

A. INTRODUCTION

This chapter examines the Willets Point Development Plan's potential effects on open space resources surrounding the Willets Point Development District. This chapter's analyses rely on the 2001 *City Environmental Quality Review (CEQR) Technical Manual*'s guidelines. The *CEQR Technical Manual* guidelines indicate that an open space assessment is necessary when a proposed project results in the physical loss of an open space or introduces 200 or more residents or 500 or more workers to an area. Both the proposed Plan and the No Convention Center Scenario would increase the resident and worker populations above the threshold for a detailed assessment. Therefore, a detailed assessment was undertaken to assess whether a direct impact or indirect impact on local open spaces would result. In accordance with the approach outlined in Chapter 2, "Procedural and Analytical Framework," this chapter analyzes the cumulative impact of both the Willets Point Development Plan and the anticipated development on Lots B and D. Quantitative assessments are provided for both the proposed Plan and the No Convention Center Scenario, as described in Chapter 2. This chapter assesses existing open space conditions (both the number of users and condition of resources), probable conditions in the future without the proposed Plan, and potential impacts on open space resources in the future with the proposed Plan.

PRINCIPAL CONCLUSIONS

In the future with the proposed Plan, the area surrounding the District would continue to have adequate active and passive open space resources. Although open space ratios would decline, for the most part the open space ratios would exceed existing City guidelines. Only the active open space ratio per 1,000 residents and the passive open space ratio per 1,000 workers would be below the recommended ratio; the total open space ratios would be well above City goals. The open space ratios indicate that workers and residents would have adequate open space to meet their needs in the future with the proposed Plan or the No Convention Center Scenario. Furthermore, these quantitative analyses do not consider the extensive open space resources just beyond the study area boundaries, particularly the numerous active recreational amenities in the remaining portions of Flushing Meadows-Corona Park. Based on the open space analysis presented in this chapter, neither the proposed Plan nor the No Convention Center Scenario is expected to result in significant adverse impacts on study area open spaces.

B. METHODOLOGY

STUDY AREAS

The *CEQR Technical Manual* recommends establishing study area boundaries as the first step in an open space analysis. Study area boundaries are based upon the distance that a person would walk to reach an open space. Workers are assumed to primarily use passive open spaces and to

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walk approximately 10 minutes, typically $\frac{1}{4}$ mile, to reach open spaces. Residents rely on both active and passive open spaces and will walk 20 minutes, approximately $\frac{1}{2}$ mile, to use these spaces. The proposed Plan includes both residential and commercial development. As such, the following analyses include both commercial ($\frac{1}{4}$ mile) and residential ($\frac{1}{2}$ mile) study areas (see Figure 6-1).

As per the *CEQR Technical Manual* guidelines, the commercial study area includes all census tracts that have at least 50 percent of their area within $\frac{1}{4}$ mile of the District. The same methodology was applied to the $\frac{1}{2}$ -mile residential study area boundary. The quantitative analysis does not include open spaces located within $\frac{1}{2}$ mile of the District but in a census tract with less than 50 percent of its area in the $\frac{1}{2}$ -mile boundary. The qualitative analysis section will discuss these open space resources.

OPEN SPACE USER POPULATIONS

U.S. Census Bureau population data were compiled for the census tracts within each study area to determine the number of residents who live in the area.¹ The residential population information includes age distribution because different age groups represent different user types: young people and senior citizens may be more reliant on local open spaces than adults of working age. The number of employees within each study area was determined by using the U.S. Census Bureau's 2000 reverse journey-to-work data.

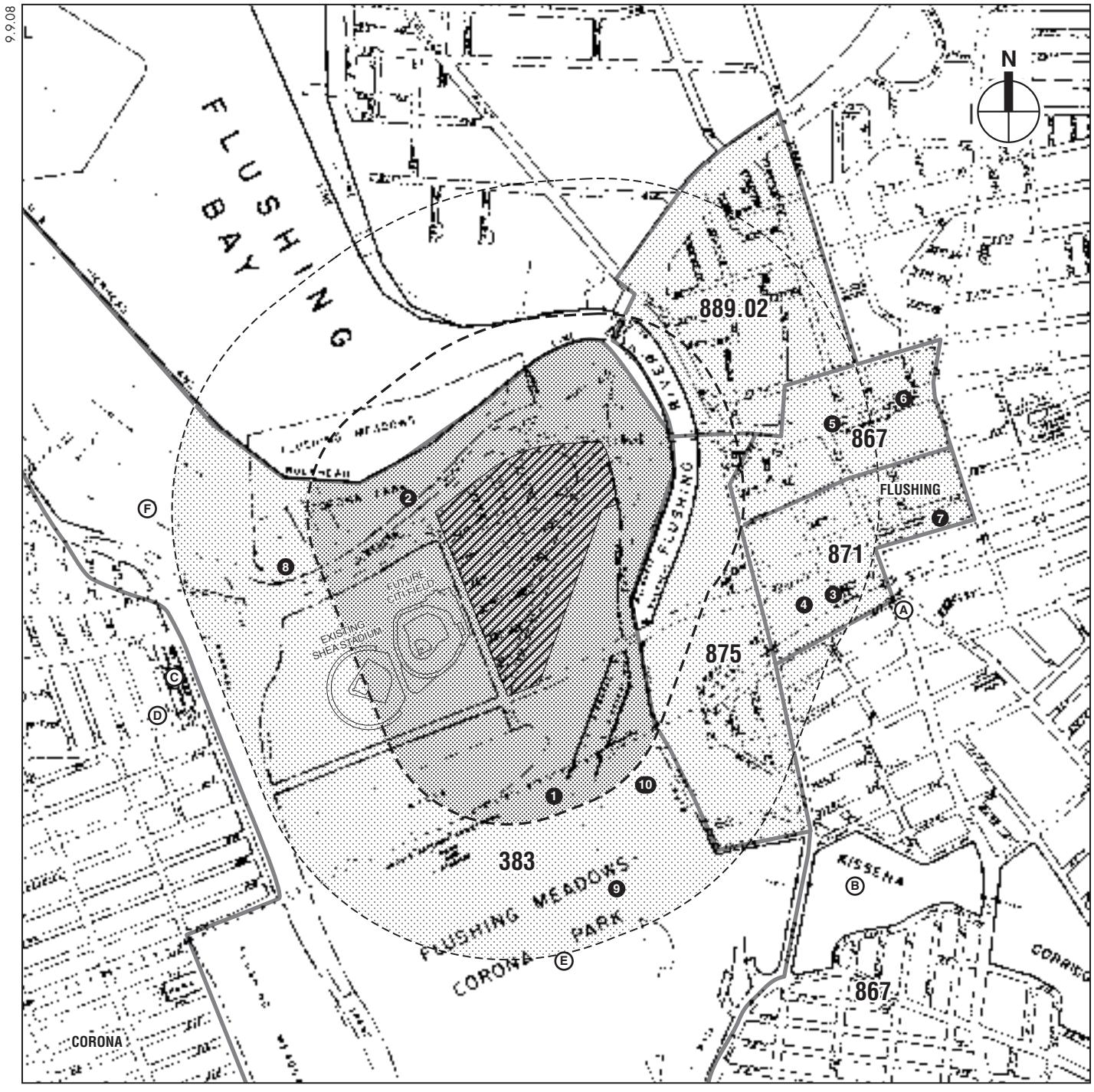
INVENTORY OF OPEN SPACE RESOURCES

The data used to analyze the proposed Plan's open space impacts were gathered through field visits as well as from the New York City Department of Parks and Recreation (DPR) and other City agencies responsible for open spaces within the study areas. The analyses include all publicly accessible open spaces within each study area. The *CEQR Technical Manual* defines a publicly accessible open space as one "that is accessible to the public on a constant and regular basis or for designated daily periods." Open spaces that are not publicly accessible or available to a limited number of people are not included in the quantitative analysis.

