

A. INTRODUCTION

The proposed actions would introduce new residents and workers to the project site, creating new demands for open space in the area. It would create approximately 0.23 acres of new publicly accessible open space. Because the proposed actions would add a new residential and non-residential (i.e., worker) population, this chapter examines the proposed actions' potential impacts on open space resources in accordance with the *City Environmental Quality Review (CEQR) Technical Manual* (January 2012 edition). This chapter examines potential direct effects of the proposed actions on nearby publicly accessible open spaces (e.g., additions or reductions in open space, shadows, noise increases) as well as indirect effects created by changes in demand for and use of the area's open spaces. The analysis inventories the condition and use of open spaces serving both the residential and worker populations and addresses impacts on open space facilities both qualitatively and quantitatively.

PRINCIPAL CONCLUSIONS

DIRECT EFFECTS

The proposed actions would not remove or alter any existing publicly accessible open spaces, nor would they result in any significant adverse shadow, noise, or air quality impacts on any open spaces. On the contrary, the proposed actions would increase the supply of publicly accessible open space in the study area by creating a new 10,000-square-foot (approximately 0.23 acres) publicly accessible open space on Site 5.

INDIRECT EFFECTS

Based on the methodology of the *CEQR Technical Manual*, a preliminary analysis of the proposed actions' indirect effects on open space was conducted to determine the need for a detailed analysis. The preliminary analysis concluded that the proposed actions would not result in a significant adverse impact on open space and that a detailed analysis was not necessary.

Table 5-1 provides a summary of the open space analysis including a comparison of conditions with and without the proposed actions. As shown in the table, the proposed actions would result in a decrease in the passive open space ratio for workers in the commercial (¼-mile) study area. However, the open space ratio for workers in the study area would still remain almost five times over the City's recommended guideline ratio. Therefore, the proposed actions would not result in any significant adverse impacts on open space resources in the commercial study area.

In the residential study area, the open space ratios for the future with the proposed actions, as with existing conditions and the future without the proposed actions, would continue to fall short of the City's recommended open space ratio guidelines. However, the proposed actions would

Table 5-1

2022 Future with the Proposed Actions: Open Space Ratios Summary

Ratio	City Guideline	Open Space Ratios			Percent Change Future Without to Future With the Proposed Actions
		Existing Conditions	Future Without the Proposed Actions	Future With the Proposed Actions	
Commercial (¼-Mile) Study Area					
Passive/Workers	0.15	0.82	0.78 0.80	0.69 0.70	-11.45% -11.61%
Residential (½-Mile) Study Area					
Total/Residents	2.5	0.79	0.83	0.82	-1.32%
Passive/Residents	0.5	0.23	0.26	0.26	-1.18%
Active/Residents	2.0	0.56	0.57	0.56	-1.38%
Note: Ratios in acres per 1,000 people.					

introduce approximately 0.23 acres of publicly accessible open space to Site 5 and, as shown in **Table 5-1**, the open space ratios for the residential study area would decrease by 1.38 percent or less. These decreases would not constitute a substantial change. Therefore, because the open space ratios would remain substantially the same in the future with the proposed actions compared to the future without the proposed actions and the proposed actions would introduce new publicly accessible open space to partially offset the additional project-generated demand, the proposed actions would not result in any significant adverse impacts on open space resources in the residential study area and a detailed open space analysis is not required.

B. METHODOLOGY

DIRECT EFFECTS ANALYSIS

According to the *CEQR Technical Manual*, a proposed action would directly affect open space conditions if it causes the loss of public open space, changes the use of an open space so that it no longer serves the same user population, limits public access to an open space, or results in increased noise or air pollutant emissions, odor, or shadows that would temporarily or permanently affect the usefulness of a public open space. This chapter uses information from Chapter 6, “Shadows,” Chapter 14, “Air Quality,” and Chapter 16, “Noise,” to determine whether the proposed actions would directly affect any open spaces near the project site. A proposed action can also directly affect an open space by enhancing its design or increasing its accessibility to the public. The direct effects analysis is included in the “Probable Impacts of the Proposed Actions” portion of Section C, “Preliminary Assessment.”

INDIRECT EFFECTS ANALYSIS

As described in the *CEQR Technical Manual*, open space can be indirectly affected by a proposed action if the project would add enough population, either residents or non-residents, to noticeably diminish the capacity of open space in an area to serve the future population. Typically, an assessment of indirect effects is conducted when a project would introduce 200 or more residents or 500 or more workers to an area; however, the thresholds for assessment are slightly different for areas of the City that have been identified as either underserved or well-served by open space. Because the project site is not located within an area that has been identified as either underserved or well-served, the 200 resident and 500 worker thresholds were applied in this analysis.

With the proposed 900 residential units, the proposed actions would introduce approximately 1,989 new residents to the project area. The proposed actions also would increase the number of

workers in the area by approximately 1,449. Because the proposed actions would introduce more than 200 new residents and more than 500 new employees to the project area, a preliminary analysis was conducted to assess the proposed actions' potential indirect effects on open space resources in the area. The purpose of a preliminary assessment is to clarify the degree to which an action would affect open space and the need for further analysis. If the preliminary assessment indicates the need for further analysis, a detailed analysis of open space should be performed.

Using the methodology of the *CEQR Technical Manual*, the adequacy of open space in the study area is assessed quantitatively using a ratio of usable open space acreage to the study area population—the open space ratio. This quantitative measure is then used to assess the changes in the adequacy of open space resources in the future, both with and without the proposed actions. In addition, qualitative factors are considered in making an assessment of a proposed action's effects on open space resources.

STUDY AREA

The *CEQR Technical Manual* recommends establishing study area boundaries as the first step in an open space analysis. Worker and residential populations use different open space study areas. Workers typically use passive open spaces within walking distance of their workplaces; this area is roughly ¼-mile. Therefore, projects that would add substantial worker populations analyze their effects on passive open spaces located within ¼-mile of the project site. Residents are more likely to travel farther to reach parks and recreational facilities, and they use both passive and active open spaces. Residents will typically walk up to ½ mile for recreational spaces. Thus, projects that would add substantial residential populations analyze their effects on active and passive open spaces located within ½ mile of the project site. The proposed actions would add sizable worker and residential populations. Therefore, as recommended in the *CEQR Technical Manual*, two study areas were used—a commercial (¼-mile) and residential (½-mile) study area.

