



National Mall and Memorial Parks Tour Bus Study

Final Report Summary



Participants during the study

- American Bus Association
- District of Columbia Department of Transportation
- Destination D.C.
- Downtown D.C. Business Improvement District
- George Mason University
- Honor Flight Network
- Metropolitan Washington Council of Governments
- National Capital Planning Commission
- The Guild of Professional Tour Guides of Washington, D.C.
- Trust for the National Mall

*Research Funded through Paul S. Sarbanes Transit in Parks Program Grant

Objectives of Report

- Develop recommendations for both long and short term improvements in overall tour bus operations within National Mall and Memorial Parks (NAMA)
- Systematically document and confirm current tour bus parking and congestion issues
- Series of studies looking at, Operational Efficiency, Congestion, Visitor Mobility, Access, Safety, Education, Recreation, Health, Natural/Cultural and Historic resource protection

Project Phases

Phase	Study	Details
I	Off-Bus Data Collection and Photographic Documentation at Loading and Unloading Zones, Part 1	Data collected and analyzed by GMU that is specific to congestion, operational efficiency, mobility, access, safety, and resource protection at loading and unloading zones. 626 buses documented
II	Off-bus Data Collection at Gateway Points	Data collected by COG for DDOT specific to tour bus volume and carrying capacity; analyzed by COG and GMU. 5,256 buses documented

Project Phases

Phase	Study	Details
III	Off-Bus Data Collection and Photographic Documentation at Loading and Unloading Zones, Part 2	Data collected and analyzed by GMU that is specific to congestion, operational efficiency, mobility, access, safety, and resource protection at loading and unloading zones. 831 buses documented
IV	Off-bus Data Collection at Parking Areas	Data collected and analyzed by GMU that is specific to turnover, stacking, user conflict, and carrying capacity at parking areas adjacent to major destinations as well as parking in peripheral locations. 1,328 buses documented.

Project Phases

Phase	Study	Details
V	On-Bus Data Collection and Documentation of Daily Bus Operations	Specific to congestion, operational efficiency, mobility, access, safety, education, recreation, health benefits and resource protection during the point-to-point experience. Six full-day and 2 half-day tours documented.
VI	Operator Self-Reports	Specific to logs, itineraries, education, recreation, health, vehicle-miles-traveled, methods used to reduce pollution, safety, regulation and suggestions for improving operational efficiency and energy conservation. Six tour companies documented.

Project Phases

Phase	Study	Details
VII	Client Self-Reports	Data collected and analyzed by GMU that is specific to itineraries, group needs, intermodal capabilities of diverse tour group markets and ways to maximize the on-bus and pedestrian experience. Four client groups documented.
		Note – over 8,000 buses documented during phases I - IV

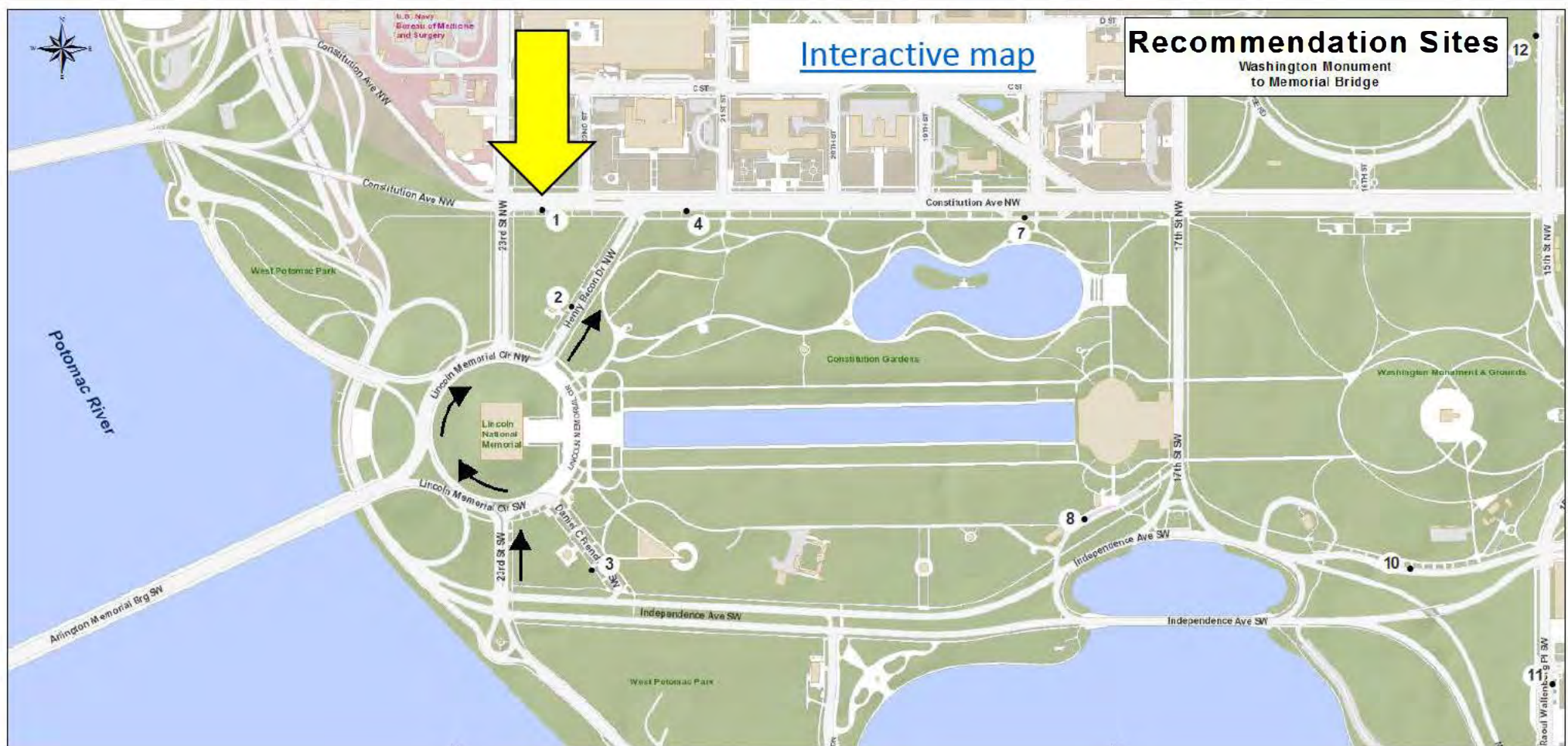
Site Specific Recommendations Overview



- Study Area, approx. 684 acres
- 21-25 million visitors annually
- 1200+ buses per day
- Study conducted March 2012 thru June 2014
- 26 site specific recommendations, numbered on map 1-26
- 8 Additional Global Recommendations, letters A-H on map (shown slide 39)

Constitution Avenue, eastbound Between 23rd and Henry Bacon Dr.

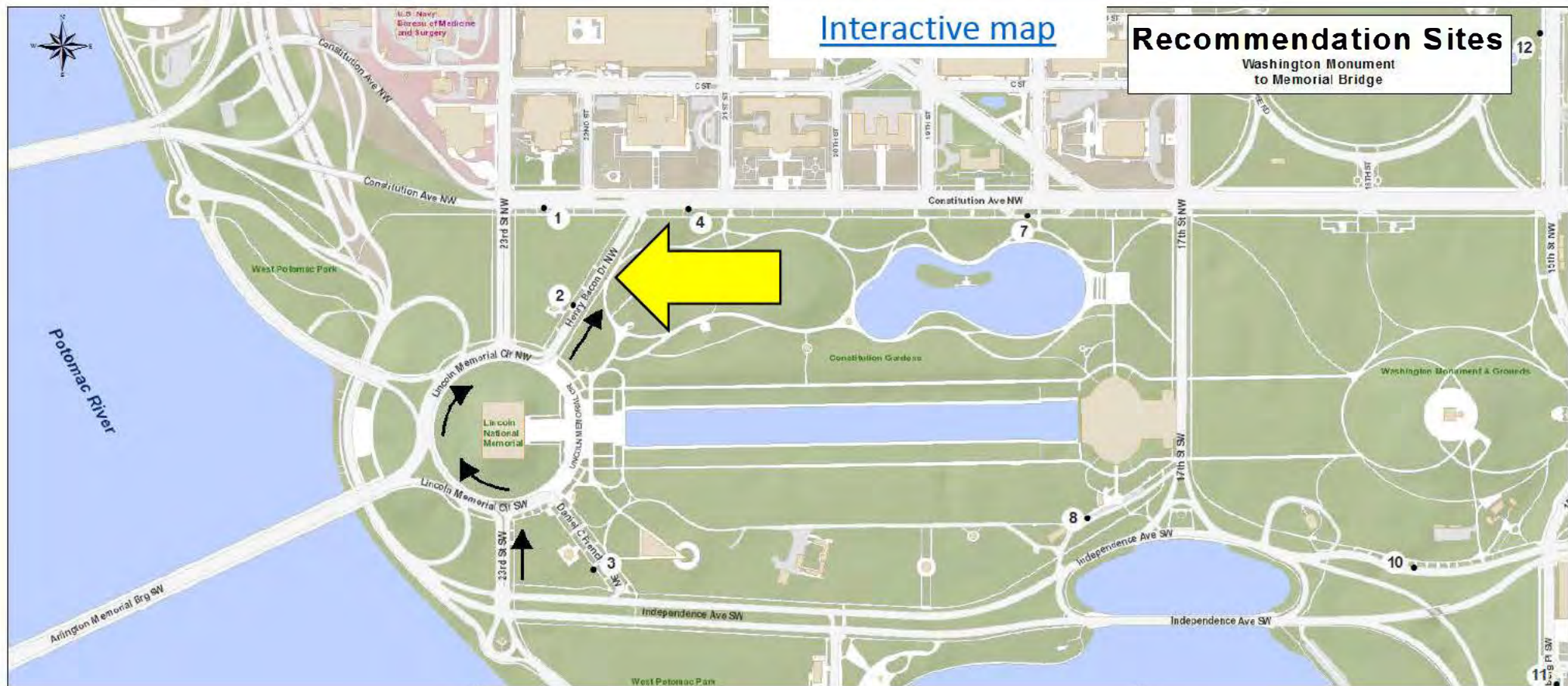
Site 1 of 26



Current Function	Summary of Documented Issues	Recommendations
3 spaces for tour bus loading/unloading during non-rush hour periods	Underutilized; illegal use as parking area; minimal/ inconsistent enforcement	Convert to 3-hour tour bus parking during peak season, non-rush hour times; install 3-hour parking meters; develop and install standard regulatory signs; standardize and coordinate enforcement.

Lincoln Memorial, North on Henry Bacon Dr.

