

2013 Nationals Park Traffic Operations and Parking Plan



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FINAL REPORT

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EXECUTIVE SUMMARY

This technical memorandum presents the summary of the process and results of the review and update of DDOT's Nationals Park Traffic Operations and Parking Plan (TOPP). This effort began on February 8, 2013, and was intended to be completed before the start of the 2013 baseball season (or by March 7th).

The project team, Sammat Engineering Services and Sam Schwartz Engineering, conducted stakeholder interviews with ANC 6D, The Capitol Riverfront Business Improvement District (BID), The Washington Nationals, MPD, and DDOT Planning/Engineering staff. The team also helped DDOT to organize and conduct a stakeholder strategy meeting on February 27, 2013 at DDOT. The stakeholder interviews and the stakeholder strategy meeting identified several key concerns related to game-day traffic operations and parking issues. Recommendations have been proposed to address some of these concerns while the remainder will involve ongoing efforts being undertaken by DDOT.

The project team analyzed ballpark attendance and Metro ridership data, identifying patterns that can be used to enhance DDOT's efforts to manage ballpark traffic operations.

A review of the inventory of existing parking availability within the environs of the ballpark indicated a marked reduction in off-street parking capacity since the 2008 TOPP was prepared. The decline reflects rapid land development around the ballpark. Parking meters are operational until 10 pm on game days (including Sundays) in the following bounded areas:

- North: Virginia Avenue SE
- East: 4th Street SE
- South: M Street SE
- West: South Capitol Street SE

This area is a performance parking zone, therefore higher rates will be in effect on game days one hour before the game and three hours during the game.

Based on the interviews, review of available documents and data gathered, a number of recommendations are proposed. These recommendations are based on the following general goals:

- Minimize the impact of parking availability and traffic flow to neighbors and commuters in the area.
- Provide adequate information to help get patrons to/from the ballpark efficiently.
- Provide enhanced information to patrons to maximize the use of Metrorail use since parking supply has declined since 2008 (due to new land development).

- Direct motorists to parking lots based on existing and new (e.g., 11th Street Bridge) approach routes. This will potentially reduce circulating around the ballpark looking for parking.
- Nationals to continue to provide information to drivers with ingress, parking, and egress information in coordination with all other stakeholders.
- Stakeholder meetings are recommended to be held on a quarterly basis. DDOT will collaborate with the Nationals to schedule these meetings and will duly inform the stakeholders.
- Enforce all restrictions during games, especially for parking and curb lane activity, with emphasis on M Street.
- Reduce pedestrian-vehicular conflicts at intersections as much as possible. This may also involve game day restriction on motor vehicle traffic for streets with high pedestrian volumes.
- As much as possible, minimize mid-block crossings at non-designated crosswalks by incorporating the wayfinding route maps (provided in this update) to pedestrians or patrons.
- Sidewalk improvements are recommended throughout the area. DDOT already has ongoing effort underway to improve sidewalks citywide.
- Suggested signage from the Washington Nationals, DC Taxicab Commission and ANC for directions to the ballpark, taxi stands and parking enforcement are under review by DDOT for potential implementation.

Specific recommendations are provided in this report. In addition, this report includes several maps (provided as an Appendix) that highlight Metrorail stop walking times, placement of Traffic Control Officers, parking facilities, and directions for using the 11th Street Bridge ramps to direct vehicular traffic from Southern MD, Northern MD and Southern VA. The Appendix also includes the methodology and data used to develop the 2013 TOPP.

Table 1 summarizes key elements of the Base and Enhanced Nationals Park TOPP for the 2013 season.