Commercial (¼-Mile) Study Area

Following the methodology in the *CEQR Technical Manual*, the commercial study area for the proposed actions includes all census tracts with at least 50 percent of their area inside a ¼-mile radius around the project site. The census tracts with at least 50 percent of their area within ¼-mile of the project site are shown on **Figure 5-1**.

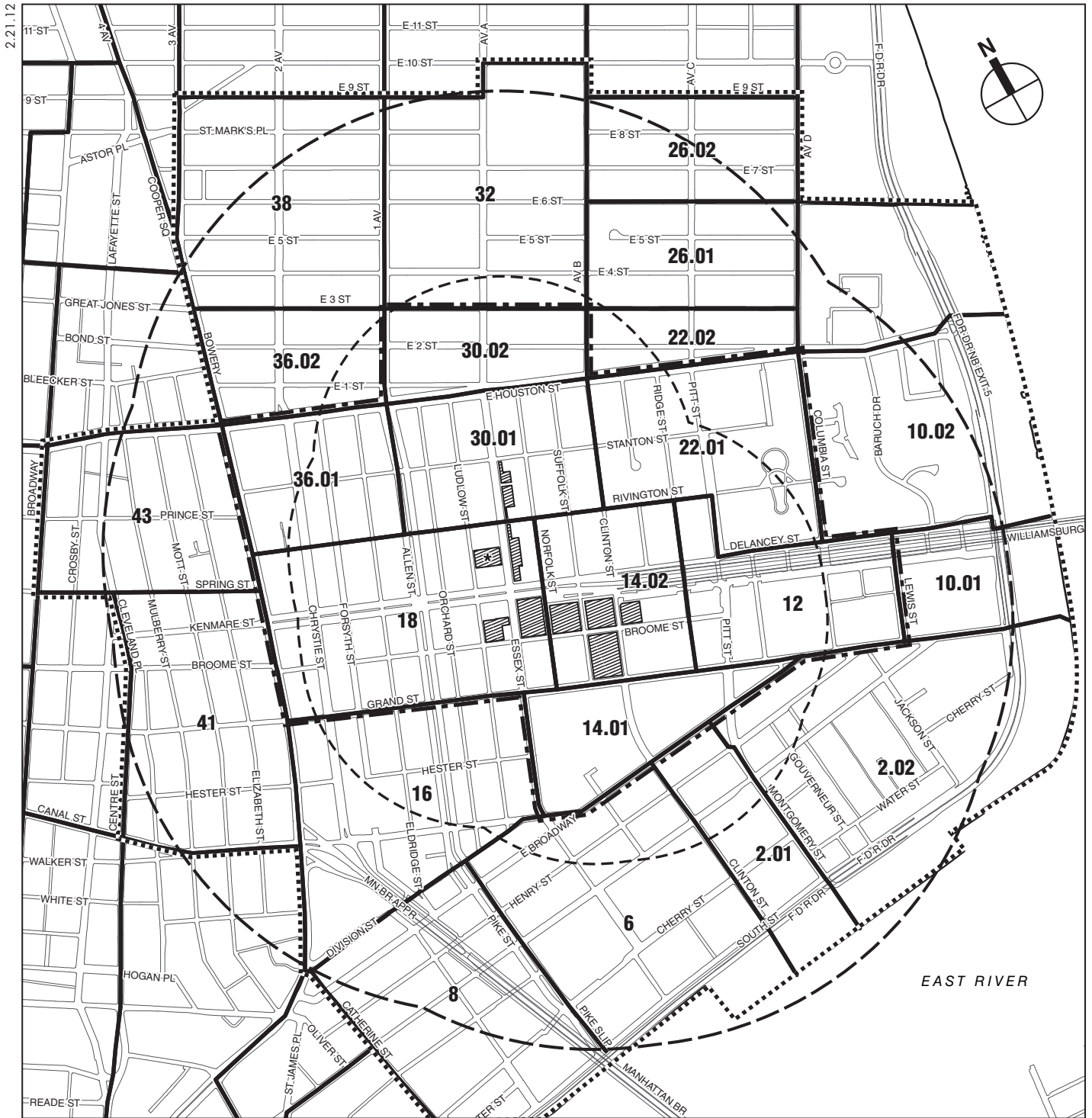
Residential (½-Mile) Study Area

The residential study area for the proposed actions includes all census tracts that fall at least 50 percent within a ½-mile radius around the project site. **Figure 5-1** shows all census tracts included in the residential study area.

OPEN SPACE USER POPULATIONS

Existing Conditions

Census data and data from ESRI, Inc, a commercial data provider, were used to identify potential open space users within the study areas. Open space user groups include area residents and employees. To determine the number of residents currently located within the study areas, data were compiled from the 2010 Census for the tracts and block groups in each study area. The worker population in the study area was estimated using 2010 employment data from ESRI, Inc.



 Proposed Development Sites

* Site 7 Would Not Be Redeveloped Under the Proposed Actions

 Half Mile Perimeter

 Quarter Mile Perimeter

 Commercial Study Area Boundary

 Residential Study Area Boundary

 Census Tract Boundary

0 1000 FEET
SCALE

Seward Park Mixed-Use Development Project

The Future Without the Proposed Actions

As discussed in Chapter 2, “Land Use, Zoning, and Public Policy,” a number of new developments are anticipated to be constructed by 2022 in the ¼-mile and ½-mile study areas. To estimate the population anticipated in the study areas in the future without the proposed actions, the average household size for Manhattan Community District 3 (2.21 persons per household) was applied to the number of new housing units forecast in each area. The number of workers introduced by these developments was estimated using standard employment density ratios for the expected uses. The number of new workers and residents introduced by these developments was added to the existing study area populations to calculate the total worker and resident populations in each study area in the future without the proposed actions.

Probable Impacts of the Proposed Actions

The residential population introduced by the proposed actions was estimated by multiplying the number of units by the average household size for Manhattan Community District 3 (2.21 persons per household). The number of workers introduced by the proposed actions was estimated using standard employment density ratios. The number of new workers and residents introduced by the proposed actions was added to the study area populations in the future without the proposed actions to calculate the total worker and resident populations in each study area in the future with the proposed actions.

INVENTORY OF OPEN SPACE RESOURCES

The *CEQR Technical Manual* defines public open space as open space that is regularly open to the public during designated daily periods. Open spaces that do not fit this definition because they are not available to the public on a regular basis or are available only to a limited set of users are considered private open space and are not included in the quantitative open space analysis. A private, fee-charging health club or roof deck for residents of a particular building are examples of a private open space.