Site 2 of 26



Current Function

6 spaces for tour bus loading/unloading on southwest bound side

Summary of Documented Issues

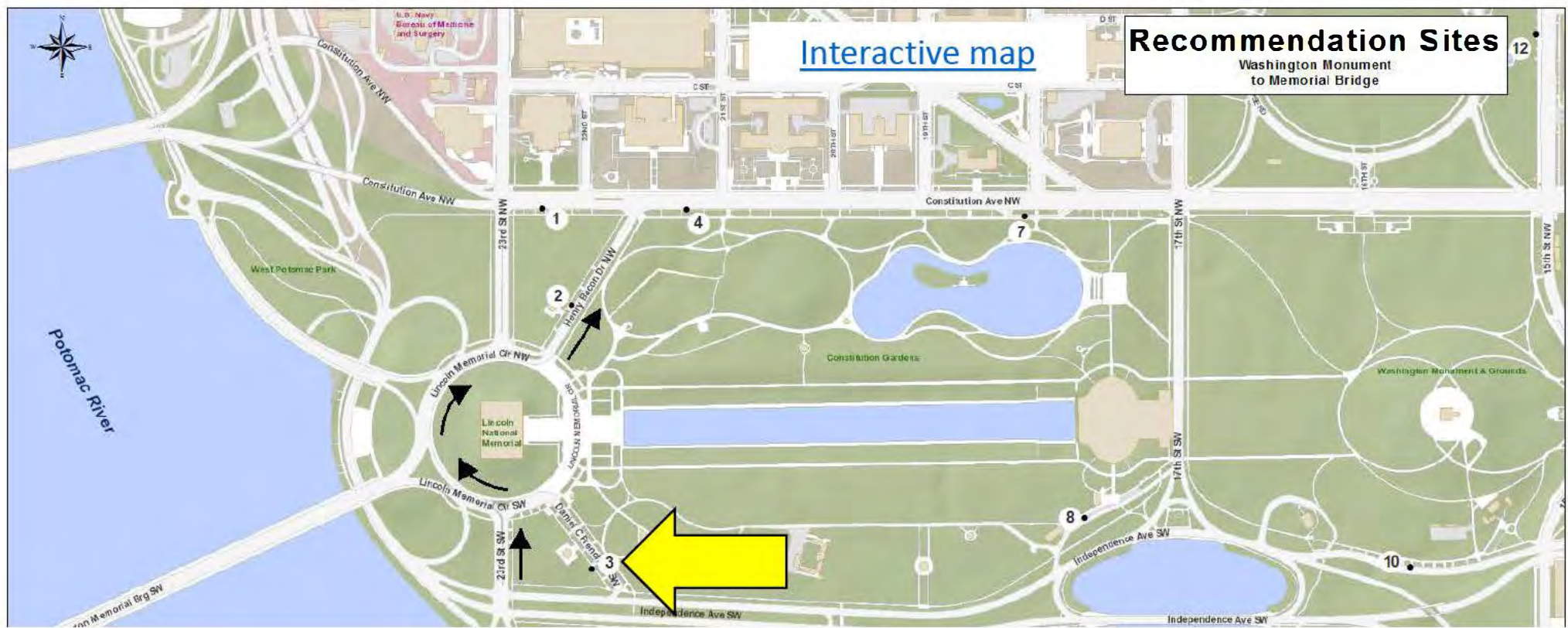
Underutilized; illegal use as parking area; idling beyond legal limits; use by private vehicles; minimal/inconsistent enforcement

Recommendations

Open northbound Lincoln Circle restricted lanes as a pilot bus route, add loading/unloading spaces on northeast bound side of Henry Bacon Dr.; develop and install standard regulatory signs; standardize and coordinate enforcement.

Lincoln Memorial, South on Daniel French Dr.

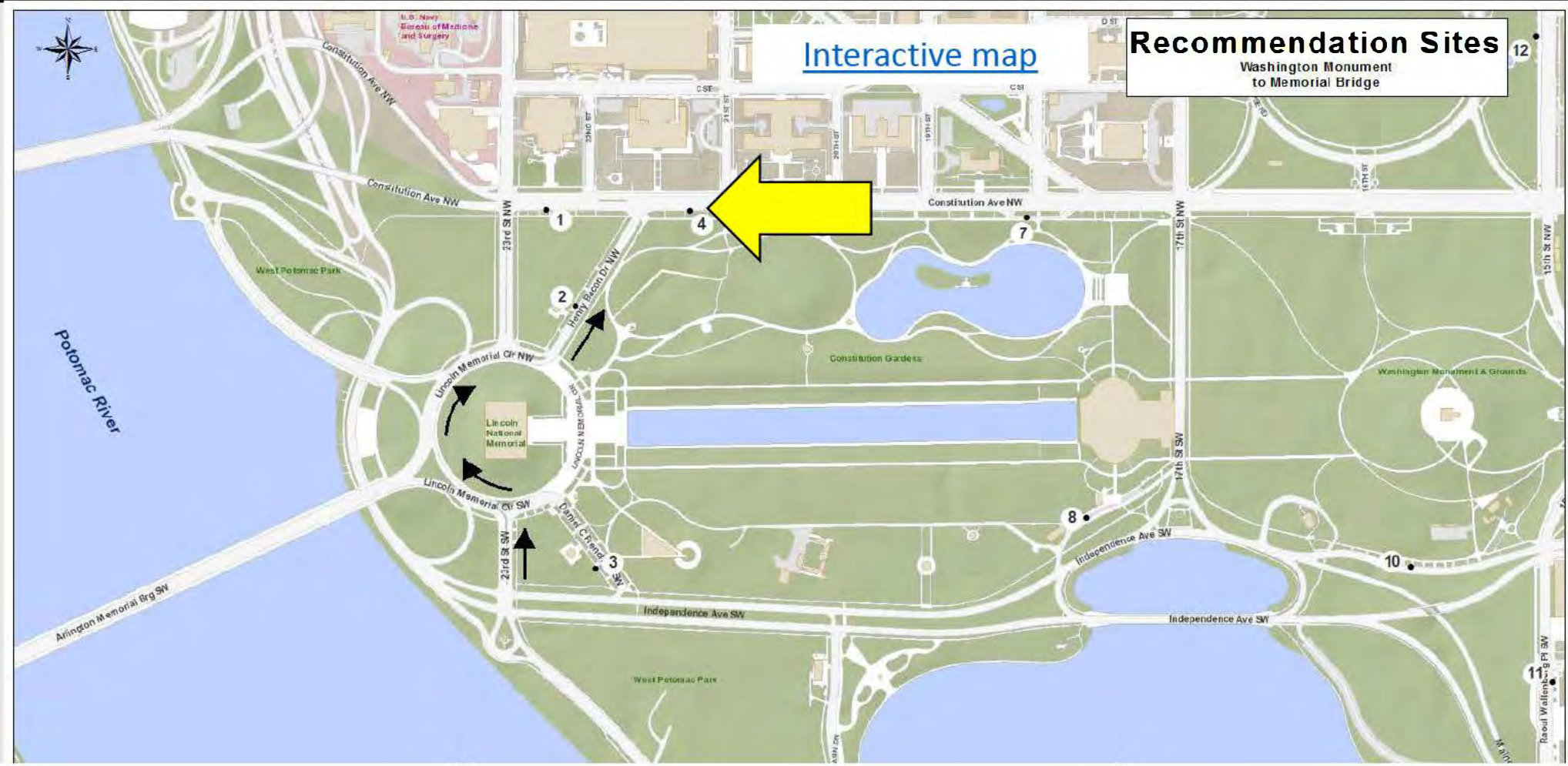
Site 3 of 26



Current Function	Summary of Documented Issues	Recommendations
6 spaces for tour bus loading/unloading	Over-utilized; congested; illegal double parking; illegal loading/unloading in non-designated areas; pulling into traffic in dangerous ways; blocking pedestrian traffic; stopping in zone beyond time needed to load/unload; illegal loading/ unloading in non-designated areas; jaywalking; minimal/ inconsistent enforcement	Open northbound Lincoln Circle restricted lanes as a pilot bus route; develop and install standard regulatory signs; standardize and coordinate enforcement.

Constitution Avenue, east-bound between Henry Bacon Drive and 21st

Site 4 of 26



Current Function	Summary of Documented Issues	Recommendations
1 space for tour bus loading/unloading during non-rush hour periods	Underutilized; illegal use as parking area; minimal/ inconsistent enforcement	Convert to designated Circulator bus stop; install 3-hour parking meters for buses or private vehicles; develop and install standard regulatory signs; standardize and coordinate enforcement.

FDR/MLK Memorial, West Basin Drive

Site 5 of 26



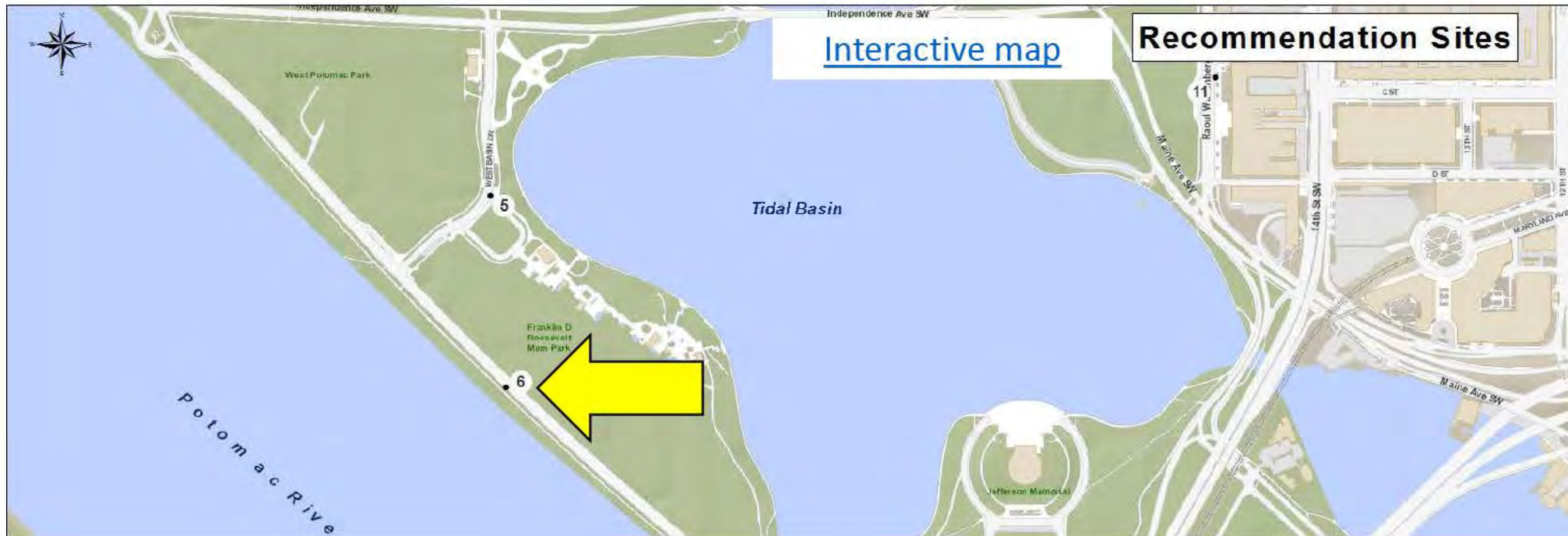
[Interactive map](#)

Recommendation Sites

Current Function	Summary of Documented Issues	Recommendations
5 spaces for tour bus loading/unloading	Over-utilized, particularly during peak season; stopping in zone beyond time needed to load/unload; illegal loading/unloading in non-designated areas; minimal/ inconsistent enforcement	Reallocate and accommodate tour bus loading/unloading, tour bus parking, private vehicle parking, parking for individuals with disabilities, NPS visitor transit, permit parking and local sightseeing buses to be responsive to seasonal modal surges; explore best uses for FDR one-way circle road; develop and install standard regulatory signs; standardize and coordinate enforcement.

