

A. INTRODUCTION

This chapter examines the potential effect of the proposed Brooklyn Bridge Park Project on services provided by public or publicly funded community facilities. It describes existing conditions, and examines and compares the future without the proposed project (No Build condition) to the future with the proposed project (Build condition) to determine the impacts of the proposed project in an analysis year of 2012.

As described below, it is anticipated that approximately 1,210 units of market rate housing would be developed as part of the Brooklyn Bridge Park program. Since the projected increase in population would increase demand for community facilities in the areas surrounding the project site, this analysis accounts for that growth and assesses the project's potential to result in significant adverse impacts on community facilities. As discussed below, the only community facility requiring detailed analysis is public schools, and the analysis concludes that even with the student-age population generated by the proposed project, there would be sufficient capacity in the public school system to accommodate this added demand. Overall, the proposed project would not have significant adverse impacts on community facilities.

B. METHODOLOGY

The 2001 *New York City Environmental Quality Review (CEQR) Technical Manual* recommends a community facilities analysis for any project that adds 100 or more residential units. With a proposed development plan that includes approximately 1,210 new units, the proposed project would exceed this screening threshold. However, for the following services, the proposed project would not exceed the specific threshold for more detailed analysis:

- Libraries. The project would not increase by more than 5 percent the number of residential units served by the Brooklyn library system.
- Health Care Facilities (Outpatient). The proposed project would not have more than 600 low- or moderate-income units.
- Police and Fire. As the project would not displace or directly affect any police or fire facilities and in accordance with city policy, the New York City Police (NYPD) and Fire Departments (FDNY) continuously monitor conditions to determine how personnel are deployed and adjust deployment patterns as deemed necessary. Therefore, a detailed impact analysis is not called for.
- Day Care. Development under the proposed project would not generate more than 50 children eligible for publicly funded day care.

According to the *CEQR Technical Manual*, an analysis of potential impacts on local public schools is required if the proposed action would generate more than 50 elementary/middle school and/or more than 150 high school students. Based on the number of residential units

proposed and the student generation rates set forth in Table 3C-2 of the *CEQR Technical Manual*, the proposed project would generate approximately 467 elementary and middle school students. Therefore, an analysis of elementary and middle schools is warranted. Given that the proposed project would generate only 76 high schools students, which is fewer than the threshold of 150 high school students, no further analysis of the impacts at the high school level is necessary. For that reason, the following schools analysis focuses on the elementary and middle school levels only.

C. EXISTING CONDITIONS

As described above, a detailed schools analysis is required if a proposed action would generate more than 50 elementary/intermediate school students. The proposed project's residential component would generate enough students to exceed the threshold for elementary/intermediate school students. Therefore, this section analyzes the potential impact of the proposed project on conditions at local public elementary and intermediate schools.

The project site lies within the boundaries of Community School District 13 (CSD 13), which extends roughly from the East River north of Fulton and Union Streets, to Garvey Avenue. CSD 13 includes much of Downtown Brooklyn as well as Brooklyn Heights, Fort Greene, Prospect Heights, and Clinton Hill (see Figure 4-1). CSD 15, bounded to the north by Atlantic Avenue, is located immediately south of the project site. Because of its proximity to the project site, existing utilization levels are also described for the schools in CSD 15 located closest to the project site.

According to the *CEQR Technical Manual*, the study area for an analysis of educational facilities generally coincides with the region within the CSD serving the site of the proposed action. The proposed project lies entirely within Region 2 of CSD 13. Therefore, this analysis assesses the potential effects of the proposed project on schools located in this region.