In addition, community gardens in the study area were not included in the open space inventory and quantitative analysis, because their use is often restricted to certain days, typically weekends, and certain times of the day. The following community gardens under the jurisdiction of the New York City Department of Parks and Recreation (DPR) were not included in the open space inventory: Miracle Garden, Kenkeleba House Garden, the community garden at the corner of Clinton and Stanton Streets, De Colores Community Garden, La Plaza Cultural, Fireman’s Memorial Garden, Green Oasis and Gilbert’s Garden, Creative Little Garden, 6th Street and Avenue B Garden, 6 B/C Botanical Garden, Secret Garden, El Jardin Del Paradiso, Generation X Garden, Los Amigos Garden, Orchard Alley Garden, Peach Tree Community Garden, Liz Christy Community Garden, and Le Petit Versailles. The following community gardens owned by the Manhattan Land Trust were not included in the open space inventory: Parque de Tanquilidad, All People’s Garden, Albert’s Garden, and the Lower East Side People Care Garden. In addition, the study area also includes the Children’s Magical Garden at the corner of Stanton and Suffolk Streets. That property occupies one privately owned lot and two lots owned by the City of New York Department of Housing Preservation & Development (HPD); the property has no formal status as a community garden and is not sanctioned by the City of New York, and the garden operators have never requested formal permission to use the City-owned lots from the City of New York (from HPD or DPR through the GreenThumb Program).

All publicly accessible open spaces and recreational facilities within the study areas were identified. The inventory of open spaces was assembled based on field visits conducted in October 2011 and information from DPR. Published environmental impact statements (EISs) for recent projects in or near the study area were also consulted.

The character, condition, and use of the publicly accessible open spaces and recreational facilities within the study areas were recorded during field visits. Active and passive amenities were noted at each open space. Active facilities are intended for vigorous activities, such as jogging, field sports, and children's active play. Such facilities might include basketball and handball courts, jogging paths, ball fields, and playground equipment. Passive facilities encourage such activities as strolling, reading, sunbathing, and people watching. Passive open spaces are characterized by picnic areas, walking paths, or gardens. Certain areas, such as lawns or public esplanades, can serve as both active and passive open spaces.

In addition to the open spaces located in the study areas, open spaces located just outside of the study areas were considered in the qualitative analysis as they may be used by the worker or resident populations.

ADEQUACY OF OPEN SPACE RESOURCES

Comparison to City Guidelines

The adequacy of open space in the study area was quantitatively assessed using a ratio of useable open space acreage to the study area population (the "open space ratio"). The open space ratio was compared to City open space planning guidelines. The following guidelines are used in this type of analysis:

- For nonresidential populations, 0.15 acres of passive open space per 1,000 non-residents is typically considered adequate.
- For residential populations, two guidelines are used. The first is a citywide median open space ratio of 1.5 acres per 1,000 residents. In New York City, local open space ratios vary widely, and the median ratio at the Community District level is 1.5 acres of open space per 1,000 residents. The second is an open space planning goal established for the City of 2.5 acres per 1,000 residents—2.0 acres of active and 0.5 acres of passive open space per 1,000 residents—for large scale plans and proposals. However, these goals are often not feasible for many areas of the City, and they are not considered an impact threshold. Rather, they are used as benchmarks to represent how well an area is served by its open space resources.

Impact Assessment

Impacts are based on how a project would change the open space ratios in the study area. According to the *CEQR Technical Manual*, if a proposed action would result in a decrease approaching or exceeding 5 percent, it is considered to substantially change open space conditions and a detailed analysis may be warranted. However, in areas that are extremely lacking in open space, a reduction as small as 1 percent may be considered significant, depending on the area of the City. Furthermore, in areas that are well-served by open space, a greater change in the open space ratio may be tolerated.

The *CEQR Technical Manual* recommends that the quantitative open space analysis described above be supplemented by an examination of qualitative factors. These factors include the proximity to "destination" resources, the beneficial effects of any open space added by the proposed actions, and the comparison of projected open space ratios with established City

guidelines. It is recognized that the open space ratios of the City guidelines described above are not feasible for many areas of the City, and they are not considered impact thresholds on their own. Rather, they are benchmarks that indicate how well an area is served by open space.

C. PRELIMINARY ASSESSMENT

A preliminary assessment of open space consists of calculating total population, tallying the open space acreage within the area, and comparing the open space ratios for the future without and with the proposed actions.

EXISTING CONDITIONS

OPEN SPACE USER POPULATION

According to 2010 data, the commercial (¼-mile) study area has a worker population of 9,463 (see **Table 5-2**). Based on the 2010 Census, the residential (½-mile) study area has a population of approximately 126,620 (see **Table 5-3**).

Table 5-2
Existing Worker Population in the
Commercial Study Area – 2011 Estimate

Tract	Worker Population
12	1,251
14.01	647
14.02	402
18	2,845
22.01	1,153
30.01	1,646
30.02	555
36.01	964
TOTAL	9,463

