



Central Park

Prospect Park

Closure of Park Drives in Off-Peak Direction

Final Report

February 2007



City of New York
Michael R. Bloomberg, Mayor



New York City
Department of Transportation
Iris Weinshall, Commissioner

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INTRODUCTION

On May 8, 2006, Mayor Michael R. Bloomberg along with Parks & Recreation Commissioner Adrian Benepe and Department of Transportation Commissioner Iris Weinshall, announced the initiation of a six-month pilot project to further limit the number of hours that motor vehicles can utilize the park drives of both Central Park and Prospect Park. The closures were implemented during the AM and PM peak periods, on weekdays, in the non-peak direction for Central Park and during the AM peak period only for Prospect Park. The drives in both parks are closed to motor vehicles on weekends and holidays. The goal of this project was to minimize potential conflicts between vehicles and pedestrians in the parks and to provide additional space for recreation.

Beginning June 5, 2006, vehicles were not permitted on Central Park’s East Drive north of 72nd Street (between East 72nd Street and the Lenox Avenue exit) in the AM peak period (7-10 am) and the West Drive (between the Adam Clayton Powell Jr. Boulevard entrance and the Seventh Avenue exit) in the PM peak period (3-7 pm). The East Drive between the Sixth Avenue entrance and the East 72nd Street exit remained open between the hours of 7 am and 7 pm. The closures in Central Park remained in effect through mid-November 2006 when holiday hours were implemented to accommodate the seasonal increases in traffic through New Year’s Day. On January 2, 2007, the pilot program hours were restored.

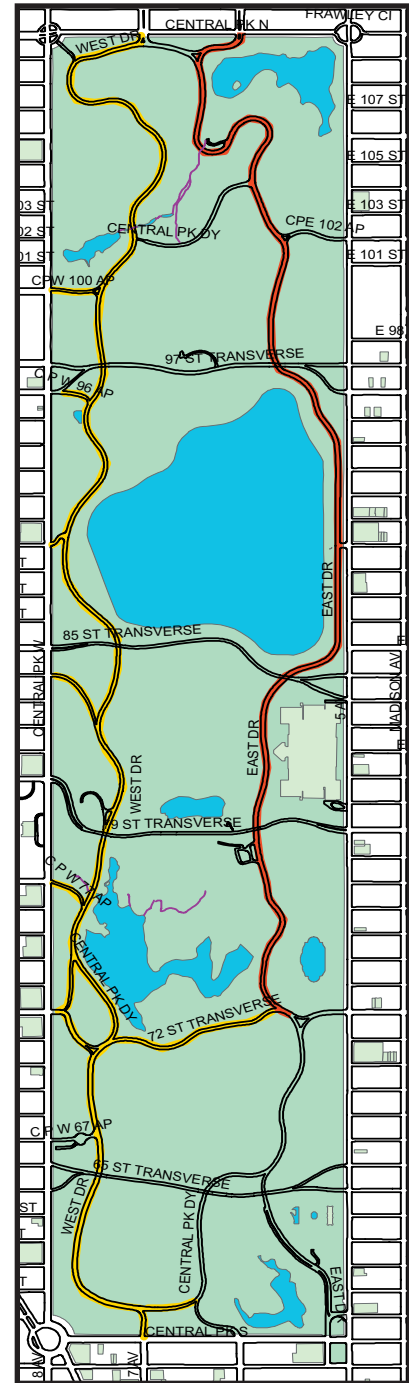


Figure 1: Central Park

- East Drive Closed 7-10 am
- West Drive Closed 3-7 pm

In Prospect Park, the West Drive was closed during the AM peak period (7-9 am) between Grand Army Plaza and Park Circle. The pilot program hours remained in effect with no change during the holiday season.

This pilot project built upon the Department of Transportation's (DOT) and Department of Parks and Recreation's (DPR) mutual efforts over the years to reduce vehicular access to the drives of both Central and Prospect Parks, which have experienced increasing numbers of recreational users in recent years. In November 2004, the West Drive of Central Park was designated as a high occupancy vehicle (HOV 2+) roadway, five Park Drive entrances and exits were closed, and the speed limit was lowered on the drives (to 25 mph from 30 mph). Beginning in January 2005, the Park Drives were closed to motor vehicles overnight from 7 pm to 7 am. In Prospect Park, car free hours have been extended, permitting cars in the park only during the weekday peak periods (7-9 am and 5-7 pm). In previous years, several Park Drive entrances and exits had been closed.

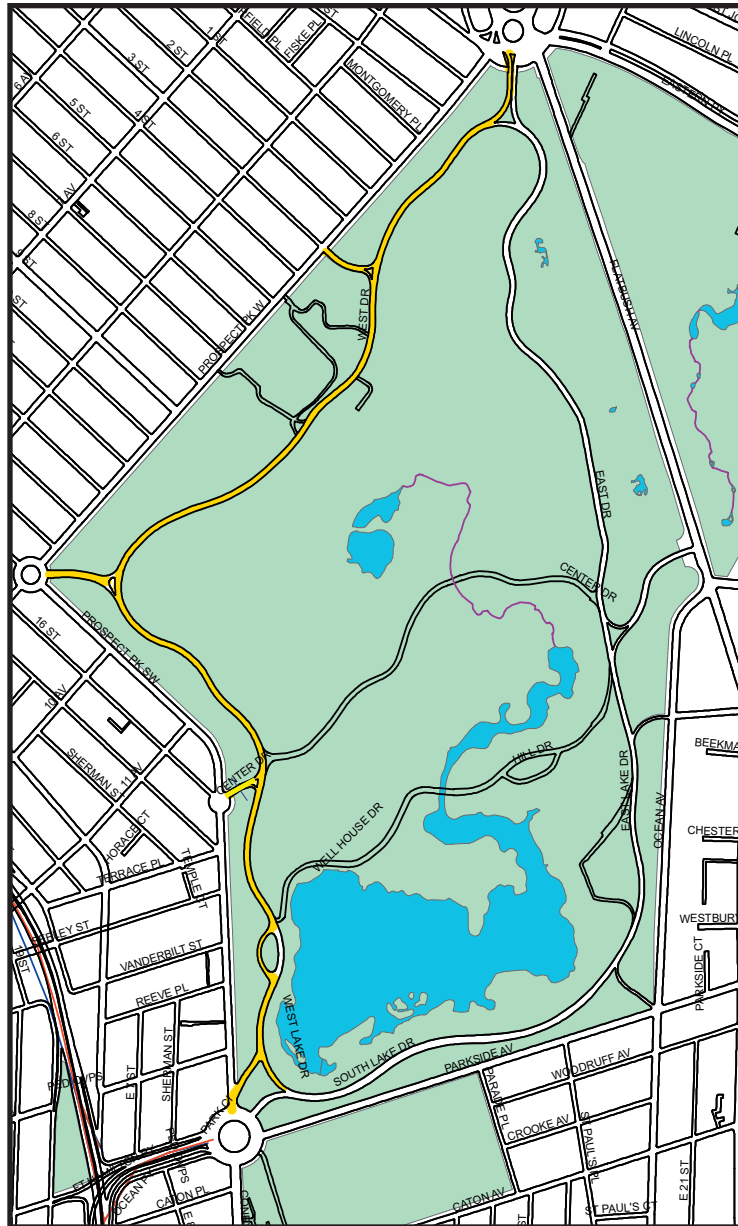


Figure 2: Prospect Park

West Drive Closed 7- 9 am

Monitoring Plan

DOT developed a comprehensive monitoring plan to assess the impacts of the pilot project on motorists when park drives were closed during AM and PM peak periods. As part of this monitoring plan, traffic data were collected in May 2006, characterized as “Before” or pre-implementation data. Data were again collected at specified intervals (July and September), during the six-month span of the pilot project in order to measure the impacts on traffic operations at different stages of the pilot project and to account for seasonal variations in traffic. This report documents the impacts associated with the off-peak closures of the park drives during the pilot project period.

Data Collection

Traffic data were collected (through Automatic Traffic Recorders and Travel Time/Speed surveys) within and in the vicinity of both Central and Prospect Parks for both the AM (7-10 am in Central Park and 7-9 am in Prospect Park) and PM peak periods (3-7 pm) in Central Park. This information was collected in both July 2006 and September 2006 to assess the impacts of the closures on traffic operations in the surrounding areas. This effort included the collection of vehicular volumes and travel times and speeds at critical locations within each study area. For Central Park, data were collected on the Park Drives and adjacent roadways, at entrances and exits to the Drives and at several other critical intersections and locations throughout the area bounded by West 110th Street/Cathedral Parkway to the north, Park Avenue to the east, West 59th Street/Columbus Circle to the south, and Broadway to the west. A similar, but more limited, data collection effort was undertaken for Prospect Park in a study area bounded by Grand Army Plaza to the north, Flatbush Avenue to the east, Parkside Avenue to the south, and Prospect Park West and Prospect Park Southwest to the west, including Park Drives and entrances and exits to and from the park. The monitoring plan for each park is provided in Appendix I.

Variable Message Sign (VMS) Boards

VMS boards were strategically installed to notify motorists of date and times of the closures. VMSs were placed at 10 locations in the vicinity of Prospect Park and at 25 locations in the vicinity of Central Park. A complete list of all VMS locations is provided in Appendix II.



VMS at Parkside Avenue



VMS in the vicinity of Central Park

MAJOR FINDINGS

Overall Findings

- The pilot project was successful and could be made permanent.
- For the most part, the street network was able to accommodate the closing of the Park Drives in the off-peak direction in both parks, although some localized congestion was experienced (particularly on the east side of Manhattan south of 72nd Street).
- Motorists were able to find and utilize alternate routes to the park drives.
- Travel times for motorists that previously used the Central Park Drives increased significantly as they were rerouted to adjacent roadways. For example, Madison Avenue travel time in the AM peak period increased by 8.8 minutes (to 16.1 minutes from 7.3 minutes). However, in Brooklyn these increases peaked at only three minutes of additional travel time.
- Impacts were least pronounced in July when overall traffic volumes were approximately 15% below May and September levels.
- There was no significant congestion recorded on roadways adjacent to Prospect Park during the West Drive closure.

Central Park

- Systemwide the pilot project resulted in only modest increases in traffic volumes and decreases in travel speeds. However, there were several roadway segments throughout the study area which exhibited significant declines in speed. These declines were most prevalent on the east side of the park south of 72nd Street. In addition, the recorded traffic volumes on these segments also declined due to increased levels of congestion.
- In the PM peak period, six segments experienced speeds below 5 mph. All were southbound locations south of 72nd Street. These included the segments on Park Avenue, Fifth Avenue and Broadway from 72nd Street to 65th Street and from 65th Street to 59th Street.

- Fifth Avenue experienced the greatest reduction in speeds in September as motorists used this roadway as an alternate route to access locations south and east of the park.
- Unexpectedly, southbound roadways on the east side of the park experienced impacts during the PM peak period when the West Drive of Central Park was closed to motor vehicle traffic. This indicates that many more motorists chose to use Fifth Avenue or Park Avenue instead of Columbus Avenue or Broadway for their southbound travel.
- In July, only the westbound 65th Street Transverse Road exhibited increases in volume as it accommodated traffic diverted from the westbound TransPark roadway which was closed to vehicular traffic during the PM peak period (3-7 pm). In September, both eastbound and westbound Transverse roadways experienced an overall increase in volume in the PM peak period of 7.2% and 16.5%, respectively, as motorists sought alternate routes.
- The closure of the West Drive in the PM peak period resulted in less than a 5% reduction or “shrinkage” in southbound traffic volume in the study area. This indicates that some motorists may have diverted to alternate routes outside the study area or elected to travel via other modes.



CENTRAL PARK

July Analysis

The north-south roadways in the vicinity of Central Park generally exhibited decreases in volume and increases in speed despite the closure of the Park Drives. This is primarily due to seasonal variations as “Before” data were collected in May while “After” data was collected in July when volumes are typically lower. (Figures 3 and 4.)

An exception to this pattern was Fifth Avenue southbound at East 72nd Street which exhibited volume increases of 4% (or 47 vehicles per hour [vph]) in the AM peak period

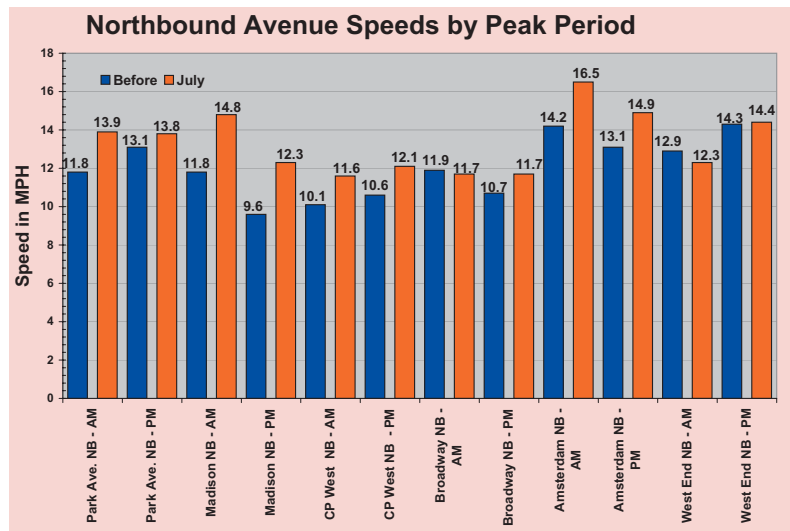


Figure 3: Northbound Speeds

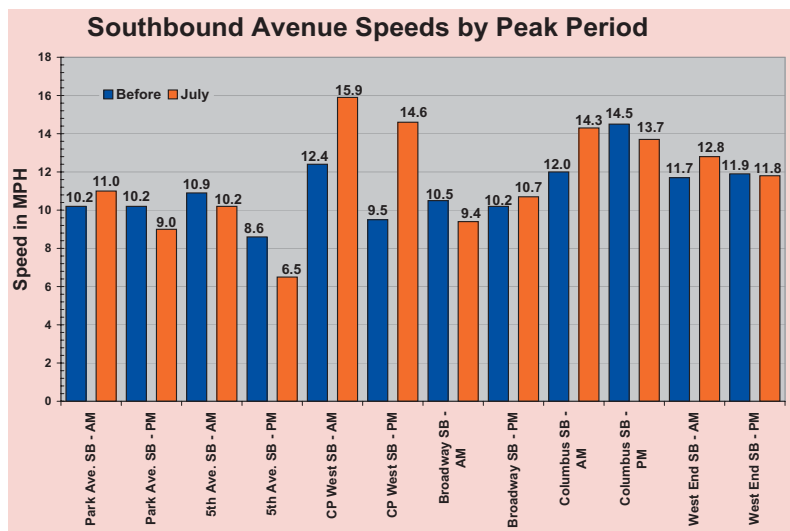


Figure 4: Southbound Speeds

and 13% (or 130 vph) in the PM peak period. Speeds on 5th Avenue (between 110th Street and 60th Street) decreased concurrently by 6% (to 10.2 mph from 10.9 mph) in the AM peak period and 24% (to 6.5 mph from 8.6 mph) in the PM peak period. The increased volumes and decreased speeds in the PM peak period are attributable, in part, to the PM closure of the westbound 72nd Street TransPark Road to vehicular traffic which resulted in the diversion of vehicles to Fifth Avenue to access the westbound 65th Street Transverse roadway, as well as motorists using Fifth Avenue as an alternative to the West Drive for southbound travel.

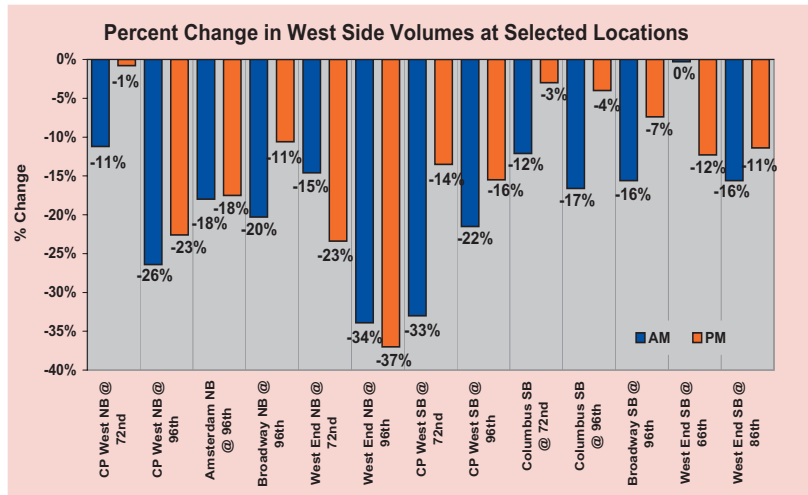


Figure 5: West Side Volumes

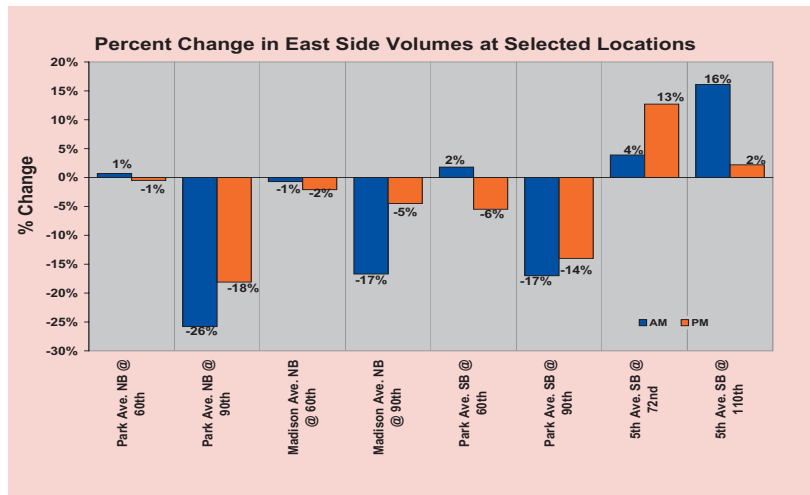


Figure 6: East Side Volumes

There were no significant impacts west of the park.

Volumes decreased on all the adjacent roadways west of the park. At the same time, speeds improved on all roadways with the exception of southbound Broadway, which decreased by 11% (to 9.4 mph from 10.5 mph) in the AM peak period and southbound Columbus Avenue, which decreased by 5% (to 13.7 mph from 14.6 mph) in the PM peak period.

As shown in the segment maps below (Figures 7 and 8), speed decreased dramatically (-52%) on Fifth Avenue south of 72nd Street in the PM peak from 6.6 mph during “Before” conditions to 3.2 mph during “After” conditions while volumes increased by 13% to 1,533 vph from 1,363 vph. These speeds were significantly slower than the speeds between 110th Street and 72nd Street which increased to 10.4 mph from 9.7 mph during “Before” conditions in the PM peak period. This improvement in speed occurred despite a slight increase (+2.2%) in volume at Fifth Avenue and 110th Street.

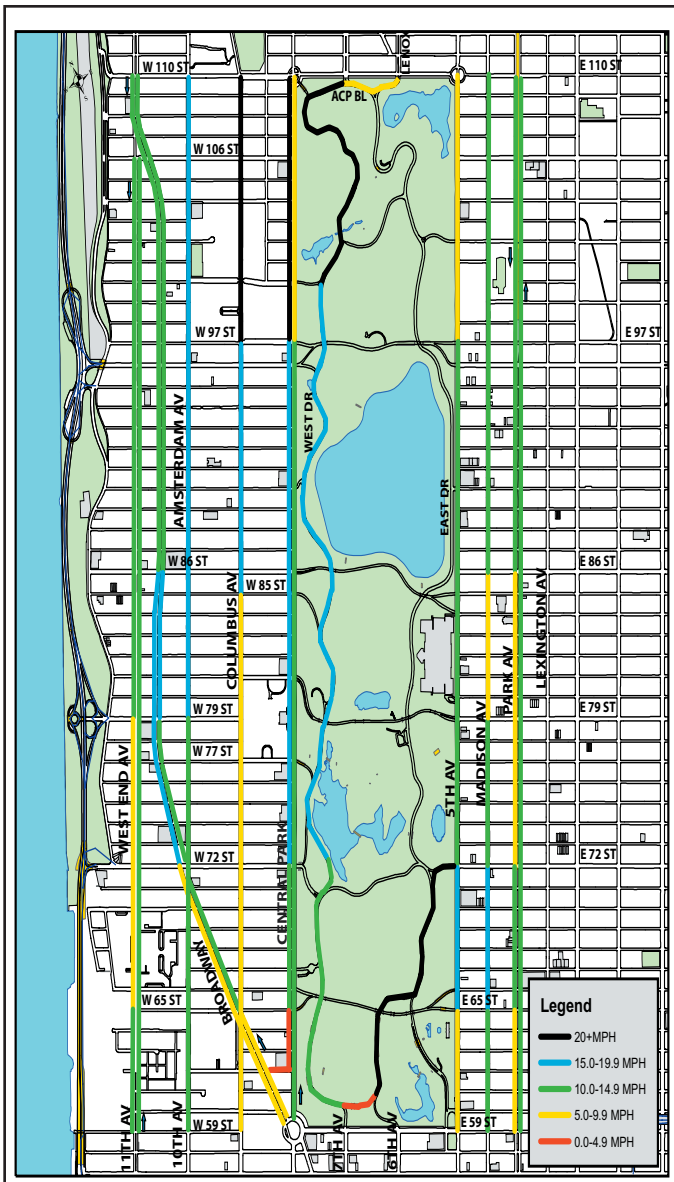


Figure 7: “Before” (May) PM Peak Period (3-7 pm)
Segment Speeds

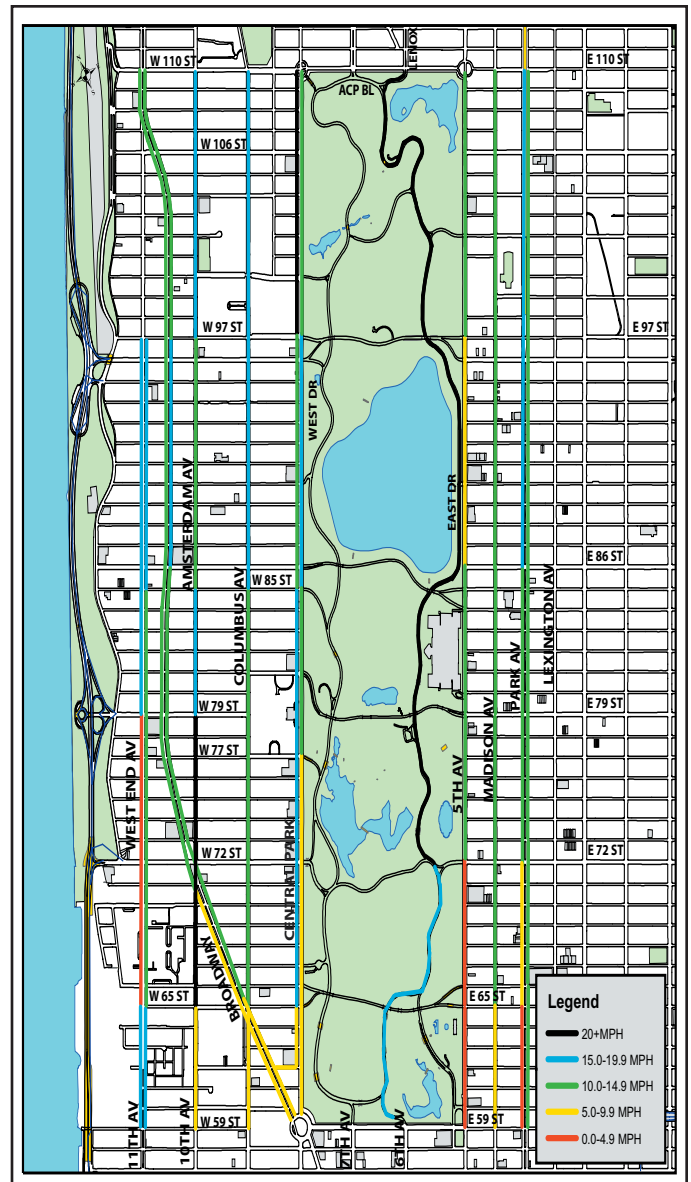


Figure 8: “After” (July) PM Peak Period (3-7 pm)
Segment Speeds

Notably, in the AM peak period, speeds on this segment of Fifth Avenue (between 110th and 72nd Streets) increased by 20% (to 13.6 mph from 11.3 mph) despite an increase in volume of 16% (or 102 vph) at Fifth Avenue and 110th Street. In the AM peak period, speeds on this segment south of 72nd Street decreased by 37% to 5.5 mph from 8.7 mph. Despite the closure of the East Drive in the AM peak period, speeds improved on Madison Avenue and northbound Park Avenue.