Ohio Drive, SW, Independence Avenue to Inlet Bridge

Site 6 of 26



Current Function	Summary of Documented Issues	Recommendations
50 curbside spaces for buses (or 150 for cars)	Consistently at capacity with private vehicles; mixed use area makes it difficult to impossible for tour buses to park; attempts to parallel park often endanger vehicles and visitors; common area for cruising	Consolidate and separate tour bus and personal vehicle parking, with parking for personal vehicles north of West Basin Drive to Independence Avenue and parking for tour buses located south of West Basin Drive to Inlet Bridge; assess feasibility of angled parking for easier tour bus access; assess feasibility of one-way access during peak season, with buses parking on east side of Ohio Drive; install 3-hour parking meters; develop and install standard regulatory signs; standardize and coordinate enforcement.

Constitution Avenue, east-bound between 19th and 18th

Site 7 of 26



Current Function

5 spaces for tour bus loading/ unloading during non-rush hour periods

Summary of Documented Issues

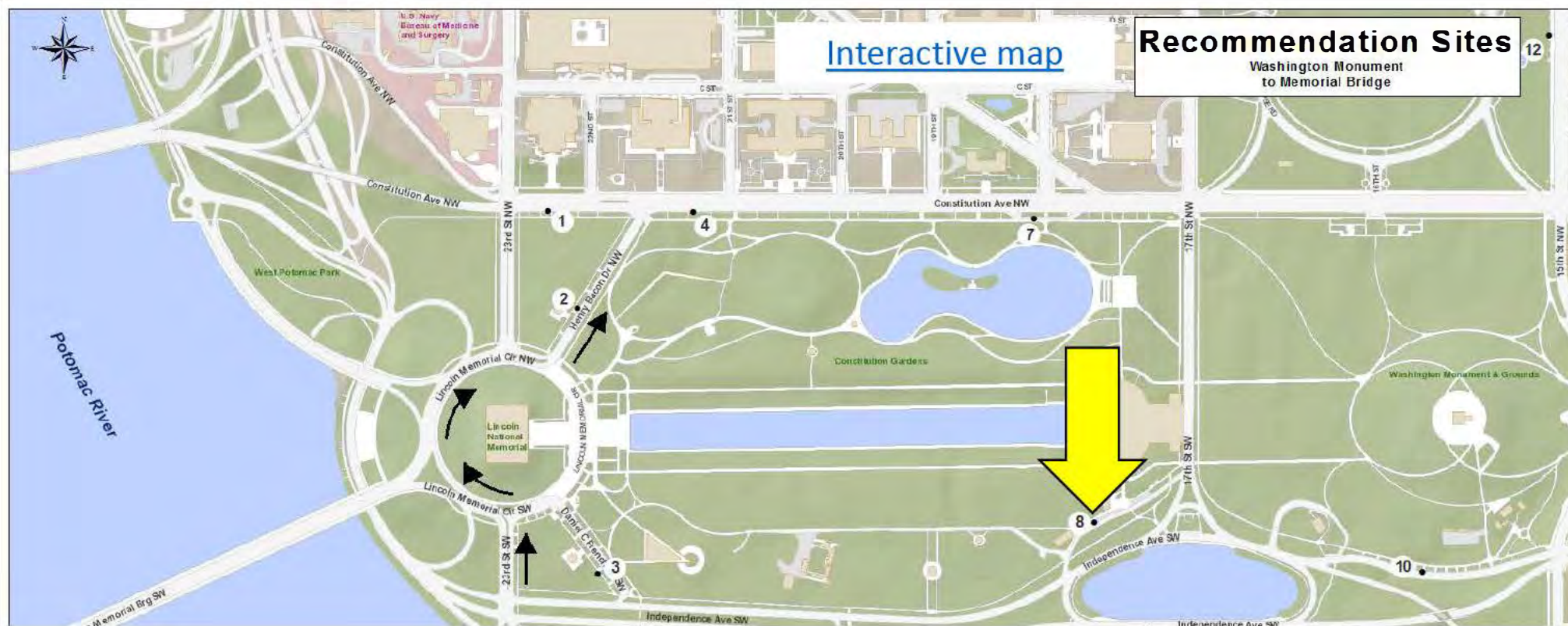
Underutilized; illegal use as parking area; minimal/ inconsistent enforcement

Recommendations

Convert to 3-hour tour bus parking during peak season, non-rush hour times; install 3-hour parking meters; develop and install standard regulatory signs; standardize and coordinate enforcement.

World War II Memorial, Homefront Dr.

Site 8 of 26



Current Function

3 spaces for tour bus loading/unloading

Summary of Documented Issues

Over-utilized during peak season; buses lined up on 17th Street awaiting entry; specialized needs for Honor Flight veterans; stopping in zone beyond time needed to load/unload; illegal loading/unloading in non-designated areas; idling beyond legal limits; minimal/inconsistent enforcement

Recommendations

Allocate supplemental loading/unloading spaces during peak season during non-rush hour times on 17th Street southbound, outside of east-west viewshed of Great Cross Axis as a seasonal pilot; develop and install standard regulatory signs; standardize and coordinate enforcement

Thomas Jefferson Memorial, East Basin Dr

Site 9 of 26



Current Function

7 spaces for tour bus loading/unloading

Summary of Documented Issues

Over-utilized during peak season; dangerous thoroughfare along East Basin Dr.; pulling dangerously into traffic; stopping in zone beyond time needed to load/unload; illegal loading/unloading in non-designated areas; idling beyond legal limits; minimal/inconsistent enforcement

Recommendations

Assess the feasibility of using a portion of NPS National Capital Regional Office parking lot as a parking area (for after drop-off) as a weekend seasonal pilot; install parking meters; develop and install standard regulatory signs; standardize and coordinate enforcement.

1500 Block, Independence Ave., NW

Site 10 of 26



Current Function	Summary of Documented Issues	Recommendations
8 curbside spaces for tour bus parking	Frequently at or beyond capacity; access difficulties due to Independence Ave. thoroughfare, parking beyond designated area; blocking turn lane at 15th street; minimal/inconsistent enforcement	Demarcate tour bus parking from through lane; reconfigure parking to protect north-south viewshed of Great Cross Axis; install parking meters; develop and install standard regulatory signs; standardize and coordinate enforcement.

U.S. Holocaust Memorial Museum, 100 Raoul Wallenberg Place

Site 11 of 26



Current Function	Summary of Documented Issues	Recommendations
2 spaces for tour bus loading/unloading	Stopping in zone beyond time needed to load/unload; illegal loading/unloading in non-designated areas	Review designated areas (i.e., government vehicle, no standing zone, bus loading/unloading, commuter vehicles) to increase tour bus loading/unloading spaces during peak season; develop and install standard regulatory signs; standardize and coordinate enforcement.

15th Street, NW between Pennsylvania Avenue and Constitution Avenue near the Ellipse

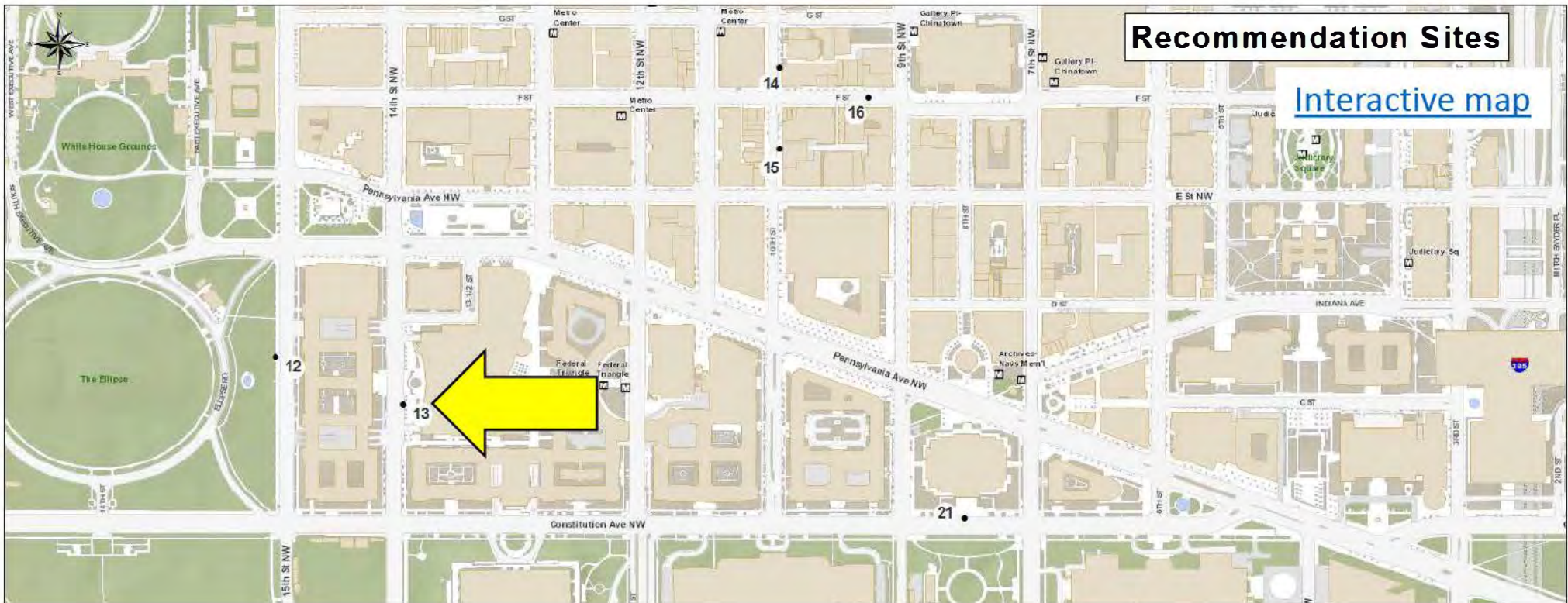
Site 12 of 26



Current Function	Summary of Documented Issues	Recommendations
5 spaces for tour bus parking; also used for loading/ unloading	Consistently at or beyond capacity; mixed use confusion; congestion; use/encroachment by private vehicles and permitted food/retail vendors; illegal double parking; blocking traffic; pulling dangerously into traffic; stopping in zone beyond time needed to load/unload; illegal loading/unloading in non-designated areas; minimal/inconsistent enforcement	Reallocate space for distinct uses (tour bus parking, tour bus loading/ unloading, vendors, bike route) and clearly separate, with input from NPS and DC to collaboratively determine appropriate percentage allocation of space for each use; install parking meters; develop and install standard regulatory signs; standardize and coordinate enforcement.

