## Harry S Truman Building Perimeter Security Improvements

## DRAFT ENVIRONMENTAL ASSESSMENT

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In cooperation with the General Services Administration and the National Capital Planning Commission

In consultation with the National Academy of Sciences and the American Pharmacists Association

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## Table of Contents

Project Abstract ..... 1
1.0 Purpose and Need ..... 2
2.0 Description of Alternatives ..... 4
2.1 Build Alternative ..... 5
2.2 No Build Alternative ..... 19
3.0 Affected Environment and Environmental Consequences ..... 23
3.1 Infrastructure and Community Services ..... 24
3.1.1 Transportation ..... 24
3.1.2 Public Safety ..... 44
3.1.3 Utilities ..... 46
3.1.4 Community Facilities ..... 48
$3.2 \quad$ Cultural Resources ..... 48
3.2.1 Historic Resources ..... 49
3.2.2 Archeological Resources ..... 72
3.3 Socioeconomic Resources ..... 80
3.3.1 On-Site Land Use ..... 80
3.3.1.1 Local and Regional Planning Context ..... 80
3.3.1.2 Adjacent Land Uses and Ownership ..... 83
3.3.1.3 Population ..... 88
3.3.1.4 Economy \& Employment ..... 89
3.3.2 Visual Resources ..... 90
3.3.3 Noise ..... 94
3.4 Solid and Hazardous Waste ..... 95
3.4.1 Solid Waste ..... 95
3.4.2 Hazardous Waste ..... 95
3.5 Natural Resources ..... 96
3.5.1 Topography ..... 96
3.5.2 Geology ..... 97
3.5.3 Soils ..... 98
3.5.4 Wetlands ..... 98
3.5.5 Floodplain ..... 99
3.5.6 Stormwater and Groundwater ..... 99
3.5.7 Air Quality ..... 101
3.6 Biological Resources ..... 106
3.6.1 Vegetation ..... 106
3.6.2 Wildlife ..... 111
3.6.3 Threatened and Endangered Species ..... 111
3.6.4 Environmental Justice ..... 112
4.0 Cumulative Impacts ..... 117
5.0 List of Preparers ..... 120
6.0 References ..... 121

## List of Tables

Table 1: Level of Service Summary 40

Table 2: $\quad$ Archeological Investigations within One Mile of Project Area 75
Table 3: $\quad$ Types of Businesses and Number of Employees in Tract 62.289
Table 4: $\quad \begin{array}{ll}\text { National Ambient Air Quality Standards and Washington, DC } \\ & \text { Monitoring Data }\end{array} 102$
Table 5: $\quad$ De Minimis Threshold in the Washington DC Area (tons per year) 105
Table 6: Environmental and Socioeconomic Consequences 113

## List of Figures

Figure 1: Proposed Concept Plan / Build Alternative 7
Figure 2: Phasing Plan 9
Figure 3: Existing Conditions / No Build Alternative 21
Figure 4: Transportation Evaluation Areas 25
Figure 5: Preliminary 22 ${ }^{\text {nd }}$ Street Urban Design Concept 35
Figure 6: Modified Future Forecasts 36
Figure 7: Revised 22 ${ }^{\text {nd }}$ Street Urban Design Concept 37
Figure 8: Individually Listed Historic Properties 51
Figure 9: Historic District Boundaries and Contributing Elements 55
$\begin{array}{lll}\text { Figure 10: } & \begin{array}{l}\text { Plan of the City of Washington, D.C. National Register } \\ \text { Documentation Contributing Streets, Reservations, } \\ \text { Appropriations and Vistas }\end{array} & 59\end{array}$
Figure 11: Area of Effects and Contributing Resources 63
Figure 12: L'Enfant Cartway 67
Figure 13: Archeological Sites 74
Figure 14: Topography 76
Figure 15: Historic Vicinity Map 77
Figure 16: 1928 Sanborn Map 78
Figure 17: Vicinity Map 85
$\begin{array}{ll}\text { Figure 18: } & 23^{\text {rd }} \text { Street Viewshed Analysis } \\ 109\end{array}$

## Appendices

Appendix A Agency Comments and Responses Table
Environmental Assessment Scoping Letter and List of Recipients
Section 106 Scoping Letters
Scoping Responses and Correspondence

## Appendix B Department of State Transportation Management Plan <br> Harry S. Truman Building Perimeter Security Improvements <br> Environmental Assessment Transportation Impact Study <br> Harry S. Truman Building Environmental Assessment Addendum $22^{\text {nd }}$ Street

$\begin{array}{ll}\text { Appendix C } & \text { Draft Programmatic Agreement } \\ \text { Appendix D } & \text { Corner Marker Partial Plan and Rendering } \\ & \text { Partial Plans and Exterior Elevations for the Proposed Perimeter } \\ & \text { Security Elements at NAS }\end{array}$

## Acronyms

| ACHP | Advisory Council on Historic Preservation |
| :--- | :--- |
| ANC | Advisory Neighborhood Commission |
| APEs | Areas of Potential Effect |
| APhA | American Pharmacists Association |
| BMPs | best management practices |
| CAA | Clean Air Act |
| CFA | Commission of Fine Arts |
| CFR | Code of Federal Regulations |
| CO | carbon monoxide |
| CSD | Context Sensitive Design |
| dbh | diameter breast height |
| DC | District of Columbia |
| DCMR | District of Columbia Municipal Regulations |
| DCSHPO | District of Columbia State Historic Preservation Office |
| DDOT | District Department of Transportation |
| DOS | Department of State |
| EA | Environmental Assessment |
| EMS | Emergency Medical Service |
| EO | Executive Order |
| EPA | The U.S. Environmental Protection Agency |
| ESA | Endangered Species Act |
| FHBM | Flood Hazard Boundary Maps |
| FHWA | Federal Highway Administration |
| FIRM | Flood Insurance Rate Maps |
| GSA | General Service Administration |
| GSF | Gross Square Feet |
| HTBPSP | Harry S Truman Building Perimeter Security Improvement Plan |
| LOS | Level of Service |
| MCLs | maximum contaminant levels |
| MWCOG | Metropolitan Washington Council of Governments |
| NAAQS | National Ambient Air Quality Standards |
| NAS | National Academy of Sciences |
| NCPC | National Capital Planning Commission |
| NCUDSP | National Capital Urban Design Security Plan |
| NEPA | National Environmental Policy Act |
| NFIP | National Flood Insurance Program |
| NOx | nitrogen dioxide |
| NPS | National Park Service |
| N-S | North to South |
| O | ozone |
| PA | Programmatic Agreement |
| Pb | particulate matter |
| PM |  |
| ppm |  |


| (the) Protocol | Transportation Project - Level Carbon Monoxide Protocol |
| :--- | :--- |
| SF | square feet |
| SHPO | State Historic Preservation Office |
| SIP | State Implementation Plan |
| SO $_{2}$ | sulfur dioxide |
| SP-2 | Special Permit zoning |
| TESS | Threatened and Endangered Species System |
| TCP | Traffic Control Plan |
| TSP | Total Suspended Particulates |
| USFWS | U.S. Fish and Wildlife Service |
| UST | Underground Storage Tank |
| VOC | volatile organic compounds |

## PROJECT ABSTRACT

In response to increased security concerns for government agencies, Department of State (DoS) officials identified the need for a strategic security improvement plan in 2002. The Harry S Truman Building Perimeter Security Improvement Plan (HTBPSP), completed in 2004, recommended a number of improvements.

The specific security designs were derived from the results of the Blast Assessment Study for the U.S. Department of State, Harry S Truman Building, 2004. The Security Improvements were guided by recommendations from the National Capital Planning Commission's National Capital Urban Design and Security Plan, October 2002 (NCPC, 2002). Both of these documents addressed the need for greater stand-off distances and improved protective barriers, visitor screening processes to be taken outside the building, the removal of some street parking, and a reconfiguration of the E Street Expressway. To determine additional needs for the building, the DoS conducted traffic studies and gathered data to process the impact of street restrictions on the area.

The DoS, after compiling a basic design concept, coordinated with neighbors, community groups, and government agencies for review. Among the agencies consulted were the National Capital Planning Commission (NCPC), the Commission of Fine Arts (CFA), the Advisory Council on Historic Preservation (ACHP), the Advisory Neighborhood Commission (ANC) and the State Historic Preservation Office (SHPO). Neighbors included the National Academy of Sciences (NAS), the Board of Governors of the Federal Reserve System, the National Park Service (NPS), and the American Pharmacists Association (APhA).

The Perimeter Security Improvements for the Harry S Truman Building must comply with current federal regulations including of the National Environmental Policy Act of 1969 and Section 106 of the National Historic Preservation Act to ensure that any environmental consequences are addressed. In compliance with these regulations, DoS has prepared this Environmental Assessment (EA) to analyze the potential environmental impacts associated with the proposed action. The document analyzes impacts on natural resources (including topography, geology, soils, water resources and air resources), biological resources (vegetation and wildlife), socioeconomic resources (land use, visual resources, and noise), infrastructure and community services (utilities, transportation and parking, public and community facilities), cultural resources (architectural and historic resources) and environmental justice.

### 1.0 PURPOSE AND NEED

The Harry S Truman Building, located between $21^{\text {st }}$ and $23^{\text {rd }}$ Streets and C and D Streets Northwest, is the headquarters for the United States Department of State. Originally completed in 1941, the 600,000 gross square foot Marshall Wing on the northeast corner of the site served as the headquarters of the War Department during World War II. When this War Department moved to its current home in the Pentagon in 1947, the State Department moved into the building. The addition of the Harry S Truman Building wing was completed in 1961 and created an additional $1,900,000$ gross square feet.

In response to increased security concerns, Department of State officials called for the development of a strategic plan in 2002 to prepare the building for the security challenges it faces in the $21^{\text {st }}$ century. Completed in 2004, the Harry S Truman Building Perimeter Security Improvement Plan recommended a number of improvements, including: the relocation of curbs to maximize building setback distance from the street, the placement of walls, fences and bollards to limit the potential for ramming of the building by vehicles, construction of new security pavilions and guard booth, re-alignment of D Street to control vehicular access, elimination of street-side parking, and preservation of the distinct character of the building and the surrounding area. Many of these recommendations presented in the HTBPSP took into consideration, and originated from, the designs presented in the National Capital Urban Design and Security Plan, prepared by NCPC (NCPC, 2002).

Before construction of these measures can occur, DoS must comply with current federal regulations including the National Environmental Policy Act of 1969 and Section 106 of the National Historic Preservation Act to take into consideration any environmental consequences of the proposed actions. In compliance with these regulations, DoS has prepared the EA to analyze the potential environmental impacts associated with the proposed action.

The purpose of this EA is to analyze alternatives for implementing building security measures for the DoS Harry S Truman Building. As a Level 5 Priority building, comparable to the Pentagon and the White House, the Harry S Truman Building requires an increased level of protection. The implementation of the HTBPSP is needed to protect DoS employees, visitors, functions, and property from potential threats generated by unauthorized access to the building by pedestrians or vehicles which could result in extensive structural damage, collapse, or loss of life.

Per the Presidential Succession Law of 1947, signed by President Harry S Truman, U.S. Code, Title 3, Chapter 1, Section 19, "Vacancy in offices of both President and Vice President; officers eligible to act", the Secretary of State is $4^{\text {th }}$ in line to assume the presidency, after the Vice President of the United States, the Speaker of the House, and the President pro Tempore of the Senate.

The Harry S Truman Building, as the headquarters of the Department of State, contains the Office of the Secretary of State, and a large number of essential employees, vital to the nation's foreign affairs mission, with certain national security responsibilities.

The Harry S Truman Building was designated as a Level Five security facility by the Department of Justice, United States Marshals Service, in its June 28, 1995, Vulnerability Assessment of Federal Facilities report to the President of the United States. President William J. Clinton subsequently issued a "Memorandum for Executive Departments and Agencies" directing them to immediately begin upgrading their Federal facilities to the minimum recommended security standards of the study.

The assessment study reported that "...each federal facility would be brought up to the minimum security standards proposed for its security level". It recommended 52 minimum security standards in several categories. The first category was "perimeter security" with parking and physical barriers as two of its security elements. The second category was "entry security" with access control and entrances/exits as two of its security elements. The third category was "interior security", and the forth was "security planning" with construction/renovation as one of its security elements. The assessment further defined the levels of facility security, from one to five. For a level five facility, it stated: "The missions of Level V facilities require that agencies secure the site according to their own requirements. The degree to which these requirements dictate security features in excess of those for a Level IV facility would be set by the individual agency".

The Department of State's Harry S Truman Building Perimeter Security Concept Design, October 2004 was developed using the Department of Justice, Presidential directed, recommended security standards, along with the Department of State determined security features necessary to control facility and adjacent parking, extend the physical perimeter with barriers, and control access to the extended site.

In addition to the physical protection provided, these security measures must further protect the civic character of the building and its perimeter by providing a pleasing appearance that is consistent with the aesthetics and character of the building and the surrounding neighborhood. Current security measures, such as temporary precast planters, detract from the historic beauty of the building, and disrupt pedestrian and vehicular circulation. The purpose of the proposed actions presented in this EA are to implement the required perimeter security for the DoS Harry S Truman Building while creating a streetscape design that enhances the quality of this unique public institution.

Due to the time that has passed since the initial Concept Submission in 2004, some design elements have been modified as thinking about the design has evolved. Where any significant discrepancies exist between the 2004 concept and 2010 designs, these changes are noted and explained in accompanying footnotes.

### 2.0 DESCRIPTION OF ALTERNATIVES*

Multiple alternatives were considered for the Harry S Truman Building Perimeter Security Improvements during the concept plan development process. One alternative involved raising and extending the canopies to fit the new security program. It was found that the existing canopies were too low to meet air conditioning requirements and would be out of proportion with the rest of the building. This alternative was excluded. A second alternative explored enclosed canopies, but the functions of the new program would not fit in the space within the canopies, forcing some security actions inside the lobby; this alternative was, therefore, also eliminated from further consideration. Retaining security screening solely in the interior space was explored, but it was felt that this option would allow someone wanting to do harm to enter the building before going through a security check. The security barrier design was reviewed and the earlier solid wall plan on $23^{\text {rd }}$ Street was changed to a more aesthetic option of an open- and closedwall design. An option to restrict traffic along $21^{\text {st }}$ Street was explored, but a traffic study cited major impacts on traffic flow, so the option was excluded. The plan was, therefore, fine-tuned during concept plan review with agencies and key stakeholders. Therefore, the Environmental Assessment evaluates only two alternatives: the Build and No Build Alternatives.

Additionally, within the Build Alternative, multiple alternatives were considered for the operational reconfiguration of $22^{\text {nd }}$ Street NW. One of the alternatives explored the provision of separate taxi drop-off and pick-up areas; the former of which would be located at the intersection of C and $22^{\text {nd }}$ Streets, and the latter of which would be located at the mid-block of $22^{\text {nd }}$ Street. Both taxi areas would have provided designated turnaround areas defined by a special pavement treatment; however, this treatment did not meet the District Department of Transportation (DDOT) standards and maintenance requirements. Additionally, the location of the taxi drop-off area was too close to the NAS parking garage exit and would increase rush-hour congestion in the area. A second alternative explored the extension of the traffic median north to the proposed taxi turnaround area at C Street, in an effort to prevent double parking on the east side of $22^{\text {nd }}$ Street; however, extending the median would inhibit truck movements at the APhA loading dock. The current design plan for $22^{\text {nd }}$ Street is the result of additional concept plan reviews with agencies and key stakeholders, including NAS, APhA, DDOT, and NCPC.

As noted above, the Department of State explored several alternative approaches to the security improvements at the Harry S Truman Building and determined that the Build Alternative meets the purpose and need of the proposed action. This Environmental Assessment analyzes in detail both of the alternatives.

### 2.1 BUILD ALTERNATIVE

The Build Alternative would implement the perimeter security measures proposed in the Harry S Truman Building Perimeter Security Improvements, including the construction of a security pavilion at each of the five entrances, additional sidewalks and protective fencing, a redesigned truck inspection area, realignment of D Street to increase building setback, construction of new guard booths, significant landscaping and street furniture enhancements, and retention of the street closings at C Street as it intersects with $23^{\text {rd }}$, $22^{\text {nd }}$ and $21^{\text {st }}$ Streets NW.

The proposed action envisions the following primary alterations to the building and site:

- A system of related design elements to improve perimeter security at the site's edges. The standard structural member of the perimeter barrier is a bollard, which would be clad as individual stainless steel posts, stainless steel fencing, granite walls, or a combination thereof to vary the articulation of the perimeter in accordance with NCPC guidelines. ${ }^{1}$
- Guard booths of consistent design to replace the existing temporary booths on C Street and to be added at other locations.
- Alteration of curbs and traffic patterns in some locations to separate traffic types and allow for vehicle inspection.
- Replacement of the Harry S Truman Building's original entrance canopies in order to remove security screening from the building's interior.
- Two small barriers (either walls or bollards) on the property of the National Academy of Sciences.

This alternative constitutes a 17 percent increase in pervious (permeable) surface, from $69,326 \mathrm{SF}$ to $81,411 \mathrm{SF}$ over a total of $721,353 \mathrm{SF}$ ( 16.6 acres). A total of 179 new trees would be planted as part of the green streetscape design along C Street, 21st Street, 23rd Street and Virginia Avenue, and in park-like groupings at D Street, providing increased vegetative cover. Of the existing trees on the project site, a total of 26 would be removed and 51 would be retained.

The individual perimeter security measures that make up the proposed action are described on the following pages, and can be referenced in Figure 1. Implementation of the Build Alternative is scheduled to occur in five phases, as shown in Figure 2.

## *A summary of impacts of the alternatives is provided in Table 6

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Figure 2 - Phasing Plan for the Build Alternative CONSTITUTION AVENUE

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## PHASE 1

## D Street at $23^{\text {rd }}$ Street

## Realignment of D Street

At the intersection with $23^{\text {rd }}$ Street, D Street would shift northward to provide additional security by moving the road and security checkpoint further away from the building. D Street would then curve back to south, approximately 70 feet to the east, until it returns to the existing D Street alignment.

## Addition of New Trees and Landscaping

Trees would be planted at the corner of $23^{\text {rd }}$ Street and D Street to improve the aesthetic quality of the security improvements in place and improve the pedestrian environment.

## Construction of a 3 Person Guard Booth

A 3 person guard booth would be built along the north curb of D Street. The guard booth would replace the existing security measures in place and control access to D Street.

## Development of Vehicular Inspection Area

A vehicular inspection area would be formed by placing security walls on the south side of the curb, with a guard booth located behind the north curb, and hydraulic barriers at the inter side of the booths. These measures would provide a security check-point where a vehicle may be contained while it is undergoing security clearance and prevent unauthorized access to D Street.

## Addition of Hydraulic Barrier

A hydraulic barrier would be installed adjacent to the guard booth on the interior of the vehicular inspection area to control the flow of incoming traffic.

## PHASE 2

$\underline{23^{r d} \text { Street at C Street }}$

## Placement of a Corner Marker

A corner marker integrated with bollards and knee walls would be located at the backside of the sidewalks at the intersection of C Street and $23^{\text {rd }}$ Street.

## Replacement of Hydraulic Barriers

Hydraulic barriers would be installed in the street to control the flow of incoming and out going traffic. The barrier would be placed behind the guard booth far enough to allow unauthorized vehicles to turn around and leave the area.

## Construction of a 3 Person Guard Booth

A 3 person guard booth would be built in between the two curbs, 16 feet from the curb on each side. The guard booth would replace the existing security measures in place and would control access to C Street.

## Addition of Trees, Plantings, and Lighting

Trees would be planted at the corner of $23^{\text {rd }}$ and C Streets to improve the aesthetic quality of the security improvements in place and improve the pedestrian environment. Lighting would be upgraded in accordance with District of Columbia lighting standards.

## $23^{\text {rd }}$ Street between C and D Streets

## Construction of Bollards, Knee Walls, and Railings along $23{ }^{\text {rd }}$ Street

Security bollards, knee walls, and railings ${ }^{2}$ would be installed along the curb to prevent unauthorized vehicular access to the sidewalk. These railings would replace the existing temporary precast planters.

## Construction of Security Pavilion

A 6,384 square feet ( 114 feet N-S (x) 56 Feet W) security pavilion would be constructed to replace the existing canopy at the Harry S Truman Building entrance on $23^{\text {rd }}$ Street. The security pavilion would serve as the main entrance for tour groups and the president when he comes to the DoS. The security pavilion would provide additional perimeter security by moving security functions currently completed within the interior of the building (i.e. employee entry, visitor check-in and screening) to the exterior of the building, thereby reducing the level of damage to the structural integrity of the building in the event of an attack, increasing safety and security for all building occupants, and preserving the historic interior of the building. Additionally, removing the temporary security screening facilities and constructing new, permanent facilities would restore and enhance the original architecture of the building.

Addition of Knee Walls and Bollards in front of the $\mathbf{2 3}{ }^{\text {rd }}$ Street Entrance Pavilion Bollards and knee walls would be installed along the curb at the $23^{\text {rd }}$ Street entrance to replace the existing temporary precast planters.

## Addition of Trees, Plantings and Lighting

Trees would be planted along the street to improve the aesthetic quality of the security improvements in place and improve the pedestrian environment. Lighting would be upgraded in accordance with District of Columbia lighting standards.

## Relocation of Curb by 10 feet Westward

The curb along $23^{\text {rd }}$ Street would be extended 10 feet westward to maximize building setback distance from the street. The new alignment would match the alignment of $23^{\text {rd }}$ Street north of C Street, where the curb currently shifts westward to make way for a dropoff area.

[^1]
## PHASE 3

## $21^{\text {st }}$ Street between C and D Streets NW

## Relocation of curb 12 feet on Western Side of the Street

The curb along the west side of the street would be relocated east 12 feet from the existing curb to increase the building setback distance from the road.

## Relocation of Curb $\mathbf{1 2}$ feet on Eastern Side of the Street and creation of Truck Inspection Area

The curb along the eastern side of $21^{\text {st }}$ Street would be relocated west 12 feet from the existing curb. An additional 6 feet would be taken from the existing sidewalk on the east side of the street in order to create the truck inspection lay-by. These changes would maintain two lanes of traffic, which would continue to flow uninterrupted, as well as a 6foot median separating traffic from the truck inspection area.

## Construction of a Three-Person Guard Booth at the Truck Inspection Area

A three-person guard booth would be constructed at the lay-by truck inspection area to inspect delivery vehicles for the DoS Harry S Truman Building. This action creates a permanent replacement for the temporary guard booths installed in October 2004.

## Construction of a Two-Person Guard Booth at the Parking and Loading Entrance

 A two-person guard booth would be constructed to replace the temporary guard booth in place at the parking garage entrance on $21^{\text {st }}$ Street.
## Construction of Security Pavilion at Marshall Wing Entrance

A 9,672 square foot ( 156 feet N-S (x) 62 feet E) security pavilion would be constructed to replace the existing canopy at the Marshall Wing entrance on 21 st Street. Temporary screening facilities have been constructed at four entrances to the Department of State, including the Marshall Wing entry on $21^{\text {st }}$ Street, the Jogger's entry on $21^{\text {st }}$ Street, the Harry S Truman Building main entry on C Street, and the Harry S Truman entry on $23^{\text {rd }}$ Street. Visitors can be given badges at the C Street and $21^{\text {st }}$ Street entrances, as well as within the building lobby. The security pavilions provide additional perimeter security by moving security functions currently completed within the interior of the building (i.e. employee entry, visitor check-in and screening) to the exterior of the building, thereby reducing the level of damage to the structural integrity of the building in the event of an attack, increasing safety and security for all building occupants, and preserving the historic interior of the building. Additionally, removing the temporary security screening facilities and constructing new, permanent facilities would restore and enhance the original architecture of the building.

## Construction of Security Bollards and Knee Walls at Marshall Wing Entrance

 Bollards and knee walls, integrated with benches and flagpole bases would be installed along the curb at the Marshall Wing entrance to replace the existing temporary precast planters protecting the entrance
## Construction of Security Pavilion at the Harry S Truman Building Entrance

A 4,895 square foot ( 89 feet N-S (x) 55 feet E) security pavilion would be constructed to replace the existing canopy at the Harry S Truman Building entrance on $21^{\text {st }}$ Street near C Street. This security pavilion would provide additional perimeter security by moving security functions currently completed within the interior of the building (i.e. employee entry, visitor check-in and screening) to the exterior of the building, thereby reducing the level of damage to the structural integrity of the building in the event of an attack, increasing safety and security for all building occupants, and preserving the historic interior of the building. Additionally, removing the temporary security screening facilities and constructing new, permanent facilities would restore and enhance the original architecture of the building.

## Construction of Security Bollards and Knee Walls at the Harry S Truman Building Entrance

Bollards and knee walls would be installed along the curb at the Harry S Truman Building entrance in place of the existing temporary precast planters protecting the entrance.

## Addition of Security Bollards, Knee Walls, and Railings along $21{ }^{\text {st }}$ Street

Security bollards, knee walls, and railings ${ }^{3}$ would be installed along the curb on $21^{\text {st }}$ Street to prevent un-authorized vehicular access to the sidewalk. These features would replace the existing temporary precast planters.

## Addition of Trees, Plantings and Lighting

Trees would be planted along the street to improve the aesthetic quality of the security improvements in place and improve the pedestrian environment. Lighting would be upgraded in accordance with new District of Columbia lighting standards.

## PHASE 4

## C Street and 21 ${ }^{\text {st }}$ Street Entrance

## Relocation of Curb on C Street and $21{ }^{\text {st }}$ Street

The curb on the south side of C Street would be relocated to the north, such that it matches the new alignment at the Federal Reserve. These modifications would be used to control traffic circulation on C Street.

## Placement of a Corner Marker

A corner marker integrated with bollards and knee walls would be located at the backside of the sidewalks at the intersection of $21^{\text {st }}$ Street and C Street (see Appendix D for rendering of the corner marker).

[^2]
## Development of Vehicular Inspection Area

A vehicular inspection area would be formed by placing security walls and bollards on both the north and south sides of the curb, with a guard booth located in the center of the street, and hydraulic barriers at the inter side of the booths These measures would provide security check-points where a vehicle may be contained while it is undergoing security clearance and prevent unauthorized access to C Street.

## Replacement of Hydraulic Barriers

Hydraulic barriers would be installed in the street to control the flow of incoming and out going traffic. The barrier would be placed behind the guard booth far enough to allow unauthorized vehicles to turn around and leave the area.

## Addition of Seating

The potential for benched seating would be incorporated in the security barrier elements.

## Construction of a Three-Person Guard Booth

A three-person guard booth would be built on an island, maintaining a 16 -foot traffic lane on each side of the guard booth. The guard booth would replace the existing security measures in place and would control access to C Street.

## Addition of Trees and Landscaping

Trees would be planted at the corner of $21^{\text {st }}$ Street and C Street to improve the aesthetic quality of the security improvements in place and improve the pedestrian environment.

## $\underline{22^{\text {nd }} \text { Street }}$

## Development of Fixed Barriers

Fixed bollards would be installed along sidewalks on C Street leading up to the proposed retractable bollards for emergency use only that restrict $22^{\text {nd }}$ Street from entering C Street.

## Development of Retractable Bollards

Retractable bollards would be installed at the intersection of C Street and $22^{\text {nd }}$ Street to control access to C Street from $22^{\text {nd }}$ Street. There would be no guard booth at this location and the bollards would be retracted in the event of an emergency or occasional visit by a high level VIP.

## Development of a Taxi Drop-Off / Pick-Up

A defined taxi drop-off/pick-up area would be located at mid block south of the APhA building garage entrance. This area would provide safe and convenient access for DoS visitors and employees, the NAS, and the APhA.

## Development of a Three-Foot Wide Median

A three-foot wide, north-south median, constructed of granite curbs and stone pavers, would be developed on $22^{\text {nd }}$ Street, $34^{\prime}$ from face of curb to face of curb from $22^{\text {nd }}$ Street's west side curb line, to discourage vehicular double-parking.

## Development of a Taxi Turnaround

Taxi turnarounds would be established at the taxi drop-off/pick-up area and at the southern entrance to $22^{\text {nd }}$ Street, off of Constitution Avenue. This arrangement would allow taxis the ability to enter and exit the area without having to congest traffic further north along $22^{\text {nd }}$ Street.

## Removal of Metered Parking Spaces

All metered parallel parking spaces ( 13 spaces total) would be removed from the east side of $22^{\text {nd }}$ Street. Taxi queuing for 6 taxis would be provided from the taxi drop-off/taxi-up south to Constitution Avenue.

## Retention of Eleven Diagonal Metered Parking Spaces

Eleven diagonal, metered parking spaces would remain on the west side of $22^{\text {nd }}$ Street. The parking orientation would be adjusted from pull-in/back-out parking, to back-in/pullout parking.

## Provide Markings for Taxi Queuing Area for Six (6) Spaces

Appropriate signage would designate six spaces as taxi queuing areas during the hours of 9:30 AM to 6:30 PM. Signage will also indicate that for all other times, the queuing spaces will be open for public use.

## Provide New Asphalt Paving

New paving would be provided along $22^{\text {nd }}$ Street, from Constitution Avenue to C Street, to accommodate the change in parking.

## Provide New Street Signs Including Taxi Stand and Parking

New street signs would be installed to identify the taxi stand and parking areas during certain times of the day. All other times would be for public parking.

## C Street between $21^{\text {st }}$ and $23^{\text {rd }}$ Streets

## Re-grading of the C Street Road Surface

Due to the numerous construction projects completed along C Street, the entire street would be re-graded to provide smoother, more consistent road surfaces for the vehicles using the street.

## Construction of Six-Foot Planted Median

A six-foot planted median constructed of granite curbs and nosing, would be placed in the middle of C Street, dividing the road into two 22' paved sections. Each section would be occupied by one way traffic and parking, with traffic on the north side of the street moving west and traffic on the south side of the street moving east.

## Construction of Security Pavilion at the C Street Entrance

A 14,350 square feet ( 82 feet $S$ (x) 175 feet E-W) security pavilion would be constructed to replace the existing canopy at the Harry S Truman Buildings entrance on C Street. The security pavilion would serve as the main entrance for foreign dignitaries and the Secretary of State. The pavilion would provide additional perimeter security by moving security functions currently completed within the interior of the building (i.e. employee entry, visitor check-in and screening) to the exterior of the building, thereby reducing the level of damage to the structural integrity of the building in the event of an attack, increasing safety and security for all building occupants, and preserving the historic interior of the building. Additionally, removing the temporary security screening facilities and constructing new, permanent facilities would restore and enhance the original architecture of the building.

## Development of a Vehicular Turnaround and Drop-off at Pavilion Entrance

A vehicular turnaround and drop-off area would be constructed in front of the security pavilion entrance to provide employees and visitors with improved entry access to the building. The alignment of the existing curb would be modified to accommodate a vehicle turning radius. The turnaround is envisioned as an urban plaza with attractive paving and lighting and would resolve steep grades that exist today in pedestrian access areas.

## Construction of a Two-Person Guard Booth at the Parking Garage Entrance/Exit

A two-person guard booth would be constructed at the parking garage entrance/exit to ensure proper vehicular movement in and out of the garage.

## Addition of Trees and Landscaping

Trees would be planted at the corner of $23^{\text {rd }}$ and C Streets to improve the aesthetic quality of the security improvements in place and improve the pedestrian environment.

## Extension of C Street Curb on the South Side

The southern curb of C Street would be extended north six feet to match the new street alignment at the Federal Reserve and continue the street character from Virginia Avenue to $23^{\text {rd }}$ Street. The south curb at the corner of C and $23^{\text {rd }}$ Streets would also be extended approximately six feet to the north to continue the alignment with the Federal Reserve.

## Addition of Benches

Benches would be placed outside of the exterior security pavilion entrance to provide outdoor seating for employees and visitors.

## Development of Vehicular Inspection Area

A vehicular inspection area would be formed by placing security walls and bollards on both the north and south sides of the $23^{\text {rd }}$ Street curb, with a guard booth located in the center of the street, and hydraulic barriers at the inter side of the booths. These measures would provide security check-points where a vehicle may be contained while it is undergoing security clearance and prevent unauthorized access to C Street.

## PHASE 5

## D Street between $23^{\text {rd }}$ Street and Virginia Avenue

## Realignment and Relocation of D Street to Virginia Avenue

D Street would be realigned and extended to create a separate DoS exit onto Virginia Avenue. This modification would provide additional security to the area by improving traffic circulation and preventing unauthorized vehicular access within the security perimeter.

## Construction of Security Pavilion on D Street

A 6,000 square foot ( 125 feet E-W x 48 feet North) security pavilion would be constructed to replace the existing canopy at the HSTB entrance on D Street. The security pavilion would provide additional perimeter security by moving security functions currently completed within the interior of the building (i.e. employee entry, visitor check-in and screening) to the exterior of the building, thereby reducing the level of damage to the structural integrity of the building in the event of an attack, increasing safety and security for all building occupants, and preserving the historic interior of the building. Additionally, removing the temporary security screening facilities and constructing new, permanent facilities would restore and enhance the original architecture of the building.

## Construction of Security Wall along E Street Expressway

A security wall would be constructed to prevent unauthorized access to D Street from the E Street Expressway.

## Addition of Trees and Landscaping

Tree plantings would be placed along D Street to improve the aesthetic quality of the improvements in place and improve the pedestrian environment.

## Addition of Benches

Benches would be placed outside of the exterior security pavilion entrance to provide outdoor seating and a bus waiting area for employees and visitors.

## Pocket Park

A new pocket park would be provided at D and $23^{\text {rd }}$ Streets for use by Department of State employees and the public. The park would include seating, new plantings and lighting and would be integrated into security elements.

## D Street and Virginia Avenue

Construction of a Two-Person Guard Booth at Virginia Avenue Exit A two-person guard booth would be constructed at the Virginia Avenue exit to ensure that all vehicles are exiting the building properly.

## Development of Bollards and Bollards with Railings along Virginia Avenue and E

 Street ExpresswayA series of bollards and bollards with railings would be completed along Virginia Avenue and the E Street Expressway to prevent un-authorized vehicular access to the building from these roadways.

## Reconfiguration of E Street Expressway to Create Additional Access to Virginia Avenue

The E Street Expressway would be reconfigured to provide a fifth leg of access to Virginia Avenue. This reconfiguration improves security by moving the flow of traffic away from the Harry S Truman Building. Ramp traffic would be redistributed to a new connection to the Virginia Avenue and E Street intersection, and the existing signal at the westbound Virginia Avenue / E Street intersection would be modified to accommodate these changes.

## Development of a Park North of the Marshall Wing

A park would be developed north of the Marshall Wing where it meets the E Street Expressway. The development of this park is necessary to enact security changes presented in the HTBPSP while protecting the civic beauty of the Bernardo de Galvez statue within the current National Park Service parcel. Small portions of the current park would be removed to develop the additional lane for the E Street Expressway.

## Addition of Trees, Plantings and Lighting

Trees and plantings would be placed at the intersection of $23^{\text {rd }}$ and D Streets to improve the aesthetic quality of the improvements in place. Lighting would be upgraded in accordance with District of Columbia lighting standards.

### 2.2 NO BUILD ALTERNATIVE

Under the No Build Alternative, none of the perimeter security measures proposed in the HTBPSP would be implemented; site conditions would remain as they appear in Figure 3. Under this alternative, the perimeter would continue to be protected by the existing temporary precast planters, bollards (to prevent unauthorized vehicular access), hydraulic barriers, interior security checkpoints, and planters. No additional circulation or landscaping improvements would be completed.

While the No Build Alternative does not meet the purpose and need for the proposed action, it is studied in the Environmental Assessment to provide a baseline for assessing the magnitude of environmental effects of the Build Alternative.

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C STREET


NOTE: Temporary structures, planters and NOTE: Temporary structures, planter
barriers are not shown in the drawing.

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### 3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

The following chapter assesses the impacts of the Build Alternative and the No Build Alternative on the affected environment. These impacts are characterized by intensity, type, and duration.

## Intensity

The intensity of an impact describes the magnitude of change that the impact generates. For the majority of the resource areas, the intensity thresholds are as follows:

Negligible: There would be no impact, or the impact does not result in a noticeable change in the resource

Minor: The impact would be slight, but detectable, resulting in a small but measurable change in the resource.

Moderate: The impact would be readily apparent and/or easily detectable
Major: The impact would be widespread and would substantially alter the resource. A major adverse impact would be considered significant under NEPA.

## Type

The impact type refers to whether it is adverse (negative) or beneficial (positive). Adverse impacts would potentially harm resources, while beneficial impacts would improve resource conditions. Within this analysis, impacts are assumed to be adverse unless identified as beneficial.

## Duration

The duration of an impact identifies whether it occurs over a restricted period of time (short-term), or persists over a longer period (long-term). For the purposes of this analysis, it is assumed that short-term impacts would occur during the construction of the improvements, while long-term impacts would persist once the construction is complete.

In addition to the factors detailed above, impacts may be characterized as direct, indirect, or cumulative. A direct impact is caused by the action and occurs at the same time and place. An indirect impact is caused by the action, but occurs later in time, or farther removed in distance. A cumulative impact occurs when the proposed action is considered together with other past, ongoing, or planned actions.

### 3.1 INFRASTRUCTURE AND COMMUNITY SERVICES

### 3.1.1 TRANSPORTATION AND PARKING

## Affected Environment

Two separate transportation studies evaluated specific improvements for the Harry S Truman Building Perimeter Security Improvements. In a study dated October 6, 2006, updated traffic counts were collected and the impact area was isolated to the intersections affected by the reconfiguration to the Virginia Avenue, NW/E Street, NW intersection. A future period of two years out to 2008 was evaluated for planning purposes. Since submission of the 2006 study, traffic impact assumptions have not changed. Subsequently, an additional study was undertaken, in coordination with the District Department of Transportation (DDOT), to evaluate the operations of $22^{\text {nd }}$ Street, NW between C Street, NW and Constitution Avenue. The evaluation area for each aforementioned study is shown in Figure 4.

## E Street Expressway

In proximity to the Department of State, Virginia Avenue, NW is a six-lane, mediandivided street. Twentieth Street, NW, north of Virginia Avenue, NW, operates one-way northbound. Twenty-first Street, NW, north of C Street, NW, operates one-way southbound. The south leg of E Street, NW operates one-way eastbound and the north leg operates one-way westbound. All eastbound traffic must exit the expressway at the D Street, NW/Virginia Avenue, NW off-ramp, or the E Street, NW off-ramp. Westbound traffic on E Street, NW at $20^{\text {th }}$ Street, NW may either enter the E Street (expressway) or continue on E Street, NW (local). Motorists bearing right on the Virginia Avenue, NW/D Street, NW ramp currently can turn right or left onto Virginia Avenue, NW. Those bearing left merge with E Street, NW just west of Virginia Avenue, NW. This segment of E Street, NW operates one-way westbound.

In the study dated October 6,2006 , the purpose was to update the traffic counts and isolate the impact area to the intersections affected by the reconfiguration to the Virginia Avenue, NW/E Street, NW intersection from an earlier 2004 evaluation. Peak hours varied by location but the street peak hours generally occurred from 8:15 AM to 9:15 AM and 5:00 PM to 6:00 PM. The key study intersections within the vicinity of the proposed roadway realignment currently operate at acceptable levels of service during the AM and PM peak periods. The stop controlled movement at the D Street, NW/Virginia Avenue, NW intersection currently operates at or near capacity.

The eastbound E Street Expressway carries 3422 vehicles in the AM peak hour and 1446 vehicles in the PM peak hour, in three lanes. The westbound E Street Expressway carries 226 vehicles in the AM peak hour and 1894 vehicles in the PM peak hour, in two lanes.


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E Street Expressway Peak Hour Traffic Counts

|  | AM Peak Hour | PM Peak Hour |
| :--- | :---: | :---: |
| E Street Expressway (Eastbound) | 3422 | 1446 |
| E Street Expressway (Westbound) | 226 | 1894 |

## Eastbound E Street Expressway off-ramp to D Street and Virginia Avenue

This ramp is used by 904 vehicles (or 26 percent of all vehicles on the eastbound E Street Expressway) during the AM peak hour, and 330 vehicles (or 23 percent of all vehicles on the eastbound E Street Expressway) during the PM peak hour. The Virginia Avenue, NW (or rightmost) ramp segment is used by approximately two-thirds of all ramp traffic, and the E Street (or leftmost) ramp segment is used by approximately one-third of all ramp traffic during the AM peak period. The E Street (or leftmost) ramp segment is used by 328 vehicles (or 36 percent of all ramp traffic) during the AM peak hour, and 106 vehicles (or 32 percent of all ramp traffic) during the PM peak hour. The Virginia Avenue, NW (or rightmost) ramp segment is used by 576 vehicles (or 64 percent of all ramp traffic) during the AM peak hour, and 224 vehicles (or 68 percent of all ramp traffic) during the PM peak hour.

Eastbound E Street Expressway Off-Ramp Traffic to D Street \& Virginia Avenue

|  | AM Peak Hour | PM Peak Hour |
| :--- | :---: | :---: |
| Off-Ramp Traffic | $904 / 3422$ | $330 / 1446$ |
| $\%$ of Eastbound E Street Expressway | $26 \%$ | $23 \%$ |

Leftmost (to E Street) and Rightmost (to Virginia Avenue) Ramp Segment Traffic

|  | AM Peak Hour | PM Peak Hour |
| :--- | :---: | :---: |
| Leftmost Ramp Segment Traffic | $328 / 904$ | $106 / 330$ |
| $\%$ of Off-Ramp Traffic | $36 \%$ | $32 \%$ |
|  |  |  |
| Rightmost Ramp Segment Traffic | $576 / 904$ | $224 / 330$ |
| $\%$ of Off-Ramp Traffic | $64 \%$ | $68 \%$ |

At the Virginia Avenue, NW/D Street, NW intersection (rightmost ramp), the majority of traffic turned right onto Virginia Avenue, 55 and 73 percent during the AM and PM peak hour respectively.

Department of State traffic (i.e. shuttles, employees, security, etc.) on the restricted portion of eastbound D Street, NW (including traffic exiting the Harry S Truman Building D Street, NW garage exit) added another 17 vehicles during the AM peak hour and 23 vehicles during the PM peak hour, to this ramp segment.

Department of State traffic accounts for little of the traffic on the Virginia Avenue, NW/E Street, NW ramp (leftmost ramp): less than 2 percent in the AM peak hour and 7 percent in the PM peak hour.

Industry standards indicate a level of service "D" or better provide an acceptable level of service (LOS). The stop controlled movement at the D Street, NW/Virginia Avenue, NW intersection currently operates near capacity at LOS "E" during the AM peak hour. All other intersections theoretically operate at acceptable LOS " $D$ " or better during both the AM and PM peak hours.

Level of Service Criteria for Signalized Intersections

| Level of Service | Stopped Delay Per Vehicle (sec) |
| :---: | :--- |
| A | $\leq 10.0$ |
| B | $>10.0$ and $\leq 20.0$ |
| C | $>20.0$ and $\leq 35.0$ |
| D | $>35.0$ and $\leq 55.0$ |
| E | $>55.0$ and $\leq 80.0$ |
| F | $>80.0$ |

Level of Service Criteria for Two-Way Stop Controlled Intersections

| Level of Service | Average Control Delay (sec/veh) |
| :---: | :--- |
| A | $\leq 10.0$ |
| B | $>10.0$ and $\leq 15.0$ |
| C | $>15.0$ and $\leq 25.0$ |
| D | $>25.0$ and $\leq 35.0$ |
| E | $>35.0$ and $\leq 50.0$ |
| F | $>50.0$ |

Total vehicular delay on all public streets in the study area is currently 133 vehicle-hours in the AM peak hour and 133 vehicle-hours during the PM peak hour. Average queues at the E Street (eastbound) $/ 20^{\text {th }}$ Street (eastbound through and left, AM) intersection currently exceeds the available storage capacity and, thus, back up beyond available storage (Wells, 2006).

