

# One Police Plaza Security Plan EIS

## CHAPTER 7: TRAFFIC AND PARKING

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### A. INTRODUCTION

This section of the EIS discusses the transportation characteristics and any potential impacts associated with the security plan implemented shortly after September 11, 2001 by the New York City Police Department (NYPD) in order to protect City, State, and Federal facilities in the “civic center” portion of lower Manhattan which were at the time, and continue to be considered potential terrorist targets. As discussed in Chapter 1, “Project Description,” the security measures include attended security checkpoint booths, planters, bollards and hydraulically-operated delta barriers to restrict the access of unauthorized vehicles from the roadways situated adjacent to the civic facilities located near One Police Plaza. The traffic and parking analysis focuses on the vehicle diversions related to the street closures that are part of the security plan. In addition, on-street and off-street parking conditions are included in the analysis.

The traffic study area and analysis locations focus on the perimeter of the security zone and on other key intersections which are considered principal diversion paths. The study area for the transportation analyses is shown in Figure 7-1. The study area was selected to encompass those roadways most likely to be used by the majority of vehicles traveling through the area near One Police Plaza, as well as those roadways most affected by the traffic diversions due to the security plan. As shown in Figure 7-1, the study area is bounded by Kenmare and Broome Streets to the north, Greene Street and Church Street to the west, John Street to the south, and Pearl Street, Madison Street, Pike Street, and Allen Street to the east. Forty intersections (38 signalized and 2 unsignalized) were analyzed in detail for vehicular traffic during the 8-9 AM, 12-1 midday, and 5-6 PM peak hours. These peak hours were chosen for analysis based on a review of the peak travel time for the area surrounding One Police Plaza and are the periods most likely to be impacted by the security plan. Potential impacts from trips diverted as a result of the security plan are identified based on criteria defined in the *CEQR Technical Manual*.

As also noted in Chapter 1, “Project Description,” some portions of the security zone were implemented in 1999 and are not part of the action, but considered under No-Action conditions. The security zone has been operational for over four years and therefore the transportation effects of the action (the With-Action condition) are readily evident and are documented in the field under 2006 conditions.

As portions of Pearl Street (southbound) and Madison Street were already closed in 1999, the principal circulation effect of the action has been the closure of Park Row which, prior to its closure, carried up to 900 two-way vehicles per hour (vph) including several NYC Transit bus



**Legend**

- Analyzed Intersections (Unsignalized)
- Analyzed Intersections (Signalized)
- ⊥ ATR Location

- Study Area Boundary
- Security Zone
- ➔ Traffic Direction

routes. Prior to the closure of Pearl Street, which traversed westbound through the zone, this roadway carried up to 500 vph. Traffic flow on Park Row, prior to closure, originated from two main components: (a) through traffic between Chinatown and Lower Manhattan via the Bowery and (b) traffic exiting from the inbound Brooklyn Bridge destined to Chinatown and points north/northeast (the reverse movement of this flow did not use Park Row). Therefore, prior to its closure, traffic flow on Park Row was split approximately 60-65% northbound and 35-40% southbound.

The closure of westbound Pearl Street reduced the limited number of east-to-west street connections for travel northbound east of Church Street. Westbound Pearl Street was also the main connector for traffic exiting the southbound FDR Drive and headed to the Centre Street corridor within the Court District as well as to Chinatown.

Before its closure, Park Row, as well as other streets in the security zone, provided curbside parking over much of their lengths. This parking has since been displaced. Also displaced were local bus operations and bus stops in the vicinity of the security zone.

As with other technical areas, the traffic and parking studies consider a No-Action condition and compare it to a With-Action condition in order to assess any potential traffic and parking impacts resulting from the security plan, using impact criteria described in the *CEQR Technical Manual*. The analysis year is 2006. The 2006 No-Action traffic and parking conditions were documented considering various secondary source data collected prior to the 2001 closures as well as data collected in 2005 and 2006. These “baseline” conditions, such as traffic volumes, curbside parking and other data are also included in this section for informational purposes.

Following the baseline discussion is an assessment of No-Action conditions (no security plan in 2006) and With-Action conditions (the security plan in place in 2006) compared to the baseline pre-September 11, 2001 baseline condition.

## **B. BASELINE CONDITIONS**

### **Vehicular Traffic**

As discussed above, for the purpose of this analysis, the existing conditions are defined as the transportation network existing prior to September 11, 2001 and after the closure of the selected streets in the area of One Police Plaza in 1999 (see Chapter 1, Figure 1-3 for 1999 street closure locations). Various sources were used to compile a 2000 base network. The 1993 *Foley Square FEIS*, 2004 *Chinatown Access and Circulation Study*, 2004 *World Trade Center Memorial and Redevelopment Plan EIS*, 2000 *48-52 Franklin Street EAS*, 2004 *One Police Plaza Security Plan*

EAS, the 2000 Woolworth Building Parking Garage EAS, and additional source material provided by NYCDOT served as sources for the construction of a 2000 base traffic network for the study area.

### *Study Area Street Network*

The study area utilized for the traffic analysis, as shown on Figure 7-1, is bordered on the north by Kenmare and Broome Streets, Green Street and Church Street to the west, John Street to the south, and Pearl Street, Madison Street, Pike Street, and Allen Street to the east. Forty intersections are analyzed in detail for the AM, midday and PM peak hours. The street configuration in the study area south of Worth Street is very irregular and becomes more typical of the Manhattan grid north of Worth Street. The street system includes a combination of north-south arterials as well as principal east-west streets. In addition, both the Brooklyn and Manhattan Bridges have their Manhattan termini in the study area.

The main north-south arterials in the western portion of the study area are Church Street and Broadway, which form a northbound/southbound one-way couplet serving much of Lower Manhattan north of Liberty Street. Church Street typically has four northbound travel lanes plus parking/loading lanes on each side of the street, while Broadway has three southbound travel lanes plus a parking/loading lane on both sides of the street. The curb lanes on both Church Street and Broadway typically have peak periods regulations. Towards the center of the study area, the Centre Street/Lafayette Street corridors carry most of the north-south traffic. Centre Street is two-way with four travel lanes between the Brooklyn Bridge and Reade Street, and then one-way northbound with typically two-to-three travel lanes plus parking/loading. Lafayette Street also has two-to-three southbound travel lanes north of Reade Street. In the easterly portion of the study area lies Water Street/Pearl Street/St. James Place and the Bowery corridor. This corridor is two-way and varies in width from two travel lanes (St. James Place) to four travel lanes (remaining portions of much of the corridor), plus curbside parking/loading on both sides along most segments. Prior to its closure, the diagonal corridor of the Park Row/Bowery corridor was also a key north-south corridor with four travel lanes plus curbside parking/loading throughout most of its length.

The principal east-west corridors in the study area are Canal Street, Worth Street and Chambers Street. Each of the facilities are two-way and provide a different function. Canal Street is the principal arterial in this area and connects to the Manhattan Bridge, the Holland Tunnel and Route 9A. Canal Street typically has four to six lanes plus curbside parking/loading with peak hour regulations. Worth Street and Chambers Street are smaller and similarly configured two-way streets, typically with two travel lanes plus curbside parking/loading on most blocks. Worth Street traverses between the Bowery and Hudson Street (mainly as a circulator facility) while Chambers Street connects the Brooklyn Bridge/City Hall area to Route 9A and Battery Park City and provides both through and circulator functions.

The local street pattern in the study area is extensive, but not continuous with major interruptions in the network due to City Hall, the complex of federal, state and city courts along Centre Street, the Manhattan and Brooklyn Bridges and numerous squares, large development block consolidations, and other features in this early New York street system. In addition, interruptions in the system have occurred due to security zones, Duane Street east of Broadway due to 26 Federal Plaza and, to the south, an extensive network surrounding the New York Stock Exchange.

Subsequent to 9/11, some key streets were taken out of service and remain temporarily closed in the vicinity of the World Trade Center (WTC) site. Of particular note is Vesey Street between Route 9A and Church Street. Vesey Street was a principal eastbound traffic corridor connecting Route 9A/Battery Park City to Park Row and points north. Vesey Street is likely to remain closed for several additional years while the WTC site is being reconstructed. Further, given the security issues associated with the Freedom Tower (to be built on Vesey Street), there is a significant potential that Vesey Street may not return to its prior traffic distribution function. In addition, Foley Square itself has been reconstructed into a consolidated open space, severing any direct connection between Pearl Street and Lafayette Street.

Chatham Square is a major confluence of roadways and a principal traffic element in the study area. Worth Street, Park Row, St. James Place, East Broadway, Bowery and Mott Street all converge in Chatham Square with inbound volumes. Only Mott Street, among these six roadways, is one-way and it is one-way into the square. Over 10 lanes of inbound traffic flow (not including Park Row) compete with pedestrians for available capacity at Chatham Square. The square was reconfigured in 2000, prior to the closure of Park Row, to add a consolidated space and better organize the fragmented traffic islands.

#### *Surface Transit Network*

In conjunction with the street network, the local bus system has also changed in response to both the security plan and other Lower Manhattan street closures. Figure 7-2 shows the Lower Manhattan area bus route maps for 2000, 2003 and 2005. As shown in the figure, prior to implementing the security plan in 2001, Park Row hosted the M9, M15, M103 and B51 bus routes. The M9 route operated between Union Square and South End Avenue in Battery Park City, while the M15 (the segment thru Park Row) traversed from East 126<sup>th</sup> Street to City Hall via 1<sup>st</sup> and 2<sup>nd</sup> Avenues. The M103 operated between East 125<sup>th</sup> Street and City Hall via Lexington and 3<sup>rd</sup> Avenues, while the B51 route traversed from the Fulton Mall in Brooklyn to City Hall (Manhattan) via the Manhattan Bridge. Together these four bus routes provided 25 to 30 buses per hour in each direction during the peak commuter periods. It should be noted that prior to May 2005, all four routes detoured around the security zone, with most using Worth Street and St. James Place for travel to/from City Hall (see Figure 7-2, 2003 map). Due to the closure of Vesey Street, the M9 route no longer crosses through the City Hall area, but reaches



Bus Routes  
January 2000



Bus Routes  
April 2003



Bus Routes  
July 2005

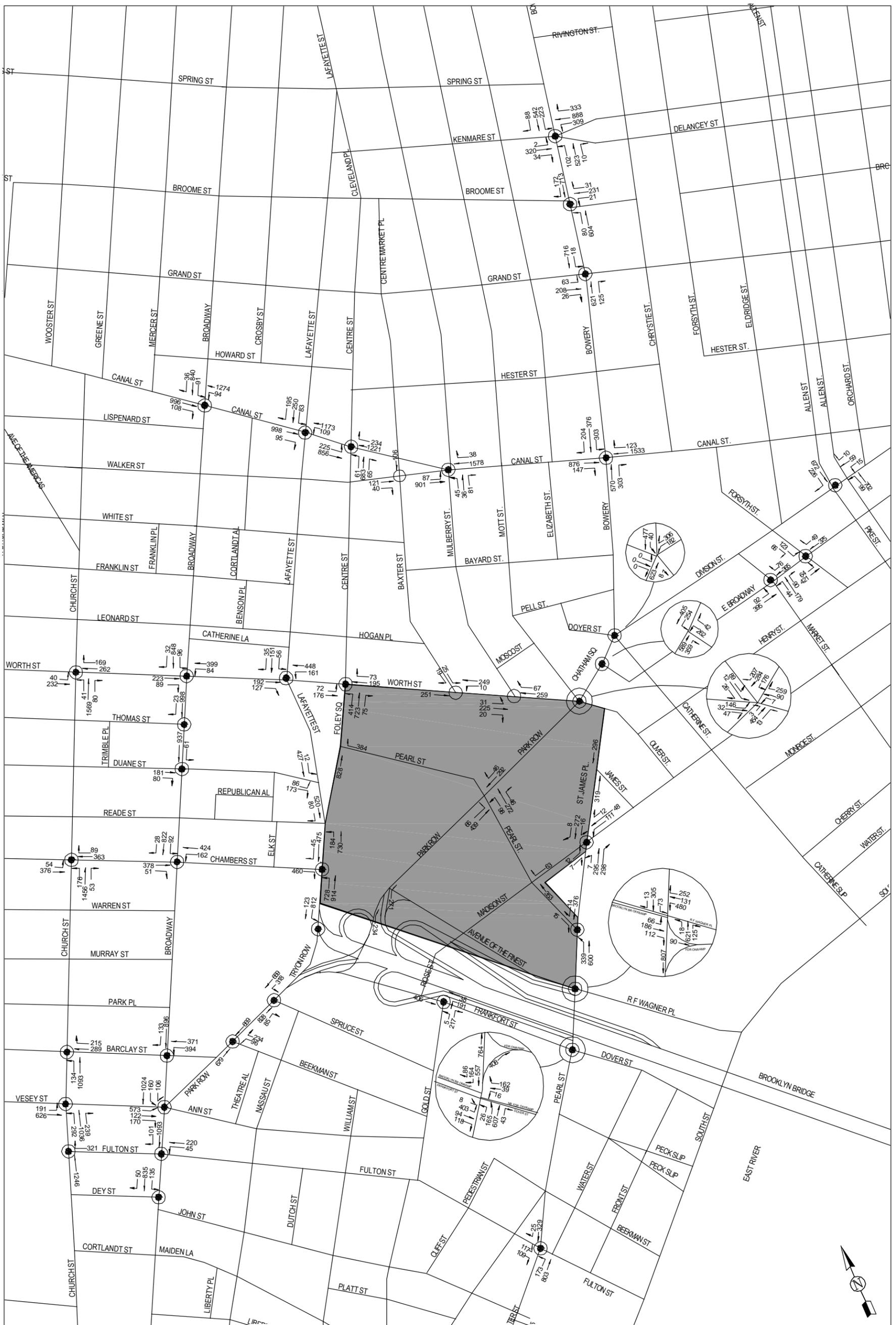
South End Avenue in Battery Park City by looping around the southern tip of Manhattan via Pearl Street/Water Street and Battery Place.

In May 2005, the M103 bus returned to its original route via Park Row (see Figure 7-2, 2005 map) on a trial basis. Buses that traverse the security zone are subject to inspection and there are no stops within the zone itself, but on either end of it. The test was expanded in November 2005 when the M15 and B51 buses also returned to their original routes via Park Row to/from City Hall.

### *Baseline Traffic Volumes*

Figure 7-3 shows the estimated baseline traffic volumes in the study area for the weekday AM, midday and PM peak hours. It should be noted that the baseline condition is presented as a reference to show pre-Park Row closure conditions. As noted above, this network represents pre-2001 historical data and does not reflect the loss of millions of square feet of office space and substantial street changes in Lower Manhattan and the study area.

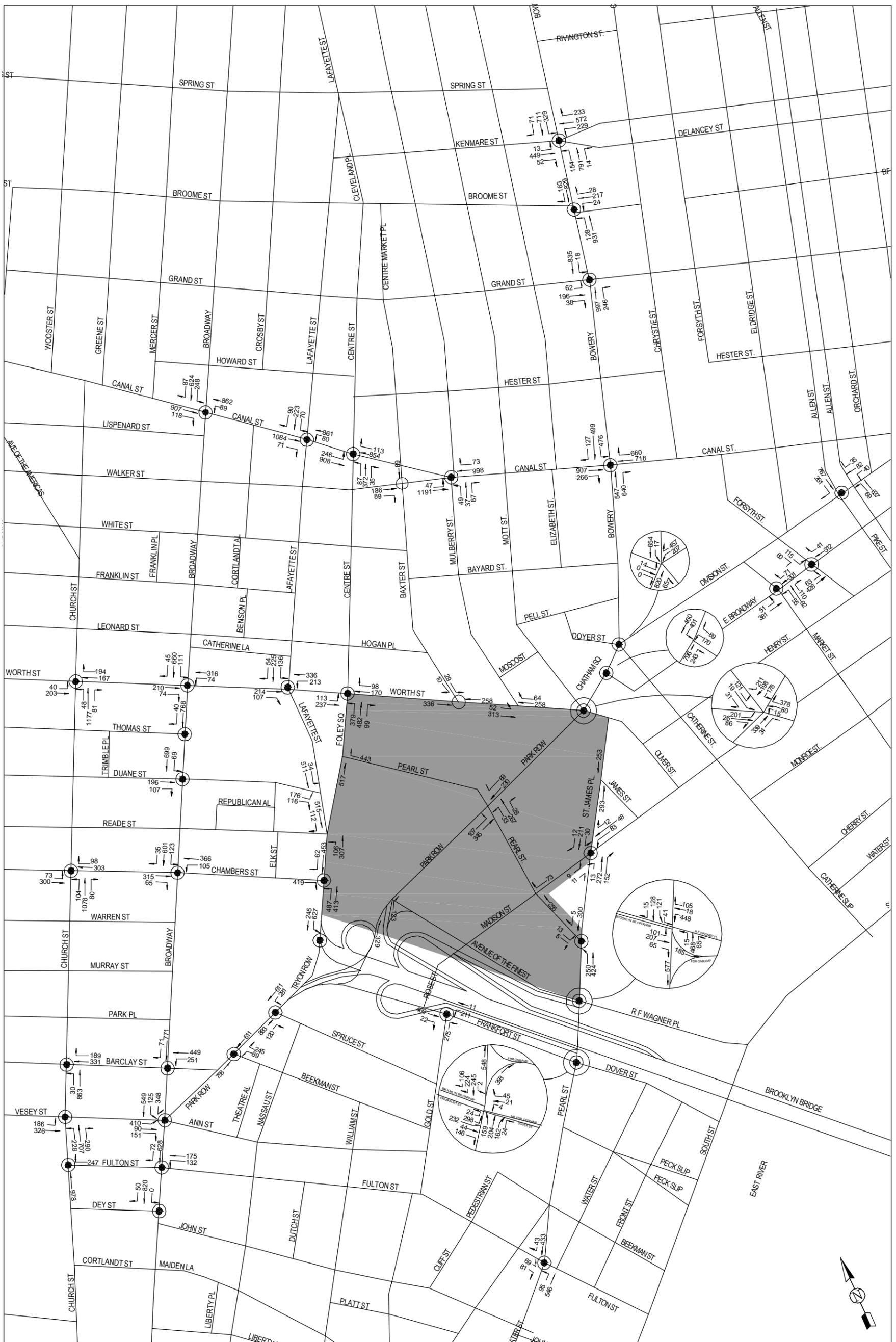
The baseline data shows that traffic volumes entering the overall security zone, mainly from Park Row (north and south), Pearl Street and the Brooklyn Bridge Manhattan bound exit ramp to Park Row amount to 1,259, 1,079, and 1,193 vehicles per hour in the AM, midday and PM peak hours, respectively. These three entering volumes are the principal flows that were subject to diversion upon implementation of the security plan after 9/11. Under the baseline condition, approximately 271, 123, and 201 vehicles per peak hour exited the Brooklyn Bridge ramp to northbound Park Row and other local streets in the AM, midday and PM peak hours, respectively. The baseline data also show other selected traffic patterns of note. Eastbound Vesey Street at Broadway contributed substantial volume to northbound Park Row. There was also a substantial volume on westbound Pearl Street that then proceeded through Foley Square to access Lafayette Street and then to westbound Reade Street. As discussed below, both of the above flows no longer exist (or are feasible) due to actions independent of the security zone and their absence, and other changes in Lower Manhattan make a comparison of baseline traffic volumes with the 2006 No-Action conditions a difficult one.