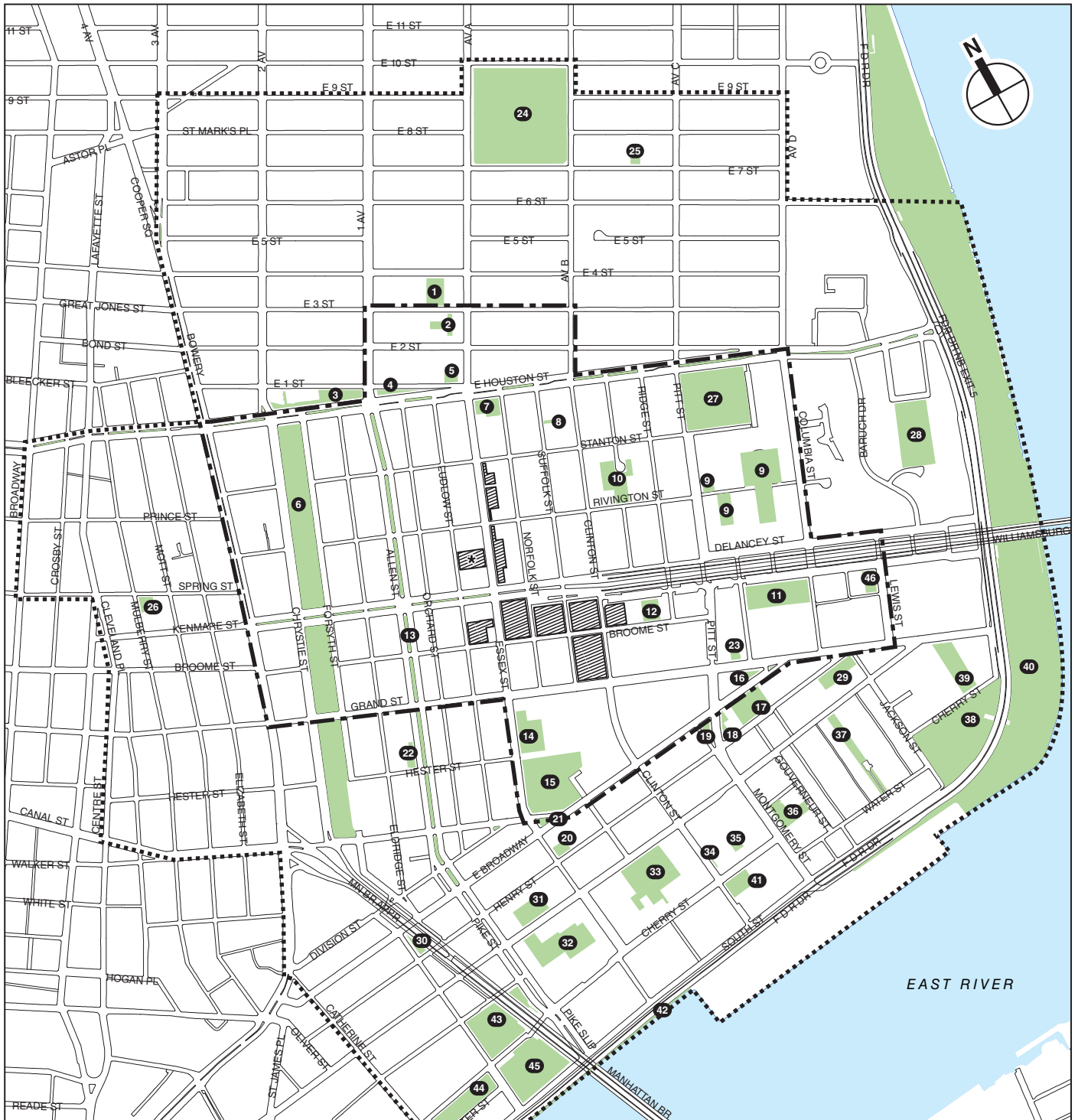
Source: ESRI Business Analyst, Inc, Business Summary Report


OPEN SPACE INVENTORY

Commercial (¼-Mile) Study Area

The commercial (¼-mile) study area contains 23 publicly accessible open spaces totaling 25.43 acres, of which 7.74 acres is passive open space and 17.69 acres is active open space (see **Figure 5-2** and **Table 5-4**). The largest open space in the commercial study area is Sara D. Roosevelt Park, which includes courts, playgrounds, gardens, and a picnic area. The park is located along Chrystie and Forsyth Streets, from East Houston Street to Canal Street. Seward Park is the second largest open space in the commercial study area, and it includes benches and recreational areas.

The commercial study area contains three playgrounds that are jointly owned and operated by DPR and the New York City Department of Education (DOE). These parks serve City public schools as well as the public. Although public use during school hours is prohibited in these parks, they were included in the open space inventory and quantitative analysis.



-  Proposed Development Sites
- * Site 7 Would Not Be Redeveloped Under the Proposed Actions
-  Commercial Study Area Boundary
-  Residential Study Area Boundary
-  Open Space Resource

0 1000 FEET
SCALE

NOTE: This figure has been revised for the FGEIS.

Table 5-3
Existing Residential Population in the
Residential Study Area – 2010 Census

Tract	Residential Population
10.01	1,434
10.02	6,547
12	3,397
14.01	3,005
14.02	2,782
16	8,478
18	8,660
2.01	3,058
2.02	7,316
22.01	6,398
22.02	2,189
26.01	3,772
26.02	4,227
30.01	4,492
30.02	3,106
32	8,234
36.01	3,393
36.02	3,151
38	9,237
41	7,817
43	4,270
6	11,367
8	10,290
TOTAL	126,620
Source: U.S. Census Bureau, 2010 Census	

A number of community gardens are located throughout the commercial study area. Use of the community gardens is often restricted to certain days, typically weekends, and certain times of the day. Therefore, these community gardens were not included in the open space inventory and quantitative analysis, as noted above.

Residential (1/2-Mile) Study Area

The residential (1/2-mile) study area contains 46 publicly accessible open spaces, including all of the open spaces within the commercial study area. There is a total of 100.38 acres of open space in the residential study area, of which 29.61 acres is passive open space and 70.77 is active open space (see **Figure 5-2** and **Table 5-4**). Approximately 25.52 acres of the roughly 57-acre East River Park fall within the residential study area. The East River Park stretches along the East River from Montgomery Street on the south to East 12th Street on the north. The park includes an amphitheater, just south of Grand Street, which has been reconstructed and is often used for public performances. The park includes football, baseball, and soccer fields; tennis, basketball, and handball courts; a running track and bike paths including the East River Greenway; and fishing, as well as other amenities. The park is bisected by the Williamsburg Bridge.