Field visits in May 2007 helped to determine the size, character, and condition of the publicly accessible open spaces and recreational facilities within the commercial and residential study areas. Active and passive uses were noted at each open space. Active uses include basketball and handball courts, jogging paths, ball fields, and playground equipment. Passive open spaces are characterized by picnic areas, walking paths, beaches, or gardens. Certain areas, such as lawns or public esplanades, can serve as both active and passive open spaces.

While the quantitative analysis includes only the open spaces that fall within the commercial and residential study areas, the qualitative analysis also considers the open spaces just beyond the $\frac{1}{2}$ -mile residential study area boundary.

¹ The residential population figure is an estimate based on the 2000 U.S. Census population data and estimated population growth based on the most current available Real Property Assessment Data (RPAD) from the New York City Department of Finance. The resident population estimate is calculated by multiplying the number of residential units constructed since 2000 by the census tract's housing occupancy rate and average household size. This number is added to the 2000 U.S. Census population figure to estimate the 2007 residential population.



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1/4-Mile Perimeter Boundary

1/2-Mile Perimeter Boundary

Open Space within Study Area (See Table 6-3)

Open Space outside Study Area (See Table 6-3)

Census Tract Boundary

Census Tract Number

1/4-Mile Open Space Study Area (Commercial Study Area)

1/2-Mile Open Space Study Area (Residential Study Area)

This figure has been updated since the DGEIS

ADEQUACY OF OPEN SPACE RESOURCES

The open spaces within the commercial and residential study areas were assessed quantitatively and qualitatively. The quantitative analysis compares the open space ratio—the ratio of usable open space acreage to the study area's population—with the City's guidelines. The City has established that 0.15 acres of passive open space per 1,000 workers is an adequate amount of open space for an area's working (daytime) population. The City uses two sets of guidelines to determine the adequacy of the open space that serves the residential population. The City-wide median open space ratio of 1.5 acres per 1,000 residents serves as the first guideline. The City's optimal planning goal of a ratio of 2.5 acres per 1,000 residents, of which 2.0 acres is active space and 0.5 acres is passive space, serves as the second. The residential population's needs are considered in combination with the worker population because it is assumed that both groups will use the same passive open spaces. Therefore, the quantitative analysis considers a weighted average of the amount of open space necessary to meet the guidelines of 0.50 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 workers. Because this ratio changes depending on the proportion of residents and workers in each study area, Table 6-4 outlines the amount of open space needed to meet City guidelines in each condition in each study area, and calculates the recommended weighted average ratio of passive open space acres per 1,000 residents and workers.

How a proposed project alters an area's open space ratios determines the project's potential impacts. Since the City's open space goals are not feasible for many areas in the City, they are not considered impact thresholds. Instead, these goals indicate how well an area is served by open space. A proposed action may result in a significant impact on open space if one of two situations occur: 1) an action causes a direct displacement or alteration of an existing open space within the study area and has a significant adverse effect on existing users, unless the proposed action would provide a comparable replacement; and 2) an action would reduce the open space ratio and consequently result in overburdening existing facilities or further exacerbate a deficiency in open space.

C. EXISTING CONDITIONS

STUDY AREA POPULATION

COMMERCIAL STUDY AREA

Per *CEQR Technical Manual* guidelines, the commercial study area includes all census tracts that have 50 percent or more of their area within $\frac{1}{4}$ mile of the District. Only census tract 383 was included in the $\frac{1}{4}$ -mile commercial study area. While the area that falls within the commercial study area covers less than 50 percent of the census tract, the tract was included in the commercial study area because it includes the entire District. Census tract 383 covers all of Flushing Meadows-Corona Park as well as a strip of land that runs along the Grand Central Parkway and Ditmars Boulevard toward LaGuardia Airport. To ensure a conservative quantitative analysis, only the portions of the open spaces within a $\frac{1}{4}$ -mile radius of the District were included, but the tract's entire worker and resident populations were included.

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The commercial study area has a resident population of 2,136 (see Table 6-1). U.S. Census reverse-journey-to-work data from the 2000 Census estimate that 3,745 people work in tract 383. The commercial study area's total residential and worker population is approximately 5,881.¹

Table 6-1
Existing Population in Commercial and Residential Study Areas

Census Tract	Commercial Population	Residential Population*	Total User Population
Commercial Study Area			
383	3,745	2,136	5,881
Commercial Study Area Population	3,745	2,136	5,881
Residential Study Area**			
867	2,315	1,305	3,620
871	4,235	1,904	6,139
875	2,045	385	2,430
889.02	2,380	602	2,982
Residential Study Area Population	14,720	6,333	21,053

Notes:

* Residential study area totals include the census tract within the commercial study area.

**The residential population figure is an estimate based on the 2000 U.S. Census population data and estimated population growth based on the most current available Real Property Assessment Data (RPAD) from the New York City Department of Finance. The resident population estimate is calculated by multiplying the number of residential units constructed since 2000 by the census tract's housing occupancy rate and average household size. This number is added to the 2000 U.S. Census population figure to estimate 2007 population. The ratio calculations in the future without the proposed Plan and the future with the proposed Plan include estimated 2007 residential population figures.

Sources: U.S. Census Bureau, 2000; Central Transportation Planning Package (CTPP) 2000 — Part 2; New York City Department of Finance Real Property Assessment Data (RPAD).

This analysis conservatively assumes that residents and workers are entirely distinct populations and that no one lives and works within the same census tract. While this assumption could double-count the daily user population, it also creates a more conservative analysis if the commercial and residential populations overlap.

RESIDENTIAL STUDY AREA

The residential study area consists of five census tracts, including the one census tract within the commercial study area. The study area includes census tracts 383, 867, 871, 875, and 889.02. While the boundaries of census tract 383 cover the entire Flushing Meadows-Corona Park and extend from Northern Boulevard to the Van Wyck Expressway, to ensure a conservative analysis the residential study area includes only the open space acreage within the park that falls

¹ The residential population figure is an estimate based on the 2000 U.S. Census population data and estimated population growth based on the most current available Real Property Assessment Data (RPAD) from the New York City Department of Finance. The resident population estimate is calculated by multiplying the number of residential units constructed since 2000 by the census tract's housing occupancy rate and average household size. This number is added to the 2000 U.S. Census population figure to estimate 2007 population. The ratio calculations in the future without the proposed Plan and the future with the proposed Plan include estimated 2007 residential population figures. Employment estimates are not updated and are based on 2000 Census figures.

within a ½-mile radius of the District. As such, the residential study area's southern boundary extends to approximately 49th Avenue and not the southern edge of tract 383. Although the analysis includes only the open spaces within a ½-mile radius of the District, the quantitative analysis conservatively includes the tract's entire worker and resident populations.

Therefore, the residential study area's boundaries extend from Northern Boulevard, the Grand Central Parkway and the Whitestone Expressway to the north, Linden Boulevard and the Van Wyck Expressway to the east, the intersection of the Grand Central Parkway, 49th Avenue to the south and 114th Avenue and the Grand Central Parkway to the west (see Figure 6-1).

The residential study area has an estimated residential population of 6,333. Approximately 14,720 people work in the residential study area, as estimated by the 2000 U.S. Census. The study area's total population, which includes residents and workers, is approximately 21,053. Again, this estimate conservatively assumes that the residential and worker populations are distinct.

