# Appendix A.6

Transportation

# **DRAFT**



To: NYCDCP Date: March 2, 2018 Memorandum

Project #: 29527.01

From: VHB Re: M1 Hotels Text Amendment EIS

Transportation Planning Factors and Travel Demand Forecast

This memorandum summarizes the transportation planning factors to be used for the analysis of transportation (traffic, transit, pedestrians, and parking) conditions for the *M1 Hotels Text Amendment EIS*. It provides a description of the Proposed Action, travel demand factors used to determine the number of trips generated by the project, estimates of the travel demand in the peak hours, assignments of project-generated trips, and study area definitions.

# **Proposed Action**

The Proposed Action is a citywide zoning text amendment to establish a new special permit under the jurisdiction of the City Planning Commission for new hotels<sup>1</sup> in M1 districts. Since the Proposed Action is a citywide action and has broad applicability, it is difficult to predict the universe of sites where development would be affected by the Proposed Action. For this reason, the Proposed Action is analyzed in this environmental review as a "generic action". Generic actions are programs and plans that have wide application or affect the range of future alternative policies. The potential impacts of hotel development in the future No-Action and With-Action Condition will be analyzed by means of a prototypical analysis as detailed below, which will be based on existing trends and reasonable projections for the future.

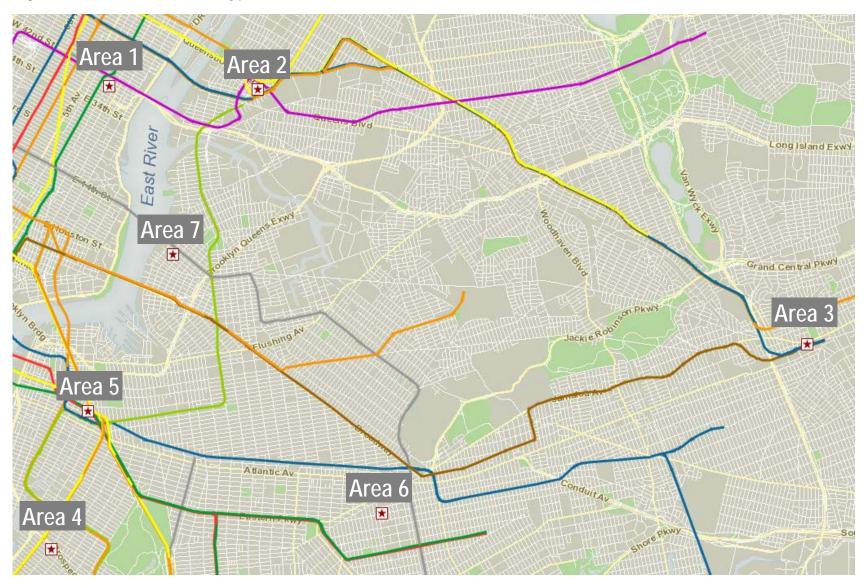
To assess the possible effects of the Proposed Action, a Reasonable Worst-Case Development Scenario (RWCDS) was established using both the current zoning (future No-Action) and proposed zoning (future With-Action) conditions. The RWCDS identifies prototypical sites in seven different neighborhoods, the general locations of which are shown in Figure 1:

- Area 1: Manhattan below 59th Street
- Area 2: Long Island City, Queens
- Area 3: Jamaica, Queens
- Area 4: South Slope, Brooklyn
- Area 5: Downtown Brooklyn
- Area 6: Brownsville, Brooklyn
- Area 7: Williamsburg, Brooklyn

The incremental difference between the future No-Action and future With-Action conditions are the basis of the transportation impact analyses of the EIS. Tables A.1 through A.7 of Attachment A summarize the No-Action Condition, With-Action Condition, and the incremental net change of component sizes by land use for each of the prototypical sites. Table 1 provides a similar summary of total component sizes for the seven prototypical sites. As

<sup>1</sup> The Proposed Action also subjects motels, tourist cabins and boatels in M1 districts to the proposed special permit. The zoning definition of "motel or tourist cabin" requires that each sleeping unit have an exterior entrance, and the definition of "boatel" requires water access for boats. Since there are very few motels, tourist cabins or boatels in NYC, and because of these limiting factors, few if any are expected to be developed in the future, this document will use the term "hotel", but will by implication also refer to these other transient accommodations.

Figure 1 – Locations of Prototypical Areas



shown in Table 1, under the RWCDS, overall the Proposed Action would result in a net increase of approximately 1,477 hotel rooms and net reductions of approximately 510 residential dwelling units, 60,975 gross square feet (gsf) of office uses, 34,211 gsf of local retail uses, and 2,300 gsf of community facility uses, compared to the No-Action condition.

Table 1 – RWDCS Combined Summary for All Areas

Land Use	No-Action Condition	With-Action Condition	Net Increment
Residential (dwelling units)	510	0	-510
Local Retail (gsf)	34,211	0	-34,211
Office (gsf)	60,975	0	-60,975
Hotel (rooms)	0	1,477	1,477
Community Facility (gsf)	2,300	0	-2,300

Note: See Attachment A for tables summarizing the No-Action, With-Action, and incremental net change of component sizes by land use for each of the prototypical sites.

# **Transportation Planning Factors**

The transportation planning factors used to forecast travel demand for the land uses in the RWCDS for Areas 1 through 7 are summarized in Tables B.1 through B.7 of Attachment B, respectively, and discussed below. The trip generation rates, temporal distributions and in/out splits, modal splits, vehicle occupancies and truck trip factors were primarily based on rates cited in the 2014 *City Environmental Quality Review (CEQR) Technical Manual*, New York City Department of Transportation (DOT) data, EASs and EISs for similar land uses and locations, 2012-2016 American Community Survey journey-to-work data, and 2006-2010 American Association of State Highway and Transportation Officials (AASHTO) Census Transportation Planning Products (CTTP) reverse journey-to-work data. Factors are provided for the weekday AM and PM peak hours (the typical peak periods for commuter travel demand) and the weekday Midday and Saturday Midday peak hours (the typical peak periods for retail establishments such as local eateries and shops).

#### Hotel

Travel demand forecasts for hotels were based on the trip generation rates and temporal distributions cited in the CEQR Technical Manual. In/out splits were obtained from the Bond Street Hotel EAS, Broadway Triangle FEIS, Downtown Jamaica Redevelopment Plan FEIS, Dutch Kills Rezoning and Related Actions FEIS, East New York Rezoning Proposal FEIS, and Greater East Midtown Rezoning FEIS, which have similar characteristics to the respective neighborhoods of the prototypical sites. Modal splits and vehicle occupancies were obtained from DOT. Truck trip generation rates were obtained from the Bond Street Hotel EAS, Broadway Triangle FEIS, Dutch Kills Rezoning and Related Actions FEIS, East New York Rezoning Proposal FEIS, and Greater East Midtown Rezoning FEIS.

#### Residential

Residential trip generation rates and temporal distributions were based on factors cited in the CEQR Technical Manual. In/out splits were obtained from the Atlantic Yards Arena and Redevelopment Project FEIS, Broadway Triangle FEIS, Downtown Jamaica Redevelopment Plan FEIS, East New York Rezoning Proposal FEIS, and Greater East Midtown Rezoning FEIS, which have similar characteristics to the respective neighborhoods of the prototypical sites. Modal splits were derived from 2012-2016 American Community Survey journey-to-work data for workers residing within the census tracts near the prototypical sites. Vehicle occupancies for autos were derived from 2012-2016 American Community Survey journey-to-work data and vehicle occupancy rates for taxis were obtained from the Atlantic Yards Arena and Redevelopment Project FEIS, Broadway Triangle FEIS, Downtown Jamaica Redevelopment Plan FEIS, East New York Rezoning Proposal FEIS, and Greater East Midtown Rezoning FEIS. Truck trip generation assumptions were based on the rates cited in the CEQR Technical Manual.

#### Office

Trip generation rates and temporal distributions for offices were based on factors cited in the CEQR Technical Manual. In/out splits were obtained from the Dutch Kills Rezoning and Related Actions FEIS, which has similar characteristics to the location of the prototypical site in Long Island City. Weekday AM and PM peak hour modal splits were derived from 2006-2010 AASHTO CTTP reverse journey-to-work data for workers at workplaces located within the census tracts at the prototypical sites. Weekday Midday peak hour modal splits were obtained from the Dutch Kills Rezoning and Related Actions FEIS. Vehicle occupancies for autos were derived from 2006-2010 AASHTO CTTP reverse journey-to-work data and vehicle occupancy rates for taxis were obtained from the Dutch Kills Rezoning and Related Actions FEIS. Truck trip generation assumptions were based on the rates cited in the CEQR Technical Manual.

#### Local Retail

Local retail would primarily attract trips from land uses in the surrounding area. It is therefore anticipated that most of these trips would be via the walk mode and that many would be "linked" trips (e.g., a trip with multiple purposes, such as stopping at a retail store while commuting to or from work or at lunchtime) and would therefore not represent the addition of new discrete trips. The proportion of "linked" trips assumed is 25 percent based on the CEQR Technical Manual. Weekday travel demand forecasts for local retail uses were based on the trip generation rates and temporal distributions cited in the CEQR Technical Manual. In/out splits were obtained from the Downtown Jamaica Redevelopment Plan FEIS, East New York Rezoning Proposal FEIS, and Greater East Midtown Rezoning FEIS, which have similar characteristics to the respective neighborhoods of the prototypical sites. Modal splits were obtained from DOT and vehicle occupancies were obtained from DOT and the Greater East Midtown Rezoning FEIS. Truck trip generation assumptions were based on the rates cited in the CEQR Technical Manual.

### **Community Facility**

This memorandum does not include transportation planning factors for community facility uses as no credit was taken for trips associated with the displaced community facility space (the Proposed Action would result in a minor displacement of approximately 2,300 gsf of community facility uses at one of the prototypical sites).

# **CEQR Transportation Analysis Screening**

The CEQR Technical Manual describes a two-step screening procedure for the preparation of a "preliminary analysis" to determine whether quantified operational analyses of transportation conditions are warranted. As discussed in the following sections, the preliminary analysis begins with a trip generation (Level 1) analysis to estimate the amount of person and vehicle trips generated by the proposed project. According to the CEQR Technical Manual, if the proposed project is expected to result in fewer than 50 peak hour vehicle trips and fewer than 200 peak hour transit or pedestrian trips, further quantified analyses are not warranted.

When these thresholds are exceeded, detailed trip assignments (Level 2) are to be performed to estimate the incremental trips that could occur at specific transportation elements and to identify potential locations for further analyses. If the trip assignments show that the proposed project would generate 50 or more peak hour vehicle trips at an intersection, 200 or more peak hour subway trips at a station, 50 or more peak hour bus trips in one direction along a bus route, or 200 or more peak hour pedestrian trips traversing a sidewalk, corner area or crosswalk, further quantified operational analyses may be warranted to assess the potential for significant adverse impacts on traffic, transit, pedestrians, parking, and vehicular and pedestrian safety.

## Trip Generation (Level 1) Screening Assessment

The incremental difference in person and vehicle trips expected to result from the Proposed Action by the analysis year of 2028 were derived based on the net change in land use component sizes in Tables A.1 through A.7 of Attachment A and the transportation planning factors in Tables B.1 through B.7 of Attachment B. Tables C.1 through C.7 of Attachment C provide an estimate of the incremental net change of peak hour trips (versus the No-Action condition) that would occur in 2028 in Areas 1 through 7, respectively, with implementation of the Proposed Action. Peak hour vehicle trips include autos, taxis, and trucks. Inbound and outbound taxi trips were balanced for each of the prototypical sites to reflect that they consist of two trip ends (one in, one out) and that some taxis arrive or depart empty. The percentage of taxi overlap (inbound full taxis that are assumed to be available for outbound demand) was assumed based on the guidance in the *CEQR Technical Manual*. For Area 1, a 75 percent taxi overlap was assumed given the presence of the nearby intermodal transportation facility at Grand Central Terminal. For Areas 2, 3, and 5, which are located in Central Business Districts (CBDs), a 25 percent taxi overlap was assumed. No taxi overlap was assumed for Areas 4, 6, and 7. Table 2 provides a summary of the incremental vehicle, subway/rail, bus, and pedestrian trips that would be generated by the Proposed Action for each of the areas during the weekday AM, Midday, PM, and Saturday Midday peak hours based on the information presented in Attachment C.

As discussed above, the CEQR Technical Manual Level 1 screening threshold for traffic and parking is 50 incremental vehicles during any peak hour. The information presented in Table 2 indicates that Areas 1, 4, and 6 would generate less than 50 vehicle trips during the weekday AM, Midday, PM, and Saturday Midday peak hours. Consequently, the Proposed Action is not expected to result in any significant adverse impacts to traffic in these areas based on CEQR Technical Manual criteria and a detailed analysis of traffic conditions is not warranted. As the incremental vehicle trips would be greater than 50 vehicles in one or more peak hours for Areas 2, 3, 5, and 7, a Level 2 screening assessment (presented in the section below) was conducted to determine if there is a need for additional quantified traffic analysis.

As discussed above, according to general thresholds used by MTA agencies specified in the *CEQR Technical Manual*, agencies, if a proposed project is projected to result in fewer than 200 peak hour subway/rail or bus transit riders, further transit analyses are not typically required as the proposed project is considered unlikely to create a significant transit impact. The information presented in Table 2 indicates that each of the prototypical sites would generate fewer than 200 trips by subway/rail during the weekday AM and PM peak hours, the critical commuter hours for which a transit analysis is typically prepared. Although Area 3 is projected to result in more than 200 new peak hour subway/rail trips in the weekday Midday peak hour, these trips would be off-peak when the subway and rail systems typically have ample capacity. As such, this off-peak period will not be analyzed in the EIS, as no impacts are expected. The information presented in Table 2 also indicates that the incremental bus trips for each of the prototypical sites would be below the CEQR analysis threshold of 50 peak hour bus trips on a single route in one direction. Consequently, the Proposed Action is not expected to result in any significant adverse impacts to subway/rail or bus transit based on *CEQR Technical Manual* criteria and a detailed analysis of transit services is not warranted.

Table 2 - Summary of Incremental Trips Generated by the Proposed Action

Trip Type	Peak	Hour	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7
		AM	18	4	122	5	30	15	33
Vehicle	Weekday	Midday	28	81	237	7	54	14	62
Trips		PM	21	24	200	6	48	20	55
	Saturday	Midday	16	43	75	2	38	14	40
		AM	14	4	73	-3	-9	15	-8
Subway/	Weekday	Midday	20	99	304	2	35	22	37
Rail Trips		PM	19	32	194	-2	8	24	8
	Saturday	Midday	13	65	76	-3	-4	13	-2
		AM	2	-13	-29	0	1	0	1
Bus	Weekday	Midday	2	-5	-20	0	2	-5	2
Trips		PM	2	-14	-32	0	2	-1	1
	Saturday	Midday	2	1	-39	0	2	-4	0
		AM	68	20	180	1	65	20	64
Pedestrian	Weekday	Midday	98	106	186	-14	176	-164	186
Trips	vveekuay	PM	97	93	264	-5	133	-41	135
	Saturday	Midday	62	134	-35	-12	82	-98	84

Notes

Trips exceeding CEQR Level 1 screening thresholds are marked in boldface.

Pedestrian trips include walk-only trips as well as the walk component of trips made by other modes.

As discussed above, the CEQR Technical Manual Level 1 screening threshold for pedestrian trips is 200 trips during any peak hour. Except for Area 3 during the weekday PM peak hour, each of the prototypical sites would generate fewer than 200 pedestrian trips during the weekday AM, Midday, PM, and Saturday Midday peak hours. Consequently, the Proposed Action is not expected to result in any significant adverse impacts to pedestrians in these areas based on CEQR Technical Manual criteria and a detailed analysis of transit services is not warranted. As the incremental pedestrian trips would be greater than 200 during one peak hour for Area 3, a Level 2 screening assessment (presented in the section below) was conducted to determine if there is a need for additional quantified pedestrian analysis.

# Trip Assignment (Level 2) Screening Assessment

As shown in Table 2, incremental vehicle trips resulting from the Proposed Action would exceed the *CEQR Technical Manual* Level 1 screening threshold for Areas 2, 3, 5, and 7 in one or more peak hours, warranting trip assignment (Level 2) screening assessments for traffic. Additionally, the incremental pedestrian trips resulting from the Proposed Action would also exceed the *CEQR Technical Manual* Level 1 screening threshold for Area 3 in one peak hour, warranting a trip assignment (Level 2) screening assessment for pedestrians.

For the Level 2 screening assessments, project-generated trips were assigned to specific intersections and pedestrian elements in the study area to determine whether individual locations are expected to experience volumes exceeding CEQR thresholds and to identify the various study areas for which detailed analyses of potential impacts would be prepared.

Vehicle trips were assigned to the surrounding roadway networks based on the most likely travel routes to and from the project sites, the configuration of the roadway networks, prevailing travel patterns, anticipated origins and destinations of vehicle trips associated with the new and displaced land uses for each prototypical site under the RWCDS (e.g., hotel, residential, office, local retail), and the locations of on-site and/or nearby off-site parking facilities.

