5.0 Open Space

A. Introduction

This chapter assesses the potential impacts of the Proposed Actions on open space resources. Open space is defined in the 2021 *CEQR Technical Manual* as publicly accessible, publicly or privately owned land that is available for leisure, play, sport, or serves to protect and enhance the natural environment. Public open space is accessible to the public on a consistent and regular basis, including for designated daily periods. Public open space may be under government or private jurisdiction and typically includes City, state, and federal parkland; esplanades; greenways; and plazas designated through regulatory approvals (such as zoning). Private open space is not considered publicly accessible if it is only available to limited users or is not available to the public on a regular or consistent basis. Examples of private open space are natural areas with no public access, front and rear yards, rooftop recreational facilities, stoops, and landscaped grounds used by community facilities, such as public and private educational institutions where the open space is accessible only to the institution-related population.

Open spaces can be characterized as either active or passive depending on the activities the space allows. In many cases, open space may be used for both active and passive recreation. Open space that is used for sports, exercise, or active play is classified as active open space. Passive open space is used for relaxation, such as sitting or strolling. Active and passive open spaces within the area are further defined in the "Existing Conditions" section, below.

A proposed project's effects on open space resources may be either direct or indirect. Direct effects may occur when the proposed project would encroach on, or cause a loss of, open space. Direct effects may also occur if the facilities within an open space would be so changed that the open space no longer serves the same user population. Other direct effects include the introduction of new noise, air pollutant emissions, odors, or shadows on public open space that may alter its usability. Indirect effects may occur when the population generated by the proposed project overtaxes the capacity of existing open spaces so that their utility or level of service to the future population of the Affected Area would be substantially or noticeably diminished. Per the guidance contained in the 2021 *CEQR Technical Manual*, an open space assessment should be conducted if a project would have a direct effect on open space, such as eliminating or altering a public open space, or an indirect effect, such as the introduction of a substantial new population that could place added demand on an area's open spaces.

As discussed in Chapter 1, "Project Description," under the RWCDS, the Proposed Actions would result in the incremental development of approximately 9,676 DUs, 462,129 gsf of local retail, and 81,755 gsf of community facility space, resulting in a projected population of approximately 16,256 residents introduced to the Affected Area compared with the No-Action condition. In addition, the Proposed Actions are anticipated to result in a decrease of 732,619 gsf of office space and 69,782 gsf of industrial/warehouse space, resulting in a decrease of 5,523 workers in the Affected Area. As discussed in more detail below, this incremental development exceeds the CEQR thresholds for a preliminary assessment, and a detailed open space analysis for residents has been prepared

for the Proposed Actions. The number of incremental workers would not exceed the threshold for detailed analysis; therefore no analysis is provided.

B. Principal Conclusions

According to the guidance contained in the 2021 *CEQR Technical Manual*, a proposed action may result in a significant impact on open space resources if (a) there would be direct displacement/alteration of existing open space within the study area that would have a significant adverse effect on existing users; or (b) it would reduce the open space ratio and consequently result in the overburdening of existing facilities or further exacerbating a deficiency in open space.

Direct Effects

The Proposed Actions would not result in any direct effects related to encroachments on or loss of open space, changes in open space such that it no longer serves the same user population, or results in impacts due to noise, air, or odor emission that may affect its usability However, the Proposed Actions would result in significant adverse shadow impacts on one open space resource, the 1185 Broadway privately owned public space (POPS). See Chapter 6, "Shadows" for more information. No air, noise, or other environmental impacts that would affect the usefulness of any study area open space are expected.

Indirect Effects

Because the Proposed Actions are expected to introduce 16,256 additional residents under the RWCDS, compared to the No-Action condition, a detailed open space analysis for the residential (half-mile) study area was conducted, pursuant to the 2021 *CEQR Technical Manual*. The detailed analysis determined that the Proposed Actions would result in a significant adverse indirect impact to passive and active open space in the residential study area.

Within the residential study area, in the future under the With-Action condition, the total, active and passive open space ratios would remain below the City's guideline ratios of 2.5 acres, which includes 2.0 acres of active and 0.5 acres of passive space per 1,000 residents, respectively. The total residential study area open space ratio would decline by 8.2 percent to 0.355 acres per 1,000 residents; the active residential study area open space ratio would decline by 8.2 percent to 0.063 acres per 1,000 residents; and the passive residential study area open space ratio would decline by 8.2 percent to 0.292 aces per 1,000 residents. Because these decreases would exceed the 1 percent impact threshold identified in Table 7-5 of the 2021 *CEQR Technical Manual*, the Proposed Actions would result in a significant adverse indirect impact on total, and active open space in the residential study area.

C. Methodology

Direct Effects

According to the 2021 *CEQR Technical Manual*, a proposed project 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, air pollutant emissions, odor, or shadows that would temporarily or permanently affect the usefulness of a public open space. Because no open space resources would be physically displaced because of the Proposed Actions, this chapter uses information from Chapter 6, "Shadows," Chapter 10, "Hazardous Materials," Chapter 15, "Air Quality," and Chapter 17, "Noise," to determine whether the Proposed Actions would directly affect any open spaces within, or close to, the Affected Area.

Indirect Effects

Preliminary Assessment

According to the 2021 *CEQR Technical Manual*, indirect open space effects may occur when a project would add enough population, either residents or workers, to noticeably diminish the ability of an area's open space to serve the future population. The preliminary screening threshold to determine whether an assessment of indirect effects is warranted is if a project would introduce more than 200 residents or 500 workers to an area. The Proposed Actions are anticipated to introduce approximately 16,256 additional residents and a decrease of 5,523 workers to the Affected Area by the 2034 analysis year. An analysis of indirect effects on open space resources is warranted because the residential population anticipated to be introduced by the Proposed Actions exceeds the CEQR analysis threshold. The non-residential population introduced by the Proposed Actions does not exceed the CEQR analysis threshold.

Detailed Assessment

The 2021 *CEQR Technical Manual* recommends conducting a preliminary assessment to determine whether a more detailed analysis is appropriate but also recognizes that for projects that introduce a large population into an area, it may be clear that a detailed analysis should be conducted. Because the Proposed Actions would introduce a sizable new residential population to the study area, a detailed analysis was conducted.

Analysis Framework

Based on the inventory of available open space resources and potential users, the adequacy of open space in the study area can be assessed both quantitatively and qualitatively. The quantitative approach computes the ratio of open space acreage to the population in the study area and compares this ratio with open space adequacy guidelines. The qualitative assessment examines other factors that may affect conclusions about adequacy, including proximity to additional resources beyond the study area, the availability of private recreational facilities, and the demographic characteristics of the area's population. Specifically, the analysis in this chapter considers:

- Characteristics of the open space user group: To determine the number of residents in the study areas, 2020 U.S. Census data were compiled for those census tracts included in the residential open space study area.
- An inventory of all publicly accessible passive and active recreational facilities in the study area.

- An assessment of the quantitative ratio of open space in the study area, conducted by computing the ratio of open space acreage to the workers, combined workers and residents, and residential populations in the study area and comparing these ratios with open space adequacy guidelines.
- An assessment of expected changes in future levels of open space supply and demand in the 2034 analysis year under the No-Action and With-Action conditions. Open space adequacy in the No-Action condition is based on planned development projects within the open space study area. To estimate the residential population expected in the study area under the No-Action condition, an average household size of 1.68 persons was applied to the number of new housing units expected in the residential study area. Any new open space or recreational facilities that are anticipated to be operational by the analysis year are also considered.
- Open space ratios for both the No-Action and With-Action conditions were compared to determine potential changes to open space adequacy in the 2034 analysis year.
- An evaluation of qualitative factors affecting open space use, including weekend and weekday utilization and the condition of facility equipment. Utilization levels are assessed by field observation and are defined in Chapter 7 of the 2021 *CEQR Technical Manual*: low utilization is considered 25 percent capacity utilization or less at the peak hour, meaning that much of the space, facility, or equipment is available for use; moderate utilization is considered 25 to 75 percent capacity utilization at peak hour, meaning that some passive spaces and/or active facilities are available for use; and heavy utilization is considered 75 percent or greater capacity utilization at peak hours, meaning that few or none of the open space facilities are available for use.
- A determination of the adequacy of open spaces in the study area under the existing, No-Action, and With-Action conditions.

