Review of Access and Circulation on the National Mall in Washington, D.C.

George Mason School of Public Policy
Transportation Policy, Operations, and Logistics Practicum
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Team Members

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- Charles Bright – U.S. Coast Guard
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- David Duncan – Virginia DOT
- Holly Jones – Virginia DOT
- George Schaubhut – U.S. General Services Administration
Project Objective

- What is considered adequate access and circulation on the National Mall?
- Public Policy issues surrounding the National Mall
  - Define the term “accessibility”
  - Challenges of providing adequate accessibility
  - Multiple categories of users
  - Reviewing the existing transportation situation
  - Examining best practices of comparable sites
  - Conclusions regarding the current state of access
  - Recommendations to facilitate improved accessibility
Projects Sponsors

- National Mall Conservancy
  - Marjorie Share, Executive Director

- George Mason University
  School of Public Policy
  - Dr. Jonathan Gifford, TPOL
Acknowledgements

- Paul Demaio, MetroBike
- Ellen Jones, Downtown BID
- George Oberlander, NCPC (retired)
- Alexa Viets, Transportation Planner, NPS
- Michael Weil, NCPC
The National Mall

- 25 million visitors annually
- 440,000+ vehicles per day
- 30,000+ people on athletic fields and courts annually
- ~30 permitted events per day
Access

- Ease of movement to destinations in order to meet needs or wants
- Elements of accessibility plans
  - Focus on reaching specific destinations
  - Measure travel options and needs of specific groups
  - Strategies promote alternatives to driving
Mall Area

- U.S. Capitol
- Union Station
- White House
- Ellipse
- National Mall Memorial Parks
- Lincoln and Jefferson Memorials
- Tidal Basin
- East and West Potomac Park
National Mall
Relevant Legislation

- 1916 Organic Act
  - Created NPS
- General Authorities Act of 1970
  - Provides responsibilities for NPS
- Commemorative Works Act of 1986
  - Standards for placement of memorials and approval process
  - Amended 2003 – National Mall a “completed work of civic art”
  - Defines the Reserve, Area I, Area II
  - Establishes the National Capital Memorial Advisory Commission
- National Park Service Concessions Management Improvement Act
  - Directs Secretary of Interior to use concession contracts to provide accommodations and services to visitors
Mall Users

- Who are they?
- Visitor Needs
- Quantifying Visitors
### Regional Demographics

<table>
<thead>
<tr>
<th>Geographic Area</th>
<th>Population Estimates</th>
<th>Under 5</th>
<th>Over 65</th>
<th>Disabled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington, DC (2006)</td>
<td>581,530</td>
<td>34,980</td>
<td>71,455</td>
<td>74,795</td>
</tr>
<tr>
<td>Montgomery County, MD (2006)</td>
<td>932,131</td>
<td>65,884</td>
<td>110,787</td>
<td>83,600</td>
</tr>
<tr>
<td>Prince George's County, MD (2006)</td>
<td>841,315</td>
<td>60,466</td>
<td>72,637</td>
<td>78,970</td>
</tr>
<tr>
<td>Fairfax County, VA (2006)</td>
<td>1,010,443</td>
<td>73,356</td>
<td>92,662</td>
<td>81,134</td>
</tr>
<tr>
<td>City of Fairfax, VA (2000)</td>
<td>22,422</td>
<td>1,289</td>
<td>2,753</td>
<td>2,961</td>
</tr>
<tr>
<td>City of Falls Church, VA (2000)</td>
<td>10,799</td>
<td>571</td>
<td>1,262</td>
<td>1,171</td>
</tr>
<tr>
<td>Arlington County, VA (2006)</td>
<td>199,776</td>
<td>12,861</td>
<td>19,890</td>
<td>15,572</td>
</tr>
<tr>
<td>City of Alexandria, VA (2006)</td>
<td>136,974</td>
<td>10,534</td>
<td>14,844</td>
<td>12,301</td>
</tr>
</tbody>
</table>

**Total Regional Population** | 3,735,390 | 259,941 | 386,290 | 350,504 |

**Regional Average**          | 7.0%      | 10.3%   | 9.4%    |

**National Average**          | 7.3%      | 9.2%    | 15.1%   |

Source: US Census Bureau, 2006 American Community Survey; 2000 US Census
Employment Concentration
Modes of Travel

- **Getting to D.C.**
  - Car (40%)
  - Air (36%)
  - Train (11%)
  - Charter or tour buses (9%)
  - Other means (3%)

- **Getting around D.C.**
  - Walking (43%)
  - Metrorail (19%)
  - Automobile (16%)
Walking

- Dominant means of moving
- Visitors Survey reported 24% of visitors had an individual in their group who could only walk limited distances.
Mass Transit