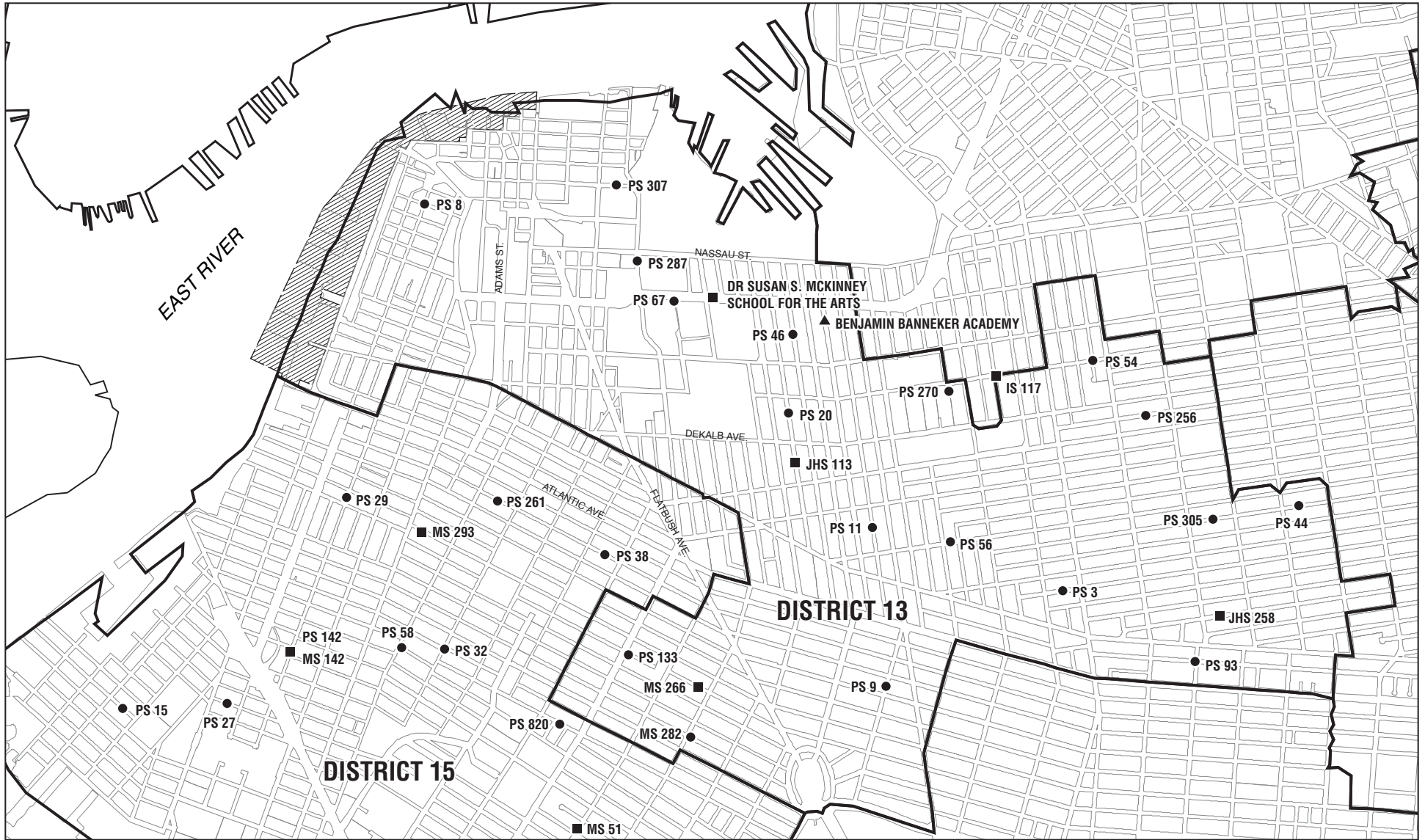
It should be noted that as population shifts within a school district over time, the New York City Department of Education (DOE) can adjust attendance zones within the district to improve the affected school or schools' composition and utilization.



ELEMENTARY SCHOOLS

As shown in Table 4-1, seven elementary schools are located within Region 2 of CSD 13. These include P.S. 8 (Robert Fulton School), P.S. 11 (Purvis J. Behan School), P.S. 20 (Clinton Hill School), P.S. 46 (Edward C. Blum School), P.S. 67 (Charles Dorsey School), P.S. 287 (Bailey K. Ashford School), and P.S. 307 (Daniel Hale Williams School).

According to the most recent enrollment and capacity figures available from DOE, which are for the 2003-2004 school year, these schools are collectively operating at 65 percent capacity, with a surplus of 2,026 seats. Total enrollment at the elementary schools throughout all of CSD 13 is 10,008 students, or 68 percent of capacity, with 4,807 available seats. The highest utilization rate at an individual school is 74 percent, at P.S. 20.