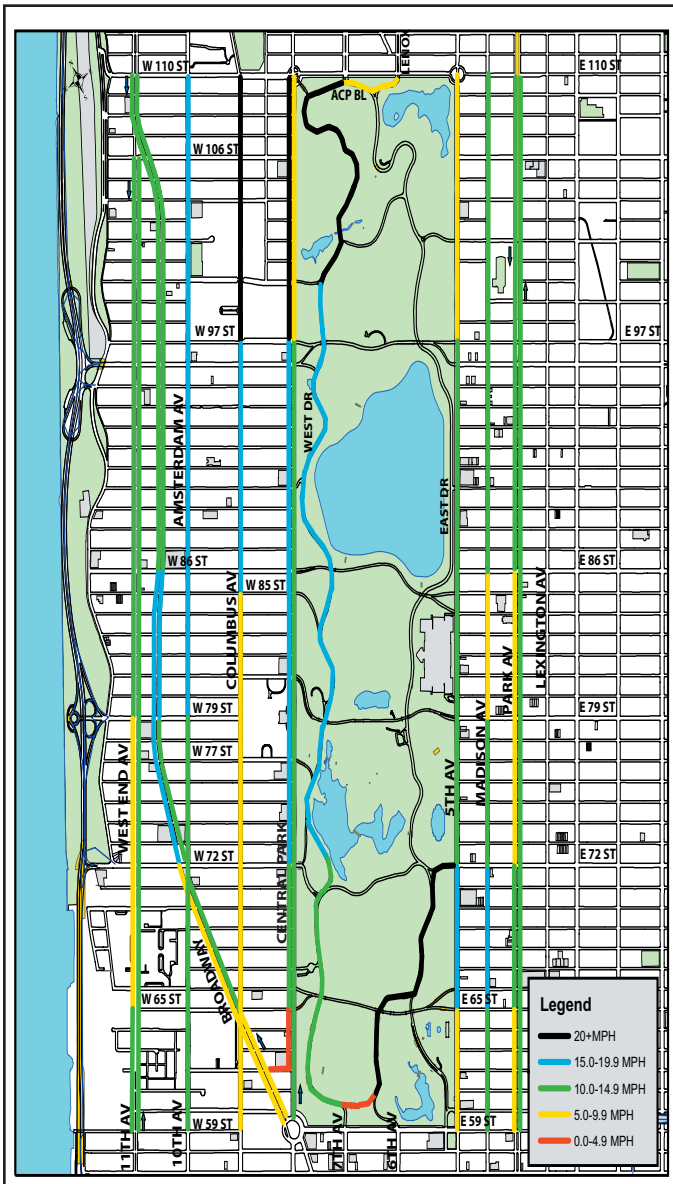


Figure 9: “Before” (May) AM Peak Period (7-10 am)
Segment Speeds

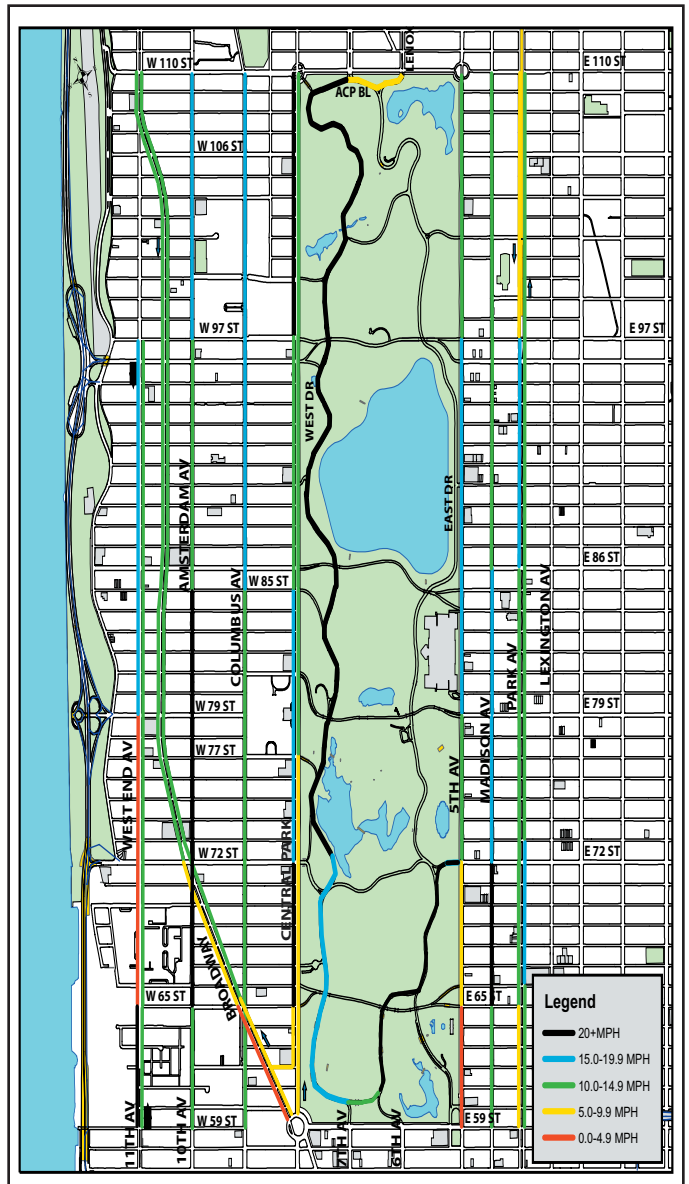
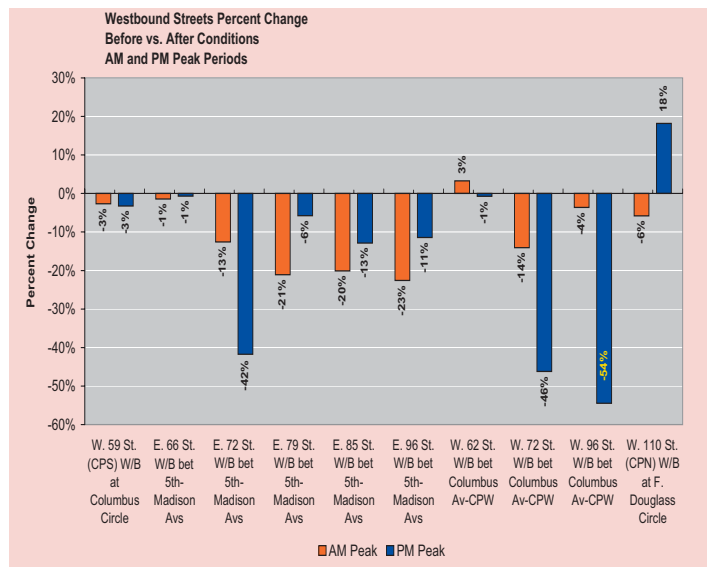
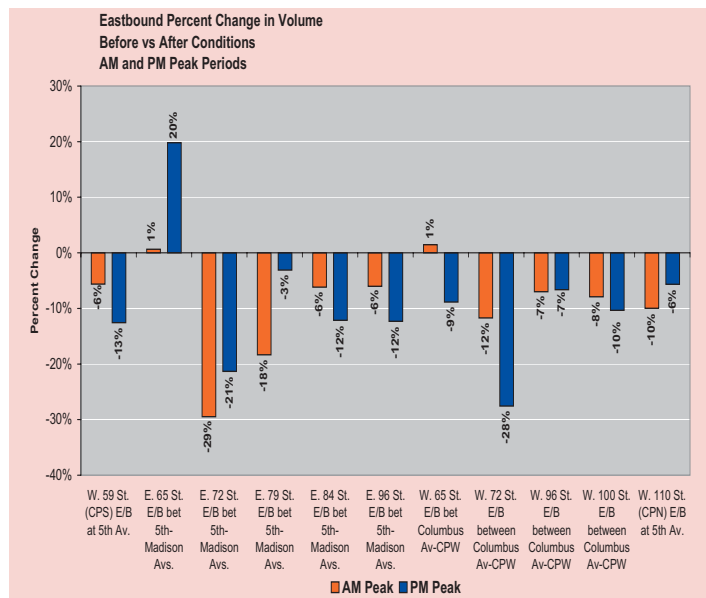
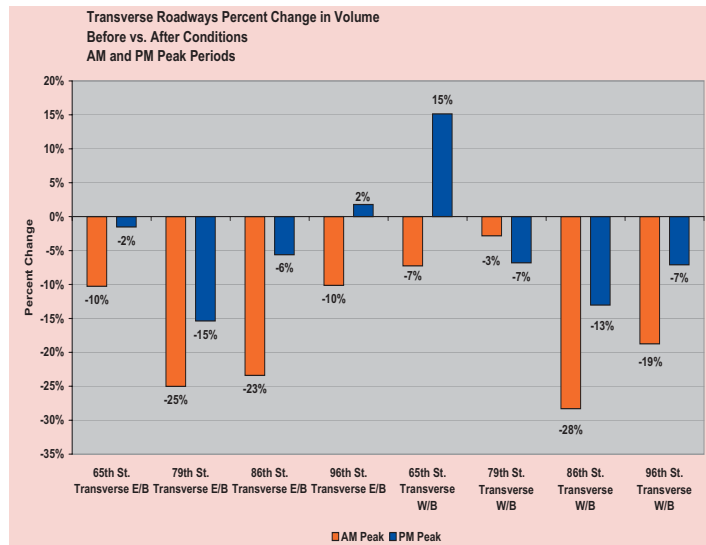


Figure 10: “After” (July) AM Peak Period (7-10 am)
Segment Speeds

In the PM peak period, volumes exiting the Park at the Adam Clayton Powell Boulevard exit increased by nearly 90% (to 254 vph) as vehicles could not proceed to the West Drive which was closed during this time period.

Nearly all the Transverse Roads exhibited decreases in volume with the exception of the 65th Street Transverse (westbound) which exhibited a 15% increase in volume (or 150 vph) during the PM peak period. The 65th Street Transverse Road served as an alternate route for westbound vehicles as the 72nd Street TransPark roadway was closed and was not available to accommodate westbound traffic during this time.

Almost all east-west streets exhibited decreases in volume. An exception was eastbound East 65th Street between Madison and Fifth Avenues which exhibited an increase in volume of 20% (or 173 vph) in the PM peak period. It is possible that motorists were seeking to find an alternate southbound route as Fifth Avenue experienced increased congestion and lower speeds within this segment.



Figures 11-13: Volume Charts

Another exception was westbound West 110th Street at Frederick Douglas Circle which exhibited an increase in volume of 18.2% (or 67 vph) during the PM peak period. This may be attributable, in part, to vehicles being forced to exit the park at the Adam Clayton Powell Boulevard Exit onto West 110th Street to access points west and south of the park during the closure of the West Drive.

Motorists who had utilized the Central Park West Drive in the PM peak period prior to the closure and were diverted to adjacent southbound roadways experienced an increased travel time of 2.9 minutes, on Central Park West, between 110th Street and 59th Street (to 11.8 minutes from 8.9 minutes utilizing the park drives). For motorists originating at Central Park West and utilizing Columbus Avenue it took an additional 3.7 minutes to reach 59th Street (to 12.6 minutes from 8.9 minutes).

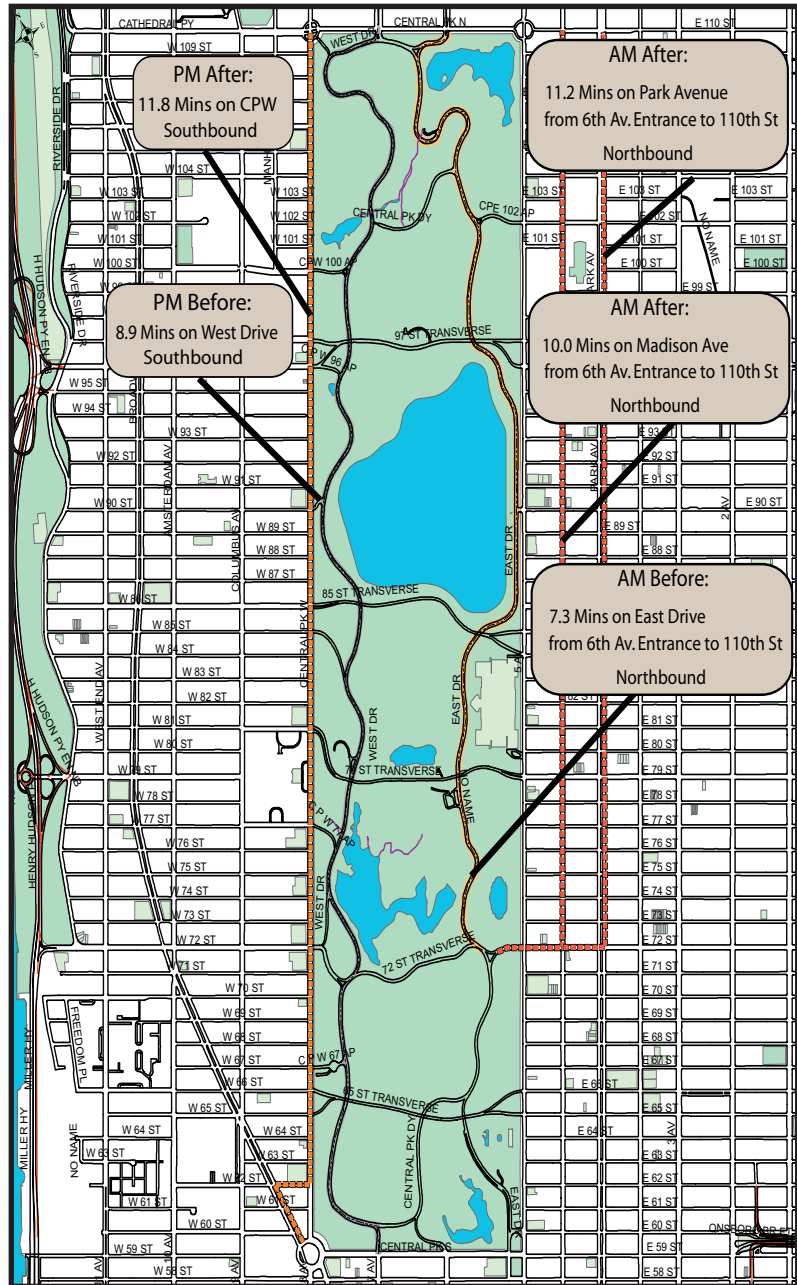


Figure 14: Travel Time Comparisons during AM and PM Peak Periods May vs. July

Motorists who had utilized the Central Park East Drive in the AM peak period prior to the closure and were diverted to adjacent northbound streets experienced an increase in travel time between the Sixth Avenue entrance at Central Park South and East 110th Street. Motorists traveling along the Central Park East Drive to Park Avenue/East 110th Street had an increase in travel time of 3.9 minutes (to 11.2 minutes from 7.3 minutes), and those utilizing Madison Avenue to East 110th Street had an increase in travel time of 2.7 minutes (to 10.0 minutes from 7.2 minutes). Detailed volume comparison summaries, charts, and travel and speed charts can be found in Appendix III and IV.

September Analysis

Decreases in speed compared to “Before” conditions were more common in September 2006 than in July 2006. This is in part due to volumes returning to normal levels, whereas they were significantly lower in July 2006. In July, speeds were generally higher than under “Before” conditions on nearly all roadways adjacent to the park with only isolated locations exhibiting speed decreases. In September, over half the adjacent roadways exhibited speed decreases.

Central Park Drives Off-peak Closures					
Changes in Segment Travel Speeds By Speed Ranges					
Northbound					
		Better Segments	Worse Segments	Unchanged Segments	Total Segments
Northbound	7-10 am	4	9	20	33
Northbound	3-7 pm	7	10	18	35
Southbound					
		Better Segments	Worse Segments	Unchanged Segments	Total Segments
Southbound	7-10 am	9	10	18	37
Southbound	3-7 pm	5	9	18	32

Table 1: NB/SB Travel Speeds

In general, southbound speeds were more severely impacted than northbound speeds, particularly in the PM peak period. This can be attributed to the fact that the East Drive is only partially closed during the AM peak period (north of East 72nd Street), whereas the West Drive is closed for the entire length of the park during the PM peak period. The most notable declines in speeds were recorded on the east side of the park south of 72nd Street. Fifth Avenue continued to experience

slower speeds as motorists used this roadway as an alternate route to access locations south and east of the park.

The closure of the West Drive in the PM peak period resulted in less than a 5% reduction or “shrinkage” in southbound traffic volumes in the study area. This indicated that some motorists may have diverted to alternative routes outside the study area or elected to travel via other modes. This “shrinkage” factor was calculated by comparing the total southbound volume crossing the 86th/90th Street screenline for “Before” and “After” conditions along the following roadways: West End Avenue, Broadway, Columbus Avenue, Central Park West, Central Park West Drive, Fifth Avenue, and Park Avenue.

Although speeds remained within the same range as “Before” conditions for a majority of segments, there were instances where segments along individual corridors exhibited considerable variation. (Note: Speeds were classified into 5 mph ranges i.e., 0-5 mph, 5-10 mph, etc.) There were more segments where speeds decreased than increased (Table 1).

Between 7-10 am, there were speed gains on thirteen segments and declines on nineteen segments. The remaining thirty-eight segments stayed in the same speed ranges as before implementation. Between 3-7 pm, there were speed range improvements on twelve segments and declines on nineteen segments. The rest of the thirty-six segments remained in the same speed ranges as before implementation.

These changes in speed ranges compared to “Before” conditions were more pronounced along the southbound roadways in the PM peak period (Table 2). Under “Before” conditions, twelve roadways exhibited speeds below 10 mph, seventeen roadways exhibited speeds between 10 and 15 mph, and three roadways exhibited speeds above 15 mph. During September, there was greater variation, as seventeen roadways exhibited speeds below 10 mph, nine roadways exhibited speeds between 10 and 15 mph, and six roadways exhibited speeds above 15 mph. The northbound direction experienced similar changes in the AM peak period, as seven segments had speeds below 10 mph as compared to three segments under “Before” conditions.

Central Park Drives Off-peak Closures					
Travel Speeds By Street Segment					
Northbound ~ 7-10 AM			Northbound ~ 3-7 PM		
Number of Segments by Speed Range			Number of Segments by Speed Range		
Speed Range, mph	Before Implementation May 2006	After Implementation September 2006	Speed Range, mph	Before Implementation May 2006	After Implementation September 2006
0.0-4.9	0	0	0.0-4.9	0	0
5.0-9.9	3	7	5.0-9.9	6	7
10.0-14.9	23	19	10.0-14.9	19	20
15.0-19.9	6	6	15.0-19.9	8	6
20.0+	1	1	20.0+	2	2
Total	33	33	Total	35	35
Southbound ~ 7-10 AM			Southbound ~ 3-7 PM		
Number of Segments by Speed Range			Number of Segments by Speed Range		
Speed Range, mph	Before Implementation May 2006	After Implementation September 2006	Speed Range, mph	Before Implementation May 2006	After Implementation September 2006
0.0-4.9	2	3	0.0-4.9	3	6
5.0-9.9	12	11	5.0-9.9	9	11
10.0-14.9	14	14	10.0-14.9	17	9
15.0-19.9	6	5	15.0-19.9	1	4
20.0+	3	4	20.0+	2	2
Total	37	37	Total	32	32

Table 2: AM & PM Segment Speeds

A detailed analysis of speeds was conducted on north/south roadways and their component segments. The roadway speeds are shown in Table 3A and Table 3B. Segment speeds are shown in Figures 19 through 22 on pages 22 and 23. Highlights of the speeds analysis are discussed below.

East of Central Park, speeds generally decreased during the AM and PM peak periods. Notably, the only exception occurred on Madison Avenue between 3-7 pm, where speeds increased by 23%, to 11.8 mph from 9.6 mph, while the East Drive was open. Conversely, in the AM peak period when the East Drive was closed, speeds decreased by 18.6%, to 9.6 mph from 11.8 mph. Specifically, in the AM peak period, the segments north of 72nd Street exhibited speeds 28% lower than the segments south of 72nd Street (8.9 mph vs. 12.3 mph) whereas in the PM peak period when the drive was open, these segments operated at virtually the same speed (11.8 mph vs. 11.9 mph).

Although speeds along Fifth Avenue showed some variation among segments in the AM peak (3.2 mph to 6.6 mph), there was substantial variation in the PM peak period. Speeds between 79th and 72nd Streets averaged 18.6 mph, while the speeds between 72nd Street and 65th Streets averaged only 3.4 mph. This was due, in part, to the closure of the 72nd Street TransPark Roadway which

Central Park Off-Peak Closures 2006							
Speed Comparisons							
After (July & September 2006) versus Before (May 2006)							
7-10 am Speeds, Miles per Hour							
Speeds, miles per Hour 7-10 am	May 2006 Before Speed	July 2006			September 2006		
		Change Speed	vs. Before	Percent Change	Change Speed	vs. Before	Percent Change
Park Drive Lenox Av. Entr. To E. 72 St. Exit	18.5	21.5	3.0	16.2 %	20.8	2.3	12.4 %
Park Drive 6th Av. Entr. To Lenox Av. Exit		No Data			No Data		
Park Ave. N/B	11.8	13.9	2.1	17.8 %	11.7	- 0.1	- 0.8 %
Madison Ave. N/B	11.8	14.8	3.0	25.4 %	9.6	- 2.2	- 18.6 %
Avgs, N/B Avenues, East Side	11.8	14.3	2.5	21.2 %	10.5	- 1.3	- 11.0 %
Park Ave. S/B	10.2	11.0	0.8	7.8 %	9.5	- 0.7	- 6.9 %
5th Ave. S/B	10.9	10.2	- 0.7	- 6.4 %	5.2	- 5.7	- 52.3 %
Avgs, S/B Avenues, East Side	10.5	10.6	0.1	1.0 %	6.8	- 3.7	- 35.2 %
Central Park West N/B	10.1	11.6	1.5	14.9 %	12.0	1.9	18.8 %
Broadway N/B	11.9	11.7	- 0.2	- 1.7 %	11.1	- 0.8	- 6.7 %
Amsterdam Av. N/B	14.2	16.5	2.3	16.2 %	15.1	0.9	6.3 %
West End Av. N/B	12.9	12.3	- 0.6	- 4.7 %	13.7	0.8	6.2 %
Avgs, N/B Avenues, West Side	11.7	12.8	1.1	9.4 %	12.6	0.9	7.7 %
Central Park West S/B	12.4	15.9	3.5	28.2 %	13.1	0.7	5.6 %
Broadway S/B	10.5	9.4	- 1.1	- 10.5 %	9.0	- 1.5	- 14.3 %
Columbus Av. S/B	12.0	14.3	2.3	19.2 %	13.5	1.5	12.5 %
West End Av. S/B	11.7	12.8	1.1	9.4 %	10.8	- 0.9	- 7.7 %
Avgs, S/B Avenues, West Side	11.2	12.6	1.4	12.5 %	11.3	0.1	0.9 %

Central Park Off-Peak Closures 2006							
Speed Comparisons							
After (July & September 2006) versus Before (May 2006)							
3-7 pm Speeds, Miles per Hour							
Speeds, miles per Hour 3-7 pm	May 2006 Before Speed	July 2006			September 2006		
		Change Speed	vs. Before	Percent Change	Change Speed	vs. Before	Percent Change
Park Drive Lenox Av. Entr. To E. 72 St. Exit		No Data			No Data		
Park Drive 6th Av. Entr. To Lenox Av. Exit	20.5	23.0	2.5	12.2 %	21.8	1.3	6.3 %
Park Ave. N/B	13.1	13.8	0.7	5.3 %	11.6	- 1.5	- 11.5 %
Madison Ave. N/B	9.6	12.3	2.7	28.1 %	11.8	2.2	22.9 %
Avgs, N/B Avenues, East Side	11.1	13.0	1.9	17.1 %	11.7	0.6	5.4 %
Park Ave. S/B	10.2	9.0	- 1.2	- 11.8 %	7.3	- 2.9	- 28.4 %
5th Ave. S/B	8.6	6.5	- 2.1	- 24.4 %	6.3	- 2.3	- 26.7 %
Avgs, S/B Avenues, East Side	9.3	7.6	- 1.7	- 18.3 %	7.3	- 2.0	- 21.5 %
Central Park West N/B	10.6	12.1	1.5	14.2 %	12.1	1.5	14.2 %
Broadway N/B	10.7	11.7	1.0	9.3 %	10.4	- 0.3	- 2.8 %
Amsterdam Av. N/B	13.1	14.9	1.8	13.7 %	13.7	0.6	4.6 %
West End Av. N/B	14.3	14.4	0.1	0.7 %	13.0	- 1.3	- 9.1 %
Avgs, N/B Avenues, West Side	11.4	13.0	1.6	14.0 %	12.0	0.6	5.3 %
Central Park West S/B	9.5	14.6	5.1	53.7 %	11.4	1.9	20.0 %
Broadway S/B	10.2	10.7	0.5	4.9 %	7.7	- 2.5	- 24.5 %
Columbus Av. S/B	14.5	13.7	- 0.8	- 5.5 %	13.2	- 1.3	- 9.0 %
West End Av. S/B	11.9	11.8	- 0.1	- 0.8 %	11.3	- 0.6	- 5.0 %
Avgs, S/B Avenues, West Side	10.8	12.6	1.8	16.7 %	10.4	- 0.4	- 3.7 %

Tables 3A & 3B: Speed Comparisons September & July vs. May

resulted in increased volumes and high levels of congestion on Fifth Avenue at 72nd Street and on the approach to the westbound 65th Street Transverse Road, which experienced an increase in volume of 13% (or 133 vph) and 29% (or 291 vph), respectively. Southbound Park Avenue also showed markedly lower speeds south of East 72nd Street, especially in the PM peak period when speeds decreased to 3.5 mph between East 72nd Street and East 65th Street from 8.6 mph, a 59% decline.