Table 1: Key Elements of 2013 Base and Enhanced National Park TOPP

	Base TOPP	Additional Coverage for Enhanced TOPP
Intersection Control Personnel	<ul style="list-style-type: none"> -South Capitol St & M St SE -Half Street & M Street SE -New Jersey Ave & M Street SE -First Street & N Street SE -1st Street & M Street SE -South Capitol St & I Street SE -South Capitol St & I Street SW 	<ul style="list-style-type: none"> -South Capitol/Potomac Ave SE -First St & Potomac Ave -South Capitol St & O St SE -South Capitol St & N St SE -Near 11th Street Bridge -Half Street & M Street SW -1st Street & M Street SW -3rd Street & M Street SW -4th Street & M Street SW -5th Street & M Street SW -3rd Street & M Street SE -M Street & Delaware Ave SW -11th St & M St/exit to 11th Street Bridge
Variable Message Signs <ul style="list-style-type: none"> -I-295 NB (2) -I-295 SB (2) -I-395 NB (2) - South Capitol Street SB - South Capitol Street NB - New York Avenue WB - 3rd Street Tunnel SB -395 Split to 11th St Bridge (Post Games only) 	Activate 90 minutes prior to scheduled game start time	Activate 120 minutes prior to scheduled game start time
Roadway Operations Patrol Assistance During 8th inning of games implement lane reductions at freeway entrance ramps and drop cones at strategic intersections to prevent left turns	<ul style="list-style-type: none"> -Ramp to 11th Street Bridge from M street SE leading to I-295 going south -On SE /SW Freeway at the ramp from South Capitol Street Drop cones on M Street at New Jersey Ave to prevent left turns	<ul style="list-style-type: none"> -On-ramp to 14th Street from Maine Avenue SW leading to I-395 going south -On northbound South Capitol Street Bridge approaching South Capitol/Potomac Ave SE Drop cones at 7 additional intersections to prevent left turns (list provided on page 8)
Traffic Signal Timing	Combination of splits and offsets that operate under three possible cycle lengths, 100 seconds, 120 seconds, and 150 seconds. Evacuation timing plan of 240 seconds for South Capitol Street corridor if the need arises to evacuate the area.	
Street Closures	<ul style="list-style-type: none"> -N St SE between South Capitol St SE First SE -Half St SE between M St & N St SE 	
Traffic Management Operations	Operators monitor traffic, incidents, signal status from DDOT's Traffic Management Center	
Curbside activity around ballpark	Curbside parking restrictions in effect at key locations on M St, N St, 1 st St, and Potomac Ave during baseball games	

RECOMMENDATIONS FOR 2013 NATIONALS TOPP

Based on findings from the stakeholder interviews, data analysis, parking assessment, and the operational plans (presented in the Appendix to this report), the following recommendations are presented.

Base and Enhanced TOPPs

DDOT will adopt **two operational plans** for Nationals games based on anticipated attendance levels and the day of week/time of day for the games:

- A **Base** TOPP would largely follow the game day procedures and staffing levels for normal games with low to moderate levels of attendance.
- An **Enhanced** TOPP will be employed for games with high levels of attendance, and for most games with weekday afternoon start times.

Presented in the following sections are the details for the Base and Enhanced TOPPs for each type of operational undertaking.

1. Traffic Signal Timing Plan

DDOT has developed several traffic signal timing plans that cover the ballpark area. These traffic signal timing plans contain a combination of splits and offsets that operate under three possible cycle lengths, 100 seconds, 120 seconds, and 150 seconds. There is also an evacuation timing plan of 240 seconds for the South Capitol Street corridor if the need arises to evacuate the area. The following signalized traffic signal locations are connected to the stadium manual plans (also see Figure 1):

Half Street and M Street SE	9 th Street and M Street SE
Half Street and M Street SW	9 th Street and Maine Avenue SW
1 st Street and M Street SE	11 th Street and M Street SE
1 st Street and N Street SE	14 th Street Bridge Ramp and Maine Ave SW
1 st Street and Potomac Avenue SW	M Street and Delaware Avenue SW
1 st Street, M Street and Canal Street SW	M Street and Isaac Hull Avenue SE
3 rd Street and M Street SE	New Jersey Avenue and M Street SE
3 rd Street and M Street SW	South Capitol Street and I Street
4 th Street and M Street SE	South Capitol Street and M Street
4 th Street and M Street SW	South Capitol Street and N Street
5 th Street Ramp, I Street and Virginia Ave SE	South Capitol Street and O Street
6 th Street and Maine Avenue SW	South Capitol Street and P Street
6 th Street and Virginia Avenue SE	South Capitol Street and Potomac Avenue
7 th Street and Maine Avenue SW	Suitland Parkway and Firth Sterling SE
8 th Street and M Street SE	Suitland Parkway and Stanton Road SE