There are two elementary schools—P.S. 29 (the John M. Harrigan School) and P.S. 261 (the Philip Livingston School)—within approximately ½ mile of the project site in CSD 15. As shown in Table 4-1, P.S. 29 is operating at 102 percent capacity and P.S. 261 is operating at 99 percent capacity.



 Project Area
 District Boundary

School Facilities

- Elementary
- Intermediate
- ▲ Intermediate/HS

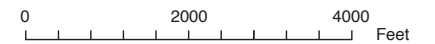


Table 4-1

Public Elementary and Intermediate Schools Serving the Project Area

School	Enrollment in Program	Program Capacity	Available Seats in Program	Program Utilization (Percent)
Elementary Schools				
CSD 13, Region 2				
P.S. 8 - Robert Fulton School	285	431	146	66
P.S. 11 - Purvis J. Behan School	599	837	238	72
P.S. 20 - Clinton Hill School	703	949	246	74
P.S. 46 - Edward C. Blum School	535	862	327	62
P.S. 67 - Charles Dorsey School	691	1063	372	65
P.S. 287 - Bailey K. Ashford School	303	674	371	45
P.S. 307* - Daniel Hale Williams School	586	912	326	64
Region 2 Total	3,702	5,728	2,026	65
CSD 13 Total	10,008	14,815	4,807	68
CSD 15 within approx. ½-mile of project site				
P.S. 29 - John M. Harrigan School	792	777	-15	102
P.S. 261 - Philip Livingston School	712	718	7	99
CSD 15 Total	15,183	15,752	559	96
Intermediate Schools				
CSD 13, Region 2				
J.H.S. 113 - Edmond Learning Center	786	1,343	557	59
I.S. 265 - Dr. Susan McKinney School for the Arts	784	1,209	425	65
Region 2 Total	1,570	2,552	982	62
CSD 13 Total	3,985	5,019	1,034	79
CSD 15 within approx. ½-mile of project site				
M.S. 293	452	718	266	63
CSD 15 Total	5,461	5,227	-234	104
Notes:				
* A portion of I.S. 265 is housed in the building with P.S. 307 and is therefore included in this analysis.				
Sources: Enrollment and capacity for individual schools: DOE, <i>Utilization Profiles: Enrollment/Capacity/Utilization, 2003-2004</i> . These figures include Pre-K enrollment in these buildings. Totals for CSD 13 enrollment: DOE and New York City Department of City Planning (DCP) Enrollment Projections for Community School Districts (Actual 2003, Projected 2004 to 2012). DCP's actual enrollment does not include Pre-K enrollment. Capacity numbers for CSD 13: DOE, <i>Utilization Profiles: Enrollment/Capacity/Utilization, 2003-2004</i> .				

INTERMEDIATE/MIDDLE SCHOOLS

Two intermediate schools are located within Region 2 of CSD 13, J.H.S. 113 (Edmond Learning Center) and I.S. 265 (Dr. Susan McKinney School for the Arts). DOE enrollment statistics for the 2003-2004 school year show that these two schools are collectively operating at 62 percent capacity, with a surplus of 982 seats (see Table 4-1). J.H.S. 113 operates at 59 percent of capacity, while I.S. 265 operates at 65 percent of capacity. Total enrollment at the intermediate schools throughout CSD 13 is 3,985 students, or 79 percent of capacity, with a surplus of 1,034 seats.

M.S. 293, which houses the intermediate school levels of the Brooklyn School for Global Studies and the School for International Studies, is within approximately ½ mile of the project site in CSD 15. As shown in Table 4-1, M.S. 293 is operating at 63 percent capacity.

D. THE FUTURE WITHOUT THE PROPOSED PROJECT

The future utilization rate for school facilities is calculated by adding the estimated enrollment from proposed residential developments to the projected enrollment from DCP or DOE and then comparing that number to projected capacity.

