

**A. INTRODUCTION**

The material in this chapter has been revised between the DEIS and FEIS to be consistent with the changes to the Reasonable Worst Case Development Scenario described in Chapter 1: “Project Description.” Revisions also incorporate comments on the DEIS received from New York City Transit.

This chapter describes the transit and pedestrian travel characteristics and potential impacts associated with the proposed actions, which affects an approximately 368-block area in Jamaica, Queens, bounded generally by the Van Wyck Expressway service road to the west, 87th Road and Highland Avenue to the north, 189th, 190th and 191st Streets and Farmers Boulevard to the east, and Waltham Street, and 105th, 108th, 109th, Sayres, and 110th Avenues to the south (see Figure 1-1 in Chapter 1, “Project Description”). As described in detail in earlier chapters of this FEIS, the proposed actions comprise zoning map amendments, a zoning text amendment to establish the Special Downtown Jamaica District, and Urban Renewal Area Designation. The proposed redevelopment area is generally located in Queens County Community Districts 8 and 12 and the communities of Jamaica, South Jamaica, Hollis, and St. Albans.

This chapter describes in detail the existing conditions at transit and pedestrian facilities expected to be used by the majority of new demand from projected development sites. The analyses focus on the weekday 8-9 AM and 5-6 PM peak hours, the periods when demand from residential and office development sites would be heaviest and the transit system (subway and bus) is generally most heavily utilized. The pedestrian analyses also include weekday midday (12-1 PM) conditions, as pedestrian facilities in this area are often intensively utilized during the midday. Future conditions in the year 2015 without the proposed actions (the No-Action condition) are then determined, including additional transit and pedestrian demand and any changes in transit facilities and services expected by the year 2015. The increase in travel demand resulting from the proposed actions is then projected and added to the No-Action condition to develop the 2015 future with the proposed actions (the With-Action condition).

Significant adverse impacts from project generated trips are then identified.

Other transit services in the area are provided by the Long Island Rail Road (LIRR) and JFK Airport AirTrain both of which serve adjacent stations located at Sutphin Boulevard and Archer Avenue. The Long Island Rail Road provides service to Long Island, and premium fare service to Downtown Brooklyn and West 34th Street in Manhattan. The JFK Airport AirTrain provides service only to and from JFK International Airport.

## B. EXISTING CONDITIONS

### DATA COLLECTION

Counts at key subway station stairways and fare arrays were conducted during the weekday AM and PM peak periods in 2005 at the E, J and Z stations on Archer Avenue at Sutphin Boulevard and Jamaica Center (Archer Avenue at Parsons Boulevard); and at the F stations along Hillside Avenue at Sutphin Boulevard, Parsons Boulevard, 169th Street and 179th Street. AM, midday and PM peak period pedestrian counts were conducted in 2005 at 35 locations along Hillside Avenue, Jamaica Avenue, Archer Avenue, Sutphin Boulevard, Liberty Avenue and 168th Street. Data on subway and bus ridership at the maximum load points along each route were obtained from NYC Transit. All transit and pedestrian count data and bus ridership data were obtained from a report prepared by the New York City Department of City Planning (NYCDCP)<sup>1</sup>.

### SUBWAY SERVICE

Four subway routes serve the proposed action area in Jamaica. E, J and Z trains serve Archer Avenue at Sutphin Boulevard and Jamaica Center (Parsons Boulevard) at the center of the study area. E trains continue west along the Queens Boulevard line (express) to Eighth Avenue (local) in Manhattan. F trains serve Hillside Avenue between Sutphin Boulevard and 179th Street along the northern portion of the study area and operate along the Queens Boulevard line (express) to Sixth Avenue (local) in Manhattan and then to Brooklyn. Transfers can be made between the E and F trains along Queens Boulevard. The J and Z trains continue through Brooklyn along Jamaica Avenue, Fulton Street and Broadway (peak direction express Myrtle Avenue to Marcy Avenue) to Nassau Street in Lower Manhattan. The Z train only operates during rush hours, operating “skip-stop” service with the J train through Queens and Brooklyn. All other trains operate at all times.

Subway trips generated by the proposed actions would primarily utilize six subway stations in the proposed action area, the Sutphin Boulevard and Jamaica Center-Parsons/Archer on the E, J and Z routes; and the Sutphin Boulevard, Parsons Boulevard, 169th Street and Jamaica-179th Street stations on Hillside Avenue on the F route (see Figure 17-1).

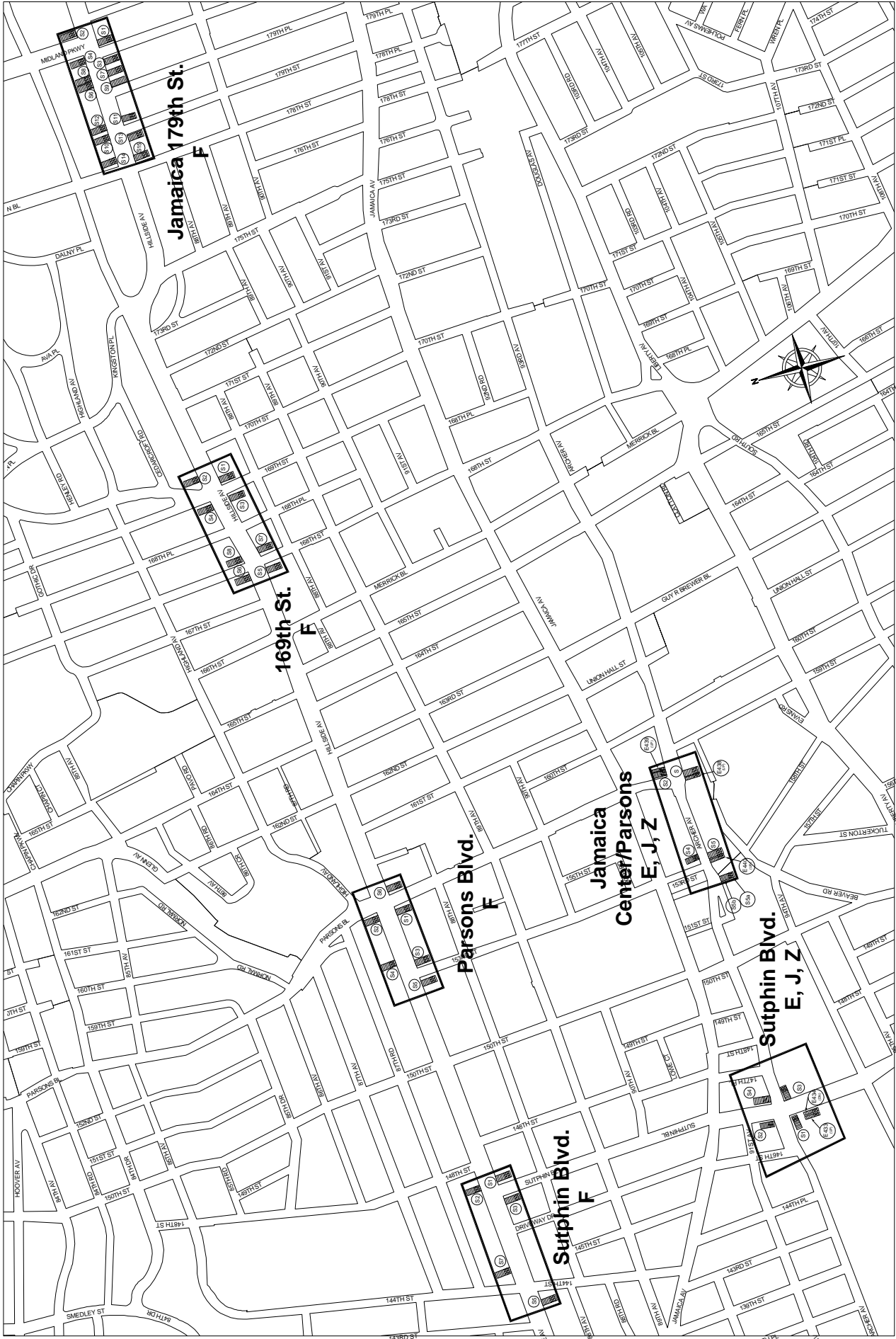
Some new subway trips generated by the proposed actions are also expected to use the Jamaica-Van Wyck station (E) at Jamaica Avenue and the Van Wyck Expressway. However, as discussed later in this chapter, the Jamaica-Van Wyck station is not included in the subway station impact analysis as it is located outside of the proposed action area to the west of the Van Wyck Expressway, and the number of new trips would be fewer than the 200-trip CEQR threshold for an impact analysis.

Table 17-1 shows the average weekday entering turnstile counts at existing subway stations serving the proposed action area for the years 2002 through 2004, as well as the 2004 ranking of each station based on average weekday ridership relative to all 423 stations system-wide.

As shown in Table 17-1, based on 2004 data, the stations with the highest utilization are the terminal stations (Jamaica Center and 179th Street) where passengers connect with buses. Utilization is also high at the Sutphin Boulevard/Archer Avenue (E, J, Z) station where there are

---

<sup>1</sup> New York City Department of City Planning, *Jamaica Parking, Public Transportation and Pedestrian Study: Technical Memorandum 3: Existing Conditions*, January 27, 2006.



THIS FIGURE HAS BEEN REVISED FOR THE FEIS

- Legend:
- Subway Entrance Stair or Escalator
  - Subway Stair Number
  - Subway Escalator Number and Direction

Area Subway Facilities and Analyzed Subway Stairs  
Figure 17-1

connections to the Long Island Rail Road and JFK Airport AirTrain. The Jamaica Center station is the most heavily used of the six stations. It ranked 19th out of 423 based on an average of 37,046 persons entering on a typical weekday. Demand at this station has remained constant, decreasing by only 0.6 percent from 2002 to 2003 and increasing by only 0.8 from 2003 to 2004. The 179th Street station is ranked 44th and had an average of 22,962 persons entering on a typical weekday. Demand has been slightly decreasing since 2002; from 2002 to 2003 demand decreased by 4.5 percent and from 2003 to 2004 demand decreased by 0.4 percent. The Sutphin Boulevard/Archer Avenue station is ranked 64th with an average of 16,851 passengers entering on a typical weekday. After decreasing by 1.4 percent from 2002 to 2003, the number of passengers entering this station increased by 7.3 percent from 2003 to 2004 with the opening of the AirTrain link to JFK International Airport on December 17, 2003. Other subway stations serve primarily local demand and some connecting bus demand.

**Table 17-1  
Average Weekday Entering Turnstile Counts**

Station	Rank	2002	2003	2004	Percent Change	
					2002-2003	2003-2004
Sutphin Boulevard/Hillside Avenue (F)	271	4,470	4,335	4,375	-3.0%	0.9%
Parsons Boulevard/Hillside Avenue (F)	221	6,137	5,818	5,703	-5.2%	-2.0%
169th Street/Hillside Avenue (F)	169	8,030	7,667	7,611	-4.5%	-0.7%
Jamaica-179th Street/Hillside Avenue (F)	44	24,148	23,052	22,962	-4.5%	-0.4%
Sutphin Boulevard/Archer Avenue (E,J,Z)	64	15,934	15,704	16,851	-1.4%	7.3%
Jamaica Center Parsons/Archer (E,J,Z)	19	36,955	36,737	37,046	-0.6%	0.8%
<b>Totals</b>		<b>95,674</b>	<b>93,313</b>	<b>94,548</b>	<b>-2.5%</b>	<b>1.3%</b>
<b>Notes:</b>						
Rank out of 423 stations system-wide in 2004.						
Source: New York City Transit 2004 Subway & Bus Ridership Report.						
February 5, 2007						

Following are descriptions of the physical characteristics and subway services provided at each of the existing subway stations in the vicinity of the proposed action area. Figure 17-1 also shows the location of each subway stair and identification.

*ARCHER AVENUE (E, J AND Z)*

The **Sutphin Boulevard** (E, J, and Z) station served by E, J and Z trains is located beneath Archer Avenue and is comprised of two stacked island platforms with one mezzanine. The J and Z trains use the lower level island platform with E trains using the platform above it, and the mezzanine is located above the E train platform with one fare array comprised of seven entry/exit turnstiles and four high entry/exit turnstiles. Stairs are located at each of the four corners of the intersection, and two escalators (one up and one down) are located at the southwest corner for passengers connecting to the Long Island Rail Road (LIRR). Passengers connecting to the Long Island Rail Road may do so by using the escalators to street level where stairs are provided from street level to each track along the Sutphin Boulevard underpass.

Alternatively, three passenger elevators connect the LIRR mezzanine (top level) above the tracks to street level where the LIRR ticket office is located to the subway mezzanine level. The JFK Airport AirTrain is located adjacent to the south side of the LIRR mezzanine and can be accessed through the mezzanine, or via the Sutphin Boulevard sidewalk where a “head house” is located with escalators and stairs.

The **Jamaica Center** (E, J, and Z) station is a terminal station for the E, J and Z trains. It is also located beneath Archer Avenue and has two stacked island platforms. The J and Z use the lowest level platform, and the E train uses the upper level platform. Two mezzanines with fare arrays are located above the E train platform. The primary mezzanine is located at the eastern end of the station at Parsons Boulevard with one fare array (nine entry/exit turnstiles), and three stairways and a pair of escalators to the street. The secondary mezzanine is located at the western end of the station at 153rd Street with one fare array (five entry/exit turnstiles, five high entry/exit turnstiles and two high-revolving exit gates), and two access areas to the street -- each with one up escalator and one stair. There is also an elevator located at 153rd Street.

#### *HILLSIDE AVENUE (F)*

The **Sutphin Boulevard** (F) station is comprised of two side platforms and one long mezzanine accessing two fare control areas that each accesses both platforms. One fare control area located at the east end of the station at Sutphin Boulevard has one fare array (with five entry/exit turnstiles, one high entry/exit turnstile, and one high-revolving exit gate) and three stairs to street (northeast, southeast and southwest quadrants). The other fare control area is located at the west end of the station at 144th Street. This fare control area is unstaffed with a fare array consisting of two high entry/exit turnstiles and two high-revolving exit gates.

The next station to the east is **Parsons Boulevard** (F), which is comprised of island platforms for express and local trains, although the express tracks are unused with the exception of a very limited number of peak hour/peak direction E trains. This station has one long mezzanine stretching between Parsons Boulevard and 153rd Street with two fare control areas. The fare control area at 153rd Street is unstaffed, consists of two high entry/exit turnstiles and one high-revolving exit gate, and is accessed by three stairways. The staffed fare control area at Parsons Boulevard consists of one fare array with seven entry/exit turnstiles and is also accessed by three stairways. This station serves Hillcrest and Jamaica high schools.

The **169th Street** (F) station is also comprised of two side platforms and one long mezzanine accessing two fare control areas (at 168th Street and 169th Street). Each fare control area serves both platforms, and is served by four stairways to the street. The fare array at 168th Street consists of six entry/exit turnstiles, two high entry/exit turnstiles and two high-revolving exit gates. The fare array at 169th Street also consists of six entry/exit turnstiles, two high entry/exit turnstiles and two high-revolving exit gates.

The **Jamaica-179th Street** is the terminus for the F train. This station is comprised of two island platforms, one for discharge only, and the other to receive passengers on Manhattan-bound trains. Above the track level is one long mezzanine with two fare control areas each accessing both platforms. The western fare control area is located at 178th-179th streets and has four street stairways and one fare array with nine entry/exit turnstiles, two high entry/exit turnstiles and two high-revolving exit gates. The eastern fare control area is located at 179th Place-180th Street with six street stairways and one fare array with 12 entry/exit turnstiles and two high-revolving exit gates. An elevator is located at the eastern fare control area.

A threshold of 200 peak hour trips entering or exiting a station has been established under *CEQR Technical Manual* criteria to determine whether new subway demand from a proposed actions warrants a detailed analysis at a particular station. As discussed later in this chapter, the travel demand forecast and subway trip assignment for the projected development sites indicate that new demand from the proposed actions would exceed this threshold at all six stations.

Analyses of subway station conditions focus on the elements with the potential to be affected in the future with the proposed actions (i.e., street stairways and fare arrays). The subway stations in the study area were constructed with a lot of vertical capacity including generous mezzanine space and many platform stairways (stairways between the platform and mezzanine). There are generally more platform stairways per station than street stairways; as such, it is more appropriate to analyze street stairways than platform stairways to identify significant stairway impacts. These analyses were prepared using the design capacities for stairs, escalators, turnstiles, and high-wheel exits specified in the *CEQR Technical Manual, NYCTA Station Planning and Design Guidelines* and procedures found in *Pedestrian Planning and Design*, by John J. Fruin. Peak 15-minute conditions during the AM and PM peak hours are reflected. Stairway analyses were conducted using the Fruin pedestrian level of service (LOS) methodology, which equates pedestrian flow per minute per foot of stairway width with qualitative measures of pedestrian comfort. Fruin defines six levels of service based on the calculated values of pedestrian volumes per foot width of stairway per minute, as shown in Table 17-2. Level of service (LOS) A represents free flow conditions without pedestrian conflicts, and LOS F indicates significant capacity limitations and inconvenience.

**Table 17-2  
Stairway Level of Service Definitions**

Level of Service	Pedestrians/Foot/Minute (PFM)	Volume/SVCD Ratio	Comments
A	less than or equal to 5	< 0.45	Free flow conditions.
B	5 - 7	0.45 to 0.70	Minor reverse flow will cause minor conflicts.
C	7 - 10	0.71 to 1.00	Slight restrictions in speed and difficulties in reverse flows.
D	10 - 13	1.01 to 1.33	Significant restrictions in speed and difficulties in reverse flows.
E	13 - 17	1.34 to 1.67	Reductions in speeds, serious reverse traffic conflicts, and intermittent stoppages.
F	greater than 17	> 1.67	Complete breakdown in traffic flow.

Practical capacities were calculated for each analyzed stairway by multiplying service volumes at LOS C/D (10 persons per foot-width per minute, or PFM) by the effective stair width and an adjustment factor to account for two-directional friction, where applicable. Peak 15-minute volumes were compared with these capacities to obtain a volume-to-capacity (v/c) ratio for each peak hour. Using this methodology, LOS A, B and C correspond to volume-to-capacity ratios of less than 1.0, while LOS D, E and F indicate demand that exceeds capacity, and therefore the v/c ratios are greater than 1.0. Levels of service for turnstiles and high revolving exit gates are also described in terms of volume-to-capacity ratios, where LOS A is less than 0.45, LOS B between 0.45 to 0.70, LOS C between 0.71 to 1.00, LOS D between 1.01 to 1.33, LOS E between 1.34 to 1.67 and LOS F greater than 1.67. A v/c ratio greater than 1.0 indicates volumes beyond capacity and extended queues.

Table 17-3A and Table 17-3B show the results of the analyses of 2005 existing AM and PM peak hour conditions for the analyzed station elements at the six subway stations. As shown in

the tables under Existing Conditions, all analyzed stairways and fare arrays generally operate at LOS A or B in both the AM and PM peak periods. However, two stairs (S6 and S10) operate at LOS C in the morning peak hours at the Jamaica-179th Street station where bus passengers transfer to the subway. At Jamaica Center, there is also a stair operating at LOS C (S5) in the AM peak hour and an escalator (E439) operating at LOS E in the PM peak hour.

### **SUBWAY LINE HAUL**

Line haul is the volume of subway riders passing a defined point (usually the point of maximum demand or “peak load point”) on a given subway line. The line haul capacity of a given subway line is a factor of the number of trains scheduled, the number of cars per train, and the per-car capacity. The line haul analysis for the proposed actions focuses on the four subway lines serving the proposed action area – the E, F, J and Z.

An analysis of the Existing subway line haul conditions on the E, F, J and Z trains is provided in Table 17-4.<sup>1</sup> The analysis of the E train examines the peak hour conditions at the on the E trains at Jackson Heights-Roosevelt Avenue, the peak load point in the peak Manhattan-bound direction in the AM peak hour and at Lexington Avenue-53rd Street the peak load point in the peak Queens-bound direction in the peak hour PM. The analysis of the F train examines peak hour conditions at Roosevelt Island, the peak load point in the peak Manhattan-bound direction in the AM peak hour and at 57th Street-6th Avenue, the peak load point in the peak Queens-bound direction in the PM peak hour. The J and Z trains function as one route. The J train is a full-time service, and the Z train provides supplemental service during rush hours where the J train and the Z train skip alternating stations to speed the overall trip (“skip-stop”). The analysis of the J/Z route examines the peak hour conditions on J/Z trains at Marcy Avenue in the peak Manhattan-bound direction in the AM and at Essex Street in the peak Brooklyn/Queens-bound direction in the PM.

As shown in Table 17-4, under Existing conditions, the E train operates over capacity in the peak Manhattan-bound direction in the AM peak hour with a volume-to-capacity (v/c) ratio of 1.02. All other trains operate with available peak direction capacity in the AM and PM peak hours. V/c ratios are typically higher during the AM peak hour than during the PM peak hour. The F train operates with a v/c ratio of 0.81 and the J/Z train operates with a v/c ratio of 0.61 Manhattan-bound in the AM peak hour. In the peak Queens-bound direction in the PM peak hour, the E train operates with a v/c ratio of 0.57, the F train operates with a v/c ratio of 0.55, and the J/Z operates with a v/c ratio of 0.41.

### **BUS SERVICE**

A total of 49 public bus routes operated by various agencies are located within the vicinity of the area affected by the proposed actions by various agencies. New York City Transit (NYCT) and MTA Bus operate 26 and 14 bus routes, respectively, in the study area. MTA Long Island Bus operates 9 bus routes through the study area. MTA Bus routes consist of all bus routes previously subsidized by NYCDOT under contract to private companies that were absorbed into

---

<sup>1</sup> Existing subway line-haul data were obtained from MTA NYC Transit. 2005 peak load point data were used for the AM peak hour. These peak load point data were not available for the PM peak hour. 2004 Weekday Cordon Count data were utilized for PM peak hour line-haul.

Table 17-3A  
2005 Existing Conditions Subway Stairways

No.	Station Element/Location	Peak Period (1)	Effective Width in Feet (2)	Maximum 15 Minute Capacity (3)	Peak 15 Minute Volume	PFM (4)	Volume to Capacity Ratio	LOS
<b>Sutphin Boulevard (F) Station</b>								
S1	Stairway @ SE Corner Hillside Avenue/Sutphin Boulevard	AM	4.43	665	95	1.43	0.14	A
		PM	4.43	665	160	2.41	0.24	A
S2	Stairway @ NE Corner Hillside Avenue/Sutphin Boulevard	AM	3.53	530	75	1.42	0.14	A
		PM	3.53	530	80	1.51	0.15	A
S3	Stairway @ NW Corner Hillside Avenue/Sutphin Boulevard	AM	4.43	665	75	1.13	0.11	A
		PM	4.43	665	80	1.20	0.12	A
S7	Stairway @ NE Corner Hillside Avenue/144th Street	AM	3.30	495	40	0.81	0.08	A
		PM	3.30	495	20	0.40	0.04	A
S5	Stairway @ NE Corner Hillside Avenue/144th Street	AM	3.53	530	15	0.28	0.03	A
		PM	3.13	470	25	0.53	0.05	A
<b>Parsons Boulevard (F) Station</b>								
S1	Stairway @ SW Corner Hillside Avenue/Parsons Boulevard	AM	3.45	518	85	1.64	0.16	A
		PM	3.07	461	145	3.15	0.31	A
S2	Stairway @ NW Corner Hillside Avenue/Parsons Boulevard	AM	3.45	518	130	2.51	0.25	A
		PM	3.45	518	70	1.35	0.14	A
S6	Stairway @ SE Corner Hillside Avenue/Parsons Boulevard	AM	3.38	507	100	1.97	0.20	A
		PM	3.00	450	135	3.00	0.30	A
S3	Stairway @ SE Corner Hillside Avenue/153rd Street	AM	3.53	530	35	0.66	0.07	A
		PM	3.13	470	65	1.38	0.14	A
S4	Stairway @ NE Corner Hillside Avenue/153rd Street	AM	3.75	563	5	0.09	0.01	A
		PM	3.75	563	5	0.09	0.01	A
S5	Stairway @ SW Corner Hillside Avenue/153rd Street	AM	4.43	665	10	0.15	0.02	A
		PM	4.92	738	5	0.07	0.01	A

**Notes:**  
Source: NYC Dept. of City Planning, *Jamaica Parking, Public Transportation and Pedestrian Study Technical Memorandum 3: Existing Conditions*, January 27, 2006.  
(1) Peak hours: 8-9 am and 5-6 pm.  
(2) Effective width measured as stairwell width less 1.5 feet to account for center and side handrails. Effective width is further reduced by 10 to 20 percent to account for friction where there are two-way flows.  
(3) Stair capacity in persons per 15 minutes based on NYC Transit guidelines of 10 persons per foot-width per minute (PFM).  
(4) Persons per foot width of stairway per minute.



**Table 17-3A (Continued)**  
**2005 Existing Conditions Subway Stairways**

No.	Station Element/Location	Peak Period (1)	Effective Width in Feet (2)	Maximum 15 Minute Capacity (3)	Peak 15 Minute Volume	PFM (4)	Volume to Capacity Ratio	LOS
<b>169th Street (F) Station</b>								
S1	Stairway @ SE Corner Hillside Avenue/169th Street	AM	3.53	530	75	1.42	0.14	A
		PM	3.53	530	150	2.83	0.28	A
S2	Stairway @ NE Corner Hillside Avenue/169th Street	AM	5.40	810	110	1.36	0.14	A
		PM	6.08	912	110	1.21	0.12	A
S3	Stairway @ SW Corner Hillside Avenue/169th Street	AM	3.53	530	15	0.28	0.03	A
		PM	3.13	470	115	2.45	0.24	A
S4	Stairway @ NW Corner Hillside Avenue/169th Street	AM	3.13	470	175	3.73	0.37	A
		PM	3.13	470	125	2.66	0.27	A
S5	Stairway @ SW Corner Hillside Avenue/168th Street	AM	3.38	507	40	0.79	0.08	A
		PM	3.00	450	90	2.00	0.20	A
S6	Stairway @ NW Corner Hillside Avenue/168th Street	AM	2.93	440	50	1.14	0.11	A
		PM	3.30	495	55	1.11	0.11	A
S7	Stairway @ SE Corner Hillside Avenue/168th Street	AM	3.53	530	45	0.85	0.08	A
		PM	3.53	530	20	0.38	0.04	A
S8	Stairway @ NE Corner Hillside Avenue/168th Street	AM	3.93	590	25	0.42	0.04	A
		PM	3.93	590	30	0.51	0.05	A

**Notes:**

Source: NYC Dept. of City Planning, *Jamaica Parking, Public Transportation and Pedestrian Study Technical Memorandum 3: Existing Conditions*, January 27, 2006.

- (1) Peak hours: 8-9 am and 5-6 pm.
- (2) Effective width measured as stairwell width less 1.5 feet to account for center and side handrails. Effective width is further reduced by 10 to 20 percent to account for friction where there are two-way flows.
- (3) Stair capacity in persons per 15 minutes based on NYC Transit guidelines of 10 persons per foot-width per minute (PFM).
- (4) Persons per foot width of stairway per minute.

June 29, 2007

**Table 17-3A (Continued)**  
**2005 Existing Conditions Subway Stairways**

No.	Station Element/Location	Peak Period (1)	Effective Width in Feet (2)	Maximum 15 Minute Capacity (3)	Peak 15 Minute Volume	PFM (4)	Volume to Capacity Ratio	LOS
<b>179th Street (F) Station</b>								
S1	Stairway @ SE Corner Hillside Avenue/180th Street	AM	3.23	485	80	1.65	0.16	A
		PM	2.87	431	175	4.07	0.41	A
<u>S2</u>	<u>Stairway @ NE Corner Hillside Avenue/Midland Parkway</u>	<u>AM</u>	<u>3.23</u>	<u>485</u>	<u>75</u>	<u>1.55</u>	<u>0.15</u>	<u>A</u>
		<u>PM</u>	<u>2.87</u>	<u>431</u>	<u>50</u>	<u>1.16</u>	<u>0.12</u>	<u>A</u>
S3	Stairway @ SW Corner Hillside Avenue/180th Street	AM	2.93	440	30	0.68	0.07	A
		PM	3.30	495	25	0.51	0.05	A
S5	Stairway @ South Side Btwn 179th Place & 180th Street/ Hillside Avenue	AM	3.23	485	45	0.93	0.09	A
		PM	2.87	431	165	3.83	0.38	A
S7	Stairway @ South Side Btwn 179th Place & 180th Street/ Hillside Avenue	AM	3.23	485	110	2.27	0.23	A
		PM	2.87	431	105	2.44	0.24	A
S6	Stairway @ North Side Btwn 179th Place & 180th Street/ Hillside Avenue	AM	2.87	431	360	8.36	0.84	C
		PM	3.23	485	60	1.24	0.12	A
S8	Stairway @ North Side Btwn 179th Place & 180th Street/ Hillside Avenue	AM	2.87	431	195	4.53	0.45	A
		PM	3.23	485	100	2.06	0.21	A
<u>S9</u>	<u>Stairway @ SE Corner Hillside Avenue/179th Place</u>	<u>AM</u>	<u>4.50</u>	<u>675</u>	<u>89</u>	<u>1.32</u>	<u>0.13</u>	<u>A</u>
		<u>PM</u>	<u>4.00</u>	<u>600</u>	<u>95</u>	<u>1.58</u>	<u>0.16</u>	<u>A</u>
S4	Stairway @ NW Corner Hillside Avenue/Midland Parkway	AM	2.87	431	75	1.74	0.17	A
		PM	3.58	537	35	0.65	0.07	A
S11	Stairway @ SE Corner Hillside Avenue/179th Street	AM	3.15	473	40	0.85	0.08	A
		PM	3.50	525	60	1.14	0.11	A
S13	Stairway @ SW Corner Hillside Avenue/179th Street	AM	2.80	420	25	0.60	0.06	A
		PM	2.80	420	55	1.31	0.13	A
S10	Stairway @ North Side Hillside Avenue/179th Street	AM	2.93	440	340	7.74	0.77	C
		PM	3.30	495	120	2.42	0.24	A
S12	Stairway @ North Side Hillside Avenue/179th Street	AM	2.93	440	95	2.16	0.22	A
		PM	3.30	495	45	0.91	0.09	A
S14	Stairway @ NE Towards Corner Hillside Avenue/178th Street	AM	3.08	462	120	2.60	0.26	A
		PM	2.73	410	55	1.34	0.13	A
S15	Stairway @ SE Towards Corner Hillside Avenue/178th Street	AM	2.80	420	80	1.90	0.19	A
		PM	2.80	420	110	2.62	0.26	A

**Notes:**

Source: NYC Dept. of City Planning, *Jamaica Parking, Public Transportation and Pedestrian Study Technical Memorandum 3: Existing Conditions*, January 27, 2006.

- (1) Peak hours: 8-9 am and 5-6 pm.
- (2) Effective width measured as stairwell width less 1.5 feet to account for center and side handrails. Effective width is further reduced by 10 to 20 percent to account for friction where there are two-way flows.
- (3) Stair capacity in persons per 15 minutes based on NYC Transit guidelines of 10 persons per foot-width per minute (PFM).
- (4) Persons per foot width of stairway per minute.

**Table 17-3A (Continued)**  
**2005 Existing Conditions Subway Stairways**

No.	Station Element/Location	Peak Period (1)	Effective Width in Feet (2)	Maximum 15 Minute Capacity (3)	Peak 15 Minute Volume	PFM (4)	Volume to Capacity Ratio	LOS
<b>Sutphin Boulevard/Archer Avenue (E, J/Z) Station</b>								
S1	Stairway @ SW Corner Sutphin Boulevard/Archer Avenue	AM	5.70	855	125	1.46	0.15	A
		PM	5.70	855	85	0.99	0.10	A
S2	Stairway @ NW Corner Sutphin Boulevard/Archer Avenue	AM	3.75	563	125	2.22	0.22	A
		PM	3.75	563	205	3.64	0.36	A
S3	Stairway @ SE Corner Sutphin Boulevard/Archer Avenue	AM	2.80	420	230	5.48	0.55	B
		PM	3.15	473	110	2.33	0.23	A
S4	Stairway @ NE Corner Sutphin Boulevard/Archer Avenue	AM	3.75	563	95	1.69	0.17	A
		PM	3.75	563	130	2.31	0.23	A
E433	Escalator (up) @ West Sidewalk Sutphin Boulevard/Archer Avenue	AM	3.0	510	165	N/A	0.32	A
		PM	3.0	510	150	N/A	0.29	A
E434	Escalator (down) @ West Sidewalk Sutphin Boulevard/Archer Avenue	AM	3.0	510	160	N/A	0.31	A
		PM	3.0	510	50	N/A	0.10	A
<b>Jamaica Center- Parsons Boulevard/Archer Avenue (E, J/Z) Station</b>								
S5	Stairway @ SE Corner 153rd Street/Archer Avenue	AM	5.33	800	680	8.51	0.85	C
		PM	5.33	800	210	2.63	0.26	A
S4	Stairway @ NE Corner 153rd Street/Archer Avenue	AM	5.27	791	315	3.98	0.40	A
		PM	5.93	890	90	1.01	0.10	A
S5a&b	Stairway @ SW Corner 153rd Street/Archer Avenue	AM	8.40	1,260	135	1.07	0.11	A
		PM	7.47	1,121	235	2.10	0.21	A
S2	Stairway @ NE Corner Parsons Boulevard/Archer Avenue	AM	10.75	1,613	1,040	6.45	0.64	B
		PM	10.75	1,613	815	5.05	0.51	B
S	Stairway @ SW Corner Parsons Boulevard/Archer Avenue	AM	5.18	777	170	2.19	0.22	A
		PM	5.18	777	185	2.38	0.24	A
E440	Escalator (up) @ SE Corner 153rd Street/Archer Avenue	AM	3.0	510	150	N/A	0.29	A
		PM	3.0	510	55	N/A	0.11	A
E438	Escalator (up) @ SW Corner Parsons Boulevard/Archer Avenue	AM	3.0	510	95	N/A	0.19	A
		PM	3.0	510	235	N/A	0.46	B
E439	Escalator (up) @ NE Corner Parsons Boulevard/Archer Avenue	AM	3.0	510	175	N/A	0.34	A
		PM	3.0	510	795	N/A	1.56	E

**Notes:**

Source: NYC Dept. of City Planning, *Jamaica Parking, Public Transportation and Pedestrian Study Technical Memorandum 3: Existing Conditions*, January 27, 2006.

- (1) Peak hours: 8-9 am and 5-6 pm.
- (2) Effective width measured as stairwell width less 1.5 feet to account for center and side handrails. Effective width is further reduced by 10 to 20 percent to account for friction where there are two-way flows.
- (3) Stair capacity in persons per 15 minutes based on NYC Transit guidelines of 10 persons per foot-width per minute (PFM).
- (4) Persons per foot width of stairway per minute.

Table 17-3B  
2005 Existing Conditions Subway Fare Arrays

No.	Station Element/Location	Array Configuration	Peak Period (1)	Maximum 15 Minute Capacity (2)	Peak 15 Minute Volume	Volume to Capacity Ratio (3)	LOS
<b>Sutphin Boulevard (F) Station</b>							
N338	Sutphin Boulevard	5 entry/exit turnstiles	AM	3,600	245	0.07	A
		1 high entry/exit turnstile	PM	3,600	320	0.09	A
		2 high revolving exit gate					
U-1	144th Street (Unstaffed)	2 high entry/exit turnstile	AM	1,500	55	0.04	A
		2 high revolving exit gates	PM	1,500	45	0.03	A
<b>Parsons Boulevard (F) Station</b>							
N339	Parsons Boulevard	7 entry/exit turnstiles	AM	3,360	315	0.09	A
			PM	3,360	350	0.10	A
U-2	153th Street (Unstaffed)	2 high entry/exit turnstiles 1 high revolving exit gate	AM	1,050	50	0.05	A
			PM	1,050	70	0.07	A
<b>169th Street (F) Station</b>							
N340	168th Street	6 entry/exit turnstiles	AM	4,380	160	0.04	A
		2 high entry/exit turnstiles	PM	4,380	195	0.04	A
		2 high revolving exit gates					
N340A	169th Street	7 entry/exit turnstiles	AM	3,360	375	0.11	A
			PM	3,360	500	0.15	A
<b>179th Street (F) Station</b>							
N342	179th Street	9 entry/exit turnstiles	AM	5,820	700	0.12	A
		2 high entry/exit turnstiles	PM	5,820	445	0.08	A
		2 high revolving exit gates					
N343	Between 179th Place and 180th Street	12 entry/exit turnstiles 3 high revolving exit gates	AM	7,110	970	0.14	A
			PM	7,110	715	0.10	A
<b>Sutphin Boulevard (E, J/Z) Station</b>							
N605	Sutphin Boulevard	7 entry/exit turnstiles 4 high entry/exit turnstiles	AM	4,560	1,090	0.24	A
			PM	4,560	860	0.19	A
<b>Jamaica Center (E, J/Z) Station</b>							
N606	Parsons Boulevard	9 entry/exit turnstiles	AM	4,320	1,485	0.34	A
			PM	4,320	2,035	0.47	B
N607	153rd Street	5 entry/exit turnstiles	AM	4,800	1,280	0.27	A
		5 high entry/exit turnstiles	PM	4,800	590	0.12	A
		2 high revolving exit gates					

**Notes:**

Source: NYC Dept. of City Planning, *Jamaica Parking, Public Transportation and Pedestrian Study Technical Memorandum 3: Existing Conditions*, January 27, 2006.

(1) Peak hours: 8-9 am and 5-6 pm.