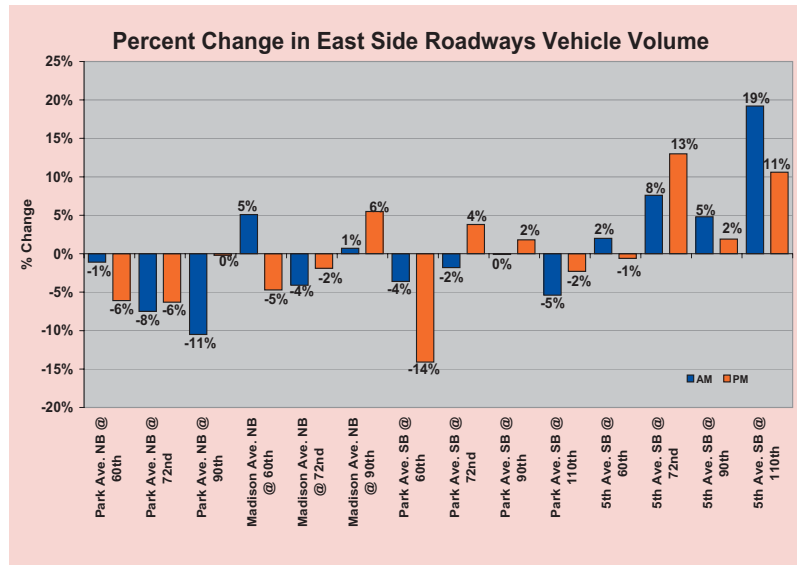


Figure 15: East Side Volumes

The increased volumes and decreased speeds on Fifth Avenue and Park Avenue in the PM peak period could be attributed to motorists utilizing east side roadways since they could no longer benefit from travel time savings on the now closed West Drive. In addition, volume increases on the eastbound transverse roads showed that motorists originating from the west side diverted to these transverse roadways to access east side southbound avenues, particularly the eastbound 79th and 86th Street Transverse Roads which showed increases in volumes of 18.4 % (or 165 vph) and 14.6% (or 119 vph), respectively.

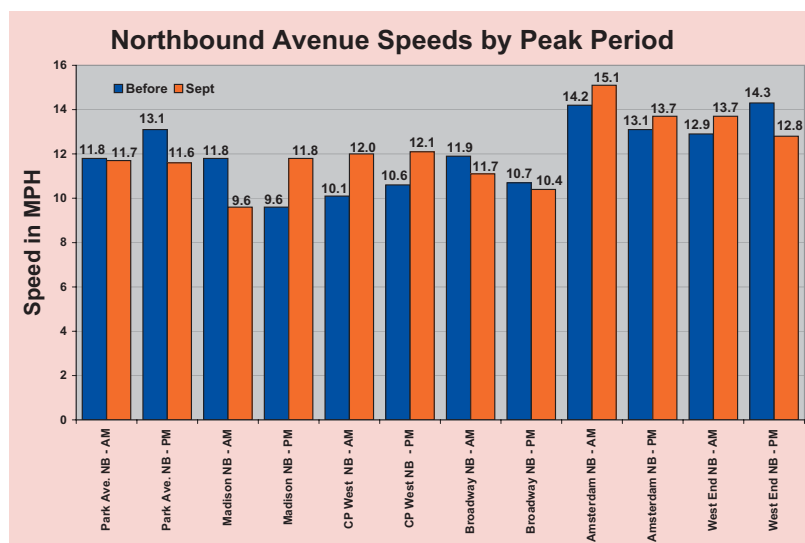


Figure 16: Northbound Speeds

Impacts were less pronounced west of Central Park. The greatest impacts were on southbound Broadway. Speeds along southbound Broadway decreased on four of the six segments in the AM peak period and all six segments in the PM peak period. While speeds north of West 72nd Street averaged above 10 mph during both peak periods,

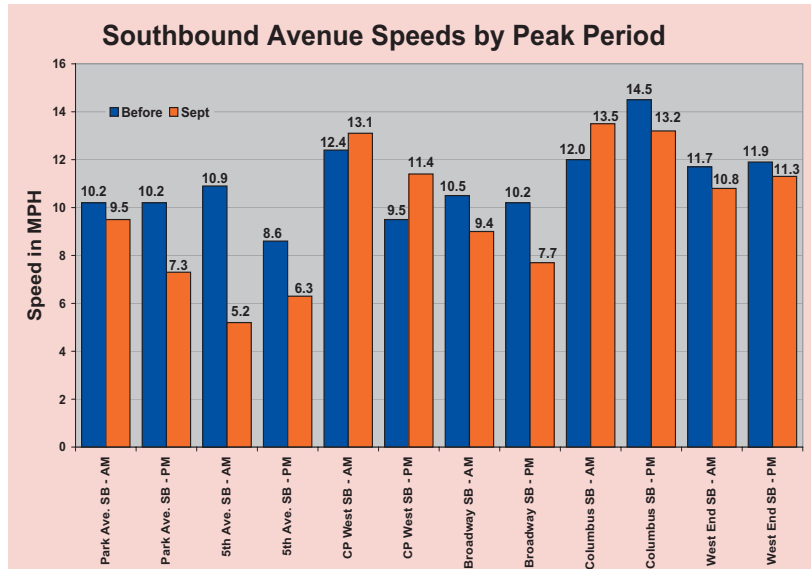


Figure 17: Southbound Speeds

speeds south of West 72nd Street were below 6 mph in the AM peak period and below 5 mph in the PM peak period. In the segment south of West 62nd Street, Broadway may have accommodated motorists that had diverted to Central Park West and were forced to turn onto West 62nd Street to continue their southbound trip. Overall speed from West 110th Street to Columbus Circle decreased 14% between 7-10 am (to 9.0 mph from 10.5 mph) and decreased 25% between 3-7 pm (to 7.7 mph from 10.2 mph).

Central Park West speeds decreased between 1% and 25% in the segments between 97th and 65th Streets in both directions during the AM and PM peak periods. This can be, in part, attributable to increased volumes entering and exiting the Transverse Roadways which were more heavily utilized due to the Drive closures. These changes in travel patterns created additional friction resulting in the perception that Central Park West was a less reliable alternative.

Despite increases in volume along the corridor (e.g., 10.1% or 106 vph), Columbus Avenue continued to operate with relatively efficient speeds in both the AM and PM peak periods, making it an attractive route for diverted southbound motorists. Although speeds along some segments declined, the corridor continued to operate with speeds averaging over 13 mph. Seemingly, Columbus Avenue was the preferred route for southbound travel, because it has additional capacity and provides a direct connection to West 59th Street and

other destinations further South.

In September, both eastbound and westbound transverse roadways experienced increases in volume in the AM and PM peak periods, as motorists sought alternate routes during the closure of the drives. Overall volume on transverse roadways for both AM and PM peak periods increased by 10% in September as opposed to an overall decrease of 10% in July.

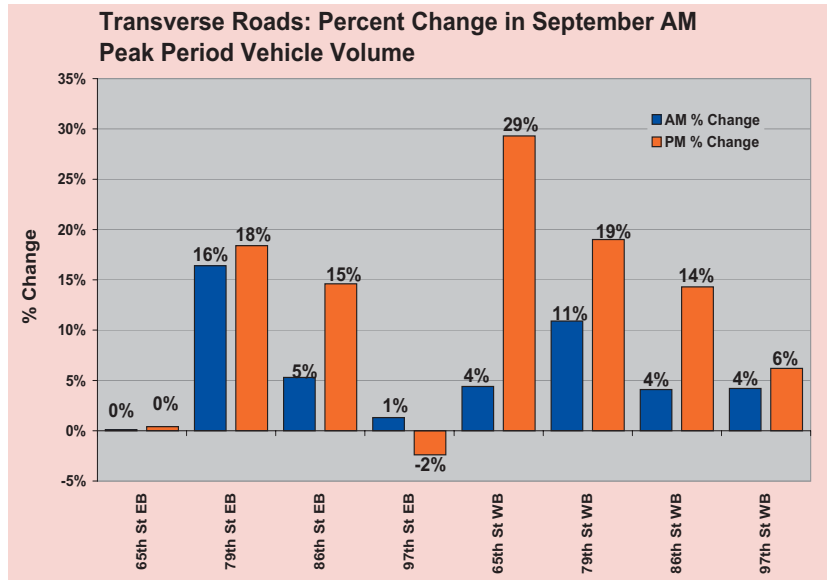


Figure 18: Transverse Roads Volumes

Between 7-10 am, September volumes were higher than pre-implementation levels on all four eastbound transverse roads. Eastbound volume on the 79th Street Transverse Road was up 16% (or 121 additional vph), while eastbound volume increases on the other three transverse roads ranged from less than 1% to 5%. In July, 7-10 am volumes had decreased between 10% and 25% on all four eastbound transverse roads.

In the PM peak period between 3-7 pm, eastbound volumes on the 79th Street and 86th Street Transverse Roads increased by 18% (or 165 additional vph) and 15% (or 119 additional vph), respectively, while volumes on the 65th Street and 96th Street Transverse Roads exhibited minimal changes as compared to the “Before” conditions.

In the AM peak period, September volumes were also higher than pre-implementation levels on all four westbound transverse roads. Westbound volume on the 79th Street Transverse Road was up 11% (or 68 additional vph), while westbound volume increased by 4% on each of the other three transverse roads. In July, AM peak period volumes had decreased on all four westbound transverse roads.

On the westbound 72nd Street TransPark Road, September volume was 25% (or 191 additional vph) above the pre-implementation level. Motorists bound for points north and west may have used this roadway as an alternate to the East Drive, which is closed during these hours.

In the PM peak period, September volumes were also higher than pre-implementation levels on all four westbound transverse roads. Westbound volume on the 65th Street Transverse Road was up 29% (or 291 vph). This appears to be the most utilized alternate to the westbound 72nd Street TransPark Road which is closed during this time period. Westbound volume also increased substantially on the 79th Street Transverse Road (+19%, or 146 vph) and on the 86th Street Transverse Road (+14%, or 152 vph). These increases may be attributed to more motorists utilizing the other transverse roads as alternate routes in September. In July, only the westbound 65th Street Transverse Road exhibited a volume increase (+15%, or 150 vph), while the other three westbound transverse roads experienced decreases between 7% and 13%. Refer to Appendix III for a complete list of Volume Charts and Tables.

As was the case in July, the park exits at Lenox Avenue and Adam Clayton Powell, Jr. Boulevard continued to exhibit large volume increases as motorists were forced to exit the park because they were no longer permitted to continue onto the West Drive between 3-7 pm. In September, 3-7 pm volume exiting at Adam Clayton Powell, Jr. Boulevard was nearly twice the pre-implementation level (+97%, or 133 vph), while volume exiting at Lenox Avenue was up 35% (or 47 vph). In July, these increases had been +87% and +17%, respectively.

Similar to July, volumes decreased significantly in the PM peak period at the park entrance at East 72nd Street (-42% in July or 205 fewer vph, -40% in September or 195 fewer vph) because motorists were unable to utilize the TransPark Road which was closed during this time. However, volumes increased significantly on the East Drive north of the East 72nd Street entrance/exit as all motorists entering at East 72nd Street were forced to continue northbound.

