

A. INTRODUCTION

This chapter assesses the potential impacts from the proposed park on transit and pedestrian systems. The proposed Fresh Kills Park would be located in an area served by 14 local bus routes, a number of which provide both local and express service and connections with the Staten Island Railway stop at Eltingville. Based on the travel demand estimates detailed in Chapter 16, “Traffic and Parking,” the proposed park would generate fewer than 200 transit users during any peak period. Therefore, based strictly on the guidelines of the *New York City CEQR Technical Manual*, a detailed transit and pedestrian analysis is not required. However, since the proposed project is a large park that would serve the local community, including pedestrian and bicycle connections, and since it is an objective of the proposed park to expand local opportunities for transit use and alternative modes of travel for reaching the park, including running, walking, biking, and ferries, a more expanded qualitative analysis of transit and pedestrian conditions is provided in this chapter than what otherwise is required under CEQR.

B. METHODOLOGY

As stated above, since the majority of trips to and from the project site are anticipated to be vehicle trips and because the area surrounding the project site is characterized by low pedestrian activity, a quantified assessment of existing pedestrian facilities is not necessary. However, this chapter includes an expanded qualitative transit assessment and a general description of pedestrian facilities in the study area.

The analysis was expanded to recognize that the proposed park is expected to be a major recreational and tourist attraction and that local access for pedestrians, bikers, joggers, and regional access for tourists, for example, is an important element in the park plan. It is also an objective of the park planners to encourage transit and alternative modes of transportation to the site for the purposes of providing more sustainable modes of travel, to reduce local vehicle traffic, to reduce vehicle within the park, and to encourage and facilitate park use that might otherwise be constrained by traffic and parking availability through mass transit. Therefore, the steps in this analysis included:

- Projecting pedestrian, bike, and walk trips based on the projects trip generation rates;
- Reviewing the New York City Department of Parks and Recreation (DPR) and New York City Department of Transportation (NYCDOT) bicycle routes proposals for this area of Staten Island;
- Conducting a field survey of local sidewalk conditions in the area, particularly in the Travis neighborhood and the pedestrian corridors that would provide access to the proposed park;
- Examining the pedestrian conditions along these corridors and the major connections to the proposed park;
- Providing an examination of pedestrian safety for the major intersections around the park;

- Meeting with Metropolitan Transit Authority (MTA)/New York City Transit (NYCT) to review local bus routes and discuss opportunities for expanded transit for the proposed park in the 2016 and 2036 analysis years; and
- Reviewing proposed bus, borough rapid transit and mass transit linkages proposed for Staten Island that could affect future mass transit demand.

C. EXISTING CONDITIONS

The following description of existing transit and pedestrian networks is based on NYCT information and field surveys conducted during July 2007.

TRANSIT

Numerous local and express bus routes and the Staten Island Railway provide transit service to the area. Figure 17-1 shows the local and express bus routes serving the area around Fresh Kills, and Figure 17-2 shows the location of bus stops and transit stops located in the immediate vicinity of the project site. A description of each of the transit routes is provided below.

RAIL SERVICE

The Staten Island Railway extends along the southern section of Staten Island and provides service seven days a week between Tottenville on the west and St. George on the east, where it connects with the Staten Island Ferry, which in turn provides service between Staten Island and lower Manhattan. The closest rail station to the proposed park is located in Eltingville, on Richmond Avenue near Amboy Road, approximately 1.5 miles from the project site. Local bus routes S59, S79, and S89 connect the project site with the Eltingville Station. Rail service to St. George operates on a 30-minute frequency during the weekday, Saturday and Sunday midday periods, with more frequent service during the weekday AM and PM commuter peak periods.

BUS SERVICE

There are 14 local bus routes that provide weekday service to the vicinity of the proposed park. Of these, seven routes operate on Saturdays and Sundays as well as weekdays. As shown in Figures 17-1 and 17-2, one or more of these local routes have stops within a short walk of entrances to the proposed park. Routes S59 and S79 provide service during all times between the proposed park and the Staten Island Railway station at Eltingville. Route S89 provides limited-stop service during the weekday AM and PM periods between the proposed park and the Staten Island Railway station at Eltingville. The area is also well served by express bus routes which provide service to Downtown and Midtown Manhattan. Table 17-1 provides a summary of the NYCT local and express bus routes and their frequencies of operation during the weekday and weekend peak hours. As shown in the table, although express service is provided to the area it is primarily a service that is provided during the weekday (only the X1 provides weekend service).

PEDESTRIANS

Pedestrian traffic in the area is light (field observations, July 2007). Most, but not all, of the streets in the area have sidewalks on one or both sides of the street, and crosswalks at intersections. In terms of traffic control, all the intersections on Richmond Avenue (along the eastern boundary of the project site) are signalized and provide crosswalks. Along the southern boundary of the project site, the intersections of Arthur Kill Road at Annandale Road, Woodrow Road, and Arden Avenue are signalized and provide crosswalks. Figure 17-3 shows the built sidewalk network on streets bordering the park (survey conducted in July 2007). Victory

Boulevard, Wild Avenue, the east side of Richmond Avenue and the south side of Arthur Kill Road have sidewalks on all or most of their rights-of-way. There are no sidewalks bordering the proposed park on the west side of Richmond Avenue between the northern entrance to the Staten Island Mall and Forest Hill Road, and only two small sections of sidewalk on the north side of Arthur Kill Road. In addition, there are no sidewalks on either side of Travis Avenue passing through the William T. Davis Wildlife Refuge, immediately north of the park. Sidewalks bordering the park are in various states of physical condition, generally narrow, and sometimes overgrown with vegetation.

**Table 17-1
Existing NYCT Local Bus Routes Serving the Study Area**

Bus Route	Start Point	End Point	Routing	Freq. of Bus Service (Headway in Minutes)				
				AM	Midday	PM	Midday Saturday	Midday Sunday
S44	New Springville	St. George Ferry Terminal	via Richmond Avenue	9	15	15	15	15
S54	West New Brighton	Eltingville	via Manor Road/Arthur Kill Road	13	30	30	30	30
S55	Huguenot	Staten Island Mall	via Annandale/Richmond Avenue	15	40	40	-	-
S56	Huguenot	Staten Island Mall	via Richmond Avenue/Arthur Kill & Forest Roads	12	40	40	-	-
S59	Hylan Boulevard	Richmond Terrace/ Park Avenue	via Richmond Avenue	15	20	15	20	15
S61	New Springville	St. George Ferry Terminal	via Victory Boulevard/Bradley Avenue	15	20	18	15	15
S62 Lcl	Victory Blvd./Wild Avenue	St. George Ferry Terminal	via Victory Boulevard	10	15	15	20	30
S74 Lcl	Tottenville	St. George Ferry Terminal	via Arthur Kill/Richmond Roads	16	20	15	15	20
S79	Bay Ridge, Brooklyn	Staten Island Mall	via Hylan Boulevard/ Richmond Avenue	10	13	10	12	12
S84 Ltd	St. George Ferry Terminal	Tottenville	via Richmond/Arthur Kill Roads	-	-	20	-	-
S89 Ltd	Hylan Boulevard/ Richmond Avenue	Bayonne, NJ	via Richmond Avenue	30	-	15	-	-
S91 Ltd	New Springville	St. George Ferry Terminal	via Victory Boulevard/Travis Avenue	10	-	15	-	-
S92 Ltd	Travis	St. George Ferry Terminal	via Victory Boulevard	15	-	15	-	-
S94 Ltd	New Springville	St. George Ferry Terminal	via Richmond Avenue	15	-	15	-	-
X1	Eltingville	Manhattan	via Hylan Boulevard/Richmond Avenue	6	17	6	20	25
X4	Eltingville	Manhattan	via Richmond Avenue/Victory Boulevard	13	-	13	-	-
X5	Eltingville	Manhattan	via Richmond Avenue/Victory Boulevard	10	-	8	-	-
X6	Eltingville	Manhattan	via Richmond Avenue/Victory Boulevard	9	-	15	-	-
X7	Eltingville	Manhattan	via Giffords Lane/Nelson Avenue/ Hylan Boulevard	15	-	14	-	-
X8	Eltingville	Manhattan	via Giffords Lane/Nelson Avenue/ Hylan Boulevard	8	-	12	-	-
X11	Port Richmond	Manhattan	via Victory Boulevard/Gannon Avenue	9	-	11	-	-
X15	Eltingville	Lower Manhattan	via Richmond Road/Arthur Kill Road	10	-	10	-	-
X17	Huguenot or Annadale	Manhattan	via Richmond/Huguenot/Arden Avenues	8	-	8	-	-
X19	Huguenot or Annadale	Manhattan	via Huguenot/Arden Avenues	15	-	11	-	-
X22	Tottenville	Midtown Manhattan	via Bloomingdale/Amboy Roads	10	-	11	-	-
X23	Huguenot Avenue/ Drumgoole Road	Midtown Manhattan	via Seguire Ave/Foster Road/ Woodrow Road	11	-	15	-	-
X24	Hylan Boulevard/ Tysens Lane	Midtown Manhattan	via Huguenot/Arden Avenues	10	-	15	-	-
X31	Eltingville Transit Center	Midtown Manhattan	via Travis Avenue	9	-	12	-	-

Source: New York City Transit, *Staten Island Bus Map* (2007).

