Chapter 16: Traffic and Parking

A. OVERVIEW

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." In addition, new signal timing information was obtained for the intersection of Liberty Avenue and Sutphin Boulevard subsequent to completion of the DEIS.

This chapter of the FEIS describes the traffic and parking 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, 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 EIS, the proposed actions comprises zoning map amendments, a zoning text amendment to establish the Special Downtown Jamaica District (SDJD), and Urban Renewal Area Designation. The proposed redevelopment area is generally located in Queens County Districts 8 and 12 and the communities of Jamaica, South Jamaica, Hollis, and St. Albans.

Typically, CEQR assessments of large area-wide zoning proposals not associated with specific development projects assume a 10-year build period. This is the time frame that can be reasonably predicted into the foreseeable future without engaging in highly speculative projections. Thus, the transportation analyses in this FEIS address a development program that could reasonably be constructed by 2015 as described in the reasonable worst case development scenario (RWCDS) section of Chapter 1. The traffic and parking analyses consider auto, taxi and truck trips, as well as parking demand and changes in supply related to these "projected" development sites. The locations of these sites and their anticipated uses are shown in Figure 1-9 and listed in Table 1-4 in Chapter 1.

The study area selected for the traffic analysis is shown in Figure 16-1. The traffic study area was selected to encompass the principal roadways most likely to be used by the majority of persons and goods traveling by vehicle to and from the projected development sites. The primary traffic study area is bounded on the north by Hillside Avenue, on the south by Liberty Avenue, on the west by the Van Wyck Expressway service road, on the east by Merrick Boulevard and 168th Street, and extending south on Guy R. Brewer Boulevard to 107th Avenue and south on Merrick Boulevard to 108th Avenue, and an additional five intersections east of Merrick Boulevard were also analyzed. Fifty-four intersections are analyzed for vehicular traffic for the weekday 8:00-9:00 AM, 12:00-1:00 PM (midday), and 5:00-6:00 PM, and the Saturday 2-3 PM peak hours, the periods when demand from these development sites would be heaviest. Of these intersections, 53 are signalized and one is unsignalized.

This chapter describes in detail the existing traffic and parking conditions in the study area. Future conditions in the year 2015 without the proposed actions (the No-Action condition) are

then determined, including additional transportation-system demand and any changes in the roadways and parking supply 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, and described in detail.

B. EXISTING CONDITIONS

DATA COLLECTION

Manual turning movement counts were conducted at 54 locations in the traffic study areas in September/October 2005. Vehicle classification counts and speed surveys were also conducted at that time, as were field surveys of parking regulations, lane configurations and other physical and operational characteristics of the street network. In addition, ATR (Automatic Traffic Recorder) counts were conducted at key locations along major roadway corridors from Sunday, September 25, 2005 through Monday, October 3, 2005. Signal timing plans for signalized intersections within the study area were obtained from the New York City Department of Transportation (NYCDOT). Weekday off-street parking utilization and on-street parking supply within the area of the proposed actions were obtained from a report prepared by the New York City Department of City Planning (NYCDCP)[1] where field data were collected in 2003 and updated in May/June 2005. On-street parking utilization data were supplemented by data collected on March 23, 2006 by PHA.

Figures 16-2 through 16-5 show the resulting 2005 base traffic volumes in the AM, midday, PM, Saturday midday peak hours, respectively.

VEHICULAR TRAFFIC

STREET NETWORK

The transportation network of the study area consists of local streets and arterials. This network is oriented as a complex grid pattern, containing 54 analyzed intersections. Avenues are generally oriented east-west and streets are generally oriented north-south. There are several sub-grids within the study area and travel between adjacent sub-grids is possible principally by using the major arterials. The major east-west arterials through the traffic study area are Hillside Avenue, Jamaica Avenue, Archer Avenue and Liberty Avenue. The major north-south streets through the traffic study area are the Van Wyck Expressway service road, Sutphin Boulevard, Parsons Boulevard, Guy R. Brewer Boulevard, and Merrick Boulevard. The traffic study area includes several terminal hubs for Metropolitan Transportation Authority bus routes (New York City Transit, MTA Bus Company, and Long Island Bus) connecting to subways, the Long Island Rail Road and JFK Airport AirTrain. These bus routes use all of the major arterials and many of the minor streets within the traffic study area and fan out to eastern Queens, northern Queens, northern Brooklyn, and Nassau County. The traffic study area is divided north-south by the elevated Long Island Rail Road tracks located on an embankment. The tracks are generally located between Archer Avenue and 94th Avenue/Liberty Avenue and separate the traffic study area. There are few connections that pass under the tracks over the 2 mile wide study area; they

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

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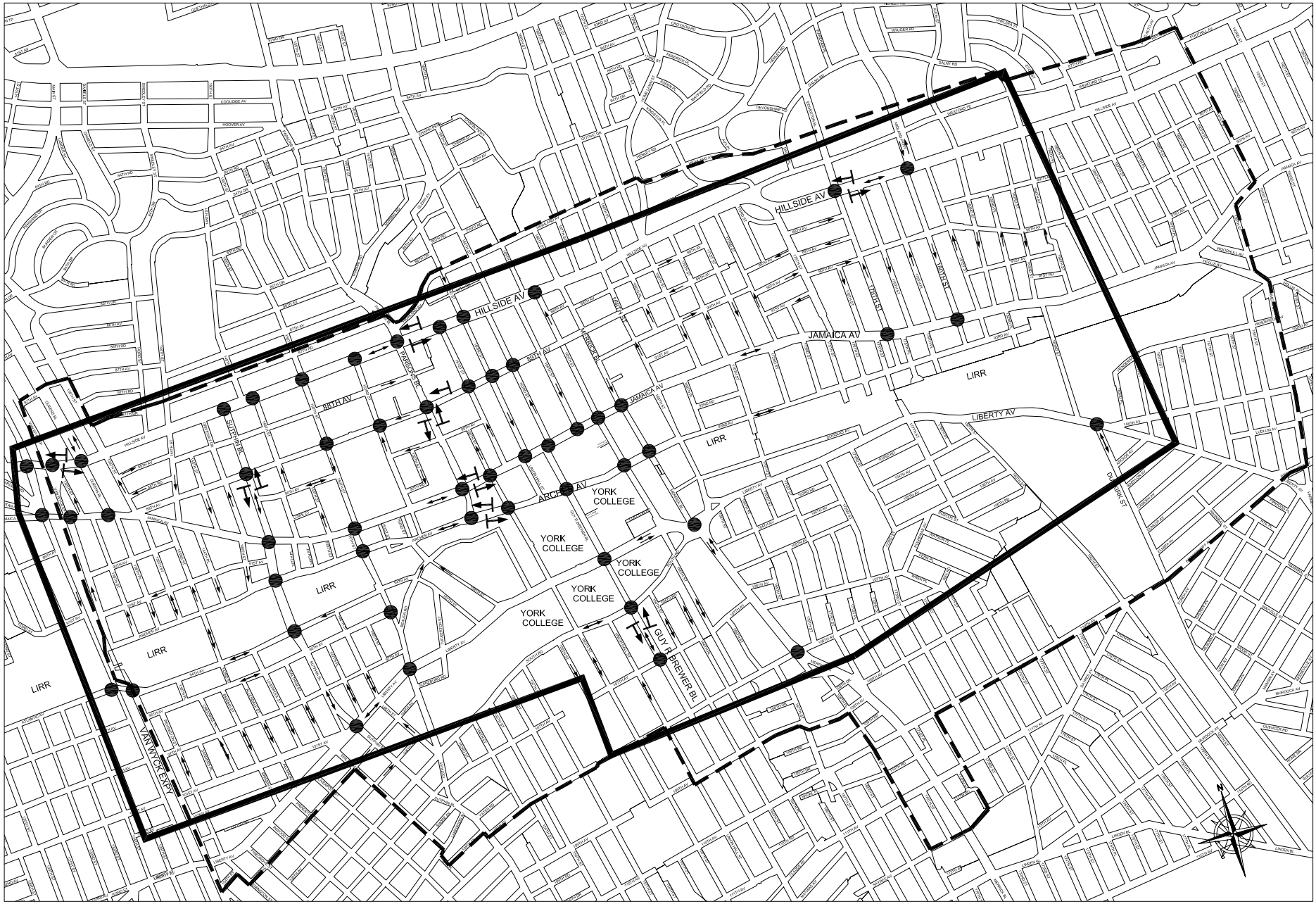


Legend:

- Area Affected by the Proposed Actions
- Traffic Study Area Boundaries
- Analyzed Intersection
- ATR Location

Jamaica Plan EIS

Traffic Study Area
Figure 16-1

Legend:

- ● - Analyzed Intersection

2005 Existing Traffic Volumes - AM Peak Hour

Figure16-2

Legend:

- ● - Analyzed Intersection

2005 Existing Traffic Volumes - Midday Peak Hour

Legend:

- ● - Analyzed Intersection

2005 Existing Traffic Volumes - PM Peak Hour

Jamaica Plan EIS

Figure16-4

Legend:

- ● - Analyzed Intersection

2005 Existing Traffic Volumes - Saturday Midday Peak Hour

Jamaica Plan EIS

Figure16-5

are at the Van Wyck Expressway service roads, 143rd Street, Sutphin Boulevard, 150th Street, 158th Street (northbound only), 160th Street (northbound only), Union Hall Street (pedestrians to York College only), Guy R. Brewer Boulevard, 165th Street, Merrick Boulevard, 168th Street, 170th Street, 177th street, and 183rd Street.

Pedestrian traffic is generally concentrated on the major arterials and streets within the core of the study area bounded by Sutphin Boulevard to the west, Hillside Avenue to the north, Merrick Boulevard to the east and Archer Avenue to the south.

A discussion of the street network within the study area is provided below (the major east-west arterials and streets followed by the north-south arterials and streets).

East-West Arterials and Streets

Hillside Avenue is a major two-way arterial along the north side of the traffic study area with two moving lanes in each direction plus left turn lanes and parking. Hillside Avenue is approximately 70 feet in width extending from Lefferts Boulevard in Brooklyn and continuing east into Nassau County. Parking is generally permitted on both sides of the street. There are interchanges on Hillside Avenue to the Van Wyck Expressway (I-678) at the northwest corner of the area affected by the proposed actions, the Clearview Expressway (I-295) and Grand Central Parkway at 212th Street, and the Cross Island Parkway at 243rd Street. Approaching Parsons Boulevard, Hillside Avenue carries two-way traffic volumes of approximately 2,550 vehicles per hour (vph) during the AM peak hour, 2,050 vph during the midday peak hour, 2,400 vph during the PM peak hour, and 2,150 vph during the Saturday midday peak hour. There are numerous bus routes that traverse parts of Hillside Avenue in the traffic study area, including the Q1, Q2, Q3, Q17, Q20A, Q20B, Q31, Q36, Q40, Q43, Q44, Q65, Q75, Q76, Q77, Q110, Q111, Q112, Q113, X32, X68, N1, N2, N3, N6, N22, N22A, N24, and N26; however the Q43 is the primary local bus serving Hillside Avenue, providing service from Sutphin Boulevard east to the City Line. Between 168th Street and Francis Lewis Boulevard the curb lanes are reserved for buses and right turning vehicles weekdays from 7 to 9 AM westbound, and from 4 to 7 PM eastbound. The F subway line travels under Hillside Avenue with stations at Sutphin Boulevard, Parsons Boulevard, 169th Street, and 179th Street. Hillside Avenue is a through-truck route, which may be used by trucks that do not have a local destination.

Jamaica Avenue is also a major east-west two-way retail street through the center of the traffic study area. Jamaica Avenue ranges from approximately 40 to 70 feet in width within different sections of the traffic study area. The road extends to the west from Brooklyn, intersecting the Van Wyck Expressway, and continuing east to Nassau County where it changes to Jericho Turnpike. This arterial has one to two moving lanes, with the curb lane reserved for buses from 4 to 7 PM every day in each direction between 168th Street and Parsons Boulevard. Only buses and right turning vehicles may use the curb lane when the bus restriction is in effect. There is a raised median separating eastbound and westbound traffic between 172nd Street and 183rd Street. There are breaks in the median to allow for turning movements. Parking is not permitted on either side of the street during the day in the section containing bus lanes, but the curb lanes are often occupied by standing vehicles. Bus routes that use Jamaica Avenue are the Q6, Q8, Q9, Q24, Q25, Q30, Q31, Q41, Q44, Q54, Q56, Q65, and the Q110. Approaching Parsons Boulevard, two-way volumes on Jamaica Avenue are approximately 1,250 vph, 1,000 vph, 1,050 vph and 1,000 vph during the AM, midday, PM and Saturday midday peak hours, respectively. Jamaica Avenue is a local truck route east of Merrick Boulevard.

Archer Avenue is another primary two-way east-west street through the traffic study area with one to two moving lanes in each direction and limited parking. Archer Avenue ranges from 40 to 50 feet in width extending between the Van Wyck Expressway to the west and Merrick Boulevard to the east where it continues as 93rd Avenue eastward to 183rd Street. Archer Avenue carries two-way traffic volumes of approximately 1,300 vph in the AM peak hour, 900 vph in the midday peak hour, 1,200 vph in the PM peak hour, and 1,000 vph in the Saturday midday peak hour approaching Parsons Boulevard. A major bus hub is located along the curb lanes at Parsons Boulevard for the Q4, Q5, Q20A, Q20B, Q25, Q30, Q31, Q34, Q42, Q65, Q83, Q84, Q111, Q112, Q113 and N4 routes for transfers to/from the E, J and Z subway lines. Those subway lines travel westward from Parsons Boulevard under Archer Avenue with a station at Sutphin Boulevard at the Long Island Rail Road's Jamaica Station and the terminal for the AirTrain to JFK Airport.

Liberty Avenue is an arterial along the south side of the traffic study area and extends from east to west from Farmers Boulevard in St. Albans to Mother Gaston Boulevard in Brownsville, Brooklyn. There are interchanges on Hillside Avenue to the Van Wyck Expressway (I-678). There are typically two moving lanes plus left turn lanes in each direction. It is approximately 50 feet in width within the traffic study area expanding to 75 feet between Merrick Boulevard and 157th Street where there is a center median and left turn lanes. Parking is permitted on both curb lanes. Limited stop buses use Liberty Avenue to bypass Archer Avenue traffic during rush hours. These routes include the Limited Stop Q4, Q5, Q83 and Q85 routes as well as the express route X64; the Q42 also uses Liberty Avenue. This arterial is also a local truck route for trucks with local destination to utilize. Liberty Avenue typically carries two-way traffic volumes of approximately 2,000-2,100 vph during the peak commuting hours (AM and PM peak hours), and approximately 1,300-1,400 vph during other peak hours (midday and Saturday midday) approaching Guy R. Brewer Boulevard.

Other local east-west streets of note within the traffic study area are 94th Avenue and 89th Avenue. 94th Avenue is the extension of Atlantic Avenue from to the west in Brooklyn, extending east to 150th Street, and it is a local truck route. The Van Wyck Expressway has an interchange at Atlantic Avenue. 89th Avenue is a one-way westbound local street extending between 171st Street to the east to 139th Street to the west. Local east-west traffic in the traffic study area is generally carried on the numbered avenues. These avenues have varied widths with some one-way and others two-way.

North-South Arterials and Streets

The Van Wyck Expressway service roads transverses north-south along the Van Wyck Expressway from John F. Kennedy Airport at the south to Queens Boulevard at the north. The service road flanks the Van Wyck Expressway on both sides and provides access to the expressway's entrance and exit ramps and is a through truck route. The service roads are approximately 33 feet wide and have three total lanes in both directions with very limited parking permitted along the right curb lanes. The southbound service road carries approximately 900 vph during the AM peak hour, 650 vph during the midday peak hour, 1,000 vph during the PM peak hour, and 950 vph during the Saturday midday peak hour approaching Jamaica Avenue, and the northbound service road carries approximately 1,150 vph during the AM peak hour, 950 vph during the midday peak hour, 1,250 vph during the PM peak hour, and 614 vph during the Saturday midday peak hour approaching Jamaica Avenue. No bus routes operate on the service road. The mainline Van Wyck Expressway is designated Interstate 678 and flows south to JFK Airport with interchanges to the Belt Parkway and Nassau Expressway. North of

the area affected by the proposed actions, the expressway interchanges with the Grand Central Parkway and Long Island Expressway (I-495). I-678 continues north and changes to the Whitestone Expressway in Flushing, and over the Bronx-Whitestone Bridge to the Bronx.

Sutphin Boulevard is one of several major north-south streets through the center of the traffic study area. It traverses two-way, north to south, from Hillside Avenue until it terminates at Rockaway Boulevard in South Jamaica. Access to the Belt Parkway is reached via Sutphin Boulevard to the south. It is approximately 40 feet in width and typically has one moving lane and one parking lane in each direction. The section of Sutphin Boulevard in the vicinity of the Jamaica AirTrain station widens to a width of approximately 60 feet and parking here is not permitted to allow for two to three moving lanes and bus routes. The bus routes that traverse Sutphin Boulevard include the Q6, Q8, Q9, Q20A, Q20B, Q40, Q41, Q43, Q44, and Q60. The station for the Jamaica Air Train to JFK Airport as well as the Jamaica LIRR station are located on the west side of Sutphin Boulevard between Archer Avenue and 94th Avenue. Approaching Archer Avenue, Sutphin Boulevard carries approximately 1,000 vph, 800 vph, 750 vph and 600 during the AM, midday, PM and Saturday midday peak hours, respectively.

Parsons Boulevard is two-way and approximately 50 feet wide with two travel lanes in each direction, traversing from the Long Island Expressway (Interstate 495) eastbound service road to the north, to Archer Avenue to the south where it ends. Parking is generally not permitted on either side of the street over the section of Parsons Boulevard within the traffic study area to allow for commuter van and bus routes. There are several bus routes that traverse Parsons Boulevard in the traffic study area, including the Q25, Q34, Q65, Q110, Q111, Q112, and the Q113. The Q25 and Q34 use Parsons Boulevard to travel north to and from Flushing and College Point. Parsons Boulevard carries two-way traffic volumes of 900 vph, 700 vph, 850 vph and 600 vph approaching 89th Avenue during the AM, midday, PM and Saturday midday peak hours, respectively.

Merrick Boulevard is a major arterial entering the traffic study area traversing north to south from Hillside Avenue to Hook Creek Boulevard in Valley Stream, Nassau County. It is one-way southbound between Hillside Avenue and Liberty Avenue, becoming a two-way arterial south of Liberty Avenue. Merrick Boulevard feeds into 168th Street northbound at Liberty Avenue, which is one-way northbound. South of Liberty Avenue, Merrick Boulevard is approximately 70 feet in width, with two moving lanes and one parking lane in each direction. This arterial is a truck route for local deliveries. The bus routes that traverse Merrick Boulevard include the Q1, Q2, Q3, Q4, Q5, Q9A, Q17, Q20A, Q20B, Q36, Q44, Q75, Q76, Q77, Q84, Q85, X32, N1, N2, N3, N4, N6, N22, N22A, N24, and N26. The 165th Street Bus Terminal is located at the southwest corner of 89th Avenue and Merrick Boulevard. The two-way volumes along Merrick Boulevard approaching 108th Avenue are approximately 1,700 vph, 1,100 vph, 1,550 vph and 1,300 vph during the AM, midday, PM and Saturday midday peak hours, respectively.

Guy R. Brewer Boulevard is a principal arterial entering the traffic study area traversing north to south from Jamaica Avenue to Rockaway Boulevard in Springfield Gardens. At approximately 40 feet in width, Guy R. Brewer Boulevard typically has one moving lane and one parking lane in each direction within the traffic study area. This road connects to the Belt Parkway to the south. Guy R. Brewer Boulevard is a local truck route south of Liberty Avenue and also accommodates the Q111, Q112, and Q113 bus routes. Guy R. Brewer Boulevard carries approximately 650 vph, 550 vph, 800 vph and 650 vph approaching Liberty Avenue during the AM, midday, PM and Saturday midday peak hours, respectively.

Queens Boulevard is a short (1 block between Hillside Avenue and Jamaica Avenue) and minor road within the traffic study area, but is a major arterial within Queens providing access to the traffic study area. It traverses north to south within the traffic study area but is generally oriented east-west from Jackson Avenue in Long Island City to Jamaica Avenue. Approaching Hillside Avenue from the north, it typically has three moving lanes and one parking lane in each direction and raised medians separate the through movements. This section of Queens Boulevard is approximately 112 feet in width, including the median. South of Hillside Avenue it narrows to about 45 feet in width with no median. The bus routes along this section include the Q20A, Q20B, Q44, Q60, and the X68. The E subway line has a stop underneath Queens Boulevard at the Van Wyck Expressway. Approximately 700 vph during the AM peak hour and midday peak hours, 1,000 during the PM peak hour, and 600 vph during the Saturday midday peak hour approach Hillside Avenue on Queens Boulevard.

Local north-south traffic in the traffic study area is generally carried on the numbered streets. These streets have varied widths with some streets with one-way traffic and other streets with two-way traffic.

BICYCLE FACILITIES

There are no existing bicycle facilities within the study area. The NYCDOT 2006 *NYC Cycling Map* identifies a number of recommended bicycle routes through the area affected by the proposed actions. These include portions of Archer Avenue (Guy R. Brewer Boulevard to 183rd Street), 94th Avenue/Atlantic Avenue (west of 150th Street), 157th Street (south of Liberty Avenue), and the streets around Rufus King Park.

CAPACITY ANALYSIS METHODOLOGY

The capacity analyses at study area intersections are based on the methodology presented in the 2000 *Highway Capacity Manual (HCM)* using the Highway Capacity Software Release 4.1f. Traffic data required for these analyses include volumes on each approach and various other physical and operational characteristics. Signal timing plans for each signalized intersection were obtained from NYCDOT. Field inventories were conducted to document curbside parking regulations, vehicle classifications and other relevant characteristics needed for the analysis.

The HCM methodology provides a volume-to-capacity (v/c) ratio for each signalized intersection approach. The v/c ratio represents the traffic volumes on an approach to the approach's carrying capacity. At a v/c ratio of between 0.95 and 1.0, near-capacity conditions are reached and delays can become substantial. Ratios of greater than 1.05 indicate saturated conditions with queuing. The HCM methodology also expresses quality of flow in terms of level of service (LOS), which is based on the amount of delay that a driver typically experiences at an intersection. Levels of service range from A, with minimal delay (10 seconds or less per vehicle), to F, which represents long delays (80 seconds or greater per vehicle).

For unsignalized intersections, the HCM methodology generally assumes that major street traffic is not affected by minor street flow. Left turns from the major street are assumed to be affected by the opposing, or oncoming major street flow. Minor street traffic is affected by all conflicting movements. Similar to signalized intersections, the HCM methodology expresses the quality of flow at unsignalized intersections in terms of level of service based on the amount of delay that a driver experiences. This relationship differs somewhat from the criteria used for signalized intersections, primarily because drivers expect different levels of performance from the two different types of transportation facilities. For unsignalized intersections, levels of service range

from A, with minimal delay (10 seconds per vehicle), to F, which represents longer delay (50 seconds or greater per vehicle).

Table 16-1 shows the LOS/delay relationship for signalized and unsignalized intersections using the HCM methodology. Levels of service A, B and C generally represent highly favorable to fair levels of traffic flow; at LOS D the influence of congestion becomes noticeable; LOS E is considered to be the limit of acceptable delay; and LOS F is considered to be unacceptable to most drivers. In this study, a signalized lane grouping operating at LOS E or F or a v/c ratio of 0.90 or above is identified as congested. For unsignalized intersections, a movement with LOS E or worse is also identified as congested.

Table 16-1
Roadway Level of Service (LOS) Criteria

Level of Service	Average Delay per Vehicle (seconds) For Signalized Intersections	Average Delay per Vehicle (seconds) For Unsignalized Intersections
A	less than or equal to 10.0	less than or equal to 10.0
B	> 10.0 to 20.0	> 10.0 to 15.0
C	> 20.0 to 35.0	> 15.0 to 25.0
D	> 35.0 to 55.0	> 25.0 to 35.0
E	> 55.0 to 80.0	> 35.0 to 50.0
F	greater than 80.0	greater than 50.0
Source: 2000 Highway Capacity Manual		

Tables 16-2 and 16-3 show the results of the capacity analysis at the 53 signalized and 1 unsignalized intersections, respectively, in the four peak hours analyzed. The tables highlight those intersection movements that operate at LOS E or F and/or have a high v/c ratio (generally above 0.90 and above). The following section identifies those intersections experiencing congestion in one or more peak hours.

Signalized Intersections

Table 16-2 shows the results of the 2005 Existing conditions capacity analysis at the 53 analyzed signalized intersections in the weekday AM, midday and PM, and Saturday midday peak hours. The table shows that 27 of the 53 analyzed signalized intersections have one or more congested movements in one or more peak hours. The commuter oriented AM peak hour has the greatest number of signalized intersections with one or more congested movements with 24 intersections. There are 12 intersections with one or more congested movements in the PM peak hour, 5 intersections in the midday peak hour and 5 intersections in the Saturday midday peak hour. The locations with congestions are discussed more fully below, by east-west corridor:

Hillside Avenue Corridor

Hillside Avenue is the most heavily traveled corridor within the traffic study area with traffic at its highest during the AM and PM peak commuting hours. Hillside Avenue connects Brooklyn, the Van Wyck Expressway, the Clearview Expressway and Nassau County, and is also heavily used by buses.

In the AM peak hour, traffic along Hillside Avenue is heavy in both directions, but is heaviest westbound toward the Van Wyck Expressway. Poor levels of service occur at one or more

Table 16-2: 2005 Existing Traffic Conditions at Signalized Intersections

Signalized Intersection	Lane Group	2005 Existing											
		Weekday AM Peak Hour			Weekday MD Peak Hour			Weekday PM Peak Hour			Saturday MD Peak Hour		
		V/C RATIO	DELAY (SEC/VEH)	LOS	V/C RATIO	DELAY (SEC/VEH)	LOS	V/C RATIO	DELAY (SEC/VEH)	LOS	V/C RATIO	DELAY (SEC/VEH)	LOS
1) Hillside Avenue (E-W) @ Van Wyck Expwy Southbound Service Road (SB)	EB-TR	0.84	42.3	D	0.51	19.3	B	0.84	41.5	D	0.58	20.5	C
	WB-L	1.01	102.1	F *	0.60	23.8	C	1.03	106.7	F *	0.66	28.9	C
	WB-T	0.34	18.7	B	0.22	8.1	A	0.31	18.3	B	0.21	8.1	A
	SB-LTR	0.71	31.4	C	0.74	33.9	C	0.62	29.2	C	0.79	35.4	D
2) Hillside Avenue (E-W) @ Van Wyck Expwy Northbound Service Road (NB)	EB-L	0.81	44.6	D	0.45	18.5	B	0.64	33.4	C	0.59	23.6	C
	EB-T	0.46	12.6	B	0.37	9.3	A	0.38	11.5	B	0.37	9.3	A
	WB-T	0.47	20.6	C	0.48	18.8	B	0.48	20.7	C	0.48	18.8	B
	WB-R	0.67	27.7	C	0.55	22.0	C	0.39	20.2	C	0.50	20.7	C
	NB-LTR	0.89	49.6	D	0.75	33.6	C	0.76	42.6	D	0.77	34.3	C
3) Hillside Avenue (E-W) @ Queens Boulevard (N-S)	EB-L	0.50	27.3	C	0.97	113.5	F *	0.77	65.8	E *	0.60	50.0	D
	EB-TR	0.69	22.5	C	0.70	35.2	D	0.76	37.4	D	0.85	42.0	D
	WB-L	0.18	16.7	B	0.17	28.0	C	0.15	27.7	C	0.23	32.8	C
	WB-T	0.62	20.6	C	0.74	36.6	D	0.63	33.1	C	0.69	34.7	C
	WB-R	0.56	21.1	C	0.55	33.4	C	0.37	29.2	C	0.43	30.5	C
	NB-L	0.27	42.8	D	0.20	33.4	C	0.48	41.8	D	0.20	33.4	C
	NB-TR	0.77	60.1	E *	0.39	36.3	D	0.25	33.7	C	0.26	33.9	C
	SB-L	0.32	27.8	C	0.29	15.2	B	0.32	15.3	B	0.27	14.7	B
	SB-TR	0.31	27.7	C	0.20	14.6	B	0.45	18.2	B	0.21	14.7	B
4) Hillside Avenue (E-W) @ Sutphin Boulevard (N-S)	EB-T	0.50	15.8	B	0.49	15.8	B	0.62	18.0	B	0.52	16.2	B
	EB-R	0.28	13.5	B	0.24	13.1	B	0.21	12.7	B	0.18	12.3	B
	WB-L	0.62	27.1	C	0.39	16.8	B	0.58	32.6	C	0.39	18.7	B
	WB-T	0.67	11.9	B	0.50	9.2	A	0.47	8.8	A	0.44	8.4	A
	NB-L	0.61	52.8	D	0.66	55.2	E *	0.38	45.4	D	0.40	45.6	D
	NB-R	0.47	48.7	D	0.47	48.8	D	0.47	48.9	D	0.39	46.1	D
5) Hillside Avenue (E-W) @ 148th Street-South (N-S)	EB-T	0.50	9.2	A	0.49	9.1	A	0.61	10.7	B	0.51	9.3	A
	WB-T	0.77	14.4	B	0.51	9.3	A	0.51	9.2	A	0.47	8.8	A
	NB-LR	0.73	58.5	E *	0.93	83.9	F *	NB-L 0.44	44.9	D	0.54	48.6	D
								NB-R 0.44	45.4	D			
6) Hillside Avenue (E-W) @ 150th Street (N-S)	EB-L	0.90	82.7	F *	0.39	14.3	B	0.57	20.7	C	0.25	10.9	B
	EB-T	0.50	11.9	B	0.49	11.6	B	0.58	12.9	B	0.50	11.7	B
	EB-R	0.08	8.0	A	0.09	8.0	A	0.10	8.1	A	0.05	7.7	A
	WB-L	0.43	15.1	B	0.27	11.3	B	0.55	21.4	C	0.42	14.9	B
	WB-TR	0.85	21.3	C	0.56	12.7	B	0.57	12.9	B	0.50	11.9	B
	SB-LTR	0.88	64.3	E *	0.58	44.7	D	0.52	42.8	D	0.54	43.5	D
7) Hillside Avenue (E-W) @ 153rd Street (NB)	EB-T	0.59	13.4	B	0.54	12.5	B	0.64	14.2	B	0.55	12.5	B
	WB-T	0.74	16.7	B	0.48	11.4	B	0.50	11.7	B	0.47	11.3	B
	NB-L	0.52	44.5	D	0.41	41.2	D	0.27	37.9	D	0.26	37.9	D
	NB-R	0.38	40.5	D	0.28	38.4	D	NB-LR 0.32	39.1	D	0.48	43.1	D
								NB-R 0.35	39.9	D			
8) Hillside Avenue (E-W) @ Parsons Boulevard (N-S)	EB-L	0.74	68.2	E *	0.45	28.8	C	0.56	36.5	D	0.50	33.9	C
	EB-T	0.65	23.4	C	0.62	22.8	C	0.77	27.3	C	0.68	24.2	C
	EB-R	0.34	18.8	B	0.20	16.5	B	0.22	16.8	B	0.17	16.0	B
	WB-L	0.31	23.3	C	0.27	20.7	C	0.40	31.4	C	0.29	24.2	C
	WB-TR	1.03	59.8	E *	0.74	26.7	C	0.78	28.2	C	0.78	28.0	C
	NB-L	0.37	39.2	D	0.23	34.8	C	0.43	40.6	D	0.29	37.1	D
	NB-T	0.81	55.7	E *	0.40	37.1	D	0.56	41.3	D	0.34	35.5	D
	NB-R	0.28	35.0	C	0.30	35.5	D	0.39	37.5	D	0.24	34.0	C
	SB-L	0.61	54.7	D	0.43	40.5	D	0.55	46.9	D	0.28	35.6	D
	SB-T	0.61	43.5	D	0.49	39.6	D	0.50	39.6	D	0.65	44.8	D
	SB-R	0.35	36.6	D	0.27	34.9	C	0.32	35.6	D	0.21	33.6	C
9) Hillside Avenue (E-W) @ 161st Street (NB)	EB-T	0.54	12.4	B	0.53	12.2	B	0.65	14.3	B	0.54	12.3	B
	WB-T	0.74	16.7	B	0.48	11.6	B	0.50	11.8	B	0.47	11.4	B
	NB-L	0.23	37.4	D	0.21	37.0	D	0.25	37.6	D	0.38	40.5	D
	NB-R	0.44	41.9	D	0.57	45.9	D	NB-LR 0.36	40.0	D	0.66	50.2	D
								NB-R 0.51	44.4	D			
10) Hillside Avenue (E-W) @ 162nd Street (SB)	EB-TR	0.63	11.2	B	0.64	11.3	B	0.79	15.4	B	0.66	11.7	B
	WB-L	0.37	12.2	B	0.29	10.4	B	0.71	41.3	D	0.50	17.8	B
	WB-T	0.71	12.8	B	0.47	8.8	A	0.48	8.9	A	0.46	8.7	A
	SB-LTR	0.78	61.0	E *	0.35	42.8	D	0.68	54.1	D	0.34	42.6	D

Abbreviations:

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound
L-Left, T-Through, R-Right, DfL-Defacto Left, E-W: East-West Roadway, N-S: North-South Roadway
V/C Ratio - Volume to Capacity Ratio
SEC/VEH - Seconds per Vehicle
LOS - Level of Service
* - Denotes Congested Location (LOS E or F, or v/c ratio > 0.90)

February 5, 2007

Table 16-2 (Continued): 2005 Existing Traffic Conditions at Signalized Intersections

Signalized Intersection	Lane Group	2005 Existing											
		Weekday AM Peak Hour			Weekday MD Peak Hour			Weekday PM Peak Hour			Saturday MD Peak Hour		
		V/C RATIO	DELAY (SEC/VEH)	LOS	V/C RATIO	DELAY (SEC/VEH)	LOS	V/C RATIO	DELAY (SEC/VEH)	LOS	V/C RATIO	DELAY (SEC/VEH)	LOS
11) Hillside Avenue (E-W) @ 165th Street-South (NB)	EB-T	0.50	9.2	A	0.47	8.8	A	0.70	12.5	B	0.64	11.2	B
	WB-T	0.63	11.1	B	0.39	8.0	A	0.46	8.7	A	0.49	8.9	A
	NB-L	0.19	40.0	D	0.22	40.6	D	0.16	39.3	D	0.20	40.1	D
	NB-R	0.29	42.3	D	0.36	44.2	D	0.49	48.2	D	0.36	44.2	D
12) Hillside Avenue (E-W) @ 178th Street (NB)	EB-L	0.22	10.8	B	0.08	6.2	A	0.13	6.9	A	0.08	6.4	A
	EB-T	0.51	9.3	A	0.43	8.4	A	0.65	11.4	B	0.51	9.3	A
	WB-TR	0.76	14.2	B	0.41	8.1	A	0.47	8.8	A	0.52	9.3	A
	NB-LTR	0.95	83.2	F *	0.57	48.4	D	0.81	62.4	E *	0.75	57.5	E *
	SB-LR	0.32	43.8	D	0.17	39.8	D	0.33	44.1	D	0.14	39.2	D
13) Hillside Avenue (E-W) @ 180th Street/Midland Pkwy (SB	EB-L	0.98	91.6	F *	0.74	43.0	D	0.81	53.5	D	0.55	24.5	C
	EB-TR	0.65	11.6	B	0.50	9.1	A	0.61	10.7	B	0.42	8.2	A
	WB-TR	0.83	16.7	B	0.62	10.9	B	0.57	10.1	B	0.44	8.4	A
	SB-L	0.31	41.5	D	0.15	38.8	D	0.36	42.6	D	0.15	38.9	D
	SB-R	0.93	84.8	F *	0.49	47.0	D	0.66	54.2	D	0.37	43.7	D
14) 89th Avenue (WB) Sutphin Boulevard (N-S)	WB-LTR	0.77	34.0	C	0.71	29.8	C	0.74	30.7	C	0.45	21.2	C
	NB-LT	0.46	9.2	A	0.42	8.6	A	0.38	8.2	A	0.29	7.3	A
	SB-TR	0.57	10.9	B	0.42	8.6	A	0.52	9.9	A	0.36	7.9	A
15) 89th Avenue (WB) 150th Street (SB)	WB-LT	0.58	16.6	B	0.48	14.4	B	0.44	13.7	B	0.37	12.8	B
	SB-TR	0.60	17.3	B	0.42	13.7	B	0.50	15.0	B	0.38	13.1	B
16) 89th Avenue (WB) @ 153rd Street (NB)	WB-TR	0.44	13.6	B	0.32	12.1	B	0.31	12.0	B	0.35	12.4	B
	NB-LT	0.61	16.4	B	0.44	13.5	B	0.48	14.0	B	0.16	10.6	B
17) 89th Avenue (WB) @ Parsons Boulevard (N-S)	WB-LTR	0.58	23.3	C	0.50	21.3	C	0.52	21.4	C	0.59	22.8	C
	NB-LT	0.32	7.0	A	0.24	6.4	A	0.28	6.6	A	0.22	6.2	A
	SB-T	0.62	11.1	B	0.42	8.1	A	0.54	9.6	A	0.37	7.5	A
	SB-R	0.15	5.9	A	0.13	5.8	A	0.10	5.6	A	0.09	5.6	A
18) 89th Avenue (WB) @ 161st Street (NB)	WB-TR	0.40	13.0	B	0.27	11.5	B	0.32	12.0	B	0.32	12.0	B
	NB-LT	0.29	11.8	B	0.41	13.3	B	0.51	14.8	B	0.56	15.5	B
19) 89th Avenue (WB) @ 162nd Street (SB)	WB-LT	0.30	11.9	B	0.26	11.5	B	0.33	12.2	B	0.29	11.7	B
	SB-TR	0.42	13.4	B	0.31	12.0	B	0.43	13.4	B	0.33	12.3	B
20) 89th Avenue (WB) @ 163rd Street (NB)	WB-TR	0.32	12.3	B	0.33	12.3	B	0.39	13.0	B	0.32	12.1	B
	NB-LT	0.64	17.4	B	0.31	12.0	B	0.46	13.8	B	0.42	13.3	B
21) Jamaica Avenue (E-W) @ Van Wyck Expwy Southbound Service Road (SB)	EB-T	0.35	17.8	B	0.40	18.6	B	0.45	19.5	B	0.59	22.6	C
	EB-R	0.38	18.5	B	0.31	17.3	B	0.28	16.7	B	0.09	14.5	B
	WB-L	0.46	15.8	B	0.55	19.8	B	0.47	19.3	B	0.19	17.8	B
	WB-T	0.26	9.5	A	0.34	10.4	B	0.36	10.4	B	0.28	9.7	A
	SB-LTR	0.84	48.6	D	0.58	40.3	D	0.86	49.6	D	0.66	42.1	D
22) Jamaica Avenue (E-W) @ Van Wyck Expwy Northbound Service Road (NB)	EB-L	0.18	14.0	B	0.27	20.2	C	0.25	18.1	B	0.48	17.8	B
	EB-T	0.34	10.4	B	0.25	9.3	A	0.28	9.6	A	0.32	10.0	A
	WB-T	0.53	21.5	C	0.74	28.9	C	0.61	23.2	C	0.42	18.9	B
	WB-R	0.03	13.8	B	0.11	14.7	B	0.06	14.2	B	0.31	17.3	B
	NB-LTR	1.00	69.6	E *	1.01	71.5	E *	1.03	76.5	E *	0.55	39.5	D
23) Jamaica Avenue (E-W) @ Queens Boulevard (N-S)	EB-LT	0.67	29.2	C	0.61	27.4	C	0.60	26.9	C	0.36	22.0	C
	WB-T	0.49	25.2	C	0.72	32.7	C	0.59	27.5	C	0.44	24.0	C
	WB-R	0.28	21.5	C	0.27	21.2	C	0.22	20.3	C	0.15	19.5	B
	SB-L	0.25	20.7	C	0.19	19.9	B	0.35	22.3	C	0.10	18.8	B
	SB-R	0.11	18.9	B	0.16	19.5	B	0.23	20.5	C	0.19	20.0	B
24) Jamaica Avenue (E-W) @ Sutphin Boulevard (N-S)	EB-LTR	0.67	30.7	C	0.66	30.4	C	0.75	34.0	C	0.57	27.2	C
	WB-LTR	0.68	30.8	C	0.56	27.5	C	0.56	27.2	C	0.68	30.9	C
	NB-LTR	0.58	26.2	C	0.41	22.8	C	0.40	22.8	C	0.33	21.6	C
	SB-LTR	0.47	24.0	C	0.25	20.4	C	0.33	21.5	C	0.18	19.6	B
25) Jamaica Avenue (E-W) @ 150th Street (N-S)	EB-T	0.42	13.8	B	0.49	15.0	B	0.47	14.5	B	0.41	13.5	B
	EB-R	0.07	9.8	A	0.07	9.8	A	0.07	9.8	A	0.06	9.7	A
	WB-LT	0.98	53.9	D *	0.66	21.1	C	0.86	35.3	D	0.72	24.0	C
	NB-LR	0.97	93.9	F *	0.48	40.3	D	0.77	60.3	E *	0.39	37.4	D
	SB-LT	0.51	38.2	D	0.46	36.8	D	0.53	38.6	D	0.42	35.9	D
	SB-R	0.31	33.9	C	0.26	32.9	C	0.24	32.5	C	0.27	33.2	C

Abbreviations:

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound
L-Left, T-Through, R-Right, DfL-Defacto Left, E-W: East-West Roadway, N-S: North-South Roadway
V/C Ratio - Volume to Capacity Ratio
SEC/VEH - Seconds per Vehicle
LOS - Level of Service
* - Denotes Congested Location (LOS E or F, or v/c ratio > 0.90)

Table 16-2 (Continued): 2005 Existing Traffic Conditions at Signalized Intersections

Signalized Intersection	Lane Group	2005 Existing											
		Weekday AM Peak Hour			Weekday MD Peak Hour			Weekday PM Peak Hour			Saturday MD Peak Hour		
		V/C RATIO	DELAY (SEC/VEH)	LOS	V/C RATIO	DELAY (SEC/VEH)	LOS	V/C RATIO	DELAY (SEC/VEH)	LOS	V/C RATIO	DELAY (SEC/VEH)	LOS
26) Jamaica Avenue (E-W) @ Parsons Boulevard (N-S)	EB-L	0.37	22.3	C	0.30	17.9	B	0.24	17.6	B	0.16	16.2	B
	EB-T	0.64	25.3	C	0.54	21.2	C	0.55	22.4	C	0.55	22.3	C
	EB-R	0.16	15.8	B	0.10	14.3	B	0.15	15.7	B	0.09	14.9	B
	WB-L	0.30	19.6	B	0.23	17.0	B	0.24	18.0	B	0.54	26.8	C
	WB-T	0.85	37.7	D	0.56	22.4	C	0.54	22.3	C	0.48	21.0	C
	WB-R	0.19	16.3	B	0.15	15.1	B	0.12	15.4	B	0.12	15.4	B
	NB-LTR	0.15	28.4	C	0.15	29.0	C	0.21	29.3	C	0.25	29.8	C
	SB-LTR	0.67	39.1	D	0.56	36.1	D	0.68	39.2	D	0.68	39.6	D
27) Jamaica Avenue (E-W) @ 160th Street (NB)	EB-L	0.05	9.1	A	0.08	9.3	A	0.11	9.6	A	0.09	9.4	A
	EB-T	0.70	19.7	B	0.58	16.1	B	0.61	16.6	B	0.66	17.9	B
	WB-T	0.82	25.9	C	0.57	15.9	B	0.49	14.0	B	0.59	16.1	B
	WB-R	0.03	8.7	A	0.02	8.6	A	0.02	8.6	A	0.01	8.5	A
	NB-LTR	0.39	35.5	D	0.62	43.4	D	0.39	35.5	D	0.58	41.9	D
28) Jamaica Avenue (E-W) @ Union Hall / 162nd St (SB)	EB-T	0.60	16.0	B	0.54	18.7	B	0.56	14.8	B	0.63	20.8	C
	EB-R	0.07	8.6	A	0.09	12.1	B	0.09	8.8	A	0.10	12.2	B
	WB-T	1.01	58.9	E *	0.85	36.6	D	0.61	17.0	B	0.77	28.7	C
	SB-LTR	0.35	41.6	D	0.25	34.0	C	0.52	45.2	D	0.24	33.9	C
29) Jamaica Avenue (E-W) @ 163rd Street (NB) / Guy R Brewer (N-S)	EB-LT	0.52	12.2	B	0.41	10.4	B	0.43	10.6	B	0.46	11.1	B
	EB-R	0.11	7.6	A	0.13	7.7	A	0.22	8.6	A	0.14	7.8	A
	WB-LT	0.81	22.4	C	0.51	12.3	B	0.46	11.3	B	0.52	12.3	B
	WB-R	0.25	8.8	A	0.14	7.7	A	0.19	8.1	A	0.23	8.6	A
	NB-LTR	0.76	54.8	D	0.54	44.5	D	0.60	46.8	D	0.53	44.4	D
30) Jamaica Avenue (E-W) @ 164th Street (SB)	EB-T	0.49	9.5	A	0.42	10.6	B	0.54	20.3	C	0.52	12.0	B
	WB-T	0.87	23.6	C	0.48	11.7	B	0.57	21.2	C	0.58	13.3	B
	SB-L	0.32	43.3	D	0.37	40.3	D	0.25	27.0	C	0.42	41.5	D
	SB-R	0.28	43.2	D	0.46	43.7	D	0.32	28.6	C	0.45	43.6	D
31) Jamaica Avenue (E-W) @ 165th Street (SB)	EB-T	0.47	9.2	A	0.44	8.8	A	0.53	20.1	C	0.51	9.7	A
	EB-R	0.14	6.1	A	0.09	5.7	A	0.21	14.9	B	0.13	5.9	A
	WB-LT	0.80	18.9	B	0.45	9.1	A	0.59	21.9	C	0.55	10.5	B
	NB-LTR	0.44	45.2	D	0.32	42.8	D	0.31	27.8	C	0.23	41.1	D
32) Jamaica Avenue (E-W) @ Merrick Boulevard (SB)	EB-T	0.51	20.0	B	0.52	19.9	B	0.54	20.4	C	0.64	22.9	C
	EB-R	0.19	14.7	B	0.17	14.4	B	0.18	14.5	B	0.12	13.8	B
	WB-LT	0.97	53.7	D *	0.66	25.0	C	0.61	22.8	C	0.85	36.5	D
	SB-LTR	0.48	30.0	C	0.33	27.5	C	0.57	31.9	C	0.52	30.8	C
33) Jamaica Avenue (E-W) @ 180th Street	EB-TR	0.27	6.7	A	0.25	6.5	A	0.28	6.7	A	0.24	6.4	A
	WB-LT	0.58	9.9	A	0.32	7.1	A	0.41	7.9	A	0.38	7.6	A
	NB-LR	0.09	39.3	D	0.17	40.6	D	0.19	41.5	D	0.11	39.4	D
	SB-LTR	0.69	56.7	E *	0.25	41.5	D	0.66	54.8	D	0.43	45.7	D
34) Archer Avenue (E-W) @ Sutphin Boulevard (N-S)	EB-L	0.28	23.1	C	0.17	21.0	C	0.32	24.0	C	0.13	20.1	C
	EB-T	0.51	26.8	C	0.30	22.3	C	0.36	23.4	C	0.19	20.6	C
	EB-R	0.40	24.6	C	0.23	21.4	C	0.24	21.6	C	0.20	20.8	C
	WB-LT	0.65	33.6	C	0.52	27.4	C	0.62	30.9	C	0.46	25.5	C
	WB-R	0.20	21.0	C	0.17	20.5	C	0.21	21.1	C	0.15	20.3	C
	NB-LTR	0.75	26.5	C	0.54	20.6	C	0.48	19.7	B	0.44	19.0	B
	SB-LTR	0.47	19.1	B	0.27	16.5	B	0.42	18.4	B	0.23	16.1	B
35) Archer Avenue (E-W) @ 150th Street (N-S)	EB-LTR	0.61	23.2	C	0.45	19.2	B	0.69	26.0	C	0.44	18.9	B
	WB-L	0.99	75.8	E *	0.49	22.3	C	0.89	54.3	D	0.51	23.0	C
	WB-TR	0.51	20.8	C	0.37	18.0	B	0.41	18.7	B	0.43	18.8	B
	NB-LTR	0.54	22.0	C	0.25	17.2	B	0.40	19.3	B	0.22	16.8	B
	SB-LTR	0.51	27.6	C	0.47	27.2	C	0.61	30.1	C	0.56	29.2	C
36) Archer Avenue (E-W) @ Parsons Boulevard (N-S)	EB-L	0.44	17.6	B	0.33	14.1	B	0.57	21.2	C	0.57	20.6	C
	EB-T	0.72	20.7	C	0.51	15.4	B	0.57	16.5	B	0.47	14.6	B
	WB-T	0.43	13.2	B	0.28	11.7	B	0.37	12.5	B	0.34	12.2	B
	SB-L	0.50	27.1	C	0.40	25.0	C	0.58	28.7	C	0.56	28.3	C
	SB-R	0.40	24.5	C	0.29	22.8	C	0.32	23.2	C	0.24	22.1	C
37) Archer Avenue (E-W) @ 160th Street (NB)	EB-LT	1.03	59.1	E *	0.63	14.6	B	0.82	23.3	C	0.67	15.3	B
	EB-R	0.24	8.7	A	0.12	7.5	A	0.31	9.4	A	0.11	7.5	A
	WB-LTR	0.80	28.3	C	0.46	18.3	B	0.65	22.1	C	0.51	19.0	B
	NB-LTR	0.64	35.2	D	0.38	29.1	C	0.46	30.6	C	0.37	28.9	C
38) Archer Avenue (E-W) @ Union Hall Street (SB)	EB-T	0.87	30.4	C	0.58	16.6	B	0.71	20.6	C	0.64	18.0	B
	WB-T	0.47	13.9	B	0.52	15.5	B	0.44	13.4	B	0.59	16.9	B
	SB-LR	0.36	24.5	C	0.34	24.2	C	0.42	25.6	C	0.36	24.5	C