14th Street, west side of Ronald Reagan Building northbound pull-off

Site 13 of 26



Current Function	Summary of Documented Issues	Recommendations
Not designated for tour bus loading/unloading	Undesignated use; blocking traffic; stopping in zone beyond time needed to load/ unload; illegal loading/ unloading in non-designated areas; idling beyond legal limits; minimal/inconsistent enforcement	Designate a minimum of two spaces for tour bus loading/unloading during peak season during non-rush hour times; assess off-peak seasonal use; develop and install standard regulatory signs; standardize and coordinate enforcement

Ford's Theatre, 600 Block 10th Street

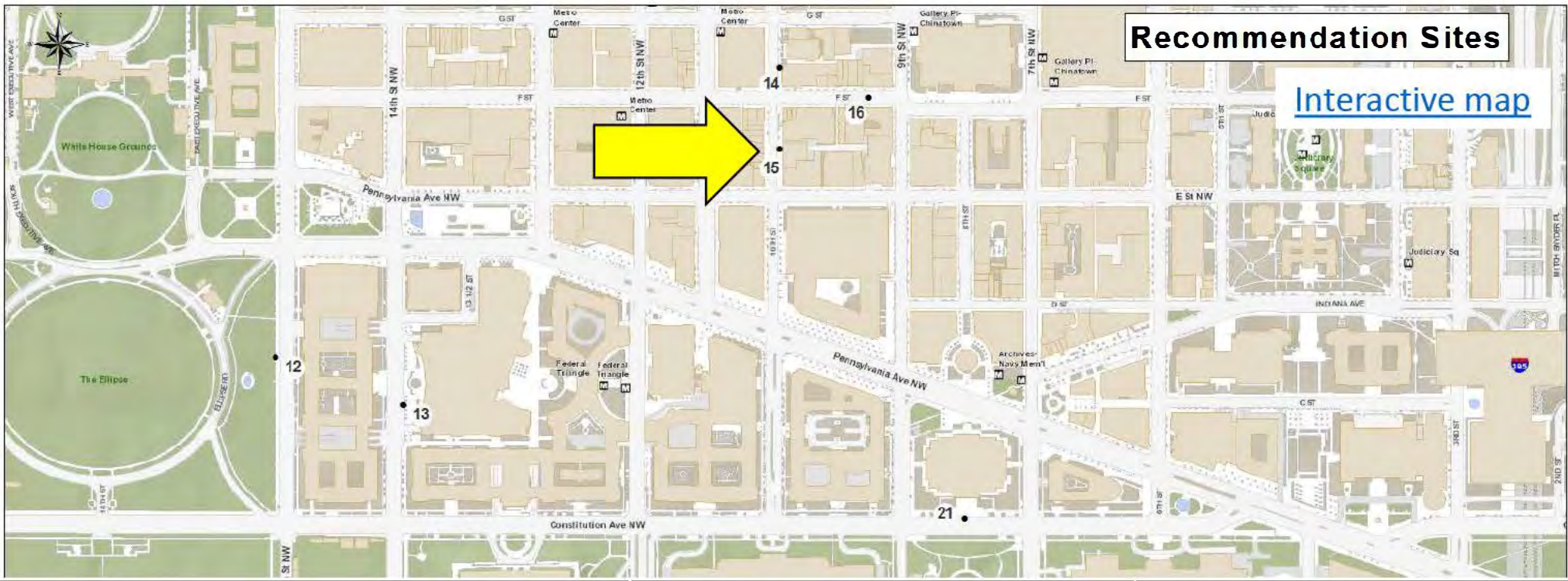
Site 14 of 26



Current Function	Summary of Documented Issues	Recommendations
1 space for tour bus loading/unloading	Underutilized; illegal use as parking area; minimal/inconsistent enforcement	Convert to metered parking; develop and install standard regulatory signs; standardize and coordinate enforcement

Ford's Theatre, 500 block 10th Street

Site 15 of 26



Current Function	Summary of Documented Issues	Recommendations
<p>One-way southbound; 2 spaces for tour bus loading/unloading</p>	<p>Over-utilized and highly congested during peak season; stopping on the wrong side of the road; illegal double parking; pulling into traffic in a dangerous way; stopping in zone beyond time needed to load/unload; illegal loading/ unloading in non-designated areas; idling beyond legal limits; minimal/ inconsistent enforcement</p>	<p>Convert public through-traffic on 10th Street to buses only and those going to parking garages; use signage and pavement changes to indicate gateway to an area that can be named Ford's Theatre District; consider use of crossing guard or traffic control personnel during peak season; develop and install standard regulatory signs; standardize and coordinate enforcement.</p>

Ford's Theatre, 1000 Block F Street

Site 16 of 26



Recommendation Sites

[Interactive map](#)

Current Function	Summary of Documented Issues	Recommendations
1 space for tour bus loading/unloading	Underutilized; illegal use as parking area; minimal/inconsistent enforcement	Convert to metered parking; develop and install standard regulatory signs; standardize and coordinate enforcement.

Ohio Drive, south of East Potomac Park Golf Course entry

Site 17 of 26



Current Function	Summary of Documented Issues	Recommendations
0 curbside spaces	Removal of curbside spaces for safety and access reasons; consistent requests from tour bus drivers and owners for reinstatement of tour bus parking spaces; common area for cruising	Reinstate and reallocate pull-off areas for tour bus parking located south of U.S. Park Police District One Station and East Potomac Park Golf Course during peak season as a pilot; ensure that tour bus presence will not block law enforcement access; install parking meters; develop and install standard regulatory signs; standardize and coordinate enforcement.

Hains Point, East Potomac Park

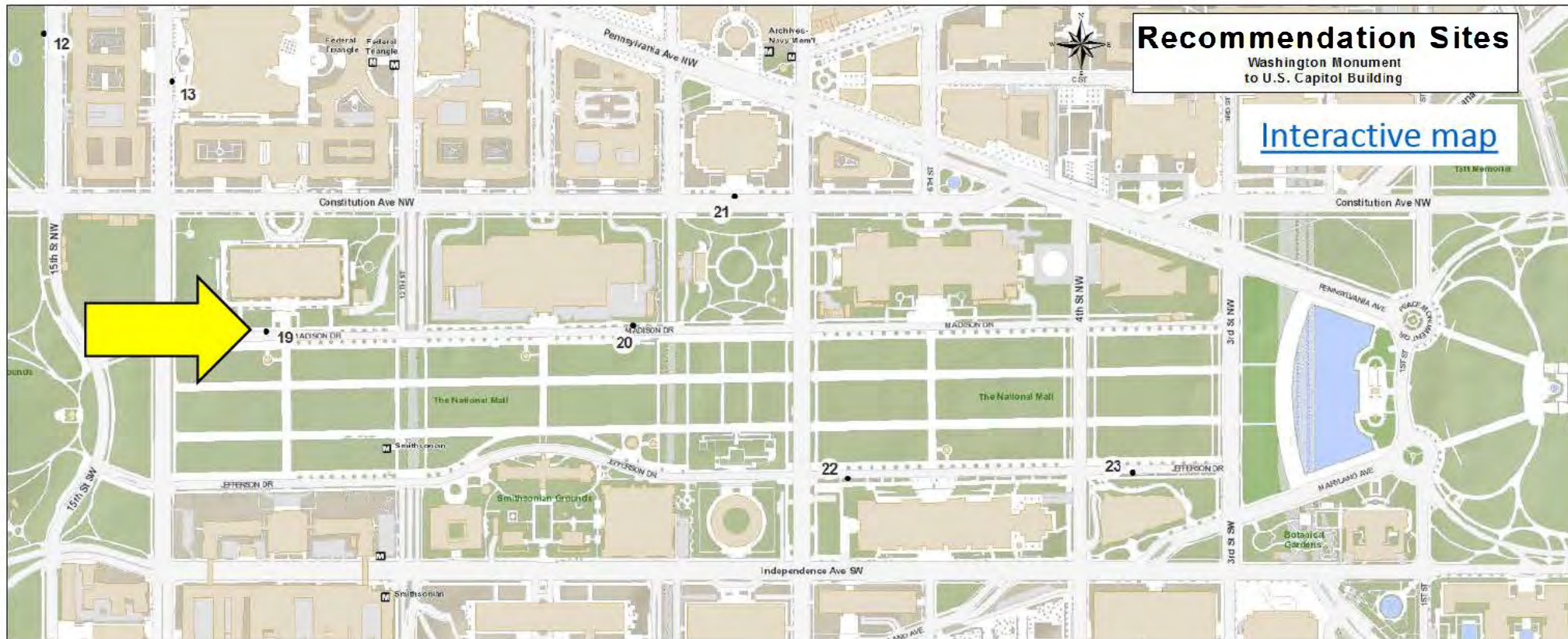
Site 18 of 26



Current Function	Summary of Documented Issues	Recommendations
11-space area for tour bus parking	Mixed use area; illegal double parking; access hindered by buses encroaching on spaces for private vehicles; common area for cruising	Reallocate and separate usage areas; increase number of tour bus parking spaces by allowing tour bus parking within the private vehicle area during peak season; clearly demarcate tour bus parking; install parking meters; develop and install standard regulatory signs; standardize and coordinate enforcement.

National Museum of American History, Madison Dr. between 12th and 14th

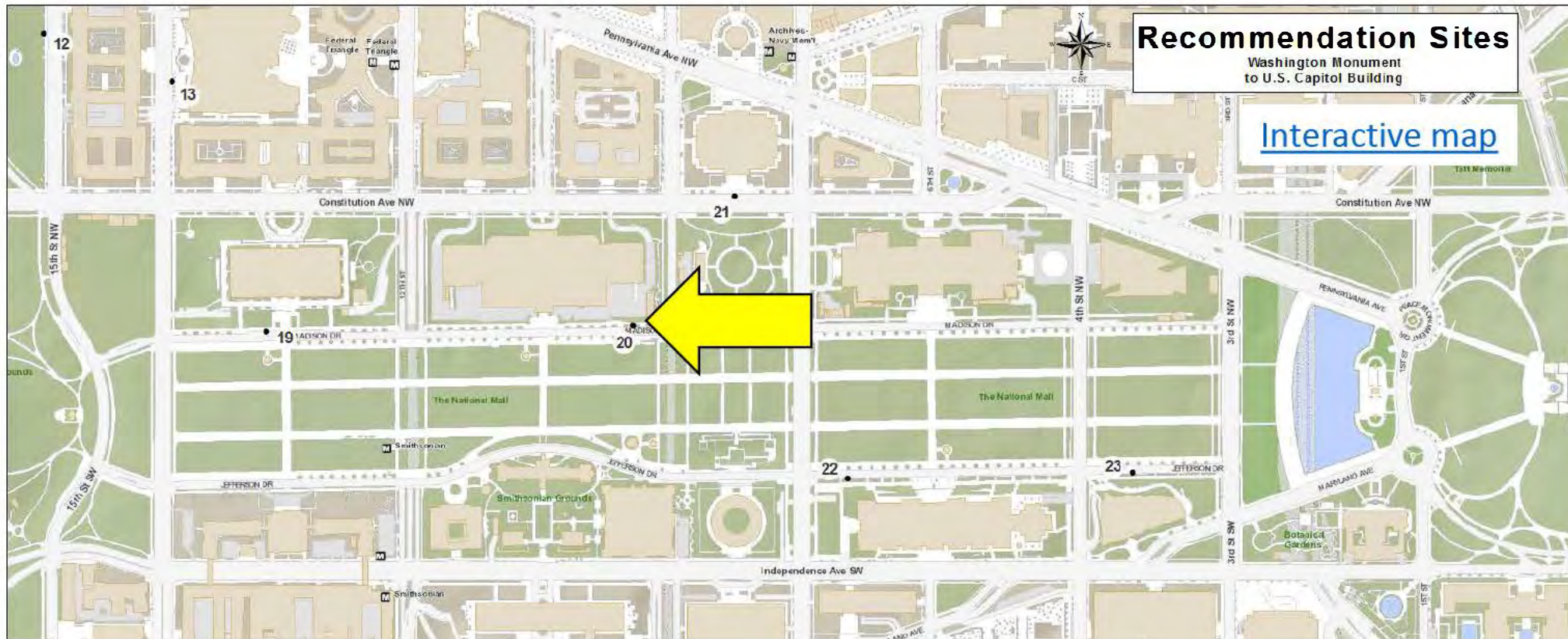
Site 19 of 26



Current Function	Summary of Documented Issues	Recommendations
3 spaces for tour bus loading/unloading	Converted to loading/unloading zone during study period; backup due to limited spaces; blocking pedestrian traffic; blocking facility entrance	Allocate supplemental seasonal loading/unloading and parking spaces on north side of Madison Avenue; add seasonal loading/unloading and parking spaces on south side of Constitution Avenue; develop and install standard regulatory signs; standardize and coordinate enforcement.