The following sections describe the specific methodology used for the analysis of indirect effects on open space, including establishing the study area, identifying open space user populations, creating an inventory of open space resources, and assessing the adequacy of open space resources.

Study Areas

The 2021 *CEQR Technical Manual* recommends establishing a study area or areas as the first step in an open space analysis. The study area is generally defined based on the distance that residents are reasonably likely to walk to reach local open space or recreational resources.

Residential Half-mile Study Area

Residents are assumed to walk approximately 20 minutes, or a half-mile, to an open space. As such, the 2021 *CEQR Technical Manual* recommends that a half-mile study area be used to evaluate an action's indirect effects on open space. Consistent with this guidance, the study area was adjusted to include all census tracts with at least 50 percent of their area located within a half-mile of the Affected Area. As shown in **Figure 5-1**, the residential study area consists of Manhattan Census Tracts 50, 52, 54, 56, 58, 68, 70.02, 72, 74, 76, 80, 81, 82, 84, 87, 89, 91, 92,

93, 94, 95,96, 97, 99,03, 101, 103, 109, 111, 113, 115, 117, 119, 121.01, 121.02, 125, 127, and 129.01. It is generally bounded by West 50th Street/49th Street to the north; Second Avenue/Third Avenue to the east; 14th Street/18th Street to the south; and Tenth Avenue to the west.

Open Space User Populations

Existing Conditions

Data on the existing residential population within the study area was compiled from the 2020 U.S. Census for the census tracts that make up the residential open space study area.

No-Action Condition

The residential population was projected by adding the number of existing residents to the number of residents expected to result from the new housing units anticipated in the residential study area under the No-Action condition (using an average household size of 1.68 people).

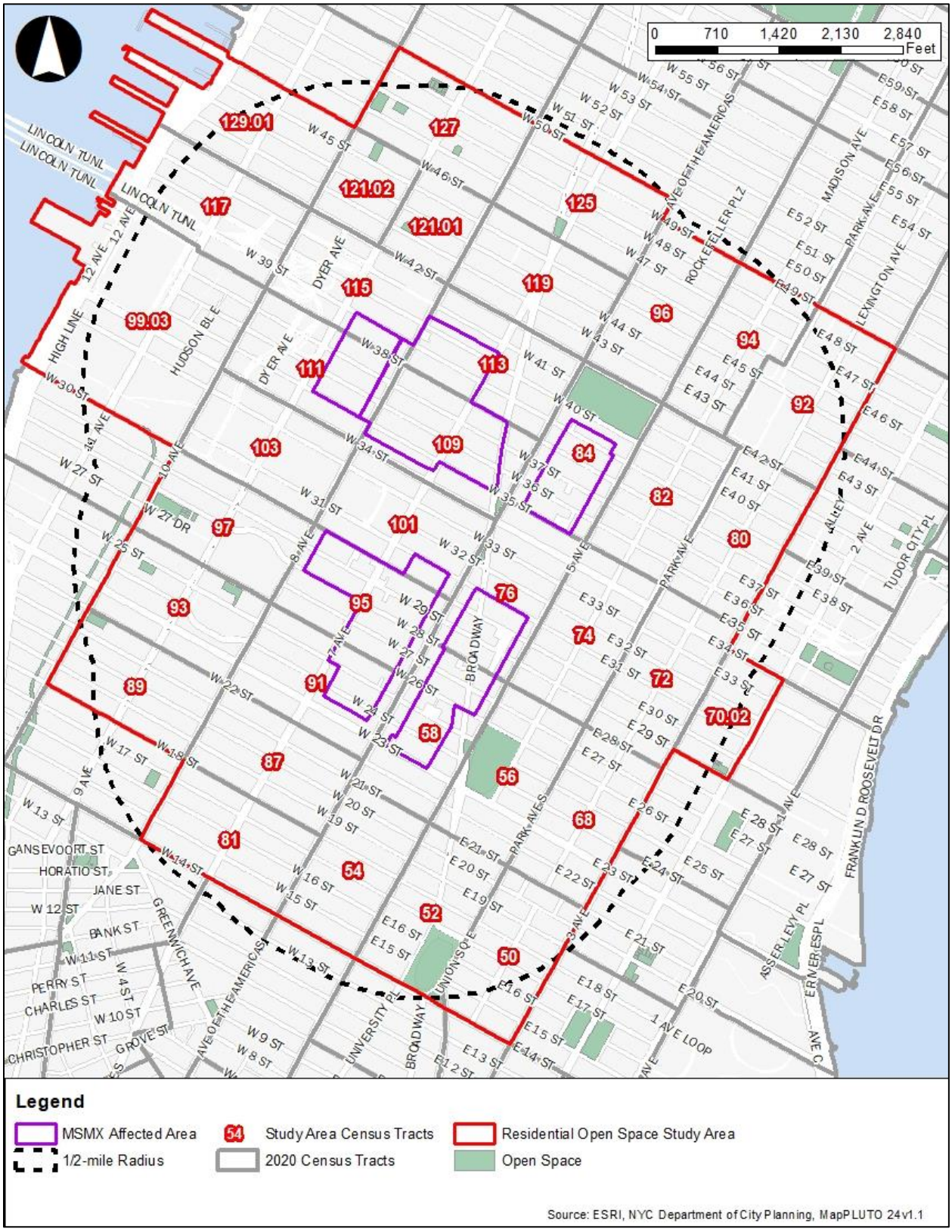
With-Action Condition

The future residential population under the With-Action condition was determined by adding the number of residents anticipated to result from the Proposed Actions to the existing residential population plus the residential population anticipated from developments expected to be completed in the study area by the 2034 analysis year (No-Action condition).

Inventory of Open Space Resources

Publicly accessible open spaces and recreational facilities located within the study area were inventoried using information from the New York City Department of Parks and Recreation (NYC Parks). The 2021 *CEQR Technical Manual* defines publicly accessible 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.

Figure 5-1: Open Space Study Area



The character, condition, and use of the publicly accessible open spaces and recreational facilities within the study area were determined based on field observations from June 2024 and are supplemented with online research and recent environmental review documents. Active and passive amenities were noted at each open space resource. 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, seating areas, or gardens. Certain areas, such as lawns or public esplanades, can serve as both active and passive open spaces. The analysis also considers any open spaces within the study area that may be created in the No-Action or With-Action conditions.

Adequacy of Open Space Resources

The adequacy of open space in the study area is quantitatively assessed using a ratio of usable open space acreage to the study area population; this is referred to as the open space ratio. Because the Proposed Actions are located in an area that currently lacks open space, the differences in open space ratios are numerically small. Therefore, this analysis uses three decimal places to show the changes in the open space ratios between the existing, No-Action and With-Action conditions. To assess the adequacy of open space resources, open space ratios are compared to planning goals set by the City for residential populations as described in the 2021 *CEQR Technical Manual*.

The City has set a planning goal of 2.5 acres per 1,000 residents, which includes 0.5 acres of passive space and 2.0 acres of active space per 1,000 residents. This planning goal is used as an optimal benchmark for residential populations. It should be noted that the City's open space planning goals are often not feasible in many areas of the City, and they are not considered a threshold for a significant adverse effect.