- Metrorail – 14 stations within approximately 7 blocks of the Mall (8 within walking distance)
- Metrobus – approximately 100 routes serve the Mall area
- D.C. Circulator – 3 routes in close proximity to the Mall
Automobile

- 40% of visitors drive to the Mall
- Of those who drive, 53% continue to drive as their primary means of circulation.
- Mall area streets carry 440,000 vehicles on an average day.
Tour Services

- Tourmobile - $25 adults, $12 children
- Old Town Trolley - $32 adults, $16 children
- L’il Red Trolley - $52 adults, $32 children
- D.C. Ducks - $29 adults, $14 children
- Water Tours & Boats - $13 adults, $6 children
- Bicycle – NPS Free, Others $40 adults, $30 children
- Taxi – Maximum $18.90 within D.C.
Parking on the National Mall

- Jurisdictional challenges in collaboration between stakeholders (DDOT, NPS, Smithsonian, etc)

- Capacity Strain
  - Turnover problem in unmetered /metered spots
  - 400 spaces / ~100 other handicapped spaces
  - Private parking is $10-20 a day
Parking on the National Mall

- NCPC ideas never realized
  - Parking scheme for the National Mall and surrounding neighborhoods
  - Underground parking on the outskirts of the Mall
  - No implementation authority

- Security concerns
  - Eliminated a significant amount of the free parking
  - Underground parking closed 1980s after terrorist attacks
  - Jefferson Memorial: closed parking lot, temporary concrete barriers, U-shaped drive closed to traffic
  - Washington Monument: tour bus parking eliminated, reconfigured walkways
Security

- Security always a major concern on the National Mall
- Heighten awareness since September 11th
- Increased threats required focus on physical security
- Security changes influence accessibility
Security

- Security improvements ~ $132 million
- Challenge = security + accessibility + preservation
- Physical Security
  - Not deter from the original intent and design
  - Able to withstand potential attacks
  - Deterrence incorporated in design - planting beds, knee walls, and bollards
- Coordination and overlap
  - Design process
  - Day to day activities and large event planning
Security – Washington Monument
Security – Jefferson Memorial

- **BOLLARDS**: Bollards are limited to the front lawn areas and pathways wider than four feet. Custom bollards will be used on the site.
- **FINISHED WALL**: The wall located in the node areas made of granite and designed as a seat wall.
- **STACKED STONE WALL WITH CAP**: Rough stone walls with a rough stone cap in wall locations directly adjacent to the pedestrian path.
- **STACKED STONE WALL**: Rough stone walls with deep mortar joints in wall locations set off of the pedestrian path.
- **DROP OFF AREA**: Several combinations of security elements are being evaluated in the bus loading zone area.
- **RELOCATED OR REMOVED TREES**: Trees that are located directly in the path of the wall and its foundation will be relocated when possible.
- **AFFECTED TREES**: Trees that will require root pruning because the wall and its foundation may encroach on the root zone.
Security – July 4th
## Venue Comparison

<table>
<thead>
<tr>
<th></th>
<th>National Mall</th>
<th>Central Park New York</th>
<th>The Royal Parks London</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size</strong></td>
<td>600 acres</td>
<td>843 acres</td>
<td>5500 acres</td>
</tr>
<tr>
<td><strong>Land</strong></td>
<td>Federal Government</td>
<td>New York City Parks Development</td>
<td>The Crown</td>
</tr>
<tr>
<td><strong>Management</strong></td>
<td>National Park Service</td>
<td>Central Park Conservancy</td>
<td>The Royal Parks Agency</td>
</tr>
<tr>
<td><strong>Visitors</strong></td>
<td>26 million</td>
<td>25–30 million</td>
<td>60–65 million</td>
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## Venue Comparison

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<tr>
<td><strong>Signage</strong></td>
<td>Different entities and signs</td>
<td>Consistent maps and signs</td>
<td>Realistic depictions</td>
</tr>
<tr>
<td><strong>Security</strong></td>
<td>Park Police, Metropolitan Police, Capital Police, Secret Service</td>
<td>New York City Police Precinct</td>
<td>Metropolitan Police</td>
</tr>
<tr>
<td><strong>Financing</strong></td>
<td>Federal, District, and Private</td>
<td>Central Park Conservancy</td>
<td>Central Gov’t and Park income</td>
</tr>
<tr>
<td><strong>Events</strong></td>
<td>Demonstrations, annual events, concerts, and festivals</td>
<td>Many recurring events</td>
<td>~70 ceremonials and commemorative events each year</td>
</tr>
</tbody>
</table>
Findings and Recommendations

- Access and Circulation
- Organization and Coordination
- Parking
- Signage and Informational Resources
Finding #1

- **Access and Circulation**
  - Public transit access to the eastern Mall area is adequate while circulation was found to be insufficient.
  - Western portion of the Mall is neither accessible nor is it easy to circulate around or through.
Recommendation #1