Abbreviations:

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound
L-Left, T-Through, R-Right, DfL-Defacto Left, E-W: East-West Roadway, N-S: North-South Roadway
V/C Ratio - Volume to Capacity Ratio
SEC/VEH - Seconds per Vehicle
LOS - Level of Service
* - Denotes Congested Location (LOS E or F, or v/c ratio > 0.90)

February 5, 2007

Table 16-2 (Continued): 2005 Existing Traffic Conditions at Signalized Intersections

Signalized Intersection	Lane Group	2005 Existing															
		Weekday AM Peak Hour				Weekday MD Peak Hour				Weekday PM Peak Hour				Saturday MD Peak Hour			
		V/C RATIO	DELAY (SEC/VEH)	LOS		V/C RATIO	DELAY (SEC/VEH)	LOS		V/C RATIO	DELAY (SEC/VEH)	LOS		V/C RATIO	DELAY (SEC/VEH)	LOS	
39) Archer Avenue (E-W) @ Guy R Brewer Boulevard (N-S)	EB-LTR	1.03	67.8	E	*	0.87	36.6	D		0.99	57.4	E	*	0.93	42.9	D	*
	WB-L	0.32	21.3	C		0.36	21.1	C		0.61	33.3	C		0.51	27.4	C	
	WB-TR	0.52	19.6	B		0.35	17.0	B		0.51	19.2	B		0.38	17.3	B	
	NB-LTR	0.93	52.9	D	*	0.54	23.1	C		0.81	36.6	D		0.68	28.5	C	
	SB-LTR	0.15	16.0	B		0.14	15.9	B		0.26	17.5	B		0.17	16.3	B	
40) Archer Avenue (E-W) @ 165th Street (N-S)	EB-LTR	1.01	62.5	E	*	0.72	26.4	C		0.96	51.7	D	*	1.01	63.3	E	*
	WB-LTR	0.66	22.7	C		0.44	18.2	B		0.66	22.6	C		0.94	50.9	D	*
	NB-LTR	0.16	16.3	B		0.19	16.7	B		0.19	16.8	B		0.35	19.0	B	
	SB-LTR	0.18	16.5	B		0.21	17.0	B		0.46	21.2	C		0.22	16.9	B	
41) Archer Avenue (E-W) @ Merrick Boulevard (SB)	EB-TR	0.57	20.3	C		0.47	18.7	B		0.61	21.4	C		0.56	20.0	B	
	WB-LT	0.80	28.8	C		0.56	20.7	C		1.02	62.5	E	*	WB-DfL 0.88	59.7	E	*
														WB-T 0.60	22.4	C	
	SB-LTR	0.49	19.8	B		0.33	17.7	B		0.53	20.4	C		0.48	19.6	B	
42) Atlantic Avenue (E-W) @ Van Wyck Expwy Southbound Service Road (SB)	EB-TR	0.57	26.2	C		0.40	23.8	C		0.52	25.5	C		0.61	26.9	C	
	WB-L	0.36	26.6	C		0.18	15.8	B		0.32	21.4	C		0.22	20.4	C	
	WB-LT	0.54	20.2	C		0.27	13.5	B		0.44	15.5	B		0.33	14.2	B	
	SB-LTR	0.80	25.0	C		0.77	27.2	C		1.01	51.0	D	*	0.73	26.2	C	
43) Atlantic Avenue (E-W) @ Van Wyck Expwy Northbound Service Road (NB)	EB-L	-DefL 0.70	32.9	C		0.55	23.0	C		EB-DfL 0.45	21.7	C		0.61	24.7	C	
	EB-T	0.42	18.7	B		0.29	13.7	B		0.39	15.2	B		0.33	14.1	B	
	WB-TR	0.68	33.1	C		0.45	30.8	C		0.79	41.8	D		0.43	30.4	C	
	NB-LTR	0.93	32.5	C	*	0.92	35.0	C	*	0.94	37.5	D	*	0.63	23.9	C	
44) 94th Avenue (E-W) @ Sutphin Boulevard (N-S)	EB-LR	0.38	17.9	B		0.42	18.4	B		0.37	17.6	B		0.42	18.4	B	
	WB-LTR	0.50	19.3	B		0.28	16.1	B		0.44	18.2	B		0.29	16.2	B	
	NB-LT	1.00	49.6	D	*	0.57	12.5	B		0.71	17.1	B		0.43	10.2	B	
	SB-TR	0.49	10.1	B		0.28	8.2	A		0.38	9.0	A		0.22	7.8	A	
45) 94th Avenue (WB) @ 150th Street (N-S)	WB-LTR	0.26	16.0	B		0.22	15.6	B		0.22	15.6	B		0.15	14.8	B	
	NB-LT	0.52	11.8	B		0.23	8.3	A		0.33	9.1	A		0.22	8.2	A	
	SB-TR	0.73	16.3	B		0.46	10.5	B		0.80	19.3	B		0.57	12.4	B	
46) Liberty Avenue (E-W) @ Sutphin Boulevard (N-S)	EB-L	0.85	56.7	E	*	0.43	18.9	B		0.88	71.0	E	*	0.48	21.0	C	
	EB-TR	0.76	18.6	B		0.43	13.0	B		0.49	13.7	B		0.44	13.2	B	
	WB-L	0.14	12.6	B		0.14	11.4	B		0.15	11.6	B		0.22	12.4	B	
	WB-TR	0.72	17.7	B		0.63	15.8	B		0.84	22.1	C		0.64	15.9	B	
	NB-LTR	0.59	15.5	B		0.32	12.1	B		0.42	13.2	B		0.75	23.3	C	
	SB-LTR	0.50	15.1	B		0.45	14.1	B		0.82	25.2	C		0.54	15.4	B	
47) Liberty Avenue (E-W) @ 150th Street (N-S)	EB-L	0.36	12.5	B		0.14	8.1	A		0.26	10.2	B		0.13	8.0	A	
	EB-TR	0.53	10.4	B		0.38	9.0	A		0.47	9.8	A		0.46	9.7	A	
	WB-L	0.03	7.0	A		0.08	7.4	A		0.10	7.7	A		0.09	7.6	A	
	WB-TR	0.57	11.0	B		0.45	9.6	A		0.54	10.6	B		0.48	9.9	A	
	NB-LTR	1.01	62.3	E	*	0.48	19.6	B		0.72	27.4	C		0.46	19.2	B	
	SB-LTR	0.94	49.2	D	*	0.46	18.5	B		0.83	32.3	C		0.75	26.5	C	
48) Liberty Avenue (E-W) @ Guy R. Brewer Boulevard (N-S)	EB-L	0.77	52.3	D		0.25	13.8	B		0.53	28.6	C		0.15	11.8	B	
	EB-TR	0.67	16.5	B		0.52	14.0	B		0.75	18.3	B		0.65	16.1	B	
	WB-L	0.20	13.3	B		0.15	11.8	B		0.24	15.1	B		0.26	14.7	B	
	WB-TR	0.97	34.6	C	*	0.54	14.3	B		0.79	19.8	B		0.48	13.5	B	
	NB-LTR	0.94	45.5	D	*	0.49	15.5	B		0.77	26.9	C		0.69	21.2	C	
	SB-L	0.09	10.7	B		0.09	10.6	B		0.19	11.7	B		0.17	11.6	B	
	SB-TR	0.49	15.5	B		0.52	16.2	B		0.78	24.9	C		0.51	15.9	B	
49) Liberty Avenue (E-W) @ Merrick Boulevard (SB)	EB-T	0.53	14.5	B		0.33	12.1	B		0.52	14.4	B		0.55	14.8	B	
	EB-R	0.31	12.5	B		0.14	10.7	B		0.39	13.5	B		0.34	12.8	B	
	WB-L	0.37	16.8	B		0.28	13.2	B		0.51	21.3	C		0.39	17.7	B	
	WB-T	0.65	16.6	B		0.31	11.9	B		0.50	14.1	B		0.44	13.3	B	
	SB-LTR	0.99	56.1	E	*	0.71	30.6	C		1.01	61.2	E	*	1.01	62.9	E	*
50) Liberty Avenue (E-W) @ Dunkirk Street	EB-T	0.63	13.3	B		0.42	9.9	A		0.69	14.6	B		0.55	11.7	B	
	EB-R	0.31	9.0	A		0.27	8.7	A		0.75	17.8	B		0.38	9.8	A	
	WB-LT	0.75	16.6	B		0.40	9.7	A		0.50	10.9	B		0.52	11.3	B	
	NB-L	1.04	68.2	E	*	0.41	17.8	B		0.54	20.1	C		0.57	20.9	C	
	NB-R	0.03	13.7	B		0.01	13.5	B		0.03	13.7	B		0.01	13.6	B	

Abbreviations:

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound
L-Left, T-Through, R-Right, DfL-Defacto Left, E-W: East-West Roadway, N-S: North-South Roadway
V/C Ratio - Volume to Capacity Ratio
SEC/VEH - Seconds per Vehicle
LOS - Level of Service
* - Denotes Congested Location (LOS E or F, or v/c ratio > 0.90)

Table 16-2 (Continued): 2005 Existing Traffic Conditions at Signalized Intersections

Signalized Intersection	Lane Group	2005 Existing											
		Weekday AM Peak Hour			Weekday MD Peak Hour			Weekday PM Peak Hour			Saturday MD Peak Hour		
		V/C RATIO	DELAY (SEC/VEH)	LOS	V/C RATIO	DELAY (SEC/VEH)	LOS	V/C RATIO	DELAY (SEC/VEH)	LOS	V/C RATIO	DELAY (SEC/VEH)	LOS
51) South Road (E-W) @	EB-LTR	0.79	31.0	C	0.54	20.9	C	0.65	24.0	C	0.46	19.1	B
Guy R Brewer Boulevard (N-S)	WB-LTR	0.35	17.0	B	0.26	15.9	B	0.50	19.5	B	0.32	16.6	B
	NB-LTR	0.76	19.4	B	0.41	10.3	B	0.59	13.4	B	0.47	10.8	B
	SB-LTR	0.65	15.0	B	0.53	12.0	B	0.77	19.1	B	0.56	12.6	B
52) 107th Avenue (E-W) @	EB-LTR	0.08	14.2	B	0.11	14.6	B	0.08	14.2	B	0.07	14.2	B
Guy R Brewer Boulevard (N-S)	WB-LTR	0.06	14.0	B	0.07	14.2	B	0.08	14.2	B	0.04	13.9	B
	NB-LTR	0.66	14.7	B	0.37	9.5	A	0.53	11.7	B	0.45	10.5	B
	SB-LTR	0.50	11.5	B	0.47	10.9	B	0.64	14.0	B	0.55	12.2	B
53) 108th Avenue (E-W) @	EB-LTR	0.45	31.7	C	0.31	28.4	C	0.43	30.9	C	0.37	29.4	C
Merrick Boulevard (N-S)	WB-LTR	0.52	33.6	C	0.55	34.6	C	0.47	32.1	C	0.34	28.6	C
	NB-L	0.20	8.8	A	0.06	7.3	A	0.12	8.1	A	0.10	7.9	A
	NB-TR	0.67	13.5	B	0.31	8.8	A	0.44	10.1	B	0.35	9.2	A
	SB-L	0.11	8.4	A	0.04	7.2	A	0.03	7.1	A	0.04	7.2	A
	SB-TR	0.34	9.1	A	0.32	8.9	A	0.46	10.3	B	0.41	9.8	A

Abbreviations:

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound
L-Left, T-Through, R-Right, DfL-Defacto Left, E-W: East-West Roadway, N-S: North-South Roadway
V/C Ratio - Volume to Capacity Ratio
SEC/VEH - Seconds per Vehicle
LOS - Level of Service
* - Denotes Congested Location (LOS E or F, or v/c ratio > 0.90)

February 5, 2007

movements at the Van Wyck Expressway southbound service road (westbound left turn), Queens Boulevard (northbound through-right turn), 148th Street (northbound approach), 150th Street (eastbound left turn and southbound approach), Parsons Boulevard (eastbound left turn, westbound through-right turn, and northbound through lane groups), 162nd Street (southbound approach), 178th Street (northbound approach) and 180th Street/Midland Parkway (eastbound left turn and southbound right turn). Signal timing generally favors the east-west movement, and therefore, congested conditions typically occur on the northbound or southbound approaches or on the eastbound or westbound left turning movements.

In the PM peak hour, there are three intersections with congestion: the Van Wyck Expressway southbound service road (westbound left turn), Queens Boulevard (eastbound left turn), and 178th Street (northbound approach).

In the weekday midday peak hour, intersections with congestion decrease to three as traffic volumes decrease. Congestion occurs at Queens Boulevard (eastbound left turn), Sutphin Boulevard (northbound left turn), and 148th Street (northbound approach). In the Saturday midday peak hour, only the intersection at 178th Street has congestion (northbound approach).

89th Avenue Corridor

89th Avenue is a residential westbound road within the center of the Jamaica core and is lightly traveled with no congested locations in any peak hour.

Jamaica Avenue Corridor

Jamaica Avenue is a primary commercial street through the traffic study area populated with retail establishments. Many bus routes also use Jamaica Avenue, with the curb lanes reserved for buses between 168th Street and Parsons Boulevard in each direction from 4 to 7 PM every day. During other hours, street regulations specify no parking on the curb lanes but standing is prevalent. The bus lane reduces bus traffic from the general traffic lanes during the PM peak hour, which reduces congestion.

In the AM peak hour, there are five intersections with congested conditions. The congested locations occur principally in the westbound direction, the primary flow of traffic in the AM peak hour. Congestion occurs at the Van Wyck Expressway northbound service road (northbound approach), 150th Street (northbound and westbound approaches), Union Hall Street/162nd Street (westbound approach), Merrick Boulevard (westbound approach), and 180th Street (southbound approach).

In the midday peak hour, the only congested intersection is the Van Wyck Expressway northbound service road, where midday construction causes congestion along the mainline of the highway. Northbound highway traffic tends to divert to the service road. The northbound approach is congested at the northbound service road.

PM peak hour congestion occurs at the western side of the Jamaica Avenue corridor where the bus lane does not exist. Congestion occurs at the Van Wyck Expressway northbound service road (northbound approach), and 150th Street (northbound approach).

There are no congested locations during the Saturday midday peak hour.

Archer Avenue Corridor

There is congestion within the Archer Avenue corridor during all peak hours except for the weekday midday peak hour. Archer Avenue is a major bus route with a bus hub located at

Parsons Boulevard at the Jamaica Center E, J and Z subway terminal. In the AM peak hour, congestion occurs at 150th Street (westbound left turn movement), 160th Street (eastbound through and left turn lane group), Guy R. Brewer Boulevard (eastbound and northbound approaches), and 165th Street (eastbound approach). There is congestion at Guy R. Brewer Boulevard (eastbound approach) and Merrick Boulevard (westbound left lane) during the PM and Saturday midday peak hour. Congestion at 165th Street occurs during the PM (eastbound approach), and Saturday midday (east and west approaches) peak hours.

Atlantic Avenue/94th Avenue Corridor

Along Atlantic Avenue and 94th Avenue there is congestion at 3 of the 4 intersections. The intersection with the Van Wyck Expressway southbound service road is congested at the southbound approach during the PM peak hour. The intersection with the Van Wyck Expressway northbound service road is congested during all peak hours, except the Saturday midday peak hour, at the northbound approach. There is congestion at the intersection with Sutphin Boulevard during the AM peak hour (northbound approach) as vehicles enter Downtown Jamaica.

Liberty Avenue Corridor

Liberty Avenue is a primary east-west connector along the south boundary of the traffic study area, providing access to York College between 157th Street and 165th Street. This corridor has intersections with congestion during the AM peak hour at Sutphin Boulevard (eastbound left turn lane), 150th Street (northbound and southbound approaches), Guy R. Brewer Boulevard (westbound through and left turn lane group and the northbound approach), Merrick Boulevard (southbound approach), and Dunkirk Street (northbound left turn). There are no intersections with congestion during the weekday midday peak hour, but there are two intersections with congestion during the PM peak hour. In the PM peak hour, intersections with congestion include Sutphin Boulevard (eastbound left turn), and Merrick Boulevard (southbound approach). Only the southbound approach at Merrick Boulevard is congested during the Saturday midday peak hour.

Other Non-Corridor Locations

There are three remaining intersections that are not located on any of the above-defined corridors. These intersections are South Road at Guy R. Brewer Boulevard, 107th Avenue at Guy R. Brewer Boulevard and 108th Avenue at Merrick Boulevard. None of these intersections experience existing congestion in any peak hour.

Unsignalized Intersection

As shown in Table 16-3, the only unsignalized intersection analyzed (Jamaica Avenue at 178th Street) experiences congestion at the northbound approach during the AM peak hour.

PARKING

Off-street and on-street parking is available within the area affected by the proposed actions. Inventories of all off-street parking lots and garages, and all on-street metered parking were conducted. The parking study areas were divided into four zones by the relative density of development in the area (see Figure 16-6). Because the area affected by the proposed actions is so large, a study of the entire area as one parking study area may not disclose localized parking deficits. The region of the highest density is in the core of Downtown Jamaica, generally bounded by the Hillside Avenue to the north, the Van Wyck Expressway to the west, Archer

Table 16-3: 2005 Existing Traffic Conditions at Unsignalized Intersections

Unsignalized Intersection	Lane Group	2005 Existing											
		Weekday AM Peak Hour			Weekday MD Peak Hour			Weekday PM Peak Hour			Saturday MD Peak Hour		
		V/C RATIO	DELAY (SEC/VEH)	LOS	V/C RATIO	DELAY (SEC/VEH)	LOS	V/C RATIO	DELAY (SEC/VEH)	LOS	V/C RATIO	DELAY (SEC/VEH)	LOS
54) Jamaica Avenue (E-W) @ 178th Street (SB)	EB-LT	0.16	12.8	B	0.03	8.7	A	0.04	8.6	A	0.10	9.8	A
	WB-LT	0.03	8.6	A	0.03	9.1	A	0.06	9.1	A	0.02	8.4	A
	NB-LT	0.50	55.4	F *	0.13	17.8	C	0.17	20.3	C	0.20	25.4	D
	NB-TR	0.51	46.9	E *	0.10	15.5	C	0.18	18.4	C	0.22	20.4	C

Abbreviations

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound

L-Left, T-Through, R-Right, DefL-Dfacto Left, E-W: East-West Roadway, N-S: North-South Roadway

V/C Ratio - Volume to Capacity Ratio

SEC/VEH - Seconds per Vehicle

LOS - Level of Service

* - Denotes Congested Location (LOS E or F, or v/c ratio > 0.90)

February 5, 2007

Avenue to the south, and 168th Street to the east. The Hillside Avenue (East) corridor encompasses Hillside Avenue east of 168th Street to 190th Street, and is generally commercial but less dense. The two remaining corridors are also lower density commercial corridors. The Jamaica Avenue (East) corridor consists of Jamaica Avenue between 168th Street and 178th Place. The Sutphin Boulevard (South) corridor includes the areas on Sutphin Boulevard between Archer Avenue and Liberty Avenue. The boundaries of these study area zones were also established based on the locations of existing public parking facilities, and metered parking spaces.

OFF-STREET PARKING

Off-street parking lots and garages within a quarter-mile radius of the boundaries of the area affected by the proposed actions were assessed in the NYCDCP report[1]; surveys were conducted in August 2003 with updates in May and June 2005. As shown in Table 16-4 and Figure 16-6, there are 15 off-street public parking facilities in operation within the Downtown Jamaica Core. They provide the zone with 5,245 parking spaces during the day, operating at 45% (2,383 spaces occupied) of their licensed capacity during the AM period and 83% (4,354 spaces occupied) of their licensed capacity during the midday period. Overnight, 41% (1,426 spaces) of the 3,472 available spaces are occupied. Within the Hillside (East) corridor, there are seven off-street parking facilities. These facilities provide 557 spaces during the AM period, 894 spaces during the midday period and 291 spaces overnight. The utilization rate for AM, midday and overnight hours are 60% (332 spaces occupied), 61% (543 spaces occupied) and 46% (135 spaces occupied), respectively. Three off-street parking facilities serve the Sutphin Boulevard (South) corridor. They supply the zone with 160 parking spaces during the AM peak hour, 64% (103 spaces occupied) of which are occupied. Off street parking is at capacity in this region during midday peak hours using all 160 of the 160 available spaces. Only 10% (4 spaces occupied) of the 40 available are occupied overnight. The Jamaica Avenue (East) corridor has no off-street parking facilities.

Overall, the peak weekday utilization levels of these parking facilities typically occur during the midday. There are 25 open public off-street parking facilities within the area affected by the proposed actions that have a total capacity of 6,299 spaces. During the midday there is an overall utilization rate of 80 percent (5,057 spaces occupied), leaving an average of approximately 1,242 available spaces. During the AM period as workers and visitors begin arriving in Downtown Jamaica, 22 facilities are open with a total capacity of 5,962 spaces and an overall utilization of 47%. Overnight, many of the public parking facilities are closed. Throughout the study area only, 9 facilities are open overnight with a total capacity of 3,803 spaces and utilization rate of 41 percent.

ON-STREET PARKING

Curbside parking regulations within the area affected by the proposed actions were surveyed by the NYCDCP in 2003[2] and are shown in Figure 1(a-f) in Appendix H. There are a variety of parking regulations within the area affected by the proposed actions. A combination of 168

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

[2] New York City Department of City Planning, *Jamaica Parking, Public Transportation and Pedestrian Study: Technical Memorandum 3: Existing Conditions,* January 27, 2006.

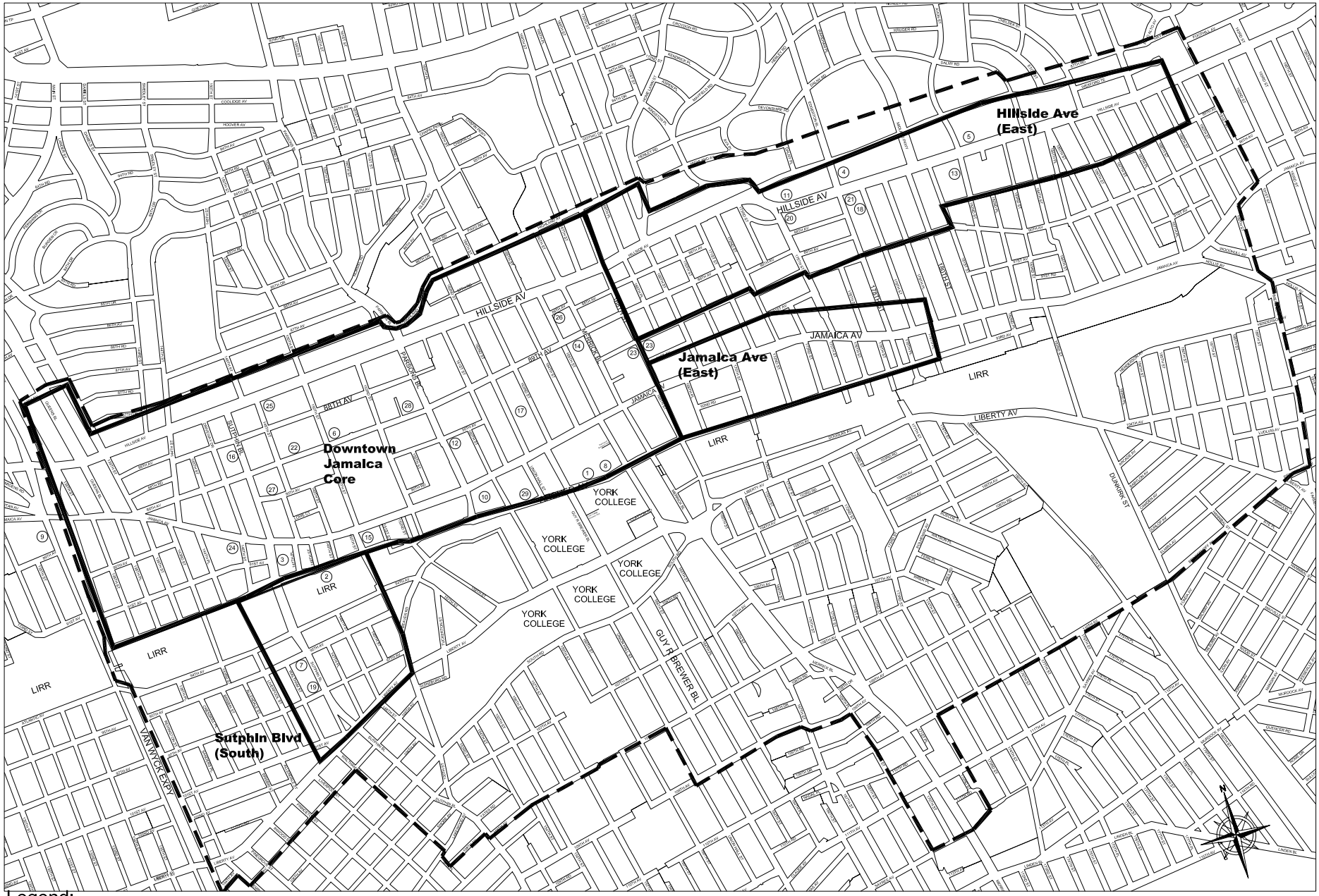
Table 16-4
2005 Existing Off-Street Parking Utilization

Map No.	Name	Address	License Number	Weekday AM			Weekday Midday			Overnight		
				Licensed Capacity	Utilization Rate	Spaces Occupied	Licensed Capacity	Utilization Rate	Spaces Occupied	Licensed Capacity	Utilization Rate	Spaces Occupied
DOWNTOWN JAMAICA CORE												
1	KINNEY SYSTEM/GERTZ PLAZA GARAGE	163-27 ARCHER AVE.	0915055	730	80%	584	730	75%	548	730	20%	146
3a	IQBAL, SHAKIL	92-15 147 PL.	1135835	50	60%	30	50	100%	50		Closed	
3b	IQBAL, SHAKIL	92-15 147 PL.	1136119	50	60%	30	50	100%	50		Closed	
6	CENTRAL PARKING MANAGEMENT	150-01 89 AVE.	0992399	358	90%	322	358	100%	358	358	50%	179
8	CENTRAL PARKING SYSTEM	92-30 165 ST.	1078956	601	40%	240	601	100%	601		Closed	
9	CENTRAL PARKING SYSTEM OF NY INC.	88-06 VAN WYCK EXPWY.	1101579	990	20%	198	990	60%	594	990	75%	743
10	CENTRAL PARKING SYSTEM OF NY INC.	159-02 JAMAICA BLVD.	1110046	351	100%	351	351	105%	369	351	33%	116
12	CENTRAL PARKING SYSTEM OF NY INC.	90-15 PARSONS BLVD.	1171222	499	50%	250	499	100%	499	499	30%	150
14	THE COLOSSEUM INC.	89-02 165 ST.	0364014	250	10%	25	250	70%	175		Closed	
15	FAMILY COURT	150-07 ARCHER AVE.	Municipal	112	20%	22	112	100%	112		Closed	
16a	COURT PARKING	88-22 SUTPHIN BLVD.	1103760	99	75%	74	99	80%	79		Closed	
16b	SUPREME COURT PARK	88-02 SUTPHIN BLVD.	1103759	52	75%	39	52	100%	52		Closed	
17	CENTRAL PARKING MANAGEMENT	89-55 162 ST./89-44 163 ST.	0836261	400	5%	20	400	50%	200		Closed	
22	GB PARKING	148-15 89 AVE.	1003796	78	30%	23	78	55%	43		Closed	
23a	CENTRAL PARKING SYSTEM OF NY INC.	90-02 168 ST.	1102881	291	17%	49	291	100%	291	291	17%	49
23b	CENTRAL PARKING SYSTEM OF NY INC.	90-01 168 ST.	1102882	253	17%	43	253	100%	253	253	17%	43
24	SOGE ASSOCIATES	145-20 JAMAICA AVE.	0767674	56	100%	56	56	100%	56		Closed	
25	MAJORS PARKING	88-03 148 ST.	N/A	25	100%	25	25	100%	25		Closed	
26	PJ PARKING	88-35 165 ST.	0835198	270	Closed		270	Closed		270	Closed	
27	QUEENS CIVIL COURT	89-17 SUTPHIN BLVD.	Municipal	230	Closed		230	Closed		230	Closed	
28	A&K PARKING SYSTEM	153-33 89 AVE.	0919232	25	Closed		25	Closed		25	Closed	
29	SAFE PARKING	160-17 ARCHER AVE.	1203411	50	Closed		50	Closed		50	Closed	
				5,245	45%	2,383	5,245	83%	4,354	3,472	41%	1,426
HILLSIDE AVENUE (EAST) CORRIDOR												
4	LA MIRAGE CAR PARK INC.	178-10 WEXFORD TERR.	0976779	148	50%	74	148	20%	30	148	33%	49
5a	WILSHIRE CAR PARK INC.	182-30 WEXFORD TERR.	0976815		Closed		204	70%	143		Closed	
5b	WILSHIRE CAR PARK INC.	183-03 HILLSIDE AVE.	0976816		Closed		65	50%	33		Closed	
5c	WILSHIRE CAR PARK INC.	183-03 HILLSIDE AVE.	0368489		Closed		68	60%	41		Closed	
11	WEXFORD OPERATING LLC	175-11 HILLSIDE AVE.	1126866	143	75%	107	143	66%	94	143	60%	86
13	H.S.N.D. PARKING	88-22 182 ST.	1017059	50	40%	20	50	20%	10		Closed	
18	HILLSIDE MGT. CORP.	179-18 HILLSIDE AVE.	0972208	22	65%	14	22	200%	44		Closed	
20	PAK. PARKING	175-10 HILLSIDE AVE.	1001946	65	50%	33	65	80%	52		Closed	
21	QQI INC.	178-02 HILLSIDE AVE.	0974321	129	65%	84	129	75%	97		Closed	
				557	60%	332	894	61%	543	291	46%	135
SUTPHIN BOULEVARD (SOUTH) CORRIDOR												
2	ELIE JOSEPH	148-22 ARCHER AVE.	0906022	50	75%	38	50	100%	50		Closed	
7	CG PARKING	95-02 SUTPHIN BLVD.	1103015	70	50%	35	70	100%	70		Closed	
19	SOUTH SIDE PARKING SYSTEM	145-11 97TH AVE.	1075313	40	75%	30	40	100%	40	40	10%	4
				160	64%	103	160	100%	160	40	10%	4
JAMAICA AVENUE (EAST) CORRIDOR												
	No Off-Street Public Parking Facilities											
			TOTAL*	**5,962**	**47%**	**2,817**	**6,299**	**80%**	**5,057**	**3,803**	**41%**	**1,564**

Sources: (1) NYCDCP, *Jamaica Parking, Public Transportation and Pedestrian Study: Technical Memorandum 3: Existing Conditions* , January 27, 2006. Field surveys in the report conducted in August 2003 and updated May/June 2005.
(2) NYCDCP Field surveys conducted August 2003 and updated May/June 2005.

Note: * - Closed facilities not included in parking capacity, utilization, nor spaces occupied.

February 5, 2007



Legend:

- - - - Area Affected by the Proposed Actions
——— - Parking Study Area Boundaries
⑮ - Parking Facility Number

Jamaica Plan EIS

Off-Street Parking Study Areas
Figure 16-6

Table 16-4
2005 Existing Off-Street Parking Utilization

				Weekday AM			Weekday Midday			Overnight		
Map No.	Name	Address	License Number	Licensed Capacity	Utilization Rate	Spaces Occupied	Licensed Capacity	Utilization Rate	Spaces Occupied	Licensed Capacity	Utilization Rate	Spaces Occupied
DOWNTOWN JAMAICA CORE												
1	KINNEY SYSTEM/GERTZ PLAZA GARAGE	163-27 ARCHER AVE.	0915055	730	80%	584	730	75%	548	730	20%	146
3a	IQBAL, SHAKIL	92-15 147 PL.	1135835	50	60%	30	50	100%	50		Closed	
3b	IQBAL, SHAKIL	92-15 147 PL.	1136119	50	60%	30	50	100%	50		Closed	
6	CENTRAL PARKING MANAGEMENT	150-01 89 AVE.	0992399	358	90%	322	358	100%	358	358	50%	179
8	CENTRAL PARKING SYSTEM	92-30 165 ST.	1078956	601	40%	240	601	100%	601		Closed	
9	CENTRAL PARKING SYSTEM OF NY INC.	88-06 VAN WYCK EXPWY.	1101579	990	20%	198	990	60%	594	990	75%	743
10	CENTRAL PARKING SYSTEM OF NY INC.	159-02 JAMAICA BLVD.	1110046	351	100%	351	351	105%	369	351	33%	116
12	CENTRAL PARKING SYSTEM OF NY INC.	90-15 PARSONS BLVD.	1171222	499	50%	250	499	100%	499	499	30%	150
14	THE COLOSSEUM INC.	89-02 165 ST.	0364014	250	10%	25	250	70%	175		Closed	
15	FAMILY COURT	150-07 ARCHER AVE.	Municipal	112	20%	22	112	100%	112		Closed	
16a	COURT PARKING	88-22 SUTPHIN BLVD.	1103760	99	75%	74	99	80%	79		Closed	
16b	SUPREME COURT PARK	88-02 SUTPHIN BLVD.	1103759	52	75%	39	52	100%	52		Closed	
17	CENTRAL PARKING MANAGEMENT	89-55 162 ST./89-44 163 ST.	0836261	400	5%	20	400	50%	200		Closed	
22	GB PARKING	148-15 89 AVE.	1003796	78	30%	23	78	55%	43		Closed	
23a	CENTRAL PARKING SYSTEM OF NY INC.	90-02 168 ST.	1102881	291	17%	49	291	100%	291	291	17%	49
23b	CENTRAL PARKING SYSTEM OF NY INC.	90-01 168 ST.	1102882	253	17%	43	253	100%	253	253	17%	43
24	SOGE ASSOCIATES	145-20 JAMAICA AVE.	0767674	56	100%	56	56	100%	56		Closed	
25	MAJORS PARKING	88-03 148 ST.	N/A	25	100%	25	25	100%	25		Closed	
26	PJ PARKING	88-35 165 ST.	0835198	270	Closed		270	Closed		270	Closed	
27	QUEENS CIVIL COURT	89-17 SUTPHIN BLVD.	Municipal	230	Closed		230	Closed		230	Closed	
28	A&K PARKING SYSTEM	153-33 89 AVE.	0919232	25	Closed		25	Closed		25	Closed	
29	SAFE PARKING	160-17 ARCHER AVE.	1203411	50	Closed		50	Closed		50	Closed	
				5,245	45%	2,383	5,245	83%	4,354	3,472	41%	1,426
HILLSIDE AVENUE (EAST) CORRIDOR												
4	LA MIRAGE CAR PARK INC.	178-10 WEXFORD TERR.	0976779	148	50%	74	148	20%	30	148	33%	49
5a	WILSHIRE CAR PARK INC.	182-30 WEXFORD TERR.	0976815		Closed		204	70%	143		Closed	
5b	WILSHIRE CAR PARK INC.	183-03 HILLSIDE AVE.	0976816		Closed		65	50%	33		Closed	
5c	WILSHIRE CAR PARK INC.	183-03 HILLSIDE AVE.	0368489		Closed		68	60%	41		Closed	
11	WEXFORD OPERATING LLC	175-11 HILLSIDE AVE.	1126866	143	75%	107	143	66%	94	143	60%	86
13	H.S.N.D. PARKING	88-22 182 ST.	1017059	50	40%	20	50	20%	10		Closed	
18	HILLSIDE MGT. CORP.	179-18 HILLSIDE AVE.	0972208	22	65%	14	22	200%	44		Closed	
20	PAK. PARKING	175-10 HILLSIDE AVE.	1001946	65	50%	33	65	80%	52		Closed	
21	QQI INC.	178-02 HILLSIDE AVE.	0974321	129	65%	84	129	75%	97		Closed	
				557	60%	332	894	61%	543	291	46%	135
SUTPHIN BOULEVARD (SOUTH) CORRIDOR												
2	ELIE JOSEPH	148-22 ARCHER AVE.	0906022	50	75%	38	50	100%	50		Closed	
7	CG PARKING	95-02 SUTPHIN BLVD.	1103015	70	50%	35	70	100%	70		Closed	
19	SOUTH SIDE PARKING SYSTEM	145-11 97TH AVE.	1075313	40	75%	30	40	100%	40	40	10%	4
				160	64%	103	160	100%	160	40	10%	4
JAMAICA AVENUE (EAST) CORRIDOR												
	No Off-Street Public Parking Facilities											
			TOTAL*	**5,962**	**47%**	**2,817**	**6,299**	**80%**	**5,057**	**3,803**	**41%**	**1,564**

Sources: (1) NYCDCP, *Jamaica Parking, Public Transportation and Pedestrian Study: Technical Memorandum 3: Existing Conditions* , January 27, 2006. Field surveys in the report conducted in August 2003 and updated May/June 2005.
(2) NYCDCP Field surveys conducted August 2003 and updated May/June 2005.
Note: * - Closed facilities not included in parking capacity, utilization, nor spaces occupied.

February 5, 2007

different types of parking regulations, standing regulations, authorized parking restrictions, meter regulations and miscellaneous restrictions (mostly related to bus stops and bus lanes) spread over much of the area's curb space, as shown in Table 1 in Appendix H. The majority of these restrictions lie to the north of the Long Island Rail Road; only 94th Avenue, Sutphin Boulevard, South Avenue, Liberty Avenue, 150th Street, Merrick Boulevard and Dunkirk Street have significant parking regulations south of the LIRR, and almost every curbside in the study area to the north of the LIRR has some type of restriction.

The most restrictive parking regulations lie along or closest to major streets. Sutphin Boulevard in the Courthouse area (at 89th Avenue) has "No Standing" regulations where bus stops are located, along with general "No Standing Anytime" regulations. (Hillside Avenue also has these restrictions.) A "No Standing 8:00 AM-6:00 PM Except for Authorized Vehicles" restriction also exists along both Sutphin Boulevard and 90th Avenue.

Parsons Boulevard has very restrictive parking regulations with almost no standing or parking allowed between Hillside and Archer avenues. Jamaica Avenue, while marginally less parking-constrained than Parsons Boulevard, has numerous bus stop no standing zones and absolute peak-hour parking prohibitions. No parking is permitted during the day between Parsons Boulevard and 168th Street, and the curb lanes are reserved for buses and right turning vehicles from 4 to 7 PM. It does, however, have metered parking elsewhere.

Almost no parking or standing exists on Archer Avenue between 150th and 168th streets, given its central role as a bus corridor and intermodal terminal. Parking and standing are almost as heavily restricted on Archer Avenue between 139th and 148th streets.

Hillside Avenue has numerous different parking and standing regulations, which vary depending on the segment, and also has an eastbound bus lane from 168th Place through the parking study area limits at 189th Street. Only buses and right turning vehicles may use this lane from 7 to 9 AM (north curb) and 4:00 PM to 7:00 PM (south curb) weekdays; parked vehicles blocking the lane during those intervals are subject to being towed.

A significant portion of 89th Avenue – from 153rd to 168th streets – has a no parking anytime restriction. Mary Immaculate Hospital, the Colosseum Mall, and the 165th Street Bus Terminal/pedestrian mall all abut 89th Avenue.

On side streets, the familiar alternate-side-of-the-street parking pattern to facilitate street cleaning exists in many locations, but more restrictive regulations are interspersed where needed.

Night regulations are also common. Sutphin Boulevard, Jamaica Avenue and Merrick Boulevard all have midnight-3:00 AM parking restrictions (for either Mondays, Wednesdays and Fridays or Tuesdays, Thursdays and Saturdays).

Metered Parking

The analysis in this FEIS only inventories on-street parking spaces at parking meters during the peak weekday midday period. For analysis purposes, all parking spaces not at meters were considered to not be available to accommodate the parking demand due to the proposed actions. A field survey of the weekday utilization of weekday midday on-street metered parking was conducted on March 23, 2006.

A total of 1,255 metered spaces were identified in the area affected by the proposed actions. With the exception of Sutphin Boulevard and a few parking meters on 94th and 95th Avenues, no metered parking exists in the study area south of the Long Island Rail Road.

Sutphin Boulevard, Hillside Avenue and Jamaica Avenue have large concentrations of meters, and a significant quantity of the study area's parking meters is along adjacent side streets.

Figures 16-7A and 16-7B show the locations of the curbside metered parking spaces in each parking study area zone, the number of parking spaces occupied and the number of total parking spaces. Table 16-5 provides a summary of the midday on-street metered parking utilization within each zone. As presented in the table, 91% (878 spaces) of 967 metered spaces are occupied in the Downtown Jamaica Core zone. In the Hillside Avenue (East) corridor, 83% (106 spaces) of 127 metered spaces are occupied. The Jamaica Avenue (East) corridor is at capacity with 97 out of 98 spaces occupied (99%). Along the Sutphin Boulevard (South) corridor, 95% (60 spaces) of 63 metered spaces are occupied.