D. Detailed Analysis

The potential for significant adverse impacts on open space is assessed both quantitatively and qualitatively. Quantitatively, Table 7-5 of the 2021 *CEQR Technical Manual* provides percentage change guidance to determine a possible open space impact. For a project where the total open space ratio is 0.5 acres per 1,000 residents or less, the active open space ratio is between 0.010 and 0.400, and the passive open space ratio is between 0.010 and 0.100, a decrease in an open space ratio of 1 percent or more compared with the No-Action condition is generally considered a significant adverse impact.

In addition to the quantitative factors cited above, the 2021 *CEQR Technical Manual* also recommends considering qualitative factors in assessing the potential for open space impacts, including the availability of nearby destination open space, the beneficial effects of new open space resources provided by a project, or other factors. As noted above, the open space ratios included in the City guidelines are not feasible for many areas of the City, and

they are not considered impact thresholds on their own. Rather, these ratios are benchmarks that indicate how well an area is served by open space.

When assessing the effects of a change in the open space ratio, the assessment should consider the balance of passive and active open space resources appropriate to support the affected population and the condition of existing open spaces within the study area. Determinations as to what constitutes a significant adverse open space impact are not based solely on the results of the quantitative assessment. Qualitative considerations—such as the distribution of open space, the distance to regional parks, the connectivity of open space, and any additional open space provided by the project—should be considered in a determination of significance.

NYC Parks Walk to a Park Initiative

Additionally, as described in the 2021 *CEQR Technical Manual*, as part of the open space assessment, a project should be reviewed to determine whether it is located within a Walk to a Park Service Area (WtPSA). WtPSA is an initiative included in the *OneNYC 2050 Building a Strong and Fair City* plan, which lays out a goal of 85 percent of New York City residents living within walking distance of a park by 2030. Existing areas located within a WtPSA are within walking distance of a park (i.e., 0.5-miles). Areas not located within a WtPSA are considered "walk gaps"; they are areas of the City that are not within walking distance to a park. As shown in **Figure 5-2**, most of the Affected Area and residential open space study area is located within a WtPSA.

Existing Conditions

Study Area Population

Based on 2020 U.S. Census data and as shown in **Table 5-1**, the half-mile residential study area has a residential population of 167,139.

Age Distribution

Table 5-2 summarizes the age distribution of the residential population located within the half-mile residential study area and compares this distribution to the age distributions of Manhattan and New York City overall. As shown in the table, the study area's working adult population (residents between 20 and 64 years old) make up a greater proportion of its population (76.7 percent) compared with the same age group in Manhattan (67.3 percent) and New York City (62.9 percent). In all other age categories, the study area has lower proportions than that of Manhattan and New York City. The median age in the study area (35.0) is slightly below Manhattan and New York City (36.9 and 36.8, respectively).

Figure 5-2: Walk to a Park Service Area

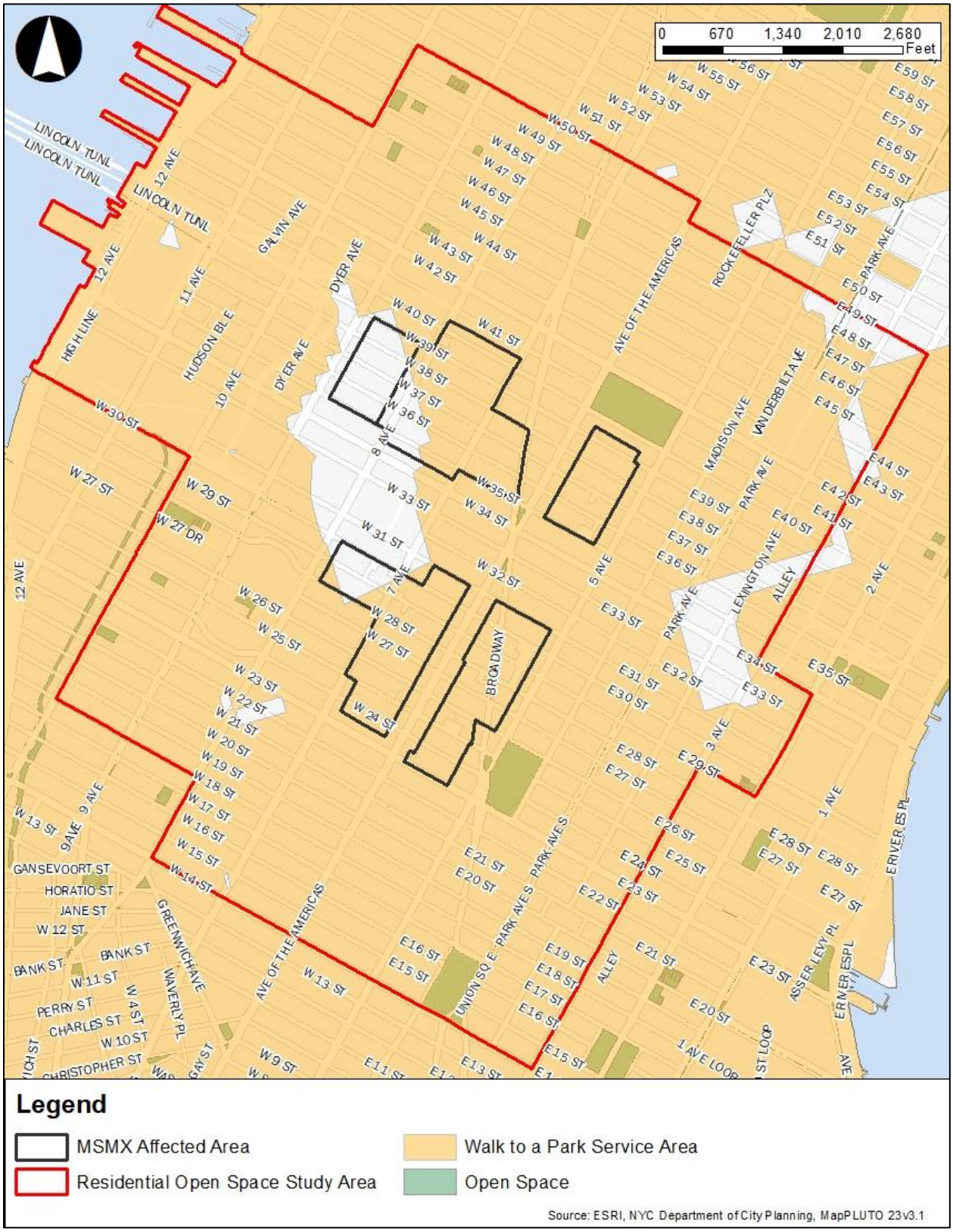


Table 5-1: Open Space Study Area Residential Population

Census Tract	Population
50	5,223
52	3,808
54	4,909
56	4,281
58	5,109
68	7,706
70.02	4,865
72	9,358
74	5,698
76	2,921
80	5,906
81	7,853
82	3,414
84	1,985
87	6,510
89	5,957
91	7,362
92	1,866
93	9,325
94	109
95	3,892
96	608
97	5,071
99.03	2,380
101	2,596
103	4,095
109	407
111	6,138
113	216
115	3,863
117	5,256
119	1,666
121.01	3,408
121.02	5,236
125	2,901
127	7,282
129.01	7,959
Total	**167,139**