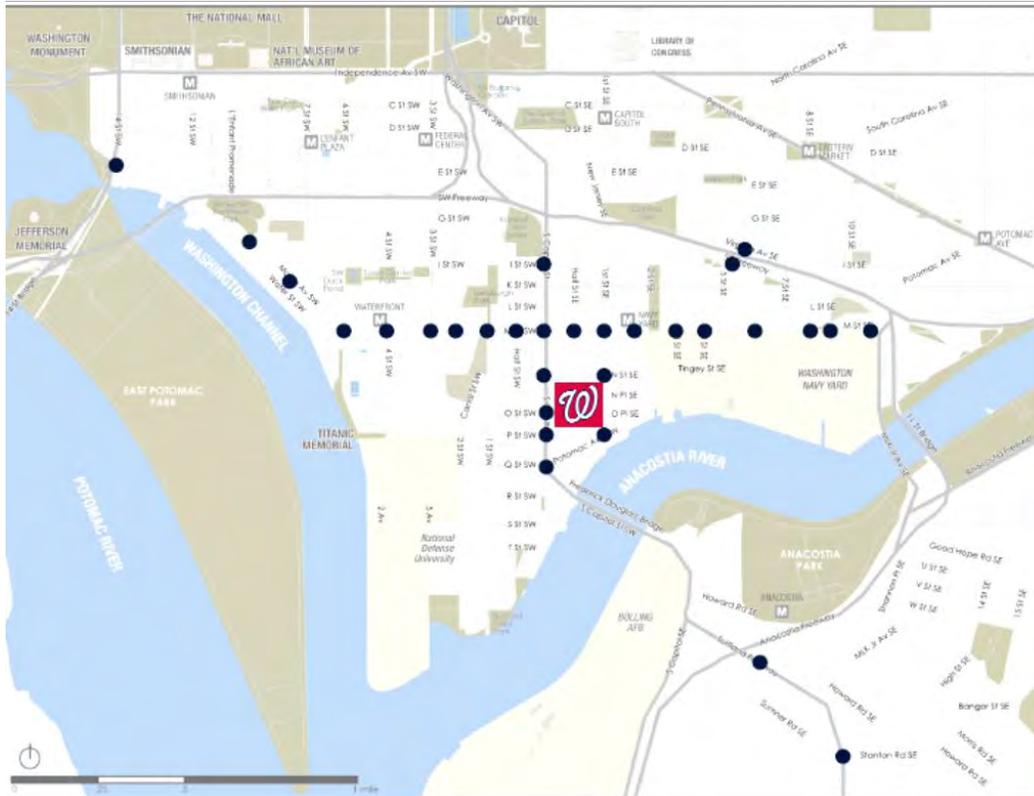


Figure 1: Intersections with game-day signal timing plans

2. Location of DC Personnel and Staff during game days

For the Nationals season, DDOT's traffic control deployment will consist of a combination of Traffic Control Officers, School Crossing Guards, Metropolitan Police Department, special personnel from the Nationals and other appointed special personnel. The personnel coverage will be provided at a total of seven (7) intersections for the Base TOPP. For the Enhanced TOPP, DDOT will consider deploying personnel at an additional 13 intersections, as listed below and shown in Figure 2:

Base TOPP

- South Capitol Street & M Street SE
- Half Street & M Street SE
- New Jersey Avenue & M Street SE
- First Street & N Street SE
- 1st Street & M Street SE
- South Capitol Street & I Street SE
- South Capitol Street & I Street SW

Additional Intersections Considered for Enhanced TOPP

- 1st Street & M Street SW
- 1st Street & M Street SW
- 1st Street & Potomac Avenue
- 3rd Street & M Street SE
- 3rd Street & M Street SW
- 4th Street & M Street SW
- 5th Street & M Street SW
- 11th Street & M Street/exit to 11th Street Bridge
- M Street & Delaware Avenue SW
- Near 11th Street Bridge
- South Capitol Street & N Street SE
- South Capitol Street & O Street SE
- South Capitol Street & Potomac Avenue SE