(2) Fare array capacity based on 32 ppm for turnstiles, 20 ppm for high entry/exit turnstiles, and 30 ppm for high revolving exit gates as per NYCT guidelines.

(3) Levels of service for turnstiles and exit gates: LOS A: v/c < 0.45, LOS B: v/c = 0.45 to 0.70, LOS C: v/c = 0.71 to 1.00, LOS D: v/c = 1.01 to 1.33, LOS E: v/c = 1.34 to 1.67, LOS F: v/c > 1.67.

**Table 17-4**  
**Existing Subway Line Haul Conditions**

Line	Peak Hour	Peak Direction	Trains per Hour (1)	Cars per Hour (1)	Available Capacity (2)	Passengers per Hour (1)	V/C Ratio (3)
E	AM	Manhattan-Bound	15	150	21,750	22,178	1.02
	PM	Queens-Bound	15	150	21,750	12,291	0.57
F	AM	Manhattan-Bound	15	120	21,000	17,082	0.81
	PM	Queens-Bound	14	112	19,600	10,833	0.55
J/Z	AM	Manhattan-Bound	12	96	13,920	8,533	0.61
	PM	Queens-Bound	12	96	13,920	5,771	0.41

**Notes:**  
(1) Sources: AM Peak Hour: MTA NYC Transit, 2005 peak load point data.  
PM Peak Hour: MTA NYC Transit, Year 2004 Weekday Cordon Count.  
(2) Capacity based on 145 passengers/car for 60' cars and 175 passengers/car for 75' cars as per NYC Transit subway car loading guidelines. E trains operate with ten 60'-cars; F trains operate predominantly with eight 75'-cars and some with ten 60'-cars; and J/Z trains operate with eight 60'-cars. Guideline capacity for each route based on the capacity associated with the predominant car type.  
(3) Volume-to-capacity ratio.  
February 5, 2007

the MTA system. Green Bus Lines, Queens Surface Corp. and Jamaica Bus Lines are the private companies that had served the study area. All NYCT and MTA Bus local bus routes and Long Island Bus routes have terminals within the area affected by the proposed actions. NYCT and MTA Bus local bus routes then radiate out to eastern Queens, northern Queens, and Brooklyn. Long Island Bus routes serve Nassau County in Long Island. Within New York City eastbound Long Island Bus trips can pick up but not drop off passengers, and westbound Long Island Bus trips can drop off but not pick up passengers. NYCT express routes travel between southeastern Queens and Manhattan.

As shown in Figure 17-2, several bus routes provide connections to E, F, J, and Z trains at subway stations within the study area. The 165th Street Bus Terminal is bounded by 165th Street, Merrick Boulevard and 89th Avenue and serves as a terminal for 20 bus routes (7 NYCT bus routes, 5 MTA Bus routes, and 8 LI Bus routes). The closest subway station to this terminal is the 169th Street (F) station, however, all bus routes serving this terminal pass close to an E, F, J or Z station enroute to or from the terminal. Until 1977, when J service was truncated to Queens Boulevard, this terminal was close to the 168th Street (J) station.

Table 17-5 presents a summary of peak hour, peak direction ridership at the maximum load point of each of the NYCT and MTA Bus routes serving the study area. Long Island Bus uses a different method to monitor bus ridership, and their two-way ridership data are only available for the peak four hours in the AM and PM peak period. All buses operate with excess capacity through their maximum load points during both peak hours, with the exception of the Q6 and Q65 during the AM peak hour and the Q25/34 during the PM peak hour. During the AM peak hour, the Q6 demand exceeds its capacity by 7 passengers at its maximum load point at Sutphin Boulevard and 111th Avenue, and the Q65 demand also exceeds its capacity by 7 passengers at its maximum load point at 164th Street and Hillside Avenue. During the PM peak hour, the Q25/34 exceeds its capacity by 14 passengers at its maximum load point at Kissena Boulevard and Holly Avenue.

Brief overviews of each bus route are provided below.

*Q1 – SPRINGFIELD BOULEVARD/BRADDOCK AVENUE/HILLSIDE AVENUE (NYCT)*

(1) Some buses operate between the 165th Street Bus Terminal, Jamaica, and Braddock Avenue/245th Street, Bellerose. (2) Other Q1 buses operate between the 165th Street Bus Terminal, Jamaica, and Springfield Boulevard/Jamaica Avenue, at the Queens Village LIRR station. (3) All late night buses serve both routes. (4) On school days, additional service runs from Hillside Avenue/231st Street to the 165th Street Bus Terminal from 1:55 to 2:40 PM and (5) from Hillside Avenue/231st Street to Springfield Boulevard/Jamaica Avenue from 1:55 to 2:35 PM. (6) Some AM rush hour service also operates between Braddock Avenue/243rd Street and the 179th Street subway station. This bus route runs at all times. Hillside Avenue is the main street of operation within the study area.

*Q2 – BELMONT PARK/HOLLIS AVENUE (NYCT)*

(1) Most buses operate over the full route between the 165th Street Bus Terminal, Jamaica, and Hempstead Avenue/235th Street, Belmont Park. (2) Supplemental AM rush hour service operates between Hollis Avenue/208th Street and the 179th Street subway station. This bus route operates at all times. Hillside Avenue is the main street of operation within the study area.

*Q3 – FARMERS BOULEVARD/JFK AIRPORT (NYCT)*

All buses operate between the 165th Street Bus Terminal and JFK International Airport. This bus route operates at all times. Hillside Avenue is the main street of operation within the study area.

*Q4 – LINDEN BOULEVARD (NYCT)*

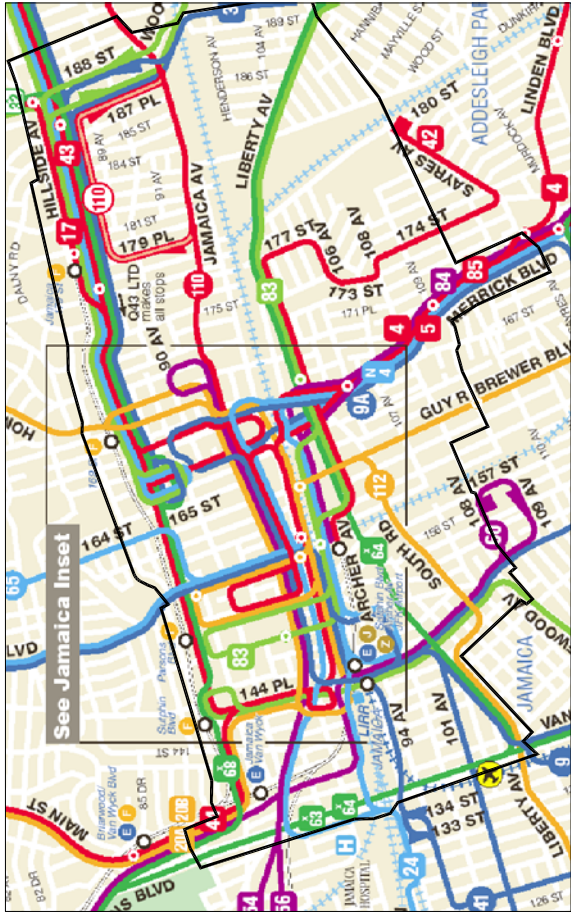
(1) All buses operate between the Jamaica-Center Parsons/Archer (E,J,Z) subway station and Linden Boulevard/235th Street. (2) Some limited-stop buses operate along this route during AM rush hours in both directions and PM rush hours toward 235th Street. This bus route operates at all times. Archer Avenue and Merrick Boulevard are the main streets of operation within the study area.

*Q5 – MERRICK BOULEVARD/GREEN ACRES/ROSEDALE (NYCT)*

Buses operate between the Jamaica Center-Parsons Archer (E,J,Z) subway station and either (1) Green Acres Road/Sunrise Highway, Green Acres Shopping Center in Valley Stream, Nassau County, or (2) Francis Lewis Boulevard at the Rosedale LIRR station. (3) Limited-stop buses operate along this route toward Parsons Boulevard in the AM rush hours and toward the Rosedale LIRR station in the PM rush hours.

During weekday rush hours Q5 local buses operate to Green Acres in both directions; during these hours the Q5 limited-stop buses operate to and from Rosedale in the peak direction and Q5 local buses operate in the opposite direction. All late night buses operate to and from Rosedale with no service to Green Acres. The Green Acres Q5 route is a Bus Rapid Transit demonstration corridor.

Archer Avenue and Merrick Boulevard are the main streets of operation within the study area.



Jamaica Inset



Source: MTA NYC Transit, March 2007  
**THIS FIGURE HAS BEEN REVISED FOR THE FEIS**  
 Jamaica Plan EIS

Proposed Action Area Bus Routes  
 Figure 17-2

Table 17-5  
Existing Bus Conditions

Peak Hour (1)	Agency	Route	Direction	Maximum Load Point	Peak Hour Buses (2)	Peak Hour Passengers (2)	Average Passengers per Bus	Available Capacity (3)	Notes	
	NYCT	Q1	EB	Not Available	4	62	16	198		
	NYCT	Q1	WB	Not Available	9	325	36	260		
	NYCT	Q2	EB	Hollis Avenue/208th Street	4	72	18	188		
	NYCT	Q2	WB	188th Street/Jamaica Avenue	12	562	47	218		
	NYCT	Q3	SB	Farmers Blvd./Linden Blvd.	6	212	35	178		
	NYCT	Q3	NB	188th Street/Jamaica Avenue	8	389	49	131		
	NYCT	Q4&L	EB	Linden Blvd./172nd Street	12	505	42	275		
	NYCT	Q4&L	WB	Linden Blvd./Farmers Blvd.	19	926	49	309		
	NYCT	Q5&L	EB	Merrick Blvd./130th Road	8	346	43	174		
	NYCT	Q5&L	WB	Merrick Blvd./Linden Blvd.	20	863	43	437		
	NYCT	Q17	NB	Kissena Blvd./Sanford Avenue	11	532	48	183		
	NYCT	Q17	SB	Horace Harding Expwy/Utopia Pkwy	9	361	40	224		
	NYCT	Q24	EB	Atlantic Avenue/Lefferts Blvd.	8	358	45	162		
	NYCT	Q24	WB	Atlantic Avenue/Lefferts Blvd.	6	156	26	234		
	NYCT	Q30	EB	Hillside Avenue/Homelawn Street	19	1085	57	150		
	NYCT	Q30	WB	Horace Harding Expwy/Francis Lew	5	199	40	126		
	NYCT	Q31	NB	Hillside Avenue/Homelawn Street	13	746	57	99		
	NYCT	Q31	SB	Utopia Parkway/Booth Memorial	4	102	26	158		
	NYCT	Q36	EB	Hillside Avenue/187th Street	4	111	28	149		
	NYCT	Q36	WB	Hillside Avenue/187th Street	9	470	52	115		
	NYCT	Q42	EB	Archer Avenue/153rd Street	6	68	11	322		
	NYCT	Q42	WB	Liberty Avenue/168th Street	6	282	47	108		
	NYCT	Q43	EB	Hillside Avenue/Springfield Blvd.	16	934	58	106		
	NYCT	Q43	WB	Hillside Avenue/179th Street	16	933	58	107		
	NYCT	Q44/20&L	NB	Main Street/Union Turnpike	20	995	50	305		
	NYCT	Q44/20&L	SB	Roosdevelt Avenue/Main Street	22	1138	52	292		
	NYCT	Q54	EB	Grand Street/Graham Street	7	328	47	127		
	NYCT	Q54	WB	Metropolitan Avenue Station	10	587	59	63		
	NYCT	Q56	EB	Jamaica Avenue/Metropolitan Ave.	6	263	44	127		
	NYCT	Q56	WB	Jamaica Avenue/Sutphin Blvd.	5	113	23	212		
	NYCT	Q75	EB	Hillside Avenue/187th Street	2	18	9	112		
	NYCT	Q75	WB	Hillside Avenue/187th Street	4	158	40	102		
	NYCT	Q76	SB	Hillside Avenue/179th Street	8	340	43	180		
	NYCT	Q76	NB	Francis Lewis Blvd/Foothill Avenue	11	586	53	129		
	NYCT	Q77	SB	Francis Lewis Blvd/Linden Blvd	8	432	54	88		
	NYCT	Q77	NB	Hillside Avenue/Francis Lewis Blvd	11	570	52	145		
AM	NYCT	Q83&L	EB	Farmers Blvd/113th Avenue	6	235	39	155		
	NYCT	Q83&L	WB	Liberty Avenue/Merrick Blvd	22	1092	50	338		
	NYCT	Q84	EB	Archer Avenue/153rd Street	4	52	13	208		
	NYCT	Q84	WB	Merrick Blvd/Liberty Avenue	14	652	47	258		
	NYCT	Q85&L	EB	Merrick Blvd/Liberty Avenue	9	289	32	296		
	NYCT	Q85&L	WB	Merrick Blvd/Liberty Avenue	23	1126	49	369		
	NYCT	X32	NB	Parsons Blvd./14th Avenue	4	153	38	107		
	NYCT	X32	SB		No Southbound AM Service				No SB AM Service	
	NYCT	X63	NB	Not Available	3	81	27	114		
	NYCT	X63	SB		No Southbound AM Service				No SB AM Service	
	NYCT	X64	WB	Queens Blvd/78th Avenue	7	289	41	166		
	NYCT	X64	EB		No Eastbound AM Service				No EB AM Service	
	NYCT	X68	WB	Not Available	7	316	45	139		
	NYCT	X68	EB		No Eastbound AM Service				No EB AM Service	
	MTA Bus	Q6	NB	Sutphin Blvd/111th Avenue	4	267	67	-7		
	MTA Bus	Q6	SB	Sutphin Blvd/119th Avenue	2	89	45	41		
	MTA Bus	Q8	EB	Sutphin Blvd/97th Avenue	5	276	55	49		
	MTA Bus	Q8	WB	101st Avenue/111th Street	3	144	48	51		
	MTA Bus	Q9	NB	Sutphin Blvd/97th Avenue	5	290	58	35		
	MTA Bus	Q9	SB	Sutphin Blvd/Archer Avenue	3	37	12	158		
	MTA Bus	Q9A	EB		No AM Service				Midday Service Only	
	MTA Bus	Q9A	WB		No AM Service				Midday Service Only	
	MTA Bus	Q25/34	NB	Kissena Blvd/Maple Avenue	2	100	50	30		
	MTA Bus	Q25/34	SB	Main Street/Northern Blvd	3	115	38	80		
	MTA Bus	Q40	NB	Sutphin Blvd/95th Avenue	9	571	63	14		
	MTA Bus	Q40	SB	142nd Street/111th Avenue	5	153	31	172		
	MTA Bus	Q41	NB	94th Avenue/Sutphin Blvd	6	128	21	262		
	MTA Bus	Q41	SB	111th Avenue/117th Street	2	65	33	65		
	MTA Bus	Q60	EB	Queens Blvd/66th Street	2	59	30	71		
	MTA Bus	Q60	WB	Sutphin Blvd/109th Avenue	3	145	48	50		
	MTA Bus	Q65	NB	164th Street/Hillside Avenue	2	137	69	-7		
	MTA Bus	Q65	SB	Northern Blvd/College Point Blvd	5	259	52	66		
	MTA Bus	Q110	EB	Jamaica Avenue 168th Street	3	87	29	108		
	MTA Bus	Q110	WB	Jamaica Avenue/181st Street	11	374	34	341		
	MTA Bus	Q111/113	NB	Guy R Brewer Blvd/South Road	12	626	52	154		
	MTA Bus	Q111/113	SB	Guy R Brewer Blvd/Foch Blvd	9	289	32	296		
	MTA Bus	Q112	EB	South Road/153rd Street	6	258	43	132		
	MTA Bus	Q112	WB	Liberty Avenue/124th Street	6	129	22	261		
	Long Island Bus Peak 4-hour Data (6-10 AM)									
	LI Bus	N1		Not Available	21	745	35	620		
	LI Bus	N2		Not Available	15	277	18	698	Runs from LI in AM	
	LI Bus	N3		Not Available	7	117	17	338	Runs from LI in AM	
	LI Bus	N4		Not Available	57	2972	52	733		
	LI Bus	N6		Not Available	76	4255	56	685		
	LI Bus	N22		Not Available	47	2554	54	501		
	LI Bus	N21		Not Available	41	1779	43	886		
	LI Bus	N26		Not Available	3	168	56	27	Runs to LI in AM	

Notes:

(1) Peak Hours: weekday 7-8 AM and 5-6 PM.

(2) Based on 2003 NYC Transit ridership summaries and NYCDOT Ridership Data. As reported in NYC Dept. of City Planning's *Jamaica Parking Public Transportation and Pedestrian Study Technical Memorandum 3: Existing Conditions*, January 27, 2006.

(3) Available capacity based on a maximum of 65 passengers for a standard 40-foot bus as per CEQR criteria.



Table 17-5 (continued)  
Existing Bus Conditions

Peak Hour (1)	Agency	Route	Direction	Maximum Load Point	Peak Hour Buses (2)	Peak Hour Passengers (2)	Average Passengers per Bus	Available Capacity (3)	Notes	
	NYCT	Q1	EB	Not Available	9	411	46	174		
	NYCT	Q1	WB	Not Available	4	76	19	184		
	NYCT	Q2	EB	Hillside Avenue/187th Street	8	416	52	104		
	NYCT	Q2	WB	Hollis Avenue/208th Street	4	137	34	123		
	NYCT	Q3	SB	Hillside Avenue/187th Street	6	256	43	134		
	NYCT	Q3	NB	Hillside Avenue/187th Street	6	172	29	218		
	NYCT	Q4&L	EB	Linden Blvd./172nd Street	14	621	44	289		
	NYCT	Q4&L	WB	Linden Blvd./Merrick Blvd.	7	282	40	173		
	NYCT	Q5&L	EB	Merrick Blvd./Liberty Avenue	15	749	50	226		
	NYCT	Q5&L	WB	Merrick Blvd./Liberty Avenue	6	210	35	180		
	NYCT	Q17	NB	Kissena Blvd./Sanford Avenue	14	302	22	608		
	NYCT	Q17	SB	Kissena Blvd./Sanford Avenue	11	551	50	164		
	NYCT	Q24	EB	Atlantic Avenue/Woodhaven Blvd.	6	191	32	199		
	NYCT	Q24	WB	Atlantic Avenue/Woodhaven Blvd.	6	280	47	110		
	NYCT	Q30	EB	Hillside Avenue/Homelawn Street	6	212	35	178		
	NYCT	Q30	WB	Utopia Parkway/Union Turnpike	6	221	37	169		
	NYCT	Q31	NB	47th Avenue/Francis Lewis Blvd.	6	103	17	287		
	NYCT	Q31	SB	169th Street/Hillside Avenue	4	145	36	115		
	NYCT	Q36	EB	Hillside Avenue/187th Street	8	330	41	190		
	NYCT	Q36	WB	Hillside Avenue/212th Street	4	144	36	116		
	NYCT	Q42	EB	Liberty Avenue/177th Place	4	142	36	118		
	NYCT	Q42	WB	Liberty Avenue/168th Place	4	48	12	212		
	NYCT	Q43	EB	Hillside Avenue/Springfield Blvd.	11	598	54	117		
	NYCT	Q43	WB	Hillside Avenue/179th Street	6	268	45	122		
	NYCT	Q44/20&L	NB	Main Street/39th Avenue	14	606	43	304		
	NYCT	Q44/20&L	SB	Roosevelt Avenue/Main Street	14	559	40	351		
	NYCT	Q54	EB	Metropolitan Avenue Station	6	260	43	130		
	NYCT	Q54	WB	Metropolitan Avenue Station	6	188	31	202		
	NYCT	Q56	EB	Jamaica Avenue/Lefferts Blvd	6	157	26	233		
	NYCT	Q56	WB	Jamaica Avenue/Sutphin Blvd	6	287	48	103		
	NYCT	Q75	EB	Hillside Avenue/187th Street	3	57	19	138		
	NYCT	Q75	WB	Hillside Avenue/187th Street	2	33	17	97		
	NYCT	Q76	SB	Francis Lewis Blvd./Horace Harding	4	155	39	105		
	NYCT	Q76	NB	Francis Lewis Blvd./Foothill Avenue	4	85	21	175		
	NYCT	Q77	SB	Hillside Avenue/179th Street	5	257	51	68		
	NYCT	Q77	NB	Springfield Blvd/Merrick Blvd	6	104	17	286		
PM	NYCT	Q83&L	EB	Archer Avenue/Parsons Blvd	14	626	45	284		
	NYCT	Q83&L	WB	Liberty Avenue/Merrick Blvd	6	177	30	213		
	NYCT	Q84	EB	Archer Avenue/153rd Street	8	307	38	213		
	NYCT	Q84	WB	Merrick Blvd/Liberty Avenue	4	82	21	178		
	NYCT	Q85&L	EB	Merrick Blvd/Baisley Blvd	16	659	41	381		
	NYCT	Q85&L	WB	Merrick Blvd/Baisley Blvd	7	218	31	237		
	NYCT	X32	NB		No Northbound PM Service				No NB PM Service	
	NYCT	X32	SB		No Data Available				PM Data only to 4 PM	
	NYCT	X63	NB		No Northbound PM Service				No NB PM Service	
	NYCT	X63	SB		No Data Available				PM Data only to 4 PM	
	NYCT	X64	WB		No Westbound PM Service				No WB PM Service	
	NYCT	X64	EB	East 57th Street/3rd Avenue, Manh.	5	195	39	130		
	NYCT	X68	WB		No Westbound PM Service				No WB PM Service	
	NYCT	X68	EB	East 57th Street/3rd Avenue, Manh.	7	244	35	211		
	MTA Bus	Q6	NB	Sutphin Blvd/Glassboro	8	2	0	518		
	MTA Bus	Q6	SB	Sutphin Blvd/Liberty Avenue	5	204	41	121		
	MTA Bus	Q8	EB	101st Avenue/127th Street	3	61	20	134		
	MTA Bus	Q8	WB	Sutphin Blvd/Archer Avenue	1	46	46	19		
	MTA Bus	Q9	NB	Sutphin Blvd/95th Avenue	4	55	14	205		
	MTA Bus	Q9	SB	146th Street/101st Avenue	5	213	43	112		
	MTA Bus	Q9A	EB		No PM Service				Midday Service Only	
	MTA Bus	Q9A	WB		No PM Service				Midday Service Only	
	MTA Bus	Q25/34	NB	Main Street/Northern Blvd	6	145	24	245		
	MTA Bus	Q25/34	SB	Kissena Blvd/Holly Avenue	2	144	72	-14		
	MTA Bus	Q40	NB	Sutphin Blvd/97th Avenue	3	22	7	173		
	MTA Bus	Q40	SB	Sutphin Blvd/Archer Avenue	3	168	56	27		
	MTA Bus	Q41	NB	111th Avenue/127th Street	2	24	12	106		
	MTA Bus	Q41	SB	Atlantic Avenue/Van Wyck Expwy	4	240	60	20		
	MTA Bus	Q60	EB	Queens Blvd/33rd Street	1	38	38	27		
	MTA Bus	Q60	WB		No Data Available				WB PM Data Not Avail	
	MTA Bus	Q65	NB	Main Street/Roosevelt Avenue	3	73	24	122		
	MTA Bus	Q65	SB	Sanford Avenue/Kissena Blvd	3	166	55	29		
	MTA Bus	Q110	EB	179th Place/Hillside Avenue	6	193	32	197		
	MTA Bus	Q110	WB	Jamaica Avenue/173rd Street	6	90	15	300		
	MTA Bus	Q111/113	NB	Guy R Brewer Blvd/Brinkerhoff	3	55	18	140		
	MTA Bus	Q111/113	SB	Guy R Brewer Blvd/Liberty Avenue	7	203	29	252		
	MTA Bus	Q112	EB	Liberty Avenue/126th Street	5	98	20	227		
	MTA Bus	Q112	WB	Liberty Avenue/134th Street	6	75	13	315		
	Long Island Bus Peak 4-hour Data (3-7 PM)									
	LI Bus	N1		Not Available	26	819	32	871		
	LI Bus	N2		Not Available	13	244	19	601	Runs from LI in PM	
	LI Bus	N3		Not Available	9	112	12	473	Runs from LI in PM	
	LI Bus	N4		Not Available	52	2497	48	883		
	LI Bus	N6		Not Available	82	4050	49	1280		
	LI Bus	N22		Not Available	57	2348	41	1357		
	LI Bus	N21		Not Available	37	1611	44	794		
	LI Bus	N26		Not Available	2	90	45	40	Runs from LI in PM	

Notes:

(1) Peak Hours: weekday 7-8 AM and 5-6 PM.

(2) Based on 2003 NYC Transit ridership summaries and NYCDOT Ridership Data. As reported in NYC Dept. of City Planning's *Jamaica Parking Public Transportation and Pedestrian Study Technical Memorandum 3: Existing Conditions*, January 27, 2006.

(3) Available capacity based on a maximum of 65 passengers for a standard 40-foot bus as per CEQR criteria.

*Q6 – SUTPHIN BOULEVARD (MTA BUS)*

(1) Buses operate over the full route between the 165th Street Bus Terminal, Jamaica and the Halmar Perishable Center (Building 77), JFK International Airport. (2) Supplemental service operates between the 165th Street Bus Terminal and Sutphin Boulevard/Rockaway Boulevard, Baisley Park. Both service patterns operate at all times. Sutphin Boulevard is the main street of operation within the study area.

*Q8 – 101ST AVENUE (MTA BUS)*

All buses operate between the 165th Street Bus Terminal, Jamaica and the Euclid Avenue (A,C) subway station, East New York, Brooklyn. This bus route operates at all times except late nights. Jamaica Avenue and Sutphin Boulevard are the main streets of operation within the study area.

*Q9 – LINCOLN STREET/SUTPHIN BOULEVARD (MTA BUS)*

All buses operate between the 165th Street Bus Terminal, Jamaica and Lincoln Street/Rockaway Boulevard, South Jamaica. This bus route operates at all times except late nights. Jamaica Avenue and Sutphin Boulevard are the main streets of operation within the study area.

*Q9A – LINCOLN STREET/SUTPHIN BOULEVARD (MTA BUS)*

All buses operate between the 165th Street Bus Terminal, Jamaica and Lincoln Street/Rockaway Boulevard, South Jamaica. This bus route operates weekdays only from 10 AM to 5:30 PM. Jamaica Avenue and Sutphin Boulevard are the main streets of operation within the study area.

*Q17 – KISSENA BOULEVARD/HORACE HARDING EXPRESSWAY/188TH STREET (NYCT)*

(1) All buses operate between Archer Avenue/Merrick Boulevard, Jamaica and the Flushing-Main Street [7] subway station. (2) Some limited-stop service is provided in both directions in the AM and PM rush hours. This bus route operates at all times. Hillside Avenue and 168th Streets are the main streets of operation within the study area.

*Q20A – MAIN STREET/UNION STREET/20TH AVENUE (NYCT)*

All buses operate between Archer Avenue/Merrick Boulevard, Jamaica and 14th Avenue/College Point Boulevard, via 20th Avenue, College Point. This bus route operates at all times except late nights. Hillside Avenue, Sutphin Boulevard, and Archer Avenue are the main streets of operation within the study area.

*Q20B – MAIN STREET/UNION STREET/14TH AVENUE (NYCT)*

All buses operate between Archer Avenue/Merrick Boulevard, Jamaica and 14th Avenue/College Point Boulevard, via 14th Avenue, College Point. This bus route operates at all times except weekends late nights. Hillside Avenue, Sutphin Boulevard, and Archer Avenue are the main streets of operation within the study area.

*Q24 – ATLANTIC AVENUE/BROADWAY (NYCT)*

All buses operate between Archer Avenue/168th Street, Jamaica and Lafayette Avenue/Patchen Avenue, Bushwick, Brooklyn. This bus route operates at all times. Jamaica Avenue and Archer Avenue are the main streets of operation within the study area.

*Q25 – PARSONS BOULEVARD/KISSENA BOULEVARD (MTA BUS)*

(1) The full route is between Archer Avenue/Sutphin Boulevard, Jamaica LIRR station and 119th Street/Fifth Avenue, College Point. (2) Some buses only operate between Jamaica and the Flushing-Main Street [7] subway station, Flushing. (3) During rush hours, additional service operates between the Flushing-Main Street [7] subway station and Jewel Avenue/Kissena Boulevard at Queens College. This bus route operates at all times except late nights. Limited-stop service on some peak period Q25 trips in both directions are scheduled to begin operating in June 2007. Parsons Boulevard and Archer Avenue are the main streets of operation within the study area.

*Q30 – UTOPIA PARKWAY/HORACE HARDING EXPRESSWAY (NYCT)*

(1) Some buses operate over the full route between the Jamaica LIRR station and the Horace Harding Expressway/Little Neck Parkway, Douglaston. (2) Others (including all late night buses) operate between Merrick Boulevard/Archer Avenue and the Horace Harding Expressway/Little Neck Parkway, Douglaston. This bus route operates at all times. Jamaica Avenue and Archer Avenue are the main streets of operation within the study area.

*Q31 – UTOPIA PARKWAY/BELL BOULEVARD (NYCT)*

All buses operate between Sutphin Boulevard/Archer Avenue, Jamaica LIRR station, and 27th Avenue/Francis Lewis Boulevard, Bayside. This bus route operates at all times except late nights. Jamaica Avenue and Archer Avenue are the main streets of operation within the study area.

*Q34 – PARSONS BOULEVARD (MTA BUS)*

All buses operate between Archer Avenue/Sutphin Boulevard, Jamaica LIRR station and 149th Street/Willets Point Boulevard, Whitestone. This bus route operates only on weekdays. Parsons Boulevard and Archer Avenue are the main streets of operation within the study area.

*Q36 – HILLSIDE AVENUE/JAMAICA AVENUE (NYCT)*

All buses operate between the 165th Street Bus Terminal, Jamaica and Jamaica Avenue/257th Street, Floral Park. This bus route operates at all times. Hillside Avenue is the main street of operation within the study area.

*Q40 – 142ND STREET (MTA BUS)*

All buses operate between the Sutphin Boulevard (F) subway station, Jamaica and 135th Avenue/140th Street, South Jamaica. This bus route operates at all times. Sutphin Boulevard is the main street of operation within the study area.

*Q41 – JAMAICA/LINDENWOOD (MTA BUS)*

All buses operate between the 165th Street Bus Terminal, Jamaica and 164th Avenue/Cross Bay Boulevard, Lindenwood. This bus route operates at all times except late nights. Jamaica Avenue is the main street of operation within the study area.

*Q42 – JAMAICA/LINDENWOOD (NYCT)*

All buses operate between the Jamaica Center-Parsons/Archer (E, J, Z) subway station and Sayres Avenue/180th Street, Addisleigh Park. This bus route operates weekdays only. Archer Avenue and Liberty Avenue are the main streets of operation within the study area.

*Q43 – HILLSIDE AVENUE (NYCT)*

(1) Most buses operate over the full route between the Sutphin Boulevard/Archer Avenue (E, J, Z) subway station and Jamaica LIRR Station, and Hillside Avenue/268th Street Floral Park. (2) Limited-stop service operates in the peak direction during weekday rush hours and evenings over the full route. Limited-stop service replaces local service in when it is running. (3) Some PM rush hour service originates at 179th Street (F) subway station. (4) On school days, supplemental service operates from 257th Street/90th Avenue to the Sutphin Boulevard/Archer Avenue (E, J, Z) subway station and Jamaica LIRR Station, departing at about 3:10 PM. This bus route operates at all times. Sutphin Boulevard and Hillside Avenue are the main streets of operation within the study area.

*Q44 – MAIN STREET/CROSS BRONX EXPRESSWAY (NYCT)*

All buses operate between Archer Avenue/Merrick Boulevard, Jamaica and the Bronx Zoo. During the day and night on weekdays and weekends this route operates only limited-stop service in Queens south of 20th Avenue. Late nights this route operates only local service. The Q20A/B provide local service when the Q44 operates limited-stop service. Archer Avenue and Sutphin Boulevard are the main streets of operation within the study area.

*Q54 – JAMAICA/METROPOLITAN AVENUES (NYCT)*

(1) Most buses operate over the full route between 171st Street/Jamaica Avenue, Jamaica and the Williamsburg Bridge Plaza, Brooklyn. (2) During rush hours some buses only operate between Metropolitan Avenue/Jamaica Avenue and the Metropolitan Avenue (M) subway station, Maspeth. This route operates at all times. Jamaica Avenue is the main street of operation within the study area.

*Q56 – JAMAICA AVENUE WEST (NYCT)*

All buses operate between 171st Street/Jamaica Avenue, Jamaica and Broadway Junction/East New York (A, C, J, L, Z) subway station, Brooklyn. This bus route operates at all times. Jamaica Avenue is the main street of operation within the study area.

*Q60 – QUEENS BOULEVARD (MTA BUS)*

All buses operate between 109th Avenue/157th Street, South Jamaica and Second Avenue/East 60th Street, Manhattan. This bus route operates at all times except late nights. Sutphin Boulevard and Archer Avenue are the main streets of operation within the study area.

*Q65 – 164TH STREET/COLLEGE POINT BOULEVARD (MTA BUS)*

All buses operate between Archer Avenue/Sutphin Boulevard, Jamaica LIRR station and 110th Street/14th Avenue, College Point. This bus route operates at all times. Parsons Boulevard and Archer Avenue are the main streets of operation within the study area.

*Q75 – HILLSIDE AVENUE/188TH STREET/73RD AVENUE (NYCT)*

All buses operate between the 165th Street Bus Terminal, Jamaica and 230th Street/69th Avenue, Oakland Gardens. This bus route operates weekdays only. Hillside Avenue is the main street of operation within the study area.

*Q76 – FRANCIS LEWIS BOULEVARD (NYCT)*

All buses operate between the 165th Street Bus Terminal, Jamaica and 20th Avenue/131st Street, College Point. This bus route operates weekdays and Saturdays only. Hillside Avenue is the main street of operation within the study area.

*Q77 – SPRINGFIELD BOULEVARD/FRANCIS LEWIS BOULEVARD (NYCT)*

All buses operate between the 165th Street Bus Terminal, Jamaica and Springfield Boulevard/145th Road, Brookville. This bus route operates weekdays and Saturdays only. Hillside Avenue is the main street of operation within the study area.

*Q83 – LIBERTY/MURDOCK AVENUES (NYCT)*

(1) The full route is between 153rd Street/Hillside Avenue, Jamaica and 113th Drive/227th Street, Cambria Heights. (2) Limited-stop buses operate during the morning and afternoon rush hours on weekdays in the peak direction over the full route. (3) When limited-stop buses are operating local buses operate between 153rd Street/Hillside Avenue, Jamaica and Murdock Avenue/Springfield Boulevard. (4) Late nights this bus operates between 153rd Street/Hillside Avenue, Jamaica and Amboy Lane/Springfield Boulevard at the Queens Village LIRR station. This bus route operates at all times. Archer Avenue and Liberty Avenue are the main streets of operation within the study area.

*Q84 – MERRICK BOULEVARD/120TH AVENUE (NYCT)*

All buses operate between the Jamaica Center-Parsons/Archer (E, J, Z) subway station, Jamaica and 238th Street/130th Avenue, Laurelton. This bus route operates at all times. Merrick Boulevard is the main street of operation within the study area.

*Q85 – MERRICK BOULEVARD/CONDUIT AVENUE (NYCT)*

(1) Some buses operate between the Jamaica Center-Parsons/Archer (E, J, Z) subway station, Jamaica and 243rd Street/Huxley Street, Rosedale. (2) Other buses operate between the Jamaica Center-Parsons/Archer (E, J, Z) subway station, Jamaica and Green Acres Mall, Nassau County. (3) Peak direction limited-stop service runs between Jamaica Center and 243rd Street/Huxley Street, Rosedale during the morning and afternoon rush hour periods. This bus route operates at all times to and from Rosedale. No late night service is provided to Green Acres Mall. Archer Avenue and Merrick Boulevard are the main streets of operation within the study area.

*Q110 – BELMONT PARK/JAMAICA AVENUE EAST (MTA BUS)*

(1) Most buses operate over the full route between the Parsons Boulevard (F) subway station, Jamaica and Hempstead Avenue/225th Street, Belmont Park. (2) During rush hours, additional service operates between the Jamaica-179th Street (F) subway station, Jamaica and Hempstead Avenue/225th Street, Belmont Park. This route operates at all times. Jamaica Avenue and Hempstead Avenue are the main streets of operation within the study area.

*Q111 – ROSEDALE/GUY R. BREWER BOULEVARD (MTA BUS)*

(1) Most buses operate over the full route between the Parsons Boulevard (F) subway station, Jamaica and 148th Avenue/Francis Lewis Boulevard, Rosedale. (2) Additional service operates between the Parsons Boulevard (F) subway station, Jamaica and Farmers Boulevard/Guy R. Brewer Boulevard, South Jamaica or (3) 137th Street/Guy R. Brewer Boulevard, South Jamaica. This route operates at all times. Guy R. Brewer Boulevard is the main street of operation within the study area.

*Q112 – LIBERTY AVENUE (MTA BUS)*

All buses operate between the Parsons Boulevard (F) subway station, Jamaica and the Rockaway Boulevard (A) subway station, Ozone Park. This route operates at all times except late nights. Guy R. Brewer Boulevard, South Road, and Liberty Avenue are the main streets of operation within the study area.

