

DC UNITED STADIUM

PRELIMINARY TRAFFIC OPERATIONS AND PARKING PLAN

WASHINGTON, DC

January 23, 2017



ZONING COMMISSION
District of Columbia
CASE NO.16-02
EXHIBIT NO.118A

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INTRODUCTION

This report consists of a preliminary Transportation Operations and Parking Plan (TOPP) for the DC United Stadium and is intended to be a working document leading up to the final TOPP to be completed closer to opening of the Stadium.

This preliminary TOPP aims outlines activities that are to occur on gamedays including curbside management, temporary signage, placement of Traffic Control Officers (TCOs), MPD and other staging areas, and other gameday operations. It also includes routing and marketing concepts behind TOPP elements.

PREVIOUS STUDIES

The TOPP builds off of previous studies that performed reviews of the DC United Stadium project, including the following:

- DDOT's Southeast-Southwest Special Events Transportation Analysis
- DC United Transportation Management Plan (TMP)
- DC United Environmental Mitigation Study (EMS)
- Buzzard Point Framework Plan Transportation Study

The findings of these studies are summarized below:

- *SE/SW Special Events Transportation Analysis*
This study, completed by DDOT in 2014, reviews the long-term impacts of the new soccer stadium in conjunction with other large event venues for the year 2035. As it was a long-term study, it assumed completion of the streetcar lines with a stop in Buzzard Point. In addition, it included the planned improvements along South Capitol Street and M Street. In short, the study found that when there are simultaneous events on weeknights at all venues, the roadway and transit systems will be over capacity. However, when events occur individually they will generate a manageable amount of transportation activity with use of Traffic Control Officers (TCOs) stationed at critical intersections.
- *DC United Transportation Management Plan (TMP)*
The TMP provides recommended transportation demand strategies for all modes, with the goal of taking advantage of existing transportation resources and dispersing transportation demand. The overall recommendations for each mode are summarized below:

Parking: Due to the constrained nature of the Buzzard Point neighborhood, only a small amount of parking should be supplied on site. Utilizing existing parking garages and lots has the benefit of dispersing vehicular traffic throughout the network instead of concentrating it in one area. On-street parking in residential areas will be protected to ensure that the surrounding neighborhood is not negatively impacted and non-residential on-street parking should be converted to multi-space meters where possible.

Vehicle Routing/Transit: The most important vehicular recommendation is to encourage the use of preferred routes to intercept drivers at the edges of the study area whenever possible and direct them to the nearest parking zones. Permanent and temporary way-finding signage, employing Traffic Control Officers (TCOs) at key intersections before and after games, and placing temporary traffic barriers to control traffic flow can further improve operations.

Transit: It is recommended that transit be heavily promoted as a travel option through marketing efforts on the DC United website, specific Stadium-branding within the Metro system, and by providing transit subsidies to season ticket holders equal to in value to the parking subsidy typically provided. The Navy Yard Metro station will be emphasized for use during game days as it is already equipped for game-day transit capacity and provides a better perceived walking route.

Pedestrian: High-priority infrastructure and operations recommendations include installing permanent and temporary pedestrian-oriented way-finding signage on the roadways near the Stadium, employing Traffic Control Officers (TCOs) at key intersections before and after games, and placing temporary traffic barriers to control vehicular flow and ensure the separation of vehicles and pedestrians.

Bicycle: Bicycle recommendations include supplying ample amount of bicycle parking and bike valet service at the Stadium in addition to installing at least one Capital Bikeshare station located within the Buzzard Point neighborhood. Bicycling will be heavily promoted as an alternative option by marketing bicycle routing and parking information on the DC United website and providing



bicycle subsidies to season-ticket holders that are equal in value to parking subsidies that are offered.

▪ *DC United Environmental Mitigation Study (EMS)*

The transportation portion of the EMS identified mitigation measures necessary to achieve a quality transportation experience on game days, including reducing the impact of the stadium on the surrounding neighborhood and guiding spectators to efficient routes for various modes. A summary of findings and mitigation measures for each mode, some of which overlap with the recommendations proposed in the TMP, is summarized below:

Parking: The amount of off-street parking, in the form of garages and lots, is adequate to serve the parking needs of the stadium during a sell-out game situation. On-street parking is expected to be used less than off-street parking, but metered parking surrounding the stadium will supply an additional outlet for stadium parking needs.

The study recommends that some parking be supplied within a short walk of the stadium to ensure that smaller events could have an independent parking supply and to help disperse overall vehicular demand. On-street residential parking should be further protected and unrestricted and metered on-street parking should be converted to multi-space meters with the option of implementing special game day rates.

Traffic: The detailed vehicular capacity analyses determined that the study area is congested under existing conditions, and becomes even more so with the addition of background developments and stadium-related traffic. An influence distribution of stadium-related traffic improves some intersections, particular along South Capitol Street and has an overall positive effect on traffic operations. Additional infrastructure changes outside of the scope of the South Capitol Street improvements are largely infeasible due to roadway constructions, but dynamic signal timing could be a practical solution to some capacity issues. Some intersections may even be manually operated by Traffic Control Officers (TCOs) to manage the conflicting movements of vehicles and pedestrians.

As such, primary vehicular mitigation measures largely echo those presented in the TMP: (1) Promote non-auto modes, (2) disseminate information to the public regarding the stadium's event schedule, (3) influence the routing of

spectators by helping patrons secure parking ahead of time and suggesting routes, (4) implementing dynamic signal timing patterns during events, and (5) game day operational measures such as short street closures, limitations of some turning movements, and barriers.

Transit: There will be adequate capacity at the Navy Yard and Waterfront Metrorail Stations to accommodate existing, future background, and DC United Metrorail demand. The recent updates to the Navy Yard west portal to accommodate Nationals Ballpark transit demand will more than suffice in handling DC United game day traffic.

It is suggested that DC United signage be installed within the Navy Yard-Ballpark Station itself and along the primary walking route. Transit should be promoted and marketed for as a primary travel option to the stadium by providing Metro subsidies to season ticket holders equal to any parking subsidies that are typically provided.

Pedestrian: Pedestrian capacity analyses were performed along sidewalks and at intersections to determine the level of service of the existing pedestrian system with the addition of game-day pedestrian traffic in order to determine where enhanced pedestrian facilities or game-day operational enhancements would be necessary. The analyses concluded that the majority of the pedestrian network in the study area would provide the necessary capacity for game-day pedestrian traffic with the exception of the sidewalk on the north side of Potomac Avenue between South Capitol Street and Half Street SW and crosswalks at the crossings of South Capitol Street at Potomac Avenue, P Street, and N Street and M Street at 4th Street.

As such, primary pedestrian mitigations measures include: (1) The construction of a wide sidewalk along Potomac Avenue west of South Capitol Street leading up to the Stadium, (2) Traffic Control Officers (TCOs) at the intersections of South Capitol Street with N Street, P Street, and Potomac Avenue, (3) Way-finding signage along roadways leading to the stadium, and (4) pedestrian and traffic barriers to ensure separation between vehicles and pedestrians at high conflict intersections and to deter patrons from walking through the adjacent residential neighborhood.



Bicycle: Bicycle facilities within the Buzzard Point neighborhood are minimal or nonexistent therefore the mitigation measures in the report largely recommend the inclusion of bicycle facilities in conjunction with the stadium. This includes bike racks surrounding the stadium, a bicycle valet system within the stadium, one or more Capital Bikeshare stations, way-finding signage along the bike route, and infrastructure improvements along the primary access routes.

- *Buzzard Point Framework Plan Transportation Study*
The purpose of this report is to review the transportation aspects of the *Buzzard Point Vision Framework + Implementation Plan*, focusing on analyzing the traffic impacts of the potential new development outlined in the plan and develop minimum roadway requirements for Buzzard Point streets. The recommendations within this study are meant to first satisfy vehicular needs, while allocating remaining roadway right-of-way to multi-modal transportation infrastructure. These recommendations take into account potential streetcar plans and how they would impact vehicular, bicycle, and pedestrian operations; the location of bicycle infrastructure in relation to vehicular traffic and overall connectivity; enhanced pedestrian infrastructure along primary pedestrian routes; and the overall functionality of a cohesive multi-modal transportation system.

The recommendations are intended to be flexible as the eventual development phasing, site access points, and land uses per parcel all may differ from the assumptions used in the analysis. The overall recommendation plan is meant to accommodate minor changes that may be needed, such as street directionality modifications (for short distances), traffic signal locations, locations of turn lanes, and other details.

The primary breakdown of “roadway types” includes: (1) 80’ ROW streets (Half and V Streets) with a recommended 40’ curb-to-curb width including one travel lane in each direction, in addition to either peak hour restricted parking, permanent on-street parking, or turn lanes; (2) 90’ ROW street (2nd Street) with a recommended 44’ curb-to-curb width or 38’ curb-to-curb width depending on streetcar operations, including one travel lane in each direction, parking lanes, and a cycle track; (3) All remaining streets, which require one travel lane in each direction

with the remaining curb-to-curb width being allocated to specific needs such as bicycle facilities and/or parking lanes.

TIMELINE FOR DRAFT AND FINAL TOPP

This preliminary TOPP serves as the basis for a more comprehensive TOPP to be completed closer to opening day. The following outlines the three phases of development for the final TOPP:

- *Stakeholder and Public Engagement*
Using this preliminary TOPP, DCU will engage major stakeholders and the surrounding community to gain input for the Draft TOPP. This includes reviewing the major strategies contained in the preliminary TOPP, discussing lessons learned from Nationals Park, and soliciting ideas not incorporated into the preliminary TOPP.

During this phase, DCU will work with DDOT to identify items that may require longer times to implement, such as policy changes and changes/expansions to bus routes and being implementation of those items.

- *Draft TOPP*
A draft TOPP will be issued approximately 6 months prior to opening day. It will contain details on all of the TOPP strategies and elements and incorporate comment received in the prior phase.

The Draft will be shared with stakeholders for comment, and feedback from the community will be gained through a meeting or other agreed to process.

- *Final TOPP*
The Final TOPP will be issued 90 days before opening day, and will incorporate feedback from the draft, and will complete any design details not in the draft TOPP. For example, the Draft TOPP will include signing recommendations on location and message and the Final TOPP will include design drawings of signs and final locations.

UPDATES AFTER OPENING DAY

This TOPP is intended to be updated as needed, usually during each off-season, to make improvements on things learned during events, and to reflect changes made to infrastructure and other TOPP resources.



The TOPP will need to be updated for the following:

- *New construction that impacts vehicular, pedestrian, or bicycle routing.*
Any construction project taking place nearby the Stadium will need to have a Traffic Control Plan (TCP) in place that accommodates stadium traffic. The TOPP will need to reflect any changes necessary from construction impacts.
- *Complete infrastructure that impacts routing and access to the stadium.*
New infrastructure that changes the routing patterns of any mode will trigger a TOPP revision, as new routes will impact signing and marketing strategies.
- *Changes to the off-street parking inventory*
Similarly, changes in the off-street parking inventory will change parking and vehicular TOPP elements.

Depending on the size of the change and its relative impact, the TOPP may need to be updated during the season instead of waiting for the off-season.

It is also anticipated that the TOPP will be updated during the first season after several events have taken place to incorporate lessons learned from those events.

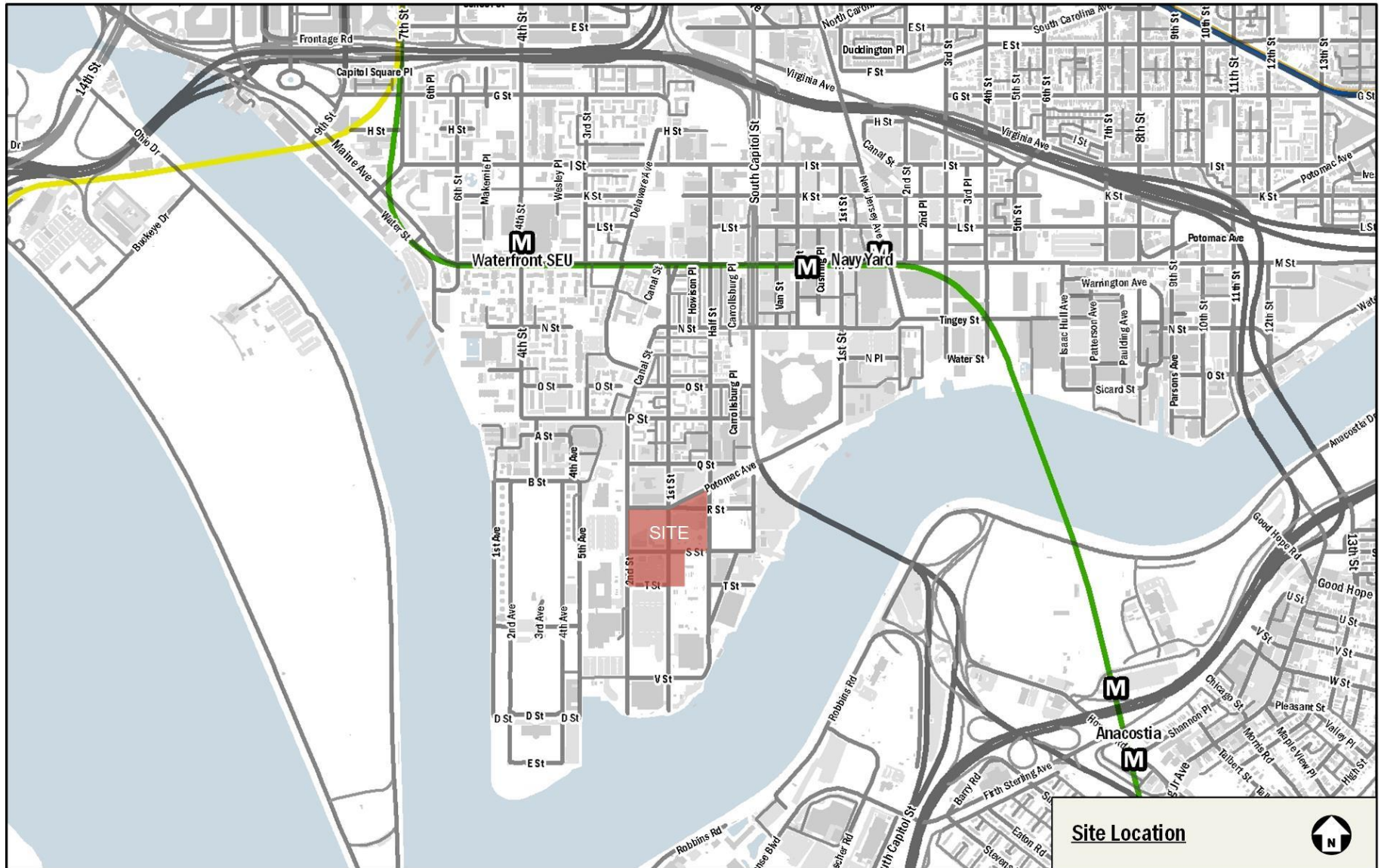


Figure 1: Site Location



TRAVEL DEMAND SCENARIOS

This section outlines the scenarios for which the TOPP strategies are based upon and summarizes the anticipated travel demand of each scenario.