Figures 17-4, 17-5a, and 17-5b provide photographs of existing pedestrian corridors around the project site—including sidewalks, crosswalks and corners—at major intersections bordering the project site on Richmond Avenue, Arthur Kill Road and Victory Boulevard/Wild Avenue.

BIKEWAYS

In the vicinity of the project site, a proposed DPR/NYCDOT Bikeway runs along Forest Hill Road (the northwestern boundary of Latourette Park) as shown in Figure 17-6. Within the study area, the bikeway runs along the entire segment of Forest Hill Road between Richmond Avenue and Travis Boulevard.

However, these bikeways are largely planned and do not currently exist (see Figure 17-6). Proposed improvements to provide bikeway connections is provided below, under “The Future Without the Proposed Project.”

D. THE FUTURE WITHOUT THE PROPOSED PROJECT: 2016 AND 2036

OVERVIEW

In the future without the proposed project, transit demand in the area is expected to increase due to background growth. The background growth used in forecasting the 2016 and 2036 pedestrian and transit conditions were developed in consultation with the NYCT. Based on NYCT’s recommendation a background growth rate of 1.5 percent per year—as identified in the *CEQR Technical Manual* for the borough of Staten Island—was used in the qualitative assessment of future 2016 and 2036 pedestrian and transit conditions in the study area.

Various development projects planned for the study area by 2016 could also result in increased pedestrian and transit activities in the broader study area as well as improved sidewalk conditions around project sites. Because the 2017 to 2036 time frame is one to three decades in the future, there are no known development projects in the study area for this time period. Therefore, the pedestrian and transit levels beyond 2016 were assumed to increase due only to the background growth and no individual development projects were assumed in the qualitative assessment of pedestrian and transit conditions in the 2017 to 2036 period study area. There would also be the park access and improvements provided as part of the Owl Hollow project in the 2016 No Build condition within South Park.

In addition, there are a number of street improvement studies and projects proposed for the area, including those proposed by both the New York State Department of Transportation (NYSDOT) and NYCDOT, such as improvements to the West Shore Expressway and Korean War Veterans Memorial Parkway, and improvements to Arthur Kill Road, for example. The West Shore Expressway and Korean War Veterans Memorial Parkway projects are not expected to affect the transit and pedestrian conditions in the study area. However, the improvements to Arthur Kill Road—which could include the construction of new sidewalks as well as crosswalks at major intersections and the project site’s southerly boundary—are expected to improve pedestrian circulation and safety in the general study area.

NO BUILD TRANSIT CONDITIONS: 2016 AND 2036

POTENTIAL FUTURE TRANSIT IMPROVEMENT PROJECTS

In addition to the roadway improvement projects discussed above, there are a number of transit related projects under consideration for Staten Island, including the following:

West Shore Light Rail. In 2004, the Staten Island Economic Development Corporation completed a study to examine the feasibility of constructing a West Shore Light Rail system that

would begin at the south shore of Staten Island, and extend north along the West Shore Expressway corridor, utilizing the existing rail right-of-way in Staten Island's northwestern corner, and, crossing the Bayonne Bridge to link with the Hudson-Bergen Light Rail line in Bayonne, New Jersey. The study determined that by the year 2020, the light rail could expect to transport approximately 31,000 riders per day. The second phase of this study includes an examination of the proposed light rail alignment, potential light rail vehicles, ridership, capital and operating costs, and engineering issues that would need to be addressed to implement the project. The project is currently in its second study phase.

North Shore Light Rail. This approximately 5-mile-long light rail route would connect Arlington and St. George Ferry Terminal potentially cutting commuter along the corridor time in half. It is assumed that construction could be completed within 8-10 years depending on federal funding. A feasibility study for this project is currently awaiting funding approval.

Extension of S74 Bus Route. A NYCT study is currently underway to study local bus routes to determine if the S74 Bus Route could be extended to include a loop around Charleston's Bricktown Shopping Center. This would provide the shoppers an opportunity to access the big-box retail stores via mass transit.

Route and Schedule Improvements. Route and schedule improvements for Staten Island Express Bus Network to meet the needs of Staten Island's residents, employees and visitors within current and projected NYCT finances.

Although the planning and design for these projects is currently underway, the final funding, and the expected time of completion has not been determined by NYCT and other responsible agencies. Therefore, these transit improvement projects are presented above as only potential future projects.

NYCT Staten Island Bus Service Study. NYCT is about to undertake a re-evaluation of its bus and transit services on Staten Island. This analysis would update a study undertaken some years ago and is expected to yield recommendations for expanding bus service on Staten Island.

NO BUILD TRANSIT DEMANDS: 2016 AND 2036

In the future without the proposed project, transit servicing the area is conservatively expected to remain the same at least through 2016. Transit demand is expected to increase due to background growth and trips attributable to other projects in the area. The *CEQR Technical Manual* recommends a background growth rate of 1.5 percent per year for Staten Island. Accounting for the *CEQR* recommended growth would result in overall of transit demand in the study area by 13.5 and 43.5 percent by 2016 and 2036, respectively. It is anticipated that with the increased transit demand, NYCT would adjust the rail and bus service to accommodate the increased future transit ridership in the study area.

It is also recognized that there are a number of studies and projects for Staten Island that could expand potential light rail and bus service to Fresh Kills (e.g., the North Shore Light Rail Project, see the discussion above). However, development of any new rail systems, transit infrastructure, or changes in bus service are not programmed at this time and major improvements such as these are not assumed to come on-line through the 2017 to 2036 analysis period.

NO BUILD PEDESTRIAN CONDITIONS: 2016 AND 2036

Like transit conditions, the pedestrian levels are assumed to grow by an annual background growth of 1.5 percent. This would result in an overall growth of 13.5 and 43.5 percent in the pedestrian levels by the years 2016 and 2036, respectively. However, based on the current land use characteristics in the vicinity of the project site, and field observations of current usage, minimal increases in pedestrian levels are anticipated on the sidewalks, corners and crosswalks along Richmond Avenue and Arthur Kill Road in the future conditions.

It is, however, expected that NYCDOT projects could improve sidewalk conditions in the area in the future without the proposed project. Of greatest relevance to the proposed project would be any improvements or the installation of sidewalks along the Arthur Kill Road. There is also the proposed New Springville Greenway project described below.

NO BUILD BICYCLE CONDITIONS: 2016 AND 2036

As described above, the City has a bicycle “Greenway” plan for the area. Implementation of the plan, however, is long-term and would require various street improvements and designs to accommodate bikers. Funding is in place for one segment of the bikeway, referred to as the New Springville Greenway. The proposed improvement is shown on Figure 17-6. As shown in that figure, the proposed New Springville Greenway would connect William T. Davis Wildlife Refuge in the north with LaTourette Park in the south. The proposed Greenway would run along the west side of Richmond Avenue, along the eastern edge of the proposed park. It is therefore assumed that certain segments of the City’s bikeway plan for the area would be implemented through the 2016 and 2036 analysis years.

E. THE FUTURE WITH THE PROPOSED PROJECT: 2016 AND 2036

TRIP GENERATION: 2016 AND 2036

The trip generation characteristics used to estimate the pedestrian and transit activity generated from the proposed park project are discussed in detail in Chapter 16, “Traffic and Parking,” and Appendix D “Transportation Planning Factors Memorandum,” and summarized below.