According to the District of Columbia Master Plan (April 2005) bicycle lanes are proposed along Virginia Avenue, NW and $21^{\text {st }}$ Street, NW in the vicinity of the proposed intersection reconfiguration. Bicycle lanes are also proposed on E Street (westbound) between Virginia Avenue, NW and $17^{\text {th }}$ Street, NW. Approximately 178 AM peak hour and 98 PM peak hour pedestrians cross D Street, NW on the north side of Department of State at the eastern security checkpoint. Currently, there is a stop sign that stops traffic exiting the E Street Expressway to allow pedestrians to cross to the Department of State. The highest numbers of pedestrians were observed on the north side of E Street, NW between $21^{\text {st }}$ and $20^{\text {th }}$ Streets, NW (Wells, 2006)

DDOT, in cooperation with the Federal Highway Administration (FHWA), has initiated Context Sensitive Design (CSD) to develop and design transportation projects to fit in the environment and community. This design plan requires that projects are in harmony with the community, preserve environmental, scenic, aesthetic, and natural resource values of their area. CSD can be applied to highways and streets, involving public participation and
stakeholder ideas to produce the best transportation design for the needs of the community it serves (DDOT, 2005).

$$
22^{\text {nd }} \text { Street }
$$

In a supplemental study dated December 4, 2009, additional traffic counts and operational observations were collected on $22^{\text {nd }}$ Street, NW between C Street, NW and Constitution Avenue, NW. Existing AM and PM peak hour levels of service were estimated at the intersections on $22^{\text {nd }}$ Street, NW based on the existing peak hour traffic volumes, the existing lane usage and traffic control, and the Highway Capacity Manual methodology (Synchro version 7). Signal timing information was obtained from DDOT. The results are summarized in Table 1 and indicate the following:

1. The signalized Constitution Avenue, NW/22 ${ }^{\text {nd }}$ Street, NW intersection currently operates at an overall LOS "B" during both the AM and PM peak commuter hours. However, Constitution Avenue, NW experiences heavy eastbound traffic during the AM peak hour and westbound traffic during the PM peak hour that is regulated by the progression of vehicles through the system of signalized intersections. Field observations indicate that there are occasions when queuing occurs between intersections and limits the number of vehicles that traverse the intersection during these periods. Thus, calculated delay times for some vehicles may be longer than those reported.
2. All of the turning movements at the unsignalized driveways on $22^{\text {nd }}$ Street, NW currently operate at LOS "C" or better during all of the peak study hours.

Full descriptions of levels-of-service "A" through "F" for both signalized and unsignalized intersections are provided in transportation report found in Appendix B.

In comparison to an existing traffic count collected for a 2003 traffic study and what was collected for the present 2009 study, the following differences were noted from the Constitution Avenue, NW/22 ${ }^{\text {nd }}$ Street, NW intersection:

1. The AM peak hour inbound trips from Constitution Avenue, NW to $22^{\text {nd }}$ Street, NW increased by 21 vehicles ( 198 vehicles to 219 vehicles) or approximately 11 percent.
2. The PM peak hour inbound traffic from Constitution Avenue, NW to $22^{\text {nd }}$ Street, NW decreased by seven (7) vehicles (146 vehicles to 139 vehicles) or approximately 5 percent.
3. The AM peak hour outbound trips from $22^{\text {nd }}$ Street, NW to Constitution Avenue, NW increase by 14 vehicles ( 87 vehicles to 101 vehicles) or approximately 16 percent.
4. The PM peak hour outbound trips from $22^{\text {nd }}$ Street, NW to Constitution Avenue, NW increased by 56 trips ( 152 vehicles to 208 vehicles) or approximately 37 percent.

The general increase of traffic on $22^{\text {nd }}$ Street, NW between Constitution Avenue, NW and C Street, NW from the 2003 study and the 2009 study can be attributed to the increase in building size and personnel occupancy of the APhA Building and increased use of the C Street, NW $/ 22^{\text {nd }}$ Street, NW intersection by the DoS.

The existing traffic data was modified to reflect the anticipated changes along $22^{\text {nd }}$ Street, NW, between Constitution Avenue, NW and C Street, NW. Although no curb changes or driveway changes are anticipated, the existing driveway serving the APhA Building was assumed to be operated by a retractable barrier. In addition, traffic currently using the DoS C Street Driveway was reassigned for the conversion of this secured driveway to emergency use only. The current trips utilizing this driveway were reassigned from $22^{\text {nd }}$ Street to other DoS site entrances located at the intersections of $23^{\text {rd }}$ Street, NW/C Street, NW, $21^{\text {st }}$ Street, NW/C Street, NW, and $23^{\text {rd }}$ Street, NW/D Street, NW. The proposed changes are shown on Figure 4 and the modified traffic forecasts are shown in Figure 5.

## Parking

Approximately 823 parking spaces are located under the Harry S Truman Building; therefore, based on approximately 8,000 employees, one off-street space is provided for every 9.72 employees (Wells, 2006). There is street parking along $21^{\text {st }}, 22^{\text {nd }}, 23^{\text {rd }}, \mathrm{D}$ and C Streets (KCCT, 2006).

There are currently, on-street parking spaces on $21^{\text {st }}$ Street, $22^{\text {nd }}, 23^{\text {rd }}$ Street, NW, C Street, NW and D Street, NW. Parking on C Street, NW includes 18 spaces in front of the APhA Building and 14 spaces in front of the NAS Building. Currently, NAS and DoS employees and visitors are not allowed to park in these spaces, due to DoS official parking and existing temporary security measures. Parking meters exist on the west side of $23^{\text {rd }}$ Street between C and D Street, NW. There may have been metered spaces in the past on $21^{\text {st }}$ Street, but they were removed prior to this project. There are 42 striped parking spaces on C Street, NW, some of which have been removed, but all spaces were likely metered at some point in time. Public parking on C Street, NW, in the vicinity of DoS, is only permitted on the north side of C Street, NW, between $20^{\text {th }}$ Street, NW and Virginia Avenue, NW. Currently, there are thirteen (13) metered, parallel parking spaces on the east side of $22^{\text {nd }}$ Street, NW, and eight (8) on the west side of $22^{\text {nd }}$ Street, NW.

## Environmental Consequences of the Build Alternative

## Transportation

Implementation of the Build Alternative would result in short-term, minor, adverse impacts during construction and long-term, beneficial impacts from the new roadway alignment. Adding a fifth traffic leg to the Virginia Avenue/E Street intersection would increase the overall delay, but the overall level of service would remain acceptable. Potential southeast queues at the Virginia Avenue/ $21^{\text {st }}$ Street intersection would be mitigated with a minor reallocation of green time. The complete information can be found in the transportation studies dated October 6, 2006 and December 4, 2009 found in Appendix B.

The new potential elimination of on-street parking, modification of curb lines and street alignments, vehicular access restriction on C Street NW, and perimeter security elements in public space along the sidewalks adjacent to $21^{\text {st }}$ Street, NW and $23^{\text {rd }}$ Street, NW,
including policies for use of traffic barricades on $21^{\text {st }}$ Street would not affect the existing conditions of vehicular traffic. The drop-off lanes and parking lanes along $21^{\text {st }}$ and $23^{\text {rd }}$ Streets, NW would be eliminated for security reasons, but would not adversely impact traffic movements. Currently, there are three lanes of southbound traffic on $23^{\text {rd }}$ Street, one of which is used as a parking lane during off-peak hours, and two lanes of northbound traffic, north of the American Pharmacists Association. The concept design would not remove any lanes currently used for northbound traffic. The area that is currently blocked off by the $\operatorname{DoS}$ is a parking lane, which would become part of the perimeter security improvements, as mentioned above.

The proposed addition of street trees on the east side of $23^{\text {rd }}$ Street would align as close as possible to the street trees on the west side of $23^{\text {rd }}$ Street, so as not to encroach upon the reciprocal vistas between Washington Circle and the Lincoln Memorial. A visual aid that reflects the existing and proposed street tree alignment on the roadway can be found in section 3.6.1.

The turning radii at the corners of C and $21^{\text {st }}$ Streets, NW and C and $23^{\text {rd }}$ Streets, NW would be increased to accommodate large shuttle buses and trucks. The 6' median has a 50' break centered at the entry of the NAS loading dock to accommodate large delivery trucks. The overall width of C Street, NW would be decreased, with the exception of the area in front of the proposed pavilion, which will remain wide enough to allow large limousines and security vehicles to turn around.

The design for $22^{\text {nd }}$ Street, NW was shown to NAS and APhA at the working meeting on November 8, 2007. The NAS and APhA have expressed concerns about the potential limited access from $22^{\text {nd }}$ Street, NW to C Street, NW for their employees. DoS is subject to the same restrictions on C Street, NW as NAS and APhA, and has worked with both agencies to ensure that traffic concerns and issues are addressed.

Under the Build Alternative, NAS would be permitted vehicular access to C Street for authorized commercial loading and unloading (such as delivery trucks, contractors and special deliveries), shuttle buses (such as the weekday employee bus program and larger buses for annual meetings and special functions), NAS employee private vehicles, and limited parking. Bus access on C Street would be permitted for NAS events during working hours, after hours, weekends and holidays, and in accordance with a schedule provided by NAS, in advance, to the Department of State Bureau of Diplomatic Security. Limited parking on C Street would be provided for six NAS official vehicles. NAS would be required to make advance arrangements with DoS for special drop-off and pickup access during events. NAS employees accessing C Street in their own, private vehicles would be required to display their NAS employee badge to the officer stationed at the security check point.

The taxis on $22^{\text {nd }}$ Street, NW were arranged by the District of Columbia, to accommodate pick-ups and drop-offs; however, DoS also developed a concept design for improving taxi and private vehicle drop-off congestion on $22^{\text {nd }}$ Street, NW. The entrance used by APhA for parking and service would be on $22^{\text {nd }}$ Street, alleviating the need for access to C Street on regular basis. The DoS is continually coordinating with the NAS and has
provided revised concepts for $22^{\text {nd }}$ Street, NW to the NAS for review and comment. An operational evaluation of $22^{\text {nd }}$ Street, NW, between C Street, NW and Constitution Avenue, NW, has been completed for this EA.

Future traffic on C Street, NW would only be accessible from $21^{\text {st }}$ or $23^{\text {rd }}$ Streets, NW. In an emergency, the bollards would be lowered on $22^{\text {nd }}$ Street, NW, to allow traffic to flow from, or to, C Street, NW at the discretion of DoS Security. It is likely that DoS Security would work out procedures whereby NAS and APhA employees would have access to C Street, NW or $22^{\text {nd }}$ Street, NW in the case of an emergency.

## E Street Expressway Off-Ramp to D Street/Virginia Avenue

As shown in the Transportation Impact Study dated October 6, 2006, located in Appendix B, Figure 4-1 shows the adjustments of existing traffic, assuming the ramp traffic would be redistributed to a new connection to the Virginia Avenue, NW/E Street, NW intersection. The resulting redistribution of existing traffic is shown in Figure 4-2. Realigning the eastbound E Street Expressway off-ramp to Virginia Avenue, NW would make the Harry S Truman Building more secure by relocating 350 to 960 peak hour vehicles from the north side of the building. This new connection would create a fifth leg at the Virginia Avenue, NW/E Street, NW intersection to accommodate the E Street Expressway off-ramp traffic bound northwest on Virginia Avenue, NW, and would introduce a third signal phase. The delay at this reconfigured intersection would increase, but would continue to operate at an overall acceptable level of service. The proposed reconfiguration of the Virginia Avenue, NW/E Street, NW intersection would have a similar interface, as today, for traffic traveling to westbound E Street, NW from the E Street Expressway off-ramp, and would not preclude any future improvement for the proposed Kennedy Center project beyond what would be needed from existing conditions. The proposed design for the reconfiguration of the E Street Expressway is based on the condition of the intersection as it exists today, not the future condition of the intersection under the proposed improvements for the Kennedy Center Access Improvements Project.

The proposed E Street Expressway ramp changes would likely require an action by the DDOT and the FHWA. The action may involve receiving a roadway modification approval and/or development of a separate FHWA environmental document. In addition, given the presence of Reservation 720, a NPS-owned parcel within the boundaries of the proposed changes, it is likely that an FHWA action would require compliance with Section 4(f) of the US Department of Transportation Act (23 CFR 774). A Section 4(f) determination would be required prior to any use of the park property (such as land acquisition), or design and implementation of this concept. A Section 4(f) determination at this time would be premature due to the fact that the proposed changes are currently only at a conceptual stage, and that the anticipated schedule for implementing the ramp changes is within a ten-to-fifteen year timeframe. During the ensuing years, it is possible that additional major changes would occur within the vicinity of this project area, ranging from the proposed Kennedy Center access modifications to potential changes to the road network in the area surrounding the existing E Street Expressway that may affect the
ramp changes being proposed as part of this action. Therefore, DoS would complete the 4(f) evaluation process during the design and implementation phases for the E Street Expressway ramp changes, prior to requesting any actions regarding park property acquisition.
$22^{\text {nd }}$ Street
The following section presents an analysis of the $22^{\text {nd }}$ Street, NW future transportation operations from a supplemental study dated December 4, 2009. The $22^{\text {nd }}$ Street, NW study area is located between Constitution Avenue, NW and C Street, NW and was evaluated concurrently with the security perimeter improvements planned at the APhA Building. This study was prepared in consultation DDOT staff. The results are based on recent October 2009 weekday vehicular traffic counts, pedestrian counts, bicycle counts, parking counts, existing lane use and traffic controls, existing signal timings, field visits, and observations. The complete $22^{\text {nd }}$ Street transportation report can be found in Appendix B.

Since the events of September 11, 2001, the portion of C Street, NW between $23^{\text {rd }}$ Street, NW and $22^{\text {nd }}$ Street, NW has been restricted and controlled by the Department of State. As a result, the function of $22^{\text {nd }}$ Street, NW from Constitution Avenue, NW to C Street, NW has been enhanced to provide for numerous functions that include an ad hoc pick-up/drop-off zone, the addition to public on-street parking, and providing service to driveways and loading for adjacent buildings. Note that the proposed improvements would not change the curbs or curb cuts along $22^{\text {nd }}$ Street, NW under the DoS or APhA proposals.

The Department of State, in consultation with DDOT, APhA, and NAS, evaluated operational improvements on $22^{\text {nd }}$ Street, NW to best control its enhanced functions. The DoS would replace the retractable barriers and guard booth at the C Street, NW/22 ${ }^{\text {nd }}$ Street, NW intersection with retraceable emergency bollards. Under this condition, DoS site trips would no longer use this site access point and it would be limited to emergencies and high level visitors. A raised median would be installed on the southern half of $22^{\text {nd }}$ Street, NW between C Street, NW and Constitution Avenue, NW to discourage double parking. The angled parking on the west side of $22^{\text {nd }}$ Street, NW would be converted from head-in parking to the DDOT-preferred back-in parking. In addition, designated taxi stand and pickup areas would be established. An operational evaluation of $22^{\text {nd }}$ Street, NW would be evaluated between C Street, NW and Constitution Avenue, NW for this EA.

All site traffic to APhA would remain the same. The main APhA garage driveway and loading dock that serves the APhA Building are oriented to $22^{\text {nd }}$ Street, NW between C Street, NW and Constitution Avenue, NW. Under a separate action, the installation of retractable barriers and security guard booths has been proposed for the APhA Building at these locations. The APhA driveway on $23^{\text {rd }}$ Street, NW would remain an emergency exit only and also has been proposed for a retractable barrier and guard booth. An evaluation of the service time to process entering vehicles would be provided with
respect to the $22^{\text {nd }}$ Street, NW operational evaluation discussed above under a separate EA for the new APhA facility. The proposed improvements at APhA include three possible security perimeter alternatives as summarized below:

No Action Alternative includes the location of a 30 " high security wall in a location along $23^{\text {rd }}$ Street, NW that was previously approved by NCPC in 2005, but has not been constructed.

Alternative 1 includes the $23^{\text {rd }}$ Street, NW wall shown in the No Action option, but also includes new guard booths and vehicle barriers at the two garage entrances one on 22 nd Street, NW, and $23^{\text {rd }}$ Street, NW, and the loading dock on $22^{\text {nd }}$ Street, NW. In addition, this alternative shows a new 30 " wall along the APhA property line on $22^{\text {nd }}$ Street, NW.

Alternative 2 locates the $23^{\text {rd }}$ Street, NW wall on the NPS western property line, and relocates the sidewalk to the west of the new wall. On $22^{\text {nd }}$ Street, NW, the wall is located on the eastern edge of the existing sidewalk. The locations of the guard booths and vehicle barriers remain as shown for Alternative 1.

Alternative 3 locates the new $23^{\text {rd }}$ Street, NW wall 24 " east of the existing curb line and the $22^{\text {nd }}$ Street, NW wall 24 " west of the existing curb line. The location of the guard booths and vehicle barriers would be the same as those described in the other two action alternatives.

Note that each of these alternatives includes new guard booths and barriers that are consistent among all of the options and are reflected in this study. The planned lane use and traffic control associated with these improvements are shown in Figure 7 - Revised $22^{\text {nd }}$ Street Future Urban Design Concept.

Future peak hour levels of service were estimated at the existing intersections on $22^{\text {nd }}$ Street, NW between Constitution Avenue, NW and C Street, NW based on the modified lane use and traffic volumes shown in Figure 5 - Preliminary $22^{\text {nd }}$ Street Urban Design Concept, Figure 6 - Modified Future Forecasts and Figure 7 - Revised $22^{\text {nd }}$ Street Urban Design Concept and the Highway Capacity Manual methodology (Synchro version 7). The results are summarized in Table 1.


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Perimeter Security Improvements


CONSTITUTION AVENUE NW

Figure 6: Modified Future Forecasts



Figure 7 - Revised $22^{\text {nd }}$ Street Urban Design Concept
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TABLE 1: LEVEL OF SERVICE SUMMARY

| Intersection | Traffic Contro | Lane Group | Existing Conditions |  |  |  |  |  | Future Conditions |  |  |  |  |  | Difference |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Vehicular Volume |  | Delay (sec) |  | Volume to Capactiv (VC) |  | Venicular Volume |  | Delay (sec) |  | Volume to Capaity (VC) |  | Vehicular Volume |  | Delay (sec) |  | Volume to Capacaily (VC) |  |
|  |  |  | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM |
| 1.22 $2^{\text {rid }}$ Street NWU Constitution Avenue NW | Signa | $\begin{gathered} \text { EBLT } \\ \text { WBTR } \\ \text { WBL } \\ \text { SBR } \\ \text { Overal } \end{gathered}$ | $\begin{aligned} & 1,794 \\ & 793 \\ & 24 \\ & \hline 7,658 \\ & \hline 2,658 \end{aligned}$ | $\begin{aligned} & 1,1751 \\ & \begin{array}{l} 1,744 \\ 471 \\ \hline 161 \\ 3,167 \end{array} \end{aligned}$ | $\begin{aligned} & \mathrm{B}(10.5) \\ & \mathrm{C}(2.30) \\ & \mathrm{B}(2.30) \\ & \hline 8(13.5) \\ & \hline(13.5) \end{aligned}$ | $\begin{aligned} & \mathrm{B}(10.6) \\ & \mathrm{C}(25.1) \\ & \mathrm{C}(25.6) \\ & \mathrm{C}(2.05) \\ & \hline \mathrm{B}(19.6) \end{aligned}$ | $\begin{aligned} & 0.60 \\ & 0.41 \\ & 0.065 \\ & \frac{0.005}{0.43} \end{aligned}$ | $\begin{aligned} & 0.45 \\ & 0.83 \\ & 0.81 \\ & 0.017 \\ & \hline 0.57 \end{aligned}$ | $\begin{aligned} & 1,744 \\ & 741 \\ & 23 \\ & 75 \\ & \hline 2.583 \end{aligned}$ | $\begin{aligned} & 1,1744 \\ & 1.84 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \mathrm{B}(10.6) \\ & \mathrm{C}(25.5) \\ & \mathrm{C}(25.3) \\ & \mathrm{B}(19.8) \\ & \hline \mathrm{B}(19.5) \end{aligned}$ | $\begin{aligned} & 0.56 \\ & 0.40 \\ & 0.05 \\ & \hline 0.050 \\ & \hline 0.40 \end{aligned}$ | $\begin{aligned} & 0.45 \\ & 0.83 \\ & 0.88 \\ & 0.0 .21 \\ & \hline 0.55 \end{aligned}$ | $\begin{aligned} & (502) \\ & (202) \\ & 12(1) \\ & (125) \end{aligned}$ | $\begin{aligned} & (1) \\ & (1) \\ & (10) \\ & \left(\frac{104}{44)}\right. \\ & \hline(45) \end{aligned}$ | $\begin{aligned} & (0.6) \\ & 0.1) \\ & 0.10 \\ & 0.0 \\ & 0.0 \\ & \hline 0.4) \end{aligned}$ | $\begin{aligned} & 0.0 \\ & 0.0 \\ & 0.0 . \\ & 0.3) \\ & 0.7) \\ & 0.1) \end{aligned}$ | $\begin{aligned} & (0.04) \\ & (0.01) \\ & (0.01) \\ & \frac{0.00}{(0)} \\ & \hline(0.03) \end{aligned}$ | $\begin{aligned} & 0.00 \\ & 0.000 \\ & 0.002) \\ & \hline(0.00) \\ & \hline 0.02) \end{aligned}$ |
| 2. $22^{\text {nd }}$ Street NW/ <br> American Pharmacists Association (APhA) Garage Entrance <br> Future Conditions: <br> Gated Access to APhA Garage <br> Storage Space for Northbound Left-Turns Taxi U-Turns at Intersection | stop |  | $\begin{aligned} & 1 \\ & N A \\ & N A \\ & 177 \\ & 1715 \end{aligned}$ | $\begin{aligned} & 15 \\ & \text { NA } \\ & \text { NA } \\ & 97 \\ & 152 \end{aligned}$ | $\begin{gathered} B[10.9] \\ N A \\ N A \\ A[A] \\ A[1.0] \\ A[0.0] \end{gathered}$ |  | $\begin{aligned} & 0.00 \\ & \text { NA } \\ & \text { NA } \\ & 0.02 \\ & 0.02 \end{aligned}$ | $\begin{aligned} & 0.02 \\ & N A \\ & N A \\ & N .00 \\ & 0.00 \end{aligned}$ | $\begin{aligned} & 1 \\ & 19 \\ & 26 \\ & 79 \\ & 99 \end{aligned}$ | $\begin{aligned} & 15 \\ & 11 \\ & 0 \\ & 96 \\ & 95 \end{aligned}$ |  | $\begin{aligned} & \mathrm{C}[15.9] \\ & \mathrm{B}[10.4] \\ & \mathrm{B}[14.8] \\ & \mathrm{A}[0.0] \\ & \mathrm{A}[0.0] \end{aligned}$ | 0.00 0.03 0.08 0.08 0.06 0.0 | $\begin{aligned} & 0.05 \\ & 0.02 \\ & 0.00 \\ & 0.006 \\ & 0.06 \end{aligned}$ | $\begin{aligned} & 0 \\ & \text { N/A } \\ & (72) \\ & (16) \\ & (16) \end{aligned}$ | $\begin{aligned} & 0 \\ & N A \\ & 0 \\ & (1) \\ & (57) \end{aligned}$ | $\begin{aligned} & 7.3 \\ & N / \\ & N A \\ & 14.3 \\ & 1.3) \\ & 0.0 \end{aligned}$ | $\begin{aligned} & 6.7 \\ & N / 8 \\ & N 4.8 \\ & 0.0 \\ & 0.0 \end{aligned}$ | $\begin{aligned} & 0.00 \\ & \text { NA } \\ & 0.00 \\ & 0.003 \\ & \text { (0.01) } \end{aligned}$ | $\begin{aligned} & 0.03 \\ & 0.01 \\ & 0.00 \\ & 0.006 \\ & 0.004) \\ & \hline 0.04) \end{aligned}$ |
| 3. $22^{\text {nd }}$ Street NW/ <br> National Academy of Sciences (NAS) Driveway | тор | $\begin{gathered} \text { WBL } \\ \text { NBLR } \\ \text { SBLTT } \end{gathered}$ | $\begin{gathered} 0 \\ { }_{4}^{107} \\ 45 \end{gathered}$ | $\begin{aligned} & 11 \\ & 19 \\ & 14 \end{aligned}$ | $\begin{aligned} & A[0.0 \\ & A\left[\begin{array}{l} A \\ A \\ A \end{array} 0.00\right] \end{aligned}$ | $\begin{aligned} & \text { B } 10.10] \\ & A(10.0] \\ & \text { A } 10.0] \end{aligned}$ | $\begin{aligned} & 0.00 \\ & 0.07 \\ & 0.00 \end{aligned}$ | $\begin{aligned} & 0.02 \\ & 0.01 \\ & 0.00 \end{aligned}$ | $\begin{aligned} & 0 \\ & 35 \\ & 23 \end{aligned}$ | 11 18 17 | $\begin{aligned} & A[0.0] \\ & A\left[\begin{array}{l} A \\ A \\ A \\ A \end{array} 0.0\right] \end{aligned}$ |  | $\begin{aligned} & 0.00 \\ & 0.02 \\ & 0.002 \end{aligned}$ | $\begin{aligned} & 0.02 \\ & 0.01 \\ & 0.01 \end{aligned}$ | $\begin{gathered} 0 \\ (72) \\ (22) \end{gathered}$ | $\begin{aligned} & 0 \\ & (17) \\ & (57) \end{aligned}$ | $\begin{aligned} & 0.0 \\ & 0.0 \\ & 0.0 \\ & 0.0 \end{aligned}$ | $\begin{aligned} & (0.4) \\ & 0.0 \\ & 0.0 \end{aligned}$ | 0.00 $\substack{0.005) \\ 0.00}$ | 0.00 0.00 0.00 |
| $\left\lvert\, \begin{aligned} & 4.22^{104} \text { Street NW/ } \\ & \mathrm{C} \text { Steet NW (Gated Entrance) } \end{aligned}\right.$ | stop | NBT SBT | 72 3 | 44 |  | $\underset{\substack{8[14.9] \\ C[16.4]}}{ }$ | 0.22 0.01 | ${ }_{0}^{0.00}{ }_{0.13}$ | NA | $\underset{\text { N/A }}{\text { N/ }}$ | N/ ${ }_{\text {NA }}$ | N/A | NA | NA | $\underset{\text { NA }}{\text { NA }}$ | NA | N/A | $\stackrel{\text { NA }}{\text { NA }}$ | NNA | N/ ${ }_{\text {NA }}$ |

The overall results are similar to those discussed under existing conditions, with slight reductions in overall delays at nearly all of the study intersections, since access to C Street would be permanently closed. Traffic using this entry/exit point destined for the DoS would use other DoS site entrances located at the intersections of $23^{\text {rd }}$ Street, NW/C Street, NW, $21^{\text {st }}$ Street, NW/C Street, NW, and $23^{\text {rd }}$ Street, NW/D Street, NW. The queuing and progression comments, as provided under existing conditions, apply to the Constitution Avenue, NW $/ 22^{\text {nd }}$ Street, NW intersection. The design of $22^{\text {nd }}$ Street, NW, which incorporates the relocation of the taxi pick-up/drop-off area to the south and the conversion of the DoS driveway from $22^{\text {nd }}$ Street, NW/C Street, NW intersection to "emergency only", would reduce vehicle trips in the vicinity of the NAS $22{ }^{\text {nd }}$ driveway from conditions observed today. The planned gated access to the APhA garage would increase delays at this driveway, but are expected to remain within acceptable levels, with all movements operating at LOS "C" or better during the AM and PM peak hours.

The Preliminary $22^{\text {nd }}$ Street Urban Design Concept (Figure 5), produced in December 2009, was evaluated under the December 4, 2009 study for $22^{\text {nd }}$ Street, NW based on the extensive data collection, field observations, permanent closure of C Street, NW, and the design concept provided by KCCT. Subsequent to the review of the December 4, 2009 study, the Revised $22^{\text {nd }}$ Street Urban Design Concept (Figure 7) was developed in February 2010 and incorporated additional comments received from APhA and NAS. The elements of this plan include the following:

1. Permanently restrict vehicular access to C Street, NW with the installation of retractable bollards for emergency use only and for an occasional visit by a high level VIP. Maintain pedestrian and bicycle access.
2. Retain the current lane configuration, signalization, traffic control, and pedestrian/bicycle facilities at the Constitution Avenue, NW $/ 22^{\text {nd }}$ Street, NW intersection.
3. Install a three-foot wide, 140 foot long raised median on $22^{\text {nd }}$ Street, NW, beginning approximately 90 feet north of Constitution Avenue to separate traffic movements and eliminate double parking in the northbound direction. The median would be terminated south of the APhA garage driveway to allow for through vehicles to bypass APhA traffic entering the garage.
4. Remove all of the existing 13 parallel metered parking spaces on the east side of $22^{\text {nd }}$ Street, NW. Designate six (6) spaces for a taxi queuing area in the vicinity of the median and a taxi drop-off area to south of the NAS parking garage exit.
5. Provide a taxi pick-up shelter on the east side of $22^{\text {nd }}$ Street, NW just north of the taxi queuing area.
6. Install a retractable barrier and guard booth at the existing APhA loading dock and garage driveway on the west side of $22^{\text {nd }}$ Street, NW.
7. Designate the curb lane between the APhA loading dock and garage entrance for short-term loading only. The DoS/APhA security would manage the loading activities and enforce the use of the loading area.
8. Convert existing angled pull-in parking on the west side of $22^{\text {nd }}$ Street, NW to back-in operation and increase the number of existing metered spaces from eight (8) to 11 spaces. These are located to the south of the APhA garage driveway.
9. Maintain the existing 56 -foot width of $22^{\text {nd }}$ Street, NW that allows for taxi turn around areas just north of Constitution Avenue, NW, south of the APhA garage entrance, and at C Street, NW. These areas would allow vehicles to drop-off and pick-up passengers more efficiently.

These elements are anticipated to increase the efficiency of vehicle maneuvers, reduce vehicle and pedestrian conflicts, and improve overall operations along $22^{\text {nd }}$ Street, NW. The success of these elements depends on the enforcement of the no parking areas in order to achieve the overall goals of the plan, improve operations, and reduce driver confusion.

The service vehicle maneuvering diagrams associated with the concept design for $22^{\text {nd }}$ Street are provided in Appendix B.

All of the intersections within the study area currently operate at acceptable levels of service during both the AM and PM peak commuter periods. This includes the signalized Constitution Avenue, NW $/ 22^{\text {nd }}$ Street, NW intersection and the unsignalized driveways on $22^{\text {nd }}$ Street, NW. Field observations indicate that, though traffic along Constitution Avenue, NW is regulated by the progression of traffic, the system of signalized intersections are limited during periods when excessive queuing occurs, resulting in longer delay times than those reported in this study.

Field observations indicate that several vehicle conflicts occur along $22^{\text {nd }}$ Street, NW due to the drop-off and pick-up activity that is exacerbated by illegally parked and doubleparked vehicles that inhibit the ability of motorists to turn around in a single maneuver and increase overall delays. Further, although motorists that travel on $22^{\text {nd }}$ Street, NW expect conflicts to occur, delays caused by illegally parked vehicles create confusion and driver frustration.

The permanent closure of C Street, NW to vehicular traffic would have a minimal impact on vehicle delays at the intersections and driveways on $22^{\text {nd }}$ Street, NW, and would slightly reduce these delays since traffic destined for the Department of State would utilize other driveways to access the site.

The proposed operations plan that includes a median on $22^{\text {nd }}$ Street, NW, designated taxi drop-off and pick-up areas, conversion of angled parking, and provision of turnaround areas would significantly improve traffic operations and reduce vehicle conflicts on $22^{\text {nd }}$ Street, NW. The success of these improvements and modifications depend on the enforcement of the "No Parking" areas in order to achieve the overall goals of the plan, improve operations, and reduce driver confusion.

## Levels of Service

## E Street Expressway Off-Ramp to D Street NW/Virginia Avenue NW

As shown in the October 6, 2006 transportation impact study, the stop controlled movement at the D Street, NW/Virginia Avenue, NW intersection near the E Street

Expressway off-ramp would begin to operate at capacity LOS "F" during the AM peak hour under the No Build Alternative. The stop controlled movement would improve to an acceptable LOS "A" under the Build Alternative, when the median break closes on Virginia Avenue, NW and the D Street, NW approach becomes a right-turn only. All other intersections would theoretically continue to operate at acceptable LOS "D" or better during both the AM and PM peak hours.
$22^{\text {nd }}$ Street NW
As shown in the December 4, 2009 transportation addendum, all of the intersections within the study area would operate at acceptable levels of service during both the AM and PM commuter peaks. This includes the signalized Constitution Avenue, NW/22 ${ }^{\text {nd }}$ Street, NW intersection and the unsignalized driveways on $22^{\text {nd }}$ Street, NW. Field observations indicate that through traffic along Constitution Avenue, NW is regulated by the progression of traffic through the system of signalized intersections and are limited during periods when excessive queuing occurs, resulting in longer delay times than those reported in this study.

## Delays

## E Street Expressway Off-Ramp to D Street, NW /Virginia Avenue, NW

As shown in the October 6, 2006 transportation impact study, creating a fifth leg at the Virginia Avenue, NW /E Street, NW intersection to accommodate E Street Expressway off-ramp traffic bound northwest on Virginia Avenue, NW would introduce a third signal phase and change the overall intersection LOS from an acceptable "A" to an acceptable " C " during the AM peak hour, and from an acceptable " B " to an acceptable " C " during the PM peak hour. Based on industry standards a LOS of "D" or better would not require mitigation.

Department of State traffic (i.e., shuttles, employees, security, etc.) that currently merges onto the E Street Expressway (eastbound) off-ramp, oriented to westbound E Street, NW, or proceeds on D Street, NW to turn left on Virginia Avenue, NW intersection would now be required to turn right on Virginia Avenue, NW and re-route to the E Street, NW /Virginia Avenue, NW via consecutive left-turns on $20^{\text {th }}$ Street, NW and E Street, NW (westbound) under the Build Alternative. This would extend trips, in both time and distance traveled, for Department of State traffic oriented to those directions. Based on existing traffic counts, this would affect approximately 12 and 15 Department of State trips during the AM and PM peak hours, respectively. The reconfiguration of the intersection creates the change in delay, not the Department of State traffic.
$22^{\text {nd }}$ Street NW
As shown in the December 4, 2009 transportation addendum, the permanent closure of C Street, NW to vehicular traffic would have a minimal impact to vehicle delays at the intersections and driveways on $22^{\text {nd }}$ Street, NW, and would slightly reduce these delays since traffic destined for the Harry S Truman Building would utilize other driveways to access the site.

## Queues

## E Street Expressway Off-Ramp to D Street, NW /Virginia Avenue, NW

The queues noted in the October 6, 2006 study for the E Street, NW (Eastbound)/20th Street intersection would become slightly worse in the future due to the additional traffic that would be generated by other approved projects and ambient traffic growth. Queues of less than 100 feet (or four car lengths) are projected on the proposed new fifth leg at the Virginia Avenue, NW/E Street, NW intersection. Queues on this new leg are not expected to back up onto the E Street Expressway. Queues on westbound E Street, NW, and in both directions on Virginia Avenue, NW, would increase slightly. The proposed ramp reconfiguration would have no significant impact on queues elsewhere on the local street network. Removal of a single travel lane on the south side of Virginia Avenue, NW from E Street, NW to $20^{\text {th }}$ Street, NW would increase the queue during the AM peak hour at the Virginia Avenue, NW/21 ${ }^{\text {st }}$ Street, NW intersection on the Virginia Avenue, NW (southbound) approach. Optimizing the signal timings by allocating a minimum of five seconds of green time from $21^{\text {st }}$ Street, NW to the Virginia Avenue, NW mainline would significantly improve the vehicle queue (Wells, 2006).
$22^{\text {nd }}$ Street NW
The permanent closure of the C Street and $22^{\text {nd }}$ Street, NW intersection to all traffic, using "emergency bollards", would reduce vehicular traffic and conflicts on $22^{\text {nd }}$ Street, NW. The excessive queues along Constitution Avenue, NW would remain as a result of the progression of traffic through the system of signalized intersections.

## Short-Term Construction Impacts

In order to accommodate the short-term impacts, a Traffic Control Plan (TCP) would be required by DDOT to depict maintenance of traffic during all phases of construction. In addition, both Interim and Ultimate Traffic Signal Modification Plans are needed at the E Street, NW/Virginia Avenue, NW intersection since an additional approach would be constructed as part of the geometric reconfiguration process. Since a new traffic pattern would be introduced along the E Street Expressway off-ramp to Virginia Avenue, NW, a Signing and Pavement Marking Plan would be required to depict the revised traffic control devices needed in conjunction with the reconfiguration (Wells, 2006).

## Parking

Implementation of the Build Alternative would decrease the number of parking spaces in front of the APhA Building, on C Street, NW, between $21^{\text {st }}$ and $23^{\text {rd }}$ Streets, from 18 spaces to six spaces, and in front of the NAS Building, from 14 spaces to six spaces. Six new parking spaces would be added in front of the Department of State. All parking spaces would be available for use only by official Department of State and NAS vehicles. Existing parking spaces on C Street, NW between $21^{\text {st }}$ and $23^{\text {rd }}$ Streets are not currently used by the public and therefore, would not affect the availability of public parking on C Street, NW. The Build Alternative does not designate creating new metered parking spaces or public parking spaces, due to security concerns, and not public parking space.

The Revised $22^{\text {nd }}$ Street Design Concept proposes the removal of all 13 metered, parallel parking spaces on the east side of $22^{\text {nd }}$ Street, NW and the retention of all 8 metered, parallel parking spaces on the west side of $22^{\text {nd }}$ Street, NW. Eleven additional metered, parallel parking spaces would be designated on the west side of $22^{\text {nd }}$ Street, NW; however, the parking orientation would be adjusted from pull-in to back-in parking. Additionally, this alternative would designate seven parking spaces on the east side of $22^{\text {nd }}$ Street, NW for taxis. The proposed hydraulic bollards at the intersection of $22^{\text {nd }}$ and C Streets, NW would replace the existing temporary guard booth and delta barriers to eliminate the daily access between C Street, NW and $22^{\text {nd }}$ Street, NW, but would not impact parking.

Metered spaces on the site are available to the public on a first come, first served basis, and would likely not consistently be used by full time DoS employees. Instead, members of the general public visiting the Harry S Truman Building, sites along Constitution Avenue, NW, and adjacent office locations would likely use these spaces. C Street, NW is the only street on the site with the potential for metered parking spaces, and the loss of spaces along C Street, NW could represent a loss of parking spaces within the immediate area of the site and a potential loss of revenue for DDOT. DoS is currently in discussion with DDOT regarding strategies to mitigate these losses. The number of employees driving to work is not expected to increase or decrease (KCCT, 2006). All of these impacts may have a moderate, long-term affect on the site area.

## Public Transit

The planned security elements would not preclude or disrupt existing Washington Metropolitan Area Transit Authority bus routes, as operated today.

## Pedestrian Mobility

Pedestrian travel along all sidewalks around the building would be much more inviting and friendly, as the temporary hodgepodge of unsightly temporary precast planters and planters would be replaced by more integrated landscaping and architectural elements. Pedestrian travel safety would be enhanced at street intersections through continued provision of crosswalks that would be free from vehicles waiting at guard stations. Pedestrian access at street corners would allow easy access from the street to the pavement area by placing bollards and walls further back from the corner sidewalk area. Pedestrian travel in an emergency (through the barrier railings to allow movement away from the building) would be provided with breakaway horizontal rails. Pedestrian travel along D Street, NW and Virginia Avenue, NW would be more convenient and safe (Concept Submission, 2004).

## Environmental Consequences of the No Build Alternative

Implementation of the No Build Alternative could result in long-term, minor, adverse impacts, due to the lack of sidewalk improvements, improvements to $22^{\text {nd }}$ Street, NW, and potential long-term benefits associated with the improvements to the E Street

Expressway. Under the No Build Alternative, no physical changes to current transportation patterns, both pedestrian and vehicular, would take place, and operations would continue as they do currently. There would be no additional lanes of traffic, no permanent closure of any streets or lanes of traffic, no improvements to the E Street Expressway, no improvements to $22^{\text {nd }}$ Street, NW, no removal of public parking and no sidewalk improvements.

## Mitigation

The re-configuration of the E Street Expressway Off-Ramp the Virginia Avenue, NW/E Street, NW intersection would result in a redistribution of traffic that would move 350 to 960 peak hour vehicles away from the north side of the Harry S Truman Building, mitigating traffic in the direct vicinity of the Harry S Truman Building. Creating a fifth leg at the Virginia Avenue, NW /E Street, NW intersection and introducing a third signal phase would maintain an overall acceptable level of service. In addition, closing the median break on Virginia Avenue, NW at D Street, NW would improve the level of service at this location to acceptable levels. Removal of a single travel lane on the south side of Virginia Avenue, NW from E Street, NW to $20^{\text {th }}$ Street, NW would increase the vehicle queue during the AM peak hour at the Virginia Avenue, NW (southbound) approach. Optimizing the signal timings at the Virginia Avenue, NW/21 ${ }^{\text {st }}$ Street, NW intersection would reduce potential southbound queues on Virginia Avenue, NW during the AM peak hour, while maintaining acceptable levels of service. The sidewalk improvements could enhance pedestrian travel as a form of transportation, mitigating the loss of parking by advocating use of public transit and foot traffic. The Department of State would work with DDOT's Public Space Management division to determine strategies for mitigating a loss of parking.

In an effort to mitigate any impact of C Street, NW restrictions, a joint agency conceptual option and transportation study for improving traffic on $22^{\text {nd }}$ Street, NW was developed and presented to DDOT. The plan takes into account single traffic lanes on $22^{\text {nd }}$ Street, NW, separated by a center median to eliminate double parking and improved traffic flow. It was decided by all three agencies in March 2010 that further discussion regarding enforcement of traffic on $22^{\text {nd }}$ Street would take place after the $22^{\text {nd }}$ Street improvements are implemented. Additionally, DoS would continue to provide NAS with access to C Street, as it does today.

### 3.1.2 PUBLIC SAFETY

## AFFECTED ENVIRONMENT

## Security

Visitors to the Department of State enter through temporary screening facilities located outside the entry lobbies to the Harry S Truman Building and the Marshall Wing. These facilities house screening equipment including x-ray machines. Currently there are four temporary screening facilities located at the Marshall Wing entrance on $21^{\text {st }}$ Street, the

Jogger's entrance on $21^{\text {st }}$ Street, the Harry S Truman Building main entrance on C Street, and the Harry S Truman Building entrance on $23^{\text {rd }}$ Street. Excess security measures inside the building have made the entrance cluttered and inhibitory in the case of an emergency. Safety measures require all visitors to be checked twice inside the building. In times of high alert, additional screening takes place outside the building in makeshift guard stations.

The Department of State perimeter is secured by guards, temporary precast planters, retractable gates, and vehicles. C Street is closed to all traffic, except Department of State traffic and vehicles using the NAS dock, by the checkpoints at $21^{\text {st }}, 22^{\text {nd }}$, and $23^{\text {rd }}$ Streets. D Street is closed to all traffic, except Department of State traffic, between $23^{\text {rd }}$ Street and the D Street/Virginia Avenue off-ramp. Guards, barricades, and the truck checkpoint control access to the parking garage/loading dock driveway on $21^{\text {st }}$ Street. There are guard booths at the intersections of C and $21^{\text {st }} / 23^{\text {rd }}$ Streets, in addition to the guard booth at the underground parking entrance (Wells, 2006).