- Expand D.C. Circulator hours of operation on the eastern half of the Mall.
- Enforce loading/unloading no parking zones to improve Circulator efficiency.
- Implement a Memorial Shuttle Service to increase circulation on the western half of the Mall.
Recommendation #1

- D.C. Circulator seven day schedule
- Base on seasonality of visits / alter operational times on passenger demand
- Coordinate movement between areas
  - Shuttle service for moving visitors around the Memorial area
  - Service from Metro stations to the Mall
  - Transfer capabilities (SmartTrip, credit card)
Recommendation #1

- Memorial Route 1 – George Washington Parkway
Recommendation #1

- Memorial Route 2 – Ohio Drive
Recommendation #1

- Memorial and Downtown Accessibility Transit Bus
Recommendation #1

- Metro to Mall Accessibility Only Route
Finding #2

- Access and Circulation
  - Bike riding remains underutilized as a means of accessing and circulating the National Mall.
Recommendation #2

- Implement a bike-share program on the National Mall.
Recommendation #2

- Touring and sightseeing
- Key locations throughout the Mall
- Automated, self-service bike stations
- Supports local initiatives
- Financing through concessionary fees, private advertising and grants
- Lower transportation costs, reduce congestion, environmentally friendly
Finding #3

- Access and Circulation
  - Twenty-five percent of visitors to the National Mall had an individual in the group that could only walk a limited distance.
Recommendation #3

- Provide programs for circulation and movement around the Mall to assist people with disabilities.
Recommendation #3

- Companion Cycling
  - Non-profit organization run by volunteers
  - Small charge for membership and individual rides

- Liberty Drives
  - Volunteers supported by community donations
  - Electric buggies that seat up to five passengers

- The Royal Parks in London
Finding #4

- Access and Circulation
  - Access to the mall from the greater Washington region via public transit on weekends is limited due to the commuter-oriented scheduling of current services offered by MARC and VRE.
Recommendation #4

- Expand operating hours for VRE and MARC to provide weekend service during peak periods to Union Station.
Recommendation #4

- Increase visitor access during peak tourist season
- Expand service for Fredericksburg, surrounding Virginia suburbs, West Virginia and Maryland visitors
- VRE and MARC include the potential expansion of weekend service
- Weekend service dependent on right-of-way, train dispatching operational agreements, and increased funding
Finding #5

- Organization and Coordination
  - Lack of collaboration between the general public and public organizations.
Recommendation #5

- Expand the planning and development role of the general public and public organizations for the National Mall.
- Create an advising committee or working group that seeks public input on projects that may affect the Mall and allows for open and free discussion with federal and state agencies prior to a formal implementation process.
Recommendation #5

- Informal committee
- Lower administrative or “deck plate” level
- Gather information from interested parties and advise in the planning and development of Mall projects
- Procedural oversight in a public non-partisan agency such as the National Mall Conservancy
Finding #6

- Parking
  - Parking is inadequate and inconsistent at the National Mall.
Recommendation #6

- Create consistency for metered/permit parking and increase enforcement measures for parking on the National Mall to promote turnover and gain more curbside capacity.
- Conduct feasibility studies to evaluate ideas for parking solutions.
Recommendation #6

- Consistent metering to increase parking turnover, generate revenue
- Improve parking enforcement
- Additional ideas
  - Revisit shuttle from RFK Stadium to the National Mall
  - Municipal parking authority for D.C.
  - Valet program for underground parking at museums
- Feasibility Study
Finding #7

- Parking
  - Parking is a challenge for tour buses along the National Mall.
Recommendation #7

- Create parking spaces or locations for tour buses.
Recommendation #7

- Make East Potomac Park available to tour buses
- Replace security blockades with checkpoints
- Incorporate real time travel information for tour bus operators
Finding #8

- Signage and Information Resources
  - Signs and Maps displayed for visitors are inconsistent and do not provide enough information to help navigate visitors to specific destinations.
Recommendation #8

- Create universal signs and maps to decrease visitor confusion and increase coordination among the entities involved in oversight of the Mall.
Recommendation #8

- Additional information and clarification
  - Hours of operation
  - Handicap accessible locations
- Standardized system
  - Include locations for food, restrooms, parking, etc
  - Available as pamphlets around the Mall
- Wayfinding system The Royal Parks, London
Finding #9

- Signage and Information Resources
  - There is limited use of technology to either reduce visitor transportation costs or improve circulation and accessibility on the National Mall.
Recommendation #9

- Provide users with podcasts, location based services, and cross-vehicle transfers that allow individuals to move about the Mall freely and inexpensively.
Recommendation #9

- Podcasts
  - Allow for guided tours or introductory commentary
- Location-based services
  - Wayfinders for cell phone, global positioning system, or digital mapping technology
- Cross-vehicle transfers
  - Move about via a single payment method