**Legend**

- Unsignalized Intersections
- Signalized Intersections

■ Security Zone



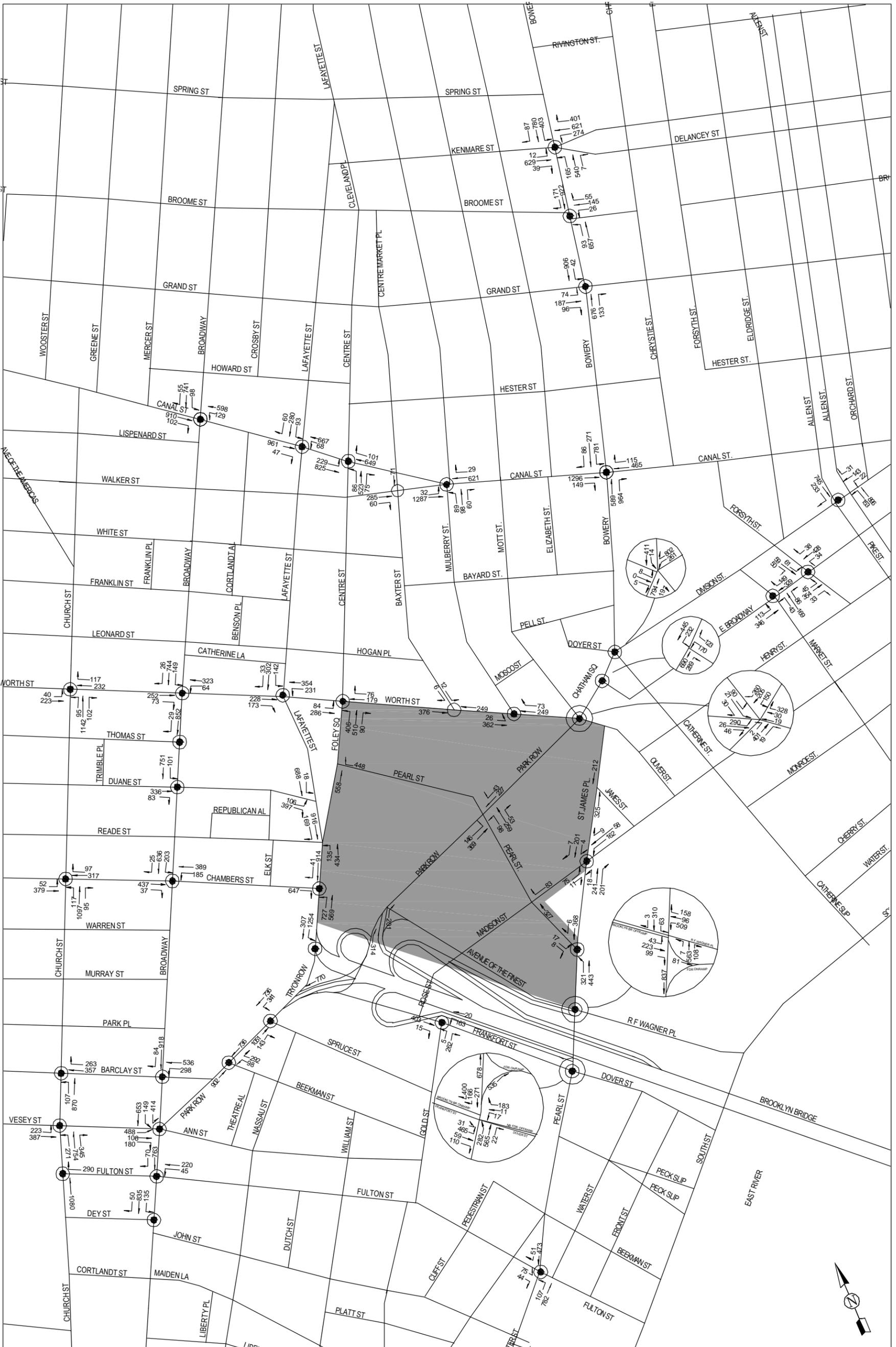
**Legend**

- Unsignalized Intersections
- Signalized Intersections

■ Security Zone

**One Police Plaza Security Plan EIS**

**Figure 7-3b**  
**2000 Baseline Traffic Volumes - MD Peak Hour**



- Legend**
- Unsignalized Intersections
  - Signalized Intersections

■ Security Zone

**One Police Plaza Security Plan EIS**

**Figure 7-3c**  
**2000 Baseline Traffic Volumes - PM Peak Hour**

## Intersection Capacity Analyses

### Methodology

Capacity analyses for the selected intersections were conducted based on the 2000 Highway Capacity Manual (HCM) methodology, using Version 4.1f of the Highway Capacity Software (HCS). The traffic data required for these analyses include the volumes on each approach, signal timings, peak hour factors (PHF), percentage of heavy vehicles, basic roadway geometries including number and width of lanes on each approach, curbside parking usage and various other physical and operational characteristics. This methodology provides a volume-to-capacity (v/c) ratio, delay and level of service (LOS) for each signalized intersection approach.

The HCM methodology provides a volume-to-capacity (v/c) ratio for each signalized intersection approach, representing the ratio of traffic volumes on an approach to its traffic-carrying capacity. A ratio of less than 0.85 is generally considered to be a non-congested condition in Manhattan; when this value increases, congestion increases. At a value of 1.0, the intersection lane group operates at or over capacity. This situation is associated with severe traffic flow congestion, with stop-and-start conditions and extensive vehicle queuing and delays.

The HCM procedure also expresses quality of flow at signalized intersections in terms of level of service, based on the amount of delay experienced by a driver at an intersection. LOS values range from LOS A, with a minimum delay, to LOS F, representing long delays. The following table shows the LOS/delay relationship for signalized and unsignalized intersections, using the HCM methodology. Levels of service A, B, and C generally represent extremely favorable to fair levels of traffic flow; at LOS D the influence of congestion will become noticeable; LOS E is considered to be the limit of acceptable delay, and LOS F is considered as unacceptable to most drivers. In this traffic study, a signalized lane group operating at LOS E or F is identified as congested.

Table 7-1 shows the LOS/delay relationship for signalized and unsignalized intersections using the HCM methodology.

**Table 7-1**  
**Roadway Level of Service Criteria**

LOS	Signalized	Unsignalized
	Delay (Seconds)	Delay (Seconds)
A	10.0 or less	10.0 or less
B	10.1 to 20.0	10.1 to 15.0
C	20.1 to 35.0	15.1 to 25.0
D	35.1 to 55.0	25.1 to 35.0
E	55.1 to 80.0	35.1 to 50.0
F	greater than 80.0	greater than 50.0

Source: 2000 Highway Capacity Manual

Based on the thresholds established for signalized intersections in the CEQR Technical Manual, if a No-Action LOS A, B or C deteriorates to unacceptable mid-LOS D, or a LOS E or F in the With-Action condition, then a significant traffic impact has occurred. The CEQR Technical Manual further states that for a No-Action LOS A, B or C, which declines to mid-LOS D or worse under the With-Action condition, mitigation to mid-LOS D is required. For a No-Action mid-LOS D, an increase of five or more seconds of delay in a lane group in the With-Action condition should be considered significant. For No-Action LOS E, an increase in delay of four seconds of delay should be considered significant. For No-Action LOS F, three seconds of delay should be considered significant, however, if a No-Action LOS F condition already has delays in excess of 120 seconds, an increase of 1.0 second in delay should be considered significant, unless the proposed action would generate fewer than five vehicles through that lane group in the peak hour.

To evaluate current operation conditions in the study area, capacity analyses were performed at each analyzed intersection utilizing the procedures described above. Table 7-2 summarizes the results of these analyses at signalized and unsignalized intersections in all peak hours analyzed. The table highlights those intersection movements that operate at LOS E or F or have a high v/c ratio (generally 0.90 and above), and are therefore considered to be congested.

**Table 7-2: Baseline LOS at Signalized Intersections**

SIGNALIZED INTERSECTION	Lane Group	Baseline AM Peak Hour			Baseline Midday Peak Hour			Baseline PM Peak Hour		
		V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
<b>Bowery Corridor</b>										
1) Bowery (N-S) @ Kenmare Street (E-W) <sup>2</sup>	NB-DefL	0.84	72.9	E *	0.98	95.0	F *	0.89	67.9	E *
	NB-TR	0.65	29.9	C	0.91	42.3	D *	0.58	26.6	C
	SB-Def L				0.84	44.6	D			
	SB-TR				1.04	62.6	E *			
	SB-LTR	1.04	63.9	E *				1.05	65.4	E *
	EB-LTR	0.39	19.2	B	0.61	25.9	C	0.69	26.0	C
	WB-L	0.93	57.6	E *	1.04	97.9	F *	0.92	58.1	E *
	WB-T	0.80	28.2	C	0.55	24.0	C	0.56	22.8	C
WB-R	1.02	80.3	F *	0.76	40.0	D	1.04	81.9	F *	
2) Bowery (N-S) @ Broome Street (E-W)	NB-LT	0.73	20.2	C	1.03	55.3	E *	0.88	29.7	C
	SB-TR	0.76	20.5	C	0.88	27.1	C	0.86	25.3	C
	WB-LTR	0.78	41.1	D	0.75	38.9	D	0.70	36.7	D
3) Bowery (N-S) @ Grand Street (E-W)	NB-T	0.48	13.8	B	0.78	21.0	C	0.48	13.8	B
	NB-R	0.48	18.3	B	1.01	80.1	F *	0.54	21.2	C
	SB-TL	0.64	16.8	B	0.71	18.7	B	0.74	19.3	B
	EB-LTR	0.76	38.3	D	0.75	37.6	D	0.94	60.8	E *
(4) Bowery (N-S) @ Canal Street (E-W) <sup>2</sup>	NB-T	1.04	85.0	F *	0.85	44.4	D	0.84	42.7	D
	SB-L	0.48	38.2	D	0.56	23.9	C	1.00	62.7	E *
	SB-LTR	1.04	72.2	E *	1.01	60.1	E *	0.71	29.5	C
	EB-T	1.05	56.9	E *	1.00	56.4	E *	1.03	56.3	E *
	EB-R	0.33	15.0	B	0.64	30.7	C	0.15	14.1	B
	WB-LTR	0.59	16.9	B	0.86	36.6	D	0.30	15.4	B
5) Bowery (N-S) @ Division Street (E-W)	NB-T	0.58	20.9	C	0.69	23.2	C	0.66	22.5	C
	NB-R	0.05	14.6	B	0.32	20.0	C	0.09	15.3	B
	SB-LT	0.56	20.7	C	0.64	22.2	C	0.41	18.1	B
	EB-LTR	0.00	32.9	C	0.06	33.8	C	0.07	34.1	C
	WB-T	0.64	40.7	D	0.70	43.4	D	0.81	51.0	D
	WB-R	0.53	21.3	C	0.75	28.7	C	1.03	64.1	E *
6) Chatham Square (N-S) @ East Broadway (E-W)	NB-T	0.40	9.8	A	0.47	10.5	B	0.36	9.3	A
	NB-R	0.99	62.0	E *	0.74	26.2	C	0.81	30.6	C
	SB-L	0.93	52.8	D *	1.01	65.6	E *	0.96	63.7	E *
	SB-T	0.26	8.5	A	0.29	8.7	A	0.25	8.3	A
	WB-L	0.82	49.6	D	0.33	28.1	C	0.40	29.0	C
	WB-R	0.25	28.5	C	0.47	34.7	C	0.59	39.0	D
(7) Park Row (N-S) @ Mott Street (SB) Worth Street (E-W) <sup>2</sup>  Mott Street	NB-LTR	0.65	29.7	C	0.56	27.9	C	0.53	23.5	C
	SB-L	1.02	100.7	F *	1.03	104.5	F *	0.83	57.5	E *
	SB-TR	1.02	74.2	E *	1.01	77.6	E *	1.05	82.3	F *
	EB-DefL	1.01	105.7	F *	0.63	33.6	C	1.05	97.5	F *
	EB-TR	0.26	23.1	C	0.41	26.7	C	0.25	23.7	C
	WB-LT	0.21	21.7	C	0.22	22.0	C	0.13	21.6	C
	WB-R	0.91	60.8	E *	1.04	86.4	F *	0.97	70.9	E *
	SB-LTR	0.77	63.3	E *	0.22	21.6	C	1.01	116.3	F *

Sources

- 1 Pre-9/11/01 Signal Timing Provided by NYCDOT
- 2 Estimated Signal Timing for Pre-9/11/01 Conditions

NOTES:

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound  
L-Left, T-Through, R-Right, DfL-Analysis considers a Defacto Left Lane on this approach .  
V/C Ratio - Volume to Capacity Ratio, SEC/VEH - Seconds per vehicle  
LOS - Level of service  
Appr - Approach

**Table 7-2: Baseline LOS at Signalized Intersections**

SIGNALIZED INTERSECTION	Lane Group	Baseline AM Peak Hour			Baseline Midday Peak Hour			Baseline PM Peak Hour		
		V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
<b>Broadway Corridor</b>										
(8) Broadway (SB) @ Canal Street (E-W)	SB-LTR	0.77	30.2	C	0.71	27.0	C	0.71	28.3	C
	EB-LTR	0.87	33.7	C	0.87	33.8	C	0.75	27.9	C
	WB-LTR	0.93	30.2	C *	0.99	45.9	D *	WB-DefL 0.43	28.1	C
							WB-T 0.42	13.5	B	
(9) Broadway (SB) @ Worth Street (E-W) <sup>1</sup>	SB-LTR	0.57	16.9	B	0.49	12.4	B	0.54	16.7	B
	EB-TR	0.62	27.4	C	0.51	24.3	C	0.56	25.0	C
	WB-L	0.48	29.5	C	0.40	25.8	C	0.35	24.5	C
	WB-T	0.71	30.2	C	0.55	25.1	C	0.54	24.5	C
10) Broadway (N-S) @ Thomas Street (E-W)	SB-T	0.79	21.6	C	0.57	11.7	B	0.59	16.1	B
	SB-R	0.10	11.1	B	0.07	7.5	A	0.15	12.2	B
(11) Broadway (SB) @ Duane Street (EB)	SB-LT	0.81	25.1	C	0.59	14.7	B	0.68	20.5	C
	EB-T	0.37	21.6	C	0.35	21.1	C	0.53	24.2	C
	EB-R	0.31	21.9	C	0.39	23.9	C	0.22	19.7	B
(12) Broadway (SB) @ Chambers Street (E-W) <sup>1</sup>	SB-LT	0.79	24.6	C	0.63	15.8	B	0.81	25.7	C
	SB-R	0.13	13.6	B	0.15	14.1	B	0.11	13.4	B
	EB-TR	0.68	28.5	C	0.85	42.3	D	0.70	28.9	C
	WB-LT	0.96	53.0	D *	0.73	30.3	C	1.04	76.6	E *
(13) Broadway (SB) @ Barclay Street (E-W)	SB-T	0.61	23.2	C	0.45	20.6	C	0.60	23.0	C
	SB-R	0.49	26.1	C	0.26	20.3	C	0.32	21.7	C
	WB-L	1.03	101.8	F *	0.72	52.7	D	0.98	91.0	F *
	WB-LT	1.02	78.1	E *	0.82	43.4	D	1.00	69.1	E *
(14) Broadway (SB) @ Vesey/Ann Street (EB)	SB-L	0.45	19.6	B	0.74	24.8	C	0.89	39.6	D
	SB-LT	0.62	20.9	C	0.30	13.9	B	0.38	17.3	B
	EB-TR	0.83	29.6	C	0.63	22.2	C	0.73	24.6	C
(15) Broadway (SB) @ Fulton Street (WB)	SB-TR	0.55	11.2	B	0.33	5.0	A	0.37	9.2	A
	WB-LT	0.40	28.1	C	0.30	26.6	C	0.35	27.3	C
<b>Canal Corridor</b>										
16) Lafayette Street (N-S) @ Canal Street (E-W)	SB-L	0.49	36.7	D	0.40	32.9	C	0.56	39.9	D
	SB-T	0.66	36.7	D	0.56	33.0	C	0.73	40.6	D
	SB-R	1.02	100.9	F *	0.58	42.0	D	0.40	33.9	C
	EB-TR	0.71	21.7	C	0.72	21.8	C	0.59	19.1	B
	WB-LT	0.78	16.4	B	0.54	11.3	B	0.39	9.6	A
17) Centre Street (N-S) @ Canal Street (E-W) <sup>2</sup>	NB-LT	1.02	68.5	E *	0.87	49.9	D	0.91	49.0	D *
	NB-R	0.35	29.4	C	0.24	32.0	C	0.40	32.4	C
	EB-DefL	0.86	60.8	E *	0.71	36.2	D	0.62	25.8	C
	EB-T	0.59	13.2	B	1.04	56.7	E *	0.50	10.9	B
	WB-TR	1.02	54.3	D *	1.00	53.8	D *	0.49	19.4	B
18) Mulberry Street (N-S) @ Canal Street (E-W) <sup>2</sup>	NB-LTR	0.86	66.6	E *	0.56	31.0	C	0.79	43.5	D
	EB-LT	1.04	56.9	E *	0.91	28.5	C *	0.99	41.8	D *
	WB-TR	1.00	37.4	D *	0.86	25.4	C	0.43	13.1	B

Sources

1 Pre-9/11/01 Signal Timing Provided by NYCDOT

2 Estimated Signal Timing for Pre-9/11/01 Conditions

NOTES:

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

L-Left, T-Through, R-Right, DfL-Analysis considers a Defacto Left Lane on this approach .

V/C Ratio - Volume to Capacity Ratio, SEC/VEH - Seconds per vehicle

LOS - Level of service

Appr - Approach

**Table 7-2: Baseline LOS at Signalized Intersections**

SIGNALIZED INTERSECTION	Lane Group	Baseline AM Peak Hour			Baseline Midday Peak Hour			Baseline PM Peak Hour		
		V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
<b>Centre Corridor</b>										
(19) Centre Street (N-S) @ Chambers Street (EB) <sup>1,2</sup>	NB-L	1.04	72.9	E *	0.90	51.4	D *	1.01	62.6	E *
	NB-LT	1.05	66.8	E *	0.79	31.5	C	0.92	45.7	D *
	SB-TR	0.43	19.4	B	0.47	20.8	C	0.86	32.2	C
	EB-R	0.58	27.8	C	0.36	16.2	B	0.56	19.2	B
(20) Centre Street (N-S) @ Tryon Row - Brooklyn Bridge (E-W)	SB-L	0.47	9.6	A	0.65	13.1	B	0.96	35.7	D *
	SB-LT	0.49	10.1	B	0.27	7.6	A	0.70	14.6	B
<b>Church Corridor</b>										
(21) Church Street (NB) @ Fulton Street (WB)	NB-T	0.70	19.5	B	0.53	12.8	B	0.56	16.8	B
	WB-R	0.90	55.9	E *	0.58	30.8	C	0.67	34.2	C
(22) Church Street (NB) @ Vesey Street (EB)	NB-LT	0.75	18.5	B	0.43	9.0	A	0.52	14.0	B
	NB-R	0.50	16.4	B	0.58	14.0	B	0.60	18.4	B
	EB-LT	0.84	35.3	D	0.52	25.5	C	0.60	26.9	C
(23) Church Street (NB) @ Barclay Street (WB)	NB-LT	0.54	11.6	D	0.42	12.7	B	0.43	12.8	D
	WB-TR	0.48	24.6	C	0.41	23.5	C	0.51	25.0	C
(24) Church Street (NB) Chambers Street (E-W) <sup>1</sup>	NB-LTR	0.99	44.5	D *	0.76	21.0	C	0.81	26.1	C
	EB-LT	0.71	26.8	C	0.63	24.3	C	0.64	24.0	C
	WB-TR	0.77	30.1	C	0.58	22.1	C	0.60	22.5	C
(25) Church Street (NB) Worth Street (E-W) <sup>1</sup>	NB-LTR	0.86	22.4	C	0.64	11.5	B	0.63	15.6	B
	EB-LT	0.43	24.6	C	0.35	23.3	C	0.29	22.2	C
	WB-TR	0.98	66.3	E *	0.89	51.5	D	0.72	33.9	C
<b>Division Corridor</b>										
(26) Pike Street (N-S) @ Division Street (E-W)	NB-LT	0.58	14.2	B	0.44	12.1	B	0.71	16.9	B
	SB-T	0.34	10.9	B	0.37	11.1	B	0.35	10.9	B
	SB-R	0.62	20.3	C	0.67	22.3	C	0.58	18.5	B
	WB-LTR	0.27	24.6	C	0.51	30.4	C	0.57	31.7	C
<b>East Broadway Corridor</b>										
(27) Forsyth Street (N-S) @ East Broadway (E-W)	SB-LR	0.68	40.4	D	0.52	32.1	C	0.49	31.2	C
	EB-LT	0.67	16.7	B	0.34	9.7	A	0.31	9.4	A
	WB-TR	0.35	9.9	A	0.26	9.0	A	0.40	10.4	B
(28) Market Street (N-S) @ East Broadway (E-W)	NB-LTR	0.86	48.9	D	0.80	44.1	D	0.47	14.8	B
	EB-LT	0.90	37.8	D *	0.37	12.6	B	0.91	50.8	D *
	WB-TR	0.71	21.4	C	0.54	16.1	B	1.03	79.0	E *
<b>Frankfort Corridor</b>										
(29) Madison/Gold St (N-S) @ Frankfort Street (E-W) <sup>2</sup>	NB-T	0.00	25.7	C	0.00	28.0	C	0.00	26.5	C
	EB-TR	1.04	84.2	D	0.98	63.6	E	1.03	79.2	E
	WB-L	0.50	33.7	D	0.75	47.2	D	0.73	48.8	D
	WB-T	0.10	26.8	D	0.03	26.0	C	0.06	26.4	C
(30) Park Row (N-S) @ Beekman Street (E-W)	NB-T	0.37	13.9	B	0.37	13.8	B	0.42	14.3	B
	SB-T	0.34	13.4	B	0.27	12.7	B	0.32	13.2	B
	WB-LR	0.68	30.6	C	0.64	28.9	C	0.78	35.4	D
(31) Park Row (N-S) @ Spruce Street (E-W)	NB-TR	0.43	9.9	A	0.44	9.9	A	0.74	15.3	B
	SB-L	0.57	8.8	A	0.46	5.2	A	0.60	17.9	B
	SB-T	0.43	10.1	B	0.36	9.3	A	0.44	10.1	B

**Sources**

- 1 Pre-9/11/01 Signal Timing Provided by NYCDOT
- 2 Estimated Signal Timing for Pre-9/11/01 Conditions

**NOTES:**

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound  
 L-Left, T-Through, R-Right, DfL-Analysis considers a Defacto Left Lane on this approach .  
 V/C Ratio - Volume to Capacity Ratio, SEC/VEH - Seconds per vehicle  
 LOS - Level of service  
 Appr - Approach