Seward Park Mixed-Use Development Project

**Table 5-4
Open Space Inventory**

Map ID No. ¹	Name	Location	Owner	Total Acres	Passive	Active	Amenities	Condition /Use Level
Inventory of Open Space Resources - 1/4 Mile Commercial Study Area								
1	McKinley Playground/P.S. 63 Playground	Avenue A, E 3rd St and E 4th St	DOE/DPR	0.56	0.00	0.56	Playground, drinking and playing fountain, chess, checkers, picnic	Excellent/Moderate
2	First Houses	112 E 3rd St	NYCHA	0.76	0.23	0.53	Benches, playground	Excellent/Low
3	First Park	Houston St, E 1st St, 1st Av	DPR	0.76	0.23	0.53	Center, trees, playground, benches, courts, artwork, fountain, recreation center	Excellent/Moderate
4	Peretz Square	E 1st St, E Houston St, 1st Av and Allen St	DPR	0.19	0.19	0.00	Benches, landscaping	Fair/Low
5	Metzer Tower	117 E 2nd St	NYCHA	0.64	0.64	0.00	Landscaping, pavement, bench	Excellent/Low
6	Sara D. Roosevelt Park	E Houston St to Canal St	DPR	7.85	0.00	7.85	Courts, benches, playground, garden, center, restrooms	Excellent/Heavy
7	ABC Playground (near P.S. 20)	Essex St, Norfolk St, Houston St	DPR	0.46	0.14	0.32	Courts, playground, benches, pavement, sculptures	Excellent/Moderate
8	The Dorothy Strelsin Memorial Garden	Suffolk Street, btw 170 and 176	NYRP	0.52	0.52	0.00	Benches, landscaping	Excellent/Low
9	Gompers Houses	60 Pitt St	NYCHA	2.27	0.68	1.59	Benches, courts, landscape, playground	Excellent/Moderate
10	Nathan Straus Playground	178 Rivington Street	DOE/DPR	0.85	0.21	0.64	Benches, courts	Good/Moderate
11	Bernard Downing/ Luther Gulick Playground	Columbia St, Delancey St, and Willet St	DPR	1.45	0.00	1.45	Courts, rollerblading, benches, playground	Excellent/Moderate
12	Broome Seward Park Extension	150 Broome St	NYCHA	0.45	0.45	0.00	Benches, trees	Good/Low
13	Allen/Pike Malls	Between E Houston St and FDR Dr along Allen St and Pike St	City of New York	2.17	2.17	0.00	Landscaping, benches, trees	Excellent/Moderate
14	William H. Seward HS Park	28 Essex St	DOE	1.02	0.00	1.02	Athletic courts and fields	Excellent/Low
15	William H. Seward Park	E Broadway and Rutgers St	DPR	3.36	1.01	2.35	Playground, benches, bathrooms, park offices, recreation center, landscaping, trees, library, water fountain	Excellent/Heavy
16	Ahearn Park	Grand St, E Broadway, and Willet St	DPR	0.09	0.09	0.00	Benches, trees, landscaping	Excellent/Low
17	Sol Lain Playground/ P.S. 134 Playground	Broadway, Henry St, Gouverneur St	DOE/DPR	0.89	0.27	0.62	Playground, benches, garden	Fair/Low
18	Martin Luther King, Jr. Community Park	Broadway and Henry St, Gouverneur St and Montgomery St	DCAS	0.15	0.15	0.00	Gazebo, sculptures, picnic tables, landscaping, trees, benches	Excellent/Low

Table 5-4 (cont'd)
Open Space Inventory

Map ID No. ¹	Name	Location	Owner	Total Acres	Passive	Active	Amenities	Condition /Use Level
Inventory of Open Space Resources - 1/4 Mile Commercial Study Area (cont'd)								
19	Landscaped sitting area/plaza	Montgomery St, Samuel Dickenson Plaza, Broadway	DPR	0.26	0.26	0.00	Benches, trees	Poor/Low
20	Captain Jacob Joseph Playground	Rutgers St and Henry St	DPR	0.14	0.00	0.14	Play equipment	Excellent/Low
21	Straus Square	Canal St, Rutgers St and E Broadway	DPR	0.12	0.12	0.00	Sculpture, benches, trees	Excellent/Low
22	45 Allen St.	45 Allen St	NYCHA	0.38	0.29	0.09	Landscaping, benches, playground	Excellent/Low
23	Abrons Art Center	464 Grand Street	Henry Street Settlement	0.09	0.09	0.00	Amphitheater seating, benches, trees	Excellent/Low
Study Area Total				25.43	7.74	17.69		
Inventory of Open Space Resources - 1/2 Mile Residential Study Area²								
24	Tompkins Square Park	Avenue A to Avenue B, E 7th St to E 10th St	DPR	10.50	0.00	10.50	Playground, courts, pavement, dog park, benches, landscape, trees, picnic, library	Excellent/High
25	Playground	E 6th Street	NYCHA	0.11	0.03	0.08	Playground, tables, benches,	Excellent/Low
26	De Salvo Playground	Spring Street and Mulberry Street	DPR	0.27	0.00	0.27	Swings, slides, seesaws, play equipment, shower basin, game tables, benches, Bocci	Excellent/ Moderate
27	Hamilton Fish Park	E Houston St, Stanton St, Sheriff St, Pitts St	DPR	4.30	1.29	3.01	Center, pool, playground, courts, fields, park supervisor's office, library	Excellent/ Moderate
28	Baruch Houses and Baruch Houses Playground/P.S. 97 ³	288 Delancey St	NYCHA/DPR	3.29	0.99	2.30	Athletic fields, courts, playground, benches, picnic, bath	Excellent/Low
29	Henry M. Jackson Playground/JHS 82 Playground	Jackson St, Madison St, and Henry St	DPR	0.61	0.00	0.61	Benches, playground equipment, handball courts	Fair/ Moderate
30	Sophie Irene Loeb Playground	Henry St, Market St, E Broadway	DPR	0.12	0.00	0.12	Playground, trees	Excellent/Low
31	Henry Rutgers	300 Cherry St	NYCHA	4.48	0.00	4.48	Playground, courts	Good/Low
32	NYCHA	45 Pike Street	NYCHA	1.55	1.17	0.38	Courts, benches, trees	Good/Low
33	LaGuardia Houses/ Little Flower Playground/ Rutgers Pool ⁴	Cherry St	NYCHA/DPR	2.02	0.61	1.41	Picnic, courts, statue, restrooms, benches, trees, spray showers, center	Good/Low
34	La Guardia Houses Playground	318 Cherry St	NYCHA	0.05	0.02	0.03	Playground, benches	Excellent/Low
35	La Guardia Houses Playground	318 Cherry St	NYCHA	0.17	0.13	0.04	Playground, benches	Excellent/Low
36	Lillian D. Wald Playground	356 Cherry St	DPR	0.68	0.34	0.34	Courts, benches, trees	Excellent/Low