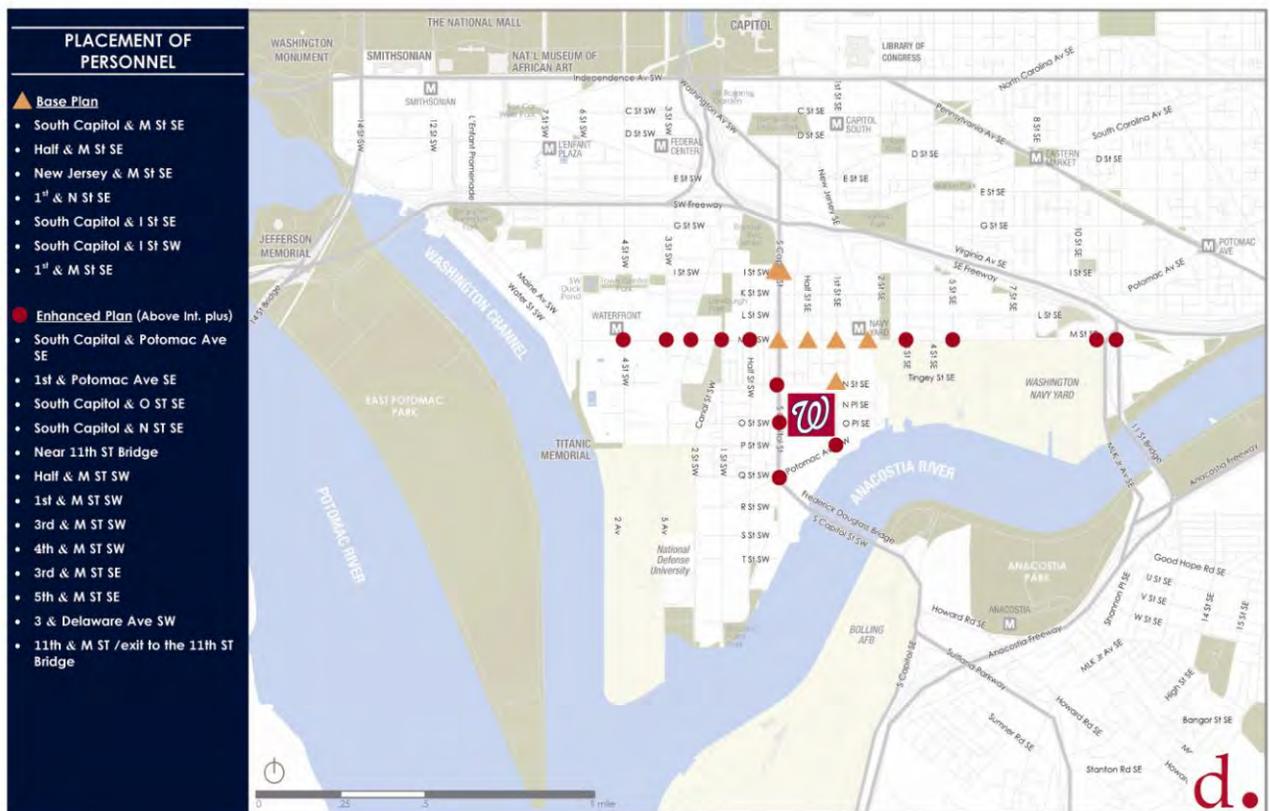


Figure 2: Location of Traffic Control Officers during Game Days

3. Roadway Operations Patrol (ROP) Assistance

ROP will implement lane reductions during the 8th inning of games to expedite the merge onto the freeways during the post-game period. Locations are as follows:

Base TOPP

- Ramp to 11th Street Bridge from M street SE leading to I-295 going south
- On SE/SW Freeway at the ramp from South Capitol Street

Additional Locations for Enhanced TOPP

- On-ramp to 14th Street from Maine Avenue SW leading to I-395 going south
- On northbound South Capitol Street Bridge approaching the intersection of South Capitol and Potomac Avenue SE

In addition to implementing freeway tapers, ROP will drop cones on M Street at New Jersey Avenue to prevent left turn as part of the Base TOPP.

For the Enhanced TOPP, ROP will drop cones at following seven (7) intersections to reduce possible turn movements at the beginning of the 8th inning:

- M Street SE @ Cushing Place (cone in between the two medians)
- Turn Lane from M street to south bound Half Street SW (cone off turn Lane)
- M Street SE @ 2nd Place SE (cone between the two medians)
- On-ramp to northbound south Capitol Street from M Street
- Turn Lane from M street to north bound Half Street SW (cone off turn Lane)
- On Ramp to southbound South Capitol Street from M Street
- M Street SE @ 2nd Street SE (cone between the two medians)

4. Variable Message Signs (VMS)

The DDOT Traffic Management Center will activate message boards 90 minutes prior to scheduled game start time under the Base TOPP, and 120 minutes prior to scheduled game start time under the Enhanced TOPP. Eleven VMS boards will be activated for each game. Locations and VMS messages are as follows:

- 3rd Street Tunnel SB: NATS BALL PARK USE I-395 EAST
- I-295 NB: NATS BALL PARK USE EXITS 3B & 4; NATS BALL PARK USE EXITS 3B & 4
- I-295 SB: NATS BALL PARK USE S. CAPITOL STREET; NATS BALL PARK USE S. CAPITOL STREET
- I-395 NB: NATS BALL PARK KEEP RIGHT; NATS BALL PARK NEXT 3 EXITS
- I-395 Split to 11th St Bridge- Post Games only: LANE SHIFT AHEAD/ MOVE TO LEFT
- New York Avenue WB: NATS BALL PARK USE I-395 SOUTH
- South Capitol Street NB: NATS BALL PARK PARKING FOLLOW DIRECTION SIGNS
- South Capitol Street SB: NATS BALL PARK PARKING USE M STREET EXIT

5. Street Closures

The same street closures will be implemented for the Base and Enhanced TOPPs:

- N St SE between South Capitol St SE and First SE
- Half St SE between M St & N St SE

These locations are designated as Special Event Areas any may be closed to non-emergency vehicular traffic starting eight (8) hours before commencement of game and continue until three (3) hours after game ends.

6. Traffic Management Operators

For both the Base and Enhanced TOPP, operators will be on hand to monitor traffic, incidents, signal status from DDOT's Traffic Management Center.

7. Curbside activity around ballpark

Curbside parking restrictions will be in effect during baseball games at the following locations:

- M Street between 9th Street SE to 9th Street SW
- N Street between South Capitol and 1st Street SE
- Potomac Avenue between South Capitol and 1st Street SE
- 1st Street from Potomac Avenue to M Street, SE

Figure 3 shows the parking regulations around the ballpark. It is recommended that these restrictions be strictly enforced during game days. The Nationals will also make a concerted effort to inform fans of these and all other parking restrictions during game days.

