A. INTRODUCTION

This chapter provides a discussion of the potential impacts of new vehicle trips associated with the proposed project on the local street network and at key intersections in the study area as well as the effect on parking conditions in the area. The project's potential impacts to transit and pedestrian facilities are described in Chapter 14. Figure 13-1 shows the traffic study area.

PRINCIPAL CONCLUSIONS

Analysis results show that the proposed project would result in significant adverse traffic impacts at 4, 4, 4, and 11 intersections during the weekday AM, midday, PM and Saturday midday peak hours, respectively, in 2010, and at 9, 8, 10, and 15 intersections during the weekday AM, midday, PM and Saturday midday peak hours, respectively, in 2015. There would be no significant adverse parking impacts. Mitigation measures, where appropriate, are described in Chapter 19, "Mitigation."

B. METHODOLOGY

OVERVIEW

The planning for a transportation impact study begins with understanding the travel characteristics associated with the proposed project's various components and the roadway network and regional transportation systems surrounding the project area. Depending on the size and anticipated trip generation of the proposed project, various transportation elements may need to be evaluated quantitatively. The determination of analysis needs for projects in New York City is based on guidance outlined in the *City Environmental Quality Review (CEQR) Technical Manual*. Impacts on vehicular flow, parking supply and demand, and vehicle-pedestrian safety are evaluated as part of the "Traffic and Parking" section of an EIS, while those on transit services and pedestrian flow are examined in the "Transit and Pedestrians" section.

Once the analysis needs are determined, a study area is developed for each of the specific transportation elements. At the same time, the appropriate analysis time periods would be determined. Typically, the weekday AM, midday and PM peak hours are selected as representative peak periods for traffic analysis. However, based on the types of proposed uses, these analysis periods could also include a late evening or weekend peak hour. To provide the basic parameters for analysis, baseline traffic, parking, transit and pedestrian data, along with physical and operational characteristics, are collected for use in developing the baseline conditions, often referred to as the "existing conditions." Once the basic analysis parameters have been established, operating levels for each of the transportation analysis areas would be determined.

The future without the proposed action, or the "No Build conditions," builds on the existing conditions analysis by incorporating background growth, other nearby projects expected to be completed, and any anticipated changes in the transportation network, if any. Again, operating levels would be computed. The analysis results would become the future baseline onto which projected increments associated with the proposed project would be layered to formulate the "Build conditions." If the future Build analyses conclude that the proposed project would result in significant transportation-related adverse impacts, as defined by the *CEQR Technical Manual*, mitigation measures would be explored to alleviate these impacts.

TRAVEL DEMAND PROJECTIONS

TRIP GENERATION PROCEDURES

The approach used to determine trip generation is similar to that followed in most transportation impact studies under *CEQR Technical Manual* guidelines. That is, relevant sources were utilized to prepare specific estimates of the number of people that would be entering and exiting the various development program elements (station, office, retail, hotel, etc.). These estimates focus on peak periods when the maximum levels of activity would occur, thereby creating the greatest potential for impacts. The total number of daily person-trips (the number of entering and exiting people) is then converted into peak hour trips by applying the percent of the daily total occurring in individual hours of the day; this percentage of trips over time is called the temporal distribution. For the proposed project, examining the weekday morning, midday, and late afternoon peak hours and the Saturday midday peak hour conservatively encompasses those time periods when future activities attributed to the proposed project would be the greatest.

The estimates of people arriving and leaving during a peak hour are then further distributed to the various means of available transportation. This distribution is referred to as the modal split. For most land uses in this part of Manhattan, public transportation (specifically the Long Island Rail Road, New Jersey Transit, subway, bus, and PATH) is the predominant mode for trips to and from the area. However, during the midday, the vast majority of trips are made on foot, many of which are associated with local lunch hour trips. For trips made by automobiles or taxis, person-trip estimates are translated into vehicle trips by applying average vehicle occupancy rates in order to determine vehicle trips generated by each land use type.

Given the scale of the project and the interconnected character of the uses, trip estimates are adjusted to account for "linkages." This adjustment reflects the fact, for example, that employees in the office space, guests in the hotel, and riders from LIRR, NJ Transit, Amtrak, and the subway will in part be the source of shoppers for the retail space. This condition of linkage between the uses is accounted for by reducing the number of trips to a given program element. The purpose of this adjustment, which varies depending upon the character of the use, is to avoid double-counting people who visit more than one of the components on the project site.

A variety of sources were consulted in preparing these trip generation estimates, including standard references such as the *CEQR Technical Manual* and Boris Pushkarev and Jeffrey Zupan's *Urban Space for Pedestrians*. These sources provide generic guidelines for uses such as office, where the number of trips and the distribution through the day is fairly standardized and not a function of location. To further refine the estimates and to develop modal split patterns, which vary by location and are dependent on the services available in a specific area, a number of relevant studies, particularly *the 2001 No. 7 Subway Extension—Hudson Yards Rezoning and Development Program Final Generic Environmental Impact Statement (Hudson Yards FGEIS)*, were consulted, along with *2000 U.S. Census of Population and Housing* data, as described later

in this section. Finally, for the transit components, ridership projections were obtained from the respective agencies.

As detailed below, the trip generation estimates show the future demand with and without the proposed action for various components of the project site. Traffic volume projections follow standard procedures for a development project in New York City, in accordance with the guidelines presented in the *CEQR Technical Manual*.

TRIP GENERATION ESTIMATES

Trip rates were developed for specific land uses, as discussed below and summarized in Tables 13-1 and 13-2.

United States Postal Service (USPS) Use

Trips generated by the USPS use were estimated based on employee projections provided by the USPS. The modal split and vehicle occupancy rates for this use were calculated based on information from the *2000 U.S. Census of Population and Housing* reverse journey-to-work data. Delivery rates were taken from the *Hudson Yards FGEIS.*

Office Use

Estimates of trips generated by the office use were based on rates presented in the *Hudson Yards FGEIS* and the *Institute of Transportation Engineers (ITE): Trip Generation Manual 7th Edition.* The modal split and vehicle occupancy rates for the office use were based on *2000 U.S. Census of Population and Housing* reverse journey-to-work data.

Commercial Retail Use

Estimates of trips generated by the commercial retail use were based on rates presented in Pushkarev and Zupan's *Urban Space for Pedestrians* and the *Hudson Yards FGEIS.* A 25 percent linkage was assumed. The modal split and vehicle occupancy rates for this use were based on rates presented in the *Hudson Yards FGEIS*.

Transit Retail Use

Trips generated by the transit retail use were estimated based on rates presented in Pushkarev and Zupan's *Urban Space for Pedestrians* and the *Hudson Yards FGEIS.* An 87.5 percent linkage was assumed. The modal split and vehicle occupancy rates for the transit retail use were based on those presented in the *Hudson Yards FGEIS*.

Hotel Use

Trips generated by the hotel use were estimated based on trip rates and modal split presented in the *Hudson Yards FGEIS*. The vehicle occupancy rates for the hotel use were based on the *42nd Street Redevelopment FEIS*. Delivery rates were taken from *Characteristics of Urban Transportation Demand (USDOT).*

Banquet Use

Trips generated by the banquet use were estimated based on trip rates, modal split, and vehicle occupancy rates presented in the *Puck Building EAS (1992).* Delivery rates were taken from the *Coliseum Redevelopment FSEIS (1996)*. For a conservative analysis, a major event was assumed to occur during each of the analysis time periods, although peak event travel typically would not overlap with the peak periods considered for analysis.

Table 13-1
Travel Demand Assumptions

Daily Trip Rates	USPS (1)	Office (3,4)	Commercial Retail (3,5)	Transit Retail (3,6)	Hotel (3,7)
Weekday Person Trips	**500**	**18**	**154**	**26**	**9.4**
Weekday Truck Trips	**-**	**0.15**	**0.35**	**0.35**	**0.06**
Saturday Person Trips	**200**	**3.9**	**366**	**61**	**9.4**
Saturday Truck Trips	**-**	**0.01**	**0.02**	**0.02**	**0.00**

All person trip rates are per 1,000 gsf, except for Hotel (per room) and USPS (number of employees). All truck trip rates are per 1,000 gsf.

Modal Split	USPS (1,2)		Office (2,3)		Commercial Retail (3)	Transit Retail (3)	Hotel (3)	
	AM/PM	**MD/Sat**	**AM/PM**	**MD/Sat**	**AM/MD/PM/ Sat**	**AM/MD/PM/ Sat**	**AM/PM/ Sat**	**MD**
Auto	**12.5%**	**0.0%**	**12.5%**	**2.0%**	**2.0%**	**2.0%**	**9.0%**	**8.0%**
Taxi	**1.5%**	**0.0%**	**1.5%**	**3.0%**	**3.0%**	**3.0%**	**18.0%**	**15.0%**
Subway	**58.0%**	**0.0%**	**58.0%**	**6.0%**	**6.0%**	**6.0%**	**24.0%**	**13.0%**
Bus	**10.5%**	**0.0%**	**10.5%**	**6.0%**	**6.0%**	**6.0%**	**3.0%**	**3.0%**
Commuter Rail	**11.1%**	**0.0%**	**11.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
Walk Only	**6.5%**	**100%**	**6.5%**	**83.0%**	**83.0%**	**83.0%**	**46.0%**	**61.0%**
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Vehicle Occupancy	USPS (2)	Office (2)	Commercial Retail (3)	Transit Retail (3)	Hotel (8)
Auto	**1.24**	**1.24**	**1.65**	**1.65**	**1.40**
Taxi/Black Car	**1.40**	**1.40**	**1.40**	**1.40**	**1.50**

All vehicle occupancy figures are persons per vehicle

Temporal Distribution	USPS (1)			Office (3,4)			Commercial Retail (3)			Transit Retail (3)			Hotel (3,7)		
	Total	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**
AM Peak Hour	**86.8%**	**84.6%**	**15.4%**	**11.8%**	**96.0%**	**4.0%**	**3.1%**	**50.0%**	**50.0%**	**3.1%**	**50.0%**	**50.0%**	**7.5%**	**39.0%**	**61.0%**
Midday Peak Hour	**36.8%**	**100%**	**100%**	**15.0%**	**48.0%**	**52.0%**	**19.0%**	**50.0%**	**50.0%**	**19.0%**	**50.0%**	**50.0%**	**14.4%**	**54.0%**	**46.0%**
PM Peak Hour	**86.8%**	**15.4%**	**84.6%**	**13.7%**	**5.0%**	**95.0%**	**9.6%**	**50.0%**	**50.0%**	**9.6%**	**50.0%**	**50.0%**	**12.8%**	**65.0%**	**35.0%**
Saturday Peak Hour	**8.5%**	**100%**	**100%**	**17.0%**	**54.0%**	**46.0%**	**13.9%**	**50.0%**	**50.0%**	**13.9%**	**50.0%**	**50.0%**	**8.8%**	**56.0%**	**44.0%**

Delivery Trip Distribution (In/Out)	USPS (3)	Office (3)	Commercial Retail (3)	Transit Retail (3)	Hotel (3)
AM Peak Hour	**9.6%**	**9.6%**	**7.7%**	**7.7%**	**12.2%**
Midday Peak Hour	**11.0%**	**11.0%**	**11.0%**	**11.0%**	**8.7%**
PM Peak Hour	**1.0%**	**1.0%**	**1.0%**	**1.0%**	**1.0%**
Saturday Peak Hour	**1.0%**	**1.0%**	**1.0%**	**1.0%**	**2.0%**

Sources:

(1) ***USPS***
(2) ***2000 U.S. Census Reverse Journey-To-Work Data***
(3) ***Hudson Yards Rezoning and Development Program (2004)***
(4) ***Institute of Transportation Engineers: Trip Generation 7th Edition***
(5) ***Urban Space for Pedestrians – Pushkarev & Zupan; Assumes 25.0% linkage.***
(6) ***Urban Space for Pedestrians – Pushkarev & Zupan; Assumes 87.5% linkage.***
(7) ***Characteristics of Urban Transportation Demand***
(8) ***42nd Street Redevelopment FEIS***
(9) ***Coliseum Redevelopment FSEIS (1997)***
(10) ***Surveys conducted by AKRF, Inc. for Puck Building EAS February 1992; Modal split adjusted to account for proximity to transit.***
2000 Census Journey-To-Work Data
(11)

Table 13-1 (cont'd)
Travel Demand Assumptions

Daily Trip Rates	Banquet (9)	Residential (3,4)	Amtrak	LIRR	NJT
Weekday Person Trips	2,000	8.075	-	-	-
Weekday Truck Trips	0.35	0.03	-	-	-
Saturday Person Trips	2,000	8.326	-	-	-
Saturday Truck Trips	0.02	0.00	-	-	-

All person trip rates are per 1,000 gsf, except for Residential (per unit) and Banquet (per event). Transit trip rates are based on increments presented in Table 13-2. All truck trip rates are per 1,000 gsf.

Modal Split	Banquet (10)	Residential (11)	Amtrak		LIRR		NJT	
	AM/MD/PM/ Sat	AM/MD/PM/ Sat	AM/MD/PM/ Sat		AM/PM	MD/Sat	AM/PM	MD/Sat
			In	Out				
Auto	8.0%	5.0%	7.0%	7.0%	0.0%	0.0%	0.0%	0.0%
Taxi	31.0%	7.0%	40.0%	50.0%	2.0%	5.0%	2.0%	2.0%
Subway	35.0%	46.0%	30.0%	25.0%	52.0%	55.0%	52.0%	52.0%
Bus	10.0%	5.0%	10.0%	10.0%	18.0%	15.0%	18.0%	18.0%
Commuter Rail	5.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Walk Only	11.0%	35.0%	13.0%	8.0%	28.0%	25.0%	28.0%	28.0%
Total	100%	100%	100%	100%	100%	100%	100%	100%

Vehicle Occupancy	Banquet (10)	Residential (11)	Amtrak	LIRR	NJT
Auto	1.80	1.20	1.50	1.50	1.50
Taxi/Black Car	2.30	1.40	1.50	1.50	1.50

All vehicle occupancy figures are persons per vehicle

Temporal Distribution	Banquet (10)			Residential (3,4)			Amtrak			LIRR			NJT		
	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out
AM Peak Hour	79.0%	100%	0.0%	9.1%	15.0%	85.0%	-	-	-	-	-	-	-	-	-
Midday Peak Hour	79.0%	100%	0.0%	4.7%	50.0%	50.0%	-	-	-	-	-	-	-	-	-
PM Peak Hour	79.0%	100%	0.0%	10.7%	70.0%	30.0%	-	-	-	-	-	-	-	-	-
Saturday Peak Hour	79.0%	100%	0.0%	8.0%	43.0%	57.0%	-	-	-	-	-	-	-	-	-

Sources:

(1) *USPS*
(2) *2000 U.S. Census Reverse Journey-To-Work Data*
(3) *Hudson Yards Rezoning and Development Program (2004)*
(4) *Institute of Transportation Engineers: Trip Generation 7th Edition*
(5) *Urban Space for Pedestrians – Pushkarev & Zupan; Assumes 25.0% linkage.*
(6) *Urban Space for Pedestrians – Pushkarev & Zupan; Assumes 87.5% linkage.*
(7) *Characteristics of Urban Transportation Demand*
(8) *42nd Street Redevelopment FEIS*
(9) *Coliseum Redevelopment FSEIS (1997)*
(10) *Surveys conducted by AKRF, Inc. for Puck Building EAS February 1992; Modal split adjusted to account for proximity to transit.*
(11) *2000 Census Journey-To-Work Data*

Table 13-1 (cont'd)
Travel Demand Assumptions

Delivery Trip Distribution (In/Out)	Banquet (9)	Residential (3)	Amtrak	LIRR	NJT
AM Peak Hour	7.9%	12.2%	7.7%	12.2%	7.9%
Midday Peak Hour	14.7%	8.7%	11.0%	8.7%	14.7%
PM Peak Hour	1.1%	1.0%	1.0%	1.0%	1.1%
Saturday Peak Hour	14.7%	0.0%	1.0%	2.0%	14.7%

Sources:

(1) *USPS*
(2) *2000 U.S. Census Reverse Journey-To-Work Data*
(3) *Hudson Yards Rezoning and Development Program (2004)*
(4) *Institute of Transportation Engineers: Trip Generation 7th Edition*
(5) *Urban Space for Pedestrians – Pushkarev & Zupan; Assumes 25.0% linkage.*
(6) *Urban Space for Pedestrians – Pushkarev & Zupan; Assumes 87.5% linkage.*
(7) *Characteristics of Urban Transportation Demand*
(8) *42nd Street Redevelopment FEIS*
(9) *Coliseum Redevelopment FSEIS (1997)*
(10) *Surveys conducted by AKRF, Inc. for Puck Building EAS February 1992; Modal split adjusted to account for proximity to transit.*
(11) *2000 Census Journey-To-Work Data*

Table 13-2
Rail Road Uses-Incremental Ridership

Ridership Increments

Analysis Period and Use	Amtrak								LIRR							
	2010 Future without the Proposed Action		2010 Future with the Proposed Action		2015 Future without the Proposed Action		2015 Future with the Proposed Action		2010 Future without the Proposed Action		2010 Future with the Proposed Action		2015 Future without the Proposed Action		2015 Future with the Proposed Action	
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
AM Peak Hour	30	135	30	130	45	200	30	130	13,136	-524	-	-	13,761	-507	-	-
Midday Peak Hour	40	35	35	35	55	55	35	35	766	656	-	-	805	690	-	-
PM Peak Hour	140	30	135	30	205	40	140	30	1,048	10,523	-	-	1,103	11,046	-	-
Saturday Peak Hour	40	35	35	35	55	55	35	35	260	247	-	-	273	260	-	-

Ridership Increments

Analysis Period and Use	NJT							
	2010 Future without the Proposed Action		2010 Future with the Proposed Action		2015 Future without the Proposed Action		2015 Future with the Proposed Action	
	In	Out	In	Out	In	Out	In	Out
AM Peak Hour	11,579	1,180	50	0	11,579	1,180	70	0
Midday Peak Hour	1,136	1,471	0	0	1,136	1,471	0	0
PM Peak Hour	621	3,001	0	50	621	3,001	0	70
Saturday Peak Hour	1,136	1,471	0	0	1,136	1,471	0	0

Note: Ridership estimates are projected based on information provided by the corresponding agency.

Residential Use

Trips generated by the residential use were estimated based on trip rates and modal split presented in the *Hudson Yards FGEI* and the *Institute of Transportation Engineers (ITE): Trip Generation Manual 7th Edition*. The vehicle occupancy rates for this use were based on *2000 U.S. Census of Population and Housing* journey-to-work data.

Amtrak

Future Amtrak ridership projections were estimated based on ridership information provided by Amtrak for 2002, 2010 No Build, and 2015 No Build. A daily ridership increase of 5 percent of the No Build ridership was assumed to estimate the 2010 and 2015 Build increment. The assumption of a 5 percent increment in ridership can be attributed to the new, state-of-the-art intermodal train facility, and is based on Amtrak's experience with the development of other similar facilities. Amtrak's projected ridership increases for both the Future without the Proposed Action and the Future with the Proposed Action scenarios for both 2010 and 2015 are presented in Table 13-2.

Long Island Rail Road (LIRR)

Future daily LIRR ridership projections were estimated based on current ridership information for 2004 and projected AM inbound peak hour ridership for 2010 and 2020 provided by LIRR. In order to present a conservative analysis, 2020 ridership characteristics were assumed for the 2015 analysis year. Future 2010 and 2015 ridership for all other peak periods were based on data provided by LIRR with the corresponding analysis year's projected AM inbound ridership. LIRR's projected ridership increases for both the Future without the Proposed Action and the Future with the Proposed Action scenarios for both 2010 and 2015 are presented in Table 13-2.

New Jersey Transit (NJT)

Future daily NJT ridership projections were estimated for the Future without the Proposed Action, based on current morning and evening peak ridership information for 2000 and projected morning inbound ridership for 2015 provided by NJT. In order to present a conservative analysis, 2015 conditions were assumed for both 2010 and 2015 analysis years. Future 2010 and 2015 ridership for the other peak analysis periods were extrapolated based on data provided by NJT. The Future with the Proposed Action's build increment for both the 2010 and 2015 analysis years was provided by NJT. NJT's projected ridership increases for both the Future without the Proposed Action and the Future with the Proposed Action scenarios for both 2010 and 2015 are presented in Table 13-2.

FUTURE WITHOUT THE PROPOSED ACTION

Typically, No Build projects within a ½-mile from a project site are incorporated into the future No Build conditions. For the proposed action, since the traffic study area defined below encompasses intersections within a large area in midtown Manhattan, No Build projects beyond the typical ½-mile were included and are shown in Figures 2-1, 2-2, and 2-3.

No Build Projects

Specific No Build projects included in the analysis are discussed below.

- Hudson Yards Rezoning: Recently approved, by 2025 this rezoning is expected to ultimately result in a projected 28 million square feet of office space, 12.6 million square feet of residential

space, 1.5 million square feet of hotel space, and 700,000 square feet of retail space. Additionally, construction and operation of an extension of the No. 7 Subway line to serve the area, an expansion, renovation and modernization of the Jacob K. Javits Convention Center, and new accommodations for new multi-agency facilities are planned to be located on the far west side of Manhattan bounded by East 53rd Street, East 28th Street, Seventh and Eighth Avenues, and the Hudson River. A portion of the No Build sites analyzed for the Hudson Yards Rezoning are anticipated to be completed on or before the analyses years of 2010 and 2015.

- Redevelopment of the Farley Post Office Building: Absent the proposed action, development on the project site is expected to be completed by 2010 and would consist of approximately 248,000 square feet of commercial retail uses, approximately 436,000 square feet of commercial office space, and approximately 650,100 square feet of USPS use. Table 13-3 summarizes the total trips generated in the Future Without the Proposed Action: 2,544, 8,801, 5,175, and 12,939 person trips and 233, 413, 348, and 570 vehicle trips during the weekday AM, midday, PM, and Saturday peak hours, respectively.

In addition to background projects expected to be completed in the study area, due to the proposed project's proximity to one of New York City's major transportation hubs, the expected increase in trips made by transit riders accessing the area also needs to be considered. Absent the proposed project, there are expected to be large ridership increases on services which currently operate out of the existing Pennsylvania Station. These services include Amtrak, LIRR, and NJT. As mentioned earlier, these increments were based on current ridership information and ridership projections provided by the various transit agencies, as summarized in Table 13-2.

2010 Future without the Proposed Action Transit Condition

Table 13-4 summarizes the total trips generated in the 2010 Future without the Proposed Action for all the transit related uses: 25,536, 4,104, 15,363, and 3,189 person trips and 683, 243, 446, and 199 vehicle trips during the weekday AM, midday, PM, and Saturday peak hours, respectively.

2015 Future without the Proposed Action Transit Condition

Table 13-5 summarizes the total trips generated in the 2015 Future without the Proposed Action for all the transit related uses: 26,258, 4,212, 16,016, and 3,250 person trips and 711, 268, 489, and 222 vehicle trips during the weekday AM, midday, PM, and Saturday peak hours, respectively.

FUTURE WITH THE PROPOSED ACTION

The projection of future trips associated with the proposed project involved an intricate process of determining the "Reasonable Worst-Case Development Scenario," developing trip rates for various Moynihan Station uses and components, and interpreting travel characteristics through census information and review of other approved documents. The proposed project is expected to be completed in two phases. The first phase is expected to be completed in 2010. The second phase has two development options including a 1-million-zoning-square-foot (zsf) office tower to be built above the Farley complex (completed by 2015) or a 1.1 million gross-square-foot primarily residential or mixed-use development to be constructed on the Development Transfer Site (to be completed by 2010, concurrent with Phase I).

Table 13-3
Trip Generation-USPS, Office, and Retail Uses
2010 Future without the Proposed Action

Person Trips by Mode

Analysis Period and Use	Auto		Taxi		Subway		Bus		Comm Rail		Walk Only		Total		
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
AM Peak Hour															
USPS	46	8	6	1	213	39	39	7	41	7	22	5	367	67	434
Office	111	5	13	1	516	21	93	4	99	4	57	2	889	37	926
Commercial	12	12	18	18	36	36	36	36	0	0	490	490	592	592	1,184
Retail	169	25	37	20	765	96	168	47	140	11	569	497	1,848	696	2,544
Total															
Midday Peak															
Hour	0	0	0	0	0	0	0	0	0	0	184	184	184	184	368
USPS	11	12	17	18	34	37	34	37	0	0	469	508	565	612	1,177
Office	73	73	109	109	218	218	218	218	0	0	3,010	3,010	3,628	3,628	7,256
Commercial	84	85	126	127	252	255	252	255	0	0	3,663	3,702	4,377	4,424	8,801
Retail															
Total															
PM Peak Hour															
USPS	8	46	1	6	39	213	7	39	7	41	5	22	67	367	434
Office	7	128	1	15	31	592	6	107	6	113	3	66	54	1,021	1,075
Commercial	37	37	55	55	110	110	110	110	0	0	1,521	1,521	1,833	1,833	3,666
Retail	52	211	57	76	180	915	123	256	13	154	1,529	1,609	1,954	3,221	5,175
Total															
Saturday Peak															
Hour	0	0	0	0	0	0	0	0	0	0	17	17	17	17	34
USPS	3	3	5	4	9	8	9	8	0	0	130	110	156	133	289
Office	126	126	189	189	378	378	378	378	0	0	5,237	5,237	6,308	6,308	12,616
Commercial	129	129	194	193	387	386	387	386	0	0	5,384	5,364	6,481	6,458	12,939
Retail															
Total															

Vehicle Trips by Type

Analysis Period and Use	Auto		Taxi		Delivery								Total		
	In	Out	In	Out	In	Out							In	Out	Total
AM Peak Hour															
USPS	37	6	4	1	0	0							41	7	8
Office	90	4	9	1	6	6							105	11	116
Commercial	7	7	13	13	7	7							27	27	54
Retail	134	17	28	28	13	13							175	58	233
Total *															
Midday Peak															
Hour	0	0	0	0	0	0							0	0	0
USPS	9	10	12	13	7	7							28	30	58
Office	44	44	78	78	10	10							132	132	264
Commercial	53	54	136	136	17	17							206	207	413
Retail															
Total *															
PM Peak Hour															
USPS	6	37	1	4	0	0							7	41	48
Office	6	103	1	11	1	1							8	115	123
Commercial	22	22	39	39	1	1							62	62	124
Retail	34	162	74	74	2	2							110	238	348
Total *															
Saturday Peak															
Hour	0	0	0	0	0	0							0	0	0
USPS	2	2	4	3	0	0							6	5	11
Office	76	76	135	135	0	0							211	211	422
Commercial	78	78	207	207	0	0							285	285	570
Retail															
Total *															

Note: * Total vehicle trips include balanced taxi trips, in accordance with the CEQR Technical Manual.

Table 13-4
Trip Generation-Transit Uses
2010 Future without the Proposed Action

Person Trips by Mode

Analysis Period and Use	Auto		Taxi		Subway		Bus		Walk Only		Total		
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
AM Peak Hour													
Amtrak	2	9	12	68	9	34	3	14	4	10	30	135	165
LIRR	0	0	263	-10	6,831	-272	2,364	-94	3,678	-148	13,136	-524	12,612
NJT	0	0	232	24	6,021	614	2,084	212	3,242	330	11,579	1,180	12,759
Total	**2**	**9**	**507**	**82**	**12,861**	**376**	**4,451**	**132**	**6,924**	**192**	**24,745**	**791**	**25,536**
Midday Peak Hour													
Amtrak	3	2	16	18	12	9	4	4	5	2	40	35	75
LIRR	0	0	38	33	421	361	115	98	192	164	766	656	1,422
NJT	0	0	57	74	625	809	170	221	284	367	1,136	1,471	2,607
Total	**3**	**2**	**111**	**125**	**1,058**	**1,179**	**289**	**323**	**481**	**533**	**1,942**	**2,162**	**4,104**
PM Peak Hour													
Amtrak	10	2	56	15	42	8	14	3	18	2	140	30	170
LIRR	0	0	21	210	545	5,472	189	1,894	293	2,947	1,048	10,523	11,571
NJT	0	0	12	60	323	1,561	112	540	174	840	621	3,001	3,622
Total	**10**	**2**	**89**	**285**	**910**	**7,041**	**315**	**2,437**	**485**	**3,789**	**1,809**	**13,554**	**15,363**
Saturday Peak Hour													
Amtrak	3	2	16	18	12	9	4	4	5	2	40	35	75
LIRR	0	0	13	12	143	136	39	37	65	62	260	247	507
NJT	0	0	57	74	625	809	170	221	284	367	1,136	1,471	2,607
Total	**3**	**2**	**86**	**104**	**780**	**954**	**213**	**262**	**354**	**431**	**1,436**	**1,753**	**3,189**

Vehicle Trips by Type

Analysis Period and Use	Auto		Taxi		Total		
	In	Out	In	Out	In	Out	Total
AM Peak Hour							
Amtrak	1	6	8	45	9	51	60
LIRR	0	0	175	-7	175	-7	168
NJT	0	0	155	16	155	16	171
Total *	**1**	**6**	**338**	**338**	**339**	**344**	**683**
Midday Peak Hour							
Amtrak	2	1	11	12	13	13	26
LIRR	0	0	25	22	25	22	47
NJT	0	0	38	49	38	49	87
Total *	**2**	**1**	**120**	**120**	**122**	**121**	**243**
PM Peak Hour							
Amtrak	7	1	37	10	44	11	55
LIRR	0	0	14	140	14	140	154
NJT	0	0	8	40	8	40	48
Total *	**7**	**1**	**219**	**219**	**226**	**220**	**446**
Saturday Peak Hour							
Amtrak	2	1	11	12	13	13	26
LIRR	0	0	9	8	9	8	17
NJT	0	0	38	49	38	49	87
Total *	**2**	**1**	**98**	**98**	**100**	**99**	**199**

Note: * Total vehicle trips includes taxi balancing. Taxi trips were not balanced by use but by scenario.

Table 13-5
Trip Generation-Transit Uses
2015 Future without the Proposed Action

Person Trips by Mode

Analysis Period and Use	Auto		Taxi		Subway		Bus		Walk Only		Total		
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
AM Peak Hour													
Amtrak	3	14	18	100	14	50	5	20	5	16	45	200	245
LIRR	0	0	275	-10	7,156	-264	2,477	-91	3,853	-142	13,761	-507	13,254
NJT	0	0	232	24	6,021	614	2,084	212	3,242	330	11,579	1,180	12,759
Total	**3**	**14**	**525**	**114**	**13,191**	**400**	**4,566**	**141**	**7,100**	**204**	**25,385**	**873**	**26,258**
Midday Peak Hour													
Amtrak	4	4	22	28	17	14	6	6	6	3	55	55	110
LIRR	0	0	40	35	443	380	121	104	201	171	805	690	1,495
NJT	0	0	57	74	625	809	170	221	284	367	1,136	1,471	2,607
Total	**4**	**4**	**119**	**137**	**1,085**	**1,203**	**297**	**331**	**491**	**541**	**1,996**	**2,216**	**4,212**
PM Peak Hour													
Amtrak	14	3	82	20	62	10	21	4	26	3	205	40	245
LIRR	0	0	22	221	574	5,744	199	1,988	308	3,093	1,103	11,046	12,149
NJT	0	0	12	60	323	1,561	112	540	174	840	621	3,001	3,622
Total	**14**	**3**	**116**	**301**	**959**	**7,315**	**332**	**2,532**	**508**	**3,936**	**1,929**	**14,087**	**16,016**
Saturday Peak Hour													
Amtrak	4	4	22	28	17	14	6	6	6	3	55	55	110
LIRR	0	0	14	13	150	143	41	39	68	65	273	260	533
NJT	0	0	57	74	625	809	170	221	284	367	1,136	1,471	2,607
Total	**4**	**4**	**93**	**115**	**792**	**966**	**217**	**266**	**358**	**435**	**1,464**	**1,786**	**3,250**

Vehicle Trips by Type

Analysis Period and Use	Auto		Taxi			Total		
	In	Out	In	Out		In	Out	Total
AM Peak Hour								
Amtrak	2	9	12	67		14	76	90
LIRR	0	0	183	-7		183	-7	176
NJT	0	0	155	16		155	16	171
Total *	**2**	**9**	**350**	**350**		**352**	**359**	**711**
Midday Peak Hour								
Amtrak	3	3	15	19		18	22	40
LIRR	0	0	27	23		27	23	50
NJT	0	0	38	49		38	49	87
Total *	**3**	**3**	**131**	**131**		**134**	**134**	**268**
PM Peak Hour								
Amtrak	9	2	55	13		64	15	79
LIRR	0	0	15	147		15	147	162
NJT	0	0	8	40		8	40	48
Total *	**9**	**2**	**239**	**239**		**248**	**241**	**489**
Saturday Peak Hour								
Amtrak	3	3	15	19		18	22	40
LIRR	0	0	9	9		9	9	18
NJT	0	0	38	49		38	49	87
Total *	**3**	**3**	**108**	**108**		**111**	**111**	**222**

Note: * Total vehicle trips include balanced taxi trips, in accordance with the *CEQR Technical Manual*.

Phase I Reasonable Worst-Case Development Scenario

As described in Chapter 1, "Project Description," the first phase of the new development, to be completed in 2010, would facilitate five different above-grade uses, including transit-related retail, commercial retail, hotel, and banquet use as well as USPS facilities. Below-grade,

additional space would be developed to expand existing transit services. In total, Phase I includes approximately 1.4 million gsf of development.

Based on trip generation rates developed for each of the possible development components, iterations of estimated future trips for different combinations of space allocation were conducted to determine a "Worst-Case Transportation Scenario" for impact assessment of transportation-related elements.

The Reasonable Worst Case Development Scenario (RWCDS) was determined to include approximately 86,000 square feet of transit-related retail uses, approximately 518,100 square feet of commercial retail uses, approximately 125,000 square feet of hotel use (125 rooms), approximately 35,000 square feet of banquet facilities and approximately 265,000 square feet of USPS space. The proposed USPS space is expected to maintain current operations in the Future with the Proposed Action. Therefore, no new trips would be added to the traffic network.

Phase II Additional Development

The proposed Phase II development program is comprised of two scenarios: an overbuild to the Farley Complex to be completed in 2015 and a building constructed on the Development Transfer Site to be completed in 2010. The overbuild development would consist of approximately 1,000,000 zsf of office space. There are two development options for the Development Transfer Site building. A primarily residential building on the Development Transfer Site would consist of approximately 120,000 square feet of commercial retail use and approximately 940,000 square feet of residential use (940 dwelling units). A mixed-use building on the Development Transfer Site would consist of approximately 120,000 square feet of commercial retail use, 630,000 square feet of residential use (630 dwelling units), and approximately 310,000 square feet of hotel use (310 hotel rooms). The mixed-use building, which would generate more trips than the primarily residential building and is therefore a more conservative scenario, was selected for analysis.

2010 Analysis

Table 13-6 summarizes the total trips generated in the Future With the Proposed Action for Phase I: 4,212, 17,333, 9,605, and 28,771 person trips and 632, 1,095, 794, and 1,505 vehicle trips during the weekday AM, midday, PM, and Saturday peak hours, respectively. With the proposed development in place, the expected on site no build development would not be undertaken. Therefore, trips generated by development expected to occur in the Future without the Proposed Action were net from the total trips presented in the summary table. Table 13-7 summarizes the net total trips expected to be generated in the Future with the Proposed Action, which are included in the analyses: 1,668, 8,532, 4,430, and 15,832 person trips and 399, 682, 446, and 935 vehicle trips during the weekday AM, midday, PM, and Saturday peak hours, respectively.

As shown in Table 13-8, the Phase II mixed-use Development Transfer Site building, also expected to be completed in 2010, is estimated to result in 1,252, 4,172, 2,691, and 6,780 person trips and 161, 286, 222, and 382 vehicle trips during the weekday AM, midday, PM, and Saturday peak hours, respectively.

Table 13-6
RWCDS Trip Generation-Retail, Hotel, and Banquet Uses
2010 Future with the Proposed Action

Person Trips by Mode

Analysis Period and Use	Auto		Taxi		Subway		Bus		Comm Rail		Walk Only		Total		
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
AM Peak Hour															
Transit Retail	1	1	1	1	2	2	2	2	0	0	29	29	35	35	70
Commercial Retail	25	25	37	37	74	74	74	74	0	0	1,027	1,027	1,237	1,237	2,474
Hotel	3	5	6	10	8	13	1	2	0	0	16	24	34	54	88
Banquet	126	0	490	0	553	0	158	0	79	0	174	0	1,580	0	1,580
Total	**155**	**31**	**534**	**48**	**637**	**89**	**235**	**78**	**79**	**0**	**1,246**	**1,080**	**2,886**	**1,326**	**4,212**
Midday Peak Hour															
Transit Retail	4	4	6	6	13	13	13	13	0	0	176	176	212	212	424
Commercial Retail	152	152	227	227	455	455	455	455	0	0	6,291	6,291	7,580	7,580	15,160
Hotel	7	6	14	12	12	10	3	2	0	0	55	48	91	78	169
Banquet	126	0	490	0	553	0	158	0	79	0	174	0	1,580	0	1,580
Total	**289**	**162**	**737**	**245**	**1,033**	**478**	**629**	**470**	**79**	**0**	**6,696**	**6,515**	**9,463**	**7,870**	**17,333**
PM Peak Hour															
Transit Retail	2	2	3	3	6	6	6	6	0	0	90	90	107	107	214
Commercial Retail	77	77	115	115	230	230	230	230	0	0	3,178	3,178	3,830	3,830	7,660
Hotel	9	5	18	10	24	13	3	2	0	0	44	23	98	53	151
Banquet	126	0	490	0	553	0	158	0	79	0	174	0	1,580	0	1,580
Total	**214**	**84**	**626**	**128**	**813**	**249**	**397**	**238**	**79**	**0**	**3,486**	**3,291**	**5,615**	**3,990**	**9,605**
Saturday Peak Hour															
Transit Retail	7	7	11	11	22	22	22	22	0	0	303	303	365	365	730
Commercial Retail	264	264	395	395	791	791	791	791	0	0	10,938	10,938	13,179	13,179	26,358
Hotel	5	4	10	8	14	11	2	1	0	0	27	21	58	45	103
Banquet	126	0	490	0	553	0	158	0	79	0	174	0	1,580	0	1,580
Total	**402**	**275**	**906**	**414**	**1,380**	**824**	**973**	**814**	**79**	**0**	**11,442**	**11,262**	**15,182**	**13,589**	**28,771**

Vehicle Trips by Type

Analysis Period and Use	Auto		Taxi		Delivery		Total		
	In	Out	In	Out	In	Out	In	Out	Total
AM Peak Hour									
Transit Retail	1	1	1	1	2	2	4	4	8
Commercial Retail	15	15	26	26	14	14	55	55	110
Hotel	2	4	4	7	1	1	7	12	19
Banquet	70	0	213	0	1	1	284	1	285
Total *	**88**	**20**	**244**	**244**	**18**	**18**	**350**	**282**	**632**
Midday Peak Hour									
Transit Retail	2	2	4	4	3	3	9	9	18
Commercial Retail	92	92	162	162	20	20	274	274	548
Hotel	5	4	9	8	1	1	15	13	28
Banquet	70	0	213	0	2	2	285	2	287
Total *	**169**	**98**	**388**	**388**	**26**	**26**	**583**	**512**	**1,095**
PM Peak Hour									
Transit Retail	1	1	2	2	0	0	3	3	6
Commercial Retail	47	47	82	82	0	0	129	129	258
Hotel	6	4	12	7	0	0	18	11	29
Banquet	70	0	213	0	0	0	283	0	283
Total *	**124**	**52**	**309**	**309**	**0**	**0**	**433**	**361**	**794**
Saturday Peak Hour									
Transit Retail	4	4	8	8	0	0	12	12	24
Commercial Retail	160	160	282	282	0	0	442	442	884
Hotel	4	3	7	5	0	0	11	8	19
Banquet	70	0	213	0	0	0	283	0	283
Total *	**238**	**167**	**550**	**550**	**0**	**0**	**788**	**717**	**1,505**

Note: * Total vehicle trips includes taxi balancing. Taxi trips were not balanced by use but by scenario.

Table 13-7
Incremental Trip Generation
2010 Future with the Proposed Action*

Person Trips by Mode

Analysis Period and Use	Auto		Taxi		Subway		Bus		Shuttle		Comm Rail		Walk Only		Total		
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
AM Peak Hour	-14	6	497	28	-128	-7	67	31	0	0	-61	-11	677	583	1,038	630	1,668
Midday Peak Hour	205	77	611	118	781	223	377	215	0	0	79	0	3,033	2,813	5,086	3,446	8,532
PM Peak Hour	162	-127	569	52	633	-666	274	-18	0	0	66	-154	1,957	1,682	3,661	769	4,430
Saturday Peak Hour	273	146	712	221	993	438	586	428	0	0	79	0	6,058	5,898	8,701	7,131	15,832

Vehicle Trips by Type

Analysis Period and Use	Auto		Taxi		Delivery		Total		
	In	Out	In	Out	In	Out	In	Out	Total
AM Peak Hour	-46	3	216	216	5	5	175	224	339
Midday Peak Hour	116	44	252	252	9	9	377	305	682
PM Peak Hour	90	-110	235	235	-2	-2	323	123	446
Saturday Peak Hour	160	89	343	343	0	0	503	432	935

Note: * 2010 Future with the Proposed Action development net trip generation from the 2010 Future without the Proposed Action development on the project site.

Table 13-8
Trip Generation-Hotel, Retail, and Residential Uses
2010 Phase II Off-site

Person Trips by Mode

Analysis Period and Use	Auto		Taxi		Subway		Bus		Comm Rail		Walk Only		Total		
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
AM Peak Hour															
Hotel	8	12	15	24	20	32	3	4	0	0	39	61	85	133	218
Commercial Retail	6	6	9	9	17	17	17	17	0	0	237	237	286	286	572
Residential	3	20	5	28	32	181	3	20	1	8	25	136	69	393	462
Total	**17**	**38**	**29**	**61**	**69**	**230**	**23**	**41**	**1**	**8**	**301**	**434**	**440**	**812**	**1,252**
Midday Peak Hour															
Hotel	18	15	34	29	30	25	7	6	0	0	138	118	227	193	420
Commercial Retail	35	35	53	53	105	105	105	105	0	0	1,458	1,458	1,756	1,756	3,512
Residential	6	6	8	8	55	55	6	6	2	2	43	43	120	120	240
Total	**59**	**56**	**95**	**90**	**190**	**185**	**118**	**117**	**2**	**2**	**1,639**	**1,619**	**2,103**	**2,069**	**4,172**
PM Peak Hour															
Hotel	22	12	44	24	58	31	7	4	0	0	111	60	242	131	373
Commercial Retail	18	18	27	27	53	53	53	53	0	0	736	736	887	887	1,774
Residential	19	8	27	11	175	75	19	8	8	3	133	58	381	163	544
Total	**59**	**38**	**98**	**62**	**286**	**159**	**79**	**65**	**8**	**3**	**980**	**854**	**1,510**	**1,181**	**2,691**
Saturday Peak Hour															
Hotel	13	10	26	20	35	27	4	3	0	0	66	53	144	113	257
Commercial Retail	61	61	92	92	183	183	183	183	0	0	2,533	2,533	3,052	3,052	6,104
Residential	9	12	13	17	83	110	9	12	4	5	62	83	180	239	419
Total	**83**	**83**	**131**	**129**	**301**	**320**	**196**	**198**	**4**	**5**	**2,661**	**2,669**	**3,376**	**3,404**	**6,780**

Vehicle Trips by Type

Analysis Period and Use	Auto		Taxi		Delivery		Total		
	In	Out	In	Out	In	Out	In	Out	Total
AM Peak Hour									
Hotel	6	9	10	16	2	2	18	27	45
Commercial Retail	4	4	6	6	3	3	13	13	26
Residential	3	17	4	20	2	2	9	39	48
Total *	**13**	**30**	**52**	**52**	**7**	**7**	**72**	**89**	**161**
Midday Peak Hour									
Hotel	13	11	23	19	2	2	38	32	70
Commercial Retail	21	21	38	38	5	5	64	64	128
Residential	5	5	6	6	2	2	13	13	26
Total *	**39**	**37**	**96**	**96**	**9**	**9**	**144**	**142**	**286**
PM Peak Hour									
Hotel	16	9	29	16	0	0	45	25	70
Commercial Retail	11	11	19	19	0	0	30	30	60
Residential	16	7	19	8	0	0	35	15	50
Total *	**43**	**27**	**76**	**76**	**0**	**0**	**119**	**103**	**222**
Saturday Peak Hour									
Hotel	9	7	17	13	0	0	26	20	46
Commercial Retail	37	37	66	66	0	0	103	103	206
Residential	8	10	9	12	0	0	17	22	39
Total *	**54**	**54**	**137**	**137**	**0**	**0**	**191**	**191**	**382**

Note: * Total vehicle trips include balanced taxi trips, in accordance with the *CEQR Technical Manual*.

