Chapter 5: Community Facilities and Services

A. INTRODUCTION

This chapter examines the potential effects of the Proposed Actions on community facilities surrounding the Development Site and Additional Housing Sites. The 2001 *City Environmental Quality Review (CEQR) Technical Manual* defines community facilities as public or publicly funded facilities including schools, hospitals, libraries, child care centers, and fire and police protection services. Direct impacts may occur when a particular action physically alters or displaces a community facility. Indirect impacts result from increases in population, which create additional demand on service delivery. The Proposed Actions would not directly affect any community facility. Therefore this analysis considers the potential for the Proposed Actions to result in indirect effects on the capacity and provision of services by community facilities in both the full Build year for the Proposed Actions (2019) and the interim analysis year (2017).

The Proposed Actions include three project sites: the Development Site, which is bounded by West 33rd Street, Eleventh Avenue, West 30th Street, and Twelfth Avenue, and two Additional Housing Sites, one located west of Tenth Avenue between West 48th Street and West 49th Street ("Tenth Avenue Site") and the second at the intersection of Ninth Avenue and West 54th Street ("Ninth Avenue Site"). There are two potential reasonable worst-case development scenarios for the Development Site—a Maximum Commercial Scenario and a Maximum Residential Scenario. For the purposes of a conservative analysis, this chapter assumes the Maximum Residential Scenario for the Development Site, which results in the development of up to 5,762 residential units. With 312 units assumed at the Additional Housing Sites, the Proposed Actions would result in a total of 6,074 units under this scenario.

As part of the Proposed Actions, 20 percent of all rental units on the Development Site would be affordable housing units under the terms of the applicable 80/20 program, with the provision of affordable units subject to (1) the allocation of sufficient tax-exempt bond cap or other equivalent low-cost financing to the Developer for each building of rental housing as and when required, and (2) the availability to the Developer of such other incentives, programs, exemptions, credits or abatements as are then generally available for the development of 80/20 housing in the City. As described in Chapter 2, "Framework for Analysis," the Maximum Residential Scenario would result in the development of approximately 1,948 rental units on the Development Site; therefore 390 of these units would be affordable. The 312 residential units to be developed at the Additional Housing Sites would be permanently affordable for low- to moderate-income households. Therefore, for purposes of this analysis, the Proposed Actions would result in a total of 702 affordable units.

The Proposed Actions also include the construction of an elementary/intermediate school (the "PS/IS school") on the Development Site. According to ongoing discussions with the New York City School Construction Authority (SCA), it is assumed this school would include 750 seats. The number of seats is based on SCA's standard programming assumptions for PS/IS facilities based on the size of the school.

PRINCIPAL CONCLUSIONS

PUBLIC SCHOOLS

The Proposed Actions would result in development located within Community School District 2 (CSD 2). The analysis of potential school impacts considers elementary and intermediate schools within CSD 2, as well as within a ½-mile radius study area surrounding the Development Site and Additional Housing Sites. The analysis of high schools considers the potential impacts on the entire Borough of Manhattan.

Under the anticipated building sequencing described in Chapter 1, "Project Description," the PS/IS school would be constructed on the Development Site by July 2017. However, for the purposes of a conservative analysis, a second scenario considers the potential effects if the school were not completed by the 2017 Build year ("Scenario Without the PS/IS School in 2017"). In 2017, the Proposed Actions would not exceed the threshold for conducting a high school analysis, and therefore high schools were analyzed for the 2019 Build year only.

2019

The construction of the PS/IS school (420 elementary seats and 330 intermediate seats) as part of the Proposed Actions by 2017 would partially offset the demand for school seats introduced by the Proposed Actions (792 elementary and 243 intermediate seats) in 2019. Elementary schools in the study area would continue to operate well over capacity in the Future with the Proposed Actions. Furthermore, the 792 elementary students generated by the Proposed Actions would exceed the 420 elementary seats to be provided by the Proposed Actions' PS/IS school on the Development Site. However, elementary school utilization rates in the study area would change minimally as a result of the Proposed Actions (169 to 170 percent) and would increase by approximately two percentage points (from 113 to 115) in the CSD. According to the *CEQR Technical Manual*, an increase in the utilization rate of 5 percentage points may indicate a significant adverse impact; under this standard, although elementary schools in the CSD would operate with a substantial deficiency of seats that would be exacerbated by the Proposed Actions, the Proposed Actions would not result in a significant adverse elementary school impact for either the study area or CSD 2 in 2019.

The development of the new PS/IS school on the Development Site would substantially decrease the deficiency of intermediate seats in the study area (from 134 to 123 percent utilization rate), because the intermediate seats to be provided at the PS/IS school on the Development Site would exceed the project-generated intermediate students. Although the intermediate schools within the study area would continue to operate well over capacity for the CSD as a whole, intermediate school utilization rates would decrease and these schools would continue to operate with a surplus of seats. As a result, the Proposed Actions would not have a significant adverse impact on intermediate schools within the study area or within CSD 2 in 2019.

With the Proposed Actions, high schools utilization rates at the borough level would not change. Sufficient space would exist in Manhattan high schools for the 364 project-generated high school students. Therefore, the Proposed Actions would not have a significant adverse impact on high schools in 2019.

2017

Proposed Actions— Scenario with the PS/IS School in 2017

The Proposed Actions would include the construction of an approximately 120,000 square-foot PS/IS school on the Development Site. According to the SCA, a school of this size would include of a total of 750 seats, with 420 for elementary students and 330 for intermediate students. The Proposed Actions would also generate approximately 247 elementary students and 82 intermediate students by 2017. Based on the anticipated construction sequencing schedule for the Development Site, the proposed PS/IS school is expected to be completed by the 2017 analysis year.

In 2017, construction of the PS/IS school on the Development Site would provide sufficient seats for elementary and intermediate students generated by the Proposed Actions, and the proposed PS/IS school would help alleviate the prevailing deficit of elementary seats within both the study area and the CSD, decreasing elementary school utilization rates in both the study area (from 169 to 150 percent) and the CSD (from 113 to 112 percent). Utilization rates at intermediate schools would also decrease in the study area (from 134 to 114 percent) and within the CSD (94 compared to 91 percent).

Therefore, with the PS/IS school on the Development Site, the Proposed Actions would not result in a significant adverse impact on elementary or intermediate schools in the 2017 analysis year.

Proposed Actions—Scenario without the PS/IS School in 2017

If the proposed PS/IS school were not completed by 2017, the Proposed Actions could result in significant adverse impacts on elementary and intermediate schools in the study area in 2017, but this impact would not remain once the school is completed. Elementary school utilization rates would increase by 5 or more percentage points in the study area, from 169 to 182 percent, which is considered a significant adverse elementary school impact, although the increase would not be significant for CSD 2 as a whole.

Intermediate schools within the study area would also experience an increase in the utilization (from 134 to 139 percent) and a shortfall of seats (approximately 577 seats). While the utilization rate would increase, it would not exceed the CEQR threshold indicating the potential for a significant adverse impact. Intermediate schools within the CSD would continue to operate with excess capacity.

LIBRARIES

The analysis considers the Proposed Actions' impact on the Muhlenberg, Columbus, and Riverside Libraries, the three branch libraries of the New York Public Library (NYPL) system within a ¾-mile radius of the Development Site and Additional Housing Sites. According to the *CEQR Technical Manual*, if a proposed project increases the study area population by 5 percent or more over the Future without the Proposed Actions condition, this increase would impair the delivery of library services in the study area, and a significant impact could occur.

2019

By full build out of the Proposed Actions in 2019, the Columbus and Riverside Branches catchment area populations would each increase by less than one percent. The combined catchment area would increase by 3 percent. In all cases, the increase in population would be

less than 5 percent, and therefore would not cause a noticeable change in the delivery of library services to the Columbus Library, Riverside Library, or the combined catchment area.

The Muhlenberg Library would receive the majority of the population growth since it serves the Development Site. As compared to the population in the Future without the Proposed Actions in 2019, the Muhlenberg catchment area populations would increase by 7 percent. While the catchment area population would increase by more than 5 percent, the increase would not impair the delivery of library services within this catchment area since residents of the Muhlenberg catchment area and the Proposed Actions would have access to the five central libraries located within the study area. Furthermore, residents would also have access to libraries near their place of work. Therefore, there would not be a significant adverse impact on library services in the study area in 2019 as a result of the Proposed Actions.

2017

In 2017, new population would be introduced to the area as a result of the Proposed Actions. The Muhlenberg Library catchment area would experience a 2 percent increase in population. The Columbus and Riverside Branch populations would each increase by less than one percent. The combined catchment area population would increase by one percent. Therefore, no significant adverse library impact is expected by 2017.

CHILD CARE CENTERS

The analysis considers the Proposed Actions' impact on publicly funded child care and Head Start facilities within a one-mile radius of the Development Site and Additional Housing Sites. The Proposed Actions would introduce 105 and 147 children under the age of 6 who would be eligible for publicly funded child care in 2017 and 2019, respectively. Publicly funded child care and Head Start facilities in the area will already be operating above capacity in the Future without the Proposed Actions in both analysis years. The new children from the Proposed Actions would exacerbate the predicted shortage in child care and Head Start slots. These new children represent 24 percent by 2017 and 33 percent by 2019 of the existing collective capacity of publicly funded child care and Head Start centers in the study area. Given that this exceeds the CEQR threshold of a 5 percent increase of the collective capacity, if no new public child care and Head Start facilities or private providers accepting vouchers are created to increase the study area's capacity, significant adverse impacts could occur in 2017 and 2019 as a result of the Proposed Actions. Potential mitigation measures to address this are described in Chapter 24, "Mitigation."

HEALTH CARE FACILITIES (OUTPATIENT)

The analysis considers the Proposed Actions' impacts on St. Luke's Roosevelt Hospital and St. Vincent's Hospital. The Proposed Actions could increase the demand for health care facilities by less than one percent, which is below the CEQR threshold of 5 percent that could cause a significant adverse impact. Therefore, a significant adverse impact on area hospitals is not anticipated as a result of the Proposed Actions.

POLICE PROTECTION SERVICES

The Proposed Actions would not result in direct effects on the physical operations of, or access to and from, a New York City Police Department (NYPD) precinct house. By 2019, the new worker, residential, and visitor population generated by the Proposed Actions could increase the demand for police protection. In coordination with the NYPD, the development associated with the Proposed

Actions has been reviewed for potential impacts on police coverage. According to the NYPD Office of Management Analysis and Planning, NYPD would continue to evaluate its staffing needs and assign personnel based on a variety of factors, including projected population increases and demographic shifts, calls for service, and crime conditions. Accordingly, there would be no significant adverse impact on police services.

FIRE PROTECTION AND EMERGENCY MEDICAL SERVICES

The Proposed Actions would not result in any direct effects to New York City Fire Department (FDNY) or Emergency Medical Services (EMS) facilities. By 2017, the new worker, residential, and visitor population generated in the Future without the Proposed Actions could increase the demand for fire protection and for emergency medical services. According to the FDNY, based on anticipated No Build development in the Development Site Study Area, the mitigation of a new firehouse as first proposed in the *Hudson Yards FGEIS* would need to be in place in 2017 (some eight years earlier than envisioned in the *Hudson Yards FGEIS*). However, FDNY would continue to evaluate its needs and determine the specific timing for this mitigation based on the actual completion of development in the Hudson Yards area. The FDNY has indicated that if the firehouse is in place by 2017, it would accommodate the demands from the Proposed Actions, as well as surrounding No Build development. Therefore, the Proposed Actions would not result in a significant adverse impact to fire services.

B. SCREENING LEVEL ASSESSMENT

The *CEQR Technical Manual* provides guidelines and thresholds (shown in Table 5-1) that are used to make an initial determination of whether a detailed study is necessary to determine potential impacts. If the Proposed Actions exceed the threshold for a specific facility, a more detailed analysis is warranted. A preliminary screening analysis was conducted to determine if the Proposed Actions would exceed these established *CEQR Technical Manual* thresholds warranting further analysis. Where detailed analyses are required, this chapter describes existing conditions and then examines and compares conditions in the Future without the Proposed Actions with conditions in the Future with the Proposed Actions to determine the Proposed Actions' potential impacts.

Table 5-1
Preliminary Screening Analysis Criteria

Community Facility	Threshold
Public schools	More than 50 elementary/middle school or 150 high school students
Libraries	Greater than 5 percent increase in ratio of residential units to libraries in borough
Health care facilities (outpatient)	More than 600 low- to moderate-income units
Child care centers (publicly funded)	More than 50 eligible children based on number of low- to moderate-income units by borough
Police protection	Direct effect only
Fire protection	Direct effect only
Source: 2001 *CEQR Technical Manual*.	

PUBLIC SCHOOLS

According to the *CEQR Technical Manual*, potential impacts on public schools may occur if there would be insufficient seats available to serve the population. These impacts result, most often, when a project introduces school-age children to an area. As set forth in Table 3C-2 in the *CEQR Technical Manual*, if a project introduces more than 50 elementary and intermediate children, or more than 150 high school students, further analysis is conducted.

The City recently revised the student generation rates in Table 3C-2 of the *CEQR Technical Manual*, which are used to analyze the number of school seats generated from the Proposed Actions and the planned developments in the area. These new rates are effective as of November 2008. Whereas the original generation rates in Table 3C-2 of the *CEQR Technical Manual* differentiated between the affordability levels of the units, the new generation rates provide one ratio per borough at elementary, intermediate, and high school levels. For Manhattan, the new student generation rates are 0.12 elementary school students per unit, 0.04 intermediate school students per unit, and 0.06 high school students per unit.

According to these new rates, by 2019, the full development of the Proposed Actions is expected to introduce 1,336 students—729 elementary, 243 intermediate, and 364 high school students (including students generated by 2017). By 2017 the Proposed Actions would introduce approximately 452 students—247 elementary, 82 intermediate, and 123 high school students. Since the Proposed Actions would exceed the 50 elementary/intermediate student threshold in 2017 and 2019, detailed analyses of elementary and intermediate schools are warranted for both the 2017 and 2019 analysis years. The Proposed Actions would introduce approximately 123 high school students in the 2017 analysis year and a total of approximately 364 high school students in the 2019 analysis year. Therefore, a detailed analysis of the Proposed Actions' effects on public high schools is warranted for only the 2019 analysis year.

LIBRARIES

Potential impacts on libraries may result from an increased user population. A noticeable change in service delivery is likely to occur only if a library is displaced or altered, or if a proposed action introduces a large residential population. Based on Table 3C-3 in the *CEQR Technical Manual*, a proposed action in the Borough of Manhattan that generates an additional 901 residential units would create a 5 percent increase in the number of units served per branch. The 2,056 and 6,704 units developed, respectively, by the Proposed Actions in 2017 and 2019 exceed this threshold. Therefore, a detailed analysis of libraries is warranted for both analysis years.

HEALTH CARE FACILITIES (OUTPATIENT)

Potential significant adverse impacts on health care facilities could occur if a proposed project would result in a population increase of 5 percent or more those who would seek services at these facilities. According to the *CEQR Technical Manual*, if a proposed project would generate more than 600 low- to moderate-income units, there may be increased demand on local public health-care facilities, which may warrant further analysis. A total of 702 low- to moderate-income housing units are expected to be developed by the Proposed Actions in 2019. Therefore, the Proposed Actions exceed the threshold for a detailed analysis in the 2019 analysis year. The Proposed Actions would result in approximately 498 low- to moderate-income housing units by 2017. Therefore, no further analysis is warranted for 2017.