Census tracts 383 and 871 contain 67 percent of the residential study area's resident population. Adults between 20 and 64 years old constitute approximately 63 percent of the residential population (Table 6-2). Adults tend to utilize a variety of active and passive open space facilities. Children and teenagers account for approximately 22 percent of the residential study area's residents. This population segment tends to utilize active amenities, such as play equipment and basketball courts, more often than passive facilities. Senior citizens 65 years old or older make up 14 percent of the population and tend to utilize more passive recreational amenities.

Table 6-2
Residential Study Area: Existing Residential Population by Age

Census Tract	Population	Under 5 Years		5 to 9 Years		10 to 14 Years		15 to 19 Years		20 to 64 Years		65 Years and Older	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
383	2,136	96	4.49	96	4.49	105	4.92	87	4.07	1295	60.63	457	21.40
867	867	41	4.73	43	4.96	57	6.57	46	5.31	611	70.47	69	7.96
871	1,775	116	6.54	135	7.61	135	7.61	122	6.87	1059	59.66	208	11.72
875	385	20	5.19	26	6.75	21	5.45	15	3.90	272	70.65	31	8.05
889.02	602	23	3.82	30	4.98	30	4.98	46	7.64	426	70.76	47	7.81
Total:	5,765	296	5.13	330	5.72	348	6.04	316	5.48	3,663	63.54	812	14.08

Sources: U.S. Census Bureau, 2000.

STUDY AREA OPEN SPACE INVENTORY

COMMERCIAL STUDY AREA

Portions of Flushing Meadows-Corona Park and the Flushing Bay Promenade, two City-owned parks, fall within the commercial study area. DPR has jurisdiction over each park, and each is open to the public (see Figure 6-1 and Table 6-3). For the purposes of a conservative analysis, only the publicly accessible portions of each park within the commercial study area were included in the analysis. As described in the methodology, the *CEQR Technical Manual* defines a publicly accessible open space as one "that is accessible to the public on a constant and regular basis or for designated daily periods." Open spaces that are not publicly accessible or available to a limited number of people are not included in the quantitative analysis. The analysis of the commercial study area's open spaces did not include Shea Stadium and its associated parking areas as open space resources because this land does not meet the *CEQR Technical Manual* definition for publicly accessible open space.

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Table 6-3
Open Space Inventory

Map Number	Name	Owner	Features	Size (acres)	Acres of Active Open Space	Acres of Passive Open Space	Condition/Utilization
Commercial Study Area							
1	Flushing Meadows-Corona Park	DPR	Benches, paved walkway, tennis courts	2.58	1.29	1.29	Good/ Moderate
2	Flushing Bay Promenade	DPR	Benches, paved walkway	4.01	2.005	2.005	Good/ Moderate
Commercial Study Area Total				6.59	3.295	3.295	
Residential Study Area							
3	Bland Playground	DPR	Basketball courts, handball courts, benches, swings, jungle gyms, fountain (for children's play)	0.55	0.50	0.05	Good/ Heavy
4	Bland Houses	NYCHA	Basketball courts, walkways, lighting	1.74	0.44	1.30	Fair/ Light
5	Daniel Carter Beard Mall	DPR	Benches	0.66	0.00	0.66	Fair/ Light
6	Flushing Greens	DPR	Trees	0.42	0.00	0.42	Fair/ Light
7	Lippman Arcade	NYC	Trees, seating	0.10	0.00	0.10	Good/ Heavy
8	Flushing Bay Promenade	DPR	Benches, paved walkway	1.50	0.75	0.75	Good/ Moderate
9	Flushing Meadows-Corona Park	DPR	Benches, paved walkway, soccer fields, golf course, tennis court	84.70	42.35	42.35	Good/ Moderate
10	Flushing Meadows-Corona Park Aquatic Center	DPR	Pool	1.5	1.50	0.00	Excellent/Heavy
Residential Study Area Total				97.77	48.84	48.93	
Outside Residential Study Area (Not Included in Quantitative Analysis)							
A	Flushing Branch Library	Queens Library	Stairway (suitable for sitting)	0.02	0.00	0.02	Good/ Heavy
B	Kissena Corridor West	DPR	Wide variety of active and passive amenities	100	50	50	Good/ Moderate
C	Hinton Park	DPR	Game tables, benches, baseball diamonds, play areas	3.73	3.36	0.37	Very Good/ Moderate
D	Louis Armstrong Playground	DPR	Play areas, basketball courts	1.90	1.90	0.0	Very Good/Moderate
E	Flushing Meadows-Corona Park	DPR	Benches, paved walkway, playfield, golf course, tennis court	1,167	583.50	583.50	Good/Moderate
F	Flushing Bay Promenade	DPR	Benches, paved walkway	1.50	0.75	0.75	Good/Moderate
Notes: See Figure 6-1 for location of open spaces.							
Sources: New York City Department of Parks and Recreation open space database; AKRF, Inc. field surveys, May 2007.							

At 1,255 acres, Flushing Meadows-Corona Park is Queens' largest park and one of the largest in New York City. The commercial study area covers a small portion of the park that falls within $\frac{1}{4}$ mile of the District and is publicly accessible. As a result, 2.58 acres of open space within

Flushing Meadows-Corona Park were included in the analysis. Given the significant size of Flushing Meadows-Corona Park, the precise breakdown of active versus passive open space is unknown. This analysis assumed that approximately half of Flushing Meadows-Corona Park is for active recreation and half is dedicated to passive recreation. Therefore, in the commercial study area, approximately 1.29 acres is assumed to be active open space, and the remaining 1.29 acres is for passive open space uses. As described above, Shea Stadium and its associated parking areas were not included in the Flushing Meadows-Corona Park acreage.

The Flushing Bay Promenade is a 1.4-mile greenway that runs along Flushing Bay from LaGuardia Airport to Flushing Meadows. The promenade was built in 2001 and includes an asphalt biking and walking path, benches, and lighting. Shea Stadium Road and Northern Boulevard provide access to the promenade, but the Grand Central Parkway and Northern Boulevard largely isolate the promenade from adjacent residential uses. The portion of the Promenade within the commercial study area includes a biking/walking path and seating, as well as the World's Fair Marina. The World's Fair Marina is a commercial marina facility and, therefore, was not included in the quantitative analysis. As a result, 4.01 acres of the promenade, half of which is considered active space and half of which is considered passive open space, are included in the commercial study area.

Overall, by combining the portions of Flushing Meadows-Corona Park and the Flushing Bay Promenade, the commercial study area includes 6.59 acres of open space divided evenly between active and passive uses (3.295 acres of each).

RESIDENTIAL STUDY AREA

The residential study area has six public open spaces, which total 97.77 acres. Of this total, 48.84 acres are active space and 48.93 acres are passive. Additional portions of the Flushing Meadows-Corona Park and the Flushing Bay Promenade fall within the residential study area. These areas include all of the USTA National Tennis Center, as well soccer fields, a portion of the pitch and putt golf course, and a large field for passive and active uses. In addition to these resources, the recently completed Flushing Meadows-Corona Park Natatorium and Ice Rink is located within the portion of the ½-mile boundary within the Park. This recreational resource includes a public Olympic-sized indoor pool and a National Hockey League regulation-sized ice rink. Construction on the pool was completed in February 2008, while the Ice Rink is scheduled to open in the fall of 2008. The pool portion of this facility operates as a standard DPR recreation facility. The pool is open to any member of the general public who purchases a standard annual membership, (\$10 for seniors, \$75 for adults, and free for youths under 18) at all times except during swimming meets and other special events. Since the Ice Rink is not yet open, the Natatorium was included in existing conditions and the Ice Rink was not included.