**Table 7-2: Baseline LOS at Signalized Intersections**

SIGNALIZED INTERSECTION	Lane Group	Baseline AM Peak Hour			Baseline Midday Peak Hour			Baseline PM Peak Hour				
		V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS		
<b>Pearl Corridor</b>												
(32) Pearl Street (N-S) @ Fulton Street (E-W)	NB-LT	1.01	54.1	D	*	0.74	23.3	C	0.94	38.8	D	*
	SB-T	0.49	17.4	B		0.59	19.2	B	0.64	20.5	C	
	SB-R	0.08	12.3	B		0.13	12.8	B	0.08	11.9	B	
	EB-LR	1.01	94.7	F	*	0.66	43.3	D	0.47	33.6	C	
(33) Pearl Street (N-S) @ Frankfort/Dover St. (E-W) <sup>2</sup>	NB-LTR	1.03	59.6	E	*	0.59	16.3	B	NB-DefL 0.69	24.9	C	
	SB-LTR	0.61	17.0	B		0.50	14.3	B	NB-TR 0.68	20.1	C	
	EB-L	1.00	79.7	E	*	0.99	69.5	E	0.71	19.6	B	
	EB-LTR	1.00	77.0	E	*	0.99	75.7	E	1.02	81.5	F	*
	WB-LTR	0.52	26.6	C		0.12	20.6	C	1.02	83.3	F	*
(34) Pearl Street (N-S) @ Avenue of the Finest (E-W) <sup>2</sup>	NB-LTR	0.89	36.6	D		0.62	24.8	C	0.67	24.3	C	
	SB-LTR	0.57	23.0	C		0.39	20.5	C	0.46	20.5	C	
	EB-LTR	0.95	67.3	E	*	1.00	78.9	E	0.82	48.0	D	
	WB-L	0.79	44.4	D		0.84	49.4	D	0.86	49.7	D	
	WB-TR	0.46	37.5	D		0.06	30.4	C	0.31	33.9	C	
	WB-R	0.41	17.7	B		0.16	13.2	B	0.57	41.3	D	
(35) St. James (N-S) @ Pearl St. (E-W) <sup>1</sup>	NB-DefL	0.70	20.9	C		NB-LT	0.62	14.6	B	0.86	35.9	D
	NB-T	0.94	39.0	D	*					0.55	13.7	B
	SB-TR	0.27	9.5	A						0.23	9.1	A
	EB-LR	0.06	23.6	C						0.06	23.4	C
<b>St. James Corridor</b>												
(36) St. James (N-S) @ Madison St. (E-W) <sup>1</sup>	NB-LTR	0.86	35.3	D		0.52	20.3	C	0.58	21.6	C	
	SB-LTR	0.51	21.1	C		0.46	20.0	B	0.33	17.6	B	
	EB-LTR	0.04	14.3	B		0.05	14.4	B	0.09	14.9	B	
	WB-LTR	0.17	15.4	B		0.15	15.2	B	0.26	16.4	B	
<b>Worth Street Corridor</b>												
(37) Centre Street (NB) @ Worth Street (E-W) <sup>1,2</sup>	NB-L	1.04	69.3	E	*	1.01	63.3	E	1.04	73.1	E	*
	NB-TR	0.54	9.6	A		0.42	9.7	A	0.43	10.2	B	
	EB-LT	0.80	51.3	D		0.89	55.6	E	0.80	43.6	D	
	WB-TR	0.89	63.3	E	*	0.82	50.8	D	0.67	38.2	D	
(38) Lafayette Street (SB) @ Worth Street (E-W) <sup>1</sup>	SB-LTR	0.19	15.5	B		0.33	16.9	B	0.36	17.3	B	
	EB-TR	0.34	17.2	B		0.31	16.9	B	0.40	18.0	B	
	WB-L	0.68	33.7	C		0.89	57.0	E	1.00	81.5	F	*
	WB-T	0.79	31.4	C		0.58	22.9	C	0.58	22.6	C	

**Table 7-2: Baseline LOS at Unsignalized Intersections**

UNSIGNALIZED INTERSECTION	Lane Group	Baseline AM Peak Hour			Baseline Midday Peak Hour			Baseline PM Peak Hour					
		V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS			
<b>Baxter Corridor</b>													
1) Baxter Street (N-S) @ Walker Street (E-W)	EB-TR	0.51	24.8	C		0.82	44.5	E	*	0.98	69.1	F	*
(2) Baxter Street (NB) @ Worth Street (E-W)	SB-LR	0.08	11.9	B		0.08	12.6	B		0.0	12.2	B	

Sources

- 1 Pre-9/11/01 Signal Timing Provided by NYCDOT
- 2 Estimated Signal Timing for Pre-9/11/01 Conditions

NOTES:

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound  
 L-Left, T-Through, R-Right, DfL-Analysis considers a Defacto Left Lane on this approach .  
 V/C Ratio - Volume to Capacity Ratio, SEC/VEH - Seconds per vehicle  
 LOS - Level of service  
 Appr - Approach

### Signalized and Unsignalized Intersections

Along Bowery, the intersection at Kenmare Street has at least four congested intersections in all three peak periods, while there is one congested approach during the midday peak period at Broome Street and one congested approach at Grand Street during the midday and PM peak hours. Additionally, at least one approach at Canal, East Broadway, and Worth Street are congested in each peak hour. Also, at the intersection of Bowery and Division Street, one approach is congested in the PM peak hour.

At the intersection of Broadway and Canal Street, one congested movement was present in the AM and midday peak hours while at Broadway and Chambers Street and Broadway and Barclay Street, there was at least one congested approach in both AM and PM peak periods. Along Canal Street, there was at least one congested approach in all three peak periods at Centre Street and Mulberry Street while there was one congested approach at Lafayette Street during the AM peak period.

At Centre Street and Chambers Street at least one approach was congested in each peak hour. Along the Church Street corridor, at the western edge of the study area, one congested approach was observed during the AM peak period at Fulton Street, Chambers Street, and Worth Street. At Market Street and East Broadway, one approach was congested during the AM peak hour while two approaches were congested during the PM peak period.

On the southeastern edge of the study area, the intersection of Pearl Street and Fulton Street experienced two congested approaches during the AM peak period and one during the PM peak period. At Pearl Street and Frankfort Street at least two approaches were congested during each peak hour while one approach was congested during the AM and midday peak periods at Pearl Street and Avenue of the Finest. At Pearl Street and St. James Street, one approach was congested during the AM Peak hour.

At Worth Street and Centre Street, all three peak periods have at least one congested approach while at Worth Street and Lafayette Street, the midday and PM peak periods have one congested approach. At the unsignalized intersection of Baxter Street and Walker Street, one approach was congested in the midday and PM peak periods.

### **Parking**

The information presented here was assembled from various sources including the 1993 *Foley Square Final Environmental Impact Statement (FEIS)*, the 2004 *World Trade Center Memorial and Redevelopment Plan Generic Impact Statement (GEIS)*, the 2001 *Public Safety Answer Center Environmental Assessment Statement (EAS)*, and the 2000 Department of City Planning's *Parking Guide*.

### *Off-Street Parking*

Prior to September 11, 2001, there were 41 identified off-street parking facilities within a quarter-mile radius of the security zone area. This public parking facility inventory is provided in Table 7-3. Figure 7-4 depicts the location of each of the identified public parking facilities.

Parking facility occupancy data was available for midday (between 11:30 AM and 1:30 PM) on a typical weekday, with capacities ranging from 9- to 400-vehicle range.

As shown in Table 7-3, pre-September 11, 2001 parking utilization data was not available for all garages within the study area. An average of the known pre-September 11, 2001 utilization rates was applied to the total capacity. As such, as shown in Table 7-3, the public parking facilities surveyed contained over 4,711 spaces, with an estimated occupancy level of about 88 percent at midday. This means that there were 566 unoccupied spaces available within off-street parking facilities under baseline conditions.

As shown in Table 7-3, the municipal parking garage (No. 41) located at 109 Park Row had a capacity of 400 spaces with a low midday utilization of 68% with 129 spaces available to the public during this time.

### *On-Street Parking*

Data regarding on-street parking regulations was also obtained from the studies mentioned above. Legal on-street parking in this area was very limited. Overall, within the parking study area, there was a relatively limited number of legal parking spaces available on-street for use by motorists. The limited number of spaces is due to the minimal width of the east/west cross streets and truck delivery activities which occur throughout the day. In addition, as this area has a high concentration of government facilities, the limited number of legal parking spaces are also due to the large number of curbside parking spaces reserved for government officials.

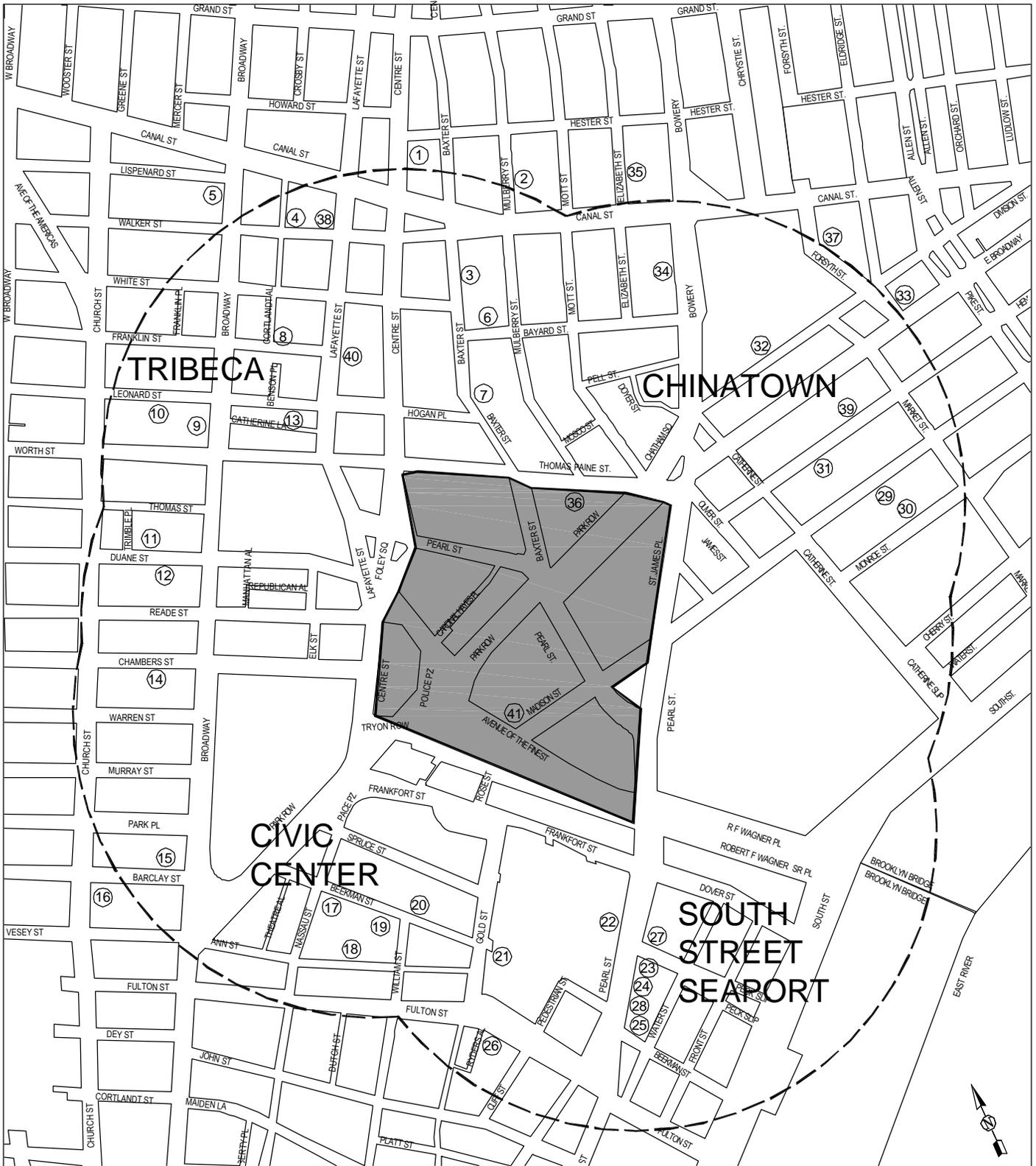
Within the study area, no parking except for authorized vehicles was allowed along Broadway, Church Street and Worth Street. No parking was allowed throughout the day on both the north and south side of Chambers Street. Parking on Duane, Reade, Lafayette and Centre Streets, and Pearl Street between Centre Street and Cardinal Hayes Place was restricted to authorized vehicles only.

Illegal curbside parking and standing were prevalent throughout the study area. Illegal parking and standing along the study area roadways for either a short- or long-term period impeded traffic flow and reduced available capacity. However, specific quantitative pre-September 11, 2001 on-street parking capacity and utilization data are not available for the study area.

**Table 7-3: Pre-9/11/01 Off-Street Parking Facilities within 1/4-mile of the Security Zone and Estimated Weekday Utilization**

No.	Operator	Address	Capacity	MD (12-1) Util.	Spaces Avail.
1	Edison NY Parking LLC	174 Centre Street	93	n/a	n/a
2	Kennee Parking Corp	114-116 Mulberry Street	42	n/a	n/a
3	Chung Pak Parking Corp	95-97 1/2 Baxter Street	28	n/a	n/a
4	Chinatown Parking Corp	88 Walker Street	35	n/a	n/a
5	Champion Tribeca LLC	411-413 Broadway	60	n/a	n/a
6	Margaret E Pescatore	98-100 Bayard Street	12	n/a	n/a
7	Champion Mulberry LLC	62-64 Mulberry Street	191	n/a	n/a
8	SSL Franklin St Parking Lot Inc	48-52 Franklin Street	40	n/a	n/a
9	(name unknown)	341 Broadway	150	93%	10
10	(name unknown)	84 Leonard Street	54	93%	4
11	Katz Parking Systems	130 Duane Street	40	63%	15
12	Kids Parking Corp	105 Duane Street	72	100%	0
13	Cobalt Car Park LLC	108 Leonard Street	150	93%	10
14	RAEM	93 Chambers Street	48	n/a	n/a
15	BGB Parking System	6 Barclay Street	86	100%	0
16	Central Parking System of NY	47 Church Street	65	n/a	n/a
17	25-27 Beekman Street Associates	25-27 Beekman Street	149	100%	0
18	John Street Parking	57-61 Ann Street	276	n/a	n/a
19	Central Parking Systems Inc	169 William Street	50	100%	0
20	NYU Downtown Hospital	170 Williams Street	144	100%	0
21	Ropetmar Garage Inc	80 Gold Street	351	100%	0
22	Ropetmar Garage Inc	299 Pearl Street	310	95%	15
23	Allright Parking Management Corp	10-12 Peck Slip	105	77%	24
24	Edison Lafayette Corp	300-302 Pearl Street	25	76%	6
25	Edison Lafayette Corp	288-294 Pearl Street	36	78%	8
26	Downtown Parking Corp	56 Fulton Street	280	n/a	n/a
27	320 Pearl Street Realty LLC	322 Pearl Street	31	81%	6
28	Edison Lafayette Corp	228-232 Water Street	120	77%	28
29	(name unknown)	88 Madison Street	50	n/a	n/a
30	(name unknown)	31 Monroe Street	110	n/a	n/a
31	(name unknown)	38 Henry Street	150	n/a	n/a
32	(name unknown)	2 Division Street	300	n/a	n/a
33	(name unknown)	79 Division Street	9	n/a	n/a
34	(name unknown)	38 Bowery	140	n/a	n/a
35	(name unknown)	44 Elizabeth Street	150	n/a	n/a
36	Chatham Parking Systems Inc	180 Park Row	130	85%	20
37	(name unknown)	26 Forsyth Street	42	n/a	n/a
38	(name unknown)	58 Walker Street	40	n/a	n/a
39	(name unknown)	49-59 Henry Street	102	n/a	n/a
40	Municipal Lot	Leonard St & Lafayette St	45	100%	0
41	Department of Transportation	109 Park Row	400	68%	129
<b>Total</b>			<b>4,711</b>	<b>88%</b>	<b>566</b>

Sources: World Trade Center Memorial and Redevelopment Plan FEIS (2004), Public Safety Answering Center II EAS (2001), Parking Guide to New York City (March 2000), 48-52 Franklin Street EAS (2000)



**Legend**

--- 1 / 4 Mile Boundary

① Pre-9 / 11 Off-Street Public Parking Facility

■ Security Zone

## C. 2006 NO-ACTION CONDITION

### Vehicular Traffic

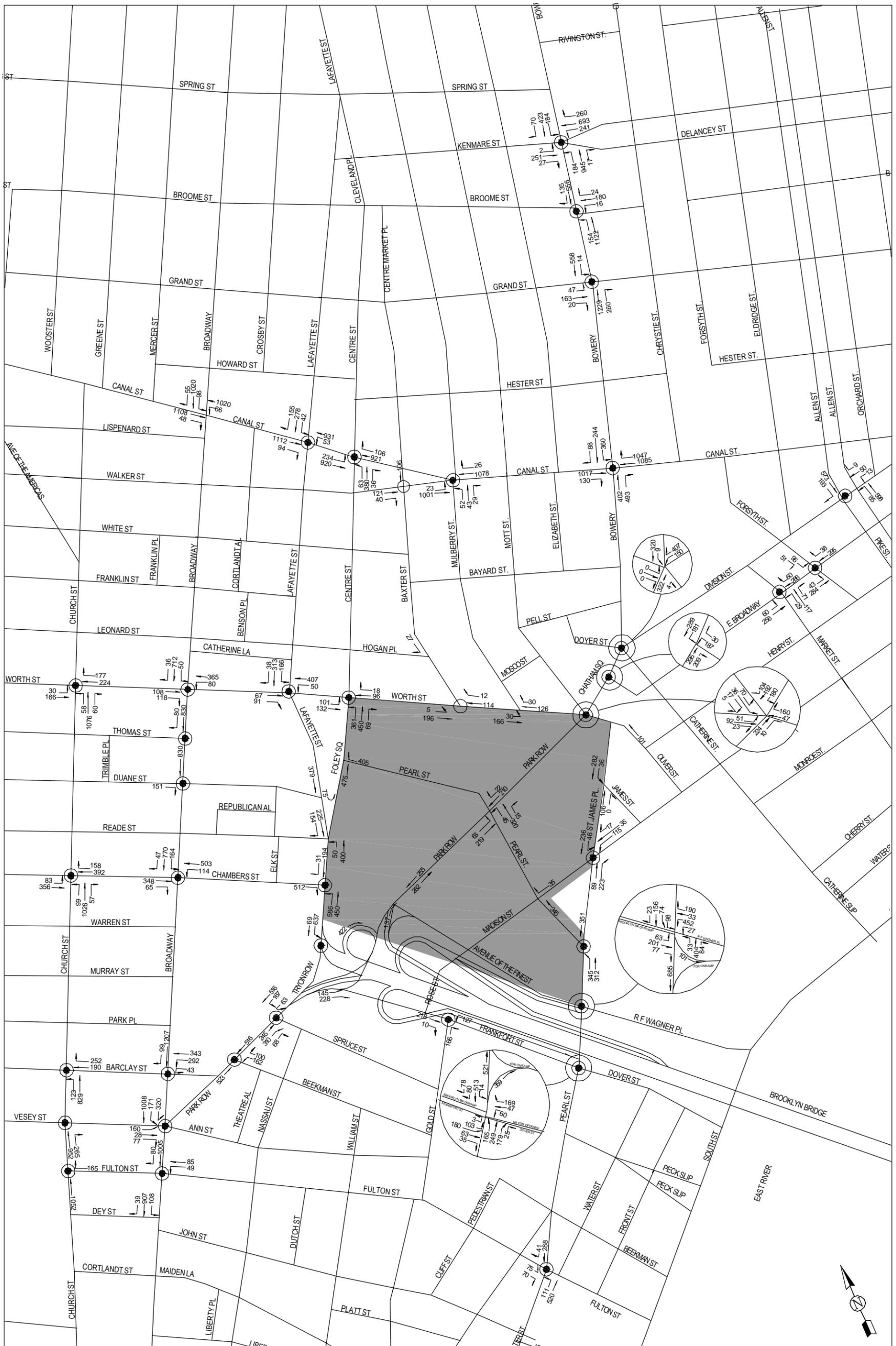
The initial traffic capacity analysis using the *2000 Highway Capacity Manual (HCM)* was performed on the 2006 No-Action condition. Under this condition, the security zone installed by NYPD after 9/11 would not be in place and traffic flow patterns, including the four bus routes discussed above, would be maintained. However, while most of the patterns would be maintained, as discussed above, the actual traffic volumes would be different (sometimes measurably) from those documented in the baseline conditions. Figure 7-5 provides the estimated 2006 No-Action traffic volumes in the study area. These traffic volumes reflect physical and land use changes that have occurred independent of the action. Generally, when compared to the baseline conditions, traffic in much of the network has declined due to lower demand and/or shifted demand due to street configuration changes, the absence of portions of Vesey Street, the security plans for 26 Federal Plaza and for the NYSE, and other roadway changes. There have also been traffic demand changes due to loss of office space, conversion of office to residential space, declining employment in certain sections of Chinatown and other socioeconomic variations. Under 2006 No-Action conditions, however, all bus routes would be maintained on Park Row as in the baseline condition, except for the M9 which is assumed to remain on its present “diverted” route to/from Battery Park City.

#### *Signalized and Unsignalized Intersections*

Table 7-4 shows the results of the 2006 No-Action capacity analysis at the 38 signalized and 2 unsignalized intersections studied for the weekday AM, midday and PM peak hours. The table shows the v/c ratio, delay and level of service (LOS) for each intersection movement in each analyzed peak hour. It should be noted that signal timing plans currently in effect (2006 Action conditions) have been used for the 2006 No-Action condition for all intersections.

Table 7-4 shows that in the 2006 No-Action condition, 15 signalized intersections would experience congestion on one or more approaches in the AM peak hour, 8 in the midday, and 13 in the PM peak hour. In the 2006 No-Action condition, there would be several signalized intersections with one or more movements with a v/c ratio of 0.90 or greater. In the AM peak hour, there would be 14 such movements, in the midday peak hour there would be 7 such movements, and in the PM peak hour there would be 13 such movements.