OUTLINE OF SCENARIOS

The TOPP strategies will have three levels, corresponding to the size of the event taking place.

- Low Attendance
Low attendance events will not have any specific event-day TOPP measures, but are small enough to rely on the permanent TOPP elements.
- Moderate Attendance
Moderate attendance events will employ a limited amount of event-day TOPP measures in conjunction with permanent strategies.
- High Attendance
High attendance games will employ a number of event-day TOPP measures in conjunction with permanent strategies.

The Draft TOPP will contain a breakdown of attendance numbers that separate these scenarios. A preliminary estimate is that 'low attendance' will apply to events under 4,000 spectators, 'moderate attendance' to 4,000 to 12,000 spectators, and 'high attendance' to over 12,000 spectators.

It is anticipated that different days of the week will have different thresholds. For example, a weeknight game may trigger the need for a high attendance TOPP at 10,000 spectators, while a weekend game will at 12,000 spectators.

TRAVEL DEMAND PROJECTIONS

The game-day travel demand assumptions for the DC United Stadium were discussed and analyzed in detail in the DC United TMP and EMS.

Preliminary demand estimates for the low, moderate the high attendance scenarios are presented in Table 1. The strategies contained in this preliminary TOPP are based on these projections. The Draft TOPP will revise and refine these estimates.

SCHEDULING AND OVERLAPPING EVENTS

Given the Stadium's proximity to Nationals Park and the potential for overlapping events, a plan has been developed to ensure that the surrounding transportation network is not overwhelmed.

First and foremost, DC United will coordinate with the Nationals to avoid scheduling conflicts in advance. The National's schedule come out months prior to DC United's, thus providing sufficient time for DC United to avoid conflicting games. It is highly advantageous for the teams to keep separate schedules as they share similar resources. For example, the same parking garage could be used for as a season ticket holder garage for both fan-bases given a non-overlapping schedule. Similarly, special events such as concerts will be carefully scheduled to avoid overlapping events.

Although the transportation system may not be able to accommodate events that occur at the same time, it could accommodate events that occur on the same day given sufficient separation. This would require several things: (1) the DC United match would have to go first, since soccer matches had a known end time and baseball games do not, (2) the games would have to be separated by a sufficient enough time to allow vehicles to empty out of parking lots (e.g. a 1pm DC United match and a 7pm Nationals game would provide around 4 hours of separation), and (3) spectators of both teams would need to be informed of any special transportation changes for the game (e.g. times when parking lots were open and/or when they need to be emptied).

In the rare occurrence of an overlapping event, the Nationals and DC United will need to coordinate a special stand-alone TOPP for that event. Because an overlapping event could

Table 1: Preliminary Travel Demand Scenarios

Scenario	Spectators	Mode Split						Spectators by Mode						Auto Occupancy	Parking Demand
		Transit	Auto	Bike	Walk	Hired Vehicle	Other	Transit	Auto	Bike	Walk	Hired Vehicle	Other		
Low	4,000	40%	55%	2%	1%	1%	1%	1,600	2,200	80	40	40	40	3.25	677
Medium	12,000	40%	55%	2%	1%	1%	1%	4,800	6,600	240	120	120	120	3.25	2,031
High	19,000	40%	55%	2%	1%	1%	1%	7,600	10,450	380	190	190	190	3.25	3,215



impact the transportation system, special measures would need to be employed for transit riders and spectators that drive and park. This would be similar for special event plans that are needed during events like July 4th on the mall, and would include strategies like satellite parking (e.g. at RFK stadium) to increase parking supply, a shuttle buses to alternate metro stations to increase transit capacity.



PEDESTRIAN OPERATIONS

This section reviews the preliminary pedestrian-related operations at the Stadium, including strategies based on previous DC United transportation studies, coordination with stakeholders, and industry standards. This sections includes strategies for the following elements:

- Pedestrian Routing;
- Wayfinding;
- Traffic Control; and
- Marketing

12 months prior to opening day, using this preliminary TOPP as a guide, the full TOPP process will begin via engagement with stakeholders such as DDOT, nearby business owners, and the surrounding community. The purpose of this outreach is to gain input for the draft TOPP.

6 to 9 months prior to opening day, a draft TOPP will be completed and will include more detailed pedestrian strategies, as a result of stakeholder engagement and refined Stadium plans.

90 days prior, a final TOPP will be completed and will include detailed design elements and operational details to supplement the pedestrian strategies outlined in the draft TOPP.

The following are preliminary thoughts regarding pedestrian TOPP elements, which are subject to change as part of the draft and final TOPPs.

ROUTING STRATEGIES

Routing strategies for Stadium-related pedestrian traffic aim to provide safe and convenient routes to and from Metrorail stations and parking lots while limiting pedestrian access through the existing residential neighborhood. The preferred routes stress the use of Navy Yard Metrorail Station as opposed to the Waterfront Metrorail Station in order to best avoid residential neighborhoods.

Preferred pedestrian routes were analyzed in the DC United TMP and DC United EMS based on criteria such as sidewalk width, queuing space at intersections, safety and availability of pedestrian crossings, DDOT and ADA compliancy, etc. As such, primary pedestrian routes include more commercial-based

roadways that have wider sidewalks and extensive pedestrian activation, as well as intersections with larger queuing spaces and longer crossing times. The analysis of pedestrian routes helped determine the adequacy of the walking routes, and in turn serve as a tool for determining where and what kind of traffic control devices would be needed, as discussed later in this section.

Based on the location of nearby transit stops and parking lots, expected improvements to the pedestrian network prior to opening day, and the amount of pedestrian traffic expected, Figure 2 shows the primary pedestrian routes leading to and away from the Stadium. These routes will be updated as part of the draft TOPP and will include projected pedestrian volumes. These routes should continue to be updated every off-season to reflect new facilities such as those associated with the South Capitol Street Oval, the Anacostia Riverwalk Trail, and approved developments along walking routes. DC United will coordinate with DDOT on these planned improvement to determine how they will influence pedestrian routing to and from the Stadium.

WAYFINDING STRATEGIES

Wayfinding elements will be placed along the proposed pedestrian routes in order to reinforce the preferred routes and develop a “sense of place”. The majority of the wayfinding elements will be permanent installations such as DCU-branded design elements along the routes such as pavers, lighting, banners, etc., as well as DC United signage within Navy Yard and Waterfront Metrorail Stations. A map outlining decision points along pedestrian routes that would benefit from wayfinding signage is shown on Figure 2.

On game days, additional wayfinding strategies may be employed depending on the size of the event. For moderate-attendance games there may be additional directional signage, especially if a limited number of ticketing booths or entrance portals are to be utilized, that will be placed at the Stadium and within a one-block radius leading up to the Stadium. This additional signage would be temporary in nature and be positioned before and after games. Detailed operations details regarding temporary signage will be discussed in the draft and final TOPPS, but it is expected that temporary signage should be placed at least an hour before the event and removed approximately one hour after the event concludes.

For high-attendance events, in addition to temporary signage, other way-finding elements may be used. These strategies will



be detailed in the draft and final TOPPs based on stakeholder engagement, but may include elements such as the following:

- Pre- and post-game activity installations along pedestrian routes (particularly Potomac Avenue) such as games, food trucks, marketing booths, etc. These could be placed within Stadium property, within private property of nearby developments, or within public space, in coordination with developers and DDOT.
- Temporary barriers placed along Q Street and South Capitol Street to direct pedestrian flow away from residential areas.

The wayfinding strategies will be refined as part of the draft TOPP and signage locations and design details will be determined as part of the final TOPP. Wayfinding strategies should also be updated during every off-season based on what is observed to work and not work, and to satisfy the routing goals if they are not being met. Additionally, if changes to pedestrian routes are made as a result of new pedestrian facilities, wayfinding strategies should be considered for the new routes.

TRAFFIC CONTROL STRATEGIES

Based on the expected pedestrian volumes along the preferred pedestrian routes, several traffic control strategies are proposed to ensure safe and efficient movement of pedestrians before and after games, particularly across South Capitol Street. If changes to the pedestrian routes are made, the additional sidewalk segments and intersections should be analyzed to determine if traffic control strategies need to be updated. Examples of potential pedestrian-related traffic control devices and locations include the following and are shown on Figure 3. These traffic control elements will be finalized in the draft TOPP with detailed design and implementation plans finalized in the final TOPP.

- M Street and 4th Street, SW
This intersection would benefit from one traffic control officer and event-specific signal timings resulting in additional pedestrian green time along the M Street crossing. These strategies would only be necessary for high-attendance events.
- South Capitol Street and N Street
This intersection would benefit from one traffic control officer and event-specific signal timings resulting in

additional pedestrian green time along the South Capitol Street crossing. These strategies would only be necessary for high-attendance events.

- South Capitol Street and P Street
This intersection would benefit from one traffic control officer for moderate and high attendance events. This intersection would also benefit from closing P Street to vehicular traffic (allowing local traffic only) between Half Street SW and South Capitol Street for high-attendance events only. This would allow for pedestrian crossings to occur without the potential for conflicts with vehicles and would help encourage the dispersal of pedestrian traffic crossing South Capitol Street.
- South Capitol Street and Potomac Avenue
One traffic control officer should be placed at this intersection for moderate-attendance events and at least two traffic control officers should be placed at this intersection for high-attendance events to help direct pedestrian and vehicular traffic and avoid any potential conflicts. This intersection would also benefit from event-specific signal timings resulting in additional pedestrian green time along the South Capitol Street crossing for both moderate- and high-attendance events.

As this intersection is expected to observe the highest amount of pedestrian traffic on event days, additional pre- and post-game traffic control measures may be necessary. These measures will be discussed as part of the draft and final TOPPs.

MARKETING STRATEGIES

Pedestrian-related marketing strategies will be further refined as part of the draft TOPP. The types of strategies being considered include the following:

- Advertise primary pedestrian routing to and from the Stadium on the DC United website.
- Advertise the use of the Navy Yard Metrorail Station which will result in pedestrian routes that offer a “sense of place” and that avoid low-density residential neighborhood streets.



Table 2: Summary of Pedestrian-Related TOPP Strategies

Type of Strategy	Permanent Strategies	Event-Day Strategies	
		Moderate Attendance	High Attendance
Routing	<ul style="list-style-type: none"> Utilize routes with sufficient existing infrastructure Avoid residential neighborhoods 	N/A	N/A
Wayfinding	<ul style="list-style-type: none"> Signage at major decision points along pedestrian routes DCU-branded sidewalk/streetscape design elements Signage at Metrorail stations 	<ul style="list-style-type: none"> Temporary signage leading up to the Stadium 	<ul style="list-style-type: none"> Temporary signage leading up to the Stadium Pre- and post-game activity installations Barriers surrounding residential areas
Traffic Control	N/A	<ul style="list-style-type: none"> Traffic control officers placed at intersections with high pedestrian volumes Event-specific signal timings 	<ul style="list-style-type: none"> Traffic control officers placed at intersections with high pedestrian volumes Event-specific signal timings P Street closed to vehicular traffic between Half Street and South Capitol Street Additional pre-/post-game measures at South Capitol Street and Potomac Avenue
Marketing	<ul style="list-style-type: none"> Advertise pedestrian routes on team website Advertise use of Navy Yard Metrorail Station on team website 	N/A	N/A

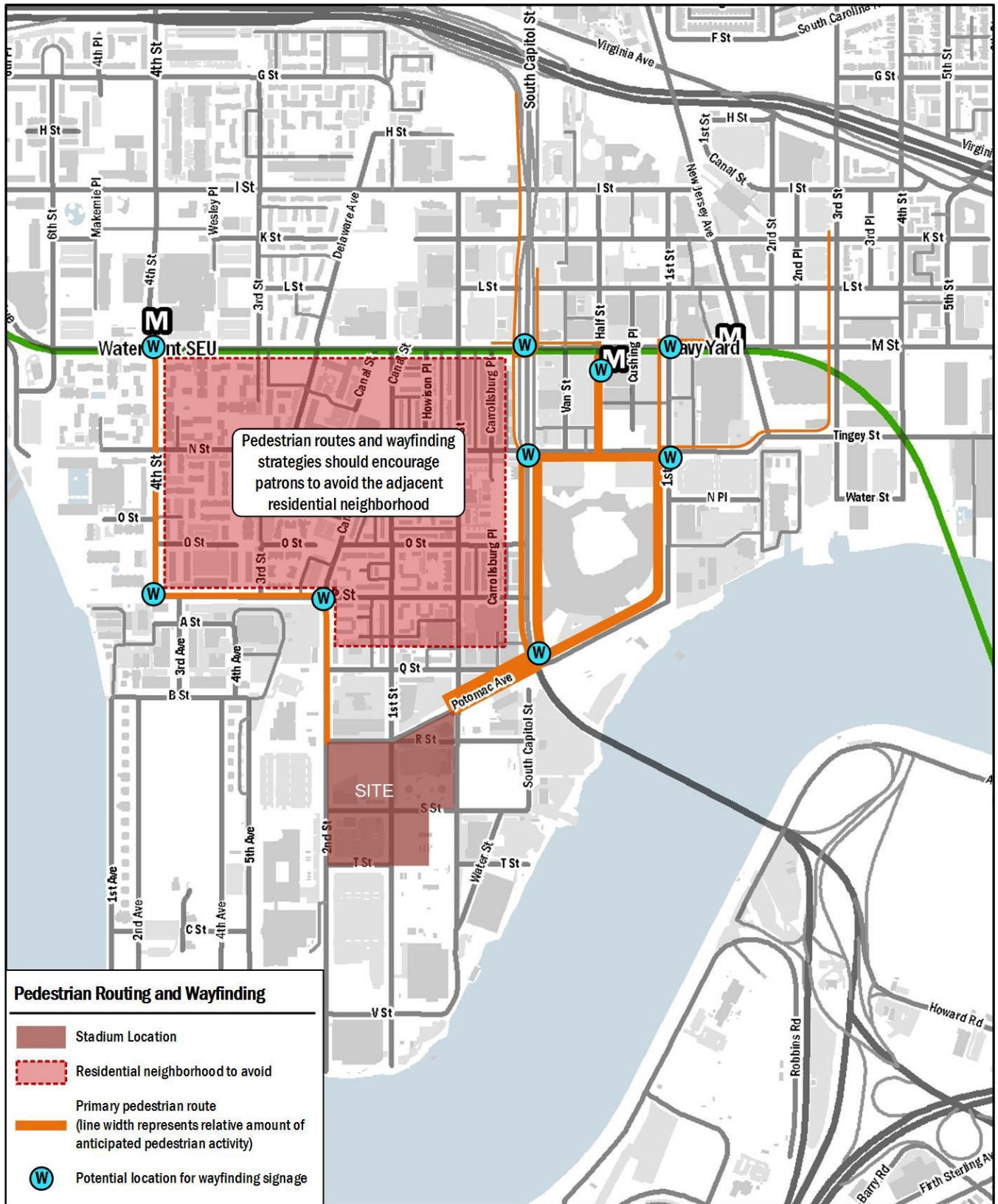


Figure 2: Pedestrian Routing and Wayfinding



Figure 3: Pedestrian Traffic Control Measures



BICYCLE OPERATIONS

This section reviews the preliminary bicycle-related operations at the Stadium, including strategies based on previous DC United transportation studies, coordination with stakeholders, and industry standards. This section includes strategies for the following elements:

- Bicycle Parking;
- Capital Bikeshare;
- Bicycle Routing;
- Wayfinding;
- Traffic Control; and
- Marketing

12 months prior to opening day, using this preliminary TOPP as a guide, the full TOPP process will begin via engagement with stakeholders such as DDOT, WABA, Capital Bikeshare, and the surrounding community. The purpose of this outreach is to gain input for the draft TOPP.