The origins and destinations of hotel and residential trips used for the assignments are based on 2006-2010 CTTP journey-to-work data for commuters driving from residences in the project areas (with adjustments for hotels to account for trips to and from the major regional airports and from tourist attraction areas such as Manhattan), while the origins and destinations of office trips are based on 2006-2010 CTTP reverse journey-to-work data for commuters driving to workplaces in the project areas. Local retail trips were generally assigned from local origins within the neighborhood and adjacent residential areas. Using these distributions, auto and taxi trips were first assigned to various portals on the periphery of the area surrounding the project sites. Project-generated auto trips were assigned to the most direct routes to approach and depart off-street parking facilities. In instances where a project site would not provide on-site parking, half of the auto trips for hotels were conservatively assigned to also "touch" the site to allow motorists to drop-off or pick-up luggage. Taxi trips were assigned to approach and depart the study area after passing by one of the block faces adjoining the project sites. Truck delivery trips were assigned from DOT-designated local truck routes.

Pedestrian trips were assigned to parking facilities where motorists would park, block faces were taxi passengers would get dropped off and picked up, subway/railroad stations, bus stops, and to the surrounding neighborhood (for walk-only trips).

The following sections discuss the trip assignments for Areas 2, 3, 5, and 7 in further detail.

#### Area 2 (Long Island City)

As discussed above, the prototypical site in Area 2 would generate more than 50 net incremental vehicle trips in the weekday Midday peak hour. This site is located on the block bounded on the north by 42nd Road, on the east by Hunter Street, and on the west by 27th Street and would have frontages on 42nd Road and Hunter Street. Key corridors providing access to the area of Long Island City include Queens Boulevard (which also provides access to and from the Long Island Expressway via Van Dam Street), Northern Boulevard, Jackson Avenue (which also provides access to and from the Queens Midtown Tunnel and the eastbound Long Island Expressway), 21st Street, and the Queensboro Bridge.

As the project site would not include any parking on-site, project-generated auto trips were assigned to two existing off-street public parking facilities: the 162-space Gotham Center Garage (located on 28th Street between Queens Plaza South and 42nd Road) and the 42-space LIC Lot garage (located on 27th Street between Queens Plaza South and 42nd Road). Both parking facilities are open 24 hours a day. The hotel would generate its peak parking demand in the overnight period, when it would have a demand of approximately 18 parking spaces. As discussed above, taxi trips were assigned to pass by one of the site's frontages.

Figure 2 shows the preliminary assignment of project-generated vehicle trips to the intersections near the project site during the weekday Midday peak hour. As shown in the figure, the highest concentration of vehicle trips would occur at the intersection of 42nd Road and Hunter Street/28th Street, adjacent to the site, with a total of 51 vehicles. No other intersections are expected exceed the 50-vehicle trip threshold. In consultation with DCP and DOT, this intersection and two additional intersections have been selected for detailed traffic analysis in the EIS:

- Queens Boulevard and Jackson Avenue/Queens Plaza East;
- Jackson Avenue and 42nd Road; and
- 42nd Road and Hunter Street/28th Street.

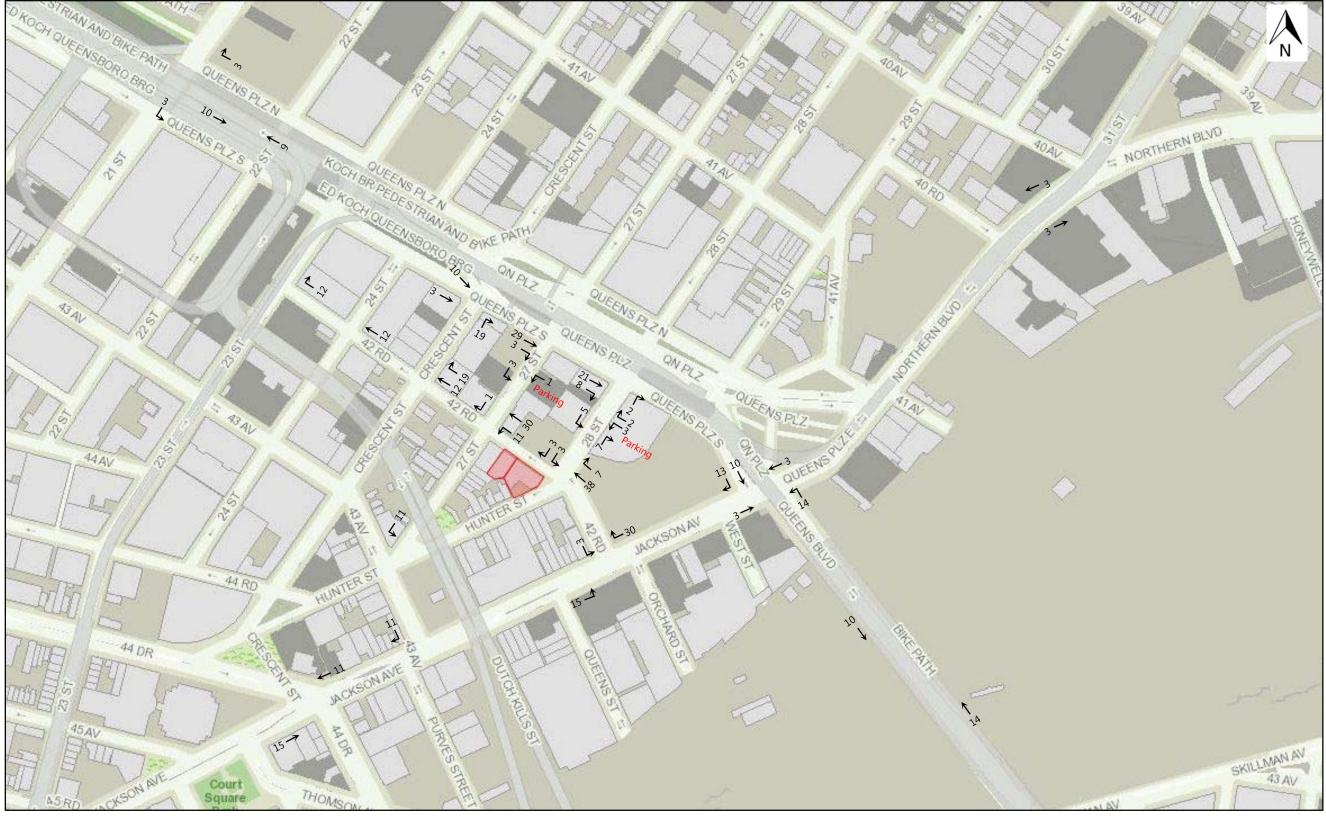
Each of these intersections will be analyzed for the weekday Midday peak hour.

Based on the parking demand estimates, a parking analysis will be warranted to inventory existing off-street parking levels within a quarter-mile radius of the project site to assess the Proposed Action's potential for a parking shortfall or any significant adverse parking impacts.

#### Area 3 (Jamaica)

#### Traffic and Parking

As discussed above, the prototypical site in Area 3 would generate more than 50 net incremental vehicle trips during all peak hours. This site includes the development of hotels on two separate blocks. One hotel would be located on the block bounded on the north by Jamaica Avenue, on the south by Archer Avenue, on the east by 149th Street, and on the west by 148th Street and would have frontages on Archer Avenue, 148th Street, and 149th Street. The other hotel would be located on the block bounded by on the north by Jamaica Avenue, on the south by Archer Avenue, on the east by 148th Street, and on the west by 147th Place and would have frontages on Archer Avenue, 147th Place, and 148th Street. Key corridors providing access to the area of Jamaica include: Archer Avenue, Jamaica Avenue, and 94th Avenue (each of which also provides access to and/or from the Van Wyck Expressway); Sutphin Boulevard, 150th



Proposed Project Site

Area 2: Long Island City With-Action Incremental Vehicle Trips Weekday Midday Peak Hour Figure 2

Street (which also provides access from the Grand Central Parkway); and Parsons Boulevard (which also provides access to points east on the Grand Central Parkway).

As the project site would include 66 parking spaces in the With-Action condition, all project-generated auto trips for were assigned to park on-site. The hotels would generate their peak parking demand in the overnight period, when they would have a demand of approximately 68 parking spaces. While it is possible that some auto trips may park in nearby off-street parking facilities, which would disperse auto trips over the local traffic network, for conservative analysis purposes, all auto trips were assigned to the project site. As discussed above, taxi trips were assigned to pass by one of the site's frontages and truck delivery trips were assigned to and from the site.

Figures 3, 4, 5, and 6 show the preliminary assignment of project-generated vehicle trips to the intersections near the project site during the weekday AM, Midday, PM, and Saturday Midday Peak hours. As shown in the figures, a total of eleven intersections are expected to incur 50 or more net incremental vehicle trips, exceeding the *CEQR Technical Manual* threshold. The following intersections would exceed the CEQR threshold in one or more peak hours and therefore have been selected for detailed traffic analysis in the EIS:

- Jamaica Avenue and Sutphin Boulevard;
- Jamaica Avenue and 147th Place;
- Jamaica Avenue and 148th Street;
- Archer Avenue and 143rd Street;
- Archer Avenue and Sutphin Boulevard;
- Archer Avenue and 147th Place;
- Archer Avenue and 148th Street;
- Archer Avenue and 149th Street;
- Archer Avenue and 150th Street;
- 94th Avenue/Atlantic Avenue and Van Wyck Expressway East Service Road; and
- 94th Avenue and 143rd Street.

Each of these intersections will be analyzed for the weekday AM, Midday, PM, and Saturday Midday peak hours. In addition, the signalized intersection of Jamaica Avenue and 149th Street, which is directly adjacent to the project site, has also been selected for analysis in the EIS.

Based on the parking demand estimates, a parking analysis will be warranted to inventory existing off-street parking levels within a quarter-mile radius of the project site to assess the Proposed Action's potential for a parking shortfall or any significant adverse parking impacts.

#### **Pedestrians**

As discussed above, Area 3 would generate more than 200 pedestrian trips in the weekday PM peak hour. The net incremental pedestrian trips associated with this site would consist of new trips that would be added by the hotel in the With-Action condition and trips that would be subtracted from the residential and local retail uses that are assumed in the No-Action condition. There would be a net increment of 264 project-generated person trips in the weekday PM peak hour; this represents net increases of 51 auto trips, 274 taxi trips, 194 subway trips, and 16 trips by other modes and net decreases of 32 bus trips and 239 walk-only trips.



Proposed Project Site

Area 3: Jamaica With-Action Incremental Vehicle Trips Weekday AM Peak Hour Figure 3



Proposed Project Site

Area 3: Jamaica With-Action Incremental Vehicle Trips Weekday Midday Peak Hour Figure 4



Proposed Project Site

Area 3: Jamaica With-Action Incremental Vehicle Trips Weekday PM Peak Hour Figure 5



Proposed Project Site

Area 3: Jamaica With-Action Incremental Vehicle Trips Saturday Midday Peak Hour Figure 6

As discussed above, the prototypical site in Area 3 consists of development on two separate blocks—a 431-room hotel on the block east of 148th Street and a 322-room hotel on the block west of 148th Street. As both sites would provide on-site parking, auto and taxi trips (and the associated pedestrian component of these trips walking to/from the sites) would be distributed among the sidewalks on the two blocks. Bus riders were assigned to bus stops nearest to the project site (along Archer Avenue, Jamaica Avenue, and Sutphin Boulevard), subway riders were assigned to the Sutphin Boulevard/Archer Avenue/JFK Airport Station (E and J lines), and railroad riders were assigned to the LIRR Jamaica Station. Walk-only trips were assigned to the surrounding area based on land use characteristics of the adjacent neighborhoods. Figure 7 shows the preliminary assignment of project-generated pedestrian trips to sidewalks, corner areas, and crosswalks near the project site during the weekday PM peak hour. As shown in the figure, no single pedestrian element would be expected to process 200 or more project-generated walk trips. Accordingly, the Proposed Action would not result in any significant adverse pedestrian impacts and no further analysis is warranted.

## Area 5 (Downtown Brooklyn)

As discussed above, the prototypical site in Area 5 would generate more than 50 net incremental vehicle trips in the weekday Midday peak hour. This site is located on the block bounded on the north by Fulton Street, on the south by Livingston Street, on the east by Nevins Street, and on the west by Hanover Place and would have frontages on Fulton Street and Hanover Place. Key corridors providing access to the area of Downtown Brooklyn include Flatbush Avenue (which also provides access to and from the Manhattan Bridge, Brooklyn Bridge, and points north on the Brooklyn-Queens Expressway), Atlantic Avenue (which also provides access to and from points south on the Brooklyn-Queens Expressway), and Livingston Street (which also provides access to and from the Brooklyn Bridge)

As the project site would not include any parking on-site, project-generated auto trips were assigned to two existing off-street public parking facilities: the 140-space Manhattan Parking Group garage and the 126-space SP Plus Corporation garage, both of which are located on Hudson Avenue between Fulton Street and Dekalb Avenue and are open 24 hours a day. The hotel would generate its peak parking demand in the overnight period, when it would have a demand of approximately 14 parking spaces. As discussed above, taxi trips were assigned to pass by one of the site's frontages.

Figure 8 shows the preliminary assignment of project-generated vehicle trips to the intersections near the project site during the weekday Midday peak hour. As shown in the figure, the highest concentration of vehicle trips would occur at the intersection of Flatbush Avenue and Fulton Street, with a total of 47 vehicles. No intersection is expected exceed the 50-vehicle trip threshold; however, in consultation with DCP and DOT, the intersection of Flatbush Avenue/Flatbush Avenue Extension and Fulton Street has been selected for detailed traffic analysis in the EIS. This intersection will be analyzed for the weekday AM, Midday, and PM peak hours.

Based on the parking demand estimates, a parking analysis will be warranted to inventory existing off-street parking levels within a quarter-mile radius of the project site to assess the Proposed Action's potential for a parking shortfall or any significant adverse parking impacts.

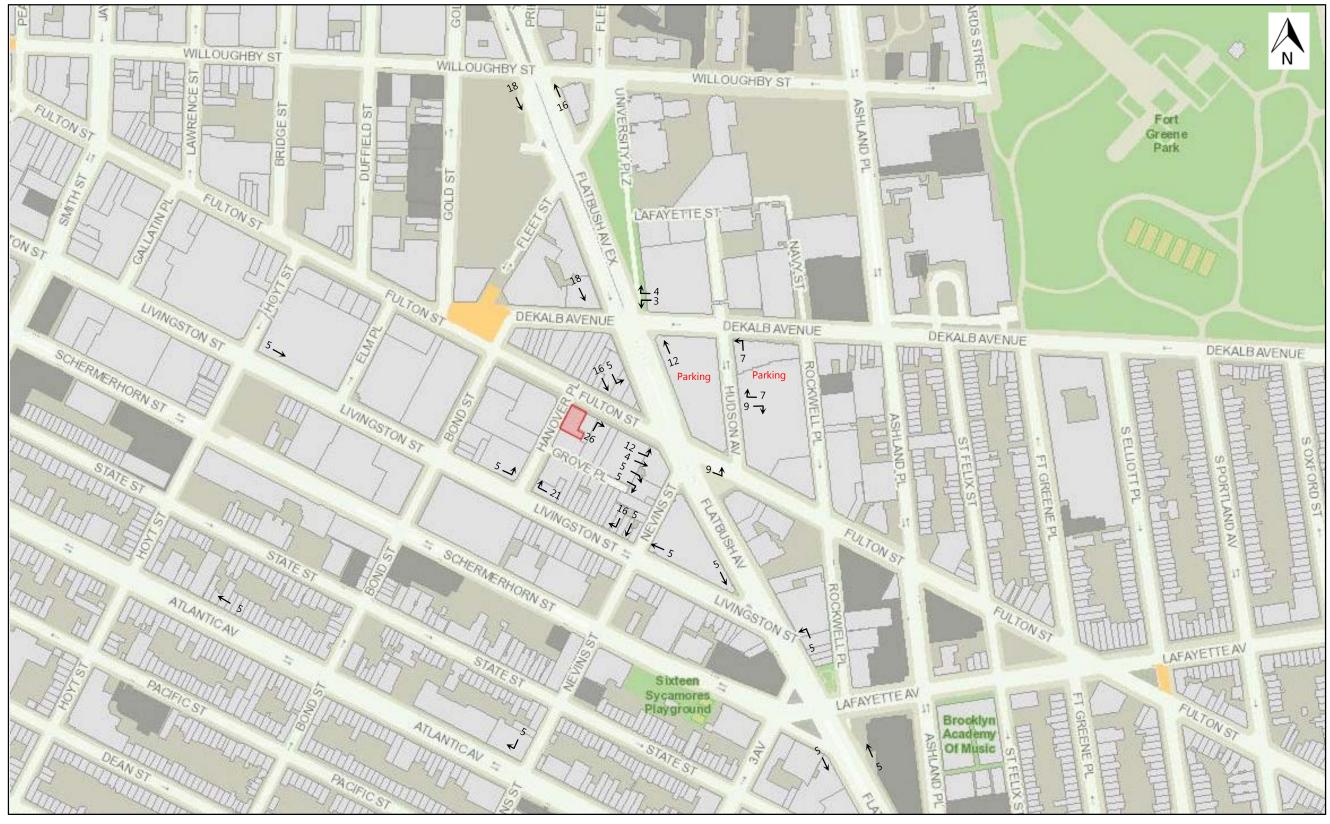
#### Area 7 (Williamsburg)

As discussed above, the prototypical site in Area 7 would generate more than 50 net incremental vehicle trips in the weekday Midday and PM peak hours. This site is located on the block bounded on the north by North 6th Street, on



Proposed Project Site

Area 3: Jamaica With-Action Incremental Pedestrian Trips Weekday PM Peak Hour Figure 7



Proposed Project Site

Area 5: Downtown Brooklyn With-Action Incremental Vehicle Trips Weekday Midday Peak Hour Figure 8

the south by North 5th Street, on the east by Berry Street, and on the west by Wythe Avenue and would have frontages on North 5th Street and Wythe Avenue. Key corridors providing access to the area of Williamsburg include the Brooklyn-Queens Expressway and the Williamsburg Bridge; Berry Street, Wythe Avenue, and Kent Avenue would also provide access for some trips using the Williamsburg Bridge or Queens Midtown Tunnel.