Table 16-5
2005 Weekday Midday On-Street Metered Parking Utilization

Parking Study Area Zones	Total Metered Spaces	Percent Occupied	Spaces Occupied
Downtown Jamaica Core	967	91%	878
Hillside Avenue (East) Corridor	127	83%	106
Jamaica Avenue (East) Corridor	98	99%	97
Sutphin Boulevard (South) Corridor	63	95%	60
Total	**1,255**	**91%**	**1,141**

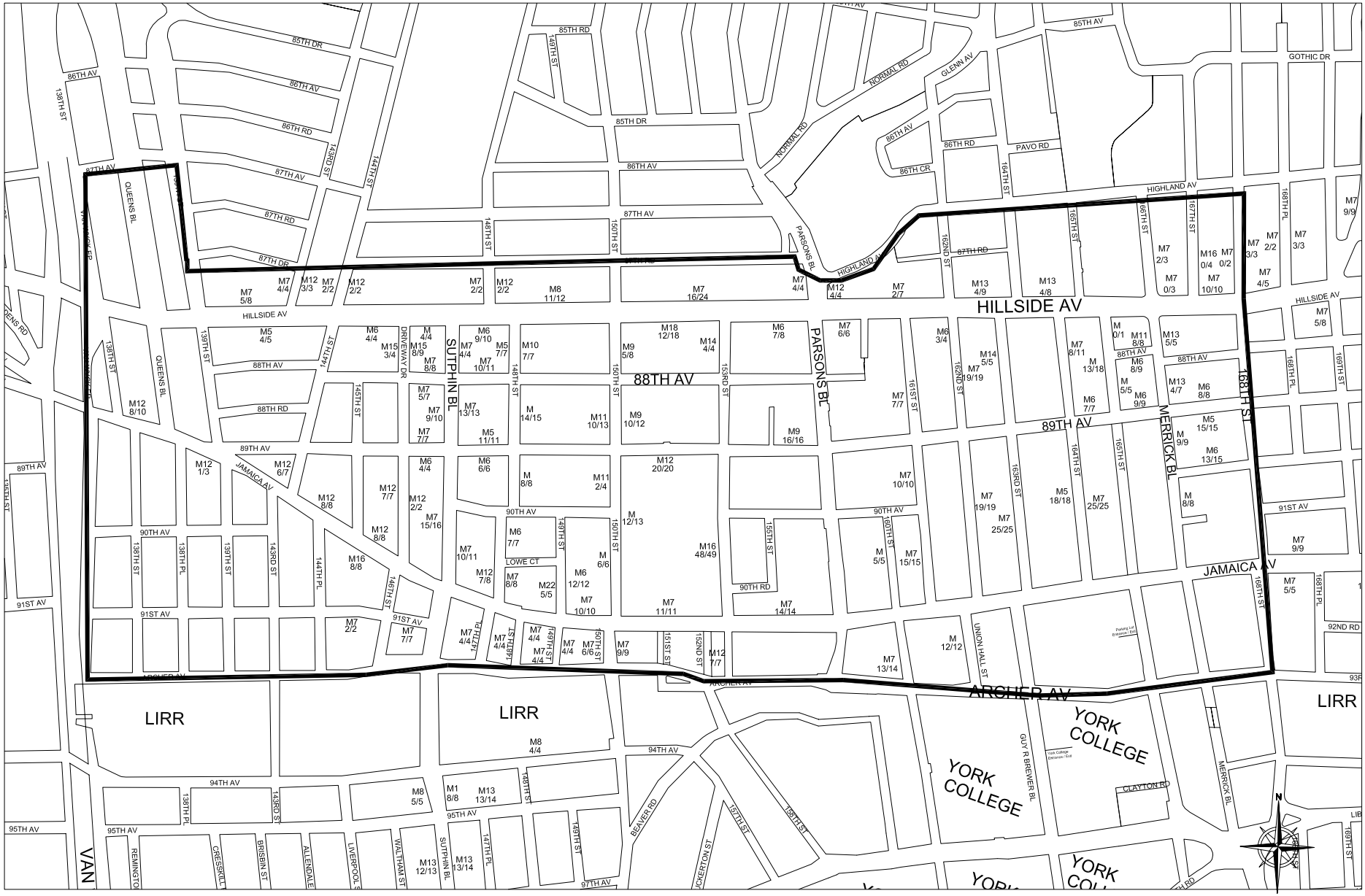
Sources: NYCDCP, *Jamaica Parking, Public Transportation and Pedestrian Study: Technical Memorandum 3: Existing Conditions*, January 27, 2006. Field surveys in the report conducted in August 2003. DCP data were supplemented with field surveys conducted by PHA on March 23, 2006.

Overall, on-street metered parking utilization during the midday period was found to be approximately 91 percent, with an average of approximately 114 curbside metered parking spaces unoccupied out of a total of 1,255 spaces.

ACCIDENT HISTORY

Annual motor vehicle accidents at study area intersections with 20 or more reportable accidents are shown in Table 16-6. These intersections were identified as experiencing the highest number of accidents over the 2000-2003 period based on a review of NYSDOT data. Reportable accidents are those that result in death, injury or property damage exceeding $1,000. There were a total of 1,353 reportable accidents at 34 intersections within the project study area during the period from 2000 to 2003. Data on the highest number of reportable accidents revealed that, at four locations, more than 50 accidents occurred over this period. These locations were: (1) I-678 Service Road (Van Wyck Expressway Service Road) and Liberty Avenue with 92 accidents,

Downtown Jamaica Core



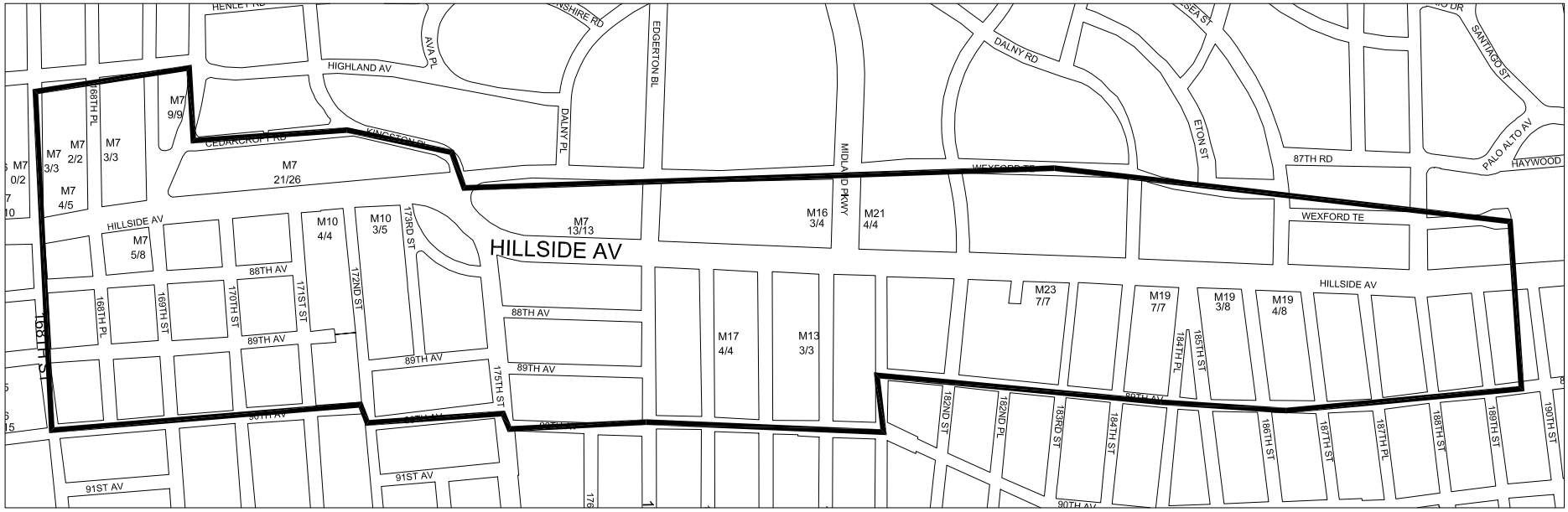
Legend:

▬ - Parking Study Area Boundaries
M1 - Parking Regulation (see Table 1 in Appendix H)
14/16 - Number of Metered Spaces Occupied/Total Number of Spaces

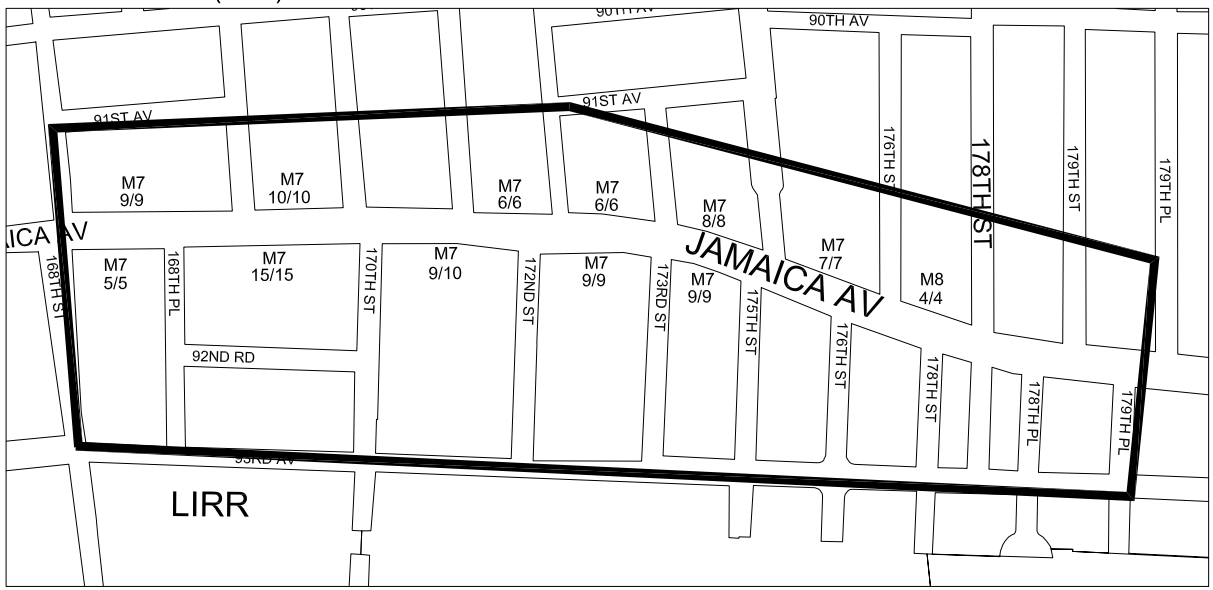
On-Street Metered Parking
Figure 16-7A

2/5/07

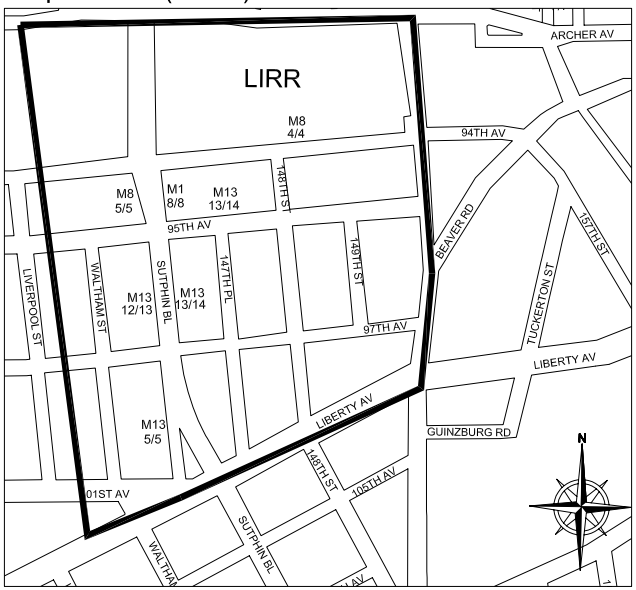
Hillside Avenue (East) Corridor



Jamaica Avenue (East) Corridor



Sutphin Blvd (South) Corridor



Legend:

- Parking Study Area Boundaries
M1 - Parking Regulation (see Table 1 in Appendix H)
14/16 - Number of Metered Spaces Occupied/Total Number of Spaces

On-Street Metered Parking
Figure 16-7B

Table 16-6
Intersections with 20 or More Total Reportable Accidents, 2000 - 2003

Intersections	Accidents
I-678 Service Road and Liberty Avenue	92
Hillside Avenue and 169th Street/Homelawn Street	84
Hillside Avenue and Parsons Boulevard	71
Liberty Avenue and Merrick Boulevard	57
Hillside Avenue and 188th Street	49
I-678 Service Road and Hillside Avenue	47
Hillside Avenue and Queens Boulevard	47
Archer Avenue and Sutphin Boulevard	45
I-678 Service Road and Atlantic Avenue	45
Hillside Avenue and I-678 Service Road Off Ramp	43
Jamaica Avenue and Parsons Boulevard	43
Liberty Avenue and 150th Street	41
Archer Avenue and Guy R. Brewer Boulevard	40
188th Street and Jamaica Avenue/Woodhull Avenue	35
Hillside Avenue and 139th Street	34
Jamaica Avenue and Merrick Boulevard	34
Jamaica Avenue and 168th Street	33
Liberty Avenue and 165th Street	32
Liberty Avenue and Guy R. Brewer Boulevard	32
Merrick Boulevard and 110th Avenue	29
I-678 Service Road and Jamaica Avenue	29
Archer Avenue and Parsons Boulevard	28
Liberty Avenue and Sutphin Boulevard	25
Parsons Boulevard and 89th Avenue	25
Archer Avenue and 160th Avenue	24
I-678 Service Road and 101st Avenue	23
Hillside Avenue between 148th Street and 150th Street	23
Hillside Avenue and 168th Street	23
I-678 Service Road and 94th Avenue/Atlantic Avenue	23
Hillside Avenue and Sutphin Boulevard	22
Guy R. Brewer Boulevard and South Road	22
Hillside Avenue and 148th Street	21
153rd Street and 88th Avenue	21

Source: New York State Department of Transportation, Local Accident Surveillance Project (LASP) as reported in the NYCDCP, *Jamaica Parking, Public Transportation and Pedestrian Study: Technical Memorandum 3: Existing Conditions*, January 27, 2006.

(2) Hillside Avenue and 169th Street/Homelawn Street with 84 accidents, (3) Hillside Avenue and Parsons Boulevard with 71 accidents, and (4) Liberty Avenue and Merrick Boulevard with 57 accidents. The data revealed that at nine additional locations, a total of 30 to 39 reportable accidents occurred, and at 15 locations 20 to 29 reportable accidents occurred over the period of 2000 to 2003.

The number of accidents involving pedestrians varied each year during the 2000 to 2003 period. The data revealed that Jamaica Avenue between 163rd and 164th Street, and Parsons Boulevard between Jamaica and Archer Avenue each had 3 pedestrian accidents in one year. However, the guidelines for pedestrian safety require five or more pedestrian/ bicycle accidents per year over the period of three recent consecutive years.

C. NO-ACTION CONDITONS

Between 2005 and 2015, it is expected that traffic and parking demands in the study area 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 1,500 new dwelling units, 536,000 sf of new commercial space, and 214,000 sf of new community facility space, and 70,000 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 Jamaica Transportation Center Intermodal Enhancements and Atlantic Avenue Extension project includes the redesign of four target areas: (1) Archer Avenue between 144th Place and 148th Street; (2) Sutphin Boulevard between 94th Avenue and 95th Avenue; (3) the block bounded by 94th Avenue, 95th Avenue, 138th Place (Rose Avenue) and the Van Wyck Expressway; and (4) the area below the LIRR viaduct on Sutphin Boulevard. 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. Archer Avenue would be realigned between 144th Place and 147th Place to allow for improved traffic flow and pedestrian safety. Atlantic Avenue would be extended from the Jamaica transportation hub to the Van Wyck Expressway through the block bonded by 94th Avenue, 95th Avenue, 138th Place, and the Van Wyck Expressway. 94th Avenue and 95th Avenue, which are both currently two-way, would form a one-way couplet between the new connection to Atlantic Avenue and Sutphin Boulevard. 94th Avenue would become one-way westbound and 95th Avenue would become one-way eastbound. NYCDOT had also adjusted the signal timing at the intersection of Liberty Avenue at Sutphin Boulevard post-2005. The analysis of No-Action traffic conditions in this area incorporates these traffic changes.

VEHICULAR TRAFFIC

Figures 16-8 through 16-11 show the expected 2015 No-Action weekday AM, midday, PM and Saturday midday peak hour traffic volumes, respectively. Tables 16-7 and 16-8 show the 2015 No-Action traffic conditions at signalized and unsignalized intersections, respectively. As shown in Tables 16-7 and 16-8, with continued growth in travel demand, intersections that were congested under existing conditions would worsen, and there would be additional locations that would become congested in one or more peak hours by 2015.

SIGNALIZED INTERSECTIONS

As shown in Table 16-7, under No-Action conditions, of the 53 signalized intersections, 34 intersections would experience congestion on one or more movements in the AM peak hour (compared with 24 intersections under Existing conditions), 10 intersections in the midday peak hour (compared with 5 intersections under Existing conditions), 25 intersections in the PM peak hour (compared with 12 intersections under Existing conditions), and 14 intersections in the Saturday midday peak hour (compared with 5 under Existing conditions). Newly congested intersections are discussed below.

Along the Hillside Avenue corridor, there would be two newly congested intersections in the AM peak hour at the Van Wyck Expressway Northbound Service Road, and Sutphin Boulevard. In the midday peak hour there would be two newly congested intersections at the Van Wyck Expressway Southbound Service Road, and Parsons Boulevard. In the PM peak hour, there would be five intersections that would be newly congested at Sutphin Boulevard, 150th Street, Parsons Boulevard, 162nd Street, and 180th Street/Midland Parkway. In the Saturday midday peak hour, there would be five newly congested intersections at the Van Wyck Expressway Southbound Service Road, Queens Boulevard, Parsons Boulevard, 161st Street, and 162nd Street.

Along the 89th Avenue corridor, there would be one intersection that is newly congested in the AM peak hour (at Sutphin Boulevard), and no newly congested intersections in the other three peak hours.

On the Jamaica Avenue corridor, there would be six new intersections that would have one or more congested movements in the AM peak hour at the Van Wyck Expressway Southbound Service Road, Parsons Boulevard, 160th Street, 163rd Street/Guy R. Brewer Boulevard, 164th Street, and 165th Street. In the midday peak hour, there would be two newly congested intersections at Union Hall Street/162nd Street and at Merrick Boulevard. In the PM peak hour, there would be four newly congested intersections at the Van Wyck Expressway Southbound Service Road, Sutphin Boulevard, Merrick Boulevard and 180th Street. In the Saturday midday peak hour, three new intersections would have congestion at one or more movements at 150th Street, Union Hall Street/162nd Street, and Merrick Boulevard.

The Archer Avenue corridor would have congestion at one or more movements at two new intersections: at Union Hall Street and at Merrick Boulevard. The intersection at Guy R. Brewer Boulevard would new congestion during the midday peak hour. There would be two new intersections with congestion during one or more peak hours during the PM peak hour at 150th Street and 160th Street. There would be no new intersections with congested movements during the Saturday middy peak hour.

Along the 94th Avenue/Atlantic Avenue corridor, there would be one new intersection with one or more congested movements. This newly congested intersection would be at 150th Street in the PM peak hour. The remaining three peak hours would not have any newly congested intersections.

Along the Liberty Avenue corridor, there would be newly congested intersections in the PM peak hour. There would be two new intersections at 150th Street and at Guy R. Brewer Boulevard with congestion at one or more movements during the PM peak hour. In the PM peak hour, there would be a newly congested intersection at Sutphin Boulevard. During the other peak hours there would be no new intersections with congestion.

Table 16-7: 2015 No-Action Traffic Conditions at Signalized Intersections

Signalized Intersection	Lane Group	2005 Existing Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS		2015 No-Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS		2005 Existing Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS		2015 No-Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS		2005 Existing Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	
1) Hillside Avenue (E-W) @	EB-TR	0.84	42.3	D		0.98	60.0	E	*	0.51	19.3	B	0.59	20.6	C	0.84	41.5	D		0.95	53.6	D	*	0.58	20.5	C	0.66	22.2	C	
Van Wyck Expwy Southbound	WB-L	1.01	102.1	F	*	1.41	253.2	F	*	0.60	23.8	C	0.80	37.8	D	1.03	106.7	F	*	1.44	268.1	F	*	0.66	28.9	C	0.85	46.2	D	
Service Road (SB)	WB-T	0.34	18.7	B		0.38	19.3	B		0.22	8.1	A	0.25	8.4	A	0.31	18.3	B		0.36	18.9	B		0.21	8.1	A	0.24	8.3	A	
	SB-LTR	0.71	31.4	C		0.86	37.8	D		0.74	33.9	C	0.96	49.7	D	* 0.62	29.2	C		0.78	33.7	C		0.79	35.4	D	0.98	55.2	E	*
2) Hillside Avenue (E-W) @	EB-L	0.81	44.6	D		1.03	89.4	F	*	0.45	18.5	B	0.56	26.1	C	0.64	33.4	C		0.82	52.8	D		0.59	23.6	C	0.72	33.2	C	
Van Wyck Expwy Northbound	EB-T	0.46	12.6	B		0.57	14.3	B		0.37	9.3	A	0.47	10.3	B	0.38	11.5	B		0.48	12.8	B		0.37	9.3	A	0.46	10.2	B	
Service Road (NB)	WB-T	0.47	20.6	C		0.55	22.0	C		0.48	18.8	B	0.57	20.3	C	0.48	20.7	C		0.57	22.4	C		0.48	18.8	B	0.56	20.1	C	
	WB-R	0.67	27.7	C		0.90	44.7	D	*	0.55	22.0	C	0.80	32.2	C	0.39	20.2	C		0.63	26.1	C		0.50	20.7	C	0.70	26.4	C	
	NB-LTR	0.89	49.6	D		1.03	75.6	E	*	0.75	33.6	C	0.87	39.2	D	0.76	42.6	D		0.88	48.6	D		0.77	34.3	C	0.89	40.6	D	
3) Hillside Avenue (E-W) @	EB-L	0.50	27.3	C		0.90	89.5	F	*	0.97	113.5	F	* 1.07	139.7	F	* 0.77	65.8	E	*	1.98	533.9	F	*	0.60	50.0	D	1.29	245.5	F	*
Queens Boulevard (N-S)	EB-TR	0.69	22.5	C		0.86	29.8	C		0.70	35.2	D	0.91	47.5	D	* 0.76	37.4	D		0.98	58.4	E	*	0.85	42.0	D	1.04	73.2	E	*
	WB-L	0.18	16.7	B		0.47	36.6	D		0.17	28.0	C	0.53	59.3	E	* 0.15	27.7	C		0.35	42.3	D		0.23	32.8	C	0.40	46.3	D	
	WB-T	0.62	20.6	C		0.77	25.0	C		0.74	36.6	D	0.96	53.9	D	* 0.63	33.1	C		0.86	42.4	D		0.69	34.7	C	0.86	42.5	D	
	WB-R	0.56	21.1	C		0.62	22.9	C		0.55	33.4	C	0.61	35.5	D	0.37	29.2	C		0.42	30.2	C		0.43	30.5	C	0.48	31.6	C	
	NB-L	0.27	42.8	D		0.33	44.6	D		0.20	33.4	C	0.25	34.6	C	0.48	41.8	D		0.59	47.0	D		0.20	33.4	C	0.25	34.5	C	
	NB-TR	0.77	60.1	E	*	0.87	70.8	E	*	0.39	36.3	D	0.45	37.7	D	0.25	33.7	C		0.30	34.6	C		0.26	33.9	C	0.31	34.7	C	
	SB-L	0.32	27.8	C		0.35	28.5	C		0.29	15.2	B	0.34	15.8	B	0.32	15.3	B		0.37	15.8	B		0.27	14.7	B	0.30	15.1	B	
	SB-TR	0.31	27.7	C		0.34	28.2	C		0.20	14.6	B	0.22	14.8	B	0.45	18.2	B		0.50	19.0	B		0.21	14.7	B	0.23	14.9	B	
4) Hillside Avenue (E-W) @	EB-T	0.50	15.8	B		0.63	18.3	B		0.49	15.8	B	0.63	18.2	B	0.62	18.0	B		0.76	21.9	C		0.52	16.2	B	0.64	18.4	B	
Sutphin Boulevard (N-S)	EB-R	0.28	13.5	B		0.32	14.2	B		0.24	13.1	B	0.29	13.6	B	0.21	12.7	B		0.25	13.2	B		0.18	12.3	B	0.20	12.6	B	
	WB-L	0.62	27.1	C		0.84	55.0	E	*	0.39	16.8	B	0.53	29.3	C	0.58	32.6	C		0.82	61.4	E	*	0.39	18.7	B	0.53	31.6	C	
	WB-T	0.67	11.9	B		0.81	16.1	B		0.50	9.2	A	0.63	11.2	B	0.47	8.8	A		0.61	10.8	B		0.44	8.4	A	0.55	9.8	A	
	NB-L	0.61	52.8	D		0.74	60.1	E	*	0.66	55.2	E	* 0.78	63.2	E	* 0.38	45.4	D		0.48	48.1	D		0.40	45.6	D	0.46	47.1	D	
	NB-R	0.47	48.7	D		0.58	53.1	D		0.47	48.8	D	0.55	51.9	D	0.47	48.9	D		0.54	51.7	D		0.39	46.1	D	0.46	48.2	D	
5) Hillside Avenue (E-W) @	EB-T	0.50	9.2	A		0.63	11.2	B		0.49	9.1	A	0.62	11.0	B	0.61	10.7	B		0.74	13.7	B		0.51	9.3	A	0.62	10.9	B	
148th Street-South (N-S)	WB-T	0.77	14.4	B		0.92	23.3	C	*	0.51	9.3	A	0.65	11.5	B	0.51	9.2	A		0.66	11.7	B		0.47	8.8	A	0.59	10.4	B	
	NB-LR	0.73	58.5	E	*	0.81	65.9	E	*	0.93	83.9	F	* 1.04	110.2	F	* NB-L	0.44	44.9	D	NB-L	0.49	46.2	D		0.54	48.6	D	0.60	51.3	D	
																NB-R	0.44	45.4	D	NB-R	0.50	46.9	D								
6) Hillside Avenue (E-W) @	EB-L	0.90	82.7	F	*	1.73	411.0	F	*	0.39	14.3	B	0.63	29.1	C	0.57	20.7	C		1.00	93.3	F	*	0.25	10.9	B	0.39	15.4	B	
150th Street (N-S)	EB-T	0.50	11.9	B		0.64	14.2	B		0.49	11.6	B	0.62	13.7	B	0.58	12.9	B		0.70	15.7	B		0.50	11.7	B	0.60	13.4	B	
	EB-R	0.08	8.0	A		0.10	8.1	A		0.09	8.0	A	0.10	8.1	A	0.10	8.1	A		0.13	8.3	A		0.05	7.7	A	0.07	7.8	A	
	WB-L	0.43	15.1	B		0.83	49.5	D		0.27	11.3	B	0.57	23.7	C	0.55	21.4	C		1.12	134.5	F	*	0.42	14.9	B	0.72	34.9	C	
	WB-TR	0.85	21.3	C		1.01	45.4	D	*	0.56	12.7	B	0.70	15.8	B	0.57	12.9	B		0.73	16.6	B		0.50	11.9	B	0.63	13.9	B	
	SB-LTR	0.88	64.3	E	*	0.98	80.9	F	*	0.58	44.7	D	0.64	46.9	D	0.52	42.8	D		0.57	44.3	D		0.54	43.5	D	0.59	45.2	D	
7) Hillside Avenue (E-W) @	EB-T	0.59	13.4	B		0.73	16.7	B		0.54	12.5	B	0.68	15.0	B	0.64	14.2	B		0.78	17.9	B		0.55	12.5	B	0.66	14.6	B	
153rd Street (NB)	WB-T	0.74	16.7	B		0.89	23.9	C		0.48	11.4	B	0.60	13.4	B	0.50	11.7	B		0.64	14.2	B		0.47	11.3	B	0.58	13.0	B	
	NB-L	0.52	44.5	D		0.67	50.6	D		0.41	41.2	D	0.55	45.3	D	0.27	37.9	D		0.33	39.2	D		0.26	37.9	D	0.33	39.3	D	
	NB-R	0.38	40.5	D		0.46	42.5	D		0.28	38.4	D	0.36	39.9	D	NB-LR	0.32	39.1	D	NB-LR	0.39	40.6	D		0.48	43.1	D	0.55	45.4	D	
																NB-R	0.35	39.9	D	NB-R	0.41	41.4	D								
8) Hillside Avenue (E-W) @	EB-L	0.74	68.2	E	*	0.85	83.6	F	*	0.45	28.8	C	0.63	48.8	D	0.56	36.5	D		0.81	68.1	E	*	0.50	33.9	C	0.68	54.8	D	
Parsons Boulevard (N-S)	EB-T	0.65	23.4	C		0.80	29.0	C		0.62	22.8	C	0.77	27.5	C	0.77	27.3	C		0.93	39.1	D	*	0.68	24.2	C	0.82	29.7	C	
	EB-R	0.34	18.8	B		0.44	20.8	C		0.20	16.5	B	0.27	17.6	B	0.22	16.8	B		0.30	18.0	B		0.17	16.0	B	0.19	16.3	B	
	WB-L	0.31	23.3	C		0.47	35.2	D		0.27	20.7	C	0.41	31.4	C	0.40	31.4	C		0.59	51.6	D		0.29	24.2	C	0.38	34.5	C	
	WB-TR	1.03	59.8	E	*	1.22	135.3	F	*	0.74	26.7	C	0.93	40.1	D	* 0.78	28.2	C		1.00	54.1	D	*	0.78	28.0	C	0.96	43.9	D	*
	NB-L	0.37	39.2	D		0.59	50.9	D		0.23	34.8	C	0.36	39.0	D	0.43	40.6	D		0.42	41.1	D		0.29	37.1	D	0.38	40.6	D	
	NB-T	0.81	55.7	E	*	0.92	70.4	E	*	0.40	37.1	D	0.47	38.7	D	0.56	41.3	D		0.65	44.7	D		0.34	35.5	D	0.38	36.3	D	
	NB-R	0.28	35.0	C		0.37	36.9	D		0.30	35.5	D	0.38	37.4	D	0.39	37.5	D		0.53	41.7	D		0.24	34.0	C	0.27	34.7	C	
	SB-L	0.61	54.7	D		0.88	96.3	F	*	0.43	40.5	D	0.55	45.7	D	0.55	46.9	D		0.75	64.1	E	*	0.28	35.6	D	0.36	37.9	D	
	SB-T	0.61	43.5	D		0.73	49.3	D		0.49	39.6	D	0.58	42.4	D	0.50	39.6	D		0.59	42.4	D		0.65	44.8	D	0.72	48.6	D	
	SB-R	0.35	36.6	D		0.41	38.1	D		0.27	34.9	C	0.32	35.9	D	0.32	35.6	D		0.36	36.8	D		0.21	33.6	C	0.24	34.2	C	
9) Hillside Avenue (E-W) @	EB-T	0.54	12.4	B		0.67	14.9	B		0.53	12.2	B	0.65	14.4	B	0.65	14.3	B		0.79	18.3	B		0.54	12.3	B	0.65	14.4	B	
161st Street (NB)	WB-T	0.74	16.7	B		0.88	23.4	C		0.48	11.6	B	0.60	13.3	B	0.50	11.8	B		0.63	14.0	B		0.47	11.4	B	0.58	13.0	B	
	NB-L	0.23	37.4	D		0.30	38.8	D		0.21	37.0	D	0.31	39.0	D	0.25	37.6	D		0.36	39.8	D		0.38	40.5	D	0.45	42.3	D	
	NB-R	0.44	41.9	D		0.53	44.5	D		0.57	45.9	D	0.68	51.3	D	NB-LR	0.36	40.0	D	NB-LR	0.43	41.9	D		0.66	50.2	D	0.76	56.4	E	*
																NB-R	0.51	44.4	D	NB-R	0.61	48.3	D								
10) Hillside Avenue (E-W) @	EB-TR	0.63	11.2	B		0.78	15.1	B		0.64	11.3	B	0.78	15.1	B	0.79	15.4	B		0.96	29.3	C	*	0.66	11.7	B	0.79	15.2	B	
162nd Street (SB)	WB-L	0.37	12.2	B		0.72	38.2	D		0.29	10.4	B	0.56	25.2	C	0.71	41.3	D		1.63	366.3	F	*	0.50	17.8	B	0.87	67.9	E	*
	WB-T	0.71	12.8	B		0.84	17.7	B		0.47	8.8	A	0.58	10.3	B	0.48	8.9	A		0.61	10.7	B		0.46	8.7	A	0.57	10.0	A	
	SB-LTR	0.78	61.0	E	*	0.88	71.6	E	*	0.35	42.8	D	0.40	44.0	D	0.68	54.1	D		0.76	59.1	E	*	0.34	42.6	D	0.39	43.7	D	

Abbreviations:

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound

L-Left, T-Through, R-Right, Dfl.-Defacto Left, E-W: East-West Roadway, N-S: North-South Roadway

V/C Ratio - Volume to Capacity Ratio

SEC/VEH - Seconds per Vehicle

LOS - Level of Service

* - Denotes Congested Location (LOS E or F, or v/c ratio > 0.90)

* - Denotes Location Becoming Congested (LOS E or F, or v/c ratio > 0.90) Under No-Build Conditions.

June 29, 2007

Table 16-7 (Continued): 2015 No-Action Traffic Conditions at Signalized Intersections

Signalized Intersection	Lane Group	2005 Existing Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS
11) Hillside Avenue (E-W) @ 165th Street-South (NB)	EB-T	0.50	9.2	A	0.62	11.0	B	0.47	8.8	A	0.58	10.3	B	0.70	12.5	B	0.84	17.5	B	0.64	11.2	B	0.76	14.1	B
	WB-T	0.63	11.1	B	0.76	14.1	B	0.39	8.0	A	0.49	9.1	A	0.46	8.7	A	0.59	10.3	B	0.49	8.9	A	0.60	10.5	B
	NB-L	0.19	40.0	D	0.21	40.3	D	0.22	40.6	D	0.25	41.1	D	0.16	39.3	D	0.17	39.6	D	0.20	40.1	D	0.22	40.4	D
	NB-R	0.29	42.3	D	0.32	43.1	D	0.36	44.2	D	0.40	45.3	D	0.49	48.2	D	0.54	50.4	D	0.36	44.2	D	0.40	45.3	D
12) Hillside Avenue (E-W) @ 178th Street (NB)	EB-L	0.22	10.8	B	0.37	21.8	C	0.08	6.2	A	0.11	6.7	A	0.13	6.9	A	0.19	8.2	A	0.08	6.4	A	0.12	7.2	A
	EB-T	0.51	9.3	A	0.60	10.6	B	0.43	8.4	A	0.50	9.2	A	0.65	11.4	B	0.75	13.9	B	0.51	9.3	A	0.59	10.4	B
	WB-TR	0.76	14.2	B	0.88	19.4	B	0.41	8.1	A	0.48	8.9	A	0.47	8.8	A	0.56	10.0	A	0.52	9.3	A	0.60	10.5	B
	NB-LTR	0.95	83.2	F *	1.06	109.5	F *	0.57	48.4	D	0.63	50.6	D	0.81	62.4	E *	0.90	73.5	E *	0.75	57.5	E *	0.82	63.8	E *
	SB-LR	0.32	43.8	D	0.40	46.5	D	0.17	39.8	D	0.19	40.3	D	0.33	44.1	D	0.38	46.0	D	0.14	39.2	D	0.16	39.6	D
13) Hillside Avenue (E-W) @ 180th Street/Midland Pkwy (SB)	EB-L	0.98	91.6	F *	1.08	122.1	F *	0.74	43.0	D	0.81	53.5	D	0.81	53.5	D	0.90	70.4	E *	0.55	24.5	C	0.61	28.9	C
	EB-TR	0.65	11.6	B	0.75	13.7	B	0.50	9.1	A	0.57	10.1	B	0.61	10.7	B	0.70	12.5	B	0.42	8.2	A	0.48	8.9	A
	WB-TR	0.83	16.7	B	0.94	25.8	C *	0.62	10.9	B	0.71	12.7	B	0.57	10.1	B	0.66	11.6	B	0.44	8.4	A	0.50	9.2	A
	SB-L	0.31	41.5	D	0.34	42.1	D	0.15	38.8	D	0.17	39.1	D	0.36	42.6	D	0.40	43.3	D	0.15	38.9	D	0.17	39.1	D
	SB-R	0.93	84.8	F *	1.03	109.6	F *	0.49	47.0	D	0.53	48.6	D	0.66	54.2	D	0.73	58.9	E *	0.37	43.7	D	0.41	44.7	D
14) 89th Avenue (WB) Sutphin Boulevard (N-S)	WB-LTR	0.77	34.0	C	0.92	51.0	D *	0.71	29.8	C	0.84	39.9	D	0.74	30.7	C	0.89	45.0	D	0.45	21.2	C	0.50	22.2	C
	NB-LT	0.46	9.2	A	0.53	10.1	B	0.42	8.6	A	0.48	9.3	A	0.38	8.2	A	0.43	8.8	A	0.29	7.3	A	0.33	7.6	A
	SB-TR	0.57	10.9	B	0.63	12.2	B	0.42	8.6	A	0.47	9.2	A	0.52	9.9	A	0.59	11.1	B	0.36	7.9	A	0.41	8.4	A
15) 89th Avenue (WB) 150th Street (SB)	WB-LT	0.58	16.6	B	0.68	19.3	B	0.48	14.4	B	0.56	15.9	B	0.44	13.7	B	0.53	15.2	B	0.37	12.8	B	0.42	13.4	B
	SB-TR	0.60	17.3	B	0.71	20.5	C	0.42	13.7	B	0.51	15.2	B	0.50	15.0	B	0.61	17.5	B	0.38	13.1	B	0.46	14.3	B
16) 89th Avenue (WB) @ 153rd Street (NB)	WB-TR	0.44	13.6	B	0.52	14.9	B	0.32	12.1	B	0.40	13.0	B	0.31	12.0	B	0.40	12.9	B	0.35	12.4	B	0.40	12.9	B
	NB-LT	0.61	16.4	B	0.71	19.1	B	0.44	13.5	B	0.52	14.7	B	0.48	14.0	B	0.55	15.3	B	0.16	10.6	B	0.19	10.9	B
17) 89th Avenue (WB) @ Parsons Boulevard (N-S)	WB-LTR	0.58	23.3	C	0.66	25.8	C	0.50	21.3	C	0.57	22.8	C	0.52	21.4	C	0.59	23.1	C	0.59	22.8	C	0.65	24.6	C
	NB-LT	0.32	7.0	A	0.42	8.0	A	0.24	6.4	A	0.34	7.2	A	0.28	6.6	A	0.41	7.8	A	0.22	6.2	A	0.25	6.4	A
	SB-T	0.62	11.1	B	0.77	15.6	B	0.42	8.1	A	0.52	9.5	A	0.54	9.6	A	0.65	11.7	B	0.37	7.5	A	0.41	8.0	A
	SB-R	0.15	5.9	A	0.17	6.1	A	0.13	5.8	A	0.16	6.0	A	0.10	5.6	A	0.12	5.7	A	0.09	5.6	A	0.10	5.6	A
18) 89th Avenue (WB) @ 161st Street (NB)	WB-TR	0.40	13.0	B	0.55	15.4	B	0.27	11.5	B	0.37	12.5	B	0.32	12.0	B	0.38	12.7	B	0.32	12.0	B	0.38	12.6	B
	NB-LT	0.29	11.8	B	0.34	12.4	B	0.41	13.3	B	0.47	14.1	B	0.51	14.8	B	0.57	15.9	B	0.56	15.5	B	0.62	17.0	B
19) 89th Avenue (WB) @ 162nd Street (SB)	WB-LT	0.30	11.9	B	0.36	12.7	B	0.26	11.5	B	0.31	12.0	B	0.33	12.2	B	0.38	12.8	B	0.29	11.7	B	0.33	12.1	B
	SB-TR	0.42	13.4	B	0.55	15.6	B	0.31	12.0	B	0.39	13.0	B	0.43	13.4	B	0.49	14.5	B	0.33	12.3	B	0.39	13.1	B
20) 89th Avenue (WB) @ 163rd Street (NB)	WB-TR	0.32	12.3	B	0.39	13.1	B	0.33	12.3	B	0.39	13.0	B	0.39	13.0	B	0.46	13.9	B	0.32	12.1	B	0.37	12.7	B
	NB-LT	0.64	17.4	B	0.72	19.7	B	0.31	12.0	B	0.35	12.4	B	0.46	13.8	B	0.51	14.7	B	0.42	13.3	B	0.47	14.0	B
21) Jamaica Avenue (E-W) @ Van Wyck Expwy Southbound Service Road (SB)	EB-T	0.35	17.8	B	0.45	19.6	B	0.40	18.6	B	0.50	20.5	C	0.45	19.5	B	0.55	21.5	C	0.59	22.6	C	0.70	26.0	C
	EB-R	0.38	18.5	B	0.43	19.5	B	0.31	17.3	B	0.35	17.9	B	0.28	16.7	B	0.31	17.3	B	0.09	14.5	B	0.11	14.7	B
	WB-L	0.46	15.8	B	0.62	23.0	C	0.55	19.8	B	0.74	32.0	C	0.47	19.3	B	0.64	28.4	C	0.19	17.8	B	0.29	23.5	C
	WB-T	0.26	9.5	A	0.31	10.0	A	0.34	10.4	B	0.40	11.1	B	0.36	10.4	B	0.42	11.3	B	0.28	9.7	A	0.33	10.2	B
	SB-LTR	0.84	48.6	D	0.98	66.4	E *	0.58	40.3	D	0.71	43.3	D	0.86	49.6	D	1.01	73.6	E *	0.66	42.1	D	0.79	46.3	D
22) Jamaica Avenue (E-W) @ Van Wyck Expwy Northbound Service Road (NB)	EB-L	0.18	14.0	B	0.26	18.1	B	0.27	20.2	C	0.40	28.7	C	0.25	18.1	B	0.36	25.1	C	0.48	17.8	B	0.61	24.0	C
	EB-T	0.34	10.4	B	0.43	11.5	B	0.25	9.3	A	0.32	10.0	A	0.28	9.6	A	0.35	10.4	B	0.32	10.0	A	0.39	10.9	B
	WB-T	0.53	21.5	C	0.66	25.2	C	0.74	28.9	C	0.89	40.5	D	0.61	23.2	C	0.74	28.0	C	0.42	18.9	B	0.50	20.6	C
	WB-R	0.03	13.8	B	0.07	14.3	B	0.11	14.7	B	0.14	15.0	B	0.06	14.2	B	0.09	14.5	B	0.31	17.3	B	0.36	18.2	B
	NB-LTR	1.00	69.6	E *	1.15	120.6	F *	1.01	71.5	E *	1.16	123.6	F *	1.03	76.5	E *	1.17	127.0	F *	0.55	39.5	D	0.63	41.2	D
23) Jamaica Avenue (E-W) @ Queens Boulevard (N-S)	EB-LT	0.67	29.2	C	0.89	43.7	D	0.61	27.4	C	0.84	38.6	D	0.60	26.9	C	0.82	36.9	D	0.36	22.0	C	0.49	24.5	C
	WB-T	0.49	25.2	C	0.64	29.4	C	0.72	32.7	C	0.88	44.3	D	0.59	27.5	C	0.74	33.1	C	0.44	24.0	C	0.55	26.3	C
	WB-R	0.28	21.5	C	0.33	22.3	C	0.27	21.2	C	0.31	22.0	C	0.22	20.3	C	0.25	20.8	C	0.15	19.5	B	0.18	19.9	B
	SB-L	0.25	20.7	C	0.28	21.2	C	0.19	19.9	B	0.22	20.3	C	0.35	22.3	C	0.40	23.1	C	0.10	18.8	B	0.12	19.0	B
	SB-R	0.11	18.9	B	0.13	19.1	B	0.16	19.5	B	0.18	19.9	B	0.23	20.5	C	0.26	21.0	C	0.19	20.0	B	0.22	20.4	C
24) Jamaica Avenue (E-W) @ Sutphin Boulevard (N-S)	EB-LTR	0.67	30.7	C	0.89	40.7	D	0.66	30.4	C	0.85	35.7	D	0.75	34.0	C	1.00	61.3	E *	0.57	27.2	C	0.73	27.1	C
	WB-LTR	0.68	30.8	C	0.51	20.2	C	0.56	27.5	C	0.42	18.3	B	0.56	27.2	C	0.43	19.7	B	0.68	30.9	C	0.48	19.1	B
	NB-LTR	0.58	26.2	C	0.66	22.4	C	0.41	22.8	C	0.48	19.2	B	0.40	22.8	C	0.45	17.7	B	0.33	21.6	C	0.38	17.8	B
	SB-LTR	0.47	24.0	C	0.54	19.7	B	0.25	20.4	C	0.30	16.7	B	0.33	21.5	C	0.37	16.4	B	0.18	19.6	B	0.21	15.8	B
25) Jamaica Avenue (E-W) @ 150th Street (N-S)	EB-T	0.42	13.8	B	0.56	16.4	B	0.49	15.0	B	0.61	17.8	B	0.47	14.5	B	0.58	16.9	B	0.41	13.5	B	0.51	15.3	B
	EB-R	0.07	9.8	A	0.07	9.8	A	0.07	9.8	A	0.08	9.9	A	0.07	9.8	A	0.07	9.8	A	0.06	9.7	A	0.07	9.8	A
	WB-LT	0.98	53.9	D *	1.32	180.4	F *	0.66	21.1	C	0.84	32.9	C	0.86	35.3	D	1.16	115.7	F *	0.72	24.0	C	0.94	48.5	D *
	NB-LR	0.97	93.9	F *	1.35	227.7	F *	0.48	40.3	D	0.68	52.2	D	0.77	60.3	E *	1.11	139.6	F *	0.39	37.4	D	0.53	43.4	D
	SB-LT	0.51	38.2	D	0.64	42.6	D	0.46	36.8	D	0.58	40.2	D	0.53	38.6	D	0.67	43.5	D	0.42	35.9	D	0.52	38.3	D
	SB-R	0.31	33.9	C	0.36	35.2	D	0.26	32.9	C	0.30	33.9	C	0.24	32.5	C	0.28	33.3	C	0.27	33.2	C	0.31	34.0	C

Abbreviations:

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound
L-Left, T-Through, R-Right, DfL-Defacto Left, E-W: East-West Roadway, N-S: North-South Roadway
V/C Ratio - Volume to Capacity Ratio
SEC/VEH - Seconds per Vehicle
LOS - Level of Service
* - Denotes Congested Location (LOS E or F, or v/c ratio > 0.90)
* - Denotes Location Becoming Congested (LOS E or F, or v/c ratio > 0.90) Under No-Build Conditions.