Since the proposed park is located on Staten Island, and currently, is not directly served by transit (e.g., subway or bus service), an auto share (modal split) of approximately 90 percent was assumed for trip generation. The only exception to this assumption is the banquet facility which would hold formal events, and therefore, a 100 percent auto share was assumed for its trip generation calculations. Therefore, a 5 percent transit share was taken into account for the future expanded service. In addition, the proposed park is anticipated to generate trips by non-motorized modes of transportation, such as the bicycle and walk trips especially by the park users residing in the immediate vicinity. It is expected that the non-motorized trips would maximize during the summer months coinciding with the high park usage during that time of the year. A 3 percent walk share and a 2 percent bicycle share were assumed for the trip generation estimates. It is expected that in the future with the proposed park, NYCT would either create new bus routes to accommodate the park generated transit demand (especially during the summer months) or would amend the existing bus routes to include new stops within the park boundaries. The availability of bus transit could potentially reduce the number of project-generated auto trips by shifting the patrons to mass transit.

It should be noted that the pedestrian and bike access are of central importance to the park, which would provide over 20 miles of hiking and biking trails (see Figure 17-7). An extensive, diverse public path system would provide bike paths, paved and unpaved running/walking paths, equestrian trails, and mountain-biking trails, appealing to a variety of park users in the community. However, the trip generation estimates for the proposed project were developed accounting for conditions where the vast majority of transportation trips on Staten Island are vehicular trips. As discussed in detail in Chapter 16 “Traffic and Parking,” this resulted in a conservative analysis of vehicle impacts—from a *CEQR* standpoint—in the future 2016 and 2036 conditions by maximizing the peak vehicle trips generated by the proposed project.

The *CEQR Technical Manual* states that a quantified analysis of potential impacts on transit service and pedestrian conditions is warranted if a proposed action or project would generate more than 200 new transit and/or walk trips during the peak hours. As presented in Tables 17-2 and 17-3, the levels of transit and pedestrian activities generated by the proposed Fresh Kills Park in the future 2016 and 2036 analysis years would be below the *CEQR* recommended threshold. Therefore, a quantified assessment of transit and pedestrian conditions is not warranted for the proposed project. However, as described below, an expanded qualitative assessment was undertaken to the 2016 and 2036 analysis years.

2016

PROPOSED PROGRAM

In the year 2016, the first phases of the proposed park and the circulation systems would be developed. The park elements to be completed by 2016 would provide a mix of passive and active recreational facilities in the north and south parks as well as the park roads and landscapes enhancement. As described in greater detail in Chapter 1, “Project Description,” the specific components of the park expected to be complete by 2016 include the North and South neighborhood parks, multi-use paths, wetland and North and South mound landscape enhancement, loop trails and overlooks.

In addition, the first segment of the park road connection with Richmond Avenue—the Forest Hill Road connection—would be completed by 2016. This would connect the park roads with Richmond Avenue at Forest Hill Road. The modified intersection would become a principal gateway into the park, and would form a direct link between the West Shore Expressway and Richmond Avenue. In terms of pedestrian infrastructure, the reconfigured intersection would provide a new sidewalk on the western side of Richmond Avenue (currently, the sidewalk only exists on the eastern side of Richmond Avenue). The connection would improve the pedestrian crossing by restriping the pavement with high visibility crosswalks to better accommodate the increased pedestrian levels. The proposed Forest Hill Road connection would also make the park available to bus access that could be extended into the site from Richmond Avenue.

With respect to pedestrian and bicycle entrances to the park, by 2016 these are proposed at the following locations:

- Wild Avenue (in the Travis neighborhood)
- Schmul Park/Melvin Avenue/Pearson Street (in the Travis neighborhood);
- Four locations along Arthur Kill Road—three in the vicinity of the Arden Neighborhood Park and one at the Muldoon Avenue entrance to the South Park Recreational Center; and
- Forest Hill Road at Richmond Avenue.

Fresh Kills Park GEIS

In addition, the South Park would have the additional connection provided by the Owl Hollow Park project in the 2016 No Build condition.

The proposed pedestrian and bikeway access point would allow recreational users to access approximately 33 miles of paths of various kinds, more than 20 miles proposed in the park would be specifically designed for bicyclists, mountain bikers, horseback riders, pedestrians or hikers. For example, 12 miles of mountain biking trails are proposed in South Park.

The park would also have multi-use paths that are designed to accommodate a mix of non-motorized activities such as walking, running, cycling, and horseback riding. These paths would be 20 feet wide and would form loops around the base of the closed landfill sections. In total, multi-use recreational paths in the park would extend for approximately 13 miles. The paths would have signage, seating, picnic areas and lighting along their length and would be the primary linear recreation paths in the park. They would also be accessible to emergency and maintenance vehicles.

Internal circulation around Confluence would also include a bikeway/walkway around the Confluence, next to but separated from the proposed park roads. To complete this loop, two pedestrian/bicycle bridges are proposed as part of the project. The principal objectives of these bridges are to:

- Provide pedestrian and bicycle access within the Confluence;
- Afford views of the park and its natural and constructed features, enhancing the experience for both pedestrians and cyclists;
- Motivate pedestrians and cyclists to use the park by helping them to feel that they are valued users of the park; and
- Enhance the beauty of the park by their form and scale.
- Water access would be accommodated from the paths and trails via docks and launches along the creeks.

Major roadways are always an intimidating obstacle for bicycles and pedestrians and can be a significant impediment to pedestrian and bicycle travel. Since the goal of the project is to promote bicycle and pedestrian movements, the project proposes multiple strategies to ensure proper separation of vehicular and pedestrian/cyclist activities to encourage the latter mode of travel.

TRANSIT AND PEDESTRIAN TRIPS

As presented in Table 17-2, based on the trip generation assumptions for the proposed park, the proposed 2016 park elements are expected to generate a total of 9 new inbound and 8 new outbound transit trips in the AM peak hour, 23 new inbound and 24 new outbound transit trips in the midday, 17 new inbound and 20 new outbound transit trips in the PM peak hour, and 24 new inbound and 24 new outbound transit trips in the Saturday midday and PM peak hours, respectively. In terms of bicycle trips, the proposed park elements are expected to generate a total of 3 new inbound and 3 new outbound bicycle trips in the AM peak hour, 8 new inbound and 9 new outbound bicycle trips in the midday, 7 new inbound and 8 new outbound bicycle trips in the PM peak hour, and 10 new inbound and 10 new outbound bicycle trips in the Saturday midday and PM peak hours, respectively. In addition to the transit and bicycle trips, the proposed park elements are expected to generate approximately 5 new inbound and 4 new outbound walk trips in the AM peak hour, 12 new inbound and 14 new outbound walk trips in