*Q113 – FAR ROCKAWAY/GUY R. BREWER BOULEVARD (MTA BUS)*

(1) Most buses operate over the full route between the Parsons Boulevard (F) subway station, Jamaica and Beach 20th Street/Seagirt Boulevard, Far Rockaway. (2) Limited-stop service is operated in both directions weekdays during rush hours. This route operates at all times except between 2:30 AM and 5 AM. Guy R. Brewer Boulevard is the main street of operation within the study area.

*X32 – QUEENS/BRONX EXPRESS (NYCT)*

The X32 express operates over three routes between the Bronx and Queens. All buses operate to and from 205th Street/Paul Avenue in the Bronx. In Queens, buses operate to and from (1) the 165th Street Bus Terminal, Jamaica; (2) Springfield Boulevard/Union Turnpike, Oakland Gardens; and (3) Bell Boulevard/23rd Avenue, Bayside. Only the 165th Street Bus Terminal route operates within the study area, operating along Hillside Avenue. The only stop in the Bronx is at 205th Street/Paul Avenue. This route operates only on days schools are in session and there is one trip to the Bronx on each branch in the AM rush hour, and one trip to each branch to Queens leaving the Bronx at 3:40 PM (the Jamaica and Oakland Gardens routes are combined in the PM).

*X64 – CAMBRIA HEIGHTS/MIDTOWN MANHATTAN EXPRESS (NYCT)*

All buses operate express between 234th Street/Linden Boulevard, Cambria Heights, and East 23rd Street/First Avenue, Manhattan. This route operates toward Manhattan from 6:30 AM to 8:00 AM and to Cambria Heights from 4:20 PM to 6:30 PM. Queens Boulevard, the Van Wyck Expressway Service Road and Liberty Avenue are the main streets of operation within the study area.

*X68 – FLORAL PARK/MIDTOWN MANHATTAN EXPRESS (NYCT)*

All buses operate express between 268th Street/Hillside Avenue, Floral Park and Midtown Manhattan. Some buses operate to East 23rd Street/First Avenue, Manhattan and other buses operate to East 57th Street/Third Avenue, Manhattan. This route operates toward Manhattan from 6:30 AM to 9:00 AM and toward Floral Park from 4:10 PM to 6:30 PM.

*N1 – HEWLETT/ELMONT (LI BUS)*

Buses to and from Jamaica operate between the 165th Street Bus Terminal, Jamaica and Broadway/Rockaway Avenue, Hewlett, Nassau County. This route operates to and from Jamaica during weekday rush hours only. All other times this route operates entirely within Nassau County. Hillside Avenue is the main street of operation within the study area.

*N2 – GREEN ACRES-FLORAL PARK (LI BUS)*

Buses to and from Jamaica operate between the 165th Street Bus Terminal, Jamaica and North Fletcher Avenue/Valley Stream Park Entrance, Valley Stream, Nassau County. This route operates to Jamaica during the morning rush hours and to Valley Stream during the afternoon rush hours only. All other times this route operates entirely within Nassau County. Hillside Avenue is the main street of operation within the study area.

*N3 – GREEN ACRES-FRANKLIN SQUARE (LI BUS)*

Buses to and from Jamaica operate between the 165th Street Bus Terminal, Jamaica and Franklin Avenue/Hempstead Avenue, Malverne, Nassau County. This route operates three trips to Jamaica during the morning rush hours and three trips to Valley Stream during the afternoon rush hours. All other times this route operates entirely within Nassau County. All other times this route operates entirely within Nassau County. Hillside Avenue is the main street of operation within the study area.

*N4 – FREEPORT-JAMAICA (LI BUS)*

All buses operate between Jamaica Center-Parsons/Archer (E, J, Z) subway station, Jamaica and Freeport, Nassau County. This route operates at all times except late nights. Archer Avenue and Merrick Boulevard are the main streets of operation within the study area.

*N6 – HEMPSTEAD-JAMAICA (LI BUS)*

(1) Most buses operate along the full route between the 165th Street Bus Terminal and the Transit Center, Hempstead, Nassau County. (2) In the AM peak period, bi-directional limited-stop service operates along the full route. (3) In the PM peak period, alternating buses have their Queens terminus at the 165th Street Bus Terminal or the Jamaica-179th Street (F) subway station. This route operates at all times. Jamaica Avenue, Hillside Avenue and Merrick Boulevard are the main streets of operation within the study area.

*N22 – HICKSVILLE-JAMAICA/N22A – ROOSEVELT FIELD-JAMAICA (LI BUS)*

(1) The N22 operates between the 165th Street Bus Terminal, Jamaica and Hicksville, Nassau County. (2) The N22A operates on weekdays only, generally between the 165th Street Bus Terminal, Jamaica and Carle Place, Nassau County with some westbound buses originating in Garden City or East Williston. (3) Some buses operate abbreviated versions of the route. This route operates at all times except late nights. Hillside Avenue and Merrick Boulevard are the main streets of operation within the study area.

*N24 – ROOSEVELT FIELD-JAMAICA (LI BUS)*

(1) Peak bi-directional service between the 165th Street Bus Terminal and East Meadow, Nassau County. (2) Middays, buses operate between Jamaica and Garden City/Uniondale, Nassau

County. (3) Early morning late nights and weekends, buses operate between the 165th Street Bus Terminal, Jamaica and Mineola/Garden City, Nassau County. Hillside Avenue and Merrick Boulevard are the main streets of operation within the study area.

*N26 – GREAT NECK-JAMAICA (LI BUS)*

All buses operate between the 165th Street Bus Terminal and Great Neck LIRR station. Hillside Avenue and Merrick Boulevard are the main streets of operation within the study area. This route operates three trips to Great Neck during the morning rush hours and two trips to Jamaica during the afternoon rush hours. Hillside Avenue and Merrick Boulevard are the main streets of operation within the study area.

**OTHER TRANSIT FACILITIES**

In addition to subway and bus transit, Downtown Jamaica is served by commuter rail and light rail vehicles. The LIRR commuter railroad and JFK Airport AirTrain light rail serve stations at Sutphin Boulevard and Archer Avenue. The LIRR operate west to Pennsylvania Station in Manhattan and Atlantic Terminal in Brooklyn. Limited peak hour peak direction trains also go to Hunters Point and Long Island City Terminal. LIRR trains operate east to all LIRR branches with the exception of the Port Washington Branch. JFK Airport AirTrain operates to and from JFK International Airport.

**PEDESTRIANS**

The analysis of pedestrian conditions focuses on representative pedestrian elements where new trips generated by projected developments are expected to be most concentrated. These elements—sidewalks, corner areas and crosswalks—are primarily located in the vicinity of subway stations and major projected developments. As shown in Figure 17-3, they include corner areas and crosswalks along several of the access corridors being analyzed within the rezoning area, including Hillside Avenue, Jamaica Avenue, Archer Avenue, Liberty Avenue, and Sutphin Boulevard. Subway stations along these access corridors include two subway stations located along Archer Avenue, served by E, J, and Z trains, and four subway stations are located along Hillside Avenue, served by F trains. In addition to the 8-9 AM and 5-6 PM peak hours, the pedestrian analyses examine weekday midday (12-1 PM) conditions, as pedestrian facilities in this area are often highly utilized during the midday.

Existing peak 15-minute pedestrian flow conditions during the AM, midday and PM peak hours were analyzed using the 2000 *Highway Capacity Manual* methodology. Under this methodology, the congestion level of pedestrian facilities is determined by considering pedestrian volumes, measuring the sidewalk or crosswalk widths, determining the available pedestrian capacity and developing a ratio of existing volume flows to capacity conditions. The resulting ratio is then compared with level of service standards for pedestrian flow, which define a qualitative relationship at a certain pedestrian traffic concentration level. The evaluation of street crosswalks and corner areas is more complicated as these spaces cannot be treated as corridors due to the time incurred waiting for traffic lights. To effectively evaluate these facilities, a “time-space” analysis methodology is employed which takes into consideration the traffic light cycle at intersections. In analyzing corner areas, allowance is also made for the presence of light poles, waste receptacles, and other pieces of sidewalk furniture that may occupy space otherwise available for pedestrian queuing and movement.



Level of service standards are based on the average area available per pedestrian during the analysis period, typically as a 15-minute peak period. Level of service (LOS) grades from A to F are assigned, with LOS A representative of free flow conditions without pedestrian conflicts and LOS F depicting significant capacity limitations and inconvenience. Table 17-6 defines the LOS criteria for pedestrian crosswalk/corner area and sidewalk conditions, as based on the 2000 *Highway Capacity Manual*.

**Table 17-6**  
**Pedestrian Crosswalk/Corner Area and Sidewalk Levels of Service**  
**Descriptions\***

Level of Service		Crosswalk/Corner Area Criteria (sq. ft./ped.)	Sidewalk Criteria (ped./ft./min.)
A	(Unrestricted)	> 60	Less than or equal to 5
B	(Slightly Restricted)	> 40-60	> 5-7
C	(Restricted but fluid)	> 24-40	> 7-10
D	(Restricted, need to continuously alter walking stride and direction)	> 15-24	> 10-15
E	(Severely restricted)	>8-15	> 15-23
F	(Forward progress only by shuffling; no reverse movement possible)	less than or equal to 8	greater than 23
<b>Notes:</b> * - based on average conditions for 15-minutes (sq. ft./ped.) – square feet per pedestrian (ped./ft./min.) – pedestrians per foot-width per minute Source: 2000 <i>Highway Capacity Manual</i>			

Figure 17-4 shows a schematic diagram of the numbering system for the locations of the analyzed walkways and crosswalks.

Tables 17-7 through 17-9 show the results of the analyses of existing sidewalk, corner area and crosswalk conditions for the AM, midday, and PM peak hours. As shown in Table 17-7, all analyzed sidewalks currently operate at LOS B or better, during all peak hours.


As shown in Table 17-8, corners generally operate at LOS C or better during all peak periods with the exception of two locations. The northeast corners at Jamaica Avenue and 160th Street operates at LOS D during the midday and PM peak hours, and the southeast corner operates at LOS E during the midday peak hour and LOS D during the PM peak hour. The northwest corner at Jamaica Avenue and Merrick Boulevard operates at LOS D during the PM peak hour.

As shown in Table 17-9, all corners operate at LOS C or better during all peak hour with the exception of Jamaica Avenue and Union Hall Street, where the east crosswalk operates at LOS D during the midday peak hour.

Overall, the generally acceptable levels of service during the peak hours at pedestrian facilities in the vicinity of the proposed action area reflect the existing low pedestrian densities found in most parts of the area (except for Jamaica Avenue), as well as the adequacy of sidewalks in the study area.



Key:

-  Analyzed Crosswalk
-  Analyzed Corner
-  Analyzed Pedestrian Facility
-  Rezoning Area Boundary

Pedestrian Facility Locations  
Figure 17-3

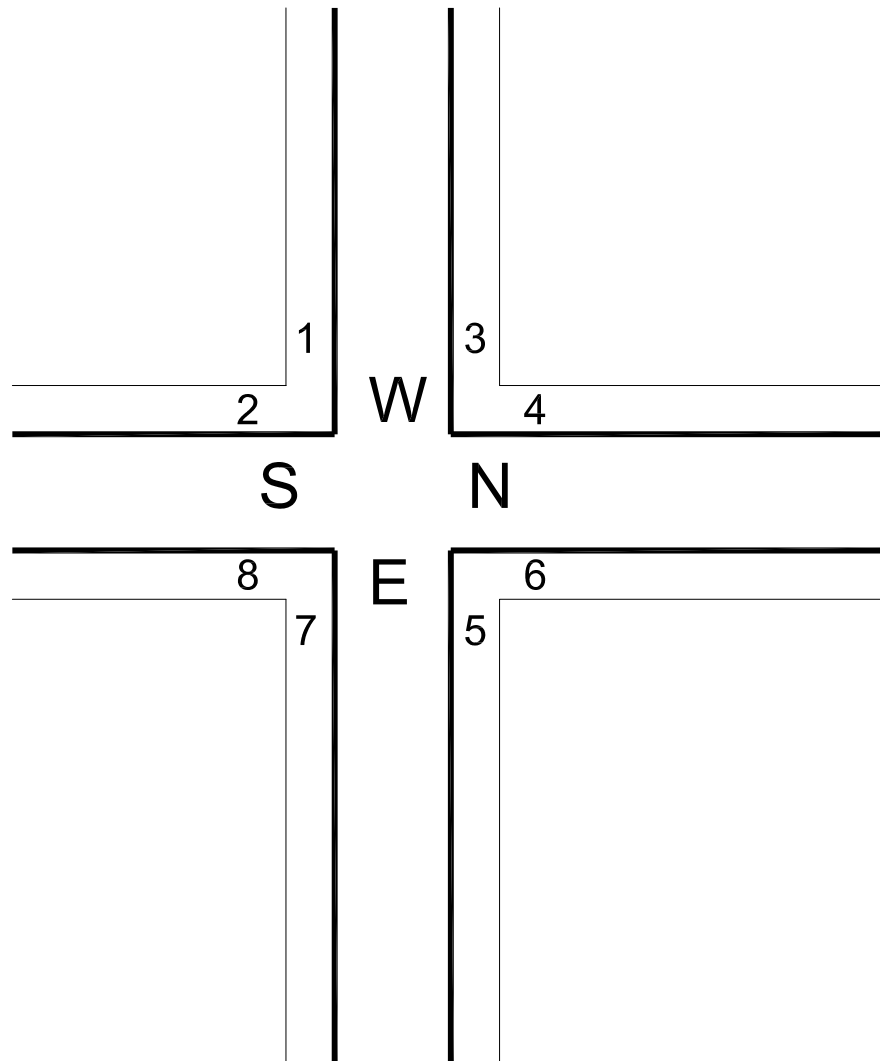


Table 17-7  
2005 Existing Sidewalk Conditions

(p/f/m = Pedestrians/Foot-width/Minute)

Intersection	Wkwy.	AM		MD		PM	
		p/f/m	LOS	p/f/m	LOS	p/f/m	LOS
Archer Ave. @ 150th St.	1	0.1	A	0.0	A	0.1	A
	2	0.0	A	0.0	A	0.1	A
	3	0.0	A	0.1	A	0.1	A
	4	0.1	A	0.1	A	0.1	A
	5	0.0	A	0.0	A	0.0	A
	6	0.1	A	0.1	A	0.1	A
	7	0.1	A	0.1	A	0.1	A
	8	0.1	A	0.0	A	0.1	A
Archer Ave. @ 153rd St.	1	0.7	A	0.5	A	0.7	A
	2	0.7	A	0.4	A	0.5	A
	3	0.8	A	0.4	A	0.8	A
	4	2.8	A	0.9	A	1.0	A
Jamaica Ave. @ 149th St.	1	0.4	A	0.7	A	0.8	A
	2	1.6	A	2.4	A	2.4	A
	3	0.3	A	0.5	A	0.5	A
	4	0.9	A	1.7	A	1.6	A
	5	0.5	A	0.8	A	0.7	A
	6	0.6	A	1.3	A	1.2	A
	7	0.2	A	0.3	A	0.3	A
	8	0.4	A	0.9	A	0.9	A
Jamaica Ave. @ 160th St.	1	0.5	A	0.5	A	0.5	A
	2	0.9	A	3.1	A	5.7	B
	3	0.7	A	1.1	A	1.0	A
	4	0.9	A	4.1	A	4.6	A
	5	0.4	A	0.7	A	0.8	A
	6	1.1	A	4.2	A	3.7	A
	7	0.3	A	0.3	A	0.5	A
	8	0.6	A	2.2	A	2.2	A
Jamaica Ave. @ 168th St.	1	0.3	A	0.4	A	0.3	A
	2	1.2	A	3.3	A	5.4	B
	3	0.9	A	1.7	A	1.5	A
	4	0.3	A	0.9	A	1.5	A
	5	0.2	A	0.3	A	0.3	A
	6	0.6	A	1.3	A	3.7	A
	7	0.2	A	0.3	A	0.4	A
	8	0.4	A	0.8	A	2.5	A
Jamaica Ave. @ Merrick Blvd.	1	0.3	A	0.8	A	0.7	A
	2	0.6	A	2.2	A	2.9	A
	3	0.2	A	0.3	A	0.3	A
	4	0.5	A	1.8	A	2.5	A
	5	0.3	A	0.6	A	0.7	A
	6	0.4	A	0.9	A	2.1	A
	7	0.2	A	0.4	A	0.5	A
	8	0.5	A	0.9	A	2.1	A

Source: NYC Dept. of City Planning, *Jamaica Parking, Public Transportation and Pedestrian Study Technical Memorandum 3: Existing Conditions*, January 27, 2006.

February 5, 2007

**Table 17-7 (continued)**  
**2005 Existing Sidewalk Conditions**

(p/f/m = Pedestrians/Foot-width/Minute)

Intersection	Wkwy.	AM		MD		PM	
		p/f/m	LOS	p/f/m	LOS	p/f/m	LOS
Jamaica Ave. @ Parsons Blvd.	1	0.3	A	0.3	A	0.7	A
	2	0.7	A	1.4	A	1.5	A
	3	1.9	A	1.6	A	0.4	A
	4	0.3	A	0.6	A	1.7	A
	5	0.4	A	0.6	A	0.8	A
	6	0.4	A	0.3	A	0.5	A
	7	0.1	A	0.4	A	0.4	A
	8	0.3	A	0.6	A	0.2	A
Jamaica Ave. @ Sutphin Blvd.	1	0.9	A	1.4	A	1.3	A
	2	1.6	A	2.1	A	1.6	A
	3	2.4	A	3.1	A	0.3	A
	4	1.3	A	1.5	A	1.3	A
	5	1.0	A	1.1	A	0.4	A
	6	2.1	A	2.8	A	2.6	A
	7	1.7	A	1.2	A	0.4	A
	8	1.3	A	3.1	A	2.1	A
Jamaica Ave. @ Union Hall St.	2	0.9	A	2.9	A	1.7	A
	4	0.9	A	2.8	A	1.8	A
	5	0.1	A	2.0	A	0.2	A
	6	1.1	A	0.2	A	1.8	A
	7	0.1	A	0.3	A	0.4	A
	8	1.0	A	1.7	A	1.7	A
Sutphin Blvd. @ Archer Ave.	1	1.1	A	1.4	A	1.7	A
	2	0.4	A	0.4	A	0.5	A
	3	1.3	A	3.4	A	3.8	A
	4	1.2	A	0.6	A	0.8	A
	5	1.4	A	1.2	A	1.2	A
	6	1.8	A	0.6	A	1.2	A
	7	1.1	A	1.1	A	1.5	A
	8	0.9	A	0.5	A	0.6	A
90th Ave. @ 168th St.	1	0.6	A	0.3	A	0.6	A
	2	0.4	A	0.2	A	0.2	A
	3	0.4	A	0.3	A	0.3	A
	4	0.3	A	0.4	A	0.3	A
	5	0.2	A	0.1	A	0.1	A
	6	0.1	A	0.1	A	0.1	A
	7	0.1	A	0.1	A	0.2	A
	8	0.5	A	0.4	A	0.3	A
Archer Ave. @ 160th St.	1	0.1	A	0.1	A	0.3	A
	2	0.3	A	0.6	A	0.7	A
	3	0.3	A	0.2	A	0.3	A
	4	0.4	A	0.6	A	0.7	A
	5	0.3	A	0.2	A	0.4	A
	6	0.7	A	0.8	A	1	A
	7	0.6	A	0.8	A	0.8	A
	8	0.2	A	0.2	A	0.4	A

Source: NYC Dept. of City Planning, *Jamaica Parking, Public Transportation and Pedestrian Study Technical Memorandum 3: Existing Conditions*, January 27, 2006.

February 5, 2007

Table 17-7 (continued)  
2005 Existing Sidewalk Conditions

(p/f/m = Pedestrians/Foot-width/Minute)

Intersection	Wkwy.	AM		MD		PM	
		p/f/m	LOS	p/f/m	LOS	p/f/m	LOS
Archer Ave. @ Parsons Blvd.	1	0.9	A	0.8	A	1.5	A
	2	1.1	A	0.7	A	1.3	A
	3	3.5	A	1.8	A	3.6	A
	4	4.0	A	2.0	A	3.4	A
Archer Ave. @ Union Hall St.	1	0.3	A	0.2	A	0.2	A
	2	0.0	A	0.1	A	0.1	A
	3	0.2	A	0.1	A	0.1	A
	4	0.3	A	0.6	A	0.6	A
Hillside Ave. @ 144th St.	1	0.4	A	0.3	A	0.3	A
	2	0.2	A	0.5	A	0.3	A
	3	0.6	A	0.4	A	0.6	A
	4	0.2	A	0.3	A	0.2	A
	5	0.2	A	0.2	A	0.2	A
	6	0.2	A	0.3	A	0.2	A
	7	0.3	A	0.3	A	0.4	A
	8	0.2	A	0.3	A	0.3	A
Hillside Ave. @ 153rd St.	5	0.3	A	0.8	A	0.4	A
	6	0.2	A	0.3	A	0.3	A
	7	0.2	A	0.2	A	0.3	A
	8	0.2	A	0.6	A	0.4	A
Hillside Ave. @ Parsons Blvd.	1	1.8	A	1.7	A	1.4	A
	2	0.4	A	0.9	A	0.4	A
	3	1.0	A	0.7	A	1.1	A
	4	0.9	A	0.9	A	0.6	A
	5	1.6	A	1.9	A	1.3	A
	6	0.7	A	0.9	A	0.5	A
	7	1.4	A	1.9	A	1.5	A
	8	0.4	A	0.7	A	0.5	A
Hillside Ave. @ Sutphin Blvd.	5	1.1	A	1.3	A	2.2	A
	6	0.4	A	1.0	A	0.4	A
	7	0.8	A	1.6	A	1.3	A
	8	0.5	A	0.9	A	0.4	A
Hillside Ave. @ Queens Blvd.	1	0.1	A	0.1	A	0.1	A
	2	0.1	A	0.2	A	0.1	A
	3	0.1	A	0.2	A	0.2	A
	4	0.3	A	0.2	A	0.2	A
	5	0.2	A	0.1	A	0.1	A
	6	0.1	A	0.2	A	0.2	A
	7	0.2	A	0.2	A	0.2	A
	8	0.1	A	0.1	A	0.2	A
Archer Ave. @ Guy R. Brewer Blvd.	1	0.6	A	0.7	A	0.7	A
	2	0.6	A	0.8	A	0.7	A
	3	0.5	A	0.9	A	0.9	A
	4	1.2	A	1.2	A	1.3	A
	5	0.7	A	0.7	A	0.9	A
	6	0.9	A	0.9	A	0.7	A
	7	0.4	A	0.4	A	0.6	A
	8	0.7	A	0.8	A	0.6	A

Source: NYC Dept. of City Planning, *Jamaica Parking, Public Transportation and Pedestrian Study Technical Memorandum 3: Existing Conditions*, January 27, 2006.

February 5, 2007

Table 17-7 (continued)  
2005 Existing Sidewalk Conditions

(p/f/m = Pedestrians/Foot-width/Minute)

Intersection	Wkwy.	AM		MD		PM	
		p/f/m	LOS	p/f/m	LOS	p/f/m	LOS
Archer Ave. @ Merrick Blvd.	1	0.5	A	0.5	A	0.9	A
	2	0.2	A	0.1	A	0.3	A
	3	0.6	A	0.4	A	0.5	A
	4	0.4	A	0.3	A	0.6	A
	5	0.2	A	0.1	A	0.2	A
	6	0.2	A	0.2	A	0.3	A
	7	0.6	A	0.5	A	0.6	A
	8	0.2	A	0.1	A	0.2	A
Liberty Ave. @ 150th St.	1	0.0	A	0.0	A	0.0	A
	2	0.1	A	0.0	A	0.0	A
	3	0.1	A	0.1	A	0.1	A
	4	0.0	A	0.0	A	0.0	A
	5	0.2	A	0.1	A	0.1	A
	6	0.1	A	0.1	A	0.0	A
	7	0.1	A	0.0	A	0.0	A
	8	0.1	A	0.1	A	0.1	A
Liberty Ave. @ Merrick Blvd.	1	0.2	A	0.2	A	0.1	A
	2	0.9	A	0.7	A	0.3	A
	3	0.1	A	0.1	A	0.1	A
	4	0.1	A	0.1	A	0.0	A
	5	0.1	A	0.2	A	0.1	A
	6	0.0	A	0.0	A	0.0	A
	7	0.1	A	0.1	A	0.1	A
	8	0.1	A	0.1	A	0.0	A
Liberty Ave. @ Sutphin Blvd.	1	0.1	A	0.1	A	0.1	A
	2	0.0	A	0.0	A	0.1	A
	3	0.1	A	0.1	A	0.1	A
	4	0.1	A	0.1	A	0.1	A
	5	0.1	A	0.1	A	0.1	A
	6	0.0	A	0.1	A	0.0	A
	7	0.1	A	0.1	A	0.1	A
	8	0.1	A	0.1	A	0.1	A
Sutphin Blvd. @ 94th Ave.	1	0.5	A	0.4	A	0.5	A
	2	0.1	A	0.3	A	0.3	A
	3	0.4	A	0.4	A	0.3	A
	4	0.2	A	0.2	A	0.2	A
	5	0.3	A	0.3	A	0.2	A
	6	0.2	A	0.2	A	0.1	A
	7	0.5	A	0.7	A	0.6	A
	8	0.4	A	0.9	A	0.3	A
Sutphin Blvd. @ 95th Ave.	1	0.6	A	0.5	A	0.6	A
	2	0.2	A	0.2	A	0.2	A
	3	1.2	A	1.2	A	0.9	A
	4	0.3	A	0.3	A	0.3	A
	5	0.5	A	0.5	A	0.3	A
	6	0.3	A	0.3	A	0.2	A
	7	0.6	A	0.5	A	0.5	A
	8	0.2	A	0.2	A	0.2	A

Source: NYC Dept. of City Planning, *Jamaica Parking, Public Transportation and Pedestrian Study Technical Memorandum 3: Existing Conditions*, January 27, 2006.

February 5, 2007

**Table 17-7 (continued)**  
**2005 Existing Sidewalk Conditions**

(p/f/m = Pedestrians/Foot-width/Minute)

Intersection	Wkwy.	AM		MD		PM	
		p/f/m	LOS	p/f/m	LOS	p/f/m	LOS
Sutphin Blvd. @ 97th Ave.	1	0.3	A	0.3	A	0.3	A
	2	0.1	A	0.1	A	0.1	A
	3	0.2	A	0.3	A	0.1	A
	4	0.1	A	0.1	A	0.1	A
	5	0.2	A	0.2	A	0.1	A
	6	0.1	A	0.1	A	0.1	A
	7	0.4	A	0.5	A	0.5	A
	8	0.1	A	0.1	A	0.1	A
Archer Ave. @ 168th St.	1	0.1	A	0.1	A	0.2	A
	2	0.1	A	0.2	A	0.2	A
	3	0.1	A	0.1	A	0.1	A
	4	0.1	A	0.1	A	0.1	A
	5	0.1	A	0.1	A	0.1	A
	6	0.1	A	0.1	A	0.2	A
	7	0.1	A	0.3	A	0.3	A
	8	0.1	A	0.2	A	0.2	A
Hillside Ave. @ 168th St.	1	0.6	A	0.6	A	0.7	A
	2	0.4	A	0.8	A	0.5	A
	3	0.8	A	0.6	A	0.8	A
	4	0.5	A	0.8	A	1.0	A
	5	0.8	A	0.5	A	0.9	A
	6	0.6	A	0.5	A	0.7	A
	7	1.0	A	0.5	A	1.1	A
	8	0.5	A	0.8	A	0.6	A
Hillside Ave. @ 169th St.	1	1.2	A	0.6	A	1.2	A
	2	0.5	A	0.9	A	0.5	A
	3	0.3	A	0.3	A	0.4	A
	4	1.3	A	0.8	A	1.6	A
	5	0.9	A	0.7	A	1.6	A
	6	0.5	A	0.5	A	0.5	A
	7	0.4	A	0.8	A	1.4	A
	8	0.7	A	1.0	A	0.8	A
Hillside Ave. @ 178th St.	1	0.3	A	0.2	A	0.3	A
	2	0.5	A	0.3	A	0.6	A
	3	0.3	A	0.2	A	0.4	A
	4	0.5	A	0.5	A	0.5	A
	5	0.2	A	0.2	A	0.2	A
	6	0.7	A	0.6	A	0.7	A
	7	0.7	A	0.3	A	0.5	A
	8	1.5	A	1.2	A	1.4	A
Hillside Ave. @ 179th St.	5	0.4	A	0.6	A	0.8	A
	6	0.4	A	0.4	A	0.6	A
	7	0.4	A	0.5	A	0.8	A
	8	0.3	A	0.2	A	0.3	A

Source: NYC Dept. of City Planning, *Jamaica Parking, Public Transportation and Pedestrian Study Technical Memorandum 3: Existing Conditions*, January 27, 2006.

February 5, 2007



**Table 17-7 (continued)**  
**2005 Existing Sidewalk Conditions**

**(p/f/m = Pedestrians/Foot-width/Minute)**

Intersection	Wkwy.	AM		MD		PM	
		p/f/m	LOS	p/f/m	LOS	p/f/m	LOS
<b>Liberty Ave. @ 160th St.</b>	<b>1</b>	0.7	A	0.7	A	0.6	A
	<b>2</b>	1.0	A	0.7	A	0.7	A
	<b>3</b>	0.6	A	0.5	A	0.5	A
	<b>4</b>	0.2	A	0.2	A	0.3	A
	<b>5</b>	0.3	A	0.2	A	0.3	A
	<b>6</b>	0.1	A	0.1	A	0.1	A
	<b>7</b>	0.3	A	0.5	A	0.3	A
	<b>8</b>	0.6	A	0.5	A	0.6	A
<b>Hillside Ave. @ 180th St.</b>	<b>5</b>	0.2	A	0.2	A	0.2	A
	<b>6</b>	0.9	A	0.6	A	1.2	A
	<b>7</b>	0.6	A	0.3	A	0.6	A
	<b>8</b>	0.6	A	0.7	A	0.7	A
<b>Liberty Ave. @ Guy R. Brewer Blvd.</b>	<b>1</b>	0.3	A	0.2	A	0.2	A
	<b>2</b>	0.1	A	0.1	A	0.1	A
	<b>3</b>	0.2	A	0.2	A	0.2	A
	<b>4</b>	0.2	A	0.2	A	0.2	A
	<b>5</b>	0.3	A	0.2	A	0.2	A
	<b>6</b>	0.3	A	0.2	A	0.2	A
	<b>7</b>	0.2	A	0.3	A	0.3	A
	<b>8</b>	0.2	A	0.1	A	0.1	A

Source: NYC Dept. of City Planning, *Jamaica Parking, Public Transportation and Pedestrian Study Technical Memorandum 3: Existing Conditions*, January 27, 2006.

February 5, 2007

Table 17-8  
2005 Existing Corner Conditions

(SF/P - Square Foot per Pedestrian)

Intersection	Corner	AM		MD		PM	
		SF/P	LOS	SF/P	LOS	SF/P	LOS
Archer Ave. @ 150th St.	Northeast	3,476.3	A	2,981.6	A	1,893.6	A
	Southeast	1,363.9	A	1,613.7	A	1,844.3	A
	Southwest	1,300.2	A	1,691.4	A	1,799.6	A
	Northwest	2,901.8	A	3,869.1	A	1,931.1	A
Archer Ave. @ 153rd St.	Northeast	211.7	A	431.1	A	414.4	A
	Northwest	192.1	A	213.8	A	181.2	A
Jamaica Ave. @ 149th St.	Northeast	178.4	A	117.0	A	105.0	A
	Southeast	214.4	A	109.0	A	111.7	A
	Southwest	159.2	A	84.6	A	85.2	A
	Northwest	106.8	A	59.6	B	60.2	A
Jamaica Ave. @ 160th St.	Northeast	95.3	A	23.9	D	22.3	D
	Southeast	58.1	B	14.6	E	18.9	D
	Southwest	148.0	A	64.2	A	66.8	A
	Northwest	92.2	A	36.5	C	28.8	C
Jamaica Ave. @ 168th St.	Northeast	170.8	A	64.6	A	30.4	C
	Southeast	243.8	A	100.9	A	50.4	B
	Southwest	310.6	A	99.3	A	37.1	C
	Northwest	186.7	A	64.3	A	34.1	C
Jamaica Ave. @ Merrick Blvd.	Northeast	387.9	A	125.6	A	91.1	A
	Southeast	204.9	A	96.3	A	39.9	C
	Southwest	330.4	A	148.2	A	68.5	A
	Northwest	120.8	A	32.5	C	21.8	D
Jamaica Ave. @ Parsons Blvd.	Northeast	77.6	A	82.3	A	76.9	A
	Southeast	89.4	A	89.2	A	99.0	A
	Southwest	460.7	A	353.1	A	339.5	A
	Northwest	135.0	A	107.5	A	74.4	A
Jamaica Ave. @ Sutphin Blvd.	Northeast	88.6	A	88.8	A	110.0	A
	Southeast	68.1	A	63.4	A	102.6	A
	Southwest	49.7	B	54.9	B	66.0	A
	Northwest	30.7	C	48.1	B	34.7	C
Jamaica Ave. @ Union Hall St.	Southeast	202.8	A	120.7	A	135.4	A
	Southwest	115.8	A	66.9	A	79.2	A
Sutphin Blvd. @ Archer Ave.	Northeast	72.8	A	68.3	A	65.8	A
	Southeast	106.7	A	104.4	A	106.5	A
	Southwest	174.9	A	160.7	A	212.2	A
	Northwest	142.9	A	131.1	A	151.8	A
90th Ave. @ 168th St.	Northeast	505.2	A	819.2	A	457.5	A
	Southeast	1,565.2	A	2,045.4	A	1,883.4	A
	Southwest	795.9	A	1,235.8	A	1,074.5	A
	Northwest	333.8	A	553.2	A	301.5	A
Archer Ave. @ 160th St.	Northeast	239.8	A	193.4	A	161.9	A
	Southeast	146.2	A	145.9	A	108.5	A
	Southwest	245.3	A	219.7	A	177.4	A
	Northwest	336.4	A	287.6	A	223.3	A

Source: NYC Dept. of City Planning, *Jamaica Parking, Public Transportation and Pedestrian Study Technical Memorandum 3: Existing Conditions*, January 27, 2006.

February 05, 2007

**Table 17-8 (continued)**  
**2005 Existing Corner Conditions**

**(SF/P - Square Foot per Pedestrian)**

Intersection	Corner	AM		MD		PM	
		SF/P	LOS	SF/P	LOS	SF/P	LOS
Archer Ave. @ Parsons Blvd.	Northeast	75.0	A	148.8	A	81.0	A
	Northwest	184.3	A	219.2	A	109.5	A
Archer Ave. @ Union Hall St.	Northeast	786.3	A	587.2	A	792.4	A
	Northwest	1,096.1	A	847.5	A	1,210.8	A
Hillside Ave. @ 144th St.	Northeast	320.6	A	259.7	A	392.6	A
	Southeast	624.3	A	451.2	A	592.5	A
	Southwest	614.9	A	432.4	A	665.7	A
	Northwest	452.5	A	319.8	A	537.4	A
Hillside Ave. @ 153rd St.	Southwest	772.4	A	702.0	A	501.8	A
	Southeast	537.4	A	674.8	A	488.3	A
Hillside Ave. @ Parsons Blvd.	Northeast	81.7	A	126.8	A	226.5	A
	Southeast	147.0	A	140.6	A	244.7	A
	Southwest	163.0	A	123.4	A	196.1	A
	Northwest	151.7	A	123.4	A	234.3	A
Hillside Ave. @ Sutphin Blvd.	Southeast	347.3	A	197.8	A	327.1	A
	Southwest	283.6	A	144.5	A	296.4	A
Hillside Ave. @ Queens Blvd.	Northeast	934.9	A	1,227.4	A	1,370.9	A
	Southeast	1,704.8	A	1,371.2	A	1,332.8	A
	Southwest	1,484.4	A	1,034.2	A	957.6	A
	Northwest	904.2	A	1,036.7	A	903.4	A
Archer Ave. @ Guy R. Brewer Blvd.	Northeast	43.1	B	37.9	C	37.3	C
	Southeast	70.5	A	79.5	A	71.8	A
	Southwest	121.6	A	129.6	A	127.8	A
	Northwest	186.4	A	161.7	A	173.5	A
Archer Ave. @ Merrick Blvd.	Northeast	156.6	A	192.0	A	140.1	A
	Southeast	724.6	A	1,002.3	A	707.6	A
	Southwest	250.4	A	295.6	A	246.1	A
	Northwest	518.9	A	575.6	A	344.1	A
Liberty Ave. @ 150th St.	Northeast	1,365.5	A	1,662.7	A	2,012.7	A
	Southeast	994.8	A	967.7	A	1,474.7	A
	Southwest	1,188.4	A	1,345.7	A	1,426.7	A
	Northwest	2,097.8	A	2,466.8	A	2,467.6	A
Liberty Ave. @ Merrick Blvd.	Northeast	1,042.3	A	610.9	A	1,492.6	A
	Southwest	1,840.3	A	1,570.6	A	2,286.0	A
	Northwest	195.1	A	156.7	A	383.4	A
Liberty Ave. @ Sutphin Blvd.	Northeast	2,100.3	A	2,100.8	A	1,424.5	A
	Southeast	1,708.7	A	1,709.5	A	1,871.4	A
	Southwest	1,981.2	A	1,893.4	A	1,675.3	A
	Northwest	2,002.9	A	1,638.3	A	1,286.6	A
Sutphin Blvd. @ 94th Ave.	Northeast	304.0	A	318.5	A	399.5	A
	Southeast	346.4	A	345.7	A	456.4	A
	Southwest	161.0	A	141.6	A	207.0	A
	Northwest	202.9	A	212.9	A	221.9	A
Sutphin Blvd. @ 95th Ave.	Northeast	106.9	A	108.8	A	127.9	A
	Southeast	336.8	A	336.4	A	335.6	A
	Southwest	280.6	A	183.0	A	279.5	A
	Northwest	260.5	A	280.3	A	253.7	A

Source: NYC Dept. of City Planning, *Jamaica Parking, Public Transportation and Pedestrian Study Technical Memorandum 3: Existing Conditions*, January 27, 2006.