National Museum of Natural History, Madison Dr. at 9th St.

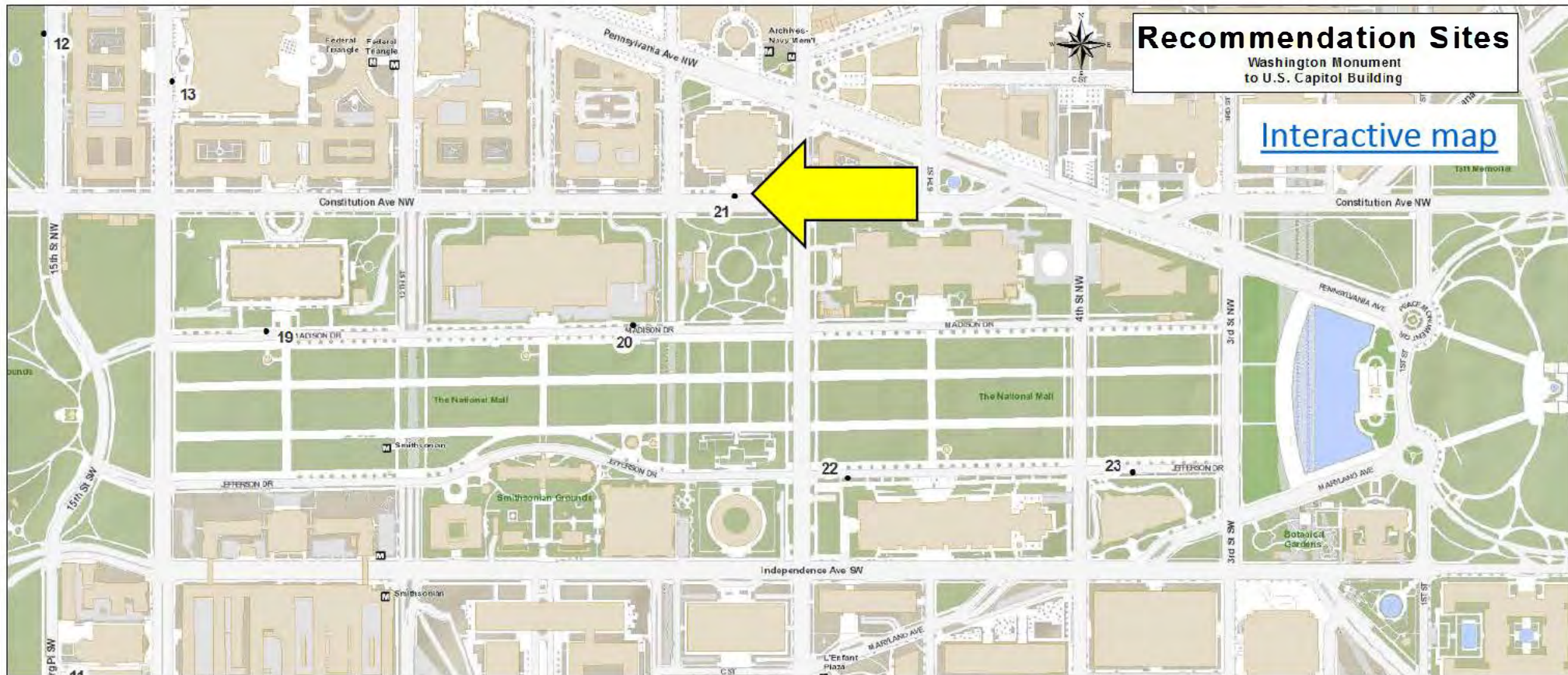
Site 20 of 26



Current Function	Summary of Documented Issues	Recommendations
8 spaces for tour bus loading/unloading	Congested; stopping in zone beyond time needed to load/unload; illegal loading/unloading in non-designated areas; use by private vehicles; minimal/inconsistent enforcement	Allocate supplemental seasonal loading/unloading and parking spaces on north side of Madison Avenue; add seasonal loading/unloading and parking spaces on south side of Constitution Avenue; develop and install standard regulatory signs; standardize and coordinate enforcement.

Constitution Avenue, Westbound south side of National Archives

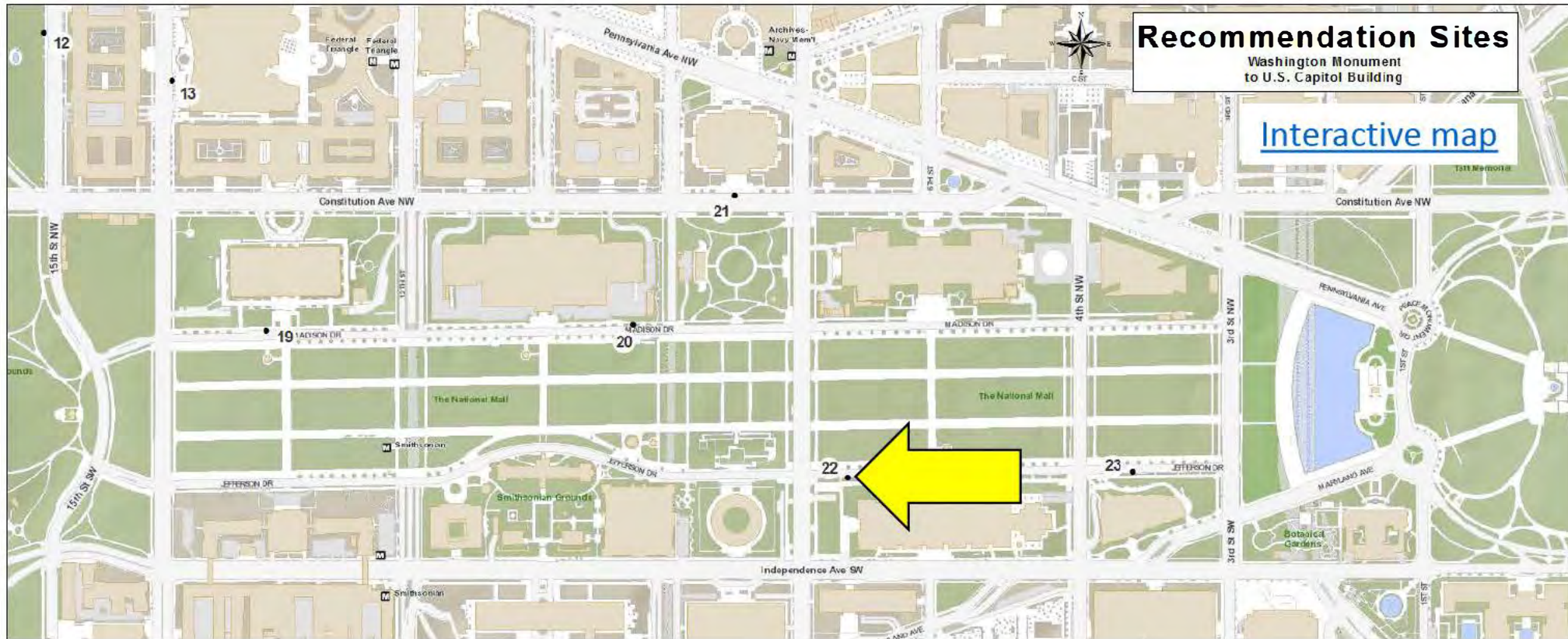
Site 21 of 26



Current Function	Summary of Documented Issues	Recommendations
Not designated for tour bus loading/unloading	Designated for general parking; use of non-designated areas to load/unload; traffic jams; illegal loading/unloading in non-designated areas; minimal/inconsistent enforcement	Convert general parking space to at least one tour bus loading/unloading space; develop and install standard regulatory signs; standardize and coordinate enforcement.

National Air and Space Museum, Jefferson Drive at 7th St.

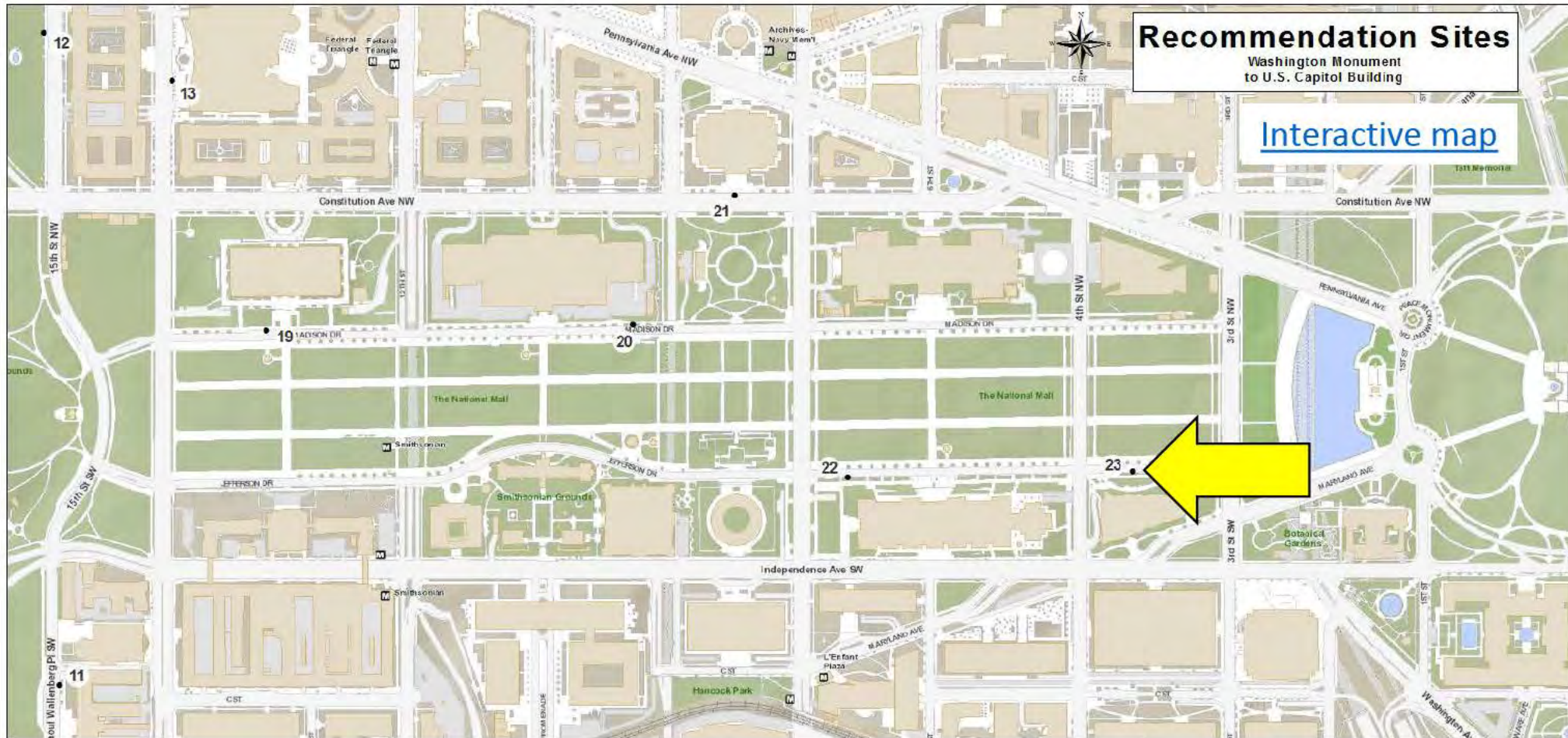
Site 22 of 26



Current Function	Summary of Documented Issues	Recommendations
9 spaces for tour bus loading/unloading	Over-utilized; congested; blocking pedestrian traffic; blocking facility entrance; stopping in zone beyond time needed to load/unload; illegal loading/unloading in non-designated areas; minimal/inconsistent enforcement	Allocate supplemental loading/ unloading and parking spaces directly south of the museum on Independence Avenue; develop and install standard regulatory signs; standardize and coordinate enforcement.