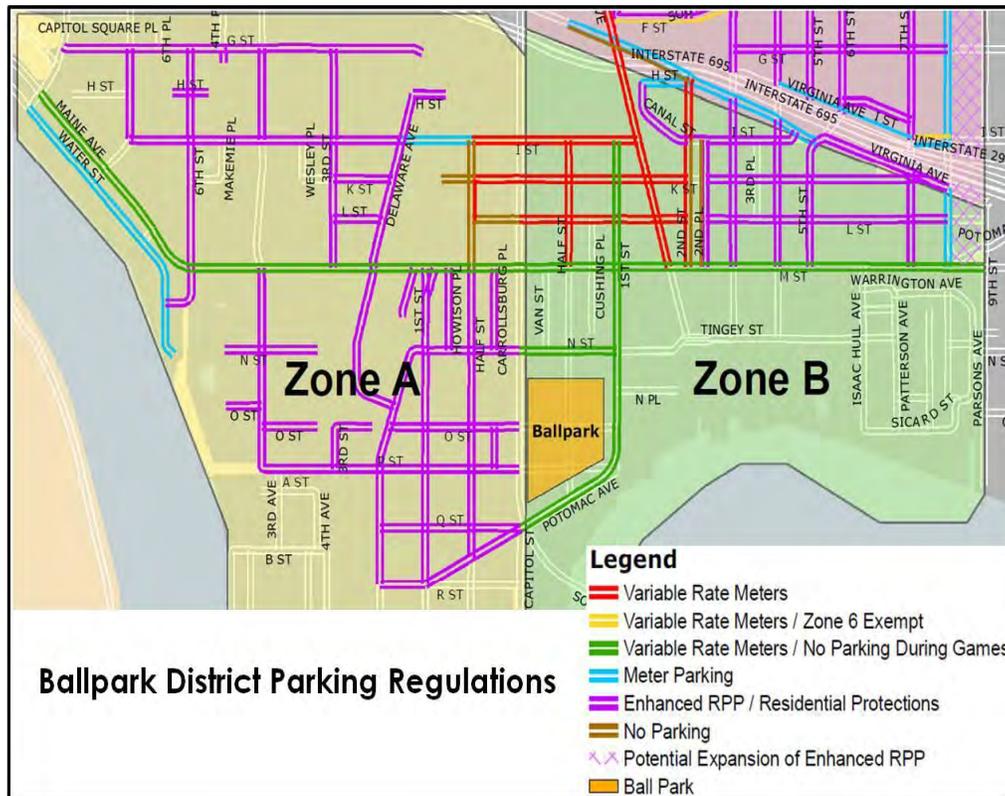


Figure 3: District Parking Regulations

8. Parking Inventory and Restrictions

Analysis of the existing parking supply shows that there has been a reduction of parking spaces since 2008 due to land use development in the Ballpark area. Thus, it is recommended that existing parking restrictions should continue to be strictly enforced. It is also recommended that existing parking restriction signage, especially in the residential neighborhoods in ANC 6D should be improved. Residents should be provided with more information regarding parking restrictions at least 24 hours before the restriction goes into effect.

DDOT will continue to work closely with the Nationals to provide clear directions for drivers traveling to and from Nats parking lots. Directional maps prepared for the 2013 TOPP are included in the Appendix.

9. Tour Bus Management

Prior to start of games, tour buses unload passengers on 1st Street prior to Potomac Avenue SE and on Potomac Avenue prior to South Capitol Street SE, on the side nearest to ballpark. Once passengers have departed, the buses proceed around the ballpark to the intersection of Potomac Ave, SE and South Capitol Street, SE and turn right onto South Capitol Street, SE, stay in the right-hand lane (avoiding the underpass) and make a right at the fourth traffic light onto M St, SE. Buses stay in the left-hand lane and make a left at the second traffic light onto First Street, SE, then travel one block and make a right onto L Street, SE. The entrance to Lot W (the bus parking lot) is located approximately six and a half (6 ½) blocks ahead on the right (past the intersection of 5th Street, SE and L Street, SE).

Buses and limousines wishing to pick up passengers MUST return to the drop-off/pick-up location, adjacent to the ballpark, during the 7th inning in order to pick up their passengers after the game. Failure to do so or late arrival will result in the vehicles being disallowed access to the drop-off/pickup location. It must be noted that Lot W may be lost to land development during the 2013 baseball season, in which case alternate parking arrangements for tour buses will need to be developed.

10. Taxi Cab Management and Enforcement

A pre-game drop-off location was established on Van Street SE south of M Street. After dropping off patrons, taxis continue on Van Street, SE and turn right onto N Street, SE. A post-game pick-up location was also established in front of the Lerner Building on M Street SE. The Nationals provided 3 starters at head of the queue. Taxis queue along the curb lane of westbound M Street in front of the Lerner Building and the Unit block of M Street. Enforcement is provided by the DC Taxicab Commission's Hack Inspectors.