Source: 2020 Census

Table 5-2: Residential Study Area Population Age Distribution

Age Group	Study Area		Manhattan		New York City	
	Persons	**Percent**	**Persons**	**Percent**	**Persons**	**Percent**
Under 5 Years	5,053	3.0%	68,849	4.1%	475,637	5.4%
5 to 9 Years	3,686	2.2%	63,039	3.7%	479,017	5.4%
10 to 14 Years	3,417	2.0%	63,419	3.7%	491,325	5.6%
15 to 19 Years	5,221	3.1%	74,917	4.4%	505,700	5.7%
20 to 64 Years	128,353	76.7%	1,140,844	67.3%	5,542,287	62.9%
65 Years and Over	21,409	12.8%	283,183	16.7%	1,310,224	15.0%
Total	**167,139**	**100.0%**	**1,694,251**	**100.0%**	**8,804,190**	**100.0%**
Median Age	35.0		36.9		36.8	

Source: 2020 Census

Within a given area, the population's age distribution affects the way open space is used and the need for various types of recreational facilities. Typically, children five years old or younger use traditional playgrounds that have play equipment for toddlers and preschool children. Children ages five through nine use traditional playgrounds as well as grassy and hard-surfaced open spaces, which are important for activities such as ball playing, running, and skipping rope. Children ages 10 through 14 typically use playground equipment, court spaces, and ball fields. Teenagers and young adults tend toward court game facilities such as basketball and field sports. Adults (ages 20 to 64) use court game facilities and sports fields and engage in more individualized recreation such as rollerblading, biking, and jogging that require bike paths and vehicle-free roadways. Adults and families also gather for picnicking, active informal sports such as Frisbee, and recreational activities in which all ages can participate. Senior citizens (65 years and older) engage in active recreation such as handball, tennis, gardening, fishing, walking, and swimming, as well as recreational activities that require passive facilities. As noted above, there is a comparatively greater working adult population in the study area, indicating a need for open space resources, (e.g., flexible spaces for individualized recreation or active informal sports or picnicking) that cater to this age group,

Open Space Inventory

All publicly accessible open space and recreational resources within the open space study area are shown in **Table 5-3**. As presented in the table, 87 publicly accessible open space resources are available within the residential study area, providing approximately 70.30 acres of public open space (refer to **Figure 5-3**).

To ensure a conservative analysis, community gardens located on NYC Parks-controlled property are considered in the qualitative assessment. These resources are shown in **Table 5-3**.

Of the 70.30 acres of publicly accessible open space in the residential study area, approximately 18 percent is for active uses (approximately 12.55 acres) and 82 percent is for

passive uses (approximately 57.75 acres). Prominent open spaces in the residential study area are described below.

Bryant Park

Bryant Park is a 9.60-acre open space located on the block bounded by West 42nd Street to the north, Fifth Avenue to the east, West 40th Street to the south, and Sixth Avenue to the west. The park contains a large lawn, multiple concession areas, passive seatings areas with movable café tables and chairs. Areas to play pétanque are located along Sixth Avenue just north of the 41st Street entrance and are open between 11:00 a.m. and 7:00 p.m. daily.[1] In the summer, the lawn is used for film screenings, and in the winter, it is home to a "Winter Village" with an ice-skating rink, pop-up shops, and concessions. Bryant Park is in excellent condition and experiences high utilization.

Union Square Park

Union Square Park is a 6.51-acre park located in the southern half of the residential study area on the block bounded by East 17th Street to the north, Union Square East to the east, East 14th Street to the south, and Union Square West to the west. The primarily passive park includes dog-friendly areas, eateries, playgrounds, and public restrooms. A greenmarket is open on the north and west sides of the park between 8:00 a.m. and 6:00 p.m. year-round on Mondays, Wednesdays, Fridays, and Saturdays. Union Square Park is in good condition and experiences high utilization.

Madison Square Park

Madison Square Park is a 6.24-acre open space located in the southern half of the residential study area. It is located on the block bounded by East 26th Street to the north, Park Avenue South to the east, East 23rd Street to the south, and Fifth Avenue to the west. Madison Square Park includes lawns, playgrounds, passive seating areas, walking paths, movable café tables and chairs, a dog run, and restaurant. The lawn hosts seasonal art installations. Madison Square Park is in excellent condition and experiences high utilization.

Chelsea Park

Chelsea Park is a 3.91-acre park located in the western half of the residential study area on West 28th Street between Ninth and Tenth Avenues. Chelsea Park is a primarily active park that includes a playground, basketball courts, ball fields, landscaping, and seating. Chelsea Park is in good condition with moderate utilization.

[1] Pétanque is a game similar to Bocce.

Table 5-3: Open Space Inventory

Map No.	Name	Location	Owner	Total Acres	Active		Passive		Amenities
					Acres	%	Acres	%	
Quantitative Resources									
1	Bryant Park	Block between Fifth and Sixth Avenues, West 40th and West 42nd Streets	NYC PARKS/BPC	9.60	0.96	10%	8.64	90%	Landscaping, lawn, gardens, café tables and chairs, art installation, Ice skating (seasonal)
2	Chelsea Park	West 28th Street between Ninth and Tenth Avenues	NYC PARKS	3.91	2.93	75%	0.98	25%	Landscaping, seating, playground, basketball courts, and ball fields, adult fitness areas, handball courts, running track
3	Chelsea Recreation Center	West 25th Street between Ninth and Tenth Avenues	NYC PARKS	0.39	0.39	100%	0.00	0%	Basketball courts, fitness equipment, indoor pools, creation center, volleyball courts
4	Clement Clarke Moore Park	West 22nd Street and Tenth Avenue	NYC PARKS	0.49	0.12	25%	0.37	75%	Playgrounds, spray showers, seating areas

Map No.	Name	Location	Owner	Total Acres	Active		Passive		Amenities
					Acres	%	Acres	%	
5	Father Duffy Square	Triangle between 45th and 47th Streets, Broadway, and Seventh Avenue	NYC PARKS	0.08	0.00	0%	0.0.08	100%	Planters, tiered seating, and statue
6	Greeley Square Park	Intersection of Sixth Avenue and Broadway between West 32nd and 33rd Streets	NYC PARKS/34th Street Partnership	0.14	0.00	0%	0.14	100%	Landscaping, seating, restroom, concession, and monument
7	Gutenberg Playground	West 49th Street and Ninth Avenue	NYC PARKS	0.55	0.55	100%	0.00	0%	Handball courts, basketball courts, playground
8	Hell's Kitchen Park	West 48th Street and Tenth Avenue	NYC PARKS	0.58	0.52	90%	0.06	10%	Basketball courts, handball courts, playgrounds, seating areas
9	Herald Square	Intersection of Sixth Avenue, Broadway, and West 34th Street	NYC PARKS	0.21	0.00	0%	0.21	100%	Landscaping, seatings, restroom, refreshment stand, and monument
10	Madison Square Park	Block between Broadway and Madison Avenue, East 23rd and East 26th Street	NYC PARKS/Madison Square Park Conservancy	6.24	0.62	10%	5.62	90%	Landscaping, lawn, playground, dog run, bench seating, eateries

Map No.	Name	Location	Owner	Total Acres	Active		Passive		Amenities
					Acres	%	Acres	%	
11	Matthews - Palmer Playground	Interior lot between West 45th and 46th Streets between Ninth and Tenth Avenues	NYC PARKS	0.47	0.235	50%	0.235	50%	Basketball courts, handball courts, playgrounds, public restrooms, spray showers
12	McCaffery Playground	West 43rd Street and Ninth Avenue	NYC PARKS	0.43	0.0.26	60%	0.17	40%	Playgrounds, swings, seating areas, basketball courts, handball courts
13	Penn South Playground	West 26th Street between Eighth and Ninth Avenue	NYC PARKS	0.60	0.48	80%	0.12	20%	Playground and basketball courts
14	Ramon Aponte Park	West 47th Street and Ninth Avenue	NYC PARKS	0.17	0.14	80%	0.03	20%	Playgrounds, spray showers
15	Union Square Park	East 14th Street and Park Avenue South	NYC PARKS	6.51	0.35	5%	6.16	95%	Dog-friendly areas, eateries, playgrounds, public restrooms, seating areas
16	Vincent F. Albano Jr. Playground	East 29th Street and Second Avenue	MTA/NYC PARKS	0.35	0.23	65%	0.12	35%	Handball courts, playgrounds, seating areas
17	Worth Square	West 25th Street and Broadway	NYC PARKS	0.27	0.00	0%	0.27	100%	Seating areas