As the project site would include 21 parking spaces in the With-Action condition, all project-generated auto trips were assigned to park on-site. The hotel would generate its peak parking demand in the overnight period, when it would have a demand of approximately 15 parking spaces. As discussed above, taxi trips were assigned to pass by one of the site's frontages.

Figures 9 and 10 show the preliminary assignment of project-generated vehicle trips to the intersections near the project site during the weekday Midday and PM peak hours, respectively. As shown in the figure, no intersection is expected to incur 50 or more net incremental vehicle trips, exceeding the *CEQR Technical Manual* threshold. The highest concentration would occur at the intersection of Wythe Avenue and North 5th Street, adjacent to the site, with a total of 35 vehicles in the weekday Midday peak hour. Accordingly, the Proposed Action is not expected to result in any significant adverse impacts to traffic and parking in this area based on *CEQR Technical Manual* criteria and no further analysis is warranted.

## **Conceptual Analysis**

As the Proposed Action would create a new special permit to allow new hotels within M1 districts, an assessment of the potential environmental impacts that could result from a hotel development in a M1 district pursuant to the special permit is needed. However, because it is not possible to predict whether a special permit would be pursued on any one site in the future, the RWCDS for the Proposed Action does not include consideration of specific development that would utilize the new special permit. Instead, a conceptual analysis of a Special Permit Scenario will be provided to understand how the new special permit could be utilized and to generically assess the potential environmental impacts that could result from a hotel development in a M1 district pursuant to the special permit.

One parcel has been identified as a site that could be potentially be redeveloped in the foreseeable future using the special permit for new hotel development in M1 districts. This site is located in Manhattan near Union Square and is currently occupied by a 74-space public parking lot, which would be expected to remain in the No-Action condition. For the conceptual analysis, it is assumed that this site would be developed as a 139-room hotel in the With-Action condition. Using the transportation planning factors described above for estimating trips for the prototypical site in Area 1 (Manhattan below 59th Street), an estimate of the incremental net change of peak hour person and vehicle trips was prepared for the Special Permit Scenario based on the net increase of 139 hotel rooms between the No-Action and With-Action conditions. Inbound and outbound taxi trips were balanced assuming a 50 percent taxi overlap as this site is in the Manhattan CBD. The resulting estimates of vehicle, transit, and pedestrian trips are presented in Attachment D. Table 3 provides a summary of the incremental vehicle, subway/rail, bus, and pedestrian trips that would be generated by the Special Permit Scenario during the weekday AM, Midday, PM, and Saturday Midday peak hours based on the information presented in Attachment D.

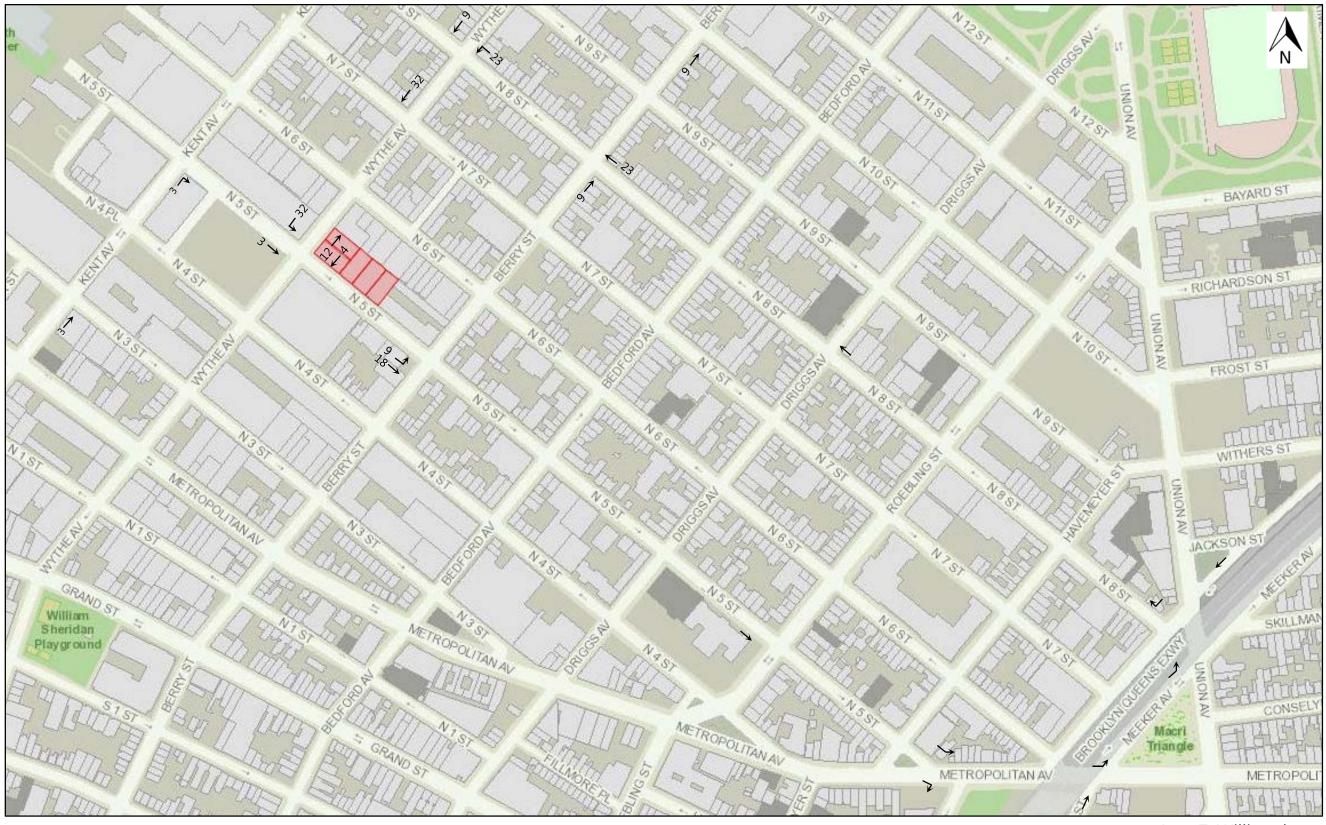
Table 3 - Summary of Incremental Trips Generated by the Special Permit Scenario

Trip Type	Peak	Hour	<b>Total Trips</b>
		AM	33
Vehicle	Weekday	Midday	48
Trips		PM	44
	Saturday	AM         3           Midday         2           PM         2           day         Midday         3           day         Midday         3           PM         3           day         Midday         2           AM         Midday         4           PM         4         4           day         Midday         4           day         AM         1           Midday         1         4           Midday         1         1           Midday         1         1           PM         1         1	25
		AM	20
Subway/	Weekday	Midday	37
Rail Trips	Caturalan	PM	34
	Saturday Midday		22
		AM	2
Bus	Weekday	Midday	4
Trips		PM	3
	Saturday	Midday	4
		AM	102
Pedestrian	Weekday	Midday	185
Trips	vveekudy	PM	170
	Saturday	Midday	117

Note: Pedestrian trips include walk-only trips as well as the walk component of trips made by other modes.

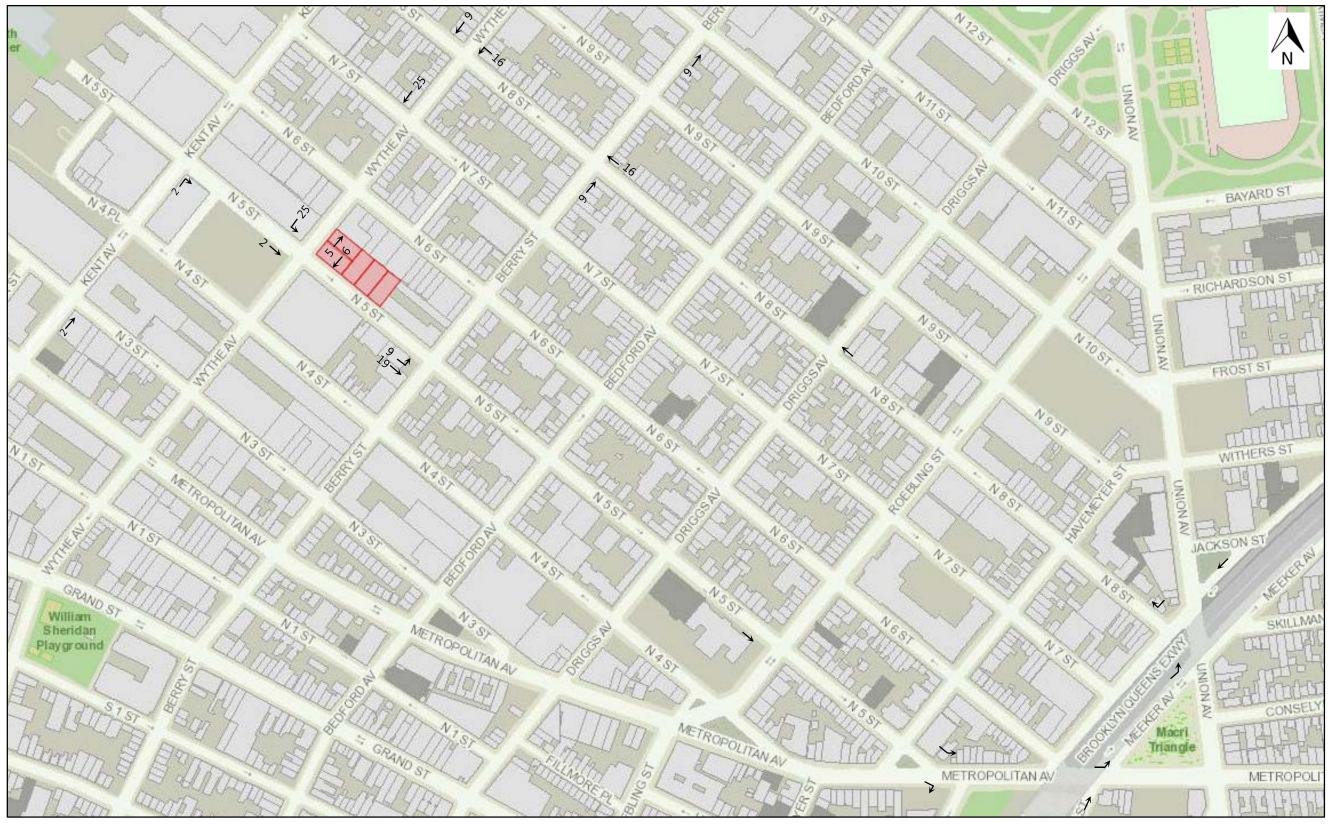
As presented in Table 3, the Special Permit Scenario would generate an incremental increase of 33, 48, 44, and 25 vehicle trips during the weekday AM, Midday, PM, and Saturday Midday peak hours, respectively. With regards to transit trips, there would be a net increase of 20, 37, 34, and 22 subway/rail trips during the weekday AM, Midday, PM, and Saturday Midday peak hours, respectively, and a net increase of 2, 4, 3, and 4 bus trips during the weekday AM, Midday, PM, and Saturday Midday peak hours, respectively. The Special Permit Scenario would generate an incremental increase of 102, 185, 170, and 117 pedestrian trips during the weekday AM, Midday, PM, and Saturday Midday peak hours, respectively.

According to CEQR Technical Manual criteria, if a proposed development is expected to result in fewer than 50 peak hour vehicle trips and fewer than 200 peak hour transit or pedestrian trips, further quantified analyses are not warranted. As shown above, the proposed development would generate less than 50 vehicle trips, 200 transit trips, and 200 pedestrian trips during all peak hours. As incremental trips generated by the Special Permit Scenario would be less than the CEQR Technical Manual thresholds in all peak hours, detailed traffic, parking, transit, and pedestrian analyses are not warranted, as impacts are not likely.



Proposed Project Site

Area 7: Williamsburg With-Action Incremental Vehicle Trips Weekday Midday Peak Hour Figure 9



Proposed Project Site

Area 7: Williamsburg With-Action Incremental Vehicle Trips Weekday PM Peak Hour Figure 10

# Attachment A

RWCDS Summaries for Prototypical Sites in Areas 1-7



Table A.1 – RWDCS Summary for Area 1: Manhattan below 59th Street

Land Use	No-Action Condition	With-Action Condition	Net Increment
Residential (dwelling units)	3	0	-3
Local Retail (gsf)	763	0	-763
Hotel (rooms)	0	91	91
Community Facility (gsf)	2,300	0	-2,300

Table A.2 – RWDCS Summary for Area 2: Long Island City

Land Use	No-Action Condition	lo-Action With-Action Condition	
Office (gsf)	60,975	0	-60,975
Hotel (rooms)	0	203	203

Table A.3 – RWDCS Summary for Area 3: Jamaica

Land Use	No-Action Condition	With-Action Condition	Net Increment
Residential (dwelling units)	349	0	-349
Local Retail (gsf)	22,648	0	-22,648
Hotel (rooms)	0	753	753

Table A.4 – RWDCS Summary for Area 4: South Slope

Land Use	No-Action Condition	With-Action Condition	Net Increment
Residential (dwelling units)	14	0	-14
Local Retail (gsf)	1,350	0	-1,350
Hotel (rooms)	0	23	23

Table A.5 – RWDCS Summary for Area 5: Downtown Brooklyn

Land Use	No-Action Condition	With-Action Condition	Net Increment
Residential (dwelling units)	66	0	-66
Hotel (rooms)	0	155	155

Table A.6 – RWDCS Summary for Area 6: Brownsville

Land Use	No-Action Condition	With-Action Condition	Net Increment
Local Retail (gsf)	9,450	0	-9,450
Hotel (rooms)	0	85	85

Table A.7 – RWDCS Summary for Area 7: Williamsburg

Land Use	No-Action Condition	With-Action Condition	Net Increment
Residential (dwelling units)	78	0	-78
Hotel (rooms)	0	167	167

# Attachment B

Transportation Planning Factors for Areas 1-7



Table B.1 - Transportation Planning Factors for Area 1: Manhattan below 59th Street

Land Use:	Local	Retail	Но	otel	Residential	
Trip Generation:	(1	L)	(:	1)	(1	.)
	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday
Daily Person Trips	205	240	9.4	9.4	8.075	9.6
Net Daily Person Trips*	154	180	9.4	9.4	8.075	9.6
	per 1,0	000 gsf	per i	room	per dwel	ling unit
Temporal Distribution:	(1	L)	(:	1)	(1	.)
AM		%		%	10	
MD	19	0%	14	1%	59	%
PM	10			3%	11	
SAT		)%		%	89	
In/Out Splits:	(2	2)	(:	2)	(2	2)
•	In	Out	In	Out	In	Out
AM	50%	50%	39%	61%	15%	85%
MD	50%	50%	54%	46%	50%	50%
PM	50%	50%	65%	35%	70%	30%
SAT	50%	50%	56%	44%	50%	50%
<b>5</b> 7	3070	30,1	30,7	, , ,	30,1	30,0
Modal Splits:	(3	3)	(3)	(3)	(4	.)
	Α	II	Weekday	Saturday	Al	I
Auto	2.5%		6%	10%	5.1%	
Taxi	0.5	5%	32%	28%	3.7%	
Bus	4.0	0%	2%	3%	5.8%	
Subway	16.	5%	18%	17%	29.9%	
Railroad	0.0	0%	2%	2%	3.7%	
Walk	76.	5%	38%	38%	50.	2%
Other	0.0	<u>)%</u>	<u>2%</u>	<u>2%</u>	<u>1.6%</u>	
	100	.0%	100%	100%	100	
Vehicle Occupancy:	(2	2)	(3)	(3)	(2,	4)
. ,	A		Weekday	Saturday	Al	
Auto		65	1.8	2.1	1.2	
Taxi	1.4		2.0	2.3	1.4	
Truck Trip Generation:	(1)	(1)	(2)	(2)	(1)	(1)
·	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday
		0.04	0.06	0.01	0.06	-
	per 1,0			room	per dwel	
	(1	1)	ľ	2)	(1	١
AM	89			2) 2%	12	
MD				%	99	
PM	11% 2%			%	29	
SAT		% .%		%	99	
SAI	11	. 70	9	/0	93	<b>′</b> 0
	In	Out	In	Out	In	Out
	50%	50%	50%	50%	50%	50%