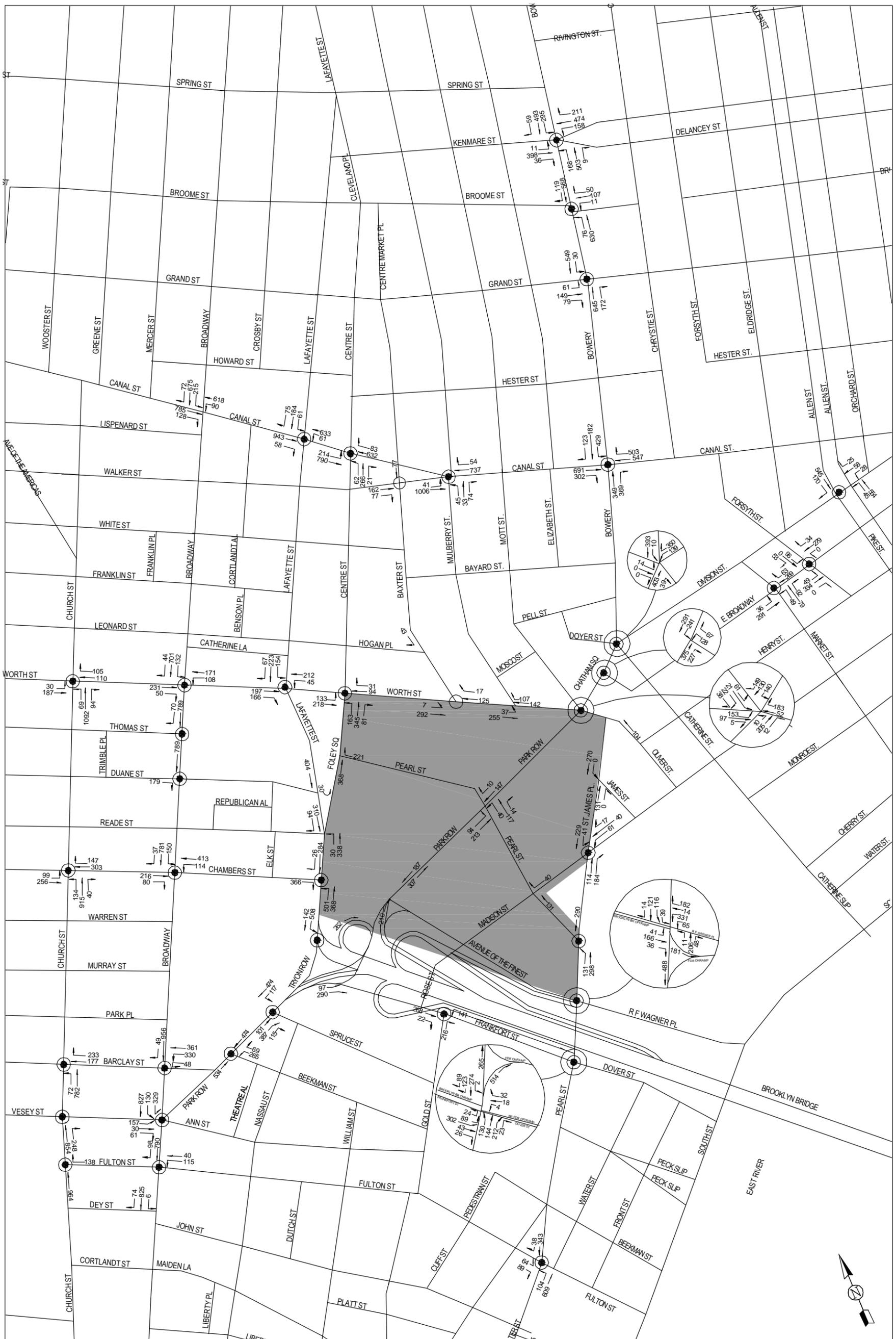
As shown in Table 7-4, of the two unsignalized intersections analyzed, the intersection of Baxter and Walker Streets was found to experience congestion in the PM peak hour in the 2006 No-Action conditions.



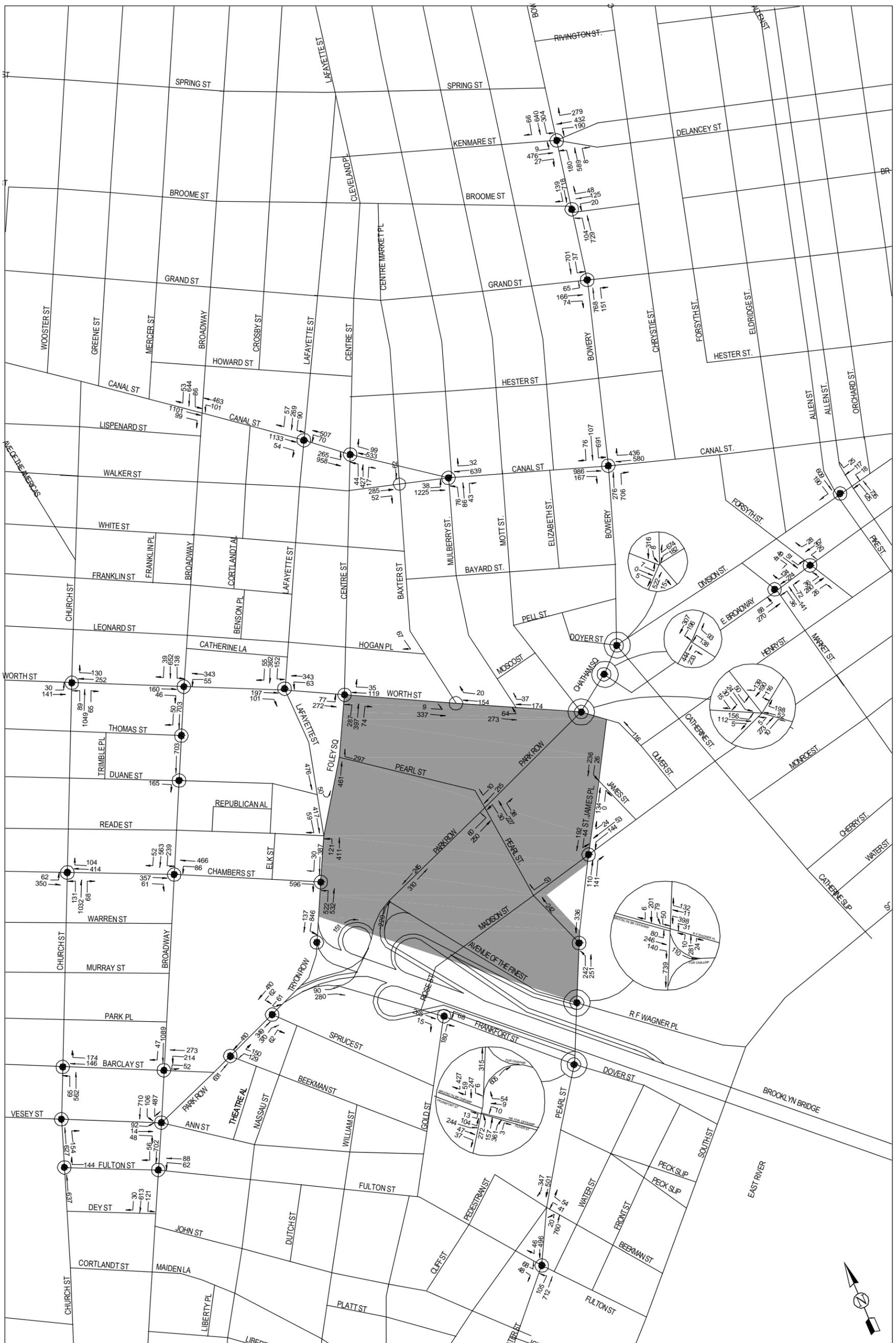
**Legend**

- Analyzed Intersections (Unsignalized)
- Analyzed Intersections (Signalized)

■ Security Zone



- Legend**
- Analyzed Intersections (Unsignalized)
  - Analyzed Intersections (Signalized)
  - Security Zone



**Legend**

- Analyzed Intersections (Unsignalized)
- Analyzed Intersections (Signalized)

■ Security Zone

Along the Bowery corridor, the intersection at Kenmare Street has congested movements in each peak hour, while at Canal Street and Broome Street, congested movements are noted in the AM and PM peak hours. The Grand Street and Division Street intersections have congestion in the AM and PM peak hours, respectively, while at Chatham Square, selected movements are congested in each peak hour analyzed.

Along the Broadway corridor, congestion is found at Canal during the AM peak hour, at Chambers Street in the AM and PM peak hours, while at Barclay Street congested movements are in AM and midday peak hours. In addition, congestion occurs at Vesey Street during the AM, midday, and PM peak hours

In addition to the above noted Canal Street intersection, the intersection of Canal Street with Lafayette Street exhibits one congested movement in the AM peak hour, during the midday period at the intersection with Centre Street, and during the PM peak hour at Mulberry Street. At the intersection of Centre Street and Chambers Street, congestion occurs during the MD and PM peak hours. Along Church Street, the intersections at Chambers Street and Worth Street have congested movements in the AM peak hour.

In the eastern portion of the study area, the East Broadway/Market Street intersection has one congested movement in the PM peak hour. Along Pearl Street, the intersection with Frankfort Street exhibits at least one congested movement in each peak hour, while at Robert F. Wagner Sr. Place, eastbound congestion is found in the AM and PM peak hours as noted in Table 7-4. Table 7-4 also shows that under No-Action conditions, the Worth Street/Centre Street intersection has northbound congestion in all peak hours, while one unsignalized intersection at Baxter Street/Walker Street exhibits PM congestion in the eastbound movement.

## **Parking**

### *Off-Street Parking*

The 400-space municipal parking lot that was located adjacent to Police Plaza was closed to the public in June 2001 and would continue to be closed to the public in the 2006 No-Action condition. As discussed in Chapter 1, "Project Description," in early 2001, an EAS was prepared for the *Public Safety Answering Center II* that was to be located in an existing building at 109-113 Park Row. This EAS analyzed the closure of the 400-space municipal garage to the public, and a negative declaration was issued June 12, 2001. The garage was then officially closed to the public on June 30, 2001. However, following the events of September 11, 2001, the above-mentioned project was cancelled and the building remains vacant. The municipal garage was reconstructed and re-opened to NYPD authorized vehicles in April of 2004. Table 7-5 shows the

**Table 7-4: 2006 No-Action Traffic Conditions at Signalized Intersections**

SIGNALIZED INTERSECTION	Lane Group	2006 No-Action AM Peak Hour				Lane Group	2006 No-Action Midday Peak Hour				Lane Group	2006 No-Action PM Peak Hour			
		V/C Ratio	Delay (sec/veh)	LOS	*		V/C Ratio	Delay (sec/veh)	LOS	*		V/C Ratio	Delay (sec/veh)	LOS	*
<b>Bowery Corridor</b>															
1) Bowery (N-S) @ Kenmare Street (E-W)	NB-DefL					NB-DefL	0.91	72.3	E	*	NB-DefL	1.03	102.4	F	*
	NB-TR					NB-TR	0.58	26.7	C		NB-TR	0.64	27.8	C	
	NB-LTR	0.94	42.9	D	*	NB-LTR					NB-LTR				
	SB-Def L	0.72	47.6	D		SB-Def L	0.86	48.7	D		SB-Def L	0.99	73.4	E	*
	SB-TR	0.89	38.4	D		SB-TR	0.95	47.5	D	*	SB-TR	0.55	17.6	B	
	EB-LTR	0.33	19.6	B		EB-LTR	0.49	22.0	C		EB-LTR	0.52	22.2	C	
	WB-L	1.03	91.5	F	*	WB-L	0.78	47.5	D		WB-L	0.89	60.9	E	*
	WB-TR	0.66	25.0	C		WB-TR	0.43	20.8	C		WB-TR	0.39	20.2	C	
	WB-R	1.00	81.1	F	*	WB-R	0.64	30.6	C		WB-R	0.84	45.1	D	
2) Bowery (N-S) @ Broome Street (E-W)	NB-LT	0.97	38.6	D	*	NB-LT	0.74	20.6	C		NB-LT	0.90	31.5	C	*
	SB-TR	0.60	16.0	B		SB-TR	0.61	16.4	B		SB-TR	0.68	17.7	B	
	WB-LTR	0.61	31.4	C		WB-LTR	0.51	29.0	C		WB-LTR	0.60	31.9	C	
3) Bowery (N-S) @ Grand Street (E-W)	NB-T	0.95	33.9	C	*	NB-T	0.51	14.3	B		NB-T	0.55	14.8	B	
	NB-R	0.99	72.4	E	*	NB-R	0.77	38.2	D		NB-R	0.62	24.6	C	
	SB-TL	0.51	14.4	B		SB-TL	0.50	14.2	B		SB-TL	0.58	15.5	B	
	EB-LTR	0.58	30.0	C		EB-LTR	0.79	41.9	D		EB-LTR	0.79	41.3	D	
4) Bowery (N-S) @ Canal Street (E-W) +	NB-T	0.62	33.9	C		NB-T	0.54	32.0	C		NB-T	0.39	29.3	C	
	SB-DefL	0.96	67.3	E	*	SB-DefL	0.73	35.7	D		SB-DefL	1.00	64.3	E	*
	SB-TR	0.71	29.5	C		SB-TR	0.70	30.0	C		SB-TR	0.40	20.7	C	
	EB-T	1.02	60.8	E	*	EB-T	0.70	26.2	C		EB-T	0.91	38.1	D	*
	EB-R	0.47	25.3	C		EB-R	0.67	29.3	C		EB-R	0.20	18.1	B	
	WB-T	0.94	41.2	D	*	WB-T	0.60	24.0	C		WB-T	0.44	20.7	C	
5) Bowery (N-S) @ Division Street (E-W)	NB-T	0.30	16.7	B		NB-T	0.34	17.1	B		NB-T	0.44	18.3	B	
	NB-R	0.02	14.2	B		NB-R	0.19	17.2	B		NB-R	0.07	15.0	B	
	SB-LT	0.32	17.0	B		SB-LT	0.38	17.6	B		SB-LT	0.31	16.8	B	
	EB-LTR	0.00	32.9	C		EB-LTR	0.06	33.8	C		EB-LTR	0.07	34.0	C	
	WB-T	0.53	36.1	D		WB-T	0.46	33.6	C		WB-T	0.57	36.6	D	
	WB-R	0.70	26.6	C		WB-R	0.57	22.4	C		WB-R	1.02	63.5	E	*
6) Chatham Square (N-S) @ East Broadway (E-W)	NB-T	0.20	8.1	A		NB-T	0.22	8.2	A		NB-T	0.23	8.2	A	
	NB-R	0.73	26.4	C		NB-R	0.69	22.9	C		NB-R	0.65	19.7	B	
	SB-L	0.69	24.6	C		SB-L	0.88	45.3	D		SB-L	0.66	21.7	C	
	SB-T	0.19	7.9	A		SB-T	0.18	7.9	A		SB-T	0.17	7.8	A	
	WB-L	0.58	35.1	D		WB-L	0.34	28.2	C		WB-L	0.32	27.6	C	
	WB-R	0.18	26.8	C		WB-R	0.35	30.8	C		WB-R	0.44	33.0	C	
7) Chatham Square (N-S) @ Worth Street (E-W)  Mott Street (E-W)	NB-TR	0.28	21.9	C		NB-TR	0.37	24.4	C		NB-TR	0.41	24.9	C	
	SB-L	1.00	95.1	F	*	SB-L	0.83	62.9	E	*	SB-L	0.75	53.9	D	
	SB-TR	0.93	63.8	E	*	SB-TR	0.98	77.1	E	*	SB-TR	0.96	68.8	E	*
	EB-DefL					EB-DefL	0.46	27.4	C		EB-DefL	0.55	31.1	C	
	EB-LTR	0.29	25.1	C		EB-LTR					EB-LTR				
	EB-TR					EB-TR	0.23	22.1	C		EB-TR	0.26	22.6	C	
	WB-LT	0.10	22.7	C		WB-LT	0.11	20.5	C		WB-LT	0.10	20.5	C	
	WB-R	0.60	35.8	D		WB-R	0.76	45.9	D		WB-R	0.66	35.7	D	
	EB-LTR	0.71	58.3	E	*	EB-LTR	0.87	78.6	E	*	EB-LTR	0.65	51.8	D	

**NOTES:**

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

L-Left, T-Through, R-Right, DfL-Analysis considers a Defacto Left Lane on this approach .

V/C Ratio - Volume to Capacity Ratio, SEC/VEH - Seconds per vehicle

LOS - Level of service

\* -Denotes Congested Location in the 2006 No-Action Condition

Analysis is based on the 2000 Highway Capacity Manual Methodology (HCS 2000 4.1f).

+ -Westbound right movement at Canal Street and Bowery is controlled by a separate signal as it is a channelized right turn

**Table 7-4: 2006 No-Action Traffic Conditions at Signalized Intersections**

SIGNALIZED INTERSECTION	Lane Group	2006 No-Action AM Peak Hour			Lane Group	2006 No-Action Midday Peak Hour			Lane Group	2006 No-Action PM Peak Hour				
		V/C Ratio	Delay (sec/veh)	LOS		V/C Ratio	Delay (sec/veh)	LOS		V/C Ratio	Delay (sec/veh)	LOS		
<b>Broadway Corridor</b>														
8) Broadway (N-S) @ Canal Street (E-W)	SB-LTR	0.94	41.8	D	*	SB-LTR	0.81	30.4	C	SB-LTR	0.63	26.3	C	
	EB-TR	0.88	34.4	C		EB-TR	0.72	27.4	C	EB-TR	0.88	33.9	C	
	WB-DefL					WB-DefL				WB-DefL	0.35	29.2	C	
	WB-LT WB-T	0.71 18.5	B		WB-LT WB-T	0.71 20.1	C		WB-LT WB-T	0.32 12.4	B			
9) Broadway (N-S) @ Worth Street (E-W)	SB-LTR	0.46	15.4	B		SB-LTR	0.53	12.8	B	SB-LTR	0.50	16.0	B	
	EB-TR	0.52	25.2	C		EB-TR	0.49	23.5	C	EB-TR	0.35	21.0	C	
	WB-L	0.40	25.3	C		WB-L	0.58	33.7	C	WB-L	0.25	21.1	C	
	WB-T	0.65	27.9	C		WB-T	0.30	20.3	C	WB-T	0.57	25.3	C	
10) Broadway (N-S) @ Thomas Street (E-W)	SB-T	0.66	17.6	B		SB-T	0.59	11.9	B	SB-T	0.49	14.4	B	
	SB-R	0.34	15.7	B		SB-R	0.12	7.9	A	SB-R	0.26	14.3	B	
11) Broadway (N-S) @ Duane Street (E-W)	SB-T	0.66	19.4	B		SB-T	0.59	14.1	B	SB-T	0.55	17.2	B	
	EB-R	0.45	24.5	C		EB-R	0.51	26.0	C	EB-R	0.36	21.7	C	
12) Broadway (N-S) @ Chambers Street (E-W)	SB-LT	1.01	59.0	E	*	SB-LT	0.81	21.0	C	SB-LT	0.80	26.0	C	
	SB-R	0.32	25.2	C		SB-R	0.17	14.3	B	SB-R	0.24	15.7	B	
	EB-TR	0.69	29.7	C		EB-TR	0.68	30.1	C	EB-TR	0.63	25.8	C	
	WB-LT	1.04	74.0	E	*	WB-LT	0.80	33.3	C	WB-LT	0.98	58.9	E	
13) Broadway (N-S) @ Barclay Street (E-W)	SB-T	0.82	29.1	C		SB-T	0.56	22.2	C	SB-T	0.71	25.4	C	
	SB-R	0.37	22.6	C		SB-R	0.18	18.8	B	SB-R	0.18	18.9	B	
	WB-L	0.99	99.9	F	*	WB-L	1.00	97.2	F	*	WB-L	0.72	53.2	D
	WB-LT	0.86	48.3	D		WB-LT	0.81	43.1	D		WB-LT	0.58	34.4	C
14) Broadway (N-S) @ Vesey Street (E-W)	SB-L	0.82	33.3	C		SB-L	0.72	23.8	C	SB-L	0.94	46.5	D	
	SB-T	0.61	20.7	C		SB-T	0.45	15.5	B	SB-T	0.42	17.7	B	
	EB-TR	1.00	93.6	F	*	EB-TR	1.02	102.8	F	*	EB-TR	0.65	50.5	D
15) Broadway (N-S) @ Fulton Street (E-W)	SB-TR	0.50	10.6	B		SB-TR	0.41	5.6	A	SB-TR	0.33	8.9	A	
	WB-LT	0.22	25.9	C		WB-LT	0.33	27.5	C	WB-LT	0.20	25.5	C	
<b>Canal Corridor</b>														
16) Lafayette Street (N-S) @ Canal Street (E-W)	SB-L	0.25	28.6	C		SB-L	0.35	31.3	C	SB-L	0.54	39.0	D	
	SB-T	0.73	40.4	D		SB-T	0.46	30.5	C	SB-T	0.70	39.0	D	
	SB-R	1.04	114.2	F	*	SB-R	0.48	36.8	D	SB-R	0.38	33.2	C	
	EB-TR	0.77	23.6	C		EB-TR	0.62	19.7	B	EB-TR	0.70	21.2	C	
	WB-LT	0.54	11.3	B		WB-LT	0.38	9.4	A	WB-LT	0.32	8.9	A	
17) Centre Street (N-S) @ Canal Street (E-W)	NB-LT	0.75	37.5	D		NB-LT	0.52	30.3	C	NB-LT	0.68	34.1	C	
	NB-R	0.21	27.7	C		NB-R	0.12	25.5	C	NB-R	0.09	25.0	C	
	EB-DefL	0.78	42.8	D		EB-DL				EB-DL	0.68	26.8	C	
	EB-T	0.61	12.5	B		EB-T	0.99	43.5	D	*	EB-T	0.59	12.1	B
	WB-TR	0.70	23.4	C		WB-TR	0.74	26.0	C		WB-TR	0.42	18.5	B
18) Mulberry Street (N-S) @ Canal Street (E-W)	NB-LTR	0.44	27.3	C		NB-LTR	0.49	28.5	C	NB-LTR	0.64	34.1	C	
	EB-LT	0.79	21.2	C		EB-LT	0.77	20.1	C	EB-LT	0.96	36.1	D	
	WB-TR	0.79	20.9	C		WB-TR	0.64	16.7	B	WB-TR	0.45	13.3	B	

**NOTES:**

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound  
L-Left, T-Through, R-Right, DfL-Analysis considers a Defacto Left Lane on this approach .

