Scenario 2: Off-Peak Closures of the Park Drives During the Peak Travel Period

Following is a summary of the average of the Week Two and Three (February 14th - February 25th) data collected during the off-peak closure of the Park Drives for the AM (7-10 AM) and the PM peak periods (3-7 PM). These were the two weeks when *The Gates* Exhibit was on view and the East Drive was closed from 7-10 AM and the West Drive was closed from 3-7PM.

Overall, there were very specific impacts associated with the off-peak closure of the Park Drives during the exhibit.

Vehicle Volumes

Northbound/Southbound Roadways

In the AM peak period, nine of the northbound roadways and seven of the southbound roadways exhibited increases in vehicle volume. In the PM peak period, eight of the northbound roadways and six of the southbound roadways exhibited increases in vehicle volume.

On the northbound roadways, Madison Avenue at 95th Street exhibited the greatest increase in volume during the AM peak period. Volume increased 37.5% (to 2,067 from 1,496 or an additional 571 vehicles). Madison Avenue at 86th Street also exhibited an increase of 19.7% (to 3,479 from 2997 or 522 additional vehicles) in the AM peak period.

Park Avenue at 95th street also exhibited a significant increase in volume during the AM peak period. Volume increased 18.1% (to 1,864 from 1,578 or 286 additional vehicles). In the PM peak period volume increased 16.1% (to 3,479 from 2,997 or 482 additional vehicles).

Amsterdam Avenue at 86th Street exhibited a significant increase in the PM peak period. Volume increased 11.5% (to 3,378 from 3,102 or 598 additional vehicles).

On the southbound roadways, the greatest impacts occurred in the PM peak period, where five locations (Columbus Avenue at 95th Street, Central Park West at 95th, 86th, 72nd and 62nd Streets) demonstrated increases of over 13%. The greatest percentage increase occurred on Central Park West at 63rd Street, where volumes increased by 53.3% (to 1,482 from 973 or 519 additional vehicles) during the PM peak period.

Other locations along Central Park West showed increases of between 15 to 20%, or approximately 300 additional vehicles.

The Gates 25

Partial Closure Vehicle Volumes Northbound Roadways Percent Change vs. Before Conditions



Partial Closure Vehicle Volumes Southbound Roadways Percent Change vs. Before Conditions



■AM ■PM

26 The Gates

Eastbound/Westbound Roadways

In the AM peak period, volumes on the eastbound roadways increased at six of the eight locations. In the PM peak period, volumes increased at all eight locations.

On the eastbound roadways, the greatest percentage increase occurred on East 72nd Street between Fifth and Madison Avenues, where volumes increased by 47.9% (to 1,514 from 1,024 or 490 additional vehicles in the AM peak period). This was attributed to motorists being forced to exit the East Drive at 72nd Street while the Park Drive was closed to the north and west.

In the AM peak period, volumes increased significantly by 31.8% (to 1,665 from 1,263 or 392 additional vehicles) on West 86th Street at Central Park West.

Volumes on eastbound 110th Street at Lenox Avenue, which had exhibited an increase under full closure conditions, showed a slight decrease under the partial closure. This may be attributed to the West Drive being open to vehicular traffic during the AM peak period.

In the PM peak period, five of the six locations exhibited increases in travel time during both the AM and PM peak periods on the westbound roadways.

Both the 65th and 86th Street Transverse Roads exhibited increases of over 20% in both the AM and PM peak periods. The 65th Street Transverses Road showed an increase of 27.3% (to 3,297 from 2,590 or 707 additional vehicles) in the AM peak period and 36.9% (to 5,094 from 3,721 or 1,373 additional vehicles) in the PM peak period. The 86th Street Transverse Road showed an increase of 20.1% (to 3,034 from 2,525 or 509 additional vehicles) in the AM peak period, and 21.5% (to 4,922 from 4,050 or 872 additional vehicles) in the PM peak period.

Significant increases also occurred on westbound 59th Street at Columbus Avenue and 110th Street at Frederick Douglass Circle. In the PM peak period, volumes increased 22% (to 3,631 from 2,973 or additional 658 vehicles), and in the PM peak period, volumes increased 12.6% (to 2,646 from 2,350 or 296 additional vehicles).