**Table 17-2
Total Project-Generated Person Trips - 2016**

Component	Size	Mode	Weekday									Saturday							
			Weekday Total	AM Peak Hour			Midday Peak Hour			PM Peak Hour			Saturday Total	Midday Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total	In	Out	Total		In	Out	Total	In	Out	Total
Active Recreation-Constructed Surface		Auto		5	5	10	5	5	10	10	10	20		8	8	16	8	8	16
		Transit		0	0	0	0	0	0	1	1	2		0	0	0	0	0	0
		Bicycle		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
		Walk		0	0	0	0	0	0	0	0	0		1	1	2	1	1	2
Tennis Center	12 Acres	TOTAL	411	5	5	10	5	5	10	11	11	22	343	9	9	18	9	9	18
Active Recreation-Indoor		Auto		20	28	48	45	62	107	31	29	60		32	43	75	32	43	75
		Transit		1	2	3	3	3	6	2	2	4		2	2	4	2	2	4
		Bicycle		0	1	1	1	1	2	1	1	2		1	1	2	1	1	2
		Walk		1	0	1	1	3	4	0	0	0		0	2	2	0	2	2
Indoor Gym	29500 Sq Ft.	TOTAL	1,319	22	31	53	50	69	119	34	32	66	831	35	48	83	35	48	83
Commercial/Restaurant		Auto		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
		Transit		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
		Bicycle		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
		Walk		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Café/Restaurants	0 Sq Ft.	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial/Retail		Auto		10	9	19	197	213	410	87	95	182		113	105	218	113	105	218
		Transit		1	1	2	11	12	23	5	5	10		6	6	12	6	6	12
		Bicycle		0	0	0	4	5	9	2	2	4		3	2	5	3	2	5
		Walk		0	0	0	7	7	14	3	4	7		4	4	8	4	4	8
Market Roof	13750 Sq Ft.	TOTAL	2,114	11	10	21	219	237	456	97	106	203	2,452	126	117	243	126	117	243
Cultural/Educational		Auto		4	0	4	2	3	5	3	4	7		2	3	5	2	3	5
		Transit		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
		Bicycle		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
		Walk		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
	1800 Sq Ft.	TOTAL	48	4	0	4	2	3	5	3	4	7	48	2	3	5	2	3	5
Regional Park		Auto		56	42	98	67	67	134	75	95	170		122	131	253	122	131	253
		Transit		3	2	5	4	4	8	4	5	9		7	7	14	7	7	14
		Bicycle		1	1	2	1	1	2	2	2	4		3	3	6	3	3	6
		Walk		2	2	4	2	2	4	2	4	6		3	5	8	3	5	8
	75.5 Acres	TOTAL	3,322	62	47	109	74	74	148	83	106	189	4,681	135	146	281	135	146	281
City Destination Park		Auto		71	54	125	86	86	172	95	122	217		156	168	324	156	168	324
		Transit		4	3	7	5	5	10	5	7	12		9	9	18	9	9	18
		Bicycle		2	1	3	2	2	4	2	3	5		3	4	7	3	4	7
		Walk		2	2	4	2	2	4	4	3	7		5	6	11	5	6	11
	30.56 Acres	TOTAL	4,248	79	60	139	95	95	190	106	135	241	5,990	173	187	360	173	187	360
TOTAL		Auto		166	138	304	402	436	838	301	355	656		433	458	891	433	458	891
		Transit		9	8	17	23	24	47	17	20	37		24	24	48	24	24	48
		Bicycle		3	3	6	8	9	17	7	8	15		10	10	20	10	10	20
		Walk		5	4	9	12	14	26	9	11	20		13	18	31	13	18	31
		TOTAL	11,461	183	153	336	445	483	928	334	394	728	14,345	480	510	990	480	510	990

the midday, 9 new inbound and 11 new outbound walk trips in the PM peak hour, and 13 new inbound and 18 new outbound walk trips in the Saturday midday and PM peak hours, respectively.

It is recognized that the proposed project would be expected to generate additional bicycle and pedestrian trips outside of the peak hours and it is also recognized that the modal split for the allocation of trips has been conservative in its approach to projecting vehicular trips. However, by 2016, over the course of an average weekday day, about 570 transit trips, 340 walk trips, and 230 bike trips would be expected. Over the course of an average weekend (Saturday), these trips would increase to about 720 transit trips, 430 walk trips, and 290 bike trips. Expanded local transit service and improved bikeway/sidewalk conditions by 2016 could, over time, shift some park vehicle trips toward these modes as well as potentially increase the total park trips as other modal choices are made available within the borough and to residents of the City as a whole through alternative transportation modes (see also the discussion below). In addition, it is expected that the proposed project would generate trips associated with school outings and functions that would arrive by City school buses and perhaps private bus services as well.

NYCT BUS SERVICE

As discussed above, the proposed park includes park roads, improvements to the northbound and southbound service roads of the West Shore Expressway, and new ramp connections to the West Shore Expressway, that, in addition to providing park access, would provide a direct connection between Richmond Avenue on the east and the West Shore Expressway (northbound and southbound lanes) on the west. Since there is currently no such direct connection, it is expected that with the new park roads, vehicles traveling north- and southbound along Richmond Avenue would use these roadways to access the West Shore Expressway, and vice-versa. The first park road connection with Richmond Avenue—the Forest Hill Road connection is proposed to be completed by 2016. This connection would link the park roadway system with Richmond Avenue at Forest Hill Road. The modified intersection would become a principal gateway into the park.

To ensure that bus service options are available to future park users, DPR would coordinate with MTA/NYCT to explore future bus route and service modifications that could enhance transit access to the park. It should be noted that in order to extend bus service into the park, the proposed park roads would need to satisfy the design requirements of NYCT for bus operations. This could be accomplished by providing at least a 24 foot right-of-way to allow the buses traveling in opposite directions to safely pass one another. In addition, bus-stops and bus turnarounds could be provided at strategic locations along the park roads to accommodate the service requirements of NYCT. Park roads could then also provide access for New York City school buses.

PEDESTRIANS

As shown in Figure 17-7, a number of pedestrian access points are proposed by 2016. Two are proposed in North Park, one at Wild Avenue and the other at Schmul Park. Given the volume of park use expected in these areas, existing sidewalk and pedestrian corridors could be used to accommodate future local walk-in trips at these locations. Once in the park, there would be the ability to use extensive footpaths and the multi-recreational path that are proposed as part of North and South Parks.

Fresh Kills Park GEIS

In addition, the proposed park would provide pedestrian access points along Arthur Kill Road. Currently, this street corridor is not designed for pedestrian access, particularly on the Fresh Kills Park side of the street (see Figure 17-3). However, in the future without the proposed park, NYCDOT has a major capital improvement project proposed for Arthur Kill Road that would provide the opportunity for enhanced pedestrian access to the site through South Park, particularly at the entrance to the South Park Recreational Center at Muldoon Avenue and the entrance at the Arden Heights neighborhood park. In order to optimize pedestrian access along this corridor, DPR would work with NYCDOT to optimize physical and design conditions along Arthur Kill Road that would ultimately enhance pedestrian access to the park and connections with the local Arden Heights neighborhood.

In addition, the proposed park would design for a new at-grade crossing in association with the proposed improvements at Forest Hill Road and Richmond Avenue as part of the Forest Hill Road connection improvement project.

BIKEWAYS

As described above, under the future without the proposed project, DPR and NYCDOT have a bikeway plan for the area. While the bikeway plan skirts Fresh Kills Park, potential opportunities exist for connections via North Park through the Travis neighborhood and South Park along Arthur Kill Road and also along Richmond Avenue in conjunction with the New Springville Greenway Project. Again, as with pedestrians, DPR and NYCDOT would coordinate to develop opportunities within these areas that would support a local bike mode of travel to the park entrances within North Park and South Park and at Forest Hill Road.

2036

PROPOSED PROGRAM

By 2036, in addition to the completion of East and West Parks and the Confluence (specifically, the Point), both the vehicular and non-vehicular circulation program would be expanded. This would also include completion of the Richmond Hill Road Connection at Richmond Avenue and the Signature Bridge, as well as a proposed ferry landing to be located in the Point, west of the West Shore Expressway.

In addition, to improve connectivity between the South Park and West Park, it is proposed to provide a grade-separated pedestrian/bicycle crossing over the West Shore Expressway at Muldoon Avenue (referred to as the Muldoon Avenue Pedestrian Bridge). The crossing over the West Shore Expressway would connect the recreational center in South Park with West Park at a location at about Muldoon Avenue. In addition, given the road width and heavy traffic volumes along Richmond Avenue, it is proposed to provide a grade-separated pedestrian and bicycle crossing over Richmond Avenue at Forest Hill Road (referred to as the Forest Hill Road Pedestrian Bridge).

In addition, the reconfigured intersection of Richmond Hill Road at Richmond Avenue would provide a new sidewalk along the northwestern periphery of the project site. The intersection would also be designed to improve the pedestrian crossing by restriping the pavement with high visibility crosswalks to better accommodate the increased pedestrian levels.

With respect to pedestrian and bicycle entrances to the park, by 2036 the following are proposed (see also Figure 17-7):

- Three entrances along Richmond Avenue including a grade separated crossing at Forest Hill Road; and
- A grade separated crossing over the West Shore Expressway connecting South Park and West Park.

TRANSIT AND PEDESTRIAN TRIPS

By 2036, the entire Fresh Kills Park would be completed. As described in greater detail in Chapter 1, “Project Description,” proposed in the long term are recreational fields; landscaped areas and restored ecological landscapes; water access for motorized and non-motorized craft; cultural, entertainment and commercial facilities (e.g., amphitheater, restaurants, event and banquet space); and the supporting park operations and maintenance facilities. In addition, the park roads that would connect the park with Richmond Avenue and the West Short Expressway as well as the necessary service roads and parking facilities would also be completed by the year 2036.