6 to 9 months prior to opening day, a draft TOPP will be completed and will include detailed bicycle strategies, as a result of stakeholder engagement and refined Stadium plans.

90 days prior, a final TOPP will be completed and will include detailed design elements and operational details to supplement the bicycle strategies outlined in the draft TOPP.

The following are preliminary thoughts regarding bicycle TOPP elements, which are subject to change as part of the draft and final TOPPs.

BICYCLE PARKING STRATEGIES

Free bicycle valet service will be provided at the southwest corner of the Stadium off of 2nd Street adjacent to DDOT's proposed cycle track. The bicycle valet service will be available for patrons of Stadium events on event days and Stadium employees on event and non-event days. The bicycle valet shall be located in a secure, covered areas and will provide enough space for a minimum of 190 bicycles. Additional operational details surrounding the bike valet, such as who will run the bicycle valet, the hours of operation, and the internal layout of the bike valet will be determined as part the draft TOPP and final TOPP. Based on comparable Stadia and industry standards, it is expected that the bike valet will operate at least

one hour prior to the start of an event and a half hour after the end of an event.

Permanent short-term bicycle parking will be placed along 2nd Street, Potomac Avenue, T Street, S Street, Half Street, and realigned First Street within close proximity to future bicycle facilities on 2nd Street and Potomac Avenue, as well as stadium entry gates. A minimum of 84 permanent short-term bicycle spaces (in the form of 42 bicycle racks) will be supplied on Stadium property. DC United will coordinate with DDOT to ensure that an additional 114 short-term bicycle parking spaces (in the form of 57 racks) are installed within public space surrounding the Stadium. For high-attendance events, additional temporary bicycle parking will be placed along the perimeter of the Stadium on sidewalks and/or within on-street parking spaces. The proposed location and configuration of potential permanent and temporary bicycle parking spaces is shown on Figure 4. In coordination with DDOT and WABA, final placement of bicycle parking will be determined as part of the draft TOPP, and operational details surrounding temporary parking will be determined as part of the final TOPP.

The usage of bicycle racks within and surrounding the Stadium will be monitored during each season to determine if additional permanent bicycle parking spaces should be installed, and if additional temporary bicycle parking spaces are needed.

BIKESHARE STRATEGIES

DC United will install a minimum of one Capital Bikeshare station in the vicinity of the Stadium. The location(s) of a station has not yet been confirmed, and will continue to be coordinated with DDOT and WABA, but potential locations include 2nd Street, near the northwest Stadium entry gate, and within the pedestrian plaza along Potomac Avenue, as shown on Figure 4. The exact location(s) of a bikeshare station will be determined as part of the draft TOPP.

A Capital Bikeshare corral, which allows patrons to check in their bikes even if docks aren't available, will be implemented for high-attendance events. Conversations with Capital Bikeshare have begun and will continue as the draft TOPP and final TOPP are assembled, to ensure that proper space is allocated for such operations.

ROUTING STRATEGIES

Routing strategies for Stadium-related bicycle traffic aim to direct bicycles along safe and convenient routes to and from



the Stadium bicycle parking and Capital Bikeshare station. Preferred routes include multi-purpose trails and cycle tracks where possible, supplemented with on-street bicycle lanes, signed bicycle routes, and low-speed, low-volume local streets where necessary.

DC United will coordinate with DDOT on planned infrastructure improvements surrounding the Stadium, including cycle tracks on Potomac Avenue and 2nd Street. DC United will also coordinate with DDOT on the planned Anacostia Riverwalk Trail expansion; however, expansion across South Capitol Street is not expected prior to the opening season.

Based on the existing bicycle facilities and those that are expected to be in place prior to the opening season, and the amount of bicycle traffic expected, Figure 5 shows the primary bicycle routes leading to and away from the Stadium. These routes will be updated as part of the draft TOPP and will include projected bicycle volumes. These routes should continue to be updated every off-season to reflect new facilities such as the South Capitol Street Oval and the Anacostia Riverwalk Trail expansion.

WAYFINDING STRATEGIES

Wayfinding elements will be placed along proposed bicycle routes to reinforce preferred routes and provide a low stress environment for cycling patrons. The majority of wayfinding elements will be in the form of DDOT-specific wayfinding signage that will be placed along bicycle routes leading up to the Stadium, as far as 1 to 2 miles from the Stadium. A map outlining decision points along bicycle routes that would benefit from wayfinding signage is shown on Figure 5

Within the Stadium property, additional wayfinding signage will be installed to direct patrons to short-term parking and free bicycle valet. These may be in the form of permanent signage, such as a map of bicycle parking surrounding the Stadium, and temporary signage to be placed at least one hour prior to the start of the event and removed one hour after the event has ended.

The wayfinding strategies will be refined as part of the draft TOPP and signage locations and design details will be determined as part of the final TOPP. Wayfinding strategies should also be updated during every off-season based on what is observed to work and not work, and to satisfy the routing goals if they are not being met. Additionally, if changes to

bicycle routes are made as a result of new facilities, wayfinding strategies should be considered for the new routes.

TRAFFIC CONTROL STRATEGIES

Based on the expected bicycle volumes along the preferred bicycle routes, several traffic control strategies are proposed to ensure safe and efficient movement of bicyclists before and after games. If changes to the bicycle routes are made, the new routes should be analyzed to determine if traffic control strategies need to be updated. Examples of potential bike-related traffic control devices and locations include:

- *M Street and 4th Street, SW*
This intersection could benefit from one traffic control officer to help ensure that conflicts do not occur between bicyclists, pedestrians, and vehicles. This strategy may only be necessary for high-attendance events.
- *South Capitol Street and Potomac Avenue*
One traffic control officer should be placed at this intersection for moderate-attendance events and two traffic control officers should be placed at this intersection for high-attendance events to help ensure that conflicts do not occur between bicyclists, pedestrians, and vehicles.
- *2nd Street and R Street*
One traffic control officer could be placed at this intersection to ensure that conflicts do not occur between bicyclists and pedestrians, particularly given the intersection of two-way cycle tracks and the Stadium entry gate.

MARKETING STRATEGIES

Bicycle-related marketing strategies will be further refined as part of the draft TOPP. The types of strategies being considered include the following:

- Advertise preferred bicycle routing to and from the Stadium on the DC United website.
- Advertise the location of bicycle parking, free bicycle valet, and Capital Bikeshare station(s) on the DC United website.
- Place a Stadium icon on the Capital Bikeshare map to promote bikeshare as an option and point out the nearest station location.
- Provide subsidies to season-ticket holders equal to any parking subsidies
- Promote cycling by providing bike-specific swag



- Coordinate “Bike-to-Game” days with raffles and prizes
- Coordinate with WABA on strategies to promote bicycling

Table 3: Summary of Bicycle-Related Operational Strategies

Type of Strategy	Permanent Strategies	Event-Day Strategies	
		Moderate Attendance	High Attendance
Bicycle Parking	<ul style="list-style-type: none"> ▪ Bicycle valet area constructed within the Stadium ▪ Bicycle parking constructed on Stadium property ▪ Bicycle parking constructed in public realm 	<ul style="list-style-type: none"> ▪ Operation of bike valet service 	<ul style="list-style-type: none"> ▪ Operation of bike valet service ▪ Temporary bicycle racks located in on-street parking or surrounding Stadium property
Capital Bikeshare	<ul style="list-style-type: none"> ▪ Capital Bikeshare station placed at Stadium 	N/A	<ul style="list-style-type: none"> ▪ Capital Bikeshare corral service
Routing	<ul style="list-style-type: none"> ▪ Utilize existing and planned bike facilities, with an emphasis on trails and cycle tracks 	N/A	N/A
Wayfinding	<ul style="list-style-type: none"> ▪ Install signage along primary routes at key decision points ▪ Install wayfinding signage within the Stadium (i.e. bike parking map) 	<ul style="list-style-type: none"> ▪ Temporary wayfinding signage directly surrounding the Stadium 	<ul style="list-style-type: none"> ▪ Temporary wayfinding signage directly surrounding the Stadium
Traffic Control	N/A	<ul style="list-style-type: none"> ▪ Traffic control officer at South Capitol Street and Potomac Avenue 	<ul style="list-style-type: none"> ▪ Traffic control officers at South Capitol Street and Potomac Avenue ▪ Traffic control officer at M Street and 4th Street ▪ Traffic control officer at 2nd Street and R Street
Marketing	<ul style="list-style-type: none"> ▪ Advertise preferred bike routes, bike parking, and Capital Bikeshare ▪ Bicycle-related subsidies for season-ticket holders ▪ Bicycle-related swag ▪ Coordinate with WABA 	N/A	<ul style="list-style-type: none"> ▪ “Bike-to-Game” days