Upon completion of the proposed action, it is estimated that NJT and Amtrak ridership would increase with the increased transportation services that are to be provided on-site. The increments for transit components, including Amtrak and NJT are summarized in Table 13-2. These increments were based on current ridership information and ridership projections provided by the various transit agencies. According to LIRR representatives, there is no new ridership increment expected for LIRR associated with the development of Moynihan Station.

Table 13-9 summarizes the total trips generated in the 2010 Future with the Proposed Action for all the transit related uses: 210, 70, 215, and 70 person trips and 101, 34, 79, and 34 vehicle trips during the weekday AM, midday, PM, and Saturday peak hours, respectively.

Table 13-9
Trip Generation-Transit Uses
2010 Future with the Proposed Action

Person Trips by Mode

Analysis Period and Use	Auto		Taxi		Subway		Bus		Walk Only		Total		
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
AM Peak Hour													
Amtrak	2	9	12	65	9	33	3	13	4	10	30	130	160
NJT	0	0	1	0	26	0	9	0	14	0	50	0	50
Total	**2**	**9**	**13**	**65**	**35**	**33**	**18**	**13**	**18**	**10**	**80**	**130**	**210**
Midday Peak Hour													
Amtrak	2	2	14	18	11	9	4	4	4	2	35	35	70
NJT	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**2**	**2**	**14**	**18**	**11**	**9**	**11**	**4**	**4**	**2**	**35**	**35**	**70**
PM Peak Hour													
Amtrak	9	2	54	15	41	8	14	3	17	2	135	30	165
NJT	0	0	0	1	0	26	0	9	0	14	0	50	50
Total	**10**	**2**	**54**	**16**	**41**	**34**	**41**	**12**	**17**	**16**	**135**	**80**	**215**
Saturday Peak Hour													
Amtrak	2	2	14	18	11	9	4	4	4	2	35	35	70
NJT	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**2**	**2**	**14**	**18**	**11**	**9**	**11**	**4**	**4**	**2**	**35**	**35**	**70**

Vehicle Trips by Type

Analysis Period and Use	Auto		Taxi		Total		
	In	Out	In	Out	In	Out	Total
AM Peak Hour							
Amtrak	1	6	8	43	9	49	58
NJT	0	0	1	0	1	0	1
Total *	**1**	**6**	**47**	**47**	**48**	**53**	**101**
Midday Peak Hour							
Amtrak	1	1	9	12	10	13	23
NJT	0	0	0	0	0	0	0
Total *	**1**	**1**	**16**	**16**	**17**	**17**	**34**
PM Peak Hour							
Amtrak	6	1	36	10	42	11	53
NJT	0	0	0	1	0	1	1
Total *	**6**	**1**	**36**	**36**	**42**	**37**	**79**
Saturday Peak Hour							
Amtrak	1	1	9	12	10	13	23
NJT	0	0	0	0	0	0	0
Total *	**1**	**1**	**16**	**16**	**17**	**17**	**34**

Note: * Total vehicle trips include balanced taxi trips, in accordance with the *CEQR Technical Manual*.

2015 Analysis

In addition to the Phase I RWCDS, the 2015 build analysis is expected to include the Phase II on-site office overbuild development. As shown in Table 13-10, the office use, is estimated to result in 2,124, 2,700, 2,466, and 663 person trips and 287, 166, 302, and 31 vehicle trips during the weekday AM, midday, PM, and Saturday peak hours, respectively.

Table 13-11 summarizes the total trips generated in the 2015 Future with the Proposed Action for all the transit related uses: 230, 70, 240, and 70 person trips and 101, 34, 82, and 34 vehicle trips during the weekday AM, midday, PM, and Saturday peak hours, respectively.

Table 13-10
Trip Generation-Office Use
2015 Phase II Overbuild

Person Trips by Mode															
Analysis Period and Use	Auto		Taxi		Subway		Bus		Comm Rail		Walk Only		Total		
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
AM Peak Hour Office	255	11	31	1	1,183	49	214	9	226	9	130	6	2,039	85	2,124
Midday Peak Hour Office	26	28	39	42	78	84	78	84	0	0	1,075	1,166	1,296	1,404	2,700
PM Peak Hour Office	15	293	2	35	71	1,359	13	246	14	260	8	150	123	2,343	2,466
Saturday Peak Hour Office	7	6	11	9	21	18	21	18	0	0	298	254	358	305	663

Vehicle Trips by Type										
Analysis Period and Use	Auto		Taxi		Delivery			Total		
	In	Out	In	Out	In	Out		In	Out	Total
AM Peak Hour Office	206	9	22	22	14	14		242	45	287
Midday Peak Hour Office	21	23	44	44	17	17		82	84	166
PM Peak Hour Office	12	236	25	25	2	2		39	263	302
Saturday Peak Hour Office	6	5	10	10	0	0		16	15	31

- Broadway at West 35th Street;
- Broadway/Sixth Avenue at West 34th Street;
- Sixth Avenue at West 31st, 32nd, 33rd, and 35th Streets;
- Seventh Avenue at West 28th, 29th, 30th, 31st, 32nd, 33rd, 34th, and 35th Streets;
- Eighth Avenue at West 28th, 29th, 30th, 31st, 32nd, 33rd, 34th, and 35th Streets;
- Ninth Avenue at West 28th, 29th, 30th, 31st, 33rd, 34th, and 35th Streets;
- Dyer Avenue/Lincoln Tunnel Expressway at West 30th, 31st, 34th, and 35th Streets; and,
- Tenth Avenue at West 28th, 29th, 30th, 31st, 33rd, 34th, and 35th Streets.

ROADWAY CHARACTERISTICS

In the grid street network, avenues extend in a north-south direction and the cross-streets extend east-west. The north-south avenues are generally high-capacity arterials that serve substantial volumes of through and local traffic, and are benefited by traffic signal timing patterns that allow traffic to proceed with good progression when traffic conditions are uncongested and conditions allow. Many of the east-west cross-streets provide access to and from the Lincoln Tunnel and traffic volumes in the study area are generally higher around the tunnel entrances. West 34th Street is the primary crosstown street in the traffic study area, carrying two to three lanes of traffic per direction.

Table 13-11
Trip Generation-Transit Uses
2015 Future with the Proposed Action

Person Trips by Mode													
Analysis Period and Use	Auto		Taxi		Subway		Bus		Walk Only		Total		
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
AM Peak Hour													
Amtrak	**2**	**9**	**12**	**65**	**9**	**33**	**3**	**13**	**4**	**10**	**30**	**130**	**160**
NJT	**0**	**0**	**1**	**0**	**36**	**0**	**13**	**0**	**20**	**0**	**70**	**0**	**70**
Total	2	9	13	65	45	33	22	13	24	10	100	130	230
Midday Peak Hour													
Amtrak	**2**	**2**	**14**	**18**	**11**	**9**	**4**	**4**	**4**	**2**	**35**	**35**	**70**
NJT	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total	2	2	14	18	11	9	11	4	4	2	35	35	70
PM Peak Hour													
Amtrak	**10**	**2**	**56**	**15**	**42**	**8**	**14**	**3**	**18**	**2**	**140**	**30**	**170**
NJT	**0**	**0**	**0**	**1**	**0**	**36**	**0**	**13**	**0**	**20**	**0**	**70**	**70**
Total	10	2	56	16	42	44	42	16	18	22	140	100	240
Saturday Peak Hour													
Amtrak	**2**	**2**	**14**	**18**	**11**	**9**	**4**	**4**	**4**	**2**	**35**	**35**	**70**
NJT	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total	2	2	14	18	11	9	11	4	4	2	35	35	70

Vehicle Trips by Type								
Analysis Period and Use	Auto		Taxi			Total		
	In	Out	In	Out		In	Out	Total
AM Peak Hour								
Amtrak	**1**	**6**	**8**	**43**		**9**	**49**	**58**
NJT	**0**	**0**	**1**	**0**		**1**	**0**	**1**
Total *	1	6	47	47		48	53	101
Midday Peak Hour								
Amtrak	**1**	**1**	**9**	**12**		**10**	**13**	**23**
NJT	**0**	**0**	**0**	**0**		**0**	**0**	**0**
Total *	1	1	16	16		17	17	34
PM Peak Hour								
Amtrak	**7**	**1**	**37**	**10**		**44**	**11**	**55**
NJT	**0**	**0**	**0**	**1**		**0**	**1**	**1**
Total *	7	1	37	37		44	38	82
Saturday Peak Hour								
Amtrak	**1**	**1**	**9**	**12**		**10**	**13**	**23**
NJT	**0**	**0**	**0**	**0**		**0**	**0**	**0**
Total *	1	1	16	16		17	17	34

Note: * Total vehicle trips include balanced taxi trips, in accordance with the CEQR Technical Manual.

Exceptions to the general grid are Dyer Avenue/Lincoln Tunnel Expressway and West 32nd Street. Dyer Avenue/Lincoln Tunnel Expressway is a north-south access road to the Lincoln Tunnel located between Ninth and Tenth Avenues that intersects the traffic study area grid only at West 30th, 31st, 34th and 35th Streets. West 32nd Street extends east-west, but is interrupted by the "superblocks" located between each avenue from Seventh to Tenth Avenues from West 31st Street to West 33rd Street. These superblocks support Madison Square Garden and the Farley Complex, among other uses.

All 40 analysis locations are controlled by pre-timed traffic signals with 90-second cycle lengths. Broadway crosses West 34th Street and Sixth Avenue at a complex six-legged intersection with four moving approaches.

OPERATIONAL ANALYSIS METHODOLOGY

SIGNALIZED INTERSECTION CAPACITY ANALYSIS

The operation of signalized intersections in the study area was analyzed in accordance with CEQR guidelines by applying the methodologies presented in the 2000 *Highway Capacity Manual (HCM)*. This procedure evaluates signalized intersections for average delay per vehicle and level of service (LOS).

LOS for the signalized intersections is based on the average stopped delay per vehicle for the various lane group movements within the intersection. This delay is the basis for an LOS determination for individual lane groups (grouping of movements in one or more travel lanes), the approaches, and the overall intersection. The levels of service are defined in the following table:

LOS Criteria for Signalized Intersections

Level-of-Service (LOS)	Average Delay
A	≤ 10.0 seconds
B	> 10.0 and ≤ 20.0 seconds
C	> 20.0 and ≤ 35.0 seconds
D	> 35.0 and ≤ 55.0 seconds
E	> 55.0 and ≤ 80.0 seconds
F	> 80.0 seconds

Sources: Transportation Research Board. *Highway Capacity Manual*, 2000.

Although the HCM methodology calculates a volume-to-capacity (v/c) ratio, there is no strict relationship between v/c ratios and LOS as defined in the HCM. A high v/c ratio indicates substantial traffic passing through an intersection, but a high v/c ratio combined with low average delay actually represents the most efficient condition in terms of traffic engineering standards, where an approach or the whole intersection processes traffic close to its theoretical maximum with minimal delay. However, very high v/c ratios—especially those approaching or greater than 1.0—are often correlated with a deteriorated LOS. Other important variables affecting delay include cycle length, progression, and green time. LOS A and B indicate good operating conditions with minimal delay. At LOS C, the number of vehicles stopping is higher, but congestion is still fairly light. LOS D describes a condition where congestion levels are more noticeable and individual cycle failures (a condition where motorists may have to wait for more than one green phase to clear the intersection) can occur. The mid-point of this service level (45 seconds of delay) is considered the threshold of acceptable operating conditions. Conditions at LOS E and F reflect poor service levels, and cycle failures are frequent. The HCM methodology provides for a summary of the total intersection operating conditions, by identifying the two critical movements (the worst-case from each roadway) and calculating a summary of critical v/c ratio, delay, and LOS.

Significant Impact Criteria

According to the criteria presented in the *CEQR Technical Manual*, impacts are considered significant and require examination of mitigation if they result in an increase of 5 or more seconds of delay in a lane group over No Build levels beyond mid-LOS D. For No Build LOS E, a 4-second increase in delay is considered significant. For No Build LOS F, a 3-second increase in delay is considered significant. However, if the No Build LOS F condition already corresponds with a delay in excess of 120 seconds, an increase of 1.0 or more seconds of delay is

considered significant. In addition, impacts are considered significant if levels of service deteriorate from acceptable A, B or C in the No Build conditions to marginally unacceptable LOS D (a delay in excess of 45 seconds, the midpoint of LOS D), or unacceptable LOS E or F in the future Build conditions. The above sliding scale is applicable only if the proposed project is expected to generate five or more vehicle trips through the analysis intersection during the peak hour being examined.

C. EXISTING CONDITIONS

Since the Farley/Moynihan project's traffic study area is contained within the study area for the *Hudson Yards FGEIS*, this analysis uses the traffic data collected and analyzed as part of that FGEIS. The *Hudson Yards FGEIS* incorporated data collected for and used in several other studies, supplemented with manual intersection counts conducted in May and June 2003 and 24-hour Automatic Traffic Recorder (ATR) machine counts conducted in May 2003. Additional data were collected in 2004 to reflect changes in street operations within the traffic study area after the completion of the Draft GEIS. The Farley/Moynihan project study has added an analysis of a Saturday midday peak hour, for which manual turning movement and ATR counts were collected in May 2005. The resulting traffic volumes were used to determine levels of service (LOS) for the weekday 8-9 AM, 12-1 PM midday, and 5-6 PM peak hours, as well as the Saturday 1-2 PM midday peak hour. Figure 13-1 shows the traffic study area, and Figures 13-2 to 13-5 present the study area baseline traffic volumes for the above peak hours.

STUDY AREA ROADWAYS AND PEAK HOUR TRAFFIC VOLUMES

TENTH AVENUE

Tenth Avenue is a northbound arterial roadway that operates as an important collector for access routes to the Lincoln Tunnel. From West 28th to 30th Streets there are five to six through traffic lanes. At West 30th Street, Tenth Avenue narrows somewhat as it passes under the High Line railroad trestle. North of West 30th Street to West 35th Street, there are four to five through lanes, with a dedicated right-turn lane onto eastbound West 34th Street. Tenth Avenue generally carries 1,500 to 1,800 vehicles per hour (vph) within the traffic study area during the weekday AM peak hour, 1,400 to just over 1,800 vph during the weekday midday peak hour, increasing to between 1,700 and 2,000 vph during the weekday PM peak hour, and 1,500 to 1,900 vph during the Saturday midday peak hour.

NINTH AVENUE

Ninth Avenue is a southbound roadway ranging from four to six lanes of traffic within the traffic study area between West 35th and West 28th Streets. Between West 33rd and West 31st Streets, Ninth Avenue runs alongside the western annex of the Farley Complex. Ninth Avenue generally carries 1,650 to 2,050 vph within the traffic study area during the weekday AM peak hour, 1,400 to 1,850 vph during the weekday midday peak hour, 1,475 to 1,750 vph during the weekday PM peak hour, and 1,350 to 1,750 vph during the Saturday midday peak hour.

DYER AVENUE/LINCOLN TUNNEL EXPRESSWAY

Dyer Avenue/Lincoln Tunnel Expressway is a bi-directional north-south roadway located between Ninth and Tenth Avenues. The roadway provides access to and from the Lincoln Tunnel from West 30th, 31st, 34th and 35th Streets in the traffic study area. The roadway is

generally two lanes in each direction. The West 33rd Street entrance, which is unsignalized, was closed recently as part of the latest traffic management plan implemented by the Port Authority of New York and New Jersey (PANY&NJ). Traffic volumes for the West 33rd street entrance, while illustrated under existing baseline conditions, were reallocated to other entrances in the evaluation of future conditions.

In general, volumes along Dyer Avenue/Lincoln Tunnel Expressway are typically higher heading southbound during the weekday AM peak hour, and northbound during the weekday PM peak hour. Dyer Avenue at West 34th Street generally carries about 450 vph southbound and 50 vph northbound during the weekday AM peak hour, 250 vph southbound and 150 vph northbound during the weekday midday peak hour, 280 vph southbound and 125 vph northbound during the weekday PM peak hour, and 500 vph southbound and 250 vph northbound during the Saturday midday peak hour. Along the Lincoln Tunnel Expressway between West 30th and West 33rd Streets, the roadway generally carries about 650 vph southbound and 150 to 250 vph northbound during the weekday AM peak hour, 350 vph southbound and 250 to 400 vph northbound during the weekday midday peak hour, 180 vph southbound and 500 to 1,000 vph northbound during the weekday PM peak hour, and 450 vph southbound and 450 to 700 vph northbound during the Saturday midday peak hour.

EIGHTH AVENUE

Eighth Avenue is an important northbound arterial, with four to six moving lanes of traffic, depending on parking regulations. Between West 31st and 33rd Streets, Eighth Avenue runs along the east side of the Farley building, and along the west side of Madison Square Garden and Pennsylvania (Penn) Station. A taxi stand is located on the east side of Eighth Avenue just north of West 31st Street at Penn Station. Eighth Avenue generally carries 1,300 to 1,600 vph within the traffic study area during the weekday AM peak hour, 1,400 to 1,725 vph during the weekday midday peak hour, 1,550 to 1,800 vph during the weekday PM peak hour, and 1,400 to 1,700 vph during the Saturday peak hour.

SEVENTH AVENUE

A southbound arterial, Seventh Avenue generally operates with six through lanes of traffic, increasing to seven lanes between West 33rd and West 32nd Streets only. In the traffic study area, Seventh Avenue is the location of the main entrances to Penn Station and Madison Square Garden. Major pedestrian entrances are located near the southwest corner of West 34th Street at Seventh Avenue and along Seventh Avenue between West 33rd and West 31st Streets. The primary taxi stand serving Penn Station and Madison Square Garden is located alongside Seventh Avenue between West 32nd and West 33rd Streets. At Seventh Avenue, West 32nd Street continues eastbound, and many buses make left turns from Seventh Avenue onto West 32nd Street, since this block of West 32nd Street serves as a final stop and layover location for some NYC Transit bus routes. Seventh Avenue generally carries 1,300 to 1,850 vph within the traffic study area during the weekday AM peak hour, 1,100 to 1,525 vph during the weekday midday peak hour, 1,225 to 1,500 vph during the weekday PM peak hour, and 1,300 to 1,700 vph during the Saturday midday peak hour.

SIXTH AVENUE AND BROADWAY

The traffic study area includes five analysis locations on Sixth Avenue, from West 31st Street to West 35th Street. Sixth Avenue is a northbound roadway which, in the traffic study area,

includes the Herald Square area and the convergence of Sixth Avenue and Broadway at West 34th Street. Sixth Avenue has four to five moving lanes, with parking on the west side of the street between West 31st and West 32nd Streets, as well as a bike lane. North of West 32nd Street, the bike lane continues, but the parking lane becomes a no standing zone. Within the study area, Broadway is southbound with three moving lanes and parking activities on curb lanes. Sixth Avenue generally carries 1,850 to 2,050 vph within the traffic study area during the weekday AM peak hour, 1,600 to 1,900 vph during the weekday midday peak hour, 1,600 to just over 1,900 vph during the weekday PM peak hour, and 1,400 to 1,700 vph during the Saturday midday peak hour. Broadway carries approximately 800 vph during the weekday AM peak hour, 850 vph during the weekday midday peak hour, 925 vph during the weekday PM peak hour, and 525 vph during the Saturday midday peak hour.

WEST 34TH STREET

The major crosstown street in the traffic study area is West 34th Street. It is the only major bi-directional east-west roadway in the traffic study area and has two or three lanes of traffic in each direction. Between Ninth and Tenth Avenues, the curb lane in each direction is designated as a bus only lane during the hours of 7-10 AM and 4-7 PM on weekdays. West 34th Street generally carries 400 to 800 vph eastbound and 485 to 600 vph westbound within the traffic study area during the AM peak hour, 500 to 700 vph eastbound and 625 to 800 vph westbound during the midday peak hour, 400 to 575 vph eastbound and 525 to 600 vph westbound during the PM peak hour, and 425 to 900 vph eastbound and 375 to 775 vph westbound during the Saturday midday peak hour.

OTHER CROSSTOWN STREETS

Aside from West 34th Street, the other crosstown streets in the traffic study area are West 28th, West 29th, and West 30th Streets between Seventh and Tenth Avenues, West 31st, West 33rd, and West 35th Streets between Sixth and Tenth Avenues, and West 32nd Street between Sixth and Seventh Avenues. All even-numbered streets operate eastbound, with odd-numbered streets operating westbound, except for the West 30th Street segment between Ninth and Dyer Avenues, where an access to the Lincoln Tunnel Expressway from Ninth Avenue results in bi-directional flow. Each crosstown street has generally one to three moving lanes, often with curbside parking, and is continuous. West 33rd Street, although continuous within the traffic study area from Sixth to Tenth Avenues, is interrupted by Broadway just east of Sixth Avenue. West 32nd Street is interrupted by the superblocks between Tenth and Seventh Avenues.

Volumes on these streets vary substantially on a street-by-street and block-by-block basis. Eastbound streets carry between 200 and 950 vph within the traffic study area during the weekday AM peak hour, 200 to 600 vph during the weekday midday peak hour, 175 to 700 vph during the weekday PM peak hour, and 200 to 700 vph during the Saturday midday peak hour. Westbound streets generally carry 200 to 700 vph within the traffic study area during the weekday AM peak hour, 225 to 600 vph during the weekday midday peak hour, 225 to 800 vph during the weekday PM peak hour, and 250 to 625 vph during the Saturday midday peak hour. The highest volumes are located on West 30th Street, which accesses the Lincoln Tunnel via Dyer Avenue/Lincoln Tunnel Expressway.

LEVEL OF SERVICE ANALYSIS

An intersection capacity and level-of-service analysis was conducted for the 40 study area intersections. The following summarizes the analysis results by travel corridor and details the

locations with substandard operating levels (marginally unacceptable mid-LOS D or more than 45 seconds of average delay) and/or high v/c ratios (0.90 or higher) by analysis time period.

SUMMARY OF ANALYSIS RESULTS

Tenth Avenue

Overall, northbound Tenth Avenue is currently operating at acceptable LOS A or B conditions during the weekday AM, midday, PM, and Saturday midday peak hours. Only certain turning movements on West 28th and West 34th Streets at Tenth Avenue operate at marginally unacceptable or unacceptable levels of service. On West 28th Street, the eastbound left-turn and through movement operates at LOS D during the weekday AM and PM peak hours, and Saturday midday peak hour. On West 34th Street, these movements include the eastbound de facto left-turn from West 34th Street onto northbound Tenth Avenue during all weekday peak periods, and the eastbound through movement and the westbound approach during the weekday midday peak hour.

Ninth Avenue

Southbound traffic on Ninth Avenue generally operates at acceptable LOS B or better during the peak analysis hours. The westbound de facto left-turn movement on West 34th Street operates at LOS F during the Saturday midday peak hour.

Dyer Avenue/Lincoln Tunnel Expressway

Traffic flow along Dyer Avenue/Lincoln Tunnel Expressway generally operates at LOS C or better during all analysis peak hours, with two traffic movements at West 34th Street operating at marginally unacceptable LOS D. These include the left-turn movement from southbound Dyer Avenue onto West 34th Street during the weekday AM peak hour, and the right-turn movement from southbound Dyer Avenue onto West 34th Street during the weekday AM, midday, and PM peak hours. In addition, the westbound approach on West 31st Street operates at LOS E and D during the weekday PM and Saturday midday peak hours, respectively, and the eastbound approach on West 34th Street operates at LOS D during the weekday midday peak hour.

Eighth Avenue

Northbound traffic on Eighth Avenue generally operates at acceptable LOS B or C conditions during all analysis peak hours, with the exception of northbound traffic on Eighth Avenue at West 33rd and West 34th Streets. Northbound approach at West 33rd Street operates at LOS D during the weekday midday and PM peak hours, and northbound approach at West 34th Street operates at LOS D during the Saturday midday peak hour. Some individual turning movements on the West 31st and West 34th Streets and Eighth Avenue intersections operate at LOS D or LOS E. These include the westbound through and right-turn movement on West 31st Street during the weekday AM peak hour, and the eastbound left-turn and through movement on West 34th Street during the weekday AM and midday peak hours, and the Saturday midday peak hour.

Seventh Avenue

Southbound traffic on Seventh Avenue generally operates at acceptable levels of service during the peak analysis hours. The left-turn and through movement on westbound West 29th Street and the through and right-turn movement on eastbound West 30th Street at Seventh Avenue both operate at LOS D during the weekday AM peak hour but improve during the midday and PM

peak hours. The westbound approach on West 33rd Street and the eastbound and westbound approaches on West 34th Street operate at LOS D during the Saturday midday peak hour.

Sixth Avenue and Broadway

Overall, northbound Sixth Avenue is currently operating at LOS B or C conditions during all analysis peak hours, except for its northbound approach at West 34th Street, where LOS D and LOS E conditions occur during weekday and Saturday peak hours. The eastbound approach on West 32nd Street at Sixth Avenue operates at LOS E during the weekday midday peak hour, and the westbound approach on West 35th Street at Sixth Avenue operates at LOS D during the weekday AM, midday, and PM peak hours. The Broadway southbound approach operates LOS D or E during all analysis peak hours at both West 34th and West 35th Streets.

West 34th Street

West 34th Street is currently operating at overall acceptable LOS C or better during all the analysis peak hours. However, several turning movements operate below acceptable levels of service, particularly at the West 34th Street intersections with Sixth, Eighth, Dyer, and Tenth Avenues.

Other Crosstown Streets

All crosstown streets currently operate at overall acceptable levels of service during the weekday AM, midday, and PM peak hours, and the Saturday midday peak hour. Turning movements operating below acceptable levels are previously described at these roadways' intersections with the north-south corridors.

LOCATIONS WITH SUBSTANDARD OPERATING LEVELS OR HIGH V/C RATIOS

The detailed operational analysis results for the study area intersections are presented in Table 13-12. Locations having at least one lane group operating at mid-LOS D (45.0 spv of delay) or worse, and/or with v/c ratios of 0.90 or greater, are described below.

Weekday AM Peak Hour

Of the 40 intersections studied, 8 intersections have at least one lane group operating at mid-LOS D or worse, and/or with v/c ratios of 0.90 or greater during the weekday AM peak hour.

- Broadway and Sixth Avenue at West 34th Street: The northbound Sixth Avenue approach operates at LOS E with 59.2 spv of delay and a v/c ratio of 1.03. The southbound Broadway approach operates at LOS D with 47.4 spv of delay and a v/c ratio of 0.90.
- Broadway at West 35th Street: The southbound approach operates at LOS D with 52.0 spv of delay and a v/c ratio of 0.95.
- Sixth Avenue at West 31st Street: The northbound approach operates at LOS C with 24.9 spv of delay and a v/c ratio of 0.90.
- Seventh Avenue at West 30th Street: The eastbound approach operates at LOS D with 45.7 spv of delay and a v/c ratio of 0.95.
- Eighth Avenue at West 33rd Street: The northbound approach operates at LOS C with 32.2 spv of delay and a v/c ratio of 0.90.
- Eighth Avenue at West 34th Street: The eastbound approach operates at LOS D with 44.4 spv of delay and a v/c ratio of 1.01.

Table 13-12
Existing Conditions Level of Service Analysis Results

Analysis Locations	Weekday AM				Weekday Midday				Weekday PM				Saturday Midday			
	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS
Broadway/Sixth Ave & W.34th St																
Eastbound	T	0.70	31.9	C	T	0.63	29.8	C	T	0.41	26.3	C	T	0.71	31.7	C
Westbound	TR	0.61	29.6	C	TR	0.78	34.4	C	TR	0.64	30.3	C	TR	0.70	31.5	C
Northbound	T	1.03	59.2	E	T	1.03	62.1	E	T	1.05	60.2	E	T	0.91	39.9	D
Southbound	T	0.90	47.4	D	T	0.99	61.8	E	T	0.99	62.2	E	T	0.64	34.5	C
Intersection			*47.3*	*D*			*50.7*	*D*			*51.2*	*D*			*35.4*	*D*
Broadway & W.35th St																
Westbound	LT	0.21	7.2	A	LT	0.23	7.3	A	LT	0.26	7.5	A	LT	0.29	7.8	A
Southbound	TR	0.95	52.0	D	TR	0.97	57.0	E	TR	1.02	68.0	E	TR	0.66	34.1	C
Intersection			*35.7*	*D*			*38.4*	*D*			*44.9*	*D*			*22.2*	*C*
Sixth Ave & W.31st St																
Westbound	TR	0.60	22.2	C	TR	0.58	21.8	C	TR	0.74	26.1	C	TR	0.66	23.9	C
Northbound	LT	0.90	24.9	C	LT	0.83	21.3	C	LT	0.86	22.8	C	LT	0.74	18.9	B
Intersection			*24.3*	*C*			*21.4*	*C*			*23.7*	*C*			*20.3*	*C*
Sixth Ave & W.32nd St																
Eastbound	LT	0.51	20.6	C	LT	0.99	67.0	E	LT	0.22	16.6	B	LT	0.34	18.2	B
Northbound	TR	0.88	23.8	C	TR	0.85	22.3	C	TR	0.86	22.4	C	TR	0.82	21.0	C
Intersection			*23.2*	*C*			*29.7*	*C*			*21.9*	*C*			*20.7*	*C*
Sixth Ave & W.33rd St																
Northbound	L	0.36	21.1	C	L	0.42	22.1	C	L	0.45	22.7	C	L	0.45	22.8	C
	T	0.89	29.0	C	T	0.76	24.0	C	T	0.76	24.0	C	T	0.70	22.9	C
Intersection			*28.2*	*C*			*23.8*	*C*			*23.9*	*C*			*22.9*	*C*
Sixth Ave & W.35th St																
Westbound	TR	0.79	35.3	D	TR	0.85	39.1	D	TR	0.96	53.5	D	TR	0.62	25.4	C
Northbound	LT	0.63	10.1	B	LT	0.54	9.2	A	LT	0.54	9.2	A	LT	0.55	12.7	B
Intersection			*16.0*	*B*			*17.4*	*B*			*22.6*	*C*			*16.1*	*B*
Seventh Ave & W.28th St																
Eastbound	TR	0.29	14.3	B	TR	0.28	14.2	B	TR	0.25	11.2	B	TR	0.45	24.8	C
Southbound	LT	0.72	22.7	C	LT	0.68	21.9	C	LT	0.85	31.6	C	LT	0.54	9.9	A
Intersection			*21.0*	*C*			*20.3*	*C*			*27.8*	*C*			*12.7*	*B*
Seventh Ave & W.29th St																
Westbound	LT	0.88	37.3	D	LT	0.58	24.0	C	LT	0.58	24.0	C	LT	0.56	23.7	C
Southbound	TR	0.57	13.8	B	TR	0.51	13.0	B	TR	0.60	14.1	B	TR	0.69	15.6	B
Intersection			*22.2*	*C*			*16.2*	*B*			*16.7*	*B*			*17.4*	*B*
Seventh Ave & W.30th St																
Eastbound	TR	0.95	45.7	D	TR	0.63	24.9	C	TR	0.37	20.2	C	TR	0.63	25.1	C
Southbound	LT	0.57	13.8	B	LT	0.51	13.1	B	LT	0.56	13.6	B	LT	0.56	13.7	B
Intersection			*26.5*	*C*			*17.0*	*B*			*14.9*	*B*			*17.1*	*B*
Seventh Ave & W.31st St																
Westbound	LT	0.63	23.7	C	LT	0.56	22.1	C	LT	0.77	28.4	C	LT	0.56	21.8	C
Southbound	TR	0.48	14.0	B	TR	0.37	13.0	B	TR	0.38	13.0	B	TR	0.68	17.0	B
Intersection			*16.9*	*B*			*15.7*	*B*			*18.5*	*B*			*18.3*	*B*
Seventh Ave & W.32nd St																
Southbound	LT	0.35	3.5	A	LT	0.29	3.3	A	LT	0.25	3.2	A	LT	0.57	4.9	A
Intersection			*3.5*	*A*			*3.3*	*A*			*3.2*	*A*			*4.9*	*A*
Seventh Ave & W.33rd St																
Westbound	LT	0.47	32.5	C	LT	0.54	33.9	C	LT	0.54	33.5	C	LT	0.72	40.1	D
Southbound	TR	0.49	4.2	A	TR	0.41	3.8	A	TR	0.41	3.8	A	TR	0.57	4.9	A
Intersection			*7.1*	*A*			*8.0*	*A*			*8.3*	*A*			*10.6*	*B*
Seventh Ave & W.34th St																
Eastbound	TR	0.53	22.6	C	TR	0.51	22.3	C	TR	0.39	20.7	C	TR	0.90	38.6	D
Westbound	LT	0.53	22.8	C	LT	0.70	26.4	C	LT	0.56	23.4	C	LT	0.89	37.9	D
Southbound	T	0.79	17.8	B	T	0.64	14.8	B	T	0.60	14.2	B	T	0.79	17.7	B
Intersection			*19.9*	*B*			*19.7*	*B*			*17.8*	*B*			*27.3*	*C*
Seventh Ave & W.35th St																
Westbound	L	0.37	22.2	C	L	0.38	22.4	C	L	0.24	20.2	C	L	0.45	26.0	C
	LT	0.30	20.4	C	LT	0.26	19.9	B	LT	0.48	22.9	C	LT	0.55	25.8	C
Southbound	TR	0.71	14.4	B	TR	0.62	13.0	B	TR	0.55	12.1	B	TR	0.67	13.7	B
Intersection			*15.9*	*B*			*14.9*	*B*			*15.3*	*B*			*16.5*	*B*

Notes: L = Left Turn; T = Through; R = Right Turn; DefL = De Facto Left Turn
V/C = Volume to Capacity; LOS = Level of Service

Table 13-12 (Continued)
Existing Conditions Level of Service Analysis Results

Analysis Locations	Weekday AM				Weekday Midday				Weekday PM				Saturday Midday			
	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS
Eighth Ave & W.28th St																
Eastbound	LT	0.41	21.9	C	LT	0.39	21.7	C	LT	0.48	23.1	C	LT	0.52	23.9	C
Northbound	TR	0.52	11.7	B	TR	0.69	14.0	B	TR	0.66	13.5	B	TR	0.61	12.8	B
Intersection			*14.0*	*B*			*15.3*	*B*			*15.5*	*B*			*15.1*	*B*
Eighth Ave & W.29th St																
Westbound	TR	0.80	31.3	C	TR	0.40	18.1	B	TR	0.58	23.9	C	TR	0.46	21.7	C
Northbound	LT	0.56	13.5	B	LT	0.79	21.0	C	LT	0.73	16.3	B	LT	0.64	14.7	B
Intersection			*19.7*	*B*			*20.5*	*C*			*18.0*	*B*			*16.1*	*B*
Eighth Ave & W.30th St																
Eastbound	LT	0.80	28.5	C	LT	0.52	19.6	B	LT	0.37	18.7	B	LT	0.57	22.0	C
Northbound	TR	0.58	15.4	B	TR	0.72	19.3	B	TR	0.73	17.7	B	TR	0.70	17.2	B
Intersection			*20.6*	*C*			*19.3*	*B*			*17.9*	*B*			*18.5*	*B*
Eighth Ave & W.31st St																
Westbound	TR	0.88	36.9	D	TR	0.48	19.5	B	TR	0.68	23.6	C	TR	0.73	25.0	C
Northbound	LT	0.65	17.9	B	LT	0.80	21.2	C	LT	0.87	24.2	C	LT	0.75	19.8	B
Intersection			*23.9*	*C*			*20.9*	*C*			*24.1*	*C*			*21.4*	*C*
Eighth Ave & W.32nd St																
Northbound	T	0.77	23.0	C	T	0.79	23.5	C	T	0.81	23.9	C	T	0.79	23.5	C
Intersection			*23.0*	*C*			*23.5*	*C*			*23.9*	*C*			*23.5*	*C*
Eighth Ave & W.33rd St																
Westbound	TR	0.17	11.4	B	TR	0.18	11.5	B	TR	0.23	12.0	B	TR	0.27	12.5	B
Northbound	LT	0.90	32.2	C	LT	0.93	35.9	D	LT	0.97	40.6	D	LT	0.92	33.9	C
Intersection			*29.1*	*C*			*32.1*	*C*			*35.4*	*D*			*30.1*	*C*
Eighth Ave & W.34th St																
Eastbound	LT	1.01	44.4	D	LT	1.02	65.6	E	LT	0.69	24.9	C	LT	1.04	68.7	E
Westbound	TR	0.41	17.9	B	TR	0.53	19.4	B	TR	0.37	17.3	B	TR	0.55	19.9	B
Northbound	LTR	0.74	19.6	B	LTR	0.73	19.6	B	LTR	0.74	19.8	B	LTR	0.97	40.4	D
Intersection			*25.9*	*C*			*30.0*	*C*			*20.3*	*C*			*42.4*	*D*
Eighth Ave & W.35th St																
Westbound	TR	0.61	28.5	C	TR	0.55	20.9	C	TR	0.86	40.3	D	TR	0.64	29.5	C
Northbound	LT	0.60	10.6	B	LT	0.64	17.8	B	LT	0.58	10.4	B	LT	0.64	11.0	B
Intersection			*14.2*	*B*			*18.6*	*B*			*18.4*	*B*			*14.6*	*B*
Ninth Ave & W.28th St																
Eastbound	TR	0.26	22.7	C	TR	0.30	23.2	C	TR	0.41	24.7	C	TR	0.57	27.5	C
Southbound	LT	0.63	10.1	B	LT	0.56	9.4	A	LT	0.43	8.1	A	LT	0.68	10.9	B
Intersection			*11.1*	*B*			*10.9*	*B*			*10.7*	*B*			*14.1*	*B*
Ninth Ave & W.29th St																
Westbound	LT	0.53	25.7	C	LT	0.36	23.5	C	LT	0.40	23.9	C	LT	0.55	27.1	C
Southbound	TR	0.58	9.5	A	TR	0.71	11.4	B	TR	0.51	8.9	A	TR	0.67	10.7	B
Intersection			*14.0*	*B*			*14.0*	*B*			*12.5*	*B*			*13.9*	*B*
Ninth Ave & W.30th St																
Eastbound	TR	0.64	28.2	C	TR	0.40	24.4	C	TR	0.29	23.4	C	TR	0.76	32.5	C
Southbound	LT	0.48	12.4	B	LT	0.51	12.7	B	LT	0.53	13.1	B	LT	0.63	14.5	B
Intersection			*17.8*	*B*			*15.7*	*B*			*15.1*	*B*			*20.3*	*C*
Ninth Ave & W.31st St																
Westbound	LT	0.37	23.7	C	LT	0.42	24.3	C	LT	0.60	26.9	C	LT	0.69	30.4	C
Southbound	TR	0.52	8.9	A	TR	0.51	8.8	A	TR	0.44	8.2	A	TR	0.60	9.8	A
Intersection			*11.7*	*B*			*12.2*	*B*			*14.4*	*B*			*15.2*	*B*
Ninth Ave & W.33rd St																
Westbound	LT	0.50	26.9	C	LT	0.62	29.2	C	LT	0.65	30.2	C	LT	0.48	26.1	C
Southbound	TR	0.50	8.7	A	TR	0.44	8.3	A	TR	0.43	8.2	A	TR	0.58	9.6	A
Intersection			*11.3*	*B*			*12.5*	*B*			*12.9*	*B*			*12.6*	*B*
Ninth Ave & W.34th St																
Eastbound	TR	0.72	29.4	C	TR	0.66	28.6	C	TR	0.52	25.8	C	TR	0.72	26.7	C
Westbound	DefL	0.35	22.6	C	DefL	0.54	29.0	C	DefL	0.28	18.0	B	DefL	1.00	96.1	F
	T	0.33	14.2	B	T	0.47	15.9	B	T	0.31	13.9	B	T	0.36	14.4	B
Southbound	LTR	0.73	23.3	C	LTR	0.63	21.3	C	LTR	0.44	18.8	B	LTR	0.74	23.9	C
Intersection			*23.7*	*C*			*22.4*	*C*			*19.5*	*B*			*28.1*	*C*

Notes: L = Left Turn; T = Through; R = Right Turn; DefL = De Facto Left Turn
V/C = Volume to Capacity; LOS = Level of Service

Table 13-12 (Continued)
Existing Conditions Level of Service Analysis Results

Analysis Locations	Weekday AM				Weekday Midday				Weekday PM				Saturday Midday			
	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS
Ninth Ave & W.35th St																
Westbound	LT	0.42	25.0	C	LT	0.53	26.5	C	LT	0.70	30.8	C	LT	0.68	30.9	C
Southbound	TR	0.52	9.0	A	TR	0.44	8.3	A	TR	0.48	8.6	A	TR	0.52	9.1	A
Intersection			*11.5*	*B*			*12.6*	*B*			*14.8*	*B*			*14.4*	*B*
Dyer Ave & W.30th St																
Eastbound	L	0.11	10.1	B	L	0.17	10.5	B	L	0.32	11.8	B	L	0.30	11.7	B
Southbound	L	0.65	28.1	C	L	0.34	22.8	C	L	0.18	21.0	C	L	0.51	25.3	C
Intersection			*25.0*	*C*			*17.7*	*B*			*14.2*	*B*			*19.2*	*B*
Dyer Ave & W.31st St																
Westbound	LTR	0.46	28.7	C	LTR	0.56	30.6	C	LTR	1.02	69.6	E	LTR	0.83	40.3	D
Northbound	LT	0.10	4.5	A	LT	0.16	4.8	A	LT	0.28	5.3	A	LT	0.30	9.2	A
Southbound	TR	0.39	10.0	B	TR	0.21	8.5	A	TR	0.11	7.8	A	TR	0.27	9.0	A
Intersection			*13.9*	*B*			*15.6*	*B*			*37.9*	*D*			*20.6*	*C*
Dyer Ave & W.34th St																
Eastbound	T	0.60	30.6	C	T	0.74	35.0	D	T	0.64	31.5	C	T	0.41	13.5	B
Westbound	T	0.26	5.0	A	T	0.32	5.3	A	T	0.23	4.8	A	T	0.18	11.1	B
	R	0.05	4.0	A	R	0.20	4.9	A	R	0.17	4.7	A	R	0.31	10.3	B
Southbound	L	0.83	49.7	D	L	0.38	34.7	C	L	0.30	33.6	C	L	0.38	22.7	C
	R	0.26	35.1	D	R	0.44	40.1	D	R	0.71	54.0	D	R	0.29	22.5	C
Intersection			*27.3*	*C*			*21.2*	*C*			*22.9*	*C*			*15.6*	*B*
Dyer Ave & W.35th St																
Westbound	LTR	0.35	25.6	C	LTR	0.37	25.8	C	LTR	0.64	30.3	C	LTR	0.45	26.8	C
Northbound	LT	0.03	4.7	A	LT	0.10	5.0	A	LT	0.07	4.8	A	LT	0.16	8.6	A
Southbound	TR	0.25	9.2	A	TR	0.17	8.6	A	TR	0.21	8.9	A	TR	0.27	9.3	A
Intersection			*15.1*	*B*			*15.5*	*B*			*19.8*	*B*			*15.0*	*B*
Tenth Ave & W.28th St																
Eastbound	LT	0.70	38.1	D	LT	0.62	33.7	C	LT	0.85	51.5	D	LT	0.83	43.6	D
Northbound	TR	0.43	8.2	A	TR	0.42	8.1	A	TR	0.56	9.3	A	TR	0.68	10.8	B
Intersection			*12.1*	*B*			*11.1*	*B*			*14.4*	*B*			*16.1*	*B*
Tenth Ave & W.29th St																
Westbound	TR	0.72	31.8	C	TR	0.54	27.0	C	TR	0.60	28.4	C	TR	0.55	26.8	C
Northbound	LT	0.46	8.5	A	LT	0.42	8.2	A	LT	0.57	9.4	A	LT	0.67	10.7	B
Intersection			*14.6*	*B*			*12.3*	*B*			*13.0*	*B*			*13.9*	*B*
Tenth Ave & W.30th St																
Eastbound	LT	0.51	26.4	C	LT	0.69	30.6	C	LT	0.51	26.2	C	LT	0.50	26.0	C
Northbound	TR	0.60	10.0	A	TR	0.52	9.1	A	TR	0.74	11.8	B	TR	0.69	11.1	B
Intersection			*13.3*	*B*			*15.1*	*B*			*14.3*	*B*			*13.9*	*B*
Tenth Ave & W.31st St																
Westbound	R	0.29	23.2	C	R	0.37	24.5	C	R	0.36	24.3	C	R	0.73	33.7	C
Northbound	T	0.48	8.6	A	T	0.61	10.0	B	T	0.51	8.8	A	T	0.52	9.1	A
Intersection			*10.1*	*B*			*12.0*	*B*			*10.6*	*B*			*14.8*	*B*
Tenth Ave & W.33rd St																
Westbound	TR	0.27	21.1	C	TR	0.30	21.6	C	TR	0.31	21.6	C	TR	0.46	24.2	C
Northbound	LT	0.67	12.2	B	LT	0.72	13.1	B	LT	0.59	10.9	B	LT	0.70	12.7	B
Intersection			*13.7*	*B*			*14.5*	*B*			*12.8*	*B*			*14.6*	*B*
Tenth Ave & W.34th St																
Eastbound	DefL	0.97	81.9	F	DefL	1.01	97.5	F	DefL	0.77	55.5	E	LT	0.60	28.6	C
	T	0.30	23.1	C	T	0.99	73.2	E	T	0.33	23.4	C				
Westbound	TR	0.46	25.0	C	TR	0.89	43.0	D	TR	0.49	25.5	C	TR	0.52	26.4	C
Northbound	LT	0.60	9.9	A	LT	0.59	9.8	A	LT	0.49	8.6	A	LT	0.64	10.2	B
	R	0.24	11.1	B	R	0.25	11.3	B	R	0.25	11.3	B	R	0.34	12.5	B
Intersection			*19.5*	*B*			*29.9*	*C*			*15.1*	*B*			*15.3*	*B*
Tenth Ave & W.35th St																
Westbound	TR	0.44	25.2	C	TR	0.51	26.4	C	TR	0.68	30.7	C	TR	0.51	26.5	C
Northbound	LT	0.55	9.3	A	LT	0.54	9.2	A	LT	0.58	9.5	A	LT	0.63	10.2	B
Intersection			*11.8*	*B*			*12.2*	*B*			*13.9*	*B*			*13.1*	*B*

Notes: L = Left Turn; T = Through; R = Right Turn; DefL = De Facto Left Turn; Int. = Intersection
V/C = Volume to Capacity; LOS = Level of Service

- Dyer Avenue at West 34th Street: The southbound left-turn movement operates at LOS D with 49.7 spv of delay and a v/c ratio of 0.83.
- Tenth Avenue at West 34th Street: The eastbound de facto left-turn movement operates at LOS F with 81.9 spv of delay and a v/c ratio of 0.97.