As presented in Table 17-3, in the year 2036, the proposed park is expected to generate a total of 25 new inbound and 16 new outbound transit trips in the AM peak hour, 81 new inbound and 83 new outbound transit trips in the midday, 54 new inbound and 59 new outbound transit trips in the PM peak hour, and 86 new inbound and 74 new outbound transit trips in the Saturday midday and PM peak hours, respectively. In terms of bicycle trips, the proposed park elements are expected to generate a total of 11 new inbound and 6 new outbound bicycle trips in the AM peak hour, 33 new inbound and 32 new outbound bicycle trips in the midday, 21 new inbound and 23 new outbound bicycle trips in the PM peak hour, and 36 new inbound and 30 new outbound bicycle trips in the Saturday midday and PM peak hours, respectively. In addition to the transit and bicycle trips, the proposed park elements are expected to generate approximately 14 new inbound and 8 new outbound walk trips in the AM peak hour, 48 new inbound and 50 new outbound walk trips in the midday, 28 new inbound and 32 new outbound walk trips in the PM peak hour, and 51 new inbound and 47 new outbound walk trips in the Saturday midday and PM peak hours, respectively. Based on the *CEQR* criteria discussed above, this level of pedestrian and transit activity would not require quantified analyses.

It is recognized that the proposed project would be expected to generate additional bicycle and pedestrian trips outside of the peak hours and it is also recognized the modal split for the allocation of trip has been conservative with respect to vehicular trips but, by 2036, over the course of an average weekday day, about 1,530 transit trips, 920 walk trips, and 610 bike trips would be expected. Over the course of an average Saturday, these trips would increase to about 1,930 transit trips, 1,160 walk trips, and 770 bike trips. However, as stated above, NYCT in coordination with DPR could expand transit service into the park and connections to the park by 2036. This expansion could also shift some park vehicle trips toward these modes as well as potentially increase the total park trips as other modal choices are made available within the borough and to residents of the City as a whole through alternative modes (see the discussion below). As stated above, it is expected that by 2036, with the significant environmental, educational, and cultural facilities at the proposed park, there would be a substantial number of trips that would arrive by City school buses as well as private bus services.

NYCT BUS SERVICE

By the year 2036, the second park road connection with Richmond Avenue would be completed. This connection, the Richmond Hill Road connection, would link the park roads with Richmond

Avenue at Richmond Hill Road and would become the northerly gateway into the park. Although not proposed at this time, in 2036 with the full build-out of Fresh Kills Park, NYCT could consider new bus routes to accommodate the park-generated transit demand (especially on the weekend summer months) or could amend the existing bus routes to include new stops within the park boundaries or at the park perimeter (e.g., along Arthur Kill Road). This could also potentially include service from other boroughs to access the site via the regional highways (i.e., the West Shore Expressway) as well as augmented local service that is provided along Richmond Avenue and could be extended into the park. Additional bus stops could also be provided along Arthur Kill Road to serve South Park. These are potential long term considerations that DPR would continue to explore with NYCT as a means of expanding transit access to the site and reducing vehicular travel.

It should be noted that in order to extend bus service into the park, the proposed park roads would need to satisfy the design requirements of NYCT for bus operations. This could be accomplished by providing at least 24 foot right-of-way to allow the buses traveling in opposite directions to safely pass one another. In addition, bus-stops and turn-arounds (with a minimum 45-foot radius) could be provided at strategic locations along the park roads to accommodate the service requirements of NYCT. As stated above, park roads could then also provide access for New York City school buses.

PEDESTRIANS

Pedestrian access to the park would be expanded by 2036, particularly along Richmond Avenue where new pedestrian entrances are proposed at Yukon Avenue and Richmond Hill Road, with a grade-separated crossing proposed at Forest Hill Road. The grade-separate overpass would allow pedestrians (and cyclists) to enter the park via an overpass structure to reach the proposed footpaths and the multi-use paths without any pedestrian/vehicle conflicts at this intersection. At the new intersection of Richmond Avenue and Richmond Hill Road, future project designs would also accommodate at-grade pedestrian and cyclist crossings at this location. Likewise, it is expected that similar crossing improvements at Yukon Avenue would be appropriate given the high traffic volumes along the Richmond Avenue corridor.

In addition to the above, the grade-separated crossing between South Park and West Park near Muldoon Avenue would provide for pedestrian/cyclist connections between these two park elements. In the absence of this connection, pedestrians and cyclists would need to travel half a mile farther south, to cross over the expressway at Arden Avenue or three quarters of a mile to the north to cross beneath the West Shore Expressway at the Loop Park Road.

BIKEWAYS

By 2036, it is anticipated that additional segments of the City's bikeway program for the area could be expanded. If this includes the proposed segment along the Richmond Avenue Corridor, direct bike connections could be provided into the park at the Richmond Hill Road and Forest Hill Road connections, or at Yukon Avenue. As discussed above, the DPR/DOT proposed Greenway runs along the east border of the project site along Richmond Avenue (see Figure 17-6). Thus, two direct connections for pedestrian and bike access into the park would be from the main park entrances at Richmond Hill Road and Forest Hill Road. In addition, in the long-term, bike connections with the park could be expanded along Arthur Kill Road to the south.

With the proposed project, DPR and NYCDOT would continue to coordinate in the long-term to implement the Staten Island Bikeway plan and the advantages that could be realized for bike travel

**Table 17-3
Total Project-Generated Person Trips - 2036**

Component	Size	Mode	Weekday									Saturday							
			Weekday Total	AM Peak Hour			Midday Peak Hour			PM Peak Hour			Saturday Total	Midday Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total	In	Out	Total		In	Out	Total	In	Out	Total
Active Recreation-Constructed Surface		Auto		5	5	10	5	5	10	10	10	20		8	8	16	8	8	16
		Transit		0	0	0	0	0	0	1	1	2		0	0	0	0	0	0
		Bicycle		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
		Walk		0	0	0	0	0	0	0	0	0		1	1	2	1	1	2
Tennis Center	12 Acres	TOTAL	411	5	5	10	5	5	10	11	11	22	343	9	9	18	9	9	18
Active Recreation-Indoor		Auto		20	28	48	45	62	107	31	29	60		32	43	75	32	43	75
		Transit		1	2	3	3	3	6	2	2	4		2	2	4	2	2	4
		Bicycle		0	1	1	1	1	2	1	1	2		1	1	2	1	1	2
		Walk		1	0	1	1	3	4	0	0	0		0	2	2	0	2	2
Indoor Gym	29500 Sq Ft.	TOTAL	1,319	22	31	53	50	69	119	34	32	66	831	35	48	83	35	48	83
Commercial/Restaurant		Auto		32	30	62	559	516	1,075	265	217	482		620	365	985	620	365	985
		Transit		2	2	4	31	29	60	15	12	27		34	20	54	34	20	54
		Bicycle		1	1	2	12	11	23	6	5	11		14	8	22	14	8	22
		Walk		1	0	1	19	17	36	8	7	15		21	12	33	21	12	33
Café/Restaurants	53500 Sq Ft.	TOTAL	6,942	36	33	69	621	573	1,194	294	241	535	8,677	689	405	1,094	689	405	1,094
Commercial/Retail		Auto		24	21	45	473	513	986	211	228	439		273	252	525	273	252	525
		Transit		1	1	2	26	29	55	12	13	25		15	14	29	15	14	29
		Bicycle		1	0	1	11	11	22	5	5	10		6	6	12	6	6	12
		Walk		1	1	2	16	17	33	6	7	13		9	8	17	9	8	17
Market Roof	33000 Sq Ft.	TOTAL	5,074	27	23	50	526	570	1,096	234	253	487	5,886	303	280	583	303	280	583
Cultural/Educational		Auto		121	8	129	79	97	176	87	121	208		79	97	176	79	97	176
		Transit		7	0	7	4	5	9	5	7	12		4	5	9	4	5	9
		Bicycle		3	0	3	2	2	4	2	3	5		2	2	4	2	2	4
		Walk		3	1	4	3	4	7	3	3	6		3	4	7	3	4	7
	66800 Sq Ft.	TOTAL	1,777	134	9	143	88	108	196	97	134	231	1,777	88	108	196	88	108	196
Regional Park		Auto		138	104	242	165	165	330	184	234	418		299	324	623	299	324	623
		Transit		8	6	14	9	9	18	10	13	23		17	18	35	17	18	35
		Bicycle		3	2	5	4	4	8	4	5	9		7	7	14	7	7	14
		Walk		4	3	7	5	5	10	6	8	14		9	11	20	9	11	20
	185.92 Acres	TOTAL	8,180	153	115	268	183	183	366	204	260	464	11,527	332	360	692	332	360	692
City Destination Park		Auto		114	86	200	138	138	276	153	195	348		249	270	519	249	270	519
		Transit		6	5	11	8	8	16	9	11	20		14	15	29	14	15	29
		Bicycle		3	2	5	3	3	6	3	4	7		6	6	12	6	6	12
		Walk		4	3	7	4	4	8	5	7	12		8	9	17	8	9	17
	49 Acres	TOTAL	6,811	127	96	223	153	153	306	170	217	387	9,604	277	300	577	277	300	577
Banquet Hall		Auto								1185	0	1,185		1185	0	1,185	1185	0	1,185
		Transit								0	0	0		0	0	0	0	0	0
		Bicycle								0	0	0		0	0	0	0	0	0
		Walk								0	0	0		0	0	0	0	0	0
	32,700 Sq.Ft	TOTAL								1,185	0	1,185	N/A	1,185	0	1,185	1,185	0	1,185
TOTAL		Auto		454	282	736	1,464	1,496	2,960	2,126	1,034	3,160		2,745	1,359	4,104	2,745	1,359	4,104
		Transit		25	16	41	81	83	164	54	59	113		86	74	160	86	74	160
		Bicycle		11	6	17	33	32	65	21	23	44		36	30	66	36	30	66
		Walk		14	8	22	48	50	98	28	32	60		51	47	98	51	47	98
		TOTAL	30,514	504	312	816	1,626	1,661	3,287	2,229	1,148	3,377	38,645	2,918	1,510	4,428	2,918	1,510	4,428