National Museum of the American Indian, Jefferson Dr. between 3rd and 4th St.

Site 23 of 26



Current Function	Summary of Documented Issues	Recommendations
9 spaces for tour bus loading/unloading	Underutilized; illegal use as parking area; minimal/inconsistent enforcement	Convert to 3-hour tour bus parking area; install parking meters; develop and install standard regulatory signs; standardize and coordinate enforcement.

900-1200 Block, Maine Avenue, SW

Site 24 of 26



Current Function	Summary of Documented Issues	Recommendations
4 curbside spaces for tour bus parking	Consistently at or beyond capacity; cruising by area	Increase number of tour bus parking spaces; install parking meters; develop and install standard regulatory signs; standardize and coordinate enforcement.

700–900 Block, Maine Avenue, SW

Site 25 of 26



Current Function	Summary of Documented Issues	Recommendations
6 curbside spaces for tour bus parking	Consistently at or beyond capacity; cruising by area; idling beyond legal limits; minimal/inconsistent enforcement	Increase number of tour bus parking spaces; install parking meters; develop and install standard regulatory signs; standardize and coordinate enforcement.

Buzzard Point, 1880 2nd Street, SW

Site 26 of 26



Current Function

Summary of Documented Issues

Recommendations

80-space mixed use parking lot

Few tour bus spaces available during weekdays due to monthly parking privileges of private vehicles; 3-hour fee of \$20 does not allow for in-and-out privileges; \$50 daily fee that allows for in and out privileges is perceived as cost prohibitive; weekend access not regularly offered

Negotiate with MarcParc leadership team to establish weekend tour bus parking with in-and-out privileges during peak season; negotiate with MarcParc leadership team to set aside 10 weekday tour bus parking spaces that require advance registration; educate drivers regarding this optional parking area.

GLOBAL RECOMMENDATIONS

- Other relevant challenges identified on and around NAMA
 - Identified as repeated challenges throughout multiple phases of study
 - Partnerships are necessary for implementation
1. Information Delivery
 2. Consistent Regulations, Signage and Enforcement
 3. Parking
 4. Crowdsourcing
 5. Cultural Needs
 6. Specialized Needs
School Groups
 7. Health Benefits
 8. Protection of Sensitive Natural, Cultural, and Historic Resources

GLOBAL RECOMMENDATIONS-Information Delivery

Challenge

- Inconsistent information for tour bus drivers prior to arrival
- Current information lacking in both breath and depth

Recommendation

- Collaborative manual designed by key stakeholders (NPS, DDOT, ABA, Destination D.C., Others)
- Current documentation language and presentation should be revised
- Web content revisions
- Multiple language translations

GLOBAL RECOMMENDATIONS-Regs,Signage,Enforcement

Challenge

- No regular enforcement
- Inconsistent policies with loading/unloading and parking
- Inconsistent requirements, standards, regulations, fees or signage

Recommendation

- Provide standard documentation as outlined above on all policies, jurisdictions, and enforcement

GLOBAL RECOMMENDATIONS-Parking

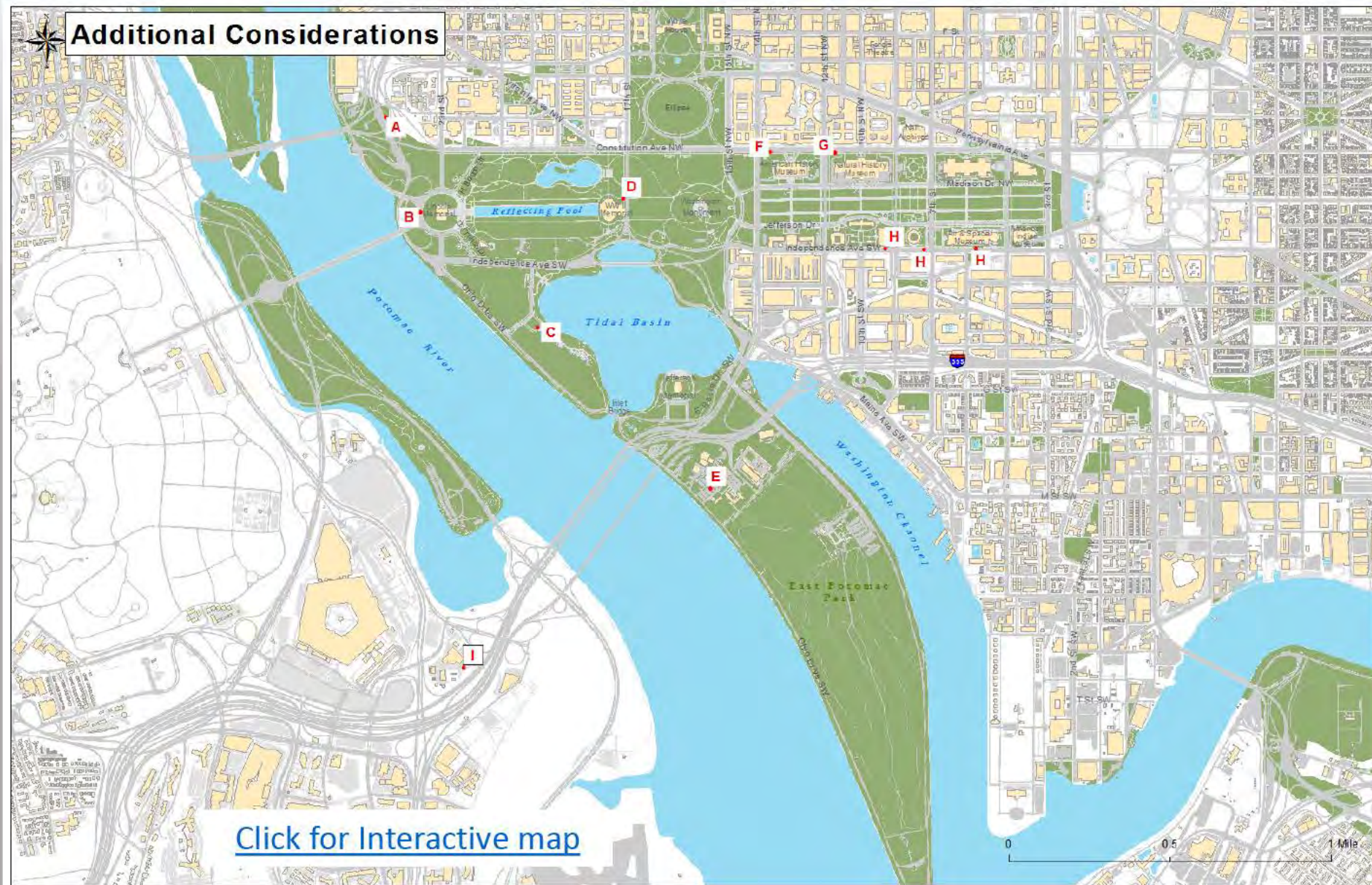
Challenge

- Lack of tour bus parking causes congestion throughout NAMA
- Lack of available spaces within high use areas such as major attractions and at peak volume times
- Inefficient management and use of currently available spaces

Recommendation

- Short term, expand existing capacity
- Long term, additional parking required
- The following maps highlight specific recommendations per parking location

GLOBAL RECOMMENDATIONS-Parking Overview Map



I-66 East, highway near the John F. Kennedy Center for the Performing Arts

Site A



Lincoln Circle

Site B



Additional Considerations

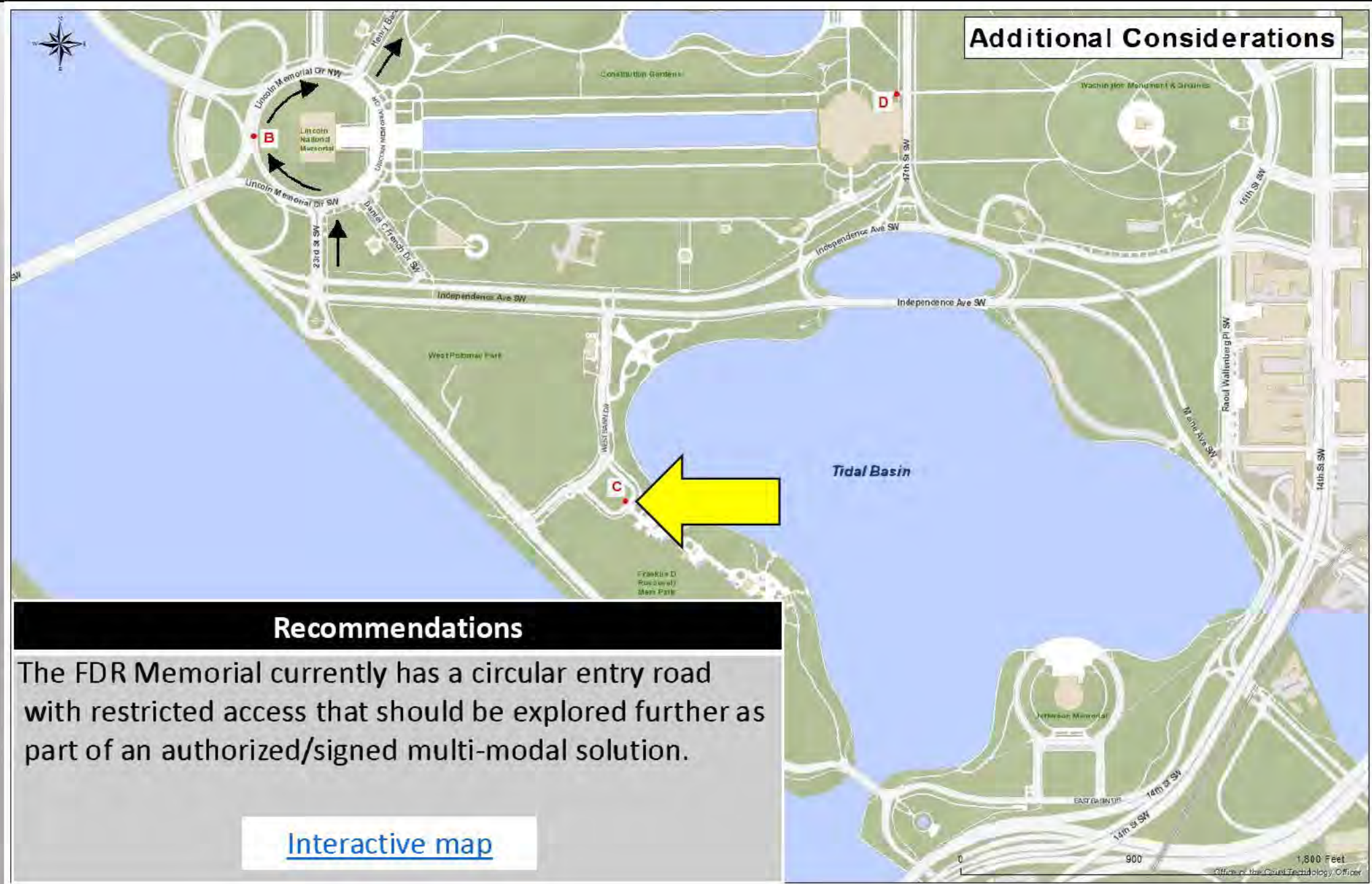
Recommendations

This is currently a restricted roadway that should be explored further as an authorized/signed tour bus route.