#### Note:

- 1 CEQR Technical Manual (2014)
- 2 Greater East Midtown Rezoning FEIS (2017)
- 3 NYCDOT

 $<sup>\</sup>ensuremath{^*}$  Includes 25% credit for linked trips to local retail

<sup>4</sup> U.S. Census Bureau, American Community Survey 2012-2016 5-Year Estimates Journey-to-Work Data for Manhattan Tracts 72, 74, 78, 80, 82, 88, and 92

Table B.2 - Transportation Planning Factors for Area 2: Long Island City

Land Use:	Off	ice	Hotel		
Trip Generation:	(1	.)	(1	1)	
	Weekday	Saturday	Weekday	Saturday	
Daily Person Trips	18.0	3.9	9.4	9.4	
	per 1,000 gsf		per room		
Temporal Distribution:	(1			1)	
AM	12			%	
MD	15		14%		
PM	14			3%	
SAT	17	%	9%		
In/Out Splits:	(2	2)	(2,3)		
	In	Out	In	Out	
AM	96%	4%	41%	59%	
MD	39%	61%	68%	32%	
PM	5%	95%	59%	41%	
SAT	60%	40%	56%	44%	
Modal Splits:	(4)	(2)	(5)	(5)	
	AM/PM	MD/SAT	Weekday	Saturday	
Auto	39.5%	2.0%	18%	14%	
Taxi	0.2%	1.0%	30%	28%	
Bus	12.0%	7.0%	2%	2%	
Subway	36.9%	7.0%	40%	38%	
Railroad	7.9%	0.0%	1%	1%	
Walk	2.9%	83.0%	7%	15%	
Other	0.6%	0.0%	<u>2%</u>	<u>2%</u>	
	100.0%	100.0%	100%	100%	
Vehicle Occupancy:	(3,		(5)	(5)	
	А		Weekday	Saturday	
Auto	1.0		2.0	2.2	
Taxi	1.4	42	2.2	2.7	
Truck Trip Generation:	(1)	(1)	(6)	(6)	
	Weekday	Saturday	Weekday	Saturday	
	0.32	0.01	0.06	0.01	
	per 1,0	000 gsf	per r	oom	
	(1	.)	(4	1)	
AM	10	%	12%		
MD	11	%	9%		
PM	29	%	2%		
SAT	11	%	9	%	
	In	Out	In	Out	
	50%	50%	50%	50%	

- 1 CEQR Technical Manual (2014)
- 2 Dutch Kills Rezoning and Related Actions FEIS (2008)
- 3 Downtown Jamaica Redevelopment Plan FEIS (2007)
- 4 U.S. Census Bureau, American Community Survey 2006-2010 Five-year estimates. Special Tabulation: Census Transportation Planning Reverse Journey-to-Work Data for Queens Tract 19
- 5 NYCDOT
- 6 East New York Rezoning Proposal FEIS (2016)

Table B.3 - Transportation Planning Factors for Area 3: Jamaica

Land Use:	Local Retail		Но	tel	Residential		
Trip Generation:	(1)		(:	1)	(1)		
	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday	
Daily Person Trips	205	240	9.4	9.4	8.075	9.6	
Net Daily Person Trips*	154	180	9.4	9.4	8.075	9.6	
	per 1,0	00 gsf	per i	oom	per dwel	ling unit	
Temporal Distribution:	(1	.)	(:	1)	(1	<b>.</b> )	
AM	39	%	8	%	10%		
MD	19	%	14	1%	5%		
PM	10	%	13	3%	11	.%	
SAT	10	%	9	%	89	%	
In/Out Splits:	(2	2)	(:	2)	(2)		
,	In (-	Out	ln .	Out	In '-	Out	
AM	50%	50%	41%	59%	20%	80%	
MD	50%	50%	68%	32%	51%	49%	
PM	50%	50%	59%	41%	65%	35%	
SAT	50%	50%	56%	44%	50%	50%	
JAT	3070	3070	3070	4470	3070	30%	
Modal Splits:	(3)	(3)	(3)	(3)	(4	1)	
	Weekday	Saturday	Weekday	Saturday	A	II	
Auto	11%	8%	18%	14%	25.	0%	
Taxi	0%	0%	30%	28%	0.5	5%	
Bus	3%	4%	2%	2%	13.	3%	
Subway	4%	7%	40%	38%	51.	7%	
Railroad	0%	0%	1%	1%	3.0	)%	
Walk	82%	81%	7%	15%	5.4	1%	
Other	0%	<u>0%</u>	2%	2%	1.1	L%	
	100%	100%	100%	100%	100.0%		
Vehicle Occupancy:	(3)	(3)	(3)	(3)	(2,	4)	
t cimere e companio,	Weekday	Saturday	Weekday	Saturday	(=) A		
Auto	1.5	1.6	2.0	2.2	1.1		
Taxi	1.4	1.4	2.2	2.7	1.4		
Truck Trip Generation:	(1)	(1)	(5)	(5)	(1)	(1)	
rrack rrip ceneration.	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday	
	0.35	0.04	0.06	0.01	0.06	0.02	
	per 1,0		per room		per dwelling unit		
	(1			3)	(1)		
AM	89			2%	12%		
MD	11			%	9%		
PM	29			%	2%		
SAT	11	%	9	%	99	%	
	In	Out	In	Out	In	Out	
	50%	50%	50%	50%	50%	50%	

#### Note:

- 1 CEQR Technical Manual (2014)
- 2 Downtown Jamaica Redevelopment Plan FEIS (2007)
- 3 NYCDOT
- 4 U.S. Census Bureau, American Community Survey 2012-2016 5-Year Estimates Journey-to-Work Data for Queens Tracts 142.02, 208, 212, 214, 216, and 240
- 5 East New York Rezoning Proposal FEIS (2016)

<sup>\*</sup> Includes 25% credit for linked trips to local retail

Table B.4 - Transportation Planning Factors for Area 4: South Slope

Land Use:	Local	Retail	Но	tel	Residential		
Trip Generation:	(1	(1)		(1)		(1)	
	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday	
Daily Person Trips	205	240	9.4	9.4	8.075	9.6	
Net Daily Person Trips*	154	180	9.4	9.4	8.075	9.6	
	per 1,0	000 gsf	peri	room	per dwel	ling unit	
Temporal Distribution:	(1	1)	(:	1)	(1	.)	
AM	3'	%	8	%	10%		
MD	19	9%	14	1%	5%		
PM	10	)%	13	3%	11	%	
SAT	10	)%	9	%	8%		
In/Out Splits:	(2	2)	(2	2)	(2)		
	In	Out	In	Out	In	Out	
AM	50%	50%	41%	59%	15%	85%	
MD	50%	50%	68%	32%	50%	50%	
PM	50%	50%	59%	41%	70%	30%	
SAT	55%	45%	56%	44%	50%	50%	
Modal Splits:	(3	3)	(3)	(3)	(4	<b>!</b> )	
	A		Weekday	Saturday	Al	ı	
Auto	11	L%	19%	25%	15.0%		
Taxi	0'	%	22%	24%	0.2%		
Bus	2'	%	1%	1%	3.1%		
Subway	3'	%	26%	25%	68.1%		
Railroad		%	1%	1%	0.5		
Walk		1%	30%	19%	9.1		
Other	0'		<u>1%</u>	<u>5%</u>	4.0%		
ound.		0%	100.0%	100.0%	100.0%		
	(3)	(3)	(3)	(3)	(2,	4)	
Vehicle Occupancy:	Weekday	Saturday	Weekday	Saturday	Α		
Auto	1.5	1.6	2.1	2.4	1.3		
Taxi	1.4	1.4	2.1	2.0	1.3		
Truck Trip Generation:	(1)	(1)	(2)	(2)	(1)	(1)	
•	Weekday	Saturday		Saturday	Weekday	Saturday	
	0.35	0.04	0.06	0.01	0.06	0.02	
	per 1,0	000 gsf		room	per dwelling unit		
	(1	1)	(2)		(1)		
AM	8'			2%	12%		
MD		1%		%	9%		
PM		%		%	2%		
SAT		L%		%	9%		
	In	Out	In	Out	In	Out	
	50%	50%	50%	50%	50%	50%	
	20,0		30,0		30,0	- 3/-	

# Note:

- 1 CEQR Technical Manual (2014)
- 2 East New York Rezoning Proposal FEIS (2016)
- 3 NYCDOT

<sup>\*</sup> Includes 25% credit for linked trips to local retail

<sup>4</sup> U.S. Census Bureau, American Community Survey 2010-2014 5-Year Estimates Journey-to-Work Data for Brooklyn Tracts 18, 117, 141, 143, 145, 147, and 149

Table B.5 - Transportation Planning Factors for Area 5: Downtown Brooklyn

Land Use:	Но	tel	Residential		
Trip Generation:	(1)		(1	L)	
	Weekday	Saturday	Weekday	Saturday	
Daily Person Trips	9.4	9.4	8.075	9.6	
	per r	room	per dwel	ling unit	
Temporal Distribution:	(:	1)	(1	1)	
AM	8%		10%		
MD	14	1%	5%		
PM	13	3%	11	.%	
SAT	9	%	89	%	
In/Out Splits:	(2	2)	(3)		
	In	Out	In	Out	
AM	39%	61%	20%	80%	
MD	54%	46%	51%	49%	
PM	65%	35%	65%	35%	
SAT	56%	44%	50%	50%	
Modal Splits:	(4)	(4)	(5	5)	
	Weekday	Saturday	A	II	
Auto	19%	25%	6.7	7%	
Taxi	22%	24%	0.6	5%	
Bus	1%	1%	0.8	3%	
Subway	26%	25%	74.	7%	
Railroad	1%	1%	0.8	3%	
Walk	30%	19%	12.	5%	
Other	<u>1%</u>	<u>5%</u>	3.9	9%	
	100%	100%	100	.0%	
Vehicle Occupancy:	(4)	(4)	(3,5)		
	Weekday	Saturday	A	II	
Auto	2.1	2.4	1.3	12	
Taxi	2.1	2.0	1.4	40	
Truck Trip Generation:	(2)	(2)	(1)	(1)	
	Weekday	Saturday	Weekday	Saturday	
	0.06	0.01	0.06	0.02	
	per r	room	per dwel	ling unit	
	(2	2)	(1	1)	
AM	12	2%	12%		
MD	9	%	9%		
PM	0	%	25	%	
SAT	9	%	99	%	
	In	Out	In	Out	
	50%	50%	50%	50%	

- 1 CEQR Technical Manual (2014)
- 2 Bond Street Hotel EAS (2015)
- 3 Atlantic Yards Arena and Redevelopment Project FEIS (2006)
- 4 NYCDOT
- 5 U.S. Census Bureau, American Community Survey 2010-2014 5-Year Estimates Journey-to-Work Data for Brooklyn Tracts 9, 11, 15, 33, 35, 37, 39, 41, and 43

Table B.6 - Transportation Planning Factors for Area 6: Brownsville

Land Use:	Local	Retail	Hotel		
Trip Generation:	(1)		(2	1)	
	Weekday	Saturday	Weekday	Saturday	
Daily Person Trips	205	240	9.4	9.4	
Net Daily Person Trips*	154	180	9.4	9.4	
	per 1,0	000 gsf	per r	room	
Temporal Distribution:	(:	1)	(1	1)	
AM	3	%	8	%	
MD	19	9%	14	<b>!</b> %	
PM	10	)%	13	3%	
SAT	10	)%	9%		
In/Out Splits:	(2	2)	(2	2)	
	In	Out	In	Out	
AM	50%	50%	41%	59%	
MD	50%	50%	68%	32%	
PM	50%	50%	59%	41%	
SAT	55%	45%	56%	44%	
Modal Splits:	(3	3)	(3)	(3)	
	А	.II	Weekday	Saturday	
Auto	11	<b>l</b> %	19%	25%	
Taxi	0	%	22%	24%	
Bus	2	%	1%	1%	
Subway	3	%	26%	25%	
Railroad	0	%	1%	1%	
Walk	84	1%	30%	19%	
Other	<u>0</u>	<u>%</u>	<u>1%</u>	<u>5%</u>	
	10	0%	100.0%	100.0%	
Vehicle Occupancy:	(3)	(3)	(3)	(3)	
	Weekday	Saturday	Weekday	Saturday	
Auto	1.5	1.6	2.1	2.4	
Taxi	1.4	1.4	2.1	2.0	
Truck Trip Generation:	(1)	(1)	(2)	(2)	
	Weekday	Saturday	Weekday	Saturday	
	0.35	0.04	0.06	0.01	
	per 1,0	000 gsf	per r	room	
		1)	(2		
AM		%	12%		
MD		L%	9%		
PM		%	2%		
SAT	11	1%	9'	%	
	In	Out	In	Out	
	50%	50%	50%	50%	

#### Note

- 1 CEQR Technical Manual (2014)
- 2 East New York Rezoning Proposal FEIS (2016)
- 3 NYCDOT

<sup>\*</sup> Includes 25% credit for linked trips to local retail

Table B.7 - Transportation Planning Factors for Area 7: Williamsburg

Land Use:	Но	tel	Residential		
Trip Generation:	(:	1)	(1	L)	
	Weekday	Saturday	Weekday	Saturday	
Daily Person Trips	9.4	9.4	8.075	9.6	
	peri	room	per dwel	ling unit	
Temporal Distribution:	(:	1)	(1	L)	
AM	8	%	10	1%	
MD	14	1%	5%		
PM	13	3%	11	.%	
SAT	9	%	8%		
In/Out Splits:	(2	,3)	(2,	3)	
	In	Out	In	Out	
AM	41%	59%	15%	85%	
MD	68%	32%	50%	50%	
PM	59%	41%	70%	30%	
SAT	56%	44%	50%	50%	
Modal Splits:	(4)	(4)	(5	5)	
	Weekday	Saturday	A		
Auto	19%	25%	12.		
Taxi	22%	24%	0.8		
Bus	1%	1%	2.0		
Subway	26%	25%	67.	1%	
Railroad	1%	1%	0.6	5%	
Walk	30%	19%	7.1	L%	
Other	<u>1%</u>	<u>5%</u>	<u>10.</u>	<u>3%</u>	
	100%	100%	100	.0%	
Vehicle Occupancy:	(4)	(4)	(2,5)		
	Weekday	Saturday	Α	II	
Auto	2.1	2.4	1.0	1.05	
Taxi	2.1	2.0	1.30		
Truck Trip Generation:	(2)	(3)	(1)	(1)	
	Weekday	Saturday	Weekday	Saturday	
	0.06	0.01	0.06	0.02	
	peri	room	per dwel	ling unit	
		,3)	(1		
AM		2%	12%		
MD		%	9%		
PM		%	29		
SAT	9	%	99	%	
	In	Out	In	Out	
	50%	50%	50%	50%	
	_ 0 / 0		30,0		

- 1 CEQR Technical Manual (2014)
- 2 Broadway Triangle FEIS (2009)
- 3 East New York Rezoning Proposal FEIS (2016)
- 4 NYCDOT
- 5 U.S. Census Bureau, American Community Survey 2010-2014 5-Year Estimates Journey-to-Work Data for Brooklyn Tracts 551, 553, 555, and 557

# **Attachment C**

Travel Demand Forecasts for Areas 1-7



Table C.1 - Travel Demand Forecast for Area 1: Manhattan below 59th Street

Project Com	ponents:	Local	Retail	Н	otel	Resid	lential						
	Size:	-7	<b>'</b> 63	g	91	-	-3						
		٤	sf	ro	oms	dwellii	ng units						
Peak Hour Tr	·ins·												
r cak nour n	AM		-4	(	58		-2						
	MD		22		20		-1						
	PM	-	12	1	11		-3						
	SAT	-	14	-	77	-	-2						
												Nat	
Person Trips:	:	In	Out	In	Out	In	Out				In	Net Out	Total
AM	Auto	0	0	2	3	0	0				2	3	5
	Taxi	0	0	9	13	0	0				9	13	22
	Bus	0	0	1	1	0	0				1	1	2
	Subway	0	0	5	8	0	-1				5	7	12
	Railroad	0	0	1	1	0	0				1	1	2
	Walk	-1	-1	10	16	0	-1				9	14	23
	Other	0	0	1	1	0	0				1	1	2
	Total	-1	-1	29	43	0	-2				28	40	68
MD	Auto	0	0	4	3	0	0				4	3	7
	Taxi	0	0	21	18	0	0				21	18	39
	Bus	0	0	1	1	0	0				1	1	2
	Subway	-2	-2	12	10	0	0				10	8	18
	Railroad	0	0	1	1	0	0				1	1	2
	Walk Other	-9 0	-9 0	25 1	21 1	0 0	0 0				16 1	12 1	28 2
	Total	-11	-11	65	55	0	0				54	44	98
PM	Auto	0	0	4	2	0	0				4	2	6
	Taxi	0	0	23	12	0	0				23	12	35
	Bus	0	0	1	1	0	0				1	1	2
	Subway Railroad	-1 0	-1 0	13 1	7 1	-1 0	0 0				11 1	6 1	17 2
	Walk	-4	-4	27	1 15	-1	0				22	11	2 33
	Other	0	0	1	1	0	0				1	1	2
	Total	-5	-5	70	39	-2	0				63	34	97
SAT	Auto	0	0	4	3	0	0				4	3	7
	Taxi Bus	0 0	0 0	12 1	9 1	0 0	0 0				12 1	9 1	21 2
	Subway	-1	-1	7	6	0	0				6	5	11
	Railroad	0	0	1	1	0	0				1	1	2
	Walk	-5	-5	16	13	-1	-1				10	7	17
	Other	0	0	1	1	0	0				1	1	2
	Total	-6	-6	42	34	-1	-1				35	27	62
											_		
Vehicle Trips	:	In	Out	In	Out	In	Out	In	Net Out	Total	To In	tal Balan Out	ced Total
AM	Auto	0	0	1	1	0	0	1	1	2	1	1	2
	Taxi	0	0	4	7	0	0	4	7	11	8	8	16
	Truck	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	5	8	0	0	5	8	13	9	9	18
MD	Auto	0	0	2	2	0	0	2	2	4	2	2	4
IVID	Taxi	0	0	10	9	0	0	10	9	19	12	12	24
	Truck	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	12	11	0	0	12	11	23	14	14	28
PM	Auto	0	0	2	1	0	0	2	1	3	2	1	3
	Taxi	0	0	12	6	0	0	12	6	18	9	9	18
	Truck Total	0	0	0 14	7	0	0	0 14	7	21	0 11	10	21
	TULdI	U	U	14	,	U	U	14	,	21	11	10	21
SAT	Auto	0	0	2	2	0	0	2	2	4	2	2	4
	Taxi	0	0	5	4	0	0	5	4	9	6	6	12
	Truck	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	7	6	0	0	7	6	13	8	8	16