Weekday Midday Peak Hour

Of the 40 intersections studied, 6 intersections have at least one lane group operating at mid-LOS D or worse, and/or with v/c ratios of 0.90 or greater during the weekday midday peak hour.

- Broadway and Sixth Avenue at West 34th Street: The northbound Sixth Avenue approach operates at LOS E with 62.1 spv of delay and a v/c ratio of 1.03. The southbound Broadway approach operates at LOS E with 61.8 spv of delay and a v/c ratio of 0.99.
- Broadway at West 35th Street: The southbound approach operates at LOS E with 57.0 spv of delay and a v/c ratio of 0.97.
- Sixth Avenue at West 32nd Street: The eastbound approach operates at LOS E with 67.0 spv of delay and a v/c ratio of 0.99.
- Eighth Avenue at West 33rd Street: The northbound approach operates at LOS D with 35.9 spv of delay and a v/c ratio of 0.93.
- Eighth Avenue at West 34th Street: The eastbound approach operates at LOS E with 65.6 spv of delay and a v/c ratio of 1.02.
- Tenth Avenue at West 34th Street: The eastbound de facto left-turn movement operates at LOS F with 97.5 spv of delay and a v/c ratio of 1.01; the eastbound through movement operates at LOS E with 73.2 spv of delay and a v/c ratio of 0.99.

Weekday PM Peak Hour

Of the 40 intersections studied, 8 intersections have at least one lane group operating at mid-LOS D or worse, and/or with v/c ratios of 0.90 or greater during the weekday PM peak hour.

- Broadway and Sixth Avenue at West 34th Street: The northbound Sixth Avenue approach operates at LOS E with 60.2 spv of delay and a v/c ratio of 1.05. The southbound Broadway approach operates at LOS E with 62.2 spv of delay and a v/c ratio of 0.99.
- Broadway at West 35th Street: The southbound approach operates at LOS E with 68.0 spv of delay and a v/c ratio of 1.02.
- Sixth Avenue at West 35th Street: The westbound approach operates at LOS D with 53.5 spv of delay and a v/c ratio of 0.96.
- Eighth Avenue at West 33rd Street: The northbound approach operates at LOS D with 40.6 spv of delay and a v/c ratio of 0.97.
- Dyer Avenue at West 31st Street: The westbound approach operates at LOS E with 69.6 spv of delay and a v/c ratio of 1.02.
- Dyer Avenue at West 34th Street: The southbound right-turn movement operates at LOS D with 54.0 spv of delay and a v/c ratio of 0.71.
- Tenth Avenue at West 28th Street: The eastbound approach operates at LOS D with 51.5 spv of delay and a v/c ratio of 0.85.
- Tenth Avenue at West 34th Street: The eastbound de facto left-turn movement operates at LOS E with 55.5 spv of delay and a v/c ratio of 0.77.

Saturday Midday Peak Hour

Of the 40 intersections studied, 5 intersections have at least one lane group operating at mid-LOS D or worse, and/or with v/c ratios of 0.90 or greater during the Saturday midday peak hour.

- Broadway and Sixth Avenue at West 34th Street: The northbound Sixth Avenue approach operates at LOS D with 40.1 spv of delay and a v/c ratio of 0.91.
- Seventh Avenue at West 34th Street: The eastbound approach operates at LOS D with 38.6 spv of delay and a v/c ratio of 0.90.
- Eighth Avenue at West 33rd Street: The northbound approach operates at LOS C with 33.9 spv of delay and a v/c ratio of 0.92.
- Eighth Avenue at West 34th Street: The eastbound approach operates at LOS E with 68.7 spv of delay and a v/c ratio of 1.04; the northbound approach operates at LOS D with 40.4 spv of delay and a v/c ratio of 0.97.
- Ninth Avenue at West 34th Street: The westbound de facto left-turn movement operates at LOS F with 96.1 spv of delay and a v/c ratio of 1.00.

PARKING

OFF-STREET PARKING

An inventory of public parking lots and garages near the Farley Complex was compiled from the parking inventory completed for the *Hudson Yards FGEIS* for weekdays, supplemented by new surveys conducted in May 2005 for the Saturday midday peak hour. In most cases, the Hudson Yards inventory fully encompasses a ½-mile radius around the Farley Complex; however, some areas to the east and the south of the Farley Complex were not included because they were one to two-blocks beyond the Hudson Yards study area limits. Nonetheless, all off-street parking facilities within ¼-mile of the Farley Complex have been included. Figure 13-6 illustrates the boundaries and off-street parking facilities.

The parking survey area roughly extends from West 43rd to West 23rd Streets, and from Twelfth to Sixth Avenues. Within ½ mile, there are 123 public parking facilities and within ¼ mile, there are 44 public parking facilities. Of the 123 public parking facilities, approximately half have capacities within the 75-250 vehicle range. As shown in Table 13-13, the surveyed facilities have over 18,000 parking spaces, with an occupancy of about 80 percent during the weekday midday period between 12 PM and 2 PM. This means that after the AM peak commuter hours have ended, approximately 3,200 parking spaces remain available. By evening, between 6 PM and 9 PM, some facilities close, reducing the parking inventory to about 17,000, slightly less than the daytime parking space inventory. During evening hours (6-9 PM),46 percent of the parking spaces are occupied, leaving approximately 9,500 unoccupied spaces. Saturday midday parking capacity is nearly 18,000 and occupancy averages 49 percent, meaning that there are about 9,300 unoccupied spaces available.

ON-STREET PARKING

- On-street parking regulations were also inventoried for this same parking study area, within the *Hudson Yards FGEIS* on weekdays and on Saturday for this study, with parking regulations recorded on a block-by-block basis. Overall, the area is characterized by a blend of very stringent parking regulations that restrict parking all day during the week and on Saturdays.

Table 13-13
Existing Off-Street Parking Inventory and Occupancy

Map No.	Name	Address	Licensed Capacity	WKDY Midday (12 – 2 PM)			WKDY Evening (6 – 9 PM)			WKDY Overnight (12 – 5 AM)			SAT Midday (12 – 3 PM)		
				Utilization Rate	Occupied Spaces	Available Spaces	Utilization Rate	Occupied Spaces	Available Spaces	Utilization Rate	Occupied Spaces	Available Spaces	Utilization Rate	Occupied Spaces	Available Spaces
1	514 West Corp.	510 W. 23rd St.	161	90%	145	16	40%	64	97	Not Applicable			50%	81	80
2	249 Parking Corp.	249 Tenth Ave.	120	100%	120	0	20%	24	96	Not Applicable			100%	120	0
3	Impark 25 LLC	545 W. 25th St.	160	30%	48	112	10%	16	144	30%	48	112	49%*	78	82
4	Central Parking System of NY Inc.	560 W. 26th St.	50	75%	37	13	45%	22	28	35%	17	33	40%	20	30
5	W. 26th St. Parking Corp.	279-283 Tenth Ave.	160	80%	128	32	Closed	0	0	Closed	0	0	40%	64	96
6	Kaz Systems Inc.	282 Eleventh Ave./ 547 W. 28th St.	134	100%	134	0	20%	27	107	40%	54	80	20%	27	107
7	29 Operating Corp.	613 W. 29th St.	46	75%	34	12	40%	18	28	Closed	0	0	100%	46	0
8	Enterprise 30th St. Garage Inc.	529-539 W. 29th St.	150	60%	90	60	40%	60	90	90%	135	15	65%	98	52
9	Enterprise 30th St. Parking LLC	506-530 W. 30th St.	113	95%	107	6	45%	51	62	35%	40	73	35%	40	73
10	Enterprise 30th St. Parking LLC	343 Tenth Ave.	50	80%	40	10	45%	22	28	35%	17	33	50%	25	25
11	Madison Square Parking Corp.	359-363 Ninth Ave.	40	100%	40	0	40%	16	24	80%	32	8	100%	40	0
12	Tunnel Parking Corp.	425 W. 31st St.	145	90%	131	14	100%	145	0	Closed	0	0	100%	145	0
13	Edison Ninth Ave. Parking Corp.	412-422 W. 33rd St.	115	80%	92	23	50%	57	58	35%	40	75	25%	29	86
14	Edison Ninth Ave. Parking Corp.	401-422 Ninth Ave.	92	100%	92	0	20%	18	74	75%	69	23	49%*	45	47
15	Joseph Gutman	408 W. 34th St.	25	100%	25	0	70%	17	8	25%	6	19	80%	20	5
16	NJ Parking Inc.	431 W. 33rd St.	77	100%	77	0	50%	38	39	Closed	0	0	20%	15	62
17	Central Parking System Inc.	441 Ninth Ave.	160	80%	128	32	20%	32	128	Closed	0	0	13%	20	140
18	Kinney 444 Tenth Ave. Inc.	444 Tenth Ave.	25	80%	20	5	Closed	0	0	Closed	0	0	60%	15	10
19	34 St. Parking Corp.	435 Tenth Ave.	99	100%	99	0	30%	30	69	Closed	0	0	49%*	49	50
20	509 W. 34th St. Garage Corp.	509-525 W. 34th St.	200	90%	180	20	30%	60	140	Closed	0	0	50%	100	100
21	Impark HSW LLC	452-464 Tenth Ave.	121	85%	103	18	60%	73	48	Closed	0	0	45%	54	67
22	Kinney 444 Tenth Ave. Inc.	447-451 W. 35th St./ 434 W. 36th St.	52	95%	49	3	50%	26	26	45%	23	29	60%	31	21
23	Central Parking System	415 W. 35th St.	52	60%	31	21	20%	10	42	35%	18	34	50%	26	26
24	Edison NY Parking LLC	451 Ninth Ave./ 409 W. 35th St.	154	90%	139	15	50%	77	77	10%	15	139	90%	139	15
25	Allright Parking NYC LLC	416 W. 36th St.	28	100%	28	0	Closed	0	0	Closed	0	0	25%	7	21
26	Ninth Avenue Parking LLC	404 W. 37th St.	165	90%	148	17	65%	107	58	30%	49	116	20%	33	132
27	E/Z Sprint Ltd.	517-525 W. 36th St.	25	100%	25	0	Closed	0	0	Closed	0	0	75%	19	6
28	West Side Express Corp.	456-458 Eleventh Ave.	20	60%	12	8	Closed	0	0	Closed	0	0	100%	20	0
29	37-38 Parking Corp.	505-519 W. 37th St./ 505-514 W. 38th St.	135	40%	54	81	Closed	0	0	Closed	0	0	60%	81	54
30	Central Parking System of NY Inc.	485 Tenth Ave.	55	80%	44	11	Closed	0	0	Closed	0	0	65%	36	19
31	Tenth Avenue Garage Corp.	498 Tenth Ave.	110	80%	88	22	75%	82	28	10%	11	99	85%	94	16
32	Kinney West 37th St. Inc.	437 W. 37th St.	52	60%	31	21	45%	23	29	10%	5	47	49%*	25	27
33	Fast Park Systems Inc.	405 W. 38th St.	30	100%	30	0	Closed	0	0	Closed	0	0	80%	24	6
34	Central Parking System	519-521 Ninth Ave.	91	80%	73	18	50%	45	46	35%	32	59	49%*	45	46
35	Meyers Parking System Inc.	541-551 W. 38th St./ 536-542 W. 39th St.	221	90%	199	22	Closed	0	0	Closed	0	0	49%*	108	113
36	Mutual LLC	470 Eleventh Ave.	12	50%	6	6	10%	1	11	Closed	0	0	49%*	6	6
37	Edison 42nd Parking LLC	401-407 W. 42nd St.	998	90%	898	100	60%	599	399	Closed	0	0	49%*	489	509
38	JDS Parking LLC	561 Tenth Ave.	71	85%	60	11	45%	32	39	35%	25	46	49%*	35	36
42	Allure Parking LLC	583 Tenth Ave.	62	50%	31	31	50%	31	31	Closed	0	0	49%*	30	32
44	520 W. Parking Corp.	520 W. 43rd St.	75	40%	30	45	50%	37	38	30%	22	53	49%*	37	38
68	43 West Broadway Parking Corp.	250 W. 43rd St.	80	75%	60	20	45%	36	44	40%	32	48	49%*	39	41
69	43rd St. Garage LLC	350 W. 43rd St.	59	90%	53	6	20%	12	47	25%	15	44	49%*	29	30
70	Impark HSW 42 LLC	305-313 W. 42nd St./ 315-317 W. 42nd St./ 314-322 W. 42nd St.	147	90%	132	15	70%	103	44	20%	29	118	49%*	72	75
71	Central Parking System of NY Inc.	625 Eighth Ave.	1,125	95%	1,069	56	50%	562	563	Closed	0	0	49%*	551	574
72	Time Square Garage	230 W. 41st St.	124	75%	93	31	15%	19	105	35%	43	81	49%*	61	63
73	Kinney Parking on W. 40th St. Inc.	252 W. 40th St.	300	50%	150	150	30%	90	210	10%	30	270	49%*	147	153
74	Best Park	310-312 W. 40th St.	42	75%	31	11	30%	13	29	Closed	0	0	49%*	21	21
75	Kinney 40th St. Inc.	326 W. 40th St.	77	70%	54	23	Closed	0	0	Closed	0	0	49%*	38	39
76	The Hertz Corp.	346-354 W. 40th St.	250	60%	150	100	30%	75	175	Closed	0	0	49%*	123	127
77	Oasis Car Park Inc.	337-341 W. 39th St.	55	70%	38	17	15%	8	47	Closed	0	0	49%*	27	28
78	A&W Parking Corp.	309 W. 39th St.	58	90%	52	6	30%	17	41	10%	6	52	49%*	28	30
79	39 Parking Corp.	310 W. 39th St.	171	90%	154	17	30%	51	120	10%	17	154	49%*	84	87
80	328 W. 39 St. Parking LLC	328 W. 39th St./ 334-336 W. 39th St./ 329 W. 38th St.	130	80%	104	26	25%	32	98	Closed	0	0	49%*	64	66
81	Felise Garage Corp.	310 W. 38th St.	500	75%	375	125	50%	250	250	Closed	0	0	25%	125	375
82	Irene Parking Corp.	333. W. 37th St.	90	90%	81	9	Closed	0	0	Closed	0	0	60%	54	36
83	NY 786 Parking	339 W. 36th St.	25	50%	12	13	30%	7	18	Closed	0	0	60%	15	10
84	26th St. Garage Corp.	326-328 W. 37th St.	100	80%	80	20	Closed	0	0	Closed	0	0	20%	20	80
85	NYC 37 Corp.	350 W. 37th St.	50	70%	35	15	Closed	0	0	Closed	0	0	50%	25	25
86	S&R Parking Inc.	312-318 W. 37th St.	71	100%	71	0	Closed	0	0	Closed	0	0	65%	46	25
87	Wizard Car Park LLC	320 W. 36th St.	150	80%	120	30	10%	15	135	10%	15	135	10%	15	135
88	361 West Parking Corp.	361 W. 34th St.	140	70%	98	42	50%	70	70	Closed	0	0	90%	126	14
89	Meyers Parking System Inc.	323 W. 34th St.	500	75%	375	125	20%	100	400	Closed	0	0	50%	250	250
90	Kinney System Inc.	324 W. 34th St.	70	100%	70	0	65%	45	25	Closed	0	0	49%*	34	36
91	Kinney System Inc.	314-318 W. 34th St.	38	100%	38	0	60%	23	15	Closed	0	0	49%*	19	19

Notes: * Overall utilization assumed.
Sources: No. 7 Train Extension FGEIS Appendix S.3 and EWT Original Surveys.

Table 13-13 (Continued)
Existing Off-Street Parking Inventory and Occupancy

Map No.	Name	Address	Licensed Capacity	WKDY Midday (12 – 2 PM)			WKDY Evening (6 – 9 PM)			WKDY Overnight (12 – 5 AM)			SAT Midday (12 – 3 PM)		
				Utilization Rate	Occupied Spaces	Available Spaces	Utilization Rate	Occupied Spaces	Available Spaces	Utilization Rate	Occupied Spaces	Available Spaces	Utilization Rate	Occupied Spaces	Available Spaces
92	Central Parking System of NY Inc.	305-319 W. 33rd St.	250	50%	125	125	45%	112	138	35%	87	163	49%*	123	127
93	Central Parking System of NY Inc.	One Penn Plaza	665	80%	532	133	50%	332	333	20%	133	532	30%	200	465
94	Kinney System Inc.	109 W. 31st St.	35	50%	17	18	20%	7	28	Closed	0	0	83%	29	6
95	Kinney System Inc.	106-108 W. 31st St.	20	75%	15	5	40%	8	12	Closed	0	0	65%	13	7
96	Jim dandy 31 Parking LLC	124 W. 31st St.	34	50%	17	17	40%	14	20	Closed	0	0	65%	22	12
97	Sharon's Garage Inc.	148 W. 31st St.	18	80%	14	4	30%	5	13	Closed	0	0	49%*	9	9
98	West 31st Garage Corp.	371 Seventh Ave.	94	90%	85	9	45%	42	52	35%	33	61	21%	20	74
99	Meyers Parking System Inc.	218 W. 31st St./ 227 W. 30th St.	1,500	85%	1,275	225	15%	225	1,275	20%	300	1,200	9%	135	1,365
100	Central Parking System of NY Inc.	300-306 W. 31st St.	46	70%	32	14	60%	28	18	Closed	0	0	61%	28	18
101	Secure Parking LLC	363 W. 30th St.	18	100%	18	0	35%	6	12	Closed	0	0	33%	6	12
102	320 W. 30th St. Garage Corp.	320 W. 30th St.	82	50%	41	41	Closed	0	0	Closed	0	0	49%*	40	42
103	Garden Garage LLC	384-386 Eighth Ave.	35	75%	26	9	40%	14	21	Closed	0	0	83%	29	6
104	Garden Garage LLC	253-255 W. 29th St.	25	80%	20	5	30%	7	18	Closed	0	0	84%	21	4
105	Park 29 LLC	217-221 W. 29th St.	48	80%	38	10	60%	29	19	Closed	0	0	80%	38	10
106	Shrimp Parking LLC	211 W. 29th St.	28	100%	28	0	Closed	0	0	Closed	0	0	86%	24	4
107	Twenty Ninth Corp.	234 W. 29th St.	70	100%	70	0	80%	56	14	Closed	0	0	49%*	34	36
108	NYC 28 Corp.	217-219 W. 28th St.	47	80%	38	9	50%	23	24	Closed	0	0	80%	38	9
109	W. 28th St. Parking LLC	241 W. 28th St.	240	100%	240	0	80%	192	48	50%	120	120	60%	144	96
110	Edison NY Parking LLC	245 W. 28th St.	131	90%	118	13	40%	52	79	Closed	0	0	70%	92	39
111	Central Parking System of NY Inc.	835-851 Sixth Ave.	387	90%	348	39	10%	39	348	30%	116	271	90%	348	39
112	587 Parking Corp.	122 W. 29th St.	44	50%	22	22	Closed	0	0	Closed	0	0	100%	44	0
113	Fero Parking Corp.	140 W. 28th St.	60	100%	60	0	Closed	0	0	Closed	0	0	92%	55	5
114	Access Parking Corp.	121-125 W. 26th St.	63	50%	31	32	30%	19	44	Closed	0	0	84%	53	10
115	SPI Operating Corp.	132-142 W. 27th St.	85	100%	85	0	100%	85	0	Closed	0	0	86%	73	12
116	241 Parking Corp.	241 W. 26th St.	225	60%	135	90	60%	135	90	40%	90	135	49%*	110	115
117	Impact Car Park LLC	333 W. 26th St.	839	90%	755	84	90%	755	84	95%	797	42	88%	737	102
118	HAG Operating Corp.	252-260 W. 26th St.	82	100%	82	0	50%	41	41	Closed	0	0	88%	72	10
119	220 W. Garage Corp.	220 W. 26th St.	120	80%	96	24	50%	60	60	25%	30	90	33%	40	80
120	100 W. 26th St. Parking Corp.	100 W. 26th St.	49	80%	39	10	40%	20	29	35%	17	32	75%	37	12
121	SP Parking Corp.	112 W. 25th St.	290	85%	246	44	50%	145	145	5%	14	276	49%*	142	148
122	Chelsea Seventh Garage Corp.	252 Seventh Ave.	175	100%	175	0	40%	70	105	75%	131	44	46%	81	94
129	Global Parking LLC	145-143 W. 40th St.	150	80%	120	30	65%	97	53	Closed	0	0	27%	41	109
130	136 W. 40th Parking LLC	136 W. 40th St.	150	80%	120	30	25%	37	113	Closed	0	0	49%*	74	76
131	Kinney Parking System	515 Seventh Ave.	305	50%	152	153	50%	152	153	Closed	0	0	13%	40	265
132	Atrium Parking LLC	161-163 W. 36th St.	149	80%	119	30	30%	45	104	Closed	0	0	49%*	73	76
133	Pace Parking LLC	990-996 Sixth Ave.	120	75%	90	30	30%	36	84	Closed	0	0	30%	36	84
134	63-67 W. 35th St. Associates LLC	63-67 W. 35th St.	149	70%	104	45	50%	74	75	30%	45	104	25%	37	112
135	Sandy Parking Corp.	57-61 W. 35th St.	29	100%	29	0	45%	13	16	Closed	0	0	100%	29	0
136	Central Parking System of NY Inc.	74 W. 35th St.	149	80%	119	30	40%	60	89	20%	30	119	40%	60	89
137	38 W. 33rd St. Corp.	38-46 W. 33rd St.	224	90%	202	22	40%	90	134	Closed	0	0	49%*	110	114
138	Central Parking System	1250 Broadway	150	70%	105	45	35%	52	98	35%	52	98	49%*	74	76
139	Central Parking System	1251 Broadway	80	80%	64	16	45%	36	44	Closed	0	0	100%	80	0
140	Peter Realty	42-64 W. 30th St.	84	85%	71	13	30%	25	59	Closed	0	0	40%	34	50
141	Central Parking System	33 W. 28th St.	224	90%	202	22	70%	157	67	Closed	0	0	70%	157	67
142	Central Parking System	55 W. 26th St.	140	95%	133	7	50%	70	70	35%	49	91	49%*	69	71
143	El Dorado Parking System	46-50 W. 26th St.	30	95%	28	2	65%	19	11	40%	12	18	49%*	15	15
144	Irwin Parking Corp	752-776 Sixth Ave.	175	100%	175	0	Closed	0	0	Closed	0	0	49%*	86	89
145	Chelsey Parking Inc.	735 Sixth Ave.	135	80%	108	27	30%	40	95	Closed	0	0	49%*	66	69
146	101 Car Park LLC	101 W. 23rd St.	140	100%	140	0	40%	56	84	Closed	0	0	25%	35	105
147	Tact Parking LLC	159-161 W. 24th St.	125	100%	125	0	50%	62	63	80%	100	25	50%	63	62
148	WK Parking Corp.	160 W. 24th St.	93	90%	84	9	20%	19	74	50%	46	47	50%	47	46
149	W. 23rd St. Garage LLC	423-431 W. 23rd St.	185	100%	185	0	50%	92	93	Not Applicable			100%	185	0
150	Edison NY Parking LLC	507 W. 21st St.	49	100%	49	0	60%	29	20	Not Applicable			80%	39	10
156	Central Parking System	550 W. 37th St.	37	30%	11	26	75%	28	9	Closed	0	0	75%	28	9
157	Enterprise 30th Street Parking LLC	505-509 W. 29th St.	130	70%	91	39	45%	58	72	90%	117	13	25%	33	97
158	Central Parking System	476-490 Eleventh Ave.	158	Closed	0	0	10%	16	142	Closed	0	0	49%*	77	81
160	Impark	462-464 Tenth Ave.	21	80%*	17	4	46%*	10	11	36%*	8	13	45%	9	12
161	Edison 9th Ave. Park Corp.	412-422 W. 33rd St.	115	80%*	92	23	46%*	53	62	36%*	41	74	75%	86	29
162	Central Parking System	800 Sixth Ave. (on W. 28th St. b/w 5 & 6)	45	80%*	36	9	46%*	21	24	36%*	16	29	49%*	22	23
	Total (123) Off-Street Parking Facilities		18,349	80%	14,935	3,256	46%	7,356	9,517	36%	3,229	5,592	49%	8,971	9,378

Notes: * Overall utilization assumed.
Sources: No. 7 Train Extension FGEIS Appendix S.3 and EWT Original Surveys.

Those areas not restricted during the entire day often have peak hour parking restrictions. Generally, parking regulations can be characterized as follows:

The most restrictive regulations such as No Standing Anytime or No Stopping Anytime are prevalent on streets around major destinations such as the Lincoln Tunnel, Penn Station, Madison Square Garden, Javits Center, Port Authority Bus Terminal, and on West 31st and West 33rd Streets adjacent to the Farley Complex.

- Outside of these major destinations, the surrounding streets are regulated with restrictive parking all day or truck loading and unloading zones. These regulations are most prevalent south of the Farley Complex, as well as around the Lincoln Tunnel entrance roadways. Typical regulations include No Parking beginning no later than 10 AM and ending no earlier than 7 PM.
- There are a few locations where metered parking is permitted. Most of these locations are below 34th Street along Eighth, Ninth and Tenth Avenues. One of these locations is along Eighth Avenue in front of the Farley Post Office building.
- Remaining parking regulations are scattered throughout the area and may restrict parking or standing during PM peak hours (4-7 PM), overnight parking from 2-6 AM, or allow for truck waiting areas, such as zones near the Javits Center.

The *Hudson Yards EIS* found that on-street weekday parking is nearly fully occupied. Additional surveys to gather data on typical Saturdays were conducted in May 2005, as presented in Table 13-14.

Table 13-14
Existing Saturday On-Street Parking Inventory and Occupancy

Totals	Capacity	Percent Occupied (of Legal Capacity)	Average per Block Face
Total Occupied	4,321	114.6 %	--
Legal Occupied	3,484	92.4 %	--
Illegal Occupied	837	22.2 %	2.1
Legal Unoccupied	288	7.6 %	0.7
Legal Capacity	3,772	--	--
Number of Block Faces	398	--	--

Sources: May 2005 surveys

Surveys on 398 block faces found that the legal capacity was 3,772 spaces and the occupancy was 4,321, or 115 percent of the legal capacity. Of this, approximately 93 percent are legally-parked cars, and 22 percent are illegally parked cars. On average, there were over two vehicles parked illegally on each block face. The majority of the illegal parking on Saturdays occurred on streets between West 23rd and West 39th Streets in the Garment District where Monday through Saturday daytime parking is restricted to trucks loading or unloading. However, on many of these restricted blocks, “Muni-meters” were present and cars that fed the meters were perhaps not ticketed. Of the 3,772 legal spaces, approximately 8 percent or 288 spaces were unoccupied. On average, just over one legal parking space was unoccupied for every two block faces. Even on Tenth, Eleventh and Twelfth Avenues where little Saturday commercial activity exists, very few legal parking spaces remained unoccupied.

D. FUTURE WITHOUT THE PROPOSED ACTION 2010

The analysis of traffic conditions in the Future 2010 Without the Proposed Action, or the 2010 "No Build" condition, serves as the baseline against which the impacts of the Proposed Action would be compared. The future No Build analysis reflects increases in background traffic volumes and traffic from other planned developments in the area (called "soft sites"), traffic from the Redevelopment of the Farley Post Office Building, and includes 2010 mitigation measures specified in the *Hudson Yards FGEIS*.

2010 Future No Build weekday peak hour traffic volumes were estimated based on traffic information in the Hudson yards FGEIS, adjusted to remove trips associated with the previous Penn Station Redevelopment Project that were included in the Hudson Yards analyses, and to add in the trips that would be expected to occur from the redevelopment of the Farley Complex by USPS (under the Future Without the Proposed Action). This resulted in the 2010 weekday peak hour No Build traffic volumes that have been used in the analyses in this document.

The Saturday peak hour No Build traffic volumes were estimated by first applying a 0.5 percent per year compounded growth rate for five years (as recommended by the *CEQR Technical Manual*) from 2005 to 2010. Then, the traffic volumes generated by projected development sites were added based on trip-generation and projections in the Hudson Yards FGEIS, adjusted to reflect Saturday midday conditions. Finally, as with the weekday peak hour volumes, estimates of the Saturday peak hour traffic increments from the USPS redevelopment of the Farley Complex (under the Future Without the Proposed Action) were added. This resulted in the 2010 Saturday peak hour No Build traffic volumes used in these analyses.

TRAFFIC VOLUMES AND LEVEL OF SERVICE

Peak hour traffic volumes for the 2010 No Build condition are shown in Figures 13-7 through 13-10. The 2010 No Build volumes relative to the existing volumes are discussed below.

TENTH AVENUE

Tenth Avenue volumes would increase from about: 1,500 to 1,800 vehicles per hour (vph) within the existing traffic study area to about 1,800 to 2,500 vph under 2010 No Build conditions during the weekday AM peak hour; increase from 1,400 to 1,800 vph existing to 1,700 to 2,500 vph under 2010 No Build conditions during the weekday midday peak hour; increase from 1,700 to 2,000 vph existing to 2,100 to 3,000 vph under the 2010 No Build conditions during the weekday PM peak hour; and increase from 1,500 to 1,900 vph existing to 1,600 to 2,300 vph under the 2010 No Build conditions during the Saturday midday peak hour.

NINTH AVENUE

Ninth Avenue carries about: 1,600 to 2,000 vph within the traffic study area during the existing weekday AM peak hour, which would increase to 2,000 to 2,300 vph under 2010 No Build conditions; 1,400 to 1,800 vph existing would increase to 1,700 to 2,200 vph under 2010 No Build conditions during the weekday midday peak hour; 1,500 to 1,800 vph existing would increase to 1,800 to 2,200 vph under 2010 No Build conditions during the weekday PM peak hour; and 1,300 to 1,800 vph existing would increase to 1,600 to 2,000 vph under 2010 No Build conditions during the Saturday midday peak hour.

DYER AVENUE/LINCOLN TUNNEL EXPRESSWAY

Dyer Avenue at West 34th Street carries about: 450 vph southbound and 50 vph northbound during the existing weekday AM peak hour, which would increase to 510 vph southbound and 50 vph northbound under the 2010 No Build conditions; 250 vph southbound and 150 vph northbound during the existing weekday midday peak hour, which would increase to 300 vph southbound and 160 vph northbound under the 2010 No Build conditions; 280 vph southbound and 125 vph northbound during the existing weekday PM peak hour, which would increase to 310 vph southbound and 130 vph northbound under the 2010 No Build conditions; and 500 vph southbound and 250 vph northbound during the existing Saturday midday peak hour, which would remain at 500 vph southbound and 250 vph northbound under the 2010 No Build conditions.

Along the Lincoln Tunnel Expressway between West 30th and West 33rd Streets, the roadway carries about: 650 vph southbound and 150 vph northbound during the existing weekday AM peak hour, which would increase to 680 vph southbound and 160 vph northbound under the 2010 No Build conditions; 350 vph southbound and 250 vph northbound during the existing weekday midday peak hour, which would increase to 370 vph southbound and 280 vph northbound under the 2010 No Build conditions; 180 vph southbound and 500 vph northbound during the existing weekday PM peak hour, which would increase to 190 vph southbound and 560 vph northbound under the 2010 No Build conditions; and 450 vph southbound and 450 vph northbound during the existing Saturday midday peak hour, which would increase to 480 vph southbound and 470 vph northbound under the 2010 No Build conditions.

EIGHTH AVENUE

Eighth Avenue generally carries about: 1,300 to 1,600 vph within the traffic study area during the existing weekday AM peak hour, which would increase to 1,600 to 2,000 vph under 2010 No Build conditions; 1,400 to 1,700 vph during the existing weekday midday peak hour, which would increase to 1,700 to 2,100 vph under 2010 No Build conditions; 1,500 to 1,800 vph during the existing weekday PM peak hour, which would increase to 1,900 to 2,200 vph under 2010 No Build conditions; and 1,400 to 1,700 vph during the existing Saturday peak hour which would increase to 1,600 to 1,900 vph under 2010 No Build conditions.

SEVENTH AVENUE

Seventh Avenue currently carries about: 1,300 to 1,800 vph within the traffic study area, which would increase to 1,400 to 2,200 vph under 2010 No Build conditions during the weekday AM peak hour; 1,100 to 1,500 vph, which would increase to 1,200 to 1,700 vph under 2010 No Build conditions during the weekday midday peak hour; 1,200 to 1,500 vph, which would increase to 1,500 to 1,800 vph under 2010 No Build conditions during the weekday PM peak hour; and 1,300 to 1,700 vph, which would increase to 1,400 to 1,900 vph under 2010 No Build conditions during the Saturday midday peak hour.

SIXTH AVENUE AND BROADWAY

Sixth Avenue carries about: 1,800 to 2,000 vph within the traffic study area during the existing weekday AM peak hour, which would increase to 2,000 to 2,200 vph under 2010 No Build conditions; 1,600 to 1,900 vph during the existing weekday midday peak hour, which would increase to 1,700 to 2,000 vph under 2010 No Build conditions; 1,600 to 1,900 vph during the existing weekday PM peak hour, which would increase to 1,700 to 2,100 vph under 2010 No

Build conditions; and 1,400 to 1,700 vph during the existing Saturday midday peak hour, which would increase to 1,500 to 1,800 vph under 2010 No Build conditions.

Broadway carries approximately: 800 vph during the existing weekday AM peak hour, which would increase to approximately 900 vph under 2010 No Build conditions; 850 vph during the existing weekday midday peak hour, which would increase to approximately 900 vph under 2010 No Build conditions; 925 vph during the existing weekday PM peak hour, which would increase to approximately 1,000 vph under 2010 No Build conditions; and 525 vph during the existing Saturday midday peak hour, which would increase to approximately 600 vph under 2010 No Build conditions.

WEST 34TH STREET

West 34th Street carries between about: 400 and 800 vph eastbound and between 485 and 600 vph westbound within the traffic study area during the existing AM peak hour, which would increase to about 600 to 1,100 vph eastbound and 600 to 700 vph westbound under 2010 No Build conditions; 500 to 700 vph eastbound and 625 to 800 vph westbound during the existing midday peak hour, which would increase to 600 to 900 vph eastbound and 700 to 950 vph westbound under 2010 No Build conditions; 400 to 575 vph eastbound and 525 to 600 vph westbound during the existing PM peak hour, which would increase to 500 to 900 vph eastbound and 700 to 800 vph westbound under 2010 No Build conditions; and 425 to 900 vph eastbound and 375 to 775 vph westbound during the existing Saturday midday peak hour, which would increase to 500 to 1,100 vph eastbound and 400 to 800 vph westbound under 2010 No Build conditions.

OTHER CROSSTOWN STREETS

Eastbound streets including West 28th, West 30th, and West 32nd Streets carry approximately 200 to 950 vph within the traffic study area during the existing weekday AM peak hour, which would increase to 300 to 1,200 vph under 2010 No Build conditions; 200 to 600 vph during the existing weekday midday peak hour, which would increase to 300 to 800 vph under 2010 No Build conditions; 175 to 700 vph during the existing weekday PM peak hour, which would increase to 200 to 800 vph under 2010 No Build conditions; and 200 to 700 vph during the existing Saturday midday peak hour, which would increase to 210 to 800 vph under 2010 No Build conditions. Westbound streets including West 29th, West 31st, West 33rd, and West 35th Streets carry about: 200 to 700 vph within the traffic study area during the existing weekday AM peak hour, which would increase to 230 to 900 vph under 2010 No Build conditions; 225 to 600 vph during the existing weekday midday peak hour, which would increase to 300 to 700 vph under 2010 No Build conditions; 225 to 800 vph during the existing weekday PM peak hour, which would increase to 300 to 1,100 vph under 2010 No Build conditions; and 250 to 625 vph during the existing Saturday midday peak hour, which would increase to 300 to 900 vph under 2010 No Build conditions.

Results of the LOS analysis are presented in Tables 13-15. As with existing conditions, locations with notable service constraints, those operating at mid-LOS D or worse, are described below.

Weekday AM Peak Hour

- Broadway and Sixth Avenue at West 34th Street: The northbound approach would deteriorate from LOS E to LOS F, with delay increasing from 59.2 to 80.2 spv and v/c ratio increasing from 1.03 to 1.09.

- Broadway at West 35th Street: The southbound approach would deteriorate from LOS D to LOS E, with delay increasing from 52.0 to 65.5 spv and v/c ratio increasing from 0.95 to 1.01.
- Sixth Avenue at West 35th Street: The westbound approach would continue to operate at LOS D, with delay increasing from 35.3 to 47.8 spv and v/c ratio increasing from 0.79 to 0.93.
- Seventh Avenue at West 29th Street: The westbound approach would deteriorate from LOS D to LOS E, with delay increasing from 37.3 to 56.7 spv and v/c ratio increasing from 0.88 to 1.00.
- Eighth Avenue at West 30th Street: The eastbound approach would deteriorate from LOS C to LOS E, with delay increasing from 28.5 to 66.5 spv and v/c ratio increasing from 0.80 to 1.05.
- Eighth Avenue at West 32nd Street: The northbound approach would deteriorate from LOS C to LOS D, with delay increasing from 23.0 to 45.7 spv and v/c ratio increasing from 0.77 to 1.01.
- Eighth Avenue at West 33rd Street: The northbound approach would deteriorate from LOS C to LOS F, with delay increasing from 32.2 to 89.8 spv and v/c ratio increasing from 0.90 to 1.13.
- Ninth Avenue at West 34th Street: The eastbound approach would deteriorate from LOS C to LOS D, with delay increasing from 29.4 to 46.4 spv and v/c ratio increasing from 0.72 to 0.96.

Weekday Midday Peak Hour

- Broadway and Sixth Avenue at West 34th Street: The northbound approach would deteriorate from LOS E to LOS F, with delay increasing from 62.1 to 85.2 spv and v/c ratio increasing from 1.03 to 1.10.
- Sixth Avenue at West 35th Street: The westbound approach would continue to operate at LOS D, with delay increasing from 39.1 to 48.2 spv and v/c ratio increasing from 0.85 to 0.94.
- Eighth Avenue at West 31st Street: The northbound approach would deteriorate from LOS C to LOS D, with delay increasing from 21.2 to 47.6 spv and v/c ratio increasing from 0.80 to 1.03.
- Eighth Avenue at West 33rd Street: The northbound approach would deteriorate from LOS D to LOS E, with delay increasing from 35.9 to 64.7 spv and v/c ratio increasing from 0.93 to 1.07.
- Ninth Avenue at West 33rd Street: The westbound approach would deteriorate from LOS C to LOS F, with delay increasing from 29.2 to 92.5 spv and v/c ratio increasing from 0.62 to 1.09.
- Tenth Avenue at West 34th Street: The westbound approach would continue to operate at LOS D, with delay increasing from 43.0 to 49.2 spv and v/c ratio increasing from 0.89 to 0.95.

Weekday PM Peak Hour

- Broadway at West 35th Street: The southbound approach would deteriorate from LOS E to LOS F, with delay increasing from 68.0 to 90.6 spv and v/c ratio increasing from 1.02 to 1.09.
- Eighth Avenue at West 31st Street: The westbound approach would deteriorate from LOS C to LOS F, with delay increasing from 23.6 to 94.2 spv and v/c ratio increasing from 0.68 to 1.12. The northbound approach would deteriorate from LOS C to LOS E, with delay increasing from 24.2 to 62.9 spv and v/c ratio increasing from 0.87 to 1.07.
- Eighth Avenue at West 32nd Street: The northbound approach would deteriorate from LOS C to LOS D, with delay increasing from 23.9 to 51.8 spv and v/c ratio increasing from 0.81 to 1.03.
- Eighth Avenue at West 35th Street: The westbound approach would continue to operate at LOS D, with delay increasing from 40.3 to 45.2 spv and v/c ratio increasing from 0.86 to 0.90.
- Ninth Avenue at West 33rd Street: The westbound approach would deteriorate from LOS C to LOS E, with delay increasing from 30.2 to 68.5 spv and v/c ratio increasing from 0.65 to 1.01.

Saturday Midday Peak Hour

- Seventh Avenue at West 34th Street: The eastbound approach would deteriorate from LOS D to LOS E, with delay increasing from 38.6 to 78.9 spv and v/c ratio increasing from 0.90 to 1.07. The westbound approach would deteriorate from LOS D to LOS F, with delay increasing from 37.9 to 84.8 spv and v/c ratio increasing from 0.89 to 1.09.
- Eighth Avenue at West 33rd Street: The northbound approach would deteriorate from LOS C to LOS E, with delay increasing from 33.9 to 78.7 spv and v/c ratio increasing from 0.92 to 1.10.
- Eighth Avenue at West 34th Street: The northbound approach would deteriorate from LOS D to LOS F, with delay increasing from 40.4 to 92.0 spv and v/c ratio increasing from 0.97 to 1.13.
- Dyer Avenue at West 31st Street: The westbound approach would deteriorate from LOS D to LOS F, with delay increasing from 40.3 to 131.0 spv and v/c ratio increasing from 0.83 to 1.19.
- Tenth Avenue at West 28th Street: The eastbound approach would deteriorate from LOS D to LOS E, with delay increasing from 43.6 to 59.0 spv and v/c ratio increasing from 0.83 to 0.94.
- Tenth Avenue at West 31st Street: The westbound approach would deteriorate from LOS C to LOS F, with delay increasing from 33.7 to 165.0 spv and v/c ratio increasing from 0.73 to 1.27.

PARKING

OFF-STREET PARKING

In the Future Without the Proposed Action in 2010, or 2010 No Build, off-street parking demand would increase due to the development of projects under the *Hudson Yards FGEIS* No Build and Build conditions. According to that study's *Appendix S.3 Transportation – Parking Analysis*, the

total capacity of off-street facilities would increase slightly to accommodate some, but not all, of the parking demand. This would result in an increase in parking utilization rates in the study area under 2010 No Build conditions. Since the *Hudson Yards FGEIS Appendix S.3 Transportation – Parking Analysis* does not state precisely at which off-street parking facilities parking utilization rates would increase, off-street parking utilization rates in the study area under 2010 No Build conditions have been assumed to match the rates in the *Hudson Yards FGEIS* 2010 Build conditions.

Therefore, 2010 No Build overall average off-street parking utilization rates per peak period have been conservatively adjusted up to the levels in the *Hudson Yards FGEIS.* Facilities that did not already operate at 100 percent of capacity under existing conditions were increased so the following overall study area average utilization rates would result: weekday midday would increase from 80 percent under existing conditions to 90 percent under No Build conditions, weekday overnight would increase from 36 to 47 percent, and weekday evening would increase from 46 to 73 percent. Because there was no Saturday midday peak hour analyzed in the *Hudson Yards FGEIS*, the largest increase of any weekday peak hour, 27 percent, was applied to the existing Saturday midday peak hour utilization rate of 58 percent, which would increase to 85 percent under No Build conditions.

ON-STREET PARKING

Because the existing on-street parking is either near capacity on a weekday or exceeds legal capacity on a Saturday midday, it is expected that in the Future Without the Proposed Action that utilization would continue to be approximately 100 percent.

E. FUTURE WITH THE PROPOSED ACTION 2010

TRIP DISTRIBUTION AND ASSIGNMENT

Trips generated by the 2010 Build program were distributed to the traffic network by assigning the total peak hour trips per mode and per land use using percentage assignments onto the study area traffic network. The trip distribution and percentage assignments were based on the *2003 Penn Station Redevelopment Project EA.* Because the proposed action does not include the construction of new parking, auto trips were assigned to existing parking facilities within ¼-mile of the site. The Moynihan Station and 1 Penn Plaza West sites have excellent vehicular accessibility due to adjacent major streets such as West 34th Street, Seventh, Eighth and Ninth Avenues, and regional access provided by the nearby Lincoln Tunnel and Route 9A. Since there are numerous approach and departure routes connecting Midtown to the north and west, the East Side to the east, and Lower Manhattan to the south, vehicular trips associated with the site are distributed to nearly all roadways in the study area.