The residential study area also includes the Bland Playground, the Daniel Carter Beard Mall, and the Flushing Green, each of which are under DPR jurisdiction. The Bland Playground is located on the same block as the New York City Housing Authority (NYCHA)'s James A. Bland Houses. The playground covers 0.55 acres and includes 0.50 acres of active uses, such as basketball and handball courts, swings, and jungle gyms, as well as 0.05 acres of passive uses, such as benches. The Bland Houses have 1.74 acres of open space with 0.44 acres of active space, and 1.30 acres of passive space. Open space associated with the Bland Houses includes basketball courts as well as 1.30 acres of passive amenities. The Daniel Carter Beard Mall is a 0.66-acre passive open space with benches available for sitting. Lippman Arcade spans the block

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between Roosevelt Avenue and 39th Avenue and features bench seating. The Arcade is 0.10 acres.

QUALITATIVE DISCUSSION

Six additional open spaces fall outside of the residential study area and are located just beyond the ½-mile radius around the District (see Figure 6-1). First, the Flushing Branch library is across the street from the residential study area boundary. Residents can sit on benches outside of the library or on the library’s steps. Second, Kissena Corridor West is located just west of Flushing Meadows-Corona Park and the residential study area boundary. Kissena Corridor West is a 100-acre park that links Flushing Meadows-Corona Park to Kissena Park. Kissena Corridor West also includes the Queens Botanical Gardens, as well as active and passive open space resources. Third, Hinton Park lies across 114th Street, just east of the residential study area and includes both passive and active open space amenities, such as two large open play areas, two baseball diamonds, game tables, and benches. Fourth, Louis Armstrong Playground is directly across the street from Hinton Park. Fifth, approximately 1,167 acres of Flushing Meadows-Corona Park are located just beyond the ½-mile boundary. Recreational resources within the portion of Flushing Meadows-Corona Park outside of the ½-mile boundary include tennis courts, soccer fields, sitting areas, and other active and passive resources. While these remaining acres may be outside of the study area boundary, they are entirely contiguous with the portions of the Park within the study area and provide a number of active and passive recreational resources for study area residents. Finally, approximately half of the Flushing Bay Promenade is located outside of the ½-mile boundary; however, the remainder of the Promenade is contiguous with the portion within the study area and would be easily accessible to study area residents.

Given that these resources are located outside of the study area, they are not included in the quantitative analysis. However, it is likely that study area residents take advantage of these parks, particularly the portions of Flushing Meadows-Corona Park and the Flushing Bay Promenade that are located just beyond the ½-mile boundary.

ADEQUACY OF OPEN SPACES

COMMERCIAL STUDY AREA

As described above, the analysis of the commercial study area focuses on passive open spaces that workers may use. The adequacy of the area’s open spaces is determined by comparing the ratio of workers to acres of open space with the City’s guideline of 0.15 acres of passive space per 1,000 workers. Furthermore, the passive open space ratio for both workers and residents in the area is compared with the recommended weighted average ratio. This ratio considers the needs of residents and workers together and is a weighted average of the amount of open space necessary to meet the City guideline of 0.50 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 non-residents.

The commercial study area is currently well served by open space resources and meets the City’s guidelines. The commercial study area includes approximately 6.59 acres of open space, of which

approximately 3.295 acres are passive in nature.¹ The commercial study area includes 2,136 residents and 3,745 workers, for a combined residential and commercial population of 5,881 people.

Based on the City guidelines for determining the open space ratio, the commercial study area has a passive open space ratio of 0.88 acres of passive open space per 1,000 workers, which is considerably higher than the City's guidelines of 0.15 acres of open space (see Table 6-4). The combined passive open space ratio is 0.56, which is higher than the recommended weighted average ratio of 0.28 acres of passive open space per 1,000 residents and workers.

Table 6-4
Existing Conditions: Adequacy of Open Space Resources

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 Study Area									
Workers	3,745			N/A	N/A	0.88	N/A	N/A	0.15
Combined workers and residents	5,881	6.59	3.295	3.295					
				N/A	N/A	0.56	N/A	N/A	0.28*
Residential Study Area									
Residents	6,333			15.44	7.71	7.73	2.50	2.0	0.50
Combined residents and workers	21,053	97.77	48.84	48.93					
				N/A	N/A	2.32	N/A	N/A	0.26*

Notes:

- * Weighted average combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents. Non-residents typically use passive open spaces; therefore, for the commercial study area, only passive open space ratios are calculated. For the residential study area, active, passive, and total park space ratios are calculated.
- ** The residential population figure is an estimate based on the 2000 U.S. Census population data and estimated population growth based on the most current available Real Property Assessment Data (RPAD) from the New York City Department of Finance. The resident population estimate is calculated by multiplying the number of residential units constructed since 2000 by the census tract's housing occupancy rate and average household size. This number is added to the 2000 U.S. Census population figure to estimate 2007 population. The ratio calculations in the future without the proposed Plan and the future with the proposed Plan include estimated 2007 residential population figures.

Sources: U.S. Census Bureau, 2000; Central Transportation Planning Package (CTPP) 2000 — Part 2; New York City Department of Parks and Recreation open space database.

RESIDENTIAL STUDY AREA

The following analysis of the adequacy of open space resources within the residential study area takes into consideration the ratios of active, passive, and total open space resources per 1,000 residents, as well as the ratio of passive open space per 1,000 residents and workers.

As in the commercial study area, the residential study area currently has adequate open space resources. The residential study area contains approximately 97.77 acres of open space, of which approximately 48.84 acres are active open space and 48.93 acres are passive open space. With a residential population of 6,333, the residential study area has a total open space ratio of 15.44 acres per 1,000 residents, considerably above the City's planning guideline of 2.5 acres of

¹ For the purposes of a conservative analysis, the quantitative analysis includes only the publicly accessible open space portions of Flushing Meadows-Corona Park and the Flushing Bay Promenade located within the ¼-mile and ½-mile radii of the District.

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combined active and passive open space per 1,000 residents. The total open space ratio is also higher than the City-wide median of 1.5 acres per 1,000 residents.

The residential study area's passive open space ratio is 7.73 acres per 1,000 residents, which is above the City's planning goals of 0.5 acres per 1,000 residents. The active open space ratio is 7.71 acres per 1,000 residents, above the City's guideline of 2.0 acres per 1,000 residents.

With a total worker and residential population of 21,053, the residential study area has a combined passive open space ratio of 2.32 acres per 1,000 residents and workers, which exceeds the City's recommended weighted average guideline ratio of 0.26 acres per 1,000 residents and workers.

QUALITATIVE DISCUSSION

In addition to the open spaces described above, other open space resources located just beyond the $\frac{1}{2}$ -mile residential study area boundary were not included in the quantitative analysis. These resources are likely utilized by residents and workers within the residential study area. This is particularly true for the 1,255-acre Flushing Meadows-Corona Park, a flagship park that draws people from throughout the City. Although significant portions of Flushing Meadows-Corona Park are within the $\frac{1}{2}$ -mile study area boundary, the majority of the park's acreage is located outside the study area boundary. Therefore, these resources were not included in the quantitative analysis. These resources include three soccer fields and five tennis courts, as well as open fields that could be used for both passive and active use. Even though these resources are located just beyond the $\frac{1}{2}$ -mile boundary, residents would be able to easily utilize them due to their proximity to the study area and direct connection to the portion of the park located within the study area boundaries.