V/C Ratio - Volume to Capacity Ratio, SEC/VEH - Seconds per vehicle

LOS - Level of service

\* -Denotes Congested Location in the 2006 No-Action Condition

Analysis is based on the 2000 Highway Capacity Manual Methodology (HCS 2000 4.1f).

**Table 7-4: 2006 No-Action Traffic Conditions at Signalized Intersections**

SIGNALIZED INTERSECTION	Lane Group	2006 No-Action AM Peak Hour			Lane Group	2006 No-Action Midday Peak Hour			Lane Group	2006 No-Action PM Peak Hour		
		V/C Ratio	Delay (sec/veh)	LOS		V/C Ratio	Delay (sec/veh)	LOS		V/C Ratio	Delay (sec/veh)	LOS
<b>Centre Corridor</b>												
19) Centre Street (N-S) @ Chambers Street (E-W)	NB-L	0.88	33.7	C	NB-L	0.91	46.9	D *	NB-L	0.93	50.2	D *
	NB-LT	0.29	10.1	B	NB-LT	0.38	8.8	A	NB-LT	0.49	10.0	A
	SB-TR	0.28	25.5	C	SB-TR	0.40	27.2	C	SB-TR	0.54	29.6	C
	EB-RT	0.75	36.1	D	EB-RT	0.51	29.1	C	EB-RT	0.83	40.4	D
20) Centre Street (N-S) @ Tryon Row - Brooklyn Bridge (E-W)	SB-L	0.62	12.0	B	SB-L	0.53	10.6	B	SB-L	0.87	22.8	C
	SB-LT	0.08	6.1	A	SB-LT	0.16	6.7	A	SB-LT	0.15	6.6	A
<b>Church Corridor</b>												
21) Church Street (N-S) @ Fulton Street (E-W)	NB-T	0.59	17.3	B	NB-T	0.52	12.7	B	NB-T	0.33	13.9	B
	WB-R	0.46	28.4	C	WB-R	0.32	25.0	C	WB-R	0.34	25.2	C
22) Church Street (N-S) @ Vesey Street (E-W)	NB-T	0.46	13.1	B	NB-T	0.39	8.7	A	NB-T	0.28	11.3	B
	NB-R	0.87	43.6	D	NB-R	0.77	26.5	C	NB-R	0.36	13.9	B
23) Church Street (N-S) @ Barclay Street (E-W)	NB-LT	0.54	9.9	A	NB-LT	0.42	12.8	B	NB-LT	0.29	11.5	B
	WB-TR	0.34	24.5	C	WB-TR	0.36	23.0	C	WB-TR	0.28	22.0	C
24) Church Street (N-S) @ Chambers Street (E-W)	NB-LTR	0.77	24.8	C	NB-LTR	0.67	18.9	B	NB-LTR	0.76	24.3	C
	EB-LT	0.99	63.1	E *	EB-LT	0.76	31.5	C	EB-LT	0.73	28.4	C
	WB-TR	0.99	58.5	E *	WB-TR	0.68	25.1	C	WB-TR	0.73	27.0	C
25) Church Street (N-S) @ Worth Street (E-W)	NB-LTR	0.62	15.5	B	NB-LTR	0.63	11.3	B	NB-LTR	0.56	14.5	B
	EB-LT	0.29	22.5	C	EB-LT	0.28	22.3	C	EB-LT	0.19	21.1	C
	WB-TR	0.94	57.9	E *	WB-TR	0.51	27.7	C	WB-TR	0.79	38.1	D
<b>Division Corridor</b>												
26) Pike Street (N-S) @ Division Street (E-W)	NB-LT	0.48	12.7	B	NB-LT	0.34	11.0	B	NB-LT	0.55	13.7	B
	SB-T	0.29	10.5	B	SB-T	0.26	10.2	B	SB-T	0.28	10.4	B
	SB-R	0.53	17.2	B	SB-R	0.44	14.7	B	SB-R	0.48	15.4	B
	WB-LTR	0.23	23.9	C	WB-LTR	0.36	26.5	C	WB-LTR	0.46	28.5	C
<b>East Broadway Corridor</b>												
27) Forsyth Street (N-S) @ East Broadway (E-W)	SB-LR	0.53	33.5	C	SB-LR	0.44	30.0	C	SB-LR	0.41	29.2	C
	EB-LT	0.44	11.6	B	EB-LT	0.47	11.9	B	EB-LT	0.24	8.8	A
	WB-TR	0.28	9.2	A	WB-TR	0.23	8.7	A	WB-TR	0.32	9.5	A
28) Market Street (N-S) @ East Broadway (E-W)	NB-LTR	0.61	31.8	C	NB-LTR	0.68	35.8	D	NB-LTR	0.39	13.5	B
	EB-LT	0.53	16.2	B	EB-LT	0.28	11.6	B	EB-LT	0.65	30.6	C
	WB-TR	0.55	16.7	B	WB-TR	0.48	14.9	B	WB-TR	1.02	79.6	E *
<b>Frankfort Corridor</b>												
29) Gold Street (N-S) @ Frankfort Street (E-W)	NB-T	0.00	25.7	C	NB-T	0.00	25.7	C	NB-T	0.00	25.7	C
	NB-R	0.00	25.7	C	NB-R				NB-R			
	EB-TR	0.58	30.0	C	EB-TR	0.65	31.6	C	EB-TR	0.71	35.5	D
	WB-L	0.17	27.3	C	WB-L	0.30	29.3	C	WB-L	0.18	27.8	C
30) Park Row (N-S) @ Beekman Street (E-W)	NB-T	0.27	12.8	B	NB-T	0.26	12.7	B	NB-T	0.30	13.0	B
	SB-T	0.26	12.7	B	SB-T	0.21	12.2	B	SB-T	0.18	12.0	B
	WB-LR	0.57	26.8	C	WB-LR	0.61	27.5	C	WB-LR	0.55	25.9	C
31) Park Row (N-S) @ Spruce Street (E-W)	NB-TR	0.40	22.3	C	NB-TR	0.28	8.5	A	NB-TR	0.47	10.4	B
	SB-L	0.55	20.4	C	SB-L	0.18	0.8	A	SB-L	0.20	1.6	A
	SB-T	0.45	23.3	C	SB-T	0.28	8.6	A	SB-T	0.24	8.3	A

**NOTES:**

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**Table 7-4: 2006 No-Action Traffic Conditions at Signalized Intersections**

SIGNALIZED INTERSECTION	Lane Group	2006 No-Action AM Peak Hour			Lane Group	2006 No-Action Midday Peak Hour			Lane Group	2006 No-Action PM Peak Hour		
		V/C Ratio	Delay (sec/veh)	LOS		V/C Ratio	Delay (sec/veh)	LOS		V/C Ratio	Delay (sec/veh)	LOS
<b>Pearl Corridor</b>												
32) Pearl Street (N-S) @ Fulton Street (E-W)	NB-LT	0.72	22.5	C	NB-LT	0.77	24.2	C	NB-LT	0.89	32.0	C
	SB-T	0.43	16.1	B	SB-T	0.46	16.5	B	SB-T	0.67	21.4	C
	SB-R	0.13	12.8	B	SB-R	0.11	12.5	B	SB-R	0.07	11.8	B
	EB-LR	0.66	43.4	D	EB-LR	0.72	48.4	D	EB-LR	0.49	34.4	C
33) Pearl Street (N-S) @ Frankfort Street (E-W)	NB-DefL	0.62	14.2	B	NB-DefL	0.44	11.0	B	NB-DefL	0.97	62.4	E *
	NB-TR	0.46	11.0	B	NB-TR	0.35	9.8	A	NB-TR	0.52	12.3	B
	SB-LTR	0.92	69.7	E *	SB-LTR	0.89	59.1	E *	SB-LTR	0.55	12.3	B
	EB-L	0.80	54.1	D	EB-L	0.71	41.1	D	EB-L	0.92	67.3	E *
	EB-TR	0.85	52.3	D	EB-TR	0.11	24.0	C	EB-TR	0.79	50.7	D
WB-LTR				WB-LTR				WB-LTR	0.16	24.6	C	
34) Pearl Street (N-S) @ Robert F Wagner Sr. Place (E-W)	NB-LTR	0.63	24.0	C	NB-LTR	0.30	18.0	B	NB-LTR	0.30	17.9	B
	SB-TR	0.53	22.1	C	SB-TR	0.33	18.5	B	SB-TR	0.37	18.8	B
	EB-LTR	0.88	55.9	E *	EB-LTR	0.71	43.6	D	EB-LTR	1.04	88.7	F *
	WB-L	0.79	44.3	D	WB-L	0.74	43.1	D	WB-L	0.72	41.5	D
	WB-RT	0.12	31.1	C	WB-RT	0.05	30.2	C	WB-RT	0.04	30.0	C
	WB-R	0.31	16.2	B	WB-R	0.29	15.9	B	WB-R	0.48	38.2	D
35) Pearl Street (N-S) @ St. James Place (E-W)	NB-DefL	0.67	18.7	B	NB-DefL				NB-DefL	0.62	18.2	B
	NB-T	0.48	12.5	B	NB-T	0.37	10.1	B	NB-T	0.30	9.7	A
	NB-LT				NB-LT				NB-LT			
	SB-T	0.24	8.8	A	SB-T	0.19	8.4	A	SB-T	0.20	8.4	A
<b>St. James Corridor</b>												
36) St. James Place (N-S) @ Madison Street (E-W)	NB-TR	0.52	21.2	C	NB-TR	0.42	18.9	B	NB-TR	0.33	17.4	B
	SB-LT	0.55	22.2	C	SB-LT	0.50	21.0	C	SB-LT	0.43	19.5	B
	WB-L				WB-L				WB-L			
	WB-LTR	0.13	15.0	B	WB-LTR	0.09	14.6	B	WB-LTR	0.17	15.3	B
	WB-R				WB-R				WB-R			
<b>Worth Street Corridor</b>												
37) Centre Street (N-S) @ Worth Street (E-W)	NB-L	1.05	92.4	F *	NB-L	1.04	110.3	F *	NB-L	1.05	96.3	F *
	NB-TR	0.73	32.3	C	NB-TR	0.58	28.0	C	NB-TR	0.64	29.4	C
	EB-DefL				EB-DefL				EB-DefL			
	EB-T	0.23	10.7	B	EB-T	0.32	11.6	B	EB-T	0.28	11.1	B
	WB-TR	0.18	16.2	B	WB-TR	0.20	16.5	B	WB-TR	0.23	16.9	B
38) Lafayette Street (N-S) Worth Street (E-W)	SB-LTR	0.44	20.8	C	SB-LTR	0.40	20.4	C	SB-LTR	0.48	21.4	C
	EB-TR	0.23	20.5	C	EB-TR	0.47	23.7	C	EB-TR	0.35	21.7	C
	WB-L	0.16	14.0	B	WB-L	0.15	15.1	B	WB-L	0.19	14.9	B
	WB-T	0.65	22.1	C	WB-T	0.33	15.4	B	WB-T	0.51	18.4	B

**Table 7-4: 2006 No-Action Traffic Conditions at Unsignalized Intersections**

UNSIGNALIZED INTERSECTION	Lane Group	2006 No-Action AM Peak Hour			Lane Group	2006 No-Action Midday Peak Hour			Lane Group	2006 No-Action PM Peak Hour		
		V/C Ratio	Delay (sec/veh)	LOS		V/C Ratio	Delay (sec/veh)	LOS		V/C Ratio	Delay (sec/veh)	LOS
<b>Baxter Corridor</b>												
1) Baxter Street (N-S) @ Walker Street (E-W)	EB-TR	0.46	22.9	C	EB-TR	0.62	27.2	D	EB-TR	0.95	67.7	F *
2) Baxter Street (N-S) @ Worth Street (E-W)	EB-LT	0.01	7.6	A	EB-LT	0.00	7.5	A	EB-LT	0.01	7.6	A

**NOTES:**

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound  
 L-Left, T-Through, R-Right, DefL-Analysis considers a Defacto Left Lane on this approach .  
 V/C Ratio - Volume to Capacity Ratio, SEC/VEH - Seconds per vehicle  
 LOS - Level of service  
 \* -Denotes Congested Location in the 2006 No-Action Condition  
 Analysis is based on the 2000 Highway Capacity Manual Methodology (HCS 2000 4.1e).

2006 No-Action off-street parking facilities in the study area and their estimated weekday midday utilizations. It is assumed that the off-street parking facilities in the study area in the 2006 No-Action condition would be the same in the 2006 With-Action condition. Therefore, the parking survey of capacity and utilization conducted in 2006 with the street closures in place would be the same if the street closures were not in place. In 2006, as shown in the table, there are 37 facilities with an overall capacity of 4,409 spaces (see Figure 7-6 for off-street parking facilities). The overall midday utilization rate was observed at about 86% with about 596 spaces available.

All other off-street parking facilities within the study area would most likely not be affected in 2006 if the action was not in place.

#### *On-Street Parking*

As discussed above, in the 2006 No-Action condition streets that were closed as part of the 2001 security plan would be open to all vehicles. Based on available information, it is estimated that parking for approximately 70 vehicles existed along Park Row, Madison Street, Pearl Street, and other roadways now closed due to the security plan. Outside of the security zone, it is not expected that regulations or supply would be different in the 2006 No-Action or under With-Action conditions. Legal on-street parking spaces within the security zone would be available to all public vehicles in the 2006 No-Action condition. On-street parking conditions within the study area would most likely not be different in the 2006 No-Action condition from the 2006 With-Action condition. Legal on-street parking would continue to be very limited and illegal curbside parking and standing would continue to be prevalent throughout the study area.

## **D. 2006 WITH-ACTION CONDITION**

### **Vehicular Traffic**

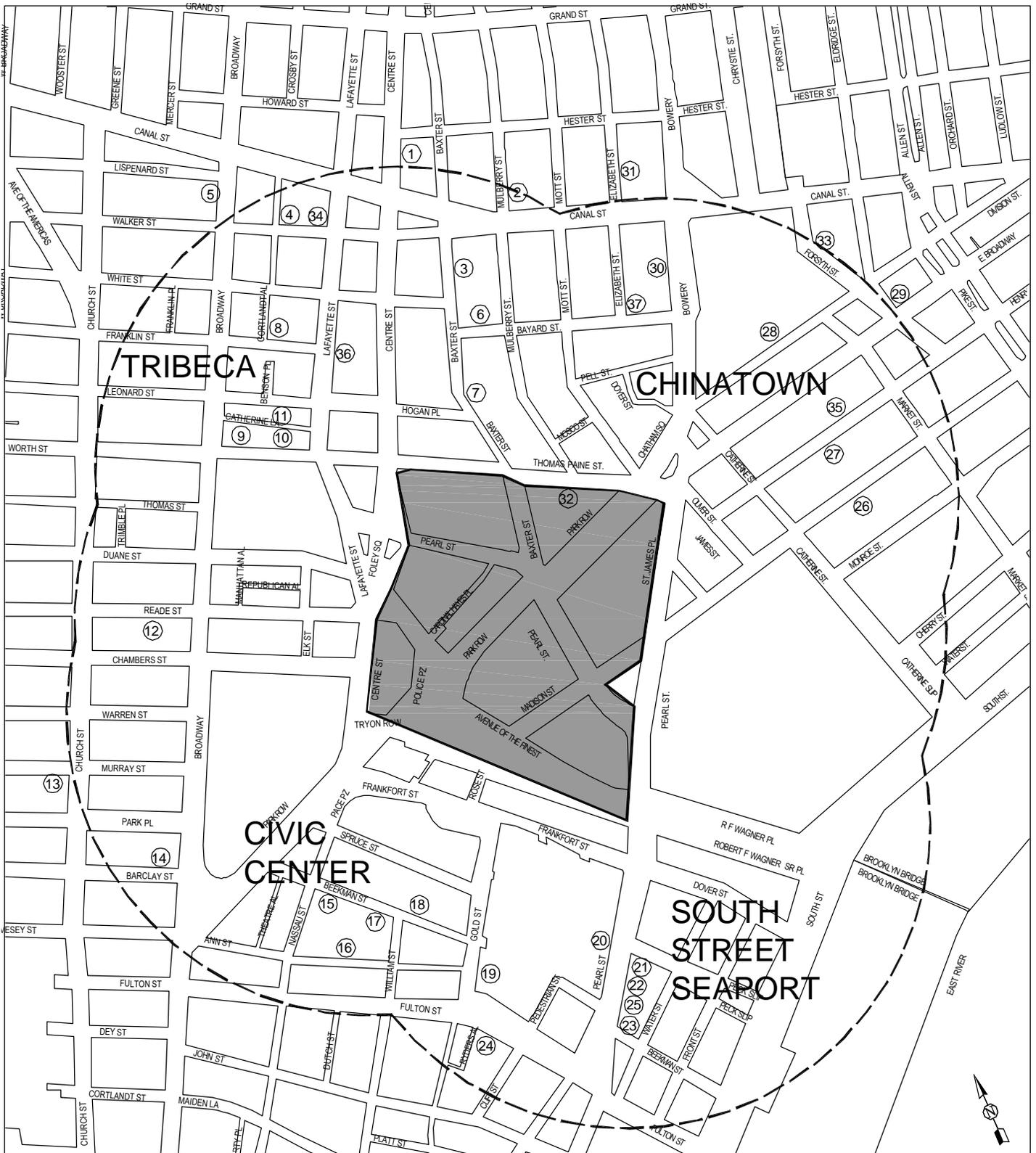
In conjunction with the May 2005 data collection effort, traffic volumes and other characteristics of the study area were documented. While action conditions are rarely measured in the field, for this action, the transportation effects of the security plan have been documented and are presented in this section. It should be noted that With-Action condition does not include any NYC Transit buses on Park Row. The return of permanent bus services to Park Row is addressed in Chapter 11, "Mitigation".

Figure 7-7 provides the 2006 With-Action condition traffic volumes in the study area for the AM, midday and PM peak hours. The resulting traffic capacity analysis of the 2006 With-Action conditions is presented in Table 7-6 along with a comparison with 2006 No-Action conditions.