## Existing Emergency Response

The Harry S Truman Building lies within PSA 207 of the Second District of the Metropolitan Police Department. This district also includes the Federal Reserve, surrounding parks, NAS and APhA. The Federal Reserve Eccles and Martin Buildings have their agency's security forces for the Federal Reserve lots on $21^{\text {st }}$ and C Streets, and Constitution and Virginia Avenues. Diplomatic Security is a federal law enforcement agency under the Police Coordination Act (Metropolitan Police Department, 2005). The closest emergency medical service (EMS) and fire department facilities are Ambulance 23, located at 2119 G Street NW, and Truck Company 1, located at 2225 M Street NW. George Washington Medical Hospital is also nearby (DC Fire and Emergency Medical Services, 2006).

## Environmental Consequences of the Build Alternative

Under the Build Alternative, long-term, beneficial impacts on the site's public safety are expected by improving the safety of building occupants. A variety of security enhancements included in the proposed action is described in section 2.0 of this document. Emergency medical services and fire engine routes are not expected to be altered from transportation changes. All new barriers would allow emergency vehicles, such as fire engines, to access the building perimeter. An increased strain on the Metropolitan Police Department is not expected.

## Environmental Consequences of the No Build Alternative

Under the No Build Alternative, safety would continue as is, which would result in longterm, minor, adverse impacts. Implementing the No Build Alternative would result in the maintenance of existing safety features, including the temporary precast planters around the perimeter of the building, which, alone, would not offset the effects of a potential blast. In the event of an attack, potential blasts in or within the vicinity of the building
would have a more severe affect on the building and the surrounding area than if the improvements are made.

## Mitigation

Access to C Street would be restricted due to security improvements; however, in the event of an emergency, the bollards along the north end of $22^{\text {nd }}$ Street would be lowered to accommodate vehicular through-traffic.

### 3.1.3 UTILITIES

## Affected Environment

The existing utilities within C Street, between $23^{\text {rd }}$ and $21^{\text {st }}$ Streets, include the following: a two-foot by four-foot telecom ductbank under the north sidewalk of C Street, from $23^{\text {rd }}$ to $21^{\text {st }}$ Streets; an eight-inch water main along the center line of C Street, between $23^{\text {rd }}$ and $21^{\text {st }}$ Streets; a six-foot by seven-foot steam tunnel under the south sidewalk of C Street, extending east from the intersection of $23^{\text {rd }}$ and C Streets for a distance of approximately 150 feet, at which point it runs south across the property line. In addition, one eleven-foot, three-inch box culvert combination sewer runs from approximately midway between $23^{\text {rd }}$ and $21^{\text {st }}$ Streets east toward $21^{\text {st }}$ Street, and approximately 5 feet north of the center line of C Street.

The existing utilities within D Street, between $23^{\text {rd }}$ and $21^{\text {st }}$ Streets include the following: a four-inch gas line runs along D Street, just south of the north D Street curb line, from $23^{\text {rd }}$ Street east toward Virginia Avenue; along the south sidewalk of D Street, a nine-way telecom ductbank runs from $23^{\text {rd }}$ Street east toward Virginia Avenue; and a twelve-inch water main runs north along the center line of D Street, from $23^{\text {rd }}$ Street east toward Virginia Avenue. An electric ductbank runs along the north side of D Street, from $23^{\text {rd }}$ Street east to a location approximately 70 feet east of the intersection of D Street and $23^{\text {rd }}$ Street, at which point it turns south and runs across the property line. In addition, there are light poles, an electric vault, fire hydrants, and other surface features along this segment of D Street, from $23^{\text {rd }}$ Street east toward Virginia Avenue. These items may require field adjustments after the existing D Street pavement is removed and new landscape/hardscape improvements are installed.

## Environmental Consequences of the Build Alternative

Implementation of the Build Alternative would result in long-term, minor, adverse impacts from relocation of some original curb lines, stormwater drains, street lights, hydrants and manholes.

Phases I and II of this project relate to moving curb lines toward the center of the road in order to decrease the space available for entry into each road. The movement of these curb lines closer to each other does not affect underground utility lines, only surface features. Hence, streetlights would need to be relocated so that they are situated adjacent
to the new curb line. In addition, some hydrants need to be moved. In some instances, the tops of manhole covers would need to be raised when the existing manhole cover, which is currently in the roadway, is relocated to a sidewalk area due to the movement of the curb line. All potential utility relocations should be discussed with the District of Columbia prior to construction.

Listed below is a summary of the effects on existing utilities of the perimeter security improvements.
$23^{\text {rd }}$ Street and C Street Intersection: The curb lines along the north and south sides of C Street would be moved in closer to the centerline of C Street in order to minimize the width of entry into C Street from $23^{\text {rd }}$ Street. At the north curb at the intersection of $23^{\text {rd }}$ and C Streets, one (1) fire hydrant would have to be moved to the south in order to be closer to the new curb line.

C Street Curbs between 23 ${ }^{\text {rd }}$ Street and $21{ }^{\text {st }}$ Street: Along the new south curb line of C Street, five (5) street lights would have to be moved to the north in order to be adjacent to the new curb location. All other utility covers in the existing south sidewalk along C Street would not require relocation or adjustment. Along the new north curb line, one existing street light would have to be moved to the south in order to be adjacent to the new curb.

21 ${ }^{\text {st }}$ Street and C Street Intersection: The curb lines along the north and south sides of C Street would be moved in closer to the centerline of C Street in order to minimize the width of entry into C Street from $21^{\text {st }}$ Street. At the north curb at the intersection of $21^{\text {st }}$ and C Streets, one curb inlet would have to be moved to the south in order to be closer to the new curb line. At the south curb at the intersection of $21^{\text {st }}$ and C Streets, one curb inlet would have to be moved to the north in order to be closer to the new curb line.
$23^{\text {rd }}$ Street and C Street Intersection: The D Street entrance at $23{ }^{\text {rd }}$ Street would be moved to the north about 40 feet from its existing location. This new location of D Street would run east about 70 feet, at which point it would turn to the southeast and run until it intersects with the existing D Street. The existing D Street, from its intersection with $23^{\text {rd }}$ Street to a distance of 70 feet $+/-$, would be removed along with associated curb and gutter.

D Street Existing Curbs from Intersection with $23{ }^{\text {rd }}$ Street to a Distance 70 Feet to the East: Along the south existing curb line, eight (8) street lights would have to be relocated. In addition, two (2) fire hydrants would have to be relocated. No utilities would need to be relocated along the existing north curb line.

D Street Curbs from $23{ }^{\text {rd }}$ Street to a Distance 70 Feet to the East: The new location of the curbs would not warrant any utility relocations or removals. However, the new pavement between the north and south curb lines would necessitate the removal of three (3) light poles and the resetting of the cover on one (1) electrical manhole.
$\mathbf{2 2}^{\text {nd }}$ Street: At this time, the design for $22^{\text {nd }}$ Street would not warrant any utility relocations or removals since there are no anticipated changes to the curbs. The median at the south half of $22^{\text {nd }}$ Street would be located at the crown of the street and is not anticipated to affect drainage.

## Environmental consequences of the No Build Alternative

Under the No Build Alternative, impacts on utilities would be negligible.

### 3.1.4 COMMUNITY FACILITIES

## AFFECTED ENVIRONMENT

There are no churches, schools, community public health centers within the vicinity of the project.

## Environmental Consequences of The Build Alternative

Under the Build Alternative, impacts on community facilities would be negligible.

## Environmental Consequences of the No Build Alternative

Under the No Build Alternative, impacts on community facilities would be negligible.

### 3.2 CULTURAL RESOURCES

As required under 36 CFR $\S 800.3$, the Department of State has conducted consultation on the potential effects of the Harry S Truman Building Perimeter Security Improvements Concept Plan on historic resources, beginning with a meeting on August 4, 2004, DoS, the lead agency for Section 106 review, and the District of Columbia State Historic Preservation Office (DCSHPO), the Advisory Council on Historic Preservation, and the National Capital Planning Commission. At this meeting two areas of potential effects, primary and secondary, were identified. (See Figure 7) On the same date, the DCSHPO, ACHP, and NCPC concurred with an evaluation by DoS and the General Services Administration (GSA) that proposed alterations, especially the removal of the building's original entrance canopies, had potential adverse effects on the Harry S Truman Building. DoS and GSA formally initiated Section 106 consultation for the project in letters to DCSHPO and ACHP dated October 16, 2004.

Under §800.3(e), all federal agencies are required to involve the public in the Section 106 process. Consultation is defined as the process of seeking, discussing, and considering the views of other participants regarding the proposed project and its potential to have an effect on historic resources. DoS and GSA conducted several meetings with interested parties while the perimeter security plan was being prepared. In addition to the DCSHPO, ACHP, and NCPC, these consulting parties included CFA, NPS, NAS, APhA, the Committee of 100 on the Federal City, the DC Preservation League, ANC 2A, and the National Coalition to Save Our Mall.

As consultation continued, the scope of the undertaking evolved to include alterations to $22^{\text {nd }}$ Street, N.W., and minor construction on the property of NAS. Section 106 consultation was reinitiated on January 22, 2010 to reflect these changes to the undertaking. Security construction associated with the addition to the APhA Building also emerged as a related, though separate undertaking. As a result of these issues, NAS and APhA were invited to be signatories to the programmatic agreement (PA) to be developed to conclude the Section 106 process. A PA for the undertaking has been drafted based on models suggested by DCSHPO, ACHP, and NCPC, and other consulting parties. Further Section 106 meetings, including review and finalization of the programmatic agreement, are planned to present the alterations on $22^{\text {nd }}$ Street and to conclude the programmatic agreement.

### 3.2.1 HISTORIC RESOURCES

## AFFECTED EnVIRONMENT

A review was completed of historical materials provided by the Department of State and the DCSHPO, as well as published information, National Register of Historic Places documentation, and Historic American Buildings Survey records, to identify historic resources in the areas of potential effects.

The primary and secondary areas of potential effect (APEs) include eight individually landmarked properties or individual properties determined potentially eligible for landmark designation (Figures 8):

1. American Institute of Pharmacy, 2215 Constitution Avenue, N.W. - D.C. Inventory of Historic Sites, January 21, 1977; National Register of Historic Places, August 18, 1977
2. American Red Cross, D.C. Chapter House, 2025 E Street, N.W. - D.C. Inventory of Historic Sites, October 24, 1996
3. Department of the Interior, South Building (Public Health Service), 1951 Constitution Avenue, N.W. - D.C. Inventory of Historic Sites, April 26, 2007; National Register of Historic Places, July 5, 2007
4. Federal Reserve Board (Eccles Building), Constitution Avenue between $20^{\text {th }}$ and $21^{\text {st }}$ Streets, N.W. - D.C. Inventory of Historic Sites, November 8, 1964
5. Lincoln Memorial (including Lincoln statue), West Potomac Park - D.C. Inventory of Historic Sites, November 8, 1964; National Register of Historic Places, October 15, 1966 (documented March 24, 1981)
6. National Academy of Sciences, 2101 Constitution Avenue, N.W. - D.C. Inventory of Historic Sites, November 8, 1964; National Register of Historic Places, March 15, 1974
7. Old Naval Observatory, $23^{\text {rd }}$ and E Streets, N.W. - DC Inventory of Historic Sites, November 8, 1964; National Historic Landmark, January 12, 1965; National Register of Historic Places, October 15, 1966
8. State Department/War Department, $21^{\text {st }}$ and E Streets, N.W. - determined potentially eligible for the National Register by GSA, April 23, 1992


DC District of Columbia Inventory of
Historic Sites
NR National Register of Historic Places
NHL National Historic Landmark

1. American Pharmacists Association (DC, NR)
2. American National Red Cross (DC, NR, NHL
3. American Red Cross, D.C. Chapter (DC)
4. Arlington Memorial Bridge (DC, NR)
a. Bridge
b. Watergate

Rock Creek \& Potomac Parkway Terminus
5. Corcoran Gallery (DC, NR,NHL)
6. DAR Constitution Hall (DC, NR, NHL)
7. DAR Memorial Continental Hall (DC, NR, NHL)
8. New Interior Building (DC, NR)
9. Interior Department Offices/GSA (NR)
10. Interior Department South (potentially eligible)
11. Federal Reserve Board (DC)
12. Lincoln Memorial (DC, NR)
13. National Academy of Sciences (DC, NR)
14. Old Naval Observatory (DC, NR, NHL)
15. Pan American Union/Organization of American States (DC, NR)
16. State Department (War Department) (potentially eligible)
17. Van Ness House Stables (DC)

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The APEs also include 9 buildings, 1 structure, and 2 objects identified as contributing elements of designated or eligible historic districts (Figure 9):

## Buildings

1. American Institute of Pharmacy, 2215 Constitution Avenue, N.W. - Northwest Rectangle Historic District, eligible for National Register and D.C. Inventory of Historic Sites, December 10, 1998
2. American Red Cross, D.C. Chapter House, 2025 E Street, N.W. - Northwest Rectangle Historic District, eligible for National Register and D.C. Inventory of Historic Sites, December 10, 1998
3. Department of the Interior, South Building (Public Health Service), 1951 Constitution Avenue, N.W. - Northwest Rectangle Historic District, eligible for National Register and D.C. Inventory of Historic Sites, December 10, 1998
4. Federal Reserve Board, Constitution Avenue between $20^{\text {th }}$ and $21^{\text {st }}$ Streets, N.W. - Northwest Rectangle Historic District, eligible for National Register and D.C. Inventory of Historic Sites, December 10, 1998
5. National Academy of Sciences, 2101 Constitution Avenue, N.W. - Northwest Rectangle Historic District, eligible for National Register and D.C. Inventory of Historic Sites, December 10, 1998
6. Old Naval Observatory, $23^{\text {rd }}$ and E Streets, N.W. - Potomac Annex Historic District, eligible for National Register, September 12, 2001
7. State Department, $21^{\text {st }}$ and E Streets, N.W. - Northwest Rectangle Historic District, eligible for National Register and D.C. Inventory of Historic Sites, December 10, 1998
8. War Department, $21^{\text {st }}$ and E streets, N.W. - Northwest Rectangle Historic District, eligible for National Register and D.C. Inventory of Historic Sites, December 10, 1998
9. Office of Personnel Management, $19^{\text {th }}$ and E Streets, N.W. - Northwest Rectangle Historic District, eligible for National Register and D.C. Inventory of Historic Sites, December 10, 1998

## Structure

1. Lincoln Memorial (including Lincoln statue and grounds), West Potomac Park East and West Potomac Parks Historic District, D.C. Inventory of Historic Sites, November 11, 1964; National Register of Historic Places, November 30, 1973 (revised November 11, 2001)

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## Seventeenth Street Historic District

Contributing Buildings
3. Corcoran Gallery of At
4. Pan American Union (Organization of American States)
5. DAR Memorial Continental Hal
. American National Red Cross
Northwest Rectangle Historic District
Contributing Buildings
3. Corcoran Gallery of Art
4. Pan American Union (Organization of American States)

DAR Memorial Continental Hal
7. American Institute of Pharmacis
8. American National Red Cross Administration Building
9. American National Red Cross Office
10. American Red Cross D.C. Chapter Hous
11. DAR Constitution Hall
12. New Department of Interior Building
13. Old Department of Interior Building (GSA)
14. Department of Interior So
15. Federal Reserve Board
16. National Academy of Sciences
17. Office of Personnel Managemen
18. Pan American Union Annex
19. Department of State Extens
21. War Department

Contributing Statuary
22. Jose Artigas Statue
23. Simon Bolivar Statue
24. General Jose de San Martin Statue
25. Major General Jo Discus Thins Statu

Potomac Parks Historic District [ partial]
Structure
Site
27. Lincoln Memorial

2incoln Memorial Ground
. Reflecting Pool
30. Elm Trees
31. Constitution Gardens

Objects
32. Vietnam Veterans Memorial
33. Vietnam Women's Memorial
4. 56 Signers Memorial

Vistas
35. 23rd Street from Constitution Avenu

Figure 9 - Historic District Boundaries and Contributing Elements

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## Objects

1. Discus Thrower (reproduction), Virginia Avenue and $21^{\text {st }}$ Street, N.W. (Reservation 105) - Northwest Rectangle Historic District, eligible for National Register and D.C. Inventory of Historic Sites, December 10, 1998
2. General Jose de San Martin Statue, Virginia Avenue and $20^{\text {th }}$ Street, N.W. (Reservation 106) - Northwest Rectangle Historic District, eligible for National Register and D.C. Inventory of Historic Sites, December 10, 1998

The statue of General Jose de San Martin has also been listed in the D.C. Inventory and the National Register as part of the Memorials in Washington, D.C., multiple property documentation (D.C. Inventory of Historic Sites, February 22, 2007; National Register of Historic Places, October 12, 2007).

Eleven appropriations and reservations, 8 streets, and 3 vistas, shown in Figure 10, that are contributing elements of the Plan of the City of Washington landmark documentation are included within the areas of potential effects.

Major elements of the L'Enfant Plan for the City of Washington were identified for listing in the DC Inventory of Historic Sites on November 8, 1964. The major elements were designated on January 19, 1971, and the documentation was expanded on January 23, 1997. L'Enfant Plan elements became part of the National Register of Historic Places on April 24, 1997. A draft National Historic Landmark nomination for the L'Enfant Plan as modified by the McMillan Plan (prepared by Robinson \& Associates, dated January 4, 2001, and currently on file at the DCSHPO) updated and expanded the National Register documentation.

## Reservations

1. Original Appropriation No. 4, between $23^{\text {rd }}$ and $25^{\text {th }}$ Streets, N.W., south of E Street (site of Old Naval Observatory)
2. Reservation No. 102, west side of Virginia Avenue, N.W., above E Street
3. Reservation No. 103, east side of Virginia Avenue, N.W., below E Street
4. Reservation No. 104, Virginia Avenue and $21^{\text {st }}$ Street, N.W., west side
5. Reservation No. 105, east side of $21^{\text {st }}$ Street, N.W., below Virginia Avenue
6. Reservation No. 106, west side of $20^{\text {th }}$ Street, N.W., above Virginia Avenue
7. Reservation No. 108, Virginia Avenue and C Street, N.W., west side
8. Reservation No. 332, West Potomac Park
9. Reservation No. 378, Virginia Avenue, C and $21^{\text {st }}$ Streets, N.W.
10. Reservation No. 715, E Street, N.W., between $19^{\text {th }}$ and $20^{\text {th }}$ Streets
11. Reservation No. 720, west side of Virginia Avenue, N.W., below E Street

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## Streets

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\begin{array}{ll}
\text { 1. } & \text { 17th } \\
\text { 2. } & \text { 18th } \\
3 . & 19 \text { th } \\
\text { 4. } & \text { 20th } \\
5 . & \text { 21st } \\
6 . & \text { 22nd } \\
7 . & \text { 23rd } \\
8 . & \text { 24th } \\
9 . & \text { C Street } \\
\text { 10. } & \text { D Street } \\
\text { 11. } & \text { E Street } \\
\text { 12. } & \text { F Street } \\
\text { 13. } & \text { Henry Bacon Drive } \\
14 . & \text { Constitution Avenue } \\
\text { 15. } & \text { Lincoln Memorial Circle } \\
\text { 16. } & \text { New York Avenue } \\
\text { 17. } & \text { Virginia Avenue }
\end{array}
$$

## Appropriations and Reservations

18. L'Enfant Original Appropriation No. 4
19. L'Enfant Reservation No. 13
20. L'Enfant Reservation No. 105
21. L'Enfant Reservation No. 106
22. L'Enfant Reservation No. 110
23. McMillan Reservation No. 332
24. McMillan Reservation No. 38
25. McMillan Reservation No. 720

Vistas
27. 23rd Street (between Washington Circle and the Lincoln Memorial)
Constitution Avenue
2. Virginia Avenue (to Washington Monument)


ROBINSON \& ASSOCIATES - HISTORIC PRESERVATION

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## Streets

1. $20^{\text {th }}$ Street, N.W.
2. $21^{\text {st }}$ Street, N.W.
3. $22^{\text {nd }}$ Street, N.W.
4. $23^{\text {rd }}$ Street, N.W.
5. C Street, N.W.
6. E Street, N.W.
7. Constitution Avenue, N.W.
8. Virginia Avenue, N.W.

Views and Vistas

1. Constitution Avenue, N.W.
2. Virginia Avenue, N.W.
3. $23^{\text {rd }}$ Street, N.W.

## Environmental Consequences of the Build Alternative

The Build Alternative envisions the following primary alterations to the building and site:

- A system of related design elements to improve perimeter security at the site's edges. The standard structural member of the perimeter barrier is a bollard, which would be clad as individual stainless steel posts, stainless steel fencing, granite walls, or a combination thereof to vary the articulation of the perimeter in accordance with NCPC guidelines. ${ }^{4}$
- Guard booths of consistent design to replace the existing temporary booths on C Street and to be added at other locations.
- Alteration of curbs and traffic patterns in some locations to separate traffic types and allow for vehicle inspection.
- Replacement of the Harry S Truman Building's original entrance canopies with screening pavilions, in order to remove security screening from the building's interior.
- Two small barriers (either walls or bollards) with gates on the property of the NAS.

[^3]At a staff-level review of the proposed action on August 4, 2004, the DCSHPO and the ACHP agreed that the actions proposed under this alternative have potential adverse effects on the Harry S Truman Building and on other historic resources associated with the site, while also reversing some inappropriate earlier construction. In summary, the plan has the following principal potential effects:

- Removes temporary security barriers and accomplishes perimeter security improvements employing materials related to the Harry S Truman Building itself.
- Removes security equipment from the building's lobbies, allowing those spaces to be returned to their original condition.
- Removes entrance canopies original to the construction of the Department of State Extension (New State) and replaces them with new entrance pavilions.
- Alters the historic open character of and views along some L'Enfant and McMillan plan streets, affecting the setting of the Harry S Truman Building and other contributing buildings of the Northwest Rectangle Historic District.
- Affects views of the Harry S Truman Building and other historic resources.

These effects are shown in Figure 11 and addressed in further detail below. DoS and GSA intend to resolve potential adverse effects through the Section 106 process, concluding with a programmatic agreement signed by DoS, GSA, NPS, DC SHPO, ACHP, NAS, and APhA. The PA will specify how Section 106 consultation will be conducted during the phases of construction.

The historic setting of the contributing buildings of the Northwest Rectangle Historic District included ample green space around monumental buildings set within the open urban framework provided by the L'Enfant and McMillan plans for Washington. Examples of these buildings within the areas of potential effects include APhA, the NAS, and the Federal Reserve Board (Eccles Building). Additions to APhA and NAS have reduced their green space near the Harry S Truman Building. Changes have also taken place in the widths of the roadways in the Northwest Rectangle. In general, roadways were widened after 1965. Until the construction of temporary security features around the Harry S Truman Building; however, these streets remained open - without medians, vegetation, guard booths, or other built features within the cartways. As a result of security construction in the cartways, the open setting of L'Enfant and McMillan plan streets around APhA and NAS receives adverse impacts.

The general planting scheme of grass and trees, employed since New State was constructed, remains today, although it is uncertain whether or not original plant materials still exist. Landscaping undertaken during the security improvement project is intended to complement the historic scheme and does not materially affect its character.


Primary effects
Secondary effects

## Buildings and Structures

$\begin{array}{lll}\text { 1. } & \begin{array}{ll}\text { American Instiut of Pharmacy } \\ \text { 2. }\end{array} \\ \text { 3. } & \begin{array}{l}\text { American Red cross, D.C. Chapter Ho } \\ \text { D. }\end{array} \\ \text { Department of Interior South }\end{array}$
3. Department of Interior So
5. Lincoln Memorial
$\begin{array}{ll}\text { 7. } & \text { National } 1 \text { Acacemy of Sciences } \\ \text { Office of Persomnel Management } \\ \text { OId }\end{array}$ Old Naval Observatory
Harry S Truman Building

Statuary
10.
General Jose de San Martin Statue
11.
Reproduction of Discus Thrower

Streets

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Appropriations and Reservations
20. L'Enfant Original Appropriation No. 4

 | LEnfant Reservation No. 102 |
| :--- |
| LEnfant Reservation No. 103 |
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LEEffant Reseration 105
Leforant Reseration 10 No 106 LEnfanan Reseseratation No. 105 McMillan Reservation No. 71 .
Mchillan Reservation No. 720 Vistas
I-
28. 23rd Street (between Washington Circle and the
29. Lincoll Memorial) Virginia Averue (to Washington Monument)

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## East

In this alternative, the relocation of the curb on both sides of $21^{\text {st }}$ Street and the insertion of 6 -foot-wide medians at two locations to create greater setback distance and truck inspection stations alter the view corridor of this L'Enfant and McMillan plan street. The $21^{\text {st }}$ Street cartway is currently 36 feet wide. The perimeter security plan would alter this width in several locations. At its intersections with C Street and Virginia Avenue, the cartway would be approximately 30 feet wide. In the locations of the truck inspection stations, the cartway would be 24 feet wide. In between these locations, the cartway would be 36 feet wide. (The width of the cartway has changed over time. Between C Street and Virginia Avenue it was widened from 32 feet in 1932 to either 43 or 48 feet by 1965 and reduced to 36 feet by 2006. As shown in Figure 12, the street's right of way is not affected by the Build Alternative. ${ }^{5}$ ) The relocated curbs, the medians, and the trees planted in the curb extensions near Virginia Avenue result in direct, long-term, minor adverse impacts to views in both directions along $21^{\text {st }}$ Street. The materials of the guard booth on the east side of $21^{\text {st }}$ Street (granite, stainless steel, and glass) relate better to the materials used in the Harry S Truman Building than does the temporary guard booth near the parking and loading ramp. Its location would not affect views of the building since the sidewalk is between the guard booth and the street. Security barriers in the form of bollards, fencing, and/or walls placed along the edge of the $21^{\text {st }}$ Street curb also have direct, long-term, minor adverse impacts on views of the Harry S Truman Building and along the L'Enfant Plan street. Incorporating the curb into the security system allows the height of the barrier itself to be lowered from 39 to 33 inches when the barrier is within 24 inches of the curb. The palette for the security barrier (stainless steel bollards and fencing and gray granite walls) is derived from materials used in the Harry S Truman Building itself in order to lessen its visual impact.

Two noncontributing structures built in 1985 (one freestanding, the other attached to Old State's original entrance) would be removed to accommodate a new entrance pavilion on $21^{\text {st }}$ Street. The new pavilion would adversely impact views of the original building façade from the sidewalk and street, and would partially enclose the original open courtyard of Old State. According to the Build Alternative, the roof of this new entrance also projects into the right-of-way of $21^{\text {st }}$ Street, potentially resulting in adverse impacts on views along this L'Enfant-McMillan Plan street. A second security pavilion attached to a secondary entrance (partially below grade) removes noncontributing granite planters installed in 1985 for security considerations. The size of the new pavilion may partially obscure the secondary entrance, which dates from the construction of New State between 1957 and 1960. The designs of the two new entrances on $21^{\text {st }}$ Street have not been finalized. Assessment of their impacts on the Harry S Truman Building would take place during the design of that phase of the security plan.

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The general planting scheme of grass and trees between the areaway walls and the sidewalk, employed since New State was constructed, remains today, although it is uncertain whether or not original plant materials still exist. Landscaping undertaken in this area during the security improvement project is intended to complement the historic scheme. Assessment of the impacts of street-side landscaping on the Harry S Truman Building would take place during the design of that phase of the security plan.

## South

The curb relocation on the south side of C Street narrows the existing roadway of this L'Enfant Plan street from 56 to 50 feet, matching the current C Street roadway between $21^{\text {st }}$ and $20^{\text {th }}$ streets. (The 56 -foot-wide roadway of C Street between $21^{\text {st }}$ and $23^{\text {rd }}$ streets was established between 1965 and 2006; between 1932 and 1965, the roadway was 32 feet wide. The street's right of way is not affected by the build alternative.) The roof of the new entrance pavilion would project into the current cartway, according to the site plan. In addition, guard booths are planned for C Street near its intersections with $23^{\text {rd }}$ and $21^{\text {st }}$ streets. Associated with the guard booths are security barriers parallel to the street within the relocated curbs. Bollards are planned to cross $22^{\text {nd }}$ Street where it intersects C Street. The Harry S Truman Building perimeter security plan also envisions a 3 -foot, off-center median in the southern half of $22^{\text {nd }}$ Street and changes to parking areas. The current roadway width ( 56 feet) remains unchanged. In 1965, the $22^{\text {nd }}$ Street roadway in the northern half of the block was 32 feet wide, but wider in the southern half (perhaps 56 feet.)

The combination of medians, security structures, and guard booths results in direct, longterm, moderate adverse impacts on views in both directions along C Street, a contributing element of the L'Enfant-McMillan Plan National Register documentation. The materials of the new guard booths relate to the materials used in the State Department, but their location, combined with security features along the street edges, has the potential to adversely affect views of the south elevation of New State (conceived of as the building's primary ceremonial entrance), and - less noticeably - of the secondary facades of the National Academy of Sciences and the Federal Reserve Board. The bollards crossing C Street and associated security construction also constitute a direct, long-term, minor adverse effect on $22^{\text {nd }}$ Street, which is a contributing element in the Plan of the City of Washington National Register documentation.

The construction of the pavilion at the south entrance adversely impacts Harry S Truman Building in that it would replace the current glass and steel canopy and granite and glass vestibules that date from the building's original construction. The new south pavilion is planned to be larger than the original canopy and its overhanging roof would project into the C Street right of way, potentially resulting in adverse impacts to views of the south elevation from C, $21^{\text {st }}, 22^{\text {nd }}$, and $23^{\text {rd }}$ Streets, as well as views along C Street. (C Street is a contributing element of the L'Enfant-McMillan Plan National Register documentation.) The design of the new pavilion on C Street has not been finalized. Assessment of its impacts on the Harry S Truman Building would take place during the design of that phase of the security plan. The relation of the new entrance pavilion and the existing retaining
walls, terraces, and flagpoles (also original to the 1957-60 construction) is not clear at this stage of the design, but the new entrance may affect the fabric and visibility of their original construction. The new entrance would remove security equipment currently inside the south lobby, allowing the ceremonial space to be returned to its original condition. The granite planters constructed at the north entrance in 1985 would also be removed when the south pavilion is constructed.

The barriers planned for the National Academy of Sciences property, either walls or bollards of a design and materials appropriate to the architecture of the Bertram Grosvenor Goodhue building, result in direct, long-term, minor adverse impacts on the spatial organization of the academy grounds. The NAS building was originally set within a generous green perimeter to complement its monumental design. The integrity of the grounds, especially toward the rear of the original building, where the barriers would be located, has been compromised, however, with the construction of a rear addition and the insertion of surface parking. These alterations limit, but do not erase, the adverse impacts of the proposed barriers.

The general planting scheme of grass and trees remains today, although it is uncertain whether or not original plant materials still exist. Landscaping undertaken in this area during the security improvement project is intended to complement the historic scheme. Assessment of the impacts of the new landscaping on the Harry S Truman Building would take place during the design of that phase of the security plan.

## West

The perimeter security plan envisions the relocation of the east curb of $23^{\text {rd }}$ Street to the west to create setback distance and space for security features such as bollards, kneewalls, and trees. The new entrance pavilion extends to this new curb line. Extension of the curb projects 10 feet into the existing cartway. (The cartway was widened from 32 feet to 56 feet between 1932 and 1965, and from 56 feet to 64 feet between 1965 and 2006.) New trees on $23^{\text {rd }}$ Street are planted within the curb extension in the perimeter security plan. The new curb, trees, and the roof of the new State Department entrance pavilion result in direct, long-term, minor adverse impacts to views along the street in both directions, although it is unlikely that the view of the Lincoln Memorial would be impaired due to the distance of this block from the memorial, its elevation, and the tree canopy. The curb extension and the new trees would replace the temporary precast planters that have closed this drop-off lane since 2001. The security features at the edge of the site on $23^{\text {rd }}$ Street would also result in direct, long-term, minor impacts on views of New State's west elevation.

The construction of the new west entrance pavilion would result in the replacement of the current glass and steel canopy and glass and aluminum vestibules that date from the building's original construction. The new pavilion would also be larger than the original one-story canopy, potentially resulting in adverse impacts on views of the west façade from $23^{\text {rd }}$ and C Streets, as well as along $23^{\text {rd }}$ Street, a contributing element of the L'Enfant-McMillan Plan National Register documentation. The design of the new
pavilion on $23^{\text {rd }}$ Street has not been finalized. Assessment of its impacts on the Harry S Truman Building would take place during the design of that phase of the security plan. The new security pavilion's curved west elevation is planned to reflect the shape of the State Department's Auditorium, an original feature of the building. The new pavilion would remove granite planters from the north entrance that were added in 1985. The removal of security equipment inside the west lobby would allow the area to be returned to its original condition.

The space between the sidewalks and areaway retaining walls were originally planted with grass and trees, with hedges and low shrubs along the retaining walls. The general planting scheme of grass and trees remains today, although it is uncertain whether or not original plant materials still exist. Landscaping undertaken in this area during the security improvement project is intended to complement the historic scheme. Assessment of the impacts of street-side landscaping on the Harry S Truman Building would take place during the design of that phase of the security plan.

## North

The addition of the guard booth at D and $23^{\text {rd }}$ Streets may have direct, long-term, minor adverse impacts on views of the north façade of the Harry S Truman Building from D and $23^{\text {rd }}$ Streets. A guard booth near the parking facility exit and along the shuttle bus exit lane seems unlikely to have an adverse impact on views of the building. The materials of these booths would relate to the materials used in the State Department itself.

The perimeter security plan envisions a change to the traffic pattern on the north side of the Harry S Truman Building, including a reconfiguration of Reservation no. 720 on the south side of the intersection of E Street and Virginia Avenue. The reservation is a contributing element of the Plan of the City of Washington National Register designation, but its current configuration is a result of the construction of the E Street Expressway in the 1960s. The change in the traffic pattern brings one expressway exit ramp marginally closer to the statue of Bernardo de Galvez, which was erected in the reservation in 1976. The immediate setting for the statue, which is neither listed in nor determined eligible for the National Register, has not been changed by the reconfiguration of the traffic lanes. The adverse impact of this reconfiguration is therefore considered to be direct and longterm, but minor.

Construction of the pavilion at the north entrance would result in the demolition of the current glass and steel canopy and granite and glass vestibules that date from the building's original construction. The addition would be larger than the original canopy and may adversely impact views of the north façade from $23^{\text {rd }}$ Street, D and E Streets, and Virginia Avenue. The design of the new pavilion on D Street has not been finalized. Assessment of its impacts on the Harry S Truman Building would take place during the design of that phase of the security plan. The new pavilion would remove granite planters from the north entrance that were added in 1985. The removal of security equipment inside the north lobby would allow the area to be returned to its original condition.

None of the original plant materials on the north side of Old State appear to date from its original landscaping plan. On the north side of New State, the spaces between the sidewalks and areaway retaining walls were originally planted with grass and trees, with hedges and low shrubs along the retaining walls. This general planting scheme remains today, although it is uncertain whether or not original plant materials still exist. Landscaping undertaken on the north side of the Harry S Truman Building during the security improvement project is intended to complement the historic scheme. Assessment of the impacts of new landscaping on the north side of the Harry S Truman Building would take place during the design of that phase of the security plan.

## Environmental Consequences of the No Build Alternative

Implementation of the No Build Alternative would have long-term, minor/moderate impacts on historic resources. The existing temporary security measures - including temporary precast planters, bollards, planters, and temporary guard booths and inspection areas - would continue under this alternative, resulting in adverse impacts to several elements of the L'Enfant-McMillan Plan for Washington. These effects are judged to be moderate on C Street and minor on $21^{\text {st }}, 22^{\text {nd }}$ and $23^{\text {rd }}$ Streets. The temporary security features would also continue to have minor adverse impacts on views of all four facades of the Harry S Truman Building and, less noticeably, NAS and the Federal Reserve.

## Mitigation

The Section 106 programmatic agreement is being prepared to provide a framework to guide design of the new entrance pavilions so as to minimize adverse effects to the Harry S Truman Building and to guide mitigation for adverse effects beyond restoration of the lobbies. In addition to the programmatic agreement, separate memoranda of agreement would be written for each phase of the project to identify adverse effects and appropriate mitigation measures.

### 3.2.2 ARCHEOLOGICAL RESOURCES

## AfFECTED EnVIRONMENT

Archeological site files at the DCSHPO record 16 locations within one mile of the project area where archeological resources have been identified or predicted (Figure 13, Table 2). Most of the historic-period sites include both commercial and domestic resources, dating from the late eighteenth century into the twentieth century. Some sites have only domestic resources, and several are industrial, particularly those along the waterfront. Several of the historic sites also have a prehistoric component.

The prehistoric sites are interpreted as camps associated with exploitation of food resources or quarrying of lithic materials. Estuaries and salt marshes, floodplains, river terraces, uplands, and lithic quarries were all found in the project vicinity. These types of landforms were often selected for occupation or use by prehistoric Native Americans, and evidence of such use survives as archeological sites. A map of the topography of the city in
approximately 1792 clearly shows the knoll on which the old Naval Observatory is located, as well as the terraces above Tiber Creek (Goose Creek) and the Potomac River (Figure 14) where the Harry S Truman Building is now located. River terraces above floodplain and marsh is the type of topographic setting where prehistoric sites are likely to be found. Historic maps document the development of the city.

By the middle of the nineteenth century, some buildings had been constructed on the squares now occupied by the Harry S Truman Building, but open space remained (Figure 15). By the beginning of the twentieth century, most of the area had been divided into lots, many of which were occupied by dwellings or commercial buildings. The triangle of land at the northeast side of the Harry S Truman Building was occupied on the south and northeast sides by rowhouses; the northwest corner was vacant. By 1928, the lots had been subdivided into narrower lots with more houses and many more commercial and/or industrial buildings (Figure 16). The triangle north of the Harry S Truman Building was occupied by the same rowhouses that were there at the beginning of the twentieth century; the northwest corner remained vacant.

Figure 13 - Archeological Sites


There are a number of archeological sites within one mile of the project area (USGS 1983).

TABLE 2: ARCHEOLOGICAL INVESTIGATIONS WITHIN ONE MILE OF PROJECT AREA

| Site Name | DC Map Number | Site Number | Site Type | Time Period | Findings |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cooper Houses | 2 | 51NW89 51NW90 | Historic; domestic | mid-19 ${ }^{\text {th }}$ to mid$20^{\text {th }}$ century | Buried yard surfaces |
| Lenthall Houses | 11 |  | Historic; domestic | $\begin{aligned} & \text { Early- } 19^{\text {th }} \text { to } 20^{\text {th }} \\ & \text { century } \end{aligned}$ | Buried yard surfaces |
| Octagon House | 15 | 51NW100 | Historic; domestic | Late-18 $8^{\text {th }}$ to $20^{\text {th }}$ century |  |
| Sq. 187 | 17 |  | Historic; government, Treasury Building | $\text { Early- } 19^{\text {th }} \text { to } 20^{\text {th }}$ century | Buried surfaces dating before Treasury building was constructed |
| Rosedale | 18 |  | Historic; domestic | Late- $18^{\text {th }}$ to $20^{\text {th }}$ century | Some intact yard surface; much construction disturbance from 1960s |
| Sq. 226, <br> Pershing Park | 20 |  | Historic; domestic \& commercial | Early-19 th $20^{\text {th }}$ century | Mean ceramic date of 1869, middle-class and upper-middle class households |
| Warner Theater | 22 | 51NW88 | Historic; residential \& commercial | Late-18 ${ }^{\text {th }}$ to late$20^{\text {th }}$ century | Yard surfaces \& features indicating 5 phases of development in the city |
| Federal Triangle | 30 |  | Historic; residential \& commercial | $19^{\text {th }}$ century | Deposits from working-class household dating to 1830 \& brothels ca. 1890s |
| Georgetown Waterfront Park | 38 | 51NW17, 51NW75 | Prehistoric \& historic commercial | Prehistoric; $18^{\text {th }}$ century to $20^{\text {th }}$ century | Prehistoric lithics; warehouses, wharfs, bulkheads, boat builder's shop |
| Crosstown Water Main | 45 \& 46 |  | Potential prehistoric \& historic sites |  | Documentary research done, no fieldwork |
| Suter's Tavern | 49 |  | Historic; residential \& commercial | 1830s | Occupation surface \& features |
| Whitehurst Freeway | 52 | 51NW103 <br> 51NW104 | Prehistoric; Historic, industrial \& domestic | Woodland; $19^{\text {th }}$ century | Woodland hearths, historic lime kiln \& brewery |
| West Potomac Park Reach | 83 |  | Potential prehistoric \& historic |  | Made land (fill) over Tiber Creek, warehouses |
| Washington Monument | 85 |  | Historic; monument | Ca. 1876 | Fill deposits |
| Rock Creek Park | 88 | Numerous sites | Prehistoric camps \& quarries |  | Quarrying sites, camp sites |

Figure 14 - Topography


A reconstructed map of the topography of Washington, D.C. in 1792 (Hawkins 1991).
Figure 15 - Historic Vicinity Map

In 1861, few buildings existed on the blocks now occupied by the Truman Building (Boschke 1861)
Figure 16-1928 Sanborn Map



Several temporary buildings were constructed during World War I on the squares on which the Harry S Truman Building now stands. In 1940, some buildings on the block were demolished to make way for the War Department Building, construction of which was completed in 1941 (KCCT 2004). In the 1950s, buildings on the squares bounded by $22^{\text {nd }}$ and $23^{\text {rd }}$ Streets, NW, and C and E Streets were demolished to make space for a new State Department Building to be annexed onto the old War Department Building (Figure 6). Some of the buildings demolished were the temporary structures dating to the war years; others were brick apartment buildings and brick or frame commercial and residential buildings (KCCT 2004).

The previous development of the project area is likely to have disturbed or destroyed prehistoric resources. Construction of, and alterations to, the Harry S Truman Building have most likely destroyed the nineteenth-century historic archeological resources that occupied the land now under or adjacent to the Harry S Truman Building. A small area south of the southwest corner of the building may have escaped disturbance, but this area would have been within the alignment of New York Avenue; thus, it would be unlikely to include archeological resources associated with occupation of the area. Construction of the E Street Expressway is likely to have destroyed any archeological resources along or near its alignment, under the northern part of the triangle northeast of the Harry S Truman Building. The only area where building foundations and associated yard deposits may survive the southeast part of the triangle of land northeast of the building, south of the E Street Expressway. However, overlaying the historic Sanborn map on the existing conditions map demonstrated that the small area that may survive undisturbed includes part of historic E Street and no more than fragments of yard surface; therefore, this area is unlikely to yield important information on the past.

## Environmental Consequences of the Build Alternative

Under the Build Alternative, impacts on archeological resources are expected to be negligible. The project area probably had evidence of prehistoric occupation, and historic occupation of the area is documented in maps. Subsurface disturbance associated with the construction of the proposed security improvements would certainly further disturb or completely destroy archeological sites that may exist in the project area.

Sites in the land occupied by the Harry S Truman Building have most likely been destroyed by demolition of earlier structures or by construction of the War Department Building and, later, the State Department extension. However, the southeast part of the triangle of land north of the Harry S Truman Building and an area south of the southwest corner of the building may have had archeological resources that survived. However, the undisturbed area of the triangle is too small to include significant yard deposits, and the area at the southwest corner of the building was within the alignment of New York Avenue. Neither area is likely to yield important information on the past.

Archeological resources existed in the blocks now occupied by the Harry S Truman Building. They have been disturbed or destroyed by destruction and construction. The area southwest of the Harry S Truman Building and the area northeast of the building that
may include archeological resources are unlikely to yield important information on the past. Thus, significant archeological resources are unlikely to be adversely impacted by the proposed security improvements. Therefore, subsurface testing is neither warranted nor recommended.

## Environmental Consequences of the No Build Alternative

Under the No Build Alternative, impacts on archeological resources would be negligible.