**Table 17-8 (continued)**  
**2005 Existing Corner Conditions**

**(SF/P - Square Foot per Pedestrian)**

Intersection	Corner	AM		MD		PM	
		SF/P	LOS	SF/P	LOS	SF/P	LOS
Sutphin Blvd. @ 97th Ave.	Northeast	593.5	A	467.1	A	670.4	A
	Southeast	600.7	A	468.9	A	592.9	A
	Southwest	257.7	A	229.8	A	217.2	A
	Northwest	842.8	A	638.6	A	660.2	A
Archer Ave. @ 168th St.	Northeast	1,541.4	A	1,259.2	A	1,065.5	A
	Southeast	1,244.3	A	760.3	A	758.5	A
	Southwest	934.1	A	716.4	A	746.1	A
	Northwest	976.8	A	979.3	A	875.4	A
Hillside Ave. @ 168th St.	Northeast	309.5	A	391.7	A	290.5	A
	Southeast	358.0	A	298.8	A	201.5	A
	Southwest	432.6	A	316.2	A	224.1	A
	Northwest	463.3	A	527.6	A	370.2	A
Hillside Ave. @ 169th St.	Northeast	314.2	A	308.3	A	201.9	A
	Southeast	271.3	A	270.7	A	219.6	A
	Southwest	240.1	A	210.1	A	175.3	A
	Northwest	298.4	A	291.0	A	215.2	A
Hillside Ave. @ 178th St.	Northeast	607.3	A	809.8	A	472.6	A
	Southeast	346.0	A	410.8	A	296.0	A
	Southwest	215.8	A	236.6	A	160.0	A
	Northwest	464.7	A	642.8	A	384.1	A
Hillside Ave. @ 179th St.	Southeast	342.3	A	453.5	A	270.6	A
	Southwest	341.6	A	384.1	A	261.5	A
Liberty Ave. @ 160th St.	Northeast	169.0	A	244.8	A	267.3	A
	Southeast	1,214.5	A	1,403.3	A	1,166.2	A
	Southwest	110.4	A	119.4	A	114.0	A
	Northwest	141.9	A	180.2	A	216.7	A
Hillside Ave. @ 180th St.	Southeast	330.9	A	321.0	A	307.7	A
	Southwest	266.8	A	281.6	A	250.2	A
Liberty Ave. @ Guy R. Brewer Blvd.	Northeast	581.4	A	638.1	A	658.7	A
	Southeast	245.4	A	278.2	A	246.1	A
	Southwest	589.1	A	600.5	A	539.3	A
	Northwest	934.9	A	962.3	A	972.1	A

Source: NYC Dept. of City Planning, *Jamaica Parking, Public Transportation and Pedestrian Study Technical Memorandum 3: Existing Conditions*, January 27, 2006.

February 05, 2007

**Table 17-9**  
**2005 Existing Crosswalk Conditions**

**(SF/P - Square Foot per Pedestrian)**

Intersection	Corner	AM		MD		PM	
		SF/P	LOS	SF/P	LOS	SF/P	LOS
Archer Ave. @ 150th St.	North	17,454.1	A	8,722.2	A	8,727.1	A
	West	3,622.3	A	4,829.7	A	2,065.3	A
	South	4,542.9	A	6,821.1	A	4,542.7	A
	East	846.5	A	1,116.5	A	1,318.2	A
Archer Ave. @ 153rd St.	North	217.5	A	171.8	A	185.9	A
	West	305.2	A	352.6	A	288.4	A
	South	199.9	A	230.4	A	187.4	A
Jamaica Ave. @ 149th St.	North	213.4	A	123.2	A	115.8	A
	West	639.3	A	339.0	A	379.0	A
	South	223.5	A	148.6	A	135.2	A
	East	471.0	A	229.4	A	249.5	A
Jamaica Ave. @ 160th St.	North	235.2	A	62.0	A	144.1	A
	West	186.2	A	59.8	B	30.3	C
	South	106.4	A	50.8	B	72.5	A
	East	182.6	A	61.8	A	50.3	B
Jamaica Ave. @ 168th St.	North	224.5	A	152.7	A	114.8	A
	West	306.1	A	86.1	A	52.1	B
	South	384.4	A	142.9	A	48.9	B
	East	711.6	A	195.1	A	74.4	A
Jamaica Ave. @ Merrick Blvd.	North	433.3	A	293.6	A	182.6	A
	West	272.7	A	60.8	A	44.1	B
	South	333.8	A	144.7	A	84.2	A
	East	362.4	A	155.4	A	52.8	B
Jamaica Ave. @ Parsons Blvd.	North	45.4	B	67.4	A	56.6	B
	West	137.7	A	113.1	A	105.3	A
	South	119.4	A	94.5	A	64.5	A
	East	160.6	A	102.9	A	157.3	A
Jamaica Ave. @ Sutphin Blvd.	North	47.0	B	39.6	C	55.3	B
	West	98.5	A	142.3	A	128.5	A
	South	38.3	C	62.2	A	40.3	B
	East	105.2	A	133.2	A	228.5	A
Jamaica Ave. @ Union Hall St.	North	261.7	A	127.8	A	178.0	A
	South	207.1	A	115.7	A	218.6	A
	East	38.7	C	21.3	D	24.9	C
Sutphin Blvd. @ Archer Ave.	North	123.8	A	125.1	A	127.2	A
	West	117.0	A	94.8	A	82.7	A
	South	87.7	A	87.7	A	122.0	A
	East	135.0	A	122.9	A	138.9	A
90th Ave. @ 168th St.	North	1,789.5	A	1,787.2	A	1,342.2	A
	West	490.3	A	983.2	A	490.3	A
	South	1,993.0	A	2,850.2	A	2,214.5	A
	East	433.6	A	711.4	A	869.9	A
Archer Ave. @ 160th St.	North	436.0	A	419.2	A	347.5	A
	West	376.2	A	264.9	A	228.8	A
	South	473.1	A	447.3	A	351.7	A
	East	639.6	A	670.8	A	502.6	A

Source: NYC Dept. of City Planning, *Jamaica Parking, Public Transportation and Pedestrian Study Technical Memorandum 3: Existing Conditions*, January 27, 2006.

**Table 17-9 (continued)**  
**2005 Existing Crosswalk Conditions**

**(SF/P - Square Foot per Pedestrian)**

Intersection	Corner	AM		MD		PM	
		SF/P	LOS	SF/P	LOS	SF/P	LOS
Archer Ave. @ Parsons Blvd.	North	221.1	A	228.1	A	87.0	A
	West	306.9	A	457.0	A	174.3	A
	South	179.3	A	214.0	A	112.7	A
Archer Ave. @ Union Hall St.	North	352.0	A	351.1	A	527.4	A
	West	804.2	A	488.0	A	647.8	A
	South	302.8	A	376.4	A	556.9	A
Hillside Ave. @ 144th St.	North	296.8	A	235.0	A	297.1	A
	West	603.2	A	474.7	A	899.4	A
	South	353.1	A	253.8	A	424.1	A
	East	727.2	A	502.9	A	672.9	A
Hillside Ave. @ 153rd St.	North	252.3	A	508.5	A	270.4	A
	South	521.6	A	604.3	A	345.1	A
	East	961.7	A	714.6	A	505.1	A
Hillside Ave. @ Parsons Blvd.	North	39.0	C	66.1	A	123.7	A
	West	177.2	A	174.0	A	332.3	A
	South	163.4	A	103.2	A	174.0	A
	East	301.3	A	185.5	A	331.2	A
Hillside Ave. @ Sutphin Blvd.	North	465.5	A	230.1	A	314.6	A
	South	411.5	A	189.8	A	386.8	A
	East	155.4	A	88.9	A	179.0	A
Hillside Ave. @ Queens Blvd.	North	2,154.3	A	8,535.6	A	3,394.0	A
	West	649.4	A	584.5	A	615.9	A
	South	783.0	A	921.6	A	701.5	A
	East	1,137.4	A	404.0	A	551.1	A
Archer Ave. @ Guy R. Brewer Blvd.	North	157.8	A	156.1	A	116.3	A
	West	151.8	A	141.0	A	163.7	A
	South	208.1	A	180.9	A	160.7	A
	East	211.8	A	288.9	A	350.3	A
Archer Ave. @ Merrick Blvd.	North	465.7	A	624.3	A	566.3	A
	West	549.0	A	664.4	A	320.1	A
	South	270.9	A	295.8	A	264.2	A
	East	747.1	A	1,247.4	A	710.3	A
Liberty Ave. @ 150th St.	North	2,570.1	A	868.8	A	1,256.5	A
	West	2,570.7	A	3,429.1	A	3,429.1	A
	South	2,263.4	A	1,616.1	A	1,886.2	A
	East	1,558.6	A	2,028.1	A	1,842.9	A
Liberty Ave. @ Merrick Blvd.	North	3,003.5	A	1,142.6	A	3,003.5	A
	West	1,400.4	A	605.1	A	1,400.4	A
	South	1,502.2	A	1,142.6	A	1,499.6	A
	East	1,400.4	A	1,408.7	A	1,408.7	A
Liberty Ave. @ Sutphin Blvd.	North	1,210.2	A	1,210.2	A	831.4	A
	West	3,022.7	A	2,517.5	A	2,518.9	A
	South	1,470.0	A	1,336.4	A	979.3	A
	East	2,242.3	A	2,241.7	A	3,926.0	A

Source: NYC Dept. of City Planning, *Jamaica Parking, Public Transportation and Pedestrian Study Technical Memorandum 3: Existing Conditions*, January 27, 2006.

February 5, 2007

**Table 17-9 (continued)**  
**2005 Existing Crosswalk Conditions**

**(SF/P - Square Foot per Pedestrian)**

Intersection	Corner	AM		MD		PM	
		SF/P	LOS	SF/P	LOS	SF/P	LOS
Sutphin Blvd. @ 94th Ave.	North	232.7	A	256.0	A	334.5	A
	West	847.1	A	847.1	A	1,331.8	A
	South	142.8	A	169.9	A	173.7	A
	East	408.8	A	451.6	A	476.9	A
Sutphin Blvd. @ 95th Ave.	North	286.3	A	223.4	A	286.3	A
	West	301.7	A	264.0	A	301.7	A
	South	186.8	A	216.4	A	186.8	A
	East	405.9	A	405.9	A	405.9	A
Sutphin Blvd. @ 97th Ave.	North	518.9	A	370.2	A	659.8	A
	West	586.1	A	670.4	A	585.2	A
	South	551.2	A	336.3	A	401.0	A
	East	618.1	A	826.3	A	545.1	A
Archer Ave. @ 168th St.	North	1,200.0	A	798.0	A	663.0	A
	West	3,006.2	A	3,006.2	A	3,006.2	A
	South	1,201.0	A	1,199.0	A	1,090.0	A
	East	1,685.8	A	1,121.5	A	1,222.2	A
Hillside Ave. @ 168th St.	North	168.6	A	285.6	A	147.4	A
	West	430.5	A	523.1	A	429.7	A
	South	206.8	A	275.7	A	136.0	A
	East	569.3	A	260.6	A	212.8	A
Hillside Ave. @ 169th St.	North	137.9	A	142.4	A	119.5	A
	West	522.1	A	413.4	A	396.3	A
	South	182.3	A	182.1	A	126.0	A
	East	350.4	A	298.6	A	244.6	A
Hillside Ave. @ 178th St.	North	434.6	A	450.6	A	333.6	A
	West	568.1	A	1,024.7	A	518.7	A
	South	367.9	A	367.0	A	277.5	A
	East	502.9	A	523.7	A	448.9	A
Hillside Ave. @ 179th St.	North	123.9	A	194.6	A	127.2	A
	South	124.9	A	164.8	A	114.3	A
	East	601.8	A	650.9	A	369.5	A
Liberty Ave. @ 160th St.	North	240.2	A	286.4	A	295.1	A
	West	394.7	A	613.5	A	704.1	A
	South	217.4	A	234.8	A	270.0	A
	East	690.9	A	820.3	A	561.3	A
Hillside Ave. @ 180th St.	North	129.7	A	119.9	A	107.4	A
	South	150.5	A	137.8	A	129.5	A
	East	513.6	A	482.7	A	512.9	A
Liberty Ave. @ Guy R. Brewer Blvd.	North	368.4	A	352.8	A	298.8	A
	West	378.1	A	456.0	A	574.7	A
	South	366.3	A	314.8	A	271.1	A
	East	300.8	A	387.2	A	33,579.0	A

Source: NYC Dept. of City Planning, *Jamaica Parking, Public Transportation and Pedestrian Study Technical Memorandum 3: Existing Conditions*, January 27, 2006.

February 5, 2007

### **C. FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION)**

Between 2005 and 2015, it is expected that the demand at analyzed transit and pedestrian facilities would increase due to long-term background growth as well as development that could occur pursuant to existing zoning. Development on projected development sites is expected to add a total of approximately 1,000 new dwelling units, 300,000 sf of new commercial space, and 214,000 sf of new community facility space, and a net decrease of 40,200 sf of industrial space over the existing conditions. In order to forecast the future conditions without the proposed actions (the No-Action condition), development on projected development sites, and developments listed on Table 2-3 and shown in Figure 2-6 in Chapter 2, “Land Use, Zoning and Public Policy,” were considered, in addition to an annual background growth rate of one percent per year applied to existing transit and pedestrian demand for the 2005 to 2015 period. This background growth rate is applied to account for smaller projects and general increases in travel demand not attributable to specific development projects.

In addition to increased demand from projected development sites, as discussed in Chapter 2, “Land Use, Zoning and Public Policy,” the Greater Jamaica Redevelopment Corporation (GJDC) plans to undertake several transportation and streetscape improvements in the Jamaica Center area. The overall goals of these improvements are to increase pedestrian access and safety, improve traffic flow, accommodate increased bus volumes, create public open space and spur transit-oriented development. The improvements at Archer Avenue between 144th Place and 148th Street (“Archer/Sutphin Intersection”) will result in increased sidewalk space and corner circulation space for pedestrians in this area. The analysis of No-Action pedestrian conditions in this area along Archer Avenue incorporates these changes. Other GJDC improvements would only affect traffic operating conditions.

The following sections describe how the growth in travel demand in Downtown Jamaica are expected to affect transit and pedestrian facilities in the future without the proposed actions.

#### **SUBWAY STATIONS**

During the 2005 through 2015 period, subway demand is expected to increase as a result of new development and long-term background growth. Tables 17-10A and 17-10B show the expected peak 15-minute volumes as well as v/c ratio and levels of service at analyzed subway station stairs and fare arrays in the 2015 future without the proposed actions. As shown in the tables, in the future without the proposed actions, almost all analyzed stairways and fare arrays at the six subway stations serving the area affected by the proposed actions would operate at acceptable LOS C or better in both the AM and PM peak hours with the exception of Escalator (E439) at the Jamaica Center station which would operate at LOS F in the PM peak hour compared to LOS E under Existing conditions. At the 179th Street (F) station, Stair S8 would operate at LOS B in the AM compared to LOS A under Existing conditions. Stair S2 at the Jamaica Center (E, J, and Z) station would operate at LOS C in the AM compared to LOS B under Existing conditions. All other stairways and fare arrays would remain at their existing levels of service in the 2015 No-Action condition.

#### **SUBWAY LINE HAUL**

By 2015, new developments combined with general background growth would increase line haul demand on the E, F, J and Z trains serving the area affected by the proposed actions. Table 17-11 shows the anticipated line haul conditions at the peak load points on the E, F and J/Z trains in the



2015 future without the proposed actions. As shown in Table 17-11, in both peak hours, F trains would continue to have available capacity, with a v/c ratio of 0.91 in the Manhattan-bound direction in the AM peak hour, and with a v/c ratio of 0.63 in the Queens-bound direction in the PM peak hour. Demand on Manhattan-bound E trains, without service adjustments, would exceed capacity by approximately 14 percent, with E trains operating at a v/c ratio of 1.14 compared to 1.02 under Existing conditions. In the PM peak hour, Queens-bound E trains would continue to operate below capacity with a v/c ratio of 0.64 compared to 0.57 under Existing conditions. The J/Z trains would continue to operate below capacity in both peak hours with a v/c ratio of 0.68 in the Manhattan-bound direction in the AM peak hour and 0.47 in the Queens-bound direction in the PM peak hour.

**Table 17-11  
No-Action Subway Line Haul Conditions**

Line	Peak Hour	Peak Direction	Trains per Hour (1)	Cars per Hour (1)	Available Capacity (2)	Passengers per Hour (3)	V/C Ratio (4)
<b>2015 No-Action Conditions at Existing Service Levels</b>							
E	AM	Manhattan-Bound	15	150	21,750	24,708	1.14
	PM	Queens-Bound	15	150	21,750	13,990	0.64
F	AM	Manhattan-Bound	15	120	21,000	19,079	0.91
	PM	Queens-Bound	14	112	19,600	12,363	0.63
J/Z	AM	Manhattan-Bound	12	96	13,920	9,531	0.68
	PM	Queens-Bound	12	96	13,920	6,577	0.47
<b>Notes:</b> (1) Sources: AM Peak Hour: MTA NYC Transit, 2005 peak load point data. PM Peak Hour: MTA NYC Transit, Year 2004 Weekday Cordon Count. (2) Capacity based on 145 passengers/car for 60' cars and 175 passengers/car for 75' cars as per NYC Transit subway car loading guidelines. E trains operate with ten 60'-cars; F trains operate predominantly with eight 75'-cars and some with ten 60'-cars; and J/Z trains operate with eight 60'-cars. Guideline capacity for each route based on the capacity associated with the predominant car type. (3) Projected No-Action volumes based on NYCT existing conditions data (AM 2005 and PM 2004) increased to reflect one percent per year background growth (2004/2005 to 2015) and demand from No-Action sites. (4) Volume-to-capacity ratio. February 5, 2007							

As a standard practice, New York City Transit routinely conducts ridership counts and adjusts service frequency to meet its service criteria, within fiscal and operating constraints. The E and F trains share the express track between Forest Hills-71st Avenue and Queens Plaza. There are a total of 30 E and F trains operating Manhattan-bound during the AM peak hour, which is the capacity of the track. No additional service can be provided under the existing infrastructure. Therefore, the E trains would continue operate above capacity during the AM peak hour under No-Action conditions.

**BUS SERVICE**

By 2015, demand on NYC Transit, MTA Bus and Long Island Bus bus routes serving Downtown Jamaica is expected to increase as a result of new developments and a general one percent per year background growth. Table 17-12 shows the estimated peak hour ridership at the maximum load point of each bus route serving the area affected by the proposed actions in the 2015 future without the proposed actions. As shown in Table 17-12, all analyzed bus routes are

Table 17-10A  
2015 No-Action Subway Stairways Conditions Compared with Existing Conditions

No.	Station Element/Location	Peak Period (1)	Effective Width in Feet (2)	Maximum 15 Minute Capacity (3)	2005 Existing				2015 No-Action			
					Peak 15 Minute Volume	PFM (4)	Volume to Capacity Ratio	LOS	Peak 15 Minute Volume	PFM (4)	Volume to Capacity Ratio	LOS
<b>Sutphin Boulevard (F) Station</b>												
S1	Stairway @ SE Corner Hillside Avenue/Sutphin Boulevard	AM	4.43	665	95	1.43	0.14	A	113	1.70	0.17	A
		PM	4.43	665	160	2.41	0.24	A	185	2.79	0.28	A
S2	Stairway @ NE Corner Hillside Avenue/Sutphin Boulevard	AM	3.53	530	75	1.42	0.14	A	83	1.56	0.16	A
		PM	3.53	530	80	1.51	0.15	A	88	1.67	0.17	A
S3	Stairway @ NW Corner Hillside Avenue/Sutphin Boulevard	AM	4.43	665	75	1.13	0.11	A	84	1.27	0.13	A
		PM	4.43	665	80	1.20	0.12	A	91	1.37	0.14	A
S7	Stairway @ NE Corner Hillside Avenue/144th Street	AM	3.30	495	40	0.81	0.08	A	44	0.90	0.09	A
		PM	3.30	495	20	0.40	0.04	A	22	0.45	0.05	A
S5	Stairway @ NE Corner Hillside Avenue/144th Street	AM	3.53	530	15	0.28	0.03	A	17	0.32	0.03	A
		PM	3.13	470	25	0.53	0.05	A	28	0.59	0.06	A
<b>Parsons Boulevard (F) Station</b>												
S1	Stairway @ SW Corner Hillside Avenue/Parsons Boulevard	AM	3.45	518	85	1.64	0.16	A	95	1.83	0.18	A
		PM	3.07	461	145	3.15	0.31	A	161	3.51	0.35	A
S2	Stairway @ NW Corner Hillside Avenue/Parsons Boulevard	AM	3.45	518	130	2.51	0.25	A	144	2.79	0.28	A
		PM	3.45	518	70	1.35	0.14	A	79	1.52	0.15	A
S6	Stairway @ SE Corner Hillside Avenue/Parsons Boulevard	AM	3.38	507	100	1.97	0.20	A	127	2.51	0.25	A
		PM	3.00	450	135	3.00	0.30	A	168	3.73	0.37	A
S3	Stairway @ SE Corner Hillside Avenue/153rd Street	AM	3.53	530	35	0.66	0.07	A	45	0.85	0.08	A
		PM	3.13	470	65	1.38	0.14	A	76	1.62	0.16	A
S4	Stairway @ NE Corner Hillside Avenue/153rd Street	AM	3.75	563	5	0.09	0.01	A	8	0.15	0.01	A
		PM	3.75	563	5	0.09	0.01	A	9	0.15	0.02	A
S5	Stairway @ SW Corner Hillside Avenue/153rd Street	AM	4.43	665	10	0.15	0.02	A	19	0.28	0.03	A
		PM	4.92	738	5	0.07	0.01	A	12	0.17	0.02	A
<b>169th Street (F) Station</b>												
S1	Stairway @ SE Corner Hillside Avenue/169th Street	AM	3.53	530	75	1.42	0.14	A	83	1.56	0.16	A
		PM	3.53	530	150	2.83	0.28	A	166	3.13	0.31	A
S2	Stairway @ NE Corner Hillside Avenue/169th Street	AM	5.40	810	110	1.36	0.14	A	122	1.50	0.15	A
		PM	6.08	912	110	1.21	0.12	A	122	1.33	0.13	A
S3	Stairway @ SW Corner Hillside Avenue/169th Street	AM	3.53	530	15	0.28	0.03	A	20	0.38	0.04	A
		PM	3.13	470	115	2.45	0.24	A	131	2.80	0.28	A
S4	Stairway @ NW Corner Hillside Avenue/169th Street	AM	3.13	470	175	3.73	0.37	A	193	4.12	0.41	A
		PM	3.13	470	125	2.66	0.27	A	138	2.94	0.29	A
S5	Stairway @ SW Corner Hillside Avenue/168th Street	AM	3.38	507	40	0.79	0.08	A	60	1.18	0.12	A
		PM	3.00	450	90	2.00	0.20	A	123	2.72	0.27	A
S6	Stairway @ NW Corner Hillside Avenue/168th Street	AM	2.93	440	50	1.14	0.11	A	57	1.30	0.13	A
		PM	3.30	495	55	1.11	0.11	A	63	1.27	0.13	A
S7	Stairway @ SE Corner Hillside Avenue/168th Street	AM	3.53	530	45	0.85	0.08	A	59	1.12	0.11	A
		PM	3.53	530	20	0.38	0.04	A	33	0.62	0.06	A
S8	Stairway @ NE Corner Hillside Avenue/168th Street	AM	3.93	590	25	0.42	0.04	A	28	0.47	0.05	A
		PM	3.93	590	30	0.51	0.05	A	33	0.56	0.06	A

**Notes:**  
(1) Peak hours: 8-9 am and 5-6 pm.  
(2) Effective width measured as stairwell width less 1.5 feet to account for center and side handrails. Effective width is further reduced by 10 to 20 percent to account for friction where there are two-way flows.  
(3) Stair capacity in persons per 15 minutes based on NYC Transit guidelines of 10 persons per foot-width per minute (PFM).  
(4) Persons per foot width of stairway per minute.  
\* - Denotes change in LOS between Existing conditions and No-Action conditions

Table 17-10A (Continued)  
2015 No-Action Subway Stairways Conditions Compared with Existing Conditions

No.	Station Element/Location	Peak Period (1)	Effective Width in Feet (2)	Maximum 15 Minute Capacity (3)	2005 Existing				2015 No-Action			
					Peak 15 Minute Volume	PFM (4)	Volume to Capacity Ratio	LOS	Peak 15 Minute Volume	PFM (4)	Volume to Capacity Ratio	LOS
<b>179th Street (F) Station</b>												
S1	Stairway @ SE Corner Hillside Avenue/180th Street	AM	3.23	485	80	1.65	0.16	A	98	2.02	0.20	A
		PM	2.87	431	175	4.07	0.41	A	203	4.71	0.47	A
<u>S2</u>	<u>Stairway @ NE Corner</u> <u>Hillside Avenue/Midland Parkway</u>	<u>AM</u>	<u>3.23</u>	<u>485</u>	<u>75</u>	<u>1.55</u>	<u>0.15</u>	<u>A</u>	<u>83</u>	<u>1.71</u>	<u>0.17</u>	<u>A</u>
		<u>PM</u>	<u>2.87</u>	<u>431</u>	<u>50</u>	<u>1.16</u>	<u>0.12</u>	<u>A</u>	<u>55</u>	<u>1.28</u>	<u>0.13</u>	<u>A</u>
S3	Stairway @ SW Corner Hillside Avenue/180th Street	AM	2.93	440	30	0.68	0.07	A	33	0.75	0.08	A
		PM	3.30	495	25	0.51	0.05	A	28	0.56	0.06	A
S5	Stairway @ South Side Btwn 179th Place & 180th Street/ Hillside Avenue	AM	3.23	485	45	0.93	0.09	A	50	1.03	0.10	A
		PM	2.87	431	165	3.83	0.38	A	182	4.23	0.42	A
S7	Stairway @ South Side Btwn 179th Place & 180th Street/ Hillside Avenue	AM	3.23	485	110	2.27	0.23	A	122	2.51	0.25	A
		PM	2.87	431	105	2.44	0.24	A	116	2.69	0.27	A
S6	Stairway @ North Side Btwn 179th Place & 180th Street/ Hillside Avenue	AM	2.87	431	360	8.36	0.84	C	398	9.24	0.92	C
		PM	3.23	485	60	1.24	0.12	A	66	1.37	0.14	A
S8	Stairway @ North Side Btwn 179th Place & 180th Street/ Hillside Avenue	AM	2.87	431	195	4.53	0.45	A	215	5.00	0.50	B
		PM	3.23	485	100	2.06	0.21	A	110	2.28	0.23	A
<u>S9</u>	<u>Stairway @ SE Corner</u> <u>Hillside Avenue/179th Place</u>	<u>AM</u>	<u>4.50</u>	<u>675</u>	<u>89</u>	<u>1.32</u>	<u>0.13</u>	<u>A</u>	<u>98</u>	<u>1.46</u>	<u>0.15</u>	<u>A</u>
		<u>PM</u>	<u>4.00</u>	<u>600</u>	<u>95</u>	<u>1.58</u>	<u>0.16</u>	<u>A</u>	<u>105</u>	<u>1.75</u>	<u>0.17</u>	<u>A</u>
S4	Stairway @ NW Corner Hillside Avenue/Midland Parkway	AM	2.87	431	75	1.74	0.17	A	83	1.92	0.19	A
		PM	3.58	537	35	0.65	0.07	A	39	0.72	0.07	A
S11	Stairway @ SE Corner Hillside Avenue/179th Street	AM	3.15	473	40	0.85	0.08	A	48	1.01	0.10	A
		PM	3.50	525	60	1.14	0.11	A	73	1.39	0.14	A
S13	Stairway @ SW Corner Hillside Avenue/179th Street	AM	2.80	420	25	0.60	0.06	A	32	0.75	0.08	A
		PM	2.80	420	55	1.31	0.13	A	68	1.62	0.16	A
S10	Stairway @ North Side Hillside Avenue/179th Street	AM	2.93	440	340	7.74	0.77	C	376	8.55	0.85	C
		PM	3.30	495	120	2.42	0.24	A	133	2.68	0.27	A
S12	Stairway @ North Side Hillside Avenue/179th Street	AM	2.93	440	95	2.16	0.22	A	105	2.39	0.24	A
		PM	3.30	495	45	0.91	0.09	A	50	1.00	0.10	A
S14	Stairway @ NE Towards Corner Hillside Avenue/178th Street	AM	3.08	462	120	2.60	0.26	A	135	2.92	0.29	A
		PM	2.73	410	55	1.34	0.13	A	64	1.55	0.16	A
S15	Stairway @ SE Towards Corner Hillside Avenue/178th Street	AM	2.80	420	80	1.90	0.19	A	96	2.29	0.23	A
		PM	2.80	420	110	2.62	0.26	A	135	3.21	0.32	A

**Notes:**  
(1) Peak hours: 8-9 am and 5-6 pm.  
(2) Effective width measured as stairwell width less 1.5 feet to account for center and side handrails. Effective width is further reduced by 10 to 20 percent to account for friction where there are two-way flows.  
(3) Stair capacity in persons per 15 minutes based on NYC Transit guidelines of 10 persons per foot-width per minute (PFM).  
(4) Persons per foot width of stairway per minute.  
\* - Denotes change in LOS between Existing conditions and No-Action conditions

Table 17-10A (Continued)  
2015 No-Action Subway Stairways Conditions Compared with Existing Conditions

No.	Station Element/Location	Peak Period (1)	Effective Width in Feet (2)	Maximum 15 Minute Capacity (3)	2005 Existing				2015 No-Action			
					Peak 15 Minute Volume	PFM (4)	Volume to Capacity Ratio	LOS	Peak 15 Minute Volume	PFM (4)	Volume to Capacity Ratio	LOS
<b>Sutphin Boulevard/Archer Avenue (E, J/Z) Station</b>												
S1	Stairway @ SW Corner Sutphin Boulevard/Archer Avenue	AM	5.70	855	125	1.46	0.15	A	138	1.61	0.16	A
		PM	5.70	855	85	0.99	0.10	A	94	1.10	0.11	A
S2	Stairway @ NW Corner Sutphin Boulevard/Archer Avenue	AM	3.75	563	125	2.22	0.22	A	141	2.51	0.25	A
		PM	3.75	563	205	3.64	0.36	A	232	4.12	0.41	A
S3	Stairway @ SE Corner Sutphin Boulevard/Archer Avenue	AM	2.80	420	230	5.48	0.55	B	257	6.11	0.61	B
		PM	3.15	473	110	2.33	0.23	A	124	2.63	0.26	A
S4	Stairway @ NE Corner Sutphin Boulevard/Archer Avenue	AM	3.75	563	95	1.69	0.17	A	122	2.17	0.22	A
		PM	3.75	563	130	2.31	0.23	A	164	2.91	0.29	A
E433	Escalator (up) @ West Sidewalk Sutphin Boulevard/Archer Avenue	AM	3.00	510	165	N/A	0.32	A	186	N/A	0.36	A
		PM	3.00	510	150	N/A	0.29	A	168	N/A	0.33	A
E434	Escalator (down) @ West Sidewalk Sutphin Boulevard/Archer Avenue	AM	3.00	510	160	N/A	0.31	A	177	N/A	0.35	A
		PM	3.00	510	50	N/A	0.10	A	55	N/A	0.11	A
<b>Jamaica Center- Parsons Boulevard/Archer Avenue(E, J/Z) Station</b>												
S5	Stairway @ SE Corner 153rd Street/Archer Avenue	AM	5.33	800	680	8.51	0.85	C	760	9.50	0.95	C
		PM	5.33	800	210	2.63	0.26	A	243	3.03	0.30	A
S4	Stairway @ NE Corner 153rd Street/Archer Avenue	AM	5.27	791	315	3.98	0.40	A	361	4.57	0.46	A
		PM	5.93	890	90	1.01	0.10	A	111	1.24	0.12	A
S5a&b	Stairway @ SW Corner 153rd Street/Archer Avenue	AM	8.40	1,260	135	1.07	0.11	A	155	1.23	0.12	A
		PM	7.47	1,121	235	2.10	0.21	A	269	2.40	0.24	A
S2	Stairway @ NE Corner Parsons Boulevard/Archer Avenue	AM	10.75	1,613	1,040	6.45	0.64	B	1,222	7.58	0.76	C *
		PM	10.75	1,613	815	5.05	0.51	B	992	6.15	0.61	B
S	Stairway @ SW Corner Parsons Boulevard/Archer Avenue	AM	5.18	777	170	2.19	0.22	A	201	2.58	0.26	A
		PM	5.18	777	185	2.38	0.24	A	230	2.96	0.30	A
E440	Escalator (up) @ SE Corner 153rd Street/Archer Avenue	AM	3.00	510	150	N/A	0.29	A	166	N/A	0.32	A
		PM	3.00	510	55	N/A	0.11	A	61	N/A	0.12	A
E438	Escalator (up) @ SW Corner Parsons Boulevard/Archer Avenue	AM	3.00	510	95	N/A	0.19	A	105	N/A	0.21	A
		PM	3.00	510	235	N/A	0.46	B	260	N/A	0.51	B
E439	Escalator (up) @ NE Corner Parsons Boulevard/Archer Avenue	AM	3.00	510	175	N/A	0.34	A	193	N/A	0.38	A
		PM	3.00	510	795	N/A	1.56	E	878	N/A	1.72	F *
<b>Notes:</b>												
(1) Peak hours: 8-9 am and 5-6 pm.												
(2) Effective width measured as stairwell width less 1.5 feet to account for center and side handrails. Effective width is further reduced by 10 to 20 percent to account for friction where there are two-way flows.												
(3) Stair capacity in persons per 15 minutes based on NYC Transit guidelines of 10 persons per foot-width per minute (PFM).												
(4) Persons per foot width of stairway per minute.												
* - Denotes change in LOS between Existing conditions and No-Action conditions												

June 29, 2007

**Table 17-10B**  
**2015 No-Action Subway Fare Arrays Conditions Compared with Existing Conditions**

Station No.	Station Element/Location	Array Configuration	Peak Period (1)	Maximum 15 Minute Capacity (2)	2005 Existing			2015 No-Action		
					Peak 15 Minute Volume	Volume to Capacity Ratio (3)	LOS	Peak 15 Minute Volume	Volume to Capacity Ratio (3)	LOS
<b>Sutphin Boulevard (F) Station</b>										
N338	Sutphin Boulevard	5 entry/exit turnstiles	AM	3,600	245	0.07	A	280	0.08	A
		1 high entry/exit turnstile	PM	3,600	320	0.09	A	365	0.10	A
		2 high revolving exit gate								
U-1	144th Street (Unstaffed)	2 high entry/exit turnstile	AM	1,500	55	0.04	A	61	0.04	A
		2 high revolving exit gates	PM	1,500	45	0.03	A	50	0.03	A
<b>Parsons Boulevard (F) Station</b>										
N339	Parsons Boulevard	7 entry/exit turnstiles	AM	3,360	315	0.09	A	366	0.11	A
			PM	3,360	350	0.10	A	408	0.12	A
U-2	153th Street (Unstaffed)	2 high entry/exit turnstiles	AM	1,050	50	0.05	A	72	0.07	A
		1 high revolving exit gate	PM	1,050	70	0.07	A	92	0.09	A
<b>169th Street (F) Station</b>										
N340	168th Street	6 entry/exit turnstiles	AM	4,380	160	0.04	A	204	0.05	A
		2 high entry/exit turnstiles	PM	4,380	195	0.04	A	252	0.06	A
		2 high revolving exit gates								
N340A	169th Street	7 entry/exit turnstiles	AM	3,360	375	0.11	A	418	0.12	A
			PM	3,360	500	0.15	A	557	0.17	A
<b>179th Street (F) Station</b>										
N342	179th Street	9 entry/exit turnstiles	AM	5,820	700	0.12	A	791	0.14	A
		2 high entry/exit turnstiles	PM	5,820	445	0.08	A	522	0.09	A
		2 high revolving exit gates								
N343	Between 179th Place and 180th Street	12 entry/exit turnstiles	AM	7,110	970	0.14	A	1,081	0.15	A
		3 high revolving exit gates	PM	7,110	715	0.10	A	806	0.11	A
<b>Sutphin Boulevard (E, J/Z) Station</b>										
N605	Sutphin Boulevard	7 entry/exit turnstiles	AM	4,560	1,090	0.24	A	1,230	0.27	A
		4 high entry/exit turnstiles	PM	4,560	860	0.19	A	980	0.21	A
<b>Jamaica Center (E, J/Z) Station</b>										
N606	Parsons Boulevard	9 entry/exit turnstiles	AM	4,320	1,485	0.34	A	1,726	0.40	A
			PM	4,320	2,035	0.47	B	2,365	0.55	B
N607	153rd Street	5 entry/exit turnstiles	AM	4,800	1,280	0.27	A	1,442	0.30	A
		5 high entry/exit turnstiles	PM	4,800	590	0.12	A	683	0.14	A
		2 high revolving exit gates								

**Notes:**

- (1) Peak hours: 8-9 am and 5-6 pm.
- (2) Fare array capacity based on 32 ppm for turnstiles, 20 ppm for high entry/exit turnstiles, and 30 ppm for high revolving exit gates as per NYCT guidelines.
- (3) Levels of service for turnstiles and exit gates: LOS A: v/c < 0.45, LOS B: v/c = 0.45 to 0.70, LOS C: v/c = 0.71 to 1.00, LOS D: v/c = 1.01 to 1.33, LOS E: v/c = 1.34 to 1.67, LOS F: v/c > 1.67.

expected to operate with available capacity in the peak direction at their maximum load points in both peak hours in the future without the proposed actions, with the exception of 10 routes (NYC Transit's Q31, Q43 and Q54, and MTA Bus' Q6, Q9, Q25/34, Q40, Q41, Q60 and Q65).