D. THE FUTURE WITHOUT THE PROPOSED PLAN

STUDY AREA POPULATION

Several new residential and commercial developments are currently planned for completion within the study area by 2017. These developments will increase both the residential and commercial populations within the study areas. Without the proposed Plan, the Willets Point Development District will remain an industrial area, and the current uses on the site will remain in place.

COMMERCIAL STUDY AREA

The Shea Stadium redevelopment is the one development project that will be completed within the commercial study area by 2017. The project will replace the current Shea Stadium with Citi Field, a new 44,100-seat stadium that will include 100,000 square feet of office space, and 8,800 parking spaces. The new stadium will continue to employ approximately 200 people full time, and approximately 1,600 employees on game dates. Because Citi Field will employ the same number of workers as the current Shea Stadium, there will be no change to total employment within the commercial study area in the future without the proposed Plan. Therefore, no new workers were added to the quantitative analysis of the commercial study area in the future without the proposed Plan. Additionally, the residential population is expected to remain the same in the future without the proposed Plan, as no new housing developments are planned within this study area.

RESIDENTIAL STUDY AREA

As described in Chapter 2, it is expected that 21 development projects will be completed in the residential study area by 2017 (in addition to the Shea Stadium project within the commercial study area). These projects will add approximately 7,484 new residents and 5,653 new workers to the residential study, bringing the residential study area's residential population to 13,817, its commercial population to 20,373, and its combined residential and worker population to 34,190.

STUDY AREA OPEN SPACES

No change to the amount of open space in the commercial study area is expected to occur by 2017. Therefore, the total amount of public open space in the commercial study area will remain unchanged at 6.59 acres. However, the proposed Flushing Commons development, which falls within the residential study area, has programmed 1.52 acres of passive open space into its design. As described above, the Flushing Meadows-Corona Park Natatorium and Ice Rink is located within the ½-mile boundary. This recreational resource includes a public Olympic-sized indoor pool and a National Hockey League regulation-sized ice rink. The Natatorium is open and is included in the Existing Conditions quantitative analysis. The Ice Rink is scheduled to open in the fall of 2008. The Ice Rink will be open to any member of the general public. Admission will be \$5 on weekdays and \$8 on weekends, and skate rentals will be \$5. Since the facility will be available to the general public, its recreational space is included in the quantitative analysis of the future without the proposed Plan as active open space. With the additional passive and active open space, the total amount of open space in the residential study area will increase to 100.61 acres, 50.16 acres of which will be active open space and 50.45 acres will be passive (see Table 6-5).

**Table 6-5
2017 Future Without the Proposed Plan
Adequacy of Open Space Resources**

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 Study Area									
Workers	3,745			N/A	N/A	0.88	N/A	N/A	0.15
Combined workers and residents	5,881	6.59	3.295	3.295					
				N/A	N/A	0.56	N/A	N/A	0.28*
Residential Study Area									
Residents	13,817			7.28	3.63	3.65	2.50	2.0	0.50
Combined residents and workers	34,190	100.6 1	50.16	50.45					
				N/A	N/A	1.48	N/A	N/A	0.29*
Notes:									
* Weighted average combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents. Non-residents typically use passive open spaces; therefore, for the commercial study area, only passive open space ratios are calculated. For the residential study area, active, passive, and total park space ratios are calculated.									
**The residential population figure is an estimate based on the 2000 U.S. Census population data and estimated population growth based on the most current available Real Property Assessment Data (RPAD) from the New York City Department of Finance. The resident population estimate is calculated by multiplying the number of residential units constructed since 2000 by the census tract's housing occupancy rate and average household size. This number is added to the 2000 U.S. Census population figure to estimate 2007 population. The ratio calculations in the future without the proposed Plan and the future with the proposed Plan include estimated 2007 residential population figures.									
Sources: U.S. Census Bureau, 2000; Central Transportation Planning Package (CTPP) 2000 — Part 2; New York City Department of Parks and Recreation open space database; RPAD.									

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In the fall of 2007, DPR opened the Fowler Recreation Center, located in Flushing Meadows-Corona Park but outside the residential study area boundary. The 20,000-square-foot recreation center includes an indoor track, racquetball and basketball courts, as well as cardiovascular and strength equipment, in addition to afterschool, teen, and senior programmatic activities. Since the recreation center facility is located just outside of the study area, it was not included in the quantitative analysis.

ADEQUACY OF OPEN SPACES

COMMERCIAL STUDY AREA

By 2017, without the proposed Plan, the number of workers (3,745) and the amount of passive open space (3.295 acres) in the commercial study area are expected to remain the same. Thus, the passive open space ratio is expected to remain 0.88 acres per 1,000 workers, substantially above the City's guidelines. In the future without the proposed Plan, the commercial study area's combined residential and commercial population is expected to remain at 5,881. In the future without the proposed Plan the passive space ratio will be 0.56 and will remain above the City's recommended weighted average ratio of 0.28 acres of passive open space per 1,000 residents and workers.

RESIDENTIAL STUDY AREA

Without the proposed Plan, the residential study area's residential population will increase by 7,484 for a total of 13,817 residents by 2017. The addition of the 1.52 acres of passive open space as part of the Flushing Commons development and the 1.3 acres of active open space as part of the Ice Rink will increase the total amount of open space to 100.61 acres, which will result in a total open space ratio of 7.28 acres of open space per 1,000 residents. This ratio will remain above the City's guideline of 2.5 acres per 1,000 residents as well as the City-wide median of 1.5 acres. The active open space ratio is expected to be 3.63 acres per 1,000 residents, which continues to be above the City's 2.0-acre guideline. The passive open space ratio would decrease to 3.65 acres per 1,000 workers, but would remain above the City's 0.5-acre guideline. The ratio for the combined worker and resident population in the residential study area would decrease to 1.48 acres per 1,000 workers and residents, but will remain above the recommended weighted average ratio of 0.29 acres.

E. PROBABLE IMPACTS OF THE PROPOSED PLAN

STUDY AREA POPULATION

COMMERCIAL STUDY AREA

Proposed Plan

As described in Chapter 2, the proposed Plan would replace the existing industrial uses in the District with a new mixed-use community and regional destination. Development associated with the proposed Plan would add approximately 8,851 workers and 14,795 residents to the District. The commercial study area's residential population would total approximately 16,931, and the worker population would total approximately 12,596, for a combined residential and worker population of approximately 29,527.

No Convention Center Scenario

The No Convention Center Scenario would add approximately 15,737 new residents to the commercial study area and approximately 8,821 workers. Therefore, the commercial study area's residential population would total approximately 17,873, and the worker population would total approximately 12,566, for a combined residential and worker population of approximately 30,439.

RESIDENTIAL STUDY AREA

Proposed Plan

The proposed Plan would increase the residential study area's residential and worker population to approximately 28,612 and 29,224, respectively. The combined population would total approximately 57,836.

No Convention Center Scenario

The No Convention Center Scenario would increase the residential study area's residential and worker population to approximately 29,554 and 29,194, respectively. The combined population would total approximately 58,748.