Central Park Segment Speed Map

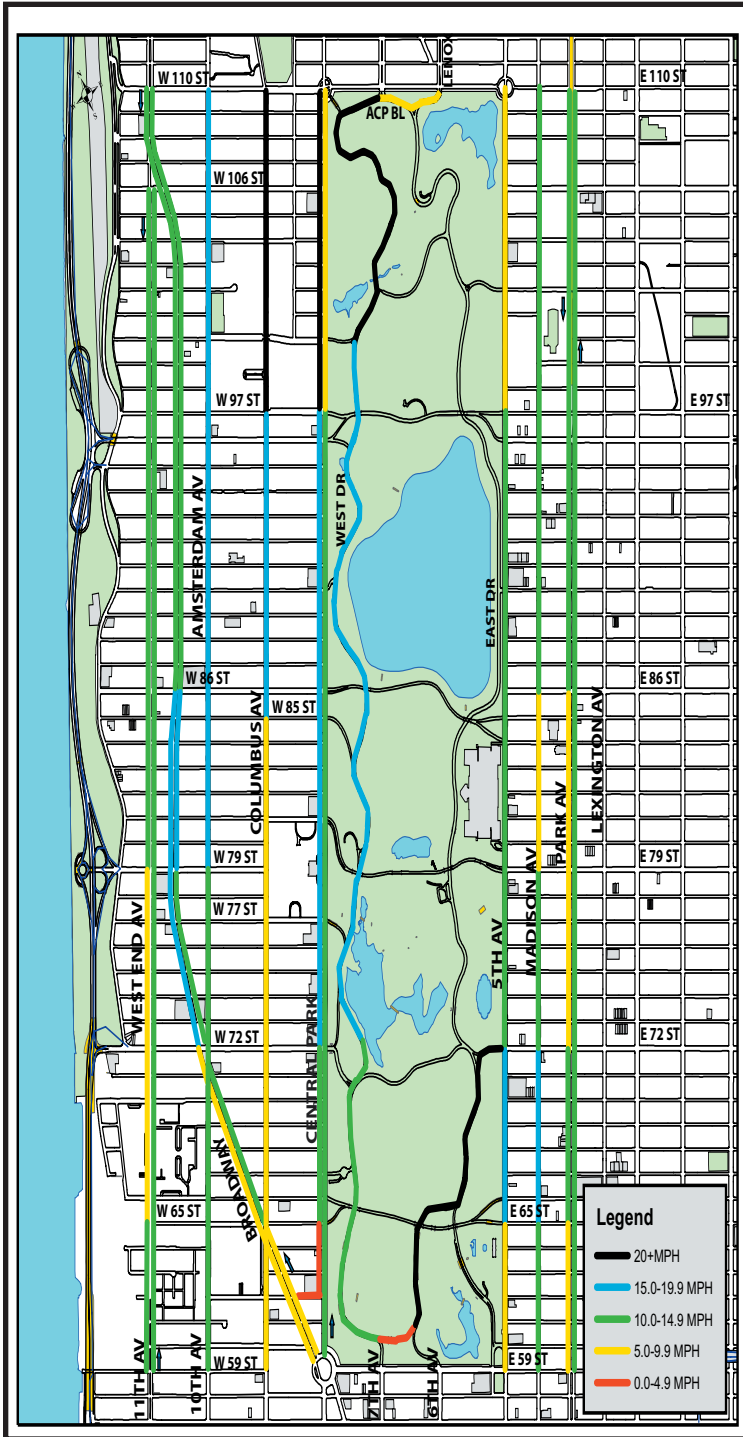


Figure 19: “Before” (May) AM Peak Period (7-10 am)
Segment Speeds

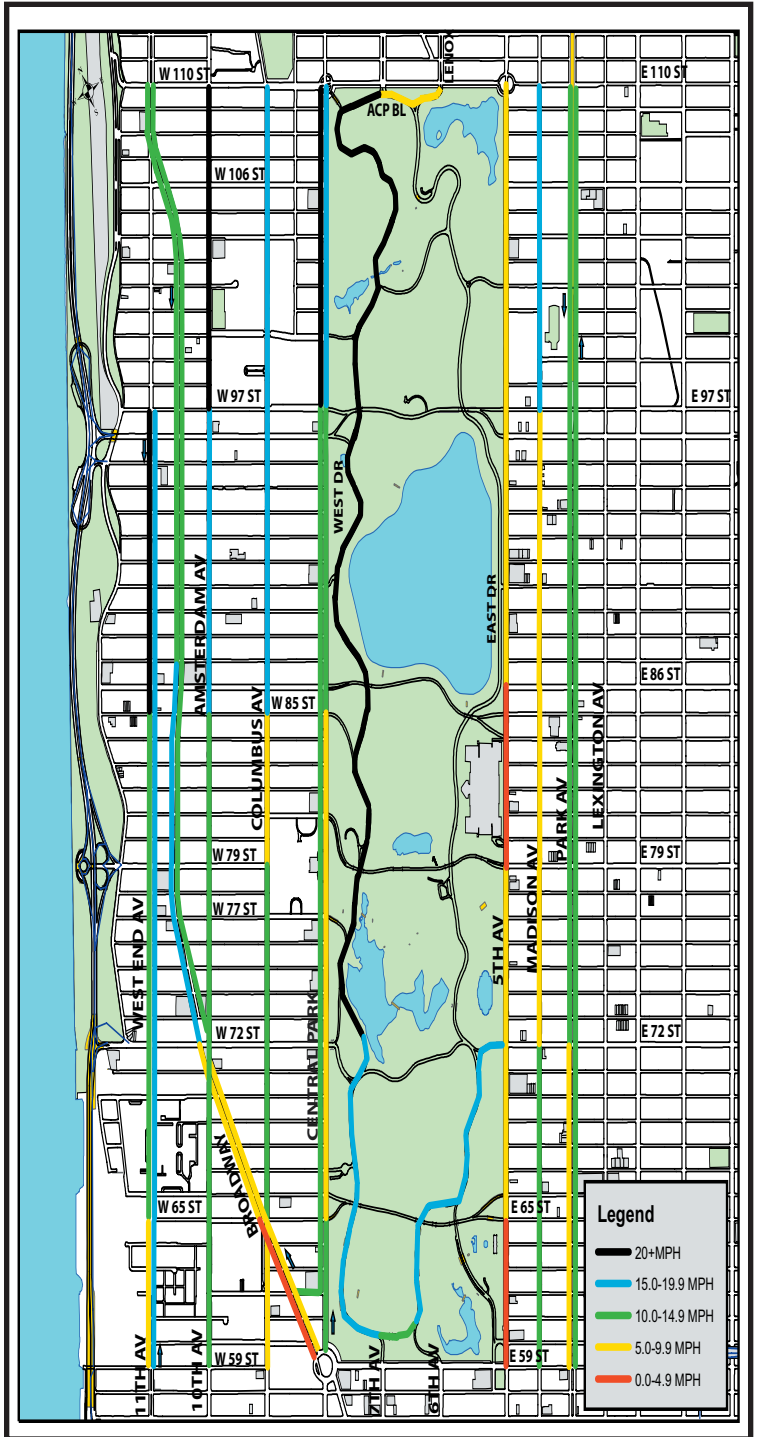


Figure 20: “After” (September) AM Peak Period (7-10 am)
Segment Speeds

Central Park Segment Speed Map

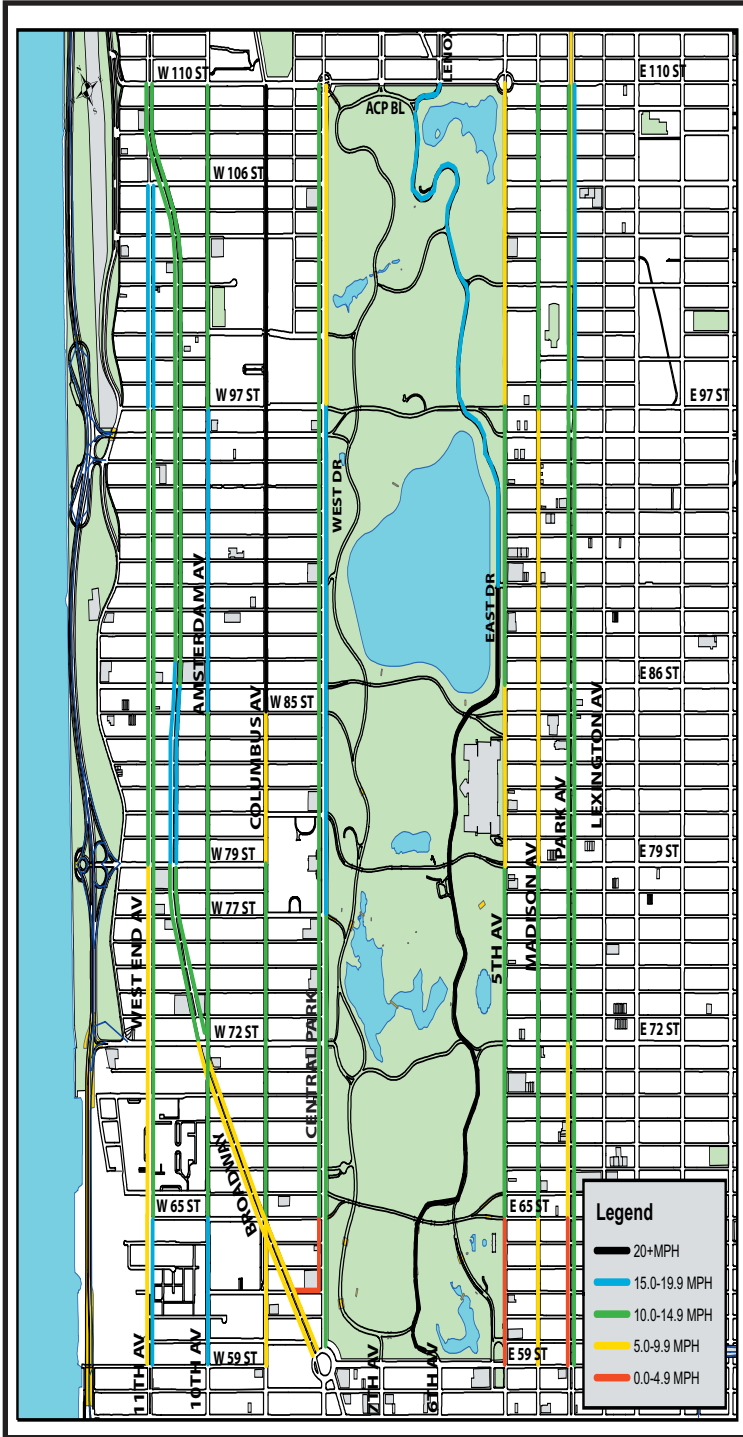


Figure 21: “Before” (May) PM Peak Period (3-7 pm)
Segment Speeds

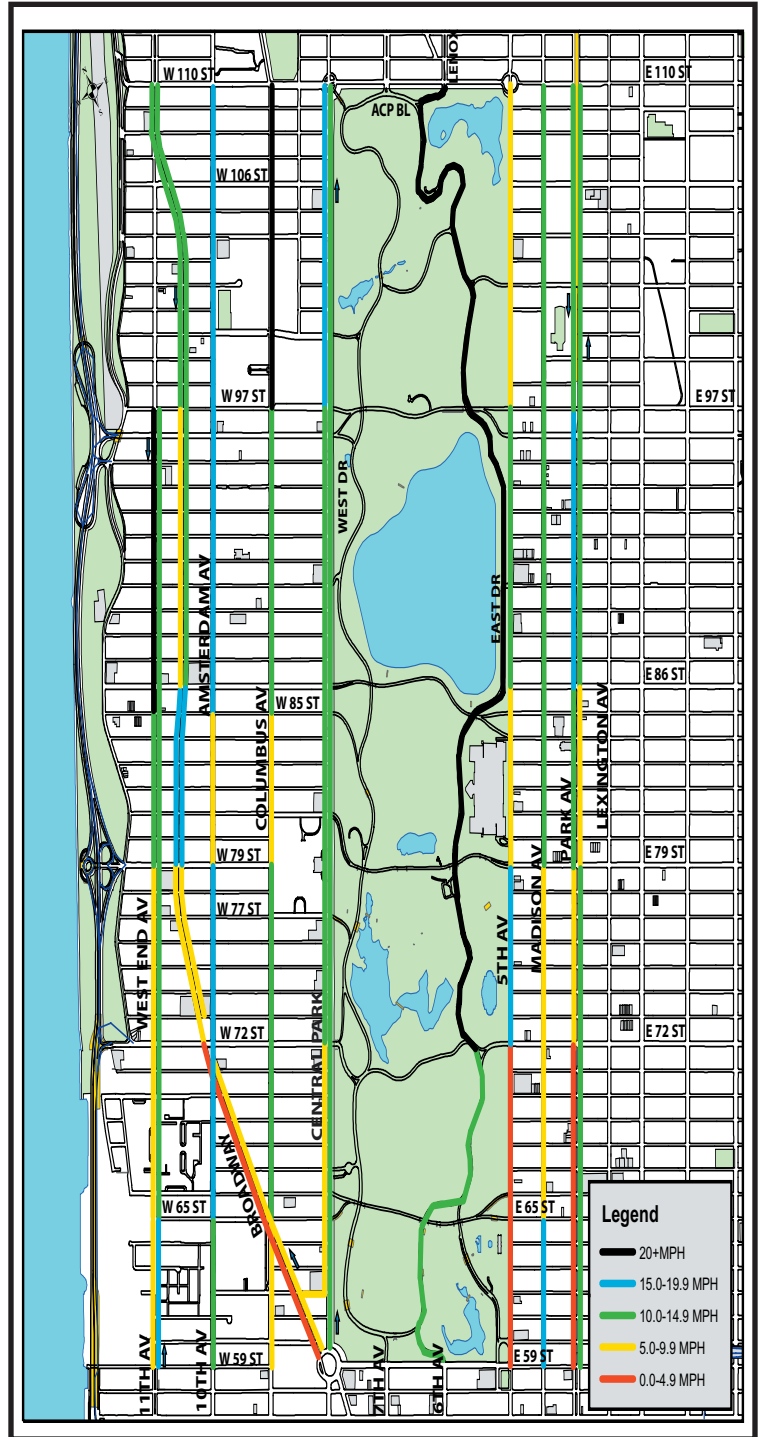


Figure 22: “After” (September) PM Peak Period (3-7 pm)
Segment Speeds

Motorists who had utilized the Central Park East Drive for AM Peak period trips between the Sixth Avenue entrance and Lenox Avenue exit at West 110th Street were diverted to adjacent northbound roadways due to the Drive closure north of East 72nd Street. In September, these motorists experienced trips nearly twice as long as travel time increased by 6.4 minutes for trips along Park Avenue to East 110th Street (to 13.7 minutes from 7.3 minutes) and by 8.8 minutes for trips along Madison Avenue to East 110th Street (to 16.1 minutes from 7.3 minutes), increases of 89% and 120%, respectively (see figure 24). These September travel times were considerably higher than the 11.2 minute travel time along Park Avenue and the 10.0 minute travel time along Madison Avenue in July.

Motorists who had utilized the Central Park West Drive in the PM Peak period for trips between the Adam Clayton Powell Jr. Boulevard/West 110th Street entrance and the Seventh Avenue exit were diverted to adjacent southbound roadways due to the Drive closure. In September, motorists utilizing Central Park West experienced an increased travel time of 5.5 minutes (to 14.4 minutes from 8.9 minutes), a 61% increase when compared to the travel time on the West Drive during “Before” Conditions. Motorists utilizing Columbus Avenue experienced an increased travel time of 4.1 minutes (to 13.0 minutes from 8.9 minutes), a 46% increase (figure 24). These September travel times on Central Park West and Columbus Avenue were 22% and 3% longer, respectively, than the 11.8 minute and 12.6 minute travel times, on these adjacent roadways in July. These travel time comparisons are illustrated in figure 23 on the right.

Travel Time Comparison Map

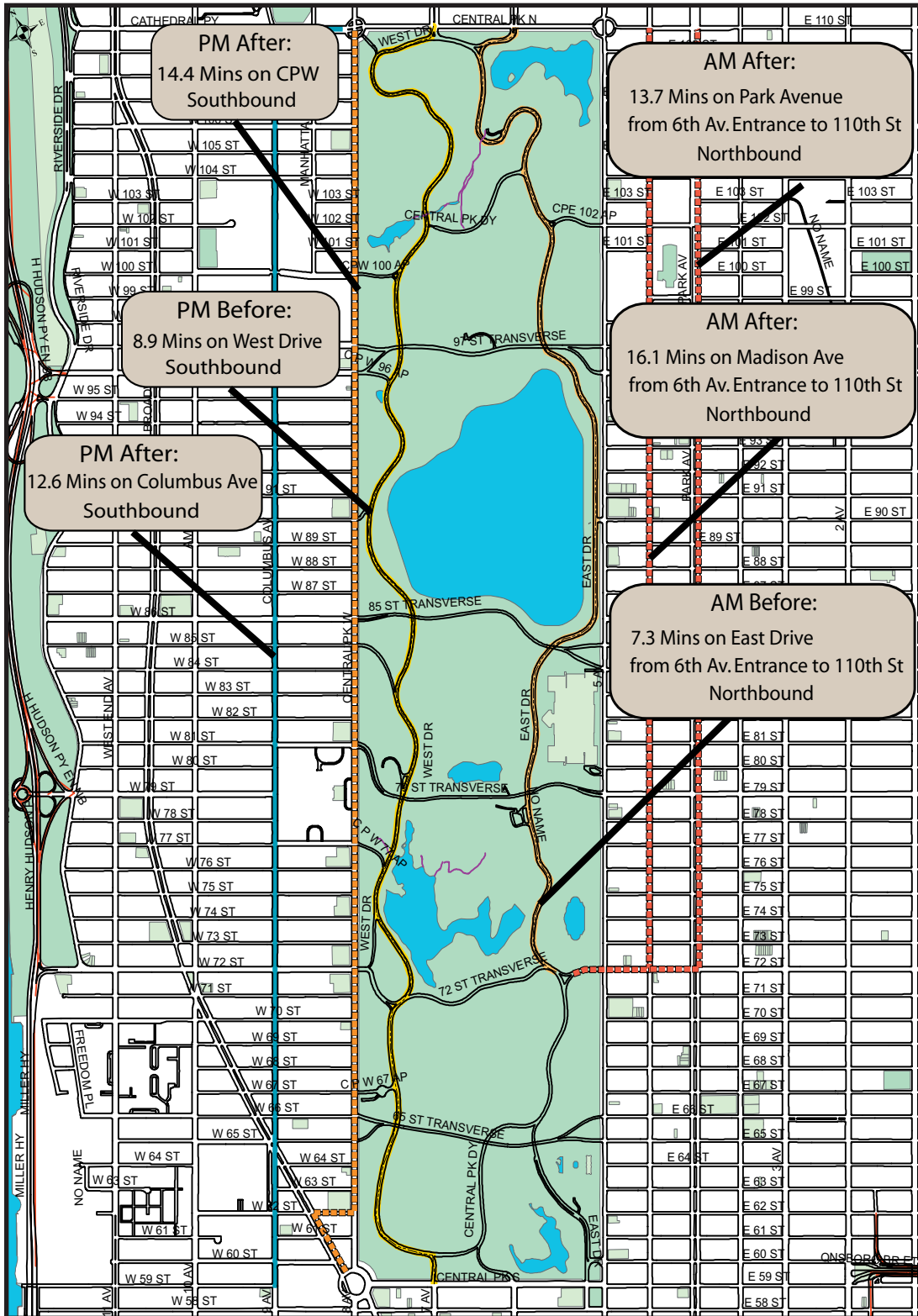


Figure 23: Travel Time Comparisons during AM and PM Peak Periods May vs. September



PROSPECT PARK

July Analysis

During the 7-9am peak period, volume increased compared to “Before” conditions on all southbound roadways west of the park except on Prospect Park West at Carroll Street, where volume was down 15%.

Of these roadways, Prospect Park Southwest at 10th Avenue, experienced the largest increase in volume of 29% (or 69 vph) during the AM peak period. This can be attributed to the West Drive not being available for destinations west and south of the park.

The biggest increase in volume on adjacent southbound roadways occurred further south as it appears that many motorists using the West Drive originated from locations west of the park.

This is in line with the traffic patterns observed during “Before” conditions where a significantly higher number of vehicles accessed the West Drive from the 3rd Street entrance than the entrance at Grand Army Plaza.

Volume Comparison for Roadways west of the Park

Southbound Roadways west of the Park	7-9 am Volume		
	May 2006	July 2006	% Change
Prospect Park West at Carroll Street	2,037	1,734	-15%
Prospect Park West 11th Street	1,291	1,372	6%
Prospect Park SW at 10th Ave. (SB)	480	618	29%
Prospect Park SW at Seeley St. (SB)	665	716	8%

Table 4: Volume on Roadways west of the park

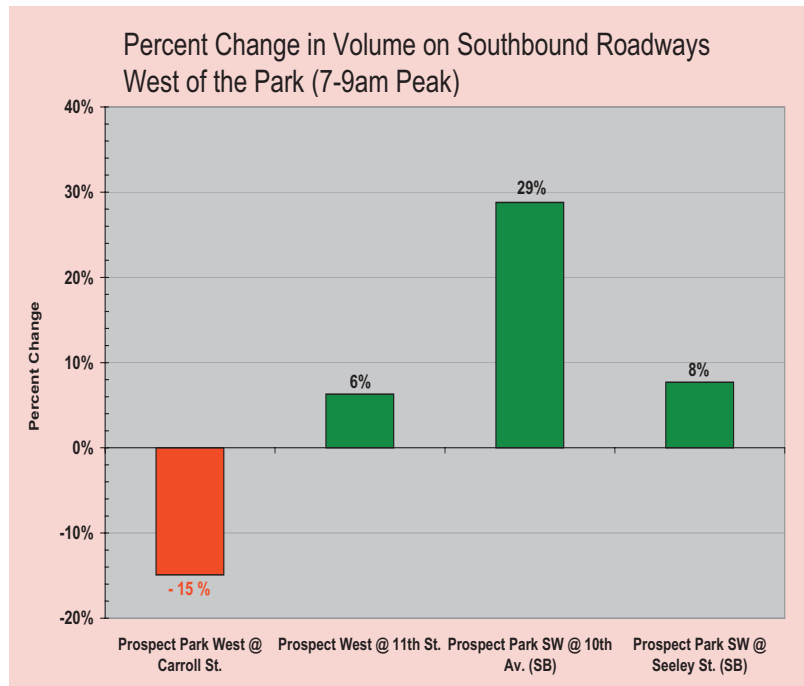


Figure 24: Volume on Southbound Roadways

On Prospect Park West and Prospect Park Southwest travel time and speeds remained virtually unchanged compared to “Before” conditions during the 7-9 am peak period (Figure 27).

Motorists who utilized the West Drive prior to its closure and were diverted to the adjacent roadways, experienced a 53% increase in travel time (although that was less than three minutes of additional travel time) by traveling on Prospect Park West and Prospect Park Southwest when the West Drive was closed during the 7-9am peak period (Figures 25 & 26).

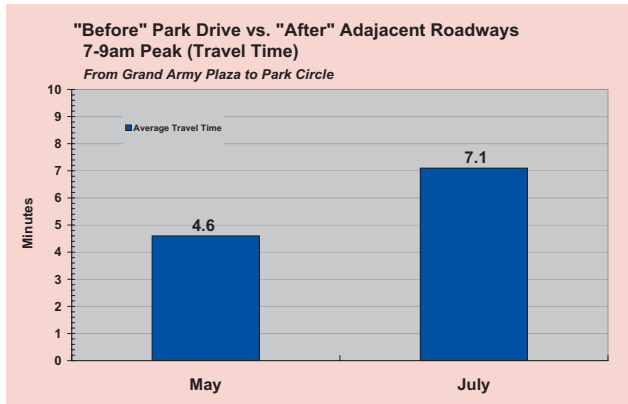


Figure 25: Travel Time Comparison

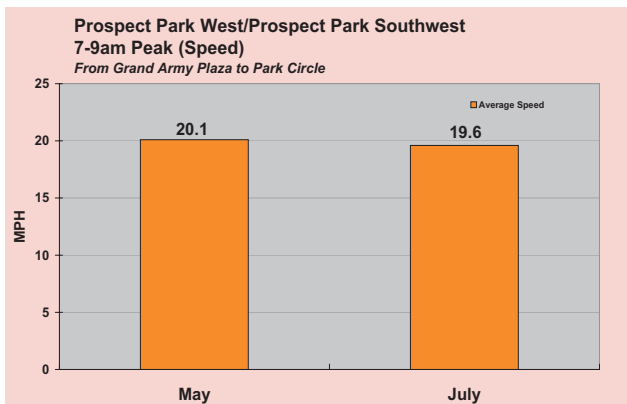


Figure 26: Speed Comparison

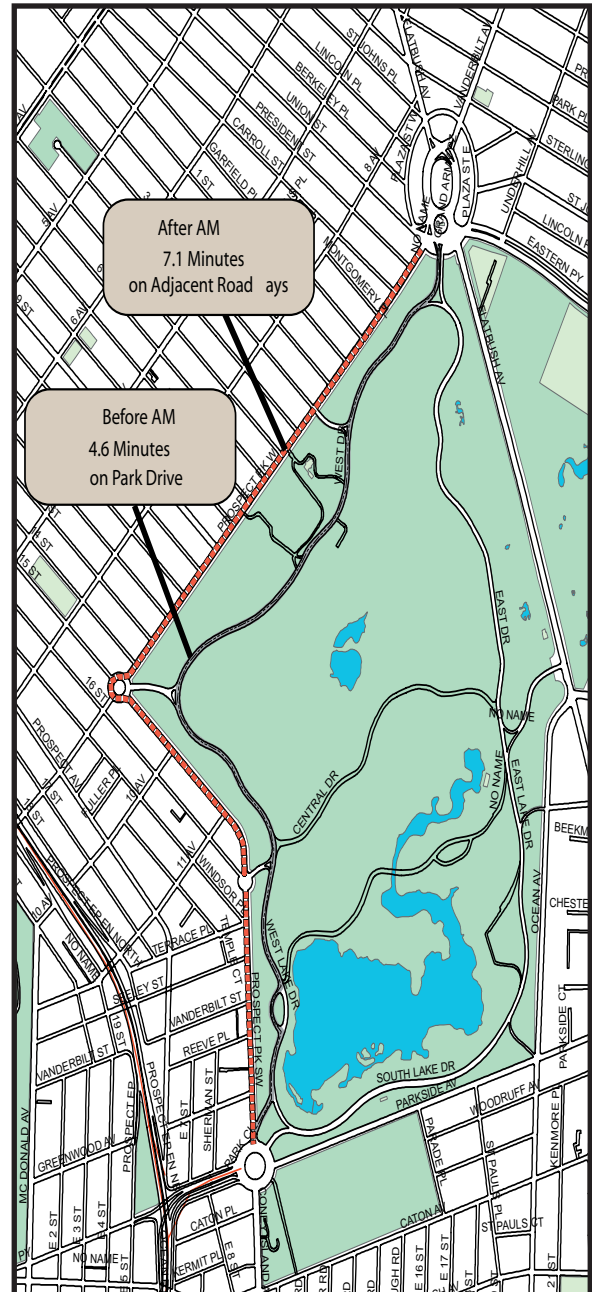


Figure 27: Off-Peak Closures Park Drive vs. Alternate Route

Volume also decreased on Parkside Avenue, which is south of the park. Volume decreased slightly in the eastbound direction but declined more than twice as much in the westbound direction. This can be attributed to generally light vehicular traffic during summer months. Additionally, among the roadways east of the park, only northbound Flatbush Avenue experienced an increase in volume of about 5% (or 53 additional vph) during the AM peak.

Volume comparison for roadways south and west of the Park

7-9 am Volume			
Roadways south & west of the Park	May 2006	July 2006	% Change
Parkside Ave. bet. E. 18th St. & St. Paul's Pl. (EB)	902	800	-11%
Parkside Ave. bet. E. 18th St. & St. Paul's Pl. (WB)	1,371	1,005	-27%
Prospect Park SW at 10th Ave. (NB)	553	515	-7%
Prospect Park SW at Seeley St. (NB)	675	562	-17%

Table 5: Volume on Roadways south and west of the park

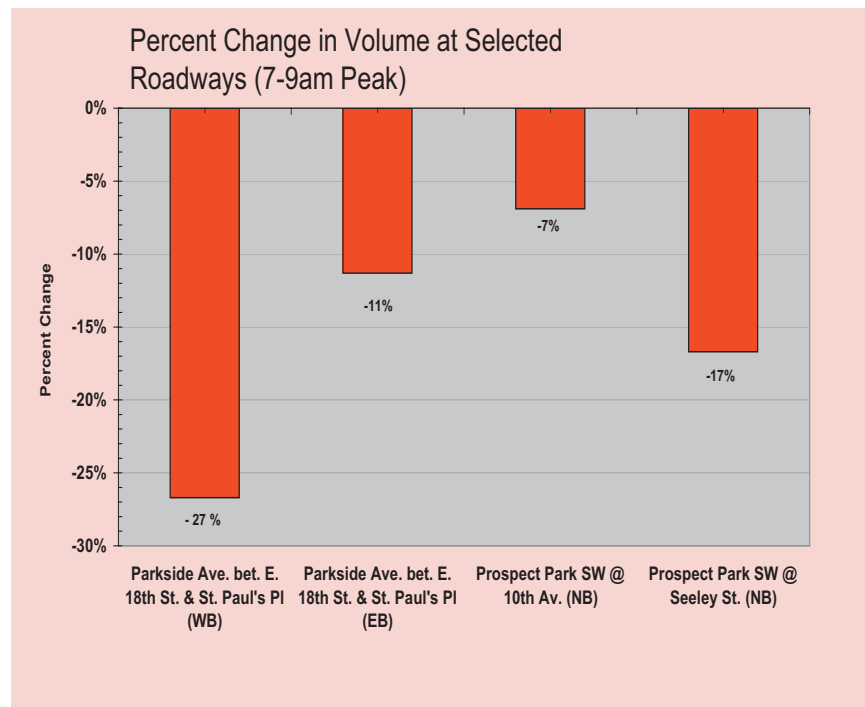


Figure 28: Volume on Selected Roadways

There was minimal diversion to southbound roadways east of the park. Volume on both southbound Ocean Avenue and southbound Flatbush Avenue remained relatively unchanged.

Roadways East of the Park

Southbound Roadways East of the Park	7-9 am Volume		
	May 2006	July 2006	% Change
Ocean Ave. bet. Parkside Ave. Lincoln R. (SB)	1,195	1,190	0%
Flatbush Ave. bet. Grand Army Plaza & Empire Blvd. (SB)	1,307	1,246	-5%

Table 6: Volume on roadways east of Prospect Park, May vs. July

September Analysis

Overall, traffic volume increased between 11% and 47% when compared to “Before” conditions, on three of the four southbound roadways west of the park. Prospect Park West at 11th Street was the only location where there was minimal variation in traffic volume (-1%, or 4 vph) during the 7-9 am peak period.

Among the southbound roadways, the largest increase in volume was observed on Prospect Park Southwest and 10th Avenue, where volume increased by 47% (or 113 vph) during the 7-9 am peak period. Motorists use this route as an alternative to the West Drive for destinations south, east, and west of the park during the AM peak period when the West Drive is closed to motor vehicles.

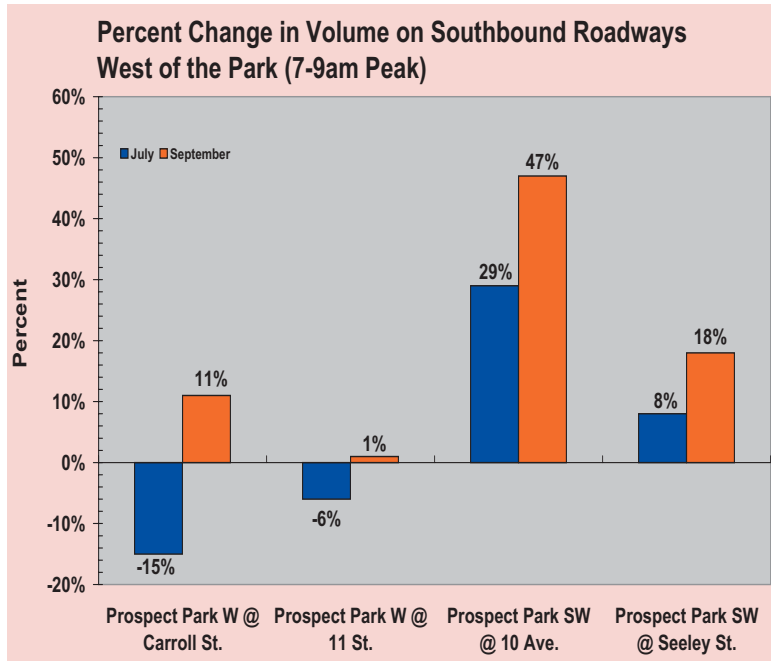


Figure 29: Volume on Southbound Roadways west of Prospect Park

The locations monitored along Prospect Park Southwest continued to exhibit greater percentage increases in volume as compared to those along Prospect Park West, as many motorists who had previously used the West Drive originated from locations west of the park. However, Prospect Park West at Carroll Street, which had exhibited a decrease in volume of 15% (or 152 vph) in July, exhibited an increase in volume of 11% (or 117 vph) in September. This may be attributable to a shift in traffic patterns as more motorists used Grand Army Plaza as an access route to Prospect Park West.

Traffic volume decreased slightly on eastbound Parkside Avenue between Coney Island Avenue and St. Paul’s Place and remained unchanged in the westbound direction.

In contrast to July observations, there was a slight diversion of traffic to southbound roadways east of the park. Volume on southbound Ocean Avenue between Parkside Avenue and Lincoln Road increased 11% (or 66 vph), as compared to “Before” conditions, and southbound Flatbush Avenue between Grand Army Plaza and Empire Boulevard experienced an increase of 6% (or 57 vph) in September. In July, these roadways had exhibited volumes near pre-implementation levels.