Based on current service levels, NYCT's Q31 would experience capacity shortfalls of 8 in the northbound direction in the AM peak hour. NYCT's Q43 route would experience capacity shortfalls of 34 in the eastbound direction and 28 in the westbound direction in the AM peak hour. NYCT's Q54 would experience a capacity shortfall of 44 in the westbound direction in the AM peak hour. MTA Bus' Q6 would experience a capacity shortfall of 45 in the northbound direction in the AM peak hour. MTA Bus' Q9 would experience a capacity shortfall of 11 in the northbound direction in the AM peak hour. MTA Bus' northbound Q40 would experience a capacity shortfall of 60 in the AM peak hour. MTA Bus' Q60 would experience a capacity shortfall of one in the AM peak hour. MTA Bus' northbound Q65 would experience a capacity shortfall of 27 in the AM peak hour.

In the PM peak hour, MTA Bus' Q41 would experience a capacity shortfall of 36 in the southbound direction, and MTA Bus' Q60 would experience a capacity shortfall of 17 in the eastbound direction. MTA Bus' Q25/34 would experience a capacity shortfall of 35 in the southbound direction.

As a standard practice, the bus operating agencies routinely conduct ridership counts and adjust service frequency to meet its service criteria, within fiscal and operating constraints. It is therefore anticipated that under 2015 No-Action conditions, NYCT and MTA Bus would increase frequency on the affected bus routes to address capacity shortfalls. As shown in Table 17-12, the addition of one bus in the northbound direction in the AM peak hour would address capacity shortfalls on the Q31. The addition of one bus both directions in the AM peak hour would address capacity shortfalls on the Q43. The addition of one bus in the westbound direction in the AM peak hour would address capacity shortfalls on the Q54. The addition of one bus on the Q6 northbound in the AM peak hour would address capacity shortfalls on the route. The addition of one northbound bus in the AM peak hour would address capacity shortfalls on the Q9. The addition of one northbound bus in the AM peak hour would address capacity shortfalls on the Q40. One additional westbound bus in the AM peak hour would address capacity shortfalls on the Q60. Capacity shortfalls would be addressed on the Q65 with the addition of one bus in the northbound direction in the AM peak hour. The addition of one southbound bus on in the PM peak hour would address capacity shortfalls on the Q41, and the addition of one bus in the eastbound direction would address capacity shortfalls on the Q60 in the PM peak hour. Capacity shortfalls on the Q25/34 would be addressed with the addition of one eastbound PM peak hour bus.

## **PEDESTRIANS**

During the 2005 through 2015 period, it is anticipated that demand at analyzed sidewalks, corner areas and crosswalks would also increase as a result of new development and general background growth (estimated at one percent per year). It is also anticipated that, sidewalks, corner areas and crosswalks would be enhanced and improved along Archer Avenue in the vicinity of Sutphin Boulevard. Tables 17-13 through 17-15 shows the results of the pedestrian analyses in the future without the proposed actions. As shown in Table 17-13, all analyzed sidewalks would continue to operate at LOS B or better in all peak hours in the 2015 future without the proposed actions. As shown in Tables 17-14 and 17-15, all analyzed corner areas and crosswalks would operate at acceptable LOS C or better or at the same level of service as

under Existing conditions during all peak hours with the exception of one location. The east crosswalk at the intersection of Jamaica Avenue and Union Hall Street would operate at LOS D in the future without the proposed actions in the PM peak hour compared to LOS C under Existing conditions.

#### **D. FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION)**

This section provides an analysis of transit and pedestrians in the future with the proposed actions. As discussed in Chapter 1, “Project Description,” the proposed actions is projected to stimulate approximately 3,565 new dwelling units, 3.1 million sf of commercial space, and 245,000 sf of community facility space, and a reduction of 380,000 sf of industrial space over No-Action conditions. These new developments, located at 186 sites within the proposed action area, would displace existing industrial uses and smaller residential and commercial uses on these sites. The analysis in this section evaluate future subway, bus and pedestrian conditions in the year 2015 with full build out of this projected development scenario.

As shown in Table 16-11 in Chapter 16, “Traffic and Parking,” the net increase in person-trips by subway resulting from the proposed actions would total 977 inbound and 984 outbound in the AM peak hour, 1,025 inbound and 999 outbound in the midday, 1,333 inbound and 1,640 outbound in the PM peak hour, and 1,457 inbound and 1,239 outbound in the Saturday midday peak hour. Person-trips by bus would total 1,058 inbound and 603 outbound in the AM peak hour, 1,062 inbound and 1,008 outbound in the midday, 1,086 inbound and 1,782 outbound in the PM peak hour, and 1,534 inbound and 1,283 outbound in the Saturday midday peak hour. Trips by Long Island Rail Road at Jamaica Station (Sutphin Boulevard at Archer Avenue) would total 215 inbound and 53 outbound in the AM peak hour, 16 inbound and 15 outbound in the midday peak hour, 52 inbound and 263 outbound in the PM peak hour, and 37 inbound and 30 outbound in the Saturday midday peak hour. Trips by walking-only would total 766 inbound and 586 outbound in the AM peak hour, 3,506 inbound and 4,239 outbound in the midday, 1,442 inbound and 1,728 outbound in the PM peak hour, and 1,795 inbound and 1,625 outbound in the Saturday midday peak hour.

The proposed actions would also require setbacks at the sidewalk level of 5 feet and 10 feet within the proposed Special Downtown Jamaica District. The property owners would be required to provide additional sidewalk space, constructed to NYCDOT standards within the property line. The locations proposed for the additional sidewalk space (also known as sidewalk widening), are shown in Figure 17-5. At locations where required sidewalk widenings are adjacent to projected development sites, the pedestrian analysis includes the additional sidewalk space.

#### **SUBWAY STATIONS**

As discussed above, the proposed actions would generate a net total of 977 inbound and 984 outbound trips by subway in the AM peak hour and 1,333 inbound and 1,640 outbound in the PM peak hour. The estimated numbers of these trips that would occur at subway stations in the vicinity of the proposed action area are shown in Table 17-16. These estimates were based on the proximity of projected development sites to individual stations, and travel patterns of journey-to-work trips.

Table 17-12  
2015 No-Action Bus Conditions and Potential Service Adjustments

Peak Hour (1)	Agency	Route	Direction	Maximum Load Point	AM 2015	No-Action Conditions with Current Service			No-Action Conditions with Potential Service Adjustments		
					Peak Hour	Peak Hour	Average	Available	Peak Hour	Average	Available
					Passengers (2)	Buses (3)	Passengers/Bus	Capacity (4)	Buses (5)	Passengers/Bus	Capacity (4)
	NYCT	Q1	EB	Maximum Load Point Not Available	73	4	18	187	4	18	187
	NYCT	Q1	WB	Maximum Load Point Not Available	370	9	41	215	9	41	215
	NYCT	Q2	EB	Hollis Avenue/208th Street	84	4	21	176	4	21	176
	NYCT	Q2	WB	188th Street/Jamaica Avenue	636	12	53	144	12	53	144
	NYCT	Q3	SB	Farmers Blvd./Linden Blvd.	241	6	40	149	6	40	149
	NYCT	Q3	NB	188th Street/Jamaica Avenue	441	8	55	79	8	55	79
	NYCT	Q4&L	EB	Linden Blvd./172nd Street	571	12	48	209	12	48	209
	NYCT	Q4&L	WB	Linden Blvd./Farmers Blvd.	1,047	19	55	188	19	55	188
	NYCT	Q5&L	EB	Merrick Blvd./130th Road	393	8	49	127	8	49	127
	NYCT	Q5&L	WB	Merrick Blvd./Linden Blvd.	977	20	49	323	20	49	323
	NYCT	Q17	NB	Kissena Blvd./Sanford Avenue	614	11	56	101	11	56	101
	NYCT	Q17	SB	Horace Harding Expwy/Utopia Pkwy	419	9	47	166	9	47	166
	NYCT	Q24	EB	Atlantic Avenue/Lefferts Blvd.	424	8	53	96	8	53	96
	NYCT	Q24	WB	Atlantic Avenue/Lefferts Blvd.	189	6	31	201	6	31	201
	NYCT	Q30	EB	Hillside Avenue/Homelawn Street	1,231	19	65	4	19	65	4
	NYCT	Q30	WB	Horace Harding Expwy/Francis Lew	238	5	48	87	5	48	87
	NYCT	Q31	NB	Hillside Avenue/Homelawn Street	853	13	66	-8	14	61	57
	NYCT	Q31	SB	Utopia Parkway/Booth Memorial	132	4	33	128	4	33	128
	NYCT	Q36	EB	Hillside Avenue/187th Street	128	4	32	132	4	32	132
	NYCT	Q36	WB	Hillside Avenue/187th Street	533	9	59	52	9	59	52
	NYCT	Q42	EB	Archer Avenue/153rd Street	77	6	13	313	6	13	313
	NYCT	Q42	WB	Liberty Avenue/168th Street	319	6	53	71	6	53	71
	NYCT	Q43	EB	Hillside Avenue/Springfield Blvd.	1,074	16	67	-34	17	63	31
	NYCT	Q43	WB	Hillside Avenue/179th Street	1,068	16	67	-28	17	63	37
	NYCT	Q44/20&L	NB	Main Street/Union Turnpike	1,146	20	57	154	20	57	154
	NYCT	Q44/20&L	SB	Roosevelt Avenue/Main Street	1,308	22	59	122	22	59	122
	NYCT	Q54	EB	Grand Street/Graham Street	422	7	60	33	7	60	33
	NYCT	Q54	WB	Metropolitan Avenue Station	694	10	69	-44	11	63	21
	NYCT	Q56	EB	Jamaica Avenue/Metropolitan Ave.	310	6	52	80	6	52	80
	NYCT	Q56	WB	Jamaica Avenue/Sutphin Blvd.	138	5	28	187	5	28	187
	NYCT	Q75	EB	Hillside Avenue/187th Street	23	2	12	107	2	12	107
	NYCT	Q75	WB	Hillside Avenue/187th Street	183	4	46	77	4	46	77
	NYCT	Q76	SB	Hillside Avenue/179th Street	390	8	49	130	8	49	130
	NYCT	Q76	NB	Francis Lewis Blvd/Foothill Avenue	667	11	61	48	11	61	48
	NYCT	Q77	SB	Francis Lewis Blvd/Linden Blvd	490	8	61	30	8	61	30
	NYCT	Q77	NB	Hillside Avenue/Francis Lewis Blvd	646	11	59	69	11	59	69
	NYCT	Q83&L	EB	Farmers Blvd/113th Avenue	273	6	46	117	6	46	117
	NYCT	Q83&L	WB	Liberty Avenue/Merrick Blvd	1,238	22	56	192	22	56	192
	NYCT	Q84	EB	Archer Avenue/153rd Street	61	4	15	199	4	15	199
	NYCT	Q84	WB	Merrick Blvd/Liberty Avenue	739	14	53	171	14	53	171
	NYCT	Q85&L	EB	Merrick Blvd/Liberty Avenue	328	9	36	257	9	36	257
	NYCT	Q85&L	WB	Merrick Blvd/Liberty Avenue	1,274	23	55	221	23	55	221
	NYCT	X32	NB	Parsons Blvd./14th Avenue	172	4	43	88	4	43	88
AM	NYCT	X32	SB	No Southbound AM Service							
	NYCT	X63	NB	Not Available	93	3	31	102	3	31	102
	NYCT	X63	SB	No Southbound AM Service							
	NYCT	X64	WB	Queens Blvd/78th Avenue	332	7	47	123	7	47	123
	NYCT	X64	EB	No Eastbound AM Service							
	NYCT	X68	WB	Not Available	373	7	53	82	7	53	82
	NYCT	X68	EB	No Eastbound AM Service							
	MTA Bus	Q6	NB	Sutphin Blvd/111th Avenue	305	4	76	-45	5	61	20
	MTA Bus	Q6	SB	Sutphin Blvd/119th Avenue	111	2	55	19	2	55	19
	MTA Bus	Q8	EB	Sutphin Blvd/97th Avenue	320	5	64	5	5	64	5
	MTA Bus	Q8	WB	101st Avenue/111th Street	171	3	57	24	3	57	24
	MTA Bus	Q9	NB	Sutphin Blvd/97th Avenue	336	5	67	-11	6	56	54
	MTA Bus	Q9	SB	Sutphin Blvd/Archer Avenue	47	3	16	148	3	16	148
	MTA Bus	Q9A	EB	No AM Service							
	MTA Bus	Q9A	WB	No AM Service							
	MTA Bus	Q25/34	NB	Kissena Blvd/Maple Avenue	115	2	58	15	2	58	15
	MTA Bus	Q25/34	SB	Main Street/Northern Blvd	137	3	46	58	3	46	58
	MTA Bus	Q40	NB	Sutphin Blvd/95th Avenue	645	9	72	-60	10	65	5
	MTA Bus	Q40	SB	142nd Street/111th Avenue	173	5	35	152	5	35	152
	MTA Bus	Q41	NB	94th Avenue/Sutphin Blvd	158	6	26	232	6	26	232
	MTA Bus	Q41	SB	111th Avenue/117th Street	81	2	41	49	2	41	49
	MTA Bus	Q60	EB	Queens Blvd/66th Street	85	2	43	45	2	43	45
	MTA Bus	Q60	WB	Sutphin Blvd/109th Avenue	196	3	65	-1	4	49	64
	MTA Bus	Q65	NB	164th Street/Hillside Avenue	157	2	78	-27	3	52	38
	MTA Bus	Q65	SB	Northern Blvd/College Point Blvd	294	5	59	31	5	59	31
	MTA Bus	Q110	EB	Jamaica Avenue 168th Street	105	3	35	90	3	35	90
	MTA Bus	Q110	WB	Jamaica Avenue/181st Street	437	11	40	278	11	40	278
	MTA Bus	Q111/113	NB	Guy R Brewer Blvd/South Road	729	12	61	51	12	61	51
	MTA Bus	Q111/113	SB	Guy R Brewer Blvd/Foch Blvd	346	9	38	239	9	38	239
	MTA Bus	Q112	EB	South Road/153rd Street	310	6	52	80	6	52	80
	MTA Bus	Q112	WB	Liberty Avenue/124th Street	150	6	25	240	6	25	240
	Long Island Bus Peak 4-hour Data (6-10 AM)										
	LI Bus	N1		Maximum Load Point Not Available	840	21	40	525	21	40	525
	LI Bus	N2		Maximum Load Point Not Available	313	15	21	662	15	21	662
	LI Bus	N3		Maximum Load Point Not Available	133	7	19	322	7	19	322
	LI Bus	N4		Maximum Load Point Not Available	3,353	57	59	352	57	59	352
	LI Bus	N6		Maximum Load Point Not Available	4,795	76	63	145	76	63	145
	LI Bus	N22		Maximum Load Point Not Available	2,879	47	61	176	47	61	176
	LI Bus	N21		Maximum Load Point Not Available	2,005	41	49	660	41	49	660
	LI Bus	N26		Maximum Load Point Not Available	190	3	63	5	3	63	5

Notes:

- (1) Peak Hours: weekday 7-8 AM and 5-6 PM.
- (2) Assumes 1.0% per year background growth (2003-2015) plus demand from No-Action sites.
- (3) Based on 2003 NYC Transit ridership summaries and NYCDOT Ridership Data. As reported in NYC Dept. of City Planning's *Jamaica Parking Public Transportation and Pedestrian Study Technical Memorandum 3: Existing Conditions*, January 27, 2006.
- (4) Available capacity based on a maximum of 65 passengers for a standard 40-foot bus as per CEQR criteria.
- (5) Assumes service levels adjusted to address capacity shortfalls during the 2003 to 2015 period.



Table 17-12 (continued)  
No-Action Bus Conditions and Potential Service Adjustments

Peak Hour (1)	Agency	Route	Direction	Maximum Load Point	PM 2015	No-Action Conditions with Current Service			No-Action Conditions with Potential Service Adjustments		
					Peak Hour Passengers (2)	Peak Hour Buses (3)	Average Passengers/Bus	Available Capacity (4)	Peak Hour Buses (5)	Average Passengers/Bus	Available Capacity (4)
	NYCT	Q1	EB	Maximum Load Point Not Available	470	9	52	115	9	52	115
	NYCT	Q1	WB	Maximum Load Point Not Available	92	4	23	168	4	23	168
	NYCT	Q2	EB	Hillside Avenue/187th Street	475	8	59	45	8	59	45
	NYCT	Q2	WB	Hollis Avenue/208th Street	160	4	40	100	4	40	100
	NYCT	Q3	SB	Hillside Avenue/187th Street	295	6	49	95	6	49	95
	NYCT	Q3	NB	Hillside Avenue/187th Street	200	6	33	190	6	33	190
	NYCT	Q4&L	EB	Linden Blvd./172nd Street	706	14	50	204	14	50	204
	NYCT	Q4&L	WB	Linden Blvd./Merrick Blvd.	323	7	46	132	7	46	132
	NYCT	Q5&L	EB	Merrick Blvd./Liberty Avenue	851	15	57	124	15	57	124
	NYCT	Q5&L	WB	Merrick Blvd./Liberty Avenue	242	6	40	148	6	40	148
	NYCT	Q17	NB	Kissena Blvd./Sanford Avenue	370	14	26	540	14	26	540
	NYCT	Q17	SB	Kissena Blvd./Sanford Avenue	650	11	59	65	11	59	65
	NYCT	Q24	EB	Atlantic Avenue/Woodhaven Blvd.	241	6	40	149	6	40	149
	NYCT	Q24	WB	Atlantic Avenue/Woodhaven Blvd.	348	6	58	42	6	58	42
	NYCT	Q30	EB	Hillside Avenue/Homelawn Street	261	6	43	129	6	43	129
	NYCT	Q30	WB	Utopia Parkway/Union Turnpike	266	6	44	124	6	44	124
	NYCT	Q31	NB	47th Avenue/Francis Lewis Blvd.	143	6	24	247	6	24	247
	NYCT	Q31	SB	169th Street/Hillside Avenue	185	4	46	75	4	46	75
	NYCT	Q36	EB	Hillside Avenue/187th Street	378	8	47	142	8	47	142
	NYCT	Q36	WB	Hillside Avenue/212th Street	168	4	42	92	4	42	92
	NYCT	Q42	EB	Liberty Avenue/177th Place	161	4	40	99	4	40	99
	NYCT	Q42	WB	Liberty Avenue/168th Place	55	4	14	205	4	14	205
	NYCT	Q43	EB	Hillside Avenue/Springfield Blvd.	700	11	64	15	11	64	15
	NYCT	Q43	WB	Hillside Avenue/179th Street	335	6	56	55	6	56	55
	NYCT	Q44/20&L	NB	Main Street/39th Avenue	729	14	52	181	14	52	181
	NYCT	Q44/20&L	SB	Roosevelt Avenue/Main Street	673	14	48	237	14	48	237
	NYCT	Q54	EB	Metropolitan Avenue Station	364	6	61	26	6	61	26
	NYCT	Q54	WB	Metropolitan Avenue Station	302	6	50	88	6	50	88
	NYCT	Q56	EB	Jamaica Avenue/Lefferts Blvd	195	6	32	195	6	32	195
	NYCT	Q56	WB	Jamaica Avenue/Sutphin Blvd	344	6	57	46	6	57	46
	NYCT	Q75	EB	Hillside Avenue/187th Street	73	3	24	122	3	24	122
	NYCT	Q75	WB	Hillside Avenue/187th Street	44	2	22	86	2	22	86
	NYCT	Q76	SB	Francis Lewis Blvd./Horace Harding	186	4	46	74	4	46	74
	NYCT	Q76	NB	Francis Lewis Blvd./Foothill Avenue	108	4	27	152	4	27	152
	NYCT	Q77	SB	Hillside Avenue/179th Street	296	5	59	29	5	59	29
	NYCT	Q77	NB	Springfield Blvd/Merrick Blvd	123	6	21	267	6	21	267
	NYCT	Q83&L	EB	Archer Avenue/Parsons Blvd	716	14	51	194	14	51	194
	NYCT	Q83&L	WB	Liberty Avenue/Merrick Blvd	209	6	35	181	6	35	181
	NYCT	Q84	EB	Archer Avenue/153rd Street	353	8	44	167	8	44	167
	NYCT	Q84	WB	Merrick Blvd/Liberty Avenue	97	4	24	163	4	24	163
PM	NYCT	Q85&L	EB	Merrick Blvd/Baisley Blvd	750	16	47	290	16	47	290
	NYCT	Q85&L	WB	Merrick Blvd/Baisley Blvd	251	7	36	204	7	36	204
	NYCT	X32	NB	No Northbound PM Service							
	NYCT	X32	SB	No Data Available							
	NYCT	X63	NB	No Northbound PM Service							
	NYCT	X63	SB	No Data Available							
	NYCT	X64	WB	No Westbound PM Service							
	NYCT	X64	EB	East 57th Street/3rd Avenue, Manh.	226	5	45	99	5	45	99
	NYCT	X68	WB	No Westbound PM Service							
	NYCT	X68	EB	East 57th Street/3rd Avenue, Manh.	291	7	42	164	7	42	164
	MTA Bus	Q6	NB	Sutphin Blvd/Glassboro	15	8	2	505	8	2	505
	MTA Bus	Q6	SB	Sutphin Blvd/Liberty Avenue	240	5	48	85	5	48	85
	MTA Bus	Q8	EB	101st Avenue/127th Street	81	3	27	114	3	27	114
	MTA Bus	Q8	WB	Sutphin Blvd/Archer Avenue	65	1	65	0	1	65	0
	MTA Bus	Q9	NB	Sutphin Blvd/95th Avenue	76	4	19	184	4	19	184
	MTA Bus	Q9	SB	146th Street/101st Avenue	258	5	52	67	5	52	67
	MTA Bus	Q9A	EB	No PM Service							
	MTA Bus	Q9A	WB	No PM Service							
	MTA Bus	Q25/34	NB	Main Street/Northern Blvd	171	6	28	219	6	28	219
	MTA Bus	Q25/34	SB	Kissena Blvd/Holly Avenue	165	2	83	-35	3	55	30
	MTA Bus	Q40	NB	Sutphin Blvd/97th Avenue	27	3	9	168	3	9	168
	MTA Bus	Q40	SB	Sutphin Blvd/Archer Avenue	192	3	64	3	3	64	3
	MTA Bus	Q41	NB	111th Avenue/127th Street	46	2	23	84	2	23	84
	MTA Bus	Q41	SB	Atlantic Avenue/Van Wyck Expwy	296	4	74	-36	5	59	29
	MTA Bus	Q60	EB	Queens Blvd/33rd Street	82	1	82	-17	2	41	48
	MTA Bus	Q60	WB	No Data Available							
	MTA Bus	Q65	NB	Main Street/Roosevelt Avenue	88	3	29	107	3	29	107
	MTA Bus	Q65	SB	Sanford Avenue/Kissena Blvd	192	3	64	3	3	64	3
	MTA Bus	Q110	EB	179th Place/Hillside Avenue	238	6	40	152	6	40	152
	MTA Bus	Q110	WB	Jamaica Avenue/173rd Street	114	6	19	276	6	19	276
	MTA Bus	Q111/113	NB	Guy R Brewer Blvd/Brinkerhoff	94	3	31	101	3	31	101
	MTA Bus	Q111/113	SB	Guy R Brewer Blvd/Liberty Avenue	264	7	38	191	7	38	191
	MTA Bus	Q112	EB	Liberty Avenue/126th Street	119	5	24	206	5	24	206
	MTA Bus	Q112	WB	Liberty Avenue/134th Street	106	6	18	284	6	18	284
	Long Island Bus Peak 4-hour Data (3-7 PM)										
	LI Bus	N1		Maximum Load Point Not Available	924	26	36	766	26	36	766
	LI Bus	N2		Maximum Load Point Not Available	276	13	21	569	13	21	569
	LI Bus	N3		Maximum Load Point Not Available	128	9	14	457	9	14	457
	LI Bus	N4		Maximum Load Point Not Available	2,819	52	54	561	52	54	561
	LI Bus	N6		Maximum Load Point Not Available	4,565	82	56	765	82	56	765
	LI Bus	N22		Maximum Load Point Not Available	2,647	57	46	1058	57	46	1,058
	LI Bus	N21		Maximum Load Point Not Available	1,817	37	49	588	37	49	588
	LI Bus	N26		Maximum Load Point Not Available	103	2	51	27	2	51	27

Notes:

- (1) Peak Hours: weekday 7-8 AM and 5-6 PM.
- (2) Assumes 1.0% per year background growth (2003-2015) plus demand from No-Action sites.
- (3) Based on 2003 NYC Transit ridership summaries and NYCDOT Ridership Data. As reported in NYC Dept. of City Planning's *Jamaica Parking Public Transportation and Pedestrian Study Technical Memorandum 3: Existing Conditions*, January 27, 2006.
- (4) Available capacity based on a maximum of 65 passengers for a standard 40-foot bus as per CEQR criteria.
- (5) Assumes service levels adjusted to address capacity shortfalls during the 2003 to 2015 period.

**Table 17-13  
2015 No-Action Sidewalk Conditions**

(p/f/m = Pedestrians/Foot-width/Minute)

Intersection	Walkway	AM		MD		PM	
		p/m/f	LOS	p/m/f	LOS	p/m/f	LOS
Archer Ave. @ 150th St.	1	0.1	A	0.1	A	0.1	A
	2	0.0	A	0.0	A	0.1	A
	3	0.1	A	0.1	A	0.1	A
	4	0.1	A	0.1	A	0.1	A
	5	0.0	A	0.0	A	0.0	A
	6	0.1	A	0.0	A	0.1	A
	7	0.1	A	0.2	A	0.2	A
	8	0.1	A	0.0	A	0.0	A
Archer Ave. @ 153rd St.	1	0.8	A	0.6	A	0.8	A
	2	0.8	A	0.4	A	0.6	A
	3	1.0	A	0.5	A	0.9	A
	4	3.2	A	1.0	A	1.2	A
Jamaica Ave. @ 149th St.	1	0.4	A	0.7	A	0.9	A
	2	1.8	A	2.7	A	2.7	A
	3	0.4	A	0.5	A	0.5	A
	4	1.1	A	1.8	A	1.8	A
	5	0.5	A	0.8	A	0.8	A
	6	0.7	A	1.4	A	1.3	A
	7	0.2	A	0.3	A	0.3	A
	8	0.5	A	1.0	A	1.0	A
Jamaica Ave. @ 160th St.	1	0.4	A	0.5	A	0.5	A
	2	1.5	A	3.6	A	6.5	B
	3	0.9	A	1.4	A	1.3	A
	4	1.1	A	4.7	A	5.3	A
	5	0.6	A	1.8	A	1.0	A
	6	1.3	A	4.7	A	4.2	A
	7	0.4	A	0.4	A	0.6	A
	8	0.8	A	2.4	A	2.6	A
Jamaica Ave. @ 168th St.	1	0.5	A	0.7	A	0.5	A
	2	1.3	A	3.6	A	6.0	B
	3	1.6	A	2.5	A	2.5	A
	4	0.4	A	1.0	A	1.7	A
	5	0.4	A	0.5	A	0.5	A
	6	0.7	A	1.5	A	4.2	A
	7	0.4	A	0.8	A	0.9	A
	8	0.5	A	1.1	A	2.9	A
Jamaica Ave. @ Merrick Blvd.	1	0.5	A	1.1	A	1.0	A
	2	0.8	A	2.5	A	3.3	A
	3	0.3	A	0.4	A	0.5	A
	4	0.6	A	2.0	A	2.8	A
	5	0.4	A	0.8	A	1.0	A
	6	0.5	A	1.1	A	2.4	A
	7	0.3	A	0.5	A	0.6	A
	8	0.6	A	1.1	A	2.4	A

**Table 17-13 (continued)**  
**2015 No-Action Sidewalk Conditions**

(p/f/m = Pedestrians/Foot-width/Minute)

Intersection	Wkwy.	AM		MD		PM	
		p/f/m	LOS	p/f/m	LOS	p/f/m	LOS
Jamaica Ave. @ Parsons Blvd.	1	0.4	A	0.3	A	0.8	A
	2	0.8	A	1.5	A	1.7	A
	3	2.1	A	1.7	A	1.9	A
	4	0.5	A	0.7	A	0.6	A
	5	0.4	A	0.9	A	1.2	A
	6	0.5	A	0.4	A	0.7	A
	7	0.2	A	0.4	A	0.4	A
	8	0.3	A	0.7	A	0.3	A
Jamaica Ave. @ Sutphin Blvd.	1	1.0	A	1.7	A	1.5	A
	2	1.8	A	2.4	A	1.8	A
	3	2.7	A	3.3	A	0.3	A
	4	1.5	A	1.7	A	1.4	A
	5	1.2	A	1.1	A	0.5	A
	6	2.3	A	3.1	A	2.8	A
	7	1.6	A	1.3	A	0.4	A
	8	1.4	A	3.4	A	2.3	A
Jamaica Ave. @ Union Hall St.	2	1.1	A	3.3	A	2.0	A
	4	1.2	A	3.2	A	2.2	A
	5	0.1	A	0.2	A	0.2	A
	6	0.9	A	2.3	A	2.1	A
	7	0.2	A	0.3	A	0.5	A
Sutphin Blvd. @ Archer Ave.	1	0.7	A	1.1	A	1.0	A
	2	0.8	A	0.7	A	0.7	A
	3	1.0	A	1.3	A	1.5	A
	4	1.7	A	0.9	A	1.1	A
	5	1.5	A	1.2	A	1.3	A
	6	1.5	A	0.3	A	0.9	A
	7	2.1	A	2.0	A	1.1	A
	8	0.7	A	0.3	A	0.1	A
90th Ave. @ 168th St.	1	0.8	A	0.9	A	1.2	A
	2	0.4	A	0.2	A	0.2	A
	3	0.4	A	0.3	A	0.5	A
	4	0.5	A	0.4	A	0.3	A
	5	0.3	A	0.1	A	0.1	A
	6	0.2	A	0.1	A	0.2	A
	7	0.2	A	0.2	A	0.3	A
	8	0.7	A	0.5	A	0.5	A
Archer Ave. @ 160th St.	1	0.1	A	0.2	A	0.3	A
	2	0.3	A	1.0	A	1.2	A
	3	0.3	A	0.4	A	0.4	A
	4	0.4	A	1.0	A	1.1	A
	5	0.3	A	1.5	A	1.5	A
	6	0.7	A	0.3	A	0.5	A
	7	0.6	A	0.8	A	0.9	A
	8	0.2	A	0.5	A	0.7	A

**Table 17-13 (continued)**  
**2015 No-Action Sidewalk Conditions**

(p/f/m = Pedestrians/Foot-width/Minute)

Intersection	Wkwy.	AM		MD		PM	
		p/f/m	LOS	p/f/m	LOS	p/f/m	LOS
Archer Ave. @ Parsons Blvd.	1	1.1	A	0.8	A	1.5	A
	2	0.9	A	0.7	A	1.3	A
	3	3.8	A	2.0	A	4.0	A
	4	4.3	A	2.4	A	3.8	A
Archer Ave. @ Union Hall St.	1	0.4	A	0.3	A	0.3	A
	2	0.1	A	0.1	A	0.2	A
	3	0.2	A	0.1	A	0.1	A
	4	0.5	A	0.9	A	1.0	A
Hillside Ave. @ 144th St.	1	0.4	A	0.4	A	0.3	A
	2	0.2	A	0.2	A	0.3	A
	3	0.6	A	0.4	A	0.6	A
	4	0.2	A	0.4	A	0.2	A
	5	0.2	A	0.2	A	0.3	A
	6	0.2	A	0.5	A	0.4	A
	7	0.3	A	0.3	A	0.4	A
	8	0.2	A	0.6	A	0.4	A
Hillside Ave. @ 153rd St.	5	0.3	A	0.4	A	0.4	A
	6	0.4	A	0.4	A	0.9	A
	7	0.3	A	0.2	A	0.4	A
	8	0.4	A	0.9	A	0.6	A
Hillside Ave. @ Parsons Blvd.	1	1.8	A	1.6	A	1.4	A
	2	0.5	A	1.1	A	0.5	A
	3	1.0	A	0.7	A	1.2	A
	4	1.0	A	1.1	A	0.7	A
	5	0.8	A	1.2	A	0.7	A
	6	1.6	A	2.0	A	1.4	A
	7	1.5	A	1.8	A	1.5	A
	8	0.4	A	0.8	A	0.6	A
Hillside Ave. @ Sutphin Blvd.	5	1.1	A	1.0	A	0.4	A
	6	0.4	A	1.3	A	2.2	A
	7	0.5	A	1.7	A	1.4	A
	8	0.9	A	1.2	A	0.5	A
Hillside Ave. @ Queens Blvd.	1	0.1	A	0.1	A	0.1	A
	2	0.1	A	0.2	A	0.2	A
	3	0.1	A	0.2	A	0.2	A
	4	0.3	A	0.2	A	0.2	A
	5	0.2	A	0.2	A	0.1	A
	6	0.2	A	0.4	A	0.3	A
	7	0.2	A	0.2	A	0.2	A
	8	0.2	A	0.2	A	0.2	A
Archer Ave. @ Guy R. Brewer Blvd.	1	0.6	A	0.8	A	0.8	A
	2	0.8	A	1.1	A	1.1	A
	3	0.5	A	0.7	A	1.0	A
	4	1.6	A	2.1	A	1.9	A
	5	0.8	A	0.9	A	1.1	A
	6	1.0	A	1.1	A	0.8	A
	7	0.5	A	0.6	A	0.7	A
	8	0.9	A	1.0	A	0.8	A

**Table 17-13 (continued)**  
**2015 No-Action Sidewalk Conditions**

(p/f/m = Pedestrians/Foot-width/Minute)

Intersection	Wkwy.	AM		MD		PM	
		p/f/m	LOS	p/f/m	LOS	p/f/m	LOS
Archer Ave. @ Merrick Blvd.	1	0.6	A	0.5	A	1.0	A
	2	0.3	A	0.4	A	0.6	A
	3	0.8	A	0.6	A	0.8	A
	4	0.9	A	1.2	A	1.5	A
	5	0.2	A	0.2	A	0.2	A
	6	0.2	A	0.2	A	0.3	A
	7	0.7	A	0.6	A	0.7	A
	8	0.2	A	0.2	A	0.3	A
Liberty Ave. @ 150th St.	1	0.1	A	0.1	A	0.0	A
	2	0.1	A	0.1	A	0.1	A
	3	0.1	A	0.1	A	0.1	A
	4	0.1	A	0.1	A	0.1	A
	5	0.2	A	0.1	A	0.1	A
	6	0.1	A	0.1	A	0.0	A
	7	0.1	A	0.1	A	0.1	A
	8	0.1	A	0.1	A	0.1	A
Liberty Ave. @ Merrick Blvd.	1	0.3	A	0.2	A	0.1	A
	2	1.1	A	0.9	A	0.4	A
	3	0.2	A	0.3	A	0.2	A
	4	0.1	A	0.1	A	0.0	A
	5	0.1	A	0.2	A	0.1	A
	6	0.0	A	0.1	A	0.1	A
	7	0.1	A	0.1	A	0.1	A
	8	0.1	A	0.1	A	0.1	A
Liberty Ave. @ Sutphin Blvd.	1	0.1	A	0.1	A	0.1	A
	2	0.1	A	0.0	A	0.1	A
	3	0.1	A	0.1	A	0.1	A
	4	0.1	A	0.1	A	0.1	A
	5	0.1	A	0.1	A	0.1	A
	6	0.0	A	0.1	A	0.0	A
	7	0.1	A	0.1	A	0.1	A
	8	0.1	A	0.0	A	0.1	A
Sutphin Blvd. @ 94th Ave.	1	0.6	A	0.4	A	0.5	A
	2	0.1	A	0.3	A	0.3	A
	3	0.5	A	0.4	A	0.3	A
	4	0.2	A	0.3	A	0.3	A
	5	0.4	A	0.3	A	0.2	A
	6	0.1	A	0.3	A	0.1	A
	7	0.6	A	0.7	A	0.7	A
	8	0.5	A	0.1	A	0.4	A
Sutphin Blvd. @ 95th Ave.	1	0.5	A	0.5	A	0.6	A
	2	0.2	A	0.3	A	0.2	A
	3	1.3	A	1.2	A	1.0	A
	4	0.3	A	0.3	A	0.3	A
	5	0.6	A	0.5	A	0.4	A
	6	0.3	A	0.3	A	0.2	A
	7	0.7	A	0.5	A	0.6	A
	8	0.2	A	0.2	A	0.2	A

**Table 17-13 (continued)**  
**2015 No-Action Sidewalk Conditions**

(p/f/m = Pedestrians/Foot-width/Minute)