Seward Park Mixed-Use Development Project

**Table 5-4 (cont'd)
Open Space Inventory**

Map ID No. ¹	Name	Location	Owner	Total Acres	Passive	Active	Amenities	Condition /Use Level
Inventory of Open Space Resources - 1/2 Mile Residential Study Area² (cont'd)								
37	Vladeck 1 Houses and Vladeck Park ⁵	656 Water St	NYCHA/DPR	7.96	2.39	5.57	Playground, benches, tables	Good/Low
38	Corlears Hook Park	Jackson St, Cherry St, FDR Dr	DPR	4.36	0.00	4.36	Playground	Excellent/Low
39	Vladeck II	14 Jackson St	NYCHA	1.33	1.33	0.00	Benches, playground, landscape	Excellent/Low
40	East River Park ⁶	Montgomery St to E 12 St, FDR Dr	DPR	25.52	12.76	12.76	Athletic fields, track, courts, playground, picnic, center, trees, landscaping, pool	Excellent/ Moderate
41	Clinton Cherry Playground	Cherry St	DPR	0.48	0.00	0.48	Courts, trees , benches, playground	Excellent/Low
42	East River Esplanade	Cherry St	DPR	0.43	0.43	0.00	Benches	Good/ Moderate
43	Coleman Square Playground	72 Market St	DPR	2.61	0.00	2.61	Playground, benches, athletic fields, courts	Excellent/Low
44	Martin F. Tanahey Playground	Cherry St to Water St, W Catherine St to Market St	DPR	1.26	0.38	0.88	Bocci, courts, rollerblading, benches, playground, chess, picnic	Excellent/Low
45	Verizon Field	Cherry St, Pike St, and Monroe St	DPR	2.61	0.00	2.61	Playfield, running track	Excellent/Low
46	P.S. 110 Playground/ Sidney Hillman Playground	Lewis St and Delancey St	DOE/DPR	0.19	0.00	0.19	Playground, courts, pavement	Excellent/Low
Study Area Total				100.38	29.61	70.77		

Notes:

- 1) See Figure 5-2 for open space resources.
- 2) The residential study area includes all of the open spaces contained within the commercial study area.
- 3) The acreage calculation for Baruch Houses and Baruch Houses Playground/P.S. 97 includes all of the publicly accessible park areas. Only 2.182 acres is owned by DPR.
- 4) The acreage calculation for LaGuardia Houses/ Little Flower Playground/ Rutgers Pool includes all of the publicly accessible park areas. Only 1.131 acres is owned by DPR.
- 5) The acreage calculation for Vladeck 1 Houses and Vladeck Park includes all of the publicly accessible park areas. Only 0.79 acres is owned by DPR.
- 6) The acreage calculation for East River Park includes only the area located within the residential study area.

DPR= New York City Department of Parks and Recreation

DOE= New York City Department of Education

NYCHA= New York City Housing Authority

Sources: AKRF Field Surveys, October 2011; *East Village/Lower East Side Rezoning FEIS*, CEQR No. 07DCP078M, September 26, 2008; NYCHA open space acreage calculated using GIS data.

Tompkins Square Park, bounded on the north by East 10th Street, on the east by Avenue B, on the south by East 7th Street, and on the west by Avenue A, is the second largest open space in the residential study area and is devoted to both active and passive uses. Amenities include three playgrounds, basketball courts, handball courts, and a temporary children’s swimming pool in the summer season. In addition, paved walkways, monuments, benches, trees, and planters are part of the passive open space.

Several of the other DPR parks are entirely active and characterized as neighborhood parks. These parks include Clinton Cherry Playground, Martin F. Tanahey Playground, and Coleman Square Playground. These parks may include playground equipment, courts, benches, and play areas.

Several New York City Housing Authority (NYCHA) housing developments with open spaces are located in the residential study area. While open space within a public housing development is primarily meant for use by residents of that housing development, the space is accessible to the public. Several of the housing developments include amenities such as benches, trees, walkways, playgrounds, jungle gyms, and basketball courts. In certain developments, such as the Baruch Houses, there are parks owned and operated by DPR or jointly owned and operated by DPR and NYCHA.

The Sidney Hillman Playground at P.S. 110, also included in the open space inventory and quantitative analysis, is the only open space in the residential study area that is jointly owned and operated by DPR and DOE. As noted above, public use during school hours is prohibited.

Several community gardens are located throughout the residential study area. These were not included in the open space inventory and quantitative analysis because of their limited hours of public accessibility, as noted above.

ADEQUACY OF OPEN SPACES

Commercial (1/4-Mile) Study Area

As described above, the analysis of the commercial study area focuses on passive open spaces that may be used by workers in the area. **Table 5-5** compares the ratio of existing passive open space per 1,000 workers in the study area with the City guidelines. The study area has a passive open space ratio of 0.82 acres per 1,000 workers, which is over five times greater than the City’s guideline of 0.15 acres of passive open space per 1,000 workers.

**Table 5-5
Existing Conditions: Adequacy of Open Space Resources**

	Total Population	Open Space Acreage			Open Space Ratios per 1,000 People			DCP Open Space Guidelines		
		Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Commercial (1/4-Mile) Study Area										
Non-residents	9,463	25.43	17.69	7.74	N/A	N/A	0.82	N/A	N/A	0.15
Residential (1/2-Mile) Study Area										
Residents	126,620	100.38	70.77	29.61	0.79	0.56	0.23	2.5	2.0	0.50
Note: Ratios in acres per 1,000 people.										

Residential (1/2-Mile) Study Area

With a total of 100.38 acres of open space (70.77 for active use and 29.61 for passive use) and a total residential population of 126,620, the residential study area has an overall open space ratio

Seward Park Mixed-Use Development Project

of 0.79 acres per 1,000 residents (see **Table 5-5**). This is substantially less than the City's planning guideline of 2.5 acres of open space per 1,000 residents, and approximately 50 percent less than the citywide community district median of 1.5 acres per 1,000 residents.

The study area's current residential passive open space ratio is 0.23 acres of passive open space per 1,000 residents, which is below the City's goal of 0.5 acres per 1,000 residents. The area's residential active open space ratio is 0.56 acres per 1,000 residents, which is also below the City's planning guideline of 2.0 acres per 1,000 residents.

Qualitative Considerations

As described above, one of the major open spaces in the study area, East River Park, extends far beyond the study area boundaries. Residents in the northeast section of the study area, particularly those seeking opportunities for active recreational activities such as biking and running, are likely to make use of a larger area of this park than the 25.52-acre portion that falls within the study area. In addition, Columbus Park and City Hall Park to the southwest, Washington Square Park and Union Square to the west and northwest respectively, and the Dry Dock Playground and Pool to the north are other large open spaces just outside of the study area boundaries that provide active and passive recreation space for residents in the study area. Together, these open space resources provide an additional 30.70 acres of open space serving study area residents within walking distance of these areas.

As previously mentioned, several community gardens are located throughout the residential study area. Although these were not included in the open space inventory and quantitative analysis, they do provide additional passive open space resources for residents within walking distance of these gardens during the hours that they are open to the public.

THE FUTURE WITHOUT THE PROPOSED ACTIONS

STUDY AREA POPULATION

Absent the proposed actions, existing conditions on the project site would not change. No new employees or residents would be introduced to the site.

As described in Chapter 2, "Land Use, Zoning, and Public Policy," several anticipated developments in both the commercial and residential study areas are planned or under construction and are expected to be completed by 2022. These developments will increase both the residential and worker populations within the study areas.