Table 16-7 (Continued): 2015 No-Action Traffic Conditions at Signalized Intersections

Signalized Intersection	Lane Group	2005 Existing Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS		2015 No-Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS		2005 Existing Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS
26) Jamaica Avenue (E-W) @ Parsons Boulevard (N-S)	EB-L	0.37	22.3	C		0.87	70.1	E	*	0.30	17.9	B	0.48	23.4	C	0.24	17.6	B	0.42	22.5	C	0.16	16.2	B	0.23	17.5	B
	EB-T	0.64	25.3	C		0.74	29.2	C		0.54	21.2	C	0.63	23.7	C	0.55	22.4	C	0.64	24.9	C	0.55	22.3	C	0.63	24.6	C
	EB-R	0.16	15.8	B		0.24	17.0	B		0.10	14.3	B	0.14	14.9	B	0.15	15.7	B	0.21	16.5	B	0.09	14.9	B	0.16	15.8	B
	WB-L	0.30	19.6	B		0.39	22.7	C		0.23	17.0	B	0.29	18.7	B	0.24	18.0	B	0.32	20.1	C	0.54	26.8	C	0.69	37.0	D
	WB-T	0.85	37.7	D		1.02	69.5	E	*	0.56	22.4	C	0.69	26.6	C	0.54	22.3	C	0.67	26.2	C	0.48	21.0	C	0.60	24.1	C
	WB-R	0.19	16.3	B		0.25	17.2	B		0.15	15.1	B	0.20	15.7	B	0.12	15.4	B	0.16	15.8	B	0.12	15.4	B	0.13	15.5	B
	NB-LTR	0.15	28.4	C		0.17	28.7	C		0.15	29.0	C	0.18	29.3	C	0.21	29.3	C	0.24	29.7	C	0.25	29.8	C	0.28	30.3	C
	SB-LTR	0.67	39.1	D		0.82	46.4	D		0.56	36.1	D	0.69	40.2	D	0.68	39.2	D	0.85	48.7	D	0.68	39.6	D	0.76	43.5	D
27) Jamaica Avenue (E-W) @ 160th Street (NB)	EB-L	0.05	9.1	A		0.08	9.8	A		0.08	9.3	A	0.11	9.8	A	0.11	9.6	A	0.14	10.1	B	0.09	9.4	A	0.11	9.9	A
	EB-T	0.70	19.7	B		0.81	25.5	C		0.58	16.1	B	0.69	19.4	B	0.61	16.6	B	0.73	20.4	C	0.66	17.9	B	0.75	21.3	C
	WB-T	0.82	25.9	C		0.98	49.5	D	*	0.57	15.9	B	0.69	19.8	B	0.49	14.0	B	0.60	16.5	B	0.59	16.1	B	0.70	19.4	B
	WB-R	0.03	8.7	A		0.03	8.7	A		0.02	8.6	A	0.02	8.6	A	0.02	8.6	A	0.02	8.6	A	0.01	8.5	A	0.01	8.5	A
	NB-LTR	0.39	35.5	D		0.45	36.5	D		0.62	43.4	D	0.69	46.7	D	0.39	35.5	D	0.44	36.4	D	0.58	41.9	D	0.66	45.2	D
28) Jamaica Avenue (E-W) @ Union Hall / 162nd St (SB)	EB-T	0.60	16.0	B		0.70	19.3	B		0.54	18.7	B	0.64	21.5	C	0.56	14.8	B	0.66	17.5	B	0.63	20.8	C	0.72	23.9	C
	EB-R	0.07	8.6	A		0.07	8.7	A		0.09	12.1	B	0.10	12.2	B	0.09	8.8	A	0.11	8.9	A	0.10	12.2	B	0.11	12.3	B
	WB-T	1.01	58.9	E	*	1.21	130.3	F	*	0.85	36.6	D	1.03	72.1	E	*	0.61	17.0	B	0.75	22.4	C	0.77	28.7	C	0.91	42.9	D	*
	SB-LTR	0.35	41.6	D		0.39	42.3	D		0.25	34.0	C	0.29	34.5	C	0.52	45.2	D	0.59	47.0	D	0.24	33.9	C	0.27	34.3	C
29) Jamaica Avenue (E-W) @ 163rd Street (NB) / Guy R Brewer (N-S)	EB-LT	0.52	12.2	B		0.61	14.2	B		0.41	10.4	B	0.49	11.6	B	0.43	10.6	B	0.52	12.1	B	0.46	11.1	B	0.53	12.3	B
	EB-R	0.11	7.6	A		0.13	7.7	A		0.13	7.7	A	0.14	7.9	A	0.22	8.6	A	0.25	8.9	A	0.14	7.8	A	0.16	8.0	A
	WB-LT	0.81	22.4	C		0.97	42.3	D	*	0.51	12.3	B	0.62	14.7	B	0.46	11.3	B	0.57	13.2	B	0.52	12.3	B	0.62	14.3	B
	WB-R	0.25	8.8	A		0.28	9.1	A		0.14	7.7	A	0.15	7.9	A	0.19	8.1	A	0.21	8.3	A	0.23	8.6	A	0.26	8.8	A
	NB-LTR	0.76	54.8	D		0.86	64.4	E	*	0.54	44.5	D	0.63	47.9	D	0.60	46.8	D	0.69	50.9	D	0.53	44.4	D	0.61	47.1	D
30) Jamaica Avenue (E-W) @ 164th Street (SB)	EB-T	0.49	9.5	A		0.57	11.0	B		0.42	10.6	B	0.50	11.9	B	0.54	20.3	C	0.65	23.5	C	0.52	12.0	B	0.59	13.4	B
	WB-T	0.87	23.6	C		1.01	49.8	D	*	0.48	11.7	B	0.58	13.6	B	0.57	21.2	C	0.69	24.9	C	0.58	13.3	B	0.67	15.7	B
	SB-L	0.32	43.3	D		0.37	44.4	D		0.37	40.3	D	0.42	41.4	D	0.25	27.0	C	0.28	27.5	C	0.42	41.5	D	0.48	43.0	D
	SB-R	0.28	43.2	D		0.36	45.3	D		0.46	43.7	D	0.52	45.9	D	0.32	28.6	C	0.36	29.6	C	0.45	43.6	D	0.52	46.2	D
31) Jamaica Avenue (E-W) @ 165th Street (SB)	EB-T	0.47	9.2	A		0.56	10.7	B		0.44	8.8	A	0.53	10.1	B	0.53	20.1	C	0.65	23.4	C	0.51	9.7	A	0.59	11.1	B
	EB-R	0.14	6.1	A		0.16	6.2	A		0.09	5.7	A	0.10	5.8	A	0.21	14.9	B	0.23	15.2	B	0.13	5.9	A	0.14	6.0	A
	WB-LT	0.80	18.9	B		0.94	33.9	C	*	0.45	9.1	A	0.55	10.7	B	0.59	21.9	C	0.72	26.4	C	0.55	10.5	B	0.64	12.4	B
	NB-LTR	0.44	45.2	D		0.48	46.4	D		0.32	42.8	D	0.35	43.5	D	0.31	27.8	C	0.34	28.5	C	0.23	41.1	D	0.26	41.7	D
32) Jamaica Avenue (E-W) @ Merrick Boulevard (SB)	EB-T	0.51	20.0	B		0.61	22.5	C		0.52	19.9	B	0.61	22.3	C	0.54	20.4	C	0.65	23.3	C	0.64	22.9	C	0.73	26.3	C
	EB-R	0.19	14.7	B		0.22	15.1	B		0.17	14.4	B	0.20	14.8	B	0.18	14.5	B	0.22	15.0	B	0.12	13.8	B	0.14	14.0	B
	WB-LT	0.97	53.7	D	*	1.39	213.2	F	*	0.66	25.0	C	1.02	73.2	E	*	0.61	22.8	C	1.23	150.2	F	*	0.85	36.5	D	1.38	209.5	F	*
	SB-LTR	0.48	30.0	C		0.59	32.4	C		0.33	27.5	C	0.43	29.1	C	0.57	31.9	C	0.69	35.1	D	0.52	30.8	C	0.64	33.5	C
33) Jamaica Avenue (E-W) @ 180th Street	EB-TR	0.27	6.7	A		0.32	7.0	A		0.25	6.5	A	0.30	6.8	A	0.28	6.7	A	0.34	7.1	A	0.24	6.4	A	0.28	6.7	A
	WB-LT	0.58	9.9	A		0.67	11.6	B		0.32	7.1	A	0.38	7.6	A	0.41	7.9	A	0.50	9.0	A	0.38	7.6	A	0.44	8.1	A
	NB-LR	0.09	39.3	D		0.10	39.5	D		0.17	40.6	D	0.19	41.0	D	0.19	41.5	D	0.22	42.3	D	0.11	39.4	D	0.12	39.6	D
	SB-LTR	0.69	56.7	E	*	0.78	63.4	E	*	0.25	41.5	D	0.28	42.2	D	0.66	54.8	D	0.75	60.5	E	*	0.43	45.7	D	0.48	47.3	D
34) Archer Avenue (E-W) @ Sutphin Boulevard (N-S)	EB-L	0.28	23.1	C		0.30	24.3	C		0.17	21.0	C	0.17	20.4	C	0.32	24.0	C	0.37	29.2	C	0.13	20.1	C	0.13	19.7	B
	EB-T	0.51	26.8	C	EB-TR	0.52	25.9	C		0.30	22.3	C	EB-TR	0.28	20.9	C	0.36	23.4	C	EB-TR	0.39	26.6	C	0.19	20.6	C	EB-TR	0.20	20.0	B
	EB-R	0.40	24.6	C						0.23	21.4	C					0.24	21.6	C					0.20	20.8	C				
	WB-L	0.65	33.6	C	WB-LT	0.38	24.0	C		0.52	27.4	C	WB-LT	0.28	20.9	C	0.62	30.9	C	WB-LT	0.39	26.8	C	0.46	25.5	C	WB-LT	0.24	20.4	C
	WB-TR	0.20	21.0	C	WB-R	0.24	22.8	C		0.17	20.5	C	WB-R	0.19	20.5	C	0.21	21.1	C	WB-R	0.28	26.2	C	0.15	20.3	C	WB-R	0.17	20.1	C
					NB-L	0.22	12.1	B					NB-L	0.13	11.7	B				NB-L	0.11	8.8	A				NB-L	0.12	11.5	B
	NB-LTR	0.75	26.5	C	NB-TR	0.50	14.1	B		0.54	20.6	C	NB-TR	0.40	13.8	B	0.48	19.7	B	NB-TR	0.32	10.0	A	0.44	19.0	B	NB-TR	0.31	12.9	B
	SB-LTR	0.47	19.1	B		0.43	13.1	B		0.27	16.5	B	0.26	12.4	B	0.42	18.4	B	0.37	10.4	B	0.23	16.1	B	0.22	11.9	B
35) Archer Avenue (E-W) @ 150th Street (N-S)	EB-LTR	0.61	23.2	C		0.67	25.4	C		0.45	19.2	B	0.50	20.2	C	0.69	26.0	C	0.76	29.5	C	0.44	18.9	B	0.49	19.8	B
	WB-L	0.99	75.8	E	*	1.18	136.7	F	*	0.49	22.3	C	0.58	25.5	C	0.89	54.3	D	1.07	100.9	F	*	0.51	23.0	C	0.59	26.3	C
	WB-TR	0.51	20.8	C		0.56	22.0	C		0.37	18.0	B	0.41	18.6	B	0.41	18.7	B	0.46	19.5	B	0.43	18.8	B	0.47	19.6	B
	NB-LTR	0.54	22.0	C		0.66	25.7	C		0.25	17.2	B	0.30	17.8	B	0.40	19.3	B	0.49	21.2	C	0.22	16.8	B	0.25	17.2	B
	SB-LTR	0.51	27.6	C		0.62	30.5	C		0.47	27.2	C	0.56	29.5	C	0.61	30.1	C	0.72	34.3	C	0.56	29.2	C	0.66	32.4	C
36) Archer Avenue (E-W) @ Parsons Boulevard (N-S)	EB-L	0.44	17.6	B		0.57	23.1	C		0.33	14.1	B	0.40	15.7	B	0.57	21.2	C	0.70	29.0	C	0.57	20.6	C	0.68	26.1	C
	EB-T	0.72	20.7	C		0.80	24.2	C		0.51	15.4	B	0.56	16.6	B	0.57	16.5	B	0.63	17.9	B	0.47	14.6	B	0.52	15.5	B
	WB-T	0.43	13.2	B		0.48	13.9	B		0.28	11.7	B	0.31	12.0	B	0.37	12.5	B	0.41	13.0	B	0.34	12.2	B	0.37	12.6	B
	SB-L	0.50	27.1	C		0.64	30.9	C		0.40	25.0	C	0.49	26.8	C	0.58	28.7	C	0.71	33.3	C	0.56	28.3	C	0.69	32.5	C
	SB-R	0.40	24.5	C		0.45	25.3	C		0.29	22.8	C	0.32	23.2	C	0.32	23.2	C	0.36	23.8	C	0.24	22.1	C	0.26	22.4	C
37) Archer Avenue (E-W) @ 160th Street (NB)	EB-LT	1.03	59.1	E	*	1.28	156.4	F	*	0.63	14.6	B	0.74	18.1	B	0.82	23.3	C	1.04	62.5	E	*	0.67	15.3	B	0.79	19.9	B
	EB-R	0.24	8.7	A		0.27	8.9	A		0.12	7.5	A	0.13	7.6	A	0.31	9.4	A	0.34	9.8	A	0.11	7.5	A	0.13	7.6	A
	WB-LTR	0.80	28.3	C		1.01	58.2	E	*	0.46	18.3	B	0.52	19.3	B	0.65	22.1	C	0.76	25.7	C	0.51	19.0	B	0.57	20.1	C
	NB-LTR	0.64	35.2	D		0.71	37.9	D		0.38	29.1	C	0.43	29.9	C	0.46	30.6	C	0.51	31.7	C	0.37	28.9	C	0.41	29.6	C

Abbreviations:

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound
L-Left, T-Through, R-Right, Dfl.-Defacto Left, E-W: East-West Roadway, N-S: North-South Roadway
V/C Ratio - Volume to Capacity Ratio
SEC/VEH - Seconds per Vehicle
LOS - Level of Service
* - Denotes Congested Location (LOS E or F, or v/c ratio > 0.90)
* - Denotes Location Becoming Congested (LOS E or F, or v/c ratio > 0.90) Under No-Build Conditions.

Table 16-7 (Continued): 2015 No-Action Traffic Conditions at Signalized Intersections

Signalized Intersection	Lane Group	2005 Existing Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS
38) Archer Avenue (E-W) @ Union Hall Street (SB)	EB-T	0.87	30.4	C	1.02	56.9	E *	0.58	16.6	B	0.67	19.0	B	0.71	20.6	C	0.83	26.6	C	0.64	18.0	B	0.75	21.4	C
	WB-T	0.47	13.9	B	0.52	14.6	B	0.52	15.5	B	0.58	16.7	B	0.44	13.4	B	0.49	14.1	B	0.59	16.9	B	0.66	18.5	B
	SB-LR	0.36	24.5	C	0.41	25.4	C	0.34	24.2	C	0.39	25.1	C	0.42	25.6	C	0.47	26.8	C	0.36	24.5	C	0.41	25.5	C
39) Archer Avenue (E-W) @ Guy R Brewer Boulevard (N-S)	EB-LTR	1.03	67.8	E *	1.20	128.8	F *	0.87	36.6	D	1.00	59.4	E *	0.99	57.4	E *	1.15	107.6	F *	0.93	42.9	D *	1.07	78.9	E *
	WB-L	0.32	21.3	C	0.43	27.4	C	0.36	21.1	C	0.47	25.8	C	0.61	33.3	C	0.80	55.9	E *	0.51	27.4	C	0.67	40.6	D
	WB-TR	0.52	19.6	B	0.58	20.6	C	0.35	17.0	B	0.39	17.5	B	0.51	19.2	B	0.56	20.1	C	0.38	17.3	B	0.42	17.8	B
	NB-LTR	0.93	52.9	D *	1.07	87.3	F *	0.54	23.1	C	0.63	26.0	C	0.81	36.6	D	0.92	50.7	D *	0.68	28.5	C	0.77	33.6	C
	SB-LTR	0.15	16.0	B	0.16	16.2	B	0.14	15.9	B	0.16	16.1	B	0.26	17.5	B	0.30	18.0	B	0.17	16.3	B	0.19	16.5	B
40) Archer Avenue (E-W) @ 165th Street (N-S)	EB-LTR	1.01	62.5	E *	1.19	123.3	F *	0.72	26.4	C	0.83	32.6	C	0.96	51.7	D *	1.20	128.4	F *	1.01	63.3	E *	1.17	116.8	F *
	WB-LTR	0.66	22.7	C	0.73	24.9	C	0.44	18.2	B	0.49	18.9	B	0.66	22.6	C	0.74	25.1	C	0.94	50.9	D *	1.07	84.1	F *
	NB-LTR	0.16	16.3	B	0.18	16.5	B	0.19	16.7	B	0.21	16.9	B	0.19	16.8	B	0.22	17.1	B	0.35	19.0	B	0.40	19.8	B
	SB-LTR	0.18	16.5	B	0.19	16.8	B	0.21	17.0	B	0.24	17.3	B	0.46	21.2	C	0.51	22.5	C	0.22	16.9	B	0.25	17.2	B
41) Archer Avenue (E-W) @ Merrick Boulevard (SB)	EB-TR	0.57	20.3	C	0.67	22.3	C	0.47	18.7	B	0.54	19.8	B	0.61	21.4	C	0.70	23.7	C	0.56	20.0	B	0.65	21.8	C
	WB-LT	0.80	28.8	C	0.97	49.7	D *	0.56	20.7	C	0.67	23.6	C	1.02	62.5	E *	1.20	126.5	F *	WB-DfL 0.88	59.7	E *	WB-DfL 1.18	147.8	F *
																				WB-T 0.60	22.4	C	WB-T 0.66	24.3	C
	SB-LTR	0.49	19.8	B	0.62	22.1	C	0.33	17.7	B	0.44	19.1	B	0.53	20.4	C	0.69	23.8	C	0.48	19.6	B	0.61	22.0	C
42) Atlantic Avenue (E-W) @ Van Wyck Expwy Southbound Service Road (SB)	EB-TR	0.57	26.2	C	0.63	27.2	C	0.40	23.8	C	0.44	24.3	C	0.52	25.5	C	0.58	26.3	C	0.61	26.9	C	0.67	28.1	C
	WB-L	0.36	26.6	C	0.43	30.8	C	0.18	15.8	B	0.21	17.1	B	0.32	21.4	C	0.37	24.5	C	0.22	20.4	C	0.25	23.0	C
	WB-LT	0.54	20.2	C	0.63	22.2	C	0.27	13.5	B	0.31	13.9	B	0.44	15.5	B	0.50	16.5	B	0.33	14.2	B	0.38	14.8	B
	SB-LTR	0.80	25.0	C	0.89	29.6	C	0.77	27.2	C	0.86	30.9	C	1.01	51.0	D *	1.13	93.4	F *	0.73	26.2	C	0.82	28.9	C
43) Atlantic Avenue (E-W) @ Van Wyck Expwy Northbound Service Road (NB)	EB-L	EB-DfL 0.70	32.9	C	1.07	90.6	F *	0.55	23.0	C	0.91	51.3	D *	EB-DfL 0.45	21.7	C	0.98	66.7	E *	0.61	24.7	C	1.00	68.7	E *
	EB-T	0.42	18.7	B	0.51	22.9	C	0.29	13.7	B	0.41	20.4	C	0.39	15.2	B	0.52	22.4	C	0.33	14.1	B	0.46	21.3	C
	WB-TR	0.68	33.1	C	0.59	27.1	C	0.45	30.8	C	0.33	22.6	C	0.79	41.8	D	0.53	25.4	C	0.43	30.4	C	0.32	22.4	C
	NB-LTR	0.93	32.5	C *	0.92	29.0	C *	0.92	35.0	C *	0.80	22.8	C	0.94	37.5	D *	0.84	24.3	C	0.63	23.9	C	0.53	17.3	B
44) 94th Avenue (E-W) @ Sutphin Boulevard (N-S)	EB-LR	0.38	17.9	B	-	-	-	0.42	18.4	B	-	-	-	0.37	17.6	B	-	-	-	0.42	18.4	B	-	-	-
	WB-LTR	0.50	19.3	B	0.20	21.1	C	0.28	16.1	B	0.09	14.5	B	0.44	18.2	B	0.17	19.4	B	0.29	16.2	B	0.09	14.6	B
					NB-L 0.45	17.2	B				NB-L 0.17	16.0	B				NB-L 0.38	16.2	B				NB-L 0.16	15.7	B
	NB-LT	1.00	49.6	D *	NB-T 0.80	23.7	C	0.57	12.5	B	NB-T 0.78	29.4	C	0.71	17.1	B	NB-T 0.59	17.9	B	0.43	10.2	B	NB-T 0.61	22.8	C
	SB-TR	0.49	10.1	B	SB-T 0.44	13.1	B	0.28	8.2	A	SB-T 0.21	15.7	B	0.38	9.0	A	SB-T 0.33	12.9	B	0.22	7.8	A	SB-T 0.19	15.5	B
					SB-R 0.13	10.4	B				SB-R 0.27	16.9	B				SB-R 0.16	11.6	B				SB-R 0.15	15.4	B
45) 94th Avenue (WB) @ 150th Street (N-S)	WB-LTR	0.26	16.0	B	0.41	23.5	C	0.22	15.6	B	0.25	16.8	B	0.22	15.6	B	0.28	18.7	B	0.15	14.8	B	0.16	15.0	B
	NB-LT	0.52	11.8	B	0.52	8.3	A	0.23	8.3	A	0.28	8.1	A	0.33	9.1	A	0.37	7.9	A	0.22	8.2	A	0.28	8.7	A
	SB-TR	0.73	16.3	B	0.71	11.6	B	0.46	10.5	B	0.52	10.8	B	0.80	19.3	B	0.84	19.5	B	0.57	12.4	B	0.65	14.1	B
46) Liberty Avenue (E-W) @ Sutphin Boulevard (N-S)	EB-L	0.85	56.7	E *	0.82	45.7	D	0.43	18.9	B	0.41	14.5	B	0.88	71.0	E *	0.98	92.0	F *	0.48	21.0	C	0.48	16.8	B
	EB-TR	0.76	18.6	B	0.73	14.2	B	0.43	13.0	B	0.41	9.6	A	0.49	13.7	B	0.47	10.2	B	0.44	13.2	B	0.43	9.8	A
	WB-L	0.14	12.6	B	0.15	9.5	A	0.14	11.4	B	0.14	8.3	A	0.15	11.6	B	0.15	8.5	A	0.22	12.4	B	0.21	9.3	A
	WB-TR	0.72	17.7	B	0.68	13.2	B	0.63	15.8	B	0.60	11.8	B	0.84	22.1	C	0.81	16.8	B	0.64	15.9	B	0.61	11.9	B
	NB-LTR	0.59	15.5	B	0.67	30.4	C	0.32	12.1	B	0.47	17.4	B	0.42	13.2	B	0.64	20.7	C	0.75	23.3	C	0.59	19.5	B
	SB-LTR	0.50	15.1	B	0.99	63.0	E *	0.45	14.1	B	0.69	23.9	C	0.82	25.2	C	1.60	300.1	F *	0.54	15.4	B	0.97	54.4	D *
47) Liberty Avenue (E-W) @ 150th Street (N-S)	EB-L	0.36	12.5	B	0.53	19.5	B	0.14	8.1	A	0.20	9.1	A	0.26	10.2	B	0.39	14.2	B	0.13	8.0	A	0.17	8.9	A
	EB-TR	0.53	10.4	B	0.62	11.7	B	0.38	9.0	A	0.44	9.5	A	0.47	9.8	A	0.55	10.7	B	0.46	9.7	A	0.54	10.6	B
	WB-L	0.03	7.0	A	0.07	7.6	A	0.08	7.4	A	0.14	8.1	A	0.10	7.7	A	0.23	9.7	A	0.09	7.6	A	0.18	8.9	A
	WB-TR	0.57	11.0	B	0.66	12.3	B	0.45	9.6	A	0.52	10.4	B	0.54	10.6	B	0.64	12.1	B	0.48	9.9	A	0.56	10.8	B
	NB-LTR	1.01	62.3	E *	1.18	119.1	F *	0.48	19.6	B	0.58	22.0	C	0.72	27.4	C	0.85	38.2	D	0.46	19.2	B	0.56	21.6	C
	SB-LTR	0.94	49.2	D *	1.34	192.4	F *	0.46	18.5	B	0.54	20.1	C	0.83	32.3	C	1.03	68.6	E *	0.75	26.5	C	0.89	38.3	D
48) Liberty Avenue (E-W) @ Guy R. Brewer Boulevard (N-S)	EB-L	0.77	52.3	D	0.87	67.7	E *	0.25	13.8	B	0.35	17.1	B	0.53	28.6	C	0.61	34.0	C	0.15	11.8	B	0.21	13.1	B
	EB-TR	0.67	16.5	B	0.80	19.9	B	0.52	14.0	B	0.61	15.4	B	0.75	18.3	B	0.87	23.9	C	0.65	16.1	B	0.77	18.9	B
	WB-L	0.20	13.3	B	0.31	17.8	B	0.15	11.8	B	0.23	13.6	B	0.24	15.1	B	0.37	20.0	C	0.26	14.7	B	0.41	21.5	C
	WB-TR	0.97	34.6	C *	1.10	73.4	E *	0.54	14.3	B	0.63	15.6	B	0.79	19.8	B	0.93	28.6	C *	0.48	13.5	B	0.56	14.6	B
	NB-LTR	0.94	45.5	D *	1.16	112.9	F *	0.49	15.5	B	0.60	18.2	B	0.77	26.9	C	0.99	60.4	E *	0.69	21.2	C	0.83	30.4	C
	SB-L	0.09	10.7	B	0.10	11.0	B	0.09	10.6	B	0.11	10.9	B	0.19	11.7	B	0.22	12.3	B	0.17	11.6	B	0.21	12.2	B
	SB-TR	0.49	15.5	B	0.54	16.6	B	0.52	16.2	B	0.59	17.7	B	0.78	24.9	C	0.87	32.3	C	0.51	15.9	B	0.57	17.2	B
49) Liberty Avenue (E-W) @ Merrick Boulevard (SB)	EB-T	0.53	14.5	B	0.62	16.0	B	0.33	12.1	B	0.39	12.7	B	0.52	14.4	B	0.60	15.6	B	0.55	14.8	B	0.63	16.2	B
	EB-R	0.31	12.5	B	0.35	13.0	B	0.14	10.7	B	0.17	11.0	B	0.39	13.5	B	0.45	14.4	B	0.34	12.8	B	0.38	13.4	B
	WB-L	0.37	16.8	B	0.54	25.8	C	0.28	13.2	B	0.36	15.1	B	0.51	21.3	C	0.71	36.9	D	0.39	17.7	B	0.56	27.4	C
	WB-T	0.65	16.6	B	0.72	18.3	B	0.31	11.9	B	0.35	12.3	B	0.50	14.1	B	0.56	15.0	B	0.44	13.3	B	0.49	13.9	B
	SB-LTR	0.99	56.1	E *	1.16	114.9	F *	0.71	30.6	C	0.87	39.0	D	1.01	61.2	E *	1.25	150.8	F *	1.01	62.9	E *	1.21	133.5	F *

Abbreviations:

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound

L-Left, T-Through, R-Right, DfL-Defacto Left, E-W: East-West Roadway, N-S: North-South Roadway

V/C Ratio - Volume to Capacity Ratio

SEC/VEH - Seconds per Vehicle

LOS - Level of Service

* - Denotes Congested Location (LOS E or F, or v/c ratio > 0.90)

* - Denotes Location Becoming Congested (LOS E or F, or v/c ratio > 0.90) Under No-Build Conditions.

Table 16-7 (Continued): 2015 No-Action Traffic Conditions at Signalized Intersections

Signalized Intersection	Lane Group	2005 Existing Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS
50) Liberty Avenue (E-W) @ Dunkirk Street	EB-T	0.63	13.3	B	0.72	15.6	B	0.42	9.9	A	0.48	10.7	B	0.69	14.6	B	0.79	18.1	B	0.55	11.7	B	0.61	12.9	B
	EB-R	0.31	9.0	A	0.34	9.3	A	0.27	8.7	A	0.30	9.0	A	0.75	17.8	B	0.83	22.1	C	0.38	9.8	A	0.42	10.3	B
	WB-LT	0.75	16.6	B	0.86	22.7	C	0.40	9.7	A	0.46	10.5	B	0.50	10.9	B	0.57	12.0	B	0.52	11.3	B	0.59	12.5	B
	NB-L	1.04	68.2	E *	1.14	105.3	F *	0.41	17.8	B	0.45	18.5	B	0.54	20.1	C	0.59	21.4	C	0.57	20.9	C	0.63	22.4	C
	NB-R	0.03	13.7	B	0.03	13.7	B	0.01	13.5	B	0.01	13.5	B	0.03	13.7	B	0.03	13.7	B	0.01	13.6	B	0.02	13.6	B
51) South Road (E-W) @ Guy R Brewer Boulevard (N-S)	EB-LTR	0.79	31.0	C	0.88	39.2	D	0.54	20.9	C	0.59	22.5	C	0.65	24.0	C	0.72	26.8	C	0.46	19.1	B	0.51	20.1	C
	WB-LTR	0.35	17.0	B	0.39	17.6	B	0.26	15.9	B	0.30	16.4	B	0.50	19.5	B	0.57	21.0	C	0.32	16.6	B	0.36	17.1	B
	NB-LTR	0.76	19.4	B	0.88	28.3	C	0.41	10.3	B	0.49	11.5	B	0.59	13.4	B	0.67	15.8	B	0.47	10.8	B	0.52	11.7	B
	SB-LTR	0.65	15.0	B	0.72	17.6	B	0.53	12.0	B	0.61	13.8	B	0.77	19.1	B	0.88	27.5	C	0.56	12.6	B	0.64	14.2	B
52) 107th Avenue (E-W) @ Guy R Brewer Boulevard (N-S)	EB-LTR	0.08	14.2	B	0.09	14.4	B	0.11	14.6	B	0.13	14.7	B	0.08	14.2	B	0.09	14.3	B	0.07	14.2	B	0.08	14.2	B
	WB-LTR	0.06	14.0	B	0.07	14.1	B	0.07	14.2	B	0.08	14.2	B	0.08	14.2	B	0.09	14.3	B	0.04	13.9	B	0.05	13.9	B
	NB-LTR	0.66	14.7	B	0.76	18.1	B	0.37	9.5	A	0.43	10.2	B	0.53	11.7	B	0.60	13.1	B	0.45	10.5	B	0.51	11.3	B
	SB-LTR	0.50	11.5	B	0.56	12.6	B	0.47	10.9	B	0.54	12.0	B	0.64	14.0	B	0.74	17.0	B	0.55	12.2	B	0.62	13.6	B
53) 108th Avenue (E-W) @ Merrick Boulevard (N-S)	EB-LTR	0.45	31.7	C	0.53	34.6	C	0.31	28.4	C	0.35	29.1	C	0.43	30.9	C	0.47	32.2	C	0.37	29.4	C	0.45	31.4	C
	WB-LTR	0.52	33.6	C	0.60	36.8	D	0.55	34.6	C	0.64	38.6	D	0.47	32.1	C	0.55	34.7	C	0.34	28.6	C	0.40	30.2	C
	NB-L	0.20	8.8	A	0.27	10.0	B	0.06	7.3	A	0.07	7.5	A	0.12	8.1	A	0.17	9.1	A	0.10	7.9	A	0.17	8.9	A
	NB-TR	0.67	13.5	B	0.76	15.9	B	0.31	8.8	A	0.35	9.2	A	0.44	10.1	B	0.50	10.8	B	0.35	9.2	A	0.40	9.7	A
	SB-L	0.11	8.4	A	0.16	9.8	A	0.04	7.2	A	0.06	7.3	A	0.03	7.1	A	0.04	7.2	A	0.04	7.2	A	0.05	7.3	A
	SB-TR	0.34	9.1	A	0.40	9.6	A	0.32	8.9	A	0.39	9.6	A	0.46	10.3	B	0.55	11.5	B	0.41	9.8	A	0.48	10.6	B

Abbreviations:
EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound
L-Left, T-Through, R-Right, Dfl.-Defacto Left, E-W: East-West Roadway, N-S: North-South Roadway
V/C Ratio - Volume to Capacity Ratio
SEC/VEH - Seconds per Vehicle
LOS - Level of Service
* - Denotes Congested Location (LOS E or F, or v/c ratio > 0.90)
* - Denotes Location Becoming Congested (LOS E or F, or v/c ratio > 0.90) Under No-Build Conditions.

June 29, 2007

Table 16-8: 2015 No-Action Traffic Conditions at Unsignalized Intersections

Unsignalized Intersection	Lane Group	2005 Existing Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS
54) Jamaica Avenue (E-W) @ 178th Street (SB)	EB-LT	0.16	12.8	B	0.20	14.6	B	0.03	8.7	A	0.03	9.0	A	0.04	8.6	A	0.05	9	A	0.10	9.8	A	0.12	10.5	B
	WB-LT	0.03	8.6	A	0.03	8.9	A	0.03	9.1	A	0.04	9.6	A	0.06	9.1	A	0.07	9.6	A	0.02	8.4	A	0.02	8.6	A
	NB-LT	0.50	55.4	F *	0.80	123.6	F *	0.13	17.8	C	0.17	20.7	C	0.17	20.3	C	0.22	25.2	D	0.20	25.4	D	0.27	32.7	D
	NB-TR	0.51	46.9	E *	0.81	107.3	F *	0.10	15.5	C	0.13	17.6	C	0.18	18.4	C	0.24	22.5	C	0.22	20.4	C	0.30	25.5	D

Abbreviations
EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound
L-Left, T-Through, R-Right, Dfl.-Defacto Left, E-W: East-West Roadway, N-S: North-South Roadway
V/C Ratio - Volume to Capacity Ratio
SEC/VEH - Seconds per Vehicle
LOS - Level of Service
* - Denotes Congested Location (LOS E or F, or v/c ratio > 0.90)
* - Denotes Location Becoming Congested (LOS E or F, or v/c ratio > 0.90) Under No-Build Conditions.

June 29, 2007

No non-corridor locations would have new intersections with congestion during any peak hour.

UNSIGNALIZED INTERSECTION

As shown in Table 16-8, the unsignalized intersection within the study area would not experience newly congested lane groups during any peak hour.

PARKING

OFF-STREET PARKING

Demand for public parking spaces in the study area is expected to change as a result of new developments as well as background growth. Eight existing public parking facilities (Nos. 5, 16, 18, 20, 21, 22, 23, and 25 in Figure 16-6; and also 28 and 29, which were already closed under Existing conditions) totaling about 1,351 spaces would be displaced by No-Action development. The Jamaica Courthouse Redevelopment (Location 1 on Figure 2-6) would add 500 public parking spaces for a net loss of 851 public parking spaces in the midday in the area affected by the proposed actions. Table 2 in Appendix H shows how the parking capacity in the area affected by the proposed actions would change under No-Action conditions for each of the analyzed periods. In addition, No-Action projects would provide accessory parking as required by the current zoning, thereby reducing public parking demand from these sites.

Table 3 in Appendix H shows the total required accessory parking spaces and total demand at projected development sites and the other development project sites in each of the four parking study areas [Downtown Jamaica Core, Hillside Avenue (East), Sutphin Boulevard (South) and Jamaica Avenue (East)]; an also at three additional parking study areas, which are located around Merrick Boulevard south of Liberty Avenue, Guy R. Brewer Boulevard south of Liberty Avenue, and other scattered areas. There are no existing off-street public parking facilities in these areas. The table also shows the demand generated that would be in excess of the required accessory supply in each parking study area. The vehicles that cannot park in the accessory parking facilities would increase parking demand at public parking facilities.

Table 4 in Appendix H shows the future No-Action public parking supply, demand and utilization in each of the parking study areas. Table 16-9 summarizes Tables 2 through 4 in Appendix H. The capacity of accessory parking spaces required by zoning and demand at the No-Action project sites are shown for each project study area, and the excess demand at each site. The table also shows the resulting capacity of public parking spaces, increase in public parking demand, and the utilization throughout the parking study areas. During the weekday midday, public parking demand would exceed the level of the public parking supply (on-street and off-street) with an overall utilization rate of 106 percent (versus 80 percent under Existing conditions). The table shows that the Hillside Avenue (East) parking study area would have the highest parking shortfall of 262 public parking spaces. The Sutphin Boulevard (South) parking study area would have a shortfall of 17 public parking spaces, the Jamaica Avenue (East) parking study area would have a shortfall of 115 public parking spaces. There would also be a demand for 67 public parking spaces along Merrick Boulevard south of Liberty Avenue, where no public parking opportunities are available.

In the AM period, the overall public parking utilization rate (off-street only) would be 58 percent versus 47 percent under Existing conditions. Demand for public parking would exceed public parking supply in the Hillside Avenue (East) parking study area by 26 spaces, and along Merrick Boulevard (South) by 31 spaces. Overnight, ample public supply would remain with an overall

Table 16-9
2015 No-Action Off-Street Parking Utilization

THIS TABLE HAS BEEN REVISED FOR THE FEIS

2015 No-Action Accessory Capacity and Demand at Projected Development Sites and No-Action Development Projects

	AM Period			Midday Period			Overnight Period		
	Accessory Capacity	Accessory Demand	Excess/ Public Demand (1)	Accessory Capacity	Accessory Demand	Excess/ Public Demand (1)	Accessory Capacity	Accessory Demand	Excess/ Public Demand (1)
Downtown Jamaica Core	3,047	1,593	0	3,047	2,101	0	3,047	1,279	0
Hillside Avenue (East)	209	161	0	209	212	-3	209	20	0
Sutphin Blvd (South)	802	286	0	802	703	0	802	131	0
Jamaica Avenue (East)	146	128	0	146	261	-115	146	68	0
Guy R. Brewer (South)	79	56	0	79	75	0	79	44	0
Merrick Boulevard (South)	16	47	-31	16	83	-67	16	1	0
Other Areas	28	13	0	28	18	0	28	16	0
Total	4,327	2,284	-31	4,327	3,453	-185	4,327	1,559	0

2015 No-Action Public Parking Demand

	AM Period				Midday Period				Overnight Period			
	Public Capacity	Public Demand	Available Public Spaces	Public Utilization	Public Capacity	Public Demand	Available Public Spaces	Public Utilization	Public Capacity	Public Demand	Available Public Spaces	Public Utilization
Downtown Jamaica Core	4,947	2,632	2,315	53%	4,947	4,810	137	97%	3,428	1,575	1,853	46%
Hillside Avenue (East)	341	367	-26	108%	341	603	-262	177%	291	149	142	51%
Sutphin Blvd (South)	160	114	47	71%	160	177	-17	111%	40	4	36	10%
Jamaica Avenue (East)	0	0	0	--	0	115	-115	--	0	0	0	--
Guy R. Brewer (South)	0	0	0	--	0	0	0	--	0	0	0	--
Merrick Boulevard (South)	0	31	-31	--	0	67	-67	--	0	0	0	--
Other Areas	0	0	0	--	0	0	0	--	0	0	0	--
	5,448	3,143	2,305	58%	5,448	5,772	-324	106%	3,759	1,727	2,032	46%

(1) - Overflow parking demand that cannot be accommodated by the accessory requirements, which would be added to the public parking demand.

June 29, 2007

Legend:

- ● - Analyzed Intersection

Jamaica Plan EIS

2015 No-Action Traffic Volumes - AM Peak Hour
Figure 16-8

2/5/07

Legend:

● - Analyzed Intersection

Jamaica Plan EIS

2015 No-Action Traffic Volumes - Midday Peak Hour
Figure 16-9

2/5/07

Legend:

- ● - Analyzed Intersection

2015 No-Action Traffic Volumes - PM Peak Hour
Figure 16-10

Jamaica Plan EIS

2/5/07

Legend:

- ● - Analyzed Intersection

2015 No-Action Traffic Volumes - Saturday Midday Peak Hour

Jamaica Plan EIS

Figure 16-11

Table 16-7: 2015 No-Action Traffic Conditions at Signalized Intersections

Signalized Intersection	Lane Group	2005 Existing Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS		2015 No-Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS		2005 Existing Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS		2015 No-Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS		2005 Existing Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	
1) Hillside Avenue (E-W) @	EB-TR	0.84	42.3	D		0.98	60.0	E	*	0.51	19.3	B	0.59	20.6	C	0.84	41.5	D		0.95	53.6	D	*	0.58	20.5	C	0.66	22.2	C	
Van Wyck Expwy Southbound	WB-L	1.01	102.1	F	*	1.41	253.2	F	*	0.60	23.8	C	0.80	37.8	D	1.03	106.7	F	*	1.44	268.1	F	*	0.66	28.9	C	0.85	46.2	D	
Service Road (SB)	WB-T	0.34	18.7	B		0.38	19.3	B		0.22	8.1	A	0.25	8.4	A	0.31	18.3	B		0.36	18.9	B		0.21	8.1	A	0.24	8.3	A	
	SB-LTR	0.71	31.4	C		0.86	37.8	D		0.74	33.9	C	0.96	49.7	D	* 0.62	29.2	C		0.78	33.7	C		0.79	35.4	D	0.98	55.2	E	*
2) Hillside Avenue (E-W) @	EB-L	0.81	44.6	D		1.03	89.4	F	*	0.45	18.5	B	0.56	26.1	C	0.64	33.4	C		0.82	52.8	D		0.59	23.6	C	0.72	33.2	C	
Van Wyck Expwy Northbound	EB-T	0.46	12.6	B		0.57	14.3	B		0.37	9.3	A	0.47	10.3	B	0.38	11.5	B		0.48	12.8	B		0.37	9.3	A	0.46	10.2	B	
Service Road (NB)	WB-T	0.47	20.6	C		0.55	22.0	C		0.48	18.8	B	0.57	20.3	C	0.48	20.7	C		0.57	22.4	C		0.48	18.8	B	0.56	20.1	C	
	WB-R	0.67	27.7	C		0.90	44.7	D	*	0.55	22.0	C	0.80	32.2	C	0.39	20.2	C		0.63	26.1	C		0.50	20.7	C	0.70	26.4	C	
	NB-LTR	0.89	49.6	D		1.03	75.6	E	*	0.75	33.6	C	0.87	39.2	D	0.76	42.6	D		0.88	48.6	D		0.77	34.3	C	0.89	40.6	D	
3) Hillside Avenue (E-W) @	EB-L	0.50	27.3	C		0.90	89.5	F	*	0.97	113.5	F	* 1.07	139.7	F	* 0.77	65.8	E	*	1.98	533.9	F	*	0.60	50.0	D	1.29	245.5	F	*
Queens Boulevard (N-S)	EB-TR	0.69	22.5	C		0.86	29.8	C		0.70	35.2	D	0.91	47.5	D	* 0.76	37.4	D		0.98	58.4	E	*	0.85	42.0	D	1.04	73.2	E	*
	WB-L	0.18	16.7	B		0.47	36.6	D		0.17	28.0	C	0.53	59.3	E	* 0.15	27.7	C		0.35	42.3	D		0.23	32.8	C	0.40	46.3	D	
	WB-T	0.62	20.6	C		0.77	25.0	C		0.74	36.6	D	0.96	53.9	D	* 0.63	33.1	C		0.86	42.4	D		0.69	34.7	C	0.86	42.5	D	
	WB-R	0.56	21.1	C		0.62	22.9	C		0.55	33.4	C	0.61	35.5	D	0.37	29.2	C		0.42	30.2	C		0.43	30.5	C	0.48	31.6	C	
	NB-L	0.27	42.8	D		0.33	44.6	D		0.20	33.4	C	0.25	34.6	C	0.48	41.8	D		0.59	47.0	D		0.20	33.4	C	0.25	34.5	C	
	NB-TR	0.77	60.1	E	*	0.87	70.8	E	*	0.39	36.3	D	0.45	37.7	D	0.25	33.7	C		0.30	34.6	C		0.26	33.9	C	0.31	34.7	C	
	SB-L	0.32	27.8	C		0.35	28.5	C		0.29	15.2	B	0.34	15.8	B	0.32	15.3	B		0.37	15.8	B		0.27	14.7	B	0.30	15.1	B	
	SB-TR	0.31	27.7	C		0.34	28.2	C		0.20	14.6	B	0.22	14.8	B	0.45	18.2	B		0.50	19.0	B		0.21	14.7	B	0.23	14.9	B	
4) Hillside Avenue (E-W) @	EB-T	0.50	15.8	B		0.63	18.3	B		0.49	15.8	B	0.63	18.2	B	0.62	18.0	B		0.76	21.9	C		0.52	16.2	B	0.64	18.4	B	
Sutphin Boulevard (N-S)	EB-R	0.28	13.5	B		0.32	14.2	B		0.24	13.1	B	0.29	13.6	B	0.21	12.7	B		0.25	13.2	B		0.18	12.3	B	0.20	12.6	B	
	WB-L	0.62	27.1	C		0.84	55.0	E	*	0.39	16.8	B	0.53	29.3	C	0.58	32.6	C		0.82	61.4	E	*	0.39	18.7	B	0.53	31.6	C	
	WB-T	0.67	11.9	B		0.81	16.1	B		0.50	9.2	A	0.63	11.2	B	0.47	8.8	A		0.61	10.8	B		0.44	8.4	A	0.55	9.8	A	
	NB-L	0.61	52.8	D		0.74	60.1	E	*	0.66	55.2	E	* 0.78	63.2	E	* 0.38	45.4	D		0.48	48.1	D		0.40	45.6	D	0.46	47.1	D	
	NB-R	0.47	48.7	D		0.58	53.1	D		0.47	48.8	D	0.55	51.9	D	0.47	48.9	D		0.54	51.7	D		0.39	46.1	D	0.46	48.2	D	
5) Hillside Avenue (E-W) @	EB-T	0.50	9.2	A		0.63	11.2	B		0.49	9.1	A	0.62	11.0	B	0.61	10.7	B		0.74	13.7	B		0.51	9.3	A	0.62	10.9	B	
148th Street-South (N-S)	WB-T	0.77	14.4	B		0.92	23.3	C	*	0.51	9.3	A	0.65	11.5	B	0.51	9.2	A		0.66	11.7	B		0.47	8.8	A	0.59	10.4	B	
	NB-LR	0.73	58.5	E	*	0.81	65.9	E	*	0.93	83.9	F	* 1.04	110.2	F	* NB-L	0.44	44.9	D	NB-L	0.49	46.2	D		0.54	48.6	D	0.60	51.3	D	
																NB-R	0.44	45.4	D	NB-R	0.50	46.9	D								
6) Hillside Avenue (E-W) @	EB-L	0.90	82.7	F	*	1.73	411.0	F	*	0.39	14.3	B	0.63	29.1	C	0.57	20.7	C		1.00	93.3	F	*	0.25	10.9	B	0.39	15.4	B	
150th Street (N-S)	EB-T	0.50	11.9	B		0.64	14.2	B		0.49	11.6	B	0.62	13.7	B	0.58	12.9	B		0.70	15.7	B		0.50	11.7	B	0.60	13.4	B	
	EB-R	0.08	8.0	A		0.10	8.1	A		0.09	8.0	A	0.10	8.1	A	0.10	8.1	A		0.13	8.3	A		0.05	7.7	A	0.07	7.8	A	
	WB-L	0.43	15.1	B		0.83	49.5	D		0.27	11.3	B	0.57	23.7	C	0.55	21.4	C		1.12	134.5	F	*	0.42	14.9	B	0.72	34.9	C	
	WB-TR	0.85	21.3	C		1.01	45.4	D	*	0.56	12.7	B	0.70	15.8	B	0.57	12.9	B		0.73	16.6	B		0.50	11.9	B	0.63	13.9	B	
	SB-LTR	0.88	64.3	E	*	0.98	80.9	F	*	0.58	44.7	D	0.64	46.9	D	0.52	42.8	D		0.57	44.3	D		0.54	43.5	D	0.59	45.2	D	
7) Hillside Avenue (E-W) @	EB-T	0.59	13.4	B		0.73	16.7	B		0.54	12.5	B	0.68	15.0	B	0.64	14.2	B		0.78	17.9	B		0.55	12.5	B	0.66	14.6	B	
153rd Street (NB)	WB-T	0.74	16.7	B		0.89	23.9	C		0.48	11.4	B	0.60	13.4	B	0.50	11.7	B		0.64	14.2	B		0.47	11.3	B	0.58	13.0	B	
	NB-L	0.52	44.5	D		0.67	50.6	D		0.41	41.2	D	0.55	45.3	D	0.27	37.9	D		0.33	39.2	D		0.26	37.9	D	0.33	39.3	D	
	NB-R	0.38	40.5	D		0.46	42.5	D		0.28	38.4	D	0.36	39.9	D	NB-LR	0.32	39.1	D	NB-LR	0.39	40.6	D		0.48	43.1	D	0.55	45.4	D	
																NB-R	0.35	39.9	D	NB-R	0.41	41.4	D								
8) Hillside Avenue (E-W) @	EB-L	0.74	68.2	E	*	0.85	83.6	F	*	0.45	28.8	C	0.63	48.8	D	0.56	36.5	D		0.81	68.1	E	*	0.50	33.9	C	0.68	54.8	D	
Parsons Boulevard (N-S)	EB-T	0.65	23.4	C		0.80	29.0	C		0.62	22.8	C	0.77	27.5	C	0.77	27.3	C		0.93	39.1	D	*	0.68	24.2	C	0.82	29.7	C	
	EB-R	0.34	18.8	B		0.44	20.8	C		0.20	16.5	B	0.27	17.6	B	0.22	16.8	B		0.30	18.0	B		0.17	16.0	B	0.19	16.3	B	
	WB-L	0.31	23.3	C		0.47	35.2	D		0.27	20.7	C	0.41	31.4	C	0.40	31.4	C		0.59	51.6	D		0.29	24.2	C	0.38	34.5	C	
	WB-TR	1.03	59.8	E	*	1.22	135.3	F	*	0.74	26.7	C	0.93	40.1	D	* 0.78	28.2	C		1.00	54.1	D	*	0.78	28.0	C	0.96	43.9	D	*
	NB-L	0.37	39.2	D		0.59	50.9	D		0.23	34.8	C	0.36	39.0	D	0.43	40.6	D		0.42	41.1	D		0.29	37.1	D	0.38	40.6	D	
	NB-T	0.81	55.7	E	*	0.92	70.4	E	*	0.40	37.1	D	0.47	38.7	D	0.56	41.3	D		0.65	44.7	D		0.34	35.5	D	0.38	36.3	D	
	NB-R	0.28	35.0	C		0.37	36.9	D		0.30	35.5	D	0.38	37.4	D	0.39	37.5	D		0.53	41.7	D		0.24	34.0	C	0.27	34.7	C	
	SB-L	0.61	54.7	D		0.88	96.3	F	*	0.43	40.5	D	0.55	45.7	D	0.55	46.9	D		0.75	64.1	E	*	0.28	35.6	D	0.36	37.9	D	
	SB-T	0.61	43.5	D		0.73	49.3	D		0.49	39.6	D	0.58	42.4	D	0.50	39.6	D		0.59	42.4	D		0.65	44.8	D	0.72	48.6	D	
	SB-R	0.35	36.6	D		0.41	38.1	D		0.27	34.9	C	0.32	35.9	D	0.32	35.6	D		0.36	36.8	D		0.21	33.6	C	0.24	34.2	C	
9) Hillside Avenue (E-W) @	EB-T	0.54	12.4	B		0.67	14.9	B		0.53	12.2	B	0.65	14.4	B	0.65	14.3	B		0.79	18.3	B		0.54	12.3	B	0.65	14.4	B	
161st Street (NB)	WB-T	0.74	16.7	B		0.88	23.4	C		0.48	11.6	B	0.60	13.3	B	0.50	11.8	B		0.63	14.0	B		0.47	11.4	B	0.58	13.0	B	
	NB-L	0.23	37.4	D		0.30	38.8	D		0.21	37.0	D	0.31	39.0	D	0.25	37.6	D		0.36	39.8	D		0.38	40.5	D	0.45	42.3	D	
	NB-R	0.44	41.9	D		0.53	44.5	D		0.57	45.9	D	0.68	51.3	D	NB-LR	0.36	40.0	D	NB-LR	0.43	41.9	D		0.66	50.2	D	0.76	56.4	E	*
																NB-R	0.51	44.4	D	NB-R	0.61	48.3	D								
10) Hillside Avenue (E-W) @	EB-TR	0.63	11.2	B		0.78	15.1	B		0.64	11.3	B	0.78	15.1	B	0.79	15.4	B		0.96	29.3	C	*	0.66	11.7	B	0.79	15.2	B	
162nd Street (SB)	WB-L	0.37	12.2	B		0.72	38.2	D		0.29	10.4	B	0.56	25.2	C	0.71	41.3	D		1.63	366.3	F	*	0.50	17.8	B	0.87	67.9	E	*
	WB-T	0.71	12.8	B		0.84	17.7	B		0.47	8.8	A	0.58	10.3	B	0.48	8.9	A		0.61	10.7	B		0.46	8.7	A	0.57	10.0	A	
	SB-LTR	0.78	61.0	E	*	0.88	71.6	E	*	0.35	42.8	D	0.40	44.0	D	0.68	54.1	D		0.76	59.1	E	*	0.34	42.6	D	0.39	43.7	D	

Abbreviations:

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound

L-Left, T-Through, R-Right, Dfl.-Defacto Left, E-W: East-West Roadway, N-S: North-South Roadway

V/C Ratio - Volume to Capacity Ratio

SEC/VEH - Seconds per Vehicle

LOS - Level of Service

* - Denotes Congested Location (LOS E or F, or v/c ratio > 0.90)

* - Denotes Location Becoming Congested (LOS E or F, or v/c ratio > 0.90) Under No-Build Conditions.