AUTOS

The auto trip assignment assumes that a portion of auto trips would proceed directly to well-known parking facilities, thereby slightly reducing the concentration of vehicular traffic on the streets directly bordering the Moynihan Station and 1 Penn Plaza West sites compared to a hypothetical Build scenario where parking would be provided on the sites. Other auto trips (consisting of motorists less familiar with the area) would approach the site, “touch” a corner or drive alongside the site, then navigate to the next available parking facility.

Commercial Retail Use

Auto trips to retail uses at Moynihan Station and 1 Penn Plaza were distributed to study area roadways, with 10 to 15 percent from Route 9A using West 30th and West 34th Streets, 10 to 20 percent from the Lincoln Tunnel, 25 to 30 percent from Midtown using Seventh and Ninth Avenues, 30 to 35 percent from the East Side using West 31st, West 33rd, West 34th, and West 35th Streets, and 10 to 20 percent from Lower Manhattan using Sixth, Eighth and Tenth Avenues. Departing trip assignments would follow similar routes using the nearest reverse-direction avenues or streets.

Transit-Related Retail Use

Auto trips to transit-related retail uses at Moynihan Station were distributed to study area roadways, with about 10 percent from Route 9A using West 30th and West 34th Streets, about 5 percent from the Lincoln Tunnel, approximately 30 percent from Midtown using Seventh and Ninth Avenues, about 35 percent from the East Side using West 31st, West 33rd, West 34th, and West 35th Streets, and approximately 20 percent from Lower Manhattan using Sixth, Eighth and Tenth Avenues. Departing trip assignments would follow similar routes using the nearest reverse-direction avenues or streets.

Transit Growth

Auto trips associated with the transit growth were distributed to study area roadways, with about 20 percent from Route 9A using West 30th and West 34th Streets, approximately 20 percent from Midtown using Seventh and Ninth Avenues, about 25 percent from the East Side using West 31st, West 33rd, West 34th, and West 35th Streets, and approximately 35 percent from Lower Manhattan using Sixth, Eighth and Tenth Avenues. Departing trip assignments would follow similar routes using the nearest reverse-direction avenues or streets.

Hotel and Banquet Use

Auto trips to hotel and banquet uses were distributed to study area roadways, with approximately 15 percent from Route 9A using West 30th and West 34th Streets, about 25 percent from the Lincoln Tunnel, about 25 percent from Midtown using Seventh and Ninth Avenues, approximately 20 percent from the East Side using West 31st, West 33rd, West 34th, and West 35th Streets, and about 15 percent from Lower Manhattan using Sixth, Eighth and Tenth Avenues. Departing trip assignments would follow similar routes using the nearest reverse-direction avenues or streets.

Residential Use

Auto trips to residential uses were distributed to study area roadways, with 10 to 15 percent from Route 9A using West 30th and West 34th Streets, 10 to 15 percent from the Lincoln Tunnel, 20 to 25 percent from Midtown using Seventh and Ninth Avenues, 25 to 30 percent from the East Side using West 31st, West 33rd, West 34th, and West 35th Streets, and 20 to 25 percent from Lower Manhattan using Sixth, Eighth and Tenth Avenues. Departing trip assignments would follow similar routes using the nearest reverse-direction avenues or streets.

TAXIS

Upon reaching the study area, taxi trips destined to Moynihan Station would predominantly travel along streets bordering the site to arrive at the designated taxi area on West 33rd Street between Eighth and Ninth Avenues. Because of its location on a one-way street between two one-way avenues, the designated taxi area induces circuitous travel, making traffic volumes on streets bordering the site higher than if taxi pick-ups and drop-offs were disorganized and

occurring outside of all lobbies and street-level pedestrian accesses to Moynihan Station. It should be noted that the benefits of a designated taxi area in the context of predictability for recurrent taxi users, wayfinding for non-recurrent users, and Moynihan Station-area traffic management outweigh the adverse effects of additional circulation of peak hour trips to reach the designated taxi area. However, not all taxi pick-ups and drop-offs were assigned to the designated taxi area at Moynihan Station. Presumably, some taxi riders would direct taxi drivers to convenient drop-off points or a small portion of taxis passing by the site would pick up riders on all four sides of the site. Although the exact proportions differ between land uses due to their unique pedestrian access options, it was conservatively assumed that taxi trips would be destined to the designated West 33rd Street taxi area in higher percentages than directly along the nearest block face for that particular land uses' main entrances. Taxis destined to 1 Penn Plaza West would not be directed to a designated taxi area; rather, they were assumed to pick up and drop off riders on the West 34th Street, West 33rd Street, and Eighth Avenue block faces.

Commercial Retail Use

Taxi trips to retail uses at Moynihan Station and 1 Penn Plaza were distributed to study area roadways, with 15 to 20 percent from Route 9A using West 30th and West 34th Streets, approximately 5 to 10 percent from the Lincoln Tunnel, 30 to 35 percent from Midtown using Seventh and Ninth Avenues, 20 to 25 percent from the East Side using West 31st, West 33rd, West 34th, and West 35th Streets, and 20 to 30 percent from Lower Manhattan using Sixth, Eighth and Tenth Avenues. Departing trip assignments would follow similar routes using the nearest reverse-direction avenues or streets.

Transit-Related Retail Use

Taxi trips to transit-related retail uses at Moynihan Station were distributed to study area roadways, with about 20 percent from Route 9A using West 30th and West 34th Streets, approximately 30 percent from Midtown using Seventh and Ninth Avenues, about 30 percent from the East Side using West 31st, West 33rd, West 34th, and West 35th Streets, and approximately 20 percent from Lower Manhattan using Sixth, Eighth and Tenth Avenues. Departing trip assignments would follow similar routes using the nearest reverse-direction avenues or streets.

Transit Growth

Taxi trips associated with the transit growth were distributed to study area roadways, with approximately 40 percent from Midtown using Seventh and Ninth Avenues, about 30 percent from the East Side using West 31st, West 33rd, West 34th, and West 35th Streets, and approximately 30 percent from Lower Manhattan using Sixth, Eighth and Tenth Avenues. Departing trip assignments would follow similar routes using the nearest reverse-direction avenues or streets.

Table 13-15
Existing and 2010 No Build Conditions Level of Service Analysis Results

Analysis Locations	Weekday AM Peak Hour								Weekday Midday Peak Hour								Weekday PM Peak Hour								Saturday Midday Peak Hour							
	Existing				2010 No Build				Existing				2010 No Build				Existing				2010 No Build				Existing				2010 No Build			
	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS
Broadway/Sixth Ave & W.34th St																																
Eastbound	T	0.70	31.9	C	T	0.89	41.4	D	T	0.63	29.8	C	T	0.77	33.9	C	T	0.41	26.3	C	T	0.69	32.7	C	T	0.71	31.7	C	T	0.83	36.5	D
Westbound	TR	0.61	29.6	C	TR	0.74	33.1	C	TR	0.78	34.4	C	TR	0.88	39.7	D	TR	0.64	30.3	C	TR	0.77	35.9	D	TR	0.70	31.5	C	TR	0.76	33.1	C
Northbound	T	1.03	59.2	E	T	1.09	80.2	F	T	1.03	62.1	E	T	1.10	85.2	F	T	1.05	60.2	E	T	1.09	72.0	E	T	0.91	39.9	D	T	0.95	44.6	D
Southbound	T	0.90	47.4	D	T	0.94	52.3	D	T	0.99	61.8	E	T	1.03	72.0	E	T	0.99	62.2	E	T	1.00	62.3	E	T	0.64	34.5	C	T	0.67	35.2	D
Intersection			*47.3*	*D*			*59.0*	*E*			*50.7*	*D*			*62.8*	*E*			*51.2*	*D*			*56.8*	*E*			*35.4*	*D*			*38.7*	*D*
Broadway & W.35th St																																
Westbound	LT	0.21	7.2	A	LT	0.27	7.6	A	LT	0.23	7.3	A	LT	0.27	7.6	A	LT	0.26	7.5	A	LT	0.31	7.9	A	LT	0.29	7.8	A	LT	0.33	8.2	A
Southbound	TR	0.95	52.0	D	TR	1.01	65.5	E	TR	0.97	57.0	E	TR	1.02	68.7	E	TR	1.02	68.0	E	TR	1.09	90.6	F	TR	0.66	34.1	C	TR	0.70	35.2	D
Intersection			*35.7*	*D*			*42.1*	*D*			*38.4*	*D*			*44.1*	*D*			*44.9*	*D*			*57.1*	*E*			*22.2*	*C*			*22.4*	*C*
Sixth Ave & W.31st St																																
Westbound	TR	0.60	22.2	C	TR	0.71	25.0	C	TR	0.58	21.8	C	TR	0.65	23.5	C	TR	0.74	26.1	C	TR	0.83	30.3	C	TR	0.66	23.9	C	TR	0.74	26.1	C
Northbound	LT	0.90	24.9	C	LT	0.97	33.4	C	LT	0.83	21.3	C	LT	0.89	24.1	C	LT	0.86	22.8	C	LT	0.93	27.9	C	LT	0.74	18.9	B	LT	0.78	19.9	B
Intersection			*24.3*	*C*			*31.4*	*C*			*21.4*	*C*			*24.0*	*C*			*23.7*	*C*			*28.6*	*C*			*20.3*	*C*			*21.7*	*C*
Sixth Ave & W.32nd St																																
Eastbound	LT	0.51	20.6	C	LT	0.53	21.0	C	LT	0.99	67.0	E	LT	1.03	78.0	E	LT	0.22	16.6	B	LT	0.23	16.7	B	LT	0.34	18.2	B	LT	0.35	18.4	B
Northbound	TR	0.88	23.8	C	TR	0.94	28.4	C	TR	0.85	22.3	C	TR	0.91	25.5	C	TR	0.86	22.4	C	TR	0.92	26.3	C	TR	0.82	21.0	C	TR	0.85	22.4	C
Intersection			*23.2*	*C*			*27.1*	*C*			*29.7*	*C*			*34.1*	*C*			*21.9*	*C*			*25.5*	*C*			*20.7*	*C*			*21.9*	*C*
Sixth Ave & W.33rd St																																
Northbound	L	0.36	21.1	C	L	0.40	21.7	C	L	0.42	22.1	C	L	0.45	22.8	C	L	0.45	22.7	C	L	0.48	23.4	C	L	0.45	22.8	C	L	0.48	23.3	C
	T	0.89	29.0	C	T	0.94	33.5	C	T	0.76	24.0	C	T	0.81	25.4	C	T	0.76	24.0	C	T	0.81	25.7	C	T	0.70	22.9	C	T	0.73	23.6	C
Intersection			*28.2*	*C*			*32.3*	*C*			*23.8*	*C*			*25.1*	*C*			*23.9*	*C*			*25.3*	*C*			*22.9*	*C*			*23.5*	*C*
Sixth Ave & W.35th St																																
Westbound	TR	0.79	35.3	D	TR	0.93	47.8	D	TR	0.85	39.1	D	TR	0.94	48.2	D	TR	0.96	53.5	D	TR	0.94	45.6	D	TR	0.62	25.4	C	TR	0.70	27.4	C
Northbound	LT	0.63	10.1	B	LT	0.68	11.5	B	LT	0.54	9.2	A	LT	0.59	10.3	B	LT	0.54	9.2	A	LT	0.64	13.9	B	LT	0.55	12.7	B	LT	0.58	13.0	B
Intersection			*16.0*	*B*			*21.0*	*C*			*17.4*	*B*			*21.3*	*C*			*22.6*	*C*			*23.9*	*C*			*16.1*	*B*			*17.1*	*B*
Seventh Ave & W.28th St																																
Eastbound	TR	0.29	14.3	B	TR	0.35	15.0	B	TR	0.28	14.2	B	TR	0.35	15.0	B	TR	0.25	11.2	B	TR	0.34	12.2	B	TR	0.45	24.8	C	TR	0.53	26.3	C
Southbound	LT	0.72	22.7	C	LT	0.78	24.4	C	LT	0.68	21.9	C	LT	0.74	23.1	C	LT	0.85	31.6	C	LT	0.96	41.7	D	LT	0.54	9.9	A	LT	0.59	10.5	B
Intersection			*21.0*	*C*			*22.4*	*C*			*20.3*	*C*			*21.2*	*C*			*27.8*	*C*			*35.1*	*D*			*12.7*	*B*			*13.8*	*B*
Seventh Ave & W.29th St																																
Westbound	LT	0.88	37.3	D	LT	1.00	56.7	E	LT	0.58	24.0	C	LT	0.67	26.2	C	LT	0.58	24.0	C	LT	0.69	27.0	C	LT	0.56	23.7	C	LT	0.63	25.5	C
Southbound	TR	0.57	13.8	B	TR	0.62	14.5	B	TR	0.51	13.0	B	TR	0.55	13.5	B	TR	0.60	14.1	B	TR	0.68	15.4	B	TR	0.69	15.6	B	TR	0.75	16.9	B
Intersection			*22.2*	*C*			*30.0*	*C*			*16.2*	*B*			*17.4*	*B*			*16.7*	*B*			*18.5*	*B*			*17.4*	*B*			*18.8*	*B*
Seventh Ave & W.30th St																																
Eastbound	TR	0.95	45.7	D	TR	0.70	25.2	C	TR	0.63	24.9	C	TR	0.78	29.8	C	TR	0.37	20.2	C	TR	0.56	23.4	C	TR	0.63	25.1	C	TR	0.77	29.6	C
Southbound	LT	0.57	13.8	B	LT	0.63	14.6	B	LT	0.51	13.1	B	LT	0.55	13.5	B	LT	0.56	13.6	B	LT	0.63	14.6	B	LT	0.56	13.7	B	LT	0.61	14.3	B
Intersection			*26.5*	*C*			*19.0*	*B*			*17.0*	*B*			*19.3*	*B*			*14.9*	*B*			*16.8*	*B*			*17.1*	*B*			*19.3*	*B*
Seventh Ave & W.31st St																																
Westbound	LT	0.63	23.7	C	LT	0.79	29.1	C	LT	0.56	22.1	C	LT	0.64	23.9	C	LT	0.77	28.4	C	LT	0.87	34.3	C	LT	0.56	21.8	C	LT	0.63	23.4	C
Southbound	TR	0.48	14.0	B	TR	0.58	15.2	B	TR	0.37	13.0	B	TR	0.44	13.6	B	TR	0.38	13.0	B	TR	0.53	14.5	B	TR	0.68	17.0	B	TR	0.76	18.8	B
Intersection			*16.9*	*B*			*19.6*	*B*			*15.7*	*B*			*16.8*	*B*			*18.5*	*B*			*21.3*	*C*			*18.3*	*B*			*20.1*	*C*

Notes: L = Left Turn; T = Through; R = Right Turn; DefL = De Facto Left Turn; V/C = Volume to Capacity; LOS = Level of Service

Table 13-15 (Continued)
Existing and 2010 No Build Conditions Level of Service Analysis Results

Analysis Locations	Weekday AM Peak Hour								Weekday Midday Peak Hour								Weekday PM Peak Hour								Saturday Midday Peak Hour							
	Existing				2010 No Build				Existing				2010 No Build				Existing				2010 No Build				Existing				2010 No Build			
	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS
Seventh Ave & W.32nd St																																
Southbound	LT	0.35	3.5	A	LT	0.40	3.7	A	LT	0.29	3.3	A	LT	0.32	3.4	A	LT	0.25	3.2	A	LT	0.32	3.4	A	LT	0.57	4.9	A	LT	0.62	5.3	A
Intersection			*3.5*	*A*			*3.7*	*A*			*3.3*	*A*			*3.4*	*A*			*3.2*	*A*			*3.4*	*A*			*4.9*	*A*			*5.3*	*A*
Seventh Ave & W.33rd St																																
Westbound	LT	0.47	32.5	C	LT	0.52	33.5	C	LT	0.54	33.9	C	LT	0.59	35.2	D	LT	0.54	33.5	C	LT	0.65	37.3	D	LT	0.72	40.1	D	LT	0.75	42.0	D
Southbound	TR	0.49	4.2	A	TR	0.58	4.8	A	TR	0.41	3.8	A	TR	0.47	4.1	A	TR	0.41	3.8	A	TR	0.49	4.2	A	TR	0.57	4.9	A	TR	0.65	5.6	A
Intersection			*7.1*	*A*			*7.5*	*A*			*8.0*	*A*			*8.2*	*A*			*8.3*	*A*			*8.7*	*A*			*10.6*	*B*			*11.2*	*B*
Seventh Ave & W.34th St																																
Eastbound	TR	0.53	22.6	C	TR	0.69	25.6	C	TR	0.51	22.3	C	TR	0.64	24.5	C	TR	0.39	20.7	C	TR	0.61	24.0	C	TR	0.90	38.6	D	TR	1.07	78.9	E
Westbound	LT	0.53	22.8	C	LT	0.65	25.2	C	LT	0.70	26.4	C	LT	0.80	29.8	C	LT	0.56	23.4	C	LT	0.69	26.5	C	LT	0.89	37.9	D	LT	1.09	84.8	F
Southbound	T	0.79	17.8	B	T	0.94	26.1	C	T	0.64	14.8	B	T	0.73	16.4	B	T	0.60	14.2	B	T	0.72	16.2	B	T	0.79	17.7	B	T	0.89	21.6	C
Intersection			*19.9*	*B*			*25.8*	*C*			*19.7*	*B*			*22.0*	*C*			*17.8*	*B*			*20.6*	*C*			*27.3*	*C*			*50.2*	*D*
Seventh Ave & W.35th St																																
Westbound	L	0.37	22.2	C	L	0.59	27.1	C	L	0.38	22.4	C	L	0.53	25.5	C	L	0.24	20.2	C	L	0.41	23.1	C	L	0.45	26.0	C	L	0.64	32.2	C
	LT	0.30	20.4	C	LT	0.33	20.8	C	LT	0.26	19.9	B	LT	0.28	20.2	C	LT	0.48	22.9	C	LT	0.51	23.3	C	LT	0.55	25.8	C	LT	0.60	27.1	C
Southbound	TR	0.71	14.4	B	TR	0.81	16.8	B	TR	0.62	13.0	B	TR	0.68	13.9	B	TR	0.55	12.1	B	TR	0.63	13.1	B	TR	0.67	13.7	B	TR	0.73	14.8	B
Intersection			*15.9*	*B*			*18.5*	*B*			*14.9*	*B*			*16.2*	*B*			*15.3*	*B*			*16.4*	*B*			*16.5*	*B*			*18.2*	*B*
Eighth Ave & W.28th St																																
Eastbound	LT	0.41	21.9	C	LT	0.51	23.5	C	LT	0.39	21.7	C	LT	0.49	23.3	C	LT	0.48	23.1	C	LT	0.63	26.1	C	LT	0.52	23.9	C	LT	0.59	25.3	C
Northbound	TR	0.52	11.7	B	TR	0.65	13.3	B	TR	0.69	14.0	B	TR	0.80	16.4	B	TR	0.66	13.5	B	TR	0.78	15.8	B	TR	0.61	12.8	B	TR	0.70	14.2	B
Intersection			*14.0*	*B*			*15.5*	*B*			*15.3*	*B*			*17.6*	*B*			*15.5*	*B*			*18.1*	*B*			*15.1*	*B*			*16.5*	*B*
Eighth Ave & W.29th St																																
Westbound	TR	0.80	31.3	C	TR	0.92	41.9	D	TR	0.40	18.1	B	TR	0.48	19.2	B	TR	0.58	23.9	C	TR	0.70	27.1	C	TR	0.46	21.7	C	TR	0.54	23.1	C
Northbound	LT	0.56	13.5	B	LT	0.69	15.6	B	LT	0.79	21.0	C	LT	0.93	27.9	C	LT	0.73	16.3	B	LT	0.86	20.0	C	LT	0.64	14.7	B	LT	0.73	16.3	B
Intersection			*19.7*	*B*			*24.1*	*C*			*20.5*	*C*			*26.3*	*C*			*18.0*	*B*			*21.6*	*C*			*16.1*	*B*			*17.7*	*B*
Eighth Ave & W.30th St																																
Eastbound	LT	0.80	28.5	C	LT	1.05	66.5	E	LT	0.52	19.6	B	LT	0.75	25.2	C	LT	0.37	18.7	B	LT	0.63	23.1	C	LT	0.57	22.0	C	LT	0.79	28.6	C
Northbound	TR	0.58	15.4	B	TR	0.77	19.5	B	TR	0.72	19.3	B	TR	0.86	23.4	C	TR	0.73	17.7	B	TR	0.86	21.8	C	TR	0.70	17.2	B	TR	0.80	19.6	B
Intersection			*20.6*	*C*			*38.5*	*D*			*19.3*	*B*			*24.0*	*C*			*17.9*	*B*			*22.1*	*C*			*18.5*	*B*			*22.3*	*C*
Eighth Ave & W.31st St																																
Westbound	TR	0.88	36.9	D	TR	0.87	32.6	C	TR	0.48	19.5	B	TR	0.71	25.4	C	TR	0.68	23.6	C	TR	1.12	94.2	F	TR	0.73	25.0	C	TR	0.85	31.5	C
Northbound	LT	0.65	17.9	B	LT	0.91	26.7	C	LT	0.80	21.2	C	LT	1.03	47.6	D	LT	0.87	24.2	C	LT	1.07	62.9	E	LT	0.75	19.8	B	LT	0.90	26.2	C
Intersection			*23.9*	*C*			*28.6*	*C*			*20.9*	*C*			*43.1*	*D*			*24.1*	*C*			*71.8*	*E*			*21.4*	*C*			*27.8*	*C*
Eighth Ave & W.32nd St																																
Northbound	T	0.77	23.0	C	T	1.01	45.7	D	T	0.79	23.5	C	T	0.97	37.1	D	T	0.81	23.9	C	T	1.03	51.8	D	T	0.79	23.5	C	T	0.94	31.7	C
Intersection			*23.0*	*C*			*45.7*	*D*			*23.5*	*C*			*37.1*	*D*			*23.9*	*C*			*51.8*	*D*			*23.5*	*C*			*31.7*	*C*
Eighth Ave & W.33rd St																																
Westbound	TR	0.17	11.4	B	TR	0.22	12.9	B	TR	0.18	11.5	B	TR	0.24	13.6	B	TR	0.23	12.0	B	TR	0.28	12.4	B	TR	0.27	12.5	B	TR	0.34	13.1	B
Northbound	LT	0.90	32.2	C	LT	1.13	89.8	F	LT	0.93	35.9	D	LT	1.07	64.7	E	LT	0.97	40.6	D	LT	0.96	37.7	D	LT	0.92	33.9	C	LT	1.10	78.7	E
Intersection			*29.1*	*C*			*78.5*	*E*			*32.1*	*C*			*56.6*	*E*			*35.4*	*D*			*33.2*	*C*			*30.1*	*C*			*66.6*	*E*

Notes: L = Left Turn; T = Through; R = Right Turn; DefL = De Facto Left Turn; V/C = Volume to Capacity; LOS = Level of Service

Table 13-15 (Continued)
Existing and 2010 No Build Conditions Level of Service Analysis Results

Analysis Locations	Weekday AM Peak Hour								Weekday Midday Peak Hour								Weekday PM Peak Hour								Saturday Midday Peak Hour							
	Existing				2010 No Build				Existing				2010 No Build				Existing				2010 No Build				Existing				2010 No Build			
	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS
Eighth Ave & W.34th St																																
Eastbound	LT	1.01	44.4	D	L	0.50	26.3	C	LT	1.02	65.6	E	L	0.40	26.4	C	LT	0.69	24.9	C	L	0.40	22.5	C	LT	1.04	68.7	E	L	0.77	52.5	D
					T	0.66	18.4	B					T	0.53	16.3	B					T	0.47	15.4	B					T	0.73	24.7	C
Westbound	TR	0.41	17.9	B	TR	0.65	27.2	C	TR	0.53	19.4	B	TR	0.80	33.4	C	TR	0.37	17.3	B	TR	0.70	30.8	C	TR	0.55	19.9	B	TR	0.61	21.0	C
Northbound	LTR	0.74	19.6	B	LTR	0.86	27.9	C	LTR	0.73	19.6	B	LTR	0.82	26.4	C	LTR	0.74	19.8	B	LTR	0.85	27.7	C	LTR	0.97	40.4	D	LTR	1.13	92.0	F
Intersection			*25.9*	*C*			*25.5*	*C*			*30.0*	*C*			*26.2*	*C*			*20.3*	*C*			*25.9*	*C*			*42.4*	*D*			*59.8*	*E*
Eighth Ave & W.35th St																																
Westbound	TR	0.61	28.5	C	TR	0.67	30.5	C	TR	0.55	20.9	C	TR	0.59	21.6	C	TR	0.86	40.3	D	TR	0.90	45.2	D	TR	0.64	29.5	C	TR	0.67	30.4	C
Northbound	LT	0.60	10.6	B	LT	0.72	12.3	B	LT	0.64	17.8	B	LT	0.77	20.5	C	LT	0.58	10.4	B	LT	0.71	12.0	B	LT	0.64	11.0	B	LT	0.72	12.3	B
Intersection			*14.2*	*B*			*15.7*	*B*			*18.6*	*B*			*20.7*	*C*			*18.4*	*B*			*20.0*	*C*			*14.6*	*B*			*15.6*	*B*
Ninth Ave & W.28th St																																
Eastbound	TR	0.26	22.7	C	TR	0.36	24.0	C	TR	0.30	23.2	C	TR	0.41	24.8	C	TR	0.41	24.7	C	TR	0.57	27.6	C	TR	0.57	27.5	C	TR	0.64	29.2	C
Southbound	LT	0.63	10.1	B	LT	0.69	10.9	B	LT	0.56	9.4	A	LT	0.64	10.2	B	LT	0.43	8.1	A	LT	0.51	8.7	A	LT	0.68	10.9	B	LT	0.76	12.4	B
Intersection			*11.1*	*B*			*12.3*	*B*			*10.9*	*B*			*12.2*	*B*			*10.7*	*B*			*12.0*	*B*			*14.1*	*B*			*15.7*	*B*
Ninth Ave & W.29th St																																
Westbound	LT	0.53	25.7	C	LT	0.56	26.3	C	LT	0.36	23.5	C	LT	0.40	23.9	C	LT	0.40	23.9	C	LT	0.45	24.5	C	LT	0.55	27.1	C	LT	0.61	28.5	C
Southbound	TR	0.58	9.5	A	TR	0.65	10.3	B	TR	0.71	11.4	B	TR	0.81	13.7	B	TR	0.51	8.9	A	TR	0.62	9.9	A	TR	0.67	10.7	B	TR	0.77	12.6	B
Intersection			*14.0*	*B*			*14.5*	*B*			*14.0*	*B*			*15.9*	*B*			*12.5*	*B*			*13.3*	*B*			*13.9*	*B*			*15.5*	*B*
Ninth Ave & W.30th St																																
Eastbound	TR	0.64	28.2	C	TR	0.72	29.8	C	TR	0.40	24.4	C	TR	0.49	25.6	C	TR	0.29	23.4	C	TR	0.35	24.0	C	TR	0.76	32.5	C	TR	0.84	36.5	D
Southbound	LT	0.48	12.4	B	LT	0.60	13.7	B	LT	0.51	12.7	B	LT	0.72	15.7	B	LT	0.53	13.1	B	LT	0.73	15.9	B	LT	0.63	14.5	B	LT	0.79	17.5	B
Intersection			*17.8*	*B*			*19.0*	*B*			*15.7*	*B*			*18.2*	*B*			*15.1*	*B*			*17.3*	*B*			*20.3*	*C*			*23.2*	*C*
Ninth Ave & W.31st St																																
Westbound	LT	0.37	23.7	C	LT	0.64	28.1	C	LT	0.42	24.3	C	LT	0.62	27.9	C	LT	0.60	26.9	C	LT	0.87	36.6	D	LT	0.69	30.4	C	LT	0.87	39.7	D
Southbound	TR	0.52	8.9	A	TR	0.68	10.7	B	TR	0.51	8.8	A	TR	0.63	10.1	B	TR	0.44	8.2	A	TR	0.64	10.2	B	TR	0.60	9.8	A	TR	0.72	11.5	B
Intersection			*11.7*	*B*			*15.0*	*B*			*12.2*	*B*			*14.3*	*B*			*14.4*	*B*			*18.7*	*B*			*15.2*	*B*			*19.0*	*B*
Ninth Ave & W.33rd St																																
Westbound	LT	0.50	26.9	C	LT	0.79	37.6	D	LT	0.62	29.2	C	LT	1.09	92.5	F	LT	0.65	30.2	C	LT	1.01	68.5	E	LT	0.48	26.1	C	LT	0.67	30.4	C
Southbound	TR	0.50	8.7	A	TR	0.63	10.0	A	TR	0.44	8.3	A	TR	0.54	9.1	A	TR	0.43	8.2	A	TR	0.55	9.2	A	TR	0.58	9.6	A	TR	0.69	11.0	B
Intersection			*11.3*	*B*			*14.7*	*B*			*12.5*	*B*			*29.0*	*C*			*12.9*	*B*			*23.1*	*C*			*12.6*	*B*			*14.9*	*B*
Ninth Ave & W.34th St																																
Eastbound	TR	0.72	29.4	C	TR	0.96	46.4	D	TR	0.66	28.6	C	TR	0.91	41.9	D	TR	0.52	25.8	C	TR	0.91	42.7	D	TR	0.72	26.7	C	TR	0.88	34.1	C
Westbound	DefL	0.35	22.6	C	DefL	0.59	37.0	D	DefL	0.54	29.0	C	DefL	0.74	43.9	D	DefL	0.28	18.0	B	DefL	0.47	29.8	C	DefL	1.00	96.1	F	DefL	1.31	190.7	F
	T	0.33	14.2	B	T	0.40	15.0	B	T	0.47	15.9	B	T	0.53	16.8	B	T	0.31	13.9	B	T	0.43	15.4	B	T	0.36	14.4	B	T	0.41	15.0	B
Southbound	LTR	0.73	23.3	C	LTR	0.88	28.2	C	LTR	0.63	21.3	C	LTR	0.76	23.9	C	LTR	0.44	18.8	B	LTR	0.61	20.9	C	LTR	0.74	23.9	C	LTR	0.87	28.2	C
Intersection			*23.7*	*C*			*32.1*	*C*			*22.4*	*C*			*28.3*	*C*			*19.5*	*B*			*26.2*	*C*			*28.1*	*C*			*38.7*	*D*
Ninth Ave & W.35th St																																
Westbound	LT	0.42	25.0	C	LT	0.46	25.5	C	LT	0.53	26.5	C	LT	0.61	28.8	C	LT	0.70	30.8	C	LT	0.84	37.8	D	LT	0.68	30.9	C	LT	0.70	31.9	C
Southbound	TR	0.52	9.0	A	TR	0.62	10.0	A	TR	0.44	8.3	A	TR	0.53	9.0	A	TR	0.48	8.6	A	TR	0.59	9.6	A	TR	0.52	9.1	A	TR	0.62	10.2	B
Intersection			*11.5*	*B*			*12.2*	*B*			*12.6*	*B*			*13.2*	*B*			*14.8*	*B*			*16.7*	*B*			*14.4*	*B*			*15.0*	*B*
Dyer Ave & W.30th St																																
Eastbound	L	0.11	10.1	B	L	0.09	10.0	A	L	0.17	10.5	B	L	0.17	10.5	B	L	0.32	11.8	B	L	0.35	12.1	B	L	0.30	11.7	B	L	0.32	11.9	B
Southbound	L	0.65	28.1	C	L	0.68	28.8	C	L	0.34	22.8	C	L	0.36	23.0	C	L	0.18	21.0	C	L	0.19	21.1	C	L	0.51	25.3	C	L	0.53	25.5	C
Intersection			*25.0*	*C*			*25.4*	*C*			*17.7*	*B*			*17.7*	*B*			*14.2*	*B*			*14.4*	*B*			*19.2*	*B*			*19.4*	*B*

Notes: L = Left Turn; T = Through; R = Right Turn; DefL = De Facto Left Turn; V/C = Volume to Capacity; LOS = Level of Service

Table 13-15 (Continued)
Existing and 2010 No Build Conditions Level of Service Analysis Results

Analysis Locations	Weekday AM Peak Hour								Weekday Midday Peak Hour								Weekday PM Peak Hour								Saturday Midday Peak Hour							
	Existing				2010 No Build				Existing				2010 No Build				Existing				2010 No Build				Existing				2010 No Build			
	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS
Dyer Ave & W.31st St																																
Westbound	LTR	0.46	28.7	C	LTR	0.66	33.4	C	LTR	0.56	30.6	C	LTR	0.50	28.3	C	LTR	1.02	69.6	E	LTR	0.95	45.8	D	LTR	0.83	40.3	D	LTR	1.19	131.0	F
Northbound	LT	0.10	4.5	A	LT	0.11	4.6	A	LT	0.16	4.8	A	LT	0.18	4.9	A	LT	0.28	5.3	A	LT	0.34	5.8	A	LT	0.30	9.2	A	LT	0.30	9.2	A
Southbound	TR	0.39	10.0	B	TR	0.40	10.2	B	TR	0.21	8.5	A	TR	0.22	8.6	A	TR	0.11	7.8	A	TR	0.11	7.9	A	TR	0.27	9.0	A	TR	0.28	9.0	A
Intersection			*13.9*	*B*			*17.0*	*B*			*15.6*	*B*			*16.4*	*B*			*37.9*	*D*			*30.1*	*C*			*20.6*	*C*			*65.2*	*E*
Dyer Ave & W.34th St																																
Eastbound	T	0.60	30.6	C	T	0.59	28.9	C	T	0.74	35.0	D	T	0.64	30.0	C	T	0.64	31.5	C	T	0.60	27.1	C	T	0.41	13.5	B	T	0.47	14.2	B
Westbound	T	0.26	5.0	A	T	0.33	6.5	A	T	0.32	5.3	A	T	0.38	6.5	A	T	0.23	4.8	A	T	0.32	6.1	A	T	0.18	11.1	B	T	0.22	11.5	B
	R	0.05	4.0	A	R	0.06	5.0	A	R	0.20	4.9	A	R	0.21	5.7	A	R	0.17	4.7	A	R	0.18	5.5	A	R	0.31	10.3	B	R	0.32	10.4	B
Southbound	L	0.83	49.7	D	L	0.78	42.9	D	L	0.38	34.7	C	L	0.36	32.8	C	L	0.30	33.6	C	L	0.29	31.8	C	L	0.38	22.7	C	L	0.40	22.8	C
	R	0.26	35.1	D	R	0.23	31.6	C	R	0.44	40.1	D	R	0.43	37.2	D	R	0.71	54.0	D	R	0.67	48.0	D	R	0.29	22.5	C	R	0.31	22.8	C
Intersection			*27.3*	*C*			*25.2*	*C*			*21.2*	*C*			*20.2*	*C*			*22.9*	*C*			*21.1*	*C*			*15.6*	*B*			*15.8*	*B*
Dyer Ave & W.35th St																																
Westbound	LTR	0.35	25.6	C	LTR	0.38	26.0	C	LTR	0.37	25.8	C	LTR	0.45	27.0	C	LTR	0.64	30.3	C	LTR	0.78	35.0	C	LTR	0.45	26.8	C	LTR	0.49	27.4	C
Northbound	LT	0.03	4.7	A	LT	0.03	4.7	A	LT	0.10	5.0	A	LT	0.10	5.0	A	LT	0.07	4.8	A	LT	0.09	4.9	A	LT	0.16	8.6	A	LT	0.17	8.6	A
Southbound	TR	0.25	9.2	A	TR	0.29	9.5	A	TR	0.17	8.6	A	TR	0.19	8.7	A	TR	0.21	8.9	A	TR	0.23	9.0	A	TR	0.27	9.3	A	TR	0.28	9.4	A
Intersection			*15.1*	*B*			*15.2*	*B*			*15.5*	*B*			*16.1*	*B*			*19.8*	*B*			*22.5*	*C*			*15.0*	*B*			*15.5*	*B*
Tenth Ave & W.28th St																																
Eastbound	LT	0.70	38.1	D	LT	0.47	25.7	C	LT	0.62	33.7	C	LT	0.41	24.7	C	LT	0.85	51.5	D	LT	0.63	29.0	C	LT	0.83	43.6	D	LT	0.94	59.0	E
Northbound	TR	0.43	8.2	A	TR	0.53	9.0	A	TR	0.42	8.1	A	TR	0.51	8.8	A	TR	0.56	9.3	A	TR	0.65	10.3	B	TR	0.68	10.8	B	TR	0.74	12.0	B
Intersection			*12.1*	*B*			*11.7*	*B*			*11.1*	*B*			*11.2*	*B*			*14.4*	*B*			*13.6*	*B*			*16.1*	*B*			*19.7*	*B*
Tenth Ave & W.29th St																																
Westbound	TR	0.72	31.8	C	TR	0.80	35.7	D	TR	0.54	27.0	C	TR	0.68	30.7	C	TR	0.60	28.4	C	TR	0.75	33.3	C	TR	0.55	26.8	C	TR	0.66	29.3	C
Northbound	LT	0.46	8.5	A	LT	0.58	9.5	A	LT	0.42	8.2	A	LT	0.53	9.0	A	LT	0.57	9.4	A	LT	0.69	10.8	B	LT	0.67	10.7	B	LT	0.73	11.7	B
Intersection			*14.6*	*B*			*15.9*	*B*			*12.3*	*B*			*13.8*	*B*			*13.0*	*B*			*15.3*	*B*			*13.9*	*B*			*15.5*	*B*
Tenth Ave & W.30th St																																
Eastbound	LT	0.51	26.4	C	LT	0.77	34.3	C	LT	0.69	30.6	C	LT	0.65	28.5	C	LT	0.51	26.2	C	LT	0.75	33.1	C	LT	0.50	26.0	C	LT	0.58	27.6	C
Northbound	TR	0.60	10.0	A	TR	0.74	12.0	B	TR	0.52	9.1	A	TR	0.65	10.5	B	TR	0.74	11.8	B	TR	0.88	15.9	B	TR	0.69	11.1	B	TR	0.75	12.2	B
Intersection			*13.3*	*B*			*17.1*	*B*			*15.1*	*B*			*15.7*	*B*			*14.3*	*B*			*19.2*	*B*			*13.9*	*B*			*15.3*	*B*
Tenth Ave & W.31st St																																
Westbound	R	0.29	23.2	C	R	0.55	28.2	C	R	0.37	24.5	C	R	0.56	27.6	C	R	0.36	24.3	C	R	0.74	32.0	C	R	0.73	33.7	C	R	1.27	165.0	F
Northbound	T	0.48	8.6	A	T	0.61	9.9	A	T	0.61	10.0	B	T	0.75	12.2	B	T	0.51	8.8	A	T	0.52	8.8	A	T	0.52	9.1	A	T	0.57	9.5	A
Intersection			*10.1*	*B*			*12.4*	*B*			*12.0*	*B*			*14.9*	*B*			*10.6*	*B*			*14.2*	*B*			*14.8*	*B*			*60.7*	*E*
Tenth Ave & W.33rd St																																
Westbound	TR	0.27	21.1	C	TR	0.47	23.9	C	TR	0.30	21.6	C	TR	0.52	25.1	C	TR	0.31	21.6	C	TR	0.57	25.7	C	TR	0.46	24.2	C	TR	0.61	27.3	C
Northbound	LT	0.67	12.2	B	LT	0.90	18.6	B	LT	0.72	13.1	B	LT	0.94	22.6	C	LT	0.59	10.9	B	LT	0.70	12.1	B	LT	0.70	12.7	B	LT	0.86	16.7	B
Intersection			*13.7*	*B*			*19.5*	*B*			*14.5*	*B*			*23.0*	*C*			*12.8*	*B*			*14.4*	*B*			*14.6*	*B*			*18.5*	*B*

Notes: L = Left Turn; T = Through; R = Right Turn; DefL = De Facto Left Turn; V/C = Volume to Capacity; LOS = Level of Service

Table 13-15 (Continued)
Existing and 2010 No Build Conditions Level of Service Analysis Results

Analysis Locations	Weekday AM Peak Hour								Weekday Midday Peak Hour								Weekday PM Peak Hour								Saturday Midday Peak Hour							
	Existing				2010 No Build				Existing				2010 No Build				Existing				2010 No Build				Existing				2010 No Build			
	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS
Tenth Ave & W.34th St																																
Eastbound	DefL	0.97	81.9	F	DefL	0.98	80.2	F	DefL	1.01	97.5	F	DefL	1.06	107.2	F	DefL	0.77	55.5	E	DefL	0.88	64.0	E	LT	0.60	28.6	C	LT	0.71	32.4	C
	T	0.30	23.1	C	T	0.39	22.2	C	T	0.99	73.2	E	T	0.44	22.9	C	T	0.33	23.4	C	T	0.35	19.1	B								
Westbound	TR	0.46	25.0	C	TR	0.50	23.6	C	TR	0.89	43.0	D	TR	0.95	49.2	D	TR	0.49	25.5	C	TR	0.51	21.1	C	TR	0.52	26.4	C	TR	0.59	28.0	C
Northbound	LT	0.60	9.9	A	LT	0.90	19.3	B	LT	0.59	9.8	A	LT	0.89	18.9	B	LT	0.49	8.6	A	LT	0.84	19.3	B	LT	0.64	10.2	B	LT	0.75	11.8	B
	R	0.24	11.1	B	R	0.48	16.4	B	R	0.25	11.3	B	R	0.64	22.1	C	R	0.25	11.3	B	R	0.74	28.1	C	R	0.34	12.5	B	R	0.57	16.8	B
Intersection			*19.5*	*B*			*24.0*	*C*			*29.9*	*C*			*30.1*	*C*			*15.1*	*B*			*22.1*	*C*			*15.3*	*B*			*17.3*	*B*
Tenth Ave & W.35th St																																
Westbound	TR	0.44	25.2	C	TR	0.53	26.7	C	TR	0.51	26.4	C	TR	0.61	28.9	C	TR	0.68	30.7	C	TR	0.79	35.3	D	TR	0.51	26.5	C	TR	0.56	27.6	C
Northbound	LT	0.55	9.3	A	LT	0.70	11.0	B	LT	0.54	9.2	A	LT	0.67	10.6	B	LT	0.58	9.5	A	LT	0.61	9.7	A	LT	0.63	10.2	B	LT	0.72	11.6	B
Intersection			*11.8*	*B*			*13.4*	*B*			*12.2*	*B*			*13.6*	*B*			*13.9*	*B*			*14.3*	*B*			*13.1*	*B*			*14.3*	*B*

Notes: L = Left Turn; T = Through; R = Right Turn; DefL = De Facto Left Turn; V/C = Volume to Capacity; LOS = Level of Service

Hotel and Banquet Use

Taxi trips to hotel and banquet uses were distributed to study area roadways, with approximately 15 percent from Route 9A using West 30th and West 34th Streets, about 15 percent from the Lincoln Tunnel, about 25 percent from Midtown using Seventh and Ninth Avenues, approximately 25 percent from the East Side using West 31st, West 33rd, West 34th, and West 35th Streets, and about 20 percent from Lower Manhattan using Sixth, Eighth and Tenth Avenues. Departing trip assignments would follow similar routes using the nearest reverse-direction avenues or streets.

Residential Use

Taxi trips to residential uses were distributed to study area roadways, with 10 to 15 percent from Route 9A using West 30th and West 34th Streets, approximately five percent from the Lincoln Tunnel, 25 to 30 percent from Midtown using Seventh and Ninth Avenues, approximately 20 percent from the East Side using West 31st, West 33rd, West 34th, and West 35th Streets, and 30 to 35 percent from Lower Manhattan using Sixth, Eighth and Tenth Avenues. Departing trip assignments would follow similar routes using the nearest reverse-direction avenues or streets.

TAXI DIVERSIONS FROM PENN STATION TO MOYNIHAN STATION

Some taxi trips would divert from the existing designated taxi areas on Seventh Avenue at West 32nd Street, West 31st Street between Seventh and Eighth Avenues, and Eighth Avenue between West 31st and West 33rd Streets to the West 33rd Street designated taxi area and other street-level access points to Moynihan Station as a result of expanded or relocated transit operations due to the proposed action. Using the 2002 existing peak hour ridership statistics to and from Penn Station according to the *2003 Penn Station Redevelopment EA* and taxi modal splits for transit growth summarized earlier in this chapter, peak hour taxi diversion assignment percentages were developed for the taxi diversion. Approximately 30 percent of taxi trips destined for Penn Station was estimated to divert to Moynihan Station. However, some trip assignment routes would remain the same and not affect 2010 Build traffic volumes. For example, those taxi trips on Eighth Avenue between West 31st and West 33rd Street that would be on the west curb under 2010 Build conditions instead of the east curb under 2010 No Build conditions would not change turning movement volumes at the adjacent intersections. The route with the highest percent of diversions would be from the existing Seventh Avenue to the West 33rd Street designated taxi area at Moynihan Station. The diverted peak hour volumes would range from 40 to 45 vph during the weekday midday or Saturday midday peak hours to 115 to 125 vph during the AM or PM weekday peak hours.