Table C.2 - Travel Demand Forecast for Area 2: Long Island City

Project Com	ponents:	Offi	ce	Но	otel						
	Size:	-60,9	175	2	03						
	JIZE.	gs:			oms						
		0-									
Peak Hour Ti	rips:										
	AM	-13			53						
	MD	-16			67						
	PM	-15			48						
	SAT	-40	)	1	72						
										Net	
Person Trips	:	In	Out	In	Out				In	Out	Total
AM	Auto	-50	-2	11	16				-39	14	-25
	Taxi	0	0	19	27				19	27	46
	Bus	-15	-1	1	2				-14	1	-13
	Subway	-47	-2	25	36				-22	34	12
	Railroad	-10	0	1	1				-9	1	-8
	Walk	-4	0	4	6				0	6	6
	Other	-1	0	1	2				0	2	2
	Total	-127	-5	62	90				-65	85	20
MD	Auto	-1	-2	33	15				32	13	45
טוא	Auto Taxi	-1 -1	-2 -1	33 54	15 26				53	13 25	45 78
	Bus	-1 -4	-1 -7	54 4	2				0	-5	-5
	Subway	-4	-7	73	34				69	27	96
	Railroad	0	0	2	1				2	1	3
	Walk	-53	-83	13	6				-40	-77	-117
	Other	0	0	4	2				4	2	6
	Total	-63	-100	183	86				120	-14	106
PM	Auto	-3	-58	26	18				23	-40	-17
	Taxi	0	0	44	31				44	31	75
	Bus	-1	-18	3	2				2	-16	-14
	Subway	-3	-54	59	41				56	-13	43
	Railroad Walk	-1 0	-12 -4	1 10	1 7				0 10	-11 3	-11 13
	Other	0	-4	3	2				3	1	4
	Total	-8	-147	146	102				138	-45	93
		· ·		1.0	102				100	.5	33
SAT	Auto	0	0	13	11				13	11	24
	Taxi	0	0	27	21				27	21	48
	Bus	-2	-1	2	2				0	1	1
	Subway	-2	-1	37	29				35	28	63
	Railroad	0	0	1	1				1	1	2
	Walk	-20	-13	14	11				-6	-2	-8
	Other	0	0	2	2				2	2	4
	Total	-24	-15	96	77				72	62	134
							Net		Tot	tal Balan	red
Vehicle Trips	:	In	Out	In	Out	In	Out	Total	In	Out	Total
AM	Auto	-46	-2	6	8	-40	6	-34	-40	6	-34
	Taxi	0	0	9	12	9	12	21	19	19	38
	Truck	-1	-1	1	1	0	0	0	0	0	0
	Total	-47	-3	16	21	-31	18	-13	-21	25	4
MD	Auto	-1	-2	16	8	15	6	21	15	6	21
	Taxi	0	-1	25	12	25	11	36	30	30	60
	Truck	-1	-1	1	1	0	0	0	0	0	0
	Total	-2	-4	42	21	40	17	57	45	36	81
PM	Auto	-3	-53	13	9	10	-44	-34	10	-44	-34
1 141	Taxi	0	0	20	14	20	14	34	29	29	58
	Truck	0	0	0	0	0	0	0	0	0	0
	Total	-3	-53	33	23	30	-30	0	39	-15	24
SAT	Auto	0	0	6	5	6	5	11	6	5	11
	Taxi	0	0	10	8	10	8	18	16	16	32
	Truck	0	0	0	0	0	0	0	0	0	0
	Total	0	0	16	13	16	13	29	22	21	43

Table C.3 - Travel Demand Forecast for Area 3: Jamaica

Project Comp	onents:	Local	Retail	Но	tel	Resid	ential						
	Size:	-22	,648	7:	53	-3	49						
			sf		oms		g units						
Peak Hour Tr	ins:												
r cak riour ii	AM	-1	05	5	66	-2	82						
	MD		63		91		41						
	PM	-3	49	9:	20	-3	10						
	SAT	-4	08	6	37	-2	68						
												Net	
Person Trips:		In	Out	In	Out	In	Out				In	Out	Total
AM	Auto	-6	-6	42	60	-14	-56				22	-2	20
	Taxi	0	0	70	100	0	-1				70	99	169
	Bus	-2	-2	5	7	-7	-30				-4	-25	-29
	Subway	-2	-2 0	93	134	-29	-117				62 0	15	77
	Railroad Walk	0 -43	-43	2 16	3 23	-2 -3	-7 -12				-30	-4 -32	-4 -62
	Other	0	0	5	7	-5 -1	-12				4	5	9
	Total	-53	-53	233	334	-56	-225				124	56	180
MD	Auto	-36	-36	121	57	-18	-17				67	4	71
	Taxi Bus	0 -10	0 -10	202 13	95 6	0 -10	0 -9				202 -7	95 -13	297 -20
	Subway	-10	-10	270	127	-10	-36				220	-13 78	298
	Railroad	0	0	7	3	-2	-2				5	1	6
	Walk	-272	-272	47	22	-4	-4				-229	-254	-483
	Other	0	0	13	6	-1	-1				12	5	17
	Total	-331	-331	673	316	-72	-69				270	-84	186
PM	Auto	-19	-19	98	68	-50	-27				29	22	51
	Taxi	0	0	163	113	-1	-1				162	112	274
	Bus	-5	-5	11	8	-27	-14				-21	-11	-32
	Subway	-7	-7	217	151	-104	-56				106	88	194
	Railroad	0	0	5	4	-6	-3				-1	1	0
	Walk	-143	-143	38	26	-11	-6 1				-116	-123	-239 16
	Other Total	-174	-174	<u>11</u> 543	378	-2 -201	-1 -108				9 168	7 96	16 264
	Total	1/4	1/4	343	370	201	100				100	30	204
SAT	Auto	-16	-16	50	39	-34	-34				0	-11	-11
	Taxi	0	0	100	78	-1	-1				99	77	176
	Bus	-8	-8	7	6	-18	-18				-19	-20	-39
	Subway Railroad	-14 0	-14 0	136 4	107 3	-69 -4	-69 -4				53 0	24 -1	77 -1
	Walk	-165	-165	54	42	- <del></del>	- <del>-4</del> -7				-118	-130	-248
	Other	0	0	7	6	-1	-1				6	5	11
	Total	-203	-203	358	281	-134	-134				21	-56	-35
									81-4				
Vehicle Trips	:	In	Out	In	Out	In	Out	In	Net Out	Total	In	tal Balan Out	cea Total
AM	Auto	-4	-4	21	30	-13	-50	4	-24	-20	4	-24	-20
	Taxi	0	0	32	46	0	-1	32	45	77	69	69	138
	Truck	0	0	3	3	-1	-1	2	2	4	2	2	4
	Total	-4	-4	56	79	-14	-52	38	23	61	75	47	122
MD	Auto	-24	-24	61	29	-16	-15	21	-10	11	21	-10	11
	Taxi	0	0	92	43	0	0	92	43	135	112	112	224
	Truck	0	0	2	2	-1	-1	1	1	2	1	1	2
	Total	-24	-24	155	74	-17	-16	114	34	148	134	103	237
PM	Auto	-13	-13	49	34	-45	-24	-9	-3	-12	-9	-3	-12
	Taxi	0	0	74	51	-1	0	73	51	124	106	106	212
	Truck	0	0	0	0	0	0	0	0	0	0	0	0
	Total	-13	-13	123	85	-46	-24	64	48	112	97	103	200
SAT	Auto	-10	-10	23	18	-30	-30	-17	-22	-39	-17	-22	-39
	Taxi	0	0	37	29	0	0	37	29	66	57	57	114
	Truck	0	0	0	0	0	0	0	0	0	0	0	0
	Total	-10	-10	60	47	-30	-30	20	7	27	40	35	75

Table C.4 - Travel Demand Forecast for Area 4: South Slope

Project Com	ponents:	Local	Retail	Н	otel	Resid	dential						
	Size:	-1,	350	:	23	-:	14						
		g	sf	ro	oms	dwellii	ng units						
Peak Hour T	rips:												
	AM		-6		17		11						
	MD		40		30		-6						
	PM		21		28		12						
	SAT	-;	24	-	19	-;	11						
												Net	_
Person Trips		In	Out	ln 4	Out	In	Out				ln 1	Out	Total
AM	Auto Taxi	0 0	0 0	1 2	2 2	0 0	-1 0				1 2	1 2	2 4
	Bus	0	0	0	0	0	0				0	0	0
	Subway	0	0	2	3	-1	-7				1	-4	-3
	Railroad	0	0	0	0	0	0				0	0	0
	Walk	-3	-3	2	3	0	-1				-1	-1	-2
	Other	0	0	0	0	0	0				0	0	0
	Total	-3	-3	7	10	-1	-9				3	-2	1
MD	Auto	-2	-2	4	2	0	0				2	0	2
•••=	Taxi	0	0	5	2	0	0				5	2	7
	Bus	0	0	0	0	0	0				0	0	0
	Subway	-1	-1	5	3	-2	-2				2	0	2
	Railroad	0	0	0	0	0	0				0	0	0
	Walk	-17	-17	6	3	0	0				-11	-14	-25
	Other	0	0	0	0	0	0				0	0	0
	Total	-20	-20	20	10	-2	-2				-2	-12	-14
PM	Auto	-1	-1	3	2	-1	-1				1	0	1
	Taxi	0	0	4	3	0	0				4	3	7
	Bus	0	0	0	0	0	0				0	0	0
	Subway	0	0	4	3	-6	-3				-2	0	-2
	Railroad Walk	0 -9	0 -9	0 5	0 3	0 -1	0 0				0 -5	0 -6	0 -11
	Other	-9	0	0	0	0	0				-5 0	-0 0	0
	Total	-10	-10	16	11	-8	-4				-2	-3	-5
SAT	Auto	-1	-1	3	2	-1	-1				1	0	1
	Taxi	0	0	3	2	0	0				3 0	2	5
	Bus Subway	0 0	0 0	0 3	0 2	0 -4	0 -4				-1	0 -2	0 -3
	Railroad	0	0	0	0	0	0				0	0	0
	Walk	-11	-9	2	2	0	0				-9	-7	-16
	Other	0	0	1	0	0	0				1	0	1
	Total	-12	-10	12	8	-5	-5				-5	-7	-12
											_		
Vehicle Trips	s:	In	Out	In	Out	In	Out	In	Net Out	Total	To In	tal Balan Out	ced Total
AM	Auto	0	0	1	1	0	-1	1	0	1	1	0	1
	Taxi	0	0	1	1	0	0	1	1	2	2	2	4
	Truck	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	2	2	0	-1	2	1	3	3	2	5
MD	Auto	-1	-1	2	1	0	0	1	0	1	1	0	1
	Taxi	0	0	2	1	0	0	2	1	3	3	3	6
	Truck	0	0	0	0	0	0	0	0	0	0	0	0
	Total	-1	-1	4	2	0	0	3	1	4	4	3	7
PM	Auto	-1	-1	2	1	-1	0	0	0	0	0	0	0
	Taxi	0	0	2	1	0	0	2	1	3	3	3	6
	Truck	0	0	0	0	0	0	0	0	0	0	0	0
	Total	-1	-1	4	2	-1	0	2	1	3	3	3	6
SAT	Auto	-1	-1	1	1	-1	-1	-1	-1	-2	-1	-1	-2
	Taxi	0	0	1	1	0	0	1	1	2	2	2	4
	Truck	0	0	0	0	0	0	0	0	0	0	0	0
	Total	-1	-1	2	2	-1	-1	0	0	0	1	1	2

Table C.5 - Travel Demand Forecast for Area 5: Downtown Brooklyn

Project Com	ponents:	Но	tel	Resid	ential						
	Size:	11	55	-6	66						
	JIZC.		oms		ig units						
					· ·						
Peak Hour Tr	rips:										
	AM		17		53						
	MD		04		27						
	PM		89		59						
	SAT	1.	31	-5	51						
										Net	
Person Trips	:	In	Out	In	Out				In	Out	Total
AM	Auto	9	14	-1	-3				8	11	19
	Taxi	10	16	0	0				10	16	26
	Bus	0	1	0	0				0	1	1
	Subway	12	18	-8	-32				4	-14	-10
	Railroad	0	1	0	0				0	1	1
	Walk	14	21	-1	-5				13	16	29
	Other	0	1	0	-2				0	-1	-1
	Total	45	72	-10	-42				35	30	65
MD	Auto	21	18	-1	-1				20	17	37
	Taxi	24	21	0	0				24	21	45
	Bus	1	1	0	0				1	1	2
	Subway	29	24	-10	-10				19	14	33
	Railroad	1	1	0	0				1	1	2
	Walk	33	28	-2	-2				31	26	57
	Other	1	1	-1	-1				0	0	176
	Total	110	94	-14	-14				96	80	176
PM	Auto	23	13	-3	-1				20	12	32
	Taxi	27	15	0	0				27	15	42
	Bus	1	1	0	0				1	1	2
	Subway	32	17	-28	-15				4	2	6
	Railroad Walk	1 37	1 20	0 -5	0 -3				1 32	1 17	2 49
	Other	1	1	-5 -1	-5 -1				0	0	0
	Total	122	68	-37	-20				85	48	133
SAT	Auto	18	14	-2	-2				16	12	28
	Taxi	18	14	0	0				18	14	32
	Bus	1	1	0	0				1	1	2
	Subway Railroad	18 1	14 1	-19 0	-19 0				-1 1	-5 1	-6 2
	Walk	14	11	-3	-3				11	8	19
	Other	4	3	-1	-1				3	2	5
	Total	74	58	-25	-25				49	33	82
									_		
Vehicle Trips	•	In	Out	le.	Out	In	Net Out	Total		tal Balan Out	
AM	Auto	in 4	6	In -1	-3	3	3	<b>Total</b> 6	In 3	3	<b>Total</b> 6
Alvi	Taxi	5	7	0	0	5	7	12	11	11	22
	Truck	1	1	0	0	1	1	2	1	1	2
	Total	10	14	-1	-3	9	11	20	15	15	30
MD	Auto	10	8	-1	-1	9	7	16	9	7	16
	Taxi	12	10	0	0	12	10	22	19	19	38
	Truck	0	0	0	0	0	0	0	0	0	0
	Total	22	18	-1	-1	21	17	38	28	26	54
PM	Auto	11	6	-2	-1	9	5	14	9	5	14
PIVI	Taxi	11 13	7	0	0	13	5 7	20	9 17	5 17	34
	Truck	0	0	0	0	0	0	0	0	0	34 0
	Total	24	13	-2	-1	22	12	34	26	22	48
SAT	Auto	8	6	-2	-2	6	4	10	6	4	10
<i>3</i> A1	Taxi	9	7	0	0	9	7	16	14	14	28
	Truck	0	0	0	0	0	0	0	0	0	0
	Total	17	13	-2	-2	15	11	26	20	18	38