June 29, 2007

Table 16-7 (Continued): 2015 No-Action Traffic Conditions at Signalized Intersections

Signalized Intersection	Lane Group	2005 Existing Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS
11) Hillside Avenue (E-W) @ 165th Street-South (NB)	EB-T	0.50	9.2	A	0.62	11.0	B	0.47	8.8	A	0.58	10.3	B	0.70	12.5	B	0.84	17.5	B	0.64	11.2	B	0.76	14.1	B
	WB-T	0.63	11.1	B	0.76	14.1	B	0.39	8.0	A	0.49	9.1	A	0.46	8.7	A	0.59	10.3	B	0.49	8.9	A	0.60	10.5	B
	NB-L	0.19	40.0	D	0.21	40.3	D	0.22	40.6	D	0.25	41.1	D	0.16	39.3	D	0.17	39.6	D	0.20	40.1	D	0.22	40.4	D
	NB-R	0.29	42.3	D	0.32	43.1	D	0.36	44.2	D	0.40	45.3	D	0.49	48.2	D	0.54	50.4	D	0.36	44.2	D	0.40	45.3	D
12) Hillside Avenue (E-W) @ 178th Street (NB)	EB-L	0.22	10.8	B	0.37	21.8	C	0.08	6.2	A	0.11	6.7	A	0.13	6.9	A	0.19	8.2	A	0.08	6.4	A	0.12	7.2	A
	EB-T	0.51	9.3	A	0.60	10.6	B	0.43	8.4	A	0.50	9.2	A	0.65	11.4	B	0.75	13.9	B	0.51	9.3	A	0.59	10.4	B
	WB-TR	0.76	14.2	B	0.88	19.4	B	0.41	8.1	A	0.48	8.9	A	0.47	8.8	A	0.56	10.0	A	0.52	9.3	A	0.60	10.5	B
	NB-LTR	0.95	83.2	F *	1.06	109.5	F *	0.57	48.4	D	0.63	50.6	D	0.81	62.4	E *	0.90	73.5	E *	0.75	57.5	E *	0.82	63.8	E *
	SB-LR	0.32	43.8	D	0.40	46.5	D	0.17	39.8	D	0.19	40.3	D	0.33	44.1	D	0.38	46.0	D	0.14	39.2	D	0.16	39.6	D
13) Hillside Avenue (E-W) @ 180th Street/Midland Pkwy (SB)	EB-L	0.98	91.6	F *	1.08	122.1	F *	0.74	43.0	D	0.81	53.5	D	0.81	53.5	D	0.90	70.4	E *	0.55	24.5	C	0.61	28.9	C
	EB-TR	0.65	11.6	B	0.75	13.7	B	0.50	9.1	A	0.57	10.1	B	0.61	10.7	B	0.70	12.5	B	0.42	8.2	A	0.48	8.9	A
	WB-TR	0.83	16.7	B	0.94	25.8	C *	0.62	10.9	B	0.71	12.7	B	0.57	10.1	B	0.66	11.6	B	0.44	8.4	A	0.50	9.2	A
	SB-L	0.31	41.5	D	0.34	42.1	D	0.15	38.8	D	0.17	39.1	D	0.36	42.6	D	0.40	43.3	D	0.15	38.9	D	0.17	39.1	D
	SB-R	0.93	84.8	F *	1.03	109.6	F *	0.49	47.0	D	0.53	48.6	D	0.66	54.2	D	0.73	58.9	E *	0.37	43.7	D	0.41	44.7	D
14) 89th Avenue (WB) Sutphin Boulevard (N-S)	WB-LTR	0.77	34.0	C	0.92	51.0	D *	0.71	29.8	C	0.84	39.9	D	0.74	30.7	C	0.89	45.0	D	0.45	21.2	C	0.50	22.2	C
	NB-LT	0.46	9.2	A	0.53	10.1	B	0.42	8.6	A	0.48	9.3	A	0.38	8.2	A	0.43	8.8	A	0.29	7.3	A	0.33	7.6	A
	SB-TR	0.57	10.9	B	0.63	12.2	B	0.42	8.6	A	0.47	9.2	A	0.52	9.9	A	0.59	11.1	B	0.36	7.9	A	0.41	8.4	A
15) 89th Avenue (WB) 150th Street (SB)	WB-LT	0.58	16.6	B	0.68	19.3	B	0.48	14.4	B	0.56	15.9	B	0.44	13.7	B	0.53	15.2	B	0.37	12.8	B	0.42	13.4	B
	SB-TR	0.60	17.3	B	0.71	20.5	C	0.42	13.7	B	0.51	15.2	B	0.50	15.0	B	0.61	17.5	B	0.38	13.1	B	0.46	14.3	B
16) 89th Avenue (WB) @ 153rd Street (NB)	WB-TR	0.44	13.6	B	0.52	14.9	B	0.32	12.1	B	0.40	13.0	B	0.31	12.0	B	0.40	12.9	B	0.35	12.4	B	0.40	12.9	B
	NB-LT	0.61	16.4	B	0.71	19.1	B	0.44	13.5	B	0.52	14.7	B	0.48	14.0	B	0.55	15.3	B	0.16	10.6	B	0.19	10.9	B
17) 89th Avenue (WB) @ Parsons Boulevard (N-S)	WB-LTR	0.58	23.3	C	0.66	25.8	C	0.50	21.3	C	0.57	22.8	C	0.52	21.4	C	0.59	23.1	C	0.59	22.8	C	0.65	24.6	C
	NB-LT	0.32	7.0	A	0.42	8.0	A	0.24	6.4	A	0.34	7.2	A	0.28	6.6	A	0.41	7.8	A	0.22	6.2	A	0.25	6.4	A
	SB-T	0.62	11.1	B	0.77	15.6	B	0.42	8.1	A	0.52	9.5	A	0.54	9.6	A	0.65	11.7	B	0.37	7.5	A	0.41	8.0	A
	SB-R	0.15	5.9	A	0.17	6.1	A	0.13	5.8	A	0.16	6.0	A	0.10	5.6	A	0.12	5.7	A	0.09	5.6	A	0.10	5.6	A
18) 89th Avenue (WB) @ 161st Street (NB)	WB-TR	0.40	13.0	B	0.55	15.4	B	0.27	11.5	B	0.37	12.5	B	0.32	12.0	B	0.38	12.7	B	0.32	12.0	B	0.38	12.6	B
	NB-LT	0.29	11.8	B	0.34	12.4	B	0.41	13.3	B	0.47	14.1	B	0.51	14.8	B	0.57	15.9	B	0.56	15.5	B	0.62	17.0	B
19) 89th Avenue (WB) @ 162nd Street (SB)	WB-LT	0.30	11.9	B	0.36	12.7	B	0.26	11.5	B	0.31	12.0	B	0.33	12.2	B	0.38	12.8	B	0.29	11.7	B	0.33	12.1	B
	SB-TR	0.42	13.4	B	0.55	15.6	B	0.31	12.0	B	0.39	13.0	B	0.43	13.4	B	0.49	14.5	B	0.33	12.3	B	0.39	13.1	B
20) 89th Avenue (WB) @ 163rd Street (NB)	WB-TR	0.32	12.3	B	0.39	13.1	B	0.33	12.3	B	0.39	13.0	B	0.39	13.0	B	0.46	13.9	B	0.32	12.1	B	0.37	12.7	B
	NB-LT	0.64	17.4	B	0.72	19.7	B	0.31	12.0	B	0.35	12.4	B	0.46	13.8	B	0.51	14.7	B	0.42	13.3	B	0.47	14.0	B
21) Jamaica Avenue (E-W) @ Van Wyck Expwy Southbound Service Road (SB)	EB-T	0.35	17.8	B	0.45	19.6	B	0.40	18.6	B	0.50	20.5	C	0.45	19.5	B	0.55	21.5	C	0.59	22.6	C	0.70	26.0	C
	EB-R	0.38	18.5	B	0.43	19.5	B	0.31	17.3	B	0.35	17.9	B	0.28	16.7	B	0.31	17.3	B	0.09	14.5	B	0.11	14.7	B
	WB-L	0.46	15.8	B	0.62	23.0	C	0.55	19.8	B	0.74	32.0	C	0.47	19.3	B	0.64	28.4	C	0.19	17.8	B	0.29	23.5	C
	WB-T	0.26	9.5	A	0.31	10.0	A	0.34	10.4	B	0.40	11.1	B	0.36	10.4	B	0.42	11.3	B	0.28	9.7	A	0.33	10.2	B
	SB-LTR	0.84	48.6	D	0.98	66.4	E *	0.58	40.3	D	0.71	43.3	D	0.86	49.6	D	1.01	73.6	E *	0.66	42.1	D	0.79	46.3	D
22) Jamaica Avenue (E-W) @ Van Wyck Expwy Northbound Service Road (NB)	EB-L	0.18	14.0	B	0.26	18.1	B	0.27	20.2	C	0.40	28.7	C	0.25	18.1	B	0.36	25.1	C	0.48	17.8	B	0.61	24.0	C
	EB-T	0.34	10.4	B	0.43	11.5	B	0.25	9.3	A	0.32	10.0	A	0.28	9.6	A	0.35	10.4	B	0.32	10.0	A	0.39	10.9	B
	WB-T	0.53	21.5	C	0.66	25.2	C	0.74	28.9	C	0.89	40.5	D	0.61	23.2	C	0.74	28.0	C	0.42	18.9	B	0.50	20.6	C
	WB-R	0.03	13.8	B	0.07	14.3	B	0.11	14.7	B	0.14	15.0	B	0.06	14.2	B	0.09	14.5	B	0.31	17.3	B	0.36	18.2	B
	NB-LTR	1.00	69.6	E *	1.15	120.6	F *	1.01	71.5	E *	1.16	123.6	F *	1.03	76.5	E *	1.17	127.0	F *	0.55	39.5	D	0.63	41.2	D
23) Jamaica Avenue (E-W) @ Queens Boulevard (N-S)	EB-LT	0.67	29.2	C	0.89	43.7	D	0.61	27.4	C	0.84	38.6	D	0.60	26.9	C	0.82	36.9	D	0.36	22.0	C	0.49	24.5	C
	WB-T	0.49	25.2	C	0.64	29.4	C	0.72	32.7	C	0.88	44.3	D	0.59	27.5	C	0.74	33.1	C	0.44	24.0	C	0.55	26.3	C
	WB-R	0.28	21.5	C	0.33	22.3	C	0.27	21.2	C	0.31	22.0	C	0.22	20.3	C	0.25	20.8	C	0.15	19.5	B	0.18	19.9	B
	SB-L	0.25	20.7	C	0.28	21.2	C	0.19	19.9	B	0.22	20.3	C	0.35	22.3	C	0.40	23.1	C	0.10	18.8	B	0.12	19.0	B
	SB-R	0.11	18.9	B	0.13	19.1	B	0.16	19.5	B	0.18	19.9	B	0.23	20.5	C	0.26	21.0	C	0.19	20.0	B	0.22	20.4	C
24) Jamaica Avenue (E-W) @ Sutphin Boulevard (N-S)	EB-LTR	0.67	30.7	C	0.89	40.7	D	0.66	30.4	C	0.85	35.7	D	0.75	34.0	C	1.00	61.3	E *	0.57	27.2	C	0.73	27.1	C
	WB-LTR	0.68	30.8	C	0.51	20.2	C	0.56	27.5	C	0.42	18.3	B	0.56	27.2	C	0.43	19.7	B	0.68	30.9	C	0.48	19.1	B
	NB-LTR	0.58	26.2	C	0.66	22.4	C	0.41	22.8	C	0.48	19.2	B	0.40	22.8	C	0.45	17.7	B	0.33	21.6	C	0.38	17.8	B
	SB-LTR	0.47	24.0	C	0.54	19.7	B	0.25	20.4	C	0.30	16.7	B	0.33	21.5	C	0.37	16.4	B	0.18	19.6	B	0.21	15.8	B
25) Jamaica Avenue (E-W) @ 150th Street (N-S)	EB-T	0.42	13.8	B	0.56	16.4	B	0.49	15.0	B	0.61	17.8	B	0.47	14.5	B	0.58	16.9	B	0.41	13.5	B	0.51	15.3	B
	EB-R	0.07	9.8	A	0.07	9.8	A	0.07	9.8	A	0.08	9.9	A	0.07	9.8	A	0.07	9.8	A	0.06	9.7	A	0.07	9.8	A
	WB-LT	0.98	53.9	D *	1.32	180.4	F *	0.66	21.1	C	0.84	32.9	C	0.86	35.3	D	1.16	115.7	F *	0.72	24.0	C	0.94	48.5	D *
	NB-LR	0.97	93.9	F *	1.35	227.7	F *	0.48	40.3	D	0.68	52.2	D	0.77	60.3	E *	1.11	139.6	F *	0.39	37.4	D	0.53	43.4	D
	SB-LT	0.51	38.2	D	0.64	42.6	D	0.46	36.8	D	0.58	40.2	D	0.53	38.6	D	0.67	43.5	D	0.42	35.9	D	0.52	38.3	D
	SB-R	0.31	33.9	C	0.36	35.2	D	0.26	32.9	C	0.30	33.9	C	0.24	32.5	C	0.28	33.3	C	0.27	33.2	C	0.31	34.0	C

Abbreviations:

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound
L-Left, T-Through, R-Right, DfL-Defacto Left, E-W: East-West Roadway, N-S: North-South Roadway
V/C Ratio - Volume to Capacity Ratio
SEC/VEH - Seconds per Vehicle
LOS - Level of Service
* - Denotes Congested Location (LOS E or F, or v/c ratio > 0.90)
* - Denotes Location Becoming Congested (LOS E or F, or v/c ratio > 0.90) Under No-Build Conditions.

Table 16-7 (Continued): 2015 No-Action Traffic Conditions at Signalized Intersections

Signalized Intersection	Lane Group	2005 Existing Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS		2015 No-Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS		2005 Existing Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS
26) Jamaica Avenue (E-W) @ Parsons Boulevard (N-S)	EB-L	0.37	22.3	C		0.87	70.1	E	*	0.30	17.9	B	0.48	23.4	C	0.24	17.6	B	0.42	22.5	C	0.16	16.2	B	0.23	17.5	B
	EB-T	0.64	25.3	C		0.74	29.2	C		0.54	21.2	C	0.63	23.7	C	0.55	22.4	C	0.64	24.9	C	0.55	22.3	C	0.63	24.6	C
	EB-R	0.16	15.8	B		0.24	17.0	B		0.10	14.3	B	0.14	14.9	B	0.15	15.7	B	0.21	16.5	B	0.09	14.9	B	0.16	15.8	B
	WB-L	0.30	19.6	B		0.39	22.7	C		0.23	17.0	B	0.29	18.7	B	0.24	18.0	B	0.32	20.1	C	0.54	26.8	C	0.69	37.0	D
	WB-T	0.85	37.7	D		1.02	69.5	E	*	0.56	22.4	C	0.69	26.6	C	0.54	22.3	C	0.67	26.2	C	0.48	21.0	C	0.60	24.1	C
	WB-R	0.19	16.3	B		0.25	17.2	B		0.15	15.1	B	0.20	15.7	B	0.12	15.4	B	0.16	15.8	B	0.12	15.4	B	0.13	15.5	B
	NB-LTR	0.15	28.4	C		0.17	28.7	C		0.15	29.0	C	0.18	29.3	C	0.21	29.3	C	0.24	29.7	C	0.25	29.8	C	0.28	30.3	C
	SB-LTR	0.67	39.1	D		0.82	46.4	D		0.56	36.1	D	0.69	40.2	D	0.68	39.2	D	0.85	48.7	D	0.68	39.6	D	0.76	43.5	D
27) Jamaica Avenue (E-W) @ 160th Street (NB)	EB-L	0.05	9.1	A		0.08	9.8	A		0.08	9.3	A	0.11	9.8	A	0.11	9.6	A	0.14	10.1	B	0.09	9.4	A	0.11	9.9	A
	EB-T	0.70	19.7	B		0.81	25.5	C		0.58	16.1	B	0.69	19.4	B	0.61	16.6	B	0.73	20.4	C	0.66	17.9	B	0.75	21.3	C
	WB-T	0.82	25.9	C		0.98	49.5	D	*	0.57	15.9	B	0.69	19.8	B	0.49	14.0	B	0.60	16.5	B	0.59	16.1	B	0.70	19.4	B
	WB-R	0.03	8.7	A		0.03	8.7	A		0.02	8.6	A	0.02	8.6	A	0.02	8.6	A	0.02	8.6	A	0.01	8.5	A	0.01	8.5	A
	NB-LTR	0.39	35.5	D		0.45	36.5	D		0.62	43.4	D	0.69	46.7	D	0.39	35.5	D	0.44	36.4	D	0.58	41.9	D	0.66	45.2	D
28) Jamaica Avenue (E-W) @ Union Hall / 162nd St (SB)	EB-T	0.60	16.0	B		0.70	19.3	B		0.54	18.7	B	0.64	21.5	C	0.56	14.8	B	0.66	17.5	B	0.63	20.8	C	0.72	23.9	C
	EB-R	0.07	8.6	A		0.07	8.7	A		0.09	12.1	B	0.10	12.2	B	0.09	8.8	A	0.11	8.9	A	0.10	12.2	B	0.11	12.3	B
	WB-T	1.01	58.9	E	*	1.21	130.3	F	*	0.85	36.6	D	1.03	72.1	E	*	0.61	17.0	B	0.75	22.4	C	0.77	28.7	C	0.91	42.9	D	*
	SB-LTR	0.35	41.6	D		0.39	42.3	D		0.25	34.0	C	0.29	34.5	C	0.52	45.2	D	0.59	47.0	D	0.24	33.9	C	0.27	34.3	C
29) Jamaica Avenue (E-W) @ 163rd Street (NB) / Guy R Brewer (N-S)	EB-LT	0.52	12.2	B		0.61	14.2	B		0.41	10.4	B	0.49	11.6	B	0.43	10.6	B	0.52	12.1	B	0.46	11.1	B	0.53	12.3	B
	EB-R	0.11	7.6	A		0.13	7.7	A		0.13	7.7	A	0.14	7.9	A	0.22	8.6	A	0.25	8.9	A	0.14	7.8	A	0.16	8.0	A
	WB-LT	0.81	22.4	C		0.97	42.3	D	*	0.51	12.3	B	0.62	14.7	B	0.46	11.3	B	0.57	13.2	B	0.52	12.3	B	0.62	14.3	B
	WB-R	0.25	8.8	A		0.28	9.1	A		0.14	7.7	A	0.15	7.9	A	0.19	8.1	A	0.21	8.3	A	0.23	8.6	A	0.26	8.8	A
	NB-LTR	0.76	54.8	D		0.86	64.4	E	*	0.54	44.5	D	0.63	47.9	D	0.60	46.8	D	0.69	50.9	D	0.53	44.4	D	0.61	47.1	D
30) Jamaica Avenue (E-W) @ 164th Street (SB)	EB-T	0.49	9.5	A		0.57	11.0	B		0.42	10.6	B	0.50	11.9	B	0.54	20.3	C	0.65	23.5	C	0.52	12.0	B	0.59	13.4	B
	WB-T	0.87	23.6	C		1.01	49.8	D	*	0.48	11.7	B	0.58	13.6	B	0.57	21.2	C	0.69	24.9	C	0.58	13.3	B	0.67	15.7	B
	SB-L	0.32	43.3	D		0.37	44.4	D		0.37	40.3	D	0.42	41.4	D	0.25	27.0	C	0.28	27.5	C	0.42	41.5	D	0.48	43.0	D
	SB-R	0.28	43.2	D		0.36	45.3	D		0.46	43.7	D	0.52	45.9	D	0.32	28.6	C	0.36	29.6	C	0.45	43.6	D	0.52	46.2	D
31) Jamaica Avenue (E-W) @ 165th Street (SB)	EB-T	0.47	9.2	A		0.56	10.7	B		0.44	8.8	A	0.53	10.1	B	0.53	20.1	C	0.65	23.4	C	0.51	9.7	A	0.59	11.1	B
	EB-R	0.14	6.1	A		0.16	6.2	A		0.09	5.7	A	0.10	5.8	A	0.21	14.9	B	0.23	15.2	B	0.13	5.9	A	0.14	6.0	A
	WB-LT	0.80	18.9	B		0.94	33.9	C	*	0.45	9.1	A	0.55	10.7	B	0.59	21.9	C	0.72	26.4	C	0.55	10.5	B	0.64	12.4	B
	NB-LTR	0.44	45.2	D		0.48	46.4	D		0.32	42.8	D	0.35	43.5	D	0.31	27.8	C	0.34	28.5	C	0.23	41.1	D	0.26	41.7	D
32) Jamaica Avenue (E-W) @ Merrick Boulevard (SB)	EB-T	0.51	20.0	B		0.61	22.5	C		0.52	19.9	B	0.61	22.3	C	0.54	20.4	C	0.65	23.3	C	0.64	22.9	C	0.73	26.3	C
	EB-R	0.19	14.7	B		0.22	15.1	B		0.17	14.4	B	0.20	14.8	B	0.18	14.5	B	0.22	15.0	B	0.12	13.8	B	0.14	14.0	B
	WB-LT	0.97	53.7	D	*	1.39	213.2	F	*	0.66	25.0	C	1.02	73.2	E	*	0.61	22.8	C	1.23	150.2	F	*	0.85	36.5	D	1.38	209.5	F	*
	SB-LTR	0.48	30.0	C		0.59	32.4	C		0.33	27.5	C	0.43	29.1	C	0.57	31.9	C	0.69	35.1	D	0.52	30.8	C	0.64	33.5	C
33) Jamaica Avenue (E-W) @ 180th Street	EB-TR	0.27	6.7	A		0.32	7.0	A		0.25	6.5	A	0.30	6.8	A	0.28	6.7	A	0.34	7.1	A	0.24	6.4	A	0.28	6.7	A
	WB-LT	0.58	9.9	A		0.67	11.6	B		0.32	7.1	A	0.38	7.6	A	0.41	7.9	A	0.50	9.0	A	0.38	7.6	A	0.44	8.1	A
	NB-LR	0.09	39.3	D		0.10	39.5	D		0.17	40.6	D	0.19	41.0	D	0.19	41.5	D	0.22	42.3	D	0.11	39.4	D	0.12	39.6	D
	SB-LTR	0.69	56.7	E	*	0.78	63.4	E	*	0.25	41.5	D	0.28	42.2	D	0.66	54.8	D	0.75	60.5	E	*	0.43	45.7	D	0.48	47.3	D
34) Archer Avenue (E-W) @ Sutphin Boulevard (N-S)	EB-L	0.28	23.1	C		0.30	24.3	C		0.17	21.0	C	0.17	20.4	C	0.32	24.0	C	0.37	29.2	C	0.13	20.1	C	0.13	19.7	B
	EB-T	0.51	26.8	C	EB-TR	0.52	25.9	C		0.30	22.3	C	EB-TR	0.28	20.9	C	0.36	23.4	C	EB-TR	0.39	26.6	C	0.19	20.6	C	EB-TR	0.20	20.0	B
	EB-R	0.40	24.6	C						0.23	21.4	C					0.24	21.6	C					0.20	20.8	C				
	WB-L	0.65	33.6	C	WB-LT	0.38	24.0	C		0.52	27.4	C	WB-LT	0.28	20.9	C	0.62	30.9	C	WB-LT	0.39	26.8	C	0.46	25.5	C	WB-LT	0.24	20.4	C
	WB-TR	0.20	21.0	C	WB-R	0.24	22.8	C		0.17	20.5	C	WB-R	0.19	20.5	C	0.21	21.1	C	WB-R	0.28	26.2	C	0.15	20.3	C	WB-R	0.17	20.1	C
					NB-L	0.22	12.1	B					NB-L	0.13	11.7	B				NB-L	0.11	8.8	A				NB-L	0.12	11.5	B
	NB-LTR	0.75	26.5	C	NB-TR	0.50	14.1	B		0.54	20.6	C	NB-TR	0.40	13.8	B	0.48	19.7	B	NB-TR	0.32	10.0	A	0.44	19.0	B	NB-TR	0.31	12.9	B
	SB-LTR	0.47	19.1	B		0.43	13.1	B		0.27	16.5	B	0.26	12.4	B	0.42	18.4	B	0.37	10.4	B	0.23	16.1	B	0.22	11.9	B
35) Archer Avenue (E-W) @ 150th Street (N-S)	EB-LTR	0.61	23.2	C		0.67	25.4	C		0.45	19.2	B	0.50	20.2	C	0.69	26.0	C	0.76	29.5	C	0.44	18.9	B	0.49	19.8	B
	WB-L	0.99	75.8	E	*	1.18	136.7	F	*	0.49	22.3	C	0.58	25.5	C	0.89	54.3	D	1.07	100.9	F	*	0.51	23.0	C	0.59	26.3	C
	WB-TR	0.51	20.8	C		0.56	22.0	C		0.37	18.0	B	0.41	18.6	B	0.41	18.7	B	0.46	19.5	B	0.43	18.8	B	0.47	19.6	B
	NB-LTR	0.54	22.0	C		0.66	25.7	C		0.25	17.2	B	0.30	17.8	B	0.40	19.3	B	0.49	21.2	C	0.22	16.8	B	0.25	17.2	B
	SB-LTR	0.51	27.6	C		0.62	30.5	C		0.47	27.2	C	0.56	29.5	C	0.61	30.1	C	0.72	34.3	C	0.56	29.2	C	0.66	32.4	C
36) Archer Avenue (E-W) @ Parsons Boulevard (N-S)	EB-L	0.44	17.6	B		0.57	23.1	C		0.33	14.1	B	0.40	15.7	B	0.57	21.2	C	0.70	29.0	C	0.57	20.6	C	0.68	26.1	C
	EB-T	0.72	20.7	C		0.80	24.2	C		0.51	15.4	B	0.56	16.6	B	0.57	16.5	B	0.63	17.9	B	0.47	14.6	B	0.52	15.5	B
	WB-T	0.43	13.2	B		0.48	13.9	B		0.28	11.7	B	0.31	12.0	B	0.37	12.5	B	0.41	13.0	B	0.34	12.2	B	0.37	12.6	B
	SB-L	0.50	27.1	C		0.64	30.9	C		0.40	25.0	C	0.49	26.8	C	0.58	28.7	C	0.71	33.3	C	0.56	28.3	C	0.69	32.5	C
	SB-R	0.40	24.5	C		0.45	25.3	C		0.29	22.8	C	0.32	23.2	C	0.32	23.2	C	0.36	23.8	C	0.24	22.1	C	0.26	22.4	C
37) Archer Avenue (E-W) @ 160th Street (NB)	EB-LT	1.03	59.1	E	*	1.28	156.4	F	*	0.63	14.6	B	0.74	18.1	B	0.82	23.3	C	1.04	62.5	E	*	0.67	15.3	B	0.79	19.9	B
	EB-R	0.24	8.7	A		0.27	8.9	A		0.12	7.5	A	0.13	7.6	A	0.31	9.4	A	0.34	9.8	A	0.11	7.5	A	0.13	7.6	A
	WB-LTR	0.80	28.3	C		1.01	58.2	E	*	0.46	18.3	B	0.52	19.3	B	0.65	22.1	C	0.76	25.7	C	0.51	19.0	B	0.57	20.1	C
	NB-LTR	0.64	35.2	D		0.71	37.9	D		0.38	29.1	C	0.43	29.9	C	0.46	30.6	C	0.51	31.7	C	0.37	28.9	C	0.41	29.6	C

Abbreviations:

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound
L-Left, T-Through, R-Right, Dfl.-Defacto Left, E-W: East-West Roadway, N-S: North-South Roadway
V/C Ratio - Volume to Capacity Ratio
SEC/VEH - Seconds per Vehicle
LOS - Level of Service
* - Denotes Congested Location (LOS E or F, or v/c ratio > 0.90)
* - Denotes Location Becoming Congested (LOS E or F, or v/c ratio > 0.90) Under No-Build Conditions.

Table 16-7 (Continued): 2015 No-Action Traffic Conditions at Signalized Intersections

Signalized Intersection	Lane Group	2005 Existing Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS
38) Archer Avenue (E-W) @ Union Hall Street (SB)	EB-T	0.87	30.4	C	1.02	56.9	E *	0.58	16.6	B	0.67	19.0	B	0.71	20.6	C	0.83	26.6	C	0.64	18.0	B	0.75	21.4	C
	WB-T	0.47	13.9	B	0.52	14.6	B	0.52	15.5	B	0.58	16.7	B	0.44	13.4	B	0.49	14.1	B	0.59	16.9	B	0.66	18.5	B
	SB-LR	0.36	24.5	C	0.41	25.4	C	0.34	24.2	C	0.39	25.1	C	0.42	25.6	C	0.47	26.8	C	0.36	24.5	C	0.41	25.5	C
39) Archer Avenue (E-W) @ Guy R Brewer Boulevard (N-S)	EB-LTR	1.03	67.8	E *	1.20	128.8	F *	0.87	36.6	D	1.00	59.4	E *	0.99	57.4	E *	1.15	107.6	F *	0.93	42.9	D *	1.07	78.9	E *
	WB-L	0.32	21.3	C	0.43	27.4	C	0.36	21.1	C	0.47	25.8	C	0.61	33.3	C	0.80	55.9	E *	0.51	27.4	C	0.67	40.6	D
	WB-TR	0.52	19.6	B	0.58	20.6	C	0.35	17.0	B	0.39	17.5	B	0.51	19.2	B	0.56	20.1	C	0.38	17.3	B	0.42	17.8	B
	NB-LTR	0.93	52.9	D *	1.07	87.3	F *	0.54	23.1	C	0.63	26.0	C	0.81	36.6	D	0.92	50.7	D *	0.68	28.5	C	0.77	33.6	C
	SB-LTR	0.15	16.0	B	0.16	16.2	B	0.14	15.9	B	0.16	16.1	B	0.26	17.5	B	0.30	18.0	B	0.17	16.3	B	0.19	16.5	B
40) Archer Avenue (E-W) @ 165th Street (N-S)	EB-LTR	1.01	62.5	E *	1.19	123.3	F *	0.72	26.4	C	0.83	32.6	C	0.96	51.7	D *	1.20	128.4	F *	1.01	63.3	E *	1.17	116.8	F *
	WB-LTR	0.66	22.7	C	0.73	24.9	C	0.44	18.2	B	0.49	18.9	B	0.66	22.6	C	0.74	25.1	C	0.94	50.9	D *	1.07	84.1	F *
	NB-LTR	0.16	16.3	B	0.18	16.5	B	0.19	16.7	B	0.21	16.9	B	0.19	16.8	B	0.22	17.1	B	0.35	19.0	B	0.40	19.8	B
	SB-LTR	0.18	16.5	B	0.19	16.8	B	0.21	17.0	B	0.24	17.3	B	0.46	21.2	C	0.51	22.5	C	0.22	16.9	B	0.25	17.2	B
41) Archer Avenue (E-W) @ Merrick Boulevard (SB)	EB-TR	0.57	20.3	C	0.67	22.3	C	0.47	18.7	B	0.54	19.8	B	0.61	21.4	C	0.70	23.7	C	0.56	20.0	B	0.65	21.8	C
	WB-LT	0.80	28.8	C	0.97	49.7	D *	0.56	20.7	C	0.67	23.6	C	1.02	62.5	E *	1.20	126.5	F *	WB-DfL 0.88	59.7	E *	WB-DfL 1.18	147.8	F *
																				WB-T 0.60	22.4	C	WB-T 0.66	24.3	C
	SB-LTR	0.49	19.8	B	0.62	22.1	C	0.33	17.7	B	0.44	19.1	B	0.53	20.4	C	0.69	23.8	C	0.48	19.6	B	0.61	22.0	C
42) Atlantic Avenue (E-W) @ Van Wyck Expwy Southbound Service Road (SB)	EB-TR	0.57	26.2	C	0.63	27.2	C	0.40	23.8	C	0.44	24.3	C	0.52	25.5	C	0.58	26.3	C	0.61	26.9	C	0.67	28.1	C
	WB-L	0.36	26.6	C	0.43	30.8	C	0.18	15.8	B	0.21	17.1	B	0.32	21.4	C	0.37	24.5	C	0.22	20.4	C	0.25	23.0	C
	WB-LT	0.54	20.2	C	0.63	22.2	C	0.27	13.5	B	0.31	13.9	B	0.44	15.5	B	0.50	16.5	B	0.33	14.2	B	0.38	14.8	B
	SB-LTR	0.80	25.0	C	0.89	29.6	C	0.77	27.2	C	0.86	30.9	C	1.01	51.0	D *	1.13	93.4	F *	0.73	26.2	C	0.82	28.9	C
43) Atlantic Avenue (E-W) @ Van Wyck Expwy Northbound Service Road (NB)	EB-L	EB-DfL 0.70	32.9	C	1.07	90.6	F *	0.55	23.0	C	0.91	51.3	D *	EB-DfL 0.45	21.7	C	0.98	66.7	E *	0.61	24.7	C	1.00	68.7	E *
	EB-T	0.42	18.7	B	0.51	22.9	C	0.29	13.7	B	0.41	20.4	C	0.39	15.2	B	0.52	22.4	C	0.33	14.1	B	0.46	21.3	C
	WB-TR	0.68	33.1	C	0.59	27.1	C	0.45	30.8	C	0.33	22.6	C	0.79	41.8	D	0.53	25.4	C	0.43	30.4	C	0.32	22.4	C
	NB-LTR	0.93	32.5	C *	0.92	29.0	C *	0.92	35.0	C *	0.80	22.8	C	0.94	37.5	D *	0.84	24.3	C	0.63	23.9	C	0.53	17.3	B
44) 94th Avenue (E-W) @ Sutphin Boulevard (N-S)	EB-LR	0.38	17.9	B	-	-	-	0.42	18.4	B	-	-	-	0.37	17.6	B	-	-	-	0.42	18.4	B	-	-	-
	WB-LTR	0.50	19.3	B	0.20	21.1	C	0.28	16.1	B	0.09	14.5	B	0.44	18.2	B	0.17	19.4	B	0.29	16.2	B	0.09	14.6	B
					NB-L 0.45	17.2	B				NB-L 0.17	16.0	B				NB-L 0.38	16.2	B				NB-L 0.16	15.7	B
	NB-LT	1.00	49.6	D *	NB-T 0.80	23.7	C	0.57	12.5	B	NB-T 0.78	29.4	C	0.71	17.1	B	NB-T 0.59	17.9	B	0.43	10.2	B	NB-T 0.61	22.8	C
	SB-TR	0.49	10.1	B	SB-T 0.44	13.1	B	0.28	8.2	A	SB-T 0.21	15.7	B	0.38	9.0	A	SB-T 0.33	12.9	B	0.22	7.8	A	SB-T 0.19	15.5	B
					SB-R 0.13	10.4	B				SB-R 0.27	16.9	B				SB-R 0.16	11.6	B				SB-R 0.15	15.4	B
45) 94th Avenue (WB) @ 150th Street (N-S)	WB-LTR	0.26	16.0	B	0.41	23.5	C	0.22	15.6	B	0.25	16.8	B	0.22	15.6	B	0.28	18.7	B	0.15	14.8	B	0.16	15.0	B
	NB-LT	0.52	11.8	B	0.52	8.3	A	0.23	8.3	A	0.28	8.1	A	0.33	9.1	A	0.37	7.9	A	0.22	8.2	A	0.28	8.7	A
	SB-TR	0.73	16.3	B	0.71	11.6	B	0.46	10.5	B	0.52	10.8	B	0.80	19.3	B	0.84	19.5	B	0.57	12.4	B	0.65	14.1	B
46) Liberty Avenue (E-W) @ Sutphin Boulevard (N-S)	EB-L	0.85	56.7	E *	0.82	45.7	D	0.43	18.9	B	0.41	14.5	B	0.88	71.0	E *	0.98	92.0	F *	0.48	21.0	C	0.48	16.8	B
	EB-TR	0.76	18.6	B	0.73	14.2	B	0.43	13.0	B	0.41	9.6	A	0.49	13.7	B	0.47	10.2	B	0.44	13.2	B	0.43	9.8	A
	WB-L	0.14	12.6	B	0.15	9.5	A	0.14	11.4	B	0.14	8.3	A	0.15	11.6	B	0.15	8.5	A	0.22	12.4	B	0.21	9.3	A
	WB-TR	0.72	17.7	B	0.68	13.2	B	0.63	15.8	B	0.60	11.8	B	0.84	22.1	C	0.81	16.8	B	0.64	15.9	B	0.61	11.9	B
	NB-LTR	0.59	15.5	B	0.67	30.4	C	0.32	12.1	B	0.47	17.4	B	0.42	13.2	B	0.64	20.7	C	0.75	23.3	C	0.59	19.5	B
	SB-LTR	0.50	15.1	B	0.99	63.0	E *	0.45	14.1	B	0.69	23.9	C	0.82	25.2	C	1.60	300.1	F *	0.54	15.4	B	0.97	54.4	D *
47) Liberty Avenue (E-W) @ 150th Street (N-S)	EB-L	0.36	12.5	B	0.53	19.5	B	0.14	8.1	A	0.20	9.1	A	0.26	10.2	B	0.39	14.2	B	0.13	8.0	A	0.17	8.9	A
	EB-TR	0.53	10.4	B	0.62	11.7	B	0.38	9.0	A	0.44	9.5	A	0.47	9.8	A	0.55	10.7	B	0.46	9.7	A	0.54	10.6	B
	WB-L	0.03	7.0	A	0.07	7.6	A	0.08	7.4	A	0.14	8.1	A	0.10	7.7	A	0.23	9.7	A	0.09	7.6	A	0.18	8.9	A
	WB-TR	0.57	11.0	B	0.66	12.3	B	0.45	9.6	A	0.52	10.4	B	0.54	10.6	B	0.64	12.1	B	0.48	9.9	A	0.56	10.8	B
	NB-LTR	1.01	62.3	E *	1.18	119.1	F *	0.48	19.6	B	0.58	22.0	C	0.72	27.4	C	0.85	38.2	D	0.46	19.2	B	0.56	21.6	C
	SB-LTR	0.94	49.2	D *	1.34	192.4	F *	0.46	18.5	B	0.54	20.1	C	0.83	32.3	C	1.03	68.6	E *	0.75	26.5	C	0.89	38.3	D
48) Liberty Avenue (E-W) @ Guy R. Brewer Boulevard (N-S)	EB-L	0.77	52.3	D	0.87	67.7	E *	0.25	13.8	B	0.35	17.1	B	0.53	28.6	C	0.61	34.0	C	0.15	11.8	B	0.21	13.1	B
	EB-TR	0.67	16.5	B	0.80	19.9	B	0.52	14.0	B	0.61	15.4	B	0.75	18.3	B	0.87	23.9	C	0.65	16.1	B	0.77	18.9	B
	WB-L	0.20	13.3	B	0.31	17.8	B	0.15	11.8	B	0.23	13.6	B	0.24	15.1	B	0.37	20.0	C	0.26	14.7	B	0.41	21.5	C
	WB-TR	0.97	34.6	C *	1.10	73.4	E *	0.54	14.3	B	0.63	15.6	B	0.79	19.8	B	0.93	28.6	C *	0.48	13.5	B	0.56	14.6	B
	NB-LTR	0.94	45.5	D *	1.16	112.9	F *	0.49	15.5	B	0.60	18.2	B	0.77	26.9	C	0.99	60.4	E *	0.69	21.2	C	0.83	30.4	C
	SB-L	0.09	10.7	B	0.10	11.0	B	0.09	10.6	B	0.11	10.9	B	0.19	11.7	B	0.22	12.3	B	0.17	11.6	B	0.21	12.2	B
	SB-TR	0.49	15.5	B	0.54	16.6	B	0.52	16.2	B	0.59	17.7	B	0.78	24.9	C	0.87	32.3	C	0.51	15.9	B	0.57	17.2	B
49) Liberty Avenue (E-W) @ Merrick Boulevard (SB)	EB-T	0.53	14.5	B	0.62	16.0	B	0.33	12.1	B	0.39	12.7	B	0.52	14.4	B	0.60	15.6	B	0.55	14.8	B	0.63	16.2	B
	EB-R	0.31	12.5	B	0.35	13.0	B	0.14	10.7	B	0.17	11.0	B	0.39	13.5	B	0.45	14.4	B	0.34	12.8	B	0.38	13.4	B
	WB-L	0.37	16.8	B	0.54	25.8	C	0.28	13.2	B	0.36	15.1	B	0.51	21.3	C	0.71	36.9	D	0.39	17.7	B	0.56	27.4	C
	WB-T	0.65	16.6	B	0.72	18.3	B	0.31	11.9	B	0.35	12.3	B	0.50	14.1	B	0.56	15.0	B	0.44	13.3	B	0.49	13.9	B
	SB-LTR	0.99	56.1	E *	1.16	114.9	F *	0.71	30.6	C	0.87	39.0	D	1.01	61.2	E *	1.25	150.8	F *	1.01	62.9	E *	1.21	133.5	F *

Abbreviations:

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound

L-Left, T-Through, R-Right, DfL-Defacto Left, E-W: East-West Roadway, N-S: North-South Roadway

V/C Ratio - Volume to Capacity Ratio

SEC/VEH - Seconds per Vehicle

LOS - Level of Service

* - Denotes Congested Location (LOS E or F, or v/c ratio > 0.90)

* - Denotes Location Becoming Congested (LOS E or F, or v/c ratio > 0.90) Under No-Build Conditions.