[Interactive map](#)

FDR Memorial / Martin Luther King, Jr. Memorial, West Basin Drive

Site C



Additional Considerations

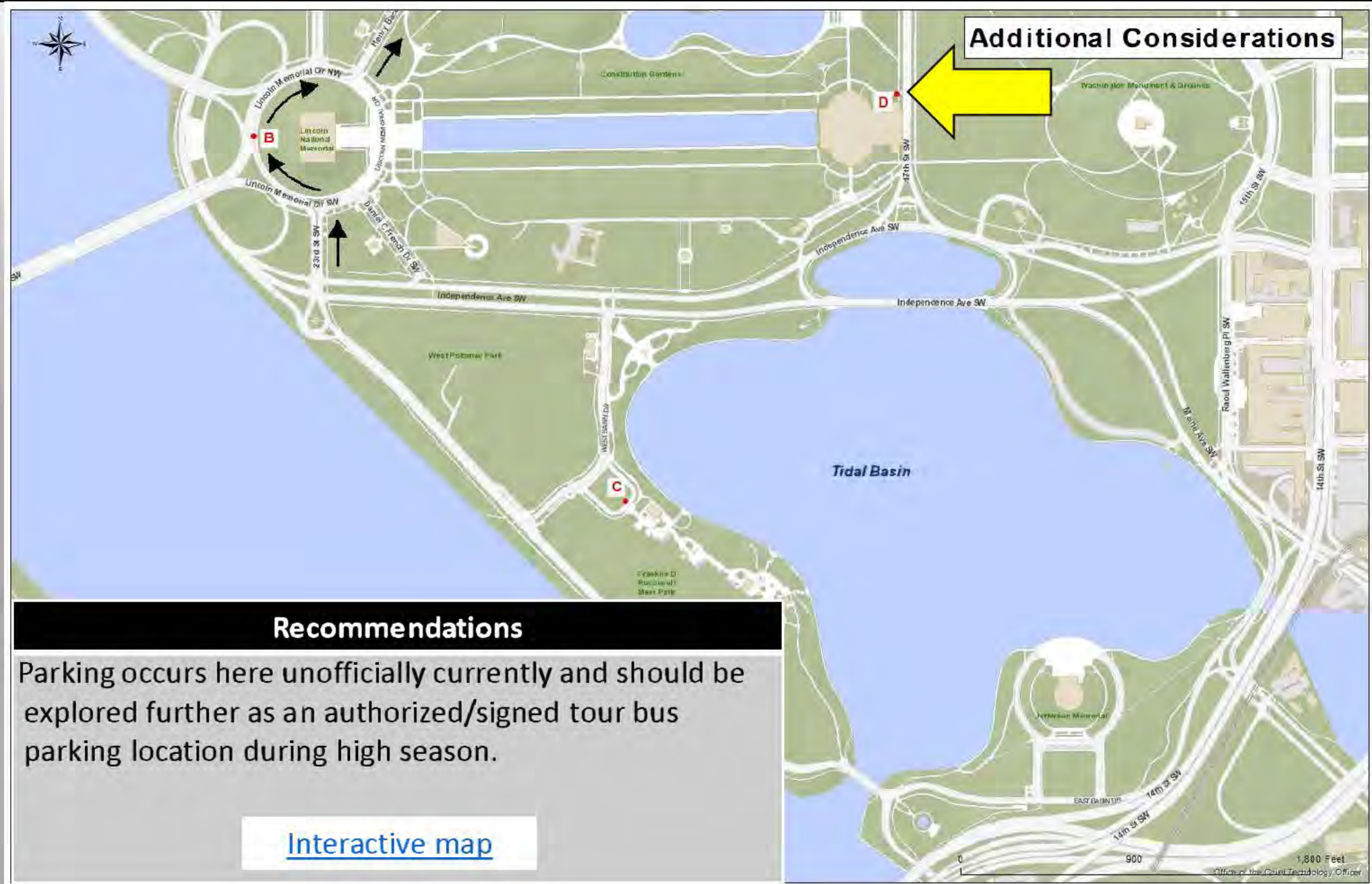
Recommendations

The FDR Memorial currently has a circular entry road with restricted access that should be explored further as part of an authorized/signed multi-modal solution.

[Interactive map](#)

FDR Memorial / Martin Luther King, Jr. Memorial, West Basin Drive

Site D



Additional Considerations

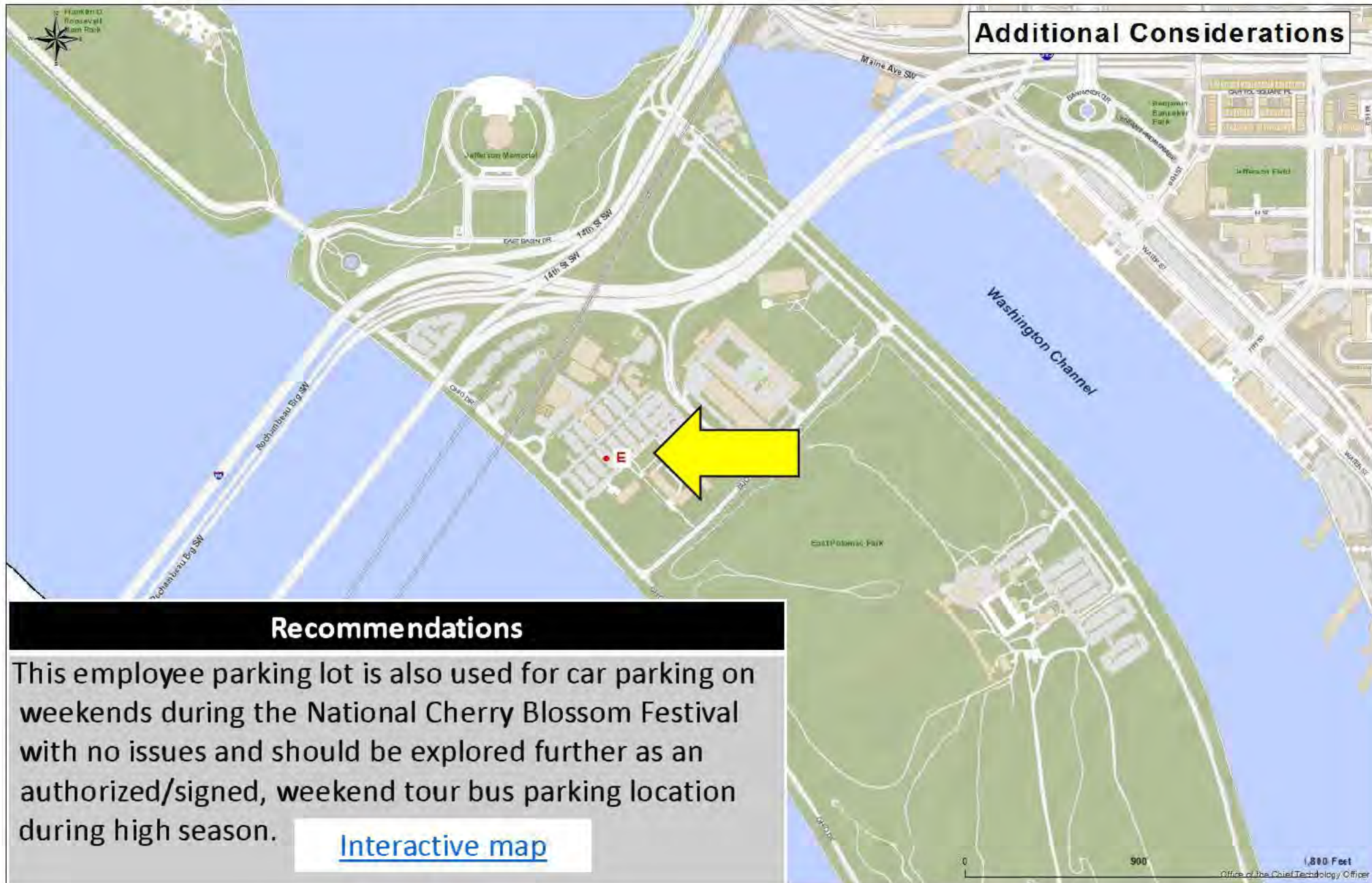
Recommendations

Parking occurs here unofficially currently and should be explored further as an authorized/signed tour bus parking location during high season.

[Interactive map](#)

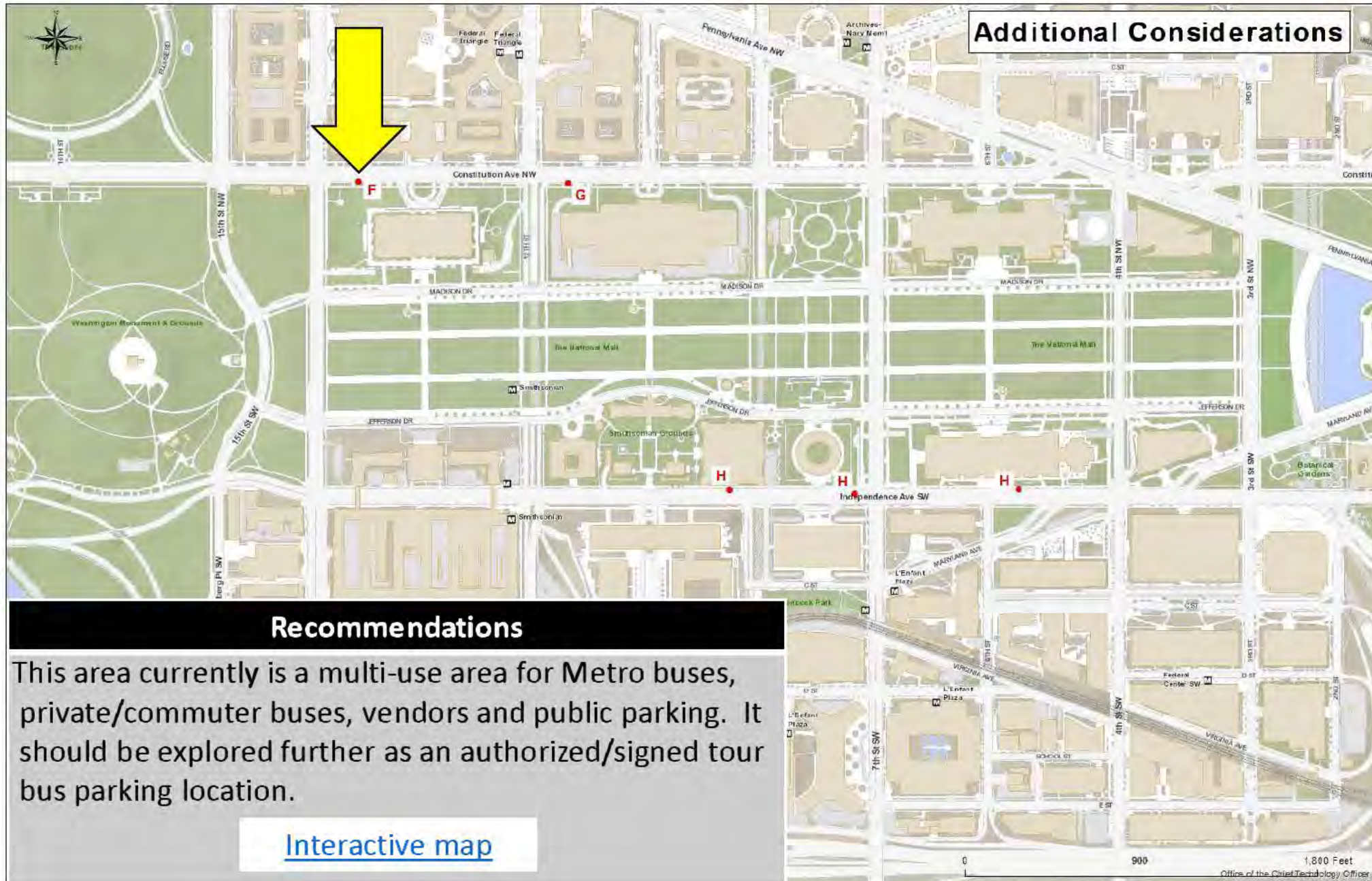
NPS National Capital Regional Office parking lot off of Ohio Drive SW