11. Metrobus and DC Circulator routes

A review of the WMATA Metrobus information shows that the routes that are more prominent and could potentially reduce congestion and have an impact on how the Nationals fans attend games are the following: Routes 74, P6, V7, V8, V9 and A9. These routes are shown in Figure 4.

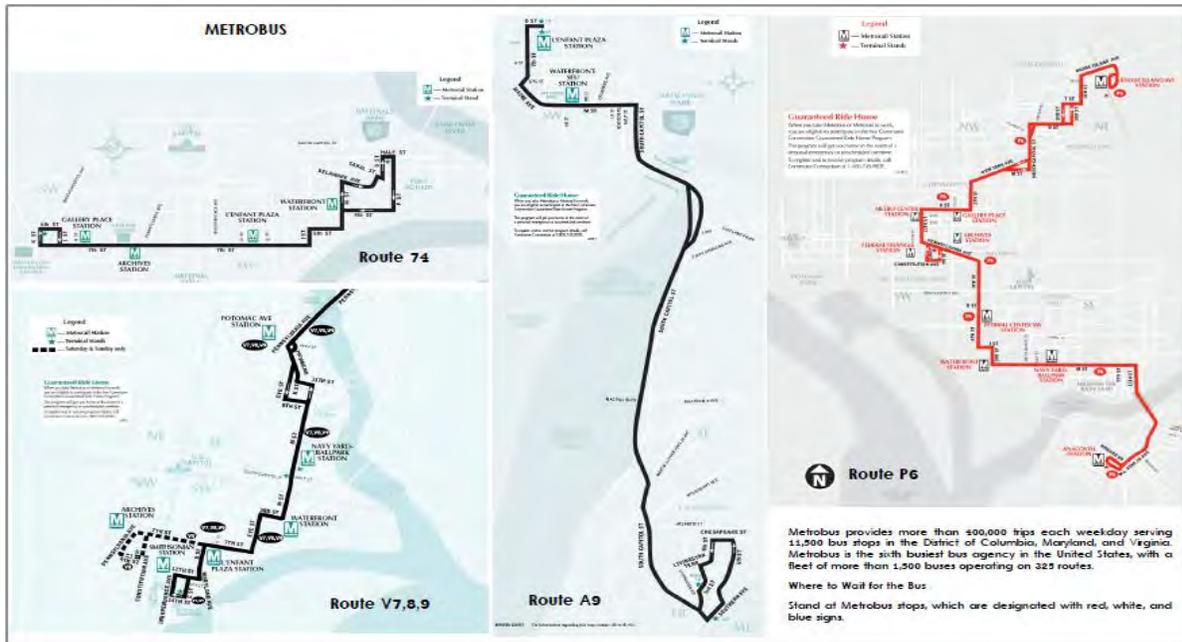


Figure 4: Metrobus Routes which could potentially reduce congestion

The DC Circulator is expanding to link cultural, entertainment and business destinations within the city's central core and District museum neighborhoods. Two new routes were added in March 2009 and most recently, in October 2011. Currently, there are five Circulator routes in all, providing easy connections to neighborhoods throughout the District and into Rosslyn, Virginia. The Circulator route Union Station – Navy Yard is the most prominent Circulator route which the Nationals fans should be encouraged to use. Figure 5 shows the DC Circulator Union Station – Navy Yard with their corresponding stops.



Figure 5: DC Circulator Union Station – Navy Yard Route

DDOT encourages walking to the ballpark from a range of Metro rail stations that serve the Blue, Orange, Yellow, and Green lines, as shown in Figure 6:

Draft maps highlighting Metr rail stop walking times

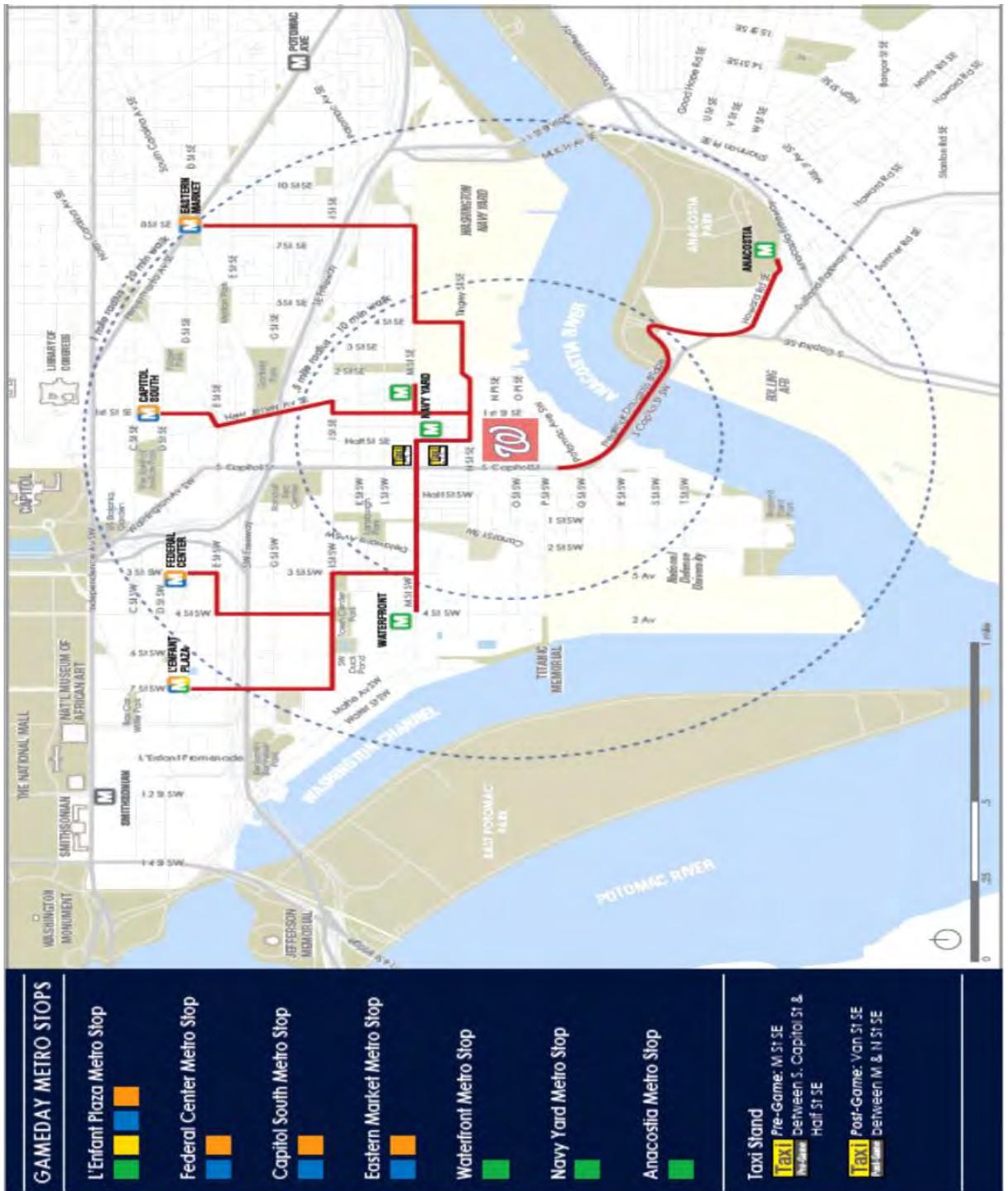


Figure 6: Example of pedestrian walking map to available Metro Stations

12. Bicycle Routes

DDOT has a well-established and very successful Bicycle Program which is committed to providing safe and convenient bicycle access throughout the city. DDOT has created 56 miles of marked bike lanes and installed 2,300 bicycle parking racks, and launched the first public bike sharing program in the United States. Figure 7 shows the bike routes available near the Nationals ballpark.



Figure 7: Available Bike Routes and Stations within the Ballpark Area

13. Water Taxi

Fans attending Nationals games now have the option of taking a water taxi to the Navy Yard area. This additional form of public transportation supports the goal of minimizing the number of automobile trips to the ballpark.

SUGGESTED UPDATES OF NATIONALS AND DDOT WEB CONTENT

The project team conducted a detailed review of the Washington Nationals' current web site (<http://washington.nationals.mlb.com>) to identify potential opportunities to improve communication with fans on transportation issues. Appendix 3 contains screen shots of transportation pages from the current website. The issues raised at the stakeholder interviews and the project team's familiarity with web pages for other sports teams was taken into account.

Overall, the Washington Nationals' website provides extensive transportation information that rivals or exceeds information provided by other professional sports teams. The website includes a sub-tab entitled "The Way to Go to Nationals Park", under which nine sub-tabs are provided:

- Parking Options
- Metrorail
- Metrobus and DC Circulator
- Bicycle Riders
- Walking
- Taxi
- Share A Ride
- Charter Bus & Limousine
- Water Taxi

The website also includes an interactive map that allows users to navigate to locations and facilities of interest. It is recommended that the Nationals should provide a prominent transportation tab on the main page of their website rather than requiring users to seek transportation information by selecting one or more sub-tabs.

It is also recommended that information on the current Metrorail tab be expanded to identify Blue/Orange line stations, as well as Green Line stations besides Navy Yard. The current Metrorail tab is only focused on the Green Line Navy Yard station. The Metrorail tab should include a link to the Nationals Park walking map developed by the project team.