Commercial (1/4-Mile) Study Area

New developments projected to be completed in the commercial study area by 2022 will introduce approximately ~~405~~ 267 new workers to the study area.¹ The total worker population in the study area will increase to approximately ~~9,868~~ 9,730 workers.

Residential (1/2-Mile) study area

In addition to the new development that will occur in the commercial study area, new development in the residential study area will result in an additional ~~523~~ 512 residential units

¹ Employment density ratios were applied to the expected square footage for each use to estimate future employment. The ratios used assume one worker each per 400 square feet of retail space; three hotel rooms; 250 square feet office space; 1,000 square feet of community facility space; 25 residential units; and 10 parking spaces.

anticipated to be constructed by 2022.¹ It is anticipated that the population of the study area will increase by 1,156 ~~4,132~~ residents for a total study area residential population of 127,776 ~~127,752~~ in 2022.²

STUDY AREA OPEN SPACES

In the future without the proposed actions, two pending and proposed park improvement projects are expected within the residential study area. According to DPR, the planned park projects in the study area are: the East River Esplanade Waterfront and Piers project and the East River Waterfront Access project. Overall, the total amount of open space is expected to increase by approximately 5.64 acres, of which 1.59 acres would be active open space and 4.05 would be passive open space (as noted below, 0.43 acres of this passive open space is currently used). With the additional open spaces, the study area would be expected to have a total of 105.60 acres of open space divided between 72.36 acres of active space and 33.24 acres of passive space. The East River Esplanade Waterfront and Piers project and East River Waterfront Access project are described in detail below.

East River Esplanade Waterfront and Piers

The City has proposed a plan for the revitalization of the East River waterfront by improving a two-mile-long, City-owned public open space connecting the Whitehall Ferry Terminal and Peter Minuit Plaza to the south to East River Park to the north. The plan seeks to improve access to the waterfront, enhance pedestrian connectivity, and create waterfront amenities for public use and enjoyment. The existing esplanade would be enhanced, some new sections of esplanade would be created, and several piers would be renovated and redeveloped.

It is expected that this project would create 2.24 acres of open space in the residential study area. Approximately 0.43 acres of this space is currently used as publicly accessible open space. Therefore, the East River Esplanade Waterfront and Piers would create 1.81 acres of new open space and would improve the 0.43 acres of existing open space. Overall, the East River Esplanade Waterfront and Piers project would improve existing open space and create new public open space along a two-mile stretch of the East River and thus help to alleviate the shortage of open space experienced by the dense residential and worker populations of Lower Manhattan.

East River Waterfront Access

The DPR-sponsored East River Waterfront Access Project would provide community amenities and significantly improve the pedestrian connections between the East River Waterfront and its neighboring Lower Manhattan areas—the South Street Seaport District, Chinatown, the Lower East Side, and East River Park. The new East River Park Connector, located in the upland portion of Pier 42 (at Gouverneur Street), would add 3.41 acres of open space to the residential study area. The East River Park Connector would create a wider, safer pedestrian and bike path connection between the existing East River Waterfront esplanade and East River Park. The Access Project would remove existing fencing and install planted berms to separate the path

¹ The 523 ~~512~~ residential units anticipated to be constructed in the residential study area includes residential units anticipated to be constructed in the commercial study area.

² The Community District 3 average household size of 2.21 persons per household was applied to the expected number of units in the residential study area.

Seward Park Mixed-Use Development Project

from the FDR Drive. The pedestrian path and bikeway would be paved with a modular, reinforced concrete system.

In addition to the two pending and proposed park improvement projects discussed above, a pedestrian plaza will be created on the south side of Delancey Street between Norfolk and Clinton Streets as a result of New York City Department of Transportation’s Delancey Street Safety Improvements plan. This plaza is expected to include planters or street furniture/other amenities. This pedestrian plaza is not included in the quantitative analysis.

ADEQUACY OF OPEN SPACES

Commercial (1/4-Mile) Study Area

The development projects expected to be completed in the commercial study area in the future without the proposed actions would introduce new workers to the study area, and the passive open space ratio would decrease slightly. However, the commercial study area would remain adequately served by passive open spaces to meet the needs of the non-residential population. The ratio of passive open space per 1,000 workers would be 0.78 ~~0.80~~ acres in the future without the proposed actions, still well above the City’s guideline ratio of 0.15 acres per 1,000 workers (see **Table 5-6**).

Table 5-6
Future Without the Proposed Actions: Adequacy of Open Space Resources

	Total Population	Open Space Acreage			Open Space Ratios per 1,000 People			DCP Open Space Guidelines		
		Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Commercial (1/4-Mile) Study Area										
Non-residents	9,868 9,730	25.43	17.69	7.74	N/A	N/A	<u>0.78</u> 0.80	N/A	N/A	0.15
Residential (1/2-Mile) Study Area										
Residents	127,776 127,752	105.60	72.36	33.24	0.83	0.57	0.26	2.5	2.0	0.50

Note: Ratios in acres per 1,000 people.

Residential (1/2-Mile) Study Area

In the future without the proposed actions, the open space ratios in the residential study area would slightly increase but would remain below the City’s guidelines. The total open space ratio would increase to 0.83 acres per 1,000 residents but would remain lower than the City’s planning guideline of 2.5 acres of total open space per 1,000 residents. It would also remain approximately 50 percent less than the citywide median of 1.5 acres per 1,000 residents (see **Table 5-6**). The active open space ratio would increase slightly to 0.57 acres per 1,000 residents, and the passive open space ratio would also increase slightly to 0.26 acres per 1,000 residents. As in existing conditions, the active and passive open space ratios would remain below the City’s guideline ratios of 2.0 acres of active open space per 1,000 residents and 0.5 acres of passive open space per 1,000 residents.

Qualitative Analysis

As in existing conditions, study area residents and workers would continue to have access to open spaces just outside the study area, most notably the portions of East River Park that extend north and south of the study area.

PROBABLE IMPACTS OF THE PROPOSED ACTIONS

DIRECT EFFECTS

The proposed actions would not directly displace any public open spaces and would have a positive direct effect on open space in the study area by adding 0.23 acres of publicly accessible open space. The proposed actions would not have any adverse impacts on existing open space in terms of air quality, noise, odors, or shadows. See Chapter 6, “Shadows,” Chapter 14, “Air Quality,” and Chapter 16, “Noise,” for additional information.