Site E



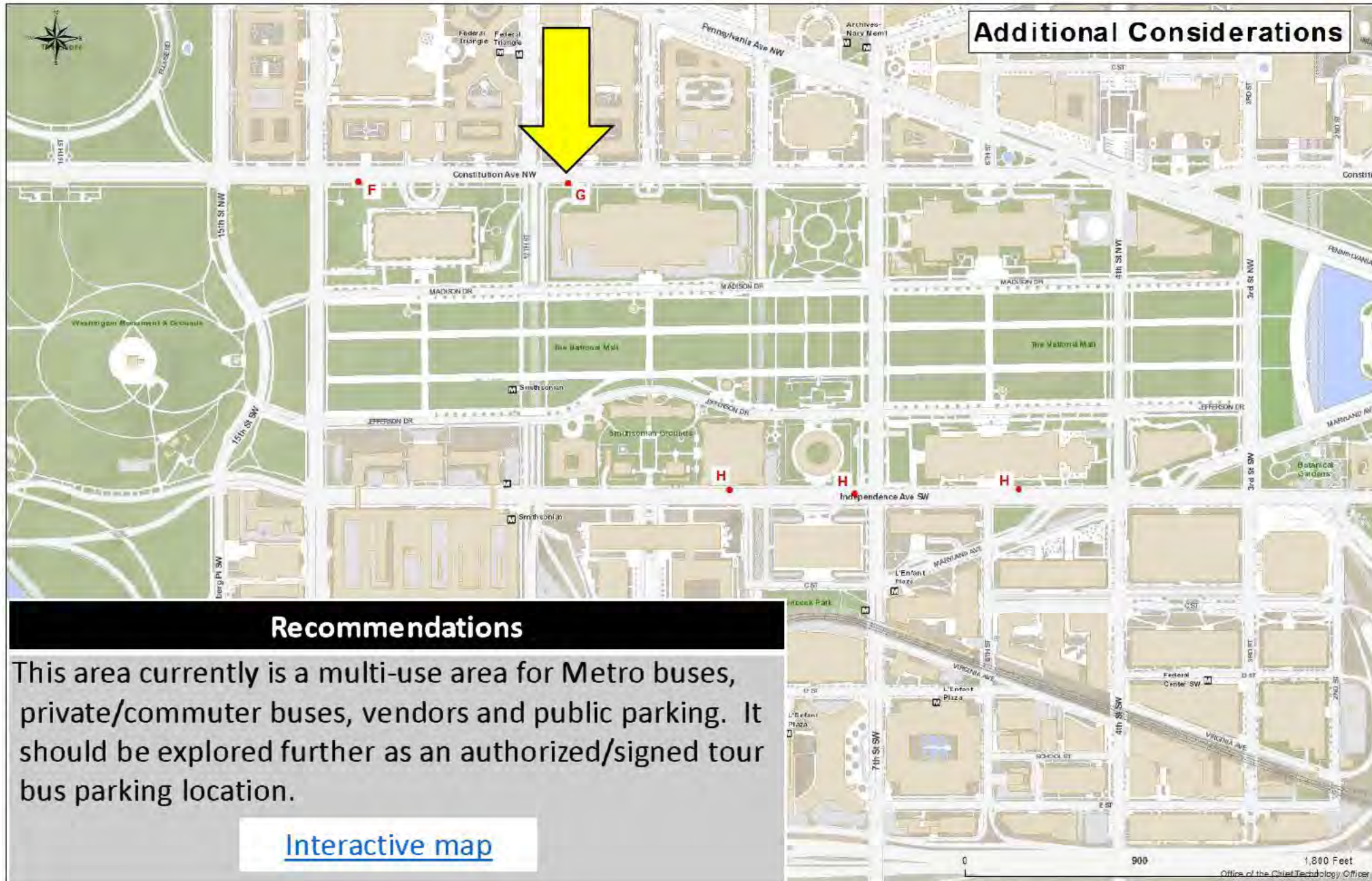
Constitution Avenue eastbound at 14th Street

Site F



Constitution Avenue eastbound at 12th Street

Site G



Additional Considerations

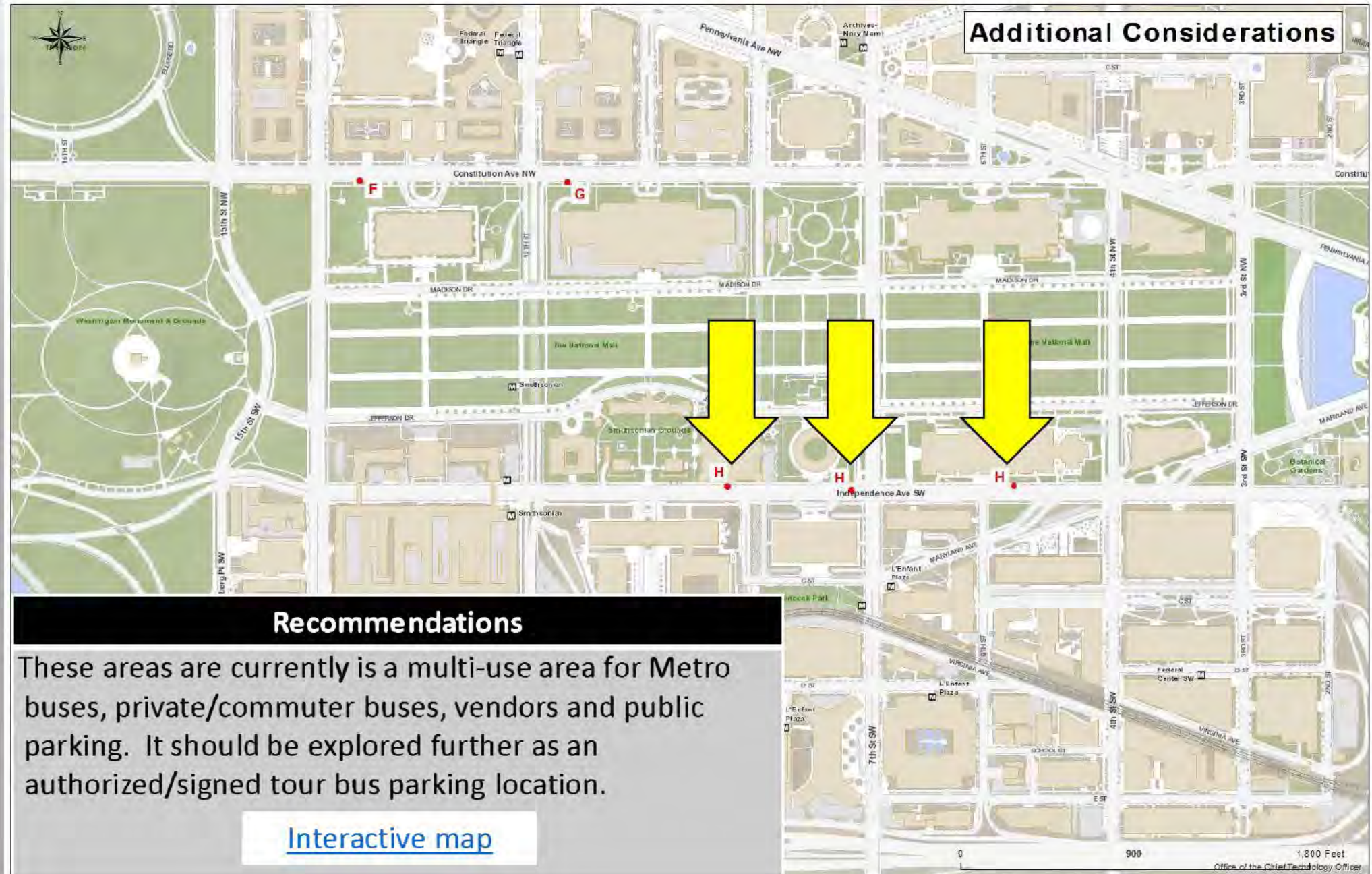
Recommendations

This area currently is a multi-use area for Metro buses, private/commuter buses, vendors and public parking. It should be explored further as an authorized/signed tour bus parking location.

[Interactive map](#)

Independence Ave SW at 4th Street

Site H



Additional Considerations

Recommendations

These areas are currently is a multi-use area for Metro buses, private/commuter buses, vendors and public parking. It should be explored further as an authorized/signed tour bus parking location.

[Interactive map](#)

GLOBAL RECOMMENDATIONS-CROWDSOURCING

Challenge

- Lack of real-time information and mobile reporting system for tour bus operators
- Lack of effective/efficient information delivery system

Recommendation

- Utilize web based technologies for information gathering and sharing
- Aligning user incentives to increase operational efficiency of tour operators

GLOBAL RECOMMENDATIONS-CULTURAL NEEDS

Challenge

- Foreign visitors tight schedules and short duration
- Cultural and language barriers

Recommendation

- Multi-language audio orientation program
- Multi-language interpretive brochures

GLOBAL RECOMMENDATIONS-SPECIALIZED NEEDS

Challenge

- Structural Constraints
(Loading/Unloading in non-ADA compliant locations)
- Weather related constraints for specialized needs

Recommendation

- Enhance driver adherence to vehicle rules and regs. when loading/unloading
- Enforcement agencies adjust policies to accommodate specialized needs
- Specialized needs to be addressed in information manual (as outlined above)

GLOBAL RECOMMENDATIONS-SCHOOL GROUPS

Challenge

- Large numbers (>60%) pre-teens or teens
- School groups have larger groups and longer itineraries (12+ hrs or more)

Recommendation

- Expanded restroom and water-filling stations to accommodate large school groups
- Expanded lighting around NAMA to accompany longer itineraries
- Expanded on-site recreational opportunities for school groups

GLOBAL RECOMMENDATIONS-HEALTH BENIFITS

Challenge

- Participants can walk up to 9 miles on full tour days
- Overheating or exhaustion leads to poor visitor experiences

Recommendation

- Reduce client risk when loading/unloading
- Reduce air pollutants by minimizing idle times
- Better amenities such as more water-filling stations, healthier food choices, additional shaded areas with seating, and improved pathways for encouraged walking
- Efficient trip planning

GLOBAL RECOMMENDATIONS-RESOURCES PROTECTION

Challenge

- Buses obstruct viewsheds or scenic views that enhance the visitor experience
- Stacked buses may idle longer than legally permitted

Recommendation

- Select appropriate loading/unloading areas that won't interfere with viewsheds
- Multi-space metered parking
- Additional parking to ease concentrated traffic congestion