In the No Build condition, new residential development would occur in portions of the surrounding study area, as described in Chapter 2, “Land Use, Zoning, and Public Policy” (see Table 2-2). Seven residential projects are proposed within Region 2 of CSD 13. Although it is not known whether these developments will include affordable housing units, for the purposes of this analysis it is conservatively assumed that 10 percent of these planned residential units will be developed as subsidized housing for low- to moderate-income households. Approximately 1,909 market rate units and 210 affordable housing units are assumed to be generated within Region 2 of CSD 13 by 2012 in the No Build condition. These residential developments and the assumptions used in this analysis are summarized in Table 4-2. Additionally, this analysis conservatively includes the 979 housing units projected to be developed by 2013, following the Build year for the proposed project, as a result of the Downtown Brooklyn Rezoning project (as estimated in the Final Environmental Impact Statement [FEIS] prepared for that project). That FEIS projected that 783 of those units would be market rate and 196 would be for low- to moderate-income residents. All of these would be located within Region 2 of CSD 13. This analysis also includes the portion of the housing proposed as part of the Atlantic Yards Arena and Redevelopment Project that would be developed by Brooklyn Bridge Park’s 2012 build year and would fall within CSD 13. This would include approximately 2,130 housing units in Region 1 of CSD 13. These are expected to include 1,065 market rate units and 1,065 low- to moderate-income units. Therefore, it is expected that a total of approximately 5,228 housing units would be added to CSD 13 in the future without the proposed project. These are expected to include approximately 3,754 market rate units and 1,471 low-moderate income units.

The *CEQR Technical Manual’s* Table 3C-2, “Projected Public School Pupil Ratios in New Housing Units of All Sizes,” summarizes pupil generation rates, based on the DOE’s analysis of income mix and location (by borough) for new residential units. Table 4-3 shows the number of new public elementary and intermediate school students estimated at the new residential development identified in Table 4-2.

DCP and the DOE Division of School Facilities predict changes in enrollment by district up to 10 years in the future using cohort survival methodology based on birth rates and grade-retention ratios. Slight differences in methodology account for variations between the DOE and DCP enrollment projections.¹ The *CEQR Technical Manual* suggests that both DCP’s and DOE’s enrollment projections may be considered in evaluating potential impacts, although the more

¹ According to DCP, the major differences in methodology between the DOE and DCP enrollment projects are the following: DOE projects births by race/ethnicity for its projects, while DCP holds the latest actual birth data constant; and DOE includes Long Term Absentees (those students who are registered but are not in attendance at a New York City public school) in its projections, while DCP does not include them.

**Table 4-2
Expected Residential Development in CSD 13:
2012 Future Without the Proposed Project**

Project Location	Total Housing Units	Market Rate Units	Low-Moderate Income Units ¹
Light Bridges (100 Jay Street)	153	138	15
85 Jay Street and Rezoning	900	810	90
60-82 Washington Street (Gair 5)	254	229	25
85 Adams Street	80	72	8
99 Gold Street	70	63	7
84 Front Street	44	40	4
133-137 Water Street	52	47	5
57 Front Street	33	30	3
4 Water Street	20	18	2
20 Henry Street	23	21	2
37 Bridge Street	60	54	6
80 Dekalb Avenue	430	387	43
<u>Downtown Brooklyn Rezoning projected development</u>	<u>979</u>	<u>783</u>	<u>196</u>
Total, Region 2	3,098	2,692	406
<u>Atlantic Yards Arena and Redevelopment</u>	<u>2,130</u>	<u>1,065</u>	<u>1,065</u>
Total, CSD 13	5,228	3,757	1,471

Notes:
¹ This analysis conservatively assumes that 10 percent of all housing units will be developed as subsidized housing for low- to moderate-income households, except for the Downtown Brooklyn Rezoning projected development and the Atlantic Yards Arena project, where more specific figures are available.

Sources: Downtown Brooklyn Council, New York City Economic Development Corporation, New York City Department of City Planning, New York City Department of Housing Preservation, and Development, AKRF, Inc.