CHILD CARE FACILITIES

According to the *CEQR Technical Manual*, if a proposed project would add more than 50 eligible children to the study area's child care facilities, a detailed analysis of the proposed project's impact on publicly funded child care facilities is warranted. This threshold is based on the number of low-income and low- to moderate-income units within a proposed project. Following the methodology of the *CEQR Technical Manual*, the estimated number of new

housing units that would yield 50 eligible children differs in each borough. In Manhattan, projects that would create 148 units of low-income and/or low- to moderate-income housing exceed the threshold for a detailed analysis of child care centers.

The City recently revised the generation rates for the projection of children eligible for public child care. The new generation rates create two categories, children up to 6 years of age and children 6 to 12 years of age, to project the number of children that would be eligible for public child care services per new residential unit. In Manhattan, the new rates are 0.21 child care-eligible children up to age 6 per low- or low-moderate income unit, and 0.13 child care-eligible children age 6 to 12 per low- or low-moderate income unit. The first category, children up to 6 years of age, is the primary age group receiving public child care services, and will be the focus of quantitative analysis. The second group, children ages 6 to 12, is more likely to receive after-school services and will only be discussed qualitatively in the impacts section.

According to these new rates, a total of 702 low- to moderate-income housing units would be introduced to the area by 2019. The Proposed Actions would result in up to approximately 498 low- to moderate-income housing units by 2017. Therefore, the Proposed Actions exceed the threshold for detailed analysis in both the 2017 and 2019 analysis years.

POLICE PROTECTION SERVICES

According to the *CEQR Technical Manual*, the ability of the police to provide public safety for a new project usually does not warrant a detailed assessment under CEQR. NYPD independently reviews its staffing levels against a precinct's population, area coverage, crime levels, and other local factors when assessing its ability to serve the community or need to redeploy services. A detailed assessment of service delivery is usually only conducted if a proposed action would have direct effects on a precinct house, either by physically altering the facility through displacement or other physical change, or by affecting access to and from the facility. The Proposed Actions would not result in direct effects. However, this chapter provides a description of existing police facilities that serve the project sites and an assessment of the potential for the Proposed Actions to affect police services.

FIRE PROTECTION AND EMERGENCY MEDICAL SERVICES

According to the *CEQR Technical Manual*, the assessment of impacts on fire protection services relates to fire response time (i.e., the amount of time it would take for fire engines to travel from the nearest fire station to the site of the proposed project or other buildings within the primary service area of that station). Generally, a detailed assessment of service delivery is conducted only if a proposed action would have direct effects on a fire or emergency facilities, either by physically altering the facility through displacement or other physical change, or by affecting access to and from the facility. The Proposed Actions would not result in these direct effects. However, this chapter provides a description of existing fire facilities that serve the project sites and an assessment of the potential for the Proposed Actions to affect fire protection services.

C. PUBLIC SCHOOLS

This section identifies public elementary, intermediate, and high schools that would serve the development resulting from the Proposed Actions and assesses conditions in terms of enrollment and utilization during the most recent school year, noting any school capacity deficiencies. The

analysis also considers future enrollment and capacity, and, finally, assesses the potential effects of the Proposed Actions.

Both the Development Site and Additional Housing Sites are located within CSD 2, which includes most of Lower Manhattan, Midtown, and the Upper East Side. The study area for the analysis of educational facilities is a ½-mile radius around the Development Site and Additional Housing Sites within CSD 2 (see Figure 5-1.) The analysis also examines effects on schools within the entire CSD, since students can also attend schools within their district but outside their immediate neighborhood. The northern boundary of CSD 2 is West 59th Street, and is therefore the northern boundary of the study area for this analysis. As population shifts within a school district over time, the New York City Department of Education (DOE) can adjust which schools students are sent to within the district to improve composition and utilization of the affected schools.

If the detailed analysis finds that a proposed action would cause an increase of five percentage points or more in the utilization rate of the affected schools (those within the study areas), a significant adverse impact may result, warranting consideration of mitigation.

As noted above in Section B, "Screening Level Assessment," in 2017 the Proposed Actions would not exceed the threshold for conducting a high school analysis. The 2017 analysis focuses on potential impacts on elementary and intermediate schools. The 2019 analysis of the Proposed Actions includes an assessment of the potential impacts on elementary, intermediate, and high schools.

EXISTING CONDITIONS

ELEMENTARY SCHOOLS

There are a total of 13 schools within the study area: four elementary, one intermediate, and eight high schools (see Tables 5-2 and 5-3).[1] As shown in Figure 5-1, PS 33, the Chelsea School, is the elementary school nearest the Development Site. According to DOE's most recent enrollment and capacity figures, which are for the 2007-2008 school year, this school is operating at 61 percent capacity and has a surplus of 212 seats. The Adolph S. Ochs School, PS 111, a K-8 school, is the school nearest to the Additional Housing Sites. The elementary component of PS 111 has a utilization rate of 74 percent with 127 available seats.[2]

There are 1,373 elementary students enrolled within the study area (see Table 5-2). Schools in the study area operate at 83 percent of capacity with 276 available seats. Total enrollment at all elementary schools in CSD 2 is 15,055 students (not including pre-K enrollment), or 105 percent utilization, with a shortfall of 726 seats.

[1] PS 111, the Adolph S. Ochs School, provides schooling for grades K-8, and therefore respective enrollment and capacity totals were included for both the elementary and intermediate levels.

[2] Enrollment data provided by DCP.



WESTERN **RAIL YARD**

Public Schools
Figure 5-1

Table 5-2
Public Elementary and Intermediate/Middle School Enrollment, Capacity, and Utilization

Map No.	School Name	Address	Enrollment	Capacity	Available Seats in Program	Program Utilization (Percent)
Elementary Schools						
1	PS 51 Elias Howe	520 West 45th Street	334	276	(58)	121
2	PS 33 Chelsea School	281 Ninth Avenue	336	548	212	61
3	PS 212 Midtown West	328 West 48th Street	347	342	(50)	129
4	PS 111 Adolph S. Ochs	440 West 53rd Street	356	483	127	74
		Study Area	**1,373**	**1,649**	**276**	**83**
		CSD 2 Total	**15,055**	**14,329**	**(726)**	**105**
Intermediate/Middle Schools						
5	PS 111 Adolph S. Ochs	440 West 53rd Street	216	294	78	73
6	MS 104 Simon Baruch	330 East 21st Street	1,040	1,181	141	88
		Study Area	**1,256**	**1,475**	**219**	**85**
		CSD 2 Total	**6,218**	**7,028**	**810**	**88**

Note: See Figure 5-1 for school location.
Sources: DOE *Utilization Profiles: Enrollment/Capacity/Utilization, 2007-2008*, target capacity. These figures include pre-K enrollment in these buildings. Enrollment and capacity for PS 111 elementary and intermediate breakdown provided by DCP.

Table 5-3
High School Enrollment, Capacity, and Utilization

Map No.	School	Address	Enrollment	Capacity	Available Seats	Utilization (Percent)
7	H.S. 408 Professional Performing Arts High School	328 West 48th Street	428	538	110	80
8	H.S. 625 High School of Graphic Communication Arts	439 West 49th Street	1,839	1,829	(10)	101
9	H.S. 288 Food and Finance High School	525 West 50th Street	405	595	190	68
	H.S. 296 High School of Hospitality Management	525 West 50th Street	376	711	335	53
	H.S. 300 Urban Assembly School of Design and Construction	525 West 50th Street	389	561	172	69
	H.S. 303 The Facing History School	525 West 50th Street	320	384	64	83
	H.S. 542 Manhattan Bridges High School	525 West 50th Street	469	651	182	72
10	H.S. 400 High School for Environmental Studies	448 West 56th Street	1,460	1,126	(334)	130
		Study Area	**5,258**	**5,857**	**599**	**90**
		Manhattan	**58,080**	**62,030**	**3,950**	**94**

Note: See Figure 5-1 for school location.
Source: DOE *Utilization Profiles: Enrollment/Capacity/Utilization, 2007-2008*, target capacity for Manhattan Alternative and Regular High Schools (does not include high school enrollment/capacity listed within the Community School District sections of the *Utilization Profiles*).

INTERMEDIATE/MIDDLE SCHOOLS

The Adolph S. Ochs School, PS 111, a K-8 school, is the only school within the study area that serves intermediate school students. The intermediate component of PS 111 has a utilization rate of 73 percent with 78 available seats. While the Simon Baruch School, M.S 104, is located outside of the study area it is located within CSD 2. It is likely that children could be assigned to this school. Therefore, to ensure a conservative analysis, this school was included in the quantitative analysis. This school has a utilization rate of 88 percent with 141 available seats.[1]

[1] Enrollment data provided by DCP.

Total enrollment at intermediate schools in all of CSD 2 is 6,218 students, or 88 percent of capacity, with 810 available seats.

HIGH SCHOOLS

DOE does not require high school students to attend a specific high school in their neighborhood. Students may attend any of the schools within the borough or City, based on seating availability and admissions criteria. According to DOE's latest admissions guidelines, students who wish to attend their zoned school must rank that particular school among their 12 choices on their applications, and would be given priority in admission. Thus, when students are not matched with schools they have ranked above their zoned school, they are automatically assigned to their zoned school. In cases where students are not accepted to one of their 12 choices and do not list their local zoned school as one of the choices, they are not automatically assigned to their zoned school, and would need to complete a new High School Choice Form.

Table 5-3 lists the enrollments of high schools located within the study area and Manhattan. Of the eight high schools in the study area, the Professional Performing Arts High School is nearest to the Development Site. This school is operating at 80 percent capacity and has a surplus of 110 seats. The High School of Graphic and Communication Arts is close to the Tenth Avenue Site, and operates at 101 percent capacity, with shortfall of 10 seats. The Park West HS complex houses five small high school programs; overall, the building operates at 68 percent capacity. Finally, the High School for Environmental Studies is closest to the Ninth Avenue Site. This school operates with a deficiency of 334 seats, or a utilization rate of 130 percent.

The eight high schools within the study area operate at 90 percent capacity, with 5,258 enrolled and 599 available seats. Total enrollment at all high schools in Manhattan is 58,080, operating at a utilization of 94 percent with 3,950 available seats.

THE FUTURE WITHOUT THE PROPOSED ACTIONS—2019

ENROLLMENT PROJECTIONS

The SCA provides future enrollment projections by district for up to 10 years, which are based on research undertaken by two demographic companies, the Grier Partnership and Statistical Forecasting. Both sets of projections were considered and the more conservative of the two (i.e., higher enrollment figures) were used in the analysis. The Grier Partnership projections were more conservative for the elementary school projections and the Statistical Forecasting projections were more conservative for the intermediate school projections. These projections indicate increases in the elementary and intermediate student population of CSD 2 of approximately 14 and 9 percent, respectively, by 2017.

These enrollment projections focus on the natural growth of the City's student population and other population increases that do not account for new residential developments planned for the area (No Build projects); therefore, the additional students from the anticipated No Build projects within the study area were also included to more conservatively predict future enrollment and utilization. This includes No Build projects identified in Chapter 2, "Framework for Analysis," but excludes those No Build projects outside of CSD 2.

In the Future without the Proposed Actions, planned development is expected to add 15,378 residential units to the study area within CSD 2 (see Table 5-4). These developments will introduce school children at the elementary, intermediate, and high school levels (see Table 5-5).

According to the recently revised student generation rates[1], these proposed developments are projected to introduce 1,845 new elementary school children, 615 new middle school children, and 923 high school students to the study area.

The analysis presented below does not assume mitigation measures proposed in the *Hudson Yards FGEIS* for reasons set forth more fully in Appendix B2, "*Hudson Yards FGEIS* Updated Public School and Day Care Analysis." As described in Appendix B2, enrollment trends and level of residential development to date in the study area relative to what was anticipated in the *Hudson Yards FGEIS* indicate that mitigation measures identified for 2010 and 2013 are not required. DOE will continue to monitor enrollment projections to determine school facility needs and will take into account school demand associated with development in the Hudson Yards area that may occur in the future.

PROJECTED SCHOOL CAPACITY

Several school projects are expected to be completed in the Future without the Proposed Actions in both the study area and CSD 2 overall (see Table 5-6). These projects consist of the expansion of existing facilities, the leasing of additional educational space, or new construction. The only increase to school capacity expected within the study area by 2017 is at PS 51, as part of a mixed-use development at West 44th Street and Eleventh Avenue. As mentioned above (see Table 5-2), PS 51's current capacity is 276 elementary seats. The mixed-use development project will develop a new facility for PS 51 with 630 seats. This represents an increase to capacity of 354 elementary seats.

Additional capacity outside the study area but within the CSD is also provided in future capital plans. The Education Construction Fund is expected to redevelop PS 59, located on the east side of Midtown Manhattan, with a larger school. In the interim, PS 59 was moved to a leased space at the Manhattan Eye, Ear, and Throat Hospital (MEETH) in September 2008; this leased space will allow some additional capacity during the interim period while the new facility is built. The leased space has approximately 168 more seats than the current PS 59 site. Therefore, an additional 168 elementary seats are included in the study area and CSD capacities. The Beekman School, a new 630-seat kindergarten through grade 8 school in Lower Manhattan, is under construction. It is expected that approximately 70 percent of the school seats (441) will be dedicated to elementary students while the remaining 30 percent (189) seats will be for intermediate students. Similarly, construction is underway at PS/IS 896 in Battery Park City, which will add 596 elementary school seats and 256 intermediate school seats (as well as 100 special education seats which are not included in quantitative analyses). New school facilities are also planned for a site at the Foundling Hospital on Sixth Avenue at 17th Street and a site on First Avenue at East 35th Street. Cumulatively, including PS 51 in the study area, these school projects will add 2,470 additional elementary seats and 835 intermediate seats to CSD 2's overall capacity.

The DOE's Office of Portfolio Development, which develops new school programs, does place new school programs in underutilized school buildings. At the present time, there are no specific plans to place new school programs in the underutilized P.S. 33 or P.S. 111 school buildings, but it is possible that DOE could do so in the future. This would affect the availability of those underutilized seats in the future.

[1] Revised student generation rates, November, 2008.