with direct connections to Fresh Kills Park as a major biking destination. The proposed bikeway within the Greenbelt, which currently is proposed to terminate in LaTourette Park at Richmond Avenue, presents one of those opportunities. This bikeway, as an off-road alternative, could logically be extended into the proposed Fresh Kills Park and provide an alternative mode of travel.

PEDESTRIAN SAFETY

The *CEQR Technical Manual* considers a location to be a high-pedestrian-accident location if five or more pedestrian-related accidents occurred within a 12-month period in the most recent three years. Data on traffic accidents for the intersections in the vicinity of the project site were compiled from NYSDOT records for the period of January 2003 through December 2007. Based on this information, none of the intersections in the study area are considered high vehicle/pedestrian accident locations.

In the future conditions, the proposed project would result in an increase in the number of vehicle and pedestrian trips, specifically at the intersections of Richmond Avenue at Forest Hill and Richmond Hill Roads (see also Chapter 16, “Traffic and Parking”). With respect to geometric deficiencies that could potentially cause pedestrian safety hazards, both of these intersections are signalized, and with the proposed project would be painted with high-visibility crosswalks once the park becomes operational. In addition, the proposed park would result in additional pedestrian trips on Arthur Kill Road and Wild Avenue by the patrons accessing the South and North Parks, respectively. However, the traffic activity levels on these roadways are significantly less than the traffic volumes on Richmond Avenue. With the improvements to the pedestrian infrastructure (sidewalks, crosswalks and corners) at the intersections providing the pedestrian connections to the park, the projected increases in vehicular and pedestrian levels are not expected to result in any significant adverse pedestrian safety impacts.

CONCLUSIONS

In total, the proposed park would generate less than 200 peak hour transit, walk and bicycle trips during the weekday and weekend conditions in the 2016 and 2036 future years. This is due to the fact that transportation trips on Staten Island are primarily vehicular trips (see Chapter 16, “Traffic and Parking”). Therefore, to provide a conservative traffic analysis, a 90 percent auto share was assumed for trip generation estimates. As a result, the number of pedestrian and transit trips generated by the park are below the *CEQR Technical Manual* recommended threshold of 200 peak hour trips for undertaking quantified analyses. Therefore, it is concluded that the proposed project would not adversely impact the pedestrian and transit conditions in the study area.

Given the relatively low volume of transit users and the numerous bus routes near the proposed park, the proposed project would not create a noticeable capacity constraint on any individual bus route. In addition, travel demand estimates indicate that a quantitative analysis of potential impacts on the Staten Island Railway is not warranted. This determination is based on the general thresholds identified by MTA/NYCT, according to which if the proposed project results in less than 200 peak hour rail or bus transit riders, detailed transit analysis is not warranted as the project is considered unlikely to create a significant transit impact.

Currently, the proposed Fresh Kills Park site is not directly served by NYCT existing bus routes; however, there are several existing NYCT bus routes that serve its periphery, as well as regional service along the West Shore Expressway (weekday service) and access to local park and rides (both existing and proposed). In the future with the proposed park, NYCT could either expand bus services and routes to accommodate the park generated transit demand (especially during the

Fresh Kills Park GEIS

weekend summer months) or would amend the existing bus routes to include new stops within the park and along its exterior boundaries. It is anticipated by park planners that expanding the availability of bus transit in the future conditions could potentially reduce the number of project generated auto trips by shifting the patrons to mass transit. This could, over time, reduce vehicle trips and improve transit use at the local (boroughwide), citywide, and regional levels. Reduced traffic would also reduce demands on parking and enhance the overall park experience while potentially increasing park use through transit arrivals. Therefore, DPR would continue to coordinate with MTA/NYCT for the purposes of providing transit service to the park.

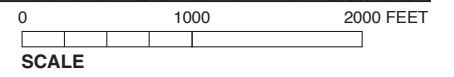
The proposed project would provide new pedestrian access points to the park on Richmond Avenue, Arthur Kill Road and Wild Avenue, Pearson Street, and Melvin Avenue. These pedestrian connections would provide new pedestrian facilities (sidewalks, crosswalks and corners) along major streets where these facilities do not currently exist, and would also improve the existing pedestrian facilities on Richmond Avenue intersections with Forest Hill Road, Yukon Avenue, and Richmond Hill Road by providing wider high-visibility crosswalks and sidewalks along the park periphery. Providing sidewalks on the park side of Arthur Kill Road is a project that would need to be coordinated with NYCDOT as part of the NYCDOT Arthur Kill Road improvement project. Improving local pedestrian options along Arthur Kill Road would be a positive enhancement to the proposed park and would improve walk trip connections between the park and the local Arden Heights neighborhood. These measures would enhance pedestrian safety at all the major access and egress points to-and-from the park along Arthur Kill Road. With respect to bicycle access, DPR and NYCDOT have a program for expanding local bike access. One proposed project is the New Springville Greenway that would link the William T. Davis Wildlife Refuge on the north with LaTourette Park to the southeast via Richmond Avenue. It is also an objective of the proposed park to expand cycling opportunities within and through the park and to be a bike destination that would also advance biking as an alternative mode of travel to the park. Project elements would expand and improve local biking opportunities would therefore be a positive impact of the proposed park. There is also a DCP/DOT study for a south shore bikeway that would connect up along Arthur Kill Road. This could also produce a regional connection between the site, south Staten Island and the Greenbelt, creating critical linkages in the borough-wide bikeway system, long planned but never implemented. Based on the vehicle-pedestrian accident data obtained from NYSDOT, currently there are no high vehicle-pedestrian accident locations in the study area, and the proposed project is not expected to adversely impact the pedestrian safety in the study area. *