**Table 4-3
Projected New Housing Units and Estimated Number of Students
Generated in Study Area: 2012 Future Without the Proposed Project**

	Housing Units ¹	Elementary School	Intermediate School	Total Elementary and Middle School Students Generated ²
Market Rate	3,757	1,014	376	1,390
Low-Moderate Income	1,471	500	190	690
Total	5,228	1,514	566	2,080

Notes:
¹ Projected new housing units in CSD 13 as shown in Table 4-2 and described in Chapter 2, "Land Use, Zoning, and Public Policy."
² Includes 746 elementary and 277 middle school students in Region 2 of CSD 13 and 650 elementary and 245 middle school students in Region 1 of CSD 13.

Sources: Student generation rates are based on the *CEQR Technical Manual's* Table 3C-2: "Projected Public School Pupil Ratios in New Housing Units of All Sizes."

conservative (higher enrollment and lower capacity) projections should be used for calculating numerical impacts. Enrollment projections were obtained from DCP and DOE, and the data were compared to determine which were more conservative in projecting future enrollment for CSD 13. This analysis uses DCP's enrollment projections. These enrollment projections do not explicitly account for discrete new residential developments planned for the area; thus, the

additional populations from the new projects planned within the CSD 13 boundary were also included to more conservatively predict future enrollment and utilization.

As discussed below, the elementary or intermediate schools in the associated school district region or throughout the overall district are not expected to operate at or above capacity in the 2012 future without the project (see Table 4-4).

Table 4-4
Estimated Public Elementary/Intermediate School Enrollment, Capacity, and Utilization: 2012 Future Without the Proposed Project

Region/District	DCP Projected Enrollment in 2012	Students Generated from New Residential Development	Total Future Enrollment in 2012	Program Capacity	Available Seats in Program	Program Utilization (Percent)
Elementary Schools						
Total, Region 2 of CSD 13	3,125	865	3,990	5,728	1,738	70
Total, CSD 13	8,448	1,515	9,963	14,815	4,852	67
Intermediate Schools						
Total, Region 2 of CSD 13	1,318	321	1,639	2,552	913	64
Total, CSD 13	3,346	566	3,912	5,019	1,107	78
Sources: Totals for CSD 13 projected enrollment: DCP Enrollment Projections (Actual 2003, Projected 2004-2012). DCP enrollment projections do not include Pre-K enrollment. Capacity numbers for CSD 13: DOE, <i>Utilization Profiles: Enrollment/Capacity/Utilization, 2003-2004</i> .						

ELEMENTARY SCHOOLS

DCP’s projections for CSD 13 indicate that the recent trend in the declining numbers of elementary grade students will continue through 2012. The projections show 1,560 fewer public elementary school students districtwide—or an approximate 16 percent net decrease—by 2012.

Applying these projection rates to the elementary schools in Region 2 of CSD 13 results in a projection of 577 fewer public elementary school students by 2012 (see Table 4-4). At the same time, residential development in the area will add 865 elementary school students to Region 2 of CSD 13. If all of these students were to attend schools within Region 2, the total enrollment in all elementary schools in this region would be 3,990 in 2012, with a surplus of 1,738 seats (68 percent utilization). Overall in CSD 13, there will be a total of 45 fewer elementary school students compared to 2003-2004 conditions and schools are forecast to operate at 67 percent of capacity, with 4,852 available seats.

Overall, in the future without the proposed project, there is expected to be available capacity at public elementary schools in the study area as well as in CSD 13 as a whole in 2012.

INTERMEDIATE/MIDDLE SCHOOLS

DCP projections show a continuing trend of decreasing intermediate school enrollments through 2012. It is expected that there will be a net overall decline of 16 percent in intermediate school enrollment, or a decrease of 639 students.

It is estimated that residential development in the area will add 321 intermediate school students to Region 2 of CSD 13. If all of these students were to attend schools in Region 2 of CSD 13, total enrollment in all intermediate schools in this region would be 1,639, with a surplus of 913 seats (64 percent utilization). In addition, throughout CSD 13 there is expected to be available capacity at public intermediate schools in 2012. There will be a total of 73 fewer students

compared to 2003-2004 conditions, with intermediate schools operating at 78 percent of capacity, with a surplus of 1,107 seats.

Overall, in the future without the proposed project, there is expected to be available capacity at public intermediate/middle schools in the study area as well as in the entire CSD 13 in 2012.