Table 5-4
Under Construction and Planned Residential Development by 2019 in Schools Study Area

Name	Units
Within ½-mile of Development Site*	
Eastern Rail Yard: located between West 30th and West 33rd Streets, Tenth and Eleventh Avenues	1,904
316 Eleventh Avenue	365
Hudson Yards Site 4: East side of Eleventh Avenue between West 34th and West 35th Streets	359
Related: Southwest corner of Tenth Ave and West 30th Street	382
Avalon Bay: Eleventh Avenue at 28th Street, northeast corner	600
Hudson Yards Site 11: West side of Tenth Avenue between West 37th and West 38th Streets	855
Tower 37: South side of West 37th Street, near Ninth Avenue	208
Hudson Yards Site 19: East side of Tenth Avenue between West 41st and West 42nd Streets	774
Hudson Yards Site 23: East side of Tenth Avenue between West 37th and West 38th Streets	388
Hudson Yards Site 24: Dyer Ave between West 37th and West 38th Streets	448
Hudson Yards Site 28: Dyer Ave between West 36th and West 37th Streets	361
Glenwood: 310-328 West 38th Street	569
420 West 25th Street	76
Hudson Yards Potential Site 62: Tenth Avenue east side between West 30th and West 31st Streets	220
River Place II: Eleventh Avenue between West 41st Street and West 42nd Street	1,349
515 West 41st Street	333
Related: midblock site, south side West 30th Street between Tenth and Eleventh Avenues	368
Savanna Ref: 415 Eighth Avenue	106
519 West 23rd Street	11
200 Eleventh Avenue	16
245 Tenth Avenue	18
500 West 23rd Street	68
552 West 24th Street	15
High Line 23, West 23rd Street	11
507 West 25th Street (West Chelsea)	175
521-527 West 20th Street (West Chelsea)	87
547-549 West 27th Street (West Chelsea)	118
507-517 West 27th Street (West Chelsea)	283
299-311 Tenth Avenue (West Chelsea)	159
Within ½-mile of Development Site Subtotal	**10,626**
Extell: 153-166 West 57th Street	120
The Esplanade: 785 Eighth Avenue	120
Procida: 405 West 53rd	85
Hudson Hill: 462 West 58th Street	65
Two Trees: 770 Eleventh Avenue	900
Avalon Bay: 622 West 57th Street	750
Helena II: 631 West 57th Street	450
750 Eighth Avenue	187
460 West 54th Street (SONY/BMG Studio)	96
592-608 Eleventh Avenue	1,170
Centro 505: 505 West 47th Street	109
Harborview Terrace: 525 West 55th Street	342
533-541 West 52nd Street	100
530-548 West 53rd Street	100
Red Cross Project, Tenth Avenue between West 48th and West 49th Streets	148
501-505 West 51st Street (Phase II)	10
Within ½-mile of Additional Housing Sites Subtotal	**4,752**
Total Combined in Schools Study Area	**15,378**

Note: * Excludes projects outside CSD 2.

Table 5-5
2019 Future Without the Proposed Actions:
Estimated Number of Students
Introduced Under Construction and Planned Residential Development

Analysis Area	New Housing Units	Elementary School Students[1]	Middle School Students[1]	High School Students[1]
Study Area within CSD 2				
Development Site: ½-Mile	10,626	1,275	425	638
Additional Housing Sites: ½-Mile	4,752	570	190	286
Total	**15,378**	**1,845**	**615**	**923**

Note:
1. Pupil generation rates based on revised City ratios, November 2008.

Table 5-6
Planned Capacity Increases within the Study Area and CSD 2

School	New Elementary Seats	New Intermediate Seats
Within Study Area		
PS 51 Elias Howe School	354	0
Within CSD 2		
Beekman School	441	189
MEETH (PS 59)	168	0
Battery Park City (PS/IS 896)	596	256
PS/IS at Foundling Hospital	394	169
PS/IS at East 35th Street	517	221
Total	**2,470**	**835**

Note: For this analysis, it is assumed that PS/IS schools will have 70 percent of their capacity for elementary seats and 30 percent for intermediate seats.
Sources: *DOE/SCA Five-Year Capital Plan Amendment Fiscal Years 2005-2009,* and *Proposed DOE/SCA Five-Year Capital Plan Amendment Fiscal Years 2010-2014*.

ANALYSIS

Elementary Schools

Counting additional students from new residential development and factoring in the projected CSD 2 enrollment changes, elementary school enrollment in the schools located within the study area will total 3,389 students, or 169 percent capacity with a shortfall of 1,386 seats (see Table 5-7). In CSD 2, elementary schools are expected to operate at 113 percent of capacity with a deficit of 2,204 seats.

The *Hudson Yards FGEIS* discussed the mitigation required for the cumulative school impacts of the proposed Hudson Yards and West Chelsea rezoning development programs. Both rezoning projects were subsequently approved in 2005. The *Hudson Yards FGEIS* identified the need to enlarge an existing school by 2010, such as the PS/IS 51 Elias Howe School with a 100-seat addition, and construct or lease a new 630-seat K-8 elementary/intermediate school between 2010 and 2013 (West Chelsea's full Build year) as mitigation for both rezoning actions. A second new 630-seat K-8 elementary/intermediate school would also be required sometime between 2010 and 2025 (Hudson Yards' full Build year). However, as noted above, this DEIS analysis does not include identified Hudson Yards mitigation based on actual development patterns to date and DOE monitoring of enrollment projections.

Table 5-7
2019 Future Without the Proposed Actions:
Projected Enrollment in Public Schools

Analysis Area	2019 Projected Enrollment[4]	Students from New Residential Development[1]	Total Projected Enrollment	Capacity[2, 3]	Available Seats	Program Utilization (Percent)
Elementary Schools						
Study Area	1,544	1,845	3,389	2,003	(1,386)	169
CSD 2	17,158	1,845	19,003	16,799	(2,204)	113
Intermediate Schools						
Study Area	1,355	615	1,970	1,475	(495)	134
CSD 2	6,775	615	7,390	7,863	473	94

Notes:
1. These new students represent only those generated by the new residential developments. Refer to Tables 5-4 and 5-5.
2. Elementary capacity for the study area includes PS 51 (354 seats); Beekman School (441 seats), Battery Park City (596 seats), and 168 additional seats for PS 59 in the interim leased facility at MEETH. Elementary capacity for CSD 2 includes P.S. 51 (354 seats).
3. Intermediate capacity for CSD 2 includes 189 seats at the Beekman School and 256 seats at Battery Park City.
4. Enrollment projections: SCA, Statistical Forecasting (Actual 2007, Projected 2008-2017). Projected enrollment for the study area was developed proportionally from the CSD projections.

Intermediate Schools

Intermediate school enrollment is expected to increase to 1,970 students within the study area, reaching 134 percent of capacity and a deficit of 495 seats. In CSD 2, intermediate schools are expected to operate at 94 percent of capacity with 473 available seats.

HIGH SCHOOLS

DOE does not provide projections of high school students on a local basis. Instead, projections are provided borough-wide. Additional high school students generated by demographic shifts and future development projects in the area would be able to choose from among the City's high schools and are not likely to greatly affect utilization at neighborhood schools.

DOE projects high school enrollment within Manhattan to decline to approximately 43,605 students by 2019. Development expected in CSD 2 in the Future without the Proposed Actions would introduce an additional 923 high school students. As shown in Table 5-8, these students would increase the total borough-wide high school enrollment within Manhattan to 44,528 students. Manhattan high schools would be expected to operate at 72 percent of capacity with a surplus of 17,502 seats.

Table 5-8
2019 Future without the Proposed Actions:
Projected Enrollment in Public High Schools

Analysis Area	2019 Projected Enrollment[2]	Students Generated by New Residential Development[1]	Total Projected Enrollment	Capacity	Available Seats	Utilization (Percent)
Manhattan Total	43,605	923	44,528	62,030	17,502	72

Note:
1. These new students represent only those generated by the new residential developments in the study area. Refer to Tables 5-4 and 5-5.
2. Enrollment projections: SCA, Statistical Forecasting (Actual 2007, Projected 2008-2017).

PROBABLE IMPACTS OF THE PROPOSED ACTIONS—2019

As described above, this analysis assumes the Maximum Residential Scenario for the Development Site. The Proposed Actions would result in up to 6,074 residential units by the 2019 analysis year, which represents the project's full build out. The majority of these units (approximately 5,762 units) would be constructed on the Development Site, while approximately 312 units would be completed on the Additional Housing Sites. Cumulatively, these new residential units would introduce 729 elementary, 243 intermediate, and 364 high school students (see Table 5-9).

Table 5-9
2019 Future with the Proposed Actions:
Estimated Number of Students Introduced by the Maximum Residential Scenario

	New Housing Units	Elementary School Students[1]	Middle School Students[1]	High School Students[1]
Development Site	5,762	691	231	345
Additional Housing Sites	312	38	12	19
Total units	6,074	729	243	364

Note:
1. Student generation rates, revised November 2008.

As previously described, the Proposed Actions include development of a 750-seat PS/IS school on the Development Site. As currently programmed by the SCA, this school would consist of 420 elementary seats and 330 intermediate seats. These seats are included in the quantitative analysis for the 2019 analysis year.

ELEMENTARY SCHOOLS

In 2019, the Proposed Actions would introduce 729 elementary students to the school study area. However, to accommodate the increased student population, 420 new elementary school seats would also be created by the Proposed Actions in the proposed PS/IS school on the Development Site. The new students and capacity would result in a total enrollment of 4,118 students (170 percent utilization) and a shortfall of 1,695 seats in the study area (see Table 5-10). This utilization rate would increase by approximately 1 percent from the Future without the Proposed Actions. Elementary schools in CSD 2 as a whole would operate at 115 percent of capacity, with a total enrollment of 19,732 and a deficit of 2,531 seats. This represents an approximately two percentage point increase in the utilization rate (from 113 to 115) for CSD 2. Elementary schools in both the study area and the CSD would continue to operate well over capacity with a substantial shortfall of seats. The project-generated school seats would somewhat offset but not fully address the students that would be introduced to both the study area and CSD 2 as a result of the full build-out of the Proposed Actions. The CEQR threshold for significant adverse impact is a 5 percent or more increase in the study area and/or CSD utilization over the Future without the Proposed Action's utilization for these areas. Since the study area and CSD school utilization would increase by less than the threshold in the Future with the Proposed Actions, as a result of the addition of the Proposed Actions' school seats, no CEQR-defined significant adverse impact would occur as a result of the Proposed Actions.

Table 5-10
2019 Future With the Proposed Actions:
Estimated Public Elementary/Middle School Enrollment, Capacity, and Utilization

Analysis Area	2019 Future without the Proposed Actions				2019 Future with the Proposed Actions			
	Enrollment	Capacity	Available Seats in Program	Program Utilization (Percent)	Enrollment	Capacity	Available Seats in Program	Program Utilization (Percent)
Elementary Schools								
Study Area	3,389	2,003	(1,386)	169	4,118	2,423	(1,695)	170
CSD 2	19,003	16,799	(2,204)	113	19,732	17,219	(2,531)	115
Intermediate Schools								
Study Area	1,970	1,475	(495)	134	2,213	1,805	(408)	123
CSD 2	7,390	7,863	473	94	7,633	8,193	560	93

Sources: DOE *Enrollment Projections*; DOE, *Utilization Profiles: Enrollment/ Capacity/ Utilization, 2007- 2008.*

INTERMEDIATE SCHOOLS

The Proposed Actions would introduce 243 intermediate students to the study area. In addition, the Proposed Actions would result in the creation of a PS/IS school with 330 intermediate seats. Within the study area, the additional intermediate students and seats would result in an enrollment of 2,213 and a utilization rate of 123 percent with a shortfall of 408 seats (see Table 5-10). The utilization rate would decrease substantially from 134 to 123 percent as a result of the 330 seats added on the Development Site. While the intermediate schools within the study area would continue to operate well over capacity, the additional intermediate seats would provide sufficient space for the students generated by the Proposed Actions and help to partially alleviate the deficit in the remainder of the study area. Therefore, in 2019, no significant adverse intermediate school impact would occur within the study area as a result of the Proposed Actions.

Within CSD 2, although the enrollment would increase by 243 students, the additional 330 school seats introduced as a result of the Proposed Actions would accommodate project-generated students and result in a greater surplus of intermediate seats than already exists. As compared with the Future without the Proposed Actions, the utilization rate would decrease from 94 to 93 percent and intermediate schools would continue to operate with 560 available seats. Therefore, the Proposed Actions would not result in a significant adverse intermediate school impact within CSD 2. Furthermore, the 560 available seats within the CSD would help alleviate the deficit of 408 intermediate seats within the study area.

HIGH SCHOOLS

As shown in Table 5-11, the Proposed Actions would result in 364 additional high school students, increasing total Manhattan projected enrollment to 44,892. This would result in 17,138 available seats, and represents a 72 percent utilization rate. High schools in Manhattan would continue to operate with a surplus of seats. Furthermore, this represents a negligible increase in the utilization rate as compared with the Future without the Proposed Actions. Therefore, no significant adverse impact on high schools would occur as a result of the Proposed Actions.

Table 5-11
2019 Future with the Proposed Actions:
Projected Enrollment in Public High Schools

Analysis Area	2019 Projected Enrollment	Students Generated by Proposed Actions	Total Projected Enrollment	Capacity	Available Seats	Utilization (Percent)
Manhattan Total	44,528	364	44,892	62,030	17,138	72

2019 CONCLUSIONS

In summary, while the elementary and intermediate schools in the study area and the elementary schools in CSD 2 would operate well over capacity (as they will in the Future without the Proposed Actions), new elementary and intermediate school seats would be added as part of the Proposed Actions to help partially alleviate these conditions. The project-generated elementary students would exceed the new seats that would be added in the proposed PS/IS school on the Development Site. However, the additional project-generated students would slightly increase the elementary school utilization rate within the study area while the utilization rate within CSD 2 would increase by two percentage points. The new intermediate school seats would provide sufficient space for the students generated by the Proposed Actions. Utilization rates of intermediate schools in both the study area and CSD 2 would decrease. Intermediate schools at the CSD level would operate below capacity. This surplus of intermediate seats would help alleviate the shortfall of seats within the study area. High schools in the Future with the Proposed Actions would have sufficient space to accommodate the project-generated students. Therefore, no significant adverse impact on these schools is expected to occur as a result of the Proposed Actions by the 2019 Build year.

THE FUTURE WITHOUT THE PROPOSED ACTIONS—2017

As noted above, SCA provides future enrollment projections calculated for up to 10 years into the future from the most recent data available (2007). Therefore, enrollment figures are projected through 2017. For this analysis, projections for 2017 are carried forward to the 2019 analysis year. As described in Chapter 2, "Framework for Analysis," the new developments anticipated to be completed in the Future without the Proposed Actions are assumed to be developed by 2019, the full Build year of the Proposed Actions. However, the EIS conservatively assumes that these developments would also be completed by the 2017 analysis year. Therefore, there is no difference between conditions in 2017 and 2019 in the Future without the Proposed Actions, and the enrollments and capacities in 2019 would be the same as in the Future without the Proposed Actions condition in 2017. See Table 5-5 for planned developments and the respective students generated from these developments.

ELEMENTARY SCHOOLS

In the Future without the Proposed Actions, elementary school capacity would be the same in 2017 and 2019. Therefore, enrollment and capacity in the 2017 analysis year would be the same as shown in Table 5-7.

INTERMEDIATE SCHOOLS

Intermediate school capacity would be the same in 2017 and 2019 in the Future without the Proposed Actions (see Table 5-7). Therefore, enrollment and capacity in the 2017 analysis year

would be the same as shown in Table 5-7. As described above, no intermediate school capacity associated with the Hudson Yards and West Chelsea mitigation is assumed for the analysis.

PROBABLE IMPACTS OF THE PROPOSED ACTIONS—2017

ENROLLMENT

As described in Chapter 1, "Project Description," based on the anticipated construction sequencing schedule for the Development Site, the proposed PS/IS school to be developed in the base of WR-2 and WR-3 is expected to be completed by the 2017 analysis year. However, since it is possible that the building sequencing could change, a quantitative assessment is also provided for a scenario in which the proposed PS/IS is not completed by the 2017 analysis year.

As described above, this analysis assumes the Maximum Residential Scenario for the Development Site. By 2017 the Proposed Actions would result in a total of 2,056 residential units—approximately 1,948 units on the Development Site and 108 units on the Additional Housing Sites. Based on the revised public school student generation rates, the Proposed Actions would introduce approximately 247 public elementary school students and 82 public intermediate school students by 2017 (see Table 5-12).

Table 5-12
2017 Future with the Proposed Actions:
Estimated Number of Students Introduced by the Maximum Residential Scenario

	New Housing Units	Elementary School Students[1]	Middle School Students[1]	High School Students[1]
Development Site	1,948	234	78	117
Additional Housing Sites	108	13	4	6
Total units	**2,056**	**247**	**82**	**123**

Note: 1. Student generation rates revised November 2008.