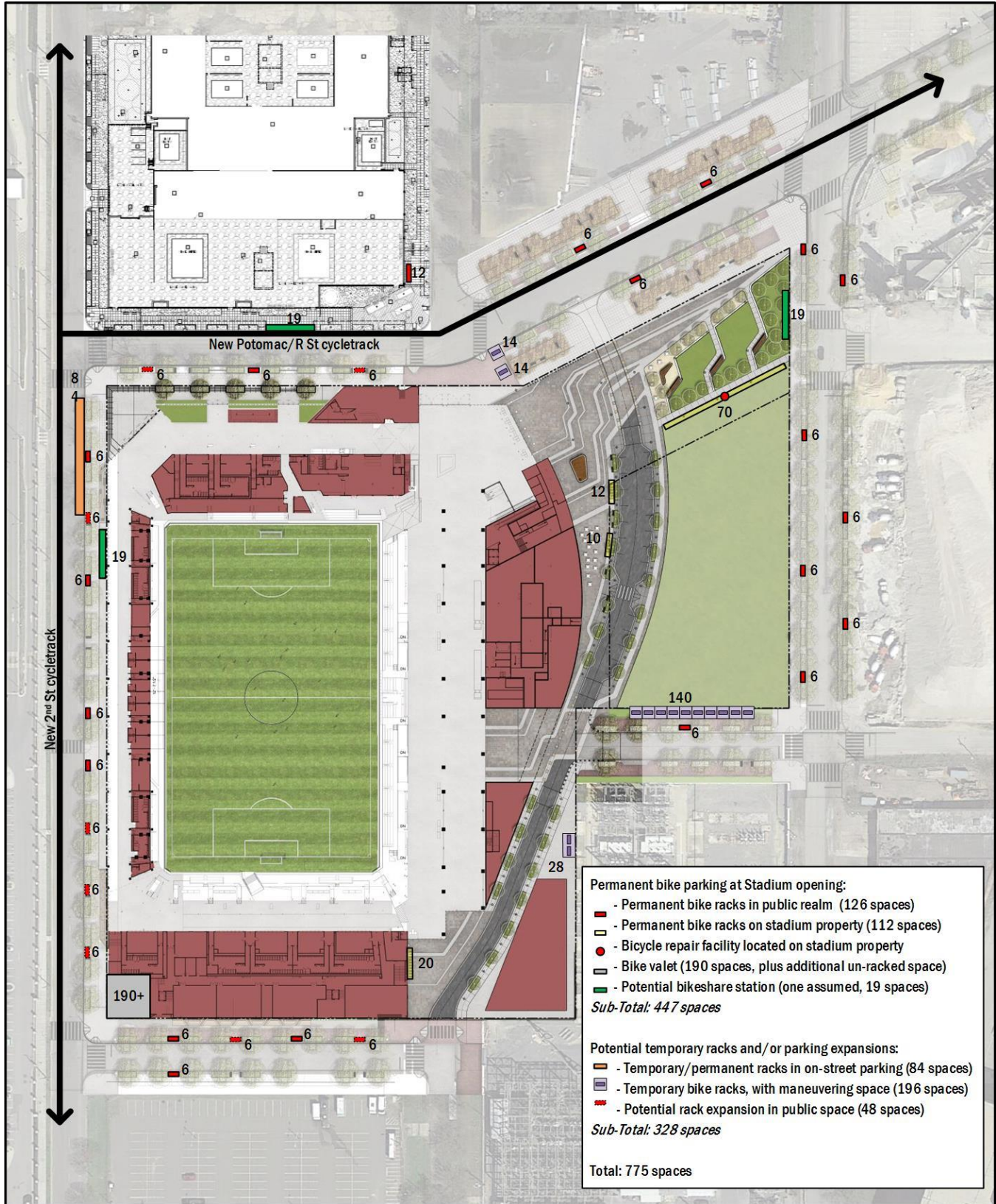


Figure 4: Proposed Bike Parking Locations and Configuration

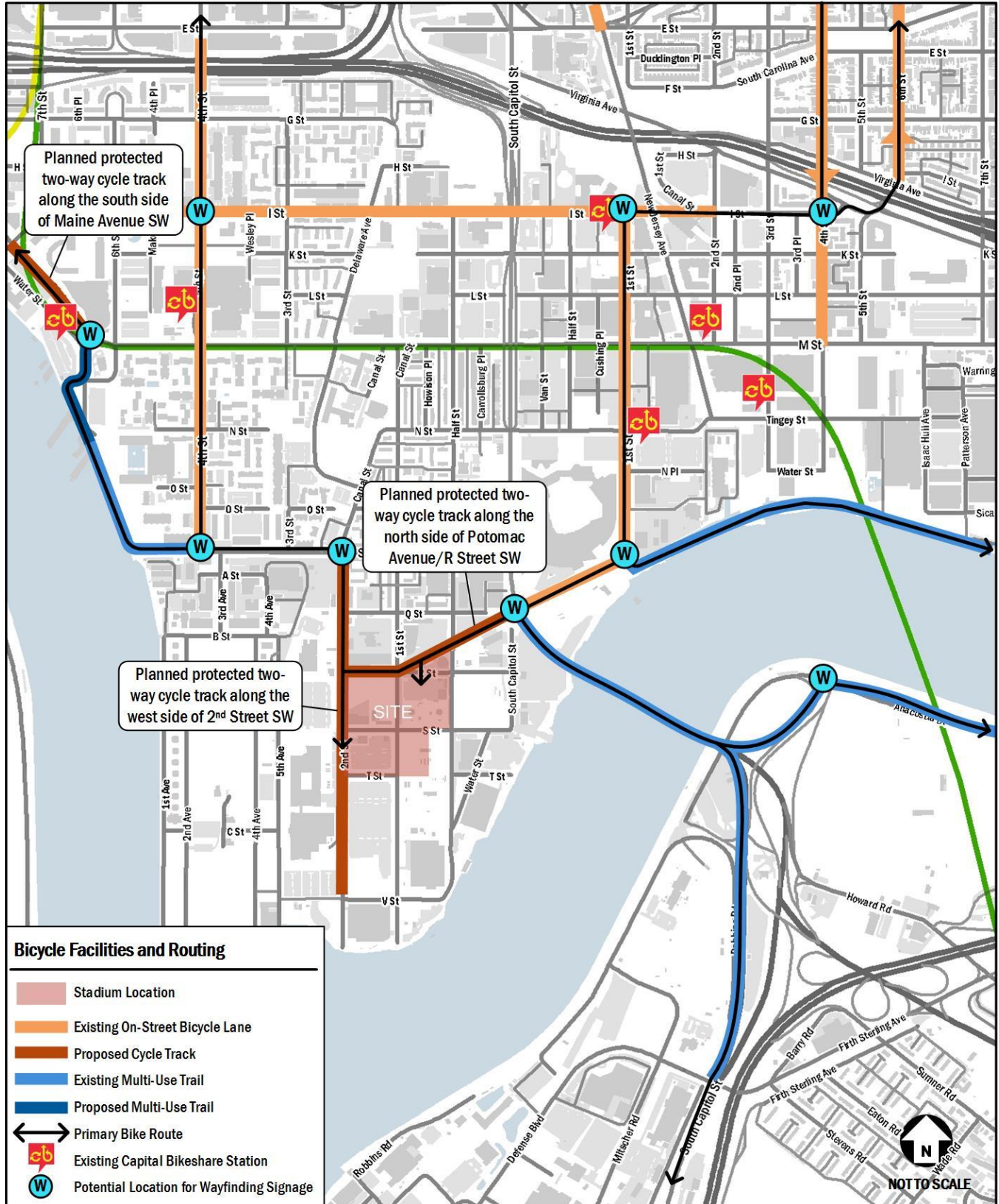


Figure 5: Bicycle Facilities and Routing



TRANSIT OPERATIONS

This section reviews the preliminary bicycle-related operations at the Stadium, including strategies based on previous DC United transportation studies, coordination with stakeholders, and industry standards. This section includes strategies for the following elements:

- Public Transit;
- Shuttle Service;
- Wayfinding; and
- Marketing

12 months prior to opening day, using this preliminary TOPP as a guide, the full TOPP process will begin via engagement with stakeholders such as DDOT, WMATA, DC Circulator, DC Streetcar, Potomac Riverboat Company, Pedicab operators, and the surrounding community. The purpose of this outreach is to gain input for the draft TOPP.

6 to 9 months prior to opening day, a draft TOPP will be completed and will include detailed transit strategies, as a result of stakeholder engagement and refined city-wide transit plans.

90 days prior, a final TOPP will be completed and will include detailed design elements and operational details to supplement the bicycle strategies outlined in the draft TOPP, particularly those surrounding DC United shuttle service.

The following are preliminary thoughts regarding transit-related TOPP elements, which are subject to change as part of the draft and final TOPPs.

PUBLIC TRANSIT STRATEGIES

Existing public transit access to the Stadium site consists of Metrorail and Metrobus. The site property line is approximately 0.55 miles from the Navy-Yard Ballpark Metrorail station. The stadium gates are located approximately two-thirds of a mile from the Navy Yard-Ballpark Metrorail station, and three-quarters of a mile from the Waterfront Metrorail station, which serve the Green Line. Walking distances along the proposed pedestrian routes are shown on Figure 6. Metrobus options that are available during game days include the Metrobus 74 route and the Metrobus P17/P19 route, which both have stop locations within a quarter-mile of the Stadium. Additional Metrobus routes (W9, P6, and V1) have

stop locations along M Street, within half a mile of the Stadium. A map of existing public transit service is shown on Figure 7.

Due to the capacity of Metrorail, it is assumed that Metrorail will act as the predominant transit service carrying patrons to and from events. Although the Waterfront and Navy Yard-Ballpark Stations are approximately equidistant from the site, use of the Navy Yard-Ballpark Station will be stressed for the following reasons:

- The Half Street portal of the Navy Yard-Ballpark Station has undergone extensive renovations and improvements to handle large event transit traffic, as a result of Nationals Park.
- The Navy Yard-Ballpark Station is already associated with Nationals Park and will be advertised as the portal to DC's "Sports District".
- Walking routes from the Navy Yard-Ballpark Station can more easily avoid residential neighborhoods and will take patrons along commercial roadways that offer a "sense of place".

Additional transit service is proposed in the future and DC United will coordinate with transit operators, particularly WMATA, DC Circulator, and DC Streetcar, which have the capability of transporting the most significant amount of patrons, to determine when planned transit initiatives will be implemented. Potential transit expansions into Buzzard Point include the North-South Streetcar Line, which would travel between Takoma/Silver Spring and Buzzard Point/Southwest Waterfront, an extension of the existing Union Station-Navy Yard DC Circulator Route along M Street to the Waterfront Metrorail Station, a new DC Circulator route connecting Dupont Circle and the Southwest Waterfront, and a water taxi service that would connect the Stadium to National Harbor and Alexandria.

12 months prior to opening day, DC United will coordinate with DDOT, WMATA, and DC Circulator to explore potential new routes or extensions to existing routes that would serve the Stadium.

At this time, only water taxi service is expected to be running concurrently with opening day, based on discussions with the Potomac Riverboat Company (PRC). PRC currently operates two to three boats per game to Nationals Park, with the capacity of 150 people per boat and is anxious to expand its service to accommodate events at the DC United Stadium (see attached



letter). Operational details regarding water taxi service will be discussed in the draft and final TOPPs. The remaining transit projects have more long-term timelines. As such, Stadium-related transit strategies will be updated during off-seasons to reflect these improvements as they are implemented.

Additional public transit strategies to help fill gaps in the network prior to the long-term transit improvements will be considered as part of the draft and final TOPPs, based on discussions with stakeholders such as DDOT and WMATA. These strategies could include increased Metrorail service pre- and post-event (similar to what is done for Nationals games), supplemented Metrobus service on game days, and adjustments to existing Metrobus routes to better serve the Stadium.

SHUTTLE SERVICE STRATEGIES

In addition to public transit, shuttle service run by DC United may be utilized to fill transit gaps, particularly for Stadium employees and disabled patrons. Additional shuttle service to supplement public transit is also being considered, and will be addressed in more detail in the draft and final TOPPs.

For Stadium employees, a shuttle would be used to provide access between the Stadium and a remote staff parking lot. The shuttle would need to be limited to serve employees only, as ridership from patrons parking would overwhelm the shuttle service. The route of this shuttle will be finalized as part of the draft TOPP when the location of the staff parking lot is secured.

For disabled patrons, dedicated shuttle service would be provided for those who wish to drive and park and those who take Metrorail, either the Navy Yard-Ballpark Station or the Anacostia Station. The goal is to serve both drivers and transit riders in one shuttle route. Such a shuttle would need to be limited to serve only patrons that cannot ably walk to the Stadium.

Potential shuttle routes for disabled patrons between both the Navy Yard-Ballpark and Anacostia Metrorail Stations are shown in Figure 8 and Figure 9, respectively. These routes are subject to change as part of the draft and final TOPPs, and may be updated during off-seasons to reflect new routing options and/or changes to the dedicated parking areas.

WAYFINDING STRATEGIES

The goal of transit-related wayfinding strategies will be to direct as many patrons to use the Navy Yard Metrorail Station, and within the Navy Yard Station itself, to direct patrons to the Half Street portal, which has the capacity to process large event-sized transit capacity. The specific operational and signage details will be discussed in the draft and final TOPPs as a result of stakeholder engagement, but will likely result from the following strategies:

- Rebranding of the Navy Yard-Ballpark Metrorail Station to include mention of the DC United Stadium, or present the idea of an overarching “Sports District”
- Add signage within the Station’s platform that direct patrons to the Half Street entrance, similar to what is done for Nationals Park
- Signage should be posted along pedestrian routes to encourage the use of the Half Street portal as part of the post-event operations. It will be determined in the draft TOPP whether this would be permanent or temporary signage.

MARKETING STRATEGIES

Transit-related marketing strategies will be further refined as part of the draft TOPP. The types of strategies being considered include the following:

- Add DC United logo or Stadium-specific branding to WMATA maps and signage, including but not limited to adding the DC United Stadium to individual Metrobus route maps, similar to what is done for Nationals Park.
- Publicize transit availability and encourage use of the Navy Yard Metrorail Station on the team website
- Provide transit subsidies to season-ticket holders equal to any parking subsidies
- Coordinate with WMATA, DC Circulator, DC Streetcar, Potomac Riverboat Company, Pedicab operators, etc.
- Coordinate scheduled service disruptions with Metro
- Increase post-game Metrorail service to accommodate condensed demand



Table 4: Summary of Transit-Related Operational Strategies

Type of Strategy	Permanent Strategies	Event-Day Strategies	
		Moderate Attendance	High Attendance
Public Transit	<ul style="list-style-type: none"> Continued coordination with transit operators 	N/A	<ul style="list-style-type: none"> Implementation of supplemental Metrorail service before and after events Implementation of event-specific Metrobus service (i.e. route adjustments, increased service)
Shuttle Service	<ul style="list-style-type: none"> Shuttle service for employees between the Stadium and a dedicated employee parking lot Shuttle service for disable patrons between the Stadium and the Navy Yard Metrorail Station/dedicated parking lot 	N/A	N/A
Wayfinding	<ul style="list-style-type: none"> Rebranding of the Navy Yard-Ballpark Metrorail Station Signage within the Station to encourage patrons to use the Half Street portal Signage along pedestrian routes for post-game operations (if permanent signage is warranted) 	N/A	<ul style="list-style-type: none"> Signage along pedestrian routes for post-game operations (if temporary signage is warranted)
Marketing	<ul style="list-style-type: none"> DC United branding on transit maps and at stations/stops Publicize transit availability on team website Provide transit subsidies to season ticket holders Coordinate with transit operators, particularly with WMATA in regards to scheduled Metrorail service disruptions 	N/A	<ul style="list-style-type: none"> Coordinate with WMATA to increase post-game Metrorail service