Updating the Metrobus/Circulator tab to include information regarding specific Metrobus and Circulator bus routes, including a new express bus service from 15th/K Street is recommended.

The Walking tab currently provides no information other than identifying walking as a healthy transportation choice. Some thought should be given to adding information that might increase the value of the Walking tab (e.g., links to local maps and areas attractions, etc.).

NATIONALS PARK DIRECTIONAL AND PARKING SIGNING

In preparation for the 2013 baseball season the Washington Nationals conducted an inventory of directional and parking signs associated with the ballpark. A copy of the complete sign inventory was provided to DDOT at the February 27th stakeholder meeting. This inventory is presented in the Appendix to this report. DDOT will work with the Nationals to address signing concerns prior to and during the 2013 baseball season.

Draft map showing how to use the 11th Street Bridge ramps to bring vehicular traffic from Southern Maryland, Northern Maryland and Southern Virginia

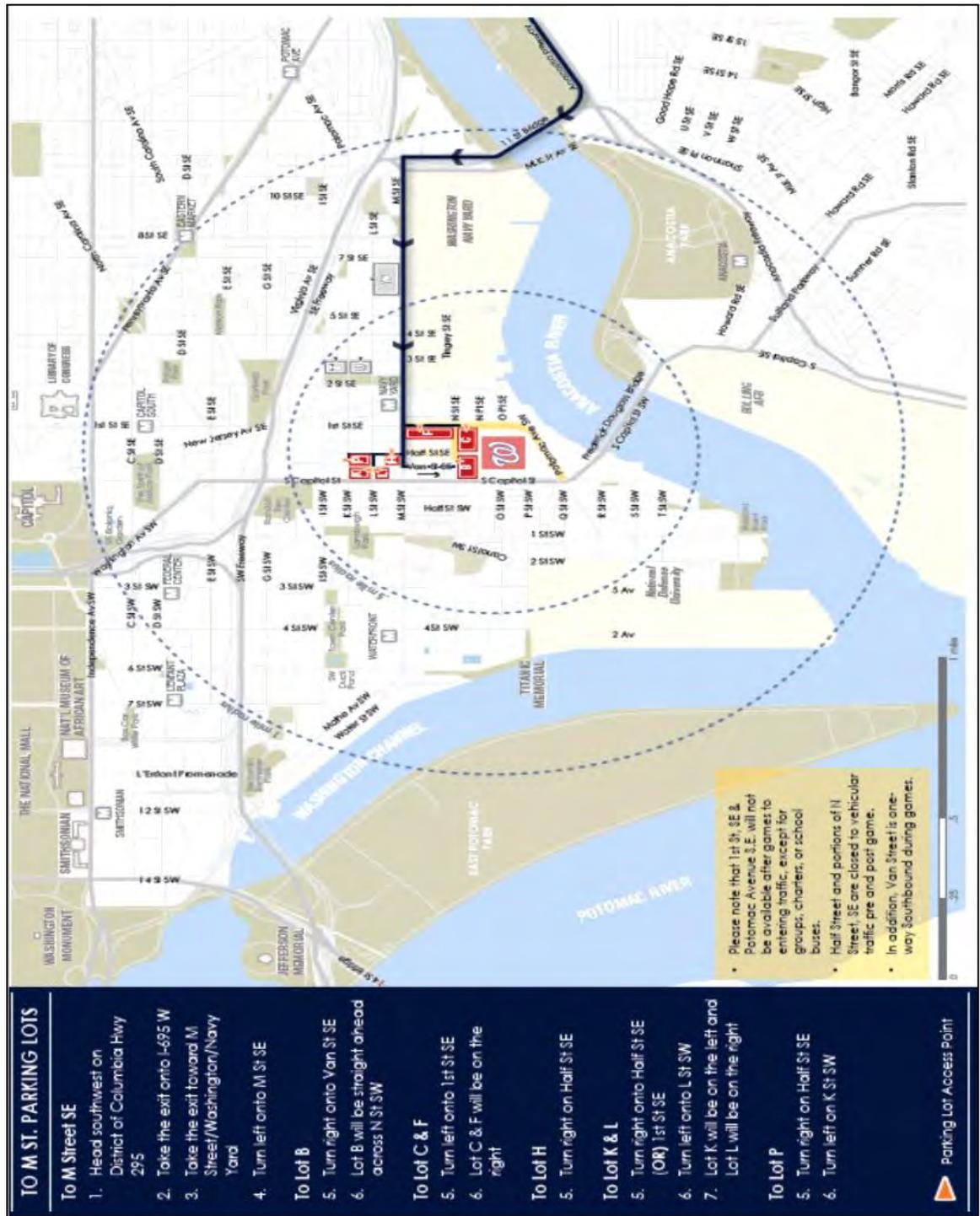


Figure 8: Example of new traffic routes using the 11th Street Bridge