DELIVERIES

Deliveries to Moynihan Station would use the truck docks on West 31st Street between Eighth and Ninth Avenues. Deliveries to the Development Transfer Site (Penn West) would use underground loading facilities accessible from West 33rd Street between Seventh and Eighth Avenues. Accessing both sites, approximately 25 percent of the truck trips were estimated to approach from Route 9A using West 30th and West 34th Streets, about 10 percent from the Lincoln Tunnel, approximately 15 percent from Uptown using Ninth Avenue, about 35 percent from the East Side using West 31st or West 34th Streets, and approximately 15 percent from Downtown using Eighth Avenue. Departing trip assignments would follow similar routes using the nearest reverse-direction avenues or streets.

TRAFFIC VOLUMES AND LEVEL OF SERVICE

Figures 13-11, 13-12, 13-13, and 13-14 present the net Build incremental traffic volumes for the 2010 weekday AM, midday, and PM, and Saturday midday peak analysis hours, respectively. The 2010 Build weekday AM, midday, and PM, and Saturday midday peak hour traffic volumes are shown in Figures 13-15, 13-16, 13-17, and 13-18, respectively.

The weekday and Saturday peak hour volumes for the Future With the Proposed Action, or the 2010 "Build" condition, have been estimated by adding the trip assignments discussed above to the 2010 peak hour No Build baseline traffic volumes. The assignments were not added directly to the 2010 No Build volumes because those volumes contain trips assigned to the Redevelopment of the Farley Post Office Building, which would not be part of the Proposed Action. The 2010 Build volumes relative to the 2010 No Build volumes are discussed below.

TENTH AVENUE

Tenth Avenue volumes would increase from about: 1,800 to 2,500 vph under 2010 No Build conditions to 1,800 to 2,700 vph under 2010 Build conditions during the weekday AM peak hour; increase from 1,700 to 2,500 vph under 2010 No Build conditions to 1,700 to 2,700 vph under 2010 Build conditions during the weekday midday peak hour; increase from 2,100 to 3,000 vph under 2010 No Build conditions to 2,100 to 3,200 vph under the 2010 Build conditions during the weekday PM peak hour; and increase from 1,600 to 2,300 vph under 2010 No Build conditions to 1,600 to 2,500 vph under the 2010 Build conditions during the Saturday midday peak hour.

NINTH AVENUE

Ninth Avenue would carry about: 2,000 to 2,300 vph within the traffic study area under 2010 No Build conditions during the weekday AM peak hour, which would increase to 2,000 to 2,500 vph under 2010 Build conditions; 1,700 to 2,200 vph under 2010 No Build conditions would increase to 1,700 to 2,300 vph under 2010 Build conditions during the weekday midday peak hour; 1,800 to 2,200 vph under 2010 No Build conditions would increase to 1,900 to 2,400 vph under 2010 Build conditions during the weekday PM peak hour; and 1,600 to 2,000 vph under 2010 No Build conditions would increase to 1,700 to 2,300 vph under 2010 Build conditions during the Saturday midday peak hour.

DYER AVENUE/LINCOLN TUNNEL EXPRESSWAY

Dyer Avenue at West 34th Street would carry about: 510 vph southbound and 50 vph northbound under 2010 No Build conditions during the weekday AM peak hour, which would increase to 650 vph southbound and 50 vph northbound under the 2010 Build conditions; 300 vph southbound and 160 vph northbound under 2010 No Build conditions during the weekday midday peak hour, which would increase to 440 vph southbound and 170 vph northbound under the 2010 Build conditions; 310 vph southbound and 130 vph northbound under 2010 No Build conditions during the weekday PM peak hour, which would increase to 520 vph southbound and 140 vph northbound under the 2010 Build conditions; and 500 vph southbound and 250 vph northbound under 2010 No Build conditions during the Saturday midday peak hour, which would increase to 660 vph southbound and 270 vph northbound under the 2010 Build conditions.

Along the Lincoln Tunnel Expressway between West 30th and West 33rd Streets, the roadway would carry about: 680 vph southbound and 160 vph northbound under 2010 No Build conditions during the weekday AM peak hour, which would increase to 700 vph southbound and 170 vph northbound under the 2010 Build conditions; 370 vph southbound and 280 vph northbound under 2010 No Build conditions during the weekday midday peak hour, which would increase to 410 vph southbound and 280 vph northbound under the 2010 Build conditions; 190 vph southbound and 560 vph northbound under 2010 No Build conditions during the weekday PM peak hour, which would increase to 230 vph southbound and 560 vph northbound under the 2010 Build conditions; 480 vph southbound and 470 vph northbound under 2010 No Build conditions during the Saturday midday peak hour, which would increase to 520 vph southbound and 475 vph northbound under the 2010 Build conditions.

EIGHTH AVENUE

Eighth Avenue would carry about: 1,600 to 2,000 vph within the traffic study area under 2010 No Build conditions during the weekday AM peak hour, which would remain at approximately 1,600 to 2,000 vph under 2010 Build conditions; 1,700 to 2,100 vph under 2010 No Build conditions during the weekday midday peak hour, which would increase to 1,800 to 2,200 vph under 2010 Build conditions; 1,900 to 2,200 vph under 2010 No Build conditions during the weekday PM peak hour, which would increase to 1,900 to 2,300 vph under 2010 Build conditions; and 1,600 to 1,900 vph under 2010 No Build conditions during the Saturday peak hour which would increase to 1,700 to 2,000 vph under 2010 Build conditions.

SEVENTH AVENUE

Seventh Avenue would carry about: 1,400 to 2,200 vph within the traffic study area under 2010 No Build conditions, which would increase to 2,300 vph north of West 33rd Street, but decrease to about 1,300 vehicles per hour south of West 33rd Street due to taxi diversions away from Seventh Avenue towards the new Moynihan Station under 2010 Build conditions during the weekday AM peak hour; 1,200 to 1,700 vph under 2010 No Build conditions, which would increase to 1,900 vph north of West 33rd Street, and stay constant at about 1,200 vehicles per hour south of West 33rd Street under 2010 Build conditions during the weekday midday peak hour; 1,500 to 1,800 vph under 2010 No Build conditions, which would increase to 1,900 vph north of West 33rd Street, but decrease to about 1,300 vehicles per hour south of West 33rd Street due to taxi diversions away from Seventh Avenue towards the new Moynihan Station under 2010 Build conditions during the weekday PM peak hour; and 1,400 to 1,900 vph under 2010 No Build conditions, which would increase to 2,100 vph north of West 33rd Street, and stay constant at about 1,400 vehicles per hour south of West 33rd Street under 2010 Build conditions during the Saturday midday peak hour.

SIXTH AVENUE AND BROADWAY

Sixth Avenue would carry about: 2,000 to 2,200 vph within the traffic study area under 2010 No Build conditions during the weekday AM peak hour, which would increase to 2,000 to 2,300 vph under 2010 Build conditions; 1,700 to 2,000 vph under 2010 No Build conditions during the weekday midday peak hour, which would increase to 1,700 to 2,100 vph under 2010 Build conditions; 1,700 to 2,100 vph under 2010 No Build conditions during the weekday PM peak hour, which would increase to 1,700 to 2,150 vph under 2010 Build conditions; and 1,500 to 1,800 vph under 2010 No Build conditions during the Saturday midday peak hour, which would remain about the same under 2010 Build conditions.

Broadway would carry approximately: 900 vph under 2010 No Build conditions during the weekday AM peak hour, which would remain at approximately 900 vph under 2010 Build conditions; 900 vph under 2010 No Build conditions during the weekday midday peak hour, which would remain at approximately 900 vph under 2010 Build conditions; 1,000 vph under 2010 No Build conditions during the weekday PM peak hour, which would remain at approximately 1,000 vph under 2010 Build conditions; and 600 vph under 2010 No Build conditions during the Saturday midday peak hour, which would remain at approximately 600 vph under 2010 Build conditions.

WEST 34TH STREET

West 34th Street would carry about: 600 to 1,100 vph eastbound and 600 to 700 vph westbound within the traffic study area under 2010 No Build conditions during the AM peak hour, which would increase to 600 to 1,200 vph eastbound and 600 to 700 vph westbound under 2010 Build conditions; 600 to 900 vph eastbound and 700 to 950 vph westbound under 2010 No Build conditions during the midday peak hour, which would increase to 700 to 1,100 vph eastbound and 700 to 950 vph westbound under 2010 Build conditions; 500 to 900 vph eastbound and 700 to 800vph westbound under 2010 No Build conditions during the PM peak hour, which would increase to 600 to 1,000 vph eastbound and 700 to 800 vph westbound under 2010 Build conditions; and 500 to 1,100 vph eastbound and 400 to 800 vph westbound under 2010 No Build conditions during the Saturday midday peak hour, which would increase to 600 to 1,300 vph eastbound and 400 to 900 vph westbound under 2010 Build conditions.

OTHER CROSSTOWN STREETS

Eastbound streets including West 28th, West 30th, and West 32nd Streets would carry: between 300 to 1,200 vph within the traffic study area under 2010 No Build conditions during the weekday AM peak hour, which would increase to 300 to 1,300 vph under 2010 Build conditions; 300 to 800 vph under 2010 No Build conditions during the weekday midday peak hour, which would increase to 300 to 1,000 vph under 2010 Build conditions; 200 to 800 vph under 2010 No Build conditions during the weekday PM peak hour, which would remain at 200 to 800 vph under 2010 Build conditions; and 210 to 800 vph under 2010 No Build conditions during the Saturday midday peak hour, which would increase to 210 to 900 vph under 2010 Build conditions.

Westbound streets including West 29th, West 31st, West 33rd, and West 35th Streets would carry about: 230 to 900 vph within the traffic study area under 2010 No Build conditions during the weekday AM peak hour, which would increase to 400 to 900 vph under 2010 Build conditions; 300 to 700 vph under 2010 No Build conditions during the weekday midday peak hour, which would increase to 300 to 900 vph under 2010 Build conditions; 300 to 1,100 vph under 2010 No Build conditions during the weekday PM peak hour, which would increase to 400 to 1,100 vph under 2010 Build conditions; and 300 to 900 vph under 2010 No Build conditions during the Saturday midday peak hour, which would increase to 300 to 1,000 vph under 2010 Build conditions.

Level of service analyses were performed for the study area intersections using the future Build peak hour traffic volumes. Table 13-16 presents a comparison of the 2010 No Build and Build conditions for the weekday AM, midday, and PM, and Saturday midday peak hours. According to the criteria presented in the *CEQR Technical Manual* and discussed in Section B of this chapter, significant adverse traffic impacts that require examination of mitigation are identified by the "+" symbol in the analysis summary table.

Table 13-16

2010 No Build and Build Conditions Level of Service Analysis Results

Analysis Locations	Weekday AM Peak Hour								Weekday Midday Peak Hour								Weekday PM Peak Hour								Saturday Midday Peak Hour							
	2010 No Build				2010 Build				2010 No Build				2010 Build				2010 No Build				2010 Build				2010 No Build				2010 Build			
	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS
Broadway/Sixth Ave & W.34th St																																
Eastbound	T	0.89	41.4	D	T	0.92	45.1	D	T	0.77	33.9	C	T	0.83	36.7	D	T	0.69	32.7	C	T	0.72	33.6	C	T	0.83	36.5	D	T	0.92	43.2	D
Westbound	TR	0.74	33.1	C	TR	0.73	32.7	C	TR	0.88	39.7	D	TR	0.89	40.4	D	TR	0.77	35.9	D	TR	0.78	36.0	D	TR	0.76	33.1	C	TR	0.77	33.6	C
Northbound	T	1.09	80.2	F	T	1.09	80.2	F	T	1.10	85.2	F	T	1.10	85.2	F	T	1.09	72.0	E	T	1.09	72.0	E	T	0.95	44.6	D	T	0.95	44.6	D
Southbound	T	0.94	52.3	D	T	0.94	52.3	D	T	1.03	72.0	E	T	1.03	72.0	E	T	1.00	62.3	E	T	1.00	62.3	E	T	0.67	35.2	D	T	0.67	35.2	D
Intersection			*59.0*	*E*			*59.6*	*E*			*62.8*	*E*			*63.1*	*E*			*56.8*	*E*			*56.8*	*E*			*38.7*	*D*			*40.4*	*D*
Broadway & W.35th St																																
Westbound	LT	0.27	7.6	A	LT	0.28	7.7	A	LT	0.27	7.6	A	LT	0.29	7.7	A	LT	0.31	7.9	A	LT	0.33	8.0	A	LT	0.33	8.2	A	LT	0.37	8.5	A
Southbound	TR	1.01	65.5	E	TR	0.99	61.2	E	TR	1.02	68.7	E	TR	1.02	69.0	E	TR	1.09	90.6	F	TR	1.08	87.5	F	TR	0.70	35.2	D	TR	0.71	35.5	D
Intersection			*42.1*	*D*			*38.8*	*D*			*44.1*	*D*			*43.2*	*D*			*57.1*	*E*			*54.1*	*D*			*22.4*	*C*			*21.9*	*C*
Sixth Ave & W.31st St																																
Westbound	TR	0.71	25.0	C	TR	0.70	24.8	C	TR	0.65	23.5	C	TR	0.67	24.0	C	TR	0.83	30.3	C	TR	0.84	31.1	C	TR	0.74	26.1	C	TR	0.78	28.0	C
Northbound	LT	0.97	33.4	C	LT	1.00	38.1	D	LT	0.89	24.1	C	LT	0.92	26.7	C	LT	0.93	27.9	C	LT	0.97	32.3	C	LT	0.78	19.9	B	LT	0.82	21.2	C
Intersection			*31.4*	*C*			*34.9*	*C*			*24.0*	*C*			*26.0*	*C*			*28.6*	*C*			*32.0*	*C*			*21.7*	*C*			*23.2*	*C*
Sixth Ave & W.32nd St																																
Eastbound	LT	0.53	21.0	C	LT	0.50	20.5	C	LT	1.03	78.0	E	LT	1.00	71.5	E	LT	0.23	16.7	B	LT	0.20	16.4	B	LT	0.35	18.4	B	LT	0.34	18.2	B
Northbound	TR	0.94	28.4	C	TR	0.98	34.3	C	TR	0.91	25.5	C	TR	0.94	28.8	C	TR	0.92	26.3	C	TR	0.96	30.6	C	TR	0.85	22.4	C	TR	0.89	24.4	C
Intersection			*27.1*	*C*			*32.0*	*C*			*34.1*	*C*			*35.4*	*D*			*25.5*	*C*			*29.6*	*C*			*21.9*	*C*			*23.7*	*C*
Sixth Ave & W.33rd St																																
Northbound	L	0.40	21.7	C	L	0.55	24.7	C	L	0.45	22.8	C	L	0.59	25.8	C	L	0.48	23.4	C	L	0.63	27.2	C	L	0.48	23.3	C	L	0.62	27.0	C
	T	0.94	33.5	C	T	0.94	33.5	C	T	0.81	25.4	C	T	0.81	25.4	C	T	0.81	25.7	C	T	0.81	25.7	C	T	0.73	23.6	C	T	0.73	23.6	C
Intersection			*32.3*	*C*			*32.3*	*C*			*25.1*	*C*			*25.5*	*C*			*25.3*	*C*			*25.9*	*C*			*23.5*	*C*			*24.2*	*C*
Sixth Ave & W.35th St																																
Westbound	TR	0.93	47.8	D	TR	0.97	53.7	D+	TR	0.94	48.2	D	TR	1.00	61.2	E+	TR	0.94	45.6	D	TR	0.99	55.3	E+	TR	0.70	27.4	C	TR	0.76	29.6	C
Northbound	LT	0.68	11.5	B	LT	0.68	11.5	B	LT	0.59	10.3	B	LT	0.59	10.3	B	LT	0.64	13.9	B	LT	0.64	13.9	B	LT	0.58	13.0	B	LT	0.58	13.0	B
Intersection			*21.0*	*C*			*22.8*	*C*			*21.3*	*C*			*25.8*	*C*			*23.9*	*C*			*27.5*	*C*			*17.1*	*B*			*18.1*	*B*
Seventh Ave & W.28th St																																
Eastbound	TR	0.35	15.0	B	TR	0.36	15.0	B	TR	0.35	15.0	B	TR	0.35	15.0	B	TR	0.34	12.2	B	TR	0.35	12.2	B	TR	0.53	26.3	C	TR	0.53	26.3	C
Southbound	LT	0.78	24.4	C	LT	0.76	23.7	C	LT	0.74	23.1	C	LT	0.73	23.0	C	LT	0.96	41.7	D	LT	0.94	38.4	D	LT	0.59	10.5	B	LT	0.59	10.5	B
Intersection			*22.4*	*C*			*21.8*	*C*			*21.2*	*C*			*21.1*	*C*			*35.1*	*D*			*32.4*	*C*			*13.8*	*B*			*13.8*	*B*
Seventh Ave & W.29th St																																
Westbound	LT	1.00	56.7	E	LT	1.00	57.3	E	LT	0.67	26.2	C	LT	0.68	26.5	C	LT	0.69	27.0	C	LT	0.70	27.3	C	LT	0.63	25.5	C	LT	0.65	25.9	C
Southbound	TR	0.62	14.5	B	TR	0.60	14.2	B	TR	0.55	13.5	B	TR	0.55	13.5	B	TR	0.68	15.4	B	TR	0.66	15.1	B	TR	0.75	16.9	B	TR	0.75	16.9	B
Intersection			*30.0*	*C*			*30.3*	*C*			*17.4*	*B*			*17.5*	*B*			*18.5*	*B*			*18.5*	*B*			*18.8*	*B*			*19.0*	*B*
Seventh Ave & W.30th St																																
Eastbound	TR	0.70	25.2	C	TR	0.78	27.6	C	TR	0.78	29.8	C	TR	0.87	35.3	D	TR	0.56	23.4	C	TR	0.67	25.9	C	TR	0.77	29.6	C	TR	0.89	38.2	D
Southbound	LT	0.63	14.6	B	LT	0.58	13.9	B	LT	0.55	13.5	B	LT	0.54	13.4	B	LT	0.63	14.6	B	LT	0.60	14.1	B	LT	0.61	14.3	B	LT	0.60	14.1	B
Intersection			*19.0*	*B*			*20.2*	*C*			*19.3*	*B*			*21.9*	*C*			*16.8*	*B*			*17.6*	*B*			*19.3*	*B*			*23.0*	*C*
Seventh Ave & W.31st St																																
Westbound	LT	0.79	29.1	C	LT	0.74	27.1	C	LT	0.64	23.9	C	LT	0.66	24.5	C	LT	0.87	34.3	C	LT	0.86	34.0	C	LT	0.63	23.4	C	LT	0.68	24.7	C
Southbound	TR	0.58	15.2	B	TR	0.49	14.1	B	TR	0.44	13.6	B	TR	0.41	13.3	B	TR	0.53	14.5	B	TR	0.46	13.8	B	TR	0.76	18.8	B	TR	0.73	18.0	B
Intersection			*19.6*	*B*			*18.4*	*B*			*16.8*	*B*			*16.9*	*B*			*21.3*	*C*			*21.2*	*C*			*20.1*	*C*			*20.0*	*C*

Notes: L = Left Turn; T = Through; R = Right Turn; DefL = De Facto Left Turn; V/C = Volume to Capacity; LOS = Level of Service
"+" denotes significant adverse impact.

Table 13-16 (Continued)
2010 No Build and Build Conditions Level of Service Analysis Results

Analysis Locations	Weekday AM Peak Hour								Weekday Midday Peak Hour								Weekday PM Peak Hour								Saturday Midday Peak Hour							
	2010 No Build				2010 Build				2010 No Build				2010 Build				2010 No Build				2010 Build				2010 No Build				2010 Build			
	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS
Seventh Ave & W.32nd St																																
Southbound	LT	0.40	3.7	A	LT	0.36	3.5	A	LT	0.32	3.4	A	LT	0.30	3.4	A	LT	0.32	3.4	A	LT	0.29	3.3	A	LT	0.62	5.3	A	LT	0.60	5.1	A
Intersection			*3.7*	*A*			*3.5*	*A*			*3.4*	*A*			*3.4*	*A*			*3.4*	*A*			*3.3*	*A*			*5.3*	*A*			*5.1*	*A*
Seventh Ave & W.33rd St																																
Westbound	LT	0.52	33.5	C	LT	0.67	37.7	D	LT	0.59	35.2	D	LT	0.72	40.0	D	LT	0.65	37.3	D	LT	0.80	44.7	D	LT	0.75	42.0	D	LT	0.91	55.5	E+
Southbound	TR	0.58	4.8	A	TR	0.64	5.3	A	TR	0.47	4.1	A	TR	0.54	4.6	A	TR	0.49	4.2	A	TR	0.57	4.7	A	TR	0.65	5.6	A	TR	0.78	7.3	A
Intersection			*7.5*	*A*			*9.3*	*A*			*8.2*	*A*			*10.0*	*B*			*8.7*	*A*			*11.2*	*B*			*11.2*	*B*			*15.9*	*B*
Seventh Ave & W.34th St																																
Eastbound	TR	0.69	25.6	C	TR	0.71	26.2	C	TR	0.64	24.5	C	TR	0.69	25.6	C	TR	0.61	24.0	C	TR	0.63	24.4	C	TR	1.07	78.9	E	TR	1.17	113.9	F+
Westbound	LT	0.65	25.2	C	LT	0.64	25.1	C	LT	0.80	29.8	C	LT	0.81	30.4	C	LT	0.69	26.5	C	LT	0.70	26.8	C	LT	1.09	84.8	F	LT	1.17	115.1	F+
Southbound	T	0.94	26.1	C	T	0.97	29.5	C	T	0.73	16.4	B	T	0.81	18.2	B	T	0.72	16.2	B	T	0.78	17.5	B	T	0.89	21.6	C	T	0.99	33.7	C
Intersection			*25.8*	*C*			*27.9*	*C*			*22.0*	*C*			*23.2*	*C*			*20.6*	*C*			*21.3*	*C*			*50.2*	*D*			*71.1*	*E*
Seventh Ave & W.35th St																																
Westbound	L	0.59	27.1	C	L	0.61	28.0	C	L	0.53	25.5	C	L	0.62	28.3	C	L	0.41	23.1	C	L	0.49	24.5	C	L	0.64	32.2	C	L	0.77	40.7	D
	LT	0.33	20.8	C	LT	0.33	20.8	C	LT	0.28	20.2	C	LT	0.28	20.2	C	LT	0.51	23.3	C	LT	0.51	23.3	C	LT	0.60	27.1	C	LT	0.67	29.5	C
Southbound	TR	0.81	16.8	B	TR	0.84	17.6	B	TR	0.68	13.9	B	TR	0.73	14.8	B	TR	0.63	13.1	B	TR	0.67	13.7	B	TR	0.73	14.8	B	TR	0.79	16.2	B
Intersection			*18.5*	*B*			*19.2*	*B*			*16.2*	*B*			*17.3*	*B*			*16.4*	*B*			*16.9*	*B*			*18.2*	*B*			*20.6*	*C*
Eighth Ave & W.28th St																																
Eastbound	LT	0.51	23.5	C	LT	0.53	24.0	C	LT	0.49	23.3	C	LT	0.52	23.8	C	LT	0.63	26.1	C	LT	0.66	26.9	C	LT	0.59	25.3	C	LT	0.63	26.2	C
Northbound	TR	0.65	13.3	B	TR	0.66	13.4	B	TR	0.80	16.4	B	TR	0.83	17.3	B	TR	0.78	15.8	B	TR	0.80	16.3	B	TR	0.70	14.2	B	TR	0.75	15.0	B
Intersection			*15.5*	*B*			*15.8*	*B*			*17.6*	*B*			*18.5*	*B*			*18.1*	*B*			*18.7*	*B*			*16.5*	*B*			*17.4*	*B*
Eighth Ave & W.29th St																																
Westbound	TR	0.92	41.9	D	TR	0.92	42.2	D	TR	0.48	19.2	B	TR	0.49	19.4	B	TR	0.70	27.1	C	TR	0.71	27.4	C	TR	0.54	23.1	C	TR	0.57	23.6	C
Northbound	LT	0.69	15.6	B	LT	0.72	15.9	B	LT	0.93	27.9	C	LT	0.97	33.3	C	LT	0.86	20.0	C	LT	0.89	21.7	C	LT	0.73	16.3	B	LT	0.78	17.4	B
Intersection			*24.1*	*C*			*24.3*	*C*			*26.3*	*C*			*30.8*	*C*			*21.6*	*C*			*23.0*	*C*			*17.7*	*B*			*18.7*	*B*
Eighth Ave & W.30th St																																
Eastbound	LT	1.05	66.5	E	LT	1.13	95.7	F+	LT	0.75	25.2	C	LT	0.90	33.9	C	LT	0.63	23.1	C	LT	0.75	26.5	C	LT	0.79	28.6	C	LT	1.02	58.7	E+
Northbound	TR	0.77	19.5	B	TR	0.79	20.1	C	TR	0.86	23.4	C	TR	0.91	26.0	C	TR	0.86	21.8	C	TR	0.90	23.8	C	TR	0.80	19.6	B	TR	0.86	21.9	C
Intersection			*38.5*	*D*			*51.6*	*D*			*24.0*	*C*			*28.6*	*C*			*22.1*	*C*			*24.5*	*C*			*22.3*	*C*			*34.4*	*C*
Eighth Ave & W.31st St																																
Westbound	TR	0.87	32.6	C	TR	0.74	25.4	C	TR	0.71	25.4	C	TR	0.68	24.2	C	TR	1.12	94.2	F	TR	0.92	40.1	D	TR	0.85	31.5	C	TR	0.89	34.1	C
Northbound	LT	0.91	26.7	C	LT	0.94	29.5	C	LT	1.03	47.6	D	LT	1.10	74.1	E+	LT	1.07	62.9	E	LT	1.14	88.9	F+	LT	0.90	26.2	C	LT	1.02	46.0	D+
Intersection			*28.6*	*C*			*28.3*	*C*			*43.1*	*D*			*64.5*	*E*			*71.8*	*E*			*76.9*	*E*			*27.8*	*C*			*42.6*	*D*
Eighth Ave & W.32nd St																																
Northbound	T	1.01	45.7	D	T	0.94	31.7	C	T	0.97	37.1	D	T	1.00	43.2	D	T	1.03	51.8	D	T	1.00	42.3	D	T	0.94	31.7	C	T	1.00	42.3	D
Intersection			*45.7*	*D*			*31.7*	*C*			*37.1*	*D*			*43.2*	*D*			*51.8*	*D*			*42.3*	*D*			*31.7*	*C*			*42.3*	*D*
Eighth Ave & W.33rd St																																
Westbound	TR	0.22	12.9	B	TR	0.42	15.0	B	TR	0.24	13.6	B	TR	0.41	15.4	B	TR	0.28	12.4	B	TR	0.45	14.2	B	TR	0.34	13.1	B	TR	0.62	17.1	B
Northbound	LT	1.13	89.8	F	LT	1.03	52.3	D	LT	1.07	64.7	E	LT	1.10	79.1	E+	LT	0.96	37.7	D	LT	0.93	33.5	C	LT	1.10	78.7	E	LT	1.18	113.0	F+
Intersection			*78.5*	*E*			*42.0*	*D*			*56.6*	*E*			*63.1*	*E*			*33.2*	*C*			*28.1*	*C*			*66.6*	*E*			*85.4*	*F*

Notes: L = Left Turn; T = Through; R = Right Turn; DefL = De Facto Left Turn; V/C = Volume to Capacity; LOS = Level of Service
"+" denotes significant adverse impact.

Table 13-16 (Continued)

2010 No Build and Build Conditions Level of Service Analysis Results

Analysis Locations	Weekday AM Peak Hour								Weekday Midday Peak Hour								Weekday PM Peak Hour								Saturday Midday Peak Hour							
	2010 No Build				2010 Build				2010 No Build				2010 Build				2010 No Build				2010 Build				2010 No Build				2010 Build			
	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS
Eighth Ave & W.34th St																																
Eastbound	L	0.50	26.3	C	L	0.58	29.6	C	L	0.40	26.4	C	L	0.44	28.0	C	L	0.40	22.5	C	L	0.46	24.8	C	L	0.77	52.5	D	L	0.87	68.7	E+
	T	0.66	18.4	B	T	0.71	19.7	B	T	0.53	16.3	B	T	0.61	17.6	B	T	0.47	15.4	B	T	0.55	16.5	B	T	0.73	24.7	C	T	0.83	29.1	C
Westbound	TR	0.65	27.2	C	TR	0.64	27.0	C	TR	0.80	33.4	C	TR	0.81	33.7	C	TR	0.70	30.8	C	TR	0.71	30.9	C	TR	0.61	21.0	C	TR	0.62	21.2	C
Northbound	LTR	0.86	27.9	C	LTR	0.82	26.4	C	LTR	0.82	26.4	C	LTR	0.84	27.2	C	LTR	0.85	27.7	C	LTR	0.82	26.5	C	LTR	1.13	92.0	F	LTR	1.20	120.9	F+
Intersection			*25.5*	*C*			*25.0*	*C*			*26.2*	*C*			*26.7*	*C*			*25.9*	*C*			*25.3*	*C*			*59.8*	*E*			*76.1*	*E*
Eighth Ave & W.35th St																																
Westbound	TR	0.67	30.5	C	TR	0.69	31.1	C	TR	0.59	21.6	C	TR	0.59	21.7	C	TR	0.90	45.2	D	TR	0.92	47.4	D	TR	0.67	30.4	C	TR	0.68	30.6	C
Northbound	LT	0.72	12.3	B	LT	0.73	12.5	B	LT	0.77	20.5	C	LT	0.80	21.3	C	LT	0.71	12.0	B	LT	0.72	12.2	B	LT	0.72	12.3	B	LT	0.76	13.0	B
Intersection			*15.7*	*B*			*16.0*	*B*			*20.7*	*C*			*21.4*	*C*			*20.0*	*C*			*20.7*	*C*			*15.6*	*B*			*16.1*	*B*
Ninth Ave & W.28th St																																
Eastbound	TR	0.36	24.0	C	TR	0.39	24.5	C	TR	0.41	24.8	C	TR	0.44	25.2	C	TR	0.57	27.6	C	TR	0.60	28.2	C	TR	0.64	29.2	C	TR	0.67	30.0	C
Southbound	LT	0.69	10.9	B	LT	0.72	11.4	B	LT	0.64	10.2	B	LT	0.68	10.7	B	LT	0.51	8.7	A	LT	0.53	8.9	A	LT	0.76	12.4	B	LT	0.82	13.8	B
Intersection			*12.3*	*B*			*12.8*	*B*			*12.2*	*B*			*12.7*	*B*			*12.0*	*B*			*12.3*	*B*			*15.7*	*B*			*17.0*	*B*
Ninth Ave & W.29th St																																
Westbound	LT	0.56	26.3	C	LT	0.56	26.3	C	LT	0.40	23.9	C	LT	0.40	23.9	C	LT	0.45	24.5	C	LT	0.45	24.5	C	LT	0.61	28.5	C	LT	0.61	28.5	C
Southbound	TR	0.65	10.3	B	TR	0.68	10.8	B	TR	0.81	13.7	B	TR	0.87	15.9	B	TR	0.62	9.9	A	TR	0.65	10.3	B	TR	0.77	12.6	B	TR	0.85	14.8	B
Intersection			*14.5*	*B*			*14.7*	*B*			*15.9*	*B*			*17.5*	*B*			*13.3*	*B*			*13.5*	*B*			*15.5*	*B*			*17.1*	*B*
Ninth Ave & W.30th St																																
Eastbound	TR	0.72	29.8	C	TR	0.75	30.5	C	TR	0.49	25.6	C	TR	0.54	26.3	C	TR	0.35	24.0	C	TR	0.39	24.5	C	TR	0.84	36.5	D	TR	0.94	45.7	D+
Southbound	LT	0.60	13.7	B	LT	0.65	14.3	B	LT	0.72	15.7	B	LT	0.80	17.5	B	LT	0.73	15.9	B	LT	0.79	17.2	B	LT	0.79	17.5	B	LT	0.91	22.9	C
Intersection			*19.0*	*B*			*19.5*	*B*			*18.2*	*B*			*19.7*	*B*			*17.3*	*B*			*18.6*	*B*			*23.2*	*C*			*29.7*	*C*
Ninth Ave & W.31st St																																
Westbound	LT	0.64	28.1	C	LT	0.67	28.8	C	LT	0.62	27.9	C	LT	0.71	30.0	C	LT	0.87	36.6	D	LT	0.89	38.6	D	LT	0.87	39.7	D	LT	1.03	69.6	E+
Southbound	TR	0.68	10.7	B	TR	0.76	12.0	B	TR	0.63	10.1	B	TR	0.72	11.3	B	TR	0.64	10.2	B	TR	0.73	11.4	B	TR	0.72	11.5	B	TR	0.84	14.3	B
Intersection			*15.0*	*B*			*16.1*	*B*			*14.3*	*B*			*15.8*	*B*			*18.7*	*B*			*19.7*	*B*			*19.0*	*B*			*29.3*	*C*
Ninth Ave & W.33rd St																																
Westbound	LT	0.79	37.6	D	LT	0.89	42.1	D	LT	1.09	92.5	F	LT	1.06	77.6	E	LT	1.01	68.5	E	LT	0.99	57.2	E	LT	0.67	30.4	C	LT	0.84	35.9	D
Southbound	TR	0.63	10.0	A	TR	0.65	10.2	B	TR	0.54	9.1	A	TR	0.57	9.4	A	TR	0.55	9.2	A	TR	0.58	9.5	A	TR	0.69	11.0	B	TR	0.74	11.9	B
Intersection			*14.7*	*B*			*18.1*	*B*			*29.0*	*C*			*30.2*	*C*			*23.1*	*C*			*23.5*	*C*			*14.9*	*B*			*19.0*	*B*
Ninth Ave & W.34th St																																
Eastbound	TR	0.96	46.4	D	TR	1.07	75.6	E+	TR	0.91	41.9	D	TR	1.05	72.4	E+	TR	0.91	42.7	D	TR	1.07	77.1	E+	TR	0.88	34.1	C	TR	1.03	60.7	E+
Westbound	DefL	0.59	37.0	D	DefL	0.60	40.0	D	DefL	0.74	43.9	D	DefL	0.76	47.7	D	DefL	0.47	29.8	C	DefL	0.48	33.1	C	DefL	1.31	190.7	F	DefL	1.33	200.6	F+
	T	0.40	15.0	B	T	0.38	14.7	B	T	0.53	16.8	B	T	0.53	16.9	B	T	0.43	15.4	B	T	0.41	15.1	B	T	0.41	15.0	B	T	0.43	15.2	B
Southbound	LTR	0.88	28.2	C	LTR	0.89	29.1	C	LTR	0.76	23.9	C	LTR	0.78	24.4	C	LTR	0.61	20.9	C	LTR	0.63	21.2	C	LTR	0.87	28.2	C	LTR	0.91	30.9	C
Intersection			*32.1*	*C*			*42.4*	*D*			*28.3*	*C*			*37.9*	*D*			*26.2*	*C*			*37.4*	*D*			*38.7*	*D*			*49.0*	*D*
Ninth Ave & W.35th St																																
Westbound	LT	0.46	25.5	C	LT	0.48	25.9	C	LT	0.61	28.8	C	LT	0.62	28.9	C	LT	0.84	37.8	D	LT	0.85	39.2	D	LT	0.70	31.9	C	LT	0.72	32.4	C
Southbound	TR	0.62	10.0	A	TR	0.63	10.1	B	TR	0.53	9.0	A	TR	0.54	9.2	A	TR	0.59	9.6	A	TR	0.60	9.7	A	TR	0.62	10.2	B	TR	0.65	10.5	B
Intersection			*12.2*	*B*			*12.4*	*B*			*13.2*	*B*			*13.3*	*B*			*16.7*	*B*			*17.1*	*B*			*15.0*	*B*			*15.2*	*B*
Dyer Ave & W.30th St																																
Eastbound	L	0.09	10.0	A	L	0.09	10.0	A	L	0.17	10.5	B	L	0.17	10.5	B	L	0.35	12.1	B	L	0.35	12.1	B	L	0.32	11.9	B	L	0.32	11.9	B
Southbound	L	0.68	28.8	C	L	0.71	29.7	C	L	0.36	23.0	C	L	0.39	23.5	C	L	0.19	21.1	C	L	0.22	21.4	C	L	0.53	25.5	C	L	0.58	26.4	C
Intersection			*25.4*	*C*			*26.3*	*C*			*17.7*	*B*			*18.3*	*B*			*14.4*	*B*			*14.8*	*B*			*19.4*	*B*			*20.2*	*C*

Notes: L = Left Turn; T = Through; R = Right Turn; DefL = De Facto Left Turn; V/C = Volume to Capacity; LOS = Level of Service
"+" denotes significant adverse impact.

Table 13-16 (Continued)
2010 No Build and Build Conditions Level of Service Analysis Results

Analysis Locations	Weekday AM Peak Hour								Weekday Midday Peak Hour								Weekday PM Peak Hour								Saturday Midday Peak Hour							
	2010 No Build				2010 Build				2010 No Build				2010 Build				2010 No Build				2010 Build				2010 No Build				2010 Build			
	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS
Dyer Ave & W.31st St																																
Westbound	LTR	0.66	33.4	C	LTR	0.91	50.7	D+	LTR	0.50	28.3	C	LTR	0.64	30.8	C	LTR	0.95	45.8	D	LTR	1.06	73.6	E+	LTR	1.19	131.0	F	LTR	1.40	220.0	F+
Northbound	LT	0.11	4.6	A	LT	0.11	4.6	A	LT	0.18	4.9	A	LT	0.18	4.9	A	LT	0.34	5.8	A	LT	0.34	5.8	A	LT	0.30	9.2	A	LT	0.30	9.2	A
Southbound	TR	0.40	10.2	B	TR	0.42	10.4	B	TR	0.22	8.6	A	TR	0.24	8.7	A	TR	0.11	7.9	A	TR	0.14	8.0	A	TR	0.28	9.0	A	TR	0.30	9.2	A
Intersection			*17.0*	*B*			*25.4*	*C*			*16.4*	*B*			*18.6*	*B*			*30.1*	*C*			*48.0*	*D*			*65.2*	*E*			*112.5*	*F*
Dyer Ave & W.34th St																																
Eastbound	T	0.59	28.9	C	T	0.68	30.9	C	T	0.64	30.0	C	T	0.74	32.7	C	T	0.60	27.1	C	T	0.70	29.2	C	T	0.47	14.2	B	T	0.58	15.9	B
Westbound	T	0.33	6.5	A	T	0.31	6.4	A	T	0.38	6.5	A	T	0.37	6.5	A	T	0.32	6.1	A	T	0.29	5.9	A	T	0.22	11.5	B	T	0.22	11.5	B
	R	0.06	5.0	A	R	0.06	5.0	A	R	0.21	5.7	A	R	0.23	5.9	A	R	0.18	5.5	A	R	0.20	5.6	A	R	0.32	10.4	B	R	0.35	10.7	B
Southbound	L	0.78	42.9	D	L	0.82	45.5	D	L	0.36	32.8	C	L	0.44	33.9	C	L	0.29	31.8	C	L	0.36	32.7	C	L	0.40	22.8	C	L	0.44	23.5	C
	R	0.23	31.6	C	R	0.23	31.6	C	R	0.43	37.2	D	R	0.43	37.2	D	R	0.67	48.0	D	R	0.67	48.0	D	R	0.31	22.8	C	R	0.31	22.8	C
Intersection			*25.2*	*C*			*27.3*	*C*			*20.2*	*C*			*22.4*	*C*			*21.1*	*C*			*23.0*	*C*			*15.8*	*B*			*16.7*	*B*
Dyer Ave & W.35th St																																
Westbound	LTR	0.38	26.0	C	LTR	0.38	26.0	C	LTR	0.45	27.0	C	LTR	0.45	27.0	C	LTR	0.78	35.0	C	LTR	0.78	35.0	D	LTR	0.49	27.4	C	LTR	0.49	27.4	C
Northbound	LT	0.03	4.7	A	LT	0.03	4.7	A	LT	0.10	5.0	A	LT	0.11	5.0	A	LT	0.09	4.9	A	LT	0.09	4.9	A	LT	0.17	8.6	A	LT	0.18	8.7	A
Southbound	TR	0.29	9.5	A	TR	0.30	9.6	A	TR	0.19	8.7	A	TR	0.20	8.9	A	TR	0.23	9.0	A	TR	0.25	9.2	A	TR	0.28	9.4	A	TR	0.29	9.5	A
Intersection			*15.2*	*B*			*15.1*	*B*			*16.1*	*B*			*15.8*	*B*			*22.5*	*C*			*22.1*	*C*			*15.5*	*B*			*15.3*	*B*
Tenth Ave & W.28th St																																
Eastbound	LT	0.47	25.7	C	LT	0.47	25.7	C	LT	0.41	24.7	C	LT	0.41	24.7	C	LT	0.63	29.0	C	LT	0.63	29.1	C	LT	0.94	59.0	E	LT	0.94	59.9	E
Northbound	TR	0.53	9.0	A	TR	0.54	9.1	A	TR	0.51	8.8	A	TR	0.52	8.9	A	TR	0.65	10.3	B	TR	0.66	10.4	B	TR	0.74	12.0	B	TR	0.77	12.4	B
Intersection			*11.7*	*B*			*11.7*	*B*			*11.2*	*B*			*11.2*	*B*			*13.6*	*B*			*13.7*	*B*			*19.7*	*B*			*20.1*	*C*
Tenth Ave & W.29th St																																
Westbound	TR	0.80	35.7	D	TR	0.81	36.2	D	TR	0.68	30.7	C	TR	0.71	31.8	C	TR	0.75	33.3	C	TR	0.77	34.1	C	TR	0.66	29.3	C	TR	0.72	30.9	C
Northbound	LT	0.58	9.5	A	LT	0.58	9.5	A	LT	0.53	9.0	A	LT	0.54	9.1	A	LT	0.69	10.8	B	LT	0.70	10.9	B	LT	0.73	11.7	B	LT	0.74	11.9	B
Intersection			*15.9*	*B*			*16.0*	*B*			*13.8*	*B*			*14.2*	*B*			*15.3*	*B*			*15.6*	*B*			*15.5*	*B*			*16.3*	*B*
Tenth Ave & W.30th St																																
Eastbound	LT	0.77	34.3	C	LT	0.78	34.5	C	LT	0.65	28.5	C	LT	0.68	29.0	C	LT	0.75	33.1	C	LT	0.77	34.1	C	LT	0.58	27.6	C	LT	0.64	28.9	C
Northbound	TR	0.74	12.0	B	TR	0.74	12.0	B	TR	0.65	10.5	B	TR	0.66	10.7	B	TR	0.88	15.9	B	TR	0.89	16.3	B	TR	0.75	12.2	B	TR	0.77	12.6	B
Intersection			*17.1*	*B*			*17.2*	*B*			*15.7*	*B*			*16.1*	*B*			*19.2*	*B*			*19.7*	*B*			*15.3*	*B*			*16.0*	*B*
Tenth Ave & W.31st St																																
Westbound	R	0.55	28.2	C	R	0.76	35.5	D	R	0.56	27.6	C	R	0.68	30.8	C	R	0.74	32.0	C	R	0.86	38.7	D	R	1.27	165.0	F	R	1.48	254.2	F+
Northbound	T	0.61	9.9	A	T	0.61	9.8	A	T	0.75	12.2	B	T	0.75	12.3	B	T	0.52	8.8	A	T	0.52	8.8	A	T	0.57	9.5	A	T	0.57	9.5	A
Intersection			*12.4*	*B*			*14.4*	*B*			*14.9*	*B*			*16.1*	*B*			*14.2*	*B*			*16.6*	*B*			*60.7*	*E*			*98.3*	*F*
Tenth Ave & W.33rd St																																
Westbound	TR	0.47	23.9	C	TR	0.59	26.0	C	TR	0.52	25.1	C	TR	0.68	28.7	C	TR	0.57	25.7	C	TR	0.69	28.6	C	TR	0.61	27.3	C	TR	0.90	42.6	D
Northbound	LT	0.90	18.6	B	LT	0.94	22.2	C	LT	0.94	22.6	C	LT	0.98	28.3	C	LT	0.70	12.1	B	LT	0.73	12.5	B	LT	0.86	16.7	B	LT	0.90	18.8	B
Intersection			*19.5*	*B*			*23.0*	*C*			*23.0*	*C*			*28.4*	*C*			*14.4*	*B*			*15.6*	*B*			*18.5*	*B*			*24.1*	*C*

Notes: L = Left Turn; T = Through; R = Right Turn; DefL = De Facto Left Turn; V/C = Volume to Capacity; LOS = Level of Service
"+" denotes significant adverse impact.