PROPOSED ACTIONS—SCENARIO WITH THE PS/IS SCHOOL IN 2017

As described above, the Proposed Actions include a new PS/IS school in the base of building WR-2 and WR-3 on the Development Site. These buildings and the 120,000 square-foot school are anticipated to be completed in 2017. According to SCA, a school of this size would include a total of 750 seats with 420 elementary seats and 330 seats for intermediate students. The addition of these new seats would increase the school capacities of both the study area and CSD 2.

Elementary Schools

In 2017, the Proposed Actions would introduce 247 elementary students to the school study area. However, as noted above, to address the increased student population, 420 new elementary school seats in the proposed PS/IS school on the Development Site would also be created. The new students and capacity would result in a total enrollment of 3,636 students (150 percent utilization) and a shortfall of 1,213 seats in the study area (see Table 5-13). This represents a decrease in utilization within the study area (from 169 to 150 percent) as compared with the Future without the Proposed Actions. Elementary schools in CSD 2 as a whole would operate at 112 percent of capacity, with a total enrollment of 19,250 and a deficit of 2,031 seats. This also represents a decrease in the utilization rate (from 113 to 112 percent). While elementary schools in both the study area and the CSD would continue to operate with a substantial deficit of seats, the proposed new PS/IS school

would provide sufficient space for the project-generated students and would also help partially alleviate the remaining deficit in both the study area and CSD 2. Therefore, in 2017, no significant adverse elementary school impact would occur as a result of the Proposed Actions.

Intermediate Schools

The Proposed Actions would introduce 82 intermediate students as well as a PS/IS school with 330 intermediate seats in the Future with the Proposed Actions. Within the study area, the additional intermediate students and seats would result in an enrollment of 2,052 and a utilization rate of 114 percent with a shortfall of 247 seats (see Table 5-13). The utilization rate would decrease from 134 to 114 percent as compared with the Future without the Proposed Actions. While the intermediate schools within the study area would continue to operate well over capacity, the additional intermediate seats would provide sufficient space for the students generated by the Proposed Actions and help to partially alleviate the shortfall in the remainder of the study area. Therefore, in 2017, no significant adverse intermediate school impact would occur within the study area as a result of the Proposed Actions.

Table 5-13
2017 Future with the Proposed Actions:
Projected Enrollment in Public Schools

Analysis Area	2017 Future without the Proposed Actions				2017 Future with the Proposed Actions			
	Enrollment	Capacity[1, 2]	Available Seats	Program Utilization (Percent)	Enrollment	Capacity[1, 2]	Available Seats	Program Utilization (Percent)
Elementary Schools								
Study Area	3,389	2,003	(1,386)	169	3,636	2,423	(1,213)	150
CSD 2	19,003	16,799	(2,204)	113	19,250	17,219	(2,031)	112
Intermediate Schools								
Study Area	1,970	1,475	(495)	134	2,052	1,805	(247)	114
CSD 2	7,390	7,863	473	94	7,472	8,193	721	91

Notes:
1. Elementary capacity for the study area includes 420 PS seats to be provided on the Development Site as part of the Proposed Actions and 354 seats for the expanded PS 51, and CSD 2 includes all planned elementary seats listed in Table 5-6, as well as the 420 seats in the Development Site school.
2. Intermediate capacity for study area includes 330 IS seats to be provided on the Development Site as part of the Proposed Actions, and CSD 2 also includes all planned intermediate seats listed in Table 5-6.

Within CSD 2, although the enrollment would increase by 82 students, the additional school capacity provided as a result of the Proposed Actions (330 seats) would result in a greater surplus of intermediate seats than already exists. As compared with the Future without the Proposed Actions, the utilization rate would decrease from 94 to 91 percent with 721 intermediate seats available. Therefore, the Proposed Actions would not result in a significant adverse intermediate school impact within CSD 2. Furthermore, the 721 available seats within the CSD would also help alleviate the deficit of 247 intermediate seats within the study area.

SCENARIO WITHOUT THE PS/IS SCHOOL IN 2017

Elementary Schools

For the scenario in which the PS/IS school is not open by 2017, the same number of residential units are assumed to be completed as the Proposed Actions with PS/IS school in 2017. However, this scenario assumes the 420 elementary seats and 330 seats for intermediate students would not be available on the Development Site for the 2017 analysis year.

The scenario without the PS/IS school in 2017 would introduce 247 elementary-aged students to the school study area. The addition of these new students would result in a total enrollment of 3,636 students (182 percent utilization) and a shortfall of 1,633 seats in the study area (see Table 5-14). This represents an increase in utilization within the study area (from 169 to 182 percent) as compared to the Future without the Proposed Actions. Since this approximately 13 percentage point increase is greater than 5 percentage points, a significant adverse impact would occur to elementary schools in the study area as a result of the Proposed Actions in the scenario without the PS/IS school in 2017.

Elementary schools in CSD 2 as a whole would operate at 115 percent of capacity, with a total enrollment of 19,250 students and a deficit of 2,451 seats. This represents an increase in the utilization rate (from 113 to 115 percent). While elementary schools in CSD 2 would continue to operate with a substantial deficit of seats, the increase (approximately 2 percentage points) that would occur as a result of the Proposed Actions in the scenario without the PS/IS school in 2017 would not constitute a significant adverse impact.

However, as concluded above, there would be a significant adverse elementary school impact within the study area.

Intermediate Schools

The Proposed Actions would introduce 82 intermediate students in 2017. Within the study area, these additional intermediate students would result in an enrollment of 2,052 students and a utilization rate of 139 percent with a shortfall of 577 seats (see Table 5-14). The utilization rate would increase from 134 to 139 percent. This 5 percentage point increase in the utilization rate for intermediate schools in the study area equals the impact threshold. Therefore, a significant adverse intermediate school impact would occur to intermediate schools in the study area as a result of the Proposed Actions in the scenario without the PS/IS school in 2017. While the surplus of seats at the CSD level (see below) would partially offset the shortfall within the study area, there would not be a sufficient surplus to provide seats for all of the students within the study area.

Table 5-14
2017 Future with the Proposed Actions – Scenario without the PS/IS School
Projected Enrollment in Public Schools

Analysis Area	2017 Future without the Proposed Actions				2017 Future with the Proposed Actions			
	Enrollment	Capacity[1, 2]	Available Seats	Program Utilization (Percent)	Enrollment	Capacity	Available Seats	Program Utilization (Percent)
Elementary Schools								
Study Area	3,389	2,003	(1,386)	169	3,636	2,003	(1,633)	182
CSD 2	19,003	16,799	(2,204)	113	19,250	16,799	(2,451)	115
Intermediate Schools								
Study Area	1,970	1,475	(495)	134	2,052	1,475	(577)	139
CSD 2	7,390	7,863	473	94	7,472	7,863	391	95

Notes:
1. Elementary capacity for the study area includes 354 PS seats for the expanded PS 51; CSD 2 includes all planned elementary seats in Table 5-6.
2. Intermediate capacity for CSD 2 includes all planned intermediate seats listed in Table 5-6.

Within CSD 2, as compared with the Future without the Proposed Actions, the utilization rate would increase from 94 to 95 percent with 391 intermediate seats available, and the intermediate schools in CSD 2 as a whole would continue to operate with available seats. Given that the

intermediate schools in the CSD as a whole would continue to operate with a surplus of seats, the Proposed Actions in the scenario without the PS/IS school in 2017 would not result in a significant adverse impact.

However, as concluded above, there would be a significant adverse intermediate school impact within the study area.

2017 CONCLUSIONS

Proposed Actions—With the PS/IS School in 2017

In summary, the Proposed Actions are not expected to result in a significant adverse elementary or intermediate school impact within the study area or CSD 2 in 2017. The development of a new 750-seat PS/IS school on the Development Site as a result of the Proposed Actions would result in a decrease in utilization rates for both elementary and intermediate schools at the study area and CSD levels. The new capacity is expected to provide sufficient space for project-generated students and would help to partially offset the shortfall of elementary and intermediate seats in the study area and elementary seats in the CSD. The new capacity would also provide a greater surplus of intermediate seats in the CSD.

Scenario Without the PS/IS School in 2017

If the PS/IS school is not constructed on the Development Site by 2017, it is anticipated that the Proposed Actions could result in a significant adverse impact on elementary and intermediate schools in the study area in 2017.

By 2017 within CSD 2 as a whole, the Proposed Actions in the scenario without the PS/IS school are not expected to result in a significant adverse elementary or intermediate school impact.

However, as concluded above, there would be a significant adverse elementary and intermediate impact within the study area.

D. LIBRARIES

According to the *CEQR Technical Manual*, neighborhood library branches serve areas based on the distance that residents would travel to use library services, which is typically not more than ¾-mile (referred to as the library's catchment area). All public libraries within a ¾-mile radius of the Development Site and the Additional Housing Sites are included in the assessment. To determine the population of each library service area, 2000 U.S. Census data were assembled for all census tracts that fall primarily within the ¾-mile catchment area for each library. The 2008 existing population was estimated by projecting an annual compounded growth rate of 0.5 percent from 2000 Census populations. The analysis also considers future population and, finally, assesses the potential effects of the Proposed Actions. As noted in Table 5-1, if the Proposed Actions would increase the average number of residential units served by library branches in the borough in which it is located by more than 5 percent, the Proposed Actions may cause significant impacts on library services and would require further analysis.

EXISTING CONDITIONS

The study area is served by the NYPL system, which serves all of Manhattan in addition to the Bronx and Staten Island. The NYPL system includes five central libraries and 80 branch libraries. Libraries provide free and open access to books, periodicals, electronic resources and

non-print materials. Three NYPL branch libraries are located within a ¾-mile radius of the Development Site and the Additional Housing Sites (Figure 5-2 and Table 5-15). These three neighborhood libraries are the Muhlenberg Branch Library, the Columbus Branch Library, and the Riverside Library. The three libraries in the study area have a combined total of 130,671 holdings. With a residential population of 329,501, the study area has a volumes-to-resident ratio of 0.40 to 1. The total population of the three boroughs served by the NYPL system is 3,476,139 residents. In total, the NYPL has a collection of approximately 52,131,145 volumes or a volumes-to-resident ratio of approximately 15 to 1. Residents can go to any NYPL branch and request books from any of the other library branches.

Table 5-15
Library Services

Map No[1]	Branch Library Name	Address	Holdings[2]	Circulation	Catchment Area Population[3]
1	Muhlenberg Branch	209 West 23rd Street	36,116	171,303	130,536
2	Riverside Library	127 Amsterdam Ave	61,715	271,468	115,942
3	Columbus Branch	742 Tenth Avenue	32,840	56,625	83,023
4	Mid-Manhattan[4]	455 Fifth Avenue	1,897,627	2,010,427	N/A
Total for Branch Libraries			**130,671**	**499,396**	**329,501**

Notes:
1. See Figure 5-2 for branch library locations.
2. Holdings includes books, CD-roms, DVDs, and videotapes.
3. 2008 population was estimated using an annual growth rate of 0.5 percent (compounded) from 2000 Census populations.
4. The Mid-Manhattan Library is located just beyond the study area boundary. As such, the library's holdings and circulation are not included in the total for the three branch libraries within the study area.

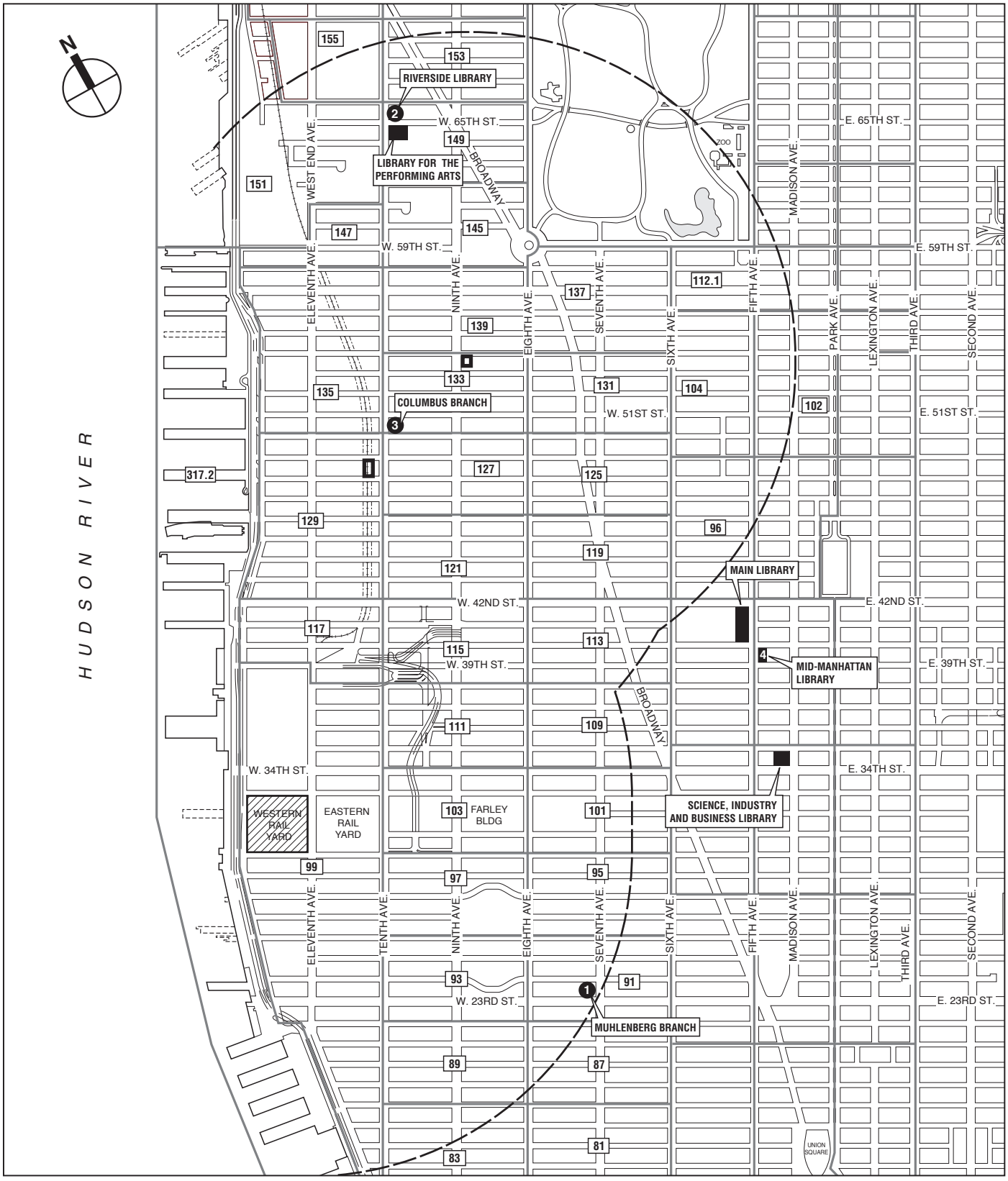
Sources: NYPL Government and Community Affairs Branch Statistics, January 2008; DCP's *Selected Facilities and Program Sites* Release 2008.1; US Census 2000 (catchment area population).

The Muhlenberg Branch Library is located at 209 West 23rd Street, southeast of the Development Site. The library includes a small reference collection on the history of Chelsea, including an extensive file of historical newspaper clippings and photographs devoted to Chelsea life. The Muhlenberg Branch serves a catchment area population of 130,536. The library has approximately 36,116 volumes and a circulation of 171,303. Thus, the Muhlenberg Branch Library has a ratio of approximately 0.28 volumes per resident.