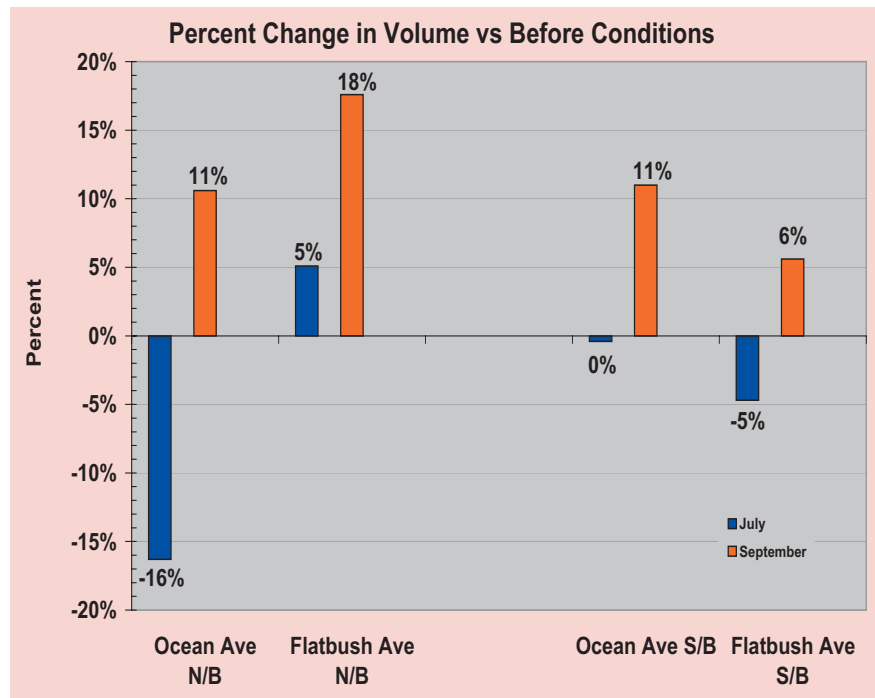


Figure 30: Volume on Ocean and Flatbush Avenues

In September, motorists experienced about three minutes (+63%) of additional travel time by utilizing Prospect Park West and Prospect Park Southwest instead of the West Drive, which was closed during the 7-9 am peak period (Figure 33).

In September, travel time along Prospect Park West and Prospect Park Southwest, increased 63% (to 7.5 from 4.6 minutes). These changes in travel time, from “Before” conditions are similar to the changes observed in July when travel time increased by 53% (to 7.1 minutes from 4.6 minutes), when volumes on southbound roadways adjacent to the park were relatively lower. See figures 31 and 32 and 33 on page 34.

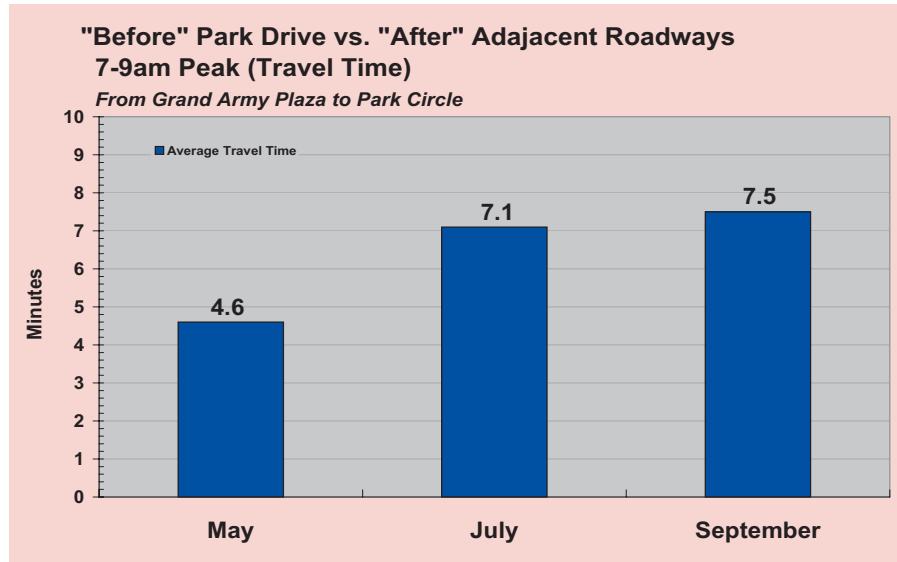


Figure 31: Travel Time Comparison

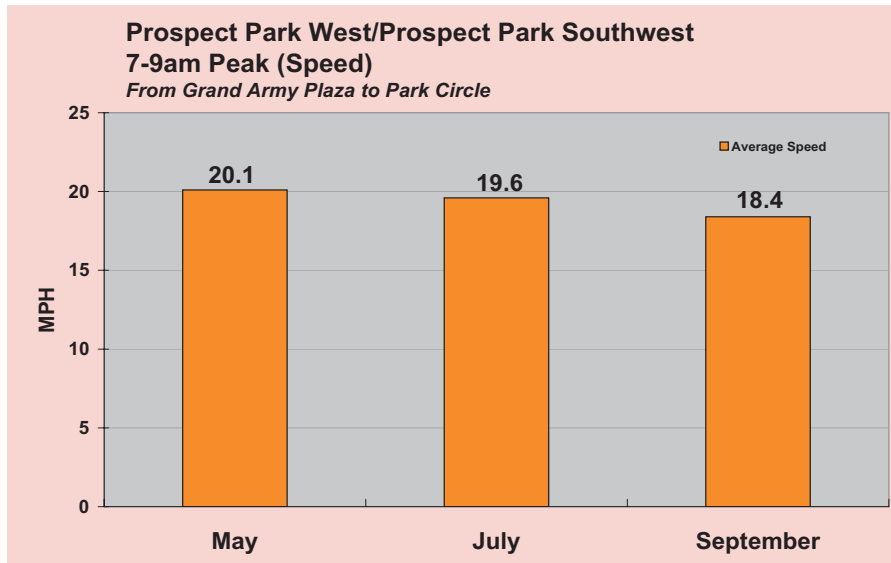


Figure 32: Speed Comparison

Prospect Park Travel Time Comparison Map

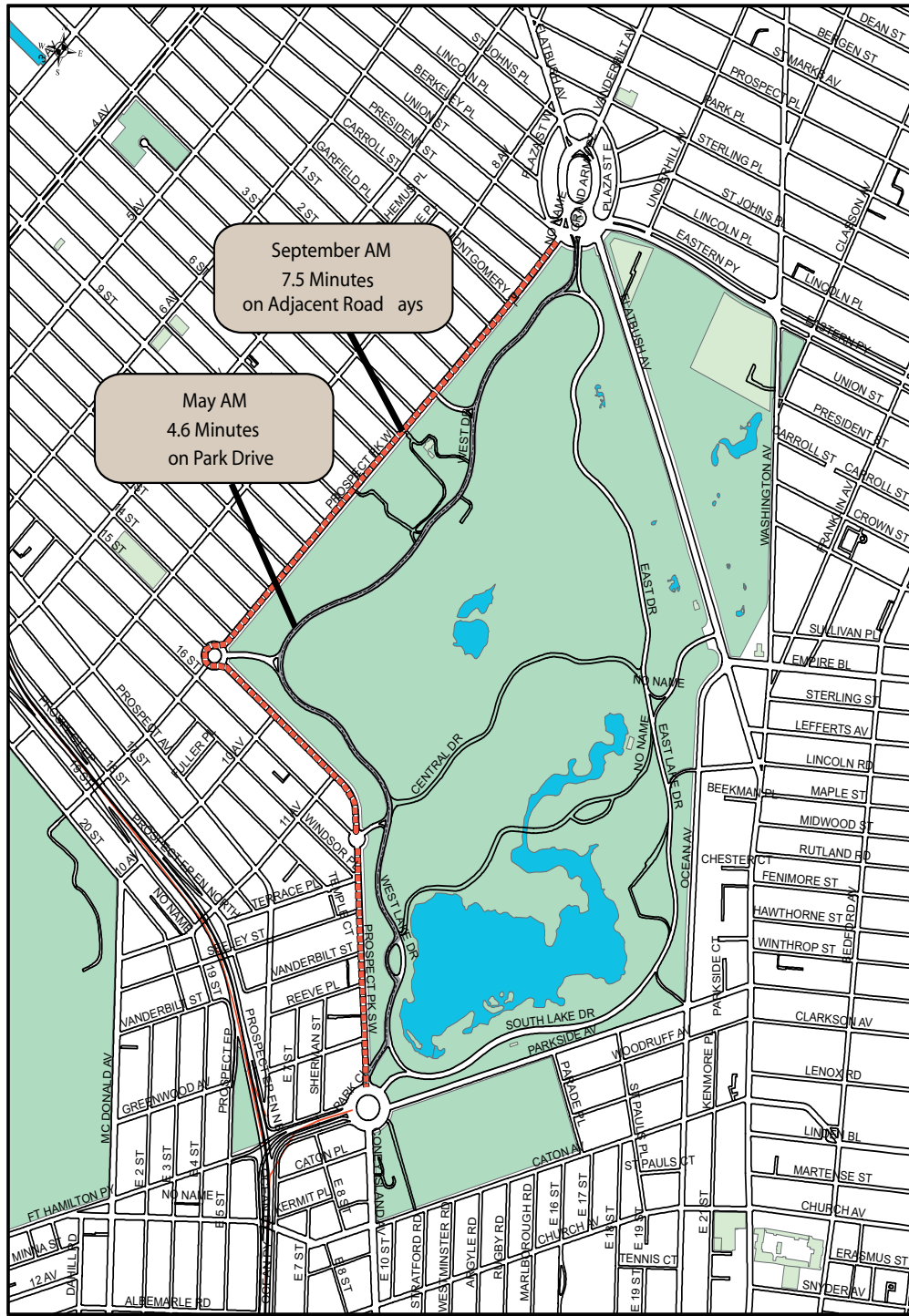


Figure 33: Off-Peak Closures
Park Drive vs. Alternate Route

APPENDICES

APPENDIX I
MONITORING PLANS

Central Park Drive Off-Peak Direction Closures Monitoring Plan

Park Drives and Entrances/Exits:

- Lenox Avenue Entrance/Exit (2)
- Central Park North Drive between Lenox Avenue and Adam Clayton Powell Boulevard
- Adam Clayton Powell Jr. Boulevard Entrance/Exit (2)
- West Drive between Adam Clayton Powell Blvd and 100th Street Entrance/Exit
- West 100th Street Entrance/Exit (2)
- West Drive between 100th Street entrance and 96th Street entrance
- West 96th Street Entrance
- West Drive between West 96th Street entrance and West 85th Street entrance
- West 85th Street Entrance
- West Drive between West 85th Street entrance and W 72nd Street entrance/exit
- West 72nd Street Entrance/Exit (2)
- Central Park West Drive between W 72nd Street and Tavern on the Green (67th Street)
- Central Park West Drive exit at 7th Avenue
- Park Drive between 7th Avenue exit and 6th Avenue entrance
- Central Park entrance at 6th Avenue
- East Drive between 6th Avenue entrance and W 72nd Street entrance/exit
- East Drive north of W. 72nd Street entrance/exit
- East Drive north of East 90th Street exit
- East 90th Street Exit
- East 72nd Street Entrance/Exit (2)

Total Machines: 25

Local Streets (west side)

- Central Park West @ 72nd Street (NB and SB) – 2 machines
- Central Park West @ 86th Street (NB and SB) – 2 machines
- Central Park West @ 96th Street (NB and SB) – 2 machines
- Central Park West @ 110th Street (NB and SB) – 2 machines
- Central Park West (southbound) between West 95th and West 96th Streets
- Central Park West northbound @ 61st Street
- Columbus Avenue @ 72nd Street
- Columbus Avenue @ 86th Street
- Columbus Avenue @ 96th Street
- Columbus Avenue @ 110th Street
- Amsterdam Avenue @ 86th Street
- Amsterdam Avenue @ 96th Street
- Amsterdam Avenue @ 110th Street
- Broadway @ 86th Street (NB and SB) – 2 machines
- Broadway @ 96th Street (NB and SB) – 2 machines
- Broadway @ 110th Street (NB and SB) – 2 machines
- West End Avenue @ 66th Street (NB and SB) – 2 machines
- West End Avenue @ 72nd Street (NB and SB) – 2 machines
- West End Avenue @ 86th Street (NB and SB) – 2 machines
- West End Avenue @ 96th Street (NB and SB) – 2 machines

Total Machines: 31

Local Streets (east side)

Park Avenue @ 60th Street (NB and SB) – 2 machines
Park Avenue @ 72nd Street (NB and SB) – 2 machines
Park Avenue @ 90th Street (NB and SB) – 2 machines
Park Avenue @ 110th Street (SB only) – 1 machines
Madison Avenue @ 60th Street
Madison Avenue @ 72nd Street
Madison Avenue @ 90th Street
Fifth Avenue @ 60th Street
Fifth Avenue @ 72nd Street
Fifth Avenue @ 90th Street
Fifth Avenue @ 110th Street
Total Machines: 14

Cross Streets (Transverse Roads, east side, north side)

65th Street Transverse Road (eastbound and westbound) – 2 machines
72nd Street Transpark Road (westbound only) between East Drive and West Drive – 1 machine
79th Street Transverse Road (eastbound and westbound) – 2 machines
86th Street Transverse Road (eastbound and westbound) -- 2 machines
97th Street Transverse Road (eastbound and westbound) – 2 machines
Central Park South (59th Street) westbound at Columbus Circle
Central Park South (59th Street) eastbound at 5th Avenue
East 65th Street between Madison and 5th Avenues
East 66th Street between Madison and 5th Avenues
East 72nd Street westbound between 5th and Madison Avenues
East 72nd Street eastbound between 5th and Madison Avenues
East 79th Street westbound between 5th and Madison Avenues
East 79th Street eastbound between 5th and Madison Avenues
East 84th Street between Madison and Fifth Avenues
East 85th Street between Madison and Fifth Avenues
East 96th Street eastbound between Madison and Fifth Avenues
East 96th Street westbound between Madison and Fifth Avenues
Central Park North (110th Street) westbound between Adam Clayton Powell Blvd and Frederick Douglas Circle
Central Park North (110th Street) eastbound between Lenox and Fifth Avenues
Total Machines: 23

Cross Streets (west side)

West 100th Street (eastbound) between Columbus Avenue and Central Park West

West 96th Street eastbound between Columbus Avenue and Central Park West

West 96th Street westbound between Columbus Avenue and Central Park West

West 72nd Street (eastbound) between Columbus Avenue and Central Park West

West 72nd Street (westbound) between Columbus Avenue and Central Park West

West 65th Street (eastbound) between Columbus Avenue and Central Park West

West 62nd Street (westbound) between Columbus Avenue and Central Park West

Total Machines: 7

Grand Total ATR Machines: 100

Vehicle Travel Times (7-10 am and 3-7 pm)

Park Drives

- Central Park Drives northbound and southbound. Begin at Lenox Avenue (checkpoints, Adam Clayton Powell Jr., Boulevard, West 96th Street entrance, West 72nd Street entrance/exit, 7th Avenue exit, 6th Avenue entrance, East 72nd Street entrance/exit, East 90th Street exit) end at Lenox Avenue.

West Side

- Central Park West northbound and southbound between 110th Street and 59th Street/Central Park South. Checkpoints: 97th, 85th, 79th and 65th Streets.
- Columbus Avenue/Amsterdam Avenue between 110th Street and 59th Street/Central Park South. Checkpoints: 97th, 85th, 79th and 65th Streets.
- Broadway between 110th Street and 59th Street (northbound and southbound). Checkpoints: 97th, 85th, 79, 65th Streets.
- West End Avenue between 110th Street and 59th Street (northbound and southbound). Checkpoints: 97th, 85th, 79, 65th Streets.

East Side

- Madison Avenue/Fifth Avenue between 59th and 110th Streets Checkpoints: 65th, 72nd, 79th, 86th and 97th Streets.
- Park Avenue northbound and southbound between 59th and 110th Streets Checkpoints: 65th, 72nd, 79th, 86th and 97th Streets.

Prospect Park Monitoring Plan

ATR Locations

1. Entrance at Ocean Avenue/Parkside Avenue
2. East Lake Drive between Ocean Avenue entrance and Ocean Avenue exit at Lincoln Road
3. Exit at Lincoln Road
4. East Lake Drive between Lincoln Road and Wellhouse Drive
5. East Lake Drive between Center Drive and Grand Army Plaza Exit
6. Drive between Grand Army Plaza exit and entrance
7. Grand Army Plaza Exit
8. Grand Army Plaza Entrance
9. West Lake Drive between Grand Army Plaza Entrance and 3rd Street Entrance/Exit
10. 3rd Street Exit
11. 3rd Street Entrance
12. West Lake Drive between 3rd Street Entrance/Exit and 16th Street Entrance/Exit
13. 16th Street Exit
14. West Lake Drive between 16th Street Entrance/Exit and Well house Drive
15. West Lake Drive between Wellhouse Drive and Park Circle Exit
16. Park Circle Entrance
17. Park Circle Exit
18. West Lake Drive between Park Circle Entrance and Exit
19. South Lake Drive between Park Circle Exit and Ocean Avenue entrance
20. Prospect Park West S/B at Carroll Street
21. Prospect Park West S/B at 11th Street
22. Prospect Park S/W at 10th Avenue (NB)
23. Prospect Park S/W at 10th Avenue (SB)
24. Prospect Park S/W at Seeley Street (NB)
25. Prospect Park S/W at Seeley Street (SB)
26. Parkside Avenue between E. 18 Street and St. Paul's Place (EB)
27. Parkside Avenue between E. 18 Street and St. Paul's Place (WB)
28. Ocean Avenue between Parkside Avenue and Lincoln Road (NB)
29. Ocean Avenue between Parkside Avenue and Lincoln Road (SB)
30. Flatbush Avenue between Grand Army Plaza and Empire Boulevard (SB)
31. Flatbush Avenue between Grand Army Plaza and Empire Boulevard (NB)

Travel Time/Speed Survey:

Adjacent Roadways:

1. Start at Park Circle – Parkside Avenue to Ocean Avenue (1st Checkpoint)
2. Continue on Ocean Avenue to Flatbush Avenue (2nd Checkpoint)
3. Continue on Flatbush Avenue to Grand Army Plaza (GAP) (3rd Checkpoint)
4. Go around the circle (GAP) to Union Street (4th Checkpoint)
5. Continue on Prospect Park West from Union Street to 15th Street (5th Checkpoint)
6. Continue on Prospect Park SW from the circle at 15th Street to Park Circle (end).

In the Park:

Start at Grand Army Plaza, proceed on West Lake Drive, 1st checkpoint is Park Circle, 2nd checkpoint is Ocean Avenue, end at Grand Army Plaza.

APPENDIX II
VARIABLE MESSAGE SIGN
(VMS) PLANS

VMS Sign Plan for Central Park

VMS signs will be installed by Friday, May 26th and will remain in operation for two weeks.

25 VMS Locations (see attached map)

Locations:

Park Drive Entrances

- Lenox Avenue
- Adam Clayton Powell Jr. Boulevard
- West 100th Street
- West 96th Street
- West 85th Street
- West 72nd Street
- East 72nd Street
- 6th Avenue Entrance

Central Park East Drive

- Central Park East Drive approaching East 72nd Street (1 facing south)

West Side (For Southbound and Eastbound Approaches)

- Broadway @ 72nd Street (1 facing north)
- Broadway @ 86th Street (1 facing north)
- Broadway @ 96th Street (1 facing north)
- West 96th Street @ Columbus Avenue (1 facing west)
- West 86th Street @ Columbus Avenue (1 facing west)
- West 72nd Street @ Columbus Avenue (1 facing west)
- West 100th Street @ Columbus Avenue (1 facing west)

East Side (For Northbound and Westbound Approaches)

- Park Avenue @ 72nd Street (1 facing south; 1 facing east)
- Madison Avenue @ 72nd Street (1 facing south)

North Side (For Southbound and Westbound Approaches)

- Frederick Douglass Blvd. @ 125th Street (1 facing north; 1 facing east)
- 5th Avenue @ 125th Street (1 facing north; 1 facing east)
- Adam Clayton Powell Jr. Boulevard between West 116th Street and West 115th Street (1 facing north on raised center median)

VMS Sign Messages:

West Side:

The *West Side* message should run at the following locations (18 total VMS):

As of
June 5

West Dr
Closed
3-7 PM

Lenox-
59 Sts
Mo-Fri

- Lenox Avenue Entrance
- Adam Clayton Powell Jr. Boulevard Entrance
- West 100th Street Entrance
- West 96th Entrance
- West 85th Entrance
- West 72nd Street Entrance
- Broadway @ 72nd Street (1 facing north)
- Broadway @ 86th Street (1 facing north)
- Broadway @ 96th Street (1 facing north)
- West 96th Street @ Columbus Avenue (1 facing west)
- West 86th Street @ Columbus Avenue (1 facing west)
- West 72nd Street @ Columbus Avenue (1 facing west)
- West 100th Street @ Columbus Avenue (1 facing west)
- Frederick Douglass Blvd. @ 125th Street (1 facing north; 1 facing east)
- 5th Avenue @ 125th Street (1 facing north; 1 facing east)
- Adam Clayton Powell Jr. Boulevard between West 116th Street and West 115th Street (1 facing north on raised center median)

East Side:

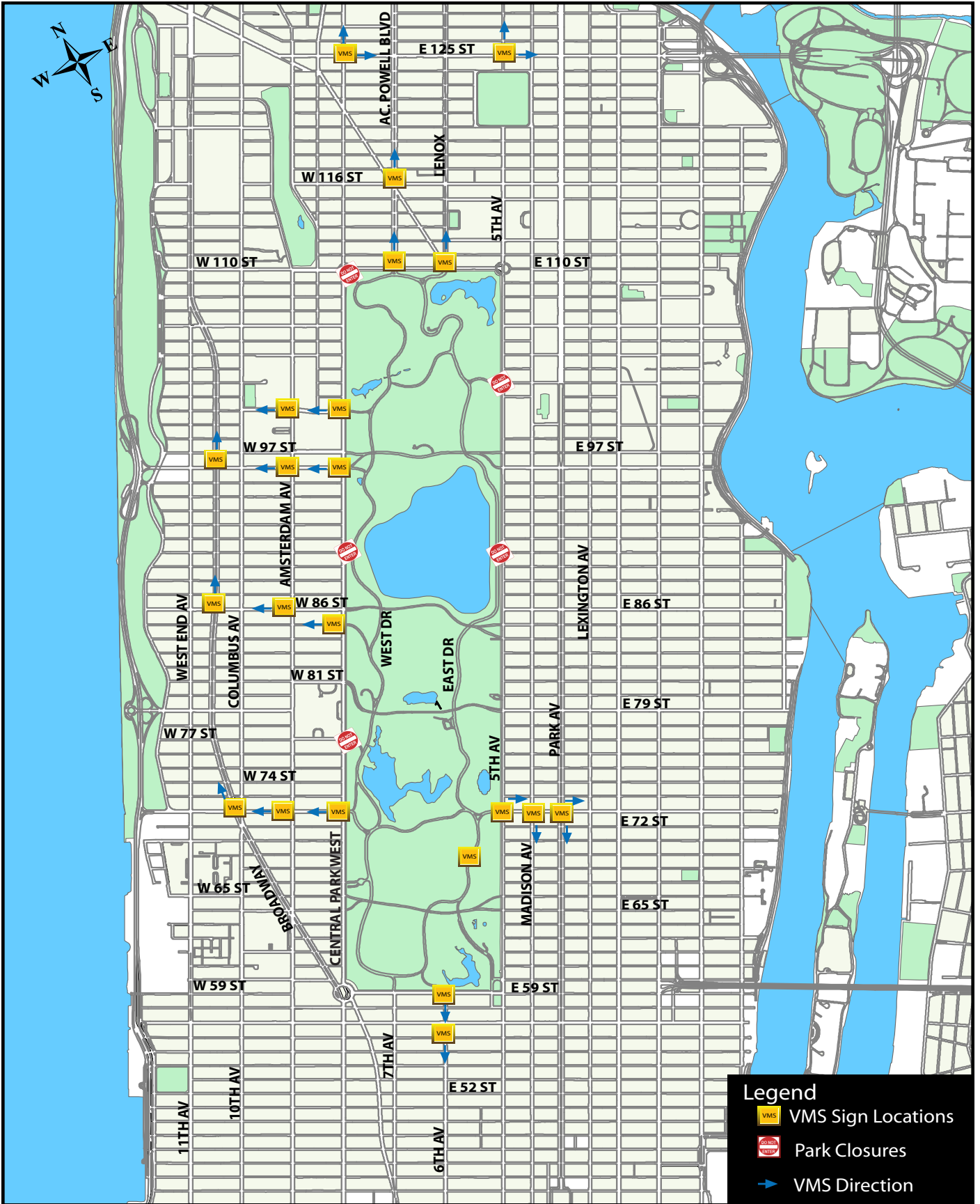
The *East Side* message should run at the following locations (7 total VMS):

As of
June 5

East Dr
Closed
7-10am

E 72-110
Streets
Mo-Fri

- 6th Avenue **Entrance**
- 6th Avenue approaching 57th Street (1 facing south)
- East 72nd Street **Entrance**
- Central Park East Drive south of East 72nd Street (1 facing south)
- Park Avenue @ 72nd Street (1 facing south; 1 facing east)
- Madison Avenue @ 72nd Street (1 facing south)



Appendix II: Variable Message Sign Plans

VMS Sign Plan for Prospect Park

VMS signs will be installed by Friday, May 26th and will remain in operation for two weeks.