**Table 7-5: 2006 No-Action Off-Street Parking Facilities within 1/4-mile of the Site and Weekday Utilization**

No.	Operator	Address	Capacity	MD (12-1) Util.	Spaces Avail.
1	Edison NY Parking LLC	174 Centre Street	93	100%	0
2	Kennee Parking Corp	114-116 Mulberry Street	42	93%	3
3	Chung Pak Parking Corp	95-97 1/2 Baxter Street	28	89%	3
4	Chinatown Parking Corp	88 Walker Street	40	100%	0
5	Champion Tribeca LLC	411-413 Broadway	60	70%	18
6	Margaret E Pescatore	98-100 Bayard Street	12	100%	0
7	Champion Mulberry LLC	62-64 Mulberry Street	191	90%	19
8	SSL Franklin St Parking Lot Inc	48-52 Franklin Street	40	100%	0
9	95 Worth LLC	336 Broadway/95 Worth St	114	95%	6
10	Central Parking System of NY	101 Worth Street	226	90%	23
11	Cobalt Car Park LLC	108 Leonard Street	143	95%	7
12	RAEM	93 Chambers Street	48	79%	10
13	Washington Street Corp	89-91 Murray Street	149	100%	0
14	BGB Parking System	6 Barclay Street	86	40%	52
15	25-27 Beekman Street Associates	25-27 Beekman Street	149	80%	30
16	John Street Parking	57-61 Ann Street	276	64%	100
17	Central Parking Systems Inc	169 William Street	52	100%	0
18	NYU Downtown Hospital	170 William Street	110	100%	0
19	Ropetmar Garage Inc	80 Gold Street	351	100%	0
20	Ropetmar Garage Inc	299 Pearl Street	310	92%	25
21	Allright Parking Management Corp	10-12 Peck Slip	105	77%	24
22	Edison Lafayette Corp	300-302 Pearl Street	25	76%	6
23	Edison Lafayette Corp	288-294 Pearl Street	36	78%	8
24	Downtown Parking Corp	56 Fulton Street	280	50%	140
25	Edison Lafayette Corp	228-232 Water Street	120	88%	14
26	(name unknown)	88 Madison Street	50	100%	0
27	(name unknown)	38 Henry Street	150	100%	0
28	(name unknown)	2 Division Street	300	90%	30
29	(name unknown)	79 Division Street	9	100%	0
30	(name unknown)	38 Bowery	140	90%	14
31	(name unknown)	44 Elizabeth Street	150	80%	30
32	Chatham Parking Systems Inc	180 Park Row	130	90%	13
33	(name unknown)	26 Forsyth Street	60	95%	3
34	(name unknown)	58 Walker Street	40	90%	4
35	(name unknown)	49-59 Henry Street	114	100%	0
36	Municipal Lot	Leonard St & Lafayette St	40	100%	0
37	Quick Park	2 Elizabeth Street	140	90%	14
<b>Total</b>			<b>4,409</b>	<b>86%</b>	<b>596</b>

Source: PHA Field Survey 2006 & 2007

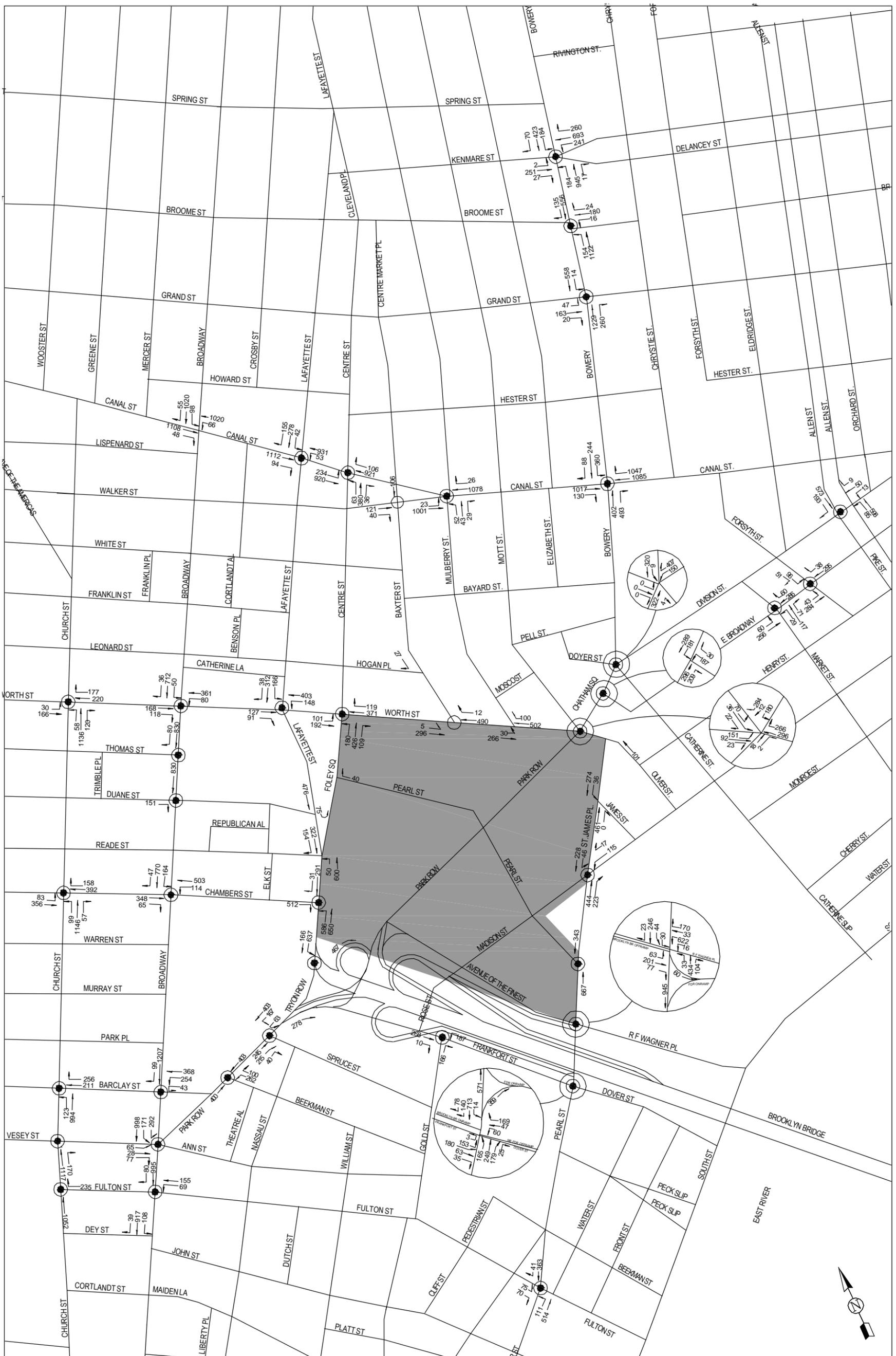


**Legend**

--- 1 / 4 Mile Boundary

① 2005 Off-Street Public Parking Facility

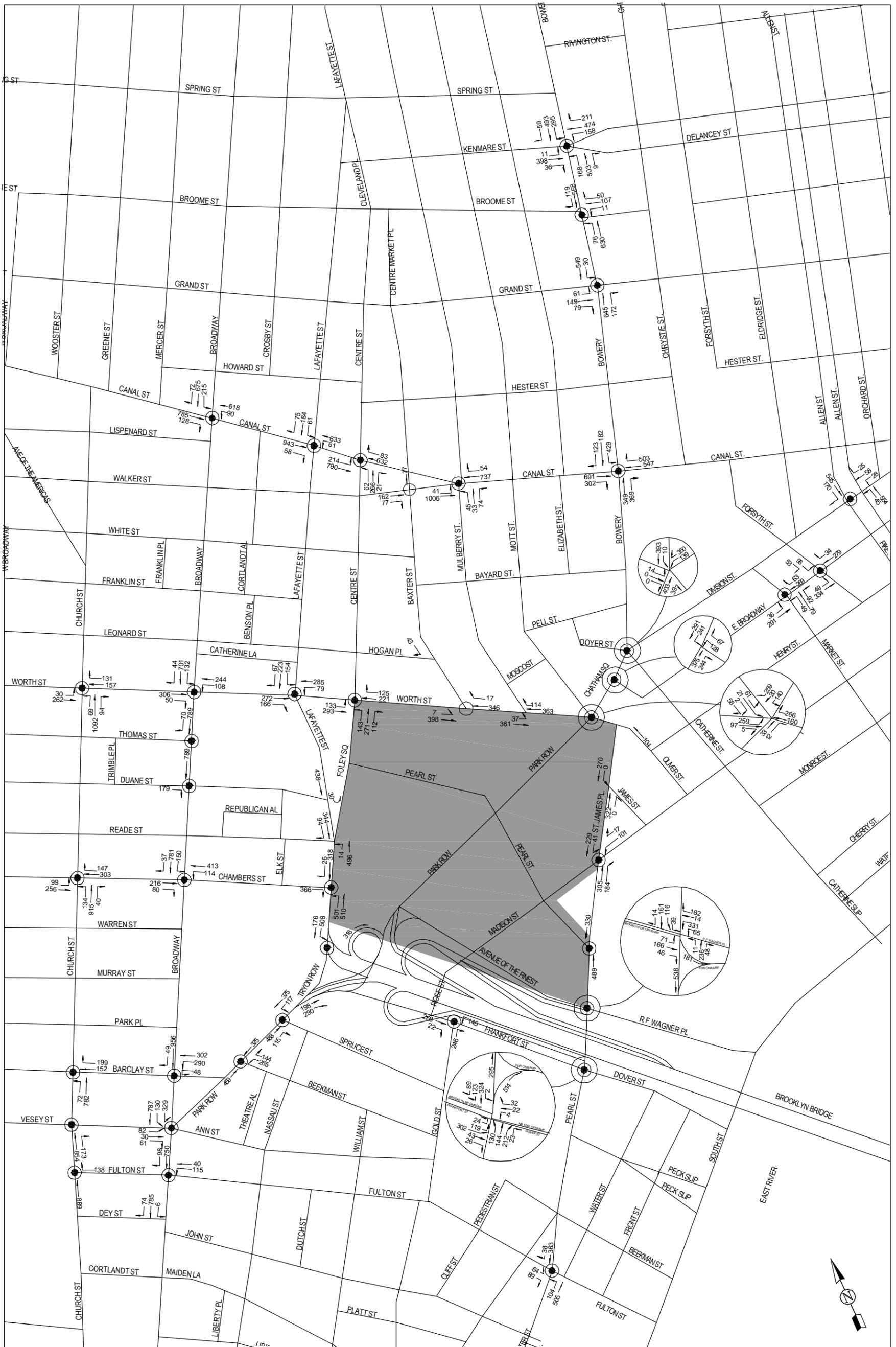
■ Security Zone



**Legend**

- Analyzed Intersections (Unsignalized)
- Analyzed Intersections (Signalized)

■ Security Zone



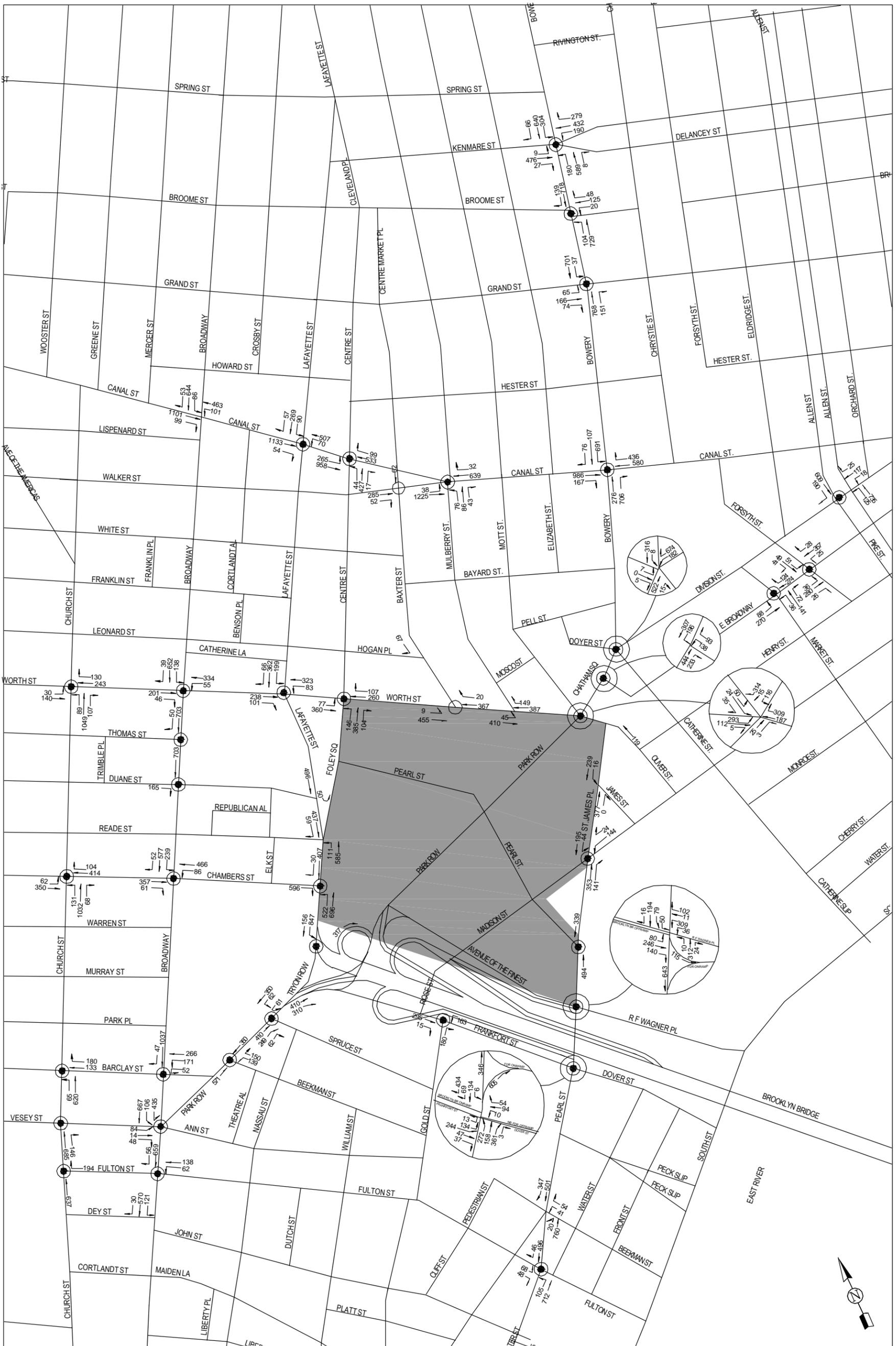
**Legend**

- Analyzed Intersections (Unsignalized)
- Analyzed Intersections (Signalized)
- Security Zone

**One Police Plaza Security Plan EIS**

**Figure 7-7b**

**2006 With-Action Traffic Volumes - MD Peak Hour**



**Legend**

- Analyzed Intersections (Unsignalized)
- Analyzed Intersections (Signalized)

█ Security Zone

Table 7-6: 2006 No-Action and With-Action Traffic Conditions at Signalized Intersections

SIGNALIZED INTERSECTION	Lane Group	2006 No-Action AM Peak Hour			2006 Action AM Peak Hour			2006 No-Action Midday Peak Hour			2006 Action Midday Peak Hour			2006 No-Action PM Peak Hour			2006 Action PM Peak Hour		
		V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
1) Boverly (N-S) @ Kenmare Street (E-W) Boverly Corridor	NB-De/L	0.94	42.9	D	0.94	42.9	D	0.91	72.3	E	0.91	72.3	E	1.03	102.4	F	1.03	102.4	F
	NB-TR	0.72	47.6	D	0.72	47.6	D	0.58	26.7	C	0.58	26.7	C	0.64	27.8	F	0.64	27.8	F
	NB-LTR	0.89	38.4	D	0.89	38.4	D	0.86	48.7	D	0.86	48.7	D	0.99	73.4	E	0.99	73.4	E
	SB-De/L	0.33	19.6	B	0.33	19.6	B	0.95	47.5	D	0.95	47.5	D	0.55	17.6	B	0.55	17.6	B
	SB-TR	1.03	91.5	F	1.03	91.5	F	0.49	22.0	C	0.49	22.0	C	0.52	22.2	C	0.52	22.2	C
	SB-LTR	0.66	25.0	C	0.66	25.0	C	0.78	47.5	D	0.78	47.5	D	0.89	60.9	E	0.89	60.9	E
	WB-L	1.00	81.1	F	1.00	81.1	F	0.43	20.8	C	0.43	20.8	C	0.39	20.2	C	0.39	20.2	C
	WB-TR	0.97	38.6	D	0.97	38.6	D	0.64	30.6	C	0.64	30.6	C	0.84	45.1	D	0.84	45.1	D
	WB-LTR	0.60	16.0	B	0.60	16.0	B	0.74	20.6	C	0.74	20.6	C	0.90	31.5	C	0.90	31.5	C
	WB-LTR	0.61	31.4	C	0.61	31.4	C	0.51	29.0	C	0.51	29.0	C	0.60	31.9	C	0.60	31.9	C
3) Boverly (N-S) @ Grand Street (E-W)	NB-T	0.95	33.9	C	0.95	33.9	C	0.51	14.3	B	0.51	14.3	B	0.55	14.8	B	0.55	14.8	B
	NB-R	0.99	72.4	E	0.99	72.4	E	0.77	38.2	D	0.77	38.2	D	0.62	24.6	C	0.62	24.6	C
	SB-TL	0.51	14.4	B	0.51	14.4	B	0.50	14.2	B	0.50	14.2	B	0.58	15.5	B	0.58	15.5	B
	SB-LTR	0.58	30.0	C	0.58	30.0	C	0.79	41.9	D	0.79	41.9	D	0.79	41.3	D	0.79	41.3	D
	NB-T	0.62	33.9	C	0.62	33.9	C	0.54	32.0	C	0.54	32.0	C	0.39	29.3	C	0.39	29.3	C
	SB-De/L	0.96	67.3	E	0.96	67.3	E	0.73	35.7	D	0.73	35.7	D	1.00	64.3	E	1.00	64.3	E
5) Boverly (N-S) @ Division Street (E-W)	SB-TR	0.71	29.5	C	0.71	29.5	C	0.70	30.0	C	0.70	30.0	C	0.40	20.7	C	0.40	20.7	C
	EB-T	1.02	60.8	E	1.02	60.8	E	0.70	26.2	C	0.70	26.2	C	0.91	38.1	D	0.91	38.1	D
	EB-R	0.47	25.3	C	0.47	25.3	C	0.67	29.3	C	0.67	29.3	C	0.20	18.1	B	0.20	18.1	B
	WB-T	0.94	41.2	D	0.94	41.2	D	0.60	24.0	C	0.60	24.0	C	0.44	20.7	C	0.44	20.7	C
	NB-T	0.30	16.7	B	0.30	16.7	B	0.34	17.1	B	0.34	17.1	B	0.44	18.3	B	0.44	18.3	B
	NB-R	0.02	14.2	B	0.02	14.2	B	0.19	17.2	B	0.19	17.2	B	0.07	15.0	B	0.07	15.0	B
	SB-LT	0.32	17.0	B	0.32	17.0	B	0.38	17.6	B	0.38	17.6	B	0.31	16.8	B	0.31	16.8	B
	EB-LTR	0.00	32.9	C	0.00	32.9	C	0.06	33.8	C	0.06	33.8	C	0.07	34.0	C	0.07	34.0	C
	WB-T	0.53	36.1	D	0.53	36.1	D	0.46	33.6	C	0.46	33.6	C	0.57	36.6	D	0.57	36.6	D
	WB-R	0.70	26.6	C	0.70	26.6	C	0.57	22.4	C	0.57	22.4	C	1.02	63.5	E	1.02	63.5	E
6) Chatham Square (N-S) @ East Broadway (E-W)	NB-T	0.20	8.1	A	0.20	8.1	A	0.22	8.2	A	0.22	8.2	A	0.23	8.2	A	0.23	8.2	A
	NB-R	0.73	26.4	C	0.73	26.4	C	0.69	22.9	C	0.69	22.9	C	0.65	19.7	B	0.65	19.7	B
	SB-L	0.69	24.6	C	0.69	24.6	C	0.88	45.3	D	0.88	45.3	D	0.66	21.7	C	0.66	21.7	C
	SB-T	0.19	7.9	A	0.19	7.9	A	0.18	7.9	A	0.18	7.9	A	0.17	7.8	A	0.17	7.8	A
	WB-L	0.58	35.1	D	0.58	35.1	D	0.34	28.2	C	0.34	28.2	C	0.32	27.6	C	0.32	27.6	C
	WB-R	0.18	26.8	C	0.18	26.8	C	0.35	30.8	C	0.35	30.8	C	0.44	33.0	C	0.44	33.0	C
	NB-T	0.28	21.9	C	0.03	20.3	C	0.37	24.4	C	0.07	20.7	C	0.41	24.9	C	0.04	20.4	C
	SB-L	1.00	95.1	F	0.89	66.4	E	0.83	62.9	E	0.70	43.4	D	0.75	53.9	D	0.57	35.5	D
	SB-TR	0.93	63.8	E	0.98	76.3	E	0.98	77.1	E	1.01	86.7	F	0.96	68.8	E	1.03	86.9	F
	EB-De/L	0.29	25.1	C	0.88	68.7	E	0.46	27.4	C	0.90	59.1	E	0.55	31.1	C	1.04	92.8	F
7) Chatham Square (N-S) @ Worth Street (E-W)	EB-LTR	0.10	22.7	C	0.29	23.1	C	0.23	22.1	C	0.23	22.1	C	0.26	22.6	C	0.26	22.6	C
	WB-LT	0.60	35.8	D	0.61	29.7	C	0.11	20.5	C	0.32	23.4	C	0.10	20.5	C	0.38	24.4	C
	WB-R	0.71	58.3	E	0.93	65.1	E	0.76	45.9	D	0.91	61.4	E	0.66	35.7	D	1.05	92.8	F
	EB-LTR	0.71	58.3	E	0.74	61.9	E	0.87	78.6	E	0.88	80.9	F	0.65	51.8	D	0.70	58.1	E

NOTES:  
 EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound  
 L-Left, T-Through, R-Right, DTL-Analysis considers a Defacto Left Lane on this approach .  
 V/C Ratio - Volume to Capacity Ratio, SEC/VEH - Seconds per vehicle  
 LOS - Level of service  
 \* -Denotes Congested Location in the 2006 No-Action Condition  
 \* -Denotes Impacted Location in the 2006 With-Action Condition  
 Analysis is based on the 2000 Highway Capacity Manual Methodology (HCS 2000 4.1f).  
 + -Westbound right movement at Canal Street and Boverly is controlled by a separate signal as it is a channelized right turn

Table 7-6: 2006 No-Action and With-Action Traffic Conditions at Signalized Intersections