Table C.6 - Travel Demand Forecast for Area 6: Brownsville

Project Com	ponents:	Local	Retail	Н	otel						
	Size:	-9.	450	8	35						
			sf		oms						
Deels Hesse To											
Peak Hour Ti	ri <b>ps:</b> AM	_	14	4	54						
	MD		<del>! 4</del> ! 77		12						
	PM		.46		04						
	SAT		.70		72						
Dawson Tuine		1	04	1	04				1	Net	T-4-1
Person Trips: AM	: Auto	In -2	Out -2	<b>In</b> 5	Out 7				<b>In</b> 3	Out 5	<b>Total</b> 8
AIVI	Taxi	0	0	6	8				6	8	14
	Bus	0	0	0	0				0	0	0
	Subway	-1	-1	7	10				6	9	15
	Railroad	0	0	0	0				0	0	0
	Walk	-18	-18	8	11				-10	-7	-17
	Other	0	0	0	0				0	0	0
	Total	-21	-21	26	36				5	15	20
MD	Auto	-15	-15	14	7				-1	-8	-9
1110	Taxi	0	0	17	8				17	8	25
	Bus	-3	-3	1	0				-2	-3	-5
	Subway	-4	-4	20	9				16	5	21
	Railroad	0	0	1	0				1	0	1
	Walk	-116	-116	23	11				-93	-105	-198
	Other	0	0	1	0				1	0	1
	Total	-138	-138	77	35				-61	-103	-164
PM	Auto	-8	-8	12	8				4	0	4
	Taxi	0	0	13	9				13	9	22
	Bus	-1	-1	1	0				0	-1	-1
	Subway	-2	-2	16	11				14	9	23
	Railroad	0	0	1	0				1	0	1
	Walk	-61	-61	18	13				-43	-48	-91
	Other	0	0	1	0				1	0	1
	Total	-72	-72	62	41				-10	-31	-41
SAT	Auto	-10	-8	10	8				0	0	0
	Taxi	0	0	10	8				10	8	18
	Bus	-2	-2	0	0				-2	-2	-4
	Subway	-3	-2	10	8				7	6	13
	Railroad	0	0	0	0				0	0	0
	Walk	-79	-64	8	6				-71	-58	-129
	Other	0	0	2	2				2	2	4
	Total	-94	-76	40	32				-54	-44	-98
							Net		To	tal Balan	ced
Vehicle Trips	::	In	Out	In	Out	In	Out	Total	In	Out	Total
AM	Auto	-2	-2	2	3	0	1	1	0	1	1
	Taxi	0	0	3	4	3	4	7	7	7	14
	Truck	0	0	0	0	0	0	0	0	0	0
	Total	-2	-2	5	7	3	5	8	7	8	15
MD	Auto	-10	-10	7	3	-3	-7	-10	-3	-7	-10
	Taxi	0	0	8	4	8	4	12	12	12	24
	Truck	0	0	0	0	0	0	0	0	0	0
	Total	-10	-10	15	7	5	-3	2	9	5	14
PM	Auto	-5	-5	6	4	1	-1	0	1	-1	0
1 141	Taxi	0	0	6	4	6	4	10	10	10	20
	Truck	0	0	0	0	0	0	0	0	0	0
	Total	-5	-5	12	8	7	3	10	11	9	20
			_		_		_			_	
SAT	Auto Taxi	-6 0	-5 0	4 5	3 4	-2 5	-2 4	-4 9	-2 9	-2 9	-4 18
	Truck	0	0	0	0	0	0	0	0	0	0
	Total	-6	-5	9	7	3	2	5	7	7	14
	TOTAL	-0	-5	9	,	3	_	5	,	,	14

Table C.7 - Travel Demand Forecast for Area 7: Williamsburg

Project Comp	ponents:	Но	tel	Resid	ential						
	Size:	1	67	-7	78						
	JIZC.		oms		ng units						
					Ü						
Peak Hour Tr	rips:										
	AM		26		53						
	MD		20		31						
	PM		04		59						
	SAT	14	41	-6	50						
										Net	
Person Trips:		In	Out	In	Out				In	Out	Total
AM	Auto	10	14	-1	-6				9	8	17
7	Taxi	11	16	0	0				11	16	27
	Bus	1	1	0	-1				1	0	1
	Subway	13	19	-6	-36				7	-17	-10
	Railroad	1	1	0	0				1	1	2
	Walk	15	22	-1	-4				14	18	32
	Other	1	1	-1	-6				0	-5	-5
	Total	52	74	-9	-53				43	21	64
MD	Auto	28	12	-2	2				26	11	27
MD	Taxi	33	13 15	-2 0	-2 0				33	11 15	37 48
	Bus	1	1	0	0				1	1	2
	Subway	39	18	-11	-11				28	7	35
	Railroad	1	1	0	0				1	1	2
	Walk	45	21	-1	-1				44	20	64
	Other	1	1	-2	-2				-1	-1	-2
	Total	148	70	-16	-16				132	54	186
PM	Auto	23	16	-6	-3				17	13	30
1 141	Taxi	26	18	0	0				26	18	44
	Bus	1	1	-1	0				0	1	1
	Subway	31	22	-33	-14				-2	8	6
	Railroad	1	1	0	0				1	1	2
	Walk	36	25	-3	-1				33	24	57
	Other	1	1	-5	-2				-4	-1	-5
	Total	119	84	-48	-20				71	64	135
SAT	Auto	20	16	-4	-4				16	12	20
SAI	Taxi	20 19	16 15	-4 0	0				19	12 15	28 34
	Bus	19	1	-1	-1				0	0	0
	Subway	20	16	-20	-20				0	-4	-4
	Railroad	1	1	0	0				1	1	2
	Walk	15	12	-2	-2				13	10	23
	Other	4	3	-3	-3				1	0	1
	Total	80	64	-30	-30				50	34	84
Malatala Tata			0.4		0.4		Net	T-4-1		al Balan	
Vehicle Trips AM		<b>In</b> 5	Out 7	In 1	<b>Out</b> -6	In 4	Out 1	<b>Total</b> 5	In 4	Out 1	Total
Alvi	Auto Taxi	5	8	-1 0	0	4 5	8	13	4 13	13	5 26
	Truck	1	1	0	0	1	1	2	13	1	2
	Total	11	16	-1	-6	10	10	20	18	15	33
				_	-						
MD	Auto	14	6	-2	-2	12	4	16	12	4	16
	Taxi	16	7	0	0	16	7	23	23	23	46
	Truck	0	0	0	0	0	0	0	0	0	0
	Total	30	13	-2	-2	28	11	39	35	27	62
PM	Auto	11	8	-6	-2	5	6	11	5	6	11
FIVI	Taxi	13	9	0	0	13	9	22	22	22	44
	Truck	0	0	0	0	0	0	0	0	0	0
	Total	24	17	-6	-2	18	15	33	27	28	55
	A 4 -	•		2	2	_	2		_	2	6
SAT	Auto Taxi	8 9	6 7	-3 0	-3 0	5 9	3 7	8 16	5 16	3 16	8 32
	Truck	0	0	0	0	0	0	0	0	0	0
	Total	17	13	-3	-3	14	10	24	21	19	40
	iotai	1/	13	-3	-5	14	10	44	21	13	40

## Attachment D

Transportation Planning Factors and Travel Demand Forecast for Conceptual Analysis



**Table D.1 - Transportation Planning Factors for Conceptual Analysis** 

Land Use:	Но	tel
Trip Generation:	(1	L)
	Weekday	Saturday
Daily Person Trips	9.4	9.4
	per r	oom
Temporal Distribution:	(1	L)
AM	8'	%
MD	14	1%
PM	13	3%
SAT	9	%
In/Out Splits:	(2	2)
	In	Out
AM	39%	61%
MD	54%	46%
PM	65%	35%
SAT	56%	44%
Modal Splits:	(3)	(3)
	Weekday	Saturday
Auto	6%	10%
Taxi	32%	28%
Bus	2%	3%
Subway	18%	17%
Railroad	2%	2%
Walk	38%	38%
Other	<u>2%</u>	<u>2%</u>
	100%	100%
Vehicle Occupancy:	(3)	(3)
	Weekday	Saturday
Auto	1.8	2.1
Taxi	2.0	2.3
Truck Trip Generation:	(2)	(2)
	Weekday	Saturday
	0.06	0.01
	per r	room
	(2	2)
AM		2%
MD	9'	%
PM	1	%
SAT	9	%
	ln	Out
	50%	50%

## Sources:

- 1 CEQR Technical Manual (2014)
- 2 Greater East Midtown Rezoning FEIS (2017)
- 3 NYCDOT

Table D.2 - Travel Demand Forecast for Conceptual Analysis

Project Comp	ponents:	Но	tel							
	Size:		39 oms							
Peak Hour Ti	da.	100	лпѕ							
Peak Hour II	AM	1(	05							
	MD		83							
	PM		70							
	SAT		18							
									Net	
Person Trips		In	Out					In	Out	Total
AM	Auto	2	4					2	4	6
	Taxi	13	20					13	20	33
	Bus	1	1					1	1	2
	Subway	7	11					7	11	18
	Railroad	1	1					1	1	2
	Walk Other	15 1	24 1					15 1	24 1	39 2
	Total	40	62					40	62	102
MD	Auto	6	5					6	5	11
	Taxi Bus	32 2	27 2					32 2	27 2	59 4
	Subway	18	15					18	15	33
	Railroad	2	2					2	2	4
	Walk	38	32					38	32	70
	Other	2	2					2	2	4
	Total	100	85					100	85	185
PM	Auto	7	4					7	4	11
	Taxi	35	19					35	19	54
	Bus	2	1					2	1	3
	Subway	20	11					20	11	31
	Railroad	2	1					2	1	3
	Walk	42	23					42	23	65
	Other	2	1					2	1	3
	Total	110	60					110	60	170
SAT	Auto	7	5					7	5	12
	Taxi	18	14					18	14	32
	Bus Subway	2 11	2 9					2 11	2 9	4 20
	Railroad	1	1					1	1	2
	Walk	25	20					25	20	45
	Other	1	1					1	1	2
	Total	65	52					65	52	117
						Net		To	tal Balan	ced
Vehicle Trips	:	In	Out	1	ln	Out	Total	In	Out	Total
AM	Auto	1	2		1	2	3	1	2	3
	Taxi	7	10		7	10	17	14	14	28
	Truck	1	1		1	1	2	1	1	2
	Total	9	13		9	13	22	16	17	33
MD	Auto	3	3		3	3	6	3	3	6
	Taxi	16	13		16	13	29	21	21	42
	Truck	0	0		0	0	0	0	0	0
	Total	19	16	-	19	16	35	24	24	48
PM	Auto	4	2		4	2	6	4	2	6
	Taxi	18	10		18	10	28	19	19	38
	Truck	0	0		0	0	0	0	0	0
	Total	22	12	2	22	12	34	23	21	44
SAT	Auto	3	2		3	2	5	3	2	5
	Taxi	8	6		8	6	14	10	10	20
	Truck	0	0		0	0	0	0	0	0
	Total	11	8	-	11	8	19	13	12	25

Long Island City Prototypical Site: Planned Projects Within or Near the Study Area by 2028

_			1				1			
l				Net Incremental	Residential	Hotel			On-Site Parking	
Block		Project Type	Address	Floor Area (sf)	(du)	(rooms)		Office (sf)	Spaces	Assumptions
52	28	RESIDENTIAL	11-12 44TH DR	49,992	49	0	4,121	0	31	Included in traffic and parking analysis
54	35	RESIDENTIAL	11-30 45TH RD	22,356	24	0	0	0	0	Included in traffic and parking analysis
72	65	RESIDENTIAL	22-12 JACKSON AVE	174,769	182	0	4,940	0	88	Included in traffic and parking analysis
76	16	RESIDENTIAL	22-43 JACKSON AVE	75,227	70	0	13,001	0	0	Included in traffic and parking analysis
78	41	RESIDENTIAL	21-30 44TH DR	24,991	85	0	10,114	0	20	Included in traffic and parking analysis
78	48	HOTEL	21-16 44TH DR	39,788	29	70	0	0	0	Included in traffic and parking analysis
78	52	RESIDENTIAL	21-10 44TH DR	21,907	22	0	2,911	0	0	Included in traffic and parking analysis
82	7501	INSTITUTION	27-28 THOMSON AVE	0	-	-	-	-	-	Included in background growth
86	1	RESIDENTIAL	22-44 JACKSON AVE	1,016,851	1,115	0	39,765	0	250	Included in traffic and parking analysis
97	4	INDUSTRIAL	47-11 AUSTELL PL	-100		-	-	-	-	Included in background growth
98	30	BUSINESS	47-32 AUSTELL PL	0	-	-	-	-	-	Included in background growth
98	42	BUSINESS	47-10 AUSTELL PL	-383	-	-	-	-	-	Included in background growth
99	10	INDUSTRIAL	47-22 PEARSON PL	18,194	-	-	-	-	-	Included in background growth
239	7	RESIDENTIAL	29-00 NERN BLVD	10,117	82	0	20,117	0	0	Included in traffic and parking analysis
239	13	RESIDENTIAL	29-22 NERN BLVD	380,692	467	0	0	0	90	Included in traffic and parking analysis
239	49	BUSINESS	29-76 NERN BLVD	0		-	-	-	-	Included in background growth
263	9	RESIDENTIAL	30-02 QUEENS BLVD	1,496,832	550	0	4,920	0	0	Included in traffic and parking analysis
264	17	RESIDENTIAL	28-30 JACKSON AVE	1,503,827	650	0	4,858	0	117	Included in traffic and parking analysis
266	3	RESIDENTIAL	43-22 QUEENS ST	619,343	790	0	4,544	0	0	Included in traffic and parking analysis
268	31	RESIDENTIAL	28-27 THOMSON AVE	36,487	49	0	0	0	0	Included in traffic and parking analysis
403	1	BUSINESS	29-63 NERN BLVD	678	-	-	-	-	-	Included in background growth
403	1	BUSINESS	29-17 41ST AVE	668					-	Included in background growth
403	1	RESIDENTIAL	29-19 41ST AVE	768,834	870	0	4,547	0	39	Included in traffic and parking analysis
403	21	BUSINESS	29-27 QUEENS PLZ N	-2.942	870	U	4,347	U	39	Included in traffic and parking analysis  Included in background growth
406	24	RESIDENTIAL	40-05 CRESCENT ST	36.433	32	0	0	0	48	Included in traffic and parking analysis
408	5			,		0		0	19	. ,
		RESIDENTIAL	23-01 41ST AVE	31,535	37		6,233			Included in traffic and parking analysis
410	1	BUSINESS	21-01 41ST AVE	0	-	-	-	-	-	Included in background growth
413	15	RESIDENTIAL	41-21 23RD ST	24,675	29	0	1,493	0	0	Included in traffic and parking analysis
413	16	RESIDENTIAL	41-15 23RD ST	52,668	71	0	0	0	0	Included in traffic and parking analysis
414	12	RESIDENTIAL	41-41 24TH ST	20,020	24	0	0	0	0	Included in traffic and parking analysis
414	23	RESIDENTIAL	41-08 CRESCENT ST	149,580	88	99	0	0	101	Included in traffic and parking analysis
414	35	RESIDENTIAL	41-18 CRESCENT ST	0	-	-	-	-	-	Included in background growth
415	26	RESIDENTIAL	41-04 27TH ST	24,987	32	0	4,073	0	0	Included in traffic and parking analysis
415	36	RESIDENTIAL	41-32 27TH ST	33,924	46	0	0	0	0	Included in traffic and parking analysis
417	3	RESIDENTIAL	41-21 28TH ST	126,960	188	0	0	0	49	Included in traffic and parking analysis
418	14	RESIDENTIAL	29-28 41 AVE	21,823	91	0	11,298	0	0	Included in traffic and parking analysis
420	1	OFFICE	28-07 JACKSON AVE	928,069	0	0	47,043	881,026	0	Included in traffic and parking analysis
422	31	RESIDENTIAL	42-26 28TH ST	206,753	182	0	0	0	34	Included in traffic and parking analysis
423	25	RESIDENTIAL	42-10 27TH ST	90,153	110	0	8,645	0	18	Included in traffic and parking analysis
423	29	RESIDENTIAL	42-20 27TH ST	140,130	195	0	2,888	0	20	Included in traffic and parking analysis
424	19	RESIDENTIAL	24-16 QUEENS PLZ S	52,865	117	0	3,600	0	0	Included in traffic and parking analysis
424	27	RESIDENTIAL	42-22 CRESCENT ST	22,148	31	0	0	0	0	Included in traffic and parking analysis
429	21	RESIDENTIAL	24-12 42ND RD	33,731	36	0	4,328	0	0	Included in traffic and parking analysis
429	26	RESIDENTIAL	42-44 CRESCENT ST	12,495	12	0	2,060	0	0	Included in traffic and parking analysis
430	21	RESIDENTIAL	42-50 27TH ST	24,859	32	0	0	0	7	Included in traffic and parking analysis
430	29	RESIDENTIAL	25-21 43RD AVE	68,145	86	0	0	0	17	Included in traffic and parking analysis
430	37	HOTEL	42-59 CRESCENT ST	22,080	0	83	0	0	0	Included in traffic and parking analysis
432	3	RESIDENTIAL	27-49 JACKSON AVE	31,612	43	0	1,739	0	0	Included in traffic and parking analysis
432	21	RESIDENTIAL	27-19 43RD AVE	73,192	91	0	6,124	0	0	Included in traffic and parking analysis
432	32	RESIDENTIAL	42-83 HUNTER ST	12,336	15	0	0	0	0	Included in traffic and parking analysis
434	16	RESIDENTIAL	43-12 HUNTER ST	90,485	123	0	4,038	0	0	Included in traffic and parking analysis
434	1	BUSINESS	23-03 44TH RD	934,864	923	0	17,453	0	209	Included in traffic and parking analysis
436	21	EDUCATIONAL	23-10 43RD AVE	0	523	-		-	209	Included in trainic and parking analysis  Included in background growth
437	8	RESIDENTIAL	23-10 43RD AVE 23-15 44TH DR	780,992	802	0	15,052	0	206	Included in traffic and parking analysis
442				780,992 0		-		-		. ,
	18	INDUSTRIAL	43-10 21ST ST		-		-		-	Included in background growth
443	14	INDUSTRIAL	12-12 43RD AVE	-77,596	-	-	-	-	-	Included in background growth
446	23	BUSINESS	11-11 44TH RD	-14,233	-	-	-	-	-	Included in background growth