Table 13-16 (Continued)
2010 No Build and Build Conditions Level of Service Analysis Results

Analysis Locations	Weekday AM Peak Hour								Weekday Midday Peak Hour								Weekday PM Peak Hour								Saturday Midday Peak Hour							
	2010 No Build				2010 Build				2010 No Build				2010 Build				2010 No Build				2010 Build				2010 No Build				2010 Build			
	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS
Tenth Ave & W.34th St																																
Eastbound	DefL	0.98	80.2	F	DefL	0.99	82.5	F	DefL	1.06	107.2	F	DefL	1.06	107.2	F	DefL	0.88	64.0	E	DefL	0.89	66.0	E	LT	0.71	32.4	C	LT	0.82	38.0	D
	T	0.39	22.2	C	T	0.42	22.6	C	T	0.44	22.9	C	T	0.51	24.0	C	T	0.35	19.1	B	T	0.40	19.8	B								
Westbound	TR	0.50	23.6	C	TR	0.48	23.3	C	TR	0.95	49.2	D	TR	0.94	48.2	D	TR	0.51	21.1	C	TR	0.48	20.6	C	TR	0.59	28.0	C	TR	0.60	28.1	C
Northbound	LT	0.90	19.3	B	LT	0.94	22.9	C	LT	0.89	18.9	B	LT	0.94	23.0	C	LT	0.84	19.3	B	LT	0.88	20.9	C	LT	0.75	11.8	B	LT	0.81	13.2	B
	R	0.48	16.4	B	R	0.60	19.4	B	R	0.64	22.1	C	R	0.75	28.0	C	R	0.74	28.1	C	R	0.87	38.9	D	R	0.57	16.8	B	R	0.67	19.7	B
Intersection			*24.0*	*C*			*26.3*	*C*			*30.1*	*C*			*32.3*	*C*			*22.1*	*C*			*24.2*	*C*			*17.3*	*B*			*19.4*	*B*
Tenth Ave & W.35th St																																
Westbound	TR	0.53	26.7	C	TR	0.53	26.8	C	TR	0.61	28.9	C	TR	0.61	28.9	C	TR	0.79	35.3	D	TR	0.79	35.3	D	TR	0.56	27.6	C	TR	0.56	27.6	C
Northbound	LT	0.70	11.0	B	LT	0.72	11.3	B	LT	0.67	10.6	B	LT	0.70	10.9	B	LT	0.61	9.7	A	LT	0.63	9.8	A	LT	0.72	11.6	B	LT	0.76	12.2	B
Intersection			*13.4*	*B*			*13.5*	*B*			*13.6*	*B*			*13.8*	*B*			*14.3*	*B*			*14.4*	*B*			*14.3*	*B*			*14.7*	*B*

Notes: L = Left Turn; T = Through; R = Right Turn; DefL = De Facto Left Turn; V/C = Volume to Capacity; LOS = Level of Service
"+" denotes significant adverse impact.

SIGNIFICANT IMPACTS

Based on the above CEQR criteria, significantly impacted locations were identified and summarized by peak analysis period, as follows. During the weekday AM, midday, and PM peak hours, the proposed action would result in 4 significantly impacted lane groups at 4 intersections. In the Saturday midday peak hour, there would be 14 significantly impacted lane groups at 11 intersections.

Weekday AM Peak Hour

- Sixth Avenue at West 35th Street: The westbound approach would worsen within LOS D and increase in average delay from 47.8 to 53.7 (+5.9) spv.
- Eighth Avenue at West 30th Street: The eastbound approach would deteriorate from LOS E to LOS F and increase in average delay from 66.5 to 95.7 (+29.2) spv.
- Ninth Avenue at West 34th Street: The eastbound approach would deteriorate from LOS D to LOS E and increase in average delay from 46.4 to 75.6 (+29.2) spv.
- Dyer Avenue at Wet 31st Street: The westbound approach would deteriorate from LOS C to LOS D and increase in average delay from 33.4 to 50.7 (+17.3) spv.

Weekday Midday Peak Hour

- Sixth Avenue at West 35th Street: The westbound approach would deteriorate from LOS D to LOS E and increase in average delay from 48.2 to 61.2 (+13.0) spv.
- Eighth Avenue at West 31st Street: The northbound approach would deteriorate from LOS D to LOS E and increase in average delay from 47.6 to 74.1 (+26.5) spv.
- Eighth Avenue at West 33rd Street: The northbound approach would worsen within LOS E and increase in average delay from 64.7 to 79.1 (+14.4) spv.
- Ninth Avenue at West 34th Street: The eastbound approach would deteriorate from LOS D to LOS E and increase in average delay from 41.9 to 72.4 (+30.5) spv.

Weekday PM Peak Hour

- Sixth Avenue at West 35th Street: The westbound approach would deteriorate from LOS D to E and increase in average delay from 45.6 to 55.3 (+9.7) spv.
- Eighth Avenue at West 31st Street: The northbound approach would deteriorate from LOS E to LOS F and increase in average delay from 62.9 to 88.9 (+26.0) spv.
- Ninth Avenue at West 34th Street: The eastbound approach would deteriorate from LOS D to LOS E and increase in average delay from 42.7 to 77.1 (+34.4) spv.
- Dyer Avenue at West 31st Street: The westbound approach would deteriorate from LOS D to LOS E and increase in average delay from 45.8 to 73.6 (+27.8) spv.

Saturday Midday Peak Hour

- Seventh Avenue at West 33rd Street: The westbound approach would deteriorate from LOS D to LOS E and increase in average delay from 42.0 to 55.5 (+13.5) spv.
- Seventh Avenue at West 34th Street: The eastbound approach would deteriorate from LOS E to LOS F and increase in average delay from 78.9 to 113.9 (+35.0) spv. The westbound approach would worsen within LOS F and increase in average delay from 84.8 to 115.1 (+30.3) spv.

- Eighth Avenue at West 30th Street: The eastbound approach would deteriorate from LOS C to LOS E and increase in average delay from 28.6 to 58.7 (+30.1) spv.
- Eighth Avenue at West 31st Street: The northbound approach would deteriorate from LOS C to LOS D and increase in average delay from 26.2 to 46.0 (+19.8) spv.
- Eighth Avenue at West 33rd Street: The northbound approach would deteriorate from LOS E to LOS F and increase in average delay from 78.7 to 113.0 (+34.3) spv.
- Eighth Avenue at West 34th Street: The eastbound left-turn movement would deteriorate from LOS D to LOS E and increase in average delay from 52.5 to 68.7 (+16.2) spv. The northbound approach would worsen within LOS F and increase in average delay from 92.0 to 120.9 (+28.9) spv.
- Ninth Avenue at West 30th Street: The eastbound approach would worsen within LOS D and increase in average delay from 36.5 to 45.7 (+9.2) spv.
- Ninth Avenue at West 31st Street: The westbound approach would deteriorate from LOS D to LOS E and increase in average delay from 39.7 to 69.6 (+29.9) spv.
- Ninth Avenue at West 34th Street: The eastbound approach would deteriorate from LOS C to LOS E and increase in average delay from 34.1 to 60.7 (+26.6) spv. The westbound de facto left-turn movement would worsen within LOS F and increase in average delay from 190.7 to 200.6 (+9.9) spv.
- Dyer Avenue at West 31st Street: The westbound approach would worsen within LOS F and increase in average delay from 131.0 to 220.0 (+89.0) spv.
- Tenth Avenue at West 31st Street: The westbound approach would worsen within LOS F and increase in average delay from 165.0 to 254.2 (+89.2) spv.

Mitigation measures for these impacts are presented in Chapter 19, “Mitigation.”

PARKING

OFF-STREET PARKING

Auto trips estimated to be generated by the proposed action under 2010 Build conditions were assigned to the roadway network to selected off-street facilities within ¼-mile of the site and layered on top of 2010 No Build parking utilization rates. All other facilities’ peak period utilization rates within ½-mile of the site would not change significantly from the No Build to Build conditions, and are not reported in this section. The selected off-street parking facilities are hereafter referred to by their assigned number according to the parking tables for brevity.

These off-street parking facilities include: #13-14-16, a collection of facilities totaling approximately 250 spaces on the north and south sides of West 33rd Street between Ninth and Tenth Avenues; #17, a facility with approximately 160 spaces on westbound West 34th Street between Ninth and Dyer Avenues; #89, a facility with approximately 500 spaces on westbound West 34th Street between Eighth and Ninth Avenues; #92, a facility with approximately 250 spaces on West 33rd Street between Eighth and Ninth Avenues; #93, the 1 Penn Plaza garage accessible via eastbound West 34th Street and West 33rd Street between Seventh and Eighth Avenues, which is assumed to have a reduced capacity of approximately 500 spaces in the Future With the Proposed Action due to loss of spaces after the construction of the structural columns for 1 Penn Plaza West; and #99, the garage immediately south of 2 Penn Plaza and

Madison Square Garden, which has a capacity of 1,500 spaces and is accessible for inbound traffic on West 31st and West 30th Streets and outbound traffic on West 31st Street.

Table 13-17 shows peak hour volumes assigned to each of the off-street parking facilities described above. The 2010 Build parking utilization rate, number of spaces occupied, and number of spaces available at the selected off-street parking facilities are presented in Table 13-18.

Table 13-17
2010 Build Increment Parking Assignments Per Facility

Facility	Capacity	Peak Hour Trips							
		Weekday AM		Weekday Midday		Weekday PM		Saturday Midday	
		In	Out	In	Out	In	Out	In	Out
13-14-16	250	2	2	9	9	5	5	16	16
17	160	0	0	0	0	0	0	0	0
89	500	2	2	14	14	7	7	25	25
92	250	21	11	32	14	33	9	42	24
93	500	52	30	99	61	88	38	130	93
99	1500	26	17	56	38	47	21	82	65

Table 13-18
2010 Build Off-Street Parking Inventory and Occupancy

Map No.	Name	Address	Licensed Capacity	WKDY Midday (12 – 2 PM)			WKDY Evening (6 – 9 PM)			WKDY Overnight (12 – 5 AM)			SAT Midday (12 – 3 PM)		
				Utilization Rate	Occupied Spaces	Available Spaces	Utilization Rate	Occupied Spaces	Available Spaces	Utilization Rate	Occupied Spaces	Available Spaces	Utilization Rate	Occupied Spaces	Available Spaces
13	Edison Ninth Ave. Parking Corp.	412-422 W. 33rd St.	115	77%	89	26	77%	89	26	46%	53	62	52%	60	55
14	Edison Ninth Ave. Parking Corp.	401-422 Ninth Ave.	92	47%	43	49	47%	43	49	86%	79	13	49%	45	47
16	NJ Parking Inc.	431 W. 33rd St.	77	77%	59	18	77%	59	18	Closed	0	77	47%	36	41
17	Central Parking System Inc.	441 Ninth Ave.	160	90%	144	16	47%	75	85	Closed	0	160	40%	64	96
89	Meyers Parking System Inc.	323 W. 34th St.	500	85%	425	75	47%	235	265	Closed	0	500	77%	385	115
92	Central Parking System of NY Inc.	305-319 W. 33rd St.	250	72%	181	69	88%	220	30	46%	115	135	61%	153	97
93	Central Parking System of NY Inc.	One Penn Plaza	500	100%	500	0	94%	471	29	31%	155	345	70%	348	152
99	Meyers Parking System Inc.	218 W. 31st St./ 227 W. 30th St.	1,500	97%	1459	41	45%	676	824	31%	465	1,035	38%	570	930

During the weekday midday, the facilities closest to the Moynihan Station and 1 Penn Plaza West sites are expected to be filled to near capacity, and during other periods, ample off-street parking would remain available.

ON-STREET PARKING

Under the 2010 No Build conditions, on-street parking would be near capacity on a weekday or would exceed legal capacity on a Saturday midday. Since no trips associated with the proposed action were assigned to on-street parking, the utilization under 2010 Build conditions is expected to continue to be approximately 100 percent.

F. FUTURE WITHOUT THE PROPOSED ACTION 2015

The analysis of traffic conditions in the 2015 No Build condition serves as the baseline against which the impacts of the proposed action would be compared. As discussed in the "Future Without the Proposed Action in 2010" section, the future No Build analysis includes increases in

background traffic volumes, traffic from projected development sites, traffic from the USPS Redevelopment of the Farley Post Office Building, and includes 2010 mitigation measures specified in the Hudson Yards FGEIS.

Future No Build weekday and Saturday peak hour traffic volumes were estimated using 2025 volumes in the Hudson Yards FGEIS. The 2015 weekday No Build volumes were calculated using the same steps detailed in the Future Without the Proposed Action in 2010 section, with an additional step to pro-rate the Hudson Yards incremental traffic expected in 2025 to 2015 levels. As with the 2010 No Build volumes, the resulting 2015 No Build volumes also included the trips that would be expected to occur from the redevelopment of the Farley Complex by USPS (under the Future Without the Proposed Action). This series of steps resulted in the 2015 weekday peak hour No Build traffic volumes that have been used in the analyses in this document.

Similar to the 2010 No Build conditions, the 2015 Saturday peak hour No Build traffic volumes were estimated by first applying a 0.5 percent per year compounded growth rate for ten years (as recommended by the *CEQR Technical Manual*) from 2005 to 2015. Then, the traffic volumes generated by Hudson Yards projected development sites (for 2025, pro-rated to reflect 2015 conditions) were added based on trip-generation and projections in the Hudson Yards FGEIS, adjusted to reflect Saturday midday conditions. Finally, as with the weekday peak hour volumes, estimates of the Saturday peak hour traffic increments from the USPS redevelopment of the Farley Complex (under the Future Without the Proposed Action) were added. This resulted in the 2015 Saturday peak hour No Build traffic volumes used in these analyses.

TRAFFIC VOLUMES AND LEVEL OF SERVICE

Peak hour traffic volumes for the 2015 No Build condition are shown in Figures 13-19 through 13-22. The 2015 No Build volumes relative to the existing volumes are discussed below.

TENTH AVENUE

Tenth Avenue volumes would increase from about: 1,500 to 1,800 vehicles per hour (vph) within the existing traffic study area to 2,000 to 2,800 vph under 2015 No Build conditions during the weekday AM peak hour; increase from 1,400 to 1,800 vph existing to 1,900 to 2,700 vph under 2015 No Build conditions during the weekday midday peak hour; increase from 1,700 to 2,000 vph existing to 2,400 to 3,400 vph under the 2015 No Build conditions during the weekday PM peak hour; and increase from 1,500 to 1,900 vph existing to 1,800 to 2,500 vph under the 2015 No Build conditions during the Saturday midday peak hour.

NINTH AVENUE

Ninth Avenue carries about: 1,600 to 2,000 vph within the traffic study area during the existing weekday AM peak hour, which would increase to 2,200 to 2,500 vph under 2015 No Build conditions; 1,400 to 1,800 vph existing would increase to 1,900 to 2,300 vph under 2015 No Build conditions during the weekday midday peak hour; 1,500 to 1,800 vph existing would increase to 2,000 to 2,400 vph under 2015 No Build conditions during the weekday PM peak hour; and 1,300 to 1,800 vph existing would increase to 1,700 to 2,100 vph under 2015 No Build conditions during the Saturday midday peak hour.

DYER AVENUE/LINCOLN TUNNEL EXPRESSWAY

Dyer Avenue at West 34th Street carries about: 450 vph southbound and 50 vph northbound during the existing weekday AM peak hour, which would increase to 700 vph southbound and 50 vph northbound under the 2015 No Build conditions; 250 vph southbound and 150 vph northbound during the existing weekday midday peak hour, which would increase to 400 vph southbound and 160 vph northbound under the 2015 No Build conditions; 280 vph southbound and 125 vph northbound during the existing weekday PM peak hour, which would increase to 500 vph southbound and 130 vph northbound under the 2015 No Build conditions; and 500 vph southbound and 250 vph northbound during the existing Saturday midday peak hour, which would increase to 600 vph southbound and 260 vph northbound under the 2015 No Build conditions.

Along the Lincoln Tunnel Expressway between West 30th and West 33rd Streets, the roadway carries about: 650 vph southbound and 150 vph northbound during the existing weekday AM peak hour, which would increase to 700 vph southbound and 200 vph northbound under the 2015 No Build conditions; 350 vph southbound and 250 vph northbound during the existing weekday midday peak hour, which would increase to 380 vph southbound and 300 vph northbound under the 2015 No Build conditions; 180 vph southbound and 500 vph northbound during the existing weekday PM peak hour, which would increase to 200 vph southbound and 600 vph northbound under the 2015 No Build conditions; and 450 vph southbound and 450 vph northbound during the existing Saturday midday peak hour, which would increase to 500 vph southbound and 480 vph northbound under the 2015 No Build conditions.

EIGHTH AVENUE

Eighth Avenue carries about: 1,300 to 1,600 vph within the traffic study area during the existing weekday AM peak hour, which would increase to 1,700 to 2,200 vph under 2015 No Build conditions; 1,400 to 1,700 vph during the existing weekday midday peak hour, which would increase to 1,800 to 2,200 vph under 2015 No Build conditions; 1,500 to 1,800 vph during the existing weekday PM peak hour, which would increase to 2,000 to 2,300 vph under 2015 No Build conditions; and 1,400 to 1,700 vph during the existing Saturday peak hour which would increase to 1,700 to 2,000 vph under 2015 No Build conditions.

SEVENTH AVENUE

Seventh Avenue currently carries about: 1,300 to 1,800 vph within the traffic study area, which would increase to 1,500 to 2,300 vph under 2015 No Build conditions during the weekday AM peak hour; 1,100 to 1,500 vph, which would increase to 1,300 to 1,800 vph under 2015 No Build conditions during the weekday midday peak hour; 1,200 to 1,500 vph, which would increase to 1,550 to 1,900 vph under 2015 No Build conditions during the weekday PM peak hour; and 1,300 to 1,700 vph, which would increase to 1,500 to 2,000 vph under 2015 No Build conditions during the Saturday midday peak hour.

SIXTH AVENUE AND BROADWAY

Sixth Avenue carries about: 1,800 to 2,000 vph within the traffic study area during the existing weekday AM peak hour, which would increase to 2,050 to 2,300 vph under 2015 No Build conditions; 1,600 to 1,900 vph during the existing weekday midday peak hour, which would increase to 1,750 to 2,100 vph under 2015 No Build conditions; 1,600 to 1,900 vph during the existing weekday PM peak hour, which would increase to 1,750 to 2,200 vph under 2015 No

Build conditions; and 1,400 to 1,700 vph during the existing Saturday midday peak hour, which would increase to 1,525 to 1,825 vph under 2015 No Build conditions.

Broadway carries approximately: 800 vph during the existing weekday AM peak hour, which would increase to approximately 900 vph under 2015 No Build conditions; 850 vph during the existing weekday midday peak hour, which would increase to approximately 900 vph under 2015 No Build conditions; 925 vph during the existing weekday PM peak hour, which would increase to approximately 1,100 vph under 2015 No Build conditions; and 525 vph during the existing Saturday midday peak hour, which would increase to approximately 600 vph under 2015 No Build conditions.

WEST 34TH STREET

West 34th Street carries about: 400 to 800 vph eastbound and 485 to 600 vph westbound within the traffic study area during the existing AM peak hour, which would increase to 700 to 1,200 vph eastbound and 700 to 800 vph westbound under 2015 No Build conditions; 500 to 700 vph eastbound and 625 to 800 vph westbound during the existing midday peak hour, which would increase to 700 to 1,000 vph eastbound and 700 to 1,000 vph westbound under 2015 No Build conditions; 400 to 575 vph eastbound and 525 to 600 vph westbound during the existing PM peak hour, which would increase to 700 to 1,100 vph eastbound and 700 to 800 vph westbound under 2015 No Build conditions; and 425 to 900 vph eastbound and 375 to 775 vph westbound during the existing Saturday midday peak hour, which would increase to 500 to 1,200 vph eastbound and 500 to 900 vph westbound under 2015 No Build conditions.

OTHER CROSSTOWN STREETS

Eastbound streets including West 28th, West 30th, and West 32nd Streets carry approximately 200 to 950 vph within the traffic study area during the existing weekday AM peak hour, which would increase to 300 to 1,300 vph under 2015 No Build conditions; 200 to 600 vph during the existing weekday midday peak hour, which would increase to 300 to 1,100 vph under 2015 No Build conditions; 175 to 700 vph during the existing weekday PM peak hour, which would increase to 200 to 1,000 vph under 2015 No Build conditions; and 200 to 700 vph during the existing Saturday midday peak hour, which would increase to 210 to 900 vph under 2015 No Build conditions. Westbound streets including West 29th, West 31st, West 33rd, and West 35th Streets carry about: 200 to 700 vph within the traffic study area during the existing weekday AM peak hour, which would increase to 260 to 1,000 vph under 2015 No Build conditions; 225 to 600 vph during the existing weekday midday peak hour, which would increase to 300 to 700 vph under 2015 No Build conditions; 225 to 800 vph during the existing weekday PM peak hour, which would increase to 300 to 1,200 vph under 2015 No Build conditions; and 250 to 625 vph during the existing Saturday midday peak hour, which would increase to 300 to 900 vph under 2015 No Build conditions.

Results of the LOS analysis are presented in Table 13-19. As with existing conditions, locations with notable service constraints, those operating at mid-LOS D or worse, are described below.

Weekday AM Peak Hour

- Broadway and Sixth Avenue at West 34th Street: The eastbound approach would deteriorate from LOS C to LOS D, with delay increasing from 31.9 to 47.2 spv and v/c ratio increasing from 0.70 to 0.94. The northbound approach would deteriorate from LOS E to LOS F, with delay increasing from 59.2 to 97.1 spv and v/c ratio increasing from 1.03 to 1.13. The

southbound approach would deteriorate from LOS D to LOS E, with delay increasing from 47.4 to 57.7 spv and v/c increasing from 0.90 to 0.97.

- Broadway at West 35th Street: The southbound approach would deteriorate from LOS D to LOS E, with delay increasing from 52.0 to 78.6 spv and v/c ratio increasing from 0.95 to 1.05.
- Sixth Avenue at West 35th Street: The westbound approach would deteriorate from LOS D to LOS E, with delay increasing from 35.3 to 77.1 spv and v/c ratio increasing from 0.79 to 1.06.
- Seventh Avenue at West 29th Street: The westbound approach would deteriorate from LOS D to LOS F, with delay increasing from 37.3 to 89.0 spv and v/c ratio increasing from 0.88 to 1.10.
- Eighth Avenue at West 29th Street: The westbound approach would deteriorate from LOS C to LOS E, with delay increasing from 31.3 to 63.0 spv and v/c ratio increasing from 0.80 to 1.02.
- Eighth Avenue at West 30th Street: The eastbound approach would deteriorate from LOS C to LOS F, with delay increasing from 28.5 to 102.2 spv and v/c ratio increasing form 0.80 to 1.15.
- Eighth Avenue at West 32nd Street: The northbound approach would deteriorate from LOS C to LOS E, with delay increasing from 23.0 to 67.3 spv and v/c ratio increasing from 0.77 to 1.08.
- Eighth Avenue at West 33rd Street: The northbound approach would deteriorate from LOS C to LOS F, with delay increasing from 32.2 to 124.6 spv and v/c ratio increasing from 0.90 to 1.21.
- Ninth Avenue at West 33rd Street: The westbound approach would deteriorate from LOS C to LOS D, with delay increasing from 26.9 to 53.5 spv and v/c ratio increasing from 0.50 to 0.94.
- Ninth Avenue at West 34th Street: The eastbound approach would deteriorate from LOS C to LOS E, with delay increasing from 29.4 to 79.3 spv and v/c ratio increasing from 0.72 to 1.08. The westbound de facto left-turn movement would deteriorate from LOS C to LOS D, with delay increasing from 22.6 to 48.5 spv and v/c ratio increasing from 0.35 to 0.74.
- Tenth Avenue at West 30th Street: The eastbound approach would deteriorate from LOS C to LOS D, with delay increasing from 26.4 to 45.3 spv and v/c ratio increasing from 0.51 to 0.91.

Table 13-19

Existing and 2015 No Build Conditions Level of Service Analysis Results

Analysis Locations	Weekday AM Peak Hour								Weekday Midday Peak Hour								Weekday PM Peak Hour								Saturday Midday Peak Hour							
	Existing				2015 No Build				Existing				2015 No Build				Existing				2015 No Build				Existing				2015 No Build			
	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS
Broadway/Sixth Ave & W.34th St																																
Eastbound	T	0.70	31.9	C	T	0.94	47.2	D	T	0.63	29.8	C	T	0.83	36.5	D	T	0.41	26.3	C	T	0.80	36.7	D	T	0.71	31.7	C	T	0.89	41.1	D
Westbound	TR	0.61	29.6	C	TR	0.85	37.9	D	TR	0.78	34.4	C	TR	0.93	45.5	D	TR	0.64	30.3	C	TR	0.81	37.5	D	TR	0.70	31.5	C	TR	0.78	34.2	C
Northbound	T	1.03	59.2	E	T	1.13	97.1	F	T	1.03	62.1	E	T	1.13	100.7	F	T	1.05	60.2	E	T	1.13	87.7	F	T	0.91	39.9	D	T	0.98	50.0	D
Southbound	T	0.90	47.4	D	T	0.97	57.7	E	T	0.99	61.8	E	T	1.06	82.0	F	T	0.99	62.2	E	T	1.04	74.4	E	T	0.64	34.5	C	T	0.70	35.9	D
Intersection			*47.3*	*D*			*68.9*	*E*			*50.7*	*D*			*72.1*	*E*			*51.2*	*D*			*66.6*	*E*			*35.4*	*D*			*42.2*	*D*
Broadway & W.35th St																																
Westbound	LT	0.21	7.2	A	LT	0.32	7.9	A	LT	0.23	7.3	A	LT	0.30	7.8	A	LT	0.26	7.5	A	LT	0.34	8.1	A	LT	0.29	7.8	A	LT	0.35	8.3	A
Southbound	TR	0.95	52.0	D	TR	1.05	78.6	E	TR	0.97	57.0	E	TR	1.07	84.0	F	TR	1.02	68.0	E	TR	1.15	115.0	F	TR	0.66	34.1	C	TR	0.74	36.5	D
Intersection			*35.7*	*D*			*47.9*	*D*			*38.4*	*D*			*52.5*	*D*			*44.9*	*D*			*70.8*	*E*			*22.2*	*C*			*23.0*	*C*
Sixth Ave & W.31st St																																
Westbound	TR	0.60	22.2	C	TR	0.77	27.4	C	TR	0.58	21.8	C	TR	0.70	24.9	C	TR	0.74	26.1	C	TR	0.89	34.9	C	TR	0.66	23.9	C	TR	0.77	27.7	C
Northbound	LT	0.90	24.9	C	LT	1.02	44.3	D	LT	0.83	21.3	C	LT	0.93	27.0	C	LT	0.86	22.8	C	LT	0.98	33.7	C	LT	0.74	18.9	B	LT	0.81	20.7	C
Intersection			*24.3*	*C*			*40.1*	*D*			*21.4*	*C*			*26.5*	*C*			*23.7*	*C*			*34.1*	*C*			*20.3*	*C*			*22.8*	*C*
Sixth Ave & W.32nd St																																
Eastbound	LT	0.51	20.6	C	LT	0.54	21.2	C	LT	0.99	67.0	E	LT	1.05	85.2	F	LT	0.22	16.6	B	LT	0.23	16.7	B	LT	0.34	18.2	B	LT	0.36	18.5	B
Northbound	TR	0.88	23.8	C	TR	0.99	35.6	D	TR	0.85	22.3	C	TR	0.95	29.5	C	TR	0.86	22.4	C	TR	0.96	31.2	C	TR	0.82	21.0	C	TR	0.88	24.0	C
Intersection			*23.2*	*C*			*33.1*	*C*			*29.7*	*C*			*38.5*	*D*			*21.9*	*C*			*30.0*	*C*			*20.7*	*C*			*23.3*	*C*
Sixth Ave & W.33rd St																																
Northbound	L	0.36	21.1	C	L	0.44	22.5	C	L	0.42	22.1	C	L	0.50	23.8	C	L	0.45	22.7	C	L	0.54	24.6	C	L	0.45	22.8	C	L	0.51	24.0	C
	T	0.89	29.0	C	T	0.98	39.1	D	T	0.76	24.0	C	T	0.83	26.4	C	T	0.76	24.0	C	T	0.84	26.8	C	T	0.70	22.9	C	T	0.76	24.1	C
Intersection			*28.2*	*C*			*37.2*	*D*			*23.8*	*C*			*26.1*	*C*			*23.9*	*C*			*26.4*	*C*			*22.9*	*C*			*24.1*	*C*
Sixth Ave & W.35th St																																
Westbound	TR	0.79	35.3	D	TR	1.06	77.1	E	TR	0.85	39.1	D	TR	1.01	63.1	E	TR	0.96	53.5	D	TR	1.01	60.0	E	TR	0.62	25.4	C	TR	0.73	28.5	C
Northbound	LT	0.63	10.1	B	LT	0.71	11.9	B	LT	0.54	9.2	A	LT	0.61	10.6	B	LT	0.54	9.2	A	LT	0.67	14.2	B	LT	0.55	12.7	B	LT	0.60	13.2	B
Intersection			*16.0*	*B*			*30.0*	*C*			*17.4*	*B*			*26.3*	*C*			*22.6*	*C*			*29.1*	*C*			*16.1*	*B*			*17.7*	*B*
Seventh Ave & W.28th St																																
Eastbound	TR	0.29	14.3	B	TR	0.38	15.3	B	TR	0.28	14.2	B	TR	0.38	15.3	B	TR	0.25	11.2	B	TR	0.37	12.5	B	TR	0.45	24.8	C	TR	0.56	26.9	C
Southbound	LT	0.72	22.7	C	LT	0.81	25.4	C	LT	0.68	21.9	C	LT	0.76	23.8	C	LT	0.85	31.6	C	LT	1.04	60.1	E	LT	0.54	9.9	A	LT	0.62	10.8	B
Intersection			*21.0*	*C*			*23.1*	*C*			*20.3*	*C*			*21.8*	*C*			*27.8*	*C*			*49.4*	*D*			*12.7*	*B*			*14.2*	*B*
Seventh Ave & W.29th St																																
Westbound	LT	0.88	37.3	D	LT	1.10	89.0	F	LT	0.58	24.0	C	LT	0.75	29.1	C	LT	0.58	24.0	C	LT	0.79	30.8	C	LT	0.56	23.7	C	LT	0.68	26.9	C
Southbound	TR	0.57	13.8	B	TR	0.65	14.8	B	TR	0.51	13.0	B	TR	0.57	13.8	B	TR	0.60	14.1	B	TR	0.73	16.3	B	TR	0.69	15.6	B	TR	0.79	17.8	B
Intersection			*22.2*	*C*			*43.1*	*D*			*16.2*	*B*			*18.7*	*B*			*16.7*	*B*			*20.4*	*C*			*17.4*	*B*			*19.9*	*B*
Seventh Ave & W.30th St																																
Eastbound	TR	0.95	45.7	D	TR	0.76	26.8	C	TR	0.63	24.9	C	TR	0.87	35.6	D	TR	0.37	20.2	C	TR	0.71	27.3	C	TR	0.63	25.1	C	TR	0.86	35.2	D
Southbound	LT	0.57	13.8	B	LT	0.65	15.0	B	LT	0.51	13.1	B	LT	0.57	13.8	B	LT	0.56	13.6	B	LT	0.67	15.3	B	LT	0.56	13.7	B	LT	0.63	14.7	B
Intersection			*26.5*	*C*			*19.9*	*B*			*17.0*	*B*			*22.0*	*C*			*14.9*	*B*			*18.7*	*B*			*17.1*	*B*			*21.7*	*C*
Seventh Ave & W.31st St																																
Westbound	LT	0.63	23.7	C	LT	0.85	32.9	C	LT	0.56	22.1	C	LT	0.69	25.4	C	LT	0.77	28.4	C	LT	0.92	40.3	D	LT	0.56	21.8	C	LT	0.66	24.2	C
Southbound	TR	0.48	14.0	B	TR	0.61	15.6	B	TR	0.37	13.0	B	TR	0.45	13.7	B	TR	0.38	13.0	B	TR	0.56	14.9	B	TR	0.68	17.0	B	TR	0.79	19.6	B
Intersection			*16.9*	*B*			*21.2*	*C*			*15.7*	*B*			*17.4*	*B*			*18.5*	*B*			*23.6*	*C*			*18.3*	*B*			*20.9*	*C*

Notes: L = Left Turn; T = Through; R = Right Turn; DefL = De Facto Left Turn; V/C = Volume to Capacity; LOS = Level of Service

Table 13-19 (Continued)
Existing and 2015 No Build Conditions Level of Service Analysis Results

Analysis Locations	Weekday AM Peak Hour								Weekday Midday Peak Hour								Weekday PM Peak Hour								Saturday Midday Peak Hour							
	Existing				2015 No Build				Existing				2015 No Build				Existing				2015 No Build				Existing				2015 No Build			
	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS
Seventh Ave & W.32nd St																																
Southbound	LT	0.35	3.5	A	LT	0.42	3.8	A	LT	0.29	3.3	A	LT	0.33	3.4	A	LT	0.25	3.2	A	LT	0.34	3.5	A	LT	0.57	4.9	A	LT	0.64	5.5	A
Intersection			*3.5*	*A*			*3.8*	*A*			*3.3*	*A*			*3.4*	*A*			*3.2*	*A*			*3.5*	*A*			*4.9*	*A*			*5.5*	*A*
Seventh Ave & W.33rd St																																
Westbound	LT	0.47	32.5	C	LT	0.57	34.7	C	LT	0.54	33.9	C	LT	0.64	36.7	D	LT	0.54	33.5	C	LT	0.70	39.5	D	LT	0.72	40.1	D	LT	0.79	44.5	D
Southbound	TR	0.49	4.2	A	TR	0.62	5.1	A	TR	0.41	3.8	A	TR	0.49	4.2	A	TR	0.41	3.8	A	TR	0.52	4.4	A	TR	0.57	4.9	A	TR	0.68	5.9	A
Intersection			*7.1*	*A*			*8.0*	*A*			*8.0*	*A*			*8.8*	*A*			*8.3*	*A*			*9.4*	*A*			*10.6*	*B*			*12.0*	*B*
Seventh Ave & W.34th St																																
Eastbound	TR	0.53	22.6	C	TR	0.73	26.8	C	TR	0.51	22.3	C	TR	0.69	25.6	C	TR	0.39	20.7	C	TR	0.70	26.1	C	TR	0.90	38.6	D	TR	1.15	108.3	F
Westbound	LT	0.53	22.8	C	LT	0.74	27.9	C	LT	0.70	26.4	C	LT	0.85	32.7	C	LT	0.56	23.4	C	LT	0.75	28.5	C	LT	0.89	37.9	D	LT	1.17	117.2	F
Southbound	T	0.79	17.8	B	T	0.99	34.0	C	T	0.64	14.8	B	T	0.77	17.2	B	T	0.60	14.2	B	T	0.77	17.2	B	T	0.79	17.7	B	T	0.92	24.0	C
Intersection			*19.9*	*B*			*30.9*	*C*			*19.7*	*B*			*23.5*	*C*			*17.8*	*B*			*22.1*	*C*			*27.3*	*C*			*66.5*	*E*
Seventh Ave & W.35th St																																
Westbound	L	0.37	22.2	C	L	0.63	28.7	C	L	0.38	22.4	C	L	0.55	26.0	C	L	0.24	20.2	C	L	0.44	23.5	C	L	0.45	26.0	C	L	0.66	33.3	C
	LT	0.30	20.4	C	LT	0.43	22.0	C	LT	0.26	19.9	B	LT	0.34	20.9	C	LT	0.48	22.9	C	LT	0.57	24.5	C	LT	0.55	25.8	C	LT	0.66	28.9	C
Southbound	TR	0.71	14.4	B	TR	0.85	18.0	B	TR	0.62	13.0	B	TR	0.71	14.4	B	TR	0.55	12.1	B	TR	0.67	13.6	B	TR	0.67	13.7	B	TR	0.76	15.4	B
Intersection			*15.9*	*B*			*19.9*	*B*			*14.9*	*B*			*16.8*	*B*			*15.3*	*B*			*17.2*	*B*			*16.5*	*B*			*19.0*	*B*
Eighth Ave & W.28th St																																
Eastbound	LT	0.41	21.9	C	LT	0.54	24.1	C	LT	0.39	21.7	C	LT	0.52	23.8	C	LT	0.48	23.1	C	LT	0.67	27.1	C	LT	0.52	23.9	C	LT	0.62	26.0	C
Northbound	TR	0.52	11.7	B	TR	0.69	14.0	B	TR	0.69	14.0	B	TR	0.84	17.7	B	TR	0.66	13.5	B	TR	0.82	17.0	B	TR	0.61	12.8	B	TR	0.73	14.7	B
Intersection			*14.0*	*B*			*16.2*	*B*			*15.3*	*B*			*18.8*	*B*			*15.5*	*B*			*19.2*	*B*			*15.1*	*B*			*17.1*	*B*
Eighth Ave & W.29th St																																
Westbound	TR	0.80	31.3	C	TR	1.02	63.0	E	TR	0.40	18.1	B	TR	0.55	20.5	C	TR	0.58	23.9	C	TR	0.79	30.9	C	TR	0.46	21.7	C	TR	0.59	24.2	C
Northbound	LT	0.56	13.5	B	LT	0.74	16.4	B	LT	0.79	21.0	C	LT	0.97	33.6	C	LT	0.73	16.3	B	LT	0.91	22.6	C	LT	0.64	14.7	B	LT	0.76	16.9	B
Intersection			*19.7*	*B*			*31.9*	*C*			*20.5*	*C*			*31.0*	*C*			*18.0*	*B*			*24.5*	*C*			*16.1*	*B*			*18.4*	*B*
Eighth Ave & W.30th St																																
Eastbound	LT	0.80	28.5	C	LT	1.15	102.2	F	LT	0.52	19.6	B	LT	0.84	29.2	C	LT	0.37	18.7	B	LT	0.75	26.7	C	LT	0.57	22.0	C	LT	0.86	33.0	C
Northbound	TR	0.58	15.4	B	TR	0.82	21.0	C	TR	0.72	19.3	B	TR	0.90	25.7	C	TR	0.73	17.7	B	TR	0.91	24.5	C	TR	0.70	17.2	B	TR	0.83	20.7	C
Intersection			*20.6*	*C*			*54.2*	*D*			*19.3*	*B*			*26.8*	*C*			*17.9*	*B*			*25.1*	*C*			*18.5*	*B*			*24.5*	*C*
Eighth Ave & W.31st St																																
Westbound	TR	0.88	36.9	D	TR	0.93	39.1	D	TR	0.48	19.5	B	TR	0.77	28.0	C	TR	0.68	23.6	C	TR	1.19	124.3	F	TR	0.73	25.0	C	TR	0.90	35.6	D
Northbound	LT	0.65	17.9	B	LT	0.98	35.7	D	LT	0.80	21.2	C	LT	1.06	60.5	E	LT	0.87	24.2	C	LT	1.13	87.3	F	LT	0.75	19.8	B	LT	0.94	29.6	C
Intersection			*23.9*	*C*			*36.8*	*D*			*20.9*	*C*			*53.6*	*D*			*24.1*	*C*			*97.9*	*F*			*21.4*	*C*			*31.4*	*C*
Eighth Ave & W.32nd St																																
Northbound	T	0.77	23.0	C	T	1.08	67.3	E	T	0.79	23.5	C	T	1.02	48.1	D	T	0.81	23.9	C	T	1.09	72.2	E	T	0.79	23.5	C	T	0.97	36.9	D
Intersection			*23.0*	*C*			*67.3*	*E*			*23.5*	*C*			*48.1*	*D*			*23.9*	*C*			*72.2*	*E*			*23.5*	*C*			*36.9*	*D*
Eighth Ave & W.33rd St																																
Westbound	TR	0.17	11.4	B	TR	0.26	13.2	B	TR	0.18	11.5	B	TR	0.26	13.9	B	TR	0.23	12.0	B	TR	0.31	12.7	B	TR	0.27	12.5	B	TR	0.36	13.4	B
Northbound	LT	0.90	32.2	C	LT	1.21	124.6	F	LT	0.93	35.9	D	LT	1.12	85.8	F	LT	0.97	40.6	D	LT	1.02	49.8	D	LT	0.92	33.9	C	LT	1.14	96.3	F
Intersection			*29.1*	*C*			*106.6*	*F*			*32.1*	*C*			*73.6*	*E*			*35.4*	*D*			*43.0*	*D*			*30.1*	*C*			*80.6*	*F*

Notes: L = Left Turn; T = Through; R = Right Turn; DefL = De Facto Left Turn; V/C = Volume to Capacity; LOS = Level of Service

Table 13-19 (Continued)

Existing and 2015 No Build Conditions Level of Service Analysis Results

Analysis Locations	Weekday AM Peak Hour								Weekday Midday Peak Hour								Weekday PM Peak Hour								Saturday Midday Peak Hour							
	Existing				2015 No Build				Existing				2015 No Build				Existing				2015 No Build				Existing				2015 No Build			
	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS
Eighth Ave & W.34th St																																
Eastbound	LT	1.01	44.4	D	L	0.55	30.8	C	LT	1.02	65.6	E	L	0.45	29.4	C	LT	0.69	24.9	C	L	0.51	27.1	C	LT	1.04	68.7	E	L	0.92	80.6	F
					T	0.70	19.4	B					T	0.58	17.0	B					T	0.57	16.9	B					T	0.79	27.1	C
Westbound	TR	0.41	17.9	B	TR	0.73	29.5	C	TR	0.53	19.4	B	TR	0.85	36.1	D	TR	0.37	17.3	B	TR	0.73	31.6	C	TR	0.55	19.9	B	TR	0.63	21.4	C
Northbound	LTR	0.74	19.6	B	LTR	0.89	29.8	C	LTR	0.73	19.6	B	LTR	0.85	27.6	C	LTR	0.74	19.8	B	LTR	0.89	29.7	C	LTR	0.97	40.4	D	LTR	1.17	108.2	F
Intersection			*25.9*	*C*			*27.5*	*C*			*30.0*	*C*			*27.7*	*C*			*20.3*	*C*			*27.3*	*C*			*42.4*	*D*			*69.4*	*E*
Eighth Ave & W.35th St																																
Westbound	TR	0.61	28.5	C	TR	0.81	37.0	D	TR	0.55	20.9	C	TR	0.66	23.4	C	TR	0.86	40.3	D	TR	1.00	63.8	E	TR	0.64	29.5	C	TR	0.72	32.2	C
Northbound	LT	0.60	10.6	B	LT	0.76	13.0	B	LT	0.64	17.8	B	LT	0.81	21.6	C	LT	0.58	10.4	B	LT	0.75	12.9	B	LT	0.64	11.0	B	LT	0.76	12.9	B
Intersection			*14.2*	*B*			*18.0*	*B*			*18.6*	*B*			*22.0*	*C*			*18.4*	*B*			*25.6*	*C*			*14.6*	*B*			*16.5*	*B*
Ninth Ave & W.28th St																																
Eastbound	TR	0.26	22.7	C	TR	0.38	24.4	C	TR	0.30	23.2	C	TR	0.44	25.1	C	TR	0.41	24.7	C	TR	0.60	28.2	C	TR	0.57	27.5	C	TR	0.67	29.9	C
Southbound	LT	0.63	10.1	B	LT	0.73	11.4	B	LT	0.56	9.4	A	LT	0.68	10.7	B	LT	0.43	8.1	A	LT	0.55	9.1	A	LT	0.68	10.9	B	LT	0.81	13.4	B
Intersection			*11.1*	*B*			*12.8*	*B*			*10.9*	*B*			*12.6*	*B*			*10.7*	*B*			*12.4*	*B*			*14.1*	*B*			*16.7*	*B*
Ninth Ave & W.29th St																																
Westbound	LT	0.53	25.7	C	LT	0.62	27.3	C	LT	0.36	23.5	C	LT	0.45	24.5	C	LT	0.40	23.9	C	LT	0.50	25.3	C	LT	0.55	27.1	C	LT	0.66	29.9	C
Southbound	TR	0.58	9.5	A	TR	0.69	10.8	B	TR	0.71	11.4	B	TR	0.86	15.3	B	TR	0.51	8.9	A	TR	0.68	10.7	B	TR	0.67	10.7	B	TR	0.81	13.6	B
Intersection			*14.0*	*B*			*15.3*	*B*			*14.0*	*B*			*17.4*	*B*			*12.5*	*B*			*14.1*	*B*			*13.9*	*B*			*16.7*	*B*
Ninth Ave & W.30th St																																
Eastbound	TR	0.64	28.2	C	TR	0.78	31.5	C	TR	0.40	24.4	C	TR	0.54	26.4	C	TR	0.29	23.4	C	TR	0.45	25.2	C	TR	0.76	32.5	C	TR	0.93	44.3	D
Southbound	LT	0.48	12.4	B	LT	0.63	14.1	B	LT	0.51	12.7	B	LT	0.77	16.6	B	LT	0.53	13.1	B	LT	0.79	17.2	B	LT	0.63	14.5	B	LT	0.83	18.7	B
Intersection			*17.8*	*B*			*19.9*	*B*			*15.7*	*B*			*19.2*	*B*			*15.1*	*B*			*18.8*	*B*			*20.3*	*C*			*26.7*	*C*
Ninth Ave & W.31st St																																
Westbound	LT	0.37	23.7	C	LT	0.70	29.6	C	LT	0.42	24.3	C	LT	0.67	29.0	C	LT	0.60	26.9	C	LT	0.92	41.5	D	LT	0.69	30.4	C	LT	0.91	44.2	D
Southbound	TR	0.52	8.9	A	TR	0.72	11.3	B	TR	0.51	8.8	A	TR	0.68	10.6	B	TR	0.44	8.2	A	TR	0.71	11.2	B	TR	0.60	9.8	A	TR	0.76	12.2	B
Intersection			*11.7*	*B*			*16.0*	*B*			*12.2*	*B*			*15.1*	*B*			*14.4*	*B*			*20.7*	*C*			*15.2*	*B*			*20.7*	*C*
Ninth Ave & W.33rd St																																
Westbound	LT	0.50	26.9	C	LT	0.94	53.5	D	LT	0.62	29.2	C	LT	1.17	124.9	F	LT	0.65	30.2	C	LT	1.11	100.6	F	LT	0.48	26.1	C	LT	0.72	32.2	C
Southbound	TR	0.50	8.7	A	TR	0.74	11.5	B	TR	0.44	8.3	A	TR	0.60	9.7	A	TR	0.43	8.2	A	TR	0.63	10.0	B	TR	0.58	9.6	A	TR	0.74	11.8	B
Intersection			*11.3*	*B*			*19.3*	*B*			*12.5*	*B*			*37.3*	*D*			*12.9*	*B*			*31.1*	*C*			*12.6*	*B*			*15.9*	*B*
Ninth Ave & W.34th St																																
Eastbound	TR	0.72	29.4	C	TR	1.08	79.3	E	TR	0.66	28.6	C	TR	1.01	59.1	E	TR	0.52	25.8	C	TR	1.13	101.9	F	TR	0.72	26.7	C	TR	0.96	43.0	D
Westbound	DefL	0.35	22.6	C	DefL	0.74	48.5	D	DefL	0.54	29.0	C	DefL	0.84	55.8	E	DefL	0.28	18.0	B	DefL	0.52	35.6	D	DefL	1.00	96.1	F	DefL	1.38	220.5	F
	T	0.33	14.2	B	T	0.45	15.6	B	T	0.47	15.9	B	T	0.55	17.1	B	T	0.31	13.9	B	T	0.43	15.4	B	T	0.36	14.4	B	T	0.42	15.1	B
Southbound	LTR	0.73	23.3	C	LTR	0.97	37.0	D	LTR	0.63	21.3	C	LTR	0.83	25.9	C	LTR	0.44	18.8	B	LTR	0.69	22.1	C	LTR	0.74	23.9	C	LTR	0.93	32.8	C
Intersection			*23.7*	*C*			*47.0*	*D*			*22.4*	*C*			*34.8*	*C*			*19.5*	*B*			*45.0*	*D*			*28.1*	*C*			*45.7*	*D*
Ninth Ave & W.35th St																																
Westbound	LT	0.42	25.0	C	LT	0.58	27.9	C	LT	0.53	26.5	C	LT	0.70	31.3	C	LT	0.70	30.8	C	LT	0.93	48.5	D	LT	0.68	30.9	C	LT	0.76	34.1	C
Southbound	TR	0.52	9.0	A	TR	0.72	11.2	B	TR	0.44	8.3	A	TR	0.59	9.6	A	TR	0.48	8.6	A	TR	0.66	10.4	B	TR	0.52	9.1	A	TR	0.67	10.8	B
Intersection			*11.5*	*B*			*13.9*	*B*			*12.6*	*B*			*14.3*	*B*			*14.8*	*B*			*20.0*	*B*			*14.4*	*B*			*16.0*	*B*
Dyer Ave & W.30th St																																
Eastbound	L	0.11	10.1	B	L	0.11	10.1	B	L	0.17	10.5	B	L	0.18	10.6	B	L	0.32	11.8	B	L	0.37	12.4	B	L	0.30	11.7	B	L	0.33	12.0	B
Southbound	L	0.65	28.1	C	L	0.70	29.4	C	L	0.34	22.8	C	L	0.37	23.1	C	L	0.18	21.0	C	L	0.19	21.1	C	L	0.51	25.3	C	L	0.55	25.8	C
Intersection			*25.0*	*C*			*25.5*	*C*			*17.7*	*B*			*17.6*	*B*			*14.2*	*B*			*14.5*	*B*			*19.2*	*B*			*19.6*	*B*