Map No.	Name	Location	Owner	Total Acres	Active		Passive		Amenities
					Acres	%	Acres	%	
18	Manhattan West	West side of Ninth Avenue between West 31st and 33rd Streets	Brookfield Properties	2.00	0.00	0%	2.00	100%	Landscaping, seating
19	Chelsea Green	West 20th Street between Sixth and Seventh Avenue	NYC PARKS	0.24	0.12	50%	0.12	50%	Landscaping, lawn, playground, bench seating, and art installation
20	Penn South	West 26th Street to West 29th Street between Eighth and Ninth Avenues	Penn South Cooperative	2.87	0.50	17%	2.37	83%	Landscaping, seating, playground
21	230 West 27th Street POPS	West 27th Street between Seventh Avenue and Eighth Avenues	Fashion Institute of Technology	0.11	0.00	0%	0.11	100%	Landscaping, seating
22	Moynihan Train Hall (Farley Building) Steps	East side of Eighth Avenue between West 31st and 33rd Streets	New York State Urban Development Corporation	0.33	0.00	00%	0.33	100%	Seating
23	525 Eighth Avenue POPS	Northwest corner of Eighth Avenue and West 36th Street	LSCH LLC	0.06	0.00	0%	0.06	100%	Landscaping, seating
24	585 Eighth Avenue POPS	West side of Eighth Avenue between West 38th and 39th Streets	IMDN Holdings, LLC	0.05	0.00	0%	0.05	100%	Landscaping, seating
25	Broadway Plazas	Broadway between West 33rd and 41st Streets	NYC DOT	1.05	0.00	0%	1.05	100%	Landscaping, seating
26	1441 Broadway POPS	Block bounded by Broadway and Seventh Avenue and West 39th and 40th Streets	1411 IC-SIC Property LLC	0.37	0.00	0%	0.37	100%	Landscaping, tiered seating, art installation, arcade

Map No.	Name	Location	Owner	Total Acres	Active		Passive		Amenities
					Acres	%	Acres	%	
27	Times Square Plaza	Broadway and Seventh Avenue between West 42nd and 45th Streets	New York City Department of Transportation (NYC DOT)	2.09	0.00	0%	2.09	100%	Landscaping, seating
28	776 Sixth Avenue POPS	East side of Sixth Avenue between West 26th and 27th Streets	Rose Associates	0.23	0.00	0%	0.23	100%	Landscaping, seating, café chairs and tables
29	835 Sixth Avenue POPS	West side of Sixth Avenue between West 29th and 30th Streets	835 Sixth Avenue Master LP/Kimpton Hotels	0.24	0.00	0%	0.24	100%	Landscaping, seating, and reflecting pool
30	1095 Sixth Avenue POPS	West side of Sixth Avenue between West 41st and 42nd Street	Board of Managers, 1095 Avenue/Americas Condor	0.40	0.00	0%	0.40	100%	Landscaping, seating, art installation, and water feature
31	10 East 28th Street	East 28th Street between Fifth Avenue and Madison Avenue	Rose Associates	0.29	0.00	0%	0.29	100%	Landscaping, seating, and lawn
32	325 Fifth Avenue POPS	East side of Fifth Avenue between 32nd and 33rd Streets	Continental Residential Holdings LLC	0.19	0.00	0%	0.19	100%	Landscaping, bench seating, and art installation
33	172 Madison Avenue POPS	Northwest corner of East 33rd Street and Madison Avenue	Tessler Developments, LLC	0.08	0.00	0%	0.08	100%	Landscaping, seating
34	420 Fifth Avenue POPS	West side of Fifth Avenue between West 37th and 38th Streets	Jones Lang LaSalle	0.09	0.00	0%	0.09	100%	Landscaping, ledge seating and movable café chairs and tables
35	425 Fifth Avenue POPS	Northeast corner of East 38th Street and Fifth Avenue	RFD 425 Fifth Avenue L.P.	0.08	0.00	0%	0.08	100%	Planters, ledge seating, and water feature

Map No.	Name	Location	Owner	Total Acres	Active		Passive		Amenities
					Acres	%	Acres	%	
36	445 Fifth Avenue POPS	Northeast corner of East 39th Street and Fifth Avenue	Brown Harris Stevens	0.05	0.00	0%	0.05	100%	Landscaping, ledge seating, fountain
37	120 Park Avenue POPS	Southwest corner of East 42nd Street and Park Avenue	Shorenstein Realty Services	0.21	0.00	0%	0.21	100%	Covered indoor pedestrian space, arcade, and art installation
38	Pershing Square Plaza	Park Avenue between East 41st and 42nd Streets	NYC DOT	0.26	0.00	0%	0.26	100%	Landscaping and seating
39	41 Madison Avenue POPS	Southeast corner of East 26th Street and Madison Avenue	Rudin Management Co.	0.12	0.00	0%	0.12	100%	Circular planters with chair seating and arcade
40	407 Park Avenue South POPS	Northeast corner of East 28th Street and Park Avenue South	Hoffman Management	0.07	0.00	0%	0.07	100%	Planters, seating
41	475 Park Avenue South POPS	Southeast corner of East 32nd Street and Park Avenue South	Cohen Brothers Realty Corp.	0.18	0.00	0%	0.18	100%	Planters, ledge seating, arcade
42	155 East 31st Street POPS	North side of East 31st Street between Third and Lexington Avenues	Milstein Properties	0.14	0.00	0%	0.14	100%	Landscaping, chairs, ledge seating
43	150 East 34th Street POPS	South side of East 34th Street between Third and Lexington Avenues	The Denihan Company	0.08	0.00	0%	0.08	100%	Landscaping, seating, art installation, and water feature

Map No.	Name	Location	Owner	Total Acres	Active		Passive		Amenities
					Acres	%	Acres	%	
44	243 Lexington Avenue POPS	Northeast corner of Lexington Avenue and East 34th Street	National Center Foundation, Inc.	0.02	0.00	0%	0.02	100%	Benches, landscaping
45	5 East 22nd Street POPS	East side of Broadway between East 23rd and 22nd Streets	Rose Associates	0.29	0.00	0%	0.29	100%	Planter seating, art installation, tables/chairs
46	Flatiron Plaza	Intersection of Broadway, Fifth Avenue, and East 23rd Street	NYC DOT	0.90	0.00	0%	0.90	100%	Landscaping, seating
47	Madison/Worth Square Plaza	Broadway between East 21st and 23rd Streets	NYC DOT	0.46	0.00	0%	0.46	100%	Landscaping, seating
48	3 Park Avenue POPS	East side of Park Avenue between East 33rd and 34th Streets	Cohen Brothers Realty Corp.	0.26	0.00	0%	0.26	100%	Ledge and step seating
49	1133 Sixth Avenue POPS	West side of Sixth Avenue between West 43rd and 44th Streets	The Durst Organization	0.12	0.00	0%	0.12	100%	Planters, seating
50	1155 Sixth Avenue POPS	West side of Sixth Avenue between West 44th and 45th Streets	The Durst Organization	0.13	0.00	0%	0.13	100%	Planters, seating
51	1535 Broadway POPS	West side of Broadway between West 45th and 46th Streets	Times Square Hotel Company	0.78	0.00	0%	0.78	100%	Plaza, through-block arcade and covered pedestrian area
52	1538 Broadway POPS	East side of Broadway between West 45th and 46th Streets	N/A	0.07	0.00	0%	0.07	100%	Indoor through-block connection

