposed Project, the proposed expansion of Penn Station on Sites 1, 2, and 3 would occur with the Lower Density Alternative. Sites 1, 2, and 3 would be redeveloped and subject to long-term construction activity under this alternative, although the overall duration of construction on Sites 1, 2, and 3 may be slightly less under this alternative than the Proposed Project. Nonetheless, the significant adverse localized neighborhood character impacts in the immediate vicinity of these sites that would occur with the Proposed Project would also occur with this alternative.

As with the Proposed Project, the Lower Density Alternative would result in the same significant adverse direct impacts on five architectural resources located on Sites 2 and 3 that would be removed for the proposed below-grade expansion of Penn Station, and one architectural resource on Site 7 that would be demolished to allow for new commercial development on Site 7. Measures that could partially mitigate these significant adverse impacts are described in Chapter 22, “Mitigation” and would be applicable to the Lower Density Alternative.

In addition, as with the Proposed Project in 2028, the Lower Density Alternative could have adverse physical impacts on six additional architectural resources that are located within 90 feet of proposed construction activities, close enough to potentially experience adverse construction-related impacts from ground-borne construction-period vibrations, falling debris, subsidence, collapse, or damage from construction machinery. With the Proposed Project, these impacts would occur as a result of construction on Sites 1, 2, 3, 7, and 8. The Lower Density Alternative would include construction on Sites 1, 2, 3, and 7, and the same potential construction-related impacts of the Proposed Project due to construction on those sites would occur. The same six architectural resources could also be adversely affected by adjacent construction in the 2038 analysis year. Therefore, like the Proposed Project, Construction Protection Plans to protect the six architectural resources within 90 feet of construction would be required to be developed and implemented in coordination with OPRHP under the Lower Density Alternative. For the NYCL and NYCL-eligible properties potentially affected by construction impacts, the construction protection plans would also be submitted to LPC for review and comment as with the Proposed Project.

Potential mitigation measures for the significant adverse construction impacts are described in Chapter 22, “Mitigation,” and would also be applicable to the Lower Density Alternative.

CONCLUSIONS REGARDING THE LOWER DENSITY ALTERNATIVE

The Lower Density Alternative considers a project program that would include less total square footage of development, including less commercial office, retail, hotel rooms, parking square footage and spaces, and open space than the Proposed Project. Under this alternative, Site 8 would not be redeveloped.

Like the Proposed Project, the Lower Density Alternative would not result in significant adverse impacts with respect to: land use, zoning, and public policy; socioeconomic conditions; community facilities and services; urban design; hazardous materials; water and sewer infrastructure; solid waste and sanitation services; energy; air quality; greenhouse gas emissions; public health; and neighborhood character.

Under the Lower Density Alternative, significant adverse impacts in the areas of open space, historic resources, noise, construction noise would be the same as or similar to those of the Proposed Project. The Lower Density Alternative would result in significant adverse transportation impacts (operational and during construction), but to a lesser extent than with the Proposed Project. With respect to shadows, the Lower Density Alternative would result in the same significant adverse impacts as the Proposed Project, with the exception of the impact to Herald Square Park. With no new development on Site 8, the Lower Density Alternative would cast less incremental shadow on Herald Square Park, and, unlike the Proposed Project, would not cause a significant adverse shadow impact to that park. With respect to visual resources, the Lower Density Alternative would result in the same significant adverse impacts as the Proposed Project, except with respect to the demolition of the copper skybridge spanning from Site 8 across West 32nd Street. If the owner of Site 8 retains the skybridge, the significant adverse impact that would occur with the Proposed Project would not occur.

Empire Station Complex Civic and Land Use Improvement Project

With respect to pedestrians, the Lower Density Alternative is expected to result in fewer overall impacted locations as compared to Phase 2 of the Proposed Project. However, because the existing Site 8 building and uses would remain under the Lower Density Alternative, it would not provide the building setbacks along the south side of West 33rd Street portion fronting Site 8 and the west side of Sixth Avenue that would otherwise accompany the Proposed Project's Site 8 development. Therefore, these two sidewalk segments, which are not impacted under the Proposed Project, could potentially be impacted under the Lower Density Alternative. Without the additional sidewalk circulation space afforded by the building setbacks, these impacts could potentially be unmitigated. Accounting for these potential two additional unmitigated sidewalk impacts and the potential reduction of unmitigated impacts at other pedestrian analysis elements due to the overall lower trip increments, the Lower Density Alternative could result in unmitigated pedestrian impacts at a similar or a slightly fewer number of elements as compared to Phase 2 of the Proposed Project.

Overall, the Lower Density Alternative would not substantially avoid or reduce the significant adverse impacts that would occur with the Proposed Project and could result in new unmitigated significant adverse impacts with respect to pedestrians that would not occur with the Proposed Project.

In general, although the Lower Density Alternative would meet a number of the Proposed Project's goals and objectives, it would do so to a lesser degree than the Proposed Project because it would introduce less new commercial office use and would not implement all of the public transportation and public realm improvements that would occur with the Proposed Project. As with the Proposed Project, the Lower Density Alternative would address substandard conditions in the Project Area by facilitating redevelopment to create a cohesive, transit-oriented commercial district, although the amount of commercial development under this alternative would be less than the Proposed Project and would not capitalize on the Project Area's unmatched transit access and would not be consistent with the maximum permitted densities of other transit-oriented districts in the City.

By providing for less overall development, the Lower Density Alternative would require land acquisition and other fixed costs to be amortized over less office space, which would offer less incentive for construction of the new office buildings, potentially delaying or forestalling their construction. Similarly, the Lower Density Alternative would foster and support economic growth to a lesser extent than the Proposed Project by creating fewer jobs and less economic activity. The Lower Density Alternative would be less supportive of the public policy goal of accommodating jobs and future economic growth in areas near transit hubs, and therefore a greater proportion of the City and state's future growth could be located in areas that are less transit-accessible than the Project Area under this alternative than with the Proposed Project.

Furthermore, the Lower Density Alternative would implement fewer public transportation and public realm improvements than the Proposed Project, as it would not provide the sidewalk widenings or public transportation improvements associated with Site 8, and it would generate substantially less revenue than the Proposed Project and would therefore be less successful at providing support for the reconstruction and expansion of Penn Station. *