Table 16-7 (Continued): 2015 No-Action Traffic Conditions at Signalized Intersections

Signalized Intersection	Lane Group	2005 Existing Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS
50) Liberty Avenue (E-W) @ Dunkirk Street	EB-T	0.63	13.3	B	0.72	15.6	B	0.42	9.9	A	0.48	10.7	B	0.69	14.6	B	0.79	18.1	B	0.55	11.7	B	0.61	12.9	B
	EB-R	0.31	9.0	A	0.34	9.3	A	0.27	8.7	A	0.30	9.0	A	0.75	17.8	B	0.83	22.1	C	0.38	9.8	A	0.42	10.3	B
	WB-LT	0.75	16.6	B	0.86	22.7	C	0.40	9.7	A	0.46	10.5	B	0.50	10.9	B	0.57	12.0	B	0.52	11.3	B	0.59	12.5	B
	NB-L	1.04	68.2	E *	1.14	105.3	F *	0.41	17.8	B	0.45	18.5	B	0.54	20.1	C	0.59	21.4	C	0.57	20.9	C	0.63	22.4	C
	NB-R	0.03	13.7	B	0.03	13.7	B	0.01	13.5	B	0.01	13.5	B	0.03	13.7	B	0.03	13.7	B	0.01	13.6	B	0.02	13.6	B
51) South Road (E-W) @ Guy R Brewer Boulevard (N-S)	EB-LTR	0.79	31.0	C	0.88	39.2	D	0.54	20.9	C	0.59	22.5	C	0.65	24.0	C	0.72	26.8	C	0.46	19.1	B	0.51	20.1	C
	WB-LTR	0.35	17.0	B	0.39	17.6	B	0.26	15.9	B	0.30	16.4	B	0.50	19.5	B	0.57	21.0	C	0.32	16.6	B	0.36	17.1	B
	NB-LTR	0.76	19.4	B	0.88	28.3	C	0.41	10.3	B	0.49	11.5	B	0.59	13.4	B	0.67	15.8	B	0.47	10.8	B	0.52	11.7	B
	SB-LTR	0.65	15.0	B	0.72	17.6	B	0.53	12.0	B	0.61	13.8	B	0.77	19.1	B	0.88	27.5	C	0.56	12.6	B	0.64	14.2	B
52) 107th Avenue (E-W) @ Guy R Brewer Boulevard (N-S)	EB-LTR	0.08	14.2	B	0.09	14.4	B	0.11	14.6	B	0.13	14.7	B	0.08	14.2	B	0.09	14.3	B	0.07	14.2	B	0.08	14.2	B
	WB-LTR	0.06	14.0	B	0.07	14.1	B	0.07	14.2	B	0.08	14.2	B	0.08	14.2	B	0.09	14.3	B	0.04	13.9	B	0.05	13.9	B
	NB-LTR	0.66	14.7	B	0.76	18.1	B	0.37	9.5	A	0.43	10.2	B	0.53	11.7	B	0.60	13.1	B	0.45	10.5	B	0.51	11.3	B
	SB-LTR	0.50	11.5	B	0.56	12.6	B	0.47	10.9	B	0.54	12.0	B	0.64	14.0	B	0.74	17.0	B	0.55	12.2	B	0.62	13.6	B
53) 108th Avenue (E-W) @ Merrick Boulevard (N-S)	EB-LTR	0.45	31.7	C	0.53	34.6	C	0.31	28.4	C	0.35	29.1	C	0.43	30.9	C	0.47	32.2	C	0.37	29.4	C	0.45	31.4	C
	WB-LTR	0.52	33.6	C	0.60	36.8	D	0.55	34.6	C	0.64	38.6	D	0.47	32.1	C	0.55	34.7	C	0.34	28.6	C	0.40	30.2	C
	NB-L	0.20	8.8	A	0.27	10.0	B	0.06	7.3	A	0.07	7.5	A	0.12	8.1	A	0.17	9.1	A	0.10	7.9	A	0.17	8.9	A
	NB-TR	0.67	13.5	B	0.76	15.9	B	0.31	8.8	A	0.35	9.2	A	0.44	10.1	B	0.50	10.8	B	0.35	9.2	A	0.40	9.7	A
	SB-L	0.11	8.4	A	0.16	9.8	A	0.04	7.2	A	0.06	7.3	A	0.03	7.1	A	0.04	7.2	A	0.04	7.2	A	0.05	7.3	A
	SB-TR	0.34	9.1	A	0.40	9.6	A	0.32	8.9	A	0.39	9.6	A	0.46	10.3	B	0.55	11.5	B	0.41	9.8	A	0.48	10.6	B

Abbreviations:
EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound
L-Left, T-Through, R-Right, Dfl.-Defacto Left, E-W: East-West Roadway, N-S: North-South Roadway
V/C Ratio - Volume to Capacity Ratio
SEC/VEH - Seconds per Vehicle
LOS - Level of Service
* - Denotes Congested Location (LOS E or F, or v/c ratio > 0.90)
* - Denotes Location Becoming Congested (LOS E or F, or v/c ratio > 0.90) Under No-Build Conditions.

June 29, 2007

Table 16-8: 2015 No-Action Traffic Conditions at Unsignalized Intersections

Unsignalized Intersection	Lane Group	2005 Existing Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2005 Existing Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS
54) Jamaica Avenue (E-W) @ 178th Street (SB)	EB-LT	0.16	12.8	B	0.20	14.6	B	0.03	8.7	A	0.03	9.0	A	0.04	8.6	A	0.05	9	A	0.10	9.8	A	0.12	10.5	B
	WB-LT	0.03	8.6	A	0.03	8.9	A	0.03	9.1	A	0.04	9.6	A	0.06	9.1	A	0.07	9.6	A	0.02	8.4	A	0.02	8.6	A
	NB-LT	0.50	55.4	F *	0.80	123.6	F *	0.13	17.8	C	0.17	20.7	C	0.17	20.3	C	0.22	25.2	D	0.20	25.4	D	0.27	32.7	D
	NB-TR	0.51	46.9	E *	0.81	107.3	F *	0.10	15.5	C	0.13	17.6	C	0.18	18.4	C	0.24	22.5	C	0.22	20.4	C	0.30	25.5	D

Abbreviations
EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound
L-Left, T-Through, R-Right, Dfl.-Defacto Left, E-W: East-West Roadway, N-S: North-South Roadway
V/C Ratio - Volume to Capacity Ratio
SEC/VEH - Seconds per Vehicle
LOS - Level of Service
* - Denotes Congested Location (LOS E or F, or v/c ratio > 0.90)
* - Denotes Location Becoming Congested (LOS E or F, or v/c ratio > 0.90) Under No-Build Conditions.

June 29, 2007

Table 16-9
2015 No-Action Off-Street Parking Utilization

THIS TABLE HAS BEEN REVISED FOR THE FEIS

2015 No-Action Accessory Capacity and Demand at Projected Development Sites and No-Action Development Projects

	AM Period			Midday Period			Overnight Period		
	Accessory Capacity	Accessory Demand	Excess/ Public Demand (1)	Accessory Capacity	Accessory Demand	Excess/ Public Demand (1)	Accessory Capacity	Accessory Demand	Excess/ Public Demand (1)
Downtown Jamaica Core	3,047	1,593	0	3,047	2,101	0	3,047	1,279	0
Hillside Avenue (East)	209	161	0	209	212	-3	209	20	0
Sutphin Blvd (South)	802	286	0	802	703	0	802	131	0
Jamaica Avenue (East)	146	128	0	146	261	-115	146	68	0
Guy R. Brewer (South)	79	56	0	79	75	0	79	44	0
Merrick Boulevard (South)	16	47	-31	16	83	-67	16	1	0
Other Areas	28	13	0	28	18	0	28	16	0
Total	4,327	2,284	-31	4,327	3,453	-185	4,327	1,559	0

2015 No-Action Public Parking Demand

	AM Period				Midday Period				Overnight Period			
	Public Capacity	Public Demand	Available Public Spaces	Public Utilization	Public Capacity	Public Demand	Available Public Spaces	Public Utilization	Public Capacity	Public Demand	Available Public Spaces	Public Utilization
Downtown Jamaica Core	4,947	2,632	2,315	53%	4,947	4,810	137	97%	3,428	1,575	1,853	46%
Hillside Avenue (East)	341	367	-26	108%	341	603	-262	177%	291	149	142	51%
Sutphin Blvd (South)	160	114	47	71%	160	177	-17	111%	40	4	36	10%
Jamaica Avenue (East)	0	0	0	--	0	115	-115	--	0	0	0	--
Guy R. Brewer (South)	0	0	0	--	0	0	0	--	0	0	0	--
Merrick Boulevard (South)	0	31	-31	--	0	67	-67	--	0	0	0	--
Other Areas	0	0	0	--	0	0	0	--	0	0	0	--
	5,448	3,143	2,305	58%	5,448	5,772	-324	106%	3,759	1,727	2,032	46%

(1) - Overflow parking demand that cannot be accommodated by the accessory requirements, which would be added to the public parking demand.

June 29, 2007

utilization rate of 46 percent, even though much of the parking supply would continue to be closed during the overnight period, as is the case under Existing conditions.

ON-STREET PARKING

Curbside metered parking spaces in the study area would also have increased use under No-Action conditions. It is expected that the metered parking utilization would increase to capacity from 91 percent under Existing conditions due to the one percent per year background growth.

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

This section provides an analysis of traffic and parking conditions in the future with the proposed actions (the With-Action condition). As described in detail in Chapter 1, "Project Description," the proposed actions are projected to stimulate approximately 3,565 new dwelling units, 3.1 million square feet of retail/commercial space, and 245,000 sf of community facility space, and a reduction of 379,700 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 examines future traffic and parking conditions in 2015 with the full build-out of the proposed projected development scenario.

TRIP GENERATION

The proposed actions are expected to result in approximately 3,565 dwelling units, 3.1 million square feet of retail/commercial space, and 245,000 sf of community facility space, and a reduction of 379,700 sf of industrial space. The trip generation rates and mode choice factors used to estimate the travel demand that would be generated by this new development were based on acceptable CEQR criteria, standard professional references, and studies that have been done for similar uses. These sources were supplemented by 2000 Census data and recent data from other sources. Trip generation rates and modal split factors used in forecasting the travel demand from projected development sites are presented in Tables 16-10 and 16-10a.

As shown in Tables 16-11 and 16-11a, the projected developments resulting from the proposed actions, would generate a net total of 1,366 new inbound and 729 new outbound vehicle trips in the AM peak hour (auto, taxi and truck), 618 new inbound and 587 new outbound vehicle trips in the midday, 846 new inbound and 1,826 new outbound vehicle trips in the PM peak hour, and 836 new inbound and 735 new outbound vehicle trips in the Saturday midday peak hour.

Net project-generated trips by subway would total 977 inbound and 984 outbound in the AM peak hour, 1,025 inbound and 999 outbound in the midday peak hour, 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. 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 peak hour, 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, bicycle or other non-vehicular modes would total 766 inbound and 586 outbound in the AM peak hour, 3,506 inbound and 4,239 outbound in the midday peak hour, 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 probable impacts of the proposed actions on the subway, bus and pedestrian modes are discussed in detail in Chapter 17, "Transit and Pedestrians."

TRIP ASSIGNMENT

For trip assignment purposes, the 186 projected development sites identified in this study were grouped by location. Many of the projected development sites would be located along the same blocks, therefore, 55 groups were defined and utilized for trip assignment purposes. Figure 16-12 shows these 55 groups. Figures 16-13 through 16-16 show the assignment of net project increment traffic (autos, taxis and trucks) to the study area street network during the AM, midday, PM and Saturday midday peak hours, respectively. Auto and taxi trips to and from projected developments were assigned to the proposed action area portals based on census origin/destination survey data. Auto and taxi trips were then assigned via the most direct routes to and from each development site block. Truck trips were assigned to designated truck routes within the study area, and then via the most direct path on the local street network to and from each development site.

VEHICULAR TRAFFIC

Figures 16-17 through 16-20 show the AM, midday, PM and Saturday midday peak hour traffic networks in the 2015 future with the proposed actions. The volumes shown are the combination of the net incremental traffic generated by the proposed actions and the 2015 No-Action network.

IMPACT ANALYSIS METHODOLOGY

According to *CEQR* criteria, if levels of service deteriorate from LOS A, B or C in the No-Action condition to marginally acceptable mid-LOS D or unacceptable LOS E or F in the With-Action condition, then a significant traffic impact has occurred. *CEQR* criteria further specify that for a No-Action LOS A, B or C which declines to mid-LOS D (45 seconds of delay for signalized intersections and 30 seconds of delay for unsignalized intersections) or worse in the With-Action condition, mitigation to mid-LOS D is required. For No-Action LOS D, and increase of five or more seconds in a lane group in the With-Action condition should be considered significant if the With-Action delay exceeds mid-LOS D. For No-Action LOS E, an increase in delay of four seconds should be considered significant. For No-Action LOS F, three seconds of delay should be considered significant, however, if the No-Action LOS F condition already has delays in excess of 120 seconds, an increase of one second in delay should be considered significant, unless the proposed actions would generate fewer than five vehicles through that intersection in the peak hour (signalized intersections) or fewer than five passenger car equivalents (PCE) in the peak hour along the critical approach (unsignalized intersection). In addition, for unsignalized intersections, for the minor street approach to generate a significant impact, 90 PCEs must be identified in the With-Action condition in any peak hour.

Tables 16-12 and 16-13 show the AM, midday, PM and Saturday midday peak hour volume-to-capacity ratios, delays and levels of service at signalized and unsignalized study area intersections, respectively, in the 2015 future with the proposed actions. The tables also identify those locations that would be impacted based on the criteria discussed above. A summary of significantly impacted intersections is provided in Table 16-14.

Table 16-10 : Transportation Planning Factors

Land Use:		Office	Residential	Destination Retail	Neigborhood Retail	Community Facility Miscellaneous	Hotel	Industrial
Size/Units:		1,728,608 gsf	3,565 DU	850,846 gsf	328,260 gsf	245,180 gsf	225 rooms	-379,752 gsf
		(1)	(2)	(5)	(7)	(8)	(9)	(10)
Trip Generation:	Weekday	18	8.075	75	205		5.82	9.54
	Saturday	0.9	7.678	100	205		8.61	1.81
		per 1,000 sf	per du	per 1,000 sf	per 1,000 sf		per room	per 1,000 sf
Temporal Distribution:		(1)	(2)	(5)	(7)		(9)	(10)
AM		11.8%	9.1%	2.3%	3.1%		6.6%	13.2%
MD		14.5%	4.7%	8.7%	19.0%		8.3%	11.0%
PM		13.7%	10.7%	8.9%	9.6%		7.7%	14.2%
SatMD		15.0%	8.2%	11.5%	9.5%		8.5%	10.7%
		(3)	(3)	(5)	(7)		(9)	(3)
Modal Splits:		AM/PM/Sat MD						AM/PM/Sat MD
Auto		46.3% 2.0%	29.0%	20.0%	2.0%		30.1%	46.3% 2.0%
Taxi		0.9% 1.0%	0.8%	1.0%	3.0%		12.3%	0.9% 1.0%
Subway		16.5% 7.0%	39.2%	23.0%	6.0%		18.9%	16.5% 7.0%
Bus		21.7% 7.0%	19.8%	33.0%	6.0%		5.5%	21.7% 7.0%
Walk		8.2% 83.0%	9.0%	23.0%	83.0%		33.2%	8.2% 83.0%
Rail		6.4% 0.0%	2.2%	0.0%	0.0%		0.0%	6.4% 0.0%
		100.0% 100%	100.0%	100.0%	100.0%		100.0%	100.0%
		(1)	(2)	(5)	(7)		(9)	(4)
In/Out Splits:		In Out	In Out	In Out	In Out		In Out	In Out
AM		96% 4%	20.0% 80.0%	61% 39%	50% 50%		41.0% 59.0%	88.0% 12.0%
MD		39% 61%	51.0% 49.0%	55% 45%	50% 50%		68.0% 32.0%	50.0% 50.0%
PM		5% 95%	65.0% 35.0%	47% 53%	50% 50%		59.0% 41.0%	24.0% 76.0%
Sat MD		60% 40%	50.0% 50.0%	55% 45%	50% 50%		56.0% 44.0%	47.0% 53.0%
Vehicle Occupancy:		(1)	(3)	(6)	(7)		(9)	(10)
Auto		1.42	1.15	2.30	2.00		1.6	1.30
Taxi		1.42	1.40	2.30	2.00		1.4	1.30
Truck Trip Generation:		(4)	(4)	(4)	(4)		(4)	(4)
		0.29	0.06	0.35	0.35		0.10	0.67
		per 1,000 sf	per DU	per 1,000 sf	per 1,000 sf		per 1,000 sf	per 1,000 sf
		(4)	(4)	(4)	(4)		(4)	(4)
AM		9.6%	12.2%	7.7%	7.7%		12.2%	14.0%
MD		11.0%	8.7%	11.0%	11.0%		8.7%	8.6%
PM		2.0%	1.0%	1.0%	1.0%		0.0%	1.0%
Sat MD		-	-	-	-		-	-
		In Out	In Out	In Out	In Out		In Out	In Out
AM/MD/PM		50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%		50.0% 50.0%	50.0% 50.0%

Notes :

(1) Weekday trip rate based on Pushkarev & Zupan, "Urban Space for Pedestrian," 1975. Saturday rate is based on Coliseum FEIS, July 1997. Vehicle occupancy based on Downtown Brooklyn Development FEIS, April 2004.

(2) Weekday Trip Rate and Temporal Distribution: Pushkarev & Zupan, "Urban Space for Pedestrian," 1975. Saturday Rate and Temporal Distribution: ITE Land Use Code (220) apartment rate variation between weekday and Saturday. In and Out split: Downtown Brooklyn Development FEIS, April 2004 (Weekday AM and PM in/out split consistent with ITE Land Use 220 - Apartment).

(3) Residential modal split is based on 2000 census journey-to-work data. Office and Industrial modal split is based on 2000 census reverse journey-to-work. Midday office/industrial mode is based on Downtown Brooklyn FEIS (April 2004).

(4) Federal Highway Administration, "Curbside Pickup and Delivery and Arterial Traffic Impacts," 1981.

(5) Destination Retail trip rate is derived from ITE rates. Mode split from One Jamaica Center EAS 1998. 35% linked trips are assumed in demand forecast summary based on planning factors derived from ITE Land Use Code 820 equations.

(6) Based on travel surveys, conducted by PHA in November 1994, for the Northern Boulevard Stores FEIS, September 1995.

(7) 2001 CEQR Technical Manual. 70% linked trip are applied in the demand forecast summary based on survey within Bronxchester Retail Technical Memorandum, February 2004.

(8) See separate trip generation summary (Table 16-10a) for different types of community facilities.

(9) Based on Marriot Hotel Transportation Survey, AKRF, August 1999. Use of JFK AirTrain is included in subway mode.

(10) ITE Land Use code (110) Light Industrial.

June 29, 2007

Table 16-10a : Transportation Planning Factors for Community Facilities

Land Use:		Social Service Office		Professional school		Hospital		Medical Office		House of Worship		Community Center	
Size/Units:		26,171 gsf		35,600 gsf		57,841 gsf		13,358 gsf		98,757 gsf		13,453 gsf	
								(6)					
		(1)		(4)		(5)		Staff	Visitors	(7)		(9)	
Trip Generation:	Weekday	18		26.60		36.99		10	33.6	19.18		48	
	Saturday	0.9		10.87		24.69		4.3	14.5	21.83 (Sun = 77.12)		19	
		per 1,000 sf		per 1,000 sf		per 1,000 sf		per 1,000 sf		per 1,000 sf		per 1,000 sf	
Temporal Distribution:		(1)		(4)		(5)		(6)		(7)		(9)	
	AM	11.8%		7.2%		6.8%		24.0%	6.0%	7.9%		7.1%	
	MD	14.5%		10.7%		8.4%		17.0%	9.0%	4.0%		10.0%	
	PM	13.7%		12.6%		6.7%		24.0%	5.0%	7.2%		7.2%	
	Sat MD	15.0%		12.6%		19.3%		17.0%	9.0%	15.8%		14.2%	
		(2)		(4)		(5)		(6)		(8)		(10)	
Modal Splits:		AM/PM/Sat	MD										
	Auto	46.3%	2.0%	10.0%		47.0%		20.0%	25.0%	29.0%		5.0%	
	Taxi	0.9%	1.0%	2.0%		24.0%		10.0%	25.0%	0.8%		1.0%	
	Subway	16.5%	7.0%	57.0%		5.0%		30.0%	29.0%	39.2%		3.0%	
	Bus	21.7%	7.0%	21.0%		13.0%		30.0%	11.0%	19.8%		6.0%	
	Walk	8.2%	83.0%	10.0%		11.0%		10.0%	10.0%	9.0%		85.0%	
	Rail	6.4%	0.0%	0.0%		0.0%		0.0%	0.0%	2.2%		0.0%	
		100.0%	100%	100.0%		100.0%		100.0%	100.0%	100.0%		100.0%	
		(1)		(4)		(5)		(6)		(7)		(9)	
In/Out Splits:		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	AM	96%	4%	94.0%	6.0%	67%	33%	94%	6%	54%	46%	61.0%	39.0%
	MD	39%	61%	46.0%	54.0%	50%	50%	50%	50%	50%	50%	55.0%	45.0%
	PM	5%	95%	44.0%	56.0%	33%	67%	12%	88%	52%	48%	29.0%	71.0%
	Sat MD	60%	40%	57.0%	43.0%	50%	50%	50%	50%	71%	29%	49.0%	51.0%
Vehicle Occupancy:		(1)		(4)		(5)		(6)		(2)		(2)	
	Auto	1.42		1.50		1.65		1.00	1.65	1.65		1.65	
	Taxi	1.42		1.50		1.40		1.40	1.20	1.40		1.40	
Truck Trip Generation:		(3)		(3)		(3)		(3)		(3)		(3)	
		0.29		0.29		0.29		0.29		0.29		0.29	
		per 1,000 sf		per 1,000 sf		per 1,000 sf		per 1,000 sf		per 1,000 sf		per 1,000 sf	
		(3)		(3)		(3)		(3)		(3)		(3)	
	AM	9.6%		9.6%		9.6%		9.6%		9.6%		9.6%	
	MD	11.0%		11.0%		11.0%		11.0%		11.0%		11.0%	
	PM	1.0%		1.0%		1.0%		1.0%		1.0%		1.0%	
	Sat MD	-		-		-		-		-		-	
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	AM/MD/PM	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%

Notes :

(1) Pushkarev & Zupan, "Urban Space for Pedestrian," 1975. Saturday rate is based on Colisuem FEIS. Vehicle occupancy based on DOT ECO survey for Downtown Brooklyn.

(2) Social Service office modal split is based on 2000 census reverse journey-to-work. Midday office mode is based on Downtown Brooklyn FEIS (April 2004).

(3) Federal Highway Administration, "Curbside Pickup and Delivery and Arterial Traffic Impacts," 1981.

(4) Trip rate (weekday) and temporal distributions are based on MetroTech FEIS, 1987 (University). Saturday rate derived from the ratio of weekday to Saturday rates of ITE Land Use Code (540) Junior/Community College. PHA transportation planning factors based on area mode splits for other uses.

(5) Trip rates and temporal distribution based on the ITE Land Use code (610) Hospital. Modal split and vehicle occupancy based Children's Hospital at Montefiore EAS.

(6) Based on 506 East 76th Street Rezoning DEIS. Saturday rate based on ITE Land Use Code (630) Clinic trip ratio between weekday and Saturday.

(7) Based on the ITE Land Use code (560) Church. Sunday rate is not used in the analysis

(8) Based on 2000 Census Journey-to-Work data.

(9) Based on the ITE Land Use code (495) Recreational Community Center .

(10) Based on "Coliseum Redevelopment FSEIS," July 1997 (Health Club) and adjusted for local conditions.

Table 16-11 : Peak Hour Demand Forecast for the Proposed Action with Linked Trips

THIS TABLE HAS BEEN REVISED FOR THE FEIS

Land Use:		Office		Residential		Destination Retail		Neigborhood Retail		Community Facility Miscellaneous		Hotel		Industrial		Total Net Demand	
Peak Hour Trips:																	
	AM	3,672		2,620		958		626		524		86		-478		8,008	
	MD	4,512		1,353		3,625		3,836		552		109		-399		13,588	
	PM	4,263		3,080		3,709		1,938		566		101		-514		13,142	
	Sun MD	233		2,245		6,345		1,918		732		165		-74		11,564	
Person Trips:																	
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
AM	Auto	1,632	68	152	608	117	75	6	6	113	46	11	15	-195	-27	1,836	791
	Taxi	32	1	4	17	6	4	9	9	35	13	4	6	-4	-1	87	50
	Subway	583	24	205	822	134	86	19	19	99	34	7	10	-70	-9	977	984
	Bus	765	32	104	415	193	123	19	19	67	23	2	3	-91	-12	1,058	603
	Walk	289	12	47	189	134	86	260	260	59	27	12	17	-35	-5	766	586
	Railway/LIRR	226	9	12	46	0	0	0	0	5	2	0	0	-27	-4	215	53
	Total	3,526	147	524	2,096	585	374	313	313	378	146	36	51	-421	-58	4,941	3,068
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
MD	Auto	35	55	200	192	399	326	38	38	67	67	22	10	-4	-4	758	685
	Taxi	18	28	6	5	20	16	58	58	29	29	9	4	-2	-2	137	137
	Subway	123	193	270	260	459	375	115	115	57	63	14	7	-14	-14	1,025	999
	Bus	123	193	137	131	658	538	115	115	40	42	4	2	-14	-14	1,062	1,008
	Walk	1,460	2,284	62	60	459	375	1,592	1,592	73	81	25	12	-165	-165	3,506	4,239
	Railway/LIRR	0	0	15	15	0	0	0	0	1	1	0	0	0	0	16	15
	Total	1760	2752	690	663	1994	1631	1918	1918	267	283	74	35	-199	-199	6,504	7,083
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
PM	Auto	99	1,875	581	313	349	393	19	19	51	112	18	12	-57	-181	1,059	2,544
	Taxi	2	36	16	9	18	20	29	29	14	34	7	5	-1	-4	85	129
	Subway	35	670	785	423	401	452	58	58	62	94	11	8	-20	-65	1,333	1,640
	Bus	46	879	396	213	575	649	58	58	34	66	3	2	-27	-85	1,086	1,782
	Walk	17	332	180	97	401	452	804	804	29	61	20	14	-10	-32	1,442	1,728
	Railway/LIRR	14	259	44	24	0	0	0	0	2	5	0	0	-8	-25	52	263
	Total	213	4,051	2,002	1,078	1,744	1,966	969	969	192	373	59	41	-123	-392	5,056	8,087
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Sat MD	Auto	65	43	325	325	698	571	19	19	142	100	28	22	-16	-18	1,262	1,063
	Taxi	1	1	9	9	35	29	29	29	39	37	11	9	-0	-0	124	113
	Subway	23	15	440	440	803	657	58	58	122	62	17	14	-6	-6	1,457	1,239
	Bus	30	20	222	222	1,152	942	58	58	75	45	5	4	-8	-8	1,534	1,283
	Walk	11	8	101	101	803	657	796	796	56	43	31	24	-3	-3	1,795	1,625
	Railway/LIRR	9	6	25	25	0	0	0	0	5	2	0	0	-2	-2	37	30
	Total	140	93	1,122	1,122	3,490	2,855	959	959	440	290	92	72	-35	-39	6,209	5,354
Vehicle Trips :																	
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
AM	Auto (Total)	1,149	48	132	528	51	32	3	3	74	29	7	9	-150	-21	1,266	629
	Taxi	22	1	3	12	3	2	5	5	25	8	3	4	-3	0	58	31
	Taxi (balanced)															60	60
	Truck	24	24	14	14	11	11	4	4	3	3	0	0	-18	-18	39	39
	Total	1,195	73	149	554	65	46	12	12	103	40	10	13	-171	-38	1,366	729
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
MD	Auto (Total)	25	39	174	167	174	142	19	19	42	42	14	6	-3	-3	444	412
	Taxi	12	19	4	4	9	7	29	29	21	21	6	3	-2	-2	80	81
	Taxi (balanced)															121	121
	Truck	27	27	10	10	16	16	6	6	4	4	0	0	-11	-11	53	53
	Total	65	86	188	181	199	165	54	54	67	67	20	9	-15	-15	618	587
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
PM	Auto (Total)	69	1,320	505	272	152	171	10	10	32	73	11	8	-44	-139	735	1,715
	Taxi	1	26	11	6	8	9	15	15	10	23	5	4	-1	-3	49	79
	Taxi (balanced)															104	104
	Truck	5	5	1	1	1	1	1	1	0	0	0	0	-1	-1	7	7
	Total	76	1,351	517	279	161	181	25	25	43	97	16	11	-46	-143	846	1,826
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Sat MD	Auto (Total)	46	30	283	283	303	248	10	10	87	61	17	14	-12	-14	734	632
	Taxi	1	1	6	6	15	12	14	14	27	27	8	6	-0	-0	72	66
	Taxi (balanced)															103	103
	Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	47	31	289	289	319	261	24	24	114	88	25	20	-13	-14	836	735

	Total Vehicle	In	Out	Total
	AM	1,366	729	2,095
	MD	618	587	1,205
	PM	846	1,826	2,672
	Sat MD	836	735	1,571

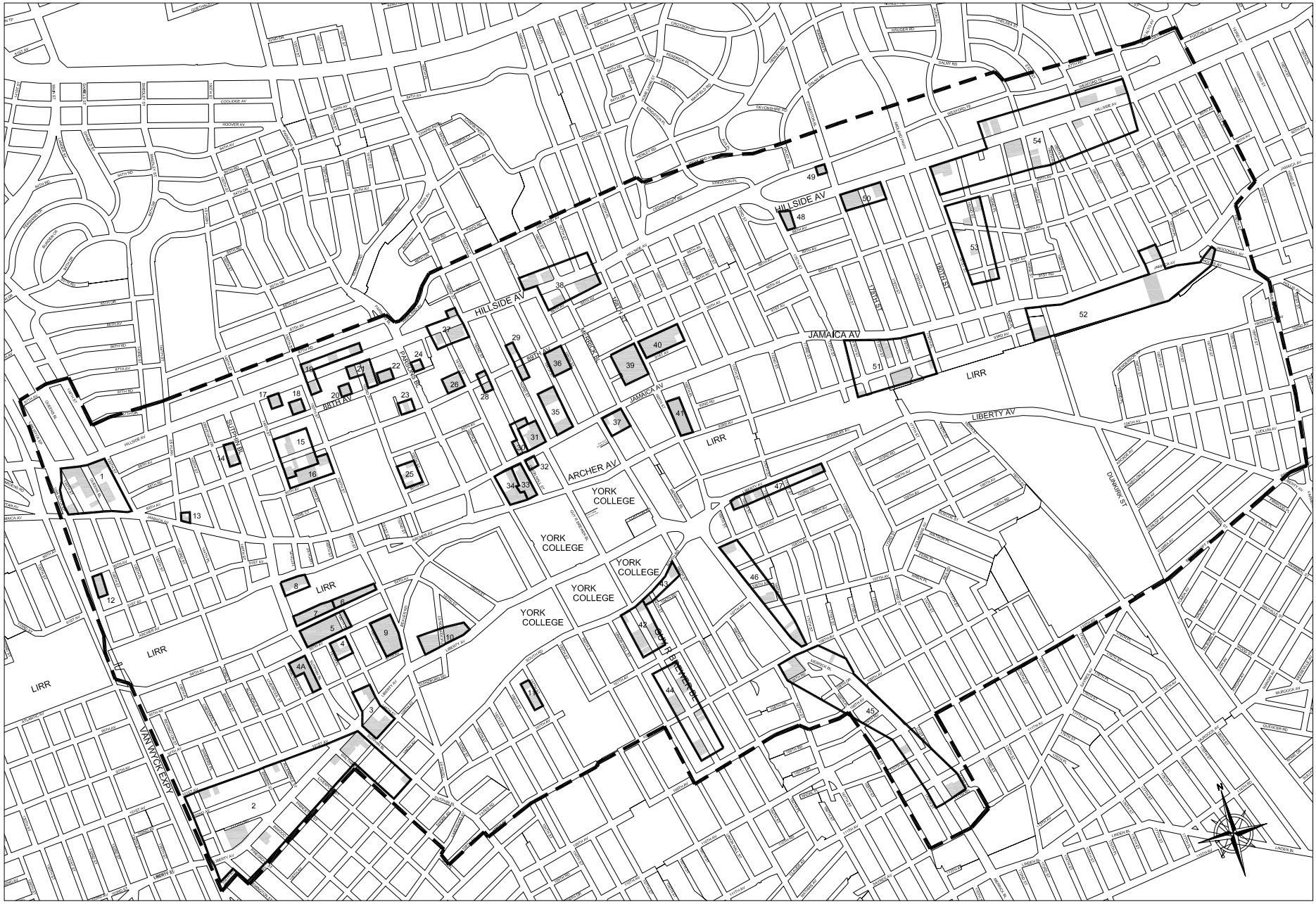
June 29, 2007

Table 16-11a : Community Facilities Demand Forecast Summary

Land Use:		Social Service Office		Professional school		Hospital		Medical Office		House of Worship		Community Center		Total Net Demand	
Size/Units:		26,171	gsf	35,600	gsf	57,841	gsf	13,358	gsf	98,757	gsf	13,453	gsf		
Peak Hour Trips:								Staff	Visitor						
	AM	56		68		146		32	27	150		46		524	
	MD	68		101		179		23	40	76		65		552	
	PM	65		119		144		32	22	137		46		566	
	Sun MD	4		49		275		10	17	341		36		732	
Person Trips:															
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
AM	Auto	25	1	6	0	46	23	12	1	23	20	1	1	113	46
	Taxi	0	0	1	0	23	12	9	1	1	1	0	0	35	13
	Subway	9	0	37	2	5	2	16	1	32	27	1	1	99	34
	Bus	12	0	13	1	13	6	12	1	16	14	2	1	67	23
	Walk	4	0	6	0	11	5	6	0	7	6	24	15	59	27
	Railway/LIRR	3	0	0	0	0	0	0	0	2	2	0	0	5	2
	Total	53	2	64	4	98	49	55	4	80	69	28	18	378	146
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
MD	Auto	1	1	5	5	42	42	7	7	11	11	2	1	67	67
	Taxi	0	0	1	1	21	21	6	6	0	0	0	0	29	29
	Subway	2	3	27	31	4	4	9	9	15	15	1	1	57	63
	Bus	2	3	10	11	12	12	6	6	8	8	2	2	40	42
	Walk	22	35	5	5	10	10	3	3	3	3	30	25	73	81
	Railway/LIRR	0	0	0	0	0	0	0	0	1	1	0	0	1	1
	Total	27	42	47	55	89	89	31	31	39	38	35	29	267	283
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
PM	Auto	1	28	5	7	22	45	1	11	21	19	1	2	51	112
	Taxi	0	1	1	1	11	23	1	8	1	1	0	0	14	34
	Subway	1	10	30	38	2	5	2	14	28	26	0	1	62	94
	Bus	1	13	11	14	6	13	1	11	14	13	1	2	34	66
	Walk	0	5	5	7	5	11	1	5	6	6	11	28	29	61
	Railway/LIRR	0	4	0	0	0	0	0	0	2	1	0	0	2	5
	Total	3	61	52	67	46	97	6	49	72	66	13	33	192	373
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Sat MD	Auto	1	1	3	2	65	65	3	3	70	29	1	1	142	100
	Taxi	0	0	1	0	33	33	3	3	2	1	0	0	39	37
	Subway	0	0	16	12	7	7	4	4	95	39	1	1	122	62
	Bus	0	0	6	4	18	18	2	2	48	20	1	1	75	45
	Walk	0	0	3	2	15	15	1	1	22	9	15	16	56	43
	Railway/LIRR	0	0	0	0	0	0	0	0	5	2	0	0	5	2
	Total	2	1	28	21	138	138	13	13	242	99	18	18	440	290
Vehicle Trips :															
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
AM	Auto (Total)	17	1	4	0	28	14	10	1	14	12	1	1	74	29
	Taxi	0	0	1	0	17	8	7	0	0	0	0	0	25	8
	Truck	0	0	0	0	1	1	0	0	1	1	0	0	3	3
	Total	18	1	6	1	46	23	17	1	15	13	1	1	103	40
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
MD	Auto (Total)	0	1	3	4	25	25	5	5	7	7	1	1	42	42
	Taxi	0	0	1	1	15	15	5	5	0	0	0	0	21	21
	Truck	0	0	1	1	1	1	0	0	2	2	0	0	4	4
	Total	1	1	4	5	42	41	10	10	8	8	1	1	67	67
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
PM	Auto (Total)	1	20	3	4	14	27	1	9	13	12	0	1	32	73
	Taxi	0	0	1	1	8	17	1	5	1	0	0	0	10	23
	Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	1	20	4	5	21	44	2	14	13	12	0	1	43	97
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Sat MD	Auto (Total)	1	0	2	1	39	39	2	2	43	17	1	1	87	61
	Taxi	0	0	0	0	24	24	2	2	1	1	0	0	27	27
	Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	1	0	2	2	63	63	4	4	44	18	1	1	114	88

	Total Vehicle	In	Out	Total
	AM	103	40	143
	MD	67	67	134
	PM	43	97	140
	Sat MD	114	88	202

6/29/07



Legend:

- Area Affected by the Proposed Actions
- Projected Development Sites
- 12 - Group Boundaries

THIS FIGURE HAS BEEN REVISED FOR THE FEIS

Jamaica Plan EIS

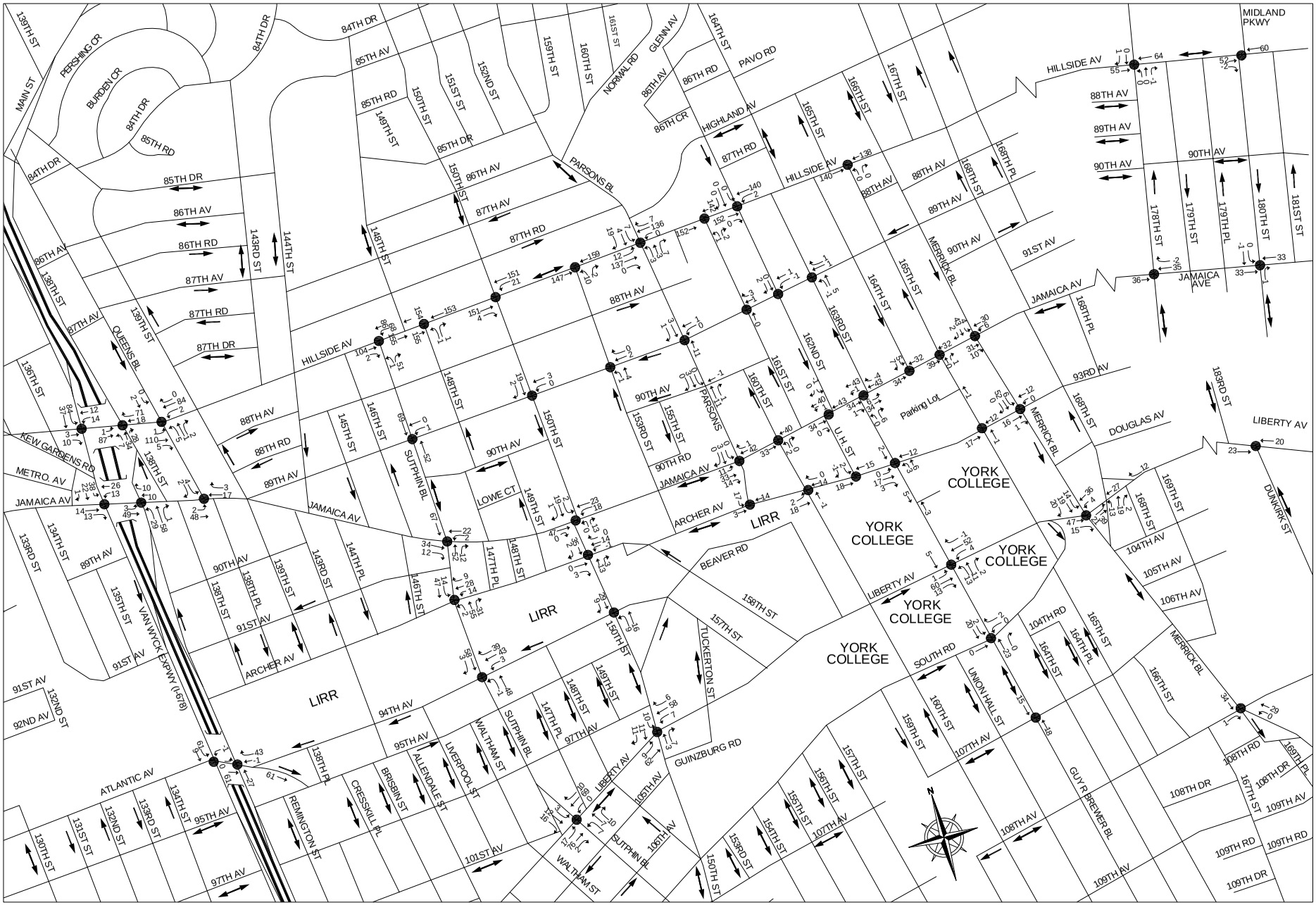
Projected Development Sites Groups
Figure 16-12

Legend:

- ● - Analyzed Intersection

THIS FIGURE HAS BEEN REVISED FOR THE FEIS

2015 Net Project Increment Traffic Volumes - AM Peak Hour
Figure 16-13



Legend:

- ● - Analyzed Intersection

THIS FIGURE HAS BEEN REVISED FOR THE FEIS

2015 Net Project Increment Traffic Volumes - Midday Peak Hour

Jamaica Plan EIS

Figure 16-14

6/29/07

Legend:

- ● - Analyzed Intersection

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2015 Net Project Increment Traffic Volumes - PM Peak Hour

Figure 16-15

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Legend:

- ● - Analyzed Intersection

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2015 Net Project Increment Traffic Volumes - Saturday Midday Peak Hour

Figure 16-16

Jamaica Plan EIS

6/29/07

Legend:

● - Analyzed Intersection

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Jamaica Plan EIS

2015 With-Action Traffic Volumes - AM Peak Hour
Figure 16-17

6/29/07

Legend:

- ● - Analyzed Intersection

THIS FIGURE HAS BEEN REVISED FOR THE FEIS

2015 With-Action Traffic Volumes - Midday Peak Hour

Jamaica Plan EIS

Figure16-18

6/29/07

Legend:

- ● - Analyzed Intersection

THIS FIGURE HAS BEEN REVISED FOR THE FEIS

2015 With-Action Traffic Volumes - PM Peak Hour

Jamaica Plan EIS

Figure16-19

6/29/07

Legend:

- ● - Analyzed Intersection

THIS FIGURE HAS BEEN REVISED FOR THE FEIS

2015 With-Action Traffic Volumes - Saturday Midday Peak Hour

Figure 16-20

Signalized Intersections

As shown in Table 16-12, the AM peak hour would have the highest number of impacted signalized intersections with 30, followed by the PM, Saturday midday and weekday midday, with 26, 19 and 17, respectively. The following provides a discussion of the impacted intersections by corridor. Measures to mitigate traffic impacts are presented in Chapter 22, "Mitigation."

Hillside Avenue Corridor

At the intersection of Hillside Avenue and the Van Wyck Expressway Southbound Service Road, the intersection would have impacted movements during all analyzed peak hours. In the AM peak hour, the eastbound approach would be impacted by project traffic remaining at LOS E (72.3 seconds of delay under With-Action conditions versus 60 seconds of delay under No-Action conditions), and westbound left turn movement would be impacted by project traffic remaining at LOS F (314.2 seconds of delay under With-Action conditions versus 253.2 seconds of delay under No-Action conditions). In the midday peak hour, the southbound approach would be impacted, operating at LOS E (78.3 seconds of delay), compared with a No-Action LOS D (49.7 seconds of delay). In the PM peak hour, the eastbound approach would be impacted by project traffic, operating at LOS E (58.6 seconds of delay) compared with LOS D (53.6 seconds of delay) under No-Action conditions. The westbound left turn movement would be impacted by project traffic with the LOS remaining F and delay increasing to 294.9 seconds from 268.1 seconds under No-Action conditions. In the Saturday midday peak hour, the westbound left turn movement would be impacted operating at LOS E (56.8 seconds of delay), compared with LOS D under No-Action conditions (46.2 seconds of delay), and the southbound approach would worsen to LOS F (102.1 seconds of delay) from LOS E (55.2 seconds of delay).

The intersection of Hillside Avenue and the Van Wyck Expressway Northbound Service Road would have impacted movements during all analyzed peak hours. The Eastbound left turn movement would be significantly impacted during the AM peak hour with the LOS remaining F, but the delay increasing to 106.0 seconds from 89.4 seconds. The westbound right turn movement in the AM peak hour would fall to LOS F (117.6 seconds of delay) from a No-Action LOS D (44.7 seconds of delay). The northbound approach would also be impacted in the AM peak hour with the No-Action LOS E (75.6 seconds of delay) worsening to LOS F (104.1 seconds of delay). In the midday peak hour, the westbound right turn approach would be impacted with the delay increasing from 32.2 seconds (LOS C) to 45.5 seconds (LOS D). In the PM peak hour, the northbound approach would be impacted with the delay increasing from 48.6 seconds (LOS D) to 66.4 seconds (LOS E). In the Saturday midday peak hour, the northbound approach would also be impacted with the delay increasing from 40.6 seconds (LOS D) under No-Action conditions to 46.9 seconds (LOS D) under With-Action conditions.