The Gates 27

Partial Closure Vehicle Volumes Eastbound Roadways Percent Change vs. Before Conditions



Partial Closure Vehicle Volumes Westbound Roadways Percent Change vs. Before Conditions



Detailed volume charts for each location can be found in Appendix V.

25 The Gates

Travel Times

Northbound/Southbound Roadways

The most significant impacts occurred on the roadways immediately adjacent to the park (Central Park West and Fifth Avenue), which is where most of the art exhibit's activities were concentrated. The greatest increases occurred mostly in the PM peak period.

The most significant increases in travel time occurred on the following roadways:

- Northbound Central Park West travel times increased 59.3% (to 21.06 minutes from 13.22 minutes);
- Southbound Central Park West travel times increased 40.9% (to 21.78 from 15.46 minutes);
- Fifth Avenue travel times increased 54.6% (to 54.60 minutes from 27.85 minutes).

Fifth Avenue was the only location to exhibit a significant increase in the AM peak period, as travel times increased by 19.5% to (21.47 minutes from 17.96 minutes). Most other locations exhibited minimal changes in travel times in the AM peak period with Columbus Avenue, Broadway northbound and southbound, and Madison Avenue experiencing travel time decreases of approximately 10%.

Eastbound/Westbound Roadways

In the AM peak period, westbound 85th Street was the only roadway to exhibit more than a slight increase in travel time. Travel time increased by 14% (to 8.37 minutes from 7.34 minutes).

Six of the other seven roadways exhibited decreases, with eastbound 85th and 97th Street showing decreases of approximately 20%.

In the PM peak period, five of the eight locations exhibited increases in travel times, with westbound 79th Street showing the greatest increase of 13.6% (to 11.78 minutes from 10.37 minutes).

Both eastbound and westbound 65th and 97th Streets showed increases in the vicinity of 6%. Meanwhile, eastbound 79th Street and 85th Street in both directions showed decreases in travel time of approximately 10%.

The Gates 21

Partial Closure Travel Times Northbound and Southbound Roadways Percent Change vs. Before Conditions



Partial Closure Travel Times Eastbound and Westbound Roadways Percent Change vs. Before Conditions



Detailed travel time/speed charts for each location can be found in Appendix VI.

30 The Gates

Segment Speed Analysis - Partial Closures

Travel time data was collected at key checkpoints along critical corridors. Generally, for the northbound and southbound roadways the checkpoints were along major crosstown roadways (e.g., 79th Street). For the eastbound and westbound roadways, every northbound/southbound roadway was a checkpoint. The total number of segments for the eight northbound/ southbound routes was 47 and the total number of segments for the eight eastbound/westbound streets was 55. Speed ranges were developed and are displayed on the maps and charts. These ranges are:

- o less than 5 MPH
- o 5.0 to 7.99 MPH
- o 8.0 to 10.99 MPH
- o 11.00 to 13.99 MPH
- o 14 MPH and above

As speeds in the lower ranges (below 8 mph) were the most critical, the speed segment analysis focused on these segments.

Northbound and Southbound Roadways

The partial closure resulted in a dramatic increase in the number of segments operating below 8 MPH in the PM peak period to 19 as compared to seven in the "before" conditions. Thirteen of these 19 segments were on roadways directly adjacent to the park (Central Park West, Fifth Avenue). There were five segments operating below 5 MPH and 14 segments operating between 5 and 8 MPH during the full closure compared to one and six segments, respectively under "before" conditions. All five segments operating below 5 MPH were on Central Park West and Fifth Avenue. In the AM peak period, the number of links operating below 8 mph exhibited a slight decrease to seven segments from nine segments. Dramatic speed reductions occurred on Fifth Avenue in the PM peak period as speed decreased by 58.4% to 5.0 MPH from 12.0 MPH between East 72nd and East 65th Streets, and by 50.0% to 2.8 MPH from 5.6 MPH south of East 65th Street.

Eastbound and Westbound Roadways

The number of segments operating below 8 mph showed only minor changes in both the AM and PM peak periods, decreasing to 35 segments from 38 segments in the AM peak period, and increasing to 39 segments from 37 segments in the PM peak period. In both the AM and PM peak periods, more

The Gates 31

than half of the segments analyzed, operated between 5-8 mph. As was the case under the full closure, and "before" conditions, the only segments exhibiting high speeds were the transverse roads in the park.



32 The Gates





The Gates 33