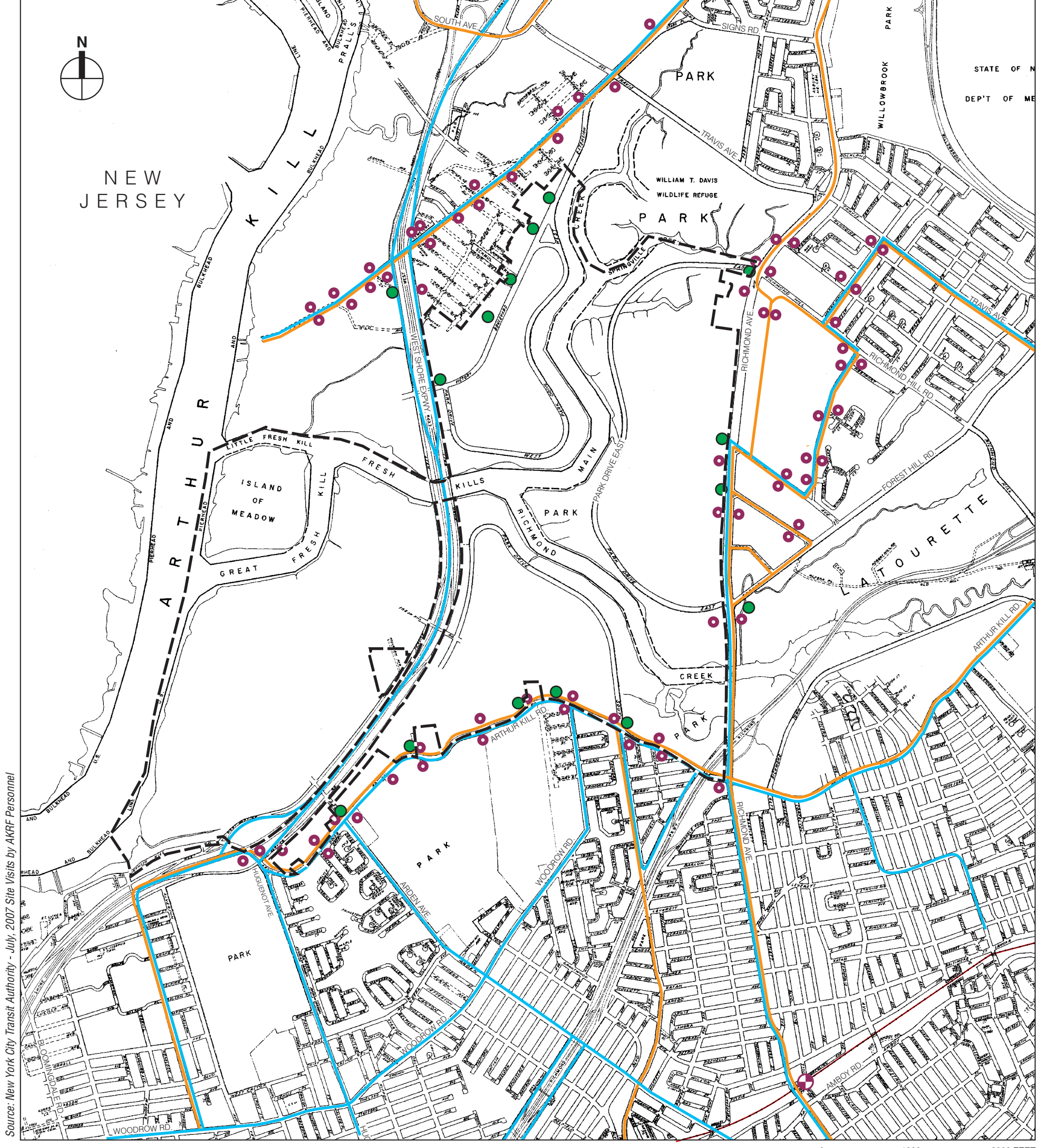


Source: New York City Transit Authority

--- Fresh Kills Project Site Boundary

59 Bus Route



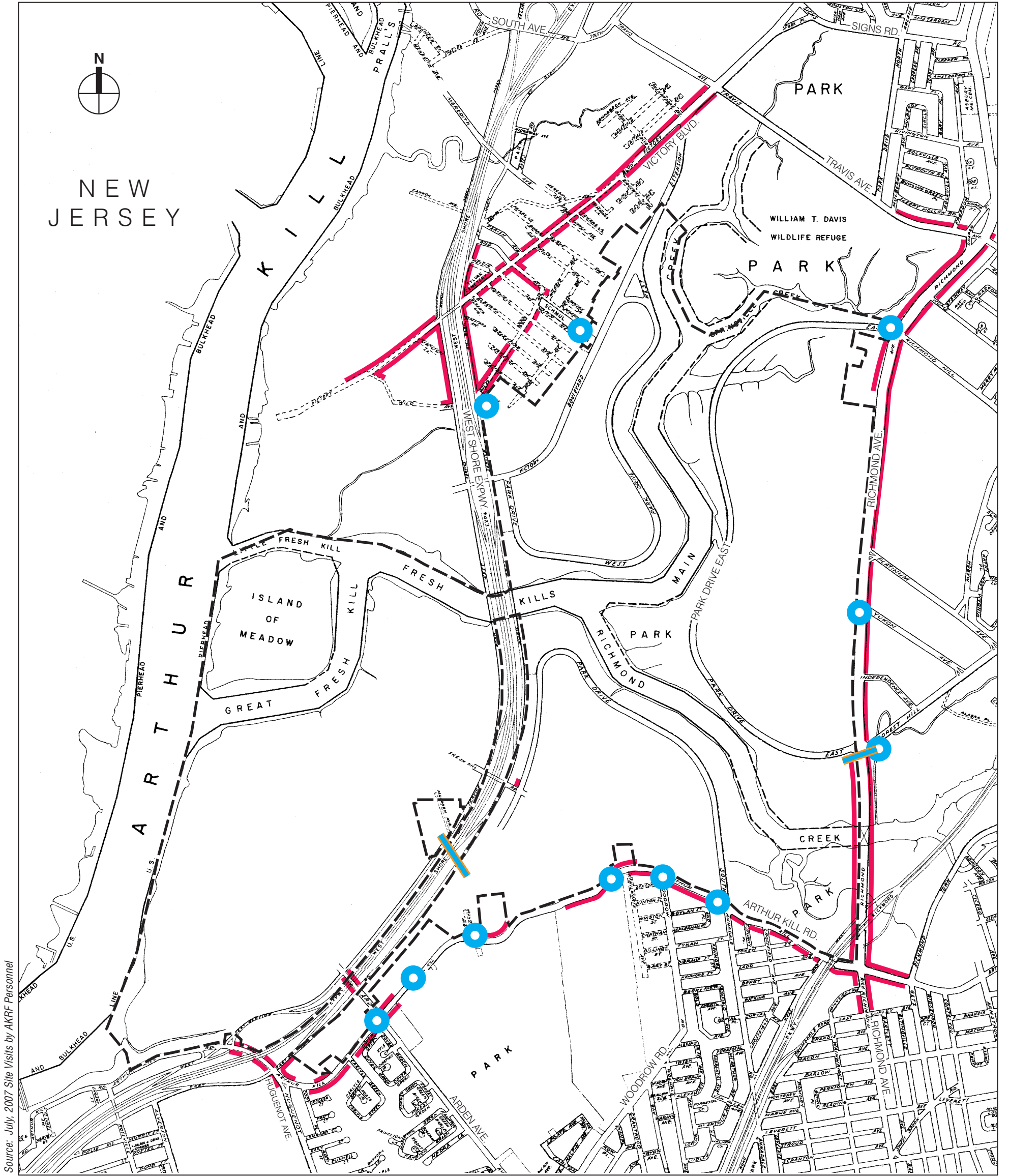


Source: New York City Transit Authority - July, 2007 Site Visits by AKRF Personnel

- Fresh Kills Project Site Boundary
- Bus Stops
- Local Bus Routes
- Express Bus Routes
- Staten Island Rapid Transit Stops (Eltingville Station)
- Staten Island Railroad
- Non-Vehicular Entrance to Proposed Park

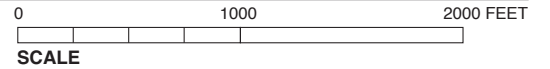
0 1000 2000 FEET
SCALE

Bus and Staten Island Rapid Transit Stops Near the Project Site
Figure 17-2



Source: July, 2007 Site Visits by AKRF Personnel

- Fresh Kills Project Site Boundary
- Existing Sidewalk
- Proposed Bike/Pedestrian Overpass
- Proposed Pedestrian Entrance





Arthur Kill Road at Muldoon Avenue 1



Arthur Kill Road at Arden Heights Neighborhood Park 2

Existing Conditions
(Arthur Kill Road)