STUDY AREA OPEN SPACES

Each development scenario (proposed Plan or No Convention Center Scenario) would add a minimum of eight acres of privately owned publicly accessible open space to the study area.¹ As required in the proposed zoning Special District, an approximately two-acre park would be developed with primarily active recreational uses. This park would be centrally located within the residential community in the eastern part of the District. While portions of this park may contain play equipment, fields, or courts used exclusively by the students of the proposed school during school hours, these recreational facilities would be publicly accessible during the remainder of the day and are therefore included in the quantitative assessment. The remaining open space within the District would be programmed primarily for passive use. The Special District would encourage high-quality design of these publicly accessible areas by prescribing design standards largely based on those for public plazas set forth in Section 37-70 of the Zoning Resolution (ZR). Enhanced and adapted to the District plan, the Special District standards would govern such elements as tree and groundcover plantings, seating, moveable chairs and tables, bicycle parking, and water fountains. Moreover, the New York City Economic Development Corporation (NYCEDC) would encourage the future developer to incorporate ground level active open space and other recreational resources, such as rooftop and interior programming of recreational amenities, into the project design as part of their formal request for proposals process (RFP). The Special District regulations would also require pedestrian amenity areas or open landscaped areas, and specify minimum dimensions of these public access areas, at various locations along the perimeter of the District. The regulations ensure that public access areas are

¹ In order to maintain programming and design flexibility, the open space planning is currently only conceptual. Details of the open space elements will be dependent on the developers' response to the City's request for proposal (RFP) process. The design, programming, and quality of those future open spaces would be subject to further review once the RFP responses are reviewed and a developer designated.

Willets Point Development Plan

developed in conjunction with the surrounding development by stipulating the dimensions of public access areas that must be provided along with certain developments (i.e., with developments or enlargements at least 100,000 sf in size and on zoning lots at least 200,000 sf). Furthermore, as described below, the City is pursuing the potential for promoting new non-vehicular linkages within and around the project area.

The programming of the two-acre open space is currently conceptual. Given the size of the open space and the size requirements of active open space amenities, it is assumed that this open space would be primarily developed with active recreational uses. Although public access of a portion of this open space may be limited during school hours, it would not significantly diminish the public's use of this open space. School yards and playgrounds meet the *CEQR Technical Manual*'s criteria for public open space since they would be available to the general public when school is not in session, which often coincides with periods when there would be greater public demand and utilization (e.g., after school, weekends, holidays, spring/summer breaks, etc.).

This analysis assumes that approximately 20 percent of the new open space (1.6 acres) would be for active uses and the remaining 80 percent (6.4 acres) would be programmed for passive use.¹ With the proposed Plan, the amount of open space in the commercial and residential study areas would increase to approximately 14.59 and 108.61 acres, respectively. The commercial study area would feature 9.70 acres of passive open space and 4.89 acres of active open space. The residential study area would have 56.85 acres of passive open space and 51.76 acres of active open space.

ADEQUACY OF OPEN SPACES

COMMERCIAL STUDY AREA

Proposed Plan

As mentioned above, the proposed Plan would add 8,851 workers to the commercial study area. Additionally, the total amount of open space would increase to 14.59 acres. The ratio of passive open space per 1,000 workers would be 0.77, which would be above the City's guideline of 0.15 acres (see Table 6-6). Thus, while the passive open space ratio would decline from 0.88 acres per 1,000 workers in the No Build condition, the worker population would continue to be well served by passive open spaces. The passive open space ratio for the combined worker and residential population would be 0.33 acres per 1,000 people, which is slightly lower than the City's recommended weighted average ratio of 0.35 acres per 1,000 residents and workers.

¹ The open space planning is focused on maximizing its utility for residents, workers, and visitors in the District. Acreage dedicated to passive uses such as walkways, seating, and open lawn space would serve a wider spectrum of users and be more enjoyable to the general public when compared to playing fields, such as tennis courts, baseball diamonds, and soccer fields, whose specialized programming would serve a limited number of users. Additionally, the active recreational resources within Flushing Meadows-Corona Park are located just beyond the ½ mile study area boundary. These resources would help to provide District residents, workers, and residents with active recreational opportunities. Furthermore, NYCEDC will encourage the incorporation of active open space and/or other recreational resources as part of the RFP process for the proposed Plan.

Table 6-6
2017 Future With the Proposed Plan
Adequacy of Open Space Resources
Proposed Plan

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 Study Area												
Workers	12,596	14.59	4.89	9.70	N/A	N/A	0.77	N/A	N/A			
Combined workers and residents	29,527				N/A	N/A	0.33	N/A	N/A			
Residential Study Area												
Residents	28,612	<u>108.61</u>	<u>51.76</u>	<u>56.85</u>	3.80	1.81	1.99	2.50	2.0			
Combined residents and workers	57,836				N/A	N/A	0.98	N/A	N/A			
Notes:												
* Weighted average combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents. Non-residents typically use passive open spaces; therefore, for the commercial study area, only passive open space ratios are calculated. For the residential study area, active, passive, and total park space ratios are calculated.												
** The residential population figure is an estimate based on the 2000 U.S. Census population data and estimated population growth based on the most current available Real Property Assessment Data (RPAD) from the New York City Department of Finance. The resident population estimate is calculated by multiplying the number of residential units constructed since 2000 by the census tract's housing occupancy rate and average household size. This number is added to the 2000 U.S. Census population figure to estimate 2007 population. The ratio calculations in the future without the proposed Plan and the future with the proposed Plan include estimated 2007 residential population figures.												
Sources: U.S. Census Bureau, 2000; Central Transportation Planning Package (CTPP) 2000 — Part 2; New York City Department of Parks and Recreation open space database.												

No Convention Center Scenario

The No Convention Center Scenario would add approximately 8,821 workers to the commercial study area. As described earlier, this development scenario would include the addition of a minimum of eight acres of open space. With the additional open space, the total amount of open space would increase to 14.59 acres.

This scenario would have the same ratio of passive open space per 1,000 workers, 0.77, as the proposed Plan. As described above, this ratio is above the recommended guideline of 0.15 acres per 1,000. Thus, the worker population within the commercial study area would be well served by passive open spaces. The passive open space ratio for the combined worker and residential population would be 0.32 acres per 1,000 people, which is slightly lower than the City's recommended weighted average ratio of 0.36 acres per 1,000 residents and workers (see Table 6-7).

RESIDENTIAL STUDY AREA

Proposed Plan

The proposed Plan would increase the residential study area combined population to approximately 57,836. Of this total, 28,612 residents would live in the residential study area and 29,224 would work in the study area. The total amount of publicly accessible open space in the study area would increase to approximately 108.61 acres; 56.85 acres would be dedicated to passive uses, and the remaining 51.76 acres would be for active uses.

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Table 6-7
2017 Future With the Proposed Plan
Adequacy of Open Space Resources
No Convention Center Scenario

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 Study Area									
Workers	12,566			N/A	N/A	0.77	N/A	N/A	0.15
Combined workers and residents	30,439	14.59	4.89	9.70	N/A	N/A	0.32	N/A	N/A
Residential Study Area									
Residents	29,544			3.67	1.75	1.92	2.50	2.0	0.50
Combined residents and workers	58,748	108.61	51.76	56.85	N/A	N/A	0.92	N/A	N/A
Notes:									
* Weighted average combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents. Non-residents typically use passive open spaces; therefore, for the commercial study area, only passive open space ratios are calculated. For the residential study area, active, passive, and total park space ratios are calculated.									
** The residential population figure is an estimate based on the 2000 U.S. Census population data and estimated population growth based on the most current available Real Property Assessment Data (RPAD) from the New York City Department of Finance. The resident population estimate is calculated by multiplying the number of residential units constructed since 2000 by the census tract's housing occupancy rate and average household size. This number is added to the 2000 U.S. Census population figure to estimate 2007 population. The ratio calculations in the future without the proposed Plan and the future with the proposed Plan include estimated 2007 residential population figures.									
Sources: U.S. Census Bureau, 2000; Central Transportation Planning Package (CTPP) 2000 — Part 2; New York City Department of Parks and Recreation open space database.									