Intersection	Wkwy.	AM		MD		PM	
		p/f/m	LOS	p/f/m	LOS	p/f/m	LOS
Sutphin Blvd. @ 97th Ave.	1	0.4	A	0.3	A	0.3	A
	2	0.1	A	0.1	A	0.1	A
	3	0.2	A	0.3	A	0.1	A
	4	0.1	A	0.1	A	0.1	A
	5	0.2	A	0.2	A	0.2	A
	6	0.2	A	0.3	A	0.2	A
	7	0.5	A	0.4	A	0.5	A
	8	0.2	A	0.2	A	0.1	A
Archer Ave. @ 168th St.	1	0.2	A	0.5	A	0.3	A
	2	0.5	A	0.3	A	0.3	A
	3	0.1	A	0.1	A	0.1	A
	4	0.1	A	0.1	A	0.2	A
	5	0.1	A	0.4	A	0.4	A
	6	0.1	A	0.2	A	0.2	A
	7	0.2	A	0.2	A	0.9	A
	8	0.5	A	0.8	A	0.3	A
Hillside Ave. @ 168th St.	1	1.2	A	0.8	A	0.8	A
	2	0.8	A	1.1	A	1.0	A
	3	0.6	A	1.0	A	0.7	A
	4	0.6	A	0.7	A	0.9	A
	5	0.7	A	1.3	A	1.1	A
	6	0.9	A	0.8	A	0.6	A
	7	0.4	A	0.6	A	0.5	A
	8	0.6	A	0.7	A	0.7	A
Hillside Ave. @ 169th St.	1	0.3	A	0.3	A	0.4	A
	2	1.3	A	0.8	A	1.6	A
	3	0.9	A	0.7	A	1.6	A
	4	0.5	A	0.5	A	0.5	A
	5	0.5	A	0.8	A	1.5	A
	6	0.7	A	1.2	A	0.8	A
	7	1.2	A	0.6	A	0.6	A
	8	0.5	A	1.0	A	1.2	A
Hillside Ave. @ 178th St.	1	0.3	A	0.3	A	0.4	A
	2	0.5	A	0.5	A	0.5	A
	3	0.2	A	0.2	A	0.2	A
	4	0.7	A	0.8	A	0.9	A
	5	0.7	A	0.3	A	0.5	A
	6	1.8	A	1.9	A	1.9	A
	7	0.3	A	0.2	A	0.3	A
	8	0.5	A	0.3	A	0.7	A
Hillside Ave. @ 179th St.	5	0.6	A	0.6	A	0.9	A
	6	0.3	A	0.5	A	0.7	A
	7	0.4	A	0.5	A	0.8	A
	8	0.3	A	0.4	A	0.4	A

Table 17-13 (continued)  
2015 No-Action Sidewalk Conditions

(p/f/m = Pedestrians/Foot-width/Minute)

Intersection	Wkwy.	AM		MD		PM	
		p/f/m	LOS	p/f/m	LOS	p/f/m	LOS
Liberty Ave. @ 160th St.	1	0.6	A	0.6	A	0.6	A
	2	0.2	A	0.3	A	0.3	A
	3	0.3	A	0.2	A	0.3	A
	4	0.1	A	0.1	A	0.1	A
	5	0.5	A	0.5	A	0.3	A
	6	0.5	A	0.5	A	0.6	A
	7	0.5	A	0.8	A	0.7	A
	8	0.5	A	0.7	A	0.7	A
Hillside Ave. @ 180th St.	5	0.2	A	0.2	A	0.3	A
	6	1.0	A	1.0	A	1.5	A
	7	0.6	A	0.3	A	0.6	A
	8	0.7	A	1.0	A	0.9	A
Liberty Ave. @ Guy R. Brewer Blvd.	1	0.2	A	0.4	A	0.3	A
	2	0.2	A	0.2	A	0.2	A
	3	0.2	A	0.3	A	0.3	A
	4	0.4	A	0.4	A	0.2	A
	5	0.3	A	0.5	A	0.4	A
	6	0.2	A	0.1	A	0.2	A
	7	0.3	A	0.3	A	0.1	A
	8	0.1	A	0.1	A	0.2	A

February 5, 2007

Table 17-14  
2015 No-Action Corner Conditions

(SF/P - Square Foot per Pedestrian)

Intersection	Corner	AM		MD		PM	
		SF/P	LOS	SF/P	LOS	SF/P	LOS
Archer Ave. @ 150th St.	Northeast	1,042.9	A	393.0	A	547.0	A
	Southeast	739.5	A	4,458.8	A	601.1	A
	Southwest	1,243.6	A	1,920.4	A	1,440.3	A
	Northwest	2,901.8	A	2,900.0	A	1,654.1	A
Archer Ave. @ 153rd St.	Northeast	175.7	A	292.1	A	296.8	A
	Northwest	155.6	A	170.1	A	146.0	A
Jamaica Ave. @ 149th St.	Northeast	151.0	A	103.2	A	89.4	A
	Southeast	191.5	A	98.3	A	99.5	A
	Southwest	141.7	A	75.9	A	75.9	A
	Northwest	89.7	A	52.1	B	51.3	A
Jamaica Ave. @ 160th St.	Northeast	57.3	B	16.5	D	18.2	D
	Southeast	35.8	C	10.3	E	15.2	D
	Southwest	108.0	A	50.5	B	52.3	B
	Northwest	65.4	A	27.6	C	22.5	D
Jamaica Ave. @ 168th St.	Northeast	122.5	A	52.1	B	24.6	C
	Southeast	159.9	A	75.4	A	40.5	B
	Southwest	162.7	A	63.2	A	26.3	C
	Northwest	122.0	A	46.2	B	24.8	C
Jamaica Ave. @ Merrick Blvd.	Northeast	309.1	A	98.0	A	72.0	A
	Southeast	130.4	A	70.2	A	30.8	C
	Southwest	222.4	A	119.9	A	55.1	B
	Northwest	84.9	A	26.0	C	18.0	D
Jamaica Ave. @ Parsons Blvd.	Northeast	60.7	A	60.9	A	57.9	B
	Southeast	67.8	A	64.5	A	71.1	A
	Southwest	398.8	A	311.9	A	294.5	A
	Northwest	108.6	A	92.2	A	62.5	A
Jamaica Ave. @ Sutphin Blvd.	Northeast	72.9	A	75.0	A	87.5	A
	Southeast	56.0	B	53.5	B	79.0	A
	Southwest	43.0	B	46.0	B	55.2	B
	Northwest	26.2	C	39.3	C	28.8	C
Jamaica Ave. @ Union Hall St.	Southeast	160.3	A	100.3	A	108.5	A
	Southwest	92.7	A	55.7	A	64.2	A
Sutphin Blvd. @ Archer Ave.	Northeast	59.5	B	56.9	B	53.3	B
	Southeast	71.5	A	76.9	A	73.2	A
	Southwest	63.1	A	61.9	A	79.5	A
	Northwest	164.5	A	145.0	A	169.4	A
90th Ave. @ 168th St.	Northeast	221.4	A	268.0	A	202.9	A
	Southeast	481.9	A	602.1	A	469.8	A
	Southwest	248.3	A	217.6	A	164.4	A
	Northwest	124.1	A	963.0	A	698.0	A
Archer Ave. @ 160th St.	Northeast	92.2	A	59.6	B	56.7	B
	Southeast	60.7	A	91.2	A	75.3	A
	Southwest	97.9	A	34.7	C	48.3	B
	Northwest	114.9	A	75.8	A	72.0	A



Table 17-14 (continued)  
2015 No-Action Corner Conditions

(SF/P - Square Foot per Pedestrian)

Intersection	Corner	AM		MD		PM	
		SF/P	LOS	SF/P	LOS	SF/P	LOS
Archer Ave. @ Parsons Blvd.	Northeast	52.9	B	68.6	A	78.8	A
	Northwest	159.2	A	201.7	A	100.7	A
Archer Ave. @ Union Hall St.	Northeast	281.3	A	170.9	A	189.4	A
	Northwest	406.0	A	255.1	A	285.4	A
Hillside Ave. @ 144th St.	Northeast	300.7	A	221.1	A	332.5	A
	Southeast	437.5	A	256.7	A	365.8	A
	Southwest	470.1	A	254.9	A	391.3	A
	Northwest	392.7	A	285.6	A	454.6	A
Hillside Ave. @ 153rd St.	Southwest	349.7	A	321.4	A	284.0	A
	Southeast	440.7	A	258.9	A	229.0	A
Hillside Ave. @ Parsons Blvd.	Northeast	865.0	A	98.6	A	173.8	A
	Southeast	119.4	A	99.8	A	164.2	A
	Southwest	142.9	A	102.6	A	168.6	A
	Northwest	128.6	A	96.8	A	181.6	A
Hillside Ave. @ Sutphin Blvd.	Southeast	270.6	A	150.7	A	236.3	A
	Southwest	237.8	A	116.6	A	227.2	A
Hillside Ave. @ Queens Blvd.	Northeast	824.4	A	827.5	A	1,174.4	A
	Southeast	1,498.5	A	1,173.8	A	1,172.9	A
	Southwest	1,296.6	A	889.8	A	847.1	A
	Northwest	800.0	A	881.7	A	782.8	A
Archer Ave. @ Guy R. Brewer Blvd.	Northeast	33.7	C	29.0	C	27.9	C
	Southeast	53.5	B	39.0	C	44.2	B
	Southwest	83.2	A	48.4	B	62.7	A
	Northwest	112.5	A	81.1	A	84.9	A
Archer Ave. @ Merrick Blvd.	Northeast	68.4	A	<u>91.0</u>	<u>A</u>	<u>77.0</u>	<u>A</u>
	Southeast	574.2	A	536.0	A	490.9	A
	Southwest	189.5	A	141.6	A	148.3	A
	Northwest	246.1	A	167.2	A	141.3	A
Liberty Ave. @ 150th St.	Northeast	1,032.4	A	830.0	A	1,194.0	A
	Southeast	866.8	A	735.8	A	1,168.9	A
	Southwest	982.8	A	910.8	A	1,096.7	A
	Northwest	1,445.9	A	1,046.7	A	1,351.6	A
Liberty Ave. @ Merrick Blvd.	Northeast	588.7	A	228.0	A	411.2	A
	Southwest	1,077.3	A	450.7	A	697.6	A
	Northwest	134.5	A	67.7	A	126.9	A
Liberty Ave. @ Sutphin Blvd.	Northeast	1,423.8	A	2,660.3	A	1,329.2	A
	Southeast	1,090.3	A	4,371.8	A	1,785.5	A
	Southwest	1,405.7	A	4,845.1	A	1,979.9	A
	Northwest	1,897.5	A	1,717.7	A	1,161.8	A
Sutphin Blvd. @ 94th Ave.	Northeast	245.5	A	<u>288.1</u>	A	<u>291.7</u>	A
	Southeast	291.5	A	335.4	A	382.7	A
	Southwest	140.8	A	139.8	A	191.2	A
	Northwest	175.1	A	219.9	A	205.6	A
Sutphin Blvd. @ 95th Ave.	Northeast	87.8	A	<u>87.2</u>	A	<u>103.4</u>	A
	Southeast	277.2	A	256.6	A	254.6	A
	Southwest	242.0	A	166.8	A	254.9	A
	Northwest	225.6	A	228.3	A	230.6	A

**Table 17-14 (continued)  
2015 No-Action Corner Conditions**

**(SF/P - Square Foot per Pedestrian)**

Intersection	Corner	AM		MD		PM	
		SF/P	LOS	SF/P	LOS	SF/P	LOS
Sutphin Blvd. @ 97th Ave.	Northeast	474.3	A	505.2	A	628.9	A
	Southeast	482.3	A	492.6	A	558.2	A
	Southwest	209.5	A	237.6	A	210.1	A
	Northwest	673.4	A	681.7	A	638.7	A
Archer Ave. @ 168th St.	Northeast	396.9	A	233.7	A	285.1	A
	Southeast	845.4	A	480.1	A	560.5	A
	Southwest	691.5	A	454.0	A	466.0	A
	Northwest	222.9	A	134.1	A	148.4	A
Hillside Ave. @ 168th St.	Northeast	288.2	A	249.4	A	290.5	A
	Southeast	274.4	A	159.2	A	201.5	A
	Southwest	304.1	A	190.0	A	224.1	A
	Northwest	416.0	A	297.2	A	370.2	A
Hillside Ave. @ 169th St.	Northeast	307.6	A	277.4	A	180.3	A
	Southeast	267.1	A	244.2	A	198.6	A
	Southwest	223.8	A	183.9	A	153.5	A
	Northwest	291.9	A	263.1	A	191.8	A
Hillside Ave. @ 178th St.	Northeast	540.8	A	640.3	A	380.8	A
	Southeast	231.8	A	127.1	A	138.6	A
	Southwest	155.5	A	86.3	A	89.1	A
	Northwest	418.5	A	527.1	A	317.0	A
Hillside Ave. @ 179th St.	Southeast	310.9	A	338.4	A	219.9	A
	Southwest	308.8	A	288.5	A	210.8	A
Liberty Ave. @ 160th St.	Northeast	133.0	A	95.5	A	123.1	A
	Southeast	861.7	A	488.4	A	549.3	A
	Southwest	87.9	A	52.5	B	63.0	A
	Northwest	133.9	A	153.3	A	180.2	A
Hillside Ave. @ 180th St.	Southeast	217.5	A	102.4	A	146.4	A
	Southwest	238.9	A	190.2	A	198.9	A
Liberty Ave. @ Guy R. Brewer Blvd.	Northeast	419.5	A	231.0	A	318.5	A
	Southeast	182.9	A	108.7	A	134.3	A
	Southwest	428.3	A	240.2	A	295.3	A
	Northwest	677.2	A	385.8	A	503.3	A

June 29, 2007

**Table 17-15**  
**2015 No-Action Crosswalk Conditions**

**(SF/P - Square Foot per Pedestrian)**

Intersection	Corner	AM		MD		PM	
		SF/P	LOS	SF/P	LOS	SF/P	LOS
Archer Ave. @ 150th St.	North	4,356.2	A	2,179.3	A	2,904.1	A
	West	3,622.3	A	4,829.7	A	2,065.3	A
	South	4,542.9	A	3,407.1	A	2,723.0	A
	East	899.4	A	7,298.7	A	2,423.6	A
Archer Ave. @ 153rd St.	North	197.8	A	156.7	A	165.7	A
	West	270.0	A	317.3	A	257.0	A
	South	168.4	A	196.8	A	159.8	A
Jamaica Ave. @ 149th St.	North	189.0	A	111.1	A	102.3	A
	West	554.3	A	300.8	A	328.7	A
	South	197.6	A	134.2	A	121.1	A
	East	425.3	A	206.9	A	225.1	A
Jamaica Ave. @ 160th St.	North	188.5	A	53.2	B	119.5	A
	West	139.5	A	49.9	B	25.3	C
	South	93.8	A	44.8	B	64.3	A
	East	138.6	A	51.9	B	42.0	B
Jamaica Ave. @ 168th St.	North	162.4	A	128.3	A	89.9	A
	West	268.0	A	76.8	A	46.2	B
	South	206.0	A	100.7	A	36.4	C
	East	536.2	A	159.5	A	64.3	A
Jamaica Ave. @ Merrick Blvd.	North	312.9	A	215.0	A	139.1	A
	West	219.5	A	53.1	B	37.8	C
	South	262.1	A	125.0	A	70.7	A
	East	276.2	A	137.7	A	45.5	B
Jamaica Ave. @ Parsons Blvd.	North	37.7	C	55.0	B	45.6	B
	West	118.1	A	103.4	A	94.7	A
	South	106.6	A	84.5	A	53.2	B
	East	141.4	A	90.8	A	140.8	A
Jamaica Ave. @ Sutphin Blvd.	North	39.9	C	36.8	C	47.3	B
	West	88.5	A	128.5	A	115.4	A
	South	34.2	C	54.5	B	35.2	C
	East	94.8	A	119.5	A	206.3	A
Jamaica Ave. @ Union Hall St.	North	222.5	A	115.7	A	153.0	A
	South	174.1	A	100.5	A	186.7	A
	East	32.5	C	18.1	D	21.0	D
Sutphin Blvd. @ Archer Ave.	North	113.0	A	125.1	A	119.6	A
	West	105.6	A	85.9	A	74.5	A
	South	78.8	A	78.7	A	110.0	A
	East	125.2	A	126.4	A	134.2	A
90th Ave. @ 168th St.	North	760.1	A	1,144.5	A	666.8	A
	West	429.0	A	983.9	A	429.0	A
	South	788.9	A	679.4	A	530.3	A
	East	250.5	A	411.0	A	324.7	A
Archer Ave. @ 160th St.	North	394.5	A	371.7	A	307.6	A
	West	174.9	A	136.8	A	109.8	A
	South	424.2	A	403.3	A	317.4	A
	East	367.8	A	277.0	A	256.5	A

**Table 17-15 (continued)**  
**2015 No-Action Crosswalk Conditions**

**(SF/P - Square Foot per Pedestrian)**

Intersection	Corner	AM		MD		PM	
		SF/P	LOS	SF/P	LOS	SF/P	LOS
Archer Ave. @ Parsons Blvd.	North	198.2	A	206.0	A	81.0	A
	West	262.4	A	383.2	A	155.0	A
	South	159.2	A	193.3	A	102.1	A
Archer Ave. @ Union Hall St.	North	316.2	A	322.9	A	457.5	A
	West	327.3	A	242.4	A	240.7	A
	South	279.9	A	344.6	A	508.5	A
Hillside Ave. @ 144th St.	North	261.0	A	204.6	A	272.3	A
	West	537.6	A	428.5	A	783.1	A
	South	317.9	A	226.8	A	374.2	A
	East	497.9	A	220.5	A	325.5	A
Hillside Ave. @ 153rd St.	North	186.6	A	276.9	A	196.0	A
	South	372.4	A	310.4	A	242.3	A
	East	758.5	A	495.3	A	397.8	A
Hillside Ave. @ Parsons Blvd.	North	50.8	B	59.1	B	108.8	A
	West	145.1	A	118.9	A	219.7	A
	South	147.4	A	98.9	A	136.0	A
	East	254.3	A	145.0	A	257.0	A
Hillside Ave. @ Sutphin Blvd.	North	420.4	A	208.4	A	286.3	A
	South	365.1	A	172.2	A	345.7	A
	East	130.8	A	67.5	A	133.4	A
Hillside Ave. @ Queens Blvd.	North	1,796.3	A	4,238.9	A	2,436.7	A
	West	581.3	A	528.5	A	554.0	A
	South	671.6	A	737.3	A	587.6	A
	East	1,022.6	A	361.4	A	509.8	A
Archer Ave. @ Guy R. Brewer Blvd.	North	142.1	A	140.7	A	104.9	A
	West	106.2	A	99.0	A	99.9	A
	South	186.9	A	162.3	A	144.2	A
	East	176.4	A	208.0	A	259.3	A
Archer Ave. @ Merrick Blvd.	North	413.3	A	550.2	A	518.6	A
	West	225.1	A	158.7	A	121.6	A
	South	244.8	A	302.7	A	243.7	A
	East	621.5	A	878.2	A	551.0	A
Liberty Ave. @ 150th St.	North	626.5	A	752.7	A	1,027.6	A
	West	1,466.3	A	890.9	A	1,367.9	A
	South	1,616.1	A	1,256.5	A	1,414.1	A
	East	1,350.2	A	1,447.3	A	1,558.6	A
Liberty Ave. @ Merrick Blvd.	North	1,412.2	A	598.3	A	1,199.4	A
	West	776.6	A	578.4	A	998.5	A
	South	1,601.0	A	725.9	A	958.4	A
	East	823.7	A	878.1	A	878.1	A
Liberty Ave. @ Sutphin Blvd.	North	830.7	A	1,903.3	A	738.4	A
	West	3,022.4	A	1,887.1	A	1,888.1	A
	South	1,336.4	A	2,101.5	A	979.3	A
	East	1,423.9	A	7,860.1	A	3,926.0	A

**Table 17-15 (continued)**  
**2015 No-Action Crosswalk Conditions**

**(SF/P - Square Foot per Pedestrian)**

Intersection	Corner	AM		MD		PM	
		SF/P	LOS	SF/P	LOS	SF/P	LOS
Sutphin Blvd. @ 94th Ave.	North	207.0	A	301.1	A	320.4	A
	West	716.4	A	716.4	A	1,164.8	A
	South	125.5	A	154.1	A	153.9	A
	East	373.0	A	408.3	A	429.0	A
Sutphin Blvd. @ 95th Ave.	North	172.8	A	184.5	A	231.8	A
	West	326.2	A	241.0	A	272.1	A
	South	159.7	A	160.5	A	165.4	A
	East	449.0	A	293.0	A	340.4	A
Sutphin Blvd. @ 97th Ave.	North	426.8	A	378.5	A	591.1	A
	West	520.6	A	586.1	A	519.7	A
	South	450.4	A	344.1	A	361.1	A
	East	549.0	A	707.8	A	490.2	A
Archer Ave. @ 168th St.	North	747.0	A	398.4	A	458.1	A
	West	570.4	A	352.2	A	369.2	A
	South	856.7	A	542.3	A	542.3	A
	East	1,347.2	A	960.3	A	1,033.7	A
Hillside Ave. @ 168th St.	North	182.6	A	294.2	A	154.2	A
	West	428.7	A	390.3	A	359.7	A
	South	236.3	A	229.6	A	139.7	A
	East	541.2	A	206.7	A	181.5	A
Hillside Ave. @ 169th St.	North	137.9	A	127.8	A	107.3	A
	West	522.0	A	374.2	A	355.7	A
	South	183.3	A	164.2	A	113.0	A
	East	350.3	A	269.2	A	221.8	A
Hillside Ave. @ 178th St.	North	434.9	A	379.0	A	284.1	A
	West	507.9	A	818.1	A	418.1	A
	South	367.9	A	325.3	A	252.5	A
	East	375.0	A	229.2	A	245.1	A
Hillside Ave. @ 179th St.	North	123.9	A	172.2	A	117.0	A
	South	124.9	A	147.5	A	104.6	A
	East	601.7	A	600.0	A	336.8	A
Liberty Ave. @ 160th St.	North	198.2	A	147.0	A	151.5	A
	West	394.7	A	542.9	A	633.1	A
	South	202.8	A	190.4	A	213.0	A
	East	618.7	A	600.2	A	448.0	A
Hillside Ave. @ 180th St.	North	128.4	A	106.9	A	107.2	A
	South	149.0	A	124.5	A	127.7	A
	East	423.5	A	257.9	A	329.4	A
Liberty Ave. @ Guy R. Brewer Blvd.	North	316.5	A	216.3	A	232.4	A
	West	362.9	A	413.2	A	508.6	A
	South	308.4	A	206.3	A	209.2	A
	East	285.9	A	335.5	A	301.2	A

February 5, 2007

**Table 17-16**

**Net Subway Demand from the Proposed Actions by Station**  
**THIS TABLE HAS BEEN REVISED FOR THE FEIS**

Station	Peak Hour	Net Trips per Hour		
		Enter	Exit	Total
Sutphin Boulevard (F)	AM	44	18	62
	PM	32	42	75
Parsons Boulevard (F)	AM	112	7	119
	PM	18	87	105
169th Street (F)	AM	48	48	96
	PM	99	121	220
Jamaica-179th Street (F)	AM	137	49	186
	PM	103	163	266
Sutphin Boulevard (E, J/Z)	AM	207	585	792
	PM	798	286	1,233
Jamaica Center (E, J/Z)	AM	380	165	545
	PM	381	527	908
Jamaica-Van Wyck (E)	AM	57	105	161
	PM	111	56	167
Total	AM	984	977	1,961
	PM	1,640	1,333	2,973

**Note:** Numbers shown are entering and exiting each subway station.  
June 29, 2007

As shown in Table 17-16, the greatest numbers of new trips would occur at the Sutphin Boulevard (E, J/Z) station, which would experience a total of 792 new trips in the AM peak hour and 1,233 new trips in the PM peak hour (entering and exiting combined). The Jamaica Center (E, J/Z) station follows with 545 and 908 new trips in the AM and PM peak hours, respectively. The Jamaica-179th Street (F) station would experience an estimated 186 new trips in the AM peak hour and 266 new trips in the PM peak hour. The 169th Street (F) station would have an increase in approximately 96 and 220 new trips in the AM and PM peak hours, respectively.

The Sutphin Boulevard (F) station and the Parsons Boulevard (F) stations are expected to have less than 120 new trips in either peak hour, which would be lower than the 200-trip CEQR analysis threshold, although it is included in the subway station impact analysis given its location within the proposed action area. The number of trips at the Jamaica Van Wyck station (E) station is also expected to increase as a result of the proposed actions. The number of new trips at this station is expected to be below the 200-trip CEQR analysis threshold, and it is located outside of the proposed action area, west of the Van Wyck Expressway; and therefore, it is not analyzed for this study.

The *CEQR Technical Manual* identifies a significant adverse impact for stairways in terms of the width increment threshold (WIT) needed to restore conditions to their No-Action state based on the location of the stair within the station. Stairways that are substantially degraded in level of service or which experience the formation of extensive queues are classified as significantly adversely impacted. Significant stairway impacts are typically considered to have occurred once the following thresholds are reached; for a With-Action LOS D condition, a WIT of six inches or more is considered significant; for a With-Action LOS E condition, three to six inches is

considered significant. For stairways operating at LOS A, B or C in the No-Action condition, a refined methodology that was utilized for the *Hudson Yards Rezoning & Development Program FGEIS* (November 2004) is employed. This methodology is based on bringing these stairways to an acceptable level of service (v/c ratio of less than 1.00), not to the LOS projected for the No-Action condition.

For turnstiles, escalators and high-wheel exit gates, the *CEQR Technical Manual* defines a significant adverse impact as an increase from No-Action volume-to-capacity ratio of below 1.00 to a v/c ratio of 1.00 or greater. Where the facility is already at a v/c ratio of 1.00 or greater, a 0.01 change in v/c ratio is also considered significant.

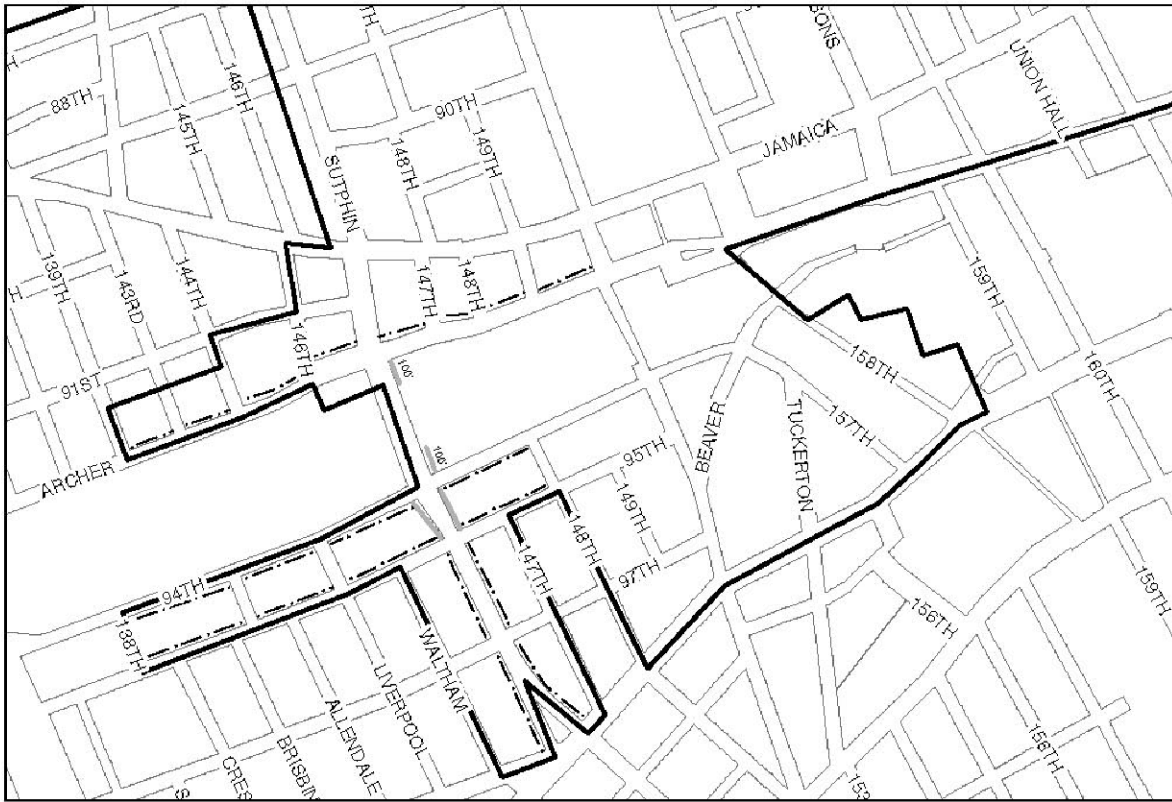
Tables 17-17A and 17-17B show the distribution of action-generated trips among the various station elements at the analyzed subway stations, and the results of the level of service analysis in the 2015 future with the proposed actions compared with the 2015 future without the proposed actions. Applying the significant adverse impact criteria, the table shows that no significant adverse impact would occur at any analyzed stairway or fare array due to the proposed actions. All analyzed facilities would continue to operate at LOS C or better in the future with the proposed actions, with the exception of Escalator E439 at the Jamaica Center (E, J/Z) station in the PM peak hour and Stairway S5 the Sutphin Boulevard and Archer Avenue (E, J/Z) station in the AM peak hour. Escalator E439 would operate at LOS F in the Future Without the Actions in the PM peak hour, but demand is not expected to increase at this location as a result of the proposed actions.

There are generally more platform stairways (stairways between the platform and mezzanine) per station in the study area than street stairways; therefore, the analysis of street stairways is more appropriate to identify significant stairway impacts. As there would be no significant adverse impacts to subway street stairways and fare arrays, it would be unlikely that platform stairways would be significantly impacted as a result of the proposed actions.

### SUBWAY LINE HAUL

The proposed actions would generate a net increase of 1,961 subway trips in the AM peak hour and 2,973 trips in the PM peak hour. Of these trips, an estimated 394 trips would be added to Manhattan-bound E trains in the AM peak hour crossing the peak load point at Jackson Heights-Roosevelt Avenue, and an estimated 533 trips would be added to Queens-bound E trains in the PM peak hour crossing the peak load point at Lexington Avenue-53rd Street. An estimated 394 trips would be added to Manhattan-bound F trains in the AM peak hour crossing the peak load point at Roosevelt Island, and an estimated 533 trips would be added to the Manhattan-bound F trains crossing the peak load point at 57th Street-6th Avenue in the PM peak hour. The riders on the J/Z trains would rise by an estimated 197 trips crossing the peak load point at Marcy Avenue in the AM peak hour, and by 267 trips in the PM peak hour at Delancy Street in the Queens-bound direction. The remaining peak hour subway trips generated by the proposed actions would occur in non-peak direction trains. Table 17-18 shows peak hour, peak direction subway line haul conditions on the E, F, J/Z trains in the 2015 future with the proposed actions.

Under CEQR criteria, any increases in load levels that remain within practical capacity limits are generally not considered significant adverse impacts. Projected increases from a No-Action condition to a With-Action condition that exceeds practical capacity may be considered a significant adverse impact if the proposed actions generate five or more additional passengers per car. Peak hour peak direction demand on the Manhattan-bound E train in the AM peak hour



- Special Downtown Jamaica District
- - - - 5' Sidewalk Widening
- 10' Sidewalk Widening

0      485      970      1,940  
 Feet





Table 17-17A  
2015 With-Action Subway Stairway Conditions Compared with No-Action Conditions

No.	Station Element/Location	Peak Period (1)	Effective Width in Feet (2)	Maximum 15 Minute Capacity (3)	2015 No-Action				2015 With-Action				Width Increment Threshold in Inches (5)
					Peak 15 Minute Volume	PFM (4)	Volume to Capacity Ratio	LOS	Peak 15 Minute Volume	PFM (4)	Volume to Capacity Ratio	LOS	
<b>Sutphin Boulevard (F) Station</b>													
S1	Stairway @ SE Corner Hillside Avenue/Sutphin Boulevard	AM	4.43	665	113	1.70	0.17	A	131	1.96	0.20	A	
		PM	4.43	665	185	2.79	0.28	A	207	3.12	0.31	A	
S2	Stairway @ NE Corner Hillside Avenue/Sutphin Boulevard	AM	3.53	530	83	1.56	0.16	A	83	1.56	0.16	A	
		PM	3.53	530	88	1.67	0.17	A	88	1.67	0.17	A	
S3	Stairway @ NW Corner Hillside Avenue/Sutphin Boulevard	AM	4.43	665	84	1.27	0.13	A	85	1.28	0.13	A	
		PM	4.43	665	91	1.37	0.14	A	92	1.38	0.14	A	
S7	Stairway @ NE Corner Hillside Avenue/144th Street	AM	3.30	495	44	0.90	0.09	A	44	0.90	0.09	A	
		PM	3.30	495	22	0.45	0.05	A	22	0.45	0.05	A	
S5	Stairway @ NE Corner Hillside Avenue/144th Street	AM	3.53	530	17	0.32	0.03	A	17	0.32	0.03	A	
		PM	3.13	470	28	0.59	0.06	A	28	0.59	0.06	A	
<b>Parsons Boulevard (F) Station</b>													
S1	Stairway @ SW Corner Hillside Avenue/Parsons Boulevard	AM	3.45	518	95	1.83	0.18	A	95	1.84	0.18	A	
		PM	3.07	461	161	3.51	0.35	A	163	3.53	0.35	A	
S2	Stairway @ NW Corner Hillside Avenue/Parsons Boulevard	AM	3.45	518	144	2.79	0.28	A	145	2.81	0.28	A	
		PM	3.45	518	79	1.52	0.15	A	80	1.54	0.15	A	
S6	Stairway @ SE Corner Hillside Avenue/Parsons Boulevard	AM	3.38	507	127	2.51	0.25	A	148	2.92	0.29	A	
		PM	3.00	450	168	3.73	0.37	A	<u>182</u>	<u>4.04</u>	0.40	A	
S3	Stairway @ SE Corner Hillside Avenue/153rd Street	AM	3.53	530	45	0.85	0.08	A	48	0.91	0.09	A	
		PM	3.13	470	76	1.62	0.16	A	81	1.73	0.17	A	
S4	Stairway @ NE Corner Hillside Avenue/153rd Street	AM	3.75	563	8	0.15	0.01	A	12	0.21	0.02	A	
		PM	3.75	563	9	0.15	0.02	A	13	0.23	0.02	A	
S5	Stairway @ SW Corner Hillside Avenue/153rd Street	AM	4.43	665	19	0.28	0.03	A	24	0.36	0.04	A	
		PM	4.92	738	12	0.17	0.02	A	19	0.26	0.03	A	
<b>169th Street (F) Station</b>													
S1	Stairway @ SE Corner Hillside Avenue/169th Street	AM	3.53	530	83	1.56	0.16	A	83	1.56	0.16	A	
		PM	3.53	530	166	3.13	0.31	A	166	3.13	0.31	A	
S2	Stairway @ NE Corner Hillside Avenue/169th Street	AM	5.40	810	122	1.50	0.15	A	122	1.50	0.15	A	
		PM	6.08	912	122	1.33	0.13	A	122	1.33	0.13	A	
S3	Stairway @ SW Corner Hillside Avenue/169th Street	AM	3.53	530	20	0.38	0.04	A	20	0.38	0.04	A	
		PM	3.13	470	131	2.80	0.28	A	131	2.80	0.28	A	
S4	Stairway @ NW Corner Hillside Avenue/169th Street	AM	3.13	470	193	4.12	0.41	A	193	4.12	0.41	A	
		PM	3.13	470	138	2.94	0.29	A	138	2.94	0.29	A	
S5	Stairway @ SW Corner Hillside Avenue/168th Street	AM	3.38	507	60	1.18	0.12	A	80	1.58	0.16	A	
		PM	3.00	450	123	2.72	0.27	A	173	3.85	0.38	A	
S6	Stairway @ NW Corner Hillside Avenue/168th Street	AM	2.93	440	57	1.30	0.13	A	54	1.23	0.12	A	
		PM	3.30	495	63	1.27	0.13	A	68	1.38	0.14	A	
S7	Stairway @ SE Corner Hillside Avenue/168th Street	AM	3.53	530	59	1.12	0.11	A	<u>71</u>	<u>1.35</u>	<u>0.13</u>	A	
		PM	3.53	530	33	0.62	0.06	A	43	0.81	0.08	A	
S8	Stairway @ NE Corner Hillside Avenue/168th Street	AM	3.93	590	28	0.47	0.05	A	28	0.47	0.05	A	
		PM	3.93	590	33	0.56	0.06	A	33	0.56	0.06	A	

**Notes:**

- (1) Peak hours: 8-9 am and 5-6 pm.
- (2) Effective width measured as stairwell width less 1.5 feet to account for center and side handrails. Effective width is further reduced by 10 to 20 percent to account for friction where there are two-way flows.
- (3) Stair capacity in persons per 15 minutes based on NYC Transit guidelines of 10 persons per foot-width per minute (PFM).
- (4) Persons per foot width of stairway per minute.
- (5) Width increment threshold needed to restore stairway to future No-Action conditions or to a v/c ratio of less than 1.0.