The Columbus Branch Library is located at 742 Tenth Avenue. This library has a catchment area population of 83,023 people. The library has approximately 32,840 volumes and a circulation of approximately 56,625 volumes. The library has a ratio of approximately 0.40 volumes per resident.

The Riverside Library, located at 127 Amsterdam Avenue, has the largest circulation of the branch libraries in the study area, with approximately 61,715 volumes and a circulation of 271,468. The catchment area population is 115,942. Therefore, the library has a ratio of approximately 0.53 volumes per resident.

The four central libraries closest to the project sites include the Humanities and Social Sciences Library (the "Main Library") at Fifth Avenue and 42nd Street, the Mid-Manhattan Library at 455 Fifth Avenue, the Library for the Performing Arts at 40 Lincoln Center Plaza, and the Science, Industry, and Business Library (SIBL) at 188 Madison Avenue. These libraries are not considered "neighborhood" libraries with individual catchment areas, as they provide system wide resources.



Public Library Locations

Figure 5-2

The Main Library is not a circulating library but it is a world-famous research library. The Mid-Manhattan Library houses the largest of all circulating and general reference collections in the NYPL's branch library system. The library, which is located just beyond the study area boundary, includes 1,897,627 holdings. The Library for the Performing Arts contains the world's most extensive reference and research materials on music, dance, theatre, recorded sound, and other performing arts. The SIBL contains a comprehensive collection of national and international patents, as well as extensive science- and business-related databases and reports.

THE FUTURE WITHOUT THE PROPOSED ACTIONS—2019

In the Future without the Proposed Actions in 2019, the Muhlenberg, Columbus, and Riverside Libraries, as well as the central libraries, will continue to serve the study area. In addition, the Donnell Library, a central library, was closed in September of 2008 and will be redeveloped and redesigned by 2011. No expansion of branch library services within the study area is anticipated.

For the 2019 Future without the Proposed Actions analysis, the development projects shown in Table 5-4 are used as a basis to determine future growth. Developments from this list that are located in census tracts with more than 50 percent of their area in the three catchment areas were included for 2019 conditions in their respective catchment areas. In addition to the planned developments shown in Table 5-4, six additional developments will be completed in the Columbus and Riverside Libraries' catchment areas, and will introduce an additional 4,339 units. These six developments and the associated number of residential units include:

- Adagio 60, 243 West 60th Street, 342 units;
- Element, 555 West 59th Street, 198 units;
- Riverside South Parcel I, 80 Riverside Boulevard, 284 units;
- Riverside South Parcels J1 and J2, 60 Riverside Boulevard, 495 units;
- Riverside South Parcels K1 and K2, 40 Riverside Boulevard, 520 units; and
- Riverside South Parcel L, M, and N, 2,500 units.

As a result, the Riverside Library catchment area population will increase to 126,893 residents. The library would have a ratio of approximately 0.49 volumes per resident, compared to 0.53 in the existing conditions. Similarly, because the two catchment areas overlap, the Columbus Library catchment population will increase to 98,299 residents. The library would have a ratio of approximately 0.33 volumes per resident, compared to 0.40 in the existing conditions. No additional projects are known to be planned within the catchment area for the Muhlenberg Library; therefore the population will remain at approximately 150,397 residents. The library would have a ratio of approximately 0.24 volumes per resident, compared to 0.28 in the existing conditions. As a result, the total catchment area population will slightly increase to approximately 363,940. As noted above, some of these residents will be within ¾-mile of both the Columbus and Riverside libraries, and therefore will be served by both branches.

PROBABLE IMPACTS OF THE PROPOSED ACTIONS—2019

As described above, this analysis assumes the Maximum Residential Scenario for the Development Site. By 2019, the Proposed Actions would introduce approximately 5,762 units (9,795 residents) to the Development Site and 312 units (530 residents) on the Additional Housing Sites, for a total of 6,704 units and 10,172 new residents to the library catchment areas. The Muhlenberg Library would receive the majority of this growth since it serves the Development Site. With this additional

population, the Muhlenberg Library would serve 160,192 residents, the Columbus Library would serve 98,829 residents, and the Riverside Library would serve 127,423 residents. As compared to the population in the 2019 Future without the Proposed Actions, the Muhlenberg catchment area populations would increase by 7 percent, while the Riverside and Columbus catchment areas would not change. The combined catchment area population would increase 3 percent to 374,112 residents.

In the Future with the Proposed Actions, the Muhlenberg Library would have a ratio of approximately 0.23 volumes per resident, which is slightly less than the ratio of 0.22 volumes per resident in the Future without the Proposed Actions. The Columbus Library would have a ratio of approximately 0.33 volumes per resident, which is the same ratio as in the Future without the Proposed Actions. Finally, the Riverside Library would have a ratio of approximately 0.48 volumes per resident, compared to the ratio of 0.49 volumes per resident in the 2019 Future without the Proposed Actions.

For the Columbus Library, Riverside Library, and combined catchment areas, the increase in population resulting from the Proposed Actions would be less than 5 percent, and therefore would not cause a noticeable change in the delivery of library services. Furthermore, as noted above, some residents of the Riverside Library catchment area are also within ¾-mile of the Columbus Libraries and could be served by both branches. For the Muhlenberg Library, although the catchment area population would increase by more than 5 percent, the increase is not expected to impair the delivery of library services within this catchment area. Residents of the Muhlenberg catchment area and the Development Site would have access to the five central libraries located within or near the study area, including the Mid-Manhattan circulating library. Residents would also have access to libraries near their place of work. Therefore, no significant adverse impact on library services in the study area in 2019 would occur as a result of the Proposed Actions.

THE FUTURE WITHOUT THE PROPOSED ACTIONS—2017

In the Future without the Proposed Actions in 2017, the Muhlenberg, Columbus, and Riverside Libraries, as well as the central libraries, will continue to serve the study area. In addition, the Donnell Library, a central library, was closed in September of 2008 and will be redeveloped and redesigned by 2011. No expansion of branch library services within the study area is anticipated.

For the 2017 Future without the Proposed Actions analysis, the development projects shown in Table 5-4 are used as a basis to determine future growth. Compared to the Future without the Proposed Actions in 2019, one development would not be completed by 2017 (Riverside South Parcel L, M, N). The five developments will introduce an additional 1,839 units. Because of these additional developments and due to the fact that the catchment areas overlap, the combined number of planned dwelling units for all of the catchment areas exceeds the total shown in Table 5-4 (15,390 units).

The ¾-mile catchment area population of each library will increase as a result of new development projects completed in the Future without the Proposed Actions. Within the Muhlenberg catchment area, it is estimated that approximately 11,683 new dwelling units will be introduced, housing approximately 19,861 new residents. This will increase the Muhlenberg catchment area population to 150,397 residents, resulting in a ratio of 0.24 volumes per resident. It is estimated that the Columbus Library will serve an additional 11,026 residents as a result of 6,486 planned dwelling units. The Columbus catchment population will increase to 94,049 residents. The library will have approximately 0.35 volumes per resident. Finally, approximately

3,730 units are expected to be developed in the Riverside catchment area, increasing the population by 6,341 residents to 122,643 and resulting in a ratio of 0.50 volumes per resident.

Overall, new development will result in a total of 17,229 new dwelling units within the combined catchment area of the three libraries within the library study area. These housing units will introduce approximately 29,289 new residents to the combined catchment area, increasing the combined catchment area population from 329,501 to 358,790 residents. Some of these residents will be within ¾-mile of both the Columbus and Riverside libraries, and therefore will be served by both branches.

In addition, the construction of new state-of-the-art facilities for the Donnell Central Library, which closed in September 2008, is anticipated to be completed by 2011. The Donnell Central Library will occupy the ground floor and below-grade levels of a building that will be shared with the Orient-Express Hotel on West 53rd Street.

PROBABLE IMPACTS OF THE PROPOSED ACTIONS—2017

According to the *CEQR Technical Manual*, if a proposed project increases the study area population by 5 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.

As described above, this analysis assumes the Maximum Residential Scenario for the Development Site. By 2017, the Proposed Actions would result in approximately 3,495 additional residents to the Muhlenberg, Columbus, and Riverside catchment areas.[1] However, the majority of this growth (1,744 units or 2,965 residents) would occur at the Development Site, which is served by Muhlenberg Library. The remainder (312 units or 530 residents) would occur at the Additional Housing Sites, and would therefore likely be served by the Riverside or Columbus Libraries.

With this additional population, the Muhlenberg Library would serve 153,362 residents (a 2 percent increase), the Columbus Library would serve 94,579 residents (less than a 1 percent increase), and the Riverside Library would serve 123,173 residents (less than a 1 percent increase). The combined catchment area population would increase 1 percent to 362,285 residents.

With the Proposed Actions, the ratio of volumes to resident would be the same as in the Future without the Proposed Actions. The Muhlenberg Library would have a ratio of approximately 0.24 volumes per resident. The Columbus Library would have a ratio of approximately 0.35 volumes per resident. Finally, the Riverside Library would have a ratio of approximately 0.50 volumes per resident.

For all three libraries, as well as the combined catchment area, the increase in population resulting from the Proposed Actions in 2017 would be less than 5 percent, and therefore would not cause a noticeable change in the availability of library services. Therefore, no significant adverse impact would result for libraries within the study area in the 2017 analysis year.

E. CHILD CARE CENTERS

Publicly funded child care for the children of income-eligible households in New York City is sponsored and financially supported by the Division of Child Care and Head Start (CCHS), within the New York City Administration for Children's Services (ACS), and Head Start,

[1] Based on 2,056 units and a 2000 Census average household size of 1.70 persons.

federally funded early childhood education and family support programs. ACS contracts with hundreds of private, non-profit organizations to provide Child Care and Head Start programs in communities across the City that are licensed by the New York City Department of Health and Mental Hygiene (DOHMH). ACS also issues vouchers to eligible families to provide financial assistance in accessing care from formal and informal providers in the City.

To receive subsidized child care services, a family must meet specific financial and social eligibility criteria that are determined by federal, state, and local regulations. Eligibility is determined by a child's age (0-13), and a family's gross income, with consideration of family size. To meet the social eligibility for publicly funded child care, a family must also have an approved "reason for care," such as involvement in a child welfare case or participation in a "welfare-to-work" program.

Publicly funded center-based and family based child care programs are contracted through community based organizations under the auspices of CCHS within ACS for the children of income-eligible households. Space for one child in such child care centers is termed a "slot." ACS funds center-based services for children under the age of five, and family based services for income-eligible children up to the age of 12. The name, location and enrollment information for publicly funded child care centers in the study are provided below (see "Existing Conditions").

Head Start is a national program that promotes school readiness by enhancing the social and cognitive development of children through the provision of educational, health, nutritional, social and other services. The program provides grants to local public and private non-profit and for-profit agencies to provide comprehensive child development services to economically disadvantaged children and families, with a special focus on helping preschoolers develop the early reading and math skills they need to be successful in school.

In addition to attending group child care centers, eligible children may also be cared for in the homes of family child care providers, also licensed by DOHMH. Family child care providers are professionals who provide care for 3 to 7 children in their residences. Group family child care providers are professionals who care for 7 to 12 children, with the help of an assistant, in their homes. The majority of family and group family child care providers in New York City are registered with a child care network, which provides access to training and support services.

In addition to these child care facilities, other publicly financed child care options are available to residents of the study area. As discussed above, given that there are no location requirements for enrollment in child care centers, some parents/guardians may choose a child care center closer to a location of employment than their place of residence. Parents/guardians who have an ACS voucher may access child care from private providers, in either a formal or informal setting, both within and outside the 1-mile study area, potentially in neighborhoods close to parents' workplaces. The portability of ACS vouchers indicates that services beyond a 1-mile study area can be and are used by eligible parents. However, as discussed in the *CEQR Technical Manual*, the centers closest to a project site are more likely to be subject to increased demand.

METHODOLOGY

Following *CEQR Technical Manual* guidelines, publicly funded child care and Head Start facilities within 1 mile of the project sites are identified and examined; private child care facilities are not considered in the analysis. Since this 1-mile study area exceeds the ½-mile planned development (No Build) list used for other sections of this chapter, conditions for the Future without the Proposed Actions will be based on all No Build projects identified in Chapter 2,

"Framework for Analysis." Impacts are identified if the Proposed Actions would result in demand for slots in publicly funded child care centers greater than available capacity, and the increase in demand generated by the Proposed Actions would be 5 percent or more of the collective capacity of the child care centers serving the study area in the Future without the Proposed Actions.

The City recently revised the generation rates for the projection of children eligible for publicly funded child care and Head Start facilities. The new generation rates create two categories—children up to 6 years of age and children 6 to 12 years of age—to project the number of children that would be eligible for public child care services per new residential unit. In Manhattan, the new rates are 0.21 child care-eligible children up to age 6 per low- or low-moderate income unit, and 0.13 child care-eligible children ages 6 to 12 per low- or low-moderate income unit. The first category, children up to 6 years of age, is the primary age group receiving public child care services, and will be the focus of quantitative analysis. Because the older children, ages 6 to 12, are expected to be attending school during most of the day, their need would be for after-school care. The school-aged children generated by the proposed actions who qualify for ACS vouchers or other programming for after school care could be served by Family Child Care Networks or school-age slots in ACS contracted child care facilities, Department of Youth and Community Development's (DYCD)'s Out of School Time programs, and/or DOE-approved after school programs.

EXISTING CONDITIONS

There are five publicly funded child care facilities located within an approximately 1-mile radius of the project sites (see Figure 5-3). As shown in Table 5-16, current capacity of these facilities is 286 slots with an enrollment of 266, or a current utilization of 93 percent. As mentioned previously, additional capacity could likely be provided by private child care centers, but these facilities are not included in this analysis. There are also two Head Start programs that have a capacity of 158 slots and an enrollment of 123.