Map No.	Name	Location	Owner	Total Acres	Active		Passive		Amenities
					Acres	%	Acres	%	
53	Rockefeller Plaza	48th Street to 51st Street, between Fifth and Sixth Avenues	Rockefeller Group	0.83	0.21	25%	0.62	75%	Plaza, trees, plantings, through-block connections, garbage cans, ice-skating rink (seasonal), retail frontage
54	1166 Sixth Avenue (MMC Plaza)	East side of Sixth Avenue between West 45th and 46th Streets	A of A Condo	0.63	0.00	0%	0.63	100%	Plaza, tables and movable chairs, benches, seat walls, ledges, plantings, sculptures
55	Grace Plaza	East side of Sixth Avenue between West 43rd and 42nd Streets	1114 Trizechahn-Swig, LLC.	0.52	0.00	0%	0.52	100%	Plaza, plantings, tables and movable chairs, benches, water fountain, food vendor
56	Tower 49 POPS	East 48th Street between Fifth and Madison Avenues	Kato Kagaku Co., LTC	0.23	0.00	0%	0.23	100%	Plaza, landscaping, benches, seat wall, ledge seating
57	575 Fifth Avenue POPS	East side of Fifth Avenue between East 46th and 47th Streets	Condominium	0.23	0.00	0%	0.23	100%	Indoor plaza with tables and movable chairs

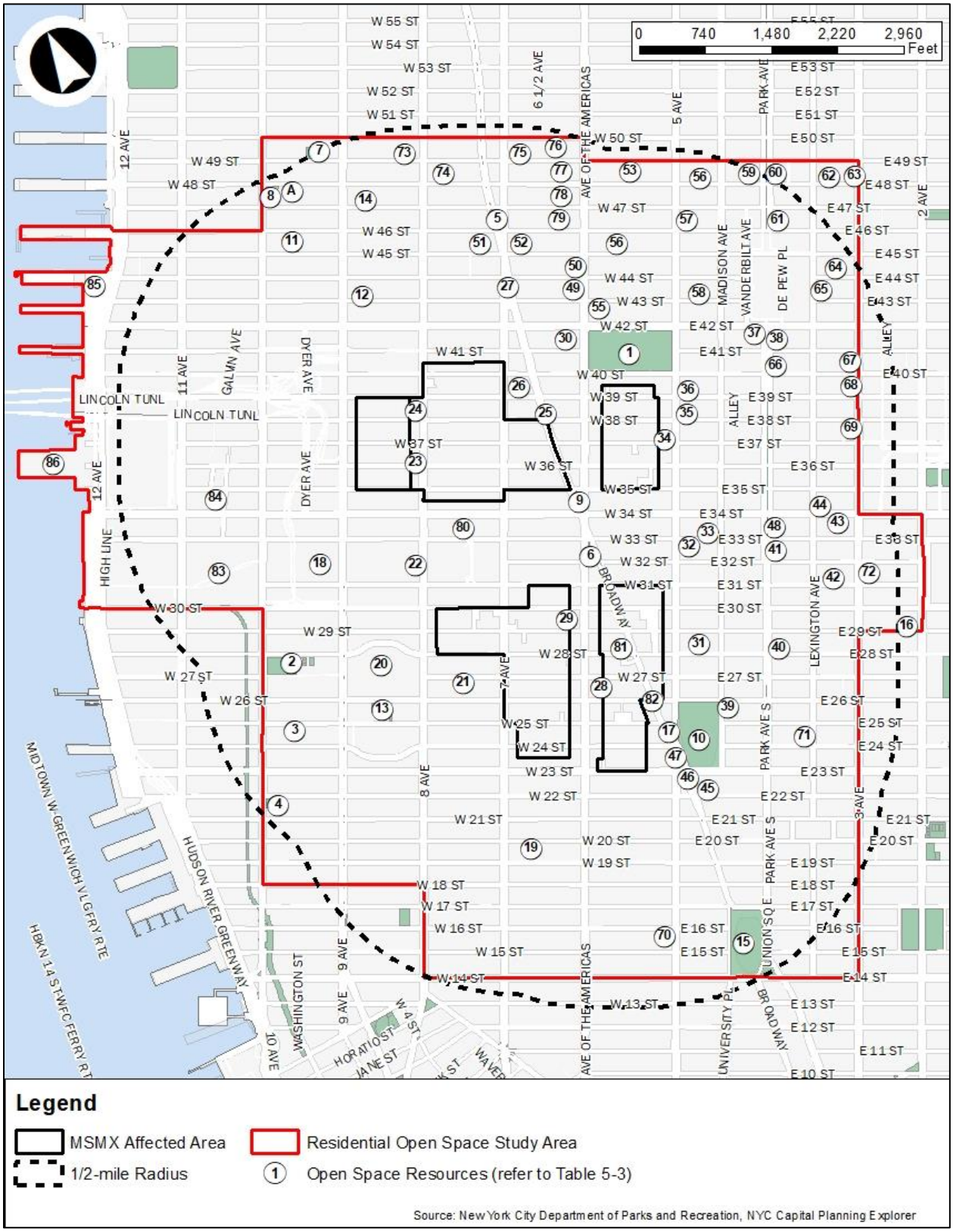
Map No.	Name	Location	Owner	Total Acres	Active		Passive		Amenities
					Acres	%	Acres	%	
58	6 East 43rd Street POPS	South side of East 43rd Street between Fifth and Madison Avenues	6 East 43rd Street Corp.	0.03	0.00	0%	0.03	100%	Planters with seating ledges
59	280 Park Avenue POPS	West side of Park Avenue between East 48th and 49th Streets	Broadway 280 Park Fee	0.40	0.00	0%	0.40	100%	Plaza, trees, planters with seating ledges, tables and movable chairs
60	299 Park Avenue POPS	East side of Park Avenue between East 48th and 49th Streets	Fisher-Park Lane Owner, LLC	0.36	0.00	0%	0.36	100%	Plaza, trees, planters, benches
61	245 Park Avenue POPS	East side of Park Avenue between East 47th and 46th Streets	Brookfield Financial	0.68	0.00	0%	0.68	100%	Plaza
62	141 East 48th Street POPS	East 48th Street between Lexington and Third Avenues	The Cosmo Condo	0.06	0.00	0%	0.06	100%	Plaza, trees, planters with seating ledges
63	780 Third Avenue POPS	West side of Third Avenue between East 49th and 48th Streets	Teachers Insurance and Annuity Assoc. of America	0.09	0.00	0%	0.09	100%	Plaza, ledge seating, food trucks
64	140 East 45th Street POPS	East 45th Street and East 44th Street between Lexington and Third Avenues	2 GCT Partners, LLC	0.11	0.00	0%	0.11	100%	Planters with seating ledges
65	425 Lexington Avenue POPS	East of Lexington Avenue on the north side of East 43rd Street	Hines 425 Lexington Avenue, LLC	0.10	0.00	0%	0.10	100%	Planters with seating ledges
66	101 Park Avenue POPS	East side of Park Avenue between East 41st and 40th Street	101 Park Avenue Associates, LLC	0.34	0.00	0%	0.34	100%	Plantings, seating steps, ledge seating