Figure 6: Walking Distance to Metrorail Stations

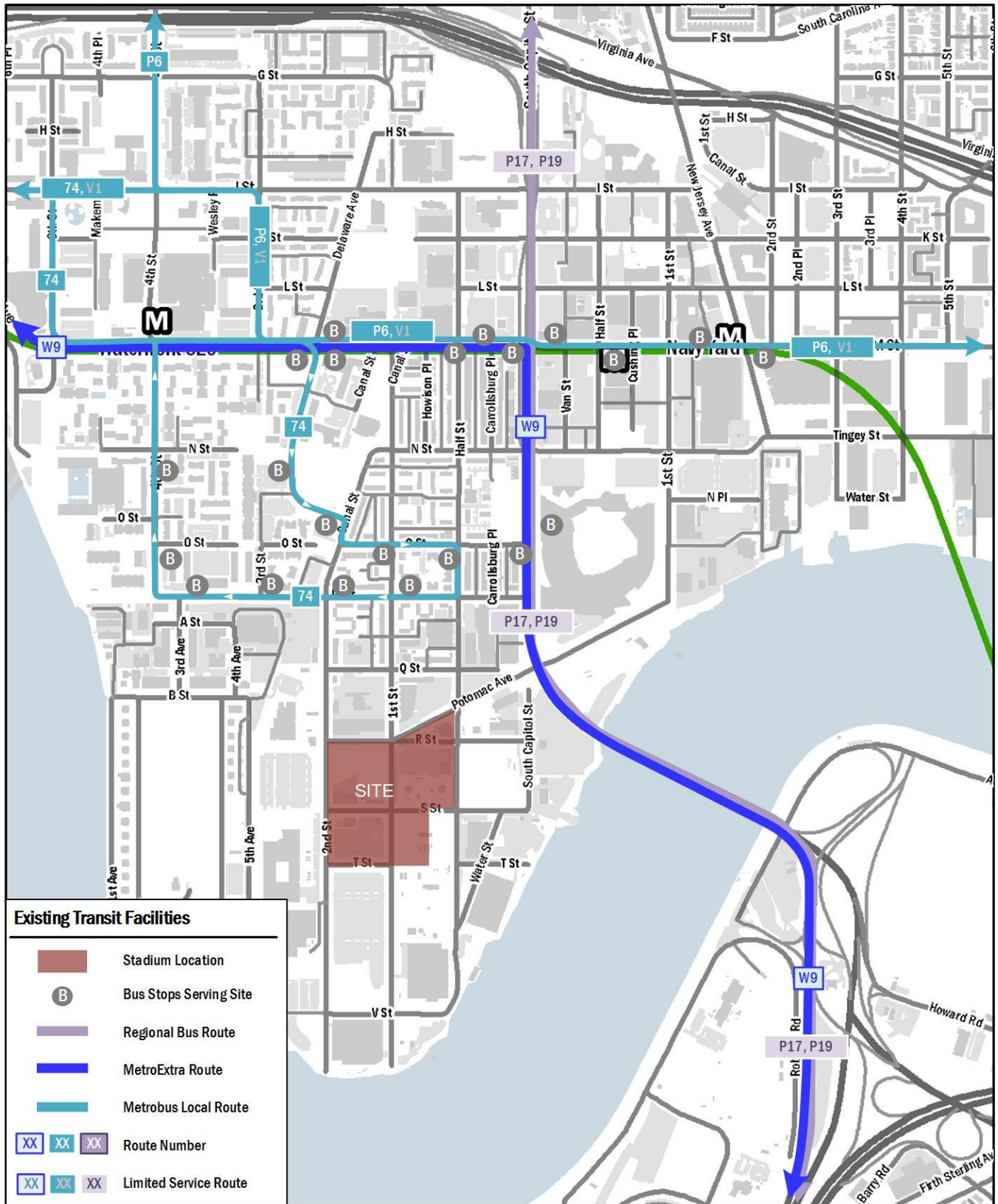


Figure 7: Existing Transit Facilities

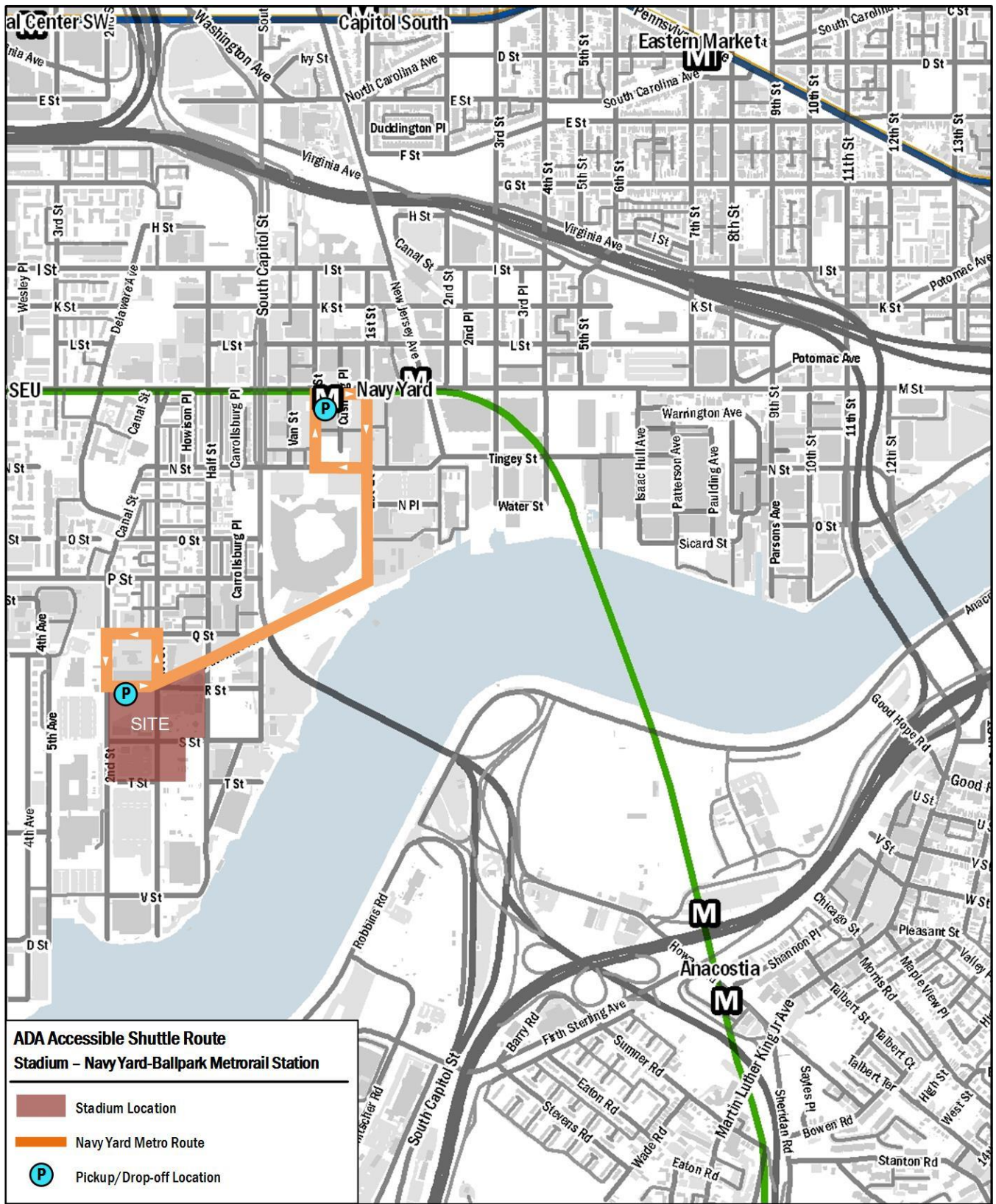


Figure 8: Proposed Shuttle Route: Stadium - Navy-Yard Ballpark Metrorail Station Route

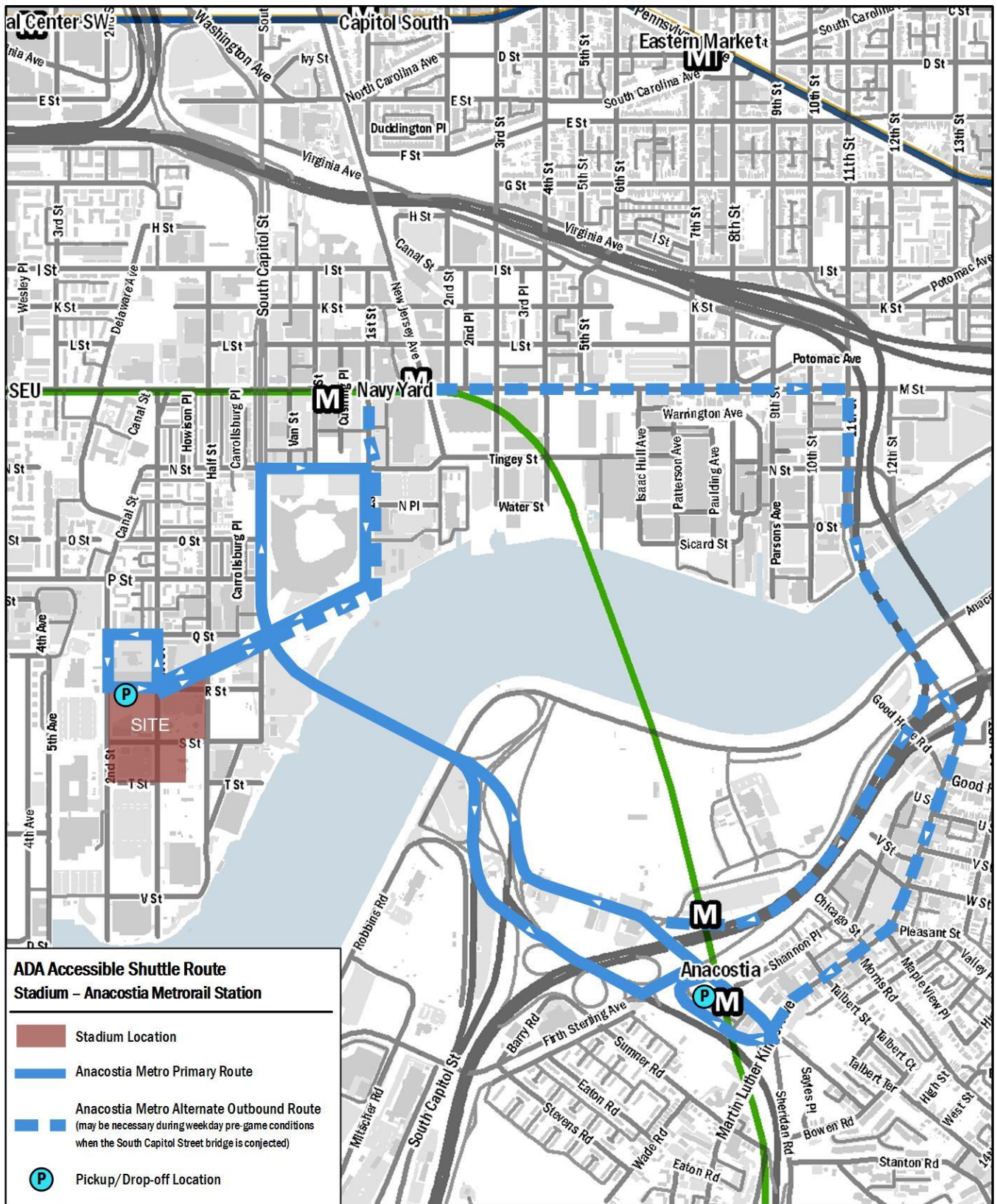


Figure 9: Proposed Shuttle Route: Stadium - Anacostia Metrorail Station Route



PARKING AND VEHICULAR OPERATIONS

This section reviews the preliminary parking and vehicular operations for the Stadium, including strategies based on previous DC United transportation studies, coordination with stakeholders, and industry standards. This section includes strategies for the following elements:

- Off-Street Parking;
- On-Street Parking; and
- Vehicular Operations

12 months prior to opening day, using this preliminary TOPP as a guide, the full TOPP process will begin via engagement with stakeholders such as DDOT, Metropolitan Police Department (MPD), Department of Public Works (DPW), parking operators, developers, and the surrounding community. The purpose of this outreach is to gain input for the draft TOPP.

6 to 9 months prior to opening day, a draft TOPP will be completed and will include a detailed parking and vehicular strategies, as a result of stakeholder engagement.

90 days prior, a final TOPP will be completed and will include detailed operational details to supplement the parking and vehicular strategies outlined in the draft TOPP.

The following are preliminary thoughts regarding parking and vehicular-related TOPP elements, which are subject to change as part of the draft and final TOPPs. The goals associated with these strategies are to influence vehicular traffic to and from the Stadium such that off-street parking is used efficiently, on-street residential parking is protected, and congested roadways and intersections are minimally impacted.

OFF-STREET PARKING

Inventory

Over 7,000 parking spaces are located within a 15- to 20-minute walk of the Stadium, providing an ample supply to serve the Stadium. Figure 10 identifies the off-street parking facilities in relation to walking distances from the Stadium. DC United has begun reaching out to individual parking operators in order to reach agreements for use during Stadium events. A refined parking map outlining the parking facilities which have been secured for use during Stadium events, and a comparison of parking supply with the parking demand for low-, moderate-,

and high-attendance event scenarios will be included in the draft TOPP.

The off-street parking inventory will be updated every off-season to reflect changes in parking availability. Some parking areas identified in Figure 10 are temporary surface parking lots on redevelopment sites, thus these lots will eventually be removed from the inventory. However, planned developments and developments under construction have the possibility of adding new parking opportunities for DC United, and many include below-grade parking garages. Office developments in particular would be targeted for use during Stadium events.

Event-Day Off-Street Parking Strategies

The off-street parking supply is expected to be partitioned off for events as follows, but may change as a result of stakeholder engagement:

- Patron Parking
 - Valet parking will be available for patrons with suites, and their vehicles will be parked in one of the nearby secured lots.
 - Season ticket holders will have the ability to purchase parking passes in designated lots. The majority of secured parking spaces will be used to cover season ticket holder parking.
 - General parking passes will be sold to non-season ticket holders and patrons of other non-game related events at the remaining lots. DC United is exploring technological solutions that would help patrons purchase parking before leaving for the stadium, in order to help tailor directions and routing, thus reducing the amount patrons circulating the surrounding roadways searching for parking.
 - A secured parking lot will be designated to parking for disabled patrons. Shuttles to and from this lot would be employed to help the mobility impaired reach the stadium. A discussion on potential shuttles is included in the transit chapter of this report.
- Non-Patron Parking
 - The team will park at their practice facility and be shuttled to and from games from the facility. The current facility is at the RFK campus, but may change in the future.
 - On event days, staff will have access to a designated parking lot. This parking lot will likely be one that is



less desirable for patron parking, and as such, staff will be shuttled between the Stadium and the parking lot.

- Parking for the media will occur in a reserved area of one of the parking facilities closer to the Stadium.

The anticipated locations of these designated parking areas will be determined as part of the draft and final TOPPs. The allocation of parking should also be updated during every off-season based on changes to parking availability.

ON-STREET PARKING

Inventory

The existing on-street parking supply within a 15-minute walk of the Stadium is primarily a mix of protected residential, metered parking, and unrestricted parking as shown on Figure 11. This on-street parking inventory will be updated as part of the draft TOPP to reflect any changes to on-street parking nearer to opening day. The inventory should also be updated during every off-season to reflect changes to off-street parking availability.

The proposed on-street parking restrictions, as detailed in the following section, are depicted in Figure 12, and will be refined as part of the draft and final TOPPs. These changes are expected to result in the most advantageous event-day operations and should be implemented prior to opening day.

Metered Parking Strategies

Metered parking spaces within walking distance of the Stadium are expected to be the primary source for on-street event-day parking. Additionally, on-street parking will serve Stadium staff on non-event days when on-street parking is less in demand.

The majority of metered parking surrounding the Stadium employs individual meters. One operational improvement that will be considered as part of the TOPP is to convert individual meters to multi-space meters. Benefits of multi-space meters include increased capacity as parking spaces aren't constrained to one size and the ability to charge event-day prices that will discourage drivers from circling and looking for parking that could be cheaper than off-street lots. The operations details of associated with the conversion to multi-space meters will be discussed in the draft and final TOPPs.

Parking along the blocks directly surrounding the Stadium, some of which does not currently exist, is proposed to be metered parking on non-event days, with the ability to be

reserved on event days for Stadium-related uses. The use of on-street parking directly surrounding the Stadium during events is discussed in detail in the Curbside Management Operations section.

Unrestricted Parking

Within Buzzard Point, there are several blocks without any parking restrictions. It is proposed that these blocks be upgraded to multi-space metered parking. Challenges associated with this conversion include blocks without curbs or blocks that do not have official on-street parking spaces or outlines restrictions. Prior to the draft TOPP, DC United will work with DDOT to identify what improvements can be made to these blocks, either converting them to metered parking or prohibiting parking on event days if meters are not an option.

Some of these upgrades may occur as a result of redevelopment in the Buzzard Point area, therefore DC United should coordinate with developers to ensure proper restrictions associated with event days.

Residential Parking Strategies

Residential parking should remain and event parking should be discouraged on these streets, including measures for preventing non-RPP parking, and intra-RPP parking from other areas within Ward 6. Strategies to deter event parking in RPP spaces will be discussed in more detail in the draft TOPP as a result of the interaction with stakeholders such as DDOT, MPD, and the surrounding community, but are likely to include the following:

- DC United will work with DDOT to help identify blocks that may require an upgrade from traditional RPP to enhanced RPP (i.e. no 2-hour grace period for non-permit holders).
- DC United will work with DDOT to determine if RPP parking surrounding the Stadium should be restricted to Zone 6D to ensure that intra-RPP parking does not occur.
- DC United will work with MPD and DPW to determine appropriate enforcement strategies surrounding RPP parking (i.e. ticketing, towing, etc.)
- Signage may be installed surrounding the residential neighborhoods to deter patrons looking for parking from cutting through the neighborhood or looking for parking in the neighborhood.