SIGNALIZED INTERSECTION	Lane Group	2006 No-Action AM Peak Hour			2006 Action AM Peak Hour			2006 No-Action Midday Peak Hour			2006 Action Midday Peak Hour			2006 No-Action PM Peak Hour			2006 Action PM Peak Hour		
		V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
8) Broadway (N-S) @ Canal Street (E-W) Broadway Corridor	SB-LTR	0.94	41.8	D	0.94	41.8	D	0.81	30.4	C	0.81	30.4	C	0.63	26.3	C	0.63	26.3	C
	EB-TR	0.88	34.4	C	0.88	34.4	C	0.72	27.4	C	0.72	27.4	C	0.88	33.9	C	0.88	33.9	C
	WB-Defl													0.35	29.2	C	0.35	29.2	C
	WB-LT	0.71	18.5	B	0.71	18.5	B	0.71	20.1	C	0.71	20.1	C	0.32	12.4	B	0.32	12.4	B
	WB-T																		
9) Broadway (N-S) @ Worth Street (E-W)	SB-LTR	0.46	15.4	B	0.46	15.4	B	0.53	12.8	B	0.53	12.8	B	0.50	16.0	B	0.50	16.0	B
	EB-TR	0.52	25.2	C	0.61	27.6	C	0.49	23.5	C	0.60	26.3	C	0.35	21.0	C	0.41	22.0	C
	WB-L	0.40	25.3	C	0.44	27.4	C	0.58	33.7	C	0.66	41.3	D	0.25	21.1	C	0.26	21.7	C
	WB-T	0.65	27.9	C	0.64	27.6	C	0.30	20.3	C	0.43	22.4	C	0.57	25.3	C	0.56	25.0	C
10) Broadway (N-S) @ Thomas Street (E-W)	SB-T	0.66	17.6	B	0.66	17.6	B	0.59	11.9	B	0.59	11.9	B	0.49	14.4	B	0.49	14.4	B
	SB-R	0.34	15.7	B	0.34	15.7	B	0.12	7.9	A	0.12	7.9	A	0.26	14.3	B	0.26	14.3	B
11) Broadway (N-S) @ Duane Street (E-W)	SB-T	0.66	19.4	B	0.66	19.4	B	0.59	14.1	B	0.59	14.1	B	0.55	17.2	B	0.55	17.2	B
	EB-R	0.45	24.5	C	0.45	24.5	C	0.51	26.0	C	0.51	26.0	C	0.36	21.7	C	0.36	21.7	C
12) Broadway (N-S) @ Chambers Street (E-W)	SB-LT	1.01	59.0	E	1.01	59.0	E	0.81	21.0	C	0.81	21.0	C	0.80	26.0	C	0.81	26.5	C
	SB-R	0.32	25.2	C	0.32	25.2	C	0.17	14.3	B	0.17	14.3	B	0.24	15.7	B	0.24	15.7	B
	EB-TR	0.69	29.7	C	0.69	29.7	C	0.68	30.1	C	0.68	30.1	C	0.63	25.8	C	0.63	25.8	C
	WB-LT	1.04	74.0	E	1.04	74.0	E	0.80	33.3	C	0.80	33.3	C	0.98	58.9	E	0.98	58.9	E
13) Broadway (N-S) @ Barclay Street (E-W)	SB-T	0.82	29.1	C	0.82	29.1	C	0.56	22.2	C	0.56	22.2	C	0.71	25.4	C	0.68	24.6	C
	SB-R	0.37	22.6	C	0.37	22.6	C	0.18	18.8	B	0.18	18.8	B	0.18	18.9	B	0.18	18.9	B
	WB-L	0.99	99.9	F	0.94	87.3	F	1.00	97.2	F	0.97	92.1	F	0.72	53.2	D	0.58	42.9	D
	WB-LT	0.86	48.3	D	0.82	44.3	D	0.81	43.1	D	0.69	37.5	D	0.58	34.4	C	0.53	33.2	C
14) Broadway (N-S) @ Vessey Street (E-W)	SB-L	0.82	33.3	C	0.78	30.2	C	0.72	23.8	C	0.72	23.8	C	0.94	46.5	D	0.86	35.7	D
	SB-T	0.61	20.7	C	0.61	20.6	C	0.45	15.5	B	0.43	15.2	B	0.42	17.7	B	0.39	17.4	B
	EB-TR	1.00	93.6	F	0.84	69.6	E	1.02	102.8	F	0.78	61.0	E	0.65	50.5	D	0.62	49.4	D
15) Broadway (N-S) @ Fulton Street (E-W)	SB-TR	0.50	10.6	B	0.50	10.5	B	0.41	5.6	A	0.40	5.5	A	0.33	8.9	A	0.31	8.8	A
	WB-LT	0.22	25.9	C	0.36	27.7	C	0.33	27.5	C	0.33	27.5	C	0.20	25.5	C	0.27	26.2	C

NOTES:

- EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound
  - L-Left, T-Through, R-Right, DfL-Analysis considers a Defacto Left Lane on this approach.
  - V/C Ratio - Volume to Capacity Ratio, SEC/VEH - Seconds per vehicle
  - LOS - Level of service
  - \* -Denotes Congested Location in the 2006 No-Action Condition
  - -Denotes Impacted Location in the 2006 With-Action Condition
- Analysis is based on the 2000 Highway Capacity Manual Methodology (HCS 2000 4.1f).

Table 7-6: 2006 No-Action and With-Action Traffic Conditions at Signalized Intersections

SIGNALIZED INTERSECTION	Lane Group	2006 No-Action AM Peak Hour			2006 Action AM Peak Hour			2006 No-Action Midday Peak Hour			2006 Action Midday Peak Hour			2006 No-Action PM Peak Hour			2006 Action PM Peak Hour		
		V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
<b>Canal Corridor</b>																			
16) Lafayette Street (N-S) @ Canal Street (E-W)	SB-L	0.25	28.6	C	0.25	28.6	C	0.35	31.3	C	0.35	31.3	C	0.54	39.0	D	0.54	39.0	D
	SB-T	0.73	40.4	D	0.73	40.4	D	0.46	30.5	C	0.46	30.5	C	0.70	39.0	D	0.70	39.0	D
	SB-R	1.04	114.2	F *	1.04	114.2	F	0.48	36.8	D	0.48	36.8	D	0.38	33.2	C	0.38	33.2	C
	EB-TR	0.77	23.6	C	0.77	23.6	C	0.62	19.7	B	0.62	19.7	B	0.70	21.2	C	0.70	21.2	C
	WB-LT	0.54	11.3	B	0.54	11.3	B	0.38	9.4	A	0.38	9.4	A	0.32	8.9	A	0.32	8.9	A
17) Centre Street (N-S) @ Canal Street (E-W)	NB-LT	0.75	37.5	D	0.75	37.5	D	0.52	30.3	C	0.52	30.3	C	0.68	34.1	C	0.68	34.1	C
	NB-R	0.21	27.7	C	0.21	27.7	C	0.12	25.5	C	0.12	25.5	C	0.09	25.0	C	0.09	25.0	C
	EB-DL	0.78	42.8	D	0.78	42.8	D	0.99	43.5	D *	0.99	43.5	D	0.68	26.8	C	0.68	26.8	C
	EB-T	0.61	12.5	B	0.61	12.5	B	0.74	26.0	C	0.74	26.0	C	0.59	12.1	B	0.59	12.1	B
	WB-TR	0.70	23.4	C	0.70	23.4	C	0.49	28.5	C	0.49	28.5	C	0.42	18.5	B	0.42	18.5	B
18) Mulberry Street (N-S) @ Canal Street (E-W)	NB-LTR	0.44	27.3	C	0.44	27.3	C	0.49	28.5	C	0.49	28.5	C	0.84	34.1	C	0.84	34.1	C
	EB-LT	0.79	21.2	C	0.79	21.2	C	0.77	20.1	C	0.77	20.1	C	0.96	36.1	D *	0.96	36.1	D
	WB-TR	0.79	20.9	C	0.79	20.9	C	0.64	16.7	B	0.64	16.7	B	0.45	13.3	B	0.45	13.3	B
<b>Centre Corridor</b>																			
19) Centre Street (N-S) @ Chambers Street (E-W)	NB-L	0.88	33.7	C	0.88	33.7	C	0.91	46.9	D *	0.89	42.2	D	0.93	50.2	D *	0.91	47.9	D
	NB-LT	0.29	10.1	B	0.43	11.6	B	0.38	8.8	A	0.47	9.7	A	0.49	10.0	A	0.59	11.4	B
	SB-TR	0.28	25.5	C	0.39	27.0	C	0.40	27.2	C	0.44	27.8	C	0.54	29.6	C	0.57	30.1	C
	EB-RT	0.75	36.1	D	0.75	36.1	D	0.51	29.1	C	0.51	29.1	C	0.83	40.4	D	0.83	40.4	D
20) Centre Street (N-S) @ Tryon Row - Brooklyn Bridge (ESB-LT)	SB-L	0.62	12.0	B	0.62	12.0	B	0.53	10.6	B	0.53	10.6	B	0.87	22.8	C	0.87	22.8	C
		0.08	6.1	A	0.18	6.9	A	0.16	6.7	A	0.20	7.0	A	0.15	6.6	A	0.17	6.8	A
<b>Church Corridor</b>																			
21) Church Street (N-S) @ Fulton Street (E-W)	NB-T	0.59	17.3	B	0.59	17.3	B	0.52	12.7	B	0.48	12.2	B	0.33	13.9	B	0.33	13.9	B
	WB-R	0.46	28.4	C	0.66	35.0	C	0.32	25.0	C	0.32	25.0	C	0.34	25.2	C	0.45	27.4	C
22) Church Street (N-S) @ Vesey Street (E-W)	NB-T	0.46	13.1	B	0.54	14.2	B	0.39	8.7	A	0.39	8.7	A	0.28	11.3	B	0.30	11.5	B
	NB-R	0.87	43.6	D	0.56	20.2	C	0.77	26.5	C	0.34	9.7	A	0.36	13.9	B	0.34	13.6	B
23) Church Street (N-S) @ Barclay Street (E-W)	NB-LT	0.54	9.9	A	0.59	10.8	B	0.42	12.8	B	0.42	12.8	B	0.29	11.5	B	0.32	11.7	B
	WB-TR	0.34	24.5	C	0.48	24.8	C	0.36	23.0	C	0.31	22.4	C	0.28	22.0	C	0.28	22.0	C
24) Church Street (N-S) @ Chambers Street (E-W)	NB-LTR	0.77	24.8	C	0.85	27.8	C	0.67	18.9	B	0.67	18.9	B	0.76	24.3	C	0.76	24.3	C
	EB-LT	0.99	63.1	E *	0.99	63.1	E	0.76	31.5	C	0.76	31.5	C	0.73	28.4	C	0.73	28.4	C
	WB-TR	0.99	58.5	E *	0.99	58.5	E	0.68	25.1	C	0.68	25.1	C	0.73	27.0	C	0.73	27.0	C
25) Church Street (N-S) @ Worth Street (E-W)	NB-LTR	0.62	15.5	B	0.69	17.0	B	0.63	11.3	B	0.63	11.3	B	0.56	14.5	B	0.59	15.0	B
	EB-LT	0.29	22.5	C	0.29	22.5	C	0.28	22.3	C	0.37	23.5	C	0.19	21.1	C	0.18	21.1	C
	WB-TR	0.94	57.9	E *	0.93	56.7	E	0.51	27.7	C	0.67	33.0	C	0.79	38.1	D	0.77	37.2	D

NOTES:

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound  
 L-Left, T-Through, R-Right, DL-Analysis considers a Defacto Left Lane on this approach.

V/C Ratio - Volume to Capacity Ratio, SEC/VEH - Seconds per vehicle

LOS - Level of service

\* -Denotes Congested Location in the 2006 No-Action Condition

\* -Denotes Impacted Location in the 2006 With-Action Condition

Analysis is based on the 2000 Highway Capacity Manual Methodology (HCS 2000 4.1f).

Table 7-6: 2006 No-Action and With-Action Traffic Conditions at Signalized Intersections

SIGNALIZED INTERSECTION	Lane Group	2006 No-Action AM Peak Hour			2006 Action AM Peak Hour			2006 No-Action Midday Peak Hour			2006 Action Midday Peak Hour			2006 No-Action PM Peak Hour			2006 Action PM Peak Hour		
		V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
Division Corridor 26) Pike Street (N-S) @ Division Street (E-W)	NB-LT	0.48	12.7	B	0.48	12.7	B	0.34	11.0	B	0.34	11.0	B	0.55	13.7	B	0.55	13.7	B
	SB-T	0.29	10.5	B	0.29	10.5	B	0.26	10.2	B	0.26	10.2	B	0.28	10.4	B	0.28	10.4	B
	SB-R	0.53	17.2	B	0.53	17.2	B	0.44	14.7	B	0.44	14.7	B	0.48	15.4	B	0.48	15.4	B
	WB-LTR	0.23	23.9	C	0.23	23.9	C	0.36	26.5	C	0.36	26.5	C	0.46	28.5	C	0.46	28.5	C
East Broadway Corridor 27) Forsyth Street (N-S) @ East Broadway (E-W)	SB-LR	0.53	33.5	C	0.53	33.5	C	0.44	30.0	C	0.44	30.0	C	0.41	29.2	C	0.41	29.2	C
	EB-LT	0.44	11.6	B	0.44	11.6	B	0.47	11.9	B	0.47	11.9	B	0.24	8.8	A	0.45	11.7	B
	WB-TR	0.28	9.2	A	0.28	9.2	A	0.23	8.7	A	0.23	8.7	A	0.32	9.5	A	0.31	9.5	A
28) Market Street (N-S) @ East Broadway (E-W)	NB-LTR	0.61	31.8	C	0.61	31.8	C	0.68	35.8	D	0.68	35.8	D	0.39	13.5	B	0.39	13.5	B
	EB-LT	0.53	16.2	B	0.53	16.2	B	0.28	11.6	B	0.28	11.6	B	0.65	30.6	C	0.65	30.6	C
	WB-TR	0.55	16.7	B	0.55	16.7	B	0.48	14.9	B	0.48	14.9	B	1.02	79.6	E *	1.02	79.6	E *
Frankfort Corridor 29) Gold Street (N-S) @ Frankfort Street (E-W)	NB-T	0.00	25.7	C	0.00	25.7	C	0.00	25.7	C	0.00	25.7	C	0.00	25.7	C	0.00	25.7	C
	NB-R	0.00	25.7	C	0.00	25.7	C												
	EB-TR	0.58	30.0	C	0.71	35.2	D	0.65	31.6	C	0.65	31.6	C	0.71	35.5	D	0.79	40.4	D
	WB-L	0.17	27.3	C	0.25	28.2	C	0.30	29.3	C	0.31	29.4	C	0.18	27.8	C	0.41	31.4	C
30) Park Row (N-S) @ Beekman Street (E-W)	NB-T	0.27	12.8	B	0.22	12.4	B	0.26	12.7	B	0.22	12.4	B	0.30	13.0	B	0.27	12.8	B
	SB-T	0.26	12.7	B	0.20	12.2	B	0.21	12.2	B	0.16	11.9	B	0.18	12.0	B	0.15	11.8	B
	WB-LR	0.57	26.8	C	0.72	31.9	C	0.61	27.5	C	0.76	33.8	C	0.55	25.9	C	0.56	26.3	C
31) Park Row (N-S) @ Spruce Street (E-W)	NB-TR	0.40	22.3	C	0.24	8.2	A	0.28	8.5	A	0.28	8.5	A	0.47	10.4	B	0.43	10.1	B
	SB-L	0.55	19.7	B	0.39	2.2	A	0.18	0.8	A	0.18	0.8	A	0.20	1.6	A	0.20	1.4	A
	SB-T	0.45	23.3	C	0.26	8.5	A	0.28	8.6	A	0.22	8.2	A	0.24	8.3	A	0.21	8.1	A

NOTES:

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound  
 L-Left, T-Through, R-Right, DfL-Analysis considers a Defacio Left Lane on this approach.  
 V/C Ratio - Volume to Capacity Ratio, SEC/VEH - Seconds per vehicle  
 LOS - Level of service

\* -Denotes Congested Location in the 2006 No-Action Condition

\* -Denotes Impacted Location in the 2006 With-Action Condition

Analysis is based on the 2000 Highway Capacity Manual Methodology (HCS 2000 4.1f).

Table 7-6: 2006 No-Action and With-Action Traffic Conditions at Signalized Intersections

SIGNALIZED INTERSECTION	Lane Group	2006 No-Action AM Peak Hour			2006 Action AM Peak Hour			2006 No-Action Midday Peak Hour			2006 Action Midday Peak Hour			2006 No-Action PM Peak Hour			2006 Action PM Peak Hour		
		V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
Pearl Corridor	NB-LT SB-T SB-R EB-LR	0.72	22.5	C	0.77	24.7	C	0.77	24.2	C	0.69	21.1	C	0.89	32.0	C	0.87	30.6	C
		0.43	16.1	B	0.55	18.5	B	0.46	16.5	B	0.49	17.0	B	0.67	21.4	C	0.66	21.1	C
		0.13	12.8	B	0.14	13.0	B	0.11	12.5	B	0.11	12.5	B	0.07	11.8	B	0.07	11.7	B
		0.86	43.4	D	0.86	42.3	D	0.72	48.4	D	0.72	48.4	D	0.49	34.4	C	0.49	35.2	D
33) Pearl Street (N-S) @ Frankfort Street (E-W)	NB-Defl NB-TR NB-LTR SB-LTR EB-L EB-TR WB-LTR	0.83	44.9	D	0.83	44.9	D							0.97	62.4	E *	0.93	53.6	D
		0.60	14.6	B	0.60	14.6	B							0.52	12.3	B	0.52	12.3	B
		0.62	14.2	B	0.64	13.6	B	0.44	11.0	B	0.45	11.1	B	0.55	12.3	B	0.51	11.7	B
		0.46	11.0	B	0.99	83.8	F *	0.35	9.8	A	0.39	10.1	B	0.92	67.3	E *	0.99	84.1	F *
		0.92	69.7	E *	0.83	58.0	E	0.89	59.1	E *	0.96	72.0	E *	0.75	43.8	D	0.95	79.1	E *
		0.80	54.1	D	0.85	52.3	D	0.71	41.1	D	0.75	43.8	D	0.16	24.6	C	0.32	26.7	C
34) Pearl Street (N-S) @ Robert F. Wagner Sr. Place (E-W)	NB-LTR SB-TR EB-LTR WB-L WB-RT WB-R	0.63	24.0	C	0.70	26.0	C	0.30	18.0	B	0.33	18.4	B	0.30	17.9	B	0.32	18.2	B
		0.53	22.1	C	0.38	19.0	B	0.33	18.5	B	0.37	19.0	B	0.37	18.8	B	0.38	19.0	B
		0.88	55.9	E *	0.88	55.9	E	0.71	43.6	D	0.83	52.9	D	1.04	88.7	F *	1.04	88.7	F *
		0.79	44.3	D	1.05	86.1	F *	0.74	43.1	D	0.74	43.1	D	0.72	41.5	D	0.58	37.2	D
		0.12	31.1	C	0.12	31.1	C	0.05	30.2	C	0.05	30.2	C	0.04	30.0	C	0.04	30.0	C
		0.31	16.2	B	0.28	15.7	B	0.29	15.9	B	0.29	15.9	B	0.48	38.2	D	0.15	14.2	B
35) Pearl Street (N-S) @ St. James Place (E-W)	NB-Defl NB-T NB-LT SB-T	0.67	18.7	B	0.49	11.4	B				0.33	9.6	A	0.62	18.2	B	0.29	9.2	A
		0.48	12.5	B	0.23	8.7	A	0.37	10.1	B	0.22	8.6	A	0.30	9.7	A	0.20	8.4	A
		0.24	8.8	A				0.19	8.4	A				0.20	8.4	A			
St. James Corridor	NB-TR SB-LT WB-L WB-LTR WB-R	0.52	21.2	C	0.80	29.2	C	0.42	18.9	B	0.57	21.2	C	0.33	17.4	B	0.53	20.1	C
		0.55	22.2	C	0.57	23.2	C	0.50	21.0	C	0.51	21.4	C	0.43	19.5	B	0.45	20.0	B
		0.13	15.0	B	0.19	15.8	B	0.09	14.6	B	0.15	15.4	B	0.17	15.3	B	0.23	16.2	B
					0.04	14.3	B				0.04	14.4	B	0.06	14.6	B			
Worth Street Corridor	NB-L NB-TR EB-Defl EB-T WB-TR	1.05	92.4	F *	0.93	76.2	E	1.04	110.3	F *	0.98	97.7	F	1.05	96.3	F *	0.72	45.1	D
		0.73	32.3	C	0.75	33.4	C	0.58	28.0	C	0.53	27.0	C	0.64	29.4	C	0.70	31.5	C
		0.23	10.7	B	0.38	24.3	C	0.32	11.6	B	0.40	12.6	B	0.28	11.1	B	0.36	12.0	B
		0.18	16.2	B	0.27	11.4	B	0.20	16.5	B	0.60	23.7	C	0.23	16.9	B	0.58	22.9	C
38) Lafayette Street (N-S) @ Worth Street (E-W)	SB-LTR EB-TR WB-L WB-T	0.44	20.8	C	0.44	20.8	C	0.40	20.4	C	0.40	20.4	C	0.48	21.4	C	0.55	22.6	C
		0.23	20.5	C	0.29	21.1	C	0.47	23.7	C	0.54	24.9	C	0.35	21.7	C	0.38	22.2	C
		0.16	14.0	B	0.48	21.0	C	0.15	15.1	B	0.28	18.6	B	0.19	14.9	B	0.26	16.7	B
		0.65	22.1	C	0.64	21.9	C	0.33	15.4	B	0.45	17.3	B	0.51	18.4	B	0.48	17.8	B

NOTES:

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound  
L-Left, T-Through, R-Right, DL-Analysis considers a Defacto Left Lane on this approach .  
V/C Ratio - Volume to Capacity Ratio, SEC/VEH - Seconds per vehicle  
LOS - Level of service  
\* -Denotes Congested Location in the 2006 No-Action Condition  
- -Denotes Impacted Location in the 2006 With-Action Condition  
Analysis is based on the 2000 Highway Capacity Manual Methodology (HCS 2000 4.1).

Table 7-6: 2006 No-Action and With-Action Traffic Conditions at Unsignalized Intersections

UN SIGNALIZED INTERSECTION	2006 No-Action AM Peak Hour			2006 Action AM Peak Hour			2006 No-Action Midday Peak Hour			2006 Action Midday Peak Hour			2006 No-Action PM Peak Hour			2006 Action PM Peak Hour			
	Lane Group	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
Baxter Corridor 1) Baxter Street (N-S) @ Walker Street (E-W)	EB-TR	0.46	22.9	C	0.46	22.9	C	0.62	27.2	D	0.62	27.2	D	0.95	67.7	F *	0.95	67.7	F
	EB-LT	0.01	7.6	A	0.00	8.5	A	0.00	7.5	A	0.01	8.0	A	0.01	7.6	A	0.01	8.1	A
2) Baxter Street (N-S) @ Worth Street (E-W)	EB-LT																		

NOTES:

- EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound
- L-Left, T-Through, R-Right, DIL-Analysis considers a Defacto Left Lane on this approach .
- V/C Ratio - Volume to Capacity Ratio, SEC/VEH - Seconds per vehicle
- LOS - Level of service
- \* - Denotes Congested Location in the 2006 No-Action Condition
- - Denotes Impacted Location in the 2006 With-Action Condition

Analysis is based on the 2000 Highway Capacity Manual Methodology (HCS 2000 4.11).