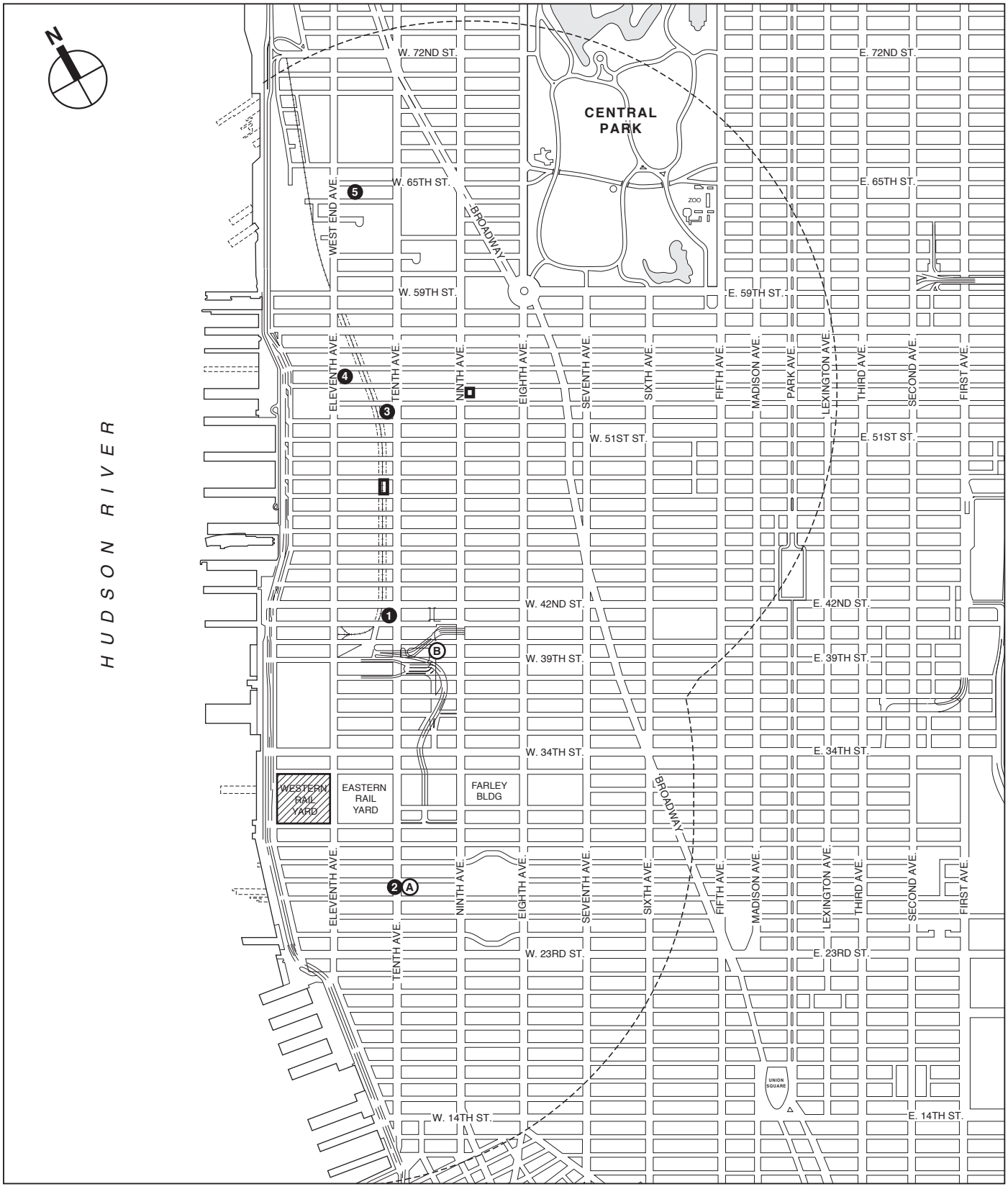
Table 5-16
Publicly Funded Child Care Facilities in Study Area

Map No.	Name	Address	Capacity	Enrollment
Child Care Facilities				
1	ICAHN House	515 West 41st Street	37	28
2	Hudson Guild	459 West 26th Street	90	98
3	LYFE Manhattan High School	317 West 52nd Street	8	6
4	YWCA Polly Dodge Early Learning Center	538 West 55th Street	83	82
5	Mabel Barrett Fitzgerald Day Care	243 West 64th Street	68	52
		Child Care Facilities Total	**286**	**266**
Head Start Facilities				
A	Hudson Guild	459 West 26th Street	111	93
B	Children's Day Care	410 West 40th Street	47	30
		Head Start Total	**158**	**123**
		Total	**444**	**389**

Note: See Figure 5-3 for public child care facilities.
Source: Administration for Children's Services, July 2008.

THE FUTURE WITHOUT THE PROPOSED ACTIONS—2019

In the Future without the Proposed Actions in 2019, planned or proposed developments would introduce a total of 26,046 residential units within 1 mile of the Development Site. Based on the



Public Child Care and Head Start Facilities

Figure 5-3

assumption of 20 percent affordable units, approximately 500 units are expected to be affordable for low- or low- to moderate-income households. Using the new generation rates discussed above, this additional amount of development will introduce an estimated 105 children under the age of 6 who are eligible for publicly funded child care, increasing the total number of eligible children to 1,094. As a result, the study area would operate with a deficit of 1,039 slots (334 percent utilization).

PROBABLE IMPACTS OF THE PROPOSED ACTIONS—2019

CHILDREN UP TO 6 YEARS OLD

As described above, this analysis assumes the Maximum Residential Scenario for the Development Site. In 2019, the Proposed Actions would generate 702 low-moderate income units, which would introduce 147 children under the age of 6 that would be eligible for publicly funded child care services. Child care facilities in the area will already be operating above capacity in the Future without the Proposed Actions in 2019. If no new child care facilities are added in the study area to respond to this new demand, the 147 new children from the Proposed Actions would exacerbate the predicted shortage in child care slots and would constitute 33 percent of the collective capacity of child care facilities in the study area. This increase would result in a significant adverse impact on child care facilities in 2019.

This potential increase in demand could be offset by a number of factors. Private child care facilities and child care centers outside of the study area (e.g., closer to parent's place of work) are not included in this analysis. Some of the increased child care demand would likely be offset by parents who choose to take their children to child care centers outside of the study area (e.g., closer to work). Some of the Family Day Care Networks serve children residing in the study area and could potentially absorb some of the demand. Nearby family programs that provide care from private homes are organized through the Hartley House at 413 West 46th Street, which oversees a capacity of 213 with 142 enrolled, and Hudson Guild at 459 West 26th Street (capacity of 47, and 39 enrolled). This new demand would also be considered in future Request for Proposal planning for contracted services. Finally, new capacity could potentially be developed as part of ACS's public-private partnership initiatives. However, if none of these measures are taken, then the Proposed Actions would result in an unmitigated significant adverse child care impact. Potential mitigation measures to address this are described in Chapter 24, "Mitigation."

SCHOOL AGED CHILDREN (6-12 YEARS OLD)

Based on the new generation rates, the Proposed Actions' 702 low-moderate income units would result in 92 children, age 6 to 12, who would also be eligible for publicly funded child care services. Because these children are expected to be attending school during most of the day, their need would be for after-school care. Eligible children who qualify for ACS vouchers or other programming for after school care could be served by Family Child Care Networks or school-age slots in ACS contracted child care facilities, DYCD's Out of School Time programs, and/or DOE approved after school programs.

THE FUTURE WITHOUT THE PROPOSED ACTIONS—2017

By 2017 in the Future without the Proposed Actions, one new development (Riverside South Parcel L, M, and N) would not be added to the child care study area, and would not result in an

additional 2,500 units. In the Future without the Proposed Actions in 2017, planned or proposed development projects will introduce an additional 8,108 residential units within 1 mile of the Additional Housing Sites and 15,438 residential units within 1 mile of the Development Site (see Tables 2-5 and 2-6 in Chapter 2, "Framework for Analysis"). A portion of these 23,546 units is expected to be affordable. If known, the number of affordable units in a planned development was used, otherwise, it was conservatively assumed that 20 percent of the new units would be occupied by low- to moderate-income residents. Based on this assumption, approximately 4,709 units are expected to be affordable for low- or low- to moderate-income households. Using the new generation rates discussed above, this amount of development will introduce an estimated 989 children under the age of 6 who are eligible for publicly funded child care (0.21 child care-eligible children per unit of low-income housing). No new publicly funded child care centers are planned in the study area by 2017.

Based on these assumptions, if no new child care facilities open in the Future without the Proposed Actions, the number of children eligible for public child care and Head Start would exceed available slots in 2017. As described above, there are currently 444 slots with 389 enrollees, leaving a surplus of 55 seats. When the estimated 989 eligible children introduced by planned development projects are added to this total, there will be a shortage of 934 slots in publicly funded child care in the study area (310 percent utilization).

PROBABLE IMPACTS OF THE PROPOSED ACTIONS—2017

CHILDREN UP TO 6 YEARS OLD

As described above, this analysis assumes the Maximum Residential Scenario for the Development Site. In the 2017 analysis year, the Proposed Actions would generate 498 low-to moderate- income units, which would introduce 105 children eligible for publicly funded child care services according to the new generation rates discussed above. Child care facilities in the area will already be operating above capacity in the Future without the Proposed Actions in 2017. If no new child care facilities are added in the study area to respond to this new demand, the 105 new children from the Proposed Actions would exacerbate the predicted shortage in child care slots and would constitute 24 percent of the collective capacity of child care and Head Start facilities (444 slots) in the study area.

According to *CEQR Technical Manual* guidelines, a significant adverse impact on publicly funded child care services may result if a proposed action would result in: (1) a demand for child care slots greater than remaining capacity of child care centers; and (2) demand that constitutes an increase of 5 percent or more of the collective capacity of the child care centers serving the study area. As described above, the introduction of child care eligible children associated with the proposed action would constitute 24 percent of the collective capacity of child care and Head Start facilities in the study area. Therefore, this increase would result in a significant adverse impact on child care facilities in the 2017 analysis year.

This potential increase in demand could be offset by a number of factors. Child care facilities outside of the study area (e.g., closer to parent's place of work) are not included in this analysis. Some of the increased child care demand would likely be offset by parents who choose to take their children to child care centers outside of the study area (e.g., closer to work). Some of the Family Day Care Networks serve children residing in the study area and could potentially absorb some of the demand. Nearby family programs that provide care from private homes are organized through the Hartley House at 413 West 46th Street, which oversees a capacity of 213 with 142 enrolled, and Hudson Guild at 459 West 26th Street (capacity of 47, and 39 enrolled).

This new demand may also be considered in future Request for Proposal planning for contracted services. Finally, new capacity could potentially be developed as part of ACS's public-private partnership initiatives. However, if none of these measures are taken, then the Proposed Actions would result in an unmitigated significant adverse child care impact in 2017.

SCHOOL AGED CHILDREN (6-12 YEARS OLD)

Based on the new generation rates, the Proposed Actions' 498 low- to moderate- income units would generate 65 children, age 6 to 12, who would also be eligible for publicly funded child care services in 2017 analysis year. Because these children are expected to be attending school during most of the day, their need would be for after-school care. Eligible children who qualify for ACS vouchers or other programming for after school care could be served by Family Child Care Networks or school-age slots in ACS contracted child care facilities, DYCD's Out of School Time programs, and/or DOE approved after school programs.

F. HEALTH CARE FACILITIES (OUTPATIENT)

METHODOLOGY

While the *CEQR Technical Manual* indicates that there is no specific study area designated for health care resources, it suggests that such facilities be mapped within a "mile-or-so" radius from a project site. As a result, this analysis uses a 1-mile study area. Since this 1-mile study area exceeds the ½-mile planned development list used for other sections of this chapter, conditions for the Future without the Proposed Actions will be based on planned developments identified in Chapter 2, "Framework for Analysis."

The focus of the analysis is on those facilities that accept public funds (usually in the form of Medicare and Medicaid reimbursements), that are available to any community member, and that could be affected by the introduction of a large low-income residential population. Private doctors' offices and other similar resources are not identified within the service area. In accordance with the *CEQR Technical Manual*, the assessment focuses on emergency and outpatient services that could be affected by the introduction of a large low-income population, which could rely heavily on nearby hospital emergency rooms and other public outpatient services. Impacts are identified if the Proposed Actions would result in an increase of 5 percent or more in the demand for services over no action levels, or would result in a facility exceeding its capacity.

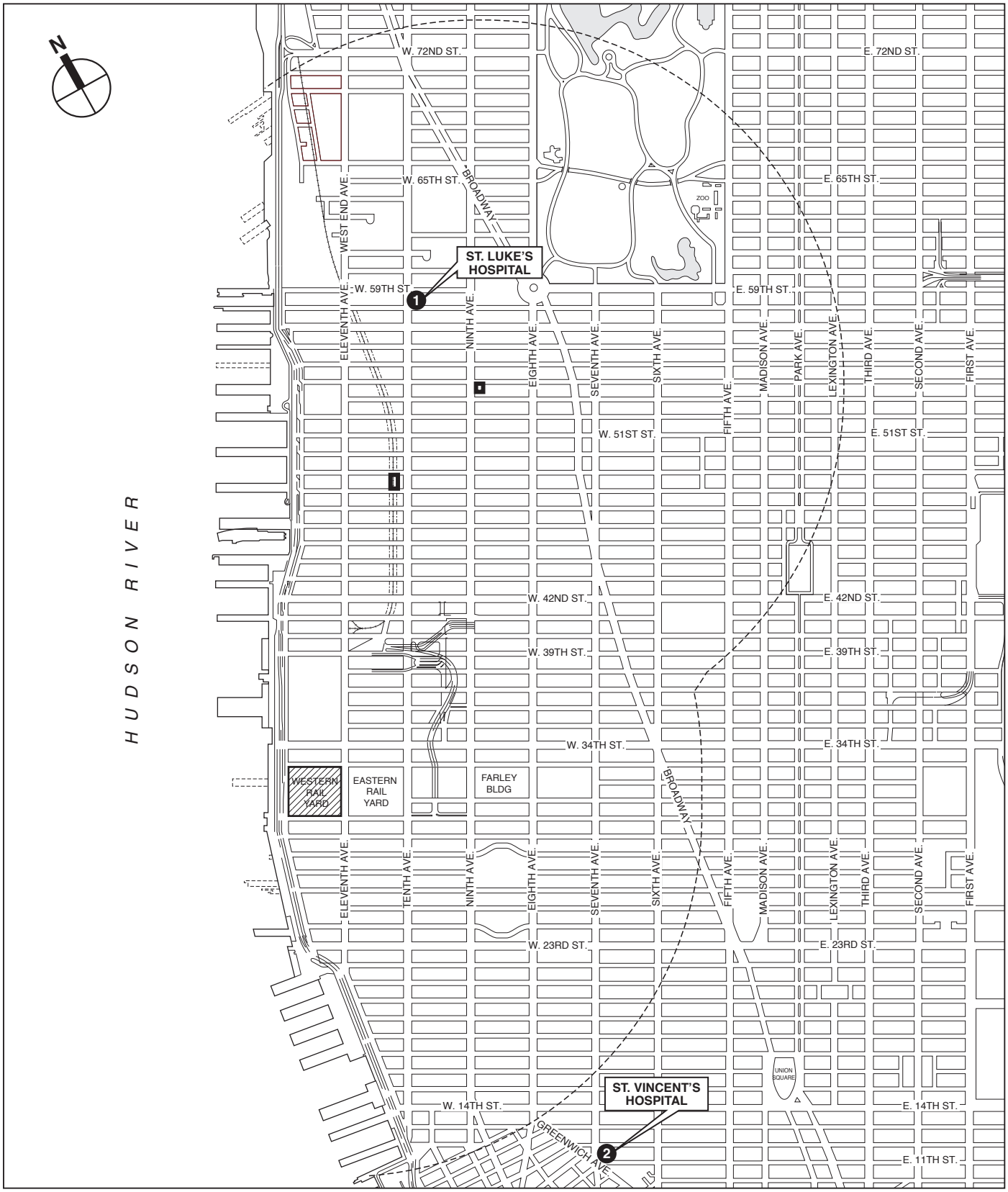
As noted in the screening analysis (Section B, "Screening Level Assessment"), the number of affordable housing units expected in the 2017 analysis year does not meet the threshold for detailed analysis. Therefore, only the 2019 conditions are analyzed below.

EXISTING CONDITIONS

HOSPITAL AND EMERGENCY ROOMS

St. Luke's Hospital at 1000 Tenth Avenue is the only hospital located within 1 mile of the Development Site or the Additional Housing Sites. St. Vincent's Hospital, at 170 West 12th Street, is just outside the study area boundary and is likely to be used by the residents and workers of the study area and is included in the analysis as well. These facilities are identified on Figure 5-4. As shown in Table 5-17, the hospital facilities serving the study areas had

5.14.09



Development Site

Additional Housing Sites

Study Area Boundary (One-Mile Perimeter)

1 *Hospital and Emergency Room Facility (See Table 5-17)*

WESTERN **RAIL YARD**

Hospital Facilities
Figure 5-4

approximately 379,421 outpatient visits and 184,122 emergency room visits in 2005, the most recent year for which data are available.