The intersection of Hillside Avenue and Queens Boulevard would have impacted movements during all four analyzed peak hours. In the AM peak hour, the eastbound left-turn movement, westbound left turn movement, and northbound through-right turn approach would be impacted. The delay on the eastbound left-turn would increase from 89.5 seconds to 343.7 seconds (remains LOS F). The delay on the westbound left turn movement would increase from 36.6 seconds (LOS D) to 65.7 seconds (LOS E). The delay at the northbound through-right turn approach would increase from 70.8 seconds to 75.2 seconds (remains LOS E). In the midday peak hour, the eastbound left-turn movement, the eastbound through-right turn approach, and westbound through lanes would be impacted. The delay on the eastbound left turn movement would increase from 139.7 seconds to 142.3 seconds (remains LOS F), the delay on the

eastbound through-right approach would increase from 47.5 seconds (LOS D) to 67.1 seconds (LOS E), the delay on the westbound left turn movement would increase from 53.9 seconds (LOS D) to 71.5 seconds (LOS E). In the PM and Saturday midday peak hours, significant impacts are expected on the eastbound approaches and the westbound left turn and through movements. In the PM peak hour, the eastbound left turn movement would remain at LOS F with the delay increasing from 533.9 seconds under No-Action conditions to 548.3 seconds under With-Action conditions. The eastbound through-right turn LOS would worsen from E (58.4 seconds of delay) to F (138.7 seconds of delay). The westbound left movement delay would increase from 42.3 seconds (LOS D) under No-Action conditions to 55.7 seconds (LOS E) under With-Action conditions. The westbound through movement would remain at LOS D with the delay increasing from 42.4 seconds under No-Action conditions to 50.6 seconds under With-Action conditions. In the Saturday midday peak hour the eastbound left turn movement would remain at LOS F, with the delay increasing from 245.5 seconds (No-Action) to 278.9 seconds (With-Action). The eastbound through-right turn lane group would operate at LOS F (125.2 seconds of delay), compared to LOS E (73.2 seconds of delay) under No-Action conditions. The westbound left turn delay would increase from 46.3 seconds (LOS D) to 53.9 (LOS D) seconds as a result of the increase in project traffic. The westbound through movement would operate at LOS E (56.8 seconds), compared with LOS D (42.5 seconds) under No-Action conditions.

The westbound left turn movement and the northbound right turn movement would be impacted in all analyzed peak hours at the intersection of Hillside Avenue and Sutphin Boulevard. The westbound left turn movement No-Action delay would increase from 55.0 seconds (LOS E) to 410.6 seconds (LOS F), from 29.3 seconds (LOS C) to 53.8 seconds (LOS D), from 61.4 seconds (LOS E) to 176.9 seconds (LOS F), and from 31.6 seconds (LOS C) to 61.8 seconds (LOS E) in the AM, midday, PM and Saturday midday peak hours, respectively. The northbound right turn movement No-Action delay would increase from 53.1 seconds (LOS D) to 66.5 seconds (LOS E), from 51.9 seconds (LOS D) to 66.1 seconds (LOS E), from 51.7 seconds (LOS D) to 469.9 seconds (LOS F), and from 48.2 seconds (LOS D) to 58.9 seconds (LOS E), in the AM, midday, PM and Saturday midday peak hours, respectively.

The intersection at Hillside Avenue and 148th Street would have impacted movements during the AM and midday peak hours. The westbound through movement would be impacted during the AM peak hour with the No-Action delay of 23.3 seconds (LOS C) increasing to 98.0 seconds (LOS F). The northbound approach would be impacted in the AM and midday peak hours with the No-Action delay of 65.9 seconds increasing to 70.0 seconds (remains LOS E) in the AM peak hour and a No-Action delay of 110.2 seconds (LOS F) increasing to 113.2 seconds (LOS F) in the midday peak hour.

The Hillside Avenue/150th Street intersection would have impacted movements during the all analyzed peak hours. In the AM peak hour the westbound left turn No-Action LOS D (49.5 seconds of delay) would fall to LOS F (157.5 seconds of delay) under With-Action conditions. The westbound through and right turn lane group would decline from LOS D (45.4 seconds of delay) without the proposed actions to LOS F (151.1 seconds of delay) with the proposed actions. In the midday peak hour, the eastbound left turn delay would increase from 29.1 seconds (LOS C) without the proposed actions to 57.9 seconds (LOS E) with the proposed actions. The westbound left turn movement would worsen from LOS C (23.7 seconds of delay) without the proposed actions to LOS E (65.8 seconds of delay) with the proposed actions. In the PM peak hour, the eastbound left turn delay of 93.3 seconds (LOS F) under No-Action conditions would increase to 214.5 (LOS F) seconds under With-Action conditions. The delay

Table 16-12: 2015 With-Action Traffic Conditions at Signalized Intersections

THIS TABLE HAS BEEN REVISED FOR THE FEIS

Signalized Intersection	Lane Group	2015 No-Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS		2015 With Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS		2015 No-Action Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 With Action Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS		2015 No-Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 With Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS		2015 No-Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 With Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	
1) Hillside Avenue (E-W) @	EB-TR	0.98	60.0	E		1.03	72.3	E	*	0.59	20.6	C	0.60	20.8	C		0.95	53.6	D		0.98	58.6	E	*	0.66	22.2	C	0.68	22.8	C	
Van Wyck Expwy Southbound	WB-L	1.41	253.2	F		1.55	314.2	F	*	0.80	37.8	D	0.84	42.0	D		1.44	268.1	F		1.51	294.9	F	*	0.85	46.2	D	0.92	56.8	E	*
Service Road (SB)	WB-T	0.38	19.3	B		0.40	19.5	B		0.25	8.4	A	0.26	8.4	A		0.36	18.9	B		0.40	19.5	B		0.24	8.3	A	0.25	8.4	A	
	SB-LTR	0.86	37.8	D		0.93	43.3	D		0.96	49.7	D	1.07	78.3	E	*	0.78	33.7	C		0.92	42.8	D		0.98	55.2	E	1.13	102.1	F	*
2) Hillside Avenue (E-W) @	EB-L	1.03	89.4	F		1.08	106.0	F	*	0.56	26.1	C	0.57	27.0	C		0.82	52.8	D		0.84	55.0	D		0.72	33.2	C	0.74	35.3	D	
Van Wyck Expwy Northbound	EB-T	0.57	14.3	B		0.61	15.0	B		0.47	10.3	B	0.51	10.8	B		0.48	12.8	B		0.58	14.4	B		0.46	10.2	B	0.52	10.9	B	
Service Road (NB)	WB-T	0.55	22.0	C		0.58	22.7	C		0.57	20.3	C	0.59	20.5	C		0.57	22.4	C		0.58	22.6	C		0.56	20.1	C	0.58	20.5	C	
	WB-R	0.90	44.7	D		1.16	117.6	F	*	0.80	32.2	C	0.93	45.5	D	*	0.63	26.1	C		0.76	31.6	C		0.70	26.4	C	0.89	39.8	D	
	NB-LTR	1.03	75.6	E		1.11	104.1	F	*	0.87	39.2	D	0.93	44.9	D		0.88	48.6	D		1.00	66.4	E	*	0.89	40.6	D	0.94	46.9	D	*
3) Hillside Avenue (E-W) @	EB-L	0.90	89.5	F		1.56	343.7	F	*	1.07	139.7	F	1.08	142.3	F	*	1.98	533.9	F		2.02	548.3	F	*	1.29	245.5	F	1.37	278.9	F	*
Queens Boulevard (N-S)	EB-TR	0.86	29.8	C		0.92	34.6	C		0.91	47.5	D	1.01	67.1	E	*	0.98	58.4	E		1.21	138.7	F	*	1.04	73.2	E	1.17	125.2	F	*
	WB-L	0.47	36.6	D		0.67	65.7	E	*	0.53	59.3	E	0.57	63.2	E		0.35	42.3	D		0.50	55.7	E	*	0.40	46.3	D	0.48	53.9	D	*
	WB-T	0.77	25.0	C		0.89	31.8	C		0.96	53.9	D	1.03	71.5	E	*	0.86	42.4	D		0.94	50.6	D	*	0.86	42.5	D	0.97	56.8	E	*
	WB-R	0.62	22.9	C		0.62	22.9	C		0.61	35.5	D	0.61	35.5	D		0.42	30.2	C		0.42	30.1	C		0.48	31.6	C	0.48	31.7	C	
	NB-L	0.33	44.6	D		0.42	47.3	D		0.25	34.6	C	0.27	35.0	D		0.59	47.0	D		0.64	50.0	D		0.25	34.5	C	0.28	35.0	C	
	NB-TR	0.87	70.8	E		0.90	75.2	E	*	0.45	37.7	D	0.46	37.8	D		0.30	34.6	C		0.33	35.0	C		0.31	34.7	C	0.32	35.1	D	
	SB-L	0.35	28.5	C		0.35	28.6	C		0.34	15.8	B	0.34	15.9	B		0.37	15.8	B		0.38	15.9	B		0.30	15.1	B	0.31	15.2	B	
	SB-TR	0.34	28.2	C		0.36	28.4	C		0.22	14.8	B	0.22	14.8	B		0.50	19.0	B		0.50	19.1	B		0.23	14.9	B	0.23	15.0	B	
4) Hillside Avenue (E-W) @	EB-T	0.63	18.3	B		0.68	19.4	B		0.63	18.2	B	0.69	19.7	B		0.76	21.9	C		0.89	28.9	C		0.64	18.4	B	0.72	20.5	C	
Sutphin Boulevard (N-S)	EB-R	0.32	14.2	B		0.32	14.2	B		0.29	13.6	B	0.29	13.7	B		0.25	13.2	B		0.58	13.3	B		0.20	12.6	B	0.21	12.6	B	
	WB-L	0.84	55.0	E		1.80	410.6	F	*	0.53	29.3	C	0.80	53.8	D	*	0.82	61.4	E		0.70	176.9	F	*	0.53	31.6	C	0.84	61.8	E	*
	WB-T	0.81	16.1	B		0.91	22.8	C		0.63	11.2	B	0.68	12.1	B		0.61	10.8	B		0.70	11.8	B		0.55	9.8	A	0.61	10.8	B	
	NB-L	0.74	60.1	E		0.74	60.6	E		0.78	63.2	E	0.78	63.5	E		0.48	48.1	D		0.20	48.2	D		0.46	47.1	D	0.46	47.2	D	
	NB-R	0.58	53.1	D		0.78	66.5	E	*	0.55	51.9	D	0.77	66.1	E	*	0.54	51.7	D		0.20	469.9	F	*	0.46	48.2	D	0.69	58.9	E	*
5) Hillside Avenue (E-W) @	EB-T	0.63	11.2	B		0.70	12.5	B		0.62	11.0	B	0.70	12.7	B		0.74	13.7	B		1.01	41.5	D		0.62	10.9	B	0.72	13.1	B	
148th Street-South (N-S)	WB-T	0.92	23.3	C		1.16	98.0	F	*	0.65	11.5	B	0.73	13.4	B		0.66	11.7	B		0.74	13.7	B		0.59	10.4	B	0.69	12.4	B	
	NB-LR	0.81	65.9	E		0.84	70.0	E	*	1.04	110.2	F	1.05	113.2	F	*	NB-L 0.49	46.2	D		NB-L 0.50	46.3	D		0.60	51.3	D	0.61	51.7	D	
																	NB-R 0.50	46.9	D		NB-R 0.50	47.1	D								
6) Hillside Avenue (E-W) @	EB-L	1.73	411.0	F		1.73	411.0	F		0.63	29.1	C	0.82	57.9	E	*	1.00	93.3	F		1.32	214.5	F	*	0.39	15.4	B	0.55	25.6	C	
150th Street (N-S)	EB-T	0.64	14.2	B		0.71	15.8	B		0.62	13.7	B	0.70	15.5	B		0.70	15.7	B		0.98	36.4	D		0.60	13.4	B	0.70	15.5	B	
	EB-R	0.10	8.1	A		0.11	8.2	A		0.10	8.1	A	0.11	8.2	A		0.13	8.3	A		0.14	8.4	A		0.07	7.8	A	0.07	7.9	A	
	WB-L	0.83	49.5	D		1.20	157.5	F	*	0.57	23.7	C	0.88	65.8	E	*	1.12	134.5	F		2.88	912.2	F	*	0.72	34.9	C	1.22	167.6	F	*
	WB-TR	1.01	45.4	D		1.28	151.1	F	*	0.70	15.8	B	0.79	18.7	B		0.73	16.6	B		0.82	19.9	B		0.63	13.9	B	0.74	16.7	B	
	SB-LTR	0.98	80.9	F		0.98	80.9	F		0.64	46.9	D	0.64	46.9	D		0.57	44.3	D		0.57	44.3	D		0.59	45.2	D	0.59	45.2	D	
7) Hillside Avenue (E-W) @	EB-T	0.73	16.7	B		0.81	19.3	B		0.68	15.0	B	0.76	17.4	B		0.78	17.9	B		1.06	58.8	E	*	0.66	14.6	B	0.76	17.3	B	
153rd Street (NB)	WB-T	0.89	23.9	C		1.13	86.8	F	*	0.60	13.4	B	0.69	15.2	B		0.64	14.2	B		0.73	16.2	B		0.58	13.0	B	0.69	15.2	B	
	NB-L	0.67	50.6	D		0.72	53.8	D		0.55	45.3	D	0.58	46.5	D		0.33	39.2	D		0.36	39.8	D		0.33	39.3	D	0.37	40.3	D	
	NB-R	0.46	42.5	D		0.49	43.3	D		0.36	39.9	D	0.36	40.0	D		NB-LR 0.39	40.6	D		NB-LR 0.41	41.1	D		0.55	45.4	D	0.57	45.9	D	
																	NB-R 0.41	41.4	D		NB-R 0.42	41.6	D								
8) Hillside Avenue (E-W) @	EB-L	0.85	83.6	F		0.94	99.3	F	*	0.63	48.8	D	0.78	67.0	E	*	0.81	68.1	E		1.22	182.3	F	*	0.68	54.8	D	0.84	78.9	E	*
Parsons Boulevard (N-S)	EB-T	0.80	29.0	C		0.89	35.1	D		0.77	27.5	C	0.88	33.6	C		0.93	39.1	D		1.26	151.7	F	*	0.82	29.7	C	0.95	41.4	D	
	EB-R	0.44	20.8	C		0.44	20.8	C		0.27	17.6	B	0.27	17.6	B		0.30	18.0	B		0.30	18.1	B		0.19	16.3	B	0.19	16.3	B	
	WB-L	0.47	35.2	D		0.52	43.1	D		0.41	31.4	C	0.46	40.0	D		0.59	51.6	D		0.63	58.3	E	*	0.38	34.5	C	0.45	45.5	D	*
	WB-TR	1.22	135.3	F		1.52	265.0	F	*	0.93	40.1	D	1.05	66.8	E	*	1.00	54.1	D		1.11	87.8	F	*	0.96	43.9	D	1.11	88.9	F	*
	NB-L	0.59	50.9	D		0.58	50.5	D		0.36	39.0	D	0.38	39.7	D		0.42	41.1	D		0.45	42.2	D		0.38	40.6	D	0.42	42.1	D	
	NB-T	0.92	70.4	E		0.94	74.8	E	*	0.47	38.7	D	0.48	38.9	D		0.65	44.7	D		0.67	45.5	D		0.38	36.3	D	0.40	36.8	D	
	NB-R	0.37	36.9	D		0.38	37.1	D		0.38	37.4	D	0.41	37.9	D		0.53	41.7	D		0.57	43.1	D		0.27	34.7	C	0.32	35.6	D	
	SB-L	0.88	96.3	F		0.99	125.4	F	*	0.55	45.7	D	0.59	48.1	D		0.75	64.1	E		0.89	85.3	F	*	0.36	37.9	D	0.44	40.8	D	
	SB-T	0.73	49.3	D		0.71	48.2	D		0.58	42.4	D	0.59	42.8	D		0.59	42.4	D		0.61	43.0	D		0.72	48.6	D	0.74	49.5	D	
	SB-R	0.41	38.1	D		0.61	45.0	D		0.32	35.9	D	0.39	37.6	D		0.36	36.8	D		0.44	38.6	D		0.24	34.2	C	0.32	35.7	D	
9) Hillside Avenue (E-W) @	EB-T	0.67	14.9	B		0.74	16.6	B		0.65	14.4	B	0.73	16.4	B		0.79	18.3	B		1.04	50.5	D	*	0.65	14.4	B	0.76	17.0	B	
161st Street (NB)	WB-T	0.88	23.4	C		1.09	70.9	E	*	0.60	13.3	B	0.67	14.9	B		0.63	14.0	B		0.71	15.8	B		0.58	13.0	B	0.68	14.9	B	
	NB-L	0.30	38.8	D		0.35	39.8	D		0.31	39.0	D	0.32	39.1	D		0.36	39.8	D		0.31	38.8	D		0.45	42.3	D	0.47	43.0	D	
	NB-R	0.53	44.5	D		0.57	45.9	D		0.68	51.3	D	0.69	51.6	D		NB-LR 0.43	41.9	D		NB-LR 0.41	41.4	D		0.76	56.4	E	0.78	57.6	E	
																	NB-R 0.61	48.3	D		NB-R 0.58	47.1	D								
10) Hillside Avenue (E-W) @	EB-TR	0.78	15.1	B		0.86	18.5	B		0.78	15.1	B	0.86	18.9	B		0.96	29.3	C		1.20	111.8	F	*	0.79	15.2	B	0.89	20.8	C	
162nd Street (SB)	WB-L	0.72	38.2	D		0.91	79.1	E	*	0.56	25.2	C	0.76	54.2	D	*	1.63	366.3	F		1.87	464.4	F	*	0.87	67.9	E	1.38	252.4	F	*
	WB-T	0.84	17.7	B		1.05	51.6	D	*	0.58	10.3	B	0.65	11.6	B		0.61	10.7	B		0.69	12.3	B		0.57	10.0	A	0.66	11.7	B	
	SB-LTR	0.88	71.6	E		0.87	71.2	E		0.40	44.0	D	0.40	44.0	D		0.76	59.1	E		0.76	59.3	E		0.39	43.7	D	0.39	43.8	D	

Abbreviations:

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound
L-Left, T-Through, R-Right, Dfl.-Defacto Left, E-W: East-West Roadway, N-S: North-South Roadway
V/C Ratio - Volume to Capacity Ratio
SEC/VEH - Seconds per Vehicle
LOS - Level of Service
* - Denotes Impacted Locations.

June 29, 2007

Table 16-12: 2015 With-Action Traffic Conditions at Signalized Intersections

THIS TABLE HAS BEEN REVISED FOR THE FEIS

Signalized Intersection	Lane Group	2015 No-Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 With Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 With Action Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 With Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 With Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS
11) Hillside Avenue (E-W) @	EB-T	0.62	11.0	B	0.70	12.6	B	0.58	10.3	B	0.65	11.6	B	0.84	17.5	B	1.02	43.0	D	0.76	14.1	B	0.85	17.8	B
165th Street-South (NB)	WB-T	0.76	14.1	B	0.91	22.4	C	0.49	9.1	A	0.56	10.0	A	0.59	10.3	B	0.67	11.8	B	0.60	10.5	B	0.68	12.1	B
	NB-L	0.21	40.3	D	0.21	40.3	D	0.25	41.1	D	0.25	41.1	D	0.17	39.6	D	0.17	39.6	D	0.22	40.4	D	0.22	40.4	D
	NB-R	0.32	43.1	D	0.32	43.1	D	0.40	45.3	D	0.40	45.3	D	0.54	50.4	D	0.55	50.5	D	0.40	45.3	D	0.40	45.3	D
12) Hillside Avenue (E-W) @	EB-L	0.37	21.8	C	0.43	28.9	C	0.11	6.7	A	0.12	6.9	A	0.19	8.2	A	0.22	9.0	A	0.12	7.2	A	0.14	7.7	A
178th Street (NB)	EB-T	0.60	10.6	B	0.64	11.4	B	0.50	9.2	A	0.53	9.6	A	0.75	13.9	B	0.85	17.7	B	0.59	10.4	B	0.63	11.0	B
	WB-TR	0.88	19.4	B	0.96	28.2	C	0.48	8.9	A	0.52	9.3	A	0.56	10.0	A	0.61	10.7	B	0.60	10.5	B	0.64	11.2	B
	NB-LTR	1.06	109.5	F	1.05	107.8	F	0.63	50.6	D	0.62	50.4	D	0.90	73.5	E	0.90	74.0	E	0.82	63.8	E	0.82	63.8	E
	SB-LR	0.40	46.5	D	0.43	47.5	D	0.19	40.3	D	0.20	40.4	D	0.38	46.0	D	0.39	46.3	D	0.16	39.6	D	0.17	39.7	D
13) Hillside Avenue (E-W) @	EB-L	1.08	122.1	F	1.08	122.1	F	0.81	53.5	D	0.81	53.5	D	0.90	70.4	E	0.90	70.4	E	0.61	28.9	C	0.61	28.9	C
180th Street/Midland Pkwy (SB	EB-TR	0.75	13.7	B	0.79	15.0	B	0.57	10.1	B	0.59	10.4	B	0.70	12.5	B	0.79	15.0	B	0.48	8.9	A	0.51	9.2	A
	WB-TR	0.94	25.8	C	1.02	41.6	D	0.71	12.7	B	0.74	13.4	B	0.66	11.6	B	0.70	12.5	B	0.50	9.2	A	0.54	9.6	A
	SB-L	0.34	42.1	D	0.34	42.1	D	0.17	39.1	D	0.17	39.1	D	0.40	43.3	D	0.40	43.3	D	0.17	39.1	D	0.17	39.1	D
	SB-R	1.03	109.6	F	1.03	109.6	F	0.53	48.6	D	0.53	48.6	D	0.73	58.9	E	0.73	58.9	E	0.41	44.7	D	0.41	44.7	D
14) 89th Avenue (WB)	WB-LTR	0.92	51.0	D	0.96	58.7	E *	0.84	39.9	D	0.85	40.1	D	0.89	45.0	D	0.88	42.7	D	0.50	22.2	C	0.50	22.3	C
Sutphin Boulevard (N-S)	NB-LT	0.53	10.1	B	0.60	11.6	B	0.48	9.3	A	0.55	10.4	B	0.43	8.8	A	0.83	20.3	C	0.33	7.6	A	0.40	8.3	A
	SB-TR	0.63	12.2	B	1.01	46.5	D *	0.47	9.2	A	0.56	10.6	B	0.59	11.1	B	0.67	12.9	B	0.41	8.4	A	0.50	9.6	A
15) 89th Avenue (WB)	WB-LT	0.68	19.3	B	0.71	20.2	C	0.56	15.9	B	0.57	16.0	B	0.53	15.2	B	0.52	15.1	B	0.42	13.4	B	0.42	13.4	B
150th Street (SB)	SB-TR	0.71	20.5	C	0.75	22.7	C	0.51	15.2	B	0.55	15.9	B	0.61	17.5	B	0.65	18.5	B	0.46	14.3	B	0.51	15.2	B
16) 89th Avenue (WB) @	WB-TR	0.52	14.9	B	0.53	15.2	B	0.40	13.0	B	0.40	13.1	B	0.40	12.9	B	0.39	12.8	B	0.40	12.9	B	0.40	12.9	B
153rd Street (NB)	NB-LT	0.71	19.1	B	0.72	19.5	B	0.52	14.7	B	0.52	14.8	B	0.55	15.3	B	0.57	15.6	B	0.19	10.9	B	0.21	11.0	B
17) 89th Avenue (WB) @	WB-LTR	0.66	25.8	C	0.70	27.2	C	0.57	22.8	C	0.57	22.9	C	0.59	23.1	C	0.56	22.5	C	0.65	24.6	C	0.65	24.6	C
Parsons Boulevard (N-S)	NB-LT	0.42	8.0	A	0.43	8.1	A	0.34	7.2	A	0.35	7.2	A	0.41	7.8	A	0.43	8.0	A	0.25	6.4	A	0.27	6.5	A
	SB-T	0.77	15.6	B	0.77	15.4	B	0.52	9.5	A	0.53	9.5	A	0.65	11.7	B	0.66	12.0	B	0.41	8.0	A	0.42	8.1	A
	SB-R	0.17	6.1	A	0.17	6.1	A	0.16	6.0	A	0.16	6.0	A	0.12	5.7	A	0.12	5.8	A	0.10	5.6	A	0.11	5.6	A
18) 89th Avenue (WB) @	WB-TR	0.55	15.4	B	0.54	15.0	B	0.37	12.5	B	0.37	12.6	B	0.38	12.7	B	0.39	12.8	B	0.38	12.6	B	0.40	12.8	B
161st Street (NB)	NB-LT	0.34	12.4	B	0.34	12.4	B	0.47	14.1	B	0.47	14.1	B	0.57	15.9	B	0.58	16.0	B	0.62	17.0	B	0.63	17.1	B
19) 89th Avenue (WB) @	WB-LT	0.36	12.7	B	0.36	12.6	B	0.31	12.0	B	0.31	12.0	B	0.38	12.8	B	0.37	12.6	B	0.33	12.1	B	0.33	12.2	B
162nd Street (SB)	SB-TR	0.55	15.6	B	0.52	14.9	B	0.39	13.0	B	0.39	13.0	B	0.49	14.5	B	0.54	15.2	B	0.39	13.1	B	0.41	13.3	B
20) 89th Avenue (WB) @	WB-TR	0.39	13.1	B	0.38	13.0	B	0.39	13.0	B	0.39	13.1	B	0.46	13.9	B	0.48	14.2	B	0.37	12.7	B	0.38	12.8	B
163rd Street (NB)	NB-LT	0.72	19.7	B	0.77	21.7	C	0.35	12.4	B	0.36	12.5	B	0.51	14.7	B	0.49	14.3	B	0.47	14.0	B	0.48	14.2	B
21) Jamaica Avenue (E-W) @	EB-T	0.45	19.6	B	0.45	19.6	B	0.50	20.5	C	0.52	20.9	C	0.55	21.5	C	0.59	22.5	C	0.70	26.0	C	0.72	27.0	C
Van Wyck Expwy Southbound	EB-R	0.43	19.5	B	0.54	22.0	C	0.35	17.9	B	0.37	18.3	B	0.31	17.3	B	0.34	17.6	B	0.11	14.7	B	0.14	15.0	B
Service Road (SB)	WB-L	0.62	23.0	C	0.66	24.9	C	0.74	32.0	C	0.78	35.9	D	0.64	28.4	C	0.68	32.5	C	0.29	23.5	C	0.31	25.3	C
	WB-T	0.31	10.0	A	0.34	10.4	B	0.40	11.1	B	0.43	11.5	B	0.42	11.3	B	0.51	12.6	B	0.33	10.2	B	0.36	10.5	B
	SB-LTR	0.98	66.4	E	1.08	96.2	F *	0.71	43.3	D	0.76	45.2	D	1.01	73.6	E	1.08	93.3	F *	0.79	46.3	D	0.85	49.7	D
22) Jamaica Avenue (E-W) @	EB-L	0.26	18.1	B	0.27	19.6	B	0.40	28.7	C	0.41	29.8	C	0.36	25.1	C	0.38	25.7	C	0.61	24.0	C	0.63	25.5	C
Van Wyck Expwy Northbound	EB-T	0.43	11.5	B	0.47	12.2	B	0.32	10.0	A	0.37	10.6	B	0.35	10.4	B	0.41	11.1	B	0.39	10.9	B	0.44	11.5	B
Service Road (NB)	WB-T	0.66	25.2	C	0.70	27.0	C	0.89	40.5	D	0.90	42.5	D	0.74	28.0	C	0.74	27.9	C	0.50	20.6	C	0.52	21.0	C
	WB-R	0.07	14.3	B	0.19	15.6	B	0.14	15.0	B	0.15	15.2	B	0.09	14.5	B	0.12	14.8	B	0.36	18.2	B	0.40	18.8	B
	NB-LTR	1.15	120.6	F	1.20	139.8	F *	1.16	123.6	F	1.23	155.3	F *	1.17	127.0	F	1.35	207.5	F *	0.63	41.2	D	0.69	42.6	D
23) Jamaica Avenue (E-W) @					-EB-DfL 1.04	111.0	F *																		
Queens Boulevard (N-S)	EB-LT	0.89	43.7	D	-EB-T 0.84	39.9	D	0.84	38.6	D	0.92	47.9	D *	0.82	36.9	D	0.92	46.7	D *	0.49	24.5	C	0.56	26.1	C
	WB-T	0.64	29.4	C	0.79	36.5	D	0.88	44.3	D	0.90	47.6	D	0.74	33.1	C	0.77	34.2	C	0.55	26.3	C	0.59	27.6	C
	WB-R	0.33	22.3	C	0.33	22.3	C	0.31	22.0	C	0.32	22.1	C	0.25	20.8	C	0.27	21.2	C	0.18	19.9	B	0.19	20.0	B
	SB-L	0.28	21.2	C	0.30	21.5	C	0.22	20.3	C	0.23	20.4	C	0.40	23.1	C	0.40	23.2	C	0.12	19.0	B	0.13	19.1	B
	SB-R	0.13	19.1	B	0.14	19.3	B	0.18	19.9	B	0.19	19.9	B	0.26	21.0	C	0.26	21.1	C	0.22	20.4	C	0.22	20.4	C
24) Jamaica Avenue (E-W) @	EB-LTR	0.89	40.7	D	0.95	50.0	D *	0.85	35.7	D	0.93	45.3	D *	1.00	61.3	E	1.12	98.2	F *	0.73	27.1	C	0.81	31.6	C
Sutphin Boulevard (N-S)	WB-LTR	0.51	20.2	C	0.60	21.9	C	0.42	18.3	B	0.45	18.7	B	0.43	19.7	B	0.48	20.5	C	0.48	19.1	B	0.52	19.8	B
	NB-LTR	0.66	22.4	C	0.75	25.4	C	0.48	19.2	B	0.54	20.3	C	0.45	17.7	B	0.87	31.7	C	0.38	17.8	B	0.45	18.9	B
	SB-LTR	0.54	19.7	B	0.81	28.0	C	0.30	16.7	B	0.36	17.5	B	0.37	16.4	B	0.43	17.3	B	0.21	15.8	B	0.28	16.5	B

Abbreviations:

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound
L-Left, T-Through, R-Right, DefL-Defacto Left, E-W: East-West Roadway, N-S: North-South Roadway
V/C Ratio - Volume to Capacity Ratio
SEC/VEH - Seconds per Vehicle
LOS - Level of Service
* - Denotes Impacted Locations.

June 29, 2007

Table 16-12: 2015 With-Action Traffic Conditions at Signalized Intersections

THIS TABLE HAS BEEN REVISED FOR THE FEIS

Signalized Intersection	Lane Group	2015 No-Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 With Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 With Action Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 With Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 With Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS
25) Jamaica Avenue (E-W) @ 150th Street (N-S)	EB-T	0.56	16.4	B	0.58	17.0	B	0.61	17.8	B	0.67	19.5	B	0.58	16.9	B	0.79	24.5	C	0.51	15.3	B	0.58	16.7	B
	EB-R	0.07	9.8	A	0.07	9.8	A	0.08	9.9	A	0.08	9.9	A	0.07	9.8	A	0.07	9.8	A	0.07	9.8	A	0.07	9.8	A
	WB-LT	1.32	180.4	F	2.00	479.1	F *	0.84	32.9	C	1.04	74.7	E *	1.16	115.7	F	1.48	252.8	F *	0.94	48.5	D	1.19	128.1	F *
	NB-LR	1.35	227.7	F	1.48	284.6	F *	0.68	52.2	D	0.78	62.3	E *	1.11	139.6	F	1.25	191.5	F *	0.53	43.4	D	0.68	53.3	D *
	SB-LT	0.64	42.6	D	0.72	46.4	D	0.58	40.2	D	0.63	42.0	D	0.67	43.5	D	0.70	45.1	D	0.52	38.3	D	0.59	40.4	D
	SB-R	0.36	35.2	D	0.38	35.6	D	0.30	33.9	C	0.31	33.9	C	0.28	33.3	C	0.28	33.5	C	0.31	34.0	C	0.32	34.3	C
26) Jamaica Avenue (E-W) @ Parsons Boulevard (N-S)	EB-L	0.87	70.1	E	2.10	575.8	F *	0.48	23.4	C	0.58	27.8	C	0.42	22.5	C	0.56	28.3	C	0.23	17.5	B	0.33	20.0	B
	EB-T	0.74	29.2	C	0.79	32.7	C	0.63	23.7	C	0.67	25.2	C	0.64	24.9	C	0.86	37.0	D	0.63	24.6	C	0.69	26.7	C
	EB-R	0.24	17.0	B	0.21	16.6	B	0.14	14.9	B	0.17	15.2	B	0.21	16.5	B	0.25	17.0	B	0.16	15.8	B	0.19	16.2	B
	WB-L	0.39	22.7	C	0.43	24.8	C	0.29	18.7	B	0.31	19.5	B	0.32	20.1	C	0.52	31.5	C	0.69	37.0	D	0.78	47.0	D *
	WB-T	1.02	69.5	E	1.32	185.3	F *	0.69	26.6	C	0.76	30.0	C	0.67	26.2	C	0.73	29.0	C	0.60	24.1	C	0.69	27.4	C
	WB-R	0.25	17.2	B	0.27	17.5	B	0.20	15.7	B	0.20	15.7	B	0.16	15.8	B	0.16	15.9	B	0.13	15.5	B	0.14	15.6	B
	NB-LTR	0.17	28.7	C	0.17	28.7	C	0.18	29.3	C	0.18	29.3	C	0.24	29.7	C	0.24	29.7	C	0.28	30.3	C	0.28	30.3	C
	SB-LTR	0.82	46.4	D	0.82	46.7	D	0.69	40.2	D	0.69	40.3	D	0.85	48.7	D	0.85	48.4	D	0.76	43.5	D	0.77	44.0	D
27) Jamaica Avenue (E-W) @ 160th Street (NB)	EB-L	0.08	9.8	A	0.18	14.8	B	0.11	9.8	A	0.12	10.0	A	0.14	10.1	B	0.15	10.4	B	0.11	9.9	A	0.13	10.2	B
	EB-T	0.81	25.5	C	0.87	30.2	C	0.69	19.4	B	0.73	20.9	C	0.73	20.4	C	0.91	34.1	C	0.75	21.3	C	0.80	24.0	C
	WB-T	0.98	49.5	D	1.21	128.8	F *	0.69	19.8	B	0.75	22.0	C	0.60	16.5	B	0.65	17.9	B	0.70	19.4	B	0.78	22.9	C
	WB-R	0.03	8.7	A	0.03	8.7	A	0.02	8.6	A	0.02	8.6	A	0.02	8.6	A	0.02	8.6	A	0.01	8.5	A	0.01	8.5	A
	NB-LTR	0.45	36.5	D	0.49	37.3	D	0.69	46.7	D	0.70	47.0	D	0.44	36.4	D	0.45	36.6	D	0.66	45.2	D	0.66	45.5	D
28) Jamaica Avenue (E-W) @ Union Hall / 162nd St (SB)	EB-T	0.70	19.3	B	0.76	21.7	C	0.64	21.5	C	0.69	23.0	C	0.66	17.5	B	0.83	25.2	C	0.72	23.9	C	0.76	26.1	C
	EB-R	0.07	8.7	A	0.07	8.7	A	0.10	12.2	B	0.10	12.2	B	0.11	8.9	A	0.12	9.1	A	0.11	12.3	B	0.12	12.4	B
	WB-T	1.21	130.3	F	1.48	244.1	F *	1.03	72.1	E	1.11	97.4	F *	0.75	22.4	C	0.83	27.5	C	0.91	42.9	D	1.02	68.4	E *
	SB-LTR	0.39	42.3	D	0.41	42.7	D	0.29	34.5	C	0.28	34.5	C	0.59	47.0	D	0.58	46.7	D	0.27	34.3	C	0.28	34.5	C
29) Jamaica Avenue (E-W) @ 163rd Street (NB) / Guy R Brewer (N-S)	EB-LT	0.61	14.2	B	0.66	15.7	B	0.49	11.6	B	0.53	12.3	B	0.52	12.1	B	0.68	15.7	B	0.53	12.3	B	0.57	13.1	B
	EB-R	0.13	7.7	A	0.13	7.8	A	0.14	7.9	A	0.15	7.9	A	0.25	8.9	A	0.25	8.9	A	0.16	8.0	A	0.16	8.0	A
	WB-LT	0.97	42.3	D	1.17	109.1	F *	0.62	14.7	B	0.68	16.1	B	0.57	13.2	B	0.64	14.8	B	0.62	14.3	B	0.69	16.6	B
	WB-R	0.28	9.1	A	0.27	9.0	A	0.15	7.9	A	0.15	7.8	A	0.21	8.3	A	0.22	8.4	A	0.26	8.8	A	0.26	8.8	A
	NB-LTR	0.86	64.4	E	0.86	63.5	E	0.63	47.9	D	0.65	48.7	D	0.69	50.9	D	0.72	52.6	D	0.61	47.1	D	0.62	47.8	D
30) Jamaica Avenue (E-W) @ 164th Street (SB)	EB-T	0.57	11.0	B	0.62	12.1	B	0.50	11.9	B	0.54	12.6	B	0.65	23.5	C	0.84	33.4	C	0.59	13.4	B	0.63	14.4	B
	WB-T	1.01	49.8	D	1.16	100.8	F *	0.58	13.6	B	0.62	14.5	B	0.69	24.9	C	0.75	27.5	C	0.67	15.7	B	0.72	17.5	B
	SB-L	0.37	44.4	D	0.43	45.9	D	0.42	41.4	D	0.43	41.8	D	0.28	27.5	C	0.28	27.4	C	0.48	43.0	D	0.49	43.5	D
	SB-R	0.36	45.3	D	0.50	50.8	D *	0.52	45.9	D	0.55	47.1	D	0.36	29.6	C	0.41	30.7	C	0.52	46.2	D	0.59	49.0	D
31) Jamaica Avenue (E-W) @ 165th Street (SB)	EB-T	0.56	10.7	B	0.62	12.1	B	0.53	10.1	B	0.57	10.8	B	0.65	23.4	C	0.84	33.0	C	0.59	11.1	B	0.64	12.1	B
	EB-R	0.16	6.2	A	0.16	6.2	A	0.10	5.8	A	0.10	5.8	A	0.23	15.2	B	0.23	15.2	B	0.14	6.0	A	0.14	6.0	A
	WB-LT	0.94	33.9	C	1.09	75.6	E *	0.55	10.7	B	0.59	11.5	B	0.72	26.4	C	0.82	32.8	C	0.64	12.4	B	0.69	13.9	B
	NB-LTR	0.48	46.4	D	0.49	46.6	D	0.35	43.5	D	0.36	43.5	D	0.34	28.5	C	0.35	28.6	C	0.26	41.7	D	0.26	41.8	D
32) Jamaica Avenue (E-W) @ Merrick Boulevard (SB)	EB-T	0.61	22.5	C	0.67	24.7	C	0.61	22.3	C	0.65	23.6	C	0.65	23.3	C	0.83	31.9	C	0.73	26.3	C	0.77	28.4	C
	EB-R	0.22	15.1	B	0.25	15.6	B	0.20	14.8	B	0.21	15.0	B	0.22	15.0	B	0.24	15.3	B	0.14	14.0	B	0.16	14.3	B
	WB-LT	1.39	213.2	F	1.65	326.9	F *	1.02	73.2	E	1.15	114.5	F *	1.23	150.2	F	1.45	244.7	F *	1.38	209.5	F	1.62	317.9	F *
	SB-LTR	0.59	32.4	C	0.60	32.6	C	0.43	29.1	C	0.47	29.8	C	0.69	35.1	D	0.74	36.6	D	0.64	33.5	C	0.70	35.3	D
33) Jamaica Avenue (E-W) @ 180th Street	EB-TR	0.32	7.0	A	0.34	7.2	A	0.30	6.8	A	0.31	7.0	A	0.34	7.1	A	0.40	7.7	A	0.28	6.7	A	0.30	6.8	A
	WB-LT	0.67	11.6	B	0.72	13.0	B	0.38	7.6	A	0.40	7.8	A	0.50	9.0	A	0.56	9.8	A	0.44	8.1	A	0.47	8.4	A
	NB-LR	0.10	39.5	D	0.11	39.7	D	0.19	41.0	D	0.19	41.0	D	0.22	42.3	D	0.21	39.9	D	0.12	39.6	D	0.12	39.7	D
	SB-LTR	0.78	63.4	E	0.78	63.4	E	0.28	42.2	D	0.28	42.2	D	0.75	60.5	E	0.75	61.0	E	0.48	47.3	D	0.48	47.4	D
34) Archer Avenue (E-W) @ Sutphin Boulevard (N-S)	EB-L	0.30	24.3	C	0.29	23.9	C	0.17	20.4	C	0.18	20.6	C	0.37	29.2	C	0.41	30.9	C	0.13	19.7	B	0.14	19.8	B
	EB-TR	0.52	25.9	C	0.52	25.9	C	0.28	20.9	C	0.28	20.9	C	0.39	26.6	C	0.39	26.6	C	0.20	20.0	B	0.20	20.0	B
					WB-DfL 0.53	33.0	C																		
	WB-LT	0.38	24.0	C	WB-T 0.40	25.0	C	0.28	20.9	C	0.33	21.6	C	0.39	26.8	C	0.49	28.6	C	0.24	20.4	C	0.30	21.1	C
	WB-R	0.24	22.8	C	0.29	23.6	C	0.19	20.5	C	0.22	20.8	C	0.28	26.2	C	0.35	27.5	C	0.17	20.1	C	0.21	20.7	C
	NB-L	0.22	12.1	B	0.34	15.8	B	0.13	11.7	B	0.15	11.9	B	0.11	8.8	A	0.15	9.3	A	0.12	11.5	B	0.14	11.7	B
	NB-TR	0.50	14.1	B	0.56	15.1	B	0.40	13.8	B	0.47	14.7	B	0.32	10.0	A	0.63	14.2	B	0.31	12.9	B	0.38	13.7	B
	SB-LTR	0.43	13.1	B	0.66	17.1	B	0.26	12.4	B	0.32	13.0	B	0.37	10.4	B	0.48	11.8	B	0.22	11.9	B	0.28	12.6	B
35) Archer Avenue (E-W) @ 150th Street (N-S)	EB-LTR	0.67	25.4	C	0.69	25.9	C	0.50	20.2	C	0.50	20.3	C	0.76	29.5	C	0.78	30.2	C	0.49	19.8	B	0.49	19.9	B
	WB-L	1.18	136.7	F	1.19	143.1	F *	0.58	25.5	C	0.58	25.4	C	1.07	100.9	F	1.08	103.9	F *	0.59	26.3	C	0.60	26.6	C
	WB-TR	0.56	22.0	C	0.61	23.3	C	0.41	18.6	B	0.44	19.0	B	0.46	19.5	B	0.46	19.5	B	0.47	19.6	B	0.49	19.9	B
	NB-LTR	0.66	25.7	C	0.75	30.5	C	0.30	17.8	B	0.33	18.2	B	0.49	21.2	C	0.54	22.2	C	0.25	17.2	B	0.30	17.8	B
	SB-LTR	0.62	30.5	C	0.86	44.1	D	0.56	29.5	C	0.64	31.8	C	0.72	34.3	C	0.76	36.3	D	0.66	32.4	C	0.76	37.2	D

Abbreviations:

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound
L-Left, T-Through, R-Right, DfL-Defacto Left, E-W: East-West Roadway, N-S: North-South Roadway
V/C Ratio - Volume to Capacity Ratio
SEC/VEH - Seconds per Vehicle
LOS - Level of Service
* - Denotes Impacted Locations.