VEHICULAR STRATEGIES

Operational strategies regarding vehicular traffic aim to disperse traffic over longer periods of time before and after events, disperse traffic across efficient routes while avoiding congested areas and residential neighborhoods, utilize the off-street parking supply in a manner that minimizes vehicular impacts, and limit the use of on-street parking, particularly residential permit parking.

Routing Strategies

Routing strategies for Stadium-related vehicular traffic aim to minimize the number of patrons circling, looking for parking, thus improving the game-day experience for patrons, other roadway users, and the surrounding community. As such, DC United will explore resources to help patrons secure parking prior to leaving for an event. It is expected that season ticket holders will have a designated parking area, thus this strategy will be primarily marketed to non-season ticket holders by way of the team website, social media, and email blasts. Pre-secured and pre-paid parking would allow patrons to choose a parking lot that is convenient for them and further ensure that patrons do not park in or circulate through residential neighborhoods.

Preferred routes to and from parking locations stress the use of the surrounding regional roadways, such as I-395 and I-295 and higher-capacity arterials such as Potomac Avenue SE, 1st Street SE, as well as M Street SE/SW. Vehicular routes should avoid roadways within the residential neighborhood north of the Stadium, as well as South Capitol Street itself. In general, vehicles should be routed away from the most congested areas surrounding the Stadium, such as the intersection of South Capitol Street and M Street.

Detailed routing graphics and projected vehicular volumes will be included in the draft TOPP with specific routing strategies for each secured lot included in the final TOPP. These routes should continue to be updated every off-season to reflect new facilities such as those associated with the South Capitol Street Oval and other South Capitol Street improvements. DC United will coordinate with DDOT on these planned improvements to determine how they will influence vehicular routing to and from the Stadium.

Wayfinding Strategies

Wayfinding signage will be used to support and encourage the proposed routing strategies. Similar to existing signage for the

Nationals Park, this would include posting signs along the regional highways and local streets near the Stadium and the surrounding lots. Discouraging the use of local residential streets should be enhanced with the use of signage that prohibits use of residential streets during DC United games. Additional temporary way-finding and directional signage could be placed near the Stadium to direct driving patrons away from the Stadium itself and instead towards the parking areas.

The design and placement of permanent and temporary signage will be finalized as part of the draft and final TOPPs.

Traffic Control Strategies

Traffic control devices will be used to improve the overall vehicular operations before and after events. As part of the draft and final TOPPs, Synchro models will be used to determine appropriate signal timing plans and turn restrictions for high-attendance events. The Synchro models will also help determine where TCO's will be necessary to help process traffic and enforce turning restrictions.

The finalized signal timing plans and traffic control strategies will be determined as part of the draft and final TOPPs, based on engagement between DC United, DDOT, and MPD.

MARKETING

Parking and vehicular-related marketing strategies will be further refined as part of the draft TOPP. The types of strategies being considered include the following:

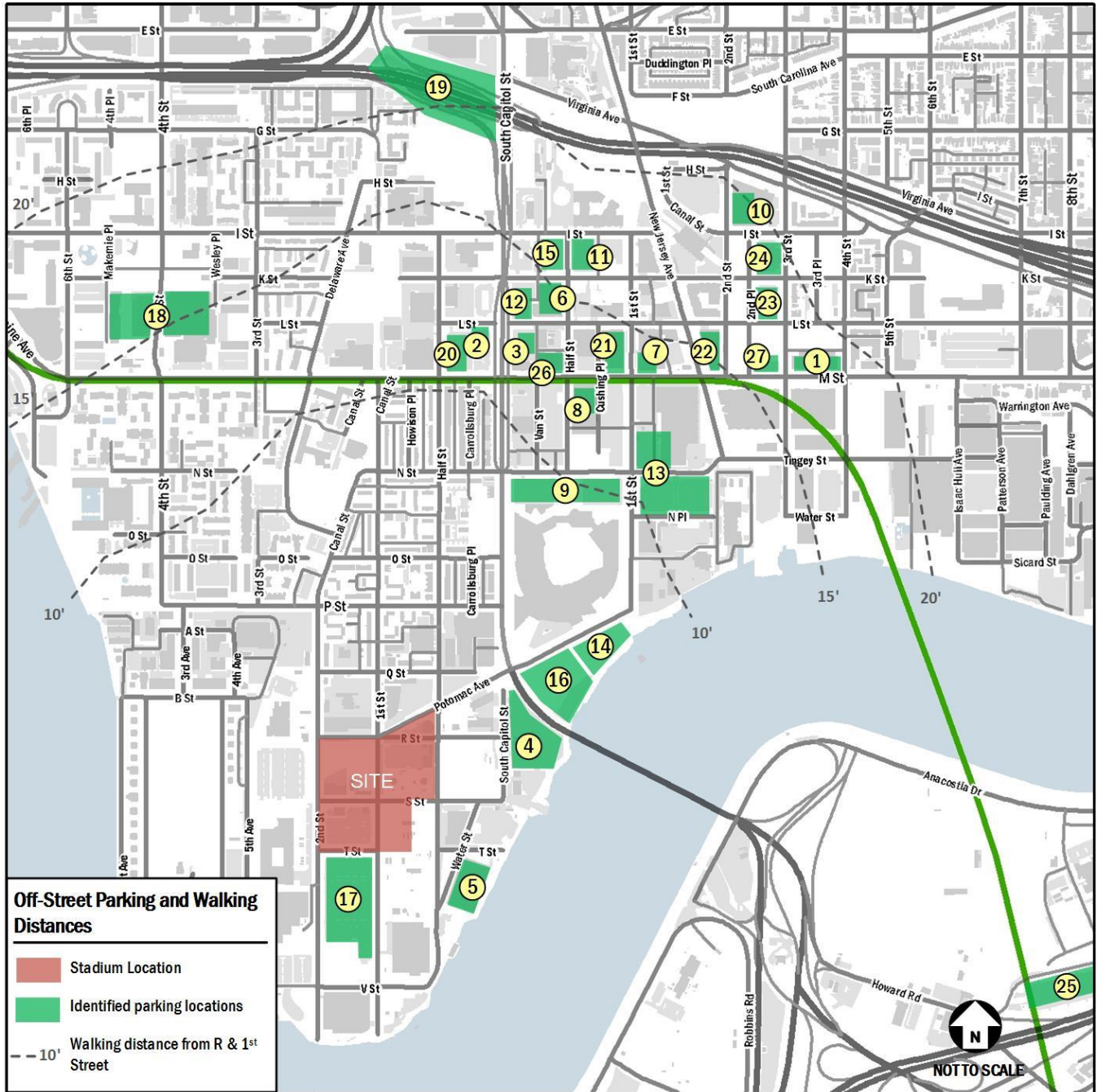
- Investigate parking lot occupancy technology and publicize availability on the team website
- Encourage drivers not to park in RPP areas by advertising parking lots and areas with available on-street parking on the team website
- Reach out to MPD regarding the protection of RPP spaces.
- Advertise preferred vehicular routing to and from the Stadium on the DC United website.
- Encourage drivers not to drive through residential neighborhoods with the use of signage and information on the team website.
- Explore revenue control technology (e.g. pre-paying for parking) such that patrons can secure parking prior to arrival and reduce the amount of patrons circling the surrounding roadways looking for parking.



- DC United will explore the possibility of later kick-off times (8:00 versus 7:30 PM) for weekday games such that game day traffic would conflict less with commuting traffic.
- DC United will explore opportunities to disperse patron traffic by coordinating with local establishments near the Stadium to offer game-day specials, both before and after games.

Table 5: Summary of Parking and Vehicular Strategies

Type of Strategy	Permanent Strategies	Event-Day Strategies	
		Moderate Attendance	High Attendance
Off-Street Parking	<ul style="list-style-type: none"> ▪ Coordination with parking operators ▪ Designated parking for disabled patrons, employees, and media ▪ Designated parking for season ticket holders ▪ Exploration of pre-secured, pre-paid parking for general patrons 	<ul style="list-style-type: none"> ▪ Valet parking for patrons with suites 	<ul style="list-style-type: none"> ▪ Valet parking for patrons with suites
On-Street Parking	<ul style="list-style-type: none"> ▪ Protection and enforcement of RPP spaces ▪ Convert metered spaces into multi-space metered parking ▪ Convert unrestricted parking to metered or no parking zones 	<ul style="list-style-type: none"> ▪ Event-specific meter prices 	<ul style="list-style-type: none"> ▪ Event-specific meter prices
Vehicle Operations	<ul style="list-style-type: none"> ▪ Utilize routes that avoid residential areas and congested areas ▪ Install wayfinding signage along vehicular routes 	<ul style="list-style-type: none"> ▪ Event-specific signal timing plans ▪ Turn restrictions ▪ TCOs to help process traffic and enforce restricted turning maneuvers 	<ul style="list-style-type: none"> ▪ Event-specific signal timing plans ▪ Turn restrictions ▪ TCOs to help process traffic and enforce restricted turning maneuvers
Marketing	<ul style="list-style-type: none"> ▪ Use team website to advertise parking locations, preferred vehicular routes, parking occupancy technology ▪ Work with MPD to enforce RPP restrictions 	<ul style="list-style-type: none"> ▪ Explore opportunities to disperse traffic by coordinating with local establishments on pre- and post-game specials 	<ul style="list-style-type: none"> ▪ Explore opportunities to disperse traffic by coordinating with local establishments on pre- and post-game specials ▪ Explore the later kick-off times in order to have less conflict with commuting traffic.



Off-Street Parking and Walking Distances

- Stadium Location
- Identified parking locations
- 10' Walking distance from R & 1st Street

ID	Name/Location	No. of Spaces	ID	Name/Location	No. of Spaces	ID	Name/Location	No. of Spaces
1	300 M St	275 spaces	11	88 K St	100 spaces	20	25 M St	150 spaces
2	1101 S Cap	50 spaces	12	1000 S Cap	100 spaces	21	80 M St	296 spaces
3	1100 S Cap	75 spaces	13	The Yards	500 spaces	22	1100 NJ Ave	150 spaces
4	1620 S Cap	350 spaces	14	Dock 79	130 spaces	23	Lot U	73 spaces
5	1900 Half	100 spaces	15	909 Half St	130 spaces	24	Lot T	73 spaces
6	1015 Half	250 spaces	16	71 Potomac	95 spaces	25	Anacostia Metro Station Garage	808 spaces
7	100 M St	100 spaces	Total Secured Lots		3,750 spaces	26	Lot H	198 spaces
8	55 M St	100 spaces	17	2nd & T St	610 spaces	27	Federal Gateway II	44 spaces
9	B & C Garage	1,195 spaces	18	1100/1101 4th St	633 spaces	Total Other Lots		3,485 spaces
10	DC Housing	200 spaces	19	Lot HH	450 spaces	Total Parking		7,235 spaces