### 3.3 SOCIOECONOMIC RESOURCES

### 3.3.1 ON-SITE LAND USE

## Affected Environment

The Harry S Truman Building is located in the District of Columbia's Northwest Rectangle Historic District. The building was constructed in two phases, occupying a total of 11.8 acres. The original part of the building, Old State, is located in the northeast quadrant of the site at the corner of $21^{\text {st }}$ and E Streets. The newest portion, New State, is an L-shaped building bordered by $21^{\text {st }}, 23^{\text {rd }}, \mathrm{C}$ and D Streets. The building faces $21^{\text {st }}$ Street to the east, C Street to the south, $23^{\text {rd }}$ Street to the west and D and E Streets to the north. Virginia Avenue crosses the area at the northeast corner of the lot. The Potomac Parks Historic District is located to the immediate south, and the Seventeenth Street Historic District is located to the east. Public parking is located to the south on C Street and to the east on $21^{\text {st }}$ Street. Administrative facilities located in the building house Department of State employees. The Harry S Truman Building provides security clearance for those working in the building and surrounding areas (Concept Submission, 2004). There are twelve residents listed on the US Census Tract for the area that includes the Harry S Truman Building (US Census, 2000).

## Environmental Consequences of the Build Alternative

Under the Build Alternative, impacts on the site's land use would be negligible.

## Environmental Consequences of the No Build Alternative

Under the No Build Alternative, impacts on the site's land use would be negligible.

### 3.3.1.1 LOCAL AND REGIONAL PLANNING CONTEXT

## Affected Environment

The Harry S Truman Building is located in Northwest DC in a medium-to-high density area of primarily commercial and institutional uses. The Department of State is owned by the federal government and is therefore "Unzoned", according to the DC Office of

Zoning. The adjacent NAS and APhA Buildings are zoned Special Permit-2 (DC Office of Zoning).

NCPC began addressing the issue of security design in March 2001 and in October of that same year, issued a report titled, Designing for Security in the Nation's Capital, which recommended specific urban design strategies for improving aesthetic conditions and access to public space in Washington. The National Capital Urban Design and Security Plan was released by NCPC in October 2002, and provides additional furnishing and landscape solutions to guard against security threats, while still preserving the open space. The Plan identifies key areas and streets within Washington's monumental core and recommends security solutions that respond to the unique conditions and special character of each area (NCPC, 2002).

Section 5 of the National Capital Planning Act of 1952, as amended (40 U.S.C. 71d), requires each federal and District of Columbia agency-prior to the preparation of construction plans or to commitments for the acquisition of land in the region-to consult with NCPC in its preliminary and successive stages of planning. In addition, DDOT permits the use or occupancy of the public right-of-way and must approve streetscape projects in the downtown area in which 50 percent of the adjoining public space (including sidewalks) is planned for construction (NCPC, 2002).

According to the NCPC Comprehensive Plan for the National Capital: Federal Elements, the Harry S Truman Building is located in the Central Employment Area of Washington, which includes the District of Columbia's downtown area, as defined in the District Elements of the Comprehensive Plan, concentrations of employment facilities in the central core of Washington, and adjacent areas where additional development, economic diversification and job generation are encouraged (NCPC, 2004).

## Environmental Consequences of the Build Alternative

Under the Build Alternative, impacts on the site's local and regional planning context would be negligible. Changes to the site comply with DC zoning regulations and would not require variances; however, the Department of State would work with DDOT to appropriately address public space issues related to the final stages of the streetscape and building designs.

Of the many perimeter security elements suggested by the National Capital Urban Design and Security Plan, the Build Alternative incorporates the following (NCPC, 2002):

- Walls, which prevent vehicles from approaching buildings and can be established at the property line on the building side of the sidewalk.
- Trees, which can be used as obstacles to block access of an approaching vehicle.
- Small knee walls, which are mostly found in the building yard as a complement to the structure's architecture and are often located in conjunction with planters and gardens.
- Gatehouses, which are separate structures located close to buildings, provide shelter for individuals who screen vehicles accessing pick-up, drop-off, or parking areas.
- Curbside bollards, which can provide security against vehicular attacks, guide pedestrian circulation, meet accessibility requirements, and enhance the character of the streetscape.

Additional site factors mentioned in the Plan that influenced the comprehensive design of the perimeter security improvements for the Build Alternative include the following (NCPC, 2002):

- "The distance between a barrier and a protected building (standoff distance). Adequate distance can preclude the need for large and expensive security measures and allow the use of security elements with decreased performance levels; however, smaller standoff distances may require creative design and elements with higher performance standards."
- "An analysis of the surrounding streets to determine the potential maximum vehicle velocity that the barrier will have to withstand. Straight, perpendicular approaches to buildings allow for the greatest ramming speed for all vehicles, vehicles, which would call for higher performance barriers. Conversely, tight curves in the roadway, narrow streets, and traffic congestion would likely reduce the required performance level for the security element and should therefore be considered during the design phase."

Specific policies outlined in the "Federal Workplace" chapter of the 2004 Comprehensive Plan for the National Capital: Federal Elements, and supported by the Build Alternative, include the following (NCPC, 2004):

- Accommodate federal and national capital activities; balance accessibility and security, and preserving historic properties and important L'Enfant and McMillan Plan design features.
- Reinforce 'Smart Growth' and sustainable development planning principles; support pedestrian-oriented development that adds vitality and visual interest to urban areas.
- Plan federal workplaces to be compatible with the character of the surrounding properties and community and, where feasible, to advance local planning objectives such as neighborhood revitalization.
- Associate federal workplaces in urban areas to their urban context and appropriately scale them to promote pedestrian activities.
- Develop sites and buildings consistent with local agencies' zoning, land use policies and development, redevelopment, or conservation objectives, to the maximum extent feasible.
- Ensure that safe and healthy working conditions continue to be provided and maintained at all sites and in all buildings occupied by the federal government.
- Agencies requiring physical perimeter security improvements should design such improvements in accordance with guidance included in the National Capital Urban Design and Security Plan.
- Where immediate security improvements are required to secure a building perimeter, agencies should utilize cost effective, temporary improvements.
- When building new construction and when making improvements to existing buildings, integrate security threat counter measures, such as building hardening and blast-resistant glazing, into the physical design of the structure and the site to minimize the impact of perimeter building security on the public realm.
- Coordinate the planning, design, and construction of building perimeter security for neighboring federal buildings that share frontage on a street.
- Incorporate security needs into the design of buildings, streetscapes, and landscapes using urban design principles in a manner that enhances and beautifies the public realm,
resulting in coherent and welcoming streetscapes; does not excessively restrict or impede operational use of sidewalks or pedestrian, handicap, and vehicular mobility; and does not impact the health of existing mature trees.
- Design projects in a manner that does not impede commerce and economic vitality but balances the need for perimeter security with the need to enhance and maintain the viability of urban area.
- Design security barrier lines and elements that complement and enhance the character of the area in which they will be located and that respect the historic context of the area when applicable.
- Design security elements to respond to site-specific conditions, such as vehicle approach speed and angles, in order to minimize the size of security elements when possible.
- Maintain security elements to preserve the capital investment and quality of the public realm. Security improvements in public areas such as sidewalks should be maintained in a consistent and uniform manner.
- Design security barriers and checkpoints at vehicular entry points on federal installations to accommodate vehicular queuing on site and to avoid adverse effects on adjacent public roadway operations and safety.


## Environmental Consequences of the No Build Alternative

Under the No Build Alternative, impacts on the site's local and regional planning context would be negligible.

### 3.3.1.2 ADJACENT LAND USES AND OWNERSHIP

## AFFECTED EnVIRONMENT

The immediate vicinity of the Harry S Truman Building consists primarily of federal and private offices and NPS land (Figure 17). The Federal Reserve Eccles Building, located on approximately 4.2 acres of land to the southeast of the Harry S Truman Building, is owned and operated by the federal government for administrative purposes. The Edward J. Kelly Park and the Federal Reserve Martin Building are located on approximately 3.8 acres to the east of the Harry S Truman Building. The Martin Building is owned by the federal government for administrative purposes. The adjacent park is owned by the NPS and contains a tennis court and benches (Federal Reserve EA, 2003). North of the Harry S Truman Building, facing $21^{\text {st }}$ Street to the west and Virginia Avenue to the northeast, is NPS Reservation 720, and also the location of the Bernardo de Galvez statue. The Navy Bureau of Medicine and Surgery faces the west side of the Department of State on $23^{\text {rd }}$ Street and is owned by the Navy. APhA and the NAS are both south of the Harry S Truman Building, across C Street, and separated to the west and east by $22^{\text {nd }}$ Street. Both buildings are private and serve administrative purposes (NCPC, 2004). Across from the intersection of Constitution Avenue and $22^{\text {nd }}$ Street is the Mall, which encompasses the Vietnam Veterans Memorial and Lincoln Memorial within close proximity of $22^{\text {nd }}$ Street.

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## Legend

1. Department of State Harry $S$ Truman Building
2. SA-01 Columbia Plaza Annex
3. $\mathrm{SA}-02$
4. SA-03
5. SA-04
6. World Health Organization
7. American Red Cross D.C. Chapter House
8. Office of Personnel Management
. Department of Interior South
9. Federal Reserve Board
10. Federal Reserve Board
11. The National Academies
12. American Pharmacists Association
13. Old Navy Observatory
14. Kennedy Center
15. White House
16. Washington Monument
17. Lincoln Memoria
18. US Institute of Peace
19. Vietnam Memorial Visitor Center


ROBINSON \& ASSOCIATES - HISTORIC PRESERVATION

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Other projects that are proposed or under construction in the area include:

- US Army Corps of Engineers Flood Control Barrier Project
- Access improvements at the Kennedy Center
- Rehabilitation of Constitution Avenue from $15^{\text {th }}$ Street to $23^{\text {rd }}$ Street and Ohio Drive from $23^{\text {rd }}$ Street to Rock Creek and Potomac Parkways
- Lincoln Memorial Circle Rehabilitation and Security Improvements
- American Pharmacists Association Perimeter Security Improvements
- Vietnam Veterans Memorial Visitor Center
- Federal Reserve Martin Building Conference and Visitor Screening Centers
- National Academy of Sciences Museum and Entry
- Nearby Road Improvements: Theodore Roosevelt Bridge, Arlington Memorial Bridge, Constitution Avenue NW from $15^{\text {th }}$ Street NW to $23^{\text {rd }}$ Street NW, and Ohio Drive from $23^{\text {rd }}$ Street to Rock Creek and Potomac Parkways.
- United States Institute of Peace Headquarters


## Environmental Consequences of the Build Alternative

Under the Build Alternative, perimeter changes at the Harry S Truman Building are expected to have long-term, moderate, adverse impacts on $21^{\text {st }}, 23^{\text {rd }}, 22^{\text {nd }}, \mathrm{D}$ and C Streets, as well as the adjacent Reservation no. 720 and NAS property, due to increased security measures. The closure of C Street to through-traffic would make the Harry S Truman Building more secure; however, C Street would continue to provide access to NAS and APhA. The guard booths and other security measures installed in the vicinity of NAS and APhA on C, $21^{\text {st }}$ and $23^{\text {rd }}$ Streets would increase security for occupants of the Harry S Truman Building, as well as the C Street entrances of the NAS and APhA Buildings, provided that guards would be controlling vehicles entering and departing both the east and west ends of C Street. The partial plans and exterior elevations for the proposed perimeter security elements at NAS can be found in Appendix D. As mentioned in the NCPC letter dated December 2, 2004, DoS continues to work with the adjacent organizations to develop specific agreements to mitigate impacts resulting from the construction and modification of the Harry S Truman Building.

Long-term, beneficial impacts of this alternative would result from incorporating security measures, similar in size and spacing, to those at the neighboring Federal Reserve building. The Build Alternative also reflects the alignment of trees, curb and gutter materials, and ground level plantings used at the Federal Reserve for similar security improvements.

The Bernardo de Galvez statue would not be temporarily or permanently relocated or removed during this project.

## Environmental Consequences of the No Build Alternative

Under the No Build Alternative, impacts on adjacent land uses and ownership would be negligible.

## Mitigation

The bollards and retaining walls along the sidewalks would use materials similar to those in the original structures, creating softened security barriers that would lessen the building's "fortress-like" appearance. Widening the sidewalks around the building, the closure of C Street and realignment of D Street would create a safer and more attractive pedestrian environment. Further development of the aesthetic quality of these security improvements would be addressed in the design phase of the project. Additionally, proposed plans for modifying $22^{\text {nd }}$ Street would help alleviate passenger pick-up and drop-off congestion at the nearby APhA and NAS, and provide a safer area for pedestrians to wait for taxis.

Land taken from Reservation 720 would be mitigated by providing additional green spaces along extended sidewalks on $21^{\text {st }}, 23^{\text {rd }}, C$ and D Streets. The small park area at the corner of D and $23^{\text {rd }}$ Streets and $21^{\text {st }}$ and D Streets would be upgraded to provide landscaped areas along the closed street, which would be an aesthetic improvement over what exists today.

### 3.3.1.3 POPULATION

## AfFECTED EnVIRONMENT

There are 572,059 people living in the District of Columbia. The Harry S Truman Building is located in Census Tract 62.02, which includes a residential population of twelve residents. Ward 2, location of the tract, had a population of 68,869 in 2002 (DCOP, 2002). There are over 8,000 employees and visitors to the Harry S Truman Building each day (Concept Submission, 2004).

## Environmental Consequences of the Build Alternative

Under the Build Alternative, impacts on the population of the area would be negligible. Due to the small residential population, no impact is expected on the twelve residents near the property. The Build Alternative would not increase or decrease the workforce population in, or the number of visitors to, the Harry S Truman Building.

## Environmental Consequences of the No Build Alternative

Under the No Build Alternative, impacts on the population would be negligible.

### 3.3.1.4 ECONOMY AND EMPLOYMENT

## AfFected Environment

The U.S. Census Bureau Zip Code Business Patterns of the 20520 zone listed 20 establishments employing 380 people. The median household income of the block area was estimated in 2004 to be $\$ 46,543$, with a lower bound of $\$ 45,371$ and the upper bound of $\$ 47,777$ (American Communities Survey, 2004). Data depicting numbers and types of businesses in the area can be found in Table 3.

Table 3: Types of Businesses and Number of Employees in Tract 62.2

|  | $1-4$ | $5-9$ | $10-19$ | $20-49$ | $100-249$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Wholesale/Trade |  | 1 |  |  |  |
| Information | 1 |  |  |  |  |
| Insurance and Finance |  | 1 | 1 |  |  |
| Professional, Scientific and Technology | 2 | 2 | 3 | 3 |  |
| Administrative, Support, Waste Management, |  |  |  | 1 | 1 |
| Remediation |  |  |  |  |  |

(US Economic Census, 2004)

## Environmental Consequences of the Build Alternative

Implementation of the Build Alternative would result in short-term, beneficial impacts on the DC's economy and employment, as the number of workers would increase for the duration of the construction phase of the project. The city's percentage of long-term employment is not expected to change positively or negatively for any place of business in the immediate area of the project site. Workers participating in the perimeter security construction for the Harry S Truman Building could contribute to the city's economy by frequenting local food chains or retail stores in the vicinity of the project's location. Fuel costs for the project could benefit DC if workers and construction vehicles use gas stations close to the project area.

## Environmental Consequences of the No Build Alternative

Under the No Build Alternative, impacts on the City's economy and employment would be negligible.

### 3.3.2 VISUAL RESOURCES ${ }^{6}$

## Affected Environment

The Harry S Truman Building itself is visible from all of the streets surrounding it, although partially obstructed from some vantage points due to trees, landscaping and the sloping topography. C, E, $21^{\text {st }}, 22^{\text {nd }}$, and $23^{\text {rd }}$ Streets and Virginia Avenue adjacent to the Harry S Truman Building, as well as Reservation no. 720, are contributing elements of the L'Enfant and McMillan Plan for the City of Washington National Register documentation and stand within the primary area of potential effects. NCPC's "Federal Elements" of the Comprehensive Plan for the National Capital identifies the L'Enfant and McMillan Plan streets and reservations as elements "that contribute to the significant system of open space forming the urban design framework of the nation's capital" and calls for their preservation (NCPC, 2004).

Views from the perimeter of the Harry S Truman Building include views of historical significance, including those of the Mall, the Lincoln Memorial and the Washington Monument. Along $23^{\text {rd }}$ Street, looking toward the Mall, it is possible to see the Lincoln Memorial; however, the size and number of trees lining the street frames much of this view when foliage is present. The Washington Monument is visible from Virginia Avenue, C Street, and from the intersection with $23^{\text {rd }}$ and C Streets.

The viewshed from the intersection of $21^{\text {st }}$ and D Streets toward C Street and Constitution Avenue leads to the Mall. It is also possible to see Arlington House, at the highest elevation of Arlington Cemetery, from the intersection of $23^{\text {rd }}$ and D Streets. The Kennedy Center is visible from Virginia Avenue, E and D Streets, looking west.

The viewshed from the intersection of C Street and $22^{\text {nd }}$ Street looking south includes the APhA Building to the west and the NAS Building to the east. During full foliage, the street trees along both the east and west sides of $22^{\text {nd }}$ Street obstruct views of the Mall; however, in winter and fall months, Constitution Avenue and the Mall are more visible. Looking north towards the Harry S Truman Building from the intersection of $22^{\text {nd }}$ Street and Constitution Avenue, in full foliage, the APhA Building is visible to the west, while the eastern NAS Building is mostly hidden by street trees. The existing C Street entrance to the Harry S Truman Building is visible from Constitution Avenue.

[^5]
## Environmental Consequences of the Build Alternative

While replacement of the current temporary security features with barriers specially designed for the Harry S Truman Building would improve overall site aesthetics, longterm, moderate, adverse impacts on the site's vistas and axes under this alternative result from the installation of guard booths on C Street, from the extension of curbs into the cartways (travel lanes and parking) of C, $21^{\text {st }}$ and $23^{\text {rd }}$ Streets, security construction, and the creation of medians on C and $21^{\text {st }}$ Streets. Potential adverse effects on visual resources could result from the new entrance pavilions on $\mathrm{C}, 21^{\text {st }}$, and $23^{\text {rd }}$ Streets. Designs for these pavilions have not been finalized, but the site plan for the project shows the overhanging roofs of these pavilions extending into the existing rights-of-way.

In order to create setbacks from the street and provide a site for security features such as bollards, kneewalls, and trees, the perimeter security plan extends curbs on both sides of $21^{\text {st }}$ Street, on the south side of C Street, and on the east side of $23^{\text {rd }}$ Street. The extension of the curb on $23^{\text {rd }}$ Street would align it with the current bump-out of the curb at the northeast corner of $23^{\text {rd }}$ and C Streets. Two 6 -foot-wide medians would be added on $21^{\text {st }}$ Street to separate truck traffic from passenger vehicles, and four 6-foot-wide medians would be placed on C Street to separate traffic lanes. Guard booths would be installed in the center of the C Street cartway near its intersections with $21^{\text {st }}$ and $23^{\text {rd }}$ Streets. Associated with the guard booths would be security barriers within the relocated curbs, which would parallel $22^{\text {nd }}$ Street at its intersection with C Street. Bollards would be placed within sidewalks at street intersections to fill in security gaps.

Changes to $22^{\text {nd }}$ Street would have both beneficial and minor, long-term, adverse impacts to views of the Harry S Truman Building and the Mall. The removal of a small number of parking spaces would open sight lines along the east side of $22^{\text {nd }}$ Street south to the Mall and north to the Harry S Truman Building; however, the proposed addition of a small number of street trees to the west side of $22^{\text {nd }}$ Street may hinder views south to the Mall, and north to the Harry S Truman Building and APhA Building. A small taxi stand on the east side of $22^{\text {nd }}$ Street may impair views of the Harry S Truman Building and NAS, looking north, and of the Mall and NAS, looking south. The proposed central median near Constitution Avenue would span only 3 feet in width and six inches in height, and would not likely impair views to, or from, the Harry S Truman Building.

Currently, views north of the Harry S Truman Building from $22^{\text {nd }}$ Street are obstructed by a series of temporary, precast planters, a temporary guard booth and a hydraulic barrier, at the intersection of C and $22^{\text {nd }}$ Streets. The proposed replacement of these temporary security elements with permanent, retractable bollards would likely result in negligible impacts to views of the Harry S Truman Building from $22^{\text {nd }}$ Street, due to the visual impacts caused by the existing security elements. It should be noted that, although the bollards would be more visually appealing and would not further obstruct views currently obstructed by temporary security measures, they would not be removable. However, the proposed design for $22^{\text {nd }}$ Street indicates the removal of the existing guard booth from the intersection of C and $22^{\text {nd }}$ Street, which would improve views of the Harry S Truman Building from $22^{\text {nd }}$ Street. Additionally, the space between the proposed bollards,
combined with a bollard height that is comparable to the height of the existing, temporary precast planters, would improve views of the Harry S Truman Building from $22^{\text {nd }}$ Street.

The impacts of this construction on views along C, $21^{\text {st }}, 22^{\text {nd }}$, and $23^{\text {rd }}$ Streets within the project area are mixed. On all four streets, the rights-of-way remain unchanged, but the cartways, and therefore the streets' view corridors, are narrowed from their current conditions. Changes, however, have taken place to the cartways in the past (Figure 11). The cartway of C Street between $21^{\text {st }}$ and $23^{\text {rd }}$ Streets, for instance, was widened from 32 feet to 56 feet between 1965 and 2006. On $21^{\text {st }}$ Street, the cartway between C Street and Virginia Avenue was widened from 32 feet in 1932 to 43 feet by 1965 and reduced to 36 feet by 2006. The 32 -foot cartway on $23^{\text {rd }}$ Street between C and D Streets was widened to 56 feet by 1965 and to 64 feet by 2006. In 1965, the $22^{\text {nd }}$ Street roadway in the northern half of the block was 32 feet wide, but wider in the southern half (perhaps 56 feet.) It was widened to 56 feet for the entire block between Constitution Avenue and C Street by $2006^{7}$. The view down C Street is already partially interrupted by Reservation no. 108, which eases traffic entering Virginia Avenue at $19^{\text {th }}$ Street.

The greatest intrusions on C Street's visual resources are the guard booths and associated security barriers, which interrupt what had been an open view prior to 2001. The guard booths, designed to harmonize with the Harry S Truman Building's Modern architecture, would replace existing temporary guard booths, but would have a moderate adverse impact on C Street's pre- 2001 condition. The greatest street narrowing occurs on $21^{\text {st }}$ Street. This narrowing and the truck inspection area have a minor adverse impact on views, especially looking south from the intersection of $21^{\text {st }}$ Street with Virginia Avenue. The security plan regularizes these views by adding trees in the alignment of existing trees. New trees on $23^{\text {rd }}$ Street are planted within the curb extension and have a minor adverse affect on views along the street in both directions. The curb extension and the new trees replace the temporary precast planters that have closed this area since 2001.

Although the designs of the new entrance pavilions have not been finalized, views of the Harry S Truman Building façade would likely receive minor, long-term, adverse impacts as a result of the new construction. The pavilions would be wider and deeper than the existing canopies but, architecturally, they would reflect the spirit of the existing entrance canopies. Moreover, the new guard booths and trees would have minor adverse impacts on views of the south façade of the building, but would not significantly affect the overall character of views of the building from $21^{\text {st }}, 23^{\text {rd }}, ~ D$, and E Streets. The impact of the proposed action on building views from a historic preservation perspective are discussed further in section 3.2 of the document.

The barriers planned for the NAS property (either walls or bollards of a design and materials appropriate to the architecture of the Bertram Grosvenor Goodhue building) may result in direct, long-term, minor adverse effects on the spatial organization of the academy grounds. The NAS Building was originally set within a generous green

[^6]perimeter to complement its monumental design. The integrity of the grounds, especially toward the rear of the original building, where the barriers would be located, has been compromised, however, with the construction of a rear addition and the insertion of surface parking. These alterations limit, but do not erase, the adverse impacts of the proposed barriers.

The views along C Street to the secondary facades of the APhA and the NAS would be impaired by the larger guard booths. The view of the Lincoln Memorial from $23^{\text {rd }}$ Street and Virginia Avenue would not be further hindered by additional trees. The views of the Washington Monument would not be impaired by security improvements to the building, nor would the view of the Arlington House. The view of the Kennedy Center would not be impacted by the improvements to D Street at $23^{\text {rd }}$ Street and D Street at Virginia Avenue.

The proposed action would have some long-term, beneficial impacts on the aesthetics of the site. Precast planters and guard booths serving as part of the current temporary security measures would be replaced with more attractive, permanent structures that are consistent with the style and materials of the building, creating a more unifying and identifiable visual character. New security walls, railings and bollards would feature an architectural treatment that disguises their security function and minimizes the fortresslike appearance. Aesthetic improvements to the streetscapes would include better integrated landscape and architectural features along sidewalks, improved street lighting and special paving treatments at intersections and entrance pavilions. Additionally, the aesthetics of street vistas would be enhanced by rows of tree canopies along C, $21^{\text {st }}$ and $23^{\text {rd }}$ Streets. Finally, the visual quality of the building perimeter would be enhanced by augmented green space in the form of planted medians, plantings along sidewalks, and green space improvements on the northeast portion of the site.

## Environmental Consequences of the No Build Alternative

Implementation of the No Build Alternative would result in long-term, minor/moderate, adverse impacts. The existing temporary security measures - including temporary precast planters, bollards, planters, and temporary guard booths and inspection areas would continue to adversely impact views associated with several elements of the L'Enfant-McMillan Plan for Washington. These effects are judged to be moderate on C Street and minor on $21^{\text {st }}, 22^{\text {nd }}$ and $23^{\text {rd }}$ Streets. ${ }^{8}$ The temporary security features would also continue to have minor adverse impacts on views of all four facades of the Harry S Truman Building and, less noticeably, NAS and the Federal Reserve.

[^7]
### 3.3.3 NOISE

## AfFected Environment

Vehicular traffic constitutes the largest source of noise in the vicinity of the Harry S Truman Building. Other sources of noise include sirens from emergency vehicles, aircraft flyovers, construction equipment operations at nearby sites, and the operation of other equipment used for building or landscape maintenance. (American Red Cross, 1999; GSA, 2003)

In general, potentially sensitive noise receptors include residences, hospitals, libraries, schools, day care centers, recreation areas, and other similar uses. In vicinity of the proposed action, sensitive noise receptors include the National Mall and memorials such as the Lincoln Memorial, the Vietnam Veterans Memorial, the George Washington University Hospital, George Washington University and the Korean War Memorial.

Chapter 28 of the District of Columbia Noise Control Act of 1977 requires that "[from] 7:00 a.m. to 7:00 p.m. on any weekday, noise levels resulting from construction or demolition (excluding pile driver devices) shall not exceed an L, one of $80 \mathrm{~dB}(\mathrm{~A})$ unless granted a variance under $\S 2705$ of Chapter 27 of this subtitle." Further, it states that issuance of permits for construction or demolition are contingent on written assurances that construction activities would comply with the above restrictions (Section 5 of the District of Columbia Noise Control Act of 1977, DC Law 2-53, 24 DCR 5293, 5308). In addition, the federal Occupational Safety and Health Administration regulates noise as an occupational hazard and provides its own standards based on decibel levels and hours of duration (29 CFR Parts 1910.5 and 1926.52)

## Environmental Consequences of the Build Alternative

Under the Build Alternative, short-term, minor, adverse impacts would result from construction activities; however, these construction activities would be required to comply with local noise ordinances. In the long-term, the Build Alternative would not significantly alter building operations or traffic patterns, and therefore, would not create any new sources of noise, resulting in negligible long-term impacts.

## Environmental Consequences of the No Build Alternative

Under the No Build Alternative, impacts on the site's noise would be negligible.

## Mitigation

Potential short-term mitigation measures would include strict adherence to all applicable noise regulations, measures to ensure that all construction equipment is maintained regularly and fitted with mufflers, and efforts to keep all stationary noise-generating equipment enclosed.

### 3.4 SOLID AND HAZARDOUS WASTE

The Resource Conservation and Recovery Act, established in 1976 and enforced by the EPA, regulates solid and hazardous waste to protect human health and the environment, reduce waste and conserve energy and natural resources, and reduce or eliminate the generation of hazardous waste as quickly as possible.

### 3.4.1 SOLID WASTE

## AfFECTED ENVIRONMENT

There are no landfills in the vicinity of the proposed action. The Department of State sends out its waste through DC disposal services, and recycles paper and other materials.

### 3.4.2 HAZARDOUS WASTE

## AFFECTED ENVIRONMENT

Studies have not been undertaken to determine the presence of hazardous soils at this location. A survey of uses of, and adjacent to, the site prior to 1938 indicates the following: a gas station located at the corner of D Street and Virginia Avenue, a cinderfill playground on Virginia Avenue and E Street, a string of car garages and body shops along demolished New York Avenue and $21^{\text {st }}$ Street, a research chemical laboratory on a demolished site at New York Avenue and $22^{\text {nd }}$ Street, and a carpet cleaning facility on the corner of C Street and $23^{\text {rd }}$ Street (Topographic Survey of War Department Site, 1938).

Construction on this site from 1940 to the present may have obliterated any hazardous soil issues; however, the presence or lack of hazardous soils on the site is unknown. Soil remediation was completed for the former GSA Square 62 property, which is now part of the American Pharmacists Association site. Groundwater contaminants identified in samples at the site included concentrations of chlorinated solvents, benzene, toluene, ethylbenzene, xylenes, and naphthalene that exceeded EPA's and the District of Columbia's maximum contaminant levels (MCLs). Other contaminants included polynuclear aromatic hydrocarbons, polychlorinated biphenyls and metals (lead, arsenic and chromium) (EPA, 2006). Due to the location of the site down gradient from the Harry S Truman Building, and the low hydrologic conductivity of the groundwater, the chance that contaminants would have migrated off the affected site to the Harry S Truman Building site is extremely minimal (GSA, 2003; GSA, 1997). Additionally, the excavation and removal of contaminated soil during the construction of the recent APhA Building addition has reduced the risk of contamination for the Department of State property.

## Environmental Consequences of the Build Alternative

Implementation of the Build Alternative could result in short-term, minor, adverse impacts on hazardous waste during construction. Any property developed as long ago as the Harry S Truman Building has potential for an unexpected discovery of hazardous waste issues as a result of prior site uses; however, there are no known or anticipated hazardous waste issues at this site. In the event that hazardous waste is encountered during construction, it would be handled in accordance with federally and locally mandated regulations for removal, treatment and disposal. Implementation of BMPs would reduce the amount of hazardous waste, such as fuel or paints, generated during construction. Any spills or other releases of potentially hazardous materials would be cleaned immediately after construction and all potential hazardous materials brought to the site would be removed.

The presence of asbestos in the existing canopies scheduled for demolition is unknown at this time; however, testing is scheduled to occur prior to construction. If asbestos is identified, it would be properly removed and disposed.

## Environmental Consequences of the No Build Alternative

Under the No Build Alternative, impacts on solid and hazardous waste would be negligible.

## Mitigation

To minimize short-term solid waste impacts, the handling of construction debris would utilize BMPs for debris removal, including proper location of empty storage containers nearby the construction site; proper storage, sealing and labeling of waste; proper transportation of waste, following state and federal guidelines; proper handling of waste in the event of an accidental spill; and proper disposal of waste by a licensed professional (California Stormwater BMP Handbook).

### 3.5 NATURAL RESOURCES

### 3.5.1 TOPOGRAPHY

## AFFECTED ENVIRONMENT

The District of Columbia is divided in half diagonally by the fall line, with the midAtlantic Coastal Plain covering the southeastern half of the city and the mid-Atlantic Piedmont covering the northwestern half of the city. The Piedmont, with an elevation of 60 meters at the fall line, is higher, rolling and more rugged than the Coastal Plain (DC Comprehensive Wildlife Conservation Strategy, 2005). The Harry S Truman Building site lies within the Coastal Plain Physiographic Province (Geologic Map of the Washington West Quadrangle, 1994).

A hill is located in the northern section of the lot, at the intersection of Virginia Avenue and $23^{\text {rd }}$ Street. Slopes to the east of the hill extend down D Street toward $21^{\text {st }}$ Street and follow south to C Street; to the west, slopes extend south down $23^{\text {rd }}$ Street. The slopes follow eastward on C Street or continue south on $23^{\text {rd }}$ Street. Additionally, slopes extend south past C Street, down $22^{\text {nd }}$ Street, towards Constitution Avenue. The Harry S Truman Building site slopes 31 feet from the lowest point at the corner of $21^{\text {st }}$ and C Streets, to its highest point at $23^{\text {rd }}$ and E Streets (Concept Submission, 2004).

## Environmental Consequences of the Build Alternative

Implementation of the Build Alternative would result in long-term, minor, adverse impacts on the site's topography. A series of concrete slabs would be placed underneath the pavilions to accommodate the additional structural load. The slabs would level slopes beneath the pavilions on $23^{\text {rd }}$ and $21^{\text {st }}$ Streets but would not affect the surrounding land. During construction, BMPs would be utilized to minimize the potential for soil erosion caused by minor alterations to topography at the pavilions, such as sediment barriers, stormdrain inlet protection and dust control measures.

## Environmental Consequences of the No Build Alternative

Under the No Build Alternative, there would be no physical changes to the site and no impacts on topography would occur.

### 3.5.2 GEOLOGY

## AfFECTED ENVIRONMENT

The land beneath the Harry S Truman Building is made of artificial fill, placed during past land development in the District, and Quaternary age deposits of Colluvium. The deepest existing area of artificial fill is in the southeast portion of the building area, with varying depths across the remaining building area. Artificial fill is also located beneath the southern portion of $22^{\text {nd }}$ Street, closest to Constitution Avenue. The Quaternary age sediments (Colluvium) consist of unsorted colluvial sands, gravel, clays and silt overlying Pleistocene era clays and sands. Rock is present at a depth of approximately 90 to 110 feet below the ground surface and the groundwater surface would be anticipated at elevations ranging from 15 to 30 feet (Fleming et al, 1994). The District of Columbia has a seismic hazard rating of two to four, with zero being the lowest hazard and 32 being the highest hazard (USGS, 2002).

## Environmental Consequences of the Build Alternative

Implementation of the Build Alternative would result in long-term, minor adverse impacts on the site's geology, due to an increase in structural load that would require drilling and digging into the earth for increased stabilization. The construction of the pavilions and bollards would require drilling into the ground and existing concrete for stabilization. Controlled compacted fill would be placed underneath each of the pavilions
to support additional weight. The site would be surveyed to identify the depth below ground surface of the water table in the immediate construction area. Minor subsidence issues would not be a concern due to the small area. The land beneath the Harry S Truman Building does not pose a seismic hazard and bedrock is not anticipated to be encountered during construction (Concept Submission, 2004).

## Environmental Consequences of the No Build Alternative

Under the No Build Alternative, impacts on the site's geology would be negligible.

### 3.5.3 SOILS

## AfFECTED ENVIRONMENT

The Harry S Truman Building is located on Urban Land, which is moderately sloping land covered by more than 80 percent of concrete, buildings, and other impervious surfaces. The initial layer beneath Urban Land, artificial fill, was deposited in amounts of 20 inches or more on poorly to excessively drained soils in uplands, terraces and flood plains in the Coastal Plains and Piedmont to create viable land for buildings, roads, railroads and recreation areas of one to 350 acres in size. Sandy, gravelly, silty and clayey soil material occupies 80 percent of the layer with bricks, trash, wire, metal, boards, cinders, industrial waste, incinerator ash, concrete and stone occupying the rest (Fleming, et al, 1994).

## Environmental Consequences of the Build Alternative

Implementation of the Build Alternative would result in long-term, minor adverse impacts on the site's soil due grading the land for construction along E and D Streets, and adding impermeable surfaces to portions of the site. The soil beneath the site would be tested to ensure that it can withstand the additional weight of the new pavilions and bollards. Construction of the new roads along E and D Streets and pavement on C and $22^{\text {nd }}$ Streets would employ available BMPs to keep erosion at a minimum and maintain sediment control.

## Environmental Consequences of the No Build Alternative

Under the No Build Alternative, there would be no physical changes to the site and no impacts on soils would occur.

### 3.5.4 WETLANDS

National Wetland Inventory maps do not show existing wetlands on the Harry S Truman Building grounds. A confirmatory site walkover by a wetland delineator found no evidence of wetlands on the property.

### 3.5.5 FLOODPLAIN

## Affected Environment

The Harry S Truman Building site is outside the 100-year floodplain of the Potomac River (District of Columbia FIRM 110001, Panel 0015 B, November 15, 1985).

## Environmental Consequences of the Build Alternative

Under the Build Alternative, impacts on wetlands and/or floodplains would be negligible. There are no existing wetlands on the Harry S Truman Building site, which also lies outside the 100-year floodplain.

## Environmental Consequences of the No Build Alternative

Under the No Build Alternative, impacts on the site's wetlands and/or floodplains would be negligible.

### 3.5.6 STORMWATER/GROUNDWATER

## Affected Environment

The Harry S Truman Building site is located in the Potomac River drainage basin, a subbasin of the Chesapeake Bay watershed. There are no permanent bodies of water located on or near the site. The site is located in a highly impervious portion of the Potomac watershed and is partially covered with concrete with low infiltration rates. This area of the watershed is interspersed with small pervious landscaped areas and urban parks. Stormwater runoff from the site flows through storm drains located around the property to a system of combined municipal sewer and storm drains, flowing south to the Tiber Creek Interceptor, and then to the Blue Plains Waste Water Treatment Plant (DCWRRC, 1993). Surface water that bypasses this drainage system flows southwards overland to the Potomac River, located approximately one mile southwest of the site.

As mentioned in section 3.5.1, the Harry S Truman Building site lies within the Coastal Plain Physiographic Province (Geologic Map of the Washington West Quadrangle, 1994). The groundwater system under the site is composed of unconfined and unconsolidated Coastal Plain sediments. Groundwater flows southward with a radial trend and is anticipated at depths of 15 to 30 feet below ground surface. This variation is a result of flows and recharge rates (i.e., rainfall).

All construction activities in DC are regulated by law and require approved construction permits from the DC Department of Environment (Watershed Protection Division, Technical Services Branch - formerly under the DC Department of Health, Environmental Health Administration), prior to the start of construction. The regulations governing stormwater management, erosion and sediment control are outlined in Chapter

5 of Title 21, and Chapter 31 of Title 20, District of Columbia Municipal Regulations (DCMR).

As part of the application for a construction permit, an erosion and sediment control plan, and/or stormwater management plan must be submitted and approved. Upon approval of construction permits, the construction site would be inspected periodically during the construction phase of the project to ensure compliance with approved plans.

## Environmental Consequences of the Build Alternative

Implementation of the Build Alternative would result in long-term, beneficial impacts to groundwater and stormwater due to increasing the amount of pervious surfaces, and short-term, minor, adverse impacts to stormwater due to construction. The Build Alternative constitutes a 17 percent increase in pervious (permeable) surface, from $69,326 \mathrm{SF}$ to $81,411 \mathrm{SF}$ over a total of $721,353 \mathrm{SF}$ ( 16.6 acres). That would provide a long-term beneficial impact to stormwater and surface water bodies, by reducing runoff volumes and peak flows to the drainage system.

No excavation of the groundwater table is anticipated during construction, and the increase in the amount of pervious surface is expected to improve groundwater recharge.

There may be short-term, minor, adverse impacts to stormwater quality due to construction. With this alternative, temporary disturbance to surface soil and concrete material may produce sediments during relocation of curbs on C Street and $21^{\text {st }}$ Street, construction of Type 'A' (3-person) guard booth, development of security walls and bollards, addition of trees and landscaping, construction of a 6' planted median, realignment of D Street entrance, repairing of $22^{\text {nd }}$ Street, and re-grading of the C Street road surface and any subsequent land preparation activity that would occur. Potential sedimentation would be short-term and would not have a significant adverse impact on water quality. Sediment control measures would be employed according to the sediment and erosion control plan, pursuant to the District's building permit requirements for construction activities.

## Environmental Consequences of the No Build Alternative

Under the No Build Alternative, impacts on the site's stormwater and groundwater would be negligible.

### 3.5.7 AIR QUALITY

## Affected Environment

## Regional and Local Air Quality Conditions

The Harry S Truman Building is located in the Metropolitan Washington Air Quality Control Region. The U.S. Environmental Protection Agency (EPA), under the requirements of the 1970 Clean Air Act (CAA) as amended in 1977 and 1990, has established National Ambient Air Quality Standards (NAAQS) for six criteria pollutants - ozone, carbon monoxide (CO), nitrogen oxides (NOx), particulate matter ( $\mathrm{PM}_{2.5}$ and $\mathrm{PM}_{10}$ ), lead, and sulfur dioxide, as shown in Table 4. Primary standards protect public health with an adequate margin of safety and secondary standards protect the public welfare from the adverse effects associated with pollutants in the ambient air.

Ambient air quality data for Washington, DC, collected by the Metropolitan Washington Council of Governments (MWCOG), measured ambient air concentrations at the monitoring stations closest to the Harry S Truman Building at well below the NAAQS, except for ozone (8-hour standard) (Table 4). The building is located in a $\mathrm{PM}_{2.5}$ nonattainment area (1997 standard) and a moderate ozone nonattainment area. Areas that meet the NAAQS criteria for pollutants are designated as being "in attainment;" areas where a criteria pollutant level exceeds the NAAQS are designated as being "in nonattainment" and are based on the severity of their pollution problem-marginal, moderate, serious, severe, or extreme.

The area is a maintenance area for CO, meaning that it was previously designated as nonattainment and subsequently redesignated to attainment, subject to the requirement to develop a maintenance plan under section 175A of the CAA, as amended.

## Existing Emissions

Existing sources of air emissions from the Harry S Truman Building include combustion emissions from water - and space-heating units and emergency generators (stationary sources) and emissions from motor vehicles traveling to and from the building, including employee, visitor and delivery vehicles (mobile sources). Steam heat for the Harry S Truman Building is provided by GSA, via an underground pipeline from a central steam plant located at another site.

Table 4 - Ambient Air

| NATIONAL AMBIENT AIR QUALITY STANDARDS AND WASHINGTON, DC MONITORING DATA |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Pollutant \& Averaging Time | 2008 Monitored Data | Monitoring Site Location | $\begin{gathered} \text { Primary } \\ \text { Standard (ppm) } \end{gathered}$ | Secondary Standard (ppm) |
| Carbon Monoxide <br> 8 - hour concentration ${ }^{\text {a }}$ <br> 1- hour concentration ${ }^{\text {a }}$ | 2.6 ppm 6.0 ppm | Verizon Phone Company | 9 ppm 35 ppm | None |
| Nitrogen Dioxide Annual Arithmetic Mean ${ }^{\circ}$ | 0.013 ppm | Arlington | 0.053 ppm | Same as primary |
| Ozone <br> 8 - hour concentration ${ }^{\circ}$ | 0.086 ppm | Arlington | 0.075 ppm | Same as primary |
| Particulate Matter <br> PM2.5: <br> Annual Arithmetic Mean ${ }^{\text {d }}$ <br> 24- hour Maximum ${ }^{\text {e }}$ <br> PM10: <br> 24- hour Maximum ${ }^{\text {a }}$ | $\begin{gathered} 13.3 \mu \mathrm{~g} / \mathrm{m}^{3} \\ 31.5 \mu \mathrm{~g} / \mathrm{m}^{3} \\ 49 \mu \mathrm{~g} / \mathrm{m}^{3} \\ \hline \end{gathered}$ | Arlington <br> Alexandria | $\begin{aligned} & 15 \mu \mathrm{~g} / \mathrm{m}^{3} \\ & 35 \mu \mathrm{~g} / \mathrm{m}^{3} \\ & 150 \mu \mathrm{~g} / \mathrm{m}^{3} \end{aligned}$ | Same as primary <br> Same as primary |
| Lead Quarterly | (f) | (f) | $1.5 \mu \mathrm{~g} / \mathrm{m}^{3}$ | Same as primary |
| Sulfur Dioxide Annual Arithmetic Mean ${ }^{\text {b }}$ 24- hour concentration ${ }^{2}$ 3 - hour concentration ${ }^{\text {a }}$ | 0.003 ppm 0.015 ppm 0.041 ppm | Alexandria | 0.03 ppm 0.14 ppm | $\begin{gathered} \overline{-} \\ \hline- \\ 0.50 \end{gathered}$ |

Source: USEPA AirData Website, http://www.epa.gov/air/data/index.html. Accessed December 10, 2009.