Table 5-17
Hospital and Emergency Rooms Visits

Map No.	Hospital	Address	Outpatient Department Visits	Emergency Room Visits
1	St. Luke's Hospital	1000 Tenth Ave	247,616	128,275
2	St. Vincent's Hospital	170 West 12th Street	131,805	55,847
		Total Visits	**379,421**	**184,122**

Note: See Figure 5-4 for hospital facility locations.
Source: United Hospital Fund Health Care Annual Update, 2005 Update.

OTHER OUTPATIENT SERVICES

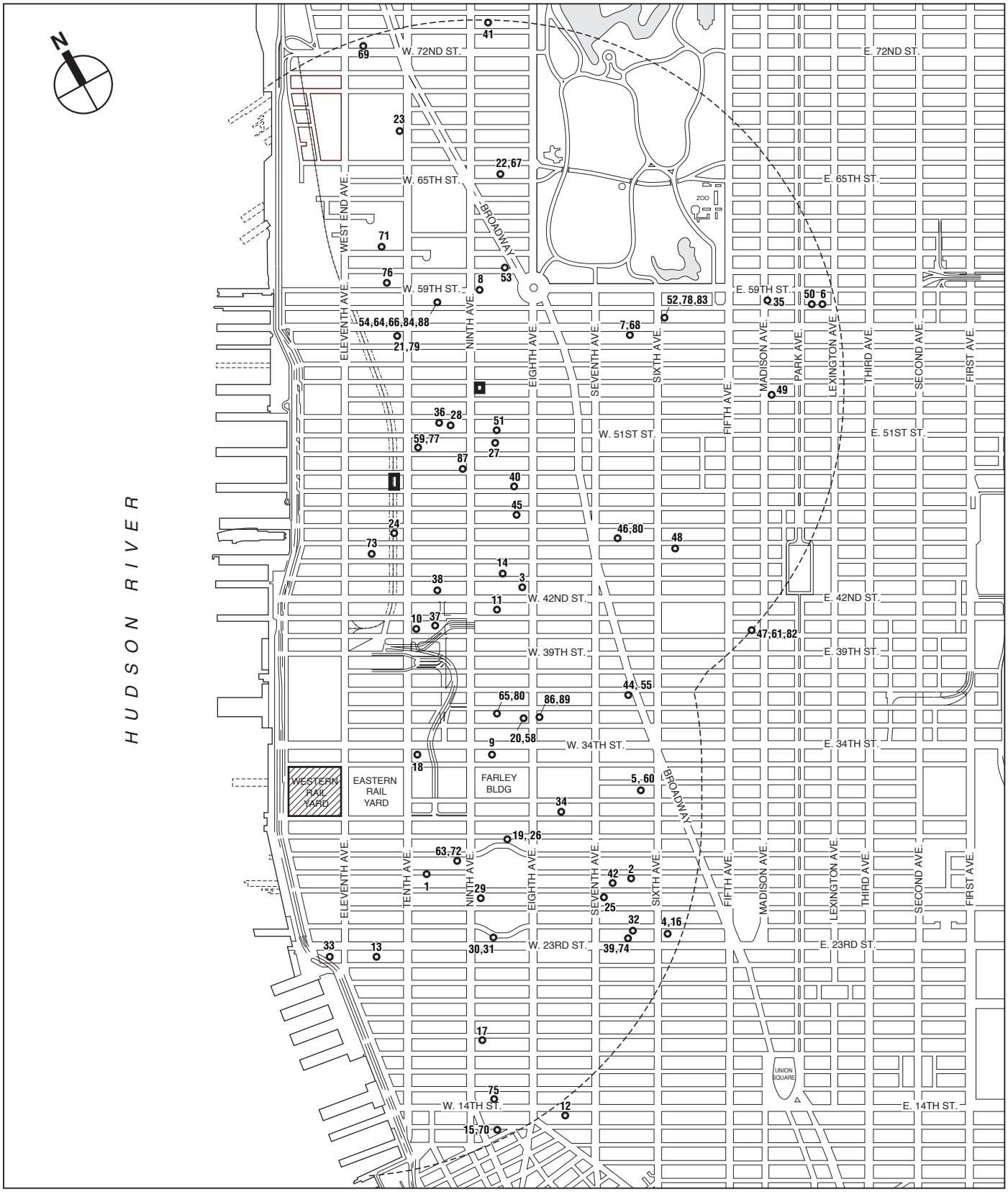
There are 89 outpatient health care facilities located in the approximately 1-mile study area for health care resources, offering general medical care, alcohol and substance abuse services, mental health services, and mental retardation and developmental disabilities services (see Tables 5-18 to 5-23 and Figure 5-5). These facilities were inventoried in the 2007 edition of the DCP's *Selected Facilities and Program Sites in New York City*.

Table 5-18
Summary of Outpatient Health Care Facilities
Facility Type: Clinic

Map No.	Facility Name	Address
1	Hudson Guild Counseling Service	441 West 26th Street
2	Greenwich House AIDS Mental Health Project	122 West 27th Street
3	Safe Space West A	300 West 43rd Street
4	League for the Hard of Hearing	71 West 23th Street
5	McMurray Clinic	115 West 31st Street
6	Center For Marital And Family Therapy	133 East 58th Street
7	Madeleine Borg Manhattan West Clinic	120 West 57th Street
8	St. Luke's-Roosevelt Div. Psych. Adult Clinic	910 Ninth Avenue

Note: See Figure 5-5 for facility locations.
Source: DCP's *Selected Facilities and Program Sites in New York City*, 2007 Edition.

5.14.09



Development Site

Additional Housing Sites

Study Area Boundary (1-Mile Perimeter)

Outpatient Health Care Facility (See Tables 5-18 through 5-23)

Outpatient Health Care Facilities

Figure 5-5

Table 5-19
Summary of Outpatient Health Care Facilities
Facility Type: Freestanding Health Center

Map No.	Facility Name	Address
9	United Cerebral Palsy of New York State	330 West 34th Street
10	Covenant House	460 West 41st Street
11	New York Diagnostic Center	330 West 42nd Street
12	Elizabeth Seton Childbearing Center	222 West 14th Street
13	Flemister House	527-31 West 22nd Street
14	H S Systems Inc.	321 West 44th Street
15	Housing Works Lower Manhattan ADHCP	320 West 13th Street
16	League for the Hard of Hearing	71 West 23rd Street
17	Michael Callen-Audre Comm. Health Center	356 West 18th Street
18	Premier Healthcare D & T Center	460 West 34th Street
19	Frost'd Primary Care, Inc.	369 Eighth Avenue
20	West Midtown Medical Group	311 West 35th Street
21	Pan American Medical Center, Inc.	500 West 57th Street
22	JGB Rehabilitation Corp.	15 West 65th Street
23	Manhattan West Center	172 Amsterdam Avenue
24	Ryan Chelsea-Clinton Health Center	651 Tenth Avenue
25	Union Health Center-ILGWU	275 Seventh Avenue

Note: See Figure 5-5 for facility locations.
Source: DCP's *Selected Facilities and Program Sites in New York City*, 2007 Edition.

Table 5-20
Summary of Outpatient Health Care Facilities
Facility Type: Hospital Attended Health Center

Map No.	Facility Name	Address
26	Penn South Geriatric Clinic	305 West 28th Street
27	Family Health Center	350 West 51st Street
28	Spellman Center for HIV	415 West 51st Street
29	Chelsea Pediatrics	365 West 25th Street
30	Chelsea Internal Medicine & Senior Health	275 Eighth Avenue
31	Senior Health at Penn South	275 Eighth Avenue
32	Chelsea Center For Special Studies	119 West 24th Street
33	NY Cornell Sports Medicine Center, Chelsea Piers	23rd St and Westside Highway
34	The Chelsea Health Services	241 West 30th Street
35	Mount Sinai Sports Therapy Center	625 Madison Avenue

Note: See Figure 5-5 for facility locations.
Source: DCP's *Selected Facilities and Program Sites in New York City*, 2007 Edition.

Table 5-21
Summary of Outpatient Health Care Facilities
Facility Type: Intermediate Care Facility

Map No.	Facility Name	Address
36	Assn. for Help of Retarded Children	426 West 52nd Street
37	The Center for Family Support, Inc.	440 West 41st Street
38	Catholic Guardian Society of New York	400 West 43rd Street
39	Catholic Guardian Society of New York	135 West 23rd Street
40	Independent Living Association, Inc.	317 West 48th Street
41	JCL – Joselow House	46 West 47th Street

Notes: See Figure 5-5 for facility locations.
Source: DCP's *Selected Facilities and Program Sites in New York City*, 2007 Edition.

Table 5-22
Summary of Outpatient Health Care Facilities:
Facility Type: Medically Supervised Chemical Dependency Outpatient Service

Map No.	Facility Name	Address
42	Exponents, Inc. – Med Sup Op-Sa	151 West 26th Street
43	NYC Dept Probation – Daytop Village	500 Eighth Avenue
44	NYC Dept Probation – Med Sup Op-Sa/Tri	1369 Broadway
45	First Steps to Recovery – Med Sup Op-Sa	310-312 West 47th Street
46	Areba/Casriel Institute – Alcoholism Clinic	145 West 45th Street
47	Villa Opc Ii, Inc. – Alcoholism Clinic	290 Madison Ave
48	Medical College/Cornell Univ-Sa Clinic	56 West 45th Street
49	Freedom Institute, Inc. – Alcsm Clinic	515 Madison Avenue
50	Ctr Marital/Fam. Therapy – Alcsm Clinic	113 East 58th Street
51	Nri Group L.L.C. – Med Sup Op-Sa	339 West 51st Street
52	Medical Arts Center Hospital – Med Sup Op-Sa	57 West 57th Street
53	Arms Acres, Inc. – Med Sup Op-Sa	1841 Broadway
54	St. Lukes-Roosevelt Hosp-Med Sup Op-Sa	1000 Tenth Avenue
55	T.R.I. Center, Inc. – Med Sup Op-Sa	1369 Broadway
56	Daytop Village Inc – Med Sup Op-Sa	500 Eighth Avenue
57	West Midtown Management – Med Sup Op-Sa	505 Eighth Avenue
58	West Midtown Management Grp-Alcsm Clinic	311 West 35th Street
59	Nri Group L.L.C. – Med Sup Op-Sa	455 West 50th Street
60	Women In Need, Inc. – Med Sup Op-Sa	115 West 31st Street
61	Villa OPC II – Outpatient Drug Abuse Clinic	290 Madison Avenue
62	Areba/Casriel Institute – Drug Abuse Clinic	145 West 45th Street

Notes: See Figure 5-5 for facility locations.
Source: DCP's *Selected Facilities and Program Sites in New York City*, 2007 Edition.

Table 5-23
Summary of Outpatient Health Care Facilities
Facility Type: Miscellaneous

Map No.	Facility Name	Address	Facility Type
63	Greenwich House	303 Ninth Avenue	Clinic treatment
64	St. Luke's-Roosevelt Cpep	1000 Tenth Avenue	Comprehensive Psychiatric Emergency Program
65	Postgraduate West Rehabilitation Center Cdtp	344 West 36th Street	Continuing day treatment
66	St.Luke's Roosevelt Division Transitional Cdt	1000 Tenth Avenue	Continuing day treatment
67	Jewish Guild For The Blind Cont. Day Treatment	15 West 65th Street	Continuing day treatment
68	JBFCS Child Development Center Day Treatment	120 West 57th Street	Day Treatment
69	Children's Day Treatment And School	255 West 71th Street	Day Treatment
70	Southern Manhattan Dialysis Center	330 West 13th Street	Dialysis Center
71	Life Care Dialysis Center	221 West 61st Street	Dialysis Center
72	Lower Manhattan District Health Center	303 Ninth Avenue	HHC network oral health center
73	PS 51	520 West 45th Street	HHC network school-based health center
74	Metro New York Ddso	120 West 24th Street	Individualized residential alternative
75	Lifespire, Inc.	333 West 14th Street	Individualized residential alternative
76	Metro New York Ddso	515 West 59th Street	Individualized residential alternative
77	NRI Group L.L.C. – S.A. Inpatient Rehab	455 West 50th Street	Inpatient rehabilitation
78	Medical Arts Hospital-Alcoholism Rehab	57 West 57th Street	Inpatient rehabilitation
79	A.R.E.B.A. – Casriel-Alcoholism Rehab	500 West 57th Street	Inpatient rehabilitation
80	Postgraduate West Rehabilitation Center Iprt	344 West 36th Street	Intensive psychiatric rehabilitation
81	Areba/Casriel Institute – M.S. With/Op	145 West 45th Street	Medically supervised chemical dependency crisis service
82	The Villa Opc Ii – M.S. With/Op	290 Madison Avenue	Medically supervised chemical dependency crisis service
83	Medical Arts Hospital – M.S. With/Op	57 West 57th Street	Medically supervised chemical dependency crisis service
84	St. Luke's Roosevelt Hosp-M.S. With/Op	1000 Tenth Avenue	Medically supervised chemical dependency crisis service
85	West Midtown Medical Corp-Mmtp Clinic #1	311 West 35th Street	Methadone treatment clinic
86	West Midtown Medical Corp-Mmtp Clinic #2	311 West 35th Street	Methadone treatment clinic
87	Beth Israel Medical Center-Mmtp Clinic	721 Ninth Avenue	Methadone treatment clinic
88	St. Luke's-Roosevelt Hospital – Mmtp Clinc	1000 Tenth Avenue	Methadone treatment clinic
89	Daytop Village, Inc. – D.F. Outpatient	500 Eighth Avenue	Non-medically supervised chemical dependency outpatient service

Notes: See Figure 5-5 for facility locations.
Source: DCP's *Selected Facilities and Program Sites in New York City*, 2007 Edition.

THE FUTURE WITHOUT THE PROPOSED ACTIONS—2019

In the Future without the Proposed Actions in 2019, St. Vincent's Hospital is planning new facilities, including a new emergency room. However, at this time, that project is still in planning stage and these new facilities may entail the relocation of existing services and would not be considered additional capacity. No major changes to capacity are expected to occur at either St. Luke's or St. Vincent's.

Planned residential developments are expected to introduce approximately 5,209 low- to moderate-income units to the study area by 2019. As discussed above, unless the number of affordable units in a planned development is known, it is conservatively assumed that 20 percent of the 26,046 planned housing units identified in the Future without the Proposed Actions (see Tables 2-5 and 2-6 in Chapter 2, "Framework for Analysis") would be for low- to moderate-income residents. Therefore, absent the Proposed Actions, the low- to moderate-income population of the study area will increase by 13,023 residents (5,209 new low to moderate-income units at 2.5 persons per unit).

Assuming the national average of about 390 annual emergency room visits per 1,000 low-income persons, the new low- to moderate-income residents could add a total of about 5,079 annual visits, a small increase over the hundreds of thousands of overall visits currently accommodated by the existing health care facilities in the study area.