Table 17-17A (Continued)  
2015 With-Action Subway Stairway Conditions Compared with No-Action Conditions

No.	Station Element/Location	Peak Period (1)	Effective Width in Feet (2)	Maximum 15 Minute Capacity (3)	2015 No-Action				2015 With-Action				Width Increment Threshold in Inches (5)
					Peak 15 Minute Volume	PFM (4)	Volume to Capacity Ratio	LOS	Peak 15 Minute Volume	PFM (4)	Volume to Capacity Ratio	LOS	
<b>179th Street (F) Station</b>													
S1	Stairway @ SE Corner Hillside Avenue/180th Street	AM	3.23	485	98	2.02	0.20	A	126	2.60	0.26	A	
		PM	2.87	431	203	4.71	0.47	A	236	5.49	0.55	B	
S2	Stairway @ NE Corner Hillside Avenue/Midland Parkway	AM	<u>3.23</u>	<u>485</u>	<u>83</u>	<u>1.71</u>	<u>0.17</u>	<u>A</u>	<u>99</u>	<u>2.04</u>	<u>0.20</u>	<u>A</u>	
		PM	<u>2.87</u>	<u>431</u>	<u>55</u>	<u>1.28</u>	<u>0.13</u>	<u>A</u>	<u>74</u>	<u>1.73</u>	<u>0.17</u>	<u>A</u>	
S3	Stairway @ SW Corner Hillside Avenue/180th Street	AM	2.93	440	33	0.75	0.08	A	33	0.76	0.08	A	
		PM	3.30	495	28	0.56	0.06	A	28	0.56	0.06	A	
S5	Stairway @ South Side Btwn 179th Place & 180th Street/ Hillside Avenue	AM	3.23	485	50	1.03	0.10	A	50	1.03	0.10	A	
		PM	2.87	431	182	4.23	0.42	A	182	4.23	0.42	A	
S7	Stairway @ South Side Btwn 179th Place & 180th Street/ Hillside Avenue	AM	3.23	485	122	2.51	0.25	A	122	2.51	0.25	A	
		PM	2.87	431	116	2.69	0.27	A	116	2.69	0.27	A	
S6	Stairway @ North Side Btwn 179th Place & 180th Street/ Hillside Avenue	AM	2.87	431	398	9.24	0.92	C	398	9.24	0.92	C	
		PM	3.23	485	66	1.37	0.14	A	66	1.37	0.14	A	
S8	Stairway @ North Side Btwn 179th Place & 180th Street/ Hillside Avenue	AM	2.87	431	215	5.00	0.50	B	215	5.00	0.50	B	
		PM	3.23	485	110	2.28	0.23	A	110	2.28	0.23	A	
S9	Stairway @ SE Corner Hillside Avenue/179th Place	AM	<u>4.50</u>	<u>675</u>	<u>98</u>	<u>1.46</u>	<u>0.15</u>	<u>A</u>	<u>98</u>	<u>1.46</u>	<u>0.15</u>	<u>A</u>	
		PM	<u>4.00</u>	<u>600</u>	<u>105</u>	<u>1.75</u>	<u>0.17</u>	<u>A</u>	<u>105</u>	<u>1.75</u>	<u>0.17</u>	<u>A</u>	
S4	Stairway @ NW Corner Hillside Avenue/Midland Parkway	AM	2.87	431	83	1.92	0.19	A	83	1.92	0.19	A	
		PM	3.58	537	39	0.72	0.07	A	39	0.72	0.07	A	
S11	Stairway @ SE Corner Hillside Avenue/179th Street	AM	3.15	473	48	1.01	0.10	A	51	1.07	0.11	A	
		PM	3.50	525	73	1.39	0.14	A	77	1.47	0.15	A	
S13	Stairway @ SW Corner Hillside Avenue/179th Street	AM	2.80	420	32	0.75	0.08	A	34	0.81	0.08	A	
		PM	2.80	420	68	1.62	0.16	A	73	1.74	0.17	A	
S10	Stairway @ North Side Hillside Avenue/179th Street	AM	2.93	440	376	8.55	0.85	C	376	8.55	0.85	C	
		PM	3.30	495	133	2.68	0.27	A	133	2.68	0.27	A	
S12	Stairway @ North Side Hillside Avenue/179th Street	AM	2.93	440	105	2.39	0.24	A	105	2.39	0.24	A	
		PM	3.30	495	50	1.00	0.10	A	50	1.00	0.10	A	
S14	Stairway @ NE Towards Corner Hillside Avenue/178th Street	AM	3.08	462	135	2.92	0.29	A	138	2.98	0.30	A	
		PM	2.73	410	64	1.55	0.16	A	67	1.64	0.16	A	
S15	Stairway @ SE Towards Corner Hillside Avenue/178th Street	AM	2.80	420	96	2.29	0.23	A	100	2.37	0.24	A	
		PM	2.80	420	135	3.21	0.32	A	149	3.56	0.36	A	

**Notes:**

- (1) Peak hours: 8-9 am and 5-6 pm.
- (2) Effective width measured as stairwell width less 1.5 feet to account for center and side handrails. Effective width is further reduced by 10 to 20 percent to account for friction where there are two-way flows.
- (3) Stair capacity in persons per 15 minutes based on NYC Transit guidelines of 10 persons per foot-width per minute (PFM).
- (4) Persons per foot width of stairway per minute.
- (5) Width increment threshold needed to restore stairway to future No-Action conditions or to a v/c ratio of less than 1.0.

Table 17-17A (Continued)  
2015 With-Action Subway Stairway Conditions Compared with No-Action Conditions

No.	Station Element/Location	Peak Period (1)	Effective Width in Feet (2)	Maximum 15 Minute Capacity (3)	2015 No-Action				2015 With-Action				Width Increment Threshold in Inches (5)
					Peak 15 Minute Volume	PFM (4)	Volume to Capacity Ratio	LOS	Peak 15 Minute Volume	PFM (4)	Volume to Capacity Ratio	LOS	
<b>Sutphin Boulevard/Archer Avenue (E, J/Z) Station</b>													
S1	Stairway @ SW Corner Sutphin Boulevard/Archer Avenue	AM	5.70	855	138	1.61	0.16	A	138	1.61	0.16	A	0.5 < 6
		PM	5.70	855	94	1.10	0.11	A	94	1.10	0.11	A	
S2	Stairway @ NW Corner Sutphin Boulevard/Archer Avenue	AM	3.75	563	141	2.51	0.25	A	142	2.53	0.25	A	
		PM	3.75	563	232	4.12	0.41	A	233	4.14	0.41	A	
S3	Stairway @ SE Corner Sutphin Boulevard/Archer Avenue	AM	2.80	420	257	6.11	0.61	B	460	10.95	1.10	D	
		PM	3.15	473	124	2.63	0.26	A	428	9.05	0.90	C	
S4	Stairway @ NE Corner Sutphin Boulevard/Archer Avenue	AM	3.75	563	122	2.17	0.22	A	133	2.36	0.24	A	
		PM	3.75	563	164	2.91	0.29	A	177	3.14	0.31	A	
E433	Escalator (up) @ West Sidewalk Sutphin Boulevard/Archer Avenue	AM	3.00	510	186	N/A	0.36	A	<u>202</u>	N/A	<u>0.40</u>	A	
		PM	3.00	510	168	N/A	0.33	A	<u>191</u>	N/A	<u>0.37</u>	A	
E434	Escalator (down) @ West Sidewalk Sutphin Boulevard/Archer Avenue	AM	3.00	510	177	N/A	0.35	A	<u>191</u>	N/A	<u>0.38</u>	A	
		PM	3.00	510	55	N/A	0.11	A	<u>83</u>	N/A	<u>0.16</u>	A	
<b>Jamaica Center- Parsons Boulevard/Archer Avenue (E, J/Z) Station</b>													
S5	Stairway @ SE Corner 153rd Street/Archer Avenue	AM	5.33	800	760	9.50	0.95	C	776	9.70	0.97	C	
		PM	5.33	800	243	3.03	0.30	A	280	3.50	0.35	A	
S4	Stairway @ NE Corner 153rd Street/Archer Avenue	AM	5.27	791	361	4.57	0.46	A	371	4.70	0.47	A	
		PM	5.93	890	111	1.24	0.12	A	124	1.39	0.14	A	
S5a&b	Stairway @ SW Corner 153rd Street/Archer Avenue	AM	8.40	1260	155	1.23	0.12	A	168	1.33	0.13	A	
		PM	7.47	1121	269	2.40	0.24	A	310	2.76	0.28	A	
S2	Stairway @ NE Corner Parsons Boulevard/Archer Avenue	AM	10.75	1613	1,222	7.58	0.76	C	<u>1,298</u>	<u>8.05</u>	<u>0.81</u>	C	
		PM	10.75	1613	992	6.15	0.61	B	<u>1,114</u>	<u>6.91</u>	<u>0.69</u>	B	
S	Stairway @ SW Corner Parsons Boulevard/Archer Avenue	AM	5.18	777	201	2.58	0.26	A	248	3.19	0.32	A	
		PM	5.18	777	230	2.96	0.30	A	290	3.74	0.37	A	
E440	Escalator (up) @ SE Corner 153rd Street/Archer Avenue	AM	3.00	510	166	N/A	0.32	A	166	N/A	0.32	A	
		PM	3.00	510	61	N/A	0.12	A	61	N/A	0.12	A	
E438	Escalator (up) @ SW Corner Parsons Boulevard/Archer Avenue	AM	3.00	510	105	N/A	0.21	A	105	N/A	0.21	A	
		PM	3.00	510	260	N/A	0.51	B	260	N/A	0.51	B	
E439	Escalator (up) @ NE Corner Parsons Boulevard/Archer Avenue	AM	3.00	510	193	N/A	0.38	A	193	N/A	0.38	A	
		PM	3.00	510	878	N/A	1.72	F	878	N/A	1.72	F	

**Notes:**

- (1) Peak hours: 8-9 am and 5-6 pm.
- (2) Effective width measured as stairwell width less 1.5 feet to account for center and side handrails. Effective width is further reduced by 10 to 20 percent to account for friction where there are two-way flows.
- (3) Stair capacity in persons per 15 minutes based on NYC Transit guidelines of 10 persons per foot-width per minute (PFM).
- (4) Persons per foot width of stairway per minute.
- (5) Width increment threshold needed to restore stairway to future No-Action conditions or to a v/c ratio of less than 1.0.

Table 17-17B  
2015 With-Action Subway Fare Array Conditions Compared with No-Action Conditions

No.	Station Element/Location	Array Configuration	Peak Period (1)	Maximum 15 Minute Capacity (2)	2015 No-Action			2015 With-Action		
					Peak 15 Minute Volume	Volume to Capacity Ratio (3)	LOS	PeakBuild 15 Minute Volume	Volume to Capacity Ratio (3)	LOS
<b>Sutphin Boulevard (F) Station</b>										
N338	Sutphin Boulevard	5 entry/exit turnstiles 1 high entry/exit turnstile 2 high revolving exit gate	AM PM	3,600 3,600	280 365	0.08 0.10	A A	298 387	0.08 0.11	A A
U-1	144th Street (Unstaffed)	2 high entry/exit turnstile 2 high revolving exit gates	AM PM	1,500 1,500	61 50	0.04 0.03	A A	61 50	0.04 0.03	A A
<b>Parsons Boulevard (F) Station</b>										
N339	Parsons Boulevard	7 entry/exit turnstiles	AM PM	3,360 3,360	366 408	0.11 0.12	A A	<del>389</del> <b>424</b>	0.12 0.13	A A
U-2	153th Street (Unstaffed)	2 high entry/exit turnstiles 1 high revolving exit gate	AM PM	1,050 1,050	72 92	0.07 0.09	A A	92 117	0.09 0.11	A A
<b>169th Street (F) Station</b>										
N340	168th Street	6 entry/exit turnstiles 2 high entry/exit turnstiles 2 high revolving exit gates	AM PM	4,380 4,380	204 252	0.05 0.06	A A	233 318	0.05 0.07	A A
N340A	169th Street	7 entry/exit turnstiles	AM PM	3,360 3,360	418 557	0.12 0.17	A A	418 557	0.12 0.17	A A
<b>179th Street (F) Station</b>										
N342	179th Street	9 entry/exit turnstiles 2 high entry/exit turnstiles 2 high revolving exit gates	AM PM	5,820 5,820	791 522	0.14 0.09	A A	803 549	0.14 0.09	A A
N343	Between 179th Place and 180th Street	12 entry/exit turnstiles 3 high revolving exit gates	AM PM	7,110 7,110	1,081 806	0.15 0.11	A A	<u>1,125</u> <del>859</del>	0.16 0.12	A A
<b>Sutphin Boulevard (E, J/Z) Station</b>										
N605	Sutphin Boulevard	7 entry/exit turnstiles 4 high entry/exit turnstiles	AM PM	4,560 4,560	1,230 980	0.27 0.21	A A	<u>1,476</u> <del>1,348</del>	0.32 <del>0.30</del>	A A
<b>Jamaica Center (E, J/Z) Station</b>										
N606	Parsons Boulevard	9 entry/exit turnstiles	AM PM	4,320 4,320	1,726 2,365	0.40 0.55	A B	<u>1,850</u> <del>2,548</del>	<u>0.43</u> 0.59	A B
N607	153rd Street	5 entry/exit turnstiles 5 high entry/exit turnstiles 2 high revolving exit gates	AM PM	4,800 4,800	1,442 683	0.30 0.14	A A	1,481 774	0.31 0.16	A A

**Notes:**

- (1) Peak hours: 8-9 am and 5-6 pm.
- (2) Fare array capacity based on 32 ppm for turnstiles, 20 ppm for high entry/exit turnstiles, and 30 ppm for high revolving exit gates as per NYCT guidelines.
- (3) Levels of service for turnstiles and exit gates: LOS A: v/c < 0.45, LOS B: v/c = 0.45 to 0.70, LOS C: v/c = 0.71 to 1.00, LOS D: v/c = 1.01 to 1.33, LOS E: v/c = 1.34 to 1.67, LOS F: v/c > 1.67.

**Table 17-18  
With-Action Subway Line Haul Conditions**

Line	Hour	Peak Direction	Trains per Hour (1)	Cars per Hour (2)	Available Capacity (2)	2015 No-Action		2015 with Action		
						Pass. Per Hour (3)	V/C Ratio (4)	Pass. per Hour	V/C Ratio (4)	Avg. Pass. per Car
E	AM	Manhattan-Bound	15	150	21,750	24,708	1.14	<u>25,102</u>	1.15	<u>3</u>
	PM	Queens-Bound	15	150	21,750	13,990	0.64	<u>14,523</u>	0.67	<u>4</u>
F	AM	Manhattan-Bound	15	120	21,000	19,079	0.91	<u>19,473</u>	0.93	3
	PM	Queens-Bound	14	112	19,600	12,363	0.63	<u>12,896</u>	0.66	<u>5</u>
J/Z	AM	Manhattan-Bound	12	96	13,920	9,531	0.68	<u>9,728</u>	0.70	2
	PM	Queens-Bound	12	96	13,920	6,577	0.47	<u>6,844</u>	0.49	3

**Notes:**  
 (1) Sources: AM Peak Hour: MTA NYC Transit, 2005 peak load point data.  
 PM Peak Hour: MTA NYC Transit, Year 2004 Weekday Cordon Count.  
 (2) Capacity based on 145 passengers/car for 60' cars and 175 passengers/car for 75' cars as per NYC Transit subway car loading guidelines. E trains operate with ten 60'-cars; F trains operate predominantly with eight 75'-cars and some with ten 60'-cars; and J/Z trains operate with eight 60'-cars.  
 Guideline capacity for each route based on the capacity associated with the predominant car type.  
 (3) Projected No-Action volumes based on NYCT existing conditions data (AM 2005 and PM 2004) increased to reflect one percent per year background growth (2004/2005 to 2015) and demand from No-Action sites.  
 (4) Volume-to-capacity ratio.  
 June 29, 2007

would continue to operate overcapacity as under No-Action conditions. The v/c ratio would increase to 1.15 under With-Action conditions compared to a v/c ratio of 1.14 under No-Action conditions. However, the proposed actions would generate only three additional passengers per car to the Manhattan-bound E train in the AM peak hour. This would not exceed the CEQR threshold of five or more passengers per car. Therefore, there are no significant adverse impacts on subway line haul.

**BUS SERVICE**

As shown in Table 16-10, the projected development that is expected to occur with the proposed actions would generate 1,058 inbound and 603 outbound bus trips in the AM peak hour, and 1,086 inbound and 1,782 outbound bus trips in the PM peak hour. These trips were assigned to 49 public bus routes throughout the proposed action area (NYCT and MTA Bus operate 26 and 14 routes in the study area, respectively, and Long Island Bus operates 9 routes) based 2000 census journey to work data for residents and workers, 2000 census population distribution data for transient visitors and shoppers, and also based on proximity of each route to individual development sites. Table 17-19 shows the conditions on these bus routes in the future with the proposed actions and compares them to conditions without the proposed actions. As shown in Table 17-19, the route with the greatest number of new peak direction trips bus trips would be the Q60 with 131 new trips westbound in the AM peak hour, and 189 new trips eastbound in the PM peak hour.

According to current NYC Transit guidelines, increases in bus load levels above their maximum capacity at any load point is considered a significant adverse impact as it would necessitate the addition of more bus service along the route. For analysis purposes, this guideline is also being applied to MTA Bus and LI Bus bus routes. NYCT's Q30, Q43 and Q54, and MTA Bus' Q6, Q8, Q40, Q41 and Q60 would experience load levels exceeding their capacity in one or both peak hours. All other analyzed bus routes would continue to operate with available peak direction capacity in both peak hours in the future with the proposed actions.

NYCT's Q30 route would experience a deficit of 17 spaces eastbound in the AM peak hour. The Q30 would continue to operate with available capacity westbound in the AM peak hour and both direction in the PM peak hour. NYCT's Q43 route would experience a deficit of 22 spaces eastbound in the PM peak hour; however, it will continue to operate with available capacity westbound in the PM peak hour and in both directions in the AM peak hour. NYCT's Q54 route would experience a deficit of 19 spaces eastbound in the AM peak hour, a deficit of 48 spaces eastbound in the PM peak hour, a deficit of 25 spaces westbound in the AM peak hour, and a deficit of 3 spaces westbound in the PM peak hour.

MTA Bus' Q6 would operate with a shortfall in capacity in both directions during the AM peak hour (101 spaces northbound and 48 spaces southbound), and in the southbound direction in the PM peak hour (86 spaces). The Q6 would continue to operate with available capacity northbound in the PM peak hour. MTA Bus' Q8 would experience a capacity deficit in both directions in the AM peak hour. The Q8 would experience a deficit of 52 spaces eastbound, and 45 spaces westbound in the AM peak hour. In the PM peak hour, the Q8 would only experience a capacity deficit westbound (101 spaces). The Q8 would have available capacity eastbound in the PM peak hour. MTA Bus' Q40 would experience a deficit of 11 spaces southbound in the PM peak hour. The Q40 would continue to operate with available capacity northbound in the PM peak hour and in both directions in the AM peak hour. MTA Bus' Q41 would experience a deficit of 17 spaces, 27 spaces and 78 spaces southbound in the AM peak hour, northbound in the PM peak hour, and southbound in the PM peak hour, respectively. The Q41 would continue to operate with available capacity northbound in the AM peak hour. MTA Bus' Q60 would experience capacity deficits during all peak hours that data are available (data were not available for the westbound Q60 in the PM peak hour). The Q60 would experience deficits of 38 spaces, 67 spaces, and 141 spaces eastbound in the AM peak hour, westbound in the AM peak hour, and eastbound in the PM peak hour, respectively.

New York City Transit's general policy is to provide additional bus service where demand warrants, taking into account financial and operational constraints. Additional buses would therefore be added by 2015 to the existing service plan to meet projected demands. As such, the capacity shortfalls would be addressed by NYC Transit and MTA Bus, and no action-initiated mitigation is required for the proposed actions.

### **PEDESTRIANS**

The proposed actions would generate new pedestrian demand on sidewalks, corner areas and crosswalks. This demand would be comprised of trips made solely by walking, as well as pedestrian trips to and from subway station entrances, Long Island Rail Road, and bus stops. As shown in Table 16-11 in Chapter 16, "Traffic and Parking," projected developments would generate a net total of 5,242 walk, subway, LIRR and bus trips in the AM peak hour, 11,870 in the midday, 9,326 in the PM peak hour and 9,000 in the Saturday midday peak hour.

Although the proposed actions would generate a net increase of approximately 9,000 walk, subway, LIRR, and bus trips in the Saturday midday, these trips would be fewer in number than those generated in the weekday peak hours, and they would be more dispersed and less concentrated on analyzed sidewalks, corner areas and crosswalks than in either of these periods. The analysis of pedestrian impacts therefore focuses on the weekday AM, midday and PM peak hours. Any mitigation proposed in the weekday AM, midday and PM peak hour would also improve conditions in the Saturday midday peak hour. As noted above, the pedestrian analysis

Table 17-19  
2015 Future with the Proposed Action Bus Conditions

THIS TABLE HAS BEEN REVISED FOR THE FEIS

Peak Hour (1)	Agency	Route	Direction	Maximum Load Point	Peak Hour Buses (2)	No-Action Available Capacity (3)	Project Increment	With-Action Available Capacity
	NYCT	Q1	EB	Maximum Load Point Not Available	4	187	7	180
	NYCT	Q1	WB	Maximum Load Point Not Available	9	215	3	212
	NYCT	Q2	EB	Hollis Avenue/208th Street	4	176	6	170
	NYCT	Q2	WB	188th Street/Jamaica Avenue	12	144	3	141
	NYCT	Q3	SB	Farmers Blvd./Linden Blvd.	6	149	6	143
	NYCT	Q3	NB	188th Street/Jamaica Avenue	8	79	3	76
	NYCT	Q4&L	EB	Linden Blvd./172nd Street	12	209	4	205
	NYCT	Q4&L	WB	Linden Blvd./Farmers Blvd.	19	188	0	188
	NYCT	Q5&L	EB	Merrick Blvd./130th Road	8	127	5	122
	NYCT	Q5&L	WB	Merrick Blvd./Linden Blvd.	20	323	5	318
	NYCT	Q17	NB	Kissena Blvd./Sanford Avenue	11	101	18	83
	NYCT	Q17	SB	Horace Harding Expwy/Utopia Pkwy	9	166	15	151
	NYCT	Q24	EB	Atlantic Avenue/Lefferts Blvd.	8	96	18	78
	NYCT	Q24	WB	Atlantic Avenue/Lefferts Blvd.	6	201	20	181
	NYCT	Q30	EB	Hillside Avenue/Homelawn Street	19	4	21	-17
	NYCT	Q30	WB	Horace Harding Expwy/Francis Lew	5	87	34	54
	NYCT	Q31	NB	Hillside Avenue/Homelawn Street	14	57	37	20
	NYCT	Q31	SB	Utopia Parkway/Booth Memorial	4	128	50	78
	NYCT	Q36	EB	Hillside Avenue/187th Street	4	132	7	125
	NYCT	Q36	WB	Hillside Avenue/187th Street	9	52	3	49
	NYCT	Q42	EB	Archer Avenue/153rd Street	6	313	1	312
	NYCT	Q42	WB	Liberty Avenue/168th Street	6	71	1	70
	NYCT	Q43	EB	Hillside Avenue/Springfield Blvd.	17	31	27	4
	NYCT	Q43	WB	Hillside Avenue/179th Street	17	37	30	8
	NYCT	Q44/20&L	NB	Main Street/Union Turnpike	20	154	43	111
	NYCT	Q44/20&L	SB	Roosevelt Avenue/Main Street	22	122	78	44
	NYCT	Q54	EB	Grand Street/Graham Street	7	33	52	-19
	NYCT	Q54	WB	Metropolitan Avenue Station	11	21	46	-25
	NYCT	Q56	EB	Jamaica Avenue/Metropolitan Ave.	6	80	9	71
	NYCT	Q56	WB	Jamaica Avenue/Sutphin Blvd.	5	187	17	170
	NYCT	Q75	EB	Hillside Avenue/187th Street	2	107	6	100
	NYCT	Q75	WB	Hillside Avenue/187th Street	4	77	3	74
	NYCT	Q76	SB	Hillside Avenue/179th Street	8	130	6	124
	NYCT	Q76	NB	Francis Lewis Blvd/Foothill Avenue	11	48	18	30
	NYCT	Q77	SB	Francis Lewis Blvd/Linden Blvd	8	30	7	23
	NYCT	Q77	NB	Hillside Avenue/Francis Lewis Blvd	11	69	3	66
	NYCT	Q83&L	EB	Farmers Blvd/113th Avenue	6	117	10	107
	NYCT	Q83&L	WB	Liberty Avenue/Merrick Blvd	22	192	3	189
	NYCT	Q84	EB	Archer Avenue/153rd Street	4	199	4	196
	NYCT	Q84	WB	Merrick Blvd/Liberty Avenue	14	171	0	171
	NYCT	Q85&L	EB	Merrick Blvd/Liberty Avenue	9	257	5	252
	NYCT	Q85&L	WB	Merrick Blvd/Liberty Avenue	23	221	5	216
	NYCT	X32	NB	Parsons Blvd./14th Avenue	4	88	0	87
	NYCT	X32	SB	No Southbound AM Service				
	NYCT	X63	NB	Maximum Load Point Not Available	3	102	1	101
	NYCT	X63	SB	No Southbound AM Service				
	NYCT	X64	WB	Queens Blvd/78th Avenue	7	123	17	106
	NYCT	X64	EB	No Eastbound AM Service				
	NYCT	X68	WB	Maximum Load Point Not Available	7	82	36	46
	NYCT	X68	EB	No Eastbound AM Service				
	MTA Bus	Q6	NB	Sutphin Blvd/111th Avenue	5	20	121	-101
	MTA Bus	Q6	SB	Sutphin Blvd/119th Avenue	2	19	67	-48
	MTA Bus	Q8	EB	Sutphin Blvd/97th Avenue	5	5	58	-52
	MTA Bus	Q8	WB	101st Avenue/111th Street	3	24	69	-45
	MTA Bus	Q9	NB	Sutphin Blvd/97th Avenue	6	54	33	21
	MTA Bus	Q9	SB	Sutphin Blvd/Archer Avenue	3	148	57	91
	MTA Bus	Q9A	EB	No AM Service				
	MTA Bus	Q9A	WB	No AM Service				
	MTA Bus	Q25/34	NB	Kissena Blvd/Maple Avenue	2	15	8	7
	MTA Bus	Q25/34	SB	Main Street/Northern Blvd	3	58	-2	60
	MTA Bus	Q40	NB	Sutphin Blvd/95th Avenue	10	5	5	0
	MTA Bus	Q40	SB	142nd Street/111th Avenue	5	152	44	107
	MTA Bus	Q41	NB	94th Avenue/Sutphin Blvd	6	232	64	168
	MTA Bus	Q41	SB	111th Avenue/117th Street	2	49	66	-17
	MTA Bus	Q60	EB	Queens Blvd/66th Street	2	45	83	-38
	MTA Bus	Q60	WB	Sutphin Blvd/109th Avenue	4	64	131	-67
	MTA Bus	Q65	NB	164th Street/Hillside Avenue	3	38	5	33
	MTA Bus	Q65	SB	Northern Blvd/College Point Blvd	5	31	2	29
	MTA Bus	Q110	EB	Jamaica Avenue 168th Street	3	90	14	75
	MTA Bus	Q110	WB	Jamaica Avenue/181st Street	11	278	-3	281
	MTA Bus	Q111/113	NB	Guy R Brewer Blvd/South Road	12	51	20	31
	MTA Bus	Q111/113	SB	Guy R Brewer Blvd/Foch Blvd	9	239	45	194
	MTA Bus	Q112	EB	South Road/153rd Street	6	80	2	79
	MTA Bus	Q112	WB	Liberty Avenue/124th Street	6	240	9	232
	Long Island Bus Peak 4-hour Data (6-10 AM)							
	LI Bus	N1		Maximum Load Point Not Available	21	525	1	523
	LI Bus	N2		Maximum Load Point Not Available	15	662	1	661
	LI Bus	N3		Maximum Load Point Not Available	7	322	1	321
	LI Bus	N4		Maximum Load Point Not Available	57	352	18	334
	LI Bus	N6		Maximum Load Point Not Available	76	145	1	143
	LI Bus	N22		Maximum Load Point Not Available	47	176	1	175
	LI Bus	N21		Maximum Load Point Not Available	41	660	1	658
	LI Bus	N26		Maximum Load Point Not Available	3	5	1	4

Notes:

- (1) Peak Hours: weekday 7-8 AM and 5-6 PM.
  - (2) Assumes service levels adjusted to address capacity shortfalls in the No-Action condition.
  - (3) Available Capacity based on a maximum of 65 passengers for a standard 40-foot bus.
  - (4) No existing ridership data available, project increment shown for informational purposes.
- \* Denotes a significant adverse impact based on CEQR criteria.

Table 17-19 (Continued)  
2015 Future with the Proposed Action Bus Conditions

THIS TABLE HAS BEEN REVISED FOR THE FEIS

Peak Hour (1)	Agency	Route	Direction	Maximum Load Point	Peak Hour Buses (2)	No-Action Available Capacity (3)	Project Increment	With-Action Available Capacity	
	NYCT	Q1	EB	Maximum Load Point Not Available	9	115	5	111	
	NYCT	Q1	WB	Maximum Load Point Not Available	4	168	7	161	
	NYCT	Q2	EB	Hillside Avenue/187th Street	8	45	5	39	
	NYCT	Q2	WB	Hollis Avenue/208th Street	4	100	7	93	
	NYCT	Q3	SB	Hillside Avenue/187th Street	6	95	5	90	
	NYCT	Q3	NB	Hillside Avenue/187th Street	6	190	7	183	
	NYCT	Q4&L	EB	Linden Blvd./172nd Street	14	204	1	202	
	NYCT	Q4&L	WB	Linden Blvd./Merrick Blvd.	7	132	4	129	
	NYCT	Q5&L	EB	Merrick Blvd./Liberty Avenue	15	124	8	116	
	NYCT	Q5&L	WB	Merrick Blvd./Liberty Avenue	6	148	5	143	
	NYCT	Q17	NB	Kissena Blvd./Sanford Avenue	14	540	40	501	
	NYCT	Q17	SB	Kissena Blvd./Sanford Avenue	11	65	40	25	
	NYCT	Q24	EB	Atlantic Avenue/Woodhaven Blvd.	6	149	26	123	
	NYCT	Q24	WB	Atlantic Avenue/Woodhaven Blvd.	6	42	29	13	
	NYCT	Q30	EB	Hillside Avenue/Homelawn Street	6	129	67	62	
	NYCT	Q30	WB	Utopia Parkway/Union Turnpike	6	124	49	76	
	NYCT	Q31	NB	47th Avenue/Francis Lewis Blvd.	6	247	77	170	
	NYCT	Q31	SB	169th Street/Hillside Avenue	4	75	59	16	
	NYCT	Q36	EB	Hillside Avenue/187th Street	8	142	5	137	
	NYCT	Q36	WB	Hillside Avenue/212th Street	4	92	7	85	
	NYCT	Q42	EB	Liberty Avenue/177th Place	4	99	1	98	
	NYCT	Q42	WB	Liberty Avenue/168th Place	4	205	1	204	
	NYCT	Q43	EB	Hillside Avenue/Springfield Blvd.	11	15	37	-22	
	NYCT	Q43	WB	Hillside Avenue/179th Street	6	55	42	13	
	NYCT	Q44/20&L	NB	Main Street/39th Avenue	14	181	131	49	
	NYCT	Q44/20&L	SB	Roosevelt Avenue/Main Street	14	237	78	159	
	NYCT	Q54	EB	Metropolitan Avenue Station	6	26	74	-48	
	NYCT	Q54	WB	Metropolitan Avenue Station	6	88	91	-3	
	NYCT	Q56	EB	Jamaica Avenue/Lefferts Blvd	6	195	21	174	
	NYCT	Q56	WB	Jamaica Avenue/Sutphin Blvd	6	46	19	27	
	NYCT	Q75	EB	Hillside Avenue/187th Street	3	122	4	118	
	NYCT	Q75	WB	Hillside Avenue/187th Street	2	86	6	80	
	NYCT	Q76	SB	Francis Lewis Blvd./Horace Harding	4	74	17	57	
	NYCT	Q76	NB	Francis Lewis Blvd./Foothill Avenue	4	152	10	142	
	NYCT	Q77	SB	Hillside Avenue/179th Street	5	29	5	24	
	NYCT	Q77	NB	Springfield Blvd/Merrick Blvd	6	267	7	260	
	NYCT	Q83&L	EB	Archer Avenue/Parsons Blvd	14	194	12	183	
	NYCT	Q83&L	WB	Liberty Avenue/Merrick Blvd	6	181	16	166	
	NYCT	Q84	EB	Archer Avenue/153rd Street	8	167	1	166	
	NYCT	Q84	WB	Merrick Blvd/Liberty Avenue	4	163	4	159	
	PM	NYCT	Q85&L	EB	Merrick Blvd/Baisley Blvd	16	290	8	282
	PM	NYCT	Q85&L	WB	Merrick Blvd/Baisley Blvd	7	204	5	199
	PM	NYCT	X32	NB	No Northbound PM Service				
	PM	NYCT	X32	SB	No Data Available (4)		0		
	PM	NYCT	X63	NB	No Northbound PM Service				
	PM	NYCT	X63	SB	No Data Available (4)		1		
	PM	NYCT	X64	WB	No Westbound PM Service				
	PM	NYCT	X64	EB	East 57th Street/3rd Avenue, Manh.	5	99	16	83
	PM	NYCT	X68	WB	No Westbound PM Service				
	PM	NYCT	X68	EB	East 57th Street/3rd Avenue, Manh.	7	164	34	130
	PM	MTA Bus	Q6	NB	Sutphin Blvd/Glassboro	8	505	104	400
	PM	MTA Bus	Q6	SB	Sutphin Blvd/Liberty Avenue	5	85	171	-86
	PM	MTA Bus	Q8	EB	101st Avenue/127th Street	3	114	110	4
	PM	MTA Bus	Q8	WB	Sutphin Blvd/Archer Avenue	1	0	101	-101
	PM	MTA Bus	Q9	NB	Sutphin Blvd/95th Avenue	4	184	95	89
	PM	MTA Bus	Q9	SB	146th Street/101st Avenue	5	67	67	0
	PM	MTA Bus	Q9A	EB	No PM Service				
	PM	MTA Bus	Q9A	WB	No PM Service				
	PM	MTA Bus	Q25/34	NB	Main Street/Northern Blvd	6	219	-1	221
	PM	MTA Bus	Q25/34	SB	Kissena Blvd/Holly Avenue	3	30	6	24
	PM	MTA Bus	Q40	NB	Sutphin Blvd/97th Avenue	3	168	60	108
	PM	MTA Bus	Q40	SB	Sutphin Blvd/Archer Avenue	3	3	14	-11
	PM	MTA Bus	Q41	NB	111th Avenue/127th Street	2	84	111	-27
	PM	MTA Bus	Q41	SB	Atlantic Avenue/Van Wyck Expwy	5	29	107	-78
	PM	MTA Bus	Q60	EB	Queens Blvd/33rd Street	2	48	189	-141
	PM	MTA Bus	Q60	WB	No Data Available (4)		158		
	PM	MTA Bus	Q65	NB	Main Street/Roosevelt Avenue	3	107	0	107
	PM	MTA Bus	Q65	SB	Sanford Avenue/Kissena Blvd	3	3	2	0
	PM	MTA Bus	Q110	EB	179th Place/Hillside Avenue	6	152	-1	153
	PM	MTA Bus	Q110	WB	Jamaica Avenue/173rd Street	6	276	12	264
	PM	MTA Bus	Q111/113	NB	Guy R Brewer Blvd/Brinkerhoff	3	101	70	31
	PM	MTA Bus	Q111/113	SB	Guy R Brewer Blvd/Liberty Avenue	7	191	46	145
	PM	MTA Bus	Q112	EB	Liberty Avenue/126th Street	5	206	17	189
	PM	MTA Bus	Q112	WB	Liberty Avenue/134th Street	6	284	11	274
				Long Island Bus Peak 4-hour Data (3-7 PM)					
		LI Bus	N1	Maximum Load Point Not Available	26	766	2	764	
		LI Bus	N2	Maximum Load Point Not Available	13	569	2	567	
		LI Bus	N3	Maximum Load Point Not Available	9	457	2	455	
		LI Bus	N4	Maximum Load Point Not Available	52	561	29	532	
		LI Bus	N6	Maximum Load Point Not Available	82	765	2	763	
		LI Bus	N22	Maximum Load Point Not Available	57	1,058	2	1056	
		LI Bus	N21	Maximum Load Point Not Available	37	588	2	586	
		LI Bus	N26	Maximum Load Point Not Available	2	27	2	25	

Notes:

- (1) Peak Hours: weekday 7-8 AM and 5-6 PM.
- (2) Assumes service levels adjusted to address capacity shortfalls in the No-Action condition.
- (3) Available Capacity based on a maximum of 65 passengers for a standard 40-foot bus.
- (4) No existing ridership data available, project increment shown for informational purposes.
- \* Denotes a significant adverse impact based on CEQR criteria.



also includes required sidewalk widening in front of projected development sites within the proposed Special Downtown Jamaica District.

### *SIDEWALKS*

According to *CEQR* criteria, a significant adverse impact to a sidewalk occurs when the flow rate increases by two or more pedestrians per foot per minute (PFM) over No-Action conditions characterized by flow rates over 13 PFM or more (the mid-LOS D). As shown in Table 17-20, all analyzed sidewalks would operate at LOS C or better in the AM, midday and PM peak hours with no sidewalk operating at a flow rate exceeding 8 PFM. Therefore, no analyzed sidewalk would be significantly impacted as a result of new demand generated by the proposed actions.