## Notes:

a Not to be exceeded more than once in a given year at any monitor. ;
b Not to be exceeded at any monitor.
c The fourth highest daily concentration each year (averaged over 3 consecutive years) is not to exceed the standard.
d The 3-year average of the weighted annual mean concentration at each monitor must not exceed the standard.
e The 3-year average of the $98^{\text {th }}$ percentile at each monitor must not exceed the standard.
f Lead is no longer monitored in Washington, DC area, because concentrations consistently remain well below the NAAQS.
ppm = parts per million
$\mu \mathrm{g} / \mathrm{m}^{3}=$ micrograms per cubic meter

## Environmental Consequences of the Build Alternative

Implementation of the Build Alternative could result in short-term, minor, adverse impacts to air quality, due to proposed construction activities, and long-term, minor, adverse impacts associated with facility operations.

## Construction Impacts

The Build Alternative would result in increased adverse impacts on local and regional air quality during the construction activities. These impacts are not expected to occur past the construction phase; therefore ambient air quality modeling has not been performed.

Air quality impacts during the construction phase of the project would occur primarily as a result of engine exhaust from diesel- and gas-fueled generators, personal vehicles (construction workers), diesel-fueled mobile sources (such as heavy trucks), and heavyduty construction equipment (such as bulldozers, backhoes, and cranes). These emissions would primarily consist of NOx, SO2, PM, CO, VOCs, and greenhouse gases, which are common at construction sites. Emissions from operating equipment and vehicles during hot summer months could contribute to ozone formation.

Any congestion resulting from construction-related traffic would temporarily increase emissions in the area surrounding the construction site. In addition, some construction phases (particularly during paving operations using asphalt) could result in short-term odors near the project site.

Fugitive $\mathrm{PM}_{10}$ and $\mathrm{PM}_{2.5}$ emissions could result from activities that include site preparation, demolition, ground excavation, grading, cut-and-fill operations, structure erection, construction-related traffic, and wind erosion of uncovered demolition and excavation areas. Relatively little earth moving activity would occur under the Build Alternative and dust emissions would be minimized by soil erosion and sedimentation control, restrictions on where vehicles can travel onsite, and speed controls for construction vehicles and equipment. Watering of exposed soil and demolition debris may also be used to control dust.

## Operational Impacts

No additional stationary sources of air emissions are proposed as a part of the Build Alternative. It is not anticipated that the proposed action would result in additional fuelburning equipment for heating. Moreover, the servicing of the new entrance pavilions should not result in a significant increase in air emissions.

The number of employees, visitors and delivery trips is not anticipated to increase as a result of the proposed action. Slight changes to traffic patterns may occur, however it is not anticipated that these changes would result in unacceptable concentrations of mobile source air pollutants in the vicinity of the project site.

CO is the primary pollutant of regulatory concern for vehicle emissions. The traffic analysis conducted for the project indicates that the intersections in proximity to the project would operate at LOS C or better. LOS of C or better are not expected to result in a violation of the carbon monoxide NAAQS, per EPA guidance. Vehicle volume and delay are both expected to decrease as a result of the Build Alternative, and the project is not expected to cause negative impacts to air quality from any mobile source air emissions in the near or long term.

## Mobile Source Air Toxics

Motor vehicles emit seven pollutants that EPA classifies as priority mobile source air toxics (MSATs): acrolein, benzene, 1.3-butadiene, diesel particulate matter plus diesel exhaust organic gases (diesel PM), formaldehyde, naphthalene, and polycyclic organic matter. The seven priority MSATs are known or suspected to cause cancer or other serious health effects.

The purpose of this project is to implement security improvements to the Harry S Truman Building. This project has been determined to generate minimal air quality impacts for CAAA criteria pollutants and has not been linked with any special MSAT concerns. This project would not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause an increase in MSAT impacts of the project from that of the no-build alternative.

Moreover, EPA regulations for vehicle engines and fuels would cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOBILE 6.2 model forecasts a combined reduction of 72 percent in the total annual emission rate for the priority MSATs from 1999 to 2050 while vehicle-miles of travel are projected to increase by 145 percent. This would both reduce the background level of MSATs as well as the possibility of even minor MSAT emissions from this project.

## General Conformity

The CAA Conformity Regulations (40 CFR Parts 6, 51, and 93) require federal agencies that propose federally-funded actions to demonstrate conformity with the CAA if located in, or affecting, nonattainment or maintenance areas. Perimeter security improvements at the Harry S Truman Building require that General Conformity be met. If the increased emissions of the criteria pollutant (or its precursors) do not exceed a defined de minimis level, the federal action has minimal air quality impact, and therefore, the action is determined to conform for that pollutant and no further analysis is required. The Harry S Truman Building is located in an attainment area for all NAAQS pollutants except ozone (8-hour standard) and $\mathrm{PM}_{2.5}$ (annual standard). It is also in a maintenance area for CO. The de minimis values for each of these three pollutants are summarized in Table 5.

Table 5 - De Minimis

| DE MINIMIS THRESHOLD IN THE WASHINGTON DC AREA (TONS PER YEAR) |  |  |
| :---: | :---: | :---: |
| Pollutant | Degree of Nonattainment Level | De Minimis ${ }^{\text {a }}$ |
| Ozone (VOCs) | Moderate, inside an ozone transport region | 50 |
| Ozone (NOx) | Moderate, inside an ozone transport region | 100 |
| Carbon Monoxide | All Maintenance | 100 |
| Particulate Matter ( $\mathrm{PM}_{2.5}$ ) | Moderate <br> Serious | $\begin{gathered} 100 \\ 70 \end{gathered}$ |
| $\mathrm{NO}_{x}=$ nitrogen oxides. <br> $\mathrm{VOCs}^{2}$ volatile organic compound. <br> $\mathrm{PM}_{2.5}=$ particulate matter less than 2.5 microns in diameter. <br> Source: 40 CFR 93.153(b)  |  |  |

Emissions increases associated with the proposed action would occur only during the construction phase. While a quantitative analysis could not be performed at the current planning stage, it is presumed that the Build Alternative is exempt from the CAA conformity requirements, because the scale of proposed construction activity is highly unlikely to generate over 50 tons per year of VOC or any other nonattainment pollutant.

## Environmental Consequences of the No Build Alternative

Under the No Build Alternative, impacts on air quality would be negligible.

## Mitigation

During construction, fugitive dust emissions would be minimized by soil erosion and sedimentation control, restrictions on where vehicles can travel onsite, and speed controls for construction vehicles and equipment. Watering of exposed soil and demolition debris may also be used to control dust as needed.

### 3.6 BIOLOGICAL RESOURCES

### 3.6.1 VEGETATION

## Affected Environment

The Harry S Truman Building is located in a highly urbanized area. The area surrounding the building is comprised primarily of maintained flower/shrub beds and mowed grass areas with trees lining the sidewalks. The trees that are planted within the perimeter typically consist of American elms (Ulmus americana) planted along the eastern half of C Street and along $21^{\text {st }}$ Street, American sycamores (Platanus occidentalis) located along $21^{\text {st }}$ Street, Willow oaks (Quercus phellos) planted along Virginia Avenue and D Street, Northern red oaks (Quercus rubra) and American sycamores along D Street as well as along $23^{\text {rd }}$ Street and the western half of C Street

The American elm trees along C Street are arranged in a row of eight and appear to have been planted more recently than the trees located around the building. The overall diameter breast height (dbh) measurement of trees within this area is approximately 5 inches.

The two American sycamore trees near the corner of C Street and $21^{\text {st }}$ Street are mature established trees, with an overall dbh measurement of approximately 14 inches. Along $21^{\text {st }}$ Street, before the entrance of the loading dock, there are four large, mature American elms, with an overall dbh measurement of approximately 21.5 inches. The Willow oaks that are along Virginia Ave and D Street are also large mature trees with an overall dbh of approximately 19 inches.

There are twelve English holly trees (Ilex aquifolium) that are planted in a line along the north side of the Old State Department portion of the site. These trees appear to be more recent plantings compared to others trees on the site. There are many large, mature American sycamore trees along $23^{\text {rd }}$ and C Streets, six of which are along $23^{\text {rd }}$ Street and five along C Street in the vicinity of the Harry S Truman Building.

## Environmental Consequences of the Build Alternative

Implementation of the Build Alternative would result in long-term, beneficial impacts by replacing some of the current impervious areas with vegetated areas. The Build Alternative would include altering several streets surrounding the building's perimeter. These alterations include: realigning C Street to match the portion of the street adjacent to the Federal Reserve Building; altering $21^{\text {st }}$ Street to improve the screening process for truck deliveries; and relocating D Street to move the flow of traffic further away from the Harry S Truman Building.

In association with these street changes, approximately 133 new trees would be planted as part of the streetscape designs along D, C, $21^{\text {st }}$, and $23^{\text {rd }}$ Streets. The chart below identifies the number of existing trees to be removed, the calipers of those trees, and the number being planted, per street. Because the final designs for $21^{\text {st }}$ and $23^{\text {rd }}$ Streets would be completed in a later phase, approximations for these street tree calculations are provided.

| Street | \# of Existing Trees | \# of Trees to be Removed | \# of New Trees |
| :---: | :---: | :---: | :---: |
| $\boldsymbol{C}$ | 14 | $13(5: 13$ with a caliper $>8$ inches $)$ | 40 |
| $\boldsymbol{D}$ | 37 | $10(10: 10$ with a caliper $>8$ inches $)$ | 31 |
| $\mathbf{2 1}^{\text {st }}$ | $+/-10$ | $+/-2(2: 2$ with a caliper $>8$ inches $)$ | $+/-42$ |
| $\mathbf{2 3}^{\text {rd }}$ | $+/-6$ | $+/-6(6: 6$ with a caliper $>8$ inches $)$ | $+/-20$ |

The two proposed trees in the Concept Design that intrude into the historic right-of-way on $21^{\text {st }}$ Street would be taken out of the design. The proposed addition of street trees on the east side of $23^{\text {rd }}$ Street would align as close as possible to the street trees on the west side of $23^{\text {rd }}$ Street, so as not to encroach upon the reciprocal vistas between Washington Circle and the Lincoln Memorial. A visual aid that reflects the existing and proposed street tree alignment on the roadway can be found in Figure 18.

Trees that are being considered for new planting after construction activities include: London plane (Platanus x acerifolia), Willow oak (Quercus phellos), Red maple cultivars (Acer rubrum), and seedless Green ash (Fraxinus pennsylvanica). Shrubs and groundcover plantings would also be added.

## Environmental Consequences of the No Build Alternative

Under the No Build Alternative, impacts on vegetation would be negligible.

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Figure 18-23rd Street Viewshed Analysis (looking south)


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### 3.6.2 WILDLIFE

## AfFected Environment

Due to the developed landscape of the area, wildlife species in the vicinity of the Harry S Truman Building are highly adapted to urban habitats. Species that may be affected are the Eastern gray squirrel (Sciurus carolinensis), the American robin (Turdus migratorius), and the mourning dove (Zenaida macroura). During a site visit conducted on September 28, 2006, no wildlife was observed within the building's perimeter grounds.

## Environmental Consequences of the Build Alternative

Under the Build Alternative, impacts on wildlife would be negligible. Urban-adapted animal species would relocate to a similar habitat (developed landscape) in the surrounding area. An effort would be made to minimize impact of construction activities on the current available habitat. After the construction is completed, species habitat would be returned to a similar manner as that found before construction activities began.

## Environmental Consequences of the No Build Alternative

Under the No Build Alternative, impacts on wildlife would be negligible.

### 3.6.3 THREATENED OR ENDANGERED SPECIES

## AfFECTED ENVIRONMENT

According to the U.S. Fish and Wildlife Service's (USFWS) Threatened and Endangered Species System (TESS), seven animal species and one plant species are listed as having special status within the District of Columbia. These species include Hay's spring amphipod (Stygobromus hayi), American burying beetle (Nicrophorus americanus), eskimo curlew (Nurmenius borealis), bald eagle (Haliaeetus leucocephalus), Eastern puma (Puma concolor couguar), dwarf wedgemussel (Alasmidonta heterodon), gray wolf (Canis Lupis) and the small whorled pogonia (Isotria medeoloides) (USFWS, 2006). Because the area surrounding the Harry S Truman Building is already developed, it is not expected that any of these federally listed species or their habitat would be located with the Department of State Buildings' grounds.

The District of Columbia has listed species considered to be "of greatest concern" within the city (District of Columbia, 2005). Examples include Brown thrasher, Eastern chipmunk, Bog turtle, Marbled salamander, Alewife floater, and Atlantic sturgeon. The vicinity of the Harry S Truman Building is developed and is not expected to harm any of the above species or their habitats.

The USFWS and the DC Division of Fisheries and Wildlife were contacted on August 25,2006 to request information about the proximity of the construction site to the habitats of the species listed above. A response from the USFWS, received on May 9, 2007, indicated that no proposed or federally listed endangered or threatened species are known to exist within the project impact area, and that no further consultation with the USFWS is required. This response can be found in Appendix A.

## Environmental Consequences of the Build Alternative

Under the Build Alternative, impacts on threatened or endangered species would be negligible.

## Environmental Consequences of the No Build Alternative

Under the No Build Alternative, impacts on threatened or endangered species would be negligible.

### 3.6.4 ENVIRONMENTAL JUSTICE

## Affected Environment

The area is zoned for government and special uses, and therefore contains only a small resident population. According the to the 2000 Census, twelve residents live in Census Tract 62.2. There are a number of public transportation options in the area that serve workers and residents.

## Environmental Consequences of the Build Alternative

Under the Build Alternative, impacts to low-income or minority populations would be negligible. Nearby residents may experience nuisance noise or dust during the construction phase, but these impacts would be temporary and not disproportionately felt by minority/low-income populations.

## Environmental Consequences of the No Build Alternative

Under the No Build Alternative, impacts to low-income or minority populations would be negligible.
TABLE 6：ENVIRONMENTAL AND SOCIOECONOMIC CONSEQUENCES
NO BUILD ALTERNATIVE measures．
Long－term，beneficial impacts from improved security．
Long－term，minor，adverse impacts from relocation of some original curb lines，
stormwater drains，street lights，hydrants and manholes．
Negligible
Long－term，minor，adverse impacts from relocation of some original curb lines，
stormwater drains，street lights，hydrants and manholes．
Negligible
Long－term，minor，adverse impacts from restructuring original architecture and
Negligible
Negligible Negligible
Long－term，moderate，adverse impacts on NAS and APhA from changes to C， $22^{\text {nd }}$ ，
$23^{\text {rd }}$ and $21^{\text {st }}$ Streets． 23 and 21 Strets．
Short－term，beneficial impacts to DC from the creation of additional construction
Long－term，moderate，adverse impacts from the construction of new security improvements that would impact views of the original building and intrude into the historic L＇Enfant rights－of－way．
Short－term，minor，adverse impacts from construction．
Short－term，minor，adverse impacts from construction．
Short－term，minor，adverse impacts from construction．
Long－term，minor，adverse impacts from placement of concrete slabs underneath
pavilions to be used for leveling land．

Long－term，minor，adverse impacts from grading for additional impervious surfaces．
Negligible
Long－term，beneficial impacts from an increase in the amount of pervious surfaces， with short－term，minor，adverse impacts from construction．
Short－term，minor，adverse impacts from construction emissions，dust from soil excavation，and odors．
Negligible
 surfaces

| $\frac{0}{0}$ |
| :--- |
| $\frac{0}{\bar{O}}$ |
| $\frac{0}{2}$ | Negligible


| SECTION | RESOURCE | NO BUILD ALTERNATIVE | BUILD ALTERNATIVE |
| :---: | :---: | :---: | :---: |
| 3．1．1 | TRANSPORTATION | Long－term，minor，adverse impacts from existing circulation and pedestrian mobility． | Long－term，beneficial，impacts from additional lane and enhanced security measures．Short－term，minor，adverse impacts would result from construction and potential congestion． |
| 3．1．2 | PUBLIC SAFETY | Long－term，minor，adverse impacts from existing security needs | Long－term，beneficial impacts from improved security． |
| 3．1．3 | UTILITIES | Negligible | Long－term，minor，adverse impacts from relocation of some original curb lines， stormwater drains，street lights，hydrants and manholes． |
| 3．1．4 | COMMUNITY FACILITIES | Negligible | Negligible |
| 3．2．1 | HISTORIC RESOURCES | Long－term，minor and moderate adverse impacts from temporary security measures | Long－term，minor，adverse impacts from restructuring original architecture and landscaping． |
| 3．2．2 | ARCHEOLOGICAL RESOURCES | Negligible | Negligible |
| 3．3．1 | ON－SITE LAND USE | Negligible | Negligible |
| 3．3．1．1 | LOCAL \＆REGIONAL PLANNING CONTEXT | Negligible | Negligible |
| 3．3．1．2 | ADJACENT LAND USES \＆OWNERSHIP | Negligible | Long－term，moderate，adverse impacts on NAS and APhA from changes to C， $22^{\text {nd }}$ ， $23^{\text {rd }}$ and $21^{\text {st }}$ Streets． |
| 3．3．1．3 | POPULATION | Negligible | Negligible |
| 3．3．1．4 | ECONOMY \＆EMPLOYMENT | Negligible | Short－term，beneficial impacts to DC from the creation of additional construction jobs for the duration of the project． |
| 3．3．2 | VISUAL RESOURCES | Long－term，minor and moderate adverse impacts from temporary security measures | Long－term，moderate，adverse impacts from the construction of new security improvements that would impact views of the original building and intrude into the historic L＇Enfant rights－of－way． |
| 3．3．3 | NOISE | Negligible | Short－term，minor，adverse impacts from construction． |
| 3．4．1 | SOLID WASte | Negligible | Short－term，minor，adverse impacts from construction． |
| 3．4．2 | HAZARDOUS WASTE | Negligible | Short－term，minor，adverse impacts from construction． |
| 3．5．1 | TOPOGRAPHY | Negligible | Long－term，minor，adverse impacts from placement of concrete slabs underneath pavilions to be used for leveling land． |
| 3．5．2 | GEOLOGY | Negligible | Long－term，minor，adverse impacts from potential drilling and dowelling，and addition of compacted fill under pavilions． |
| 3．5．3 | soils | Negligible | Long－term，minor，adverse impacts from grading for additional impervious surfaces． |
| 3．5．4 | WETLANDS | Negligible | Negligible |
| 3．5．5 | FLOODPLAIN | Negligible | Negligible |
| 3．5．6 | STORMWATER \＆GROUNDWATER | Negligible | Long－term，beneficial impacts from an increase in the amount of pervious surfaces， with short－term，minor，adverse impacts from construction． |
| 3．5．7．1 | REGIONAL \＆LOCAL AIR QUALITY | Negligible | Short－term，minor，adverse impacts from construction emissions，dust from soil excavation，and odors． |
| 3．5．7．2 | EXISTING EMISSIONS | Negligible | Negligible |
| 3．6．1 | vegetation | Negligible | Long－term，beneficial impacts from addition of trees and vegetative pervious surfaces． |
| 3．6．2 | WILDLIFE | Negligible | Negligible |
| 3．6．3 | THREATENED \＆ENDANGERED SPECIES | Negligible | Negligible |
| 3．6．4 | ENVIRONMENTAL JUSTICE | Negligible | Negligible |

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### 4.0 CUMULATIVE IMPACTS

According to Section 1508.7 of the National Environmental Policy Act:
Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.
(NEPA, the Environmental Quality Improvement Act of 1970, as amended (42 U.S.C. 4371 et seq.), sec. 309 of the Clean Air Act, as amended (42 U.S.C. 7609), and E.O. 11514 (Mar. 5, 1970, as amended by E.O. 11991, May 24, 1977))

The proposed action is the implementation of the 2004 Concept Submission for the Perimeter Security Improvements for the Department of State Harry S Truman Building. This Submission describes the phasing process and projected magnitude of the proposed perimeter security actions for the site area and vicinity. There are no other projects during this time at the Harry S Truman Building that would add to the potential cumulative impacts of the Concept Submission.

Ongoing projects that may contribute to the cumulative effects of the Department of State perimeter security improvements include those listed below. Categories of impact include ‘neutral’ (none), 'beneficial’ (positive), and ‘detrimental’ (negative).

Lincoln Memorial Circle Rehabilitation and Security Improvements would provide tour bus parking, increase visitor safety, improve the cultural integrity of the Lincoln Memorial, and improve the overall visitor experience in the vicinity of the Memorial. A new vehicular barrier system would consist of a retaining wall, bollards, a secure gate, and two visitor service areas that would impact the west, north and south sides of the Memorial, Daniel Chester French Drive, and Henry Bacon Drive.

American Pharmacists Association (APhA) is in the process of designing and implementing perimeter security improvements to the new office building addition on C St. NW, between $22^{\text {nd }}$ and $23^{\text {rd }}$ Streets NW.

Vietnam Veterans Memorial Visitor Center is being proposed on a site bounded by Henry Bacon Drive, Lincoln Memorial Circle, $23^{\text {rd }}$ St. NW, and Constitution Ave. NW.

Federal Reserve Martin Building is in the beginning phases of design and an environmental study for new conference pavilions and a visitor screening center.

National Academy of Sciences is constructing a small museum, located on Constitution Avenue NW between $21^{\text {st }}$ and $22^{\text {nd }}$ Streets NW.

Nearby Road Improvements include rehabilitation of the Theodore Roosevelt Bridge, rehabilitation of Constitution Avenue NW from $15^{\text {th }}$ Street NW to $23^{\text {rd }}$ Street NW, and rehabilitation of Ohio Drive from $23^{\text {rd }}$ Street to Rock Creek and Potomac Parkways. The Theodore Roosevelt Bridge improvement project is currently in the preliminary planning stage and construction is not expected to begin until after the Lincoln Memorial Project is complete.

United States Institute of Peace Headquarters is currently being constructed on the northwest corner of the intersection of $23^{\text {rd }}$ Street NW and Constitution Avenue NW. The building comprises 154,000 SF.

## TRANSPORTATION AND PARKING

Cumulative impacts on transportation and parking at the Harry S Truman site and vicinity would be minor adverse in the short-term and beneficial in the long-term. Mitigation measures for these impacts can be found in section 3.1.1. The current arrangement of temporary precast planters and closure of C and D Streets affect traffic patterns on the site, externalizing these problems to the surrounding area. This and future security improvements result in the elimination of a small number of on-street parking spaces, leading to a small reduction in public parking in the area.

Additionally, the United States Institute of Peace Headquarters, a 248,000 SF building, is under development in the northwest quadrant of the $23^{\text {rd }}$ Street/Constitution Avenue intersection. This site is immediately south, southeast, and west of the Navy Bureau of Medicine and Surgery, Harry S Truman Department of State (DoS), and American Pharmacists Association, respectively. Traffic impacts from the Institute of Peace Headquarters on the surrounding road network were evaluated in a traffic study dated March 13, 2006, with subsequent analysis dated February 13, 2007. The studies conducted for the Institute of Peace reflected the security improvements envisioned by the DoS, with respect to the reconfiguration of the E Street/Virginia Avenue intersection. The Institute of Peace traffic studies, as well as the October 28, 2004 and October 6, 2006 DoS traffic studies, accounted for regional traffic growth that considers planned, but not built, projects in the vicinity of the DoS.

The Institute of Peace Headquarters would provide 140 replacement parking spaces for the U.S. Navy Annex from its inventory of 240 below-grade parking spaces. The existing access point serving the parking lot, approximately 85 feet north of Constitution Avenue, would be closed. The proposed access point oriented to $23^{\text {rd }}$ Street is being evaluated under signal control as part of the C Street, U.S. Annex driveway, and $23^{\text {rd }}$ Street pretimed clustered system.

Additionally, the Vietnam Veterans Memorial Fund is proposing a Memorial Visitor Center on a site bounded by Henry Bacon Drive, Lincoln Memorial Circle, 23rd Street, and Constitution Avenue. Locating the Memorial Visitor Center at this location has the potential to cumulatively impact traffic in the vicinity of the Harry S Truman Building
during the work week; however, it could be expected that the majority of traffic impacts would occur on weekends and holidays.

The Department of State, in consultation with DDOT, APhA, and NAS, has evaluated operational improvements on $22^{\text {nd }}$ Street to best control its enhanced functions. The DoS would replace the retractable barriers and guard booth at the C Street/ $22^{\text {nd }}$ Street intersection with retractable emergency bollards. Under this condition, DoS site trips would no longer use this site access point, with the exception of emergencies and highpriority visitors. A raised median would be installed on the southern half of $22^{\text {nd }}$ Street, between C Street and Constitution Avenue, NW, to discourage double parking. The angled parking on the west side of $22^{\text {nd }}$ Street would be converted from head-in parking to the DDOT-preferred back-in parking. In addition, designated taxi stand and pick-up areas would be established. An operational evaluation of $22^{\text {nd }}$ Street has been evaluated between C Street and Constitution Avenue, NW for this EA.

All site traffic to APhA would remain the same. The main APhA garage driveway and loading dock that serves the APhA Building are oriented to $22^{\text {nd }}$ Street between C Street and Constitution Avenue, NW. Under a separate action, the installation of retractable barriers and security guard booths has been proposed for the APhA Building at these locations. The APhA driveway on $23^{\text {rd }}$ Street, NW would remain an emergency exit only and also has been proposed for a retractable barrier and guard booth. An evaluation of the service time to process entering vehicles would be provided with respect to the $22^{\text {nd }}$ Street, NW operational evaluation discussed above under a separate EA for the new APhA facility. The proposed improvements at APhA include three (3) possible security perimeter alternatives as summarized below:

No Action Alternative includes the location of a 30 " high security wall in a location along $23^{\text {rd }}$ Street, NW that was previously approved by NCPC in 2005, but has not been constructed.

Alternative 1 includes the $23^{\text {rd }}$ Street wall shown in the No Action option, but also includes new guard booths and vehicle barriers at the two garage entrances one on 22nd Street, NW, and $23^{\text {rd }}$ Street, NW, and the loading dock on $22^{\text {nd }}$ Street, NW. In addition, this alternative shows a new 30 " wall along the APhA property line on $22^{\text {nd }}$ Street, NW.

Alternative 2 locates the $23^{\text {rd }}$ Street, NW wall on the National Park Service western property line, and relocates the sidewalk to the west of the new wall. On $22^{\text {nd }}$ Street, NW, the wall is located on the eastern edge of the existing sidewalk. The locations of the guard booths and vehicle barriers remain as shown for Alternative 1.

Alternative 3 locates the new $23^{\text {rd }}$ Street, NW wall 24 " east of the existing curb line and the $22^{\text {nd }}$ Street, NW wall 24 " west of the existing curb line. The location of the guard booths and vehicle barriers would be the same as those described in the other two action alternatives.

## VISUAL RESOURCES

Cumulative impacts on visual resources at the Harry S Truman site and vicinity would improve site-specific aesthetics in the long-term, but would be moderately adverse on the site's vistas and axes in the long-term. The placement of the guard booths on C Street would intrude into the historic L'Enfant right-of-way and create a visual barrier from the NAS and APhA Buildings to the Department of State, and visa versa. The design for the new C Street pavilion would need to be revised as it impedes into the C Street historic L'Enfant right-of-way. There would be impacts from the D Street pavilion into the historic L'Enfant right-of-way.

The combined effect of construction along $23^{\text {rd }}$ Street, including the DoS, APhA and the United States Institute of Peace Headquarters, would change the visual character of both sides of $23^{\text {rd }}$ Street between C Street and Constitution Avenue. These changes could be considered beneficial in that new urban design elements would be provided; however, the installation of temporary and permanent security improvements at the Department of State, in conjunction with those at APhA, could have long-term, minor to moderate, adverse cumulative impacts on visual resources, by adversely altering views of the $23^{\text {rd }}$, $22^{\text {nd }}$, and C Streets streetscapes. Additionally, removal of traditional street elements, most notably street trees, represents a long-term adverse visual impact and removes the important framing elements that positively contribute to views.

## AIR QUALITY

Cumulative impacts on air quality at the Harry S Truman site and surrounding area would be minor adverse in the long-term. Construction activities at the Harry S Truman Building would have neutral impacts on air quality, as they are short-term and would generate emissions in quantities below de minimis levels. Similarly, other projects in the local area, such as those for the Federal Reserve (future), APhA (future), and the Kennedy Center (access improvements completed, additional projects on hold), have been determined to have minimal impact on air quality. Typically, adverse cumulative impacts on air quality are expected, due to multiple construction projects occurring at the same time, in the same area. Although two of these nearby projects could occur concurrently with the proposed action, the cumulative impacts are not expected to be above the impact of normal construction activities occurring throughout the city.

## WATER RESOURCES

Cumulative impacts on water resources at the Harry S Truman site and vicinity would be beneficial in the long-term, and minor adverse in the short-term, due to construction. The Build Alternative at the Harry S Truman Building would actually result in an increase in pervious area and have beneficial impacts on the Harry S Truman site. This would offset some of the increase in impervious areas caused by new construction at the APhA Building, the Kennedy Center access improvements, and other construction projects in the vicinity, and have a long-term beneficial impact to stormwater and groundwater in this area.

## VEGETATION

Cumulative impacts on vegetation at the Harry S Truman site and vicinity would be beneficial in the short- and long-term. The Build Alternatives for perimeter security at the Harry S Truman Building and APhA would have temporary detrimental impacts on vegetation due to construction activities; however, once construction is completed, the result would be beneficial, as the Build Alternative would increase the number of trees and other vegetative cover at the site. This would offset some of the potential detrimental impacts to terrestrial vegetation that may result from new construction at the APhA Building, Kennedy Center access improvements, and other construction projects in the area.

## WILDLIFE

Cumulative impacts on wildlife at the Harry S Truman site and vicinity would be negligible. The Build Alternatives for perimeter security at the Harry S Truman Building and the APhA would have cumulative, but temporary detrimental, impacts on those species which are adapted to a highly urbanized environment. Because these species are regarded as transient species and/or habitat generalists, construction would not have a permanent detrimental impact on these species and they would return once construction activities are completed.

## SECURITY

Cumulative impacts on security at the Harry S Truman site and vicinity would be beneficial in the short- and long-term. Past activity at the Harry S Truman Building has included the addition of the New State Building to Old State, or War Department Building.

### 5.0 LIST OF PREPARERS

KCCT Architects
Overall Project Management
Quality Control (QA/QC)
Rhodeside \& Harwell, Incorporated
Project Management
Purpose and Need
Description of Alternatives
Geology
Soils
Vegetation
Solid Waste
Hazardous Waste
Land Use
Visual Resources
Noise
Population
Economic and Employment
Community Facilities
Public Safety
Environmental Justice
Significance of Impacts
Cumulative Impacts
Wells \& Associates, Inc.
Parking
Transportation
Robinson \& Associates, Inc.
Historic Resources

## CH2M HILL

Air Quality
Threatened and Endangered Species
Water Resources
Wildlife
John Milner \& Associates, Inc.
Archeological Resources
Edwards and Kelcey, Engineers
Topography
Utilities

### 6.0 REFERENCES

Agency for Toxic Substances and Disease Registry. Department of Health and Human Services. Internet HazDat- Site Activity Map. 2002. http://www.atsdr.cdc.gov/haz-usa1.html

Baist, George William. Baist's Real Estate Atlas of Surveys of Washington, District of Columbia. Philadelphia: G.W. Baist, 1932, 1939, 1948, 1957, 1965.

Boschke, Albert. 1861 Topographical Map of the District of Columbia. D. McClelland, Blanchard \& Mohn, Washington, DC In Washington on View: The Nation's Capital Since 1790, John W. Reps, editor, p. 139. The University of North Carolina Press, Chapel Hill.

California Stormwater BMP Handbook; Construction. http://www.cabmphandbooks.com/Documents/Construction/WM-6.pdf January 2003.

DC Atlas. http://dcatlas.dcgis.dc.gov/Environmental/viewer.htm. 2002.
District of Columbia Department of Health, Fisheries and Wildlife Division DC Comprehensive Wildlife Conservation Strategy. October 1, 2005.
(DDOH, 2005.) District of Columbia Department of Health. 2005. http://doh.dc.gov/doh/cwp/view,A,1374,Q,583992,dohNav_GID,1809.asp

District of Columbia, 2005. District of Columbia Comprehensive Wildlife Conservation Strategy.

District of Columbia Fire and Emergency Medical Services, 2006. http://fems.dc.gov/fems/cwp/view,a,3,q,526088,femsNav,|31511|.asp

District of Columbia State Historic Preservation Office. District of Columbia Inventory of Historic Sites, 2004, and April 2009 update, http://www.planning.dc.gov/ planning/cwp/view,A,1284,Q,570748.asp.

District Department of Transportation. District of Columbia Transportation Audit Guidelines. 2006
http://ddot.dc.gov/ddot/frames.asp?doc=/ddot/lib/ddot/services/traffic audits/trans portationaudits 2006-02-21.pdf\&ddotNav=|32397|

District Department of Transportation. Context Sensitive Design Guidelines. March 28, 2005.
http://contextsensitivesolutions.org/content/reading/ddot_csd guidelines/re ources/ddot csd guidelines/
(DCWRRC, 1993.) District of Columbia Water Resources Research Center. 1993. Ground Water Resource Assessment Study for the District of Columbia. University of the District of Columbia. DC WRRC Report No. 145.
E.H.T. Traceries. District of Columbia Preservation Review Board Application for Historic District - Northwest Rectangle. District of Columbia State Historic Preservation Office, Washington, D.C., December 7, 1998.

Environmental Protection Agency. Region 3 GPRA Baseline RCRA Corrective Action Facility: General Services Administration. June 7, 2006. http://www.epa.gov/reg3wcmd/ca/dc/pdf/dc8470090004.pdf
(EPA, 2005.) U.S. Environmental Protection Agency. 2005. Carbon Monoxide-Nature and Sources of the Pollutant. http://www.epa.gov/air/airtrends/aqtrnd01/carbon.html
(EPA, 1995). U.S. Environmental Protection Agency. January 1995. AP-42, Fifth Edition, Volume I, Chapter 13.2.3: Heavy Construction Operations.

Fleming, A.H., A. A. Drake and Lucy McCartan. Geologic Map of the Washington West Quadrangle, District of Columbia, Montgomery and Prince George's Counties, Maryland, and Arlington and Fairfax Counties, Virginia: U.S. Geological Survey, Geologic Quadrangle Map GQ-1748, scale 1:24000. 1994. http://ngmdb.usgs.gov/ngm-bin/ILView.pl?sid=q24_277_us_c.sid\&vtype=b
(FIRM map.) District of Columbia Flood Insurance Rate Map 110001, Panel 0015 B. November 15, 1985.

GSA. Final Environmental Assess and Finding of No Significant Impact: Disposition of Square 62. November, 2003.
(GSA, 1997). U.S. General Services Administration. 15 December 1997. Draft Phase I Environmental Audit, Lots 810, 813, 814 and 815 of Square 62, Washington DC Prepared by Kemron Environmental Services, Inc. Vienna, Virginia.

Hawkins, Don Alexander. The Landscape of the Federal City: A 1792 Walking Tour. In Washington History, 3(1), pp. 10-33. 1991

Karn Charuhas Chapman and Twohey (KCCT). Perimeter Security Improvements, Department of State, Harry S Truman Building: Concept Submission, Vol. 1. 2004

Metropolitan Police Department, 2004. http://mpdc.dc.gov/mpdc/cwp/view,a,1239,q,543336,mpdcNav_GID,1523,mpdc Nav,.|asp
(MWCOG, 2005.) MWCOG, Department of Environmental Programs. 2005. Air Quality Trends, Washington, DC Metropolitan Area 1993-2004.

National Capital Planning Commission. Comprehensive Plan for the National Capital: Federal Elements. August 5, 2004.

National Capital Planning Commission. The National Capital Urban Design and Security Plan. October 2002/November 2004.

National Capital Planning Commission. U.S. Department of State Harry S Truman Building Perimeter Security Improvements Staff Recommendations. November 24, 2004.

NPS. Map A. November, 2005.
Office of Documents and Administrative Issuances. DC Municipal Regulations. 2001. http://www.amlegal.com/nxt/gateway.dll/Title\ 11?fn=main nf.htm $\$ \mathrm{f}=$ templates $\$ 3.0$

Sanborn Map Company Fire Insurance Map of Washington, DC Sanborn Map Company, New York. (http://sanborn.umi.com). 1928

Short and Ford Architects. "Historic Structure Report and Preservation Manual for the State Department, Final Report." Prepared for the General Services Administration, National Capital Region, August 1990.

Topographic Survey of War Department Site, 1938.
(UCD ITS, 1997). University of California, Davis, Institute of Transportation Studies. December 1997. Transportation Project-Level Carbon Monoxide Protocol (UCD-ITS-RR-97-31).
U.S Census Bureau. 2000 U.S. Census. 2000.
U.S. Census Bureau. American Communities Survey. 2004.
U.S. Fish and Wildlife Service. 2006. USFWS Threatened and Endangered Species System (TESS). http://ecos.fws.gov/tess public/StateListingAndOccurrence.do?state=DC

United States Department of Agriculture Soil Conservation Service. Soil Survey of the District of Columbia. July 1976. http://www.sawgal.umd.edu/nrcsweb/DCsoils/DC.pdf

USGS. Conterminous States Probabilistic Maps \& Data. 2002. http://earthquake.usgs.gov/research/hazmaps/products data/images/nshm us02.gi f

United States Geological Survey (USGS)
Washington West, DC-MD-VA., Quadrangle Map, 7.5 minute series. United States Geological Survey, Washington, DC

URS Group, Inc. Final Environmental Assessment for the Installation of a Building Perimeter Site Security Program for the Federal Reserve System, Washington, DC November 26, 2003.
(Wells, 2006.) Wells \& Associates, LLC. September 22, 2006. Harry S Truman Building Perimeter Security Improvements Transportation Impact Study, Reconfiguration of the E Street/Virginia Avenue Intersection (Draft). Prepared for KCCT Architects.