In the future with the proposed Plan, only the active open space ratio per 1,000 residents would be below the City's recommended guidelines. The total residential open space ratio would be 3.80 acres per 1,000 residents, which is above the recommended 2.50 total acres per 1,000 residents. Thus, residents would be well served by open spaces within the residential study area. The active open space ratio would be 1.81 acres per 1,000 residents, which is below the recommended ratio of 2.0 acres of active space per 1,000 residents. The passive open space would be 1.99 acres per 1,000, considerably above the City's recommended guideline of 0.50 acres. The combined residential and worker passive open space ratio would be 0.98 acres, which is also above the City's recommended weighted average ratio of 0.32 acres per 1,000 workers and residents.

No Convention Center Scenario

The No Convention Center Scenario would increase the residential study area's resident and worker population to approximately 58,748. Of this total, 29,554 residents would live in the residential study area and 29,194 would work in the study area. The total amount of publicly accessible open space in the study area would increase to approximately 108.61 acres; 56.85 acres would be dedicated to passive uses, and the remaining 51.76 acres would be for active uses.

For the No Convention Center Scenario, only the active open space ratio per 1,000 residents would be below the City's recommended guidelines. The total residential open space ratio would be 3.67 acres per 1,000 residents, which is above the recommended City open space guideline of 2.50 total acres per 1,000 residents. As such, residents would be well served by open spaces within the residential study area. The active open space ratio would be 1.75 acres per 1,000 residents, which is below the recommended ratio of 2.0 acres of active space per 1,000 residents. The passive open space ratio would be 1.92 acres per 1,000, considerably above the City's recommended guideline of 0.50 acres.

The combined residential and worker passive open space ratio would be 0.97 acres, which is also above the City's recommended weighted average ratio of 0.33 acres per 1,000 workers and residents.

F. CONCLUSIONS

QUANTITATIVE DISCUSSION

COMMERCIAL STUDY AREA

Proposed Plan

According to the *CEQR Technical Manual*, a 5 percent decrease in open space ratios is considered a substantial change; however, in areas where the open space ratio is very low, a small decrease in the open space ratio may result in a potential significant adverse impact on open space. The passive open space ratio would decline from 0.88 to 0.77, which is an approximately 13 percent decrease. The combined passive open space ratio per 1,000 residents and workers would decline from 0.56 to 0.33, which is an approximately 41 percent decrease (see Table 6-8). Decreases of this size could indicate the potential for significant adverse open space impacts. The combined passive open space ratio would be slightly below the City recommended guideline of 0.35 acres per 1,000 residents and workers. However, the passive open space ratio for workers would exceed the City's recommended guidelines, indicating that the non-residential study area would have sufficient open space resources to serve the worker population's needs. Furthermore, the quantitative analysis does not include the portions of Flushing Meadows-Corona Park or the Flushing Bay Promenade that are contiguous with the study area but just beyond the boundaries, which would likely be used by residents of the study area. The qualitative analysis describes how these additional resources would alleviate any potential significant adverse open space impacts.

Table 6-8
2017 Future With the Proposed Plan: Open Space Ratios Summary
Proposed Plan

Ratio	City Guideline	Open Space Ratios			Percent Change
		Existing Conditions	Future Without the Proposed Plan	Future With the Proposed Plan	
Commercial Study Area					
Passive/Workers	0.15	0.88	0.88	0.77	-13%
Passive/Total Population	Weighted (0.28)*	0.56	0.56	0.33	-41%
Residential Study Area					
Total/Residents	2.5	15.44	7.28	3.80	-48%
Active/Residents	2.0	7.71	3.63	1.81	-50%
Passive/Residents	0.5	7.73	3.65	1.99	-46%
Passive/Total Population	Weighted (0.26)*	2.32	1.48	0.98	-33%
Notes:	* Weighted average combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents. Non-residents typically use passive open spaces; therefore, for the commercial study area, only passive open space ratios are calculated. For the residential study area, active, passive, and total park space ratios are calculated.				
Sources:	U.S. Census Bureau, 2000; Central Transportation Planning Package (CTPP) 2000 — Part 2; New York City Department of Parks and Recreation open space database.				

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No Convention Center Scenario

Similar to the proposed Plan, the passive open space ratio per 1,000 workers and the combined passive open space ratio per 1,000 workers and residents would each decrease by more than 5 percent. The passive open space ratio per 1,000 workers would decline from 0.88 to 0.77, which is an approximately 13 percent decrease (see Table 6-9). The combined passive open space ration per 1,000 residents and workers would decline from 0.56 to 0.32, which is an approximately 43 percent decrease.

As described above, the passive open space ratio for workers would exceed the City's recommended guidelines, and the combined ratio per 1,000 workers and residents would be slightly below the recommended ratio. Thus, while the percentage decrease in the passive open space ratios could indicate that the No Convention Center Scenario could result in significant adverse impacts, the ratios indicate that the worker population would be well served by passive open space. Furthermore, the quantitative analysis did not include the additional open spaces just beyond the study area's borders, particularly the remaining portions of Flushing Meadows-Corona Park.

Table 6-9
2017 Future With the Proposed Plan: Open Space Ratios Summary
No Convention Center Scenario

Ratio	City Guideline	Open Space Ratios			Percent Change
		Existing Conditions	Future Without the Proposed Plan	Future With the Proposed Plan	
Commercial Study Area					
Passive/Workers	0.15	0.88	0.88	0.77	-12%
Passive/Total Population	Weighted (0.28)*	0.56	0.56	0.32	-43%
Residential Study Area					
Total/Residents	2.5	15.44	7.28	3.67	-50%
Active/Residents	2.0	7.71	3.63	1.75	-52%
Passive/Residents	0.5	7.73	3.65	1.92	-47%
Passive/Total Population	Weighted (0.26)*	2.32	1.48	0.97	-34%
Notes:	* Weighted average combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents. Non-residents typically use passive open spaces; therefore, for the commercial study area, only passive open space ratios are calculated. For the residential study area, active, passive, and total park space ratios are calculated.				
Sources:	U.S. Census Bureau, 2000; Central Transportation Planning Package (CTPP) 2000 — Part 2; New York City Department of Parks and Recreation open space database.				

RESIDENTIAL STUDY AREA

Proposed Plan

In the future with the proposed Plan, only the active open space ratio per 1,000 residents would be below the recommended guidelines. Each of the other ratios would exceed City guidelines. This indicates that the study area residents and workers would be well served by study area open spaces.

The *CEQR Technical Manual* states that “as a planning goal, the City attempts to achieve a ratio of 2.5 acres per 1,000 population for large-scale plans and proposals.” While attaining this goal is often not feasible within many parts of the City, the open space ratios within the residential study area would exceed the City’s planning goal. Within the residential study area, the total open space ratio would be 3.80 acres per 1,000 residents, which exceeds the City’s guidelines and meets that planning goal. Although the ratios are above recommended ratios, the decrease in ratios between the No Build and Build conditions could indicate the potential for significant adverse impacts. The total open space ratio would decline from 7.28 acres to 3.80 acres per 1,000 residents, which is a decrease of approximately 48 percent. The active open space ratio would decrease by approximately 50 percent, from 3.63 acres to 1.81 acres per 1,000 residents. The passive open space ratio would decline from 3.65 acres to 1.99 acres per 1,000 residents, which is a decrease of approximately 46 percent. Finally, the combined passive open space ratio would decrease from 1.48 to .98, a drop of approximately 33 percent. Decreases in the open space ratios of this size indicate that the proposed Plan could result in significant adverse open space impacts, even though only the active open space ratio would be below the City’s recommended guidelines.