Figure 17-4



Melvin Avenue, view towards North Park 3



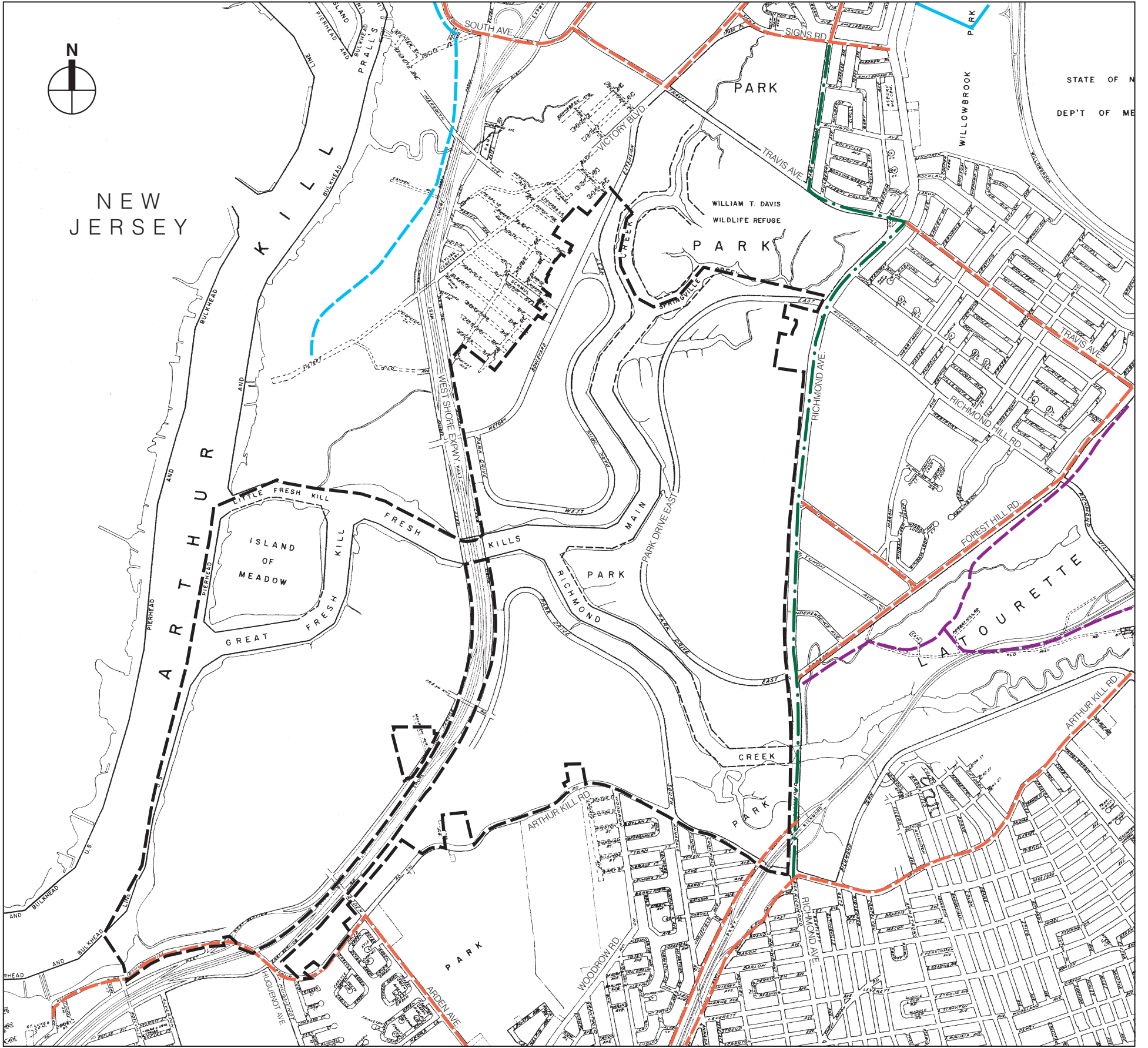
Pearson Avenue, view towards North Park 4



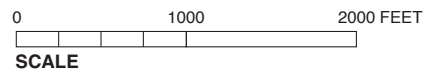
Wild Avenue, view towards Travis 5



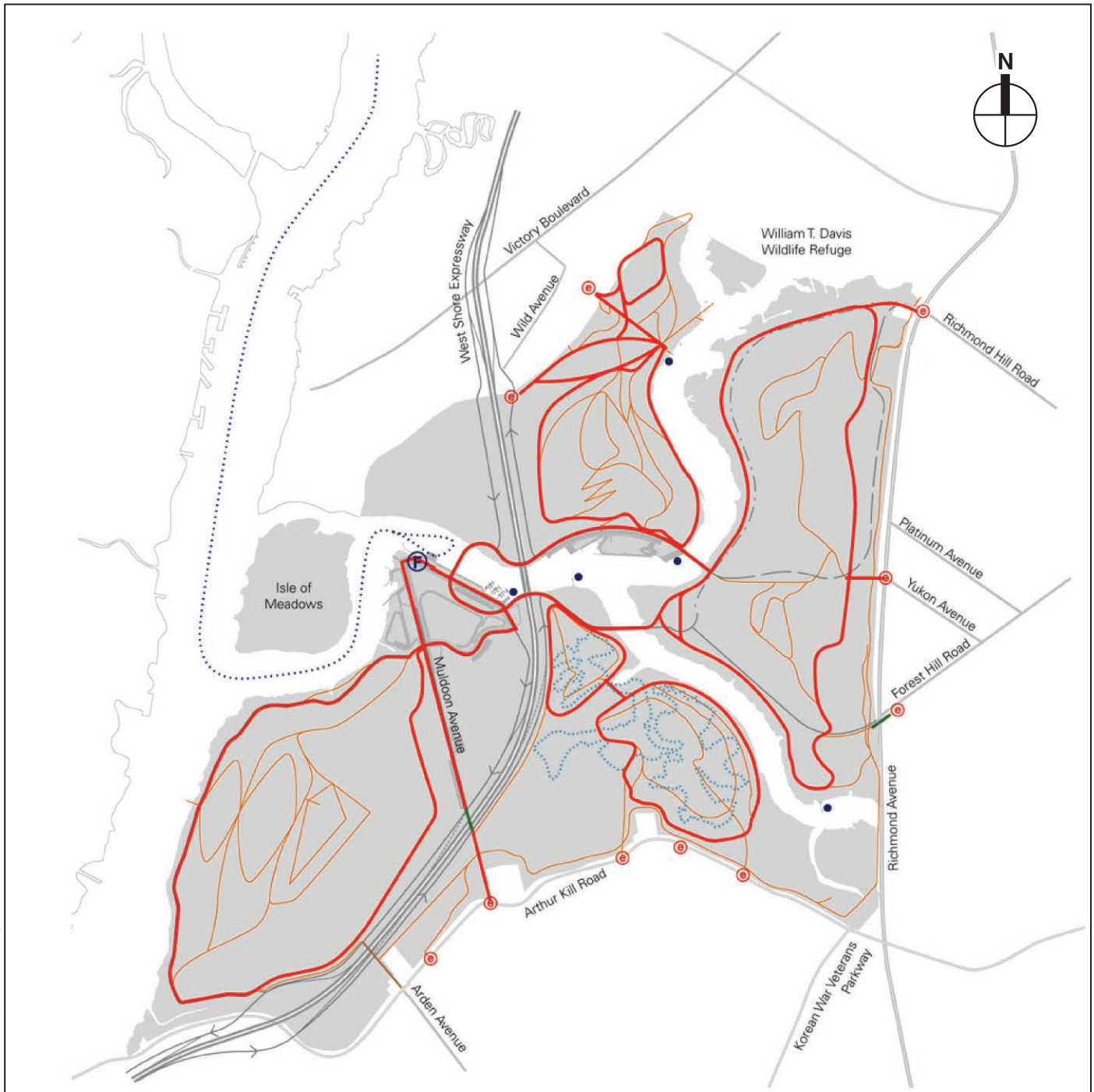
Wild Avenue, view towards North Park 6



- Fresh Kills Project Site Boundary
- Existing Bike Lane
- - - Proposed Bike Lane (Recommended Route)
- Existing Greenway
- - - Proposed Greenway
- · · New Springville Greenway (Proposed)
- - - Greenway Under Construction



Existing and Proposed Bicycle Routes Near Project Site
Figure 17-6



- ⓔ Non-Vehicular Entrance
- ⋯⋯⋯ Ferryboat waterway
- ⓕ Ferry Dock
- Canoe and Boat Launch
- Pedestrian Bridge
- Primary Recreation Path
- Secondary Foot Paths and Trails
- ⋯⋯⋯ Mountain Biking Trails



Fresh Kills Park Non-Vehicular Circulation Plan
Figure 17-7