Notes: L = Left Turn; T = Through; R = Right Turn; DefL = De Facto Left Turn; V/C = Volume to Capacity; LOS = Level of Service

Table 13-19 (Continued)
Existing and 2015 No Build Conditions Level of Service Analysis Results

Analysis Locations	Weekday AM Peak Hour								Weekday Midday Peak Hour								Weekday PM Peak Hour								Saturday Midday Peak Hour							
	Existing				2015 No Build				Existing				2015 No Build				Existing				2015 No Build				Existing				2015 No Build			
	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS
Dyer Ave & W.31st St																																
Westbound	LTR	0.46	28.7	C	LTR	0.80	39.3	D	LTR	0.56	30.6	C	LTR	0.57	29.5	C	LTR	1.02	69.6	E	LTR	1.03	63.7	E	LTR	0.83	40.3	D	LTR	1.23	145.6	F
Northbound	LT	0.10	4.5	A	LT	0.13	4.7	A	LT	0.16	4.8	A	LT	0.20	5.0	A	LT	0.28	5.3	A	LT	0.36	5.9	A	LT	0.30	9.2	A	LT	0.31	9.3	A
Southbound	TR	0.39	10.0	B	TR	0.42	10.3	B	TR	0.21	8.5	A	TR	0.23	8.6	A	TR	0.11	7.8	A	TR	0.12	7.9	A	TR	0.27	9.0	A	TR	0.29	9.1	A
Intersection			*13.9*	*B*			*19.8*	*B*			*15.6*	*B*			*17.4*	*B*			*37.9*	*D*			*41.3*	*D*			*20.6*	*C*			*72.1*	*E*
Dyer Ave & W.34th St																																
Eastbound	T	0.60	30.6	C	T	0.68	30.8	C	T	0.74	35.0	D	T	0.72	32.1	C	T	0.64	31.5	C	T	0.75	30.8	C	T	0.41	13.5	B	T	0.48	14.4	B
Westbound	T	0.26	5.0	A	T	0.37	6.9	A	T	0.32	5.3	A	T	0.41	6.8	A	T	0.23	4.8	A	T	0.34	6.2	A	T	0.18	11.1	B	T	0.23	11.6	B
	R	0.05	4.0	A	R	0.06	5.0	A	R	0.20	4.9	A	R	0.21	5.7	A	R	0.17	4.7	A	R	0.18	5.5	A	R	0.31	10.3	B	R	0.33	10.5	B
Southbound	L	0.83	49.7	D	L	0.82	45.5	D	L	0.38	34.7	C	L	0.38	33.1	C	L	0.30	33.6	C	L	0.35	32.6	C	L	0.38	22.7	C	L	0.42	23.1	C
	R	0.26	35.1	D	R	0.26	32.2	C	R	0.44	40.1	D	R	0.47	38.5	D	R	0.71	54.0	D	R	0.72	51.4	D	R	0.29	22.5	C	R	0.32	23.0	C
Intersection			*27.3*	*C*			*26.3*	*C*			*21.2*	*C*			*21.6*	*C*			*22.9*	*C*			*23.9*	*C*			*15.6*	*B*			*16.0*	*B*
Dyer Ave & W.35th St																																
Westbound	LTR	0.35	25.6	C	LTR	0.56	28.6	C	LTR	0.37	25.8	C	LTR	0.55	28.5	C	LTR	0.64	30.3	C	LTR	0.88	41.5	D	LTR	0.45	26.8	C	LTR	0.54	28.2	C
Northbound	LT	0.03	4.7	A	LT	0.03	4.7	A	LT	0.10	5.0	A	LT	0.10	5.0	A	LT	0.07	4.8	A	LT	0.08	4.9	A	LT	0.16	8.6	A	LT	0.17	8.7	A
Southbound	TR	0.25	9.2	A	TR	0.34	9.9	A	TR	0.17	8.6	A	TR	0.20	8.8	A	TR	0.21	8.9	A	TR	0.25	9.2	A	TR	0.27	9.3	A	TR	0.29	9.5	A
Intersection			*15.1*	*B*			*17.5*	*B*			*15.5*	*B*			*17.6*	*B*			*19.8*	*B*			*26.6*	*C*			*15.0*	*B*			*16.1*	*B*
Tenth Ave & W.28th St																																
Eastbound	LT	0.70	38.1	D	LT	0.52	26.6	C	LT	0.62	33.7	C	LT	0.43	25.1	C	LT	0.85	51.5	D	LT	0.65	29.7	C	LT	0.83	43.6	D	LT	0.98	66.6	E
Northbound	TR	0.43	8.2	A	TR	0.59	9.6	A	TR	0.42	8.1	A	TR	0.55	9.2	A	TR	0.56	9.3	A	TR	0.69	10.8	B	TR	0.68	10.8	B	TR	0.78	12.7	B
Intersection			*12.1*	*B*			*12.3*	*B*			*11.1*	*B*			*11.5*	*B*			*14.4*	*B*			*14.1*	*B*			*16.1*	*B*			*21.5*	*C*
Tenth Ave & W.29th St																																
Westbound	TR	0.72	31.8	C	TR	0.91	44.8	D	TR	0.54	27.0	C	TR	0.77	34.5	C	TR	0.60	28.4	C	TR	0.86	39.6	D	TR	0.55	26.8	C	TR	0.72	31.1	C
Northbound	LT	0.46	8.5	A	LT	0.65	10.3	B	LT	0.42	8.2	A	LT	0.57	9.4	A	LT	0.57	9.4	A	LT	0.74	11.5	B	LT	0.67	10.7	B	LT	0.77	12.3	B
Intersection			*14.6*	*B*			*18.7*	*B*			*12.3*	*B*			*15.2*	*B*			*13.0*	*B*			*17.3*	*B*			*13.9*	*B*			*16.5*	*B*
Tenth Ave & W.30th St																																
Eastbound	LT	0.51	26.4	C	LT	0.91	45.3	D	LT	0.69	30.6	C	LT	0.76	31.5	C	LT	0.51	26.2	C	LT	1.08	87.6	F	LT	0.50	26.0	C	LT	0.73	31.7	C
Northbound	TR	0.60	10.0	A	TR	0.84	14.5	B	TR	0.52	9.1	A	TR	0.72	11.5	B	TR	0.74	11.8	B	TR	0.95	21.3	C	TR	0.69	11.1	B	TR	0.80	13.2	B
Intersection			*13.3*	*B*			*21.8*	*C*			*15.1*	*B*			*17.5*	*B*			*14.3*	*B*			*37.0*	*D*			*13.9*	*B*			*17.4*	*B*
Tenth Ave & W.31st St																																
Westbound	R	0.29	23.2	C	R	0.70	32.9	C	R	0.37	24.5	C	R	0.65	29.9	C	R	0.36	24.3	C	R	0.82	36.1	D	R	0.73	33.7	C	R	1.32	185.6	F
Northbound	T	0.48	8.6	A	T	0.70	10.9	B	T	0.61	10.0	B	T	0.83	14.4	B	T	0.51	8.8	A	T	0.58	9.4	A	T	0.52	9.1	A	T	0.61	10.0	B
Intersection			*10.1*	*B*			*14.2*	*B*			*12.0*	*B*			*17.2*	*B*			*10.6*	*B*			*15.6*	*B*			*14.8*	*B*			*66.2*	*E*
Tenth Ave & W.33rd St																																
Westbound	TR	0.27	21.1	C	TR	0.63	26.6	C	TR	0.30	21.6	C	TR	0.61	26.7	C	TR	0.31	21.6	C	TR	0.74	29.9	C	TR	0.46	24.2	C	TR	0.78	32.9	C
Northbound	LT	0.67	12.2	B	LT	1.04	44.8	D	LT	0.72	13.1	B	LT	1.06	50.7	D	LT	0.59	10.9	B	LT	0.79	13.6	B	LT	0.70	12.7	B	LT	0.92	20.1	C
Intersection			*13.7*	*B*			*41.0*	*D*			*14.5*	*B*			*46.3*	*D*			*12.8*	*B*			*16.9*	*B*			*14.6*	*B*			*22.7*	*C*

Notes: L = Left Turn; T = Through; R = Right Turn; DefL = De Facto Left Turn; V/C = Volume to Capacity; LOS = Level of Service

Table 13-19 (Continued)
Existing and 2015 No Build Conditions Level of Service Analysis Results

Analysis Locations	Weekday AM Peak Hour								Weekday Midday Peak Hour								Weekday PM Peak Hour								Saturday Midday Peak Hour							
	Existing				2015 No Build				Existing				2015 No Build				Existing				2015 No Build				Existing				2015 No Build			
	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS
Tenth Ave & W.34th St																																
Eastbound	DefL	0.97	81.9	F	DefL	1.21	153.3	F	DefL	1.01	97.5	F	DefL	1.16	139.4	F	DefL	0.77	55.5	E	DefL	0.91	68.8	E	LT	0.60	28.6	C	LT	0.81	37.5	D
	T	0.30	23.1	C	T	0.45	23.1	C	T	0.99	73.2	E	T	0.50	23.8	C	T	0.33	23.4	C	T	0.46	20.6	C								
Westbound	TR	0.46	25.0	C	TR	0.59	25.1	C	TR	0.89	43.0	D	TR	1.03	68.8	E	TR	0.49	25.5	C	TR	0.54	21.6	C	TR	0.52	26.4	C	TR	0.63	28.7	C
Northbound	LT	0.60	9.9	A	LT	1.00	33.0	C	LT	0.59	9.8	A	LT	0.98	28.2	C	LT	0.49	8.6	A	LT	0.94	24.4	C	LT	0.64	10.2	B	LT	0.80	13.1	B
	R	0.24	11.1	B	R	0.53	17.5	B	R	0.25	11.3	B	R	0.72	26.1	C	R	0.25	11.3	B	R	0.88	40.6	D	R	0.34	12.5	B	R	0.62	18.1	B
Intersection			*19.5*	*B*			*38.1*	*D*			*29.9*	*C*			*41.2*	*D*			*15.1*	*B*			*26.7*	*C*			*15.3*	*B*			*19.1*	*B*
Tenth Ave & W.35th St																																
Westbound	TR	0.44	25.2	C	TR	0.83	37.5	D	TR	0.51	26.4	C	TR	0.75	33.5	C	TR	0.68	30.7	C	TR	0.91	46.4	D	TR	0.51	26.5	C	TR	0.62	29.0	C
Northbound	LT	0.55	9.3	A	LT	0.80	12.7	B	LT	0.54	9.2	A	LT	0.74	11.6	B	LT	0.58	9.5	A	LT	0.67	10.3	B	LT	0.63	10.2	B	LT	0.78	12.6	B
Intersection			*11.8*	*B*			*17.6*	*B*			*12.2*	*B*			*15.6*	*B*			*13.9*	*B*			*17.3*	*B*			*13.1*	*B*			*15.5*	*B*

Notes: L = Left Turn; T = Through; R = Right Turn; DefL = De Facto Left Turn; V/C = Volume to Capacity; LOS = Level of Service

Weekday Midday Peak Hour

- Broadway and Sixth Avenue at West 34th Street: The westbound approach would deteriorate from LOS C to LOS D, with delay increasing from 34.4 to 45.5 spv and v/c ratio increasing from 0.78 to 0.93. The northbound approach would deteriorate from LOS E to LOS F, with delay increasing from 62.1 to 100.7 spv and v/c ratio increasing from 1.03 to 1.13. The southbound approach would deteriorate from LOS E to LOS F, with delay increasing from 61.8 to 82.0 spv and v/c ratio increasing from 0.99 to 1.06.
- Broadway at West 35th Street: The southbound approach would deteriorate from LOS E to LOS F, with delay increasing from 57.0 to 84.0 spv and v/c ratio increasing from 0.97 to 1.07.
- Sixth Avenue at West 32nd Street: The eastbound approach would deteriorate from LOS E to LOS F, with delay increasing from 67.0 to 85.2 spv and v/c ratio increasing from 0.99 to 1.05.
- Sixth Avenue at West 35th Street: The westbound approach would deteriorate from LOS D to LOS E, with delay increasing from 39.1 to 63.1 spv and v/c ratio increasing from 0.85 to 1.01.
- Eighth Avenue at West 31st Street: The northbound approach would deteriorate from LOS C to LOS E, with delay increasing from 21.2 to 60.5 spv and v/c ratio increasing from 0.80 to 1.06.
- Eighth Avenue at West 32nd Street: The northbound approach would deteriorate from LOS C to LOS D, with delay increasing from 23.5 to 48.1 spv and v/c ratio increasing from 0.79 to 1.02.
- Eighth Avenue at West 33rd Street: The northbound approach would deteriorate from LOS D to LOS F, with delay increasing from 35.9 to 85.8 spv and v/c ratio increasing from 0.93 to 1.12.
- Ninth Avenue at West 33rd Street: The westbound approach would deteriorate from LOS C to LOS F, with delay increasing from 29.2 to 124.9 spv and v/c ratio increasing from 0.62 to 1.17.
- Ninth Avenue at West 34th Street: The eastbound approach would deteriorate from LOS C to LOS E, with delay increasing from 28.6 to 59.1 spv and v/c ratio increasing from 0.66 to 1.01. The westbound de facto left-turn movement would deteriorate from LOS C to LOS E, with delay increasing from 29.0 to 55.8 spv and v/c ratio increasing from 0.54 to 0.84.
- Tenth Avenue at West 33rd Street: The northbound approach would deteriorate from LOS B to LOS D, with delay increasing from 13.1 to 50.7 spv and v/c ratio increasing from 0.72 to 1.06.
- Tenth Avenue at West 34th Street: The westbound approach would deteriorate from LOS D to LOS E, with delay increasing from 43.0 to 68.8 spv and v/c ratio increasing from 0.89 to 1.03.

Weekday PM Peak Hour

- Broadway and Sixth Avenue at West 34th Street: The northbound approach would deteriorate from LOS E to LOS F, with delay increasing from 60.2 to 87.7 spv and v/c ratio increasing from 1.05 to 1.13.

- Broadway at West 35th Street: The southbound approach would deteriorate from LOS E to LOS F, with delay increasing from 68.0 to 115.0 spv and v/c ratio increasing from 1.02 to 1.15.
- Sixth Avenue at West 35th Street: The westbound approach would deteriorate from LOS D to LOS E, with delay increasing from 53.5 to 60.0 spv and v/c ratio increasing from 0.96 to 1.01.
- Seventh Avenue at West 28th Street: The southbound approach would deteriorate from LOS C to LOS E, with delay increasing from 31.6 to 60.1 spv and v/c ratio increasing from 0.85 to 1.04.
- Eighth Avenue at West 31st Street: The westbound approach would deteriorate from LOS C to LOS F, with delay increasing from 23.6 to 124.3 spv and v/c ratio increasing from 0.68 to 1.19. The northbound approach would deteriorate from LOS C to LOS F, with delay increasing from 24.2 to 87.3 spv and v/c ratio increasing from 0.87 to 1.13.
- Eighth Avenue at West 32nd Street: The northbound approach would deteriorate from LOS C to LOS E, with delay increasing from 23.9 to 72.2 spv and v/c ratio increasing from 0.81 to 1.09.
- Eighth Avenue at West 33rd Street: The northbound approach would continue to operate at LOS D, with delay increasing from 40.6 to 49.8 spv and v/c ratio increasing from 0.97 to 1.02.
- Eighth Avenue at West 35th Street: The westbound approach would deteriorate from LOS D to LOS E, with delay increasing from 40.3 to 63.8 spv and v/c ratio increasing from 0.86 to 1.00.
- Ninth Avenue at West 33rd Street: The westbound approach would deteriorate from LOS C to LOS F, with delay increasing from 30.2 to 100.6 spv and v/c ratio increasing from 0.65 to 1.11.
- Ninth Avenue at West 34th Street: The eastbound approach would deteriorate from LOS C to LOS F, with delay increasing from 25.8 to 101.9 spv and v/c ratio increasing from 0.52 to 1.13.
- Ninth Avenue at West 35th Street: The westbound approach would deteriorate from LOS C to LOS D, with delay increasing from 30.8 to 48.5 spv and v/c ratio increasing from 0.70 to 0.93.
- Tenth Avenue at West 30th Street: The eastbound approach would deteriorate from LOS C to LOS F, with delay increasing from 26.2 to 87.6 spv and v/c ratio increasing from 0.51 to 1.08.
- Tenth Avenue at West 35th Street: The westbound approach would deteriorate from LOS C to LOS D, with delay increasing from 30.7 to 46.4 spv and v/c ratio increasing from 0.68 to 0.91.

Saturday Midday Peak Hour

- Broadway and Sixth Avenue at West 34th Street: The northbound approach would continue to operate at LOS D, with delay increasing from 39.9 to 50.0 spv and v/c ratio increasing from 0.91 to 0.98.
- Seventh Avenue at West 34th Street: The eastbound approach would deteriorate from LOS D to LOS F, with delay increasing from 38.6 to 108.3 spv and v/c ratio increasing from 0.90

to 1.15. The westbound approach would deteriorate from LOS D to LOS F, with delay increasing 37.9 to 117.2 spv and v/c ratio increasing from 0.89 to 1.17.

- Eighth Avenue at West 33rd Street: The northbound approach would deteriorate from LOS C to LOS F, with delay increasing from 33.9 to 96.3 spv and v/c ratio increasing from 0.92 to 1.14.
- Eighth Avenue at West 34th Street: The eastbound approach would change from LOS E for a shared left and through movement with a delay of 68.7 spv and a v/c ratio of 1.04 to LOS F for a left-turn movement with a delay of 80.6 spv and a v/c ratio of 0.92, and LOS C for a through movement with a delay of 27.1 spv and v/c ratio of 0.79. The northbound approach would deteriorate from LOS D to LOS F, with delay increasing from 40.4 to 108.2 spv and v/c ratio increasing from 0.97 to 1.17.
- Dyer Avenue at West 31st Street: The westbound approach would deteriorate from LOS D to LOS F, with delay increasing from 40.3 to 145.6 spv and v/c ratio increasing from 0.83 to 1.23.
- Tenth Avenue at West 28th Street: The eastbound approach would deteriorate from LOS D to LOS E, with delay increasing from 43.6 to 66.6 spv and v/c ratio increasing from 0.83 to 0.98.
- Tenth Avenue at West 31st Street: The westbound approach would deteriorate from LOS C to LOS F, with delay increasing from 33.7 to 185.6 spv and v/c ratio increasing from 0.73 to 1.32.

PARKING

OFF-STREET PARKING

In the Future Without the Proposed Action in 2015, off-street parking demand would increase further due to the development of projects under the *Hudson Yards FGEIS* No Build and Build conditions between 2010 and 2025. However, because the total capacity would increase significantly (by more than 7,000 spaces) by 2025 according to that study's *Appendix S.3 Transportation – Parking Analysis*, the parking utilization percentage would *decrease* in 2025 when compared to 2010 in three of the four peak hours. Since the No Build year for the Future Without the Proposed Action is 2015 and these parking utilization decreases are projected in 2025, it was conservatively assumed that the 2015 No Build off-street parking supply would keep pace with demand, and not outpace it, as the case would be according to the *Hudson Yards FGEIS.*

Hence, the weekday midday, weekday overnight, weekday evening, and Saturday midday parking overall utilization rates would remain at 90 percent, 47 percent, 73 percent, and 85 percent, respectively, under 2015 No Build conditions.

ON-STREET PARKING

Because the existing on-street parking is either near capacity on a weekday or exceeds legal capacity on a Saturday midday, it is expected that in the Future Without the Proposed Action that utilization would continue to be approximately 100 percent.

G. FUTURE WITH THE PROPOSED ACTION 2015

TRIP DISTRIBUTION AND ASSIGNMENT

Trips generated by the 2015 Build program were distributed to the traffic network by assigning the total peak hour trips per mode and per land use using percentage assignments similar to the 2010 Build program. The trip distribution and percentage assignments were based on the *2003 Penn Station Redevelopment Project EA.* As with the 2010 Build trip assignments, 2015 Build auto trips have been assigned to existing parking facilities within ¼-mile of the site, and this is discussed further under Parking at the end of this section.

AUTOS

The 2015 Build program would include several of the same land uses as the 2010 Build program, including Commercial Retail, Transit-Related Retail, Transit Growth, Hotel, and Banquet Uses on the Moynihan Station site, and these assignments would be similar to the 2010 Build program and are not repeated here. There would be no new development at the Development Transfer site under 2015 Build conditions. One additional land use, Office, would be included in the 2015 Build conditions.

Office Use

Auto trips to office uses were distributed to study area roadways, with approximately 20 percent from Route 9A using West 30th and West 34th Streets, approximately five percent from the Lincoln Tunnel, about 25 percent from Midtown using Seventh and Ninth Avenues, approximately 30 percent from the East Side using West 31st, West 33rd, West 34th, and West 35th Streets, and about 20 percent from Lower Manhattan using Sixth, Eighth and Tenth Avenues. Departing trip assignments would follow similar routes using the nearest reverse-direction avenues or streets.

TAXIS

Like the Auto section, the same land uses as the 2010 Build program are not repeated, there would be no taxi trips to the Development Transfer site, and there would be one additional land use, Office.

Office Use

Taxi trips to office uses were distributed to study area roadways, with about 10 percent from Route 9A using West 30th and West 34th Streets, approximately 25 percent from Midtown using Seventh and Ninth Avenues, about 30 percent from the East Side using West 31st, West 33rd, West 34th, and West 35th Streets, and approximately 35 percent from Lower Manhattan using Sixth, Eighth and Tenth Avenues. Departing trip assignments would follow similar routes using the nearest reverse-direction avenues or streets.

TAXI DIVERSIONS FROM PENN STATION TO MOYNIHAN STATION

Changes to taxi travel patterns, related to trips diverting from Pennsylvania Station to Moynihan Station, would be similar to those described for 2010 conditions.

DELIVERIES

Deliveries to the Office Use at Moynihan Station would use the truck docks on West 31st Street between Eighth and Ninth Avenues, and approach using approximately the same routes and percentages as the 2010 Build conditions. Departing trip assignments would also remain about the same as the 2010 Build conditions.

TRAFFIC VOLUMES AND LEVEL OF SERVICE

Figures 13-23, 13-24, 13-25, and 13-26 present the net Build incremental traffic volumes for the 2015 weekday AM, midday, and PM, and Saturday midday peak analysis hours, respectively. The 2015 Build weekday AM, midday, and PM, and Saturday midday peak hour traffic volumes are shown in Figures 13-27, 13-28, 13-29, and 13-30, respectively.

The weekday and Saturday peak hour volumes for the Future With the Proposed Action, or the 2015 "Build" condition, have been estimated by adding the trip assignments discussed above to the 2015 peak hour No Build baseline traffic volumes. As with the 2010 volumes, the 2015 assignments were not added directly to the 2015 No Build volumes because those volumes contain trips assigned to the Redevelopment of the Farley Post Office Building, which would not be part of the Proposed Action. The 2015 Build volumes relative to the 2015 No Build volumes are discussed below.

TENTH AVENUE

Tenth Avenue volumes would increase from about: 2,000 to 2,800 vph under 2015 No Build conditions within the traffic study area to 2,100 to 3,000 vph under 2015 Build conditions during the weekday AM peak hour; increase from 1,900 to 2,700 vph under 2015 No Build conditions to 1,900 to 2,900 vph under 2015 Build conditions during the weekday midday peak hour; increase from 2,400 to 3,400 vph under 2015 No Build conditions to 2,400 to 3,500 vph under the 2015 Build conditions during the weekday PM peak hour; and increase from 1,800 to 2,500 vph under 2015 No Build conditions to 1,800 to 2,700 vph under the 2015 Build conditions during the Saturday midday peak hour.

NINTH AVENUE

Ninth Avenue would carry about: 2,200 to 2,500 vph within the traffic study area under 2015 No Build conditions during the weekday AM peak hour, which would increase to 2,300 to 2,600 vph under 2015 Build conditions; 1,900 to 2,300 vph under 2015 No Build conditions would increase to 1,900 to 2,500 vph under 2015 Build conditions during the weekday midday peak hour; 2,000 to 2,400 vph under 2015 No Build conditions would increase to 2,000 to 2,600 vph under 2015 Build conditions during the weekday PM peak hour; and 1,700 to 2,100 vph under 2015 No Build conditions would increase to 1,800 to 2,400 vph under 2015 Build conditions during the Saturday midday peak hour.

DYER AVENUE/LINCOLN TUNNEL EXPRESSWAY

Dyer Avenue at West 34th Street would carry about: 700 vph southbound and 50 vph northbound under 2015 No Build conditions during the weekday AM peak hour, which would increase to 750 vph southbound and 50 vph northbound under the 2015 Build conditions; 400 vph southbound and 160 vph northbound under 2015 No Build conditions during the weekday midday peak hour, which would increase to 460 vph southbound and 160 vph northbound under the 2015 Build conditions; 500 vph southbound and 130 vph northbound under 2015 No Build

conditions during the weekday PM peak hour, which would increase to 560 vph southbound and 130 vph northbound under the 2015 Build conditions; and 600 vph southbound and 260 vph northbound under 2015 No Build conditions during the Saturday midday peak hour, which would increase to 670 vph southbound and 260 vph northbound under the 2015 Build conditions.

Along the Lincoln Tunnel Expressway between West 30th and West 33rd Streets, the roadway would carry about: 700 vph southbound and 200 vph northbound under 2015 No Build conditions during the weekday AM peak hour, which would increase to 740 vph southbound and 200 vph northbound under the 2015 Build conditions; 380 vph southbound and 300 vph northbound under 2015 No Build conditions during the weekday midday peak hour, which would increase to 420 vph southbound and 300 vph northbound under the 2015 Build conditions; 200 vph southbound and 600 vph northbound under 2015 No Build conditions during the weekday PM peak hour, which would increase to 230 vph southbound and 600 vph northbound under the 2015 Build conditions; and 500 vph southbound and 480 vph northbound under 2015 No Build conditions during the Saturday midday peak hour, which would increase to 530 vph southbound and 480 vph northbound under the 2015 Build conditions.

EIGHTH AVENUE

Eighth Avenue would carry about: 1,700 to 2,200 vph within the traffic study area under 2015 No Build conditions during the weekday AM peak hour, which would increase to 1,800 to 2,200 vph under 2015 Build conditions; 1,800 to 2,200 vph under 2015 No Build conditions during the weekday midday peak hour, which would increase to 1,900 to 2,300 vph under 2015 Build conditions; 2,000 to 2,300 vph under 2015 No Build conditions during the weekday PM peak hour, which would increase to 2,000 to 2,400 vph under 2015 Build conditions; and 1,700 to 2,000 vph under 2015 No Build conditions during the Saturday peak hour which would increase to 1,800 to 2,100 vph under 2015 Build conditions.

SEVENTH AVENUE

Seventh Avenue would carry about: 1,500 to 2,300 vph under 2015 No Build conditions within the traffic study area, which would increase to 2,400 vph north of West 33rd Street, but decrease to about 1,400 vehicles per hour south of West 33rd Street due to taxi diversions away from Seventh Avenue towards the new Moynihan Station under 2015 Build conditions during the weekday AM peak hour; 1,300 to 1,800 vph under 2015 No Build conditions, which would increase to 1,900 vph north of West 33rd Street, but decrease to about 1,200 vehicles per hour south of West 33 Street due to taxi diversions away from Seventh Avenue towards the new Moynihan Station under 2015 Build conditions during the weekday midday peak hour; 1,550 to 1,900 vph under 2015 No Build conditions, which would increase to 2,000 vph north of West 33rd Street, but decrease to about 1,400 vehicles per hour south of West 33rd Street due to taxi diversions away from Seventh Avenue towards the new Moynihan Station under 2015 Build conditions during the weekday PM peak hour; and 1,500 to 2,000 vph under 2015 No Build conditions, which would increase to 2,100 vph north of West 33rd Street, but decrease to about 1,400 vehicles per hour south of West 33rd Street due to taxi diversions away from Seventh Avenue towards the new Moynihan Station under 2015 Build conditions during the Saturday midday peak hour.

SIXTH AVENUE AND BROADWAY

Sixth Avenue would carry about: 2,050 to 2,300 vph within the traffic study area under 2015 No Build conditions during the weekday AM peak hour, which would increase to 2,050 to 2,400 vph under 2015 Build conditions; 1,750 to 2,100 vph under 2015 No Build conditions during the weekday midday peak hour, which would increase to 1,750 to 2,200 vph under 2015 Build conditions; 1,750 to 2,200 vph under 2015 No Build conditions during the weekday PM peak hour, which would remain at 1,750 to 2,200 vph under 2015 Build conditions; and 1,525 to 1,825 vph under 2015 No Build conditions during the Saturday midday peak hour, which would increase to 1,525 to 1,900 vph under 2015 Build conditions.

Broadway would carry approximately 900 vph under 2015 No Build conditions during the weekday AM peak hour, which would remain at approximately 900 vph under 2015 Build conditions; 900 vph under 2015 No Build conditions during the weekday midday peak hour, which would remain at approximately 900 vph under 2015 Build conditions; 1,100 vph under 2015 No Build conditions during the weekday PM peak hour, which would remain at approximately 1,100 vph under 2015 Build conditions; and 600 vph under 2015 No Build conditions during the Saturday midday peak hour, which would remain at approximately 600 vph under 2015 Build conditions.

WEST 34TH STREET

West 34th Street would carry about: 700 to 1,200 vph eastbound and 700 to 800 vph westbound within the traffic study area under 2015 No Build conditions during the AM peak hour, which would increase to 800 to 1,400 vph eastbound and 700 to 900 vph westbound under 2015 Build conditions; to 700 to 1,000 vph eastbound and 700 to 1,000 vph westbound under 2015 No Build conditions during the midday peak hour, which would increase to 800 to 1,100 vph eastbound and 800 to 1,000 vph westbound under 2015 Build conditions; 700 to 1,100 vph eastbound and 700 to 800 vph westbound under 2015 No Build conditions during the PM peak hour, which would increase to 700 to 1,200 vph eastbound and 700 to 800 vph westbound under 2015 Build conditions; and 500 to 1,200 vph eastbound and 500 to 900 vph westbound under 2015 No Build conditions during the Saturday midday peak hour, which would increase to 600 to 1,300 vph eastbound and 500 to 900 vph westbound under 2015 Build conditions.

OTHER CROSSTOWN STREETS

Eastbound streets including West 28th, West 30th, and West 32nd Streets would carry approximately: 300 to 1,300 vph within the traffic study area under 2015 No Build conditions during the weekday AM peak hour, which would increase to 300 to 1,400 vph under 2015 Build conditions; 300 to 1,100 vph under 2015 No Build conditions during the weekday midday peak hour, which would remain at 300 to 1,100 vph under 2015 Build conditions; 200 to1,000 vph under 2015 No Build conditions during the weekday PM peak hour, which would remain at 200 to 1,000 vph under 2015 Build conditions; and 210 to 900 vph under 2015 No Build conditions during the Saturday midday peak hour, which would increase to 210 to 1,000 vph under 2015 Build conditions.

Westbound streets including West 29th, West 31st, West 33rd, and West 35th Streets would carry about: 260 to 1,000 vph within the traffic study area under 2015 No Build conditions during the weekday AM peak hour, which would increase to 400 to 1,000 vph under 2015 Build conditions; 300 to 700 vph under 2015 No Build conditions during the weekday midday peak hour, which would increase to 400 to 900 vph under 2015 Build conditions; 300 to 1,200 vph under 2015 No Build conditions during the weekday PM peak hour, which would increase to

400 to 1,400 vph under 2015 Build conditions; and 300 to 900 vph under 2015 No Build conditions during the Saturday midday peak hour, which would increase to 300 to 1,000 vph under 2015 Build conditions.

Level of service analyses were performed for the study area intersections using the future Build peak hour traffic volumes. Table 13-20 presents a comparison of the 2015 No Build and Build conditions for the weekday AM, midday, and PM, and Saturday midday peak hours. As previously discussed, significant impacts (identified by the "+" symbol in the analysis summary table) were determined based on the criteria presented in the *CEQR Technical Manual*.

SIGNIFICANT IMPACTS

Significantly impacted locations were identified and summarized by peak analysis period, as follows. During the weekday AM peak hour, the proposed action would result in 10 significantly impacted lane groups at 9 intersections. During the weekday midday peak hour, the proposed actions would result in 8 significantly impacted lane groups at 8 intersections. During the weekday PM peak hour, the proposed actions would result in 10 significantly impacted lane groups at 10 intersections. During the Saturday midday peak hour, the proposed actions would result in 18 significantly impacted lane groups at 15 intersections.

Weekday AM Peak Hour

- Sixth Avenue at West 31st Street: The northbound approach would worsen within LOS D and increase in average delay from 44.3 to 51.6 (+7.3) spv.
- Sixth Avenue at West 35th Street: The westbound approach would deteriorate from LOS E to LOS F and increase in average delay from 77.1 to 91.2 (+14.1) spv.
- Eighth Avenue at West 30th Street: The eastbound approach would worsen within LOS F and increase in average delay from 102.2 to 151.4 (+49.2) spv.
- Eighth Avenue at West 31st Street: The northbound approach would worsen within LOS D and increase in average delay from 35.7 to 48.9 (+13.2) spv.
- Ninth Avenue at West 34th Street: The eastbound approach would deteriorate from LOS E to LOS F and increase in average delay from 79.3 to 133.4 (+54.1) spv.
- Dyer Avenue at West 31st Street: The westbound approach would deteriorate from LOS D to LOS F and increase in average delay from 39.3 to 82.9 (+43.6) spv.
- Tenth Avenue at West 31st Street: The westbound approach would deteriorate from LOS C to LOS D and increase in average delay from 32.9 to 52.9 (+20.0) spv.
- Tenth Avenue at West 33rd Street: The northbound approach would deteriorate from LOS D to LOS E and increase in average delay from 44.8 to 64.8 (+20.0) spv.
- Tenth Avenue at West 34th Street: The eastbound de facto left-turn movement would worsen within LOS F and increase in average delay from 153.3 to 157.1 (+3.8) spv. The northbound left and through movement would deteriorate from LOS C to LOS D and increase in average delay from 33.0 to 46.3 (+13.3) spv.

Table 13-20

2015 No Build and Build Conditions Level of Service Analysis Results

Analysis Locations	Weekday AM Peak Hour								Weekday Midday Peak Hour								Weekday PM Peak Hour								Saturday Midday Peak Hour							
	2015 No Build				2015 Build				2015 No Build				2015 Build				2015 No Build				2015 Build				2015 No Build				2015 Build			
	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS
Broadway/Sixth Ave & W.34th St																																
Eastbound	T	0.94	47.2	D	T	0.96	51.2	D	T	0.83	36.5	D	T	0.88	39.5	D	T	0.80	36.7	D	T	0.85	39.4	D	T	0.89	41.1	D	T	0.95	47.2	D+
Westbound	TR	0.85	37.9	D	TR	0.86	39.1	D	TR	0.93	45.5	D	TR	0.95	47.6	D	TR	0.81	37.5	D	TR	0.81	37.7	D	TR	0.78	34.2	C	TR	0.80	34.7	C
Northbound	T	1.13	97.1	F	T	1.13	97.1	F	T	1.13	100.7	F	T	1.13	100.7	F	T	1.13	87.7	F	T	1.13	87.7	F	T	0.98	50.0	D	T	0.98	50.0	D
Southbound	T	0.97	57.7	E	T	0.97	57.7	E	T	1.06	82.0	F	T	1.06	82.0	F	T	1.04	74.4	E	T	1.04	74.4	E	T	0.70	35.9	D	T	0.70	35.9	D
Intersection			*68.9*	*E*			*69.7*	*E*			*72.1*	*E*			*72.8*	*E*			*66.6*	*E*			*66.8*	*E*			*42.2*	*D*			*43.8*	*D*
Broadway & W.35th St																																
Westbound	LT	0.32	7.9	A	LT	0.33	8.0	A	LT	0.30	7.8	A	LT	0.31	7.9	A	LT	0.34	8.1	A	LT	0.35	8.2	A	LT	0.35	8.3	A	LT	0.38	8.6	A
Southbound	TR	1.05	78.6	E	TR	1.04	72.8	E	TR	1.07	84.0	F	TR	1.07	82.9	F	TR	1.15	115.0	F	TR	1.14	110.3	F	TR	0.74	36.5	D	TR	0.74	36.3	D
Intersection			*47.9*	*D*			*43.7*	*D*			*52.5*	*D*			*50.7*	*D*			*70.8*	*E*			*66.7*	*E*			*23.0*	*C*			*22.4*	*C*
Sixth Ave & W.31st St																																
Westbound	TR	0.77	27.4	C	TR	0.79	28.3	C	TR	0.70	24.9	C	TR	0.74	26.0	C	TR	0.89	34.9	C	TR	0.91	36.8	D	TR	0.77	27.7	C	TR	0.81	29.7	C
Northbound	LT	1.02	44.3	D	LT	1.04	51.6	D+	LT	0.93	27.0	C	LT	0.95	29.8	C	LT	0.98	33.7	C	LT	1.00	38.9	D	LT	0.81	20.7	C	LT	0.83	21.6	C
Intersection			*40.1*	*D*			*45.8*	*D*			*26.5*	*C*			*28.8*	*C*			*34.1*	*C*			*38.3*	*D*			*22.8*	*C*			*24.0*	*C*
Sixth Ave & W.32nd St																																
Eastbound	LT	0.54	21.2	C	LT	0.51	20.7	C	LT	1.05	85.2	F	LT	1.03	79.4	E	LT	0.23	16.7	B	LT	0.21	16.4	B	LT	0.36	18.5	B	LT	0.35	18.4	B
Northbound	TR	0.99	35.6	D	TR	1.02	44.3	D	TR	0.95	29.5	C	TR	0.98	33.8	C	TR	0.96	31.2	C	TR	0.99	37.4	D	TR	0.88	24.0	C	TR	0.91	25.8	C
Intersection			*33.1*	*C*			*40.5*	*D*			*38.5*	*D*			*40.8*	*D*			*30.0*	*C*			*36.0*	*D*			*23.3*	*C*			*25.0*	*C*
Sixth Ave & W.33rd St																																
Northbound	L	0.44	22.5	C	L	0.58	25.5	C	L	0.50	23.8	C	L	0.61	26.4	C	L	0.54	24.6	C	L	0.66	28.2	C	L	0.51	24.0	C	L	0.61	26.6	C
	T	0.98	39.1	D	T	0.98	39.1	D	T	0.83	26.4	C	T	0.83	26.4	C	T	0.84	26.8	C	T	0.84	26.8	C	T	0.76	24.1	C	T	0.76	24.1	C
Intersection			*37.2*	*D*			*37.2*	*D*			*26.1*	*C*			*26.4*	*C*			*26.4*	*C*			*27.0*	*C*			*24.1*	*C*			*24.6*	*C*
Sixth Ave & W.35th St																																
Westbound	TR	1.06	77.1	E	TR	1.10	91.2	F+	TR	1.01	63.1	E	TR	1.06	78.0	E+	TR	1.01	60.0	E	TR	1.05	71.9	E+	TR	0.73	28.5	C	TR	0.78	30.4	C
Northbound	LT	0.71	11.9	B	LT	0.71	11.9	B	LT	0.61	10.6	B	LT	0.61	10.6	B	LT	0.67	14.2	B	LT	0.67	14.2	B	LT	0.60	13.2	B	LT	0.60	13.2	B
Intersection			*30.0*	*C*			*34.6*	*C*			*26.3*	*C*			*31.5*	*C*			*29.1*	*C*			*33.5*	*C*			*17.7*	*B*			*18.5*	*B*
Seventh Ave & W.28th St																																
Eastbound	TR	0.38	15.3	B	TR	0.38	15.3	B	TR	0.38	15.3	B	TR	0.38	15.3	B	TR	0.37	12.5	B	TR	0.37	12.5	B	TR	0.56	26.9	C	TR	0.56	26.9	C
Southbound	LT	0.81	25.4	C	LT	0.79	24.7	C	LT	0.76	23.8	C	LT	0.76	23.7	C	LT	1.04	60.1	E	LT	1.02	55.6	E	LT	0.62	10.8	B	LT	0.62	10.9	B
Intersection			*23.1*	*C*			*22.5*	*C*			*21.8*	*C*			*21.7*	*C*			*49.4*	*D*			*45.8*	*D*			*14.2*	*B*			*14.2*	*B*
Seventh Ave & W.29th St																																
Westbound	LT	1.10	89.0	F	LT	1.10	90.2	F	LT	0.75	29.1	C	LT	0.76	29.6	C	LT	0.79	30.8	C	LT	0.79	31.2	C	LT	0.68	26.9	C	LT	0.70	27.3	C
Southbound	TR	0.65	14.8	B	TR	0.63	14.6	B	TR	0.57	13.8	B	TR	0.57	13.8	B	TR	0.73	16.3	B	TR	0.72	16.1	B	TR	0.79	17.8	B	TR	0.79	17.9	B
Intersection			*43.1*	*D*			*43.9*	*D*			*18.7*	*B*			*18.9*	*B*			*20.4*	*C*			*20.4*	*C*			*19.9*	*B*			*20.1*	*C*
Seventh Ave & W.30th St																																
Eastbound	TR	0.76	26.8	C	TR	0.84	30.1	C	TR	0.87	35.6	D	TR	0.97	49.6	D+	TR	0.71	27.3	C	TR	0.86	35.0	D	TR	0.86	35.2	D	TR	0.98	52.5	D+
Southbound	LT	0.65	15.0	B	LT	0.61	14.2	B	LT	0.57	13.8	B	LT	0.56	13.6	B	LT	0.67	15.3	B	LT	0.63	14.6	B	LT	0.63	14.7	B	LT	0.62	14.4	B
Intersection			*19.9*	*B*			*21.6*	*C*			*22.0*	*C*			*28.3*	*C*			*18.7*	*B*			*21.6*	*C*			*21.7*	*C*			*28.9*	*C*
Seventh Ave & W.31st St																																
Westbound	LT	0.85	32.9	C	LT	0.84	32.1	C	LT	0.69	25.4	C	LT	0.71	26.1	C	LT	0.92	40.3	D	LT	0.92	39.6	D	LT	0.66	24.2	C	LT	0.70	25.1	C
Southbound	TR	0.61	15.6	B	TR	0.54	14.7	B	TR	0.45	13.7	B	TR	0.43	13.5	B	TR	0.56	14.9	B	TR	0.49	14.1	B	TR	0.79	19.6	B	TR	0.76	18.6	B
Intersection			*21.2*	*C*			*20.7*	*C*			*17.4*	*B*			*17.7*	*B*			*23.6*	*C*			*23.5*	*C*			*20.9*	*C*			*20.5*	*C*

Notes: L = Left Turn; T = Through; R = Right Turn; DefL = De Facto Left Turn; V/C = Volume to Capacity; LOS = Level of Service
"+" denotes significant adverse impact.