10 VMS Locations

One VMS sign at the Ocean Avenue/Parkside Avenue entrance. To be placed on the median separating the entrance and the west leg of Parkside Avenue. (See attached map)

Three VMS signs at Grand Army Plaza (see attached aerial map for exact locations)

One VMS sign at the 3rd Street entrance.

Four VMS signs at Park Circle (see attached aerial map for exact locations).

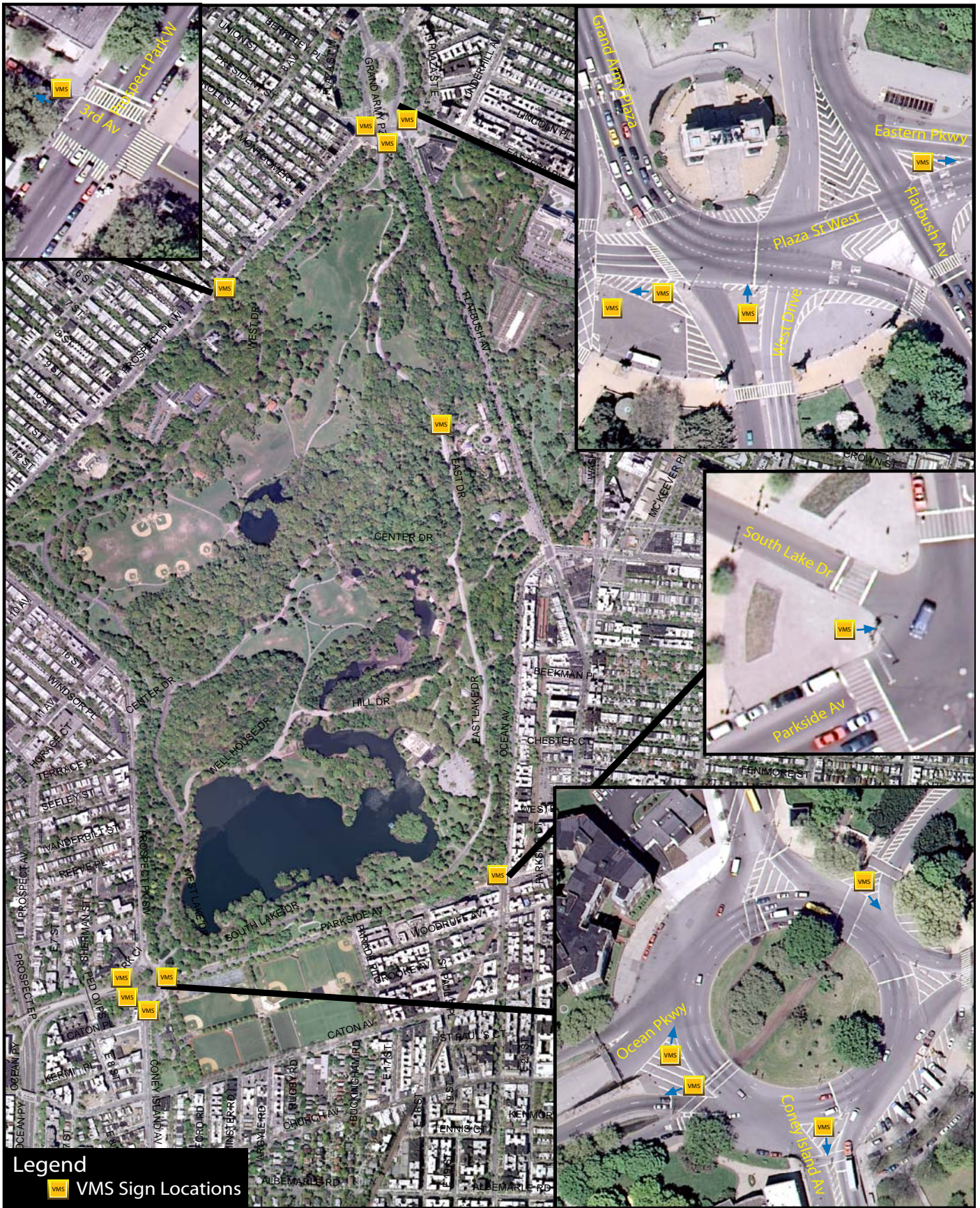
One VMS sign on East Lake Drive (within the Park) in advance of the Grand Army Plaza exit (closer to Center Drive).

Message:

As of
June 5

W Drive
Closed
7-9 AM

GAP to
Pk Cir
Mo-Fr



Appendix II: Variable Message Sign Plans

APPENDIX III
VOLUMES

Central Park Off-Peak Closures 2006 ~ Peak Periods ATR Volumes North-South Avenues ~ East of Central Park

7-10 am Northbound Avenues ~ East of Central Park

Northbound Avenues East of Central Park	May 2006 Before Volume	July 2006			September 2006		
		Change vs. Volume	Before	Percent Change	Change vs. Volume	Before	Percent Change
Park Ave. N/B at E. 60th St.	3,376	3,401	25	0.7 %	3,338	- 38	- 1.1 %
Madison Ave. N/B at E. 60th St.	4,043	4,014	- 29	- 0.7 %	4,250	207	5.1 %
Total N/B at E. 60th St. Screenline	7,419	7,415	- 4	- 0.1 %	7,588	169	2.3 %
Park Ave. N/B at E. 72nd St.	3,266	2,899	- 367	- 11.2 %	3,020	- 246	- 7.5 %
Madison Ave. N/B at E. 72nd St.	3,503	3,253	- 250	- 7.1 %	3,359	- 144	- 4.1 %
Total N/B at E. 72nd St. Screenline	6,769	6,152	- 617	- 9.1 %	6,379	- 390	- 5.8 %
Park Ave. N/B at E. 90th St.	2,514	1,865	- 649	- 25.8 %	2,250	- 264	- 10.5 %
Madison Ave. N/B at E. 90th St.	3,101	2,582	- 519	- 16.7 %	3,122	21	0.7 %
Total N/B at E. 90th St. Screenline	5,615	4,447	- 1,168	- 20.8 %	5,372	- 243	- 4.3 %

7-10 am Southbound Avenues ~ East of Central Park

Southbound Avenues East of Central Park	May 2006 Before Volume	July 2006			September 2006		
		Change vs. Volume	Before	Percent Change	Change vs. Volume	Before	Percent Change
Park Ave. S/B at E. 60th St.	4,363	4,442	79	1.8 %	4,207	- 156	- 3.6 %
5th Ave. S/B at E. 60th St.	4,877	4,564	- 313	- 6.4 %	4,975	98	2.0 %
Total S/B at E. 60th St. Screenline	9,240	9,006	- 234	- 2.5 %	9,182	- 58	- 0.6 %
Park Ave. S/B at E. 72nd St.	3,901	3,556	- 345	- 8.8 %	3,832	- 69	- 1.8 %
5th Ave. S/B at E. 72nd St.	3,644	3,786	142	3.9 %	3,920	276	7.6 %
Total S/B at E. 72nd St. Screenline	7,545	7,342	- 203	- 2.7 %	7,752	207	2.7 %
Park Ave. S/B at E. 90th St.	2,810	2,331	- 479	- 17.0 %	2,806	- 4	- 0.1 %
5th Ave. S/B at E. 90th St.	2,910	2,610	- 300	- 10.3 %	3,051	141	4.8 %
Total S/B at E. 90th St. Screenline	5,720	4,941	- 779	- 13.6 %	5,857	137	2.4 %
Park Ave. S/B at E. 110th St.	2,067	1,832	- 235	- 11.4 %	1,955	- 112	- 5.4 %
5th Ave. S/B at E. 110th St.	2,072	2,405	333	16.1 %	2,469	397	19.2 %
Total S/B at E. 110th St. Screenline	4,139	4,237	98	2.4 %	4,424	285	6.9 %

Central Park Off-Peak Closures 2006 ~ Peak Periods ATR Volumes North-South Avenues ~ East of Central Park

3 - 7 pm Northbound Avenues ~ East of Central Park

Northbound Avenues East of Central Park	May 2006 Before Volume	July 2006			September 2006		
		Change vs. Volume	Before	Percent Change	Change vs. Volume	Before	Percent Change
Park Ave. N/B at E. 60th St.	4,707	4,682	- 25	- 0.5 %	4,421	- 286	- 6.1 %
Madison Ave. N/B at E. 60th St.	5,890	5,765	- 125	- 2.1 %	5,612	- 278	- 4.7 %
Total N/B at E. 60th St. Screenline	10,597	10,447	- 150	- 1.4 %	10,033	- 564	- 5.3 %
Park Ave. N/B at E. 72nd St.	5,166	4,700	- 466	- 9.0 %	4,840	- 326	- 6.3 %
Madison Ave. N/B at E. 72nd St.	5,129	5,235	106	2.1 %	5,033	- 96	- 1.9 %
Total N/B at E. 72nd St. Screenline	10,295	9,935	- 360	- 3.5 %	9,873	- 422	- 4.1 %
Park Ave. N/B at E. 90th St.	4,235	3,469	- 766	- 18.1 %	4,225	- 10	- 0.2 %
Madison Ave. N/B at E. 90th St.	4,675	4,463	- 212	- 4.5 %	4,930	255	5.5 %
Total N/B at E. 90th St. Screenline	8,910	7,932	- 978	- 11.0 %	9,155	245	2.7 %

3 - 7 pm Southbound Avenues ~ East of Central Park

Southbound Avenues East of Central Park	May 2006 Before Volume	July 2006			September 2006		
		Change vs. Volume	Before	Percent Change	Change vs. Volume	Before	Percent Change
Park Ave. S/B at E. 60th St.	5,275	4,984	- 291	- 5.5 %	4,530	- 745	- 14.1 %
5th Ave. S/B at E. 60th St.	5,355	5,318	- 37	- 0.7 %	5,322	- 33	- 0.6 %
Total S/B at E. 60th St. Screenline	10,630	10,302	- 328	- 3.1 %	9,852	- 778	- 7.3 %
Park Ave. S/B at E. 72nd St.	5,258	4,909	- 349	- 6.6 %	5,458	200	3.8 %
5th Ave. S/B at E. 72nd St.	4,088	4,606	518	12.7 %	4,619	531	13.0 %
Total S/B at E. 72nd St. Screenline	9,346	9,515	169	1.8 %	10,077	731	7.8 %
Park Ave. S/B at E. 90th St.	3,787	3,257	- 530	- 14.0 %	3,857	70	1.8 %
5th Ave. S/B at E. 90th St.	3,744	3,447	- 297	- 7.9 %	3,814	70	1.9 %
Total S/B at E. 90th St. Screenline	7,531	6,704	- 827	- 11.0 %	7,671	140	1.9 %
Park Ave. S/B at E. 110th St.	2,167	1,924	- 243	- 11.2 %	2,117	- 50	- 2.3 %
5th Ave. S/B at E. 110th St.	2,266	2,315	49	2.2 %	2,507	241	10.6 %
Total S/B at E. 110th St. Screenline	4,433	4,239	- 194	- 4.4 %	4,624	191	4.3 %

Central Park Off-Peak Closures 2006 ~ Peak Periods ATR Volumes
Northbound Avenues ~ West of Central Park

7-10 am Northbound Avenues ~ West of Central Park

Northbound Avenues West of Central Park	May 2006 Before Volume	July 2006			September 2006		
		Change vs. Volume	Before	Percent Change	Change vs. Volume	Before	Percent Change
Central Park West N/B at W. 61st St.	2,351	2,081	- 270	-11.5 %	2,246	- 105	- 4.5 %
West End Ave. N/B at W. 66th St.	890	792	- 98	-11.0 %	1,093	203	22.8 %
Central Park West N/B at W. 72nd St.	2,179	1,936	- 243	-11.2 %	2,286	107	4.9 %
West End Ave. N/B at W. 72nd St.	1,744	1,489	- 255	-14.6 %	2,039	295	16.9 %
Total N/B at E. 72nd St. Screenline	3,923	3,425	- 498	-12.7 %	4,325	402	10.2 %
Central Park West N/B at W. 86th St.	1,836	1,282	- 554	-30.2 %	1,678	- 158	- 8.6 %
Amsterdam Ave. N/B at W. 86th St.	3,307	2,899	- 408	-12.3 %	3,281	- 26	- 0.8 %
Broadway N/B at W. 86th St.	1,033	956	- 77	- 7.5 %	1,023	- 10	- 1.0 %
West End Ave. N/B at W. 86th St.	1,024	880	- 144	-14.1 %	1,148	124	12.1 %
Total N/B at W. 86th St. Screenline	7,200	6,017	- 1,183	-16.4 %	7,130	- 70	- 1.0 %
Central Park West N/B at W. 96th St.	1,588	1,168	- 420	-26.4 %	1,687	99	6.2 %
Amsterdam Ave. N/B at W. 96th St.	3,919	3,214	- 705	-18.0 %	3,592	- 327	- 8.3 %
Broadway N/B at W. 96th St.	1,588	1,265	- 323	-20.3 %	1,661	73	4.6 %
West End Ave. N/B at W. 96th St.	1,849	1,222	- 627	-33.9 %	1,352	- 497	-26.9 %
Total N/B at W. 96th St. Screenline	8,944	6,869	- 2,075	-23.2 %	8,292	- 652	- 7.3 %
Central Park West N/B at W. 110th St.	1,731	1,596	- 135	- 7.8 %	1,631	- 100	- 5.8 %
Amsterdam Ave. N/B at W. 110th St.	2,311	1,980	- 331	-14.3 %	2,460	149	6.4 %
Broadway N/B at W. 110th St.	1,510	1,237	- 273	-18.1 %	1,538	28	1.9 %
Total N/B at W. 110th St. Screenline	5,552	4,813	- 739	-13.3 %	5,629	77	1.4 %

3 - 7 pm Northbound Avenues ~ West of Central Park

Northbound Avenues West of Central Park	May 2006 Before Volume	July 2006			September 2006		
		Change vs. Volume	Before	Percent Change	Change vs. Volume	Before	Percent Change
Central Park West N/B at W. 61st St.	3,935	3,414	- 521	-13.2 %	3,325	- 610	-15.5 %
West End Ave. N/B at W. 66th St.	2,173	1,496	- 677	-31.2 %	1,890	- 283	-13.0 %
Central Park West N/B at W. 72nd St.	4,045	4,012	- 33	- 0.8 %	4,202	157	3.9 %
West End Ave. N/B at W. 72nd St.	3,931	3,010	- 921	-23.4 %	3,853	- 78	- 2.0 %
Total N/B at E. 72nd St. Screenline	7,976	7,022	- 954	-12.0 %	8,055	79	1.0 %
Central Park West N/B at W. 86th St.	4,004	2,914	- 1,090	-27.2 %	3,482	- 522	-13.0 %
Amsterdam Ave. N/B at W. 86th St.	6,545	5,744	- 801	-12.2 %	6,140	- 405	- 6.2 %
Broadway N/B at W. 86th St.	2,436	2,439	3	0.1 %	2,579	143	5.9 %
West End Ave. N/B at W. 86th St.	2,662	2,165	- 497	-18.7 %	2,633	- 29	- 1.1 %
Total N/B at W. 86th St. Screenline	15,647	13,262	- 2,385	-15.2 %	14,834	- 813	- 5.2 %
Central Park West N/B at W. 96th St.	3,390	2,623	- 767	-22.6 %	3,310	- 80	- 2.4 %
Amsterdam Ave. N/B at W. 96th St.	7,267	5,994	- 1,273	-17.5 %	6,132	- 1,135	-15.6 %
Broadway N/B at W. 96th St.	3,090	2,763	- 327	-10.6 %	3,124	34	1.1 %
West End Ave. N/B at W. 96th St.	3,842	2,405	- 1,437	-37.4 %	2,723	- 1,119	-29.1 %
Total N/B at W. 96th St. Screenline	17,589	13,785	- 3,804	-21.6 %	15,289	- 2,300	-13.1 %
Central Park West N/B at W. 110th St.	3,389	3,144	- 245	- 7.2 %	3,183	- 206	- 6.1 %
Amsterdam Ave. N/B at W. 110th St.	4,719	4,094	- 625	-13.2 %	4,615	- 104	- 2.2 %
Broadway N/B at W. 110th St.	3,753	3,153	- 600	-16.0 %	3,450	- 303	- 8.1 %
Total N/B at W. 110th St. Screenline	11,861	10,391	- 1,470	-12.4 %	11,248	- 613	- 5.2 %

Central Park Off-Peak Closures 2006 ~ Peak Periods ATR Volumes
Southbound Avenues ~ West of Central Park

7-10 am Southbound Avenues ~ West of Central Park

Southbound Avenues West of Central Park	May 2006 Before Volume	July 2006			September 2006		
		Change vs. Volume	Before	Percent Change	Change vs. Volume	Before	Percent Change
West End Ave. S/B at W. 66th St.	2,711	2,704	- 7	- 0.3 %	2,622	- 89	- 3.3 %
Central Park West S/B at W. 72nd St.	2,185	1,465	- 720	-33.0 %	1,756	- 429	-19.6 %
Columbus Ave. S/B at W. 72nd St.	4,072	3,581	- 491	-12.1 %	3,951	- 121	- 3.0 %
West End Ave. S/B at W. 72nd St.	1,874	1,784	- 90	- 4.8 %	1,795	- 79	- 4.2 %
Total S/B at W. 72nd St. Screenline	8,131	6,830	- 1,301	-16.0 %	7,502	- 629	- 7.7 %
Central Park West S/B at W. 86th St.	2,066	1,760	- 306	-14.8 %	1,934	- 132	- 6.4 %
Columbus Ave. S/B at W. 86th St.	4,096	3,191	- 905	-22.1 %	3,925	- 171	- 4.2 %
Broadway S/B at W. 86th St.	2,390	1,985	- 405	-16.9 %	2,446	56	2.3 %
West End Ave. S/B at W. 86th St.	1,855	1,566	- 289	-15.6 %	1,906	51	2.7 %
Total S/B at W. 86th St. Screenline	10,407	8,502	- 1,905	-18.3 %	10,211	- 196	- 1.9 %
Central Park West S/B at W. 96th St.	2,687	2,109	- 578	-21.5 %	2,612	- 75	- 2.8 %
Columbus Ave. S/B at W. 96th St.	3,868	3,225	- 643	-16.6 %	3,964	96	2.5 %
Broadway S/B at W. 96th St.	2,499	2,108	- 391	-15.6 %	2,412	- 87	- 3.5 %
West End Ave. S/B at W. 96th St.	2,403	2,045	- 358	-14.9 %	2,305	- 98	- 4.1 %
Total S/B at W. 96th St. Screenline	11,457	9,487	- 1,970	-17.2 %	11,293	- 164	- 1.4 %
Columbus Ave. S/B at W. 110th St.	2,378	2,264	- 114	- 4.8 %	1,177	- 1,201	-50.5 %
Broadway S/B at W. 110th St.	2,950	2,533	- 417	-14.1 %	2,786	- 164	- 5.6 %
Total S/B at W. 110th St. Screenline	5,328	4,797	- 531	-10.0 %	3,963	- 1,365	-25.6 %
Central Park West S/B between 95-96 Sts.	1,930	1,864	- 66	- 3.4 %	1,882	- 48	- 2.5 %

3 - 7 pm Southbound Avenues ~ West of Central Park

Southbound Avenues West of Central Park	May 2006 Before Volume	July 2006			September 2006		
		Change vs. Volume	Before	Percent Change	Change vs. Volume	Before	Percent Change
West End Ave. S/B at W. 66th St.	3,356	2,942	- 414	-12.3 %	3,307	- 49	- 1.5 %
Central Park West S/B at W. 72nd St.	2,792	2,414	- 378	-13.5 %	2,496	- 296	-10.6 %
Columbus Ave. S/B at W. 72nd St.	4,774	4,631	- 143	- 3.0 %	5,016	242	5.1 %
West End Ave. S/B at W. 72nd St.	2,563	2,206	- 357	-13.9 %	2,487	- 76	- 3.0 %
Total S/B at W. 72nd St. Screenline	10,129	9,251	- 878	- 8.7 %	9,999	- 130	- 1.3 %
Central Park West S/B at W. 86th St.	2,273	1,977	- 296	-13.0 %	2,323	50	2.2 %
Columbus Ave. S/B at W. 86th St.	4,374	4,095	- 279	- 6.4 %	4,705	331	7.6 %
Broadway S/B at W. 86th St.	3,375	3,200	- 175	- 5.2 %	3,498	123	3.6 %
West End Ave. S/B at W. 86th St.	2,166	1,919	- 247	-11.4 %	2,255	89	4.1 %
Total S/B at W. 86th St. Screenline	12,188	11,191	- 997	- 8.2 %	12,781	593	4.9 %
Central Park West S/B at W. 96th St.	3,010	2,543	- 467	-15.5 %	3,196	186	6.2 %
Columbus Ave. S/B at W. 96th St.	4,173	4,005	- 168	- 4.0 %	4,596	423	10.1 %
Broadway S/B at W. 96th St.	3,624	3,355	- 269	- 7.4 %	3,423	- 201	- 5.5 %
West End Ave. S/B at W. 96th St.	3,183	2,826	- 357	-11.2 %	3,156	- 27	- 0.8 %
Total S/B at W. 96th St. Screenline	13,990	12,729	- 1,261	- 9.0 %	14,371	381	2.7 %
Columbus Ave. S/B at W. 110th St.	2,458	2,615	157	6.4 %	1,424	- 1,034	-42.1 %
Broadway S/B at W. 110th St.	3,583	3,071	- 512	-14.3 %	3,282	- 301	- 8.4 %
Total S/B at W. 110th St. Screenline	6,041	5,686	- 355	- 5.9 %	4,706	- 1,335	-22.1 %
Central Park West S/B between 95-96 Sts.	2,076	2,056	- 20	- 1.0 %	2,316	240	11.6 %

**Central Park Off-Peak Closures 2006 ~ Peak Periods ATR Volumes
Eastbound Cross Streets**

7-10 am Cross Streets ~ Eastbound

Eastbound Cross Streets	May 2006 Before Volume	July 2006			September 2006		
		Change vs.		Percent Change	Change vs.		Percent Change
		Volume	Before		Volume	Before	
E. 65 St. E/B between 5th-Madison Avs.	2,354	2,369	15	0.6 %	2,245	- 109	- 4.6 %
E. 72 St. E/B between 5th-Madison Avs.	1,716	1,210	- 506	-29.5 %	1,508	- 208	-12.1 %
E. 79 St. E/B between 5th-Madison Avs.	1,675	1,368	- 307	-18.3 %	1,820	145	8.7 %
E. 84 St. E/B between 5th-Madison Avs.	1,801	1,690	- 111	- 6.2 %	1,909	108	6.0 %
E. 96 St. E/B between 5th-Madison Avs.	2,158	2,028	- 130	- 6.0 %	2,221	63	2.9 %
Subtotal -- East Side -- Eastbound	9,704	8,665	- 1,039	- 10.7 %	9,703	- 1	- 0.0 %
W. 65 St. E/B bet. Columbus Av.-Cent. Pk. W.	1,841	1,868	27	1.5 %	1,931	90	4.9 %
W. 72 St. E/B bet. Columbus Av.-Cent. Pk. W.	1,341	1,184	- 157	-11.7 %	1,349	8	0.6 %
W. 96 St. E/B bet. Columbus Av.-Cent. Pk. W.	2,028	1,886	- 142	- 7.0 %	2,107	79	3.9 %
W. 100 St. E/B bet. Columbus Av.-Cent. Pk. W.	947	872	- 75	- 7.9 %	960	13	1.4 %
Subtotal -- West Side -- Eastbound	6,157	5,810	- 347	- 5.6 %	6,347	190	3.1 %
W. 59 St. (Cent. Pk. West.) E/B at 5th Av.	2,005	1,892	- 113	- 5.6 %	1,829	- 176	- 8.8 %
W. 110 St. (Cent. Pk. North) E/B at 5th Av.	923	831	- 92	-10.0 %	998	75	8.1 %
Grand Total -- E/B Cross Streets	18,789	17,198	- 1,591	- 8.5 %	18,877	88	0.5 %