### *Impact Analysis Methodology*

Based on the thresholds established for signalized intersections in the *CEQR Technical Manual*, if a No-Action LOS A, B or C deteriorates to unacceptable mid-LOS D, or a LOS E or F in the future action condition, then a significant traffic impact has occurred. The *CEQR Technical Manual* further states that for a No-Action LOS A, B or C, which declines to mid-LOS D (45 seconds) or worse under the With-Action condition, mitigation to mid-LOS D is required. For a No-Action mid-LOS D, an increase of five or more seconds of delay in a lane group in the With-Action condition should be considered significant. For No-Action LOS E, an increase in delay of four seconds of delay should be considered significant. For No-Action LOS F, three seconds of delay should be considered significant; however, if a No-Action LOS F condition already has delays in excess of 120 seconds, an increase of 1.0 second in delay should be considered significant, unless the action would generate fewer than five vehicles through that lane group in the peak hour. These impact criteria are also applicable to unsignalized intersections. However, for the minor street to trigger a significant impact, 90 passenger-car-equivalents must be identified in the With-Action condition in any peak hour.

Table 7-6 shows the AM, midday, and PM peak hour volume-to-capacity ratios, delays and levels of service at signalized and unsignalized study area intersections, respectively, in the 2006 With-Action condition. The tables also identify those locations that would be impacted based on the criteria discussed above. A summary of significantly impacted intersections is provided in Table 7-7.

### *Signalized Intersections*

As shown in Table 7-7, the AM, midday, and PM peak hours have three impacted intersections each. The following provides a discussion of the impacted locations by corridor. Measures to mitigate traffic impacts are presented in Chapter 11, “Mitigation.”

Pearl Street: At the intersection of Pearl Street and Frankfort Street, the eastbound left turn movement is impacted by the action in the AM, midday, and PM peak hours, operating at LOS F (83.8 seconds of delay), versus a No-Action LOS E (69.7 seconds of delay), operating at LOS E (72.0 seconds of delay), versus a No-Action LOS E (59.1 seconds), and operating at LOS F (84.1 seconds of delay), versus a No-Action LOS E (67.3 seconds of delay), respectively. The eastbound thru-right approach at this intersection would also be impacted in the PM peak hour operating at LOS E (79.1 seconds of delay), versus a No-Action LOS D (50.7 seconds of delay), respectively.

At Pearl Street and Robert F. Wagner Place, the westbound left turn movement would be impacted in the AM peak hour, operating at LOS F (86.1 seconds of delay), versus a No-Action

LOS D (44.3 seconds of delay). The eastbound approach at this intersection would also be impacted in the midday peak hour, operating at LOS D (52.9 seconds of delay), versus a No-Action LOS D (43.6 seconds of delay).

**TABLE 7-7**  
**Summary of Impacted Intersections**

Signalized Intersections	AM	MD	PM
Pearl Street @ Frankfort Street	X	X	X
	X	X	
Chatham Square @ Worth Street	X	X	X
			X
X impacts to one or more movements in the peak hour.			

Chatham Square: At the intersection of Chatham Square and Worth Street, the Bowery southbound thru-right approach would be impacted in all three peak hours, deteriorating to LOS E (76.3 seconds of delay) in the AM, LOS F (86.7 seconds of delay) in the midday, and LOS F (86.9 seconds of delay) in the PM. The eastbound Worth Street left turn movement at this intersection would also be impacted in all three peak hours, deteriorating to LOS E (68.7 seconds of delay) in the AM, LOS E (59.1 seconds of delay) in midday, and LOS F (92.8 seconds of delay) in the PM. The westbound St. James Place right turn movement would also be impacted at this intersection in all three peak hours, deteriorating to LOS E (65.1 seconds of delay) in the AM, LOS E (61.4 seconds of delay) in the midday, and LOS F (92.8 seconds of delay) in the PM.

At Chatham Square at Mott Street, the Mott Street approach would also be impacted in the PM peak hour operating at LOS E (58.1 seconds of delay), versus a No-Action LOS D (51.8 seconds of delay).

*Unsignalized Intersections*

As shown in Table 7-6, neither of the two unsignalized intersections analyzed as part of this study would be impacted by project diverted traffic in any peak hour.

Chapter 11, “Mitigation,” provides a detailed assessment of mitigation options for these impacted intersections.

## **Traffic Simulation**

Traffic modeling was performed within the vicinity of the security zone (Worth Street, Broadway, Centre Street, Pearl Street, St. James Street, and Frankfort Street) with Synchro Version 6.0 to identify traffic patterns in the No-Action and With-Action conditions. The traffic model is a computer based tool by which the flow of traffic is modeled and simulated. The modeling and simulation were performed to determine the points of congestion in the current road network and to propose solutions to improve the traffic flow by providing alternative use of the existing road networks and modification of signal timing and road lane geometry.

A traffic model was created to show traffic flow conditions in the No-Action condition and in the With-Action condition. The simulation of the No-Action and With-Action traffic flow conditions provides a visual representation of how the street closures have affected congestion and traffic queuing in the vicinity of the security zone in the AM, midday, and PM peak hours. The traffic simulation showed heavy congestion and long traffic queues at the impacted intersections listed in Table 7-7 above. Traffic simulation and modeling was also utilized in testing the feasibility of different mitigation measures to alleviate the significant adverse impacts created by the action. These mitigation measures are described in detail in Chapter 11, “Mitigation.”

## **Parking**

### *Off-Street Parking*

An inventory of current parking conditions was conducted in 2006 for all off-street public parking facilities within a quarter-mile radius of the security zone. As discussed above under “2006 No-Action Condition,” it is assumed that off-street parking facilities in the 2006 No-Action condition would not be different from the 2006 With-Action condition as the security plan has not resulted in changes to off-street public parking facilities.

As shown in Table 7-5 above, there are 37 off-street parking facilities within a quarter-mile radius of the security zone containing 4,409 spaces (see Figure 7-6 for 2006 off-street parking locations). The surveyed occupancy of these spaces at midday was approximately 86 percent, with 596 available spaces. Table 7-8 indicates that since the 400-space municipal garage was closed in 2001, the number of off-street public parking spaces has decreased to 4,409 versus 4,711 under baseline conditions, as shown in Table 7-3.

**Table 7-8: Baseline vs. With-Action Off-Street Parking Capacity and Utilization**

	Capacity	Utilization	Available Spaces
<b>Baseline Condition</b>	4,711	88%	566
<b>With-Action Condition</b>	<u>4,409</u>	86%	<u>596</u>

As the security plan neither creates demand for public parking nor eliminates any of the off-street public parking supply, no significant adverse impacts in off-street parking have occurred as a result of the implementation of the security plan.

#### *On-Street Parking*

As with the baseline and No-Action conditions, legal on-street parking is very limited within the study area in the 2006 With-Action condition. Curbside regulations vary greatly, and most blockfronts have more than one regulation in effect. Most of the regulations change at different times of the day and night and are different on weekdays and weekends. Curbside parking regulations within the study area were surveyed in January 2006 and are shown in Figure 7-8. Within the security zone, on-street parking is permitted for authorized vehicles only, with the exception of Park Row where no on-street parking is permitted for any vehicles.

As shown in Figure 7-8, street regulations in the historic Chinatown core tend to be highly restrictive. During the daytime, many areas are limited to standing only by trucks loading and unloading. Narrow streets often have no standing anytime on one side, and busy streets often restrict any standing during peak traffic periods. Where parking is permitted, it is generally metered, limited to one or two hours. The blocks in the vicinity of government facilities limit parking to authorized police or court officer vehicles only. In this area, residential parking competes with parking by shoppers and diners, freight unloading at stores, and vendors' vehicles parked on various streets. Due to the high number of visitors driving to this area, this section of the study area has the most intense parking demand, and is also busy on weeknights and weekends. This competition for public parking spaces in the area is exacerbated by the demand for parking by police and court officers, who have special parking privileges.

Field surveys of weekday utilization of on-street parking capacity were conducted in January 2006. The surveys focused on the weekday midday period, and included all legal curbside spaces within a quarter-mile of the security zone area. In order to take a closer look at on-street parking, the area within a quarter-mile of the security zone was divided into four zones, as shown in Figure 7-9. As seen in Table 7-9, during the weekday midday period the number of legal curbside public parking spaces within the total study area totals approximately 426. Utilization



**Legend**

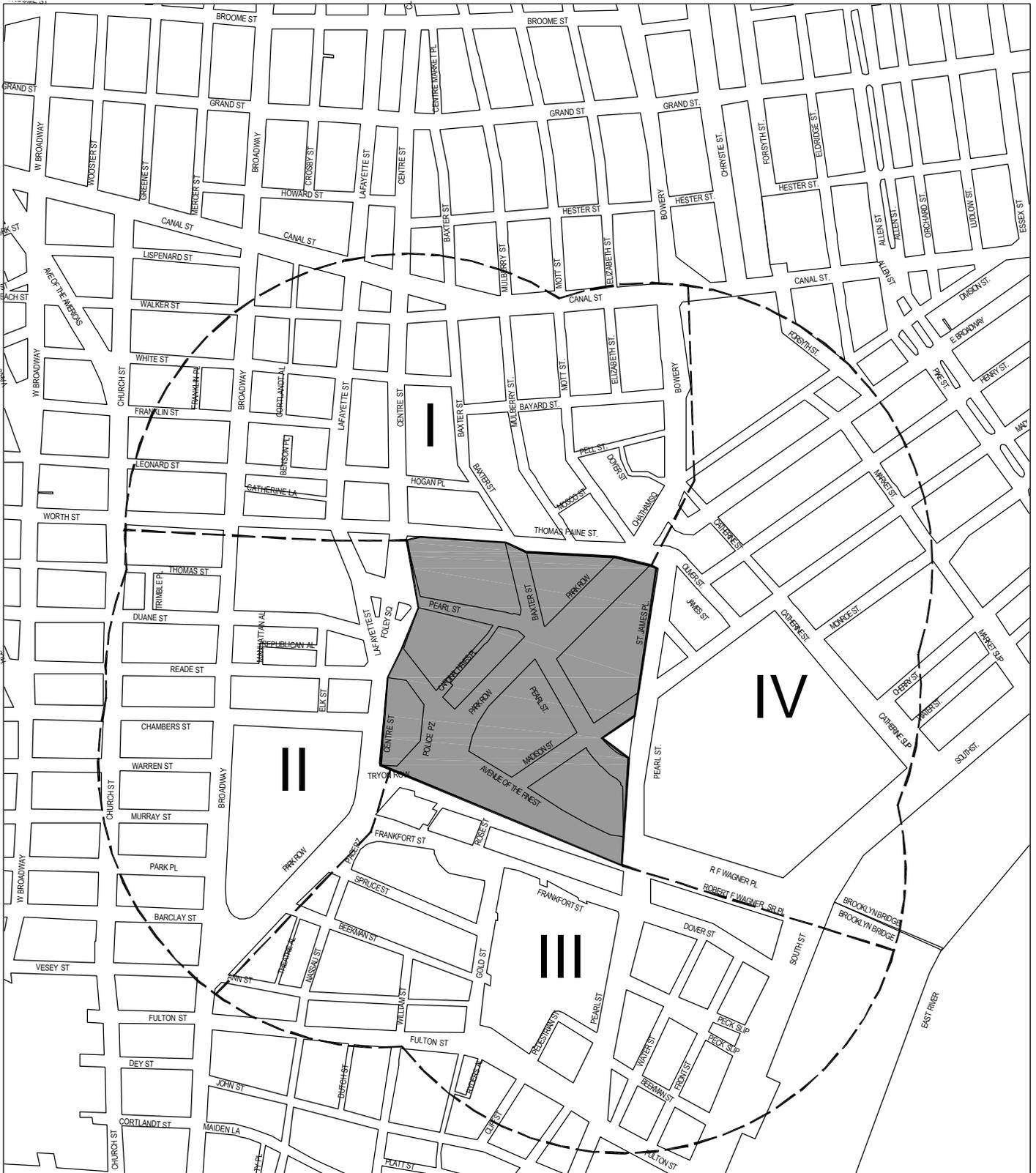
① Parking Restriction

----- Traffic Study Area

█ Security Zone

## On-Street Parking Regulations

- ① No Parking Anytime
- ② No Standing Anytime
- ③ 2 Hour Parking 9am-7pm Mon-Fri
- ④ No Parking 3am - 6am Tues, Thurs, Sat
- ⑤ No Parking 3am - 6am Mon, Wed, Fri
- ⑥ No Standing 8am - 6pm Mon-Fri  
Except Trucks Unloading & Loading
- ⑦ No Parking Midnight - 3am Tues, Thurs, Sat
- ⑧ No Parking Midnight - 3am Mon, Wed, Fri
- ⑨ No Standing Anytime Except  
Trucks Unloading & Loading
- ⑩ 1 Hour Parking 9am-7pm Mon-Fri
- ⑪ No Parking 7:30am - 8am Except Sunday
- ⑫ No Standing 7am - 10am Mon-Fri
- ⑬ 1 Hour Parking 10am-7pm Mon-Fri
- ⑭ No Standing 7am - 7pm Mon-Fri
- ⑮ No Parking 8:30am - 9am Except Sunday
- ⑯ No Parking 8am - 6pm Mon-Fri
- ⑰ No Standing 7am - 10am & 4pm - 7pm No  
Standing All Other Times Except Trucks  
Unloading & Loading Mon-Fri
- ⑱ 1 Hour Parking 10am-4pm Mon-Fri
- ⑲ No Parking 8am - 9:30am Tues & Fri
- ⑳ No Standing 4pm - 7pm Mon - Fri
- ㉑ No Standing 7am - 7pm Mon - Fri  
Except Trucks Loading & Unloading
- ㉒ No Parking 7am - 4pm School Days
- ㉓ No Standing 7am - 4pm Mon - Fri  
Except Trucks Loading & Unloading
- ㉔ No Parking 7am - 10am Except Sunday
- ㉕ No Standing Anytime Except Authorized Vehicles
- ㉖ No Standing 7am - 10am Except Sunday
- ㉗ No Standing 10am - 7pm  
Except Trucks Unloading & Loading
- ㉘ No Parking 8am - 8:30am Except Sunday
- ㉙ No Standing 7am - 7pm Except Authorized Vehicles
- ㉚ No Standing Hotel Loading Zone
- ㉛ No Standing 7am - 7pm
- ㉜ No Standing 7am - 7pm Except Trucks Loading & Unloading
- ㉝ No Standing 7am - 7pm Except Authorized Vehicles
- ㉞ No Standing 7am - 10am & 4pm - 7pm No Standing All Other  
Times Except Trucks Unloading & Loading Mon-Fri
- ㉟ 1 Hour Parking 10am-4pm Mon-Fri 9am - 7pm Sat & Sun
- ㊱ No Parking 2am - 6am Mon & Thurs
- ㊲ No Standing 7am - 10am & 3pm - 7pm No Standing  
10am - 3pm Except Trucks Loading & Unloading Mon-Fri
- ㊳ No Parking 2am - 6am Tues & Fri
- ㊴ No Standing 8am - 6pm Except Trucks Loading & Unloading
- ㊵ No Parking 11am - 12:30pm Tues & Fri
- ㊶ 1 Hour Parking 8am - 7pm Including Sunday
- ㊷ No Parking 8am - 6pm Mon-Fri
- ㊸ No Standing 7am - 3pm Except Trucks  
Loading & Unloading No Standing 3pm - 7pm Mon-Fri
- ㊹ No Standing 4pm - 7pm No Standing 7am - 4pm Anytime  
Except Trucks Loading & Unloading Mon-Fri
- ㊺ No Parking 7:30am - 8am Except Sunday
- ㊻ No Standing 7am - 10am & 4pm - 7pm  
No Standing 10am - 4pm  
Except Truck Loading & Unloading
- ㊼ No Standing 7am - 11am & 2pm  
No Standing 7am - 11am & 2pm -7pm  
Except Truck Loading & Unloading Mon-Fri
- ㊽ No Standing 1pm - 7pm No Standing All Other Times
- ㊾ No Parking 8am - 8:30am Mon-Fri
- ㊿ 2 Hour Parking 8:30am - 7pm Mon-Fri
- ① No Parking 11am - 12:30pm Tues & Fri
- ② No Parking 11am - 12:30pm Mon & Thurs
- ③ No Stopping Anytime
- ④ No Standing 4pm - 7pm Except Sunday &  
No Standing 7am - 4pm Except Truck  
Loading & Unloading except Sunday
- ⑤ No Parking 7am - 4pm Except Sunday  
No Standing 4pm - 7pm Except Sunday
- ⑥ No Parking 7am - 7pm Except Sunday
- ⑦ No Parking 11am - 12:30pm Mon & Thurs



**Legend**

--- On-Street Parking Zone Boundary  
 IV Zone Number

█ Security Zone

during this period was found to be essentially at capacity (approximately 96 percent), with an average of approximately 15 spaces available in the overall study area.

**Table 7-9: Legal On-Street Parking Capacity and Utilization**

	Public			Authorized Vehicles		
	Capacity	Utilization	Available Spaces	Capacity	Utilization	Available Spaces
<b>Zone 1</b>	117	96%	5	447	96%	19
<b>Zone 2</b>	0	n/a	n/a	280	96%	11
<b>Zone 3</b>	20	100%	0	75	81%	14
<b>Zone 4</b>	289	97%	10	144	97%	4
<b>Total - Study Area</b>	<b>426</b>	<b>96%</b>	<b>15</b>	<b>946</b>	<b>95%</b>	<b>48</b>

The study area contains a number of government facilities and much of the on-street parking in the area is designated for government officials and employees. The field surveys indicated that there are approximately 946 on-street parking spaces available for official vehicles only in the total study area. As shown in Table 7-9, during the weekday midday period, utilization of these curbside parking spaces was found to be approximately 95 percent, with an average of approximately 48 spaces available for official vehicles only. It should be noted that the number of available spaces fluctuates somewhat by time of day and day of week, depending on the prevailing parking regulations. The capacities quoted here are typical for the time periods examined.

As seen in Table 7-9, Zone I contained approximately 117 spaces for the general public and 447 spaces reserved for authorized government vehicles. In Zone II, there were no parking spaces designated for the general public and approximately 280 spaces for authorized vehicles. In terms of legal parking spaces for Zone III, 20 spaces were available to the public while 75 were reserved for authorized vehicles. In Zone IV there were approximately 289 spaces for the general public and 144 for authorized vehicles.

Field observations also indicate that illegal curbside parking is prevalent within the study area. The illegal parking by passenger cars generally involved fire hydrant spaces, parking in truck loading zones and bus stops, and in areas designated as no standing or no parking. Many of these vehicles are the private vehicles of government employees with a placard displayed in the

windshield of the cars. Illegal parking among the four zones can be seen in Table 7-10. During the field survey, it was observed that approximately 1,012 vehicles with City placards and 205 non-City employee vehicles were parked illegally during the typical weekday midday period within the study area. These are in addition to those listed in Table 7-10.

In Zone I, there were 568 illegally parked vehicles with 454 of them belonging to city employees. Zone II contained approximately 202 vehicles parked illegally, of which 156 were official vehicles. The zone south of the security area, Zone III, was observed to have approximately 239 vehicles illegally parked with 213 belonging to city employees. With regards to Zone IV, approximately 208 vehicles were parked illegally. Of these vehicles, 189 belonged to city employees and displayed placards.

**Table 7-10: Illegal On-Street Parking**

Zone	I	II	III	IV	Total
<b>Total of Illegally Parked Vehicles</b>	568	202	239	208	<b>1,217</b>
<b>Number of Illegally Parked Vehicles Displaying City Placards</b>	454	156	213	189	<b>1,012</b>

In addition to the authorized vehicles parking in the four zones, there are a substantial number of such vehicles (primarily NYPD employee vehicles) parking in the security zone area. There is parking along the streets, ramps, and other areas (except along Park Row) within the security zone since the streets were closed to unauthorized vehicles.

As demonstrated in Tables 7-9 and 7-10, there are about 616 private vehicles and 1,910 authorized vehicles (or City-employee owned) parked curbside (both legally and illegally) within the quarter mile study area boundary. In addition, approximately 135 vehicles park on the street within the security zone. While the implementation of the security plan resulted in the loss of on-street parking spaces within the security zone, which were formerly available to the public, this loss is substantially less than the number of on-street spaces created for authorized vehicles only along closed streets and ramps. Under No-Action conditions, most of these authorized vehicles would be displaced outside of the security zone, further exacerbating the private/public imbalance in curbside parking capacity. Consequently, while there is substantial competition for curbside space outside of the security zone, the action has not been the cause of this condition and, therefore, there would be no significant on-street parking impacts.

## **E. CONCLUSION**

This chapter analyzes the effects of the diverted traffic that has resulted from the implementation of the security plan on the Lower Manhattan street network during the weekday AM, midday, and PM peak hours. The results of the analyses show that diverted traffic has created significant traffic impacts (see Table 7-7). Chapter 11, “Mitigation,” of this EIS provides a description of measures to be developed to mitigate the traffic impacts identified in this chapter.

While parking conditions, both off-street and on-street remain very competitive and the availability of curbside parking for shoppers and others is very limited, these conditions did not result from the With-Action condition. In addition, as the security plan neither creates demand for public parking nor eliminates any off-street public parking supply. Consequently, no significant adverse impacts on parking have occurred as a result of the implementation of the security plan.