PROBABLE IMPACTS OF THE PROPOSED ACTIONS—2019

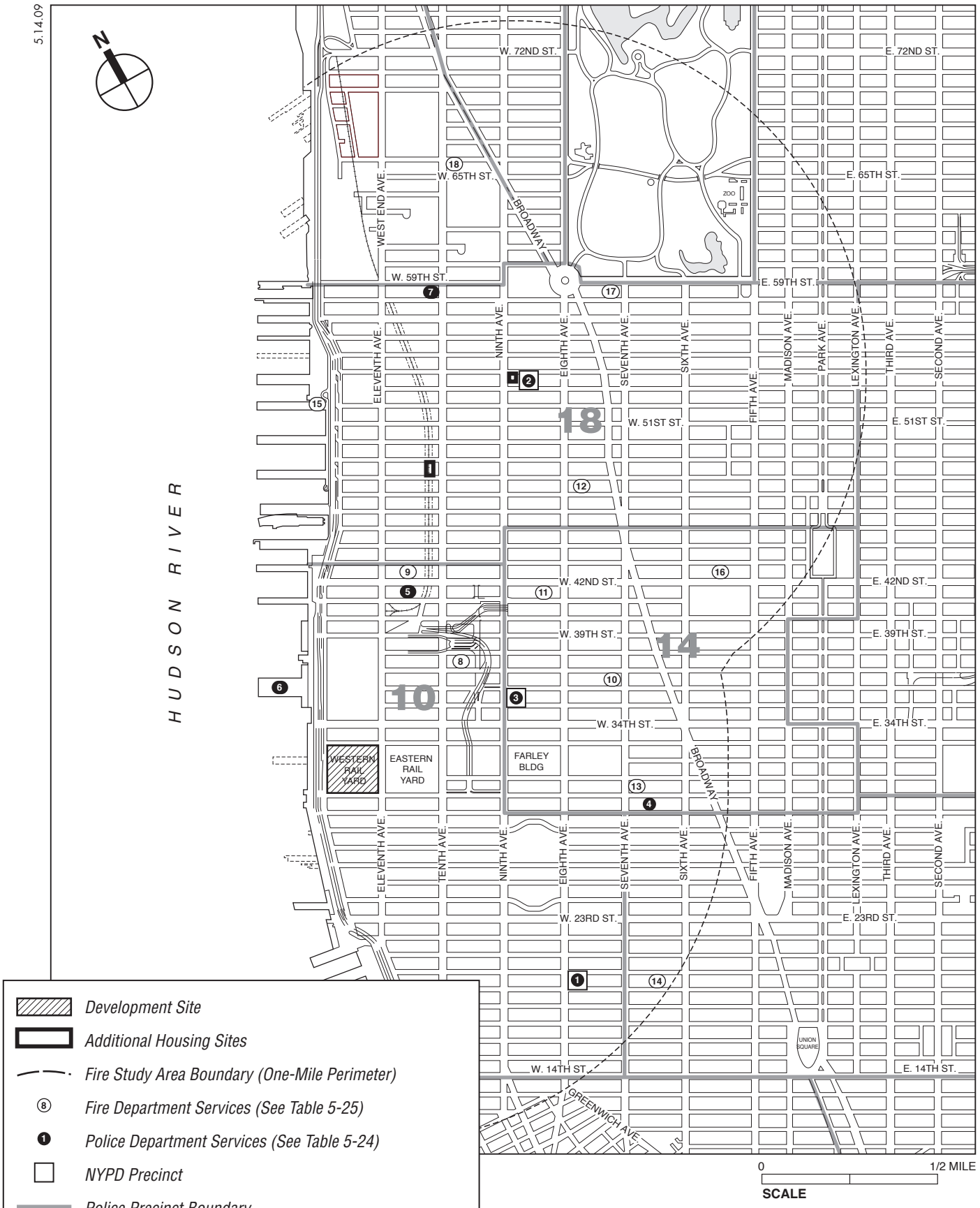
As described above, this analysis assumes the Maximum Residential Scenario for the Development Site. By 2019, the Proposed Actions would result in approximately 702 new low- to moderate-income housing units and introduce approximately 1,755 new low- to moderate-income residents to the study area. Based on the national average of 390 annual emergency room visits per 1,000 low-income persons, these new low to moderate-income residents could add an estimated 684 annual visits to study area emergency rooms. This additional low- to moderate-income population would generate a minimal change in demand over the Future without the Proposed Actions (less than 1 percent increase in study area hospital and emergency room visits). As this increase is less than the *CEQR Technical Manual*'s threshold of a 5 percent increase in the demand for services, no significant adverse impact on hospitals and emergency rooms is expected as a result of the Proposed Actions.

G. POLICE PROTECTION SERVICES

The *CEQR Technical Manual* recommends detailed analyses of impacts on police service only in cases of direct impacts on facilities (i.e., displacing a precinct house or affecting the access to and from the facility). The Proposed Actions would not result in any of theses direct effects. However, this section provides a description of existing police facilities that serve the project sites and an assessment of the potential for the Proposed Actions to affect police services.

EXISTING CONDITIONS

The Proposed Actions are located within NYPD's 10th Precinct and 18th (Midtown North) Precinct (see Figure 5-6 and Table 5-24). Additional police facilities that serve the area surrounding the project sites are also described below and listed in Table 5-24.



WESTERN **RAIL YARD**

Police and Fire Services
Figure 5-6

Table 5-24
Police Protection Services

Map No.	Police Department	Address	Facility Type	Staff
Precincts Responsible for Development and Additional Housing Sites				
1	10th Precinct	230 West 20th Street	NYC Police Station	153
2	18th Precinct— Midtown North	306 West 54th Street	NYC Police Station	279
Other Precincts				
3	14th Precinct—Midtown South	357 West 35th Street	NYC Police Station	387
Supplementary Facilities				
4	Manhattan South Traffic Task Force	138 West 30th Street	Other NYPD Facility	227
	NYPD Movie and TV Unit	138 West 30th Street	Other NYPD Facility	23
5	Manhattan South Task Force	524 West 42nd Street	Other NYPD Facility	189
6	Mounted Unit Troop B	Pier 76	Other NYPD Facility	30
7	Drug Enforcement Task Force	899 Tenth Ave	NYC Police Station	N/A

Note: Refer to Figure 5-6 for facility locations.
Source: NYPD, October 2008.

The 10th Precinct, located at 230 West 20th Street, is one of two police units primarily responsible for providing police services to the study area. The 10th Precinct serves an area of approximately 0.93 square miles generally bounded by West 43rd Street on the north, Ninth and Seventh Avenues on the east, West 14th Street on the south, and the Hudson River on the west. It serves the Chelsea residential neighborhood; the Hudson Yards district; notable large attractions, such as Chelsea Piers and the Jacob K. Javits Convention Center; and major transportation routes, such as the Lincoln Tunnel and West Side Highway. Approximately 151 uniformed staff members are assigned to the 10th Precinct.

The Midtown North 18th Precinct serves an area of approximately 1.1 square miles generally bounded by 59th Street to the north, Lexington Avenue to the east, West 43rd Street to the south, and the Hudson River to the west. The area served by this precinct includes many historic and tourist sites, such as Radio City Music Hall and Rockefeller Center, as well as the Midtown commercial core, and residential areas.

Although neither the Development Site nor the Additional Housing Sites are located within the Midtown South (14th) Precinct, the precinct house is located near the eastern edge of the 10th Precinct, and approximately three avenues east of the Development Site. The Midtown South Precinct serves the area generally east of Ninth Avenue. In total, the Midtown South Precinct serves an area of approximately 0.77 square miles bounded by West 45th Street, Lexington Avenue, West 29th Street, and Ninth Avenue.

The study area includes police facilities that do not factor into local response capabilities because they provide services to large portions of Manhattan, the entire borough, or even the entire City. These facilities include the Drug Enforcement Task Force, the Movie and TV Unit, Mounted Unit Troop B, Manhattan Traffic Task Force, and the Manhattan South Task Force.

The Drug Enforcement Task Force, located at 899 Tenth Avenue, is a City partnership with the federal Drug Enforcement Agency. The Drug Enforcement Task Force provides narcotics enforcement for the entire City.

The Movie and TV Unit is a subdivision of the Manhattan Traffic Task Force. The unit provides traffic control at film production locations and ensures compliance with permits issued by the Mayor's Film Office.

The Mounted Unit Troop B is based at Pier 76. In addition to housing Troop B, this facility serves the Mounted Unit's citywide headquarters. Troop B is responsible for patrolling in Manhattan from 59th Street to the southern tip of the island. The Mounted Unit provides traffic and crowd control, community relations, and prevention of street crime.

The Midtown South Traffic Task Force provides additional traffic-related protection and services in Manhattan, primarily south of 59th Street. The Midtown South Traffic Task Force generally serves the area from the southern end of Manhattan to 59th Street and is dedicated to assisting local precincts with maintaining traffic flow in Manhattan.

The Manhattan South Task Force is located at 524 West 42nd Street and augments local patrol precincts for large scale incidents, such as concerts or events. They do not directly patrol the study area.

THE FUTURE WITHOUT THE PROPOSED ACTIONS—2019

In the Future without the Proposed Actions in 2019, NYPD will continue to adjust its allocation of personnel as the need arises. Increased allocations are considered when increased demand becomes apparent. It is NYPD policy not to make adjustments in advance of planned or potential development. Each year, the precinct may be assigned new recruits, but there are also losses due to transfers and promotions. The development expected in the Future without the Proposed Actions may prompt the need for adjustments to the size and deployment of the police force. In addition, further adjustments could be made based on budgetary factors or other policy decisions made by 2019.

PROBABLE IMPACTS OF THE PROPOSED ACTIONS—2019

By 2019, the new worker, residential, and visitor population generated by the Proposed Actions could increase the demand for police protection. According to the NYPD Office of Management Analysis and Planning (see Appendix B1, "Community Facilities Correspondence"), NYPD would continue to evaluate its staffing and resource needs based on a variety of factors, including projected population increases and demographic shifts, calls for service, and crime conditions. Accordingly, there would be no significant adverse impact on police services.

Access to the Development Site and Additional Housing Sites would remain unchanged as there are no proposed street closings. In the Future with the Proposed Actions, NYPD vehicles would be able to access the project sites and surrounding area as they do other areas throughout New York City, including the most congested areas of Midtown and Downtown Manhattan.

H. FIRE PROTECTION AND EMERGENCY MEDICAL SERVICES

METHODOLOGY

The *CEQR Technical Manual* recommends detailed analyses of impacts on fire protection and emergency medical services only in cases of direct impacts on facilities (i.e., displacing a firehouse or affecting the access to and from the facility). The Proposed Actions would not result in any of these direct effects. However, based on the size and location of the Proposed Actions, this section provides a description of existing firehouses that serve the project sites and an assessment of the potential for the Proposed Actions to affect fire protection services.

EXISTING CONDITIONS

Table 5-25 and Figure 5-6 identify the 11 FDNY facilities located within one mile of the Development Site and the Additional Housing Sites. There are nine firehouses and two EMS facilities that service the study area.

Table 5-25
Fire Protection Services

Map No.	Fire Department	Address	Facility Type
8	Engine 34 Ladder 2	440 West 38th Street	NYC Firehouse
9	Rescue Co. 1	530 West 43rd Street	NYC Firehouse
10	Engine 26	220 West 37th Street	NYC Firehouse
11	EMS Battalion #9 Port Authority Outpost	641 Eighth Avenue	NYC EMS
12	Engine 54 Ladder 4	782 Eighth Avenue	NYC Firehouse
13	Engine 1 Ladder 2	142 West 31st Street	NYC Firehouse
14	Engine 3 Ladder 12 Battalion 7	146 West 19th Street	NYC Firehouse
15	Marine Co. 1	Pier 53	NYC EMS
16	Engine 65	33 West 43rd Street	NYC Firehouse
17	Engine 23	215 West 58th Street	NYC Firehouse
18	Engine 40 Ladder 25	131 Amsterdam Avenue	NYC Firehouse

Note: Refer to Figure 5-6 for facility locations.
Source: New York City Fire Department.

In New York City, FDNY engine companies carry hoses; ladder companies provide search, rescue, and building ventilation functions; and rescue companies specifically respond to fires or emergencies in high-rise buildings. In addition, FDNY operates the City's EMS system. Normally, a total of three engine companies and two ladder companies respond to each call, although initial responses to alarms from any given call box location are sometimes determined by the specific needs of the geographic location or use at that location. Each FDNY squad company is capable of operating as an Engine, Ladder, or Rescue company, ensuring the versatility of companies for incident commanders. Each squad is also part of Hazardous Materials (HazMat) Response Group, with each company containing a HazMat Tech Unit. An FDNY battalion is the first (lowest) level of command and usually comprises five to seven companies (three to six engine companies and two to three ladder companies). There are five to six battalions in a division. FDNY can also call on units in other parts of the City as needed.

In addition to those listed, the study area is also serviced by Marine Company 1, which is responsible for protecting the Hudson River and New York Harbor. The company has a docking location at the foot of Little West 12th Street on Pier 53, and houses the company's boat, the John D. McKean. In addition, Marine Company 1 serves as one of the three EMS facilities.

Approximately 25 personnel are staffed in each engine and ladder company. Therefore, if a firehouse contains one engine and one ladder company, a total of approximately 50 personnel are assigned to that facility. Typically, during one shift, each engine and ladder company is manned by five and six firefighters, respectively.

There are two types of ambulances in the City—911 providers and those providing inter-facility transport. Municipal FDNY and hospital-based ambulances are the sole providers of 911 services, and they operate that system under contract with EMS. (Inter-facility transports are carried out by private contractors and do not participate in the 911 system.) All hospital-based ambulances which operate in the New York City 911 System do so by contractual agreement with FDNY Bureau of EMS. All ambulances in the 911 system are dispatched by FDNY under

the same computer based system, regardless of hospital affiliation. The dispatch system divides the City into geographic "atoms," based loosely on NYPD precinct sectors, with a number of atoms located within each precinct, and assigns the nearest unit to an emergency call based on its current location. All units are assigned a permanent cross-street location where they await a service call; units return to this location once service is complete. These locations are determined by FDNY and based on historical call volumes by location and time of day. Similar to other emergency responders, ambulances would adjust to any congestion encountered en route to its destination. Response time has recently improved due at least in part to the City's implementation of an automatic vehicle location (AVL) system in all ambulances and FDNY apparatus.

THE FUTURE WITHOUT THE PROPOSED ACTIONS—2019

FDNY does not allocate personnel based on proposed or potential development, but responds to demonstrated need. In the Future without the Proposed Actions in 2019, FDNY will continue to evaluate the need for personnel and equipment in the study area and make necessary adjustments to adequately serve the area. According to a letter dated May 8, 2009 (see Appendix B1, "Community Facilities Correspondence"), no changes to fire protection or fire houses are planned at this time. However, in the *Hudson Yards FGEIS*, a firehouse is required to be constructed in the area by 2025 as mitigation for that action.

PROBABLE IMPACTS OF THE PROPOSED ACTIONS—2019

By 2019, the new worker, residential, and visitor population generated by the Proposed Actions could increase the demand for fire protection services. According to a letter from FDNY dated May 8, 2009 (see Appendix B1, "Community Facilities Correspondence"), if fully developed as planned, the Proposed Actions would increase the demand for fire protection and for emergency medical services. The letter further states that additional fire companies and/or a fire house and additional emergency medical services units will be required to satisfy this increased demand.

According to the FDNY, based on anticipated No Build development in the Development Site Study Area, the mitigation of a new firehouse as first proposed in the *Hudson Yards FGEIS* would need to be in place in 2017 (some eight years earlier than envisioned in the *Hudson Yards FGEIS*). However, FDNY would continue to evaluate its needs and determine the specific timing for this mitigation based on the actual completion of development in the Hudson Yards area. The FDNY has indicated that if the firehouse is in place by 2017, it would accommodate the demands from the Proposed Actions, as well as surrounding No Build development. Therefore, the Proposed Actions would not result in a significant adverse impact to fire services.✷