3 - 7 pm Cross Streets ~ Eastbound

Eastbound Cross Streets	May 2006 Before Volume	July 2006			September 2006		
		Change vs.		Percent Change	Change vs.		Percent Change
		Volume	Before		Volume	Before	
E. 65 St. E/B between 5th-Madison Avs.	3,503	4,195	692	19.8 %	3,574	71	2.0 %
E. 72 St. E/B between 5th-Madison Avs.	2,264	1,781	- 483	-21.3 %	1,930	- 334	-14.8 %
E. 79 St. E/B between 5th-Madison Avs.	2,615	2,534	- 81	- 3.1 %	2,863	248	9.5 %
E. 84 St. E/B between 5th-Madison Avs.	2,940	2,583	- 357	-12.1 %	3,030	90	3.1 %
E. 96 St. E/B between 5th-Madison Avs.	2,994	2,625	- 369	-12.3 %	2,903	- 91	- 3.0 %
Subtotal -- East Side -- Eastbound	14,316	13,718	- 598	- 4.2 %	14,300	- 16	- 0.1 %
W. 65 St. E/B bet. Columbus Av.-Cent. Pk. W.	2,711	2,471	- 240	- 8.9 %	2,574	- 137	- 5.1 %
W. 72 St. E/B bet. Columbus Av.-Cent. Pk. W.	1,810	1,311	- 499	-27.6 %	1,526	- 284	-15.7 %
W. 96 St. E/B bet. Columbus Av.-Cent. Pk. W.	2,897	2,705	- 192	- 6.6 %	2,839	- 58	- 2.0 %
W. 100 St. E/B bet. Columbus Av.-Cent. Pk. W.	1,132	1,015	- 117	-10.3 %	1,055	- 77	- 6.8 %
Subtotal -- West Side -- Eastbound	8,550	7,502	- 1,048	-12.3 %	7,994	- 556	- 6.5 %
W. 59 St. (Cent. Pk. West.) E/B at 5th Av.	3,002	2,625	- 377	-12.6 %	2,411	- 591	-19.7 %
W. 110 St. (Cent. Pk. North) E/B at 5th Av.	1,201	1,133	- 68	- 5.7 %	1,309	108	9.0 %
Grand Total -- E/B Cross Streets	27,069	24,978	- 2,091	- 7.7 %	26,014	- 1,055	- 3.9 %

**Central Park Off-Peak Closures 2006 ~ Peak Periods ATR Volumes
Westbound Cross Streets**

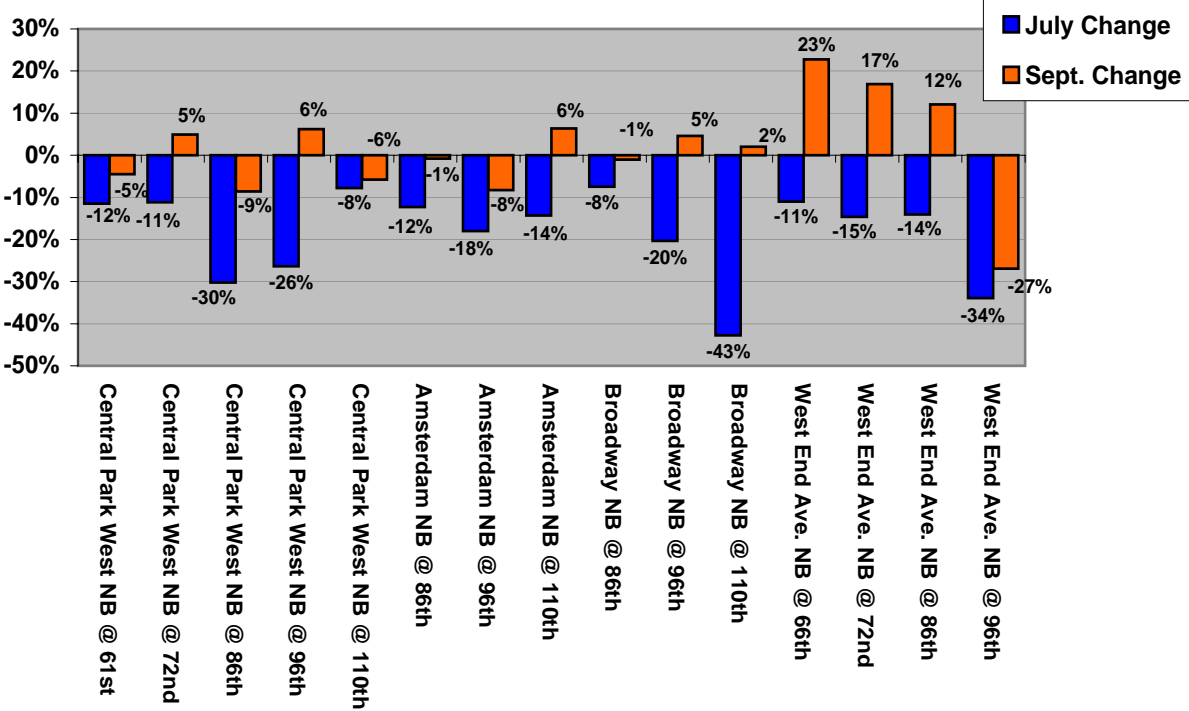
7-10 am Cross Streets ~ Westbound

Westbound Cross Streets	May 2006 Before Volume	July 2006			September 2006		
		Change vs.		Percent Change	Change vs.		Percent Change
		Volume	Before		Volume	Before	
E. 66 St. W/B between 5th-Madison Avs.	2,160	2,129	- 31	- 1.4 %	2,170	10	0.5 %
E. 72 St. W/B between 5th-Madison Avs.	1,711	1,496	- 215	- 12.6 %	1,374	- 337	- 19.7 %
E. 79 St. W/B between 5th-Madison Avs.	2,007	1,584	- 423	- 21.1 %	2,189	182	9.1 %
E. 85 St. W/B between 5th-Madison Avs.	1,670	1,334	- 336	- 20.1 %	1,578	- 92	- 5.5 %
E. 96 St. W/B between 5th-Madison Avs.	416	322	- 94	- 22.6 %	396	- 20	- 4.8 %
Subtotal -- East Side -- Westbound	7,964	6,865	- 1,099	- 13.8 %	7,707	- 257	- 3.2 %
W. 62 St. W/B bet. Columbus Av.-Cent. Pk. W.	516	533	17	3.3 %	548	32	6.2 %
W. 72 St. W/B bet. Columbus Av.-Cent. Pk. W.	1,259	1,082	- 177	- 14.1 %	1,252	- 7	- 0.6 %
W. 96 St. W/B bet. Columbus Av.-Cent. Pk. W.	690	665	- 25	- 3.6 %	623	- 67	- 9.7 %
Subtotal -- West Side -- Westbound	2,465	2,280	- 185	- 7.5 %	2,423	- 42	- 1.7 %
W. 59 St. (Cent. Pk. W.) W/B at Columbus Cir.	2,768	2,694	- 74	- 2.7 %	2,683	- 85	- 3.1 %
W. 110 St. (Cent. Pk. No.) W/B at Douglass Cir.	1,242	1,170	- 72	- 5.8 %	650	- 592	- 47.7 %
Grand Total -- W/B Cross Streets	14,439	13,009	- 1,430	- 9.9 %	13,463	- 976	- 6.8 %

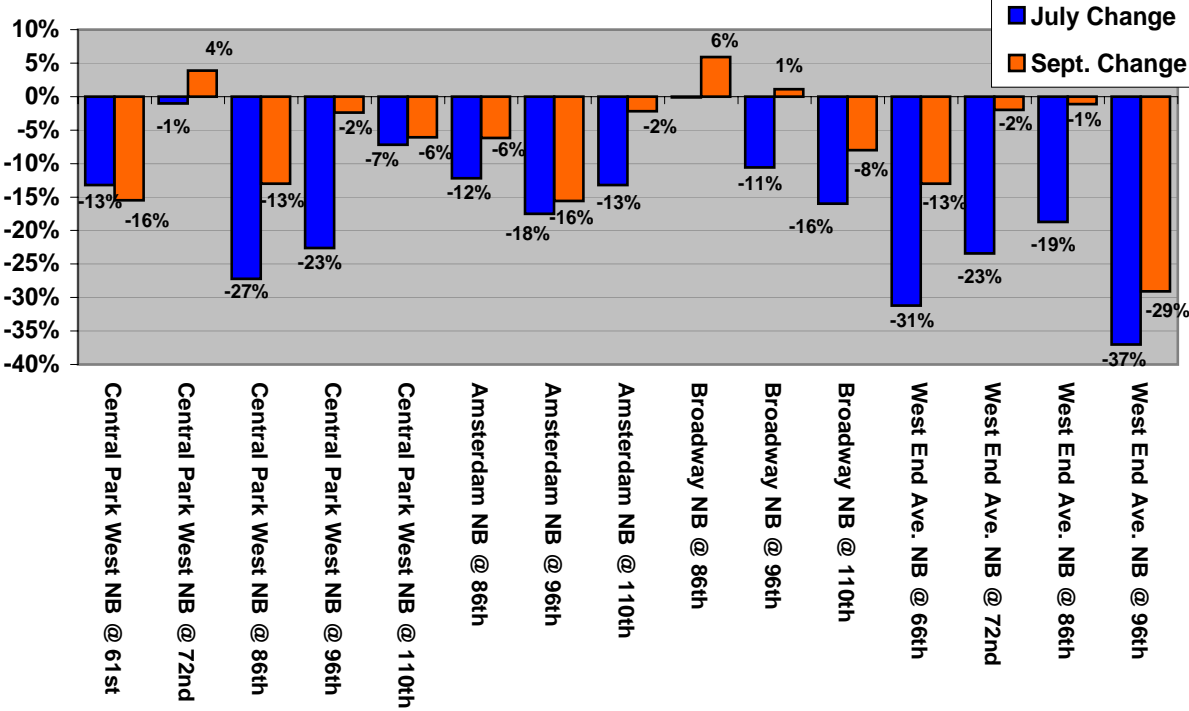
3 - 7 pm Cross Streets ~ Westbound

Westbound Cross Streets	May 2006 Before Volume	July 2006			September 2006		
		Change vs.		Percent Change	Change vs.		Percent Change
		Volume	Before		Volume	Before	
E. 66 St. W/B between 5th-Madison Avs.	3,150	3,128	- 22	- 0.7 %	3,195	45	1.4 %
E. 72 St. W/B between 5th-Madison Avs.	2,167	1,262	- 905	- 41.8 %	1,237	- 930	- 42.9 %
E. 79 St. W/B between 5th-Madison Avs.	2,689	2,534	- 155	- 5.8 %	3,175	486	18.1 %
E. 85 St. W/B between 5th-Madison Avs.	2,732	2,380	- 352	- 12.9 %	2,588	- 144	- 5.3 %
E. 96 St. W/B between 5th-Madison Avs.	682	604	- 78	- 11.4 %	677	- 5	- 0.7 %
Subtotal -- East Side -- Westbound	11,420	9,908	- 1,512	- 13.2 %	10,872	- 548	- 4.8 %
W. 62 St. W/B bet. Columbus Av.-Cent. Pk. W.	827	821	- 6	- 0.7 %	857	30	3.6 %
W. 72 St. W/B bet. Columbus Av.-Cent. Pk. W.	1,973	1,061	- 912	- 46.2 %	1,980	7	0.4 %
W. 96 St. W/B bet. Columbus Av.-Cent. Pk. W.	1,225	558	- 667	- 54.4 %	1,148	- 77	- 6.3 %
Subtotal -- West Side -- Westbound	4,025	2,440	- 1,585	- 39.4 %	3,985	- 40	- 1.0 %
W. 59 St. (Cent. Pk. W.) W/B at Columbus Cir.	3,275	3,169	- 106	- 3.2 %	3,045	- 230	- 7.0 %
W. 110 St. (Cent. Pk. No.) W/B at Douglass Cir.	1,473	1,741	268	18.2 %	1,091	- 382	- 25.9 %
Grand Total -- W/B Cross Streets	20,193	17,258	- 2,935	- 14.5 %	18,993	- 1,200	- 5.9 %

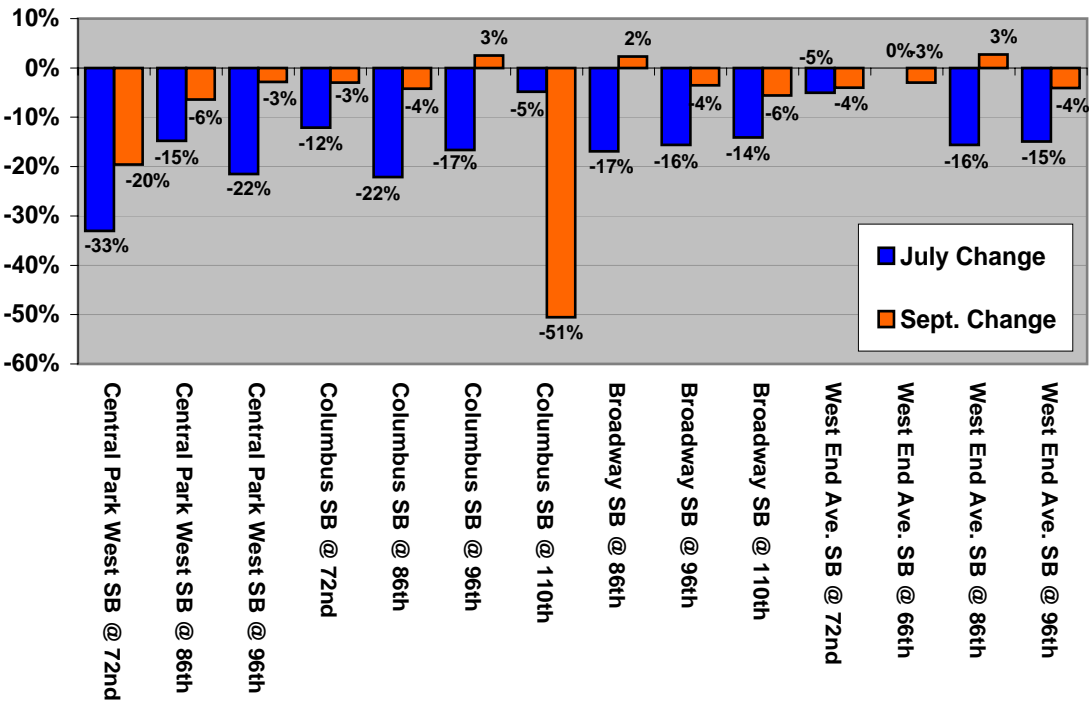
**Northbound Westside Avenues: Percent Change in AM Peak
Period Vehicle Volume**



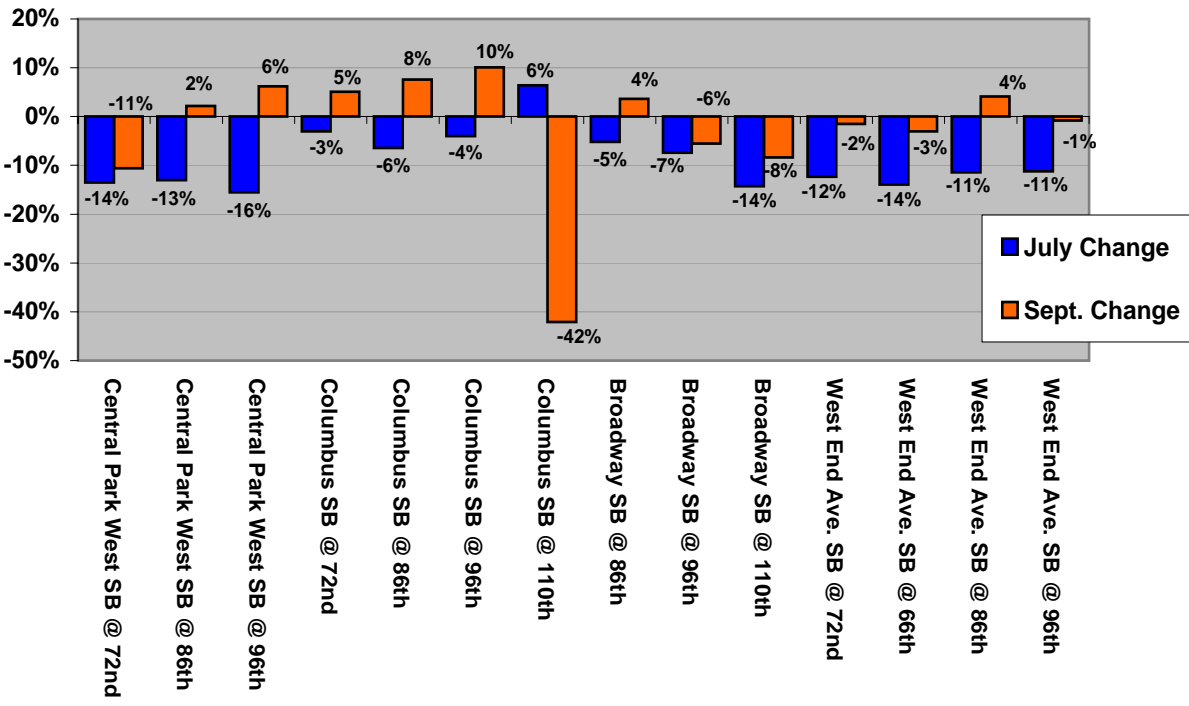
**Northbound Westside Avenues: Percent Change in PM Peak
Period Vehicle Volume**



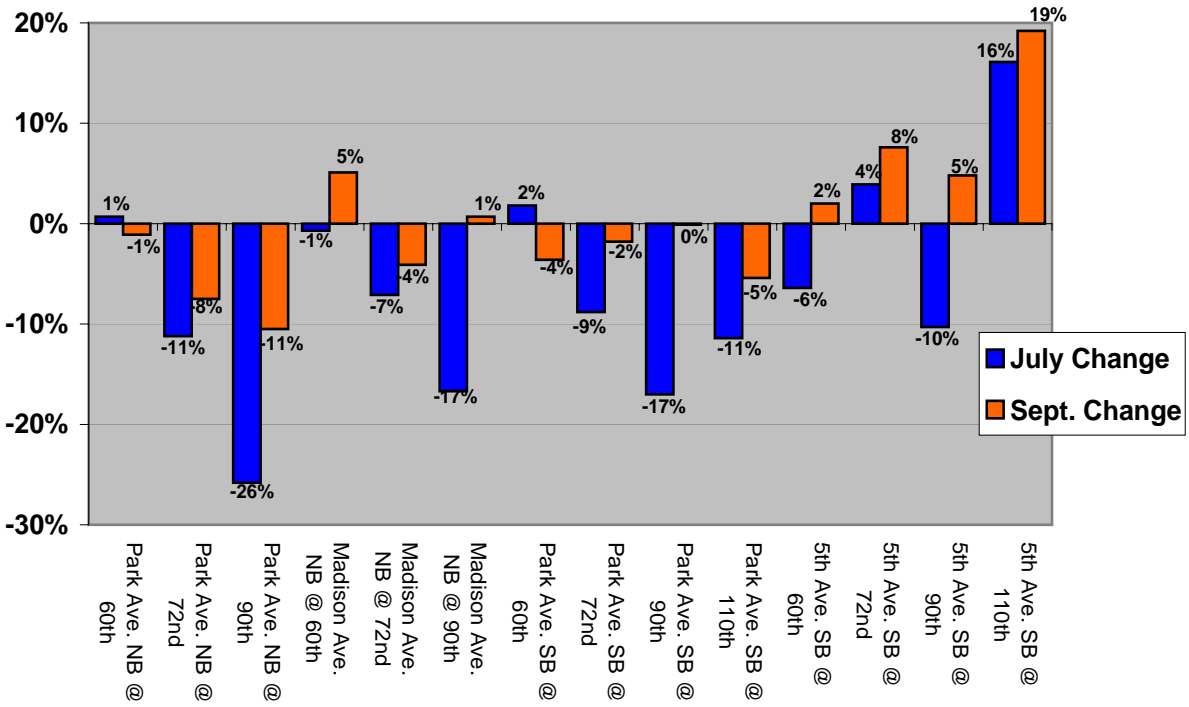
Southbound Westside Avenues: Percent Change in AM Peak Period Vehicle Volume



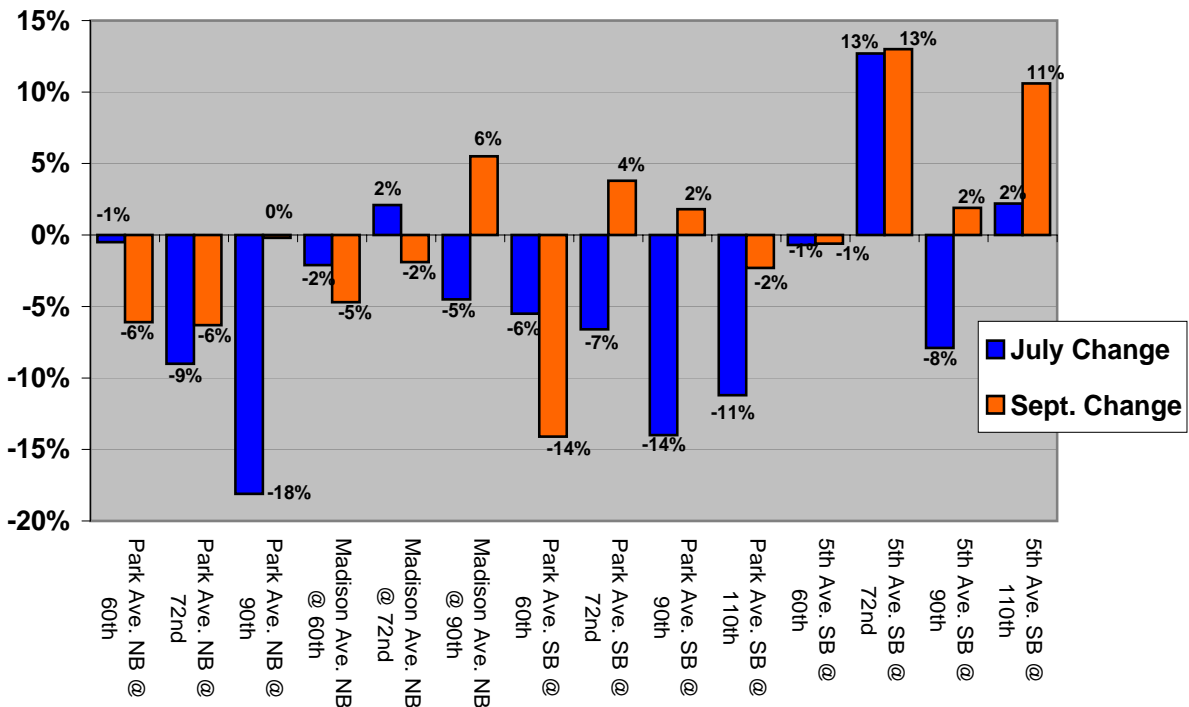
Southbound Westside Avenues: Percent Change in PM Peak Period Vehicle Volume