Figure 10: Off-Street Parking and Walking Distances

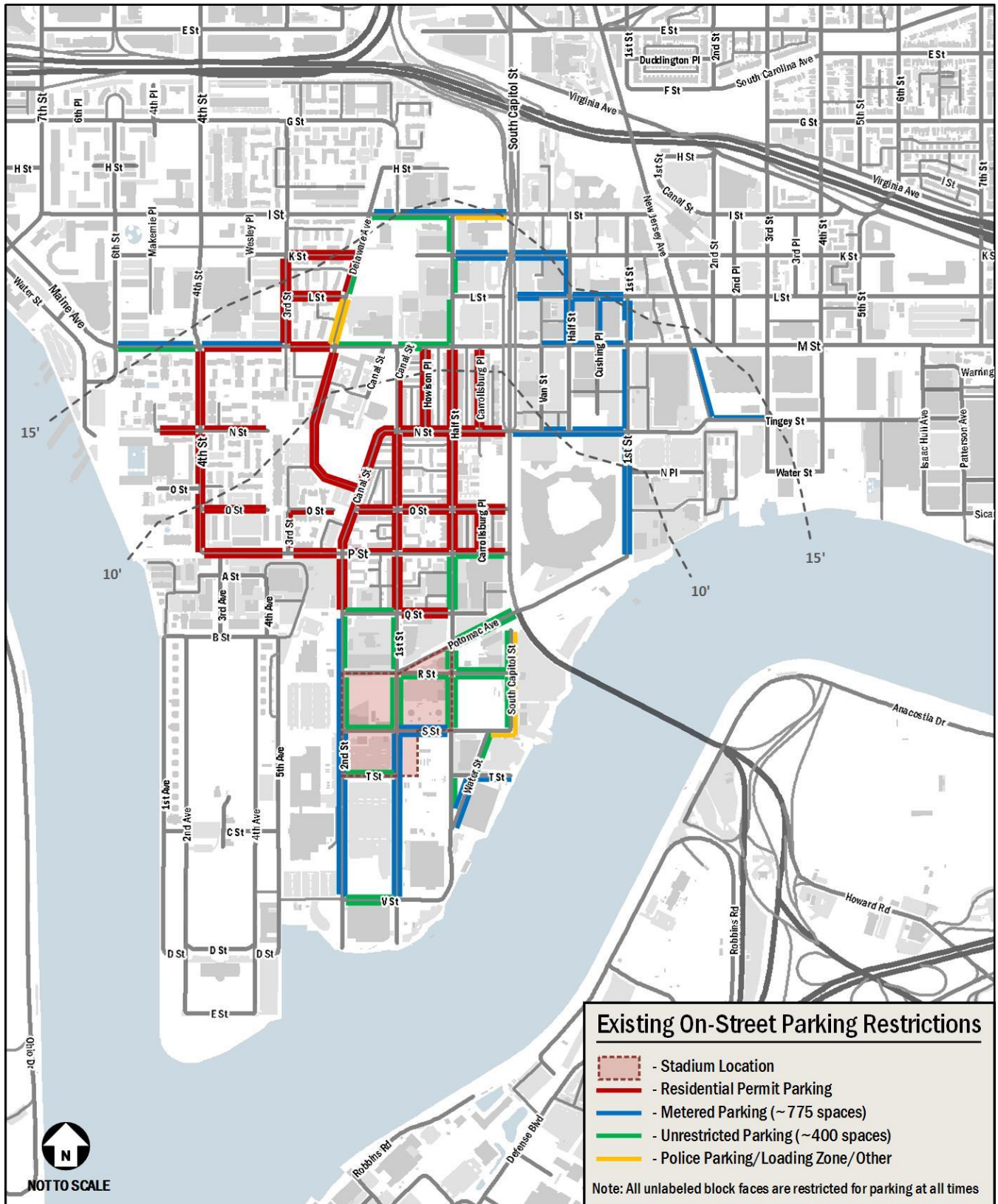


Figure 11: Existing On-Street Parking Restrictions

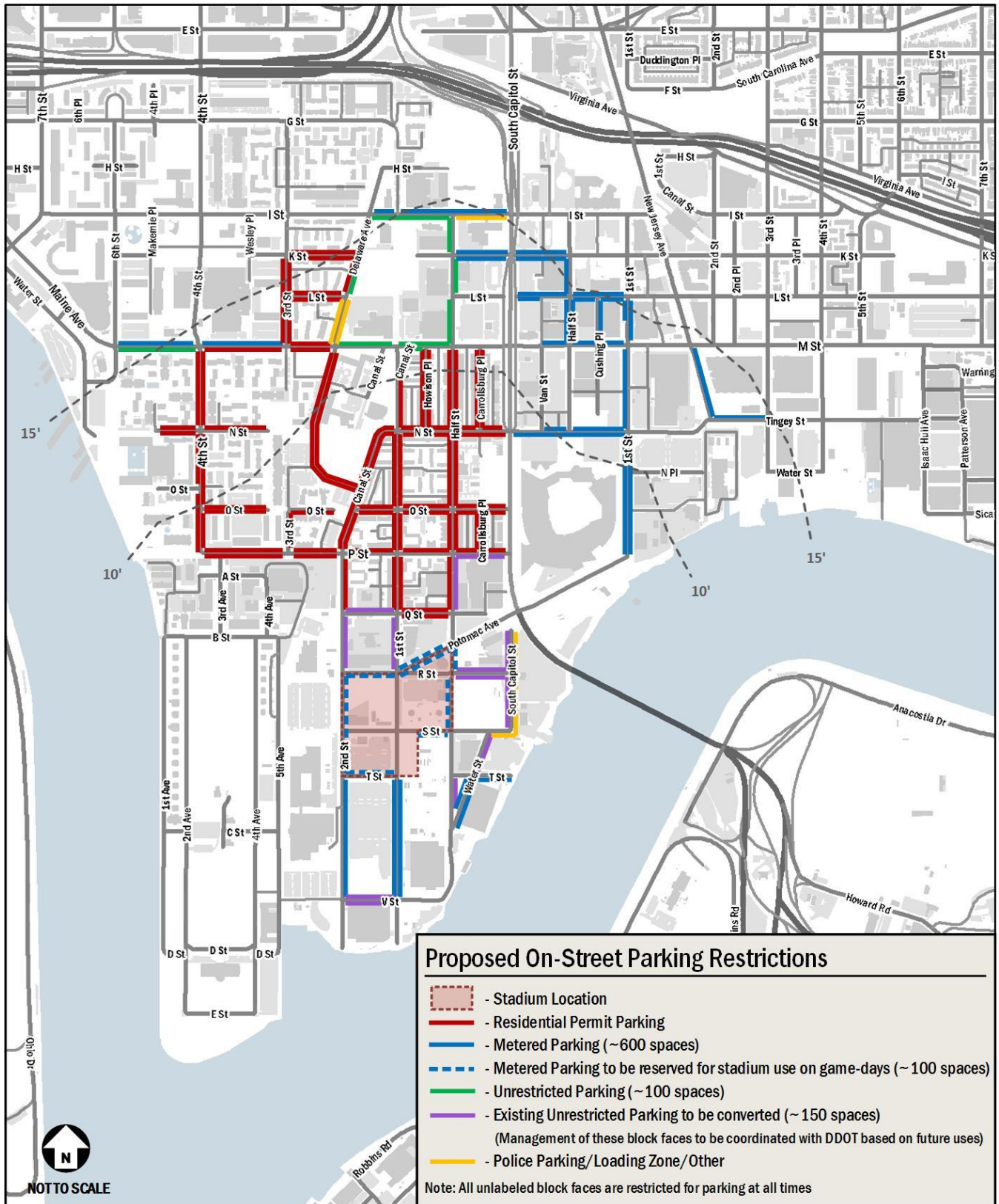


Figure 12: Proposed On-Street Parking Restrictions



STADIUM OPERATIONS

This section reviews the preliminary on-site operational strategies for the Stadium, including strategies based on previous DC United transportation studies, coordination with stakeholders, and industry standards. This section includes the following elements:

- Pre- and Post-Event Strategies;
- Event-Day Strategies; and
- First Street Operations

12 months prior to opening day, using this preliminary TOPP as a guide, the full TOPP process will begin via engagement with stakeholders such as DDOT, hired vehicle services, and the surrounding community. The purpose of this outreach is to gain input for the draft TOPP.

6 to 9 months prior to opening day, a draft TOPP will be completed and will include detailed on-site operational strategies, as a result of stakeholder engagement and refined Stadium plans, including the redesign of surrounding roadways.

90 days prior, a final TOPP will be completed and will include even further detailed operational and design details to supplement the draft on-site operational strategies outlined in the draft TOPP. These details will include specific timing of Stadium-related operations leading up to, during, and after events.

The following are preliminary thoughts regarding on-site operational elements, which are subject to change as part of the draft and final TOPPs.

PRE- AND POST-EVENT STRATEGIES

Pre- and post-event operations will primarily include setting up and taking down event-specific facilities, and generally getting the Stadium ready for a large amount of patrons. This includes the accommodation of several large vehicles, some of which will make quick deliveries, some of which will be located at the Stadium for the duration of the event. These vehicles will access the site in the days prior to events, on a regular and scheduled bases. Deliveries to the stadium will use various facilities and loading docks, mostly concentrated along the First Street easement that runs north-south through the Stadium.

Trucks will be routed on the shortest possible path between South Capitol Street and the Stadium, with varied routes based on the type of delivery and the size of the vehicles. Figure 13 and shows the preliminary routing strategies for the various deliveries described below, subject to change as a result of stakeholder engagement. As part of the draft and final TOPPs, the specific timing of these deliveries and vehicular operations will be finalized such that pre- and post-event activities have minimal impact to the surrounding neighborhood and typical traffic patterns.

The following deliveries are anticipated at the stadium:

- Broadcast trucks: Broadcast trucks are large vehicles that act as mobile television studios during events. Multiple trucks are usually employed depending on the television studio, with different trucks used for directing, engineering, satellite uplink, and other needs.

DC United anticipates that three to five broadcast trucks will be needed for each event, varying in size but the largest ones being tractor trailers (up to size WB-67 trucks). These trucks usually arrive one to three days prior to the event (depending on what location they're departing from beforehand), and leave the night of or morning after the event.

Three parking spots for large broadcast trucks are provided within the easement that runs through the stadium site. Additional broadcast vehicles are expected to park across First Street from these trucks, or along the curbside of 2nd Street which is designated for stadium-related vehicles during events.

Broadcast trucks will only be used during events that are televised, which are most likely to be the high-attendance events.

- Commissary Deliveries: Commissary deliveries are food and beverage deliveries for concessions and other food services at the stadium.

A typical week with one major event will have around five to six food deliveries and two beverage deliveries delivered on the days leading up to the event. The size of trucks is generally split between smaller single unit trucks and large tractor trailers (up to size WB-67 trucks).



Commissary deliveries will use the commissary loading facilities accessed via the First Street easement within the Stadium.

- **Armored Vehicles:** Armored vehicles are expected twice a week when events are scheduled, always on a non-event day. These are smaller trucks, and will load within the First Street easement within the stadium site.
- **Concert Trucks:** Touring concerts that have events in the stadium will be preceded by multiple tractor trailers (up to WB-67 trucks) and tour buses. Approximately eight to fifteen trucks will arrive three to four days prior to the concert. These trucks will load/unload within the First Street easement, with some having direct access to the field. After unloading, these trucks will move to an off-site location until they are needed to return to load equipment and depart, which typically happens the night of or morning after the concert. The off-site location will be determined as part of the final TOPP.
- **Waste Collection Trucks:** A waste collection loading area is located adjacent to the commissary dock within the First Street easement. Trash trucks are expected to pick-up trash one to two times a week, plus several hours after an event concludes.
- **Operations Deliveries:** Operations deliveries are general deliveries of materials and equipment necessary for general Stadium use. These are typically smaller single unit (box) trucks, with deliveries approximately once a week. They will unload within the First Street easement.
- **Retail Deliveries:** Retail deliveries are deliveries of goods for general sale at the Stadium. There are primarily made via FedEx trucks or similar services, and will be unloaded in the First Street easement.
- **Fuel Deliveries:** Approximately once a month fuel will be delivered to the Stadium generators. These deliveries will occur within the First Street easement.

EVENT-DAY STRATEGIES

On event days, on-street parking surrounding the Stadium will be reserved for Stadium use, to provide room for special vehicle parking zones and pick-up/drop-off activity. This section summarizes a preliminary plan for event-day vehicular activity.

Circulation diagrams and curbside management restrictions for the uses described below are shown on Figure 14 for patron activity and Figure 15 for Stadium-related activity. These routing and curbside management strategies are subject to change as a result of stakeholder engagement. As part of the draft and final TOPPs, the specific timing of event-day operations as well as the design of necessary striping and signage will be finalized, such that event-day activities have minimal impact to the surrounding neighborhood and typical traffic patterns.

- **Special Vehicle Parking:**
 - Fire Department, ambulance, and MPD vehicles will use space on the southern curbside of S Street, and within the southern plaza of the Stadium near the intersection of First and T Streets. Command buses are also expected to park on S Street.
 - ENG (Electronic News Gathering) trucks, which are media trucks not involved in the broadcast of the game (e.g. local news reporting on a DC United game), will be parked on the eastern side of 2nd Street.
- **Non-Patron Pick-up/Drop-off:**
 - Team Bus: The curbside use of T Street on the southern side of the Stadium will be used for team bus drop-off as it is closest to their destination. Team buses will proceed to parking located along the eastern side of 2nd Street.
 - Game Officials: The curbside use on T Street on the southern side of the Stadium will be used for game official drop-off as it is closest to their destination.
 - Media: Similarly, the curbside use on T Street on the southern side of the Stadium will be used for media drop-off as it is closest to their destination.
- **Patron Pick-up/Drop-off:**
 - General: General patron pick-up/drop-off is usually in the form of taxis, ubers, and other hired vehicles. These vehicles often drop-off patrons as soon as possible and will not utilize circuitous routing. The preliminary plan is to help facilitate this activity by reserving some of the available curbside space nearest to South Capitol Street for this use. After games, a taxi stand could be provided on eastbound Potomac Street, with taxi storage on First Street.
 - ADA: A designated pick-up/drop-off zone will be located along R Street at the northern edge of the site since it will provide the most efficient access for disabled patrons.



- Charter Bus: Charter buses will load and unload from a reserved area adjacent to the plaza along Potomac Avenue. This location was selected partially because the access and egress routes provide turns that are easier for buses to make. After charter buses unload, they will proceed to designated charter bus parking lots per the goDCgo website, and return when the event is close to concluding.

FIRST STREET OPERATIONS

Although the private road running through the Stadium site is referred to as First Street, it will not function like an extension of First Street on all occasions. At the north end of the site, it does not connect to the intersection of First Street and R Street, but intersects Potomac Avenue to the east. As such, it is proposed that the terminus of First Street with Potomac Avenue will operate as a right turn in and out only intersection, thus limiting its ability to act as a through corridor.

This new section of First Street will be a private road, but will be open to the public as much as possible when event schedules allow. DC United will have the flexibility to close and incorporate the streetscape as an extension of the matchday plaza.

Adjacent to the plaza, between Potomac and S Streets, DCU anticipates closing First Street on event-days. The timing of this closure will be finalized as part of the draft and final TOPPs but is expected to occur from up to 6 hours prior to an event until a few hours afterwards. This section of First Street is planned to be closed for all events, regardless of size to incorporate the streetscape as an extension of the plaza. South of the plaza, between S and T Streets, DCU anticipates closing First Street during moderate- and high-attendance events (i.e. events that will require the use of the S Street gate).

MARKETING

Stadium-related TOPP elements will primarily include internal coordination; however are some patron-related strategies that would benefit from marketing. The strategies being considered include the following:

- Coordinate with Uber, Lyft, Department of For-Hire Vehicles, and other hired vehicle operators on the signage and technologies needed to support the proposed curbside
- pick-up/drop-off operations, such that patrons will cooperate with the plan
- Promote designated areas for hired-vehicle pick-up/drop-off on the team website

Table 6: Summary of Parking and Vehicular Operations

Type of Strategy	Permanent Strategies	Event-Day Strategies	
		Moderate Attendance	High Attendance
Pre- and Post-Event	<ul style="list-style-type: none"> ▪ Coordinate deliveries that will occur before and after events such that they do not disturb residential areas or commuting traffic. Stadium deliveries are less dependent on the size of the event, and more dependent on the type of event. 		
Event-Day	<ul style="list-style-type: none"> ▪ Prior to events, coordinate curbside needs such that the appropriate amount of curbside space can be allocated to event uses. Specific curbside needs are less dependent on the size of the event, and more dependent on the type of event. 		
First Street	<ul style="list-style-type: none"> ▪ Right-in/right-out at junction with Potomac Avenue ▪ Ability to close First Street between S Street and Potomac Avenue for events of all sizes 	<ul style="list-style-type: none"> ▪ Ability to close First Street between T Street and S Street 	<ul style="list-style-type: none"> ▪ Ability to close First Street between T Street and S Street
Marketing	<ul style="list-style-type: none"> ▪ Coordinate with Uber, Lyft, Department of For-Hire Vehicles on necessary signage/technologies ▪ Promote designated areas for hired-vehicle pick-up/drop-off on the team website 	N/A	N/A