Map No.	Name	Location	Owner	Total Acres	Active		Passive		Amenities
					Acres	%	Acres	%	
67	622 Third Avenue POPS (Grand Central Plaza)	West side of Third Avenue between East 41st and 40th Streets	622 Third Avenue Company, LLC	0.30	0.00	0%	0.30	100%	Planters with seating ledges
68	600 Third Avenue POPS	West side of Third Avenue between East 40th and East 39th Streets	Third Avenue Tower Owner, LLC	0.20	0.00	0%	0.20	100%	Planters with seating ledges, tables and movable chairs
69	160 East 38th Street POPS	Southwest corner of East 38th Street and Third Avenue	Murray Hill Mews Owners, CP	0.15	0.00	0%	0.15	100%	Planters, benches
70	108 Fifth Avenue POPS	Southwest corner of Fifth Avenue and West 16th Street	108 Fifth Avenue Condominium	0.04	0.00	0%	0.04	100%	Planters, benches
71	50 Lexington Avenue POPS	Northwest corner of Lexington Avenue and East 24th Street	Lexington Tenant Corp.	0.10	0.00	0%	0.10	100%	Landscaping, benches
72	200 East 32nd Street POPS	Southeast corner of East 32nd Street and Third Avenue	N/A	0.13	0.00	0%	0.13	100%	Landscaping, planters, benches
73	One Worldwide Plaza	West side of Eighth Avenue between West 50th and 49th Streets	New York Communications Center Associate S L.P.	0.62	0.00	0%	0.62	100%	Trees, tables with movable chairs, restaurants, planters, sculptures
747	235 West 49th Street POPS	North side of West 48th Street east of Eighth Avenue	CS Ritz Residences LLC	0.15	0.00	0%	0.15	100%	Planters, seating

Map No.	Name	Location	Owner	Total Acres	Active		Passive		Amenities
					Acres	%	Acres	%	
75	745 Fifth Avenue POPS	East side of Seventh Avenue between West 50th and 49th Streets	US Real Estate Holdings No. 1 Limited	0.36	0.00	0%	0.36	100%	Tables with movable chairs, planters, through-block connection, trees
76	1251 Sixth Avenue POPS	West side of Sixth Avenue between West 50th and 49th Streets	N/A	0.68	0.00	0%	0.68	100%	Fountains, ledge seating
77	1221 Sixth Avenue POPS	West side of Sixth Avenue between West 49th and 48th Streets	1221 Avenue Holdings LLC	0.66	0.00	0%	0.66	100%	Sunken plaza, ledge seating, sculptures
78	1211 Sixth Avenue POPS	West side of Sixth Avenue between West 48th and 47th Streets	1211 6th Avenue Syndication Partners JV, L.P.	0.50	0.00	0%	0.50	100%	Planters, benches
79	1185 Sixth Avenue POPS	West side of Sixth Avenue between West 47th and 46th Streets	SL Green Realty Corp.	0.37	0.00	0%	0.37	100%	Trees, seating, through-block connection
80	One Penn Plaza POPS	34th Street between Seventh and Eighth Avenues	KORPENN LLC	1.24	0.00	0%	1.24	100%	Arcade, plaza, seating, planters
81	1185 Broadway POPS	North side of West 28th Street west of Broadway	RP 1185 LLC	0.10	0.00	0%	0.10	100%	Planters, seating
82	Broadway Plazas South	Broadway between West 27th and 26th Streets and West 26th and 25th Streets	NYC DOT	0.30	0.00	0%	0.30	100%	Planters, seating
83	Backyard at Hudson Yards	West 33rd Street between 10th and 11th Avenues	N/A	3.72	0.00	0%	3.72	100%	16-story interactive art feature (The Vessel)

Map No.	Name	Location	Owner	Total Acres	Active		Passive		Amenities
					Acres	%	Acres	%	
84	Bella Abzug Park	West 34th Street between 10th and 11th Avenues	NYC Parks	2.15	2.00	0%	2.63	100%	Seating, fountains, playground
85	Pier 84 at Hudson River Park	West 44th Street and 12th Avenue	NYS Office of Parks, Recreation, and Historic Preservation	2.30	0.69	30%	1.61	70%	Kayak launch, seating, fountain, dog run
86	Pier 76 at Hudson River Park	West 37th Street and 12th Avenue	NYS Office of Parks, Recreation, and Historic Preservation	5.62	2.81	50%	2.81	50%	Landscaping, seating, and active court spaces
			Total:	**70.18**	**12.55**	**18%**	**57.63**	**82%**	
Qualitative Resources									
A	Clinton Community Garden	West 48th Street between Ninth and Tenth Avenue	NYC PARKS	0.34	0	0%	0.34	100%	Community garden

Figure 5-3: Open Space Resources



Penn South

Penn South is a 2.87-acre open space located on the block bounded by West 29th Street to the north, Eighth Avenue to the east, West 26th Street to the south, and Ninth Avenue to the west. This open space is located in the areas between the buildings on the Penn South Housing Cooperative Complex. The area is primarily passive and includes walking paths, benches, and a playground. The open space is in good condition with moderate utilization.

Other Open Spaces

As shown in **Table 5-3**, the residential open space study area includes several dozen POPS that provide a large amount of publicly accessible passive open space for residents and workers in the residential study area.

In addition to the open spaces outlined above, the residential study area includes one open space resource that is not included in the quantitative assessment. In accordance with 2021 *CEQR Technical Manual* methodology, Clinton Community Garden, a 0.34-acre passive open space is not included in the quantitative assessment but is located in the residential study area (refer to **Figure 5-3**).

Assessment of Open Space Adequacy

The assessment of the adequacy of open space resources within the residential study area considers the ratios of active, passive, and total open space resources per 1,000 residents. According to the 2020 U.S. Census, the residential study area had a population of approximately 167,139.

Quantitative Assessment

As shown in **Table 5-4**, the residential study area has a total of 70.30 acres of open space, of which approximately 57.63 acres (82 percent) are used for passive recreation and 12.55 acres (18 percent) are used for active recreation.

Based on the methodology contained in the 2021 *CEQR Technical Manual*, the residential study area has a total open space ratio of 0.420 acres per 1,000 residents, a passive open space ratio of 0.345 acres per 1,000 residents, and an active open space ratio of 0.075 acres per 1,000 residents (**Table 5-4**). These ratios are lower than the City's recommended guidelines of 2.500 acres of total open space per 1,000 residents, 2.000 acres of active open space per 1,000 residents, and 0.500 acres of passive open space per 1,000 residents. As such, there is an existing shortfall of passive and active open space in the residential study area.

Table 5-4: Adequacy of Open Space Resources in the Residential Study Area: Existing Conditions

		Open Space Acreage			Open Space Ratios per 1,000 Persons			*CEQR Technical Manual* Open Space Guidelines		
	Population	Total	Passive	Active	Total	Passive	Active	Total	Passive	Active
Residents	167,139	70.18	57.63	12.55	0.420	0.345	0.075	2.5	0.5	2.0

Qualitative Assessment

As discussed above, approximately 18percent of the open space in the residential study area is dedicated to active recreation and approximately 82 percent is dedicated to passive recreation. Although the residential study area contains a mix of recreational facilities, the open space ratios still fall below the CEQR goal of 2.5 acres per 1,000 residents and the citywide median of 1.5 acres per 1,000 residents. Furthermore, both the active and passive open space ratios fall below the CEQR recommended 2.0 acres of active open space and 0.5 acres of passive open space per 1,000 residents, respectively.

Open spaces in the residential study area include a variety of actively programmed spaces appropriate for all age groups, including children, teenagers, adults, and seniors. As noted in **Table 5-2**, the study area includes a higher percentage of working-age adults (ages 20 to 64), compared with Manhattan and New York City overall (76 percent in the study area compared with 67 percent in Manhattan and 63 percent in New York City). As indicated in the 2021 *CEQR Technical Manual*, adults tend to use active recreational amenities (such as handball and basketball courts) as well as open lawns and other passive recreational amenities, and the open space within the residential study area includes such facilities (see **Table 5-3**).