E. THE FUTURE WITH THE PROPOSED PROJECT

The proposed project would introduce 1,210 market rate housing units to Region 2 of CSD 13. Using the formula set forth in Table 3C-2 of the *CEQR Technical Manual*, an estimated 327 elementary and 121 intermediate school students would be introduced into this region of the school district by 2012 (see Table 4-5). All of the children living in the proposed residential buildings on the project site would be zoned to attend public schools in CSD 13.

**Table 4-5
Estimated Public Elementary/Intermediate School Enrollment,
Capacity, and Utilization: 2012 Future With the Proposed Project**

Region/District	Projected Enrollment in 2012	Students Generated from Proposed Project	Total Future Enrollment in 2012	Program Capacity	Available Seats in Program	Program Utilization (Percent)
Elementary Schools						
Total, Region 2 of CSD 13	<u>3,990</u>	327	<u>4,317</u>	5,728	<u>1,411</u>	<u>75</u>
Total, CSD 13	<u>9,963</u>	327	<u>10,290</u>	14,815	<u>4,525</u>	<u>70</u>
Intermediate Schools						
Total, Region 2 of CSD 13	<u>1,639</u>	121	<u>1,760</u>	2,552	<u>792</u>	<u>69</u>
Total, CSD 13	<u>3,912</u>	121	<u>4,033</u>	5,019	<u>986</u>	<u>80</u>
Sources: Totals for CSD 13 projected enrollment: DCP Enrollment Projections. DCP enrollment projections do not include Pre-K enrollment. Capacity numbers for CSD 13: DOE, <i>Utilization Profiles: Enrollment/Capacity/Utilization, 2003-2004.</i>						

ELEMENTARY SCHOOLS

The approximately 327 elementary school students that would be introduced into Region 2 of CSD 13 by new housing at the proposed project would cause total enrollment in the region to rise to 4,317, with a surplus of 1,411 seats (75 percent capacity). Elementary schools in CSD 13 as a whole would operate at 70 percent capacity in 2012, with 4,525 available seats and a total enrollment of 10,290. Therefore, increased enrollment attributable to the proposed project is not expected to result in significant adverse impacts to public elementary schools. Furthermore, the provision of a nearby park, which could be used as an educational resource, would be a positive impact of the proposed project.

INTERMEDIATE/MIDDLE SCHOOLS

The proposed development would introduce approximately 121 intermediate/middle school students into Region 2 of CSD 13 by 2012. Total intermediate/middle school enrollment in the region would therefore rise to 1,760, with a surplus of 792 seats (69 percent capacity). Intermediate/middle schools in CSD 13 as a whole would operate at 80 percent in 2012, with 986 available seats and a total enrollment of 4,033. Therefore, increased enrollment attributable to the proposed project is not expected to result in significant adverse impacts to public intermediate schools. The provision of the nearby park as an educational resource would be a beneficial aspect of the proposed project for the intermediate/middle school population.

F. PARK SECURITY

Because the park would not directly affect a police facility, detailed impact studies of municipal police service are not called for. However, with respect to current security plans, the park is expected to be open to the public between 6 and 1 AM and most likely will be policed by dedicated Brooklyn Bridge Park security personnel, including police officers and park rangers. The number of officers and rangers will fluctuate based on the season and day of the week; preliminary planning calls for a daily staffing level ranging from 5 to 11 persons.

Park patrols would be done on foot, by bicycle or by vehicle depending upon the time of day and season. Security staff would be supplemented by recreation, gardening, and maintenance staff, who would be in radio communication, as needed, with police personnel. In addition to park patrols, security surveillance would be provided via installation of security camera at key public facilities.

In the event of an emergency or a major event it is expected that park security would call on the NYPD for support.

The security arrangement contemplated for Brooklyn Bridge Park is similar to the security arrangements used in Central Park and other parks in New York City, none of which rely exclusively on New York Police Department officers. Parks operated by the New York City Department of Parks and Recreation rely on Park Enforcement Patrol officers for security. Parks operated by the New York State Office of Parks, Recreation, and Historic Preservation use Park Rangers for security. *