## Jamaica Prototypical Site: Planned Projects Within or Near the Study Area by 2028

				Residential	Hotel	Commercial	Community	On-Site Parking	
Block	Lot	Project Type	Address	(du)	(rooms)	(sf)	Facility (sf)	Spaces	Assumptions
9620	45	MIXED USE	140-35 QUEENS BLVD	32	0	43,600	0	73	Included in traffic and parking analysis
9620	60	HOTEL	140-17 QUEENS BLVD	0	49	11,940	0	0	Included in traffic and parking analysis
9681	50	MIXED USE	89-07 148TH ST	97	0	0	0	50	Included in traffic and parking analysis
9681	64	RESIDENTIAL	148-36 89TH AVE	27	0	0	0	0	Included in traffic and parking analysis
9681	73	RESIDENTIAL	89-14 150TH ST	22	0	0	0	4	Included in traffic and parking analysis
9681	85	RESIDENTIAL	148-29 90TH AVE	90	0	0	0	45	Included in traffic and parking analysis
9681	91	RESIDENTIAL	148-15 90TH AVE	65	0	0	0	0	Included in traffic and parking analysis
9685	52	HOTEL	139-04 HILLSIDE AVE	10	46	12,963	0	0	Included in traffic and parking analysis
9692	85	MIXED USE	147-07 88TH AVE	10	0	484	0	0	Included in traffic and parking analysis
9694	26	MIXED USE	148-46 HILLSIDE AVE	0	0	3,376	13,406	0	Included in traffic and parking analysis
9694	49	RESIDENTIAL	148-37 88TH AVE	109	0	0	0	60	Included in traffic and parking analysis
9695	14	MIXED USE	152-01 88TH AVE	482	0	0	0	237	Included in traffic and parking analysis
9697	15	MIXED USE	150-16 HILLSIDE AVE	10	0	2,357	0	0	Included in traffic and parking analysis
9697	21	MIXED USE	150-28 HILLSIDE AVE	15	0	2,090	0	0	Included in traffic and parking analysis
9755	61	MIXED USE	153-11 90TH AVE	10	0	0	1,427	0	Included in traffic and parking analysis
9762	49	MIXED USE	153-33 89TH AVE	46	0	0	3,209	28	Included in traffic and parking analysis
9793	78	MIXED USE	89-50 164TH ST	174	0	10,515	41,625	64	Included in traffic and parking analysis
9796	25	COMMERCIAL	91-01 MERRICK BLVD	0	0	66,602	0	0	Included in traffic and parking analysis
9796	63	MIXED USE	90-02 168TH ST	525	0	75,273	5,100	0	Included in traffic and parking analysis
9801	51	MIXED USE	168-30 89TH AVE	29	0	0	800	15	Included in traffic and parking analysis
9813	8	COMMUNITY FACILITY	88-39 163TH ST	44	0	0	20,728	0	Included in traffic and parking analysis
9813	11	MIXED USE	88-35 163RD ST	17	0	0	0	9	Included in traffic and parking analysis
9817	21	RESIDENTIAL	166-30 88TH AVE	20	0	0	0	10	Included in traffic and parking analysis
9994	31	HOTEL	90-75 SUTPHIN BLVD	0	213	178,400	0	49	Included in traffic and parking analysis
9997	15	HOTEL	149-21 ARCHER AVE	0	68	31,812	0	0	Included in traffic and parking analysis
9997	97	HOTEL	149-03 ARCHER AVE	0	128	56,693	0	12	Included in traffic and parking analysis
9998	25	MIXED USE	147-07 94TH AVE	522	0	16,133	0	114	Included in traffic and parking analysis
9998	29	HOTEL	145-07 95TH AVE	0	48	19,764	0	0	Included in traffic and parking analysis
9998	42	HOTEL	147-05 94 AVE	0	225	110,196	0	0	Included in traffic and parking analysis
9998	91	MIXED USE	147-40 ARCHER AVE	669	0	26,073	18,335	186	Included in traffic and parking analysis
9998	109	MIXED USE	148-12 ARCHER AVE	18	0	0	1,492	0	Included in background growth
9998	110	HOTEL	148-18 ARCHER AVE	0	338	143,911	0	46	Included in traffic and parking analysis
9999	9	MIXED USE	147-20 94TH AVE	380	0	0	0	105	Included in traffic and parking analysis
10020	114	HOTEL	144-15 LIBERTY AVE	12	86	23,686	0	0	Included in traffic and parking analysis
10030	1	MIXED USE	97-01 WALTHAM ST	0	58	19,948	2,379	2	Included in traffic and parking analysis
10030	22	MIXED USE	97-34 SUTPHIN BLVD	0	398	129,491	30,693	51	Included in traffic and parking analysis
10031	14	HOTEL	97-26 147TH PLACE	0	59	20,626	0	8	Included in traffic and parking analysis
10041	6	MIXED USE	143-18 LIBERTY AVE	12	75	16,982	0	9	Included in traffic and parking analysis
10101	3	COMMERCIAL	160-08 JAMAICA AVE	0	0	119,497	0	0	Included in traffic and parking analysis
10101	27	HOTEL	92-32 UNION HALL ST	0	110	0	0	0	Included in traffic and parking analysis
10110	19	COMMERCIAL	150-30 LIBERTY AVE	0	0	31,132	0	0	Included in traffic and parking analysis
10155	35	HOTEL	165-20 ARCHER AVE	0	206	72,062	0	6	Included in traffic and parking analysis
10155	105	MIXED USE	92-61 165TH ST	89	0	7,234	0	0	Included in traffic and parking analysis
10209	115	MIXED USE	92-23 168TH ST	389	0	60,651	18,935	130	Included in traffic and parking analysis