As shown in **Table 5-2**, approximately 10.3 percent of the residential study area population consists of children and persons below the age of 20, lower than percentages for the same age group in Manhattan and New York City (15.9 percent and 22.1 percent, respectively). As noted in the 2021 *CEQR Technical Manual*, children require a variety of active recreational amenities including playgrounds and sports facilities, such as basketball and handball courts, similar to the adult population. The residential study area's open space resources serving this population include 13 parks with playground/jungle gym equipment, seven parks with basketball courts, and six parks with other age-appropriate recreational amenities.

In addition to the quantified open space resources within the residential study area, there are two additional open spaces located within a half-mile radius of the Affected Area that are not within the residential study area. Dr. Gertrude B. Kelly Playground is a 0.53-acre playground located west of Eighth Avenue between West 17th and 16th Streets. The playground includes basketball courts, handball courts, playgrounds, and spray showers. The Highline is a 6.73-acre, former elevated freight line transformed into a public park between Gansevoort Street and 30th Street.

Approximately a half a mile north of the residential open space study area's northern boundary is Central Park, an 840-acre flagship park that includes baseball fields, basketball courts, bicycling and greenways, dog-friendly areas, eateries, fishing areas, fitness equipment, handball courts, horseback riding trails, ice-skating rinks, nature centers, outdoor pools, paddleboat rentals, playgrounds, recreation centers, soccer fields, tennis courts, volleyball courts, and a zoo.

No-Action Condition

Study Area Population

Under the No-Action condition, current land use trends and general development patterns in the Affected Area are expected to continue. These trends and patterns are characterized by the development of a mix of uses and primarily include commercial, industrial, and to a lesser extent

residential development. As detailed in Chapter 1, "Project Description," it is anticipated that in the No-Action condition, absent the Proposed Actions, the projected development sites and conversion area would remain the same as under existing conditions.

Within the residential open space study area, 36 development projects are anticipated to be constructed under the No-Action condition. As a result of these additional projects, the residential study area population is expected to increase by 15,065 residents.

Open Space Resources

Three open space resources are expected to be completed by the 2034 build year. At 515 7th Avenue, a 5,542-sf (0.12 acre) passive open space will open at a new development. At 270 Park Avenue, a 10,000 sf (0.229-acre) POPS will provide passive areas for bench seating, moveable tables and chairs, water features, a food service kiosk, and an art sculpture. The reconstruction of the Port Authority Bus Terminal is expected to provide 3.5 acres of publicly accessible open space by 2034.

Assessment of Open Space Adequacy

As shown in **Table 5-5**, under the No-Action condition, the residential study area would have a total open space ratio of 0.387 acres per 1,000 residents, a passive open space ratio of 0.318 acres per 1,000 residents, and an active open space ratio of 0.069 acres per 1,000 residents. These ratios are lower than the City's recommended guidelines of 2.5 acres of total open space per 1,000 residents, 2.0 acres of active open space per 1,000 residents, and 0.5 acres of passive open space per 1,000 residents. As such, there would be shortfall of both passive and active open space in the residential study area under the No-Action condition.

Table 5-5: Adequacy of Open Space Resources in the Residential Study Area: No-Action Condition

		Open Space Acreage			Open Space Ratios per 1,000 Persons			*CEQR Technical Manual* Open Space Guidelines		
	Population	Total	Passive	Active	Total	Passive	Active	Total	Passive	Active
Residents	182,204	70.53	57.98	12.55	0.387	0.318	0.069	2.5	0.5	2.0

With-Action Condition

Direct Effects

The Proposed Actions would not result in any direct effects related to encroachments or loss of open space or changes in open space such that it no longer serves the same user population. As discussed in Chapter 6, "Shadows," incremental shadow generated by the Proposed Actions would result in significant adverse impacts to the 1185 Broadway POPS as incremental shadow may negatively affect the usability/enjoyment of the passive open space by decreasing direct sunlight during the late morning and early afternoon hours.

Indirect Effects

The Proposed Actions are expected to introduce 16,256 new residents to the Affected Area. As indicated in **Table 5-6**, the additional population is expected to increase the residential population to 198,460 by the 2034 analysis year.

Open Space Resources

At present, no additional open space resources are planned for the residential open space study area by the 2034 analysis year.

Table 5-6: With-Action Open Space Residential Study Area Population

	No-Action Population	With-Action Population
Residents	182,204	198,460

Assessment of Open Space Adequacy

Quantitative Assessment

As shown in **Table 5-7**, under the With-Action condition, the residential study area would have a total open space ratio of 0.355 acres per 1,000 residents, a passive open space ratio of 0.292 acres per 1,000 residents, and an active open space ratio of 0.063 acres per 1,000 residents. These ratios are lower than the City's recommended guidelines of 2.5 acres of total open space per 1,000 residents, 2.0 acres of active open space per 1,000 residents, and 0.5 acres of passive open space per 1,000 residents. As such, there would continue to be a shortfall of both passive and active open space in the residential study area.

Qualitative Assessment

In the future under the With-Action condition, ratios of open space would continue to be lower than the City's measure of open space adequacy and the guideline planning goals. The population that would be generated by the Proposed Actions under the RWCDS is not expected to have any special characteristics, such as a disproportionately younger or older population, that would place heavy demand on facilities that cater to specific groups.

Table 5-7: Adequacy of Open Space Resources in the Residential Study Area: With-Action Condition

		Open Space Acreage			Open Space Ratios per 1,000 Persons			*CEQR Technical Manual* Open Space Guidelines		
	Population	Total	Passive	Active	Total	Passive	Active	Total	Passive	Active
Residents	198,460	70.53	57.98	12.55	0.355	0.292	0.063	2.5	0.5	2.0

As noted above, in addition to the quantified open space resources within the residential study area, two additional open spaces are located within a half-mile radius of the Affected Area that are not within the residential study area: Dr. Gertrude B. Kelly Playground and the Highline. These two resources and the 840-acre Central Park located north of the residential study area could help to partially offset this quantitative deficit. In addition, the future planned 3.5-acre open space at the Port Authority Bus Terminal would provide additional active and passive open space to residents in the area.

Determining Impact Significance

Table 7-5 of the 2021 *CEQR Technical Manual* indicates that a decrease in the open space ratio of one percent in areas with a total open space ratio range of 0.50 or less, an active open space ratio range between 0.01 to 0.40, and a passive open space ratio range between 0.01 and 0.10 could result in an indirect open space impact. It is important to note that the City's optimal open space ratios and percentage reductions do not constitute an absolute impact threshold; projects are further assessed qualitatively to determine the overall significance of the impact.

Under the With-Action condition the total, active, and passive open space ratios would remain below the City's guideline ratios of 2.5 acres, 2.0 acres, and 0.5 acres per 1,000 residents, respectively. As shown in **Table 5-8**, in the With-Action condition, total, passive, and active open space ratio would decrease by 8.2 percent compared with the No-Action condition. Therefore, the Proposed Actions would result in an indirect significant adverse impact to open space primarily due to the low existing open space ratios and the decrease in open space ratios between the No-Action and With-Action conditions. Potential mitigation measures to address this significant adverse impact are discussed in Chapter 20, "Mitigation."

Table 5-8: Impact Determination

	Total	**Passive**	**Active**
Existing	0.420	0.345	0.075
No-Action	0.387	0.318	0.069
With-Action	0.355	0.292	0.063
Percent Change	**-8.19%**	**-8.19%**	**-8.19%**