June 29, 2007

Table 16-12: 2015 With-Action Traffic Conditions at Signalized Intersections

THIS TABLE HAS BEEN REVISED FOR THE FEIS

Signalized Intersection	Lane Group	2015 No-Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 With Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 With Action Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 With Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 With Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS
36) Archer Avenue (E-W) @ Parsons Boulevard (N-S)	EB-L	0.57	23.1	C	0.61	25.8	C	0.40	15.7	B	0.41	15.9	B	0.70	29.0	C	0.70	29.2	C	0.68	26.1	C	0.69	27.2	C
	EB-T	0.80	24.2	C	0.79	23.9	C	0.56	16.6	B	0.57	16.7	B	0.63	17.9	B	0.64	18.2	B	0.52	15.5	B	0.53	15.7	B
	WB-T	0.48	13.9	B	0.51	14.3	B	0.31	12.0	B	0.32	12.1	B	0.41	13.0	B	0.41	13.0	B	0.37	12.6	B	0.39	12.7	B
	SB-L	0.64	30.9	C	0.61	30.0	C	0.49	26.8	C	0.52	27.6	C	0.71	33.3	C	0.75	35.4	D	0.69	32.5	C	0.73	34.6	C
	SB-R	0.45	25.3	C	0.45	25.3	C	0.32	23.2	C	0.32	23.2	C	0.36	23.8	C	0.36	23.8	C	0.26	22.4	C	0.26	22.4	C
37) Archer Avenue (E-W) @ 160th Street (NB)	EB-LT	1.28	156.4	F	1.31	169.4	F *	0.74	18.1	B	0.76	19.3	B	1.04	62.5	E	1.14	96.9	F *	0.79	19.9	B	0.82	22.0	C
	EB-R	0.27	8.9	A	0.27	8.9	A	0.13	7.6	A	0.13	7.6	A	0.34	9.8	A	0.34	9.8	A	0.13	7.6	A	0.13	7.6	A
	WB-LTR	1.01	58.2	E	1.05	68.4	E *	0.52	19.3	B	0.53	19.5	B	0.76	25.7	C	0.78	26.9	C	0.57	20.1	C	0.59	20.5	C
	NB-LTR	0.71	37.9	D	0.71	37.9	D	0.43	29.9	C	0.42	29.8	C	0.51	31.7	C	0.52	31.8	C	0.41	29.6	C	0.41	29.5	C
38) Archer Avenue (E-W) @ Union Hall Street (SB)	EB-T	1.02	56.9	E	0.99	50.0	D	0.67	19.0	B	0.69	19.7	B	0.83	26.6	C	0.86	28.8	C	0.75	21.4	C	0.78	22.9	C
	WB-T	0.52	14.6	B	0.54	15.0	B	0.58	16.7	B	0.60	17.1	B	0.49	14.1	B	0.49	14.1	B	0.66	18.5	B	0.67	19.0	B
	SB-LR	0.41	25.4	C	0.47	26.8	C	0.39	25.1	C	0.39	25.1	C	0.47	26.8	C	0.48	27.0	C	0.41	25.5	C	0.44	26.1	C
39) Archer Avenue (E-W) @ Guy R Brewer Boulevard (N-S)	EB-LTR	1.20	128.8	F	1.20	126.7	F	1.00	59.4	E	1.03	67.8	E *	1.15	107.6	F	1.18	122.0	F *	1.07	78.9	E	1.13	97.5	F *
	WB-L	0.43	27.4	C	0.42	26.7	C	0.47	25.8	C	0.48	26.9	C	0.80	55.9	E	0.82	61.2	E *	0.67	40.6	D	0.71	45.3	D
	WB-TR	0.58	20.6	C	0.60	21.0	C	0.39	17.5	B	0.40	17.6	B	0.56	20.1	C	0.56	20.2	C	0.42	17.8	B	0.43	18.0	B
	NB-LTR	1.07	87.3	F	1.07	87.6	F	0.63	26.0	C	0.65	26.7	C	0.92	50.7	D	0.95	55.6	E	0.77	33.6	C	0.78	34.2	C
	SB-LTR	0.16	16.2	B	0.16	16.3	B	0.16	16.1	B	0.16	16.2	B	0.30	18.0	B	0.31	18.1	B	0.19	16.5	B	0.19	16.6	B
40) Archer Avenue (E-W) @ 165th Street (N-S)	EB-LTR	1.19	123.3	F	1.16	112.4	F	0.83	32.6	C	0.86	34.6	C	1.20	128.4	F	1.23	140.5	F *	1.17	116.8	F	1.22	135.1	F *
	WB-LTR	0.73	24.9	C	0.75	25.7	C	0.49	18.9	B	0.50	19.1	B	0.74	25.1	C	0.75	25.3	C	1.07	84.1	F	1.10	94.1	F *
	NB-LTR	0.18	16.5	B	0.18	16.5	B	0.21	16.9	B	0.21	16.9	B	0.22	17.1	B	0.22	17.1	B	0.40	19.8	B	0.40	19.9	B
	SB-LTR	0.19	16.8	B	0.20	16.8	B	0.24	17.3	B	0.24	17.3	B	0.51	22.5	C	0.52	22.6	C	0.25	17.2	B	0.25	17.2	B
41) Archer Avenue (E-W) @ Merrick Boulevard (SB)	EB-TR	0.67	22.3	C	0.65	21.9	C	0.54	19.8	B	0.56	20.1	C	0.70	23.7	C	0.72	24.3	C	0.65	21.8	C	0.67	22.3	C
	WB-LT	0.97	49.7	D	0.97	50.0	D	0.67	23.6	C	0.69	24.2	C	1.20	126.5	F	1.21	132.4	F *	WB-DI 1.18	147.8	F	-DefL 1.25	175.4	F *
																				WB-T 0.66	24.3	C	WB-T 0.68	24.9	C
	SB-LTR	0.62	22.1	C	0.64	22.6	C	0.44	19.1	B	0.48	19.8	B	0.69	23.8	C	0.73	25.0	C	0.61	22.0	C	0.68	23.6	C
42) Atlantic Avenue (E-W) @ Van Wyck Expwy Southbound Service Road (SB)	EB-TR	0.63	27.2	C	0.63	27.2	C	0.44	24.3	C	0.44	24.3	C	0.58	26.3	C	0.58	26.3	C	0.67	28.1	C	0.67	28.1	C
	WB-L	0.43	30.8	C	0.44	31.2	C	0.21	17.1	B	0.21	17.0	B	0.37	24.5	C	0.38	24.9	C	0.25	23.0	C	0.26	23.0	C
	WB-LT	0.63	22.2	C	0.64	22.3	C	0.31	13.9	B	0.31	13.9	B	0.50	16.5	B	0.51	16.6	B	0.38	14.8	B	0.38	14.8	B
	SB-LTR	0.89	29.6	C	1.04	57.7	E *	0.86	30.9	C	0.90	33.7	C	1.13	93.4	F	1.18	114.0	F *	0.82	28.9	C	0.88	32.0	C
43) Atlantic Avenue (E-W) @ Van Wyck Expwy Northbound Service Road (NB)	EB-L	1.07	90.6	F	1.05	83.7	F	0.91	51.3	D	0.98	66.5	E *	0.98	66.7	E	0.80	42.9	D	1.00	68.7	E	1.10	103.2	F *
	EB-T	0.51	22.9	C	0.90	41.9	D	0.41	20.4	C	0.50	21.9	C	0.52	22.4	C	0.62	24.8	C	0.46	21.3	C	0.58	23.8	C
	WB-TR	0.59	27.1	C	0.62	27.9	C	0.33	22.6	C	0.38	23.2	C	0.53	25.4	C	0.87	36.9	D	0.32	22.4	C	0.38	23.3	C
	NB-LTR	0.92	29.0	C	0.94	31.2	C	0.80	22.8	C	0.81	23.2	C	0.84	24.3	C	0.85	24.8	C	0.53	17.3	B	0.54	17.5	B
44) 94th Avenue (E-W) @ Sutphin Boulevard (N-S)	EB-LR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WB-LTR	0.20	21.1	C	0.24	21.4	C	0.09	14.5	B	0.14	14.9	B	0.17	19.4	B	0.69	26.6	C	0.09	14.6	B	0.14	15.0	B
	NB-L	0.45	17.2	B	0.68	32.8	C	0.17	16.0	B	0.19	16.3	B	0.38	16.2	B	0.41	17.2	B	0.16	15.7	B	0.17	16.0	B
	NB-T	0.80	23.7	C	0.86	27.7	C	0.78	29.4	C	0.85	34.5	C	0.59	17.9	B	0.67	20.2	C	0.61	22.8	C	0.69	25.3	C
	SB-T	0.44	13.1	B	0.61	15.6	B	0.21	15.7	B	0.26	16.1	B	0.33	12.9	B	0.37	13.3	B	0.19	15.5	B	0.24	16.0	B
	SB-R	0.13	10.4	B	0.15	10.6	B	0.27	16.9	B	0.28	17.0	B	0.16	11.6	B	0.17	11.7	B	0.15	15.4	B	0.16	15.6	B
45) 94th Avenue (WB) @ 150th Street (N-S)	WB-LTR	0.41	23.5	C	0.41	23.5	C	0.25	16.8	B	0.25	16.8	B	0.28	18.7	B	0.28	18.7	B	0.16	15.0	B	0.17	15.8	B
	NB-LT	0.52	8.3	A	0.53	8.6	A	0.28	8.1	A	0.32	8.6	A	0.37	7.9	A	0.41	8.4	A	0.28	8.7	A	0.34	8.9	A
	SB-TR	0.71	11.6	B	0.87	19.7	B	0.52	10.8	B	0.56	11.6	B	0.84	19.5	B	0.86	21.2	C	0.65	14.1	B	0.70	14.7	B
46) Liberty Avenue (E-W) @ Sutphin Boulevard (N-S)	EB-L	0.82	45.7	D	1.14	129.3	F *	0.41	14.5	B	0.58	22.2	C	0.98	92.0	F	1.17	151.1	F *	0.48	16.8	B	0.70	32.0	C
	EB-TR	0.73	14.2	B	0.88	20.5	C	0.41	9.6	A	0.47	10.1	B	0.47	10.2	B	0.53	10.8	B	0.43	9.8	A	0.50	10.5	B
	WB-L	0.15	9.5	A	0.20	11.4	B	0.14	8.3	A	0.15	8.6	A	0.15	8.5	A	0.17	9.0	A	0.21	9.3	A	0.26	10.3	B
	WB-TR	0.68	13.2	B	0.74	14.4	B	0.60	11.8	B	0.65	12.6	B	0.81	16.8	B	1.01	40.7	D	0.61	11.9	B	0.68	13.1	B
	NB-LTR	0.87	30.4	C	1.02	56.7	E *	0.47	17.4	B	0.51	18.1	B	0.64	20.7	C	0.70	22.7	C	0.59	19.5	B	0.64	20.7	C
	SB-LTR	0.99	63.0	E	1.17	124.1	F *	0.69	23.9	C	0.77	27.6	C	1.60	300.1	F	1.83	404.4	F *	0.97	54.4	D	1.13	101.8	F *
47) Liberty Avenue (E-W) @ 150th Street (N-S)	EB-L	0.53	19.5	B	0.75	44.5	D	0.20	9.1	A	0.26	10.3	B	0.39	14.2	B	0.48	18.6	B	0.17	8.9	A	0.26	10.8	B
	EB-TR	0.62	11.7	B	0.65	12.1	B	0.44	9.5	A	0.48	9.9	A	0.55	10.7	B	0.71	13.3	B	0.54	10.6	B	0.58	11.2	B
	WB-L	0.07	7.6	A	0.11	8.3	A	0.14	8.1	A	0.17	8.7	A	0.23	9.7	A	0.45	18.0	B	0.18	8.9	A	0.27	10.7	B
	WB-TR	0.66	12.3	B	0.80	15.8	B	0.52	10.4	B	0.57	10.9	B	0.64	12.1	B	0.70	13.2	B	0.56	10.8	B	0.62	11.6	B
	NB-LTR	1.18	119.1	F	1.16	111.7	F	0.58	22.0	C	0.60	22.7	C	0.85	38.2	D	0.90	43.7	D	0.56	21.6	C	0.60	22.7	C
	SB-LTR	1.34	192.4	F	1.59	298.0	F *	0.54	20.1	C	0.62	22.1	C	1.03	68.6	E	1.09	87.5	F *	0.89	38.3	D	1.01	61.7	E *

Abbreviations:

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound

L-Left, T-Through, R-Right, DfL-Defacto Left, E-W: East-West Roadway, N-S: North-South Roadway

V/C Ratio - Volume to Capacity Ratio

SEC/VEH - Seconds per Vehicle

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* - Denotes Impacted Locations.

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Signalized Intersection	Lane Group	2015 No-Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 With Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 With Action Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 With Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 With Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS
48) Liberty Avenue (E-W) @	EB-L	0.87	67.7	E	0.78	54.7	D	0.35	17.1	B	0.40	19.2	B	0.61	34.0	C	0.62	34.7	C	0.21	13.1	B	0.23	13.9	B
Guy R. Brewer Boulevard (N-S	EB-TR	0.80	19.9	B	0.82	20.9	C	0.61	15.4	B	0.67	16.5	B	0.87	23.9	C	1.09	69.3	E *	0.77	18.9	B	0.84	22.0	C
	WB-L	0.31	17.8	B	0.34	19.0	B	0.23	13.6	B	0.29	15.5	B	0.37	20.0	C	0.40	21.4	C	0.41	21.5	C	0.51	27.0	C
	WB-TR	1.10	73.4	E	1.23	127.0	F *	0.63	15.6	B	0.67	16.4	B	0.93	28.6	C	0.96	32.7	C	0.56	14.6	B	0.61	15.4	B
	NB-LTR	1.16	112.9	F	1.58	290.0	F *	0.60	18.2	B	0.69	21.5	C	0.99	60.4	E	1.20	130.0	F *	0.83	30.4	C	1.03	68.7	E *
	SB-L	0.10	11.0	B	0.11	11.1	B	0.11	10.9	B	0.12	10.9	B	0.22	12.3	B	0.23	12.4	B	0.21	12.2	B	0.21	12.3	B
	SB-TR	0.54	16.6	B	0.55	16.8	B	0.59	17.7	B	0.60	18.0	B	0.87	32.3	C	0.88	33.7	C	0.57	17.2	B	0.58	17.4	B
49) Liberty Avenue (E-W) @	EB-T	0.62	16.0	B	0.62	16.0	B	0.39	12.7	B	0.42	13.0	B	0.60	15.6	B	0.67	16.9	B	0.63	16.2	B	0.66	16.8	B
Merrick Boulevard (SB)	EB-R	0.35	13.0	B	0.38	13.3	B	0.17	11.0	B	0.19	11.2	B	0.45	14.4	B	0.57	16.6	B	0.38	13.4	B	0.41	13.8	B
	WB-L	0.54	25.8	C	0.58	27.9	C	0.36	15.1	B	0.40	16.3	B	0.71	36.9	D	0.90	71.5	E *	0.56	27.4	C	0.65	35.4	D
	WB-T	0.72	18.3	B	0.82	21.8	C	0.35	12.3	B	0.37	12.6	B	0.56	15.0	B	0.59	15.4	B	0.49	13.9	B	0.51	14.3	B
	SB-LTR	1.16	114.9	F	1.21	136.4	F *	0.87	39.0	D	0.93	46.5	D *	1.25	150.8	F	1.29	169.2	F *	1.21	133.5	F	1.31	175.6	F *
50) Liberty Avenue (E-W) @	EB-T	0.72	15.6	B	0.74	16.2	B	0.48	10.7	B	0.51	11.1	B	0.79	18.1	B	0.87	23.7	C	0.61	12.9	B	0.63	13.3	B
Dunkirk Street	EB-R	0.34	9.3	A	0.34	9.3	A	0.30	9.0	A	0.30	9.0	A	0.83	22.1	C	0.83	22.1	C	0.42	10.3	B	0.42	10.3	B
	WB-LT	0.86	22.7	C	0.94	31.6	C	0.46	10.5	B	0.49	10.8	B	0.57	12.0	B	0.58	12.4	B	0.59	12.5	B	0.62	13.1	B
	NB-L	1.14	105.3	F	1.14	105.3	F	0.45	18.5	B	0.45	18.5	B	0.59	21.4	C	0.59	21.4	C	0.63	22.4	C	0.63	22.4	C
	NB-R	0.03	13.7	B	0.03	13.7	B	0.01	13.5	B	0.01	13.5	B	0.03	13.7	B	0.03	13.7	B	0.02	13.6	B	0.02	13.6	B
51) South Road (E-W) @	EB-LTR	0.88	39.2	D	0.88	39.2	D	0.59	22.5	C	0.59	22.5	C	0.72	26.8	C	0.72	26.9	C	0.51	20.1	C	0.51	20.2	C
Guy R Brewer Boulevard (N-S	WB-LTR	0.39	17.6	B	0.41	17.8	B	0.30	16.4	B	0.30	16.5	B	0.57	21.0	C	0.57	21.1	C	0.36	17.1	B	0.37	17.2	B
	NB-LTR	0.88	28.3	C	0.96	40.9	D	0.49	11.5	B	0.53	12.1	B	0.67	15.8	B	0.71	17.0	B	0.52	11.7	B	0.57	12.5	B
	SB-LTR	0.72	17.6	B	0.76	19.3	B	0.61	13.8	B	0.65	14.7	B	0.88	27.5	C	0.99	45.3	D *	0.64	14.2	B	0.70	16.1	B
52) 107th Avenue (E-W) @	EB-LTR	0.09	14.4	B	0.09	14.4	B	0.13	14.7	B	0.13	14.7	B	0.09	14.3	B	0.09	14.3	B	0.08	14.2	B	0.08	14.2	B
Guy R Brewer Boulevard (N-S	WB-LTR	0.07	14.1	B	0.07	14.1	B	0.08	14.2	B	0.08	14.2	B	0.09	14.3	B	0.09	14.3	B	0.05	13.9	B	0.05	13.9	B
	NB-LTR	0.76	18.1	B	0.82	21.5	C	0.43	10.2	B	0.45	10.6	B	0.60	13.1	B	0.63	13.7	B	0.51	11.3	B	0.55	12.0	B
	SB-LTR	0.56	12.6	B	0.59	13.1	B	0.54	12.0	B	0.56	12.3	B	0.74	17.0	B	0.82	20.8	C	0.62	13.6	B	0.65	14.3	B
53) 108th Avenue (E-W) @	EB-LTR	0.53	34.6	C	0.53	34.6	C	0.35	29.1	C	0.35	29.2	C	0.47	32.2	C	0.48	32.4	C	0.45	31.4	C	0.45	31.5	C
Merrick Boulevard (N-S)	WB-LTR	0.60	36.8	D	0.60	36.8	D	0.64	38.6	D	0.64	38.6	D	0.55	34.7	C	0.55	34.8	C	0.40	30.2	C	0.41	30.3	C
	NB-L	0.27	10.0	B	0.29	10.4	B	0.07	7.5	A	0.08	7.6	A	0.17	9.1	A	0.20	9.9	A	0.17	8.9	A	0.19	9.2	A
	NB-TR	0.76	15.9	B	0.82	17.9	B	0.35	9.2	A	0.37	9.4	A	0.50	10.8	B	0.53	11.2	B	0.40	9.7	A	0.43	10.0	B
	SB-L	0.16	9.8	A	0.19	11.0	B	0.06	7.3	A	0.06	7.3	A	0.04	7.2	A	0.04	7.3	A	0.05	7.3	A	0.06	7.4	A
	SB-TR	0.40	9.6	A	0.42	9.9	A	0.39	9.6	A	0.41	9.8	A	0.55	11.5	B	0.62	12.5	B	0.48	10.6	B	0.51	10.9	B

Abbreviations:

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound

L-Left, T-Through, R-Right, DfL-Defacto Left, E-W: East-West Roadway, N-S: North-South Roadway

V/C Ratio - Volume to Capacity Ratio

SEC/VEH - Seconds per Vehicle

LOS - Level of Service

* - Denotes Impacted Locations.

June 29, 2007

Table 16-13: 2015 With-Action Traffic Conditions at Unsignalized Intersections

THIS TABLE HAS BEEN REVISED FOR THE FEIS

Unsignalized Intersection	Lane Group	2015 No-Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 With Action Weekday AM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 With Action Weekday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 With Action Weekday PM Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 No-Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS	2015 With Action Saturday MD Peak Hour V/C RATIO	DELAY (SEC/VEH)	LOS
54) Jamaica Avenue (E-W) @	EB-LT	0.20	14.6	B	0.22	16.0	C	0.03	9.0	A	0.03	9.2	A	0.05	9.0	A	0.05	9.2	A	0.12	10.5	B	0.05	9.2	A
178th Street (SB)	WB-LT	0.03	8.9	A	0.03	9.1	A	0.04	9.6	A	0.04	9.7	A	0.07	9.6	A	0.08	10.2	B	0.02	8.6	A	0.08	10.2	B
	NB-LT	0.80	123.6	F	1.00	200.0	F *	0.17	20.7	C	0.18	21.8	C	0.22	25.2	D	0.26	29.9	D	0.27	32.7	D	0.26	29.9	D
	NB-TR	0.81	107.3	F	1.02	180.8	F *	0.13	17.6	C	0.14	18.4	C	0.24	22.5	C	0.28	26.6	D	0.30	25.5	D	0.28	26.6	D

Abbreviations

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound

L-Left, T-Through, R-Right, DfL-Defacto Left, E-W: East-West Roadway, N-S: North-South Roadway

V/C Ratio - Volume to Capacity Ratio

SEC/VEH - Seconds per Vehicle

LOS - Level of Service

* - Denotes Impacted Locations.

June 29, 2007

Table 16-14
Summary of Impacted Intersections

		AM	MD	PM	SMD
Signalized Intersections					
Hillside Avenue @	Van Wyck Southbound Service Road	X	X	X	X
	Van Wyck Northbound Service Road	X	X	X	X
	Queens Boulevard	X	X	X	X
	Sutphin Boulevard	X	X	X	X
	148th Street-South	X	X		
	150th Street	X	X	X	X
	153rd Street	X		X	
	Parsons Boulevard	X	X	X	X
	161st Street	X		X	
	162nd Street	X	X	X	X
89th Avenue @	Sutphin Boulevard	X			
Jamaica Avenue @	Van Wyck Southbound Service Road	X		X	
	Van Wyck Northbound Service Road	X	X	X	
	Queens Boulevard	X	X	X	
	Sutphin Boulevard	X	X	X	
	150th Street	X	X	X	X
	Parsons Boulevard	X			X
	160th Street	X			
	Union Hall/ 162nd Street	X	X		X
	Guy R Brewer Boulevard/ 163rd Street	X			
	164th Street	X			
	165th Street	X			
	Merrick Boulevard	X	X	X	X
Archer Avenue @	150th Street	X		X	
	160th Street	X		X	
	Guy R Brewer Boulevard		X	X	X
	165th Street			X	X
	Merrick Boulevard			X	X
Atlantic Avenue @	Van Wyck Southbound Service Road	X		X	
	Van Wyck Northbound Service Road		X		X
Liberty Avenue @	Sutphin Boulevard	X		X	X
	150th Street	X		X	X
	Guy R Brewer Boulevard	X		X	X
	Merrick Boulevard	X	X	X	X
South Road @	Guy R Brewer Boulevard			X	
Unsignalized Intersection					
Jamaica Avenue @	178th Street	X			
	Total Intersections by Peak Hour	**31**	**17**	**26**	**19**
	Total Intersections Listed	**36**			

X - Impacts to one or more movements in the peak hour.

June 29, 2007

on the westbound left turn movement would increase from 134.5 seconds (LOS F) without the proposed actions to 912.2 seconds (LOS F) with the proposed actions. The westbound left turn movement would also be impacted during the Saturday midday peak hour (34.9 seconds and LOS C under No-Action conditions worsening to 167.6 seconds and LOS F under With-Action conditions).

Hillside Avenue and 153rd Street would have impacted movements in the AM and PM peak hours. The AM peak hour level of service at the westbound approach would decline from LOS C (23.9 seconds) to LOS E (86.8 seconds) from No-Action to With-Action conditions. The PM peak hour level of service at the PM peak hour would decline from LOS B (17.9 seconds) to LOS E (58.8 seconds) from No-Action to With-Action conditions.

Hillside Avenue and Parsons Boulevard would have impacted movements in all peak hours. The eastbound left turn movement would be impacted in the AM peak hour with the LOS remaining F but the delay increasing from 83.6 seconds to 99.3 seconds; in the midday peak hour, the delay would increase from 48.8 seconds (LOS D) to 67.0 seconds (LOS E); in the PM peak hour, the delay would increase from 68.1 seconds (LOS E) to 182.3 seconds (LOS F); and in the Saturday midday peak hour, the delay would increase from 54.8 seconds (LOS D) to 78.9 seconds (LOS E). The westbound through-right turn movement's delay would increase from 135.3 seconds (LOS F) to 265.0 seconds (LOS F) in the AM peak hour; from 40.1 seconds (LOS D) to 66.8 seconds (LOS E) in the midday peak hour; from 54.1 seconds (LOS D) to 87.8 seconds (LOS F) in the PM peak hour; and from 43.9 seconds (LOS D) to 88.9 seconds (LOS E) in the Saturday midday peak hour. Additionally, in the AM peak hour, the southbound left turn movement would be impacted with the delay increasing from 96.3 seconds to 125.4 seconds (remains LOS F), and the northbound through movement would be impacted with the delay increasing from 70.4 seconds to 74.8 seconds (remains LOS E). In the PM peak hour, the eastbound through movement would be impacted with the delay increasing from 39.1 seconds (LOS D) to 151.7 (LOS F); the westbound left turn movement's delay would increase from 51.6 seconds (LOS D) to 58.3 seconds (LOS E); and the delay on the southbound left turn movement would increase from 64.1 seconds (LOS E) to 85.3 seconds (LOS F). In the Saturday midday peak hour, the westbound left turn lane would be impacted with the delay increasing from 34.5 seconds (LOS C) to 45.5 seconds (LOS D).

The Hillside Avenue and 161st Street intersection would have an impacted movement in the AM and PM peak hours. The westbound through movement delay would increase from 23.4 seconds (LOS C) to 70.9 seconds (LOS E) in the AM peak hour, and the eastbound through movement delay would increase from 18.3 seconds (LOS B) to 50.5 seconds (LOS D).

The intersection of Hillside Avenue and 162nd Street would have impacted movements during all peak hours. The westbound left turn movement would be impacted in the AM peak hour with the delay at 79.1 seconds (LOS E) compared to 38.2 seconds (LOS D) under No-Action conditions; in the midday peak hour the delay would be 54.2 seconds (LOS D) under With-Action conditions compared to 25.2 seconds (LOS C) under No-Action conditions; the PM peak hour delay would be 464.4 seconds (LOS F) versus 366.3 seconds (LOS F) under No-Action conditions; and in the Saturday midday peak hour, the delay would increase from 67.9 seconds (LOS E) to 252.4 seconds (LOS F). Additionally, during the AM peak hour, the westbound through movement would be impacted with the delay increasing from 17.7 seconds (LOS B) to 51.6 seconds (LOS D); and during the PM peak hour, the eastbound approach would be impacted with the delay increasing from 29.3 seconds (LOS C) to 111.8 seconds (LOS F).

89th Avenue Corridor

The only impact on the 89th Avenue corridor would occur at 89th Avenue and Sutphin Boulevard during the AM peak hour. The westbound approach would be impacted with the delay increasing from 51.0 seconds (LOS D) to 58.7 seconds (LOS E). The southbound approach would be impacted with the delay increasing from 12.2 seconds (LOS B) to 46.5 seconds (LOS D).

Jamaica Avenue Corridor

The intersection of Jamaica Avenue and the Van Wyck Expressway Southbound Service Road would have impacted approaches during the AM and PM peak hours. The southbound approach would be impacted in the AM peak hour with the delay increasing from 66.4 seconds (LOS E) to 96.2 seconds (LOS F), and in the PM peak hour with the delay increasing from 73.6 seconds (LOS E) to 93.3 seconds (LOS F).

Jamaica Avenue and the Van Wyck Expressway Northbound Service Road would have impacted approaches during all analyzed weekday peak hours. The northbound approach would operate at LOS F under No-Action and With-Action conditions in the weekday peak hours with the delay increasing from 120.6 seconds to 139.8 seconds in the AM peak hour, from 123.6 seconds to 155.3 seconds in the midday peak hour, and 127.0 seconds to 207.5 seconds in the PM peak hour.

At the intersection of Jamaica Avenue and Queens Boulevard impacts would occur in all weekday peak hours. A new eastbound defacto left turn would operate at LOS F with 111.0 seconds of delay. The eastbound left through movement's delay would increase from 38.6 seconds to 47.9 seconds (both LOS D) in the midday peak hour, and from 36.9 seconds to 46.7 seconds (both LOS D) in the PM peak hour.

The intersection of Jamaica Avenue and Sutphin Boulevard would have impacted approaches in the AM, midday and PM peak hours. In the AM peak hour, the eastbound approach would be impacted with the delay increasing from 40.7 seconds (LOS D) to 50.0 seconds (LOS D). In the midday peak hour, eastbound approach would be impacted with the delay increasing from 35.7 seconds to 45.3 seconds (remains LOS D). In the PM peak hour, the eastbound approach would be impacted with the delay increasing from 61.3 seconds (LOS E) to 98.2 seconds (LOS F).

At Jamaica Avenue and 150th Street, significant impacts would occur during all analyzed peak hours at the westbound and northbound approaches. In the AM peak hour, the westbound approach would have a delay increase from 180.4 seconds (LOS F) to 479.1 seconds (LOS F), and the northbound approach would have a delay increase from 227.7 seconds (LOS F) to 284.6 seconds (LOS F). In the midday peak hour, the westbound approach would have a delay increase from 32.9 seconds (LOS C) to 74.7 seconds (LOS E), and the northbound approach delay would increase from 52.2 seconds (LOS D) to 62.3 seconds (LOS E). In the PM peak hour, the westbound delay would increase from 115.7 seconds (LOS F) to 252.8 seconds (LOS F), and the northbound delay would increase from 139.6 seconds (LOS F) to 191.5 seconds (LOS F). In the Saturday midday peak hour, the westbound approach would have a delay increase from 48.5 seconds (LOS D) to 128.1 seconds (LOS F), and the northbound approach delay would increase from 43.4 seconds (LOS D) to 53.3 seconds (LOS D).

Jamaica Avenue and Parsons Boulevard would have impacted movements in the AM and Saturday midday peak hours. The eastbound left turn movement would be impacted in the AM peak hour with the delay increasing from 70.1 (LOS E) seconds to 575.8 seconds (LOS F). The

westbound through movement would be impacted with the delay increasing from 69.5 seconds (LOS E) to 185.3 seconds (LOS F). In the Saturday midday peak hour, the westbound left turn movement would be impacted with the delay increasing from 37.0 seconds (LOS D) to 47.0 seconds (LOS D).

The intersection at Jamaica Avenue and 160th Street would be impacted in the AM peak hour at the westbound through lane group with the delay increasing from 49.5 seconds (LOS D) to 128.8 seconds (LOS F).

At the intersection of Jamaica Avenue and Union Hall Street/162nd Street, significant impacts would occur during all peak hours except the PM peak hour. The westbound approach would be impacted with an increase in delay from 130.3 seconds (LOS F) to 244.1 seconds (LOS F) in the AM peak hour, from 72.1 seconds (LOS E) to 97.4 seconds (LOS F) in the midday peak hour, and from 42.9 seconds (LOS D) to 68.4 seconds (LOS E) in the Saturday midday peak hour.

The Jamaica Avenue and 163rd Street/Guy R. Brewer intersection would have an impacted approach in the AM peak hour. The westbound left turn-through lane group would be impacted with an increase in delay from 42.3 seconds (LOS D) to 109.1 seconds (LOS F) in the AM peak hour.

At Jamaica Avenue and 164th Street the westbound approach would be impacted in the AM peak hour with an increase in delay from 49.8 seconds (LOS D) to 100.8 seconds (LOS F). The southbound right turn lane would also be impacted in the AM peak hour with an increase in delay from 45.3 seconds to 50.8 seconds (both LOS D).

Jamaica Avenue and 165th Street would have an impacted approach during the AM peak hour. The westbound approach would be impacted during the AM peak hour with LOS E (75.6 seconds of delay) versus LOS C (33.9 seconds of delay) under No-Action conditions.

The intersection at Jamaica Avenue and Merrick Boulevard would have impacted approaches during all analyzed peak hours. The westbound approach would be impacted with a delay increase from 213.2 seconds (LOS F) to 326.9 seconds (LOS F) during the AM peak hour, from 73.2 seconds (LOS E) to 114.5 seconds (LOS F) during the midday peak hour, from 150.2 seconds (LOS F) to 244.7 seconds (LOS F) in the PM peak hour, and from 209.5 seconds (LOS F) to 317.9 seconds (LOS F) in the Saturday midday peak hour.

Archer Avenue Corridor

The intersection of Archer Avenue and 150th Street would be impacted at the westbound left turn movement during the AM and PM peak hours. The delay would increase from 136.7 seconds (LOS F) to 143.1 seconds (LOS F) during the AM peak hour, and from 100.9 seconds (LOS F) to 103.9 seconds (LOS F) during the PM peak hour.

At Archer Avenue and 160th Street, movements would be impacted during the AM and PM peak hours. In the AM peak hour, the eastbound left turn and through approach would be impacted with the delay increasing from 156.4 seconds (LOS F) to 164.9 seconds (LOS F), and the westbound approach would be impacted with the delay increasing from 58.2 seconds (LOS E) to 68.4 seconds (LOS E). In the PM peak hour, the delay on the eastbound left turn-through approach would increase from 62.5 seconds (LOS E) to 96.9 seconds (LOS F).

Archer Avenue and Guy R. Brewer Boulevard would have impacted movements in the midday, PM, and Saturday midday peak hours. In the midday peak hour, the eastbound approach would be impacted with a delay increase from 59.4 seconds (LOS E) to 67.8 seconds (LOS E). In the

PM peak hour, the eastbound approach would be impacted with a delay increase from 107.6 seconds (LOS F) to 122.0 seconds (LOS F), and the westbound left turn movement would be impacted with a delay increase from 55.9 seconds (LOS E) to 61.2 seconds (LOS E). The eastbound approach would also be impacted in the Saturday midday peak hour, with a delay increase from 78.9 seconds (LOS E) to 97.5 seconds (LOS F).

The Archer Avenue and 165th Street intersection would have impacted lane groups in the PM and Saturday midday peak hours. The eastbound approach would be impacted during the PM peak hour with a delay increase from 128.4 seconds (LOS F) to 140.5 seconds (LOS F), and during the Saturday midday peak hour with a delay increase from 116.8 seconds (LOS F) to 135.1 seconds (LOS F). The westbound approach would be impacted in the Saturday midday peak hour with a delay increase from 84.1 seconds (LOS F) to 94.1 seconds (LOS F).

The intersection of Archer Avenue and Merrick Boulevard would have impacted locations during the PM and Saturday midday peak hours. The westbound approach would be impacted during the PM peak hour, with a delay increase from 126.5 seconds (LOS F) to 132.4 seconds (LOS F) in the PM peak hour. The westbound defacto left turn movement would be impacted in the Saturday midday peak hour with the delay increasing from 147.8 seconds (LOS F) to 175.4 seconds (LOS F).

Atlantic Avenue/94th Avenue Corridor

There would be impacted movements during the AM and PM peak hours at the intersection of Atlantic Avenue and the Van Wyck Expressway Southbound Service Road. The southbound approach would be impacted with a delay increase from 29.6 seconds (LOS C) to 57.7 seconds (LOS D) in the AM peak hour, and a delay increase from 93.4 seconds (LOS F) to 114.0 seconds (LOS F) in the PM peak hour.

Impacted movements would occur at Atlantic Avenue and the Van Wyck Expressway Northbound Service Road under the proposed actions during the midday and Saturday midday peak hours. The eastbound left turn approach would be impacted during the midday peak hour with a delay increase from 51.3 seconds (LOS D) to 66.5 seconds (LOS E). The eastbound left turn approach would be impacted in the PM peak hour with a delay increase from 68.7 seconds (LOS E) to 103.2 seconds (LOS F).

Liberty Avenue Corridor

The Liberty Avenue and Sutphin Boulevard intersection would have impacted locations during the AM, PM and Saturday midday peak hours. The eastbound left turn movement would be impacted in the AM peak hour with the delay increasing from 45.7 seconds (LOS D) to 129.3 seconds (LOS F); and in the PM peak hour, the delay would increase from 92.0 seconds (LOS F) to 151.1 seconds (LOS F). The northbound approach would be impacted in the AM peak hour with the delay increasing from 30.4 seconds (LOS C) to 56.7 seconds (LOS E). The southbound approach would be impacted with the delay increasing from 63.0 seconds (LOS E) to 124.1 seconds (LOS F) in the AM peak hour and from 300.1 seconds (LOS F) to 404.4 seconds (LOS F) in the PM peak hour. The southbound approach would also be impacted in the Saturday midday peak hour with the delay increasing from 54.4 seconds (LOS D) under No-Action conditions to 101.8 seconds (LOS F) with the proposed actions.

The intersection of Liberty Avenue and 150th Street would have impacts on the southbound approach during the AM, PM and Saturday midday peak hours. The delay would increase from 192.4 seconds (LOS F) to 298.0 seconds (LOS F) in the AM peak hour, from 68.6 seconds (LOS

E) to 87.5 seconds (LOS F) in the PM peak hour, and from 38.3 seconds (LOS D) to 61.7 seconds (LOS E) in the Saturday midday peak hour.

The Liberty Avenue at Guy R. Brewer Boulevard would have impacted locations during the AM, PM and Saturday midday peak hours. The northbound approach would be impacted during all of those peak hours with a delay increase from 112.9 seconds (LOS F) to 290.0 seconds (LOS F) in the AM peak hour, from 60.4 (LOS E) to 130.0 seconds (LOS F) in the PM peak hour, and from 30.4 seconds to 68.7 seconds (LOS E) in the Saturday midday peak hour. The westbound through-right turn lane group would be impacted in the AM peak hour with LOS F (127.0 seconds of delay) versus LOS E (73.4 seconds of delay) under No-Action conditions. The eastbound through-right turn lane group would be impacted in the PM peak hour with an increase in delay from 23.9 seconds (LOS C) to 69.3 seconds (LOS E).

The intersection at Liberty Avenue and Merrick Boulevard would have impacted locations during all four analyzed peak hours. The westbound left turn movement would be impacted during the PM peak hour with a delay increase from 36.9 seconds (LOS D) to 71.5 seconds (LOS E). The southbound approach would be impacted during all analyzed peak hours with a delay increase from 114.9 seconds (LOS F) to 136.4 seconds (LOS F) in the AM peak hour, from 39.0 seconds (LOS D) to 46.5 seconds (LOS D) in the midday peak hour, from 150.8 seconds (LOS F) to 169.2 seconds (LOS F) in the PM peak hour, and 133.5 seconds (LOS F) to 175.6 seconds (LOS F) in the Saturday midday peak hour.

Other Non-Corridor Locations

Off of the principal corridors, the intersection of South Road and Guy R. Brewer Boulevard would be impacted during the PM peak hour at the southbound approach. The delay would increase from 27.5 seconds (LOS C) to 45.3 seconds (LOS D).

Unsignalized Intersection

As shown in Table 16-13, the only analyzed unsignalized intersection (Jamaica Avenue and 178th Street) would be impacted during the AM peak hour at the northbound lane groups. The northbound left turn-through lane group would be impacted with a delay increase from 123.6 seconds (LOS F) under No-Action conditions to 200.0 seconds (LOS F) under With-Action conditions. The northbound through-right turn lane group would be impacted with a delay increase from 107.3 seconds (LOS F) to 180.8 seconds (LOS F).

PARKING

The number of off-street public parking spaces would increase by 1,040 spaces in the AM and midday hours, and 1,110 spaces over night; and the number of on-street metered public parking spaces would not change as a result of the proposed actions. The demand for public parking spaces would increase compared to No-Action conditions. It is assumed that development sites would provide accessory parking, and two of those projected development sites, 298-URA and 192-JC3, would provide public parking for 250 cars and 900 cars, respectively. Development as a result of the proposed actions at Projected Development Site 337-AT3 would eliminate two public parking facilities (sites 7 and 19 in Figure 16-6), thereby reducing the off-street public parking spaces by 110 in the AM and midday periods, and 70 overnight (parking site 7 is closed overnight). This change in the off-street public parking capacity in each parking study area is shown in Table 5 in Appendix H.

OFF-STREET

The proposed actions would increase the overall accessory parking capacity at projected development sites by 19 spaces with a mixture of increases and decreases in the various parking study areas. The entire decrease would occur in the Downtown Jamaica Core area (1,193 spaces), and there would be increases in accessory parking supply in all other parking study areas (see Table 6 in Appendix H). It is assumed that all vehicles would park in their accessory parking areas, and any excess demand would be added to the demand for parking at public parking facilities. A total of approximately 1,062, 2,881, and 786 additional cars in the AM, midday and overnight periods, respectively, would not be accommodated in accessory parking facilities as a result of the proposed actions and would seek parking in public facilities. Table 16-15 shows the net change in overall weekday hourly parking demand in the future with the proposed actions compared to No-Action conditions. Table 6 in Appendix H shows how the excess parking demand would affect each parking study area. The Downtown Jamaica Core study area would have a net loss of 1,193 accessory parking spaces, and combined with a net gain in demand of up to 1,212 spaces in the midday period, there would be a shortfall in accessory parking in this area of up to 1,452 spaces in the midday. Those vehicles would have to find parking in public facilities. There would also be shortfalls in accessory parking within the Sutphin Boulevard (South) corridor in the AM and midday periods; and in other areas for the entire day. These deficits in accessory parking spaces would increase demand for public parking.

Table 16-16 and Table 7 in Appendix H show the overall affect on the public parking system under With-Action conditions. As shown in the table, under With-Action conditions there would be an overall deficit of about 2,165 spaces in the midday. During the AM period there would be a 65 percent utilization rate, a utilization rate of 133 percent in the midday, and a utilization rate of 52 percent overnight. However, localized deficits would occur in the AM period in the Hillside Avenue (East) corridor with a deficit of 47 spaces, and continue to occur where no off-street public parking exist or are anticipated in the future in all hours.

Off-street parking utilization levels would be above capacity during the midday period with the proposed actions. Overnight, the project's residents at the other areas where no off-street parking exists (at the southwest corner of the area affected by the proposed actions and 157th Street and South Road with a deficit of 19 spaces total) may choose to park in an off-street parking facilities within the Downtown Jamaica Core or curbside near their residence. Ample curbside parking with street cleaning regulations is available throughout most of the area affected by the proposed actions with the exception of in the Downtown Jamaica Core parking study area. There would be significant parking impacts in the midday period, and as noted in Chapter 22, "Mitigation," no parking mitigation is proposed, and this midday shortfall at off-street public parking facilities would remain. Generally, no nearby off-street public parking exists outside of the area affected by the proposed actions, therefore, the unsatisfied demand for parking spaces at the midday period would result in vehicles parking on-street at non-metered curbside spaces regulated by street cleaning rules and motorists walking greater distances to their destinations.

ON-STREET

The on-street midday supply is assumed to remain unchanged in the future with the proposed actions. The 1,255 metered spaces are expected to remain at capacity. There would be no available metered curbside spaces to relieve the projected over-capacity conditions on the off-street public parking system.

Table 16-15
Weekday Net Parking Demand From the Proposed Action

THIS TABLE HAS BEEN REVISED FOR THE FEIS

	Office (1)	Residential (2)	Destination Retail (3)	Neigh. Retail (4)	Hotel (5)	Industrial (1)	Soc. Svce. Office (1)	Professional School (6)	Hospital (7)	Medical Office (8)	House of Worship (9)	Community Center (9)	Total Net Demand
12 : 00 - 1 : 00 AM	0	2,280	0	0	225	0	0	0	22	0	0	0	2,527
1 : 00 - 2 : 00	0	2,317	0	0	225	0	0	0	22	0	0	0	2,564
2 : 00 - 3 : 00	0	2,317	0	0	225	0	0	0	24	0	0	0	2,566
3 : 00 - 4 : 00	0	2,317	0	0	225	0	0	0	24	0	0	0	2,566
4 : 00 - 5 : 00	0	2,317	0	0	225	0	0	0	28	0	0	0	2,570
5 : 00 - 6 : 00	0	2,277	0	0	225	0	0	0	40	0	0	0	2,542
6 : 00 - 7 : 00	0	2,078	0	0	223	0	0	0	65	0	5	0	2,371
7 : 00 - 8 : 00	179	1,759	34	1	224	-11	1	1	82	1	13	1	2,285
8 : 00 - 9 : 00	1,280	1,363	53	1	222	-140	17	5	96	10	15	1	2,923
9 : 00 - 10 : 00	2,113	1,204	86	1	220	-209	31	9	114	9	7	1	3,586
10 : 00 - 11 : 00	2,169	1,165	154	5	218	-216	31	9	122	9	10	1	3,677
11 : 00 - 12 : 00	2,146	1,165	203	6	214	-234	31	8	123	10	14	1	3,687
12 : 00 - 1 : 00 PM	2,132	1,172	235	6	222	-234	30	7	123	10	14	1	3,718
1 : 00 - 2 : 00	2,139	1,132	244	5	222	-238	31	7	122	10	17	1	3,692
2 : 00 - 3 : 00	2,130	1,211	228	4	220	-220	31	6	119	10	18	1	3,758
3 : 00 - 4 : 00	2,099	1,410	206	5	220	-200	31	5	109	11	18	1	3,915
4 : 00 - 5 : 00	1,475	1,649	190	7	222	-131	22	4	81	10	23	1	3,553
5 : 00 - 6 : 00	224	1,882	171	7	225	-36	3	3	68	2	24	0	2,573
6 : 00 - 7 : 00	42	2,121	173	5	227	-25	1	3	52	1	24	0	2,624
7 : 00 - 8 : 00	0	2,232	199	1	229	-6	0	2	36	0	21	0	2,714
8 : 00 - 9 : 00	0	2,311	145	0	229	0	0	0	27	0	12	0	2,724
9 : 00 - 10 : 00	0	2,311	49	0	228	0	0	0	23	0	6	0	2,617
10 : 00 - 11 : 00	0	2,284	20	0	225	0	0	0	22	0	0	0	2,551
11 : 00 - 12 : 00	0	2,243	0	0	225	0	0	0	22	0	0	0	2,490

Notes:

(1) Pattern based on Pushkarev and Zupan, Table 2.7 office, sharp peak. Accounts for lower midday mode share.
(2) Pattern based on Hudson Yards EIS. Overnight demand uses 0.65 autos/household based on 2000 Census data.
(3) Pattern based on ITE Trip Generation, 7th Edition Land Use Code 820.
(4) Pattern based on Northern Boulevard Shops EAS
(5) Pattern based on data collected at the LaGuardia Crowne Plaza. LaGuardia Hampton Inn EAS, January 2001, Table C-6.
(6) Pattern based on Metrotech EIS, 1987, Table IV-3.
(7) Pattern based on Montefiore Medical Center Parking Garage EAS, October 1996, Table C.5.
(8) Pattern based on 506 East 76th Stret Rezoning DEIS, Table C-8.
(9) Pattern based on Hudson Yards EIS.

June 29, 2007

Table 16-16
2015 With-Action Off-Street Parking Utilization

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2015 With-Action Accessory Capacity and Demand at Projected Development Sites

	AM Period				Midday Period				Overnight Period			
	Accessory Capacity	Accessory Demand	Accessory Utilization	Excess/ Public Demand (1)	Accessory Capacity	Accessory Demand	Accessory Utilization	Excess/ Public Demand (1)	Accessory Capacity	Accessory Demand	Accessory Utilization	Excess/ Public Demand (1)
Downtown Jamaica Core	1,854	2,638	142%	784	1,854	3,253	175%	1,399	1,854	2,542	137%	688
Hillside Avenue (East)	374	395	106%	21	374	419	112%	45	374	399	107%	25
Sutphin Blvd (South)	1,416	1,589	112%	173	1,416	2,695	190%	1,279	1,416	636	45%	0
Jamaica Avenue (East)	460	261	57%	0	460	403	88%	0	460	237	52%	0
Guy R. Brewer (South)	119	132	111%	13	119	165	138%	46	119	120	100%	1
Merrick Boulevard (South)	89	141	158%	52	89	167	188%	78	89	142	160%	53
Other Areas	34	53	156%	19	34	68	200%	34	34	53	156%	19
Total	4,346	5,209	120%	1,062	4,346	7,170	165%	2,881	4,346	4,129	95%	786

2015 With-Action Public Parking Demand

	AM Period				Midday Period				Overnight Period			
	Public Capacity	Public Demand	Available Public Spaces	Public Utilization	Public Capacity	Public Demand	Available Public Spaces	Public Utilization	Public Capacity	Public Demand	Available Public Spaces	Public Utilization
Downtown Jamaica Core	5,847	3,416	2,431	58%	5,847	6,209	-362	106%	4,328	2,263	2,065	52%
Hillside Avenue (East)	341	388	-47	114%	341	648	-307	190%	291	174	117	60%
Sutphin Blvd (South)	300	287	14	96%	300	1,456	-1,156	485%	250	4	246	2%
Jamaica Avenue (East)	0	0	0	--	0	115	-115	--	0	0	0	--
Guy R. Brewer (South)	0	13	-13	--	0	46	-46	--	0	1	-1	--
Merrick Boulevard (South)	0	83	-83	--	0	145	-145	--	0	53	-53	--
Other Areas	0	19	-19	--	0	34	-34	--	0	19	-19	--
	6,488	4,205	2,283	65%	6,488	8,653	-2,165	133%	4,869	2,513	2,356	52%

(1) - Overflow parking demand that cannot be accommodated by the accessory requirements, which would be added to the public parking demand.

June 29, 2007

E. SUMMARY

This chapter analyzes the effects of added traffic and parking demand from the projected development sites on the Downtown Jamaica street network during the weekday AM, midday and PM, and Saturday midday peak hours. The results of the analyses show that project demand would create significant traffic impacts (see Tables 16-12, 16-13 and 16-14), with the AM peak hour having the most impacts, with 31 impacted intersections (30 signalized and one unsignalized), followed by the PM, the Saturday midday and the midday, with 26, 19 and 17 impacted intersections, respectively. The proposed actions would result in a shortfall in the supply of public parking in the within the area affected by the proposed actions during the midday peak period. Chapter 22, "Mitigation," of this FEIS provides a description of measures to be developed to mitigate the traffic impacts identified in this chapter. ✷