### *CORNERS AND CROSSWALK AREAS*

For corners areas and crosswalks, *CEQR* criteria define a significant adverse impact as a decrease in pedestrian space of one or more square feet per pedestrian (SF/ped) when the No-Action condition has an average occupancy of 20 square feet per pedestrian (mid-LOS D). A deterioration from LOS C or better to LOS E or F would also be considered a significant impact. As shown in Table 17-21, there would be no impacts to corner areas in the AM and midday peak hours, and there would be impacts to one corner area in the PM peak hour. The northwest corner at the intersection of Jamaica Avenue and Merrick Boulevard would be impacted in the PM peak hour with the SF/ped decreasing to 16.5 SF/ped (LOS D) under With-Action conditions compared to 18.0 SF/ped (LOS D) under the No-Action conditions.

As shown in Table 17-22, in the future with the proposed actions, all analyzed crosswalks would continue to operate at LOS C or better in all weekday peak hours under the proposed actions, with the exception of the east crosswalk at the intersection of Jamaica Avenue and Union Hall Street would remain operating at LOS D as under No-Action conditions in the midday and PM peak hours, and the west crosswalk at the intersection of Jamaica Avenue and 160th Street would fall from LOS C (25.3 SF/ped) to LOS D (24.0 SF/ped) in the PM peak hour, but would remain better than mid-LOS D. As all analyzed crosswalks would operate at LOS C or better or with minimal change in pedestrian space at the locations that would operate at LOS D, none of these crosswalk facilities would be considered to be impacted by new demand from the proposed actions under *CEQR* criteria.

## **E. CONCLUSIONS**

This chapter analyzes the effects of added travel demand from projected development sites on subway stations, bus services and pedestrian facilities in the vicinity of the proposed action area. The results of the analyses show that this new demand would not result in any significant adverse impacts to any analyzed subway stairways or fare arrays. New subway demand would not result in any significant adverse line haul impact to any subway line (E, F or J/Z). New bus trips generated by projected development sites would result in significant impacts to NYC Transit's Q30, Q43 and Q54, and MTA Bus' Q6, Q8, Q40, Q41 and Q60 bus routes. New pedestrian demand would not result any significant adverse crosswalk or sidewalk impacts, but would result in significant impacts to one corner area in the PM peak hour. Chapter 22, "Mitigation," provides a description of measures to be developed to mitigate the transit and pedestrians impacts identified in this chapter. \*

Table 17-20  
2015 With Action Sidewalk Conditions

THIS TABLE HAS BEEN REVISED FOR THE FEIS

(p/f/m = Pedestrians/Foot-width/Minute)

Intersection	Walkway	AM		MD		PM	
		p/m/f	LOS	p/m/f	LOS	p/m/f	LOS
Archer Ave. @ 150th St.	1	0.3	A	0.8	A	0.1	A
	2	0.0	A	0.0	A	0.1	A
	3	0.1	A	0.2	A	0.2	A
	4	0.1	A	0.1	A	0.1	A
	5	0.1	A	0.2	A	0.2	A
	6	0.4	A	1.1	A	0.7	A
	7	0.7	A	2.8	A	1.4	A
	8	0.2	A	0.2	A	0.2	A
Archer Ave. @ 153rd St.	1	0.8	A	0.6	A	0.8	A
	2	0.8	A	0.4	A	0.6	A
	3	1.1	A	0.6	A	1.0	A
	4	3.2	A	1.0	A	1.1	A
Jamaica Ave. @ 149th St.	1	0.5	A	0.8	A	1.0	A
	2	1.8	A	2.7	A	2.8	A
	3	0.4	A	0.5	A	0.5	A
	4	1.1	A	1.8	A	1.8	A
	5	0.5	A	0.8	A	0.8	A
	6	0.7	A	1.4	A	1.3	A
	7	0.2	A	1.0	A	0.3	A
	8	0.5	A	0.3	A	1.0	A
Jamaica Ave. @ 160th St.	1	0.4	A	0.5	A	0.5	A
	2	1.6	A	3.7	A	6.7	B
	3	1.1	A	1.3	A	1.3	A
	4	1.2	A	4.6	A	5.3	B
	5	0.6	A	0.9	A	0.9	A
	6	1.4	A	4.5	A	4.4	A
	7	0.4	A	0.5	A	0.6	A
	8	0.8	A	2.3	A	2.6	A
Jamaica Ave. @ 168th St.	1	0.5	A	0.9	A	0.7	A
	2	1.3	A	3.6	A	6.0	B
	3	2.5	A	4.4	A	4.4	A
	4	0.4	A	1.0	A	1.6	A
	5	0.6	A	1.6	A	1.3	A
	6	0.8	A	1.8	A	4.4	A
	7	0.5	A	0.9	A	1.0	A
	8	0.5	A	1.3	A	3.0	A
Jamaica Ave. @ Merrick Blvd.	1	0.6	A	1.3	A	1.4	A
	2	0.8	A	2.5	A	3.4	A
	3	0.3	A	0.7	A	0.8	A
	4	0.6	A	2.0	A	2.8	A
	5	0.4	A	1.1	A	1.4	A
	6	0.5	A	1.3	A	2.5	A
	7	0.4	A	0.6	A	0.8	A
	8	0.6	A	1.3	A	2.6	A

Table 17-20 (continued)  
2015 With Action Sidewalk Conditions

THIS TABLE HAS BEEN REVISED FOR THE FEIS

(p/f/m = Pedestrians/Foot-width/Minute)

Intersection	Wkwy.	AM		MD		PM	
		p/f/m	LOS	p/f/m	LOS	p/f/m	LOS
Jamaica Ave. @ Parsons Blvd.	1	0.4	A	0.3	A	0.9	A
	2	0.8	A	1.5	A	1.7	A
	3	2.2	A	1.7	A	2.0	A
	4	0.5	A	0.8	A	0.8	A
	5	0.5	A	1.0	A	1.6	A
	6	0.5	A	0.3	A	0.7	A
	7	0.2	A	0.4	A	0.4	A
	8	0.3	A	0.6	A	0.3	A
Jamaica Ave. @ Sutphin Blvd.	1	1.8	A	1.7	A	1.5	A
	2	1.0	A	2.4	A	1.8	A
	3	2.8	A	3.7	A	0.6	A
	4	1.5	A	1.7	A	1.5	A
	5	1.7	A	3.0	A	1.2	A
	6	2.3	A	3.1	A	2.8	A
	7	1.6	A	1.3	A	0.4	A
	8	1.4	A	3.4	A	2.3	A
Jamaica Ave. @ Union Hall St.	2	1.1	A	3.4	A	2.1	A
	4	1.2	A	3.3	A	2.2	A
	5	0.1	A	0.2	A	0.2	A
	6	1.0	A	2.3	A	2.1	A
	7	0.1	A	0.3	A	0.2	A
	8	1.2	A	1.9	A	2.0	A
Sutphin Blvd. @ Archer Ave.	1	1.2	A	1.7	A	1.5	A
	2	0.5	A	0.5	A	0.5	A
	3	2.0	A	6.9	B	5.8	B
	4	1.3	A	0.7	A	0.9	A
	5	3.1	A	4.4	A	3.8	A
	6	2.2	A	1.0	A	1.6	A
	7	1.3	A	1.5	A	1.8	A
	8	1.0	A	0.5	A	0.7	A
90th Ave. @ 168th St.	1	1.1	A	1.6	A	2.0	A
	2	0.4	A	0.2	A	0.2	A
	3	0.8	A	0.6	A	0.8	A
	4	0.3	A	0.4	A	0.3	A
	5	0.3	A	0.3	A	0.4	A
	6	0.2	A	0.2	A	0.1	A
	7	0.2	A	0.2	A	0.4	A
	8	0.7	A	0.6	A	0.6	A
Archer Ave. @ 160th St.	1	0.2	A	0.2	A	0.3	A
	2	1.1	A	1.0	A	1.8	A
	3	0.5	A	0.3	A	0.4	A
	4	1.0	A	1.0	A	1.6	A
	5	0.5	A	0.4	A	0.7	A
	6	2.0	A	2.3	A	2.7	A
	7	0.8	A	0.9	A	1.1	A
	8	0.8	A	0.9	A	1.3	A

Table 17-20 (continued)  
2015 With Action Sidewalk Conditions

THIS TABLE HAS BEEN REVISED FOR THE FEIS

(p/f/m = Pedestrians/Foot-width/Minute)

Intersection	Wkwy.	AM		MD		PM	
		p/f/m	LOS	p/f/m	LOS	p/f/m	LOS
Archer Ave. @ Parsons Blvd.	1	0.9	A	0.8	A	1.5	A
	2	1.1	A	0.7	A	1.3	A
	3	4.0	A	2.2	A	4.4	A
	4	4.6	A	2.4	A	4.3	A
Archer Ave. @ Union Hall St.	1	0.3	A	0.0	A	0.2	A
	2	0.2	A	0.1	A	0.3	A
	3	0.2	A	0.0	A	0.1	A
	4	0.8	A	1.0	A	1.5	A
Hillside Ave. @ 144th St.	1	0.4	A	0.3	A	0.3	A
	2	0.2	A	0.5	A	0.3	A
	3	0.6	A	0.4	A	0.6	A
	4	0.2	A	0.4	A	0.2	A
	5	0.3	A	0.2	A	0.3	A
	6	0.3	A	0.5	A	0.4	A
	7	0.3	A	0.3	A	0.4	A
	8	0.3	A	0.5	A	0.4	A
Hillside Ave. @ 153rd St.	5	0.5	A	0.6	A	1.1	A
	6	0.3	A	0.5	A	0.4	A
	7	0.3	A	0.3	A	0.5	A
	8	0.4	A	1.0	A	0.7	A
Hillside Ave. @ Parsons Blvd.	1	1.8	A	1.7	A	1.4	A
	2	0.5	A	1.2	A	0.6	A
	3	1.0	A	0.7	A	1.2	A
	4	1.0	A	1.2	A	0.8	A
	5	1.7	A	1.9	A	1.4	A
	6	0.9	A	1.2	A	0.8	A
	7	1.5	A	1.9	A	1.5	A
	8	0.5	A	0.9	A	0.6	A
Hillside Ave. @ Sutphin Blvd.	5	1.1	A	1.3	A	2.2	A
	6	0.4	A	1.6	A	0.4	A
	7	0.9	A	1.7	A	1.4	A
	8	0.5	A	1.2	A	0.6	A
Hillside Ave. @ Queens Blvd.	1	0.1	A	0.1	A	0.1	A
	2	0.1	A	0.2	A	0.2	A
	3	0.1	A	0.2	A	0.2	A
	4	0.3	A	0.2	A	0.2	A
	5	0.2	A	0.1	A	0.1	A
	6	0.2	A	0.4	A	0.3	A
	7	0.2	A	0.2	A	0.2	A
	8	0.2	A	0.2	A	0.2	A
Archer Ave. @ Guy R. Brewer Blvd.	1	0.6	A	0.7	A	0.7	A
	2	1.0	A	1.2	A	1.4	A
	3	0.6	A	0.7	A	1.0	A
	4	1.7	A	2.2	A	2.5	A
	5	0.8	A	1.0	A	1.2	A
	6	1.2	A	1.2	A	1.0	A
	7	0.6	A	0.7	A	0.8	A
	8	1.2	A	1.3	A	1.2	A

Table 17-20 (continued)  
2015 With Action Sidewalk Conditions

THIS TABLE HAS BEEN REVISED FOR THE FEIS

(p/f/m = Pedestrians/Foot-width/Minute)

Intersection	Wkwy.	AM		MD		PM	
		p/f/m	LOS	p/f/m	LOS	p/f/m	LOS
Archer Ave. @ Merrick Blvd.	1	0.7	A	0.7	A	1.3	A
	2	0.4	A	0.8	A	1.0	A
	3	0.8	A	1.0	A	1.3	A
	4	1.4	A	2.8	A	2.7	A
	5	0.2	A	0.2	A	0.3	A
	6	0.2	A	0.2	A	0.3	A
	7	0.8	A	0.6	A	0.8	A
	8	0.3	A	0.3	A	0.4	A
Liberty Ave. @ 150th St.	1	0.1	A	0.2	A	0.2	A
	2	0.2	A	0.3	A	0.2	A
	3	0.2	A	0.3	A	0.3	A
	4	0.1	A	0.3	A	0.2	A
	5	0.2	A	0.3	A	0.3	A
	6	0.1	A	0.1	A	0.1	A
	7	0.1	A	0.2	A	0.2	A
	8	0.3	A	0.5	A	0.4	A
Liberty Ave. @ Merrick Blvd.	1	0.3	A	1.0	A	0.1	A
	2	1.2	A	0.2	A	0.6	A
	3	0.3	A	0.3	A	0.3	A
	4	0.1	A	0.1	A	0.0	A
	5	0.1	A	0.2	A	0.1	A
	6	0.1	A	0.1	A	0.2	A
	7	0.1	A	0.1	A	0.1	A
	8	0.1	A	0.1	A	0.1	A
Liberty Ave. @ Sutphin Blvd.	1	0.1	A	0.1	A	0.1	A
	2	0.1	A	0.3	A	0.3	A
	3	0.4	A	1.1	A	0.6	A
	4	0.1	A	0.1	A	0.2	A
	5	0.2	A	0.4	A	0.3	A
	6	0.1	A	0.2	A	0.1	A
	7	0.1	A	0.1	A	0.2	A
	8	0.4	A	1.3	A	0.9	A
Sutphin Blvd. @ 94th Ave.	1	0.7	A	0.8	A	0.8	A
	2	0.2	A	0.8	A	0.5	A
	3	2.0	A	3.8	A	2.9	A
	4	1.5	A	4.4	A	2.3	A
	5	1.2	A	1.8	A	1.6	A
	6	0.2	A	0.5	A	0.3	A
	7	0.8	A	1.1	A	1.0	A
	8	0.9	A	2.7	A	1.2	A
Sutphin Blvd. @ 95th Ave.	1	0.8	A	0.9	A	1.0	A
	2	0.2	A	0.3	A	0.2	A
	3	4.3	A	8.2	A	6.1	B
	4	1.1	A	1.2	A	1.6	A
	5	1.2	A	2.8	A	1.5	A
	6	0.3	A	0.3	A	0.2	A
	7	0.9	A	1.0	A	1.0	A
	8	0.2	A	0.2	A	0.2	A

Table 17-20 (continued)  
2015 With Action Sidewalk Conditions

THIS TABLE HAS BEEN REVISED FOR THE FEIS

(p/f/m = Pedestrians/Foot-width/Minute)

Intersection	Wkwy.	AM		MD		PM	
		p/f/m	LOS	p/f/m	LOS	p/f/m	LOS
Sutphin Blvd. @ 97th Ave.	1	0.5	A	0.7	A	0.5	A
	2	0.1	A	0.1	A	0.1	A
	3	0.8	A	2.3	A	1.1	A
	4	0.1	A	0.1	A	0.1	A
	5	0.6	A	1.5	A	0.8	A
	6	0.1	A	0.1	A	0.1	A
	7	0.7	A	1.1	A	1.0	A
	8	0.1	A	0.1	A	0.1	A
Archer Ave. @ 168th St.	1	0.3	A	0.6	A	0.7	A
	2	1.1	A	2.6	A	2.3	A
	3	0.5	A	2.0	A	1.2	A
	4	0.2	A	0.8	A	0.5	A
	5	0.1	A	0.3	A	0.2	A
	6	0.1	A	0.2	A	0.2	A
	7	0.2	A	0.4	A	0.4	A
	8	0.5	A	0.3	A	0.3	A
Hillside Ave. @ 168th St.	1	0.6	A	0.6	A	0.7	A
	2	0.4	A	0.9	A	0.6	A
	3	0.8	A	1.2	A	0.8	A
	4	0.5	A	0.9	A	1.0	A
	5	1.0	A	0.7	A	1.2	A
	6	0.6	A	0.6	A	0.7	A
	7	1.3	A	1.3	A	1.7	A
	8	0.6	A	0.6	A	0.9	A
Hillside Ave. @ 169th St.	1	1.2	A	0.6	A	1.2	A
	2	0.6	A	1.0	A	0.6	A
	3	0.3	A	0.3	A	0.4	A
	4	1.3	A	0.8	A	1.6	A
	5	0.9	A	0.7	A	1.6	A
	6	0.5	A	0.5	A	0.5	A
	7	0.5	A	0.8	A	1.5	A
	8	0.7	A	1.1	A	0.8	A
Hillside Ave. @ 178th St.	1	0.3	A	0.2	A	0.4	A
	2	0.5	A	0.3	A	0.7	A
	3	0.3	A	0.3	A	0.4	A
	4	0.5	A	0.5	A	0.5	A
	5	0.2	A	0.2	A	0.2	A
	6	0.8	A	0.9	A	1.0	A
	7	0.7	A	0.3	A	0.5	A
	8	1.9	A	0.3	A	2.1	A
Hillside Ave. @ 179th St.	5	0.4	A	0.6	A	0.9	A
	6	0.5	A	0.5	A	0.8	A
	7	0.4	A	0.5	A	0.8	A
	8	0.3	A	0.4	A	0.4	A

**Table 17-20 (continued)**  
**2015 With Action Sidewalk Conditions**

**THIS TABLE HAS BEEN REVISED FOR THE FEIS**

**(p/f/m = Pedestrians/Foot-width/Minute)**

Intersection	Wkwy.	AM		MD		PM	
		p/f/m	LOS	p/f/m	LOS	p/f/m	LOS
Liberty Ave. @ 160th St.	1	0.9	A	0.9	A	0.8	A
	2	1.0	A	0.7	A	0.7	A
	3	0.7	A	0.7	A	0.3	A
	4	0.2	A	0.4	A	0.1	A
	5	0.3	A	0.2	A	0.6	A
	6	0.1	A	1.0	A	0.4	A
	7	0.5	A	0.5	A	0.3	A
	8	0.5	A	0.5	A	0.6	A
Hillside Ave. @ 180th St.	5	0.2	A	0.2	A	0.3	A
	6	1.2	A	1.1	A	1.8	A
	7	0.6	A	0.3	A	0.6	A
	8	0.7	A	1.1	A	1.0	A
Liberty Ave. @ Guy R. Brewer Blvd.	1	0.3	A	0.3	A	0.3	A
	2	0.1	A	0.1	A	0.1	A
	3	0.3	A	0.4	A	0.3	A
	4	0.2	A	0.2	A	0.2	A
	5	0.4	A	0.5	A	0.4	A
	6	0.3	A	0.3	A	0.3	A
	7	0.3	A	0.7	A	0.5	A
	8	0.2	A	0.2	A	0.2	A

June 29, 2007

Table 17-21  
2015 With Action Corner Conditions

THIS TABLE HAS BEEN REVISED FOR THE FEIS  
(SF/P - Square Foot per Pedestrian)

Intersection	Corner	AM		MD		PM	
		SF/P	LOS	SF/P	LOS	SF/P	LOS
Archer Ave. @ 150th St.	Northeast	611.7	A	352.8	A	399.2	A
	Southeast	313.8	A	117.5	A	178.2	A
	Southwest	387.3	A	120.0	A	238.9	A
	Northwest	851.1	A	254.9	A	523.7	A
Archer Ave. @ 153rd St.	Northeast	166.4	A	241.1	A	250.7	A
	Northwest	147.4	A	148.9	A	132.7	A
Jamaica Ave. @ 149th St.	Northeast	147.7	A	101.8	A	87.4	A
	Southeast	191.5	A	97.7	A	95.3	A
	Southwest	141.7	A	75.9	A	75.3	A
	Northwest	85.5	A	51.6	B	49.9	B
Jamaica Ave. @ 160th St.	Northeast	48.1	B	16.6	D	17.3	D
	Southeast	30.2	C	12.0	E	14.4	E
	Southwest	97.5	A	57.3	B	49.1	B
	Northwest	59.2	B	27.3	C	20.9	D
Jamaica Ave. @ 168th St.	Northeast	107.0	A	37.6	C	20.2	D
	Southeast	120.3	A	46.5	B	32.0	C
	Southwest	129.7	A	44.5	B	21.3	D
	Northwest	103.8	A	36.5	C	20.4	D
Jamaica Ave. @ Merrick Blvd.	Northeast	245.9	A	86.4	A	63.6	A
	Southeast	116.9	A	60.6	A	26.2	C
	Southwest	197.6	A	109.0	A	48.2	B
	Northwest	77.4	A	23.0	D	16.5	D *
Jamaica Ave. @ Parsons Blvd.	Northeast	58.4	B	63.8	A	55.0	B
	Southeast	63.8	A	76.5	A	68.2	A
	Southwest	383.7	A	283.3	A	269.3	A
	Northwest	104.6	A	76.7	A	54.8	B
Jamaica Ave. @ Sutphin Blvd.	Northeast	67.1	A	66.1	A	76.6	A
	Southeast	51.7	B	47.2	B	67.4	A
	Southwest	42.9	B	46.0	B	55.0	B
	Northwest	26.1	C	39.2	C	28.6	C
Jamaica Ave. @ Union Hall St.	Southeast	154.2	A	119.4	A	107.2	A
	Southwest	88.6	A	69.0	A	61.8	A
Sutphin Blvd. @ Archer Ave.	Northeast	45.3	B	25.2	C	37.3	C
	Southeast	38.3	C	24.5	C	30.7	C
	Southwest	56.8	B	43.5	B	60.4	A
	Northwest	164.1	A	145.0	A	168.6	A
90th Ave. @ 168th St.	Northeast	135.1	A	93.7	A	99.2	A
	Southeast	333.8	A	249.4	A	259.0	A
	Southwest	190.4	A	113.4	A	94.6	A
	Northwest	89.4	A	48.2	B	39.1	C
Archer Ave. @ 160th St.	Northeast	66.7	A	49.4	B	36.8	C
	Southeast	30.8	C	68.2	A	52.5	B
	Southwest	51.1	B	21.2	D	27.2	C
	Northwest	81.8	A	65.4	A	47.4	B

\* - Denotes a significant adverse impact based on CEQR criteria.



Table 17-21 (continued)  
2015 With Action Corner Conditions

THIS TABLE HAS BEEN REVISED FOR THE FEIS  
(SF/P - Square Foot per Pedestrian)

Intersection	Corner	AM		MD		PM	
		SF/P	LOS	SF/P	LOS	SF/P	LOS
Archer Ave. @ Parsons Blvd.	Northeast	46.0	B	68.1	A	39.7	C
	Northwest	158.6	A	191.1	A	99.0	A
Archer Ave. @ Union Hall St.	Northeast	173.1	A	116.3	A	110.2	A
	Northwest	252.6	A	199.3	A	170.2	A
Hillside Ave. @ 144th St.	Northeast	276.6	A	224.5	A	328.5	A
	Southeast	449.2	A	262.6	A	352.8	A
	Southwest	445.4	A	260.4	A	386.7	A
	Northwest	391.3	A	283.6	A	453.8	A
Hillside Ave. @ 153rd St.	Southwest	282.5	A	259.7	A	173.1	A
	Southeast	380.3	A	252.3	A	244.7	A
Hillside Ave. @ Parsons Blvd.	Northeast	90.1	A	94.9	A	163.5	A
	Southeast	108.7	A	125.3	A	186.6	A
	Southwest	139.6	A	94.9	A	152.9	A
	Northwest	126.1	A	90.6	A	166.3	A
Hillside Ave. @ Sutphin Blvd.	Southeast	255.2	A	147.0	A	222.2	A
	Southwest	234.7	A	114.5	A	224.2	A
Hillside Ave. @ Queens Blvd.	Northeast	825.6	A	826.9	A	1,174.4	A
	Southeast	1,497.0	A	1,174.4	A	1,173.2	A
	Southwest	1,297.9	A	906.1	A	846.9	A
	Northwest	800.1	A	900.3	A	783.1	A
Archer Ave. @ Guy R. Brewer Blvd.	Northeast	30.0	C	27.9	C	46.2	B
	Southeast	40.8	B	28.4	C	31.6	C
	Southwest	58.1	B	33.1	C	41.2	B
	Northwest	84.2	A	52.0	B	51.8	B
Archer Ave. @ Merrick Blvd.	Northeast	45.9	B	47.4	B	21.1	D
	Southeast	443.2	A	351.2	A	348.5	A
	Southwest	138.0	A	99.3	A	104.3	A
	Northwest	166.4	A	75.9	A	76.2	A
Liberty Ave. @ 150th St.	Northeast	635.0	A	341.9	A	387.5	A
	Southeast	544.0	A	353.9	A	361.8	A
	Southwest	605.6	A	379.5	A	341.0	A
	Northwest	891.4	A	420.4	A	468.3	A
Liberty Ave. @ Merrick Blvd.	Northeast	330.9	A	182.1	A	247.1	A
	Southwest	643.6	A	359.8	A	447.5	A
	Northwest	92.9	A	55.6	B	81.5	A
Liberty Ave. @ Sutphin Blvd.	Northeast	418.3	A	181.7	A	209.7	A
	Southeast	286.6	A	115.7	A	150.0	A
	Southwest	394.5	A	144.7	A	199.2	A
	Northwest	1,199.9	A	569.4	A	608.2	A
Sutphin Blvd. @ 94th Ave.	Northeast	28.5	C	111.5	A	128.2	A
	Southeast	41.5	B	79.4	A	26.4	C
	Southwest	78.8	A	38.2	C	63.5	A
	Northwest	100.7	A	53.9	A	75.6	A
Sutphin Blvd. @ 95th Ave.	Northeast	26.7	C	103.3	A	177.0	A
	Southeast	133.0	A	57.0	B	73.7	A
	Southwest	156.6	A	56.7	B	113.7	A
	Northwest	153.8	A	97.6	A	113.7	A

\* - Denotes a significant adverse impact based on CEQR criteria.

Table 17-21 (continued)  
2015 With Action Corner Conditions

THIS TABLE HAS BEEN REVISED FOR THE FEIS  
(SF/P - Square Foot per Pedestrian)

Intersection	Corner	AM		MD		PM	
		SF/P	LOS	SF/P	LOS	SF/P	LOS
Sutphin Blvd. @ 97th Ave.	Northeast	162.4	A	60.3	A	98.1	A
	Southeast	164.8	A	57.6	B	92.3	A
	Southwest	111.0	A	53.4	B	66.8	A
	Northwest	347.8	A	157.6	A	202.5	A
Archer Ave. @ 168th St.	Northeast	211.4	A	75.5	A	100.7	A
	Southeast	560.5	A	193.0	A	255.2	A
	Southwest	517.8	A	243.6	A	303.7	A
	Northwest	117.5	A	44.6	B	55.3	B
Hillside Ave. @ 168th St.	Northeast	286.8	A	355.7	A	252.4	A
	Southeast	214.6	A	1,304.0	A	119.7	A
	Southwest	217.6	A	147.8	A	103.7	A
	Northwest	408.1	A	356.3	A	273.8	A
Hillside Ave. @ 169th St.	Northeast	307.6	A	277.9	A	181.4	A
	Southeast	267.1	A	243.6	A	197.5	A
	Southwest	224.1	A	184.9	A	151.8	A
	Northwest	291.6	A	262.0	A	193.5	A
Hillside Ave. @ 178th St.	Northeast	481.7	A	608.6	A	357.5	A
	Southeast	203.5	A	121.8	A	117.8	A
	Southwest	140.8	A	83.9	A	78.8	A
	Northwest	381.0	A	492.6	A	293.3	A
Hillside Ave. @ 179th St.	Southeast	298.5	A	335.6	A	208.3	A
	Southwest	299.3	A	281.5	A	198.6	A
Liberty Ave. @ 160th St.	Northeast	105.1	A	69.2	A	84.6	A
	Southeast	615.4	A	331.1	A	380.2	A
	Southwest	63.8	A	38.6	C	45.4	B
	Northwest	126.4	A	128.7	A	160.9	A
Hillside Ave. @ 180th St.	Southeast	157.3	A	85.0	A	108.9	A
	Southwest	229.0	A	178.8	A	189.5	A
Liberty Ave. @ Guy R. Brewer Blvd.	Northeast	334.2	A	176.0	A	227.4	A
	Southeast	146.3	A	174.5	A	92.4	A
	Southwest	334.6	A	157.6	A	196.2	A
	Northwest	540.3	A	268.2	A	344.2	A

\* - Denotes a significant adverse impact based on CEQR criteria.

June 29, 2007

Table 17-22

2015 With Action Crosswalk Conditions

THIS TABLE HAS BEEN REVISED FOR THE FEIS  
(SF/P - Square Foot per Pedestrian)

Intersection	Corner	AM		MD		PM	
		SF/P	LOS	SF/P	LOS	SF/P	LOS
Archer Ave. @ 150th St.	North	1,935.0	A	1,740.5	A	1,582.3	A
	West	3,622.3	A	4,829.7	A	2,065.3	A
	South	610.4	A	153.3	A	381.0	A
	East	300.2	A	107.0	A	216.1	A
Archer Ave. @ 153rd St.	North	197.8	A	156.7	A	165.7	A
	West	270.0	A	312.0	A	257.0	A
	South	163.3	A	189.9	A	152.9	A
Jamaica Ave. @ 149th St.	North	189.0	A	109.7	A	102.3	A
	West	534.2	A	300.8	A	325.3	A
	South	197.6	A	134.2	A	119.2	A
	East	425.3	A	206.9	A	225.1	A
Jamaica Ave. @ 160th St.	North	171.0	A	53.4	B	114.5	A
	West	128.7	A	48.3	B	24.0	D
	South	92.0	A	44.7	B	63.9	A
	East	126.2	A	56.7	B	39.8	C
Jamaica Ave. @ 168th St.	North	132.2	A	98.8	A	70.4	A
	West	268.0	A	76.8	A	46.2	B
	South	161.5	A	75.1	A	30.0	C
	East	489.3	A	134.7	A	61.9	A
Jamaica Ave. @ Merrick Blvd.	North	294.5	A	157.7	A	105.7	A
	West	214.9	A	51.3	B	36.9	C
	South	239.7	A	103.8	A	59.6	B
	East	261.5	A	149.7	A	44.0	B
Jamaica Ave. @ Parsons Blvd.	North	36.5	C	52.7	B	41.9	B
	West	123.9	A	101.6	A	94.7	A
	South	105.1	A	83.6	A	52.8	B
	East	140.6	A	92.0	A	142.6	A
Jamaica Ave. @ Sutphin Blvd.	North	36.1	C	30.5	C	39.3	C
	West	88.5	A	128.5	A	115.4	A
	South	33.6	C	54.5	B	35.1	C
	East	94.8	A	119.5	A	206.3	A
Jamaica Ave. @ Union Hall St.	North	218.0	A	155.2	A	177.3	A
	South	173.6	A	180.8	A	205.1	A
	East	31.7	C	19.2	D	20.2	D
Sutphin Blvd. @ Archer Ave.	North	69.7	A	32.6	C	56.5	B
	West	105.6	A	75.3	A	74.5	A
	South	78.8	A	70.8	A	101.7	A
	East	115.1	A	96.3	A	113.8	A
90th Ave. @ 168th St.	North	481.2	A	546.9	A	453.2	A
	West	429.0	A	983.9	A	429.0	A
	South	595.8	A	346.4	A	293.0	A
	East	242.7	A	299.9	A	259.4	A
Archer Ave. @ 160th St.	North	404.1	A	379.9	A	320.0	A
	West	111.7	A	136.6	A	80.7	A
	South	425.2	A	403.3	A	317.4	A
	East	184.1	A	170.3	A	133.0	A

June 29, 2007

Table 17-22 (continued)  
2015 With Action Crosswalk Conditions

THIS TABLE HAS BEEN REVISED FOR THE FEIS  
(SF/P - Square Foot per Pedestrian)

Intersection	Corner	AM		MD		PM	
		SF/P	LOS	SF/P	LOS	SF/P	LOS
Archer Ave. @ Parsons Blvd.	North	198.2	A	206.6	A	78.3	A
	West	259.4	A	402.8	A	156.1	A
	South	160.2	A	192.0	A	100.2	A
Archer Ave. @ Union Hall St.	North	213.2	A	319.4	A	461.1	A
	West	224.3	A	248.5	A	156.7	A
	South	273.2	A	342.5	A	508.1	A
Hillside Ave. @ 144th St.	North	261.0	A	211.3	A	261.3	A
	West	531.6	A	428.5	A	783.1	A
	South	317.6	A	226.4	A	374.0	A
	East	452.2	A	228.7	A	315.5	A
Hillside Ave. @ 153rd St.	North	163.2	A	167.0	A	147.0	A
	South	312.5	A	168.4	A	171.8	A
	East	758.5	A	644.3	A	456.3	A
Hillside Ave. @ Parsons Blvd.	North	50.2	B	59.0	B	109.4	A
	West	139.4	A	109.4	A	196.8	A
	South	147.4	A	91.7	A	152.0	A
	East	246.1	A	135.1	A	244.0	A
Hillside Ave. @ Sutphin Blvd.	North	422.8	A	207.3	A	286.3	A
	South	365.1	A	170.7	A	345.5	A
	East	127.4	A	67.0	A	131.5	A
Hillside Ave. @ Queens Blvd.	North	1,794.1	A	4,246.1	A	2,422.2	A
	West	581.3	A	528.5	A	554.0	A
	South	671.6	A	774.6	A	588.1	A
	East	1,022.6	A	361.4	A	509.8	A
Archer Ave. @ Guy R. Brewer Blvd.	North	142.1	A	140.7	A	104.9	A
	West	87.2	A	87.9	A	67.9	A
	South	186.9	A	166.5	A	152.8	A
	East	137.4	A	167.5	A	171.4	A
Archer Ave. @ Merrick Blvd.	North	413.3	A	550.2	A	518.6	A
	West	148.0	A	65.1	A	62.4	A
	South	240.1	A	334.2	A	248.4	A
	East	464.5	A	647.4	A	411.0	A
Liberty Ave. @ 150th St.	North	417.0	A	267.3	A	267.6	A
	West	1,024.0	A	424.2	A	158.9	A
	South	1,027.6	A	375.2	A	351.9	A
	East	963.1	A	878.9	A	748.0	A
Liberty Ave. @ Merrick Blvd.	North	826.0	A	583.6	A	748.8	A
	West	605.1	A	494.9	A	696.5	A
	South	1,042.3	A	647.0	A	683.4	A
	East	535.8	A	667.3	A	537.6	A
Liberty Ave. @ Sutphin Blvd.	North	357.4	A	205.9	A	209.0	A
	West	1,888.1	A	1,159.3	A	1,005.3	A
	South	772.6	A	332.2	A	406.4	A
	East	329.7	A	121.7	A	173.1	A

**Table 17-22 (continued)**  
**2015 With Action Crosswalk Conditions**

**THIS TABLE HAS BEEN REVISED FOR THE FEIS**  
**(SF/P - Square Foot per Pedestrian)**

Intersection	Corner	AM		MD		PM	
		SF/P	LOS	SF/P	LOS	SF/P	LOS
Sutphin Blvd. @ 94th Ave.	North	50.6	B	29.1	C	34.4	C
	West	489.0	A	231.2	A	516.6	A
	South	81.0	A	52.3	A	70.5	A
	East	148.0	A	54.6	B	106.5	A
Sutphin Blvd. @ 95th Ave.	North	82.9	A	34.2	C	65.6	A
	West	314.1	A	200.2	A	192.3	A
	South	116.1	A	89.2	A	97.3	A
	East	303.2	A	142.2	A	191.7	A
Sutphin Blvd. @ 97th Ave.	North	136.7	A	46.5	B	89.3	A
	West	520.6	A	586.1	A	166.4	A
	South	273.7	A	130.5	A	165.7	A
	East	549.0	A	707.8	A	490.2	A
Archer Ave. @ 168th St.	North	569.1	A	177.4	A	221.8	A
	West	411.3	A	130.6	A	165.1	A
	South	856.7	A	542.3	A	542.3	A
	East	1,223.5	A	839.4	A	838.5	A
Hillside Ave. @ 168th St.	North	182.6	A	292.4	A	152.8	A
	West	411.1	A	404.6	A	359.1	A
	South	236.3	A	229.6	A	139.7	A
	East	511.5	A	216.5	A	185.7	A
Hillside Ave. @ 169th St.	North	137.9	A	127.8	A	107.3	A
	West	522.0	A	374.2	A	355.7	A
	South	183.3	A	164.2	A	113.8	A
	East	350.3	A	269.2	A	221.8	A
Hillside Ave. @ 178th St.	North	404.3	A	377.1	A	284.1	A
	West	467.9	A	766.4	A	397.6	A
	South	367.9	A	325.3	A	246.8	A
	East	335.3	A	215.2	A	212.6	A
Hillside Ave. @ 179th St.	North	123.9	A	178.6	A	115.4	A
	South	124.9	A	146.0	A	102.9	A
	East	601.7	A	600.0	A	336.6	A
Liberty Ave. @ 160th St.	North	162.7	A	116.6	A	119.3	A
	West	378.7	A	379.0	A	593.3	A
	South	178.6	A	169.6	A	182.9	A
	East	511.4	A	528.9	A	372.7	A
Hillside Ave. @ 180th St.	North	129.7	A	107.7	A	107.4	A
	South	150.5	A	123.6	A	129.5	A
	East	376.6	A	237.0	A	289.4	A
Liberty Ave. @ Guy R. Brewer Blvd.	North	316.5	A	190.0	A	199.7	A
	West	362.9	A	386.2	A	444.7	A
	South	308.4	A	170.1	A	172.0	A
	East	285.9	A	295.7	A	252.9	A

June 29, 2007