INDIRECT EFFECTS

Study Area Population

The proposed actions would result in the development of new retail, office, community facility, residential, and publicly accessible open space uses. As described in Chapter 2, “Land Use, Zoning, and Public Policy,” the proposed development would increase both the residential and worker populations within the study areas.

Commercial (1/4-Mile) Study Area

The proposed actions would introduce approximately 1,449 new workers. With the addition of these new workers, the nonresidential commercial study area population is expected to increase to 11,317 ~~11,179~~.

Residential (1/2-Mile) Study Area

The proposed actions would introduce approximately 1,989 new residents. These new residents would increase the residential study area’s total population to 129,765 ~~129,741~~.

Study Area Open Spaces

Commercial (1/4-Mile) Study Area

As previously described, the proposed actions would create approximately 0.23 acres of publicly accessible open space on the project site. For analysis purposes it is assumed that approximately half of the open space would be dedicated to passive open space (0.115 acres) and the other half to active open space (0.115 acres). With the addition of the open space on the project site, the total amount of open space in the commercial study area would be 25.66 acres, of which 7.86 would be passive recreation and 17.80 would be active recreation.

Residential (1/2-Mile) Study Area

With the proposed actions, the total amount of open space in the residential study area would be 105.83 acres, of which 33.36 would be passive recreation and 72.47 would be active recreation.

Adequacy of Open Spaces

Commercial (1/4-Mile) Study Area

In the future with the proposed actions, the ratio of passive open space acreage per 1,000 workers would decrease to 0.69 ~~0.70~~ acres, compared to 0.78 ~~0.80~~ acres in the future without the

Seward Park Mixed-Use Development Project

proposed actions. However, as in existing conditions and the future without the proposed actions, the passive open space ratio in the commercial study area would still remain nearly five times greater than the recommended City guideline of 0.15 acres of passive open space per 1,000 workers (see **Table 5-7**).

Table 5-7
Future With the Proposed Actions: Adequacy of Open Space Resources

	Total Population	Open Space Acreage			Open Space Ratios per 1,000 People			DCP Open Space Guidelines		
		Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Commercial (¼-Mile) Study Area										
Non-residents	<u>11,317</u> 41,179	25.66	17.80	7.86	N/A	N/A	<u>0.69</u> 0.70	N/A	N/A	0.15
Residential (½-Mile) Study Area										
Residents	<u>129,765</u> 129,744	105.83	72.47	33.36	0.82	0.56	0.26	2.5	2.0	0.50
Note: Ratios in acres per 1,000 people.										

Residential (½-Mile) Study Area

With the proposed actions, similar to existing conditions and the future without the proposed actions, all of the open space ratios in the residential study area would remain below City guideline levels. Although the proposed actions would add 0.23 acres of publicly accessible open space to the study area, a slight decrease in the total, active, and passive open space categories would still occur because of the increase in the residential population (see **Table 5-7**). However, the total open space ratio would only slightly decrease from 0.83 acres per 1,000 residents in the future without the proposed actions to 0.82 acres per 1,000 residents in the future with the proposed actions (a decrease of less than two percent). The active and passive open space ratios also would only slightly decrease by less than two percent from the future without to the future with the proposed actions.

Qualitative Considerations

As in existing conditions and the future without the proposed actions, study area residents and workers would continue to have access to open spaces just outside the study area, including the remainder of East River Park north and south of the study area, Columbus Park and City Hall Park to the southwest, Washington Square Park and Union Square to the west and northwest respectively, and the Dry Dock Playground and Pool to the north. As noted above, these open space resources provide an additional 30.70 acres of open space serving study area residents within walking distance of these resources.

D. CONCLUSIONS

According to the *CEQR Technical Manual*, if the decrease in the open space ratio approaches or exceeds 5 percent, it is generally considered a substantial change warranting a more detailed analysis. However, the change in the open space ratio should be balanced against how well-served an area is by open space. If the study area exhibits a low open space ratio, even a small decrease may warrant a detailed analysis. Likewise, if the study area exhibits an open space ratio that approaches or exceeds the planning goal of 2.5 acres, a greater percentage of change in the ratio may be acceptable.

COMMERCIAL (¼-MILE) STUDY AREA

The proposed actions would result in a decrease in the passive open space ratio from 0.78 ~~0.80~~ acres per 1,000 workers in the future without the proposed actions to 0.69 ~~0.70~~ acres per 1,000 workers in the future with the proposed actions (see **Table 5-8**). Although this reduction constitutes an approximately 11.5 ~~12~~ percent decrease, the passive open space ratio would still remain nearly five times greater than the City’s recommended guidelines of 0.15 acres of passive open space per 1,000 workers. Therefore, the proposed actions would not result in any significant adverse impacts on open space resources in the commercial study area.

RESIDENTIAL (½-MILE) STUDY AREA

As with existing conditions and the future without the proposed actions, the open space ratios for the future with the proposed actions would continue to fall short of the City’s recommended open space ratio guidelines. However, the proposed actions would introduce approximately 0.23 acres of open space to Site 5 and, as shown in **Table 5-8**, open space ratios for the residential study area would decrease by 1.38 ~~2.5~~ percent or less. These decreases would not constitute a substantial change.

Table 5-8
Future with the Proposed Actions: Open Space Ratios Summary

Ratio	City Guideline	Open Space Ratios			Percent Change Future Without to Future With the Proposed Actions
		Existing Conditions	Future Without the Proposed Actions	Future With the Proposed Actions	
Commercial (¼-Mile) Study Area					
Passive/Workers	0.15	0.82	<u>0.78</u> 0.80	<u>0.69</u> 0.70	<u>-11.45%</u> -11.61%
Residential (½-Mile) Study Area					
Total/Residents	2.5	0.79	0.83	0.82	-1.32%
Passive/Residents	0.5	0.23	0.26	0.26	-1.18%
Active/Residents	2.0	0.56	0.57	0.56	-1.38%

Note: Ratios in acres per 1,000 people.

It is recognized that the City guidelines are not feasible for many areas of the City, and they are not considered impact thresholds. In addition, some of the active open space needs of the study area population would be met by open spaces outside the study area, particularly East River Park. East River Park’s active open space amenities just outside the study area include the continuation of the bike/jogging path, an open lawn area that could be used for active recreation such as informal ball games, and several multi-use athletic fields.

Overall, because the open space ratios would remain substantially the same in the future with the proposed actions compared to the future without the proposed actions and the proposed actions would introduce new publicly accessible open space to partially offset the additional project-generated demand, the proposed actions would not result in any significant adverse impacts on open space resources in the residential study area and a detailed open space analysis is not required. *