## APPENDIX A

Agency Comments and Responses Tables
EA Scoping Letter and List of Recipients
Section 106 Initiation Letters and Correspondence
EA Scoping Responses and Correspondence

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Harry S Truman Building Perimeter Security Improvements
Preliminary Draft Environmental Assessment Comment/Response Matrix

| Item | Section | Commenter | Comment | A/E Response |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Design Concept | NCPC 2004 | Develop specific agreements with the District Department of Transportation regarding elimination of on-street parking, modification to curb lines and street alignments, vehicular access restriction on C Street NW, and perimeter security elements in public space along the sidewalks adjacent to $21^{\text {st }}$ and $23^{\text {rd }}$ Streets, including policies for use of traffic barricades on $21^{\text {st }}$ Street. | DOS will coordinate all improvements with the District of Columbia Department of Transportation and obtain agreements and permits as required. |
| 2 | Design Concept | NCPC 2004 | Develop specific agreements with adjacent property owners, including the APhA and the NAS, regarding access from C Street, and circulation at the intersection of $22^{\text {nd }}$ and C Streets. | DOS has developed specific arrangements and agreements as mutually decided for APHA and NAS access to and from C Street and $22^{\text {nd }}$ Street. |
| 3 | Design Concept | NCPC 2004 | Coordinate with the FHA and the Kennedy Center regarding the proposed modifications to E Street, which could affect access improvements to the Kennedy Center. | The proposed design for the reconfiguration of the $E$ Street Expressway is based on the condition of the intersection as it exists today. The design will be further coordinated with the FHA and Kennedy Center projects after they are finalized, and will be revised if necessary. |
| 4 | Design Concept | NCPC 2004 | Coordinate with NPS regarding the possible relocation of the Bernardo de Galvez statue currently located on US Reservation 720. | The Bernardo de Galvez statue would not be temporarily or permanently relocated or removed during this project. |
| 5 | Design Concept | NCPC 2004 | Further develop the design of bollards, wall, rails and corner markers along with adjacent landscaping. Further develop the design of the entry pavilions to reflect the character of the building's architectural era and ensure that they are located within the building yard, between the face of the building and the public sidewalk, and that they do not intrude into the view corridor of the adjacent historic streets. | An informal review meeting was held on November 26, 2007 with CFA and the SHPO. It was generally agreed that the designs were appropriate for the building and the site, as well as the official submission for final approval. |
| 6 | Design Concept | NCPC 2004 | Eliminate the two proposed trees that intrude into the historic $21^{\text {st }}$ Street right-ofway and further study the impacts of proposed street trees within the $23^{\text {rd }}$ Street right-of-way on view sheds to and from the Lincoln Memorial. | The two trees that adversely affect the views on $21^{\text {st }}$ Street will be taken out of the design for $21^{\text {st }}$ Street. The proposed addition of street trees on the east side of $23^{\text {rd }}$ Street would align as close as possible to the street trees on the west side of $23^{\text {rd }}$ Street, so as not to encroach upon the reciprocal vistas between Washington Circle and the Lincoln Memorial. A visual aid that reflects the existing and proposed street tree alignment on the roadway can be found in the Vegetation section. |
| 7 | Cover | NCPC 2007 | NCPC requests identification of the NCPC as a federal cooperating agency, as noted in the September 25, 2006 letter. | Corrected. |
| 8 | 3.5.1 | NCPC 2007 | Correct physiographic location of the site | Corrected. |
| 9 | 3.6.1 | NCPC 2007 | 'Willow' is misspelled as well as other terms throughout the document - please revise | Corrected. |
| 10 | 3.3.1.2 | NCPC 2007 | Include proposed construction of the US Institute of Peace Headquarters Building and the Vietnam Memorial Visitor Center at Bacon Drive and Constitution Avenue | The proposed US Institute of Peace Headquarters Building and the Vietnam Memorial Visitor Center at Beacon Drive on Constitution Avenue have been added to page 50 and to the Vicinity Map. |

Harry S Truman Building Perimeter Security Improvements
Preliminary Draft Environmental Assessment Comment/Response Matrix

| Item | Section | Commenter | Comment | A/E Response |
| :---: | :---: | :---: | :---: | :---: |
| 11 | 3.3.1.4 | NCPC 2007 | Identify or state the effects from the build alternative as effects from the project's location, operation or employment presence to the city's economy; not as effects on the site. | Effects have been identified. |
| 12 | 3.3.2 | NCPC 2007 | Text should reflect that the 2004 Federal Elements of the Comprehensive Plan for the National Capital no longer specify Special Streets; streets within the L'Enfant City are now characterized in the Comprehensive Plan as historic rights-of-way of the L'Enfant Plan. They are protected by listing in the National Register of Historic Places and in the District Inventory of Historic Sites as contributing elements of the Plan of the City of Washington, DC designation, and are further protected by policies in the Comprehensive Plan. (The document describes the L'Enfant plan in Section 3.6.2) | Text has been corrected. |
| 13 | 3.3.2 | NCPC 2007 | Identify and analyze the effect of the guard booths in the rights-of-way on the character of the rights-of-way views themselves, rather than just the effects of the guard booths on views of adjacent buildings. | Effects have been identified and analyzed. |
| 14 | 3.1 .1 | NCPC 2007 | Clearly state the location in the Appendix for Figure 4-1 and Figure 4-2. Specific areas of possible direction of strategies to mitigate parking and access interruptions of losses should specified for the access issues relative to C Street, in relation to NAS and APhA, and should be addressed in the mitigation paragraph. Stating concern and a moderate impact is insufficient for NEPA. | The locations of these figures have been identified in the text. |
| 15 | 3.2.1 | NCPC 2007 | Augment the fourth bullet in the summary of principal potential effects by referring to the L'Enfant Plan rights-of-way and their historic open character and views in the L'Enfant Plan rather than the "current conditions," which include temporary, recent security intrusions. | The bullet has been augmented. |
| 16 | Table 6 | NCPC 2007 | Integrate ALL of the above comments to the table of Environmental and Socioeconomic Consequences. For the analysis of the Build Alternative, include impacts to the L'Enfant rights-of-way that would occur by the construction of security structures in the rights-of-way. | Integrated. <br> These impacts have been included. |
| 17 | 3.1.1 | NAS 2006 | Concern regarding: <br> - Restricted access to C Street entrance <br> - Traffic on $22^{\text {nd }}$ Street <br> - Absence of a passenger drop-off point on $21^{\text {st }}$ Street <br> - Aesthetics of C Street | These concerns have been addressed in the text. |
| 18 | $\begin{aligned} & \hline \text { 3.3.1.2 } \\ & \text { Table } 6 \end{aligned}$ | NAS 2007 | The EA states on page 32 that "no significant adverse impacts on adjacent land uses and ownership is expected." This is amplified by Table 3, which states that the project has "no effects" on adjacent land uses and ownership. | This analysis has been revised. |


Preliminary Draft Environmental Assessment Comment/Response Matrix

| Item | Section | Commenter | Comment | A/E Response |
| :---: | :---: | :---: | :---: | :---: |
| 19 | 3.1.1 | NAS 2007 | - The Transportation section on page 43 states that "(it)t is anticipated that the NAS would continue to use C Street to provide access only to their shuttle buses and service trucks"; <br> - The Transportation section also states that "(t)he NAS has expressed concerns about the potential limited access from $22^{\text {nd }}$ Street to C Street for their employees, and the DOS is willing to work with the NAS and (American Institute of Pharmacy) staff to ensure that traffic concerns and issues are addressed. A design meeting between the NAS, APhA, and DOS has been requested to solve the access issues along C Street. <br> - The EA states "the design team and DOS would continue to work with the NAS and APhA to address any concerns relating to the closure of C Street and $22^{\text {nd }}$ Street, and limited access on $21^{\text {st }}$ Street." | Design and coordination meetings have been held with DOS, NAS, and APHA, and transportation concerns have been addressed. The findings of these discussions are included in the text. |
| 20 | 3.1.1 | NAS 2007 | - The letter from NAS on September 13, 2006 and comments from the meeting between NAS and DOS of September 25, 2006 should be appended to the EA <br> - Both documents clearly identify issues NAS has with the project's treatment of $21^{\text {st }}$, and C Streets and their impacts on NAS visitors, volunteers, and employees. The EA's failure to adequately address these issues is in violation of NEPA requirements. | The letter from September 13, 2006 and the letter dated September 29, 2006 are in Appendix A. The meeting minutes from the September 25, 2006 meeting could not be found. |
| 21 | 3.1.1 | NAS 2007 | - Closing C Street will create a loss of taxi and other vehicle access to the NAS entrance on C Street used by NAS staff, volunteers and visitors and persons with disabilities; <br> - Unsafe conditions for pedestrians on $22^{\text {nd }}$ Street caused by taxis/vehicles that will no longer use C Street and will use a dead-end street without a turnaround or organized traffic pattern; <br> - Congested egress from the NAS parking facility onto $22^{\text {nd }}$ Street caused by the number of taxis and other vehicles that used C Street but will instead wait on $22^{\text {nd }}$ Street; <br> - Unsafe conditions for passengers if C Street is closed, causing $21^{\text {st }}$ Street to be used as a drop-off and loading area that is not safely out of the flow of traffic | These issues have been addressed in the Transportation section of the EA. |
| 22 | 3.1.1 | NAS 2007 | The proposed 6' planted median on C Street, pg. 8 Figure 1, seems to adversely affect access to the C Street entrance by the NAS Shuttle and access to the NAS loading dock by delivery vehicles and would substantially limit the amount of turn-around space such vehicles require; and the proposed exterior pavilion at the C Street entrance of the building, as described on page 8, as extending 82 feet south, seems to be inconsistent with, and if described accurately, would extend well beyond the current center line of C Street, causing the proposed vehicular turnaround and drop-off at the entrance to the pavilion to be directly in front of the exit of the NAS parking facility under the Academy Building, and increase the congestion, safety and difficulties that are currently part of the problem. | A discussion of these elements, and their impacts, are addressed in the Transportation section of the EA. |

Harry S Truman Building Perimeter Security Improvements
Preliminary Draft Environmental Assessment Comment/Response Matrix

| Item | Section | Commenter | Comment | A/E Response |
| :---: | :---: | :---: | :---: | :---: |
| 23 | 3.1.1 | NAS 2007 | - The EA states that there are parking spaces on C Street in front of the Academy Building, but, temporary security measures do not allow NAS employees, visitors or volunteers to use these spaces (clarified on pg. 45, Build Alternative) - the EA does not discuss the impacts from or mitigation for the loss of these parking spaces; <br> - Of the 14 spaces identified in front of NAS, the EA states that 6 spaces would remain available to NAS, but does not address how they would be used by NAS; <br> - None of the spaces would be available to the general public; <br> - There is no discussion of the impacts on NAS or possible alternatives to mitigate the impacts; <br> - Neither the access and traffic issues which NAS has raised nor mitigation measures designed to address the negative impacts of the project on NAS are fully and adequately addressed. | The existing parking conditions text has been corrected. |
| 24 | 3.1.1 | NAS 2007 | There is no analysis of the impact of the closure on $22^{\text {nd }}$ Street traffic. | A $22^{\text {nd }}$ Street analysis has been provided in the Transportation section of the EA. The entire analysis is provided in Appendix $B$. |
| 25 | 3.1.1 | NAS 2007 | - EA needs an analysis of the traffic impact of the C Street closure, as well as a traffic analysis of possible mitigation measures such as the November 30, 2004 document entitled " $22^{\text {nd }}$ Street - Taxi Drop Off and Pick Up" that was presented to NAS by DOS at the March $15^{\text {th }}$ meeting; <br> - EA needs a full discussion of mitigation measures: new entrance to NAS, safe passenger drop off and loading point on $21^{\text {st }}$ Street, and option to keep a single one way lane on the south side of C Street open to the public | These issues are addressed in the Transportation section of the EA. |
| 26 | 3.1.1 | NAS 2007 | As a possible resolution of this matter, NAS proposes entering into a binding memorandum of agreement with NAS that addresses the vehicular and pedestrian concerns that NAS has raised with DOS regarding the Project. This would certainly be consistent with the direction of the National Capital Planning Commission as stated in its Commission Action, dated December 2, 2004, in its approval of the design concept for the project. | As a consulting party to the undertaking, NAS will be a signatory to the programmatic agreement DOS and GSA will develop to conclude Section 106 consultation for the perimeter security master plan. NAS will also be a signatory to any memorandum of agreement required to conclude consultation resulting from construction that affects NAS. Either of these agreements can serve as a vehicle to address transportation, parking, and pedestrian concerns, as agreed by the signatories. |


Preliminary Draft Environmental Assessment Comment/Response Matrix

| Item | Section | Commenter | Comment | A/E Response |
| :---: | :---: | :---: | :---: | :---: |
| 27 | 3.2 | NAS 2007 | - As legally required, the requirements of Section 106 of the National Historic Preservation Act are being considered as part of this Environmental Assessment and are addressed at the beginning of page 57. <br> - The EA considers the Academy Building to be within the areas of potential effects, and recognizes that the Academy Building is listed on both the DC Inventory of Historic Sites and the National Register of Historic Places, and is also a contributing building in the Northwest Rectangle Historic District, which the federal government has determined is eligible for inclusion in the National Register. <br> - The EA recognizes that major elements of the L'Enfant Plan for the City of Washington are impacted by the project. As noted in the EA, the District of Columbia State Historic Preservation (ACHP) found that the project had potential adverse effects on the Truman Building and other historic resources, including the original L'Enfant Plan streets. <br> - The EA states that the adverse effects are to be resolved through the Section 106 process, with a programmatic agreement, as provided for in 36 CFR s800.14(b), to be entered into by DOS, the General Services Administration, the National Park Service, DCSHPO, and ACHP. The EA provides that the only impact on the Academy Building would be the view of the C Street façade. | As a consulting party to the undertaking, NAS will be a signatory to the programmatic agreement DOS and GSA will develop to conclude Section 106 consultation for the perimeter security master plan. NAS will also be a signatory to any memorandum of agreement required to conclude consultation resulting from construction that affects NAS. Either of these agreements can serve as a vehicle to address transportation, parking, and pedestrian concerns, as agreed by the signatories. <br> The Cultural Resources section of the EA has been revised to reflect these concerns. |
| 28 | 3.2 | NAS 2007 | While the Academy Building has been identified in the EA, no adverse effect on the building has been noted, nor is the NAS identified as a potential signatory or consulting party to the programmatic agreement, despite requests to be so considered in the past. Indeed, the NAS was never asked to participate in any of the prior Section 106 discussions initiated with other impacted parties. | These impacts have been addressed in the Cultural Resources section of the EA. As a consulting party to the undertaking, NAS will be a signatory to the programmatic agreement DOS and GSA will develop to conclude Section 106 consultation for the perimeter security master plan. NAS will also be a signatory to any memorandum of agreement required to conclude consultation resulting from construction that affects NAS. Either of these agreements can serve as a vehicle to address transportation, parking, and pedestrian concerns, as agreed by the signatories. |

Harry S Truman Building Perimeter Security Improvements
Preliminary Draft Environmental Assessment Comment/Response Matrix

| Item | Section | Commenter | Comment | A/E Response |
| :---: | :---: | :---: | :---: | :---: |
| 29 | 3.2 | NAS 2007 | NAS believes that the project significantly changes the character of physical features within the Academy Building's setting that contribute to its historic significance, and that more attention needs to be paid to this impact in the EA, including ways of mitigating such impact or alternatives to what is currently proposed. Moreover, NAS believes that the project introduces visual elements that diminish the integrity of the Academy Building's significant historic features, and that the mitigation of such impact, or alternatives that do not have the same level of impact, need to be explored. Furthermore, since, under the Section 106 regulations, any supporting documentation for the views expressed in the EA are required to be provided to the NAS as an identified consulting party, we would appreciate receipt of copies of such documentation that was utilized to support the finding that long term impacts on historic resources are "minor." | Further analysis of the L'Enfant and McMillan Plan features in the vicinity of DOS has been undertaken since the preliminary draft EA was completed. This information will be presented in Section 106 consultation meetings, and is presented in the EA text -- as well as the impact of the security plan on these historic plans and the settings of adjacent buildings such as NAS. Detailed discussions of mitigation have not yet taken place. As a consulting party, NAS will have the opportunity to participate in the development of strategies to avoid, minimize, or mitigate potential adverse effects. NAS will also be a signatory to the Memorandum of Agreement covering the first phase of work at DOS, as well as future phases of work affecting its property. Any documents that have not been included in the process that the NAS would like to bring to the table will be accepted at any point during discussion. The DOS would like to remind the NAS that any and all "permanent" security improvements during this project are reversible and can be changed back to their current conditions. The DOS attempts to make all security improvements as soft and transparent as possible to ensure a pedestrian-friendly and elegant urban design solution with a 'greener', or sustainable, and less aggressive appearance than the current temporary security measures offer. |
| 30 | 3.1.1 | $\begin{gathered} \hline \text { APhA } \\ 2006 / 7 \\ \hline \end{gathered}$ | There is continued concern about the traffic congestion on $22^{\text {nd }}$ Street. | An analysis of $22^{\text {nd }}$ Street impacts have been provided in the Transportation section of the EA. |
| 31 | 3.2 | $\begin{gathered} \text { Committee } \\ \text { of } 100 \\ 2007 \end{gathered}$ | Greater concerns would be the impact of the pavilions for security equipment and the permanent guard houses at the HST entrances, and those concerns relate to the design of the structures themselves and their impact on the views along the L'Enfant and McMillan plan streets. A viewshed of particular note is south on $23^{\text {rd }}$ Street toward the Lincoln Memorial. | These concerns have been addressed in the Cultural Resources and Visual Resources sections of the EA. |
| 32 | 3.2 | National Coalition to Save Our Mall 2007 | Designating the Truman Building site as a Level 5 Priority building, comparable to the much larger Pentagon and White House sites, immediately creates set back needs. The closing of C and D Streets, to through traffic, the construction of guard houses in the streets and the change in the $23^{\text {rd }}$ Street sidewalk, all impact the original open character of the historic L'Enfant rights-of-way. No mitigation is provided or addressed in the Assessment which deals with these concerns. | These impacts have been addressed in the Purpose and Need and the Cultural Resources sections of the EA. |

Harry S Truman Building Perimeter Security Improvements
Preliminary Draft Environmental Assessment Comment/Response Matrix

| Item | Section | Commenter | Comment | A/E Response |
| :---: | :---: | :---: | :---: | :---: |
| 33 | 4.0 | National Coalition to Save Our Mall 2007 | This section is the only place that mentions that the US Institute of Peace proposed construction on the west side of $23^{\text {rd }}$ Street, which is directly visible from the west portion of the Truman Building. The Assessment does not address the cumulative traffic/visitor impacts of this approved construction, as well as the overall traffic/visitor impacts of the Mall and the additional underground Vietnam Memorial Visitor Center proposed at Constitution Avenue and $23^{\text {rd }}$ Street. | These impacts have been addressed in the Cumulative Impacts section of the EA. |
| 34 | 3.1.1 | National <br> Coalition to <br> Save Our <br> Mall <br> 2007 | Question the security value of the proposed changes to the D/E Streets/Virginia Avenue ramps due to the limited setback distance that is provided. The Assessment needs to provide evidence that the proposal will not adversely impact the proposed changes to the E Street access to the Kennedy Center improvements. | This issue is addressed in the Transportation section of the EA. |
| 35 | 3.3.1.2 | National Coalition to Save Our Mall 2007 | The Assessment makes no reference to the December 2, 2004 National Capital Planning Commission direction regarding specific agreements with several public and adjacent private organizations. | This direction is mentioned in the Adjacent Land Uses and Ownership section of the EA. |
| 36 | 3.5 .6 | DDOE 2007 | Please delete the words "Sediment and Stormwater" | Deleted. |
| 37 | 3.5.6 | DDOE 2007 | Delete the word "floodplain" and substitute it with the word "storm water management" | Deleted and replaced. |
| 38 | 3.1.1 | FHA 2006/7 | On page 5 and 12, the Proposed Site Plan is still showing the older design proposed for the intersection of the E Street Expressway Ramp with Virginia Avenue and E Street. In the back of the EA, under Appendix 1, our letter and related design memo dated September 25, 2006 was included for reference. In that letter, we requested that "Refined Option 2B" be shown as the preferred concept at this locations based upon the proposed improvements under the Kennedy Center Access Improvements Project. Please revise your Site Plan (page 5) and Alternative description (page 12) to reflect this. | This issue is addressed in the Transportation section of the EA. |
| 39 | 3.3.1.2 | United States Institute of Peace 2007 | The Unites States Institute of Peace Headquarters project should be listed, under Adjacent Land Uses and Ownership, with "other projects that are proposed, under construction, or completed in the area. | Listed. |
| 40 | 3.5.4 | U.S. <br> Department of the Interior 2007 | Federal and state partners of the Chesapeake Bay Program have adopted an interim goal of no overall net loss of the Basin's remaining wetlands and the long term goal of increasing the quality and quantity of the Basin's wetlands resource base. Because of this policy and the functions and values wetlands perform, the Service recommends avoiding wetland impacts. All wetlands within the project area should be identified and if alterations of wetlands are proposed, the U.S Army Corps of Engineers, Baltimore District should be contacted for permit requirements. | The information in this comment will be acknowledged, should any wetlands be identified in the project area. To date, no wetlands have been identified in the area. |

Harry S Truman Building Perimeter Security Improvements
Preliminary Draft Environmental Assessment Comment/Response Matrix

| Item | Section | Commenter | Comment | A/E Response |
| :---: | :---: | :---: | :---: | :---: |
| 41 | 3.1 .1 | WMATA 2007 | We respectfully request that your planning process provide for the mitigation of negative impacts to the provision of transit service along E Street, Virginia Avenue and $23^{\text {rd }}$ Street which surround the State Department facilities. Specifically, we ask that the United States Department of State and its planners and construction managers ensure that there are opportunities for safe access and egress of pedestrians who utilize bus stops for the following existing bus routes in your project area: S1; 80; 3Y; 16Y; N3; L1; H1. | This issue is addressed in the Transportation section of the EA. |
| 42 | $\begin{gathered} 2.1 \\ 3.3 .1 .2 \end{gathered}$ | NPS 2006/7 | In September 2006, we objected to the conceptual relocations of the Bernardo de Galvez Memorial to the confines of a traffic island. Although our letter is included in the current appendix, the concept first commented upon in 2004 remains unchanged (Figure 1: Proposed Action Design Concept) and there is no corresponding response to this comment in Appendix 2. Proposing to relocate this commemorative works seems to have no basis in relation to the perimeter security project. Therefore, we will not agree to its relocation other than the location proposed adjacent to Old State. | Please see response to comment \#2. |
| 43 | 3.1 .1 3.6 .1 | NPS 2007 | Currently $23^{\text {rd }}$ Street provides three lanes for northbound and three lanes for southbound traffic. The concept design removes one northbound travel lane. The roadway is constricted, and altered by the introduction of a new line of street trees on the $23^{\text {rd }}$ Street approach to the Lincoln Memorial and Constitution Avenue. Consideration should be given to placing the new street trees within the alignment of the other street trees on the east side of $23^{\text {rd }}$ Street so as not to encroach upon the reciprocal vistas between Washington Circle and the Lincoln Memorial since the proposed placement only increases the vehicular standoff distance by approximately 11 feet. | Currently, there are three lanes of southbound traffic, one of which is used as a parking lane during nonpeak hours, and two lanes of northbound traffic, north of the American Pharmacists Association. The concept design would not remove any lanes currently used for northbound traffic. The area that is currently blocked off by the DoS is a parking lane, which would become part of the perimeter security improvements. The proposed addition of street trees on the east side of $23^{\text {rd }}$ Street would align as close as possible to the street trees on the other side of $23^{\text {rd }}$ Street, so as not to encroach upon the reciprocal vistas between Washington Circle and the Lincoln Memorial. A visual aid has been produced to reflect the existing and proposed street tree alignment on the roadway. |
| 44 | 3.3.1.2 | NPS 2007 | The Vietnam Veterans Memorial Center, the Peace Institute, and the US Army Corps of Engineers Flood Control Barrier project at $23^{\text {rd }}$ Street, NW should be added to the list of related projects on page 32. | Added. |


Preliminary Draft Environmental Assessment Comment/Response Matrix

| Item | Section | Commenter | Comment | A/E Response |
| :---: | :---: | :---: | :---: | :---: |
| 45 | Policy Issue | DDOT 2007 | The Applicant will have to bear the entire cost of the project. This includes relocating curbs, and any necessary road reconstruction that brings the streets into compliance with DDOT Blue Book standards. DC will need to be compensated for the takings of land required by certain security measures as a long-term public space rental fee. These include, but are not limited to: <br> - Relocation of curb on western side of $21^{\text {st }}$ Street NW between C Street NW and Virginia Avenue, <br> - Relocation of curb on eastern side of $21^{\text {st }}$ Street NW between C Street NW and Virginia Avenue and creation of truck inspection area, <br> - Narrowing the sidewalk on the eastern side of $21^{\text {st }}$ Street NW, <br> - Addition of six-foot medians on $21^{\text {st }}$ Street NW between C Street NW and Virginia Avenue <br> - Blocking C Street NW between $21^{\text {st }}$ Street NW and $23^{\text {rd }}$ Street NW for restricted access, <br> - Blocking D Street NW between $23^{\text {rd }}$ Street NW and Virginia Avenue for restricted access, <br> - Relocation of curb on south side of Virginia Avenue between E Street NW and $21^{\text {st }}$ Street NW, <br> - Any District property used to construct corner markers, guard booths, security pavilions, etc. | DOS will work with DDOT to determine required cost compensations. |
| 46 | 3.5 .6 | DDOT 2007 | The Applicant will be accountable for proper stormwater management drainage of the entire block on which curb relocation occurs. This also provides an opportunity LID, which DDOT expects the Applicant to employ in order to reduce storm water runoff. | DOS understands its accountability for proper stormwater management associated with curb relocation. The build alternative would constitute a $17 \%$ increase in pervious (permeable) surface over 16.6 acres. Sediment control measures would be employed during construction to mitigate impacts on stormwater. |
| 47 | 3.1 .1 | $\begin{aligned} & \text { DDOT } \\ & \text { 2006/7 } \end{aligned}$ | The closing of the E Street Expressway off-ramp connection to Virginia Avenue/D Street and relocating the ramp away from the HST Building with a new connection to Virginia Avenue/E intersection, even temporarily, will have far reaching impact on traffic movement and circulation not only on the Foggy Bottom area but also in the Georgetown area. The traffic analysis of the EA does not address the impact of diverting of traffic and the alternative routes the diverted traffic will use. The traffic analysis must include the effect of relocating the ramp on traffic movements in the area. | An analysis of these impacts is provided in the Transportation section and Appendix B of the EA. |
| 48 | 3.5.7 | DDOT 2007 | The air quality assessments do not take into account the effects of altering the E Street Expressway off-ramp, which will most likely result in congestion and traffic diversion. The EA also makes no mention of the long-range air quality impacts of this alteration. The EA states that emissions from construction will be contained locally. There is no technology that can ensure this, and therefore this statement should be eliminated and emissions from construction should be included as local and regional air quality impacts. | These issues are addressed in the Air Quality section of the EA. |


Preliminary Draft Environmental Assessment Comment/Response Matrix

| Item | Section | Commenter | Comment | A/E Response |
| :---: | :---: | :---: | :---: | :---: |
| 49 | $\begin{aligned} & 3.3 .3 \\ & 3.5 .7 \end{aligned}$ | DDOT 2007 | Closing E Street to normal through traffic will have noise and air quality impacts resulting from congestion and the rerouting of traffic. This must be described in the EA. | E Street will not be closed as a result of the proposed actions. |
| 50 | Policy Issue | DDOT 2007 | DDOT must review and approve all design plans, and inspect and approve construction of the new ramp. | DOS will comply with all DDOT review and inspection requirements. |
| 51 | Policy Issue | DDOT 2007 | In order to encourage transit, parking should not be subsidized. Instead, parking should be available at market rate with very limited monthly passes. | DOS does not subsidize parking for employees. |
| 52 | 3.1.1 | DDOT 2007 | The concerns of adjacent building occupants, such as the National Academy of Sciences (NAS), must also be mitigated. In a meeting on June 22, 2007, representatives from NAS shared their concerns with DDOT. The following is a list of concerns which should be addressed and mitigated: <br> - The Department of State (DOS) is planning to close off C Street to through traffic with retractable bollards and guard posts. <br> This is the only ADA accessible entrance to the NAS Building C Street is currently closed off now to through traffic, and NAS has raised concerned that this space in effect acts as a parking lot for employees and security vehicles of DOS <br> - There is no plan for how $22^{\text {nd }}$ Street should function. Problems to normal functioning include: <br> o Bollards at C Street prevent any through traffic movement <br> o There is no space dedicated for vehicles to turn around <br> o Similar to C Street, the street is often blocked by parking of limousines and other DOS visitors. This apparently results because C Street is taken up with security vehicles <br> o Double and triple parking create dangerous conditions for pedestrians <br> o The current situation also requires an aesthetic solution <br> - Loading/unloading on $21^{\text {st }}$ Street south of C Street has the potential (as seen in other areas of the District with similar plans) to disrupt traffic flow and cause potentially dangerous conflicts between turning vehicles, vehicles traveling straight, and pedestrians <br> - Vehicles use the curb lane south of C Street as a de facto drop-off/pick-up zone, which blocks the visibility from the NAS Parking Garage for exiting vehicles. This creates the serious potential of conflicts and crashes. | These issues are addressed in the Transportation section of the EA. Additionally, DoS has met with NAS to discuss these issues. |

Harry S Truman Building Perimeter Security Improvements
Preliminary Draft Environmental Assessment Comment/Response Matrix

| Item | Section | Commenter | Comment | A/E Response |
| :---: | :---: | :---: | :---: | :---: |
| 53 | 3.1.1 | DDOT 2007 | The use of C Street as private parking for employees and security officers is not acceptable | DOS does not offer any type of employee parking along the restricted sections of C Street. The Bureau of Diplomatic Security permits parking for diplomatic vehicles (which was in effect prior to the street being restricted), members of Congress (statuary requirement) and DOS vehicles on official business. A significant amount of the Diplomatic Security vehicles parked on C Street are "police package" vehicles associated with protective details and other security operations. Vehicles that are privately owned by security officers are limited to those who use them for official business. |

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## APPENDIX A

## EA Scoping Letter and List of Recipients

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August 22, 2006

Ms. Dorothy Miller
2440 Virginia Avenue, NW
Washington, DC 20037
Re: Perimeter Security Improvements Plan
United States Department of State
Harry S Truman Building
Washington, DC
RHI\#24871

Dear Ms. Miller:
The United States Department of State, working with a consultant team led by the firms of KCCT and Rhodeside and Harwell, Incorporated, is conducting an Environmental Assessment (EA) to address the potential environmental effects of the construction of permanent perimeter security improvements around the United States Department of State Harry S Truman Building.

The Harry S Truman Building is the 2.5 million square foot headquarters of the U.S. Department of State located in Washington, D.C., between $21^{\text {st }}$ and $23^{\text {rd }}$ Streets, and C and D Streets NW. The proposed perimeter security improvements will replace the current temporary security barriers and controls with permanent security measures, while providing an aesthetically pleasing appearance and pedestrian friendly environment that is consistent with the civic character of the surrounding community. Plans of the improvements and a brief written description are enclosed for your review. Additionally, a map indicating the general location of the Harry S Truman Building and the areas subject to improvement around the building are also enclosed.

The EA will be used to identify the existing natural, biological, cultural, and socio-economic resources affecting the Harry S Truman Building and evaluate the effect that the improvements will have on the current state of the environment in this location.

In order to assist in identification of environmental issues that may affect the implementation of the proposed perimeter security improvements, please provide written comments regarding issues that you or your organization believes should be addressed in the EA. Your response within 21 days from the receipt of this letter would be appreciated. Please send your comments to me at Room 1420, Harry S Truman Building, 2201 C Street, NW, Washington, DC 20407. If you have any questions regarding this request, please contact me at 202-647-7455.

## Sincerely,

Mark M. Butowsky<br>Chief<br>Special Projects Division

Attachments: As stated.

## EA SCOPING LETTER RECIPIENTS

Advisory Neighborhood Commission 2A05
2440 Virginia Avenue, NW, \#D206
Washington, DC 20037
Home (202) 331-0191
Fax (202) 331-0947
Dorothy Miller

## American Pharmaceutical Association

1100 15th Street, NW, Suite 400, Washington, DC 20005
Ms. Ann Dubas, asomerset@comcast.net
Director
Baker, Christopher K., pt@aphanet.org
e-Marketing \& Communications
GvtAff@aphanet.org

## Committee of $\mathbf{1 0 0}$ on the Federal City

1317 G Street, NW
Washington, DC 20005
202.628.8030
202.628.8031 (fax)
info@committeeof100.net
Don A. Hawkins, Chairman, donhawkins@comcast.net
Laura M. Richards
The Honorable Eleanor Holmes Norton
U.S. House of Representatives

National Press Building
529 14th Street, N.W., Suite 900
Washington, D.C. 20045

## The Honorable Anthony A. Williams

Mayor of the District of Columbia
John A. Wilson Building
1350 Pennsylvania Avenue, NW
Washington, DC 20004
DC Preservation League
401 F Street, NW, Room 324
Washington, D.C. 20001
Office (202) 783.5144
Fax (202) 783.5596
info@dcpreservation.org
Rebecca A. Miller, Executive Director, Rebecca@dcpreservation.org

## Board of Governors of the Federal Reserve System

$20^{\text {th }}$ and C Street, NW
Washington, DC 20551
Keith Bates, Assistant Director of the Board's Engineering and Facilities Department

## John F. Kennedy Center for the Performing Arts

PO Box 101510
Arlington, VA 22210
Claudette Donlon, cdonlon@kennedy-center.org
Executive Vice President

## National Academy of Sciences

$5005^{\text {th }}$ Street, NW
Washington, DC 20001
Ralph J. Cicerone, rcicerone@nas.edu President

## National Coalition to Save Our Mall

P.O. Box 4709

Rockville, MD 20849
Judy Scott Feldman, PhD, Chairman, jfeldman@savethemall.org

## National Trust for Historic Preservation

1785 Massachusetts Avenue, NW
Washington, DC 20036
Office (202) 588-6000
Fax (202) 588-6272
Robert Nieweg, Director, Southern Field Office, robert_nieweg@nthp.org, 202.588.6107
cc: Nell Ziehl, nell_ziehl@nthp.org
cc: Elizabeth Merritt, betsy_merritt@nthp.org, 202.588.6026

## United States Department of the Navy

John Imperato, Director of Corporate Information Management, Washington Navy Yard
Building 200, Room 21N06
Washington, DC 20374-5001
john.imperato@navy.mil

Federation of Citizens Associations of the District of Columbia C/O West End Citizens Association,<br>Jack Batham<br>West End President<br>3710 S Street, NW, Washington, DC 20007

# Councilman Jack Evans, Chair Pro Tempore District of Columbia Council, Ward 2 <br> 1350 PA Ave, NW Room 106 <br> Washington, DC 20004 <br> www.jackevans.org 

## Foggy Bottom Association

Joy Howell -- President, FBA
2560 Virginia Ave. NW
Box 195
1101 24th St. NW
Washington, D.C., 20037
joy@cambridgestrategicpartners.org

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## APPENDIX A

Section 106 Initiation Letters and Correspondence

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United States Department of State
Washington, D.C. 20520

October 26, 2004

Ms. Lisa M. Burcham<br>State Historic Preservation Officer<br>for the District of Columbia<br>D.C. Office of Planning<br>801 North Capitol Street, N.E. - $3^{\text {rd }}$ Floor<br>Washington, DC 20002<br>RE: Harry S Truman Building Perimeter Security Improvements - Section 106 Review

Dear Ms. Burcham:
The purpose of this letter is to formally initiate Section 106 consultation with your office regarding proposed site security improvements at the U.S. Department of State, Harry S. Truman Building, 2201 C Street, N.W. The project involves changes to the building's entrances and construction of bollards, fences, walls, and guard booths on the site's perimeter. The Department of State serves as lead agency for Section 106 review, and the General Services Administration is acting as a secondary agency as Federal owner of the property. It is our opinion that the proposed alterations will have potential adverse effects on the Truman Building and on other historic resources associated with the site. The District of Columbia State Historic Preservation Office (DCHPO) and the Advisory Council on Historic Preservation (ACHP) concurred with this evaluation at a staff-level meeting on the project on August 4, 2004.

The Truman Building occupies a four-square-block site bounded by $21^{\text {st }}$ and $23^{\text {rd }}$ streets on the east and west and D Street, Virginia Avenue and C Street on the north and south. The original section of the building, constructed between 1939 and 1941 for the War Department at $21^{\text {st }}$ and Virginia Avenue, was determined potentially eligible for the National Register of Historic Places in 1992 by the General Services Administration (GSA). The DCSHPO agreed with this finding.

Subsequently, the entire building (the original portion and the addition) was identified as a contributing element of the Northwest Rectangle Historic District. The district includes several individually landmarked buildings in the immediate vicinity of the State Department, such as the American Pharmacists Association, the National Academy of Sciences, and the Federal Reserve Board. The Old Naval Observatory, a National Historic Landmark, stands across $23^{\text {rd }}$ Street from the Truman Building. In addition, the orthogonal street grid and Virginia Avenue, as well as several public reservations, were cied as contributing elements in the Plan of the City of Washington National Register: documentation. Vistas in the neighborhood (along $23{ }^{\text {rd }}$ Street, Virginia Avenae, and

Date: $06+26,2004$
Robert H. Sanders, Architect
Office of Real Property Management
Federal Preservation Officer
U.S. Department of State
Ran Pot
Gate: $10 \cdot 26 \cdot 04$
Division of Portfolio Management
U.S. General Services Administration
cc: David Maloney, D.C. State Historic Preservation Office Nancy Witherell, National Capital Planning Commission John M. Fowler, Advisory Council on Historic Preservation Enrique Bellini, Brooke Odom, Karn Charuhas Chapman \& Twohey Judy Robinson, Robinson \& Associates, Inc.
Faye Harwell, Rhodeside \& Harwell

United States Department of State
Washington, D.C. 20520

October 26, 2004

Mr. John M. Fowler<br>Executive Director<br>Advisory Council on Historic Preservation<br>1100 Pennsylvania Avenue, N.W. $-8^{\text {th }}$ floor<br>Washington, DC 20004

RE: Harry S Truman Building Perimeter Security Improvements - Section 106 Review
Dear Mr. Fowler:

The purpose of this letter is to invite the Advisory Council on Historic Preservation to participate in an ongoing Section 106 consultation involving proposed site security improvements at the U.S. Department of State, Harry S. Truman Building, 2201 C Street, N.W. The Council's participation in the consultation process is invited per Appendix A of 36 CFR part 800 . The project involves changes to the building's entrances and construction of bollards, fences, walls, and guard booths on the site's perimeter. The Department of State serves as lead agency for Section 106 review and the General Services Administration is acting as a secondary agency as Federal owner of the property. It is our opinion that the proposed alterations will have potential adverse effects on the State Department building and on other historic resources associated with the site. The District of Columbia Historic Preservation Office (DCSHPO) concurred with this evaluation at a staff-level meeting on the project on August 4, 2004.

The Truman Building occupies a four-square-block site bounded by $21^{\text {st }}$ and $23^{\text {rd }}$ streets on the east and west and D Street, Virginia Avenue and C streets on the north and south. The original section of the building, constructed between 1939 and 1941 for the War Department at $21^{\text {st }}$ Street and Virginia Avenue, was determined potentially eligible for the National Register of Historic Places in 1992 by the General Services Administration (GSA). The DCSHPO agreed with this finding.

Subsequently, the entire building (the original portion and the addition) was identified as a contributing element of the Northwest Rectangle Historic District. The district includes several individually landmarked buildings in the immediate vicinity of the State Department, such as the American Pharmacists Association, the National Academy of Sciences, and the Federal Reserve Board. The Old Naval Observatory, a National Historic Landmark, stands across $23^{\text {rd }}$ Street from the Truman Building. In addition, the orthogonal street grid and Virginia Avenue, as well as several public reservations, were cited as contributing elements in the Plan of the City of Washington National Register docr: fatatuon. Vistas in the neighborhood (along $23{ }^{\text {rd }}$ Street, Virginia Avenue, and Constitution Avenue) were also identified in the documentation for the Plan $\mathrm{c}^{5}$ the City of Washington.


cc: David Maloney, D.C. State Historic Preservation Office Nancy Witherell, National Capital Planning Commission Enrique Bellini, Brooke Odom, Karn Charuhas Chapman \& Twohey Judy Robinson, Robinson \& Associates, Inc.<br>Faye Harwell, Rhodeside \& Harwell

July 20, 2006

Mr. David Maloney<br>Acting State Historic Preservation Officer for the District of Columbia<br>D.C. Office of Planning<br>801 North Capitol Street, N.E., Suite 3000<br>Washington D.C. 20002

RE: Harry S. Truman Building Perimeter Security Improvements
Section 106 Review - Phases I, II, IIIa, and VIIa

## Dear Mr. Maloney:

The purpose of this letter is to formally initiate Section 106 consultation with your office regarding the implementation of certain phases of proposed perimeter site security improvements at the U.S. Department of State's Harry S. Truman Building, 2201 C Street, N.W.

The National Capital Planning Commission (NCPC) approved the design concept for the overall security improvement program on November 24, 2004. DOS and the General Services Administration, as co-lead agencies, initiated Section 106 consultation for the concept design on October 16, 2004, with the District of Columbia State Historic Preservation Office (DCSHPO) and the Advisory Council on Historic Preservation (ACHP). Consultation continued through submission and approval of the design concept by NCPC.

DOS has begun development of preliminary plans for Phases I, II, IIIa, and VIIa for the project. It is preparing, as well, a Programmatic Agreement to cover all seven phases of the project and an Environmental Assessment (in accordance with NCPC's Envirommental and Historic Preservation Policies and Procedures). The Section 106 consultation initiated by this letter specifically covers the following phases of the multiphased security enhancements project:

- Phase I - Design and construction of guard booths at C Street and retractable bollards at the intersection of C and $22^{\text {nd }}$ Streets.
- Phase II -- Addition of a guard booth at the corner of $23^{\text {rd }}$ and D Streets, reconfiguration of the entry at $D$ Street, and construction of a pavilion at the $D$ Street building entrance.
- Phase IIIa - Realignment of C Street, road work and landscaping, and a new garage entry guard booth.
- Phase VIIa - Road work and landscaping in front of the main C Street entrance.

The Truman Building occupies a four-square-block site bounded by $21^{\text {st }}$ and $23^{\text {rd }}$ streets on the east and west, and D Street, Virginia Avenue, and C Street on the north and south.

The original section of the building, constructed between 1939 and 1941 for the War Department at $21^{\text {st }}$ and Virginia Avenue, was determined potentially eligible for the National Register of Historic Places in 1992 by the GSA. The DCSHPO agreed with this finding.

Subsequently, the entire building (the original portion and the addition) was identified as a contributing element of the Northwest Rectangle Historic District. The historic district includes several individually landmarked buildings in the immediate vicinity of the State Department, such as the American Pharmacists Association, the National Academy of Sciences, and the Federal Reserve Board. The Old Naval Observatory, a National Historic Landmark, stands across $23^{\text {rd }}$ Street from the Truman Building. In addition, the orthogonal street grid and Virginia Avenue, as well as several public reservations, were cited as contributing elements in the Plan of the City of Washington National Register documentation. Vistas in the neighborhood (along $23^{\text {rd }}$ Street, Virginia Avenue, and Constitution Avenue) were also identified in the documentation for the Plan of the City of Washington.

It was determined in the previous Section 106 consultation that the proposed alterations would have potentially adverse effects on the Truman Building and on other historic resources associated with the site. The potentially adverse effects of the overall project arise from four sources: 1) security barriers planned for the perimeter of the site; 2) permanent guard booths to be located at C and $21^{\text {st }}$ streets, C and $23^{\text {rd }}$ streets, D and $23^{\text {rd }}$ streets, D Street and Virginia Avenue, and on $21^{\text {st }}$ Street between C Street and Virginia Avenue; 3) pavilions to house security screening equipment at the building's five entrances; and 4) changes to accommodate an altered traffic patterns on the building's north and south sides. These alterations affect the Truman Building's fabric, as well as views of the building and of other historic resources. The project includes new landscaping, removal of some later construction, and redesign of current security structures to avoid or mitigate some of these effects. During the consultation, the area of potential effect for the project was determined to include the Truman Building itself, adjacent historic properties, and L'Enfant Plan streets, views, and public reservations.

We look forward to working with your staff, other agencies, and interested organizations as this project proceeds. Please contact me on (202) 647-7455 if you have any further questions.

Sincerely,

Mark Butowsky<br>Chief, Special Projects Division<br>U.S. Department of State.

Date: $\qquad$
Robert H. Sanders, Architect
Office of Real Property Management
Federal Preservation Officer
U.S. Department of State

Date: $\qquad$
Gary Porter, Asset Manager
Division of Portfolio Management
U.S. General Services Administration
cc: David Maloney, D.C. State Historic Preservation Office Nancy Witherell, National Capital Planning Commission John M. Fowler, Advisory Council on Historic Preservation Enrique Bellini, Karn Charuhas Chapman \& Twohey Judy Robinson, Robinson \& Associates, Inc. Faye Harwell, Rhodeside \& Harwell

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United States Department of State

Washington, D.C. 20520
January 22, 2010

Mr. John Fowler<br>Executive Director<br>Advisory Council on Historic Preservation<br>Old Post Office Building<br>1100 Pennsylvania Avenue, N.W.<br>Suite 803<br>Washington, D.C. 20004

## RE: Harry S. Truman Building Perimeter Security Improvements Re-initiation of Section 106 Review

Dear Mr. Fowler:

The purpose of this letter is to reinitiate Section 106 consultation on the master plan for proposed perimeter security improvements at the U.S. Department of State's Harry S. Truman Building, 2201 C Street, N.W., and on a programmatic agreement to guide the implementation of this phased undertaking. Since the previous consultation on the project, the undertaking has been redefined to include the block of $22^{\text {nd }}$ Street, N.W., between Constitution Avenue and C Street, and re-initiation of consultation will address this change.

The Department of State (DOS), as the lead agency, and the General Services Administration (GSA) initiated Section 106 consultation for the concept design on October 26, 2004, with the District of Columbia State Historic Preservation Office (DCSHPO) and the Advisory Council on Historic Preservation (ACHP). Consultation with the DCSHPO, ACHP, NCPC, the National Park Service, as well as neighbors and concerned organizations, continued through submission and approval of the design concept by NCPC on November 24, 2004.

Subsequent to NCPC approval, Section 106 consultation continued with the development of a draft programmatic agreement (PA) to cover all phases of the perimeter security improvements project. The PA will govern the submission and review of each phase of construction and will ensure compliance with the Master Plan. The reinitiated consultation will conclude with the signing of the programmatic agreement. An environmental assessment (in accordance with NCPC's Environmental and Historic Preservation Policies and Procedures) was also begun following NCPC approval and will address the entire perimeter security improvements project.

The Truman Building occupies a four-square-block site bounded by $21^{\text {st }}$ and $23^{\text {rd }}$ streets on the east and west, and D Street, Virginia Avenue, and C Street on the north and south. The original section of the building, constructed between 1939 and 1941 for the War

Department at $21^{\text {st }}$ and Virginia Avenue, was determined potentially eligible for the National Register of Historic Places in 1992 by the GSA. The DCSHPO agreed with this finding. GSA is in the process of developing a NR nomination for the entire State Department building and hopes to submit the nomination in 2010.

Subsequently, the entire building (the original portion and the addition) was identified as a contributing element of the Northwest Rectangle Historic District. The historic district includes several individually landmarked buildings in the immediate vicinity of the State Department, such as the American Pharmacists Association, the National Academy of Sciences, and the Federal Reserve Board. The Old Naval Observatory, a National Historic Landmark, stands across $23^{\text {rd }}$ Street from the Truman Building. In addition, the orthogonal street grid and Virginia Avenue, as well as several public reservations, were cited as contributing elements in the Plan of the City of Washington National Register documentation. Vistas in the neighborhood (along $23^{\text {rd }}$ Street, Virginia Avenue, and Constitution Avenue) were also identified in the National Register documentation for the Plan of the City of Washington.

It was determined in the previous Section 106 master plan consultation that the proposed alterations would have potentially adverse effects on the Truman Building and on other historic resources associated with the site. The potentially adverse effects of the overall project arise from four sources: 1) security barriers planned for the perimeter of the site; 2) permanent guard booths to be located on some L'Enfant-McMillan Plan streets; 3) pavilions to house security screening equipment at the building's five entrances; and 4) changes to accommodate altered traffic patterns on the building's north and south sides. These alterations affect the Truman Building's fabric, as well as views of the building and of other historic resources. The project includes new landscaping, removal of some later construction, and redesign of current security structures to avoid or minimize some of these effects. During the consultation, the area of potential effect for the project was determined to include the Truman Building itself, adjacent historic properties, and L'Enfant Plan streets, views, and public reservations. The addition of one block of $22^{\text {nd }}$ Street to the perimeter security improvements plan has not altered the area of potential effects.