No Convention Center Scenario

Similar to the proposed Plan, each of the open space ratios would decline between the No Build and Build conditions under the No Convention Center Scenario. The total open space ratio per 1,000 residents would decline by approximately 50 percent, the active open space ratio per 1,000 residents would decline by approximately 52 percent, the passive open space ratio per 1,000 residents would decline by approximately 47 percent, and the combined passive open space ratio per 1,000 residents and workers would decline by 34 percent. As described earlier, these declines could indicate the potential for a significant adverse open space impact, even though only the active open space ratio for 1,000 residents would be below recommended City guidelines. The total open space ratio would be 3.67 acres per 1,000 residents, which exceeds the City’s guidelines and meets the planning goal described earlier.

QUALITATIVE DISCUSSION

The proposed Plan would introduce a minimum of eight acres of open space that would serve residents, workers, and visitors alike. As demonstrated by open space ratios in the quantitative analysis, the workers and residents within both study areas would continue to be well served by open spaces. Although the declines in open space ratios between the No Build and Build conditions for each development scenario suggest that a significant adverse impact could result, there are a number of important factors not addressed in the quantitative analysis.

First, NYCEDC would encourage the future developer to incorporate ground level active open space and other recreational resources, such as rooftop and interior programming of recreational amenities, into the project design as part of their formal RFP process. While these recreational amenities may be available only to tenants and residents of the site—and thus have not been included in the quantitative analysis—these amenities would help offset the burden on public active and passive resources resulting from the introduction of new users to the District.

Second, the remainder of the most significant open space in Queens—the 1,255-acre Flushing Meadows-Corona Park—is not included in the quantitative analysis. This park is one of the flagship parks in the DPR inventory and draws residents from throughout the City. In particular, several active open space amenities and recreational facilities that are just beyond the $\frac{1}{2}$ -mile boundary were not included in the quantitative analysis. These include three soccer fields and

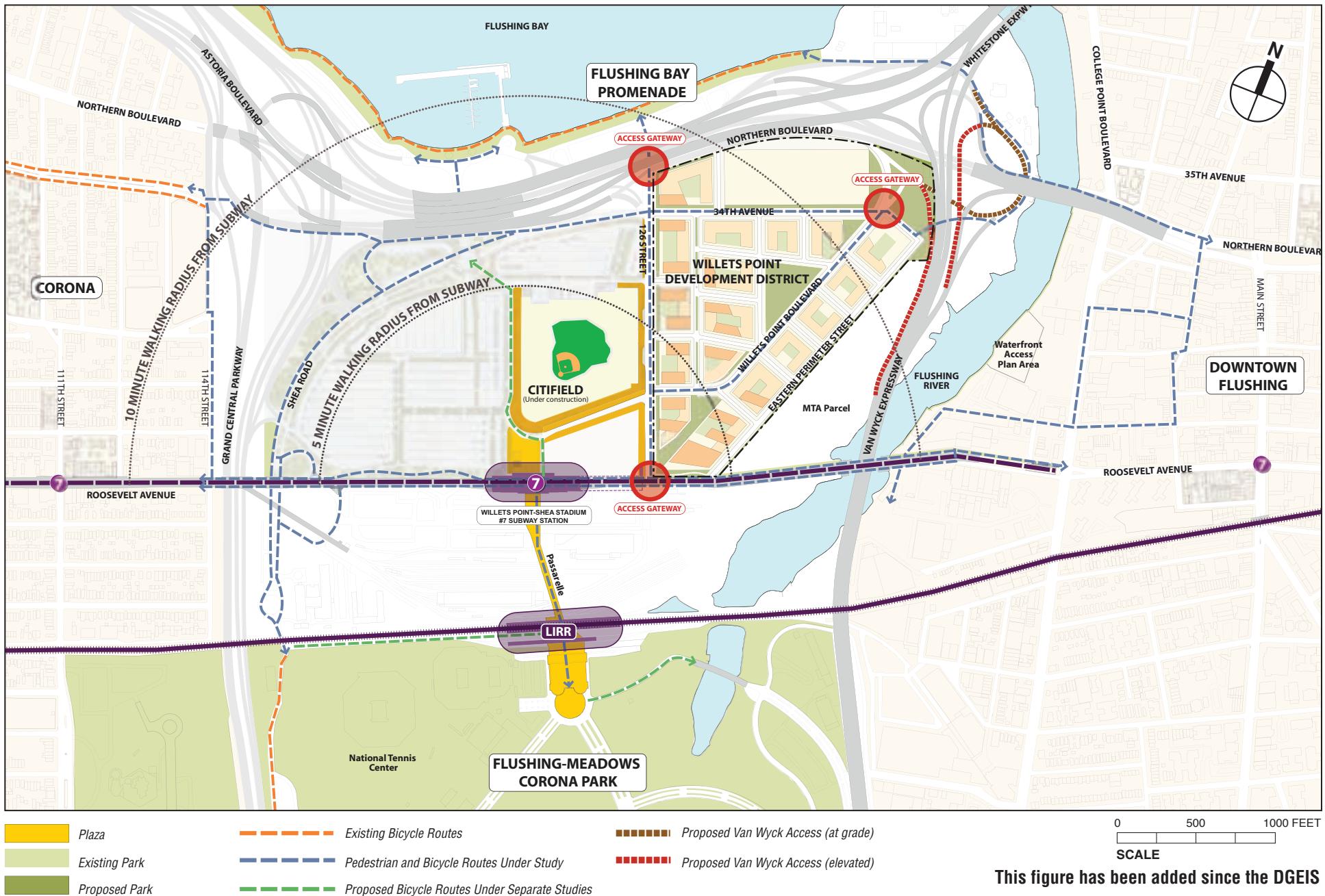
Willets Point Development Plan

five tennis courts, as well as open fields that could be used for both passive and active use. Additionally, DPR is also expected to finish construction on the Fowler Recreation Center, located in Flushing Meadows-Corona Park but outside the residential study area boundary. The 20,000-square-foot recreation center will offer an indoor track, racquetball and basketball courts, as well as cardiovascular and strength equipment, in addition to afterschool, teen, and senior programmatic activities.

Bicycle lanes would be required on connector streets within the redeveloped District. In addition, NYCEDC is currently pursuing opportunities to improve bicycle and pedestrian connections between Willets Point and surrounding destinations, such as Flushing Bay Promenade and Flushing Meadows-Corona Park, as well as Downtown Flushing and Corona. A number of bicycle and pedestrian access improvement measures have been identified throughout the area, and the City is currently seeking funding and approvals to implement these improvements. (An illustration of the proposed improvements is shown in Figure 6-2.) The bicycle lanes in the District would connect to this area-wide bicycle and greenway network, and indoor accessory bicycle parking would be required for all new residential, office, and retail uses developed in the District. Together, these measures will improve connectivity between Willets Point and surrounding areas, and provide new recreational cycling opportunities for area residents and visitors.

Finally, the 100-acre Kissena Corridor West park is located just outside the residential study area to the east. This large destination park would provide additional active and passive open space resources to residents in the District.

Overall, the proposed Plan would create a minimum of eight acres of open space resources and recreational opportunities for both residents and non-residents. In the future with the proposed Plan, residents and workers would have enough open space resources to meet their needs. Finally, the additional open spaces that lie just beyond the study area boundaries, and were therefore conservatively excluded from the quantitative analysis, would offset any potential open space impacts that could result from development in the District. Therefore, the proposed Plan would not result in significant adverse open space impacts. *



WILLETS POINT DEVELOPMENT PLAN

Figure 6-2
Bicycle and Pedestrian Connections