Table 13-20 (Continued)
2015 No Build and Build Conditions Level of Service Analysis Results

Analysis Locations	Weekday AM Peak Hour								Weekday Midday Peak Hour								Weekday PM Peak Hour								Saturday Midday Peak Hour							
	2015 No Build				2015 Build				2015 No Build				2015 Build				2015 No Build				2015 Build				2015 No Build				2015 Build			
	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS
Seventh Ave & W.32nd St																																
Southbound	LT	0.42	3.8	A	LT	0.38	3.6	A	LT	0.33	3.4	A	LT	0.31	3.4	A	LT	0.34	3.5	A	LT	0.31	3.4	A	LT	0.64	5.5	A	LT	0.62	5.3	A
Intersection			*3.8*	*A*			*3.6*	*A*			*3.4*	*A*			*3.4*	*A*			*3.5*	*A*			*3.4*	*A*			*5.5*	*A*			*5.3*	*A*
Seventh Ave & W.33rd St																																
Westbound	LT	0.57	34.7	C	LT	0.71	39.2	D	LT	0.64	36.7	D	LT	0.75	41.1	D	LT	0.70	39.5	D	LT	0.83	47.3	D+	LT	0.79	44.5	D	LT	0.90	54.4	D+
Southbound	TR	0.62	5.1	A	TR	0.68	5.6	A	TR	0.49	4.2	A	TR	0.55	4.6	A	TR	0.52	4.4	A	TR	0.58	4.8	A	TR	0.68	5.9	A	TR	0.77	7.3	A
Intersection			*8.0*	*A*			*9.8*	*A*			*8.8*	*A*			*10.3*	*B*			*9.4*	*A*			*11.8*	*B*			*12.0*	*B*			*15.4*	*B*
Seventh Ave & W.34th St																																
Eastbound	TR	0.73	26.8	C	TR	0.75	27.3	C	TR	0.69	25.6	C	TR	0.72	26.5	C	TR	0.70	26.1	C	TR	0.73	27.0	C	TR	1.15	108.3	F	TR	1.21	130.4	F+
Westbound	LT	0.74	27.9	C	LT	0.76	28.5	C	LT	0.85	32.7	C	LT	0.87	33.8	C	LT	0.75	28.5	C	LT	0.76	28.9	C	LT	1.17	117.2	F	LT	1.23	140.8	F+
Southbound	T	0.99	34.0	C	T	1.03	43.2	D	T	0.77	17.2	B	T	0.82	18.8	B	T	0.77	17.2	B	T	0.81	18.3	B	T	0.92	24.0	C	T	1.00	35.3	D
Intersection			*30.9*	*C*			*36.3*	*D*			*23.5*	*C*			*24.6*	*C*			*22.1*	*C*			*22.9*	*C*			*66.5*	*E*			*82.2*	*F*
Seventh Ave & W.35th St																																
Westbound	L	0.63	28.7	C	L	0.67	30.1	C	L	0.55	26.0	C	L	0.62	28.3	C	L	0.44	23.5	C	L	0.49	24.7	C	L	0.66	33.3	C	L	0.79	42.3	D
	LT	0.43	22.0	C	LT	0.43	22.0	C	LT	0.34	20.9	C	LT	0.34	20.9	C	LT	0.57	24.5	C	LT	0.57	24.5	C	LT	0.66	28.9	C	LT	0.67	29.6	C
Southbound	TR	0.85	18.0	B	TR	0.88	19.5	B	TR	0.71	14.4	B	TR	0.75	15.2	B	TR	0.67	13.6	B	TR	0.70	14.2	B	TR	0.76	15.4	B	TR	0.80	16.5	B
Intersection			*19.9*	*B*			*21.1*	*C*			*16.8*	*B*			*17.7*	*B*			*17.2*	*B*			*17.6*	*B*			*19.0*	*B*			*21.0*	*C*
Eighth Ave & W.28th St																																
Eastbound	LT	0.54	24.1	C	LT	0.56	24.6	C	LT	0.52	23.8	C	LT	0.55	24.4	C	LT	0.67	27.1	C	LT	0.70	27.9	C	LT	0.62	26.0	C	LT	0.65	26.9	C
Northbound	TR	0.69	14.0	B	TR	0.71	14.3	B	TR	0.84	17.7	B	TR	0.87	18.9	B	TR	0.82	17.0	B	TR	0.84	17.7	B	TR	0.73	14.7	B	TR	0.77	15.5	B
Intersection			*16.2*	*B*			*16.6*	*B*			*18.8*	*B*			*19.9*	*B*			*19.2*	*B*			*20.0*	*B*			*17.1*	*B*			*17.9*	*B*
Eighth Ave & W.29th St																																
Westbound	TR	1.02	63.0	E	TR	1.03	63.9	E	TR	0.55	20.5	C	TR	0.55	20.6	C	TR	0.79	30.9	C	TR	0.80	31.2	C	TR	0.59	24.2	C	TR	0.61	24.7	C
Northbound	LT	0.74	16.4	B	LT	0.77	17.1	B	LT	0.97	33.6	C	LT	1.01	43.3	D	LT	0.91	22.6	C	LT	0.94	25.2	C	LT	0.76	16.9	B	LT	0.81	18.1	B
Intersection			*31.9*	*C*			*32.3*	*C*			*31.0*	*C*			*38.9*	*D*			*24.5*	*C*			*26.6*	*C*			*18.4*	*B*			*19.4*	*B*
Eighth Ave & W.30th St																																
Eastbound	LT	1.15	102.2	F	LT	1.26	151.4	F+	LT	0.84	29.2	C	LT	0.99	49.4	D+	LT	0.75	26.7	C	LT	0.89	35.1	D	LT	0.86	33.0	C	LT	1.07	72.8	E+
Northbound	TR	0.82	21.0	C	TR	0.85	22.1	C	TR	0.90	25.7	C	TR	0.95	30.2	C	TR	0.91	24.5	C	TR	0.95	27.9	C	TR	0.83	20.7	C	TR	0.89	23.2	C
Intersection			*54.2*	*D*			*77.1*	*E*			*26.8*	*C*			*36.8*	*D*			*25.1*	*C*			*30.1*	*C*			*24.5*	*C*			*40.4*	*D*
Eighth Ave & W.31st St																																
Westbound	TR	0.93	39.1	D	TR	0.80	27.8	C	TR	0.77	28.0	C	TR	0.75	26.8	C	TR	1.19	124.3	F	TR	1.12	96.3	F	TR	0.90	35.6	D	TR	0.90	35.9	D
Northbound	LT	0.98	35.7	D	LT	1.03	48.9	D+	LT	1.06	60.5	E	LT	1.16	99.6	F+	LT	1.13	87.3	F	LT	1.19	112.9	F+	LT	0.94	29.6	C	LT	1.05	54.1	D+
Intersection			*36.8*	*D*			*42.8*	*D*			*53.6*	*D*			*85.1*	*F*			*97.9*	*F*			*108.5*	*F*			*31.4*	*C*			*48.9*	*D*
Eighth Ave & W.32nd St																																
Northbound	T	1.08	67.3	E	T	1.02	46.8	D	T	1.02	48.1	D	T	1.04	54.8	D+	T	1.09	72.2	E	T	1.07	65.6	E	T	0.97	36.9	D	T	1.01	45.9	D+
Intersection			*67.3*	*E*			*46.8*	*D*			*48.1*	*D*			*54.8*	*D*			*72.2*	*E*			*65.6*	*E*			*36.9*	*D*			*45.9*	*D*
Eighth Ave & W.33rd St																																
Westbound	TR	0.26	13.2	B	TR	0.44	15.1	B	TR	0.26	13.9	B	TR	0.40	15.3	B	TR	0.31	12.7	B	TR	0.48	14.6	B	TR	0.36	13.4	B	TR	0.56	16.1	B
Northbound	LT	1.21	124.6	F	LT	1.13	92.2	F	LT	1.12	85.8	F	LT	1.15	98.3	F+	LT	1.02	49.8	D	LT	1.00	44.7	D	LT	1.14	96.3	F	LT	1.20	120.3	F+
Intersection			*106.6*	*F*			*71.4*	*E*			*73.6*	*E*			*78.2*	*E*			*43.0*	*D*			*36.3*	*D*			*80.6*	*F*			*92.4*	*F*

Notes: L = Left Turn; T = Through; R = Right Turn; DefL = De Facto Left Turn; V/C = Volume to Capacity; LOS = Level of Service
"+" denotes significant adverse impact.

Table 13-20 (Continued)
2015 No Build and Build Conditions Level of Service Analysis Results

Analysis Locations	Weekday AM Peak Hour								Weekday Midday Peak Hour								Weekday PM Peak Hour								Saturday Midday Peak Hour							
	2015 No Build				2015 Build				2015 No Build				2015 Build				2015 No Build				2015 Build				2015 No Build				2015 Build			
	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS
Eighth Ave & W.34th St																																
Eastbound	L	0.55	30.8	C	L	0.65	35.7	D	L	0.45	29.4	C	L	0.50	31.5	C	L	0.51	27.1	C	L	0.57	29.9	C	L	0.92	80.6	F	L	1.04	112.9	F+
	T	0.70	19.4	B	T	0.77	21.8	C	T	0.58	17.0	B	T	0.63	18.1	B	T	0.57	16.9	B	T	0.62	17.9	B	T	0.79	27.1	C	T	0.85	30.3	C
Westbound	TR	0.73	29.5	C	TR	0.75	29.9	C	TR	0.85	36.1	D	TR	0.87	37.0	D	TR	0.73	31.6	C	TR	0.73	31.7	C	TR	0.63	21.4	C	TR	0.64	21.6	C
Northbound	LTR	0.89	29.8	C	LTR	0.84	27.3	C	LTR	0.85	27.6	C	LTR	0.86	27.9	C	LTR	0.89	29.7	C	LTR	0.88	29.0	C	LTR	1.17	108.2	F	LTR	1.20	121.3	F+
Intersection			*27.5*	*C*			*26.9*	*C*			*27.7*	*C*			*28.2*	*C*			*27.3*	*C*			*27.2*	*C*			*69.4*	*E*			*77.7*	*E*
Eighth Ave & W.35th St																																
Westbound	TR	0.81	37.0	D	TR	0.83	38.2	D	TR	0.66	23.4	C	TR	0.66	23.5	C	TR	1.00	63.8	E	TR	1.02	68.2	E+	TR	0.72	32.2	C	TR	0.72	32.4	C
Northbound	LT	0.76	13.0	B	LT	0.77	13.1	B	LT	0.81	21.6	C	LT	0.83	22.4	C	LT	0.75	12.9	B	LT	0.77	13.1	B	LT	0.76	12.9	B	LT	0.78	13.4	B
Intersection			*18.0*	*B*			*18.4*	*B*			*22.0*	*C*			*22.6*	*C*			*25.6*	*C*			*26.9*	*C*			*16.5*	*B*			*16.8*	*B*
Ninth Ave & W.28th St																																
Eastbound	TR	0.38	24.4	C	TR	0.41	24.8	C	TR	0.44	25.1	C	TR	0.47	25.6	C	TR	0.60	28.2	C	TR	0.63	28.9	C	TR	0.67	29.9	C	TR	0.70	30.7	C
Southbound	LT	0.73	11.4	B	LT	0.76	11.9	B	LT	0.68	10.7	B	LT	0.71	11.2	B	LT	0.55	9.1	A	LT	0.58	9.4	A	LT	0.81	13.4	B	LT	0.86	14.9	B
Intersection			*12.8*	*B*			*13.4*	*B*			*12.6*	*B*			*13.1*	*B*			*12.4*	*B*			*12.7*	*B*			*16.7*	*B*			*18.0*	*B*
Ninth Ave & W.29th St																																
Westbound	LT	0.62	27.3	C	LT	0.62	27.3	C	LT	0.45	24.5	C	LT	0.45	24.5	C	LT	0.50	25.3	C	LT	0.50	25.3	C	LT	0.66	29.9	C	LT	0.66	29.9	C
Southbound	TR	0.69	10.8	B	TR	0.72	11.2	B	TR	0.86	15.3	B	TR	0.92	18.5	B	TR	0.68	10.7	B	TR	0.72	11.3	B	TR	0.81	13.6	B	TR	0.88	16.2	B
Intersection			*15.3*	*B*			*15.5*	*B*			*17.4*	*B*			*19.8*	*B*			*14.1*	*B*			*14.4*	*B*			*16.7*	*B*			*18.6*	*B*
Ninth Ave & W.30th St																																
Eastbound	TR	0.78	31.5	C	TR	0.82	32.8	C	TR	0.54	26.4	C	TR	0.59	27.1	C	TR	0.45	25.2	C	TR	0.49	25.7	C	TR	0.93	44.3	D	TR	1.01	61.3	E+
Southbound	LT	0.63	14.4	B	LT	0.69	14.9	B	LT	0.77	16.6	B	LT	0.85	19.0	B	LT	0.79	17.2	B	LT	0.88	20.0	B	LT	0.83	18.7	B	LT	0.94	25.0	C
Intersection			*19.9*	*B*			*20.7*	*C*			*19.2*	*B*			*21.1*	*C*			*18.8*	*B*			*21.2*	*C*			*26.7*	*C*			*36.3*	*D*
Ninth Ave & W.31st St																																
Westbound	LT	0.70	29.6	C	LT	0.75	31.0	C	LT	0.67	29.0	C	LT	0.78	32.4	C	LT	0.92	41.5	D	LT	0.99	53.1	D+	LT	0.91	44.2	D	LT	1.06	78.8	E+
Southbound	TR	0.72	11.3	B	TR	0.81	13.0	B	TR	0.68	10.6	B	TR	0.76	12.0	B	TR	0.71	11.2	B	TR	0.81	13.0	B	TR	0.76	12.2	B	TR	0.87	15.2	B
Intersection			*16.0*	*B*			*17.5*	*B*			*15.1*	*B*			*17.2*	*B*			*20.7*	*C*			*25.2*	*C*			*20.7*	*C*			*32.4*	*C*
Ninth Ave & W.33rd St																																
Westbound	LT	0.94	53.5	D	LT	0.95	48.5	D	LT	1.17	124.9	F	LT	1.15	110.3	F	LT	1.11	100.6	F	LT	1.12	97.6	F	LT	0.72	32.2	C	LT	0.79	33.2	C
Southbound	TR	0.74	11.5	B	TR	0.77	12.1	B	TR	0.60	9.7	A	TR	0.64	10.1	B	TR	0.63	10.0	B	TR	0.66	10.4	B	TR	0.74	11.8	B	TR	0.79	12.9	B
Intersection			*19.3*	*B*			*20.9*	*C*			*37.3*	*D*			*39.2*	*D*			*31.1*	*C*			*36.4*	*D*			*15.9*	*B*			*18.4*	*B*
Ninth Ave & W.34th St																																
Eastbound	TR	1.08	79.3	E	TR	1.21	133.4	F+	TR	1.01	59.1	E	TR	1.15	109.4	F+	TR	1.13	101.9	F	TR	1.27	157.5	F+	TR	0.96	43.0	D	TR	1.08	76.7	E+
Westbound	DefL	0.74	48.5	D	DefL	0.75	51.1	D	DefL	0.84	55.8	E	DefL	0.86	59.3	E	DefL	0.52	35.6	D	DefL	0.52	36.0	D	DefL	1.38	220.5	F	DefL	1.39	228.6	F+
	T	0.45	15.6	B	T	0.42	15.3	B	T	0.55	17.1	B	T	0.55	17.1	B	T	0.43	15.4	B	T	0.43	15.3	B	T	0.42	15.1	B	T	0.42	15.1	B
Southbound	LTR	0.97	37.0	D	LTR	1.00	42.7	D	LTR	0.83	25.9	C	LTR	0.85	26.9	C	LTR	0.69	22.1	C	LTR	0.71	22.4	C	LTR	0.93	32.8	C	LTR	0.97	38.1	D
Intersection			*47.0*	*D*			*68.3*	*E*			*34.8*	*C*			*50.5*	*D*			*45.0*	*D*			*64.2*	*E*			*45.7*	*D*			*59.7*	*E*
Ninth Ave & W.35th St																																
Westbound	LT	0.58	27.9	C	LT	0.60	28.4	C	LT	0.70	31.3	C	LT	0.71	31.5	C	LT	0.93	48.5	D	LT	0.95	51.5	D	LT	0.76	34.1	C	LT	0.76	34.5	C
Southbound	TR	0.72	11.2	B	TR	0.73	11.5	B	TR	0.59	9.6	A	TR	0.60	9.8	A	TR	0.66	10.4	B	TR	0.68	10.6	B	TR	0.67	10.8	B	TR	0.70	11.2	B
Intersection			*13.9*	*B*			*14.2*	*B*			*14.3*	*B*			*14.4*	*B*			*20.0*	*B*			*20.8*	*C*			*16.0*	*B*			*16.3*	*B*
Dyer Ave & W.30th St																																
Eastbound	L	0.11	10.1	B	L	0.11	10.1	B	L	0.18	10.6	B	L	0.18	10.6	B	L	0.37	12.4	B	L	0.37	12.4	B	L	0.33	12.0	B	L	0.33	12.0	B
Southbound	L	0.70	29.4	C	L	0.73	30.5	C	L	0.37	23.1	C	L	0.40	23.6	C	L	0.19	21.1	C	L	0.22	21.4	C	L	0.55	25.8	C	L	0.59	26.6	C
Intersection			*25.5*	*C*			*26.5*	*C*			*17.6*	*B*			*18.2*	*B*			*14.5*	*B*			*14.9*	*B*			*19.6*	*B*			*20.2*	*C*

Notes: L = Left Turn; T = Through; R = Right Turn; DefL = De Facto Left Turn; V/C = Volume to Capacity; LOS = Level of Service
"+" denotes significant adverse impact.

Table 13-20 (Continued)

2015 No Build and Build Conditions Level of Service Analysis Results

Analysis Locations	Weekday AM Peak Hour								Weekday Midday Peak Hour								Weekday PM Peak Hour								Saturday Midday Peak Hour							
	2015 No Build				2015 Build				2015 No Build				2015 Build				2015 No Build				2015 Build				2015 No Build				2015 Build			
	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS
Dyer Ave & W.31st St																																
Westbound	LTR	0.80	39.3	D	LTR	1.06	82.9	F+	LTR	0.57	29.5	C	LTR	0.72	32.8	C	LTR	1.03	63.7	E	LTR	1.15	108.2	F+	LTR	1.23	145.6	F	LTR	1.42	229.0	F+
Northbound	LT	0.13	4.7	A	LT	0.13	4.7	A	LT	0.20	5.0	A	LT	0.20	5.0	A	LT	0.36	5.9	A	LT	0.36	5.9	A	LT	0.31	9.3	A	LT	0.31	9.3	A
Southbound	TR	0.42	10.3	B	TR	0.44	10.5	B	TR	0.23	8.6	A	TR	0.25	8.8	A	TR	0.12	7.9	A	TR	0.14	8.0	A	TR	0.29	9.1	A	TR	0.31	9.3	A
Intersection			*19.8*	*B*			*39.8*	*D*			*17.4*	*B*			*20.1*	*C*			*41.3*	*D*			*70.4*	*E*			*72.1*	*E*			*116.9*	*F*
Dyer Ave & W.34th St																																
Eastbound	T	0.68	30.8	C	T	0.79	34.6	C	T	0.72	32.1	C	T	0.83	36.2	D	T	0.75	30.8	C	T	0.84	34.7	C	T	0.48	14.4	B	T	0.57	15.9	B
Westbound	T	0.37	6.9	A	T	0.35	6.7	A	T	0.41	6.8	A	T	0.40	6.7	A	T	0.34	6.2	A	T	0.33	6.2	A	T	0.23	11.6	B	T	0.23	11.6	B
	R	0.06	5.0	A	R	0.06	5.0	A	R	0.21	5.7	A	R	0.22	5.8	A	R	0.18	5.5	A	R	0.19	5.5	A	R	0.33	10.5	B	R	0.33	10.5	B
Southbound	L	0.82	45.5	D	L	0.86	49.1	D	L	0.38	33.1	C	L	0.43	33.7	C	L	0.35	32.6	C	L	0.39	33.2	C	L	0.42	23.1	C	L	0.44	23.5	C
	R	0.26	32.2	C	R	0.26	32.2	C	R	0.47	38.5	D	R	0.47	38.5	D	R	0.72	51.4	D	R	0.72	51.4	D	R	0.32	23.0	C	R	0.32	23.0	C
Intersection			*26.3*	*C*			*29.6*	*C*			*21.6*	*C*			*24.2*	*C*			*23.9*	*C*			*26.3*	*C*			*16.0*	*B*			*16.7*	*B*
Dyer Ave & W.35th St																																
Westbound	LTR	0.56	28.6	C	LTR	0.56	28.6	C	LTR	0.55	28.5	C	LTR	0.55	28.5	C	LTR	0.88	41.5	D	LTR	0.88	41.5	D	LTR	0.54	28.2	C	LTR	0.54	28.2	C
Northbound	LT	0.03	4.7	A	LT	0.03	4.7	A	LT	0.10	5.0	A	LT	0.10	5.0	A	LT	0.08	4.9	A	LT	0.08	4.9	A	LT	0.17	8.7	A	LT	0.17	8.7	A
Southbound	TR	0.34	9.9	A	TR	0.35	10.0	B	TR	0.20	8.8	A	TR	0.21	8.9	A	TR	0.25	9.2	A	TR	0.26	9.3	A	TR	0.29	9.5	A	TR	0.30	9.5	A
Intersection			*17.5*	*B*			*17.4*	*B*			*17.6*	*B*			*17.4*	*B*			*26.6*	*C*			*26.4*	*C*			*16.1*	*B*			*16.1*	*B*
Tenth Ave & W.28th St																																
Eastbound	LT	0.52	26.6	C	LT	0.52	26.6	C	LT	0.43	25.1	C	LT	0.43	25.1	C	LT	0.65	29.7	C	LT	0.65	29.7	C	LT	0.98	66.6	E	LT	0.98	66.6	E
Northbound	TR	0.59	9.6	A	TR	0.60	9.7	A	TR	0.55	9.2	A	TR	0.56	9.3	A	TR	0.69	10.8	B	TR	0.71	11.0	B	TR	0.78	12.7	B	TR	0.80	13.2	B
Intersection			*12.3*	*B*			*12.4*	*B*			*11.5*	*B*			*11.6*	*B*			*14.1*	*B*			*14.2*	*B*			*21.5*	*C*			*21.7*	*C*
Tenth Ave & W.29th St																																
Westbound	TR	0.91	44.8	D	TR	0.91	45.6	D	TR	0.77	34.5	C	TR	0.80	36.3	D	TR	0.86	39.6	D	TR	0.87	41.1	D	TR	0.72	31.1	C	TR	0.77	33.1	C
Northbound	LT	0.65	10.3	B	LT	0.65	10.3	B	LT	0.57	9.4	A	LT	0.58	9.5	A	LT	0.74	11.5	B	LT	0.74	11.6	B	LT	0.77	12.3	B	LT	0.78	12.5	B
Intersection			*18.7*	*B*			*18.9*	*B*			*15.2*	*B*			*15.8*	*B*			*17.3*	*B*			*17.8*	*B*			*16.5*	*B*			*17.4*	*B*
Tenth Ave & W.30th St																																
Eastbound	LT	0.91	45.3	D	LT	0.94	49.8	D	LT	0.76	31.5	C	LT	0.78	32.3	C	LT	1.08	87.6	F	LT	1.11	95.3	F+	LT	0.73	31.7	C	LT	0.77	33.5	C
Northbound	TR	0.84	14.5	B	TR	0.85	14.7	B	TR	0.72	11.5	B	TR	0.73	11.7	B	TR	0.95	21.3	C	TR	0.96	22.0	C	TR	0.80	13.2	B	TR	0.81	13.6	B
Intersection			*21.8*	*C*			*23.2*	*C*			*17.5*	*B*			*18.0*	*B*			*37.0*	*D*			*39.6*	*D*			*17.4*	*B*			*18.2*	*B*
Tenth Ave & W.31st St																																
Westbound	R	0.70	32.9	C	R	0.93	52.9	D+	R	0.65	29.9	C	R	0.80	36.2	D	R	0.82	36.1	D	R	0.96	50.3	D+	R	1.32	185.6	F	R	1.52	274.2	F+
Northbound	T	0.70	10.9	B	T	0.70	10.9	B	T	0.83	14.4	B	T	0.83	14.4	B	T	0.58	9.4	A	T	0.58	9.4	A	T	0.61	10.0	B	T	0.61	10.0	B
Intersection			*14.2*	*B*			*18.9*	*B*			*17.2*	*B*			*19.1*	*B*			*15.6*	*B*			*20.0*	*B*			*66.2*	*E*			*103.0*	*F*
Tenth Ave & W.33rd St																																
Westbound	TR	0.63	26.6	C	TR	0.74	29.7	C	TR	0.61	26.7	C	TR	0.75	31.0	C	TR	0.74	29.9	C	TR	0.88	37.3	D	TR	0.78	32.9	C	TR	1.01	62.9	E+
Northbound	LT	1.04	44.8	D	LT	1.10	64.8	E+	LT	1.06	50.7	D	LT	1.11	69.0	E+	LT	0.79	13.6	B	LT	0.82	14.3	B	LT	0.92	20.1	C	LT	0.96	24.4	C
Intersection			*41.0*	*D*			*56.8*	*E*			*46.3*	*D*			*61.1*	*E*			*16.9*	*B*			*19.4*	*B*			*22.7*	*C*			*33.5*	*C*

Notes: L = Left Turn; T = Through; R = Right Turn; DefL = De Facto Left Turn; V/C = Volume to Capacity; LOS = Level of Service
"+" denotes significant adverse impact.

Table 13-20 (Continued)
2015 No Build and Build Conditions Level of Service Analysis Results

Analysis Locations	Weekday AM Peak Hour								Weekday Midday Peak Hour								Weekday PM Peak Hour								Saturday Midday Peak Hour							
	2015 No Build				2015 Build				2015 No Build				2015 Build				2015 No Build				2015 Build				2015 No Build				2015 Build			
	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS	Lane Group	V/C Ratio	Delay (spv)	LOS
Tenth Ave & W.34th St																																
Eastbound	DefL	1.21	153.3	F	DefL	1.22	157.1	F+	DefL	1.16	139.4	F	DefL	1.16	139.4	F	DefL	0.91	68.8	E	DefL	0.91	68.8	E	LT	0.81	37.5	D	LT	0.89	44.5	D
	T	0.45	23.1	C	T	0.50	23.9	C	T	0.50	23.8	C	T	0.56	24.9	C	T	0.46	20.6	C	T	0.50	21.2	C								
Westbound	TR	0.59	25.1	C	TR	0.56	24.6	C	TR	1.03	68.8	E	TR	1.03	67.8	E	TR	0.54	21.6	C	TR	0.54	21.7	C	TR	0.63	28.7	C	TR	0.62	28.7	C
Northbound	LT	1.00	33.0	C	LT	1.04	46.3	D+	LT	0.98	28.2	C	LT	1.03	41.1	D	LT	0.94	24.4	C	LT	0.98	29.2	C	LT	0.80	13.1	B	LT	0.86	14.7	B
	R	0.53	17.5	B	R	0.68	22.0	C	R	0.72	26.1	C	R	0.85	36.8	D	R	0.88	40.6	D	R	1.02	67.6	E+	R	0.62	18.1	B	R	0.71	21.6	C
Intersection			*38.1*	*D*			*46.1*	*D*			*41.2*	*D*			*48.5*	*D*			*26.7*	*C*			*32.6*	*C*			*19.1*	*B*			*21.6*	*C*
Tenth Ave & W.35th St																																
Westbound	TR	0.83	37.5	D	TR	0.83	37.5	D	TR	0.75	33.5	C	TR	0.75	33.6	C	TR	0.91	46.4	D	TR	0.91	46.4	D	TR	0.62	29.0	C	TR	0.62	29.0	C
Northbound	LT	0.80	12.7	B	LT	0.81	13.1	B	LT	0.74	11.6	B	LT	0.76	12.0	B	LT	0.67	10.3	B	LT	0.69	10.6	B	LT	0.78	12.6	B	LT	0.81	13.4	B
Intersection			*17.6*	*B*			*17.9*	*B*			*15.6*	*B*			*15.9*	*B*			*17.3*	*B*			*17.3*	*B*			*15.5*	*B*			*16.0*	*B*

Notes: L = Left Turn; T = Through; R = Right Turn; DefL = De Facto Left Turn; V/C = Volume to Capacity; LOS = Level of Service
"+" denotes significant adverse impact.

Weekday Midday Peak Hour

- Sixth Avenue at West 35th Street: The westbound approach would worsen within LOS E and increase in average delay from 63.1 to 78.0 (+14.9) spv.
- Seventh Avenue at West 30th Street: The eastbound approach would worsen within LOS D and increase in average delay from 35.6 to 49.6 (+14.0) spv.
- Eighth Avenue at West 30th Street: The eastbound approach would deteriorate from LOS C to LOS D and increase in average delay from 29.2 to 49.4 (+20.2) spv.
- Eighth Avenue at West 31st Street: The northbound approach would deteriorate from LOS E to LOS F and increase in average delay from 60.5 to 99.6 (+39.1) spv.
- Eighth Avenue at West 32nd Street: The northbound approach would worsen within LOS D and increase in average delay from 48.1 to 54.8 (+6.7) spv.
- Eighth Avenue at West 33rd Street: The northbound approach would worsen within LOS F and increase in average delay from 85.8 to 98.3 (+12.5) spv.
- Ninth Avenue at West 34th Street: The eastbound approach would deteriorate from LOS E to LOS F and increase in average delay from 59.1 to 109.4 (+50.3) spv.
- Tenth Avenue at West 33rd Street: The northbound approach would deteriorate from LOS D to LOS E and increase in average delay from 50.7 to 69.0 (+18.3) spv.

Weekday PM Peak Hour

- Sixth Avenue at West 35th Street: The westbound approach would worsen within LOS E and increase in average delay from 60.0 to 71.9 (+11.9) spv.
- Seventh Avenue at West 33rd Street: The westbound approach would worsen within LOS D and increase in average delay from 39.5 to 47.3 (+7.8) spv.
- Eighth Avenue at West 31st Street: The northbound approach would worsen within LOS F and increase in average delay from 87.3 to 112.9 (+25.6) spv.
- Eighth Avenue at West 35th Street: The westbound approach would worsen within LOS E and increase in average delay from 63.8 to 68.2 (+4.4) spv.
- Ninth Avenue at West 31st Street: The westbound approach would worsen within LOS D and increase in average delay from 41.5 to 53.1 (+11.6) spv.
- Ninth Avenue at West 34th Street: The eastbound approach would worsen within LOS F and increase in average delay from 101.9 to 157.5 (+55.6) spv.
- Dyer Avenue at West 31st Street: The westbound approach would deteriorate from LOS E to LOS F and increase in average delay from 63.7 to 108.2 (+44.5) spv.
- Tenth Avenue at West 30th Street: The eastbound approach would worsen within LOS F and increase in average delay from 87.6 to 95.3 (+7.7) spv.
- Tenth Avenue at West 31st Street: The westbound approach would worsen within LOS D and increase in average delay from 36.1 to 50.3 (+14.2) spv.
- Tenth Avenue at West 34th Street: The northbound right-turn movement would deteriorate from LOS D to LOS E and increase in average delay from 40.6 to 67.6 (+27.0) spv.

Saturday Midday Peak Hour

- Broadway and Sixth Avenue at West 34th Street: The eastbound approach would worsen within LOS D and increase in average delay from 41.1 to 47.2 (+6.1) spv.
- Seventh Avenue at West 30th Street: The eastbound approach would worsen within LOS D and increase in average delay from 35.2 to 52.5 (+17.3) spv.
- Seventh Avenue at West 33rd Street: The westbound approach would worsen within LOS D and increase in average delay from 44.5 to 54.4 (+9.9) spv.
- Seventh Avenue at West 34th Street: The eastbound approach would worsen within LOS F and increase in average delay from 108.3 to 130.4 (+22.1) spv. The westbound approach would worsen within LOS F and increase in average delay from 117.2 to 140.8 (+23.6) spv.
- Eighth Avenue at West 30th Street: The eastbound approach would deteriorate from LOS C to LOS E and increase in average delay from 33.0 to 72.8 (+39.8) spv.
- Eighth Avenue at West 31st Street: The northbound approach would deteriorate from LOS C to LOS D and increase in average delay from 29.6 to 54.1 (+24.5) spv.
- Eighth Avenue at West 32nd Street: The northbound approach would worsen within LOS D and increase in average delay from 36.9 to 45.9 (+9.0) spv.
- Eighth Avenue at West 33rd Street: The northbound approach would worsen within LOS F and increase in average delay from 96.3 to 120.3 (+24.0) spv.
- Eighth Avenue at West 34th Street: The eastbound left-turn movement would worsen within LOS F and increase in average delay from 80.6 to 112.9 (+32.3) spv. The northbound approach would worsen within LOS F and increase in average delay from 108.2 to 121.3 (+13.1) spv.
- Ninth Avenue at West 30th Street: The eastbound approach would deteriorate from LOS D to LOS E and increase in average delay from 44.3 to 61.3 (+17.0) spv.
- Ninth Avenue at West 31st Street: The westbound approach would deteriorate from LOS D to LOS E and increase in average delay from 44.2 to 78.8 (+34.6) spv.
- Ninth Avenue at West 34th Street: The eastbound approach would deteriorate from LOS D to LOS E and increase in average delay from 43.0 to 76.7 (+33.7) spv. The westbound de facto left-turn movement would worsen within LOS F and increase in average delay from 220.5 to 228.6 (+8.1) spv.
- Dyer Avenue at West 31st Street: The westbound approach would worsen within LOS F and increase in average delay from 145.6 to 229.0 (+83.4) spv.
- Tenth Avenue at West 31st Street: The westbound approach would worsen within LOS F and increase in average delay from 185.6 to 274.2 (+88.6) spv.
- Tenth Avenue at West 33rd Street: The westbound approach would deteriorate from LOS C to LOS E and increase in average delay from 32.9 to 62.9 (+30.0) spv.

Mitigation measures for these impacts are presented in Chapter 19, “Mitigation.”

PARKING

OFF-STREET PARKING

Auto trips estimated to be generated by the proposed action under 2015 Build conditions were assigned to the roadway network to selected off-street facilities (as described for 2010 Build

parking conditions) within ¼-mile of the site and layered on top of 2015 No Build parking utilization rates. All other facilities' peak period utilization rates within ½-mile of the site would not change significantly from the No Build to Build conditions, and are not reported in this section. Table 13-21 shows peak hour volumes assigned to each of the off-street parking facilities. The 2015 Build parking utilization rate, number of spaces occupied, and number of spaces available at the selected off-street parking facilities are presented in Table 13-21. Note that #93 would maintain its current capacity of 665 spaces since there would not be an "off-site" development on the 1 Penn Plaza West site under 2015 Build conditions.

Table 13-21
2015 Build Increment Parking Assignments Per Facility

Facility	Capacity	Peak Hour Trips							
		Weekday AM		Weekday Midday		Weekday PM		Saturday Midday	
		In	Out	In	Out	In	Out	In	Out
13-14-16	250	2	2	9	9	5	5	16	16
17	160	10	0	1	1	1	12	0	0
89	500	33	4	17	18	9	43	26	25
92	250	62	9	34	16	31	54	37	19
93	500	84	14	76	41	62	67	97	61
99	1500	106	15	57	40	45	111	72	54

Table 13-22
2015 Build Off-Street Parking Inventory and Occupancy

Map No.	Name	Address	Licensed Capacity	WKDY Midday (12 – 2 PM)			WKDY Evening (6 – 9 PM)			WKDY Overnight (12 – 5 AM)			SAT Midday (12 – 3 PM)		
				Utilization Rate	Occupied Spaces	Available Spaces	Utilization Rate	Occupied Spaces	Available Spaces	Utilization Rate	Occupied Spaces	Available Spaces	Utilization Rate	Occupied Spaces	Available Spaces
13	Edison Ninth Ave. Parking Corp.	412-422 W. 33rd St.	115	77%	89	26	77%	89	26	46%	53	62	52%	60	55
14	Edison Ninth Ave. Parking Corp.	401-422 Ninth Ave.	92	47%	43	49	47%	43	49	86%	79	13	49%	45	47
16	NJ Parking Inc.	431 W. 33rd St.	77	77%	59	18	77%	59	18	Closed	0	77	47%	36	41
17	Central Parking System Inc.	441 Ninth Ave.	160	100%	160	0	50%	81	79	Closed	0	160	40%	64	96
89	Meyers Parking System Inc.	323 W. 34th St.	500	97%	485	15	50%	251	249	Closed	0	500	77%	386	114
92	Central Parking System of NY Inc.	305-319 W. 33rd St.	250	100%	250	0	92%	230	20	46%	115	135	58%	145	105
93	Central Parking System of NY Inc.	One Penn Plaza	665	100%	665	0	87%	581	84	31%	206	459	63%	420	245
99	Meyers Parking System Inc.	218 W. 31st St./ 227 W. 30th St.	1,500	100%	1,500	0	47%	704	796	31%	465	1,035	37%	551	949

During the weekday midday, the facilities closest to Moynihan Station are expected to be filled to near or at capacity, and during this time, some motorists would need to travel an extra block to the edge of the ¼-mile radius from the project site to find parking. During other periods, parking would be available at the facilities closest to the site.

ON-STREET PARKING

Under the 2015 No Build conditions, on-street parking would be near capacity on a weekday or would exceed legal capacity on a Saturday midday. Since no trips associated with the proposed action were assigned to on-street parking, the utilization under 2015 Build conditions is expected to continue to be approximately 100 percent.

H. PEDESTRIAN SAFETY

The *CEQR Technical Manual* was consulted to identify high vehicular/pedestrian accident locations within the study area. A high-accident location is one with 5 or more pedestrian accidents in any year in the most recent three-year period. Accident data for all analysis intersections were compiled based on information obtained from the New York State Department of Transportation (NYSDOT) for the period between June 1999 and May 2002 to provide a comprehensive assessment of pedestrian safety. Within the study area, 16 analysis locations were identified as high pedestrian accident locations, as listed in Table 13-23.

Table 13-23
Summary of High Bicyclist and Pedestrian Accident Locations

Intersection	Accident Type	1999[1]	2000	2001	2002[2]	Total
Broadway/Sixth Ave & W.34th St	Vehicle-Bicyclist		3		1	4
	Vehicle-Pedestrian	4	7	4	2	17
Sixth Ave & W.31st St	Vehicle-Bicyclist		1	2		3
	Vehicle-Pedestrian	3	1	1		5
Sixth Ave & W.32nd St	Vehicle-Bicyclist			2		2
	Vehicle-Pedestrian		2	2		4
Sixth Ave & W.33rd St	Vehicle-Bicyclist		1			1
	Vehicle-Pedestrian	3	3	1		7
Seventh Ave & W.29th St	Vehicle-Bicyclist		1	1		2
	Vehicle-Pedestrian	2	1	3		6
Seventh Ave & W.30th St	Vehicle-Bicyclist		1		1	2
	Vehicle-Pedestrian	1	1	1	1	4
Seventh Ave & W.32nd St	Vehicle-Bicyclist	1	1			2
	Vehicle-Pedestrian	7	4	3	1	15
Seventh Ave & W.33rd St	Vehicle-Bicyclist			2		2
	Vehicle-Pedestrian	4	1	3		8
Seventh Ave & W.34th St	Vehicle-Bicyclist	1	1		3	5
	Vehicle-Pedestrian	5	7	4	2	18
Eighth Ave & W.31st St	Vehicle-Bicyclist	2			1	3
	Vehicle-Pedestrian	2	3	2	2	9
Eighth Ave & W.33rd St	Vehicle-Bicyclist				1	1
	Vehicle-Pedestrian	2	7	1		10
Eighth Ave & W.34th St	Vehicle-Bicyclist					
	Vehicle-Pedestrian	5	2	2		9
Ninth Ave & W.28th St	Vehicle-Bicyclist			1	1	2
	Vehicle-Pedestrian	1		2		3
Ninth Ave & W.30th St	Vehicle-Bicyclist		1			1
	Vehicle-Pedestrian	1	4	1	1	7
Ninth Ave & W.33rd St	Vehicle-Bicyclist			1		1
	Vehicle-Pedestrian	1	3		1	5
Ninth Ave & W.34th St	Vehicle-Bicyclist					
	Vehicle-Pedestrian	3	3	3		9

Notes:
[1] Accident data for June through December 1999.
[2] Accident data for January through May 2002.

The accident data indicates that intersections along West 34th Street, while processing a comparatively higher amount of traffic, are also the most prone to traffic accidents. Between June 1999 and May 2002, the West 34th Street intersections with Broadway/Sixth, Seventh, Eighth, and Ninth Avenues had a total of more than 60 pedestrian and bicyclist related accident occurrences. Among all the north-south arterials within the study area, Seventh Avenue had the highest number of pedestrian and bicyclist related accidents, while Lincoln Tunnel

Expressway/Dyer and Tenth Avenues had fewer than 5 same type of accidents during the three-year period.

In reviewing the nature of these accidents, it was concluded that the majority of the pedestrian-related accidents were caused by inattentiveness, signal disregard, and other human factors by the driver or the pedestrian. In several cases, turning vehicles conflicting with crossing pedestrians were the main factor for the accidents. Overall, there were very few distinct trends in the accident patterns beyond typical conflicts attributed to high vehicular and pedestrian traffic. Recent efforts to improve pedestrian safety with physical and signal modifications, such as the Herald Square intersection improvements, the midtown split phasing program, and the citywide pedestrian signal upgrade, are intended to have positive impacts on the overall pedestrian safety in midtown Manhattan.

In 2010 and 2015 with the proposed action in place, these study area intersections which are considered high pedestrian accident locations would experience increases in vehicular traffic, and those closer to the project site would also experience appreciable increases in pedestrian traffic. In addition, the new Moynihan Station would result in shifts in pedestrian movement from Seventh Avenue to Eighth and Ninth Avenues.

According to the *CEQR Technical Manual*, pedestrian safety is especially of concern if the proposed action would result in additional vehicular and pedestrian traffic near sensitive land uses, such as hospitals, schools, parks, nursing homes, and elderly housing, at high-accident locations, or at locations where specific geometric deficiencies have been identified. The manual also acknowledges the fact that sections of midtown and downtown Manhattan have historically had a substantially higher level of pedestrian activity, and pedestrians there have, to some extent, become acclimated to and tolerant of the restricted conditions. These criteria were considered in determining whether the proposed action would result in significant safety impacts. In considering future uses within the study area, the proposed action does not include sensitive land uses described above, although a substantial increase in and some redistribution of existing pedestrian activities are anticipated. Also, during the daytime hours when project-generated activities would be the highest, pedestrian movements to and from Moynihan Station tend to cross intersections in platoons and are directionally distributed, and would not result in substantial increases in exposure of pedestrian traffic and vehicle traffic. With respect to geometric deficiencies that could potentially cause safety hazards, the study area intersections are part of the Manhattan street grid and are all signalized with clearly painted crosswalks. In the review of the accident history, no prevailing trends were identified as the primary causes of recorded accidents at these intersections. Therefore, it was concluded that the anticipated increases in vehicular and pedestrian activities, although appreciable particularly at locations closest to the project site, would not result in significant safety impacts at study area locations. Furthermore, as discussed earlier, NYCDOT is expected to continue to implement physical and signal modifications, and operational and enforcement measures to enhance safety and reduce vehicle-pedestrian conflicts. These efforts would positively impact pedestrian safety in the study area.

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