We plan to hold a Section 106 consulting party meeting in the near future and look forward to working with you, other agencies, and interested organizations as this project proceeds. Please contact me on (202) 647-7455 if you have any further questions or if we can provide any further information.


Chief, Special Projects Division
Federal Preservation Officer

## Concurrence:


cc: David Maloney, District of Columbia State Historic Preservation Office Nancy Witherell, National Capital Planning Commission
Enrique Bellini, Karn Charuhas Chapman \& Twohey Judith Robinson, Robinson \& Associates, Inc.
Deana Rhodeside, Rhodeside \& Harwell
Kirsten Brinker Kulis, Advisory Council on Historic Preservation

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Washington, D.C. 20520

January 22, 2010

Mr. David Maloney<br>State Historic Preservation Officer<br>for the District of Columbia<br>D.C. Office of Planning<br>$200014^{\text {th }}$ Street, $4^{\text {th }}$ Floor<br>Washington D.C. 20009

## RE: Harry S. Truman Building Perimeter Security Improvements Re-initiation of Section 106 Review

Dear Mr. Maloney:
The purpose of this letter is to reinitiate Section 106 consultation on the master plan for proposed perimeter security improvements at the U.S. Department of State's Harry S. Truman Building, 2201 C Street, N.W., and on a programmatic agreement to guide the implementation of this phased undertaking. Since the previous consultation on the project, the undertaking has been redefined to include the block of $22^{\text {nd }}$ Street, N.W., between Constitution Avenue and C Street, and re-initiation of consultation will address this change.

The National Capital Planning Commission (NCPC) approved the Master Plan design concept for the overall security improvement program on November 24, 2004. The Department of State (DOS), as the lead agency, and the General Services Administration (GSA) initiated Section 106 consultation for the concept design on October 26, 2004, with the District of Columbia State Historic Preservation Office (DCSHPO) and the Advisory Council on Historic Preservation (ACHP). Consultation with the DCSHPO, ACHP, NCPC, the National Park Service, as well as neighbors and concerned organizations, continued through submission and approval of the design concept by NCPC.

Subsequent to NCPC approval, Section 106 consultation continued with the development of a draft programmatic agreement ( PA ) to cover all phases of the perimeter security improvements project. The PA will govern the submission and review of each phase of construction and will ensure compliance with the Master Plan. The re-initiated consultation will conclude with the signing of the programmatic agreement. An environmental assessment (in accordance with NCPC's Environmental and Historic Preservation Policies and Procedures) was also begun following NCPC approval and will address the entire perimeter security improvements project.

The Truman Building occupies a four-square-block site bounded by $21^{\text {st }}$ and $23^{\text {rd }}$ streets on the east and west, and D Street, Virginia Avenue, and C Street on the north and south.

The original section of the building, constructed between 1939 and 1941 for the War Department at $21^{\text {st }}$ and Virginia Avenue, was determined potentially eligible for the National Register of Historic Places (NR) in 1992 by the GSA. The DCSHPO agreed with this finding. GSA is in the process of conducting a NR nomination for the entire State Department building and hopes to submit the nomination in 2010.

Subsequently, the entire building (the original portion and the addition) was identified as a contributing element of the Northwest Rectangle Historic District. The historic district includes several individually landmarked buildings in the immediate vicinity of the State Department, such as the American Pharmacists Association, the National Academy of Sciences, and the Federal Reserve Board. The Old Naval Observatory, a National Historic Landmark, stands across $23{ }^{\text {rd }}$ Street from the Truman Building. In addition, the orthogonal street grid and Virginia Avenue, as well as several public reservations, were cited as contributing elements in the Plan of the City of Washington National Register documentation. Vistas in the neighborhood (along $23^{\text {rd }}$ Street, Virginia Avenue, and Constitution Avenue) were also identified in the National Register documentation for the Plan of the City of Washington.

It was determined in the previous Section 106 master plan consultation that the proposed alterations would have potentially adverse effects on the Truman Building and on other historic resources associated with the site. The potentially adverse effects of the overall project arise from four sources: 1) security barriers planned for the perimeter of the site; 2) permanent guard booths to be located on some L'Enfant-McMillan Plan streets; 3) pavilions to house security screening equipment at the building's five entrances; and 4) changes to accommodate altered traffic patterns on the building's north and south sides. These alterations affect the Truman Building's fabric, as well as views of the building and of other historic resources. The project includes new landscaping, removal of some later construction, and redesign of current security structures to avoid or minimize some of these effects. During the consultation, the area of potential effect for the project was determined to include the Truman Building itself, adjacent historic properties, and L'Enfant Plan streets, views, and public reservations. The addition of one block of $22^{\text {nd }}$ Street to the perimeter security improvements plan has not altered the area of potential effects.

We plan to hold a Section 106 consulting party meeting in the near future and look forward to working with your staff, other agencies, and interested organizations as this project proceeds. Please contact me on (202) 736-7827 if you have any further questions.


Chief, Special Projects Division
Federal Preservation Officer

## Concurrence:

Fan LPAt ..... Date: $J_{\text {Awn }} 20,2 \Delta 10$
Gary Porter
National Capital Region Historic Preservation Office U.S. General Services Administration
cc:
Nancy Witherell, National Capital Planning Commission
Kirsten Brinker Kulis, Advisory Council on Historic PreservationEnrique Bellini, Karn Charuhas Chapman \& TwoheyJudith Robinson, Robinson \& Associates, Inc.Deana Rhodeside, Rhodeside \& HarwellJoan Brierton, GSA Center for Historic Buildings

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## APPENDIX A

## Scoping Responses and Correspondence

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...John L. Naut, II
Chairman

Bernadette Castro
Vice Chairman

John M. Fowler Executive Director


Preserving America's Heritage

Novernber 18, 2004
Honorable Colin L. Powell
Secretary of State
Washington, DC. 20540
Dear Secretary Powell:
The Chief of the Special Projects Division of the U.S. Department of State has invited the Advisory Council on Historic Preservation (ACHP) to participate in consultation for the proposed perimeter security improvements to the Harry S. Truman Building, pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800). We are notifying you that the ACHP is pleased to consult with the U.S. Department of State, the District of Columbia State Historic Preservation Officer (SHPO), and others, including the interested public, to consider how best to avoid, minimize, or mitigate potential adverse effects of this undertaking on properties that are listed in, or meet the criteria for listing in, the National Register.

In reaching this decision, the ACHP determined that Appendix A, Criteria for Council Involvement in Reviewing Individual Secilan 106 Cases, of the regulations was met due to the importance of the Harry S . Truman Building, which has been determined to be eligible for listing on the National Register of Historic Places and is included as a contributing element in the Northwest Rectangle Historic District a property listed on the National Register. We are providing this notice as required by 36 CTR $\$ 800.6$ (a)(1)(iii). We enclose a copy of our letter of November 18, 2004 to Mr. Mark Burowsky, Chief, State Department Special Projects Division, notifying him of our decision to participate in consultation.

## Sincerely,

John M. Fowler
Executive Director

Enclosure

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Preserving America's Heritage.

November 18, 2004
Mr. Mark Butowsky
Chief, Special Projects Division
United States Department of State
2201 C Street, NW
Washington, DC 20520

## REF: Proposed Perimeter Security Improvements to the Harry S. Truman Building District of Columbia

## Dear Mr. Butowsky:

Thank you for your recent notification and invitation to the Advisory Council on Historic Preservation (ACHP) to participate in consultation for the referenced project. In accordance with 36 CR $\$ 800.6($ a) (1) of the ACHP's regulations, "Protection of Historic Properties," the ACHP has concluded that Appendix A, Criteria for Council Involvement in Reviewing Individual Section 106 Cases, of the regulations applies to this undertaking. We, therefore, will participate in consultation. We have provided notice of our decision (enclosed) to the Secretary of State as required by 36 CTR $8800.6(\mathrm{a}$ )(1)(iii).

We look forward to consulting with the U.S. Department of State, the District of Columbia State Historic Preservation Officer, and the interested public to consider how best to resolve adverse effects of this undertaking. If you have any questions or wish to discuss this matter further, please contact Martha Catling at (202) 606-8529, or via e-mail at meatin@achp.gov.

Sincerely,
Martha Catkin
Don L. Klima
Director
Office of Federal Agency Programs

Enclosure

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## COMMISSION ACTION

NCPC File No. 6541

U.S. DEPARTMENT OF STATE<br>HARRY S TRUMAN BUILDING PERIMETER SECURITY IMPROVEMENTS<br>2201 C Street, NW<br>Washington, DC

Submitted by the U.S. Department of State
December 2, 2004

## Commission Action Requested by Applicant

Approval of design concept pursuant to 40 U.S.C. § 8722(d) and Section 5 of the National Capital Planning Act (40 U.S.C. § 8722(b) (1))).

## Commission Action

The Commission:

- Commends the Department of State for closely following the recommendations included in the Commission's Urban Design and Security Plan, as well as for its thorough coordination and early consultation of this proposal with NCPC, the Commission of Fine Arts, the Advisory Council on Historic Preservation, the District of Columbia State Historic Preservation Office, and the District of Columbia Department of Transportation.
- Approves the design concept for perimeter security improvements, Harry S Truman Building, 2201 C Street, NW, as shown on NCPC Map File No. 1.34(38.40)41490.
- Directs the Department of State to undertake the following as the design development proceeds:
- Develop specific agreements with the District Department of Transportation regarding elimination of on-street parking, modification to curb lines and street alignments, vehicular access restriction on C Street NW, and perimeter security elements in public space along the sidewalks adjacent to $21^{\text {st }}$ and $23^{\text {rd }}$ Streets including policies for use of traffic barricades on $21^{\text {st }}$ Street.
- Develop specific agreements with adjacent property owners, including the American Pharmacists Association and the National Academy of Sciences, regarding access from C Street, and circulation at the intersection of $22^{\text {nd }}$ and C Streets.
- Coordinate with the Federal Highway Administration and the John F. Kennedy Center for the Performing Arts regarding proposed modifications to E Street, which could affect access improvements to the Kennedy Center.
- Coordinate with the National Park Service regarding the possible relocation of the Bernardo de Galvez statue currently located on U.S Reservation 720.
- Further develop the design of bollards, walls, rails and corner markers along with adjacent landscaping.
- Further develop the design of the entry pavilions to reflect the character of the building's architectural era and ensure that they are located within the building yard, between the face of the building and the public sidewalk, and that they do not intrude into the view corridor of the adjacent historic streets.
- Eliminate the two proposed trees that intrude into the historic $21^{\text {st }}$ Street right-ofway and further study the impacts of proposed street trees within the $23^{\text {rd }}$ Street right-ofway on viewsheds to and from the Lincoln Memorial.

Deborah B. Young
Secretary to the National Capital Planning Commission

Office of the President
September 13, 2006

Mr. Mark M. Butowsky<br>Chief, Special Projects Division<br>U.S. Department of State<br>Washington, D.C. 20520<br>Dear Mr. Butowsky:

Thank you for your August 25 letter describing in general terms the current plans for permanent improvements in the Harry $S$ Truman Building security perimeter, and inviting us to raise issues that we believe should be considered as part of the environmental assessment of those plans.

We recognize that facilities like the Harry S Truman Building have special security needs and we are ready to cooperate with your efforts to improve perimeter security for the facility. We hope that you will in turn work with us to minimize the adverse impact of those improvements on our organization and its activities. To that end, we have three requests.

First, we would appreciate an opportunity for members of our senior leadership to be briefed on the details of your plans, particularly as they affect the Academy and its activities. The temporary security measures that have been in place for the last five years have significantly affected our operations and we need to understand in detail what permanent arrangements are now proposed so that we can intelligently assess and comment on them. The description of the plans accompanying your August 25 letter are very general and while you have provided some additional details orally to Joe Papa, I and others in our senior leadership would like to be briefed as well.

Second, it would be very helpful if you could explain where you are in the process of reaching a final decision on the plans, and in particular, what steps that involve public participation remain. We have concerns that we hope can be taken into account in reaching a decision on the plans and we are happy to raise them now as part of the environmental assessment. However, some of those concerns may be more appropriately raised elsewhere, for example before the Fine Arts Commission. Information about the steps in the approval process that lie ahead will allow us to voice our concerns at the proper time and before the proper authorities.

Mr. Mark M. Butowsky
September 13, 2006
Page 2
Finally, we have four concems that we ask you to work with us to address as part of the environmental assessment or in connection with some other part of the process of finalizing the perimeter security improvement plans.

Restricted access to C St. entrance. Since the closure of C St. between $21^{\text {st }}$ and $22^{\text {nd }}$ Sts. we have been without vehicle access to our C St. entrance. This is a particular hardship for our staff and visitors with limited mobility because this is the only entrance to our building that is accessible to them. It is also a considerable inconvenience during inclement weather for the scores of volunteers who come to our building by taxicab on a daily basis. We hope that a solution can be found to the problem proving adequate access to our building for the mobility impaired and during inclement weather.

Traffic on $22^{\text {nd }}$ St. The closure of $22^{\text {nd }} \mathrm{St}$. at its intersection with C St. has resulted in a dangerous situation in which pedestrians must wander through a maze of parked and standing vehicles mixed with vehicles making $U$ turns or passing through your security point with no organized traffic pattern. If something is not done, someone is eventually going to be seriously hurt. Currently, this is where our volunteers and visitors must go to get a taxicab. We are concerned for their safety and the safety of all pedestrians at this intersection, and believe that this safety problem has to be addressed. Although it is a less serious matter, we are also concerned that standing vehicles, often waiting for State Department employees, sometimes block the exit from our garage.

Absence of a passenger drop off point on $21^{\text {st }}$ St. Since the closure of C St., taxicabs and other vehicles coming from the north have been required to use $21^{\text {St }}$ St. as the drop off point for people coming to our building. This is unsafe because of the narrowness of the street, the parking along its west side, and the speed of traffic on $21^{\text {st }} \mathrm{St}$. bound for Constitution Ave. Again, we believe this probiem has to be addressed.-

Aesthetics of C St. If C St. must be closed to traffic, then we hope the aesthetics of the street can be improved. It does not seem appropriate to us to bar everyone but State Department employees and diplomats from the street and then turn it into a crowded parking lot for government vehicles and in some cases the private vehicles of Department employees. We hope that the permanent perimeter-security plans will address this problem and in so far as possible turn C St into an attractive and pedestrian-friendly street that is free of parked vehicles.

As I said at the beginning of this letter, we understand and support your goal of making the Harry S Truman Building a safer place in which to conduct the important business of the State Department. In return we ask only that you work with us to find

# Mr. Mark M. Butowsky 

September 13, 2006
Page 3
ways to minimize the extent to which your plans for achieving that goal interfere with our ability to do the work of the Academy.

I look forward to hearing from you.

Sincerely,

Ralph J. Cicerone
President

## Cc: The Honorable Henrietta H. Fore <br> The Honorable Raj Chellaraj <br> Mr. Steven Rodriguez

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# GOVERNMENT OF THE DISTRICT OF COLUMBIA <br> DEPARTMENT OF TRANSPORTATION <br> 火 $火 火$ <br> maxam <br> Wamer 

Office of the Director

September 20， 2006
Mr．Mark M．Butowsky，Chief
Special Projects Division
Harry S．Truman Building
2201 C Street，NW
Room 1420
Washington，IC 20520
Dear Mr．Butowsky：
Thank you for your letter informing the District Department of Transportation（DDOT） of the permanent perimeter security improvements around the United States Department of State Harry S．Truman Building．Our primary interest in the environmental study will focus on how these security measures impact traffic circulation and resulting air quality in the surrounding area．

The DDOT policy regarding security perimeters requires them to be established within privately－owned space or federal public space adjacent to buildings（i．e．，not on sidewalks，curbs，gutters or streets）．If the Department of State wishes to place building security measures in District of Columbia public space adjacent to the Harry S．Truman Building，DOS will need to complete required forms and follow procedures to obtain a Public Space Permit from DDOT，Public Space Management Administration．The proposed perimeter security improvements should be no closer than two（2）feet from the curb line and should not block pedestrian access from the curb line to the sidewalk，or Americans with Disabilities Act ramps，and the improvements should not present an unreasonable barrier to pedestrians traveling within the sidewalk．Tam enclosing a cony of our nolicy document regarding security measurec for your infomanu．

Based upon the phases of construction at the noted intersections around the Harry S ． Truman Building，I＇ve requested that DDOT＇s Traffic Services Administration engineers review the vehicle crash data that may assist with the improvements．Although not directly part of the DOS project，the Virginia Avenue，NW and E Street，NW intersection has posed concerns with vehicle crashes in the past three（3）years．The reported vehicle crashes total thirteen（13）for that intersection and the intersection at Virginia and $21^{\text {st }}$ Street totaled nine（9）crashes over the same time period．We would request that the environmental study address how these proposed security measures would impact vehicle and pedestrian safety around the Harry S．Truman Building．

Should you have any questions, please contact Mr. Kenneth Laden, Associate Director for Transportation Policy and Planning, at (202) 671-2309, or by e-mail at: ken.laden@dc.gov.

Sincerely,
Yldechello Prenciau

## Michelle Pourciau

Acting Director

Enclosure

# United States Department of the Interior 

in reply referto:
L30 (NCR-LRP)

NATIONAL PARK SERVICE<br>National Capital Region 1100 Ohio Drive, S.W. Washington, D.C. 20242<br>SEF 212006

Mark M. Butowsky
Chief, Special Projects Division
United States Department of State
Washington, D.C. 20520
Dear Mr. Butowsky:
This is written in response to your letter of August 25,2006, post marked on August 30 and received on September 6,2006, regarding the preparation of an Environmental Assessment for perimeter security improvements around the Harry S. Truman Building.

We were pleased to work with you and your consultants in 2004 preparatory to your submission of the design concept of the security plan to the National Capital Planning Commission (NCPC) and its November 24, 2004 meeting. In advance of the meeting, we identified concern for the location of new trees within the $23^{\text {rd }}$ Street view corridor, as well as the conceptualized relocation by the Department of State (DOS) of the memorial to Bernardo de Galvez into a traffic island. Instead, we offered that a conceptual site adjacent to the Old State Building in the alignment of D Street, N.W. (converted to DOS use) existed. We would also like to consider leaving the statue at its current site while removing the existing sidewalk that leads to the crosswalk to the Truman Building.

A copy of the NCPC approval action and its directions to DOS is enclosed. Further, we have enclosed a copy of the conceptualized memorial site that was previously acceptable to DOS, with the proviso that we administer the memorial upon its relocation at DOS expense. Time was of essence in 2004, so this idea would necessarily have to be coordinated with the Government of Spain which donated the commemorative work in 1977 in accord with Public Law 94-287. Further, the approvals of NCPC, Commission of Fine Arts, and District of Columbia will be required.

We look forward to continuing to work with you on this important DOS security project. In this regard we have already been contacted by your consultants, Rhodeside and Harwell and are attempting to schedule an intial meeting in the near future.

If you have any questions, please contact me at (202) 619-7025.
Sincerely,

John G. Parsons
Associate Regional Director
Lands, Resources and Planning
Enclosures

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Federal Highway Administration

Refer to: HFHD-15

Mr. Mark M. Butowsky
Chief, Special Projects Division
United States Department of State
Harry S. Truman Building, Room 1420
2201 C Street, NW
Washington, DC 20520
Subject: Perimeter Security Improvements Plan
United States Department of State
Harry S. Truman Building
Dear Mr. Butowsky:
Thank you for your recent letter requesting comments on the Draft Purpose and Need Statement: and Concept Master Plan. As part of the continuing effort of our agencies to coordinate your Perimeter Security Improvements and the Kennedy Center Access Improvements Project, our comments are limited to the work covered under Phase III of your proposed construction phasing, specifically at D Street and Virginia Avenue. The proposed improvements shown on your Site Plan do not reflect the intersection configuration discussed at our coordination meetings held in 2005. In a letter, dated November 30, 2005, the Department of State concurred that "Refined Option 2B" was the preferred concept for the intersection of Virginia Avenue, D Street, and E Street. We respectfully request that the Site Plan, and other future supporting documents, reflect this preferred concept.

We look forward to working together on these two important projects and thank you for the opportunity to comment. Please contact me at 703-404-6302, if there are any questions regarding these comments.

Sincerely yours,


Robert A. Morris<br>Project Manager

Enclosure


# REFINEMENT OF OPTIONS <br> TRAFFIC ANALYSIS FOR ROADWAYS EAST OF 23rd STREET NW AND NORTH OF THE HARRY S. TRUMAN BUILDING 

## INTRODUCTION:

This memorandum summarizes the evaluation of a refined option that was developed following the meeting with the District Department of Transportation (DDOT) on December 6, 2005. The purpose of this meeting was to present the Preferred Option for the intersection of Virginia Avenue, E Street and Ramp V (from the E Street Expressway). This option was presented and approved by the Department of State (DOS). DDOT had approved of the work completed under the Preferred Option, however requested a minor geometric change on Ramp V, which reconfigured the lane channelization.

## TRAFFIC ANALYSES:

The traffic volumes used in this analysis were the same traffic volumes that were used in the previous analyses prepared for the DOS options. Ramp $V$, which carries traffic from the $E$ Street Expressway to Virginia Avenue and E Street, was reconfigured at the request of DDOT. In the previous analyses, the right leg of Ramp $V$ was configured as a single lane, which carried southbound traffic movement to Virginia Avenue. The left leg was configured as a two-lane ramp with a dedicated lane for the U-Turn movement for E Street traffic and a dedicated lane for the through-turn movement for northbound Virginia Avenue Traffic. For this analysis, the right leg remained as a single lane. The left leg was reconfigured with a dedicated lane for the northbound Virginia Avenue movement, and a shared lane for the northbound Virginia Avenue and U-Turn movement for E Street.

## Preferred Option



There are no significant impacts to traffic operations for the configuration preferred by DDOT at this intersection during either the AM or the PM peak hour. During the AM peak hour, the Virginia Avenue-E Street-Ramp V intersection performs at LOS C with a delay of 21.4 seconds per vehicle. During the PM peak hour, the LOS is $C$ and delay is 20.1 seconds per vehicle. The queue lengths are about 300 feet on Ramp $V$ during the $A M$ peak hour, and less than 100 feet in the PM peak hour. Thus, the operations will not affect traffic flow on the E Street Expressway. The intersection of the south leg of Ramp V and Virginia Avenue performs at LOS A in both peak hours. The following table summarizes the Existing, No-Build and Preferred Option conditions.

## Virginia Avenue, E Street and Ramp V Intersection Traffic Analysis

|  | AM |  |  | PM |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | LOS | Delay ${ }^{1}$ | Queue | LOS | Delay ${ }^{1}$ | Queue |
| Existing Conditions ${ }^{2}$ | B | 11.4 | 243 feet | B | 12.2 |  |
| 2009 No-Build Conditions ${ }^{2}$ | B | 11.4 | 263 feet | B | 12.0 |  |
| 2009 Preferred Option Conditions ${ }^{3}$ | C | 21.4 | 300 feet | C | 20.1 | feet |

1) Delay is measured as average delay in seconds per vehicle
2) Harry S. Truman Building, Perimeter Security Improvements, Transportation Impact Study. Wells \& Associates, Inc. October 2004.
3) Ramp $V$ configuration as preferred by DDOT. Shared left-through lane and a through lane. All other aspects remain as in the Preferred Option as proposed by Parsons Brinckerhoff, Inc, and preferred by DOS. December 2005

The increase of delay for the intersection in the Preferred Option is due to the number of phases increasing from two to three. The traffic analyses assumed that each signal timing phase would have a clearance time of seven seconds (Yellow time of five seconds and an All-Red time of two seconds), which is greater than the five seconds normally used by DDOT. The clearance time was increased because the stop bars at the Virginia Avenue-E Street-Ramp V intersection were located farther back from the intersection than normal, due to the alignment of the approaches and the placement of the crosswalks. These factors require that each signal phase have a longer clearance time.

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IN REPLY REFER TO:
NCPC File No. 6541

## SEP 252006

Mr. Mark Butowsky
Chief, Special Projects Division
United States Department of State
Harry S Truman Building
2201 C Street, NW, Room 1420
Washington, DC 20520

Dear Mr. Butowsky:
Thank you for the opportunity to participate in the scoping of your planned Environmental Assessment (EA) for the development of permanent perimeter security improvements at the U.S. Department of State Harry S Truman Building. As a federal regulatory requirement, the EA is being prepared on the whole of the existing facility, including all of its various structures and site features. Our EA scoping comments focus on the Commission's role as the central planning agency for the federal government in the National Capital Region and express our general views on planning and environmental issues.

I request, in conformance with the Commission's requirements under its Environmental and Historic Preservation Policies and Procedures, and with the guidance issued by the President's Council on Environmental Quality, that NCPC be identified and established in your EA development process as a federal cooperating agency.

The Commission anticipates that the planned EA will address the concept design reviewed by the Commission in December 2004 that proposed replacement of the current temporary security barriers and controls with permanent structures. Please ensure that your EA covers the Commission's interests, including:

- Discussion and evaluation of specific actions that may involve the District Department of Transportation regarding the potential elimination of on-street parking, modification to curb lines and street alignments, vehicular access restriction on C Street NW, and perimeter security elements in public space along the sidewalks adjacent to $21^{\text {st }}$ and $23^{\text {rd }}$ Streets, including policies for use of traffic barricades on $21^{\text {st }}$ Street.
- Traffic impacts to adjacent property owners, including the American Pharmacists Association, the U.S. Institute of Peace, the National Academy of Sciences, the U.S. Navy, and the Federal Reserve regarding access from C Street, and circulation at adjacent intersections.

Mr. Mark Butowsky
Page 2

- Coordination of the proposed plans with the Federal Highway Administration and the John F. Kennedy Center for the Performing Arts regarding proposed modifications to E Street.
- Coordination of the proposed plans with the National Park Service and discussion within the EA of any impacts or requirements regarding the possible relocation of the Bernardo de Galvez statue currently on U.S Reservation 720.

NCPC staff emphasizes that the substantial removal of vegetation in any proposed plan would not be supported by the Comprehensive Plan objectives or the new policies of the Commission. We request that the NEPA review specify additional guidelines toward mitigation efforts under the guidance of a prepared tree and open space conservation plan regarding access roadway alignments, retention of open space, and integration of public space with development areas. Green space should be preserved within every development zone of the plan as a component of its development.

NCPC staff encourages a cultural resource analysis within the proposed EA and believes it is imperative that the undertaking have the support of the District of Columbia Historic Preservation Officer (DC SHPO). The EA should respond to issues raised during Section 106 consultation. The Truman Building itself, the L'Enfant Plan, the National Register-eligible Northwest Rectangle Historic District, and nearby historic buildings and sites may be affected by the undertaking and should be adequately addressed in the Section 106 consultation and in the EA. Cultural landscape features such as road and curbs alignments, tree lines, and open spaces could be disrupted or lost entirely and should also be considered. In the context of the EA's viewshed analysis, views to and from the site as well as views through the site should be fully evaluated along with streetscape views at $21^{\text {st }}, 22^{\text {nd }}$ and $23^{\text {rd }}$ Streets.

We recommend that the consultative process be described in the EA. Issues and consulting parties should be identified. Any eligibility determinations should be concluded with the DC SHPO prior to release of the EA. The project should seek to avoid or minimize adverse effects to the Truman Building and adjacent and nearby historic buildings and settings. If deemed necessary, mitigation measures should be identified during consultation.

I ask that you consider NCPC a consulting party and potentially a signatory in the Section 106 review leading to the development of the programmatic agreement.

## Mr. Mark Butowsky <br> Page 3

We regard, as you do, the Truman Building as a highly significant building in an equally significant precinct. We acknowledge your exemplary stewardship of the building and appreciate your consultation with our staff and other review agencies to date, including the informative September 22 tour of the building. Your consideration of our comments at this stage of the environmental review is most timely and I look forward to assisting with the preparation for the EA as it progresses in its development. If you have technical questions concerning the information related in this letter, please contact Eugene Keller or Nancy Witherell in the Office of Urban Design and Plans Review at (202) 482-7251 or 482-7239, respectively.

Sincerely,


Patricia E. Gallagher, AlCP
Executive Director

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September 26, 2006
Mr. Mark M. Butowsky
Chief, Special Projects Branch
2201 C Street, NW, Room 1420
Washington, DC 20520
Dear Mr. Butowsky:
In response to your invitation to comment on the EA being conducted by the State Department to determine the impact of its perimeter security plan, I want to emphasize that the American Pharmacists Association is still awaiting a resolution to the traffic circulation problems on 22 'nd street that have resulted from the closing of 22 'nd at C Street. We have raised this issue on several occasions. As you know, a proposal was developed by KCCT with input from APhA but to my knowledge this has not been submitted to the District of Columbia. As we understand it, resolution of this issue is a condition of the approval of the plan by NCPC.

Secondly, APhA has previously requested permission to enter and exit through 22'nd and C St in the event of an emergency that closes the intersection of $22^{\prime}$ 'nd and Constitution or $23^{\prime} \mathrm{d}$ and Constitution. This permission was granted but we want to ensure that it continues.

Neither of these matters is new, however, we do want to take this opportunity to keep them on the table.
Lastly, Christopher K. Baker of APhA appears on your mailing list. Please do not address correspondence to Mr. Baker. His work does not relate to matters of this type.

Yours truly,
C 422
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Ann T. Dubs
Senior Administrative Director

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Mr. Ralph J. Cicerone<br>President<br>National Academy of Sciences<br>500 Fifth Street, NW<br>Washington, DC 20001

September 29,2006

## Dear Mr. Cicerone:

Thank you for meeting with us on September 25, 2006 to brief you on the Perimeter Security Improvements Coneept Master Plan for the Harry $S$ Truman (HST) Building. We hope the briefing provided you with a better understanding of the Department of State security concerns, background and details of the Concept Master Plan, while responding to the comments in your September 13, 2006 letter. The following is a summary of our direction for addressing the specific listed concerns:

- Restricted Access to C Street Entrance: The Department of State and National Academy of Sciences mutually experience the inconvenient access to our buildings' C Street entrances for visitors, the mobility impaired and during periods of inclement weather. We are hopeful that the proposed widened sidewalks without the many security obstructions will make it much easier to travel from drop off points, or that other building entrances could be utilized as well.
- Traffic on $22^{\text {nd }}$ Street: The Department of State will be alleviating some of the traffic issues at $22^{\text {nd }}$ street by restricting vehicle access to the HST building at $22^{\text {nd }}$ Street and C Street, with retractable bollards that will only be lowered for emergency vehicles or special occasions. We will also eliminate the guard booth at this location. However, we are aware of the continued presence of taxis, and increased traffic that will result from the American Pharmaceutical Association building addition that is being constructed. Therefore, as we suggested, we
will convene a working level meeting with the three organizations to consider options for alleviating the traffic concerns.
- Absence of passenger drop off point on $21^{55}$ Street: Due to the need for barriers extending out to the curb line and truck security screening along $21^{\text {st }}$ Street, there is no convenient drop off area along the street abutting the HST building. Instead, drop-offs will continue along Virginia Avenue and south of the HST building. We therefore recommend that the Academy's ongoing Renovation Study consider options for modifying the $21^{\text {st }}$ street area in front of the National Academy of Sciences building to include a drop off area.

Aesthetics of C Street: During the Concept design approval process the National Capital Plaming Commission (NCPC) and Commission of Fine Arts (CFA) were very complimentary of the Department's design for improving the overall appearance and pedestrian experience around the entire HST building. One of our primary goals is to disguise the security facilities as much as possible with aesthetically sensitive architectural and landscaping features. The restricted access on C Street actually improves the appearance of the street by eliminating the need for barriers between the $21^{\text {st }}$ and 23 rd street access points. The unencumbered streetscape will be enhanced even further by significantly reducing the parking, widening the sidewalks, adding trees, grass mediums and more overall green space with benches and plantings. We are very confident that the entire streetscape appearance and pedestrian access will be vastly improved.

In response to your tequest to explain where we are in the planning process and opportunities for public participation, we have received Concept Design Master Plan approval from the NCPC and CFA. The architectural company of Karns Charuhas Chapman and Twohey (KCCT) architects is currently completing an Environmental Assessment for the phased project and is developing the final design for the initial phases of the project. These initial phases include streetscape improvements on $C$ and $D$ Streets and a new Security Screening Pavilion on D Street. We will continue to coordinate the design with the District of Columbia, our neighbors and affected organizations during the design process. The final design documents. will be submitted to the NCPC and CFA for final approval. During this entire process the National Academy of Sciences is able to comment on the project, and can attend the NCPC and CPA hearings.

As we continue to develop the final drawings and agreements to meet the critical security goals of the Department of State, we intend to work with the National Academy of Sciences and our other neighbors to address their concerns as much as possible. We believe that the benefits of this project will reach far beyond the employees and visitors of the Department of State. We look forward to working with you and your staff, and the National Academy of Sciences' continued support of this important project.

Sincerely,


Mark M. Butowsky Chief
Special Projects Division

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Office of the President
January 25, 2007

Mr. Mark M. Butowsky<br>Chief, Special Projects Division<br>U.S. Department of State<br>Washington, D.C. 20520

Dear Mr. Butowsky:
Last fall, I wrote you raising four issues concerning the impact on our organization of the Department of State's plans for improving perimeter security for the Harry S. Truman Building. In your September 29 response you said that the Department is going to convene a working group that includes representatives from our organization and the American Pharmaceutical Association to consider options for addressing one of those issues -- the dangerous traffic congestion problem on $22^{\text {nd }}$ Street created by the closure of the intersection of $22^{\text {nd }}$ and C Streets. We have not yet heard from you, and $I$ am writing to urge that you bring this group together as soon as possible.

I also want to bring you up to date on our plans for dealing with the problem created for us by the permanent loss of vehicle access to our C Street entrance, which you will recall is the only entrance to our building accessible to visitors and staff with limited mobility. We have been working on this problem since the fall meeting and now have concept drawings for a new entrance on $22^{\text {nd }}$ Street. We would welcome the opportunity to share the drawings with you and the other members of working group so that the possibility of this new entrance can be taken into account in the group's deliberations.

As I have previously said, we support the Department's goal of making the Harry S. Truman Building a safer place; we ask only that the Department work with us to minimize the impact of the plan for achieving this goal on our organization and on our ability to do our work. We expect to be active participants in the process by which the Department's plans are considered and approved by the various government agencies involved. Enclosed is a copy of our letter to the Department dealing specifically with our involvement in the consideration of the project under the National Historic Preservation Act and the National Environmental Policy Act. Our hope is that through the working group and other discussions between our two organizations, the issues we have raised can be addressed in advance so that we can be cooperative and unqualified supporters of the plan in every forum.

I look forward to hearing from you.
Sincerely,

Ralph J. Cicerone President

## Enclosure

Cc: : The Honorable Henrietta H. Fore<br>The Honorable Rajkumar Chellaraj<br>Mr . Steven Rodriguez

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Office of the General Counsel

January 25, 2007

Mr. Mark M. Butowsky<br>Chief, Special Projects Division<br>United States Department of State<br>Washington, D.C. 20520

Re: Environmental Assessment for Security Measures at Department of State
Dear Mr. Butowsky:
This is in follow-up to your letter of September 29, 2006, in which you responded to our letter of September 13, 2006 and the concerns raised in that letter and during our briefing of September 25, 2006 concerning the security measures ("Project") proposed for the perimeter of the Harry S. Truman Building ("Building") and their impact on the employees, visitors and volunteers using the National Academy of Sciences ("NAS") building located adjacent to the Truman building.

Pursuant to Section 106 of the National Historic Preservation Act (16 USC § 470f), because (1) the Building was determined eligible for the National Register of Historic Places ("Register") on April 23, 1992; and (2) the Project is located within the Northwest Rectangle Historic District ("Historic District") which the federal government has determined is eligible for inclusion in the Register; (3) the Building is considered a contributing building within the Historic District; and (4) the Project impacts original District of Columbia streets that are included within the original L'Enfant Plan for the Federal City ("L'Enfant Plan"), which is listed on both the National and District of Columbia registers, the Department is required, prior to the expenditure of funds or the issuance of any license for the Project, to take into account the effect of the Project on the Building, the Historic District, and the L'Enfant Plan. Because the National Academy of Sciences building is located within the Historic District and utilizes the same L'Enfant Plan streets as access for its building, the NAS has a demonstrated interest in the proposed project and its impact on the historic character of the Building, the Historic District and the L'Enfant Plan. Accordingly, the NAS wishes to be considered as a consulting party to this Project, as provided for in $36 \mathrm{CFR} \S 800.2(\mathrm{c})(5)$, and to be afforded all notices and participation in the Section 106 process that is afforded to consulting parties.

Mark M. Butowsky
January 25, 2007
Page 2

Furthermore, pursuant to Section 102 of the National Environmental Policy Act of 1969, the Department is required to undertake an environmental assessment of a federal action, such as the Project, that has the potential to significantly affect the quality of the environment, and to study alternatives that have a lesser effect on the environment, prior to undertaking such an action. We are pleased that you have determined to include the NAS as an interested party in the preparation of the Environmental Assessment and in the identification of environmental issues raised by the Project that are to be addressed in the Environmental Assessment. By our letter of September 13, 2006, we identified those environmental issues that have a direct impact on the NAS that we wished to see addressed in the Environmental Assessment. We would request that we be part of a continuing dialogue with you as you refine the issues that are to be included in the Environmental Assessment and determine potential alternatives to what is currently proposed as part of the Project that would have a lesser impact on the environment. Furthernore, in the event that there is a determination that there is a significant impact on the environment through this Project and therefore that an environmental impact statement is necessary, we would request that, pursuant to $40 \mathrm{CFR} \S 1501.7$, the NAS be considered an interested person for purposes of determining the scoping of the environmental impact statement. Furthermore, as provided in 40 CFR § 1506.6 (b), we request that we be provided notice of all NEPA-related hearings, public meetings and the availability of environmental documents generated by or for the Department in connection with this Project.

Thank you for your continued consideration of our interests as you move forward with this Project. Please feel free to get in touch with me if you have any questions or concerns.

Sincerely,


United States Department of State
Assistant Secretary of State
for Administration
Washington, D.C. 20520

February 15, 2007

Dear Mr. Cicerone:
This letter is in response to your'January 25, 2007 letter to Mark Butowsky, Chief, Special Projects Division, in which you expressed concerns regarding the Harry S Truman (HST) Building Perimeter Security Improvements Project, and specifically those matters that have an impact on the National Academy of Sciences (NAS).

Mr. Butowsky has been in contact with Mr. Joseph Papa of your organization, and recently informed him of the reasons for the delay in initiating the suggested working group meeting regarding 22nd Street. In an effort to make the meeting most productive, he emphasized how we were waiting for a contract with our architect/engineer (A\&E) consultant to be modified and preliminary drawings to be completed for changes that will affect both NAS and the American Pharmacists Association (APhA) properties, and for our architect to assist in the $22^{\text {nd }}$ Street meetings.

Since we received your letter and considering the additional time required to accomplish the A\&E related contractual issues, we will gladly initiate the working group meetings to the extent possible without the aid of our consultants. We would also like to become more informed on your proposed $22^{\text {nd }}$ Street entrance. Therefore, Mr. Butowsky will contact Mr. Papa to set up the initial meeting. He will also respond to Mr. James F. Hinchman's January 25, 2007 letter, regarding the Environmental Assessment and Section 106 Historic Preservation process.

Mr. Ralph J. Cicerone<br>National Academy of Sciences, 500 Fifth Street, NW, Washington, DC 20001.

We appreciate your support in our efforts to make the Harry S Truman Building and surrounding facilities a safer and more secure area.

Sincerely,
Lee PR. Lothus
Lee Lohman, Acting
Drafted by: $\quad$ A/OPR/SP/P - Mark Butowsky
2/9/07 ..... ext. 7-7455
Clearances: A/OPR/SP: Steven Wright via email dtd $2 / 12 / 07$
A/OPR: Steven Rodríguez ..... via email dtd $2 / 12 / 07$
A/OPR: Richard Iselin ..... via email dtd $2 / 12 / 07$
A: Marco Sims ..... via email dtd 2/13/07
Perimeter Security Project - Response Letter to NAS Ralph Cicerone

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Office of the General Counsel

March 22, 2007

Mr. Mark M. Butowsky<br>Chief, Special Projects Division<br>United States Department of State<br>Washington, D.C. 20520

Re: Environmental Assessment for Security Measures at Department of State
Dear Mr. Butowsky:
Thank you for your letter of March 12, 2007, in which you responded to our letter of January 25,2007 concerning the proposed security measures for the perimeter of the Harry $S$ Truman Building ("Building") and their impact on the employees, visitors and volunteers using the National Academy of Sciences ("NAS") building located adjacent to the Building.

We are pleased that you have determined the NAS to be a consulting party to this project, as provided for in 36 CFR $\S 800.2$ (c)(5), and that we will be provided with all notices and be a participant in the Section 106 process as a consulting party. We are also pleased that you have recognized us as an interested party for purposes of the environmental assessment ("EA"), as provided for at 40 CFR § 1501.7 and that, as an interested party, we will (1) be invited to and be a participant in the combined Section 106/National Environmental Policy Act ("NEPA") consultation meetings, and (2) be able to review and comment on the draft EA when it is issued in pre-final form. While we understand from your letter that the issues raised in our letter of September 13, 2006 will be incorporated into the pre-final EA, we did not intend for that letter to constitute the sum of our comments prior to the completion of the pre-final EA, since the letter was not provided in that context. Therefore, we would appreciate the opportunity to provide additional comments and concerns prior to the completion of the pre-final EA as additional details are provided to us.

We look forward to continuing to work with you on ensuring that the development and design of the perimeter security measures for the Building do not adversely affect the operations of the NAS. As always, please feel free to get in touch with me if you have any questions or concerns.


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# GOVERNMENT OF THE DISTRICT OF COLUMBIA <br> DISTRICT DEPARTMENT OF TRANSPORTATION <br> TRANSPORTATION PLANNING AND POLICY ADMINISTRATION 

Date: April 11, 2007

| TO: | Ann Simpson-Mason <br> Chair, Public Space Committee |
| :--- | :--- |
| FROM: | Ken Laden <br> Associate Director, TPPA |
| RE: | Comments to Perimeter Security Improvements Project for the <br> Department of State in the Harry S. Truman building |

TPPA is in agreement with various recommendations such as installation of fixed or moveable bollards, knee walls, railings, guard booths, security pavilions on DOS property, hydraulic barriers, landscaping, and the relocation of the curb on $23^{\text {rd }}$ Street NW in order to widen the sidewalk.

However, the District of Columbia will need to be compensated for the takings of land required by certain security measures. These include, but are not limited to:

- Relocation of curb on western side of $21^{\text {st }}$ Street NW between C Street NW and Virginia Avenue,
- Relocation of curb on eastern side of $21^{\text {st }}$ Street NW between C Street NW and Virginia Avenue and creation of truck inspection area,
- Narrowing the sidewalk on the eastern side of $21^{\text {st }}$ Street NW,
- Addition of six-foot medians on $21^{\text {st }}$ Street NW between C Street NW and Virginia Avenue
- Blocking C Street NW between $21^{\text {st }}$ Street NW and $23^{\text {rd }}$ Street NW for restricted access,
- Blocking D Street NW between $23^{\text {rd }}$ Street NW and Virginia Avenue for restricted access,
- Relocation of curb on south side of Virginia Avenue between E Street NW and $21^{\text {st }}$ Street NW,
- Any District property used to construct corner markers, guard booths, security pavilions, etc.

If you have any questions, please contact Christopher Ziemann, Transportation Management Specialist for Ward 2 at 202-671-2555 or christopher.ziemann@dc.gov.

| From: | Arguto.William@epamail.epa.gov |
| :--- | :--- |
| Sent: | Tuesday, April 17,2007 $9: 52 \mathrm{AM}$ |
| To: | Dubke, Barbara A |
| Subject: | Re: Environmental Assessment from State Department |

Barbara;

We are in receipt of the Pre final EA for security improvements for the Dept of State. I completed a cursory review of the document for any major environmental concerns and I did not see any issues that would warrant a written response. Please forward the Final when completed.
Are there any specific issues that you would like to discuss?