Eastside Avenues: Percent Change in AM Peak Period Vehicle Volume



Eastside Avenues: Percent Change in PM Peak Period Vehicle Volume



Central Park Off-Peak Closures 2006 ~ Peak Periods ATR Volumes
Central Park Transverse Roads

7-10 am Central Park Transverse Roads ~ Eastbound

Central Park Transverse Roads ~ Eastbound	May 2006 Before Volume	July 2006			September 2006		
		Change vs. Percent			Change vs. Percent		
		Volume	Before	Change	Volume	Before	Change
65th St. Transverse E/B	3,002	2,694	- 308	- 10.3 %	3,004	2	0.1 %
79th St. Transverse E/B	2,215	1,661	- 554	- 25.0 %	2,579	364	16.4 %
86th St. Transverse E/B	2,171	1,663	- 508	- 23.4 %	2,287	116	5.3 %
96th St. Transverse E/B	2,380	2,139	- 241	- 10.1 %	2,412	32	1.3 %
Total of E/B Transverse Roads	9,768	8,157	- 1,611	- 16.5 %	10,282	514	5.3 %

7-10 am Central Park Transverse Roads ~ Westbound

Central Park Transverse Roads ~ Westbound	May 2006 Before Volume	July 2006			September 2006		
		Change vs. Percent			Change vs. Percent		
		Volume	Before	Change	Volume	Before	Change
65th St. Transverse W/B	2,729	2,531	- 198	- 7.3 %	2,849	120	4.4 %
79th St. Transverse W/B	1,879	1,826	- 53	- 2.8 %	2,084	205	10.9 %
86th St. Transverse W/B	2,513	1,802	- 711	- 28.3 %	2,616	103	4.1 %
96th St. Transverse W/B	2,757	2,240	- 517	- 18.8 %	2,874	117	4.2 %
Total of W/B Transverse Roads	9,878	8,399	- 1,479	- 15.0 %	10,423	545	5.5 %

7-10 am 72nd Street Transpark ~ Westbound

72nd Street Transpark Westbound	May 2006 Before Volume	July 2006			September 2006		
		Change vs. Percent			Change vs. Percent		
		Volume	Before	Change	Volume	Before	Change
72nd St. Transpark W/B	2,275	2,139	- 136	- 6.0 %	2,847	572	25.1 %

Central Park Off-Peak Closures 2006 ~ Peak Periods ATR Volumes
Central Park Transverse Roads

3 - 7 pm Central Park Transverse Roads ~ Eastbound

Central Park Transverse Roads ~ Eastbound	May 2006 Before Volume	July 2006			September 2006		
		Change vs. Percent			Change vs. Percent		
		Volume	Before	Change	Volume	Before	Change
65th St. Transverse E/B	4,391	4,324	- 67	- 1.5 %	4,407	16	0.4 %
79th St. Transverse E/B	3,578	3,028	- 550	- 15.4 %	4,238	660	18.4 %
86th St. Transverse E/B	3,260	3,077	- 183	- 5.6 %	3,735	475	14.6 %
96th St. Transverse E/B	3,515	3,578	63	1.8 %	3,429	- 86	- 2.4 %
Total of E/B Transverse Roads	14,744	14,007	- 737	- 5.0 %	15,809	1,065	7.2 %

3 - 7 pm Central Park Transverse Roads ~ Westbound

Central Park Transverse Roads ~ Westbound	May 2006 Before Volume	July 2006			September 2006		
		Change vs. Percent			Change vs. Percent		
		Volume	Before	Change	Volume	Before	Change
65th St. Transverse W/B	3,963	4,563	600	15.1 %	5,126	1,163	29.3 %
79th St. Transverse W/B	3,071	2,862	- 209	- 6.8 %	3,654	583	19.0 %
86th St. Transverse W/B	4,267	3,711	- 556	- 13.0 %	4,876	609	14.3 %
96th St. Transverse W/B	4,673	4,341	- 332	- 7.1 %	4,961	288	6.2 %
Total of W/B Transverse Roads	15,974	15,477	- 497	- 3.1 %	18,617	2,643	16.5 %

3 - 7 pm 72nd Street Transpark ~ Westbound

72nd Street Transpark Westbound	May 2006 Before Volume	July 2006			September 2006		
		Change vs. Percent			Change vs. Percent		
		Volume	Before	Change	Volume	Before	Change
72nd St. Transpark W/B	3,013	401	- 2,612	- 86.7 %	355	- 2,658	- 88.2 %

**Central Park Off-Peak Closures 2006 ~ Peak Periods ATR Volumes
Central Park Entrances & Exits**

7-10 am Central Park Entrances

Central Park Entrances	May 2006 Before Volume	July 2006			September 2006		
		Change vs. Volume	Before	Percent Change	Change vs. Volume	Before	Percent Change
Park Entrance at A.C. Powell Blvd.	939	743	- 196	- 20.9 %	978	39	4.2 %
Park Entrance at West 100th St.	474	459	- 15	- 3.2 %	531	57	12.0 %
Park Entrance at West 96th St.	223	192	- 31	- 13.9 %	251	28	12.6 %
Park Entrance at West 85th St.	467	425	- 42	- 9.0 %	399	- 68	- 14.6 %
Park Entrance at West 72nd St.	877	1,021	144	16.4 %	1,183	306	34.9 %
Park Entrance at 6th Ave.	1,537	1,132	- 405	- 26.4 %	1,332	- 205	- 13.3 %
Park Entrance at East 72nd St.	1,922	1,709	- 213	- 11.1 %	1,618	- 304	- 15.8 %
Park Entrance at Lenox Ave.	222	12	- 210	- 94.6 %	591	369	166.2 %

7-10 am Central Park Exits

Central Park Exits	May 2006 Before Volume	July 2006			September 2006		
		Change vs. Volume	Before	Percent Change	Change vs. Volume	Before	Percent Change
Park Exit at A.C. Powell Blvd.	989	45	- 944	- 95.4 %	48	- 941	- 95.1 %
Park Exit at West 100th St.	552	262	- 290	- 52.5 %	446	- 106	- 19.2 %
Park Exit at West 72nd St.	1,007	952	- 55	- 5.5 %	1,633	626	62.2 %
Park Exit at 7th Ave.	4,063	3,496	- 567	- 14.0 %	3,647	- 416	- 10.2 %
Park Exit at East 72nd St.	917	1,027	110	12.0 %	1,128	211	23.0 %
Park Exit at East 90th St.							
Park Exit at Lenox Ave.							

**Central Park Off-Peak Closures 2006 ~ Peak Periods ATR Volumes
Central Park Entrances & Exits**

3 - 7 pm Central Park Entrances

Central Park Entrances	May 2006 Before Volume	July 2006			September 2006		
		Change vs. Volume	Before	Percent Change	Change vs. Volume	Before	Percent Change
Park Entrance at A.C. Powell Blvd.							
Park Entrance at West 100th St.							
Park Entrance at West 96th St.							
Park Entrance at West 85th St.							
Park Entrance at West 72nd St.							
Park Entrance at 6th Ave.	3,594	2,876	- 718	- 20.0 %	3,173	- 421	- 11.7 %
Park Entrance at East 72nd St.	1,937	1,117	- 820	- 42.3 %	1,157	- 780	- 40.3 %
Park Entrance at Lenox Ave.							

3 - 7 pm Central Park Exits

Central Park Exits	May 2006 Before Volume	July 2006			September 2006		
		Change vs. Volume	Before	Percent Change	Change vs. Volume	Before	Percent Change
Park Exit at A.C. Powell Blvd.	544	1,017	473	86.9 %	1,074	530	97.4 %
Park Exit at West 100th St.							
Park Exit at West 72nd St.							
Park Exit at 7th Ave.							
Park Exit at East 72nd St.	1,863	1,560	- 303	- 16.3 %	1,698	- 165	- 8.9 %
Park Exit at East 90th St.	1,684	1,755	71	4.2 %	1,488	- 196	- 11.6 %
Park Exit at Lenox Ave.	532	623	91	17.1 %	719	187	35.2 %

**Prospect Park Off Peak Closures
Peak Periods (7-9 AM) ATR Volume Comparisons
After (July 2006) Versus Before (May 2006)**

		7:00AM - 9:00 AM							
		Before May	After July	Change Jul-May	Percent Change May/Jul	Change Sept-May	Percent Change Sept-May	Change Sept-July	Percent Change Sept/July
Northbound Roadways East of the Park									
Ocean Ave. bet. Parkside Ave. & Lincoln Road NB	1,483	1,235	-248	-16.7%	-157	-10.6%	91	7.4%	
Flatbush Ave. bet. Grand Army Plaza & Empire BI NB	2,059	2,165	106	5.1%	362	17.6%	256	11.8%	

		7:00AM - 9:00 AM						
		Before May	After July	Change July-May	Percent Change May/Jul	Change Sept-May	Percent Change Sept-May	Change Sept-July
Southbound Roadways East of the Park								
Ocean Ave. bet. Parkside Ave. & Lincoln Road SB	1,195	1,190	-5	-0.4%	132	11.0%	137	11.5%
Flatbush Ave. bet. Grand Army Plaza & Empire BI SB	1,307	1,246	-61	-4.7%	73	5.6%	134	10.8%

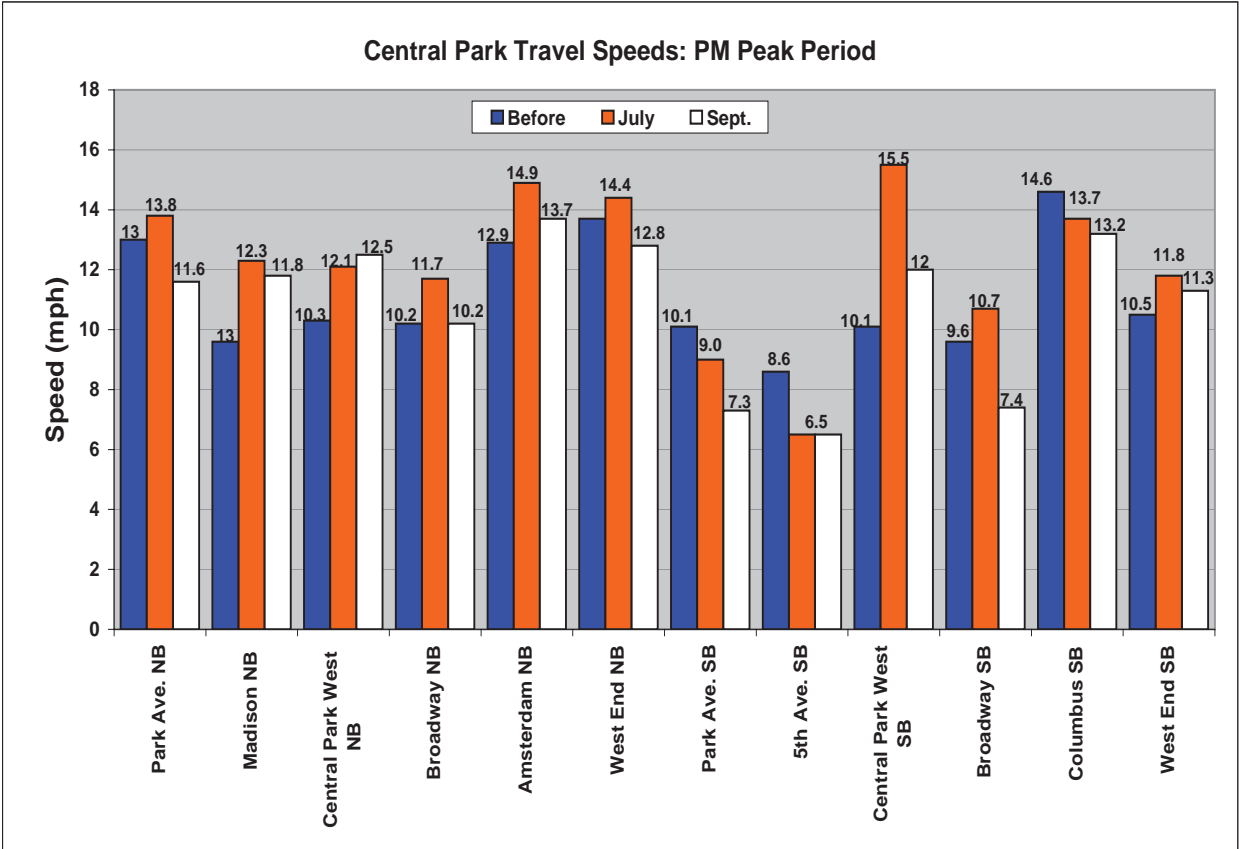
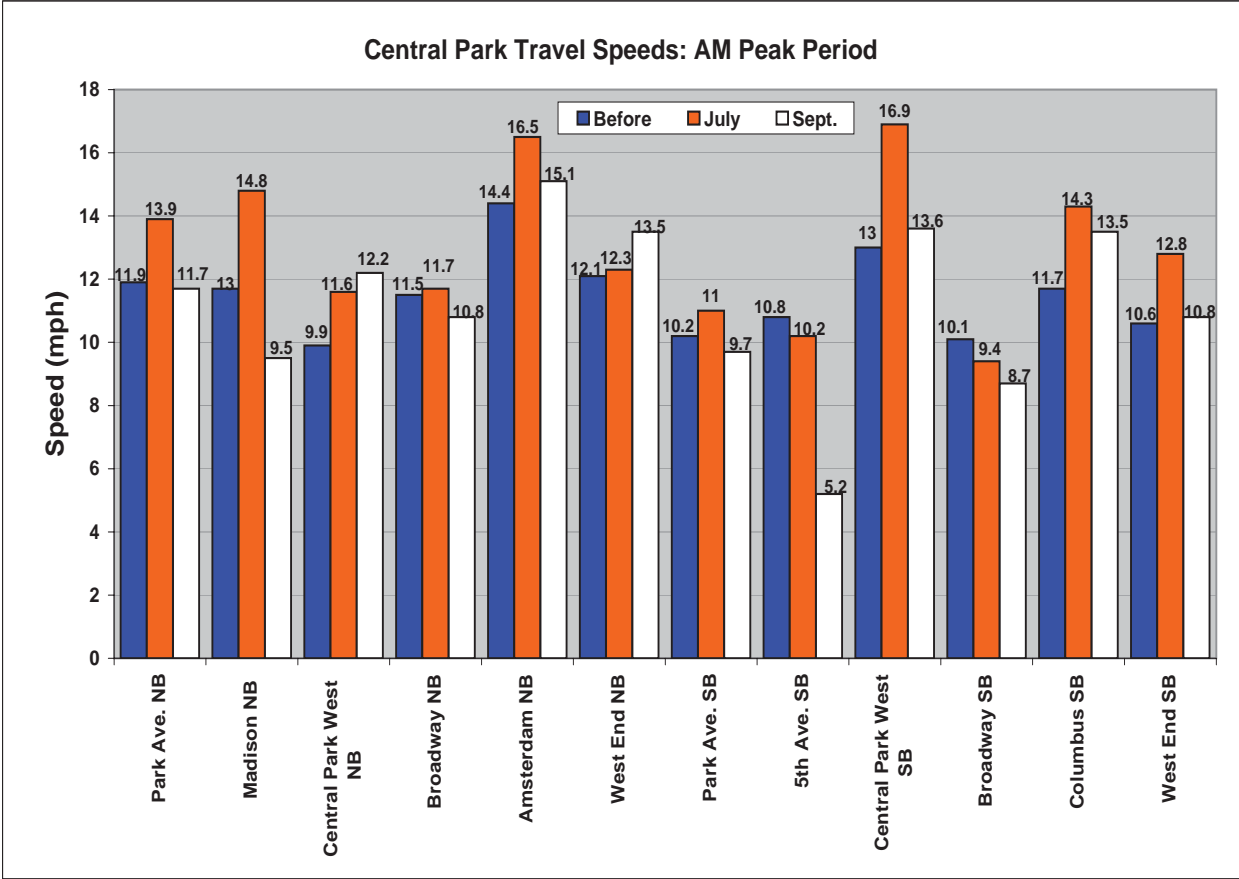
**Prospect Park Off-Peak Closures
Peak Periods (7-9 AM) ATR Volume Comparisons
After (July, September, and October 2006) versus Before (May 2006)**

		7:00AM - 9:00 AM						
		Before May	After July	Change July	Percent Change Jul/May	Change Sept-May	Percent Change Sept-May	Change Sept-July
Northbound Roadways West of the Park								
Prospect Park SW at 10th Avenue	553	515	-38	-6.9%	67	12.1%	105	20.4%
Prospect Park SW at Seeley Street	675	562	-113	-16.7%	49	7.3%	162	28.8%

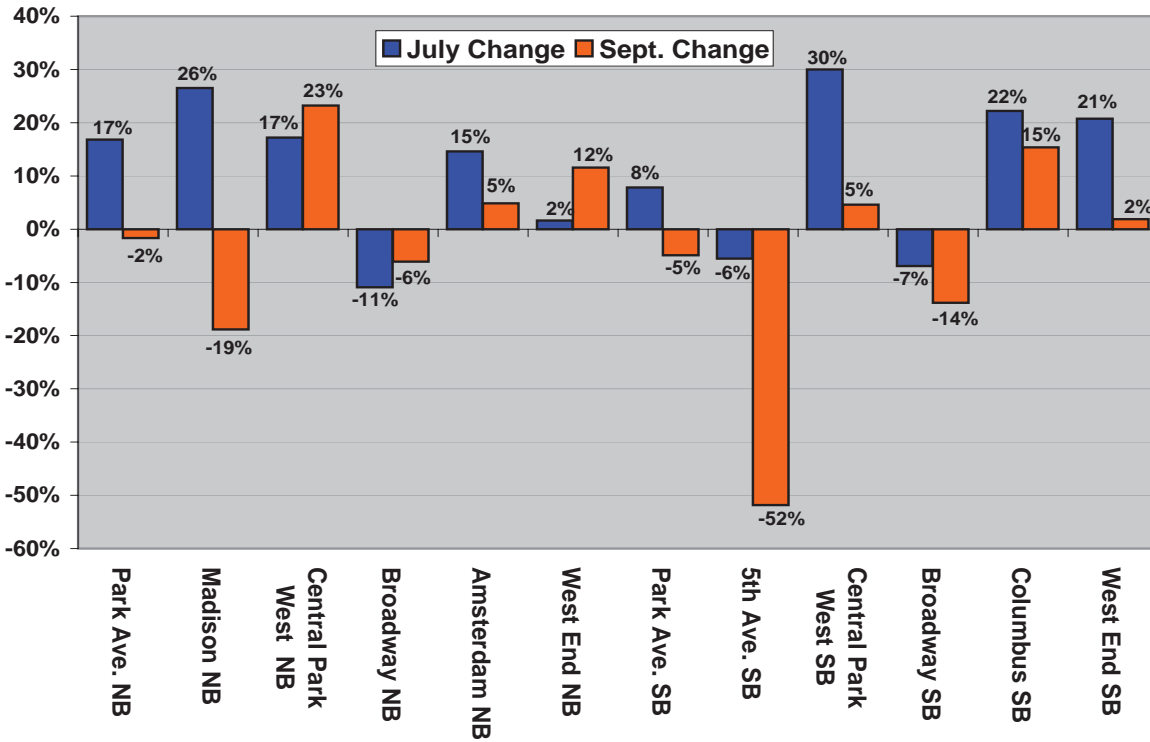
		7:00AM - 9:00 AM						
		Before May	After July	Change July	Percent Change Jul/May	Change Sept-May	Percent Change Sept-May	Change Sept-July
Roadways South of the Park								
Parkside Ave. bet. E. 18th St. & St. Paul's PI (EB)	902	800	-102	-11.3%	-68	-7.5%	34	4.3%
Parkside Ave. bet. E. 18th St. & St. Paul's PI (WB)	1,371	1,005	-366	-26.7%	8	0.6%	374	37.2%

		7:00AM - 9:00 AM						
		Before May	After July	Change July-May	Percent Change Jul/May	Change Sept-May	Percent Change Sept-May	Change Sept-July
Southbound Roadways West of the Park								
Prospect Park West at Carroll Street	2,037	1,734	-303	-14.9%	233	11.4%	536	30.9%
Prospect Park West at 11th Street	1,291	1,372	81	6.3%	-8	-0.6%	-89	-6.5%
Prospect Park SW at 10th Avenue	480	618	138	28.8%	226	47.1%	88	14.2%
Prospect Park SW at Seeley Street	665	716	51	7.7%	121	18.2%	70	9.8%

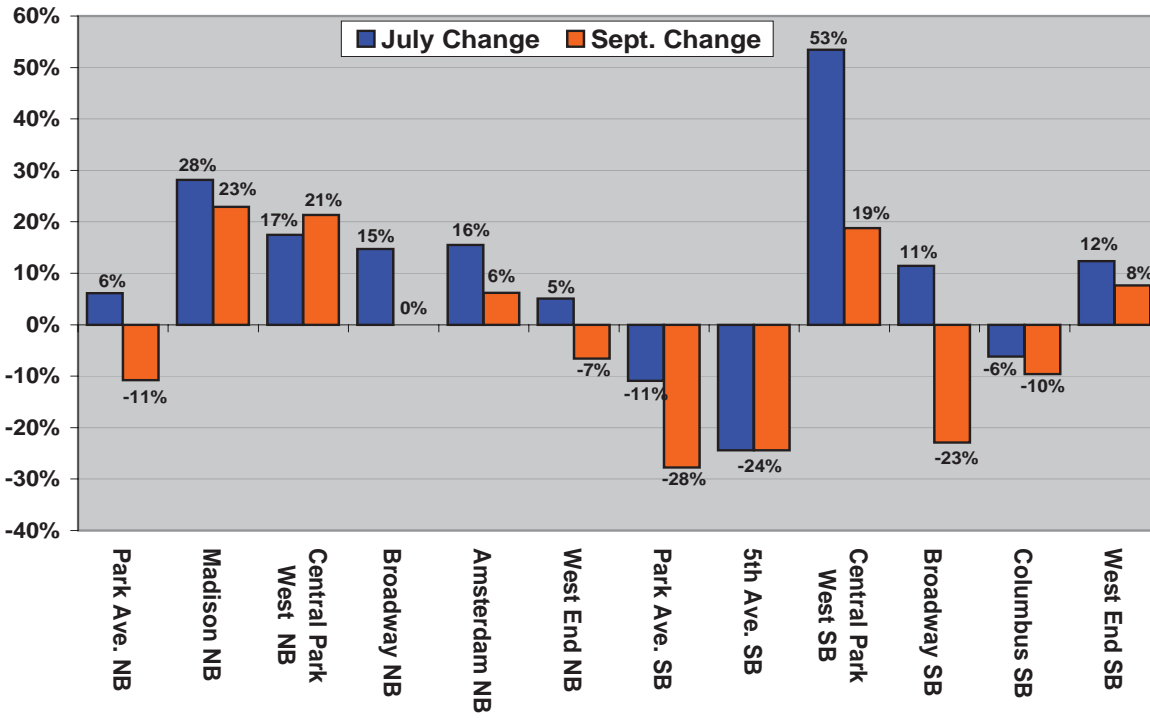
APPENDIX IV
SPEEDS



Average Percent Change in Travel Speeds: AM Peak Period



Average Percent Change in Travel Speeds: PM Peak Period



Prospect Park Off-Peak Closures 2006
After (July, September, and December 2006) versus Before (May 2006)

7-9:00 AM		Before May 2006	After July 2006	Change	Percent Change	After September 2006	Change	Percent Change
Travel Time (Minutes)								
Grand Army Plaza to Park Circle (outside the park)		6.86	7.04	0.18	2.6%	7.51	0.65	9.5%
"Before" inside the park versus "After" outside the park		4.61	7.04	2.43	52.7%	7.51	2.90	62.9%

After (July, September, and December 2006) versus Before (May 2006)

7-9:00 AM		Before May 2006	After July 2006	Change	Percent Change	After September 2006	Change	Percent Change
Speeds (MPH)								
Grand Army Plaza to Park Circle (outside the park)		20.1	19.6	-0.5	-2.5%	18.4	-1.7	-8.5%
"Before" inside the park versus "After" outside the park		23.4	19.6	-3.8	-16.2%	14.4	-9.0	-38.5%

Prospect



Park