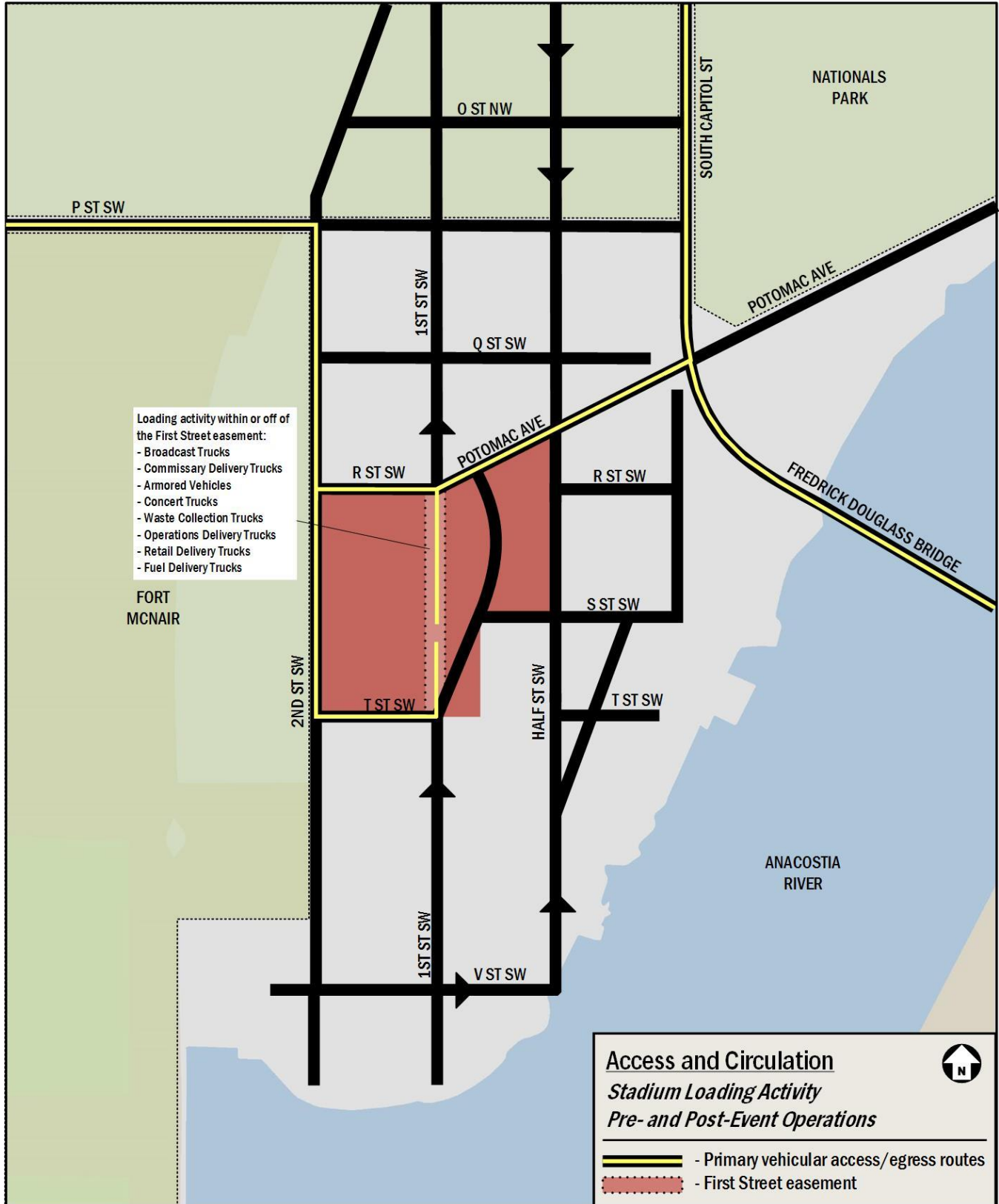


Figure 13: Pre- and Post-Event Stadium Loading Operations

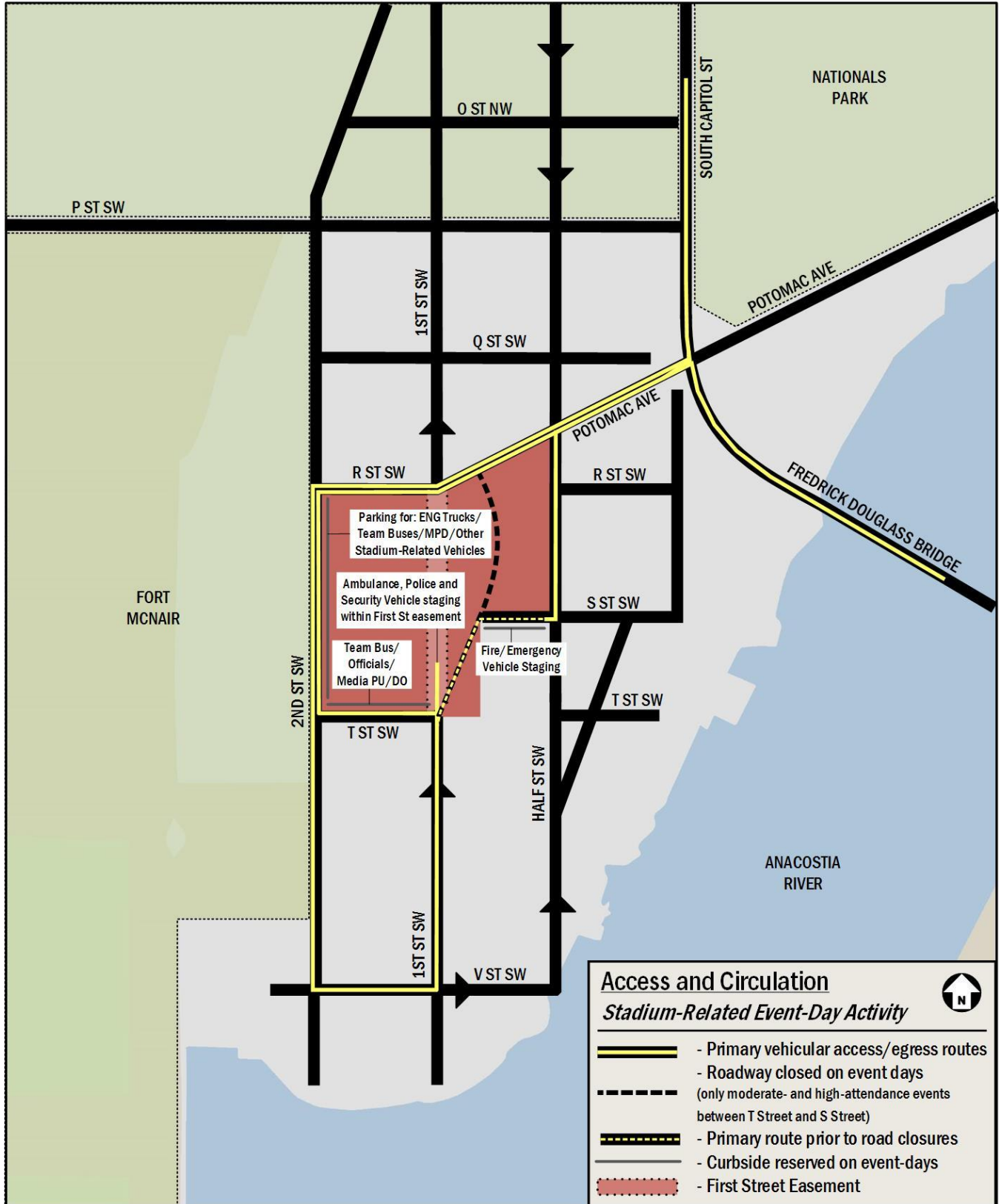


Figure 14: Event-Day Stadium-Related Operations

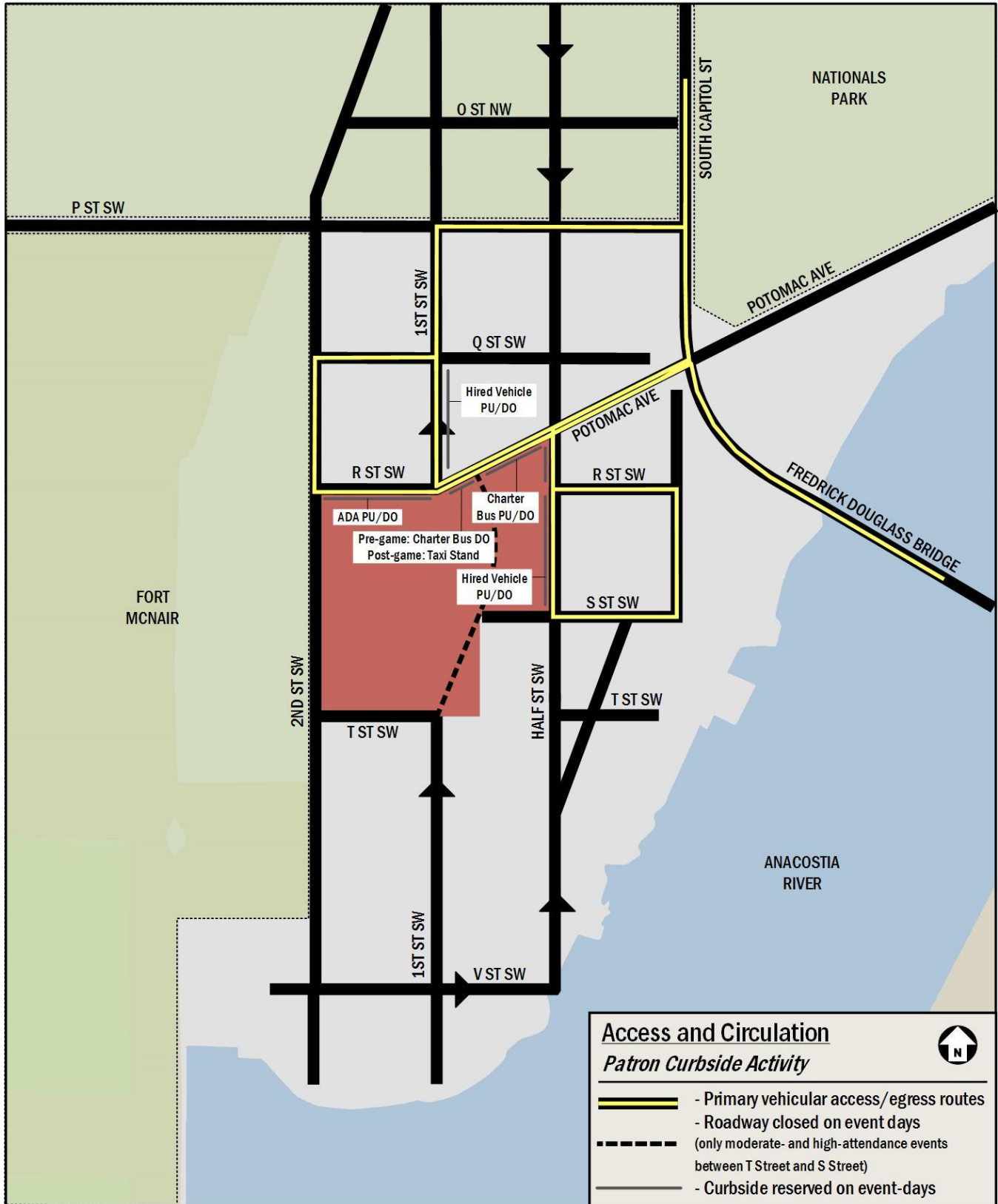


Figure 15: Event-Day Patron-Related Operations



MARKETING

There are a variety of marketing tools and technologies available that can be used to improve the patron experience, and ensure minimal impact to the surrounding community and daily commuters. The following are preliminary thoughts regarding marketing strategies and how they will be implemented. These strategies are subject to change as part of the draft and final TOPPs.

- Encourage the use of non-auto modes of transportation.

DCU will have message boards (e.g. television monitors) in the Stadium that display real-time transit schedules and promotions for alternative travel modes. DCU will commit to having monitors, placed near each of the exit and entry gates, at a minimum.

- Publicize transit availability and encourage use

Public transit options will be heavily advertised on the DC United website as a primary travel option to the Stadium, particularly use of the Navy Yard-Ballpark Metrorail Station. In addition it will be essential to add DC United logo or specific Stadium-branding to Metrorail and Metrobus maps, in addition to way-finding signage between the Navy Yard-Ballpark Metrorail Station and the Stadium.

DC United may also explore strategies such as the development of a game-day application which could be used to promote transit usage by providing real-time schedule updates and providing transit information as supplemental information on tickets.

- Provide non-auto subsidies to season-ticket holders equal to any parking subsidies

DCU will provide incentives for patrons to use non automobile modes, such as offering season ticket holders DC United-branded SmarTrip cards with preloaded fares or DC United-branded cycling apparel. DC United commits to offering a non-auto incentive equal or exceeding any discounts for parking (i.e. if DC United offers discounted parking for season ticket holders, an equal or higher subsidy will be provided for season ticket holders that do not arrive to games via automobile).

- Coordinate with WABA, Capital Bikeshare, etc. to promote cycling

This will include establishing and promoting a bicycle valet system at the Stadium, making bicycling a more favorable option by improving bicycle facilities directly surrounding the Stadium, coordinating “Bike to Game” days with raffles and prizes, and establishing one or more Capital Bikeshare stations at the Stadium (with the option of setting up a bike corral to account for overflow).

DC United may also explore strategies such as the development of a game-day application which could be used to provide a map of Stadium bike parking and available bicycle facilities leading up to the Stadium.

- Advertise primary pedestrian routing to and from the Stadium

Preferred pedestrian routes should be advertised on the team website, stressing the use of commercial roadways with wide sidewalks and discouraging use of more narrow sidewalks along the surrounding neighborhood streets.

Preferred routes should also be reinforced with the use of DC United and or DC United/Nationals flags to light posts lining the preferred pedestrian routes. Not only would this keep pedestrians in the preferred routes, but it would also create a sense of arrival and make the walk to the Stadium a much more pleasant experience.

- Advertise parking lots/garages and areas with on-street parking

A map of preferred game-day parking locations will be provided on the DC United website including all available parking lots, garages, and non-residential on-street parking areas. On this map residential parking should be highlighted as restricted on game-days. Parking applications such as Park Me, Spot Hero, Parking Panda, or other applications that allow patrons to secure and pay for parking prior to arriving to the event should also be advertised on the team website.

- Advertise primary vehicular routing to and from the Stadium

Routing diagrams should be included on the DC United website along with encouragement to secure parking before heading to an event. This would allow for patrons to choose the parking location that is most convenient for them while looking at the preferred routing strategies.



It may be beneficial to provide a Transportation Hub similar to that used by the New York Red Bulls such that users can click on the region they are traveling from and be provided the suggested routes.

- *Promote the dispersal of traffic before and after the game.*
DC United should coordinate with local establishments to advertise game-day specials before and after the game in order to help spread out traffic. DC United will also help spread out vehicular demand arriving at the stadium on weeknight events in particular as they would overlap with the evening commuter rush hour. DCU will commit to holding an event (e.g. pre-concerts, Stadium happy hours, tailgate parties, etc.) every non-holiday weeknight game starting a minimum of two hours before start time. These specials may be displayed on electronic message boards during events at the Stadium.