Thanks

Bill Arguto
EPA Mid Atlantic
Environmental Assessment and Innovation Division NEPA - Team Leader
215-814-3367
1650 Arch Street
Phila Pa 19103
"Dubke, Barbara
$A^{\prime \prime}$
«DubkeBA@state. 9
To
ov> William Arguto/R3/USEPA/US@EPA
cc
04/12/2007 11:46 "Butowsky, Mark M"
AM
[ButowskyMM@state.gov](mailto:ButowskyMM@state.gov) Subject
Environmental Assessment from
State Department
Dubke, Barbara A
From: Harkness, Mr, Edward (WDC) [harknese(epaho.org]
Sent: Friday, April 20, 2007 12:15 PM
To: Dubke, Barbara A
Cc: Gentry, Mrs. Eugenia (WDC)
Subject: RE: Environmental Assessment from State - yes from PAHO
Ms. Dubke
Yes, I received the the package. Paho has no comments to forward to Mr. Bulowsky.
Thanks,
Ed Harkness
GSO, PAHO
From: Dubke, Barbara A [mallto:DubkeBA@state،gov]
Sent: Friday, April 20, 2007 8:43 AM
To: Gentry, Mrs. Eugenla (WDC)
Cc: Butowsky, Mark M
Subject: Environmental Assessment from State
Mark Butowsky, Chief of Special Project Division, at the Department ofState recently sent a package entitled Environmental Assessment Pre-finalDraft.
The purpose of this email is to confirm that you received the mailing and toencourage your written comments by April 27.
Please let us know that the parcel was delivered to you.
Thank you for your response.
Sincerely,
Barbara Dubke on behalf of Mark Butowsky (butowskymm@state.gov)
Barbara Lubke
U.S. Department of State
Office of Operations
HST-Room 1417
Phone: (202) 647-1639
Fax: (202)647-7509
e-mail: dubkeba@stategov
ENCLOSURE 64/20/2007

Dubke, Barbara A
From: Dubke, Barbara A
Sent: Wednesday, April 25, 2007 7:18 AM
To: 'Imparato, John CIV NDW, NOO'
ce: Butowsky, Mark M
Subject: RE: COMMENTS ON SECURITY PLANS

## Mr. Imparato,

Thank you for your comments. We will keep you informed when plans are firm so that you may take appropriate action with your tenants, etc.

Batb

From: Imparato, John CIV NDW, NOO [mailto;john.imparato@navy.mil]
Sent: Tuesday, April 24, 2007 4:58 PM
To: Dubke, Barbara A
Cc: Murray, Michael R NSA North Potomac; Blazek, Caroline CIV
Subject: COMMENTS ON SECURTY PLANS

Ms Dubke.
Thank you for the call this morning.
The plans you have provided were reviewed by our primary tenant and other staff at our Potomac Annex facility. (23rd \& C NW)

The plans present no particular concerns.
We request that we be notified beffore construction begins so we can notify our tenants and adjust traffic, parking, perhaps schedules etc.

The best points of contact for this notification are:

$$
\begin{array}{ll}
\text { 1. Mr Michael Murray } & 202-762-0115 \\
\text { 2. Ms Chathel.muray@navy.mil } \\
\text { 2. } \mathrm{Ma} \text { Gazek } & 202-762-0267 \text { berazek@navy.mil }
\end{array}
$$

Please don't hesitate to call if I can be of help.
John
John Imparato
Director, Corporate Information Management
HQ, Naval District Washington, Code NOOI
Phone: 202.433.2554, Fax: 202.433.2207
email: john.mparato@navy,mil

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801 Pennsylvania Avenue, NW Washington, DC 20576 Suite 301

To: Mark M. Butowsky, Chief, Special Projects Division

Cc: Christine Saum, Director Urban Design and Plan Review Division

From: Eugene Keller, Environmental Review Officer
Nancy Witherell, Historic Preservation Officer
Date: April 26, 2007
Re: Review of Pre-Final Draft Environmental Assessment for the Department of State, Harry S Truman Building Perimeter Security Project

1. The NCPC staff has completed its review of the Pre-Final Draft of the Environmental Assessment (EA) for the Harry S Truman Building Perimeter Security Project. This review is being provided as requested by your letter of April 5, 2007.
2. The preliminary review has found the draft EA requires revision. These revisions the the document, as presented below, are strongly recommended to be implemented before the EA is printed for distribution to other agencies and the public. NCPC presently finds sufficient problems with the text, such that the document would be unacceptable for Commission use and review.
3. The following EA revisions are requested by NCPC staff:

- At the inside cover page of the document, NCPC staff requests identification of the NCPC as a federal cooperating agency, as noted in our letter of September 25, 2006. Identification of the agency will allow NCPC to adopt the document without any further delay due to separate circulation for comment on the proposed action.
- At section 3.1 and at page 19 of the EA, there appears to be a discrepancy in describing the physiographic location of the building site. At 3.1 it is stated the building is situated within the piedmont, while at page 19 it is noted the building exists on the coastal plain. It can be one or the other, but not both.
- At section 3.2.1, Vegetation, there is the misspelling of the word "Willow" in the first paragraph. Other misspellings of words have been found further-on in the document and it is recommended a careful spell-check of the whole document is in order.
- At section 3.4.1.2, please include the proposed construction of the U.S. Institute of Peace Headquarters Building and the Vietnam Memorial Visitor Center, at Bacon Drive and Constitution Avenue, in the list at page 32 and on the visual figure 4 Vicinity Map.
- At Section 3.4.1.4, Economy and Employment, identify or state the effects from the build alternative as effects from the project's location, operation or employment presence to the city's economy; not as effects on the site.
- At Section 3.4.2, Visual Resources, please have the text reflect the fact that the 2004 Federal Elements of the Comprehensive Plan for the National Capital no longer specify Special Streets. The streets within the L'Enfant City are now characterized in the Comprehensive Plan as historic rights-of-way of the L'Enfant Plan. They are protected by listing in the National Register of Historic Places and in the District Inventory of Historic Sites as contributing elements of the Plan of the City of Washington, DC designation, and are further protected by policies in the Comprehensive Plan. (The document describes the L'Enfant Plan elements at 3.6.2.)
- Also at Section 3.4.2,Visual Resources, identify and analyze the effect of the guardbooths in the rights-of-way on the character of the rights-of-way views themselves, rather than just the effects of the guardbooths on views of adjacent buildings.
- At Section 3.5.2, Transportation and Parking, page 43, clearly state the location at Appendix 1 for Figure 4-1 and Figure 4-2. At the mitigation paragraph for this analysis area on page 45 , specific areas of possible direction of strategies to mitigate parking and access interruptions or losses should be specified for the access issues relative to C Street, which are a concern to adjacent agencies, such as NAS and APha. To just say there is concern and it's a moderate impact, without saying what could mitigate the impact, is a non-starter for NEPA evaluation and could be easily be challenged as an incomplete review and evaluation of the issue.
- At Section 3.6.2, Visual Resources, page 63, augment the fourth bullet in the summary of principal potential effects by referring to the L'Enfant rights-of-way and their historic open character and views in the L'Enfant Plan rather than the "current conditions," which include temporary, recent security intrusions.
- In Table 5, pages 68 and 69 , integrate all the above comments to the table of Environmental and Socioeconomic Consequences. For 3.4.2 and 3.6.2, for the analysis of the Build Alternative, include impacts to the L'Enfant rights-of-way that would occur by the construction of security structures in the rights-of-way.

4. Due to the necessary extent of revisions for this EA text, NCPC staff requests that a revised version of all the EA be provided to NCPS prior to its final printing and release to outside agencies and the public for review.
5. If you have any questions regarding the requested revisions please contact Eugene Keller at (202) 482-7251, (e-mail, gene.keller@ncpc.gov.) or Nancy Witherell at (202) 482-7239 (email, nancy.witherell@ncpc.gov.).

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## American Pharmacists Association ${ }^{\circ}$ <br> mproving medication use. Advancing patient care.

 APhAMr. Mark M. Butowsky, Chief<br>Special Projects Division<br>United States Department of State<br>Harry S Truman Building<br>2201 C Strect, NW<br>Room 1420<br>Washington, DC 20520

April 26, 2007
Dear Mr. Butowsky:
In responsc to your communication on April 5, 2007 conceming your Perimeler Security Improvements Project, APhA continues to be concemed about traffic congestion on $22^{\text {nd }}$ Street. We appreciate your on-going communication on this subject. Nevertheless, this matter is still in need of a resolution.

If you have any questions please fecl free to contact me at (202)429-7529 or by email at adubas@aphaner.org

Kind regards,


Amn Dubas
Managing Director
APhA Property Holdings \& Management

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## Dubke, Barbara A

From: Rounds, Jesse (DPR) jesse.rounds@dc.gov]
Sent: Thursday, April 26, 2007 10:24 AM
To: Dubke, Barbara A
Subject: Harry S Truman Building Permeter Security Project EA

Ms. Dubke,
Thank you for the opportunity to review the Draft Environmental Assessment prepared for the Perimeter Security Project at the Harry S. Truman Building. The District of Columbia Department of Parks and Recreation has reviewed the document and found no impact on DPR resources.

Sincerely,

Jesse Rounds
Jesse Rounds
Community Planner
D.C. Department of Parks and Recreation
(o) 202/671-0416
(f) $202 / 673-3424$

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Richard B. Nettleir
202-736-2720/2721

April 27, 2007

## BY HAND

Mark M. Butowsky
Chief, Special Projects Division
United States Department of State
Washington, DC 20520

> Re: Pre-Final Environmental Assessment for Security Measures at Department of State; Formal Comments of National Academy of Sciences

Dear Mr. Butowsky:
We have been retained by the National Academy of Sciences ("NAS") to represent its interests with regard to the project proposed by the United States Department of State ("DOS") to improve security measures at and within perimeter of the Harry S Truman Building ("Building") of the DOS. This letter is in response to the submission by DOS to NAS of the PreFinal Draft of the environmental assessment ("EA") being conducted by DOS in connection with the proposed project and serves as the formal comments of NAS to the EA. In addition, this letter serves as a renewed request by NAS to be included as a consulting party with regard to the Programmatic Agreement being prepared for compliance with Section 106 of the National Historic Preservation Act.

As you know, and as NAS has previously mentioned in its correspondence and meetings with you and others within DOS, NAS has been, and remains, concerned about this project and its impact on its employees, visitors and volunteers working in or visiting the NAS building located adjacent to the Building ("Academy Building").

The following provides additional comments on the EA and supplements comments sent to you by NAS on September 13, 2006 and January 25, 2007, and provided to you in meetings with NAS on September 25, 2006 and March 15, 2007.

In the EA, DOS states on page 32 that "no significant adverse impacts on the site's adjacent land uses and ownership are expected." This is amplified by Table 5 at Item 3.4.1.2, which states that the project has "no effects" on adjacent land uses and ownership. At the same time, in the Transportation section on Page 43, the EA states that "[i]t is anticipated that the NAS would continue to use C Street to provide access only to their shuttle buses and service trucks."

Mark M. Butowsky
April 27, 2007
Page 2

The Transportation section also states that " $[t$ the NAS has expressed concerns about the potential limited access from 22nd Street to C Street for their employees, and the DOS is willing to work with the NAS and [American Institute of Pharmacy] staff to ensure that traffic concerns and issues are addressed. A design meeting between the NAS, APhA and DOS has been requested to solve the access issues along C Street." Finally, on page 46, the EA states that "[t]he design team and DOS would continue to work with the NAS and APhA to address any concerns relating to the closure of C Street and 22nd Street, and the limited access on 21st Street."

The letter from NAS to you of September 13, 2006, which is appended to the EA, as well as comments provided to you at the meeting between NAS and DOS of September 25, 2006, minutes of which are not appended to the EA and should be, clearly identify the issues NAS has with the project's treatment of 21 st, 22 nd and C Streets and the impact of such treatment on NAS and its visitors, volunteers and employees. The EA's failure to adequately identify and address these issues is in violation of NEPA requirements.

Specifically, NAS has raised the following concerns about the impacts of the proposed permanent closure of C Street, which are based not on speculation but on NAS' actual experience with the current "temporary" closure of C Street:
(1) The loss of taxi and other vehicle access to the Academy Building entrance on C Street, which is the principal pedestrian entrance for all NAS staff, volunteers and visitors and the only entrance for persons with disabilities;
(2) Unsafe conditions for pedestrians on 22 nd Street, including those coming to the Academy Building, because large numbers of taxis and other vehicles that previously used C Street for passenger drop off and loading must now use a narrower dead-end street with no turn around or organized traffic pattern;
(3) Congested egress from the NAS parking facility underneath the Academy Building onto 22 nd Street because the large number of taxis and other vehicles that previously used C Street as a standing area must now wait on 22nd Street; and
(4) Unsafe conditions for passengers, including those coming to the Academy Building, because C Street is closed and 21 st Street must be used as a drop-off and loading area, even though there is no drop-off and loading point that is safely out of the flow of traffic.

Additionally, certain aspects of the proposed project, as shown in Figure 1 on page 5 and as described in the narrative of Section 2.1, raise the following additional concerns for which mitigation measures should be proposed and evaluated:
(1) The proposed 6' planted median on C Street, as described on page 8 and shown in Figure 1, without further description, seems to adversely affect access to the C Street entrance by the NAS Shuttle and access to the NAS loading dock by delivery vehicles and would substantially limit the amount of turn-around space such vehicles require; and
(2) The proposed exterior pavilion at the C Street Entrance of the Building as described on page 8 , as extending 82 feet south, seems to be inconsistent with, and if described accurately would extend well beyond the current center line of C Street, causing the proposed vehicular turnaround and drop-off at the entrance to the pavilion to be directly in front of the exit of the NAS parking facility under the Academy Building and increase the congestion, safety and difficulties that are currently part of the problem.

Finally, as regards parking on C Street, page 42 states that parking spaces currently exist on C Street in front of the Academy Building. While this may be true, due to the temporary security measures in place, none of the spaces are currently available to NAS, its employees, volunteers or visitors, a fact that only becomes apparent in the discussion of parking under the Build Alternative on page 45. There is no discussion of how the loss of spaces impacts the NAS, which it does, nor is there any discussion of alternative mitigating measures explored by DOS. Moreover, of the 14 spaces identified as being in front of the Academy Building, the Build Alternative states that 6 spaces would remain available to NAS, but does not discuss how these spaces could possibly be utilized by NAS. In any event, it is apparent from the Build Alternative that none of the spaces would be available to the general public, and again, there is no discussion as to how this impacts NAS and possible alternatives that would mitigate the impact on NAS. The EA needs to be revised by DOS before further consideration can be given it by the public or any public agency.

As a matter of law, an EA requires a reasonably complete discussion of possible measures to mitigate project impacts. The EA does not meet this requirement, particularly with regard to the issues raised by NAS. Neither the access and traffic issues which NAS has raised, nor mitigation measures designed to address the negative impacts of the Project on NAS and its employees, volunteers and visitors, are fully and adequately addressed in the body of the EA. Nor is there any analysis of the traffic impact of the C Street closure. Most notably, there is no analysis of the impact of the closure on 22 nd Street traffic. This is in stark contrast to the detailed traffic analysis in the EA for the reconfiguration of the E Street/Virginia Avenue intersection.

While NAS appreciates the willingness of DOS, as stated in the EA, to work with NAS to address its concerns, and appreciates the opportunity to meet with you on March 15 th, NAS believes that the EA should specifically reference each of the concerns NAS has raised and provide mitigation measures that have been mutually agreed upon by DOS and NAS.

At a minimum, the EA should contain an analysis of the traffic impact of the C Street closure, as well as a traffic analysis of possible mitigation measures such as the November 30, 2004 document entitled " $22^{\text {nd }}$ Street - Taxi Drop Off and Pick Up" that was presented to NAS by DOS at the March 15 th meeting. Equally important, there should be a full discussion in the EA of this and other mitigation measures, such as the new entrance to the Academy Building proposed by NAS at that meeting, creation of a safe and lawful passenger drop off and loading point on 21 st Street, and the option of keeping a single one way lane on the south side of C Street
open to the public, so that all potential alternatives and mitigation measures that would enable the Project to have a lesser impact on the environment are explored.

As a possible resolution of this matter, NAS proposes that you consider entering into a binding memorandum of agreement with NAS that addresses the vehicular and pedestrian concerns that NAS has raised with DOS regarding the Project. This would certainly be consistent with the direction of the National Capital Plaming Commission as stated in its Commission Action, dated December 2, 2004, in its approval of the design concept for the project.

NAS is also concerned about the treatment of historic preservation issues in the EA. As legally required, the requirements of Section 106 of the National Historic Preservation Act are being considered as part of this Environmental Assessment and are addressed, albeit inadequately, beginning at page 57. The EA considers the Academy Building to be within the areas of potential effects, and recognizes that the Academy Building is listed on both the DC Inventory of Historic Sites and the National Register of Historic Places, and is also a contributing building in the Northwest Rectangle Historic District, which the federal government has determined is eligible for inclusion in the National Register. Moreover, the EA recognizes that major elements of the L'Enfant Plan for the City of Washington are impacted by the project. As noted in the EA, the District of Columbia State Historic Preservation Office ("DCSHPO") and the Advisory Council on Historic Preservation ("ACHP") found that the project had potential adverse effects on the Truman Building and other historic resources, including the original L'Enfant Plan streets. The EA states that the adverse effects are to be resolved through the Section 106 process, with a programmatic agreement, as provided for in 36 CFR $\S 800.14$ (b), to be entered into by DOS, the General Services Administration, the National Park Service, DCSHPO and ACHP. The EA provides that the only impact on the Academy Building would be the view of its C Street façade.

As noted in 36 CFR $\S 800.1$, the purpose of consultation is to "identify historic properties potentially affected by the undertaking, assess its effects and seek ways to avoid, minimize or mitigate any adverse effects on historic properties." While the Academy Building has been identified in the EA, no adverse effects on the building have been noted, nor is the NAS identified as a potential signatory or consulting party to the programmatic agreement, despite requests to be so considered in the past. Indeed, the NAS was never asked to participate in any of the prior Section 106 discussions initiated with other impacted parties. According to the Section 106 regulations:

An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified
subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

Identified adverse impacts include "change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance" and "introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features." NAS believes that the project significantly changes the character of physical features within the Academy Building's setting that contribute to its historic significance, and that more attention needs to be paid to this impact in the EA, including ways of mitigating such impact or alternatives to what is currently proposed. Moreover, NAS believes that the project introduces visual elements that diminish the integrity of the Academy Building's significant historic features, and that the mitigation of such impact, or alternatives that do not have the same level of impact, need to be explored. Furthermore, since, under the Section 106 regulations, any supporting documentation for the views expressed in the EA are required to be provided to the NAS as an identified consulting party, we would appreciate receipt of copies of such documentation that was utilized to support the finding that long term impacts on historic resources are "minor."

We appreciate the opportunity to comment on the EA on behalf of NAS. We would appreciate an opportunity to work with you to develop mitigation measures to ensure that the project does not have a significant adverse impact on NAS, or its visitors, volunteers and employees. We look forward to receiving a revised pre-Final Draft EA.

Sincerely,
ROBINS, KAPLAN, MILLER \& CIRESI L.L.P.


Richard B. Nettle

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## Duke, Barbara A

From: Butowsky, Mark M
Sent: Friday, April 27. 2007 12:56 PM
To: Dubke, Barbara A
Subject: FW: DOS Perimeter Security Improvements
-----OrigInal Message---.*
From: ZARTMANB]@aol.com [mailto:ZARTMANEJ@aol.com]
Sent: Friday, April 27, 2007 12:38 PM
To: Butowsky, Mark M
Cc: donhawkins@comcast.net
Subject: DOS Perimeter Security Improvements
Mr. Mark M. Butowsky, Chief
Special Projects Division
United States Department of State
Washington, D. C. 20520
Dear Mr. Butowsky:
On behalf of the Committee of 100 on the Federal City and its Chairman Don A. Hawkins, I want to thank the Department for the opportunity to comment on the Environmental Assessment of the perimeter security project at the Harl S Truman Building. First I would like to compliment you on the clarity of your report and the effective outreach for reactions.

The project has of course been necessitated by the ramped-up Federal security standards enacted following the $9 / 11$ attacks. While we very much appreciate the role that the National Capital Planning Commission has played in guiding these security enhancement programs, we are very much of the belief that overall the standards are too rigorous. As a result, too many rational design options are precluded in the name of those rigorous standards, and both the public and consulting parties asked to assess project impacts based on how much better they are than unsightly temporary security measures rather than on their intrinsic merit.

Nonetheless, in the present instance our comments are relatively brief as there has clearly been an effort to respond to earlier comments. We are saddened by the necessary loss of vegetation, particularly the removal of mature trees. But our greater concerns would be the impact of the pavilions for security equipment and the permanent guard houses at the HST entrances, and those concerns relate to the design of the structures thernselves and their impact on views along the L'Enfant and McMillan plan streets. I would in particular note the views south on 23rd Street toward the Lincoln Memorial.

We look to the programmatic agreement as an instrument to maximize design opportunities, for minimization of adverse effects, and for enhancement of mitigation measures. I look forward to seeing what can be accomplished by that process at this very important building in a very important place. Thank you again for the opportunity to add our voice.

Sincerely,
Barbara Zartman
Immediate Past Chairman

See what's free at http://www.aol.com.

## BGARD OF DIRECTORS

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Former Administrutor, EPA
Robert E. Simon, Jr,
Founder. Reston, $V_{\mathrm{R}}$.

# National Coalition to Save Our Mall ${ }^{2}$ <br> 9507 Overlea Drive <br> Rockvilhe, MD 20850 301.340. 3938 <br> P.O. P. Pox 4709 <br> preserving Our Monument to De mocracy Rockille, MD 20849 <br> National Mall Third Century Inidiabe nationalmallane 

April 27. 2007

Mr. Mark M. Butowsky, Chief<br>Special Projects Division<br>U.S. Department of State<br>Washington, C.C. 20520<br>Dear Mr. Butowsky:

The National Coalition to Save Our Mall appreciates the opportunity to comment on the March 2007 Pre-Final Draft Environmental Assessment for the Department of State, Hary S. Truman Building Perimeter Security Project. Our main envirommental and Section 106 comments deal with the proposed security project's impact on traffic/pedestrian movements, long-term street closings, and possible adverse impacts on the National Mall, the nation's premier People's Place and civic stage.

While the security project would be an improvement over "current conditions" that include hastily erected temporary barriers, it will introduce changes to che historic character of the site and surroundings that we believe nced to be more fully evaluated. Our primary concem is that the Assessment does not address the effect of the security projecr on the image and symbolism of the City of Washington and, more specifically, the National Mall one block away, Extensive fortification of the Truman Building of the kind being proposed does not reflect well on our democratic principles and freedoms.

We understand that current thinking about risk assessment in Washington and around the country is leading some government agencies away from the type of maximum approach taken in the immediate aftermath of $9 / 11$ and towards less obtrusive measures. Has the security team taken this changing perspective into consideration? If not, we believe the EA should evaluate other less obtrusive altematives-- and also the very latest rechnologies-before it is finalized. The goal should be to serve a security function while minimizing the effects on the historic L' Enfant Plan, views, openness, and symbolism of the site and the larger city.

More specifically, we have the following comments:

- Designating the Truman Building site as a Level 5 Priority building, comparable to the much larger Pentagon and White House sites, immediately creates set back needs. The closing of C \& D Streets, to through traffic, the construction of guard houses in the streets and the change in the $23^{\text {rd }}$ Street sidewalk, all impact the original open character of the histnric L.'Enfant rights-of-way. No mitigation is provided or addressed in the Assessment which deals with these concens.
- Page 70 of the Assessment is the only place which mentions the U.S. Institute of Peace proposed construction on the west side of $23^{66}$ Street

Which is directly visible from the west portion of the Truman Building. In our opinion, the Assessment does not address the cumulative traffic/visitor impacts of this approved construction, as well as the overall traffic/visitor impacts of the Mall and the additional underground Vietnam Memorial Visitor Center proposed at Constitution Avenue and $23^{\text {d }}$ Street.

- We also question the security value of the proposed changes to the $\mathrm{D} / \mathrm{E}$ Streers/Virginia Avenue ramps. A very limited increase in setback distance is provided. The Assessment needs to identify the costs involved and justify the security gained. In addition, the Assessment needs to provide evidence that the proposal will not adversely impact the proposed changes to the E Surer access to the Kennedy Center improvements.
- The Assessment makes no reference to the December 2, 2004 National Capital Planning Commission direction regarding specific agreements with several public and adjacent private organizations.

In sum, we find the Assessment. still lacking basic elements.

## Sincerely,



Judy Scott Feldman, Ph.D. President and Chair

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Dubke, Barbara A
From: Butowsky, Mark M
Sent: Friday, April 27, 2007 2:27 PM
To: Dubke, Barbara A
Subject: FW: PERIMETER SECURITY IMPROVEMENTS RPOJECT
------Original Message-----
From: Butowsky, Mark M
sent: Friday, April 27, 2007 2:25 PM
To: 'Builo, Ibrahim (DDOE)'
Cc: Inge, Rosalind (DDOE); Ebanks, Edna (DDOE)
Subject: RE: PERIMETER SECURITY IMPROVEMENTS RPOJECT
Thank you for your comments
.----Original Message-mmn
From: Bullo, Ibrahim (DDOE) [mailto:ibrahim.bullo@dc.gov]
Sent: Friday, April 27, 2007 1:59 PM
To: Butowsky, Mark M
Cc: Inge, Rosalind (DDOE), Ebanks, Edna (DDOE)
Subject: PERIMETER SECURTTY IMPROVEMENTS RPOJECT
Dear Mr. Butowsky,
Towards the end of September, 2006, the District Department of the Environment subrnitted its commentsas they related to the Perimeter Security Improvements project. These comments addressed thedepartment's areas of concern pertaining to all land disturbing activities associated with constructionprojects. In particular, we requested the State Department to address Erosion and Sediment Control andStorm Water Management issues in the Environmental Assessment (EA). The Pre-Final Draft EAaddresses these issues. However, the Pre-Final Draft EA contains minor technical errors.
On Page 19, Paragraph 3, please delete the words "Sediment and Stormwater".
On Page 19, Paragraph 4, delete the word "floodplain" and substitute it with the word "stormwatermanagement",
Please do not hesitate to contact me if you have any questions. We look forward to receiving the actualErosion and Sediment Control and Stormwater management plans as they become available. Thank you.
Ibrahim Bullo
Environmental Review Coordinator/
Interim FOIA Officer/
Environmental Justicc Coordinator
District Department of the Environment
51 N Street, NE
Room 5020
Washington, DC 20002
Phone: (202) 5352506
Fax: (202) 535-2881

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| aighway Cmismo | Stering VA $20166-651$ |

Mr. Mark M. Bumowsk
Chier, Spectal Profects Division
I nited States Departmem of State
Itarry S. Truman Building. Room $1+2$
2201 ( Street. NW
Washingron. DC 20.20

##  Dinded suace Department or Siate Harns.s Fuman Buiding

Mear Wr. Buanws!:









 shons is the prefered concept at his keation basei upon the proposed imporemens under the hennedy Center heses Improvements Prowe. Please evine your Sim Plan (page s) and Vternative description page ? ? to relle this.

 rewadiney thece comments.

Sincercly ?ours.


Roherl A. Mortis
Projeen \anaser
©: Ms. Clatude Dombon. Senor Tice Presidem. Kenteds Center, Washingon. DC

## AMERICAN ECONOMY

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# United States Department of the Interior 

FISH AND WILDLIFE SERVICE
Chesapeake Bay Field Office
177.Admiral Cochrane Drive Annapolis, MD 21401

410/573-4575
May 9, 2007

Mark Butowsky
Room 1420
Harry S Truman Building
2201 C Street
NW, Washington DC 20520

## RE: Perimeter security improvements at the United States Department of Sate Harry S Truman Building Washington $D C$

Dear Mark Butowsky

This responds to your letter, received April 9, 2007, requesting information on the presence of species which are federally listed or proposed for listing as endangered or threatened in the above referenced project area. We have reviewed the information you enclosed and are providing comments in accordance with section 7 of the Endangercd Species Act ( 87 Stat. 884, as amended; 16 U.S.C. 1531 et seg.).

Except for occasional transient individuals, no proposed or federally listed endangered or threatened species are known to exist within the project impact area. Therefore, no Biological Assessment or further section 7 consultation with the U.S. Fish and Wildlife Service is required. Should project plans change, or should additional information on the distribution of listed or proposed species become available, this determination may be reconsidered.

This response relates only to fedcrally protected threatened or endangered species under our jurisdiction. Limited information is currently available regatding the distribution of other rare species in the District of Columbia. However, the Nature Conservancy and National Park Service (NPS) have initiated an inventory of rare species within the District. For further information on such rare species, you should contact Mary Pfaffko of the National Park Service at (202)-535-1739.

An additional concem of the Service is wetlands protection. Federal and state partners of the Chesapeake Bay Program have adopted an interim goal of no overall net loss of the Basin's remaining wetlands, and the long tem goal of increasing the quality and quantity of the Basin's wetlands resource base. Because of this policy and the functions and values wetlands perform, the Service recommends avoiding wetland impacts. All wetlands within the project area should be identified, and if alterations of wellands is proposed, the U.S. Army Corps of Engineers, Baltimore District, should be contacted for permit requirements. They can be reached at (410) 962-3670.

We appreciate the opportunity to provide information relative to fish and wildlife issues, and thank you for your interests in these resources. If you have any questions or need further assistance, please contact Devin Ray at (410) 573-4531.

Sincerely,

## Man Ratnaswamy

Mary J. Ratnaswamy, Ph.D.
Program Supervisor, Threatened and Endangered Species

## Dubke, Barbara A

From:
Sent:
To:
Subject:

Jeffrey J. Binder [i.j.binder@verizon.net]
Thursday, May 10, 2007 12:07 PM
Dubke, Barbara A
Re: Environmental Assessment from State

Ms. Dubke -
Thank you for your follow up. Your Department gave an illuminating presentation regarding this subject at our last ANC2A Commissioners' Meeting. I have no further comment.

Jeff Binder
ANC Commissioner 2AO4

```
>From: "Dubke, Barbara A" <DubkeBA@state.gov>
>Date: 2007/05/10 Thu AM 08:40:18 CDT
>To: jeffrey,binder@anc2a.org
>CC: "Butowsky, Mark M" «ButowskyMM@state.gov>,
    "Osmond, Jeffrey J" <OsmondJJ@state.gov>
*Subject: Environmental Assessment from State
```

,
$>$ DéarA Mr . Binder:

## $>\hat{A}$

$>$ Mr. Butowsky, Chief of Special Projects Division, sent you a letterdated April 5 requesting your review of an attached Pre-Final draft Environmental Assessment, March 2007 for the Harry $S$ Truman Building (U.S. Departmentof State) Perimeter Security improvements Project. He also requested that you provide any review comments by April27. A Since we have not received anycomments from your office, we conclude that there are no further concerns fromyour office. $\hat{A}$ If this is incorrect or youhave any further questions, please contact me via email or call 202-647-1639.
>Thank you for your review and consideration. $\hat{A}$ A Sincerely, Barbara sDubke $\hat{A} \hat{A}$ Barbara Dubke U.S. Department of State Office of Operations गHST - Room 1417 Phone: $\hat{A}$ (202) 647-1639 Fax: $\hat{A}$ (202) 647-7509 e-mail: $\hat{A}$ >dubkeba@state.gov $\hat{A}$

## Dubke, Barbara A

From: Molotsky, Michele (COUNC(L) [Mmolotsky@DCCOUNCIL.US]
Sent: Thursday, May 10, 2007 5:30 PM
To: Dubke, Barbara A
Cc: Evans, Jack (COUNCIL)
Subject: FW: Environmental Assessment from State Department

## Dear Ms Dubke:

I actually corresponded with Mr. Butowsky about it. I hadn't realized you wanted a written confirmation that we had received the package and did not want to make any comments. We understand the State Department made a presentation to the Advisory Neighborhood Commission who took no action or voiced any opposition. We rely on the response of residents most affected and as they have no objection, Councilmember Evans does not need to add any comments.

Thank you for including us in your process.

Sincerely,

## Micheh Molotiky;

Deputy Cloief of S'aff
Comailmember laco Linans, Ward 2
13.50 Pbnusylumia Anemu, NiW", \#10\%;

Pb: 202-724-8033. 1:202-72+8023

-----Original Message...---
From: Dubke, Barbara A [mailto:DubkeBA@state.gov]
Sent: Thursday, May 10, 2007 10:32 AM
To: Evans, Jack (COUNCIL)
Cc: Butowsky, Mark M; Osmond, Jeffrey J
Subject: Environmental Assessment from State Department

## Dear Councilman Evans:

Mr. Butowsky, Chief of Special Projects Division, sent you a letter dated April 12 requesting your review of an attached Pre-Final draft Environmental Assessment, March 2007 for the Harry S Truman Building (U.S. Department of State) Perimeter Security improvements Project. He also requested that you provide any review comments by May 4. Since we have not received any comments from your office, we conclude that there are no further concerns from your office. If this is incorrect or you have any further questions, please contact me via email or call 202-647-1639. Thank you for your revicw and consideration.

Sincerely,

# (2) <br>  <br>  

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May 10, 2007

Mr. Mark M. Butowsky<br>Chief<br>Special Projects Division<br>U.S. Department of State<br>Washington, DC 20520

RE: Perimeter Security Improvements Project U.S. Department of Sate, Harry S. Truman Building Pre-Final Draft of Environmental Assessment

Dear Mr. Butowsky:

Thank you for providing a review copy of the Pre-Final Draft of the Environmental Assessment addressing potential environmental effects of the construction of permanent perimeter security improvements at the U.S. Department of State Harry S. Truman Building. We appreciate the opportunity to review the draft and provide our comments.

Our only comment at this time is that the United States Institute of Peace Headquarters project should be listed, under section 3.4.1.2 Adjacent Land Uses and Ownership, on page 32 with "other projects that are proposed, under construction. or completed in the area",

We look forward to the successful completion of both of our projects on $23^{\text {rd }}$ Street.
Sincerely yours,


Charles E. Nelson
Vice President

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## Dubke, Barbara A

From: Donlon, Claudette [CDonlon(OKennedy-Center.org]
Sent: Thursday, May 10, 2007 10:09 AM
To: Dubke, Barbara A
Subject: RE: Environmental Assessment from State Department

Dear Ms. Dubke,
Thank you for following up. We have not comments or questions on the EA.
Best regards,
Claudette Donlon
------Original Message-----
From: Dubke, Barbara A [maito:DubkeBA@state.gov]
Sent: Thursday, May 10, 2007 9:55 AM
To: Donlon, Claudette
Cc: Butowsky, Mark M; Osmond, Jeffrey J
Subject: Environmental Assessment from State Department
Dear Ms. Donlon:
Mr. Butowsky, Chief of Special Projects Division, sent you a letter dated April 5 requesting your review of an attached Pre-Final draft Environmental Assessment, March 2007 for the Harry S Truman Building (U.S. Department of State) Perimeter Security improvements Project.
He also requested that you provide any review comments by April 27. Since we have not received any comments from your office, we conclude that there are no further concerns from your office. If this is incorrect or you have any further questions, please contact me via email or call 202-647-1639.
Thank you for your review and consideration.
Sincerely, Barbara Dubke

Barfara Dubke
U.S. Department of State

Office of Operations
HST- Room 1417
Pforte: (202)647-1639
Fax: (202) 647-7509
e-mail: dubkeba@stategou

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May 11, 2007
Mr. Mark M. Butowsky, Chief Special Projects Division


United States Departmert of State
Harry S. Truman Building, Room 1420
2201 C Street, NW
Washington, D.C. 20520
Dear Mr.Butowsky:
Thank you for your letter of April 5, 2007 regarding the envirommental review process for the United States Department of State Perimeter Security Improvements Project Environmental Assessment (EA). The Washington Metropoliten Arca Transil Authority (WMATA) appreciates the opportunity to provide comments on this project.

We respectully request : hat your planning process provide for the mitigation of negative in:pacts to the provision of transit service along E Street, Virginia a venuc and 23rd Street which surround the State Department Facilitics. Specifically, we ask that the United States Department of Statc anc'. its planners and construction managers ensure that there are opportunires for safe access and egress of pedestrians who utilize bus stop. For the following existing bus routes in your project area:

- Sl
- 80
- 3 Y
- 16Y
- N3
- L1
- H1

In the event that there will be impacts to the existing bus service, we request that you contact Mr. David Erion, in our Office of Bus Operations Planning anci Administrative Support, to coordinate the appropriate response to ensuring reliable transit service for our customers. He can be rached at 202-962-1266, or at derion(\%)watacom.

# Thank you for the invitation to comment. Should you need additional infomation, pleasc connact me at (202) 962-2429, or at thughey(owmata.com. 

Sincercly,

Tomika R. Hughey<br>Assistant Planning Projuct Manager<br>Office of Busincss Planning \& Project Development

## Dubke, Barbara A

From; d.lehrman(9)att.net
Sent: Monday, May 14, 2007 12:29 PM
To: Dubke, Barbara A
Subject: Re: Environmental Assessment from State Department
Dear Ms. Dubke:
I have no comments, and thanks for keeping in touch. I was satisfied with the information provided thus far, and the appearances before our commission to date.

Best wishes,
David Lehrman
ANC 2A01 Commissioner
Foggy bottom ANC 2A
$\qquad$ Original message from "Dubkc, Barbara A" < DubkcBA@state.gov>: $\qquad$
Dear Mr. Lehrman

Mr. Butowsky, Chief of Special Projects Division, sent you a letter dated April 5 requesting your review of an attached Pre-Final draft Environmental Assessment, March 2007 for the Harry S Truman Building (U.S. Department of State) Perimeter Security improvements Project.
He also requested that you provide any review comments by April 27 . Since we have not received any comments from your office, we conclude that there are no further concerns from your office. If this is incorrect or you have any further questions, please contact me via email or call 202-647-1639.
Thank you for your review and consideration.
Sincerely,
Barbara Dubke

Barbara Dubke
71.S. Department of State

Office of Operations
$\mathcal{H}$ SST - Room 1417
Pflume: (202) 647-1639
Fax: (202) 647-7509
e-mail: dubkeba@state.gov

Dubke, Barbara A

| From: | Sally_Blumenthal@nps.gov |
| :--- | :--- |
| Sent: | Tuesday, May 15,2007 10:07 AM |
| To: | Butowsky, Mark M; Dubke, Barbara A. |
| Cc: | John_Parsons@nps.gov; Glenn_DeMarr@nps.gov; Steve_Lorenzetti@nps.gov; |
| Subject: | Perry_Wheelock@nps.gov |
| Attachments: | Comments on DRAFTEA |
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KB)

Mark M. Butowsky, Chief<br>Special Projects Division<br>United States Department of State<br>Washington, D.C. 20520

Dear Mr. Butowsky:
In response to your April 5, 2007 request for comment on the Pre-Final Draft Environmental Assessment (EA), Harry 5 Truman Building Perimeter Security Project, we have reviewed the draft and offer the following comments. Although we have previously commented on similar documentation by our letter dated September 21, 2006 (Appendix 1 of the EA), our comments hove not been incorporated into this version of the EA.

In September 2006, we objected to the conceptual relocation of the Bernardo de Galvez Memorial to the confines of a traffic island. Although our letter is included in the current appendix, the concept first commented upon in 2004 remains unchanged (Figure 1: Proposed Action Design Concept) and there is no corresponding response to this comment in Appendix 2. Proposing to relocate this commemorative work seems to have no basis in relation to the perimeter security project. Therefore, we will not agree to its relocation other than the location proposed adjacent to Old State.

At present 23 rd Street provides three lanes for northbound and three lanes for southbound traffic. The concept design removes one northbound travel lane. The roadway is constricted, and is further amended by the introduction of a new line of street trees on the 23 rd Street approach to the Lincoln Memorial and Constitution Avenue. Consideration should be given to placing the new street trees within the alignment of the other street trees on the east side of 23 rd Street so as not to encroach upon the reciprocal vistas between Washington Circle and the Lincoln Memorial since the proposed placement only increases the vehicular standoff
distance by approximately 11 feet.
The Vietnam Veterans Memorial Center, the Peace Institute, and the US Army Corps of Engineers Flood Control Barrier project. at 23 rd Street, NW. should be added to the list of related projects on page 32.

We look forward to discussing the redesign of the setting of the Bernardo de Galvez Memorial in the near future. Please feel free to contact my office ot (202) 619-7025 to arrange a convenient time for such a discussion.

## Sincerely,

(Embedded image moved to file: pic14964.jpg)
Sara K. Blumenthal
Deputy Associate Regional Director
Lands, Resources and Planning

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# GOVERNMENT OF THE DISTRICT OF COLUMBIA DISTRICT DEPARTMENT OF TRANSPORTATION 



TRANSPORTATION PLANNING AND POLICY ADMINISTRATION

Mr. Robert H. Sanders, Chief of Special Projects Division<br>United States Department of State<br>Room 1420<br>Harry S Truman Building<br>2201 C Street, NW<br>Washington, DC 20520

RE: Pre-Final Draft of the Environmental Assessment for Perimeter Security Improvements Project for the Department of State in the Harry S. Truman Building

Dear Mr. Sanders,
Below are the preliminary comments from DDOT on the Pre-Final Draft of the Environmental Assessment for Perimeter Security Improvements Project for the Department of State in the Harry S. Truman Building (EA). Please keep in mind that these are only preliminary, and any permanent or temporary alteration in the public space must have a public space permit and be reviewed and approved by the Public Space Committee.

- The Applicant will have to bear the entire cost of the project. This includes relocating curbs, and any necessary road reconstruction that brings the streets into compliance with DDOT Blue Book standards.
- The Applicant will be accountable for proper strormwater drainage of the entire block on which a curb relocation occurs. This also provides an opportunity to incorporate Low Impact Design, which DDOT expects the Applicant to employ in order to reduce stormwater runoff.
- The closing of the E Street Expressway off-ramp connection to Virginia Avenue/D Street and relocating the ramp away from the HST Building with a new connection to Virginia Avenue/E intersection, even temporarily, will have a far reaching impact on traffic movement and circulation not only on the Foggy Bottom area but also in the Georgetown area. The traffic analysis of the Environmental Assessment does not address the impact of diverting of traffic and the alternative routes the diverted traffic will use. The traffic analysis must include the effect of relocating the ramp on traffic movements in the area
- Air quality assessments do not take into account the effects of altering the E Street Expressway off-ramp, which will most likely result in congestion and traffic
diversion. This EA also makes no mention of the long-range air quality impacts of this alteration.
- The EA states that emissions from construction will be contained locally. There is no technology that can ensure this, and therefore this statement should be eliminated and emissions from construction should be included as local and regional air quality impacts.
- Closing E Street to normal through traffic will have noise and air quality impacts resulting from congestion and the rerouting of traffic. This must be described in the EA.
- DDOT must review and approve all design plans, and inspect and approve construction of the new ramp.
- In order to encourage transit, parking should not be subsidized. Instead, parking should be available at market rate with very limited monthly passes.

In addition, the District of Columbia will need to be compensated for the takings of land required by certain security measures as a long-term public space rental fee. These include, but are not limited to:

- Relocation of curb on western side of $21^{\text {si }}$ Street NW between C Street NW and Virginia Avenue,
- Relocation of curb on eastern side of $21^{\text {st }}$ Street NW between C Street NW and Virginia Avenue and creation of truck inspection area,
- Narrowing the sidewalk on the eastern side of $21^{\text {st }}