Section   Project Type			I		Net Incremental	Net Incremental	Residential	1	l	On-Site Parking	
14.5   10   15,000   15,000   15   15   15   15   15   15   15	Block	Lot	Project Type	Address				Retail (sf)	Office (sf)	_	Assumptions
145   6							-	-	-	-	0 0
140								-	-	-	0 0
148   1								23,740			
190											
150											
155   ASSIVARY   101.00065070837   0   0   1   1   1   1   1   1   1   1											
150   1								-	-		
157   1   STORAGE   11   NOT ST   0   -993.08   481   99.857   0   150   Included in traffic and parking packys.											
161   18   MERCATIN   275 (10000070817   0   18,005   17,007   0   19,005   17,005   18,005											
1515   38   WIGNISS   SAPTIALTONS   10   131,895   0   17,2977   0   0   Thicked in traffic and parking analysis   161,674   7,201   20,001,553   310,007,652   320   1,007,652   320								- 99,032			
1560   12   MISCHARTHAN   15							0	172,977			Included in traffic and parking analysis
150   150							184	2,664			
137   32   ASSEMBLY   300 UNINGERIOR ST   0   0   4   \$1,125   0   0   Induced in backgrowd growth   1771   307   RISIONETIAL   3115/ATS ST   2   1   1   1   1   1   1   1   1   1								- 6 308			0 0
171   200   RESIDENTIAL   313 STATES   2											
1712   2001   RESIDENTIAL   313 STATEST   2   2   2	171	201	RESIDENTIAL	311 STATE ST	2		-	-	-	-	Included in background growth
177   2006   RESIDENTIAL   331 STATES   7   2   29,667											
371   2006   RESIDENTIAL   315 ATSTREET   2							-	-	-	-	
1717   207   RESIDENTIAL   319 STATS ST   2						29,667	-	-	-	-	
177   208   RESPENTIAL   319 STATE ST   2							-	-	-	-	Included in background growth
172   SO							-	-	-	-	
173   32   RESIDENTIAL   471 STATE ST   -1   404     Included in background growth   173   50   RESIDENTIAL   461 STATE ST   -1   404     Included in background growth   173   50   RESIDENTIAL   461 STATE ST   -0   915     Included in background growth   173   50   RESIDENTIAL   429 STATE ST   -5   0   0     Included in background growth   173						2 373	- 0	14 273	- 0	- 0	
173   50   RESIDENTIAL   441 STATEST   0   915											
177   28   RESIDENTIAL   205 STATES T   -1   0   -									-		
177   28   RESIDENTIAL   388 STATE ST   -1   0											
177   42   RESIDENTIAL   381 ATRANTIC AVE   1   11,980							-	-	-	-	
178   8   RESIDENTIAL   75 BOND ST   1   11,980   -							-	-	-	-	
178   9   RESIDENTIAL   75 BOND ST   1   11.980     Included in background growth   178   13   RESIDENTIAL   73 BOND ST   1   11.980     Included in background growth   178   13   RESIDENTIAL   73 BOND ST   1   11.980     Included in background growth   178   178   70   ASSEMBLY   411 ATLANTIC AVE   0   753   2   1.330   0   Included in Tartific and parking analysis   179   7   RESIDENTIAL   477 ATLANTIC AVE   0   100       Included in background growth   180   52   RESIDENTIAL   541 ATLANTIC AVE   0   0       Included in background growth   180   52   RESIDENTIAL   553 ATLANTIC AVE   0   0       Included in background growth   181   20   RESIDENTIAL   259 ATLANTIC AVE   0   0       Included in background growth   181   20   RESIDENTIAL   226 ATLANTIC AVE   4   5,868   4   1,257   0   0   Included in Tartific and parking analysis   181   22   RESIDENTIAL   228 ATLANTIC AVE   0   5,526   0   2,994   0   0   Included in Tartific and parking analysis   182   28   BUSINESS   226 ATLANTIC AVE   0   5,526   0   2,994   0   0   Included in Tartific and parking analysis   182   28   RESIDENTIAL   280 ATLANTIC AVE   1   0   0   0   2   Included in Tartific and parking analysis   183   2   RESIDENTIAL   280 ATLANTIC AVE   1   0   0   0   2   Included in Tartific and parking analysis   183   2   RESIDENTIAL   280 ATLANTIC AVE   1   0   0   0   2   Included in Tartific and parking analysis   183   2   RESIDENTIAL   280 ATLANTIC AVE   1   0   0   0   2   Included in Tartific and parking analysis   183   2   RESIDENTIAL   280 ATLANTIC AVE   1   0   0   0   0   1   Included in Tartific and parking analysis   183   2   RESIDENTIAL   280 ATLANTIC AVE   1   0   0   0   0   1   Included in Tartific and parking analysis   183   2   RESIDENTIAL   280 ATLANTIC AVE   1   0   0   0   0   1   Included in Tartific and parking analysis   183   2   RESIDENTIAL   280 ATLANTIC AVE   1   0   0   0   0   0   1   Included in Tartific and parking analysi											
178   10   RESIDENTIAL   73 BOND ST   1   11,980     Included in background growth   178   70   ASSIMILIY   411 ATLANTIC AVE   0   753   2   1,330   0   0   Included in Taffic and parking analysis   179   7   RESIDENTIAL   466 STATE ST   8   864     Included in Taffic and parking analysis   179   7   RESIDENTIAL   466 STATE ST   8   864     Included in Dackground growth   179   52   RESIDENTIAL   477 ATLANTIC AVE   0   100     Included in Dackground growth   180   52   RESIDENTIAL   477 ATLANTIC AVE   0   0     Included in Dackground growth   180   53   RESIDENTIAL   539 ATLANTIC AVE   0   0     Included in Taffic and parking gravity   181   22   RESIDENTIAL   539 ATLANTIC AVE   4   5,666   4   1,257   0   included in Taffic and parking gravity   181   22   RESIDENTIAL   230 ATLANTIC AVE   1   1,203     Included in Taffic and parking gravity   181   22   RESIDENTIAL   234 ATLANTIC AVE   1   1,203     Included in Taffic and parking gravity   181   23   RESIDENTIAL   234 ATLANTIC AVE   2   1,176   0   4,005   0   Included in Taffic and parking gravity   181   23   RESIDENTIAL   237 PACINE ST   10   5,277   10   0   0   2   Included in Taffic and parking gravity   181   23   RESIDENTIAL   236 PACINE ST   2   579       Included in Taffic and parking gravity   181   23   RESIDENTIAL   236 PACINE ST   1   20											
178   33   RESIDENTIAL   398 STATEST   8   24     Included in background growth   179   7   RESIDENTIAL   405 STATEST   8   864     Included in background growth   180   52   RESIDENTIAL   477 ATLANTIC AVE   0   100       Included in background growth   180   52   RESIDENTIAL   541 ATLANTIC AVE   0   0       Included in background growth   180   52   RESIDENTIAL   559 ATLANTIC AVE   0   0       Included in background growth   181   20   RESIDENTIAL   259 ATLANTIC AVE   0   0       Included in background growth   181   20   RESIDENTIAL   220 ATLANTIC AVE   4   5,868   4   1,257   0   0   Included in Tarific and parking analysis   181   22   RESIDENTIAL   220 ATLANTIC AVE   0   5,326   0   2,994   0   0   Included in Tarific and parking analysis   181   23   BUSINESS   286 ATLANTIC AVE   0   5,326   0   2,994   0   0   Included in Tarific and parking analysis   182   18   BUSINESS   328 ATLANTIC AVE   2   1,176   0   4,505   0   0   Included in Tarific and parking analysis   182   34   RESIDENTIAL   287 PACIFIC ST   10   9,297   10   0   0   2   Included in Tarific and parking analysis   183   2   RESIDENTIAL   287 PACIFIC ST   10   9,297   10   0   0   2   Included in Tarific and parking analysis   183   8   RESIDENTIAL   287 PACIFIC ST   1   202   -     Included in Tarific and parking analysis   183   8   RESIDENTIAL   350 ATLANTIC AVE   1   0   -							-	-	-	-	
179   7   RESIDENTIAL   466 STATE ST   -8   -864   -							-	-	-	-	
179   52   RESIDENTIAL   477 ATLANTIC AVE   0   0   0   -   -											
180   \$52   RESIDENTIAL   \$59 ATLANTIC AVE   0											
180   53   RESIDENTIAL   280 ATLANTIC AVE   0   0     -							-		-	-	
181   22   RESIDENTIAL   284 ATLANTIC AVE   -1   1.203   -   -     -	180	53		539 ATLANTIC AVE							
181   23   BUSINESS   238 ATLANTIC AVE   0   5,926   0   2,994   0   0   Included in traffic and parking analysis   182   54   RESIDENTIAL   287 PACIFIC ST   10   9,297   10   0   0   2   Included in traffic and parking analysis   183   2   RESIDENTIAL   287 PACIFIC ST   10   9,297   10   0   0   2   Included in traffic and parking analysis   183   2   RESIDENTIAL   287 PACIFIC ST   10   9,297   10   0   0   2   Included in background growth   184   35   RESIDENTIAL   350 ATLANTIC AVE   1   0   -											
182											
182											
183   8   RESIDENTIAL   350 ATLANTIC AVE   1   0		54			10						
184   35   RESIDENTIAL   437 PACIFIC ST   -1   292   -1   -1   Included in background growth   185   2   RESIDENTIAL   89 NEVINS ST   0   0   -1   -1   Included in background growth   185   3   RESIDENTIAL   459 PACIFIC ST   0   0   -1   -1   Included in background growth   185   54   RESIDENTIAL   459 PACIFIC ST   0   0   -1   -1   Included in background growth   186   1   RESIDENTIAL   459 PACIFIC ST   38   70,342   38   13,854   0   15   Included in traffic and parking analysis   187   43   RESIDENTIAL   45 DEAN ST   1   4,387   -1   Included in background growth   187   44   RESIDENTIAL   45 DEAN ST   1   4,387   -1   Included in background growth   187   44   RESIDENTIAL   45 DEAN ST   1   4,387   -1   Included in background growth   190   36   RESIDENTIAL   25 DEAN ST   1   0   -1   Included in background growth   192   31   RESIDENTIAL   25 DEAN ST   -1   0   -1   Included in background growth   194   10   RESIDENTIAL   25 DEAN ST   -1   0   -1   Included in background growth   194   53   RESIDENTIAL   109 BERGEN ST   -2   0   -1   Included in background growth   194   53   RESIDENTIAL   109 BERGEN ST   -2   0   -1   Included in background growth   195   44   RESIDENTIAL   109 BERGEN ST   -1   308   -1   Included in background growth   195   44   RESIDENTIAL   181 BERGEN ST   -1   1   30   -1   Included in background growth   196   47   RESIDENTIAL   181 BERGEN ST   -1   0   -1   Included in background growth   196   48   RESIDENTIAL   123 BERGEN ST   -1   1   30   -1   Included in background growth   196   47   RESIDENTIAL   123 BERGEN ST   -1   0   -1   Included in background growth   196   47   RESIDENTIAL   123 BERGEN ST   -1   0   -1   Included in background growth   196   47   RESIDENTIAL   233 BERGEN ST   -1   0   -1   Included in background growth   196   47   RESIDENTIAL   233 BERGEN ST   -1   742   -1   Included in background growth   196   47   RESIDENTIAL   233 BERGEN ST   -1   742   -1   Included in background growth   196   47   RESIDENTIAL   233 BERGEN ST   -1   742   -1   Included in ba											
185   2											
185							-	-	-	-	
186			RESIDENTIAL				-	-	-	-	Included in background growth
187   43   RESIDENTIAL   43 DEAN ST   1   4,387   -   -							- 20	12.054			
187									-		
192   31   RESIDENTIAL   544 PACIFIC ST   -8							-	-	-		
194   10   RESIDENTIAL   82 DEAN ST   -8   750   -   -   -   -     Included in background growth     194   53   RESIDENTIAL   109 BERGEN ST   -2   0   -   -   -     Included in background growth     195   55   RESIDENTIAL   105A BERGEN ST   -1   308   -   -   -     Included in background growth     195   44   RESIDENTIAL   181 BERGEN ST   -1   0   -   -     -     Included in background growth     196   3   RESIDENTIAL   147 BOND ST   0   135   -   -     Included in background growth     196   44   RESIDENTIAL   235 BERGEN ST   0   1,112   -   -     -     Included in background growth     196   45   RESIDENTIAL   235 BERGEN ST   -1   742   -   -     -     Included in background growth     196   47   RESIDENTIAL   229 BERGEN ST   -2   1,040   -   -     Included in background growth     196   47   RESIDENTIAL   229 BERGEN ST   -2   1,040   -   -     Included in background growth     196   136   RESIDENTIAL   229 BERGEN ST   1   1,472   -   -       Included in background growth     196   136   RESIDENTIAL   250 DEAN ST   0   0   -   -   -     Included in background growth     269   7501   RESIDENTIAL   110 LIVINGSTON ST   0   -247   -   -     Included in background growth     279   1   BUSINESS   35 DEAN ST   0   0   -   -   -     Included in background growth     279   37   ASSEMBLY   96 BOERUM PL   0   0   -   -   -     Included in background growth     385   14   RESIDENTIAL   29 BERGEN ST   -1   110   -   -											
194   53   RESIDENTIAL   109 BERGEN ST   -2   0   -   -   -   -   -   Included in background growth   194   55   RESIDENTIAL   105A BERGEN ST   -1   308   -   -   -   -   Included in background growth   195   44   RESIDENTIAL   181 BERGEN ST   -1   0   -   -   -   -   Included in background growth   196   3   RESIDENTIAL   147 BOND ST   0   135   -   -   -   -   Included in background growth   196   44   RESIDENTIAL   235 BERGEN ST   0   1,112   -   -   -   -   Included in background growth   196   45   RESIDENTIAL   235 BERGEN ST   -1   742   -   -   -   -   Included in background growth   196   47   RESIDENTIAL   229 BERGEN ST   -2   1,040   -   -   -   -   Included in background growth   196   63   RESIDENTIAL   229 BERGEN ST   1   1,472   -   -   -   -   Included in background growth   196   136   RESIDENTIAL   250 DEAN ST   0   0   -   -   -   -   Included in background growth   196   136   RESIDENTIAL   250 DEAN ST   0   0   -   -   -   -   Included in background growth   196   136   RESIDENTIAL   250 DEAN ST   0   0   -   -   -   -   Included in background growth   197   170   1								1			
194   55											
195   44   RESIDENTIAL   181 BERGEN ST   -1   0   -   -   -   -   -   Included in background growth     196   3   RESIDENTIAL   147 BOND ST   0   135   -   -   -   -   Included in background growth     196   44   RESIDENTIAL   235 BERGEN ST   0   1,112   -   -   -   -   Included in background growth     196   45   RESIDENTIAL   233 BERGEN ST   -1   742   -   -   -   -   Included in background growth     196   47   RESIDENTIAL   229 BERGEN ST   -2   1,040   -   -   -   -   Included in background growth     196   63   RESIDENTIAL   229 BERGEN ST   1   1,472   -   -   -   -   Included in background growth     196   136   RESIDENTIAL   250 DEAN ST   0   0   -   -   -   -   Included in background growth     269   7501   RESIDENTIAL   250 DEAN ST   0   0   -   -   -   -   -   Included in background growth     278   1   RESIDENTIAL   237 PACIFIC ST   3   5,512   0   1,614   0   3   Included in traffic and parking analysis     279   1   BUSINESS   35 DEAN ST   0   0   -   -   -   -   -   Included in background growth     385   14   RESIDENTIAL   92 BERGEN ST   -1   110   -   -   -   -   -   Included in background growth     385   21   RESIDENTIAL   92 BERGEN ST   -1   110   -   -   -   -   -   Included in background growth     386   14   RESIDENTIAL   106 BERGEN ST   -1   1963   -   -   -   -   Included in background growth     386   14   RESIDENTIAL   106 BERGEN ST   -1   582   -   -   -   -   Included in background growth     387   36   RESIDENTIAL   244 BERGEN ST   -2   0   -   -   -   -   Included in background growth     387   36   RESIDENTIAL   244 BERGEN ST   -2   0   -   -   -   -   Included in background growth     387   36   RESIDENTIAL   237 BERGEN ST   -2   0   -   -   -   -     Included in background growth     387   36   RESIDENTIAL   234 BERGEN ST   -2   0   -   -   -   -     Included in background growth     387   36   RESIDENTIAL   234 BERGEN ST   -2   0   -   -   -							-		-		
196											
196   45   RESIDENTIAL   233 BERGEN ST   -1   742   -   -   -   -     Included in background growth     196   47   RESIDENTIAL   229 BERGEN ST   -2   1,040   -   -   -     Included in background growth     196   63   RESIDENTIAL   203 BERGEN ST   1   1,472   -   -   -     Included in background growth     196   136   RESIDENTIAL   230 BERGEN ST   0   0   -   -                         196   136   RESIDENTIAL   250 DEAN ST   0   0   -   -                         269   7501   RESIDENTIAL   110 LIVINGSTON ST   0   -247   -   -                             278   1   RESIDENTIAL   237 PACIFIC ST   3   5,512   0   1,614   0   3								1			
196   47   RESIDENTIAL   229 BERGEN ST   -2   1,040   -   -   -   -     Included in background growth     196   63   RESIDENTIAL   203 BERGEN ST   1   1,472   -   -   -     Included in background growth     196   136   RESIDENTIAL   250 DEAN ST   0   0   -   -   -       Included in background growth     196   136   RESIDENTIAL   10 LIVINGSTON ST   0   0   -   -   -											
196   63   RESIDENTIAL   203 BERGEN ST   1   1,472   -   -   -   -     Included in background growth     196   136   RESIDENTIAL   250 DEAN ST   0   0   -   -   -							-		-		
269   7501   RESIDENTIAL   110 LIVINGSTON ST   0   -247   -   -   -   -     Included in background growth	196	63	RESIDENTIAL	203 BERGEN ST	1	1,472					Included in background growth
278         1         RESIDENTIAL         237 PACIFIC ST         3         5,512         0         1,614         0         3         Included in traffic and parking analysis           279         1         BUSINESS         35 DEAN ST         0         0         -         -         -         Included in background growth           279         37         ASSEMBLY         96 BOERUM PL         0         0         -         -         -         Included in background growth           385         14         RESIDENTIAL         92 BERGEN ST         -1         110         -         -         -         Included in background growth           386         21         RESIDENTIAL         150 BERGEN ST         -1         582         -         -         -         Included in background growth           386         14         RESIDENTIAL         150 BERGEN ST         -1         582         -         -         -         Included in background growth           387         15         RESIDENTIAL         168 BERGEN ST         -2         0         -         -         -         Included in background growth           387         36         RESIDENTIAL         204 BERGEN ST         -2         0         -											
279         1         BUSINESS         35 DEAN ST         0         0         -         -         -         -         Included in background growth           279         37         ASSEMBLY         96 BOERUM PL         0         0         -         -         -         Included in background growth           385         14         RESIDENTIAL         92 BERGEN ST         -1         110         -         -         -         Included in background growth           386         14         RESIDENTIAL         150 BERGEN ST         -1         582         -         -         -         Included in background growth           386         23         RESIDENTIAL         168 BERGEN ST         -2         0         -         -         -         Included in background growth           387         15         RESIDENTIAL         206 BERGEN ST         2         1,619         -         -         -         Included in background growth           387         36         RESIDENTIAL         244 BERGEN ST         -2         0         -         -         -         Included in background growth           387         52         RESIDENTIAL         237A WYCKOFF ST         -5         116         -         -											
279         37         ASSEMBLY         96 BOERUM PL         0         0         -         -         -         -         Included in background growth           385         14         RESIDENTIAL         92 BERGEN ST         -1         910         -         -         -         -         Included in background growth           386         21         RESIDENTIAL         1100 BERGEN ST         -1         963         -         -         -         -         Included in background growth           386         14         RESIDENTIAL         150 BERGEN ST         -1         582         -         -         -         Included in background growth           387         15         RESIDENTIAL         168 BERGEN ST         -2         0         -         -         -         Included in background growth           387         36         RESIDENTIAL         206 BERGEN ST         -2         0         -         -         -         Included in background growth           387         36         RESIDENTIAL         244 BERGEN ST         -2         0         -         -         -         Included in background growth           387         52         RESIDENTIAL         237A WYCKOFF ST         -5         1							-	-	-	-	
385         21         RESIDENTIAL         106 BERGEN ST         -1         963         -         -         -         -         Included in background growth           386         14         RESIDENTIAL         150 BERGEN ST         -1         582         -         -         -         -         Included in background growth           386         23         RESIDENTIAL         168 BERGEN ST         -2         0         -         -         -         Included in background growth           387         15         RESIDENTIAL         206A BERGEN ST         2         1,619         -         -         -         Included in background growth           387         36         RESIDENTIAL         244 BERGEN ST         -2         0         -         -         -         Included in background growth           387         52         RESIDENTIAL         247 RESIDENTIAL         237A WYCKOFF ST         -5         116         -         -         -         Included in background growth           389         47         RESIDENTIAL         51 ST MARKS PL         2         1,835         -         -         -         -         Included in background growth           391         55         RESIDENTIAL         345 WA											Included in background growth
386         14         RESIDENTIAL         150 BERGEN ST         -1         582         -         -         -         -         Included in background growth           386         23         RESIDENTIAL         168 BERGEN ST         -2         0         -         -         -         -         Included in background growth           387         15         RESIDENTIAL         206A BERGEN ST         2         1,619         -         -         -         Included in background growth           387         36         RESIDENTIAL         244 BERGEN ST         -2         0         -         -         -         -         Included in background growth           387         52         RESIDENTIAL         237A WYCKOFF ST         -5         116         -         -         -         Included in background growth           389         47         RESIDENTIAL         51 ST MARKS PL         2         1,835         -         -         -         Included in background growth           391         55         RESIDENTIAL         345 WARREN ST         1         1,556         -         -         -         -         Included in background growth								1			
386   23   RESIDENTIAL   168 BERGEN ST   -2   0   -   -   -   -   Included in background growth											
387         15         RESIDENTIAL         206A BERGEN ST         2         1,619         -         -         -         -         Included in background growth           387         36         RESIDENTIAL         244 BERGEN ST         -2         0         -         -         -         Included in background growth           387         52         RESIDENTIAL         237A WYCKOFF ST         -5         116         -         -         -         Included in background growth           389         47         RESIDENTIAL         51 ST MARKS PL         2         1,835         -         -         -         Included in background growth           391         55         RESIDENTIAL         345 WARREN ST         1         1,556         -         -         -         -         Included in background growth							-	-	-		
387         52         RESIDENTIAL         237A WYCKOFF ST         -5         116         -         -         -         -         Included in background growth           389         47         RESIDENTIAL         51 ST MARKS PL         2         1,835         -         -         -         -         Included in background growth           391         55         RESIDENTIAL         345 WARREN ST         1         1,556         -         -         -         -         Included in background growth	387	15	RESIDENTIAL	206A BERGEN ST	2	1,619					Included in background growth
389         47         RESIDENTIAL         51 ST MARKS PL         2         1,835         -         -         -         -         Included in background growth           391         55         RESIDENTIAL         345 WARREN ST         1         1,556         -         -         -         -         Included in background growth								1			
391 55 RESIDENTIAL 345 WARREN ST 1 1,556 Included in background growth											
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							-	-	-	-	

				Net Incremental	Net Incremental	Residential		ĺ	On-Site Parking	
Block	Lot	Project Type	Address	Units	Floor Area (sf)	(du)	Retail (sf)	Office (sf)	Spaces	Assumptions
393	58	RESIDENTIAL	451 WARREN ST	1	1,046	-	-	-	-	Included in background growth
393	60	RESIDENTIAL	447 WARREN ST	-1	263	-	-	-	-	Included in background growth
395	3	RESIDENTIAL	8 ST MARK'S PL	14	26,956	14	485	0	0	Included in traffic and parking analysis
399	30	RESIDENTIAL	492 WARREN ST	-2	1,136	-	-	-	-	Included in background growth
928	7503	RESIDENTIAL	393 DEAN ST	0	0	-	-	-	-	Included in background growth
928	7503	RESIDENTIAL	391 DEAN ST	0	0	-	-	-	-	Included in background growth
2034	134	RESIDENTIAL	112 ST EDWARDS ST	146	112,955	146	0	0	0	Included in traffic and parking analysis
2059	1	EDUCATIONAL	4 METROTECH CTR	0	0	-	-	-	-	Included in background growth
2059	1	BUSINESS	4 METROTECH CTR	0	0	-	-	-	-	Included in background growth
2061	101	RESIDENTIAL	218 MYRTLE AVE	0	0	-	-	-	-	Included in background growth
2062	23	RESIDENTIAL	112 FLEET PL	20	24,111	20	0	0	2	Included in traffic and parking analysis
2062	23	RESIDENTIAL	112 FLEET PL	20	24,111	20	0	0	2	Included in traffic and parking analysis
2068	117	INSTITUTIONAL	140 ST EDWARDS ST	0	0	-	-	-	-	Included in background growth
2085	1	EDUCATIONAL	61 DEKALB AVE	0	0	476	0	183,530	564	Included in traffic and parking analysis
2089	47	RESIDENTIAL	226 CARLTON AVE	-2	0	-	-	-	-	Included in background growth
2095	45	ASSEMBLY	651 FULTON ST	0	4,229	-	-	-	-	Included in background growth
2095	45	ASSEMBLY	651 FULTON ST	0	0	-	-	-	-	Included in background growth
2096	14	RESIDENTIAL	30 ST FELIX ST	0	0	-	-	-	-	Included in background growth
2096	41	RESIDENTIAL	22 ST FELIX ST	1	1,884	-	-	-	-	Included in background growth
2097	39	RESIDENTIAL	118 DEKALB AVE	0	0	-	-	-	-	Included in background growth
2097	49	RESIDENTIAL	22 FORT GREENE PL	0	320	-	-	-	-	Included in background growth
2097	50	RESIDENTIAL	24 FORT GREENE PL	-1	-179	-	-	-	-	Included in background growth
2097	53	RESIDENTIAL	30 FORT GREENE PL	2	3,400	2	0	0	0	Included in traffic and parking analysis
2097	53	RESIDENTIAL	30 FORT GREENE PL	2	3,400	2	0	0	0	Included in traffic and parking analysis
2098	83	RESIDENTIAL	80 S ELLIOTT PL	0	1,080	-	-	-	-	Included in background growth
2099	34	RESIDENTIAL	13 S ELLIOTT PL	0	0	-	-	-	-	Included in background growth
2099	55	RESIDENTIAL	26 S PORTLAND AVE	-2	0	-	-	-	-	Included in background growth
2099	7501	ASSEMBLY	87 LAFAYETTE AVE	0	0	-	-	-	-	Included in background growth
2100	11	RESIDENTIAL	45 S PORTLAND AVE	0	0	-	-	-	-	Included in background growth
2100	41	RESIDENTIAL	6 S OXFORD ST	-7	0	-	-	-	-	Included in background growth
2100	64	RESIDENTIAL	52 S OXFORD ST	0	0	-	-	-	-	Included in background growth
2101	1	RESIDENTIAL	73 S OXFORD ST	0	0	-	-	-	-	Included in background growth
2101	46	RESIDENTIAL	228 CUMBERLAND ST	0	0	-	-	-	-	Included in background growth
2101	47	RESIDENTIAL	230 CUMBERLAND ST	0	302	-	-	-	-	Included in background growth
2106	29	RESIDENTIAL	1 FLATBUSH AVE	183	142,498	183	19,140	0	0	Included in traffic and parking analysis
2107	36	RESIDENTIAL	15 LAFAYETTE AVE	123	651,408	123	2,622	16,498	0	Included in traffic and parking analysis
2112	51	RESIDENTIAL	130 FORT GREENE PL	0	0	-	-	-	-	Included in background growth
2113	8	RESIDENTIAL	133 FORT GREENE PL	-2	-126	-	-	-	-	Included in background growth
2114	4	RESIDENTIAL	121 S ELLIOTT PL	-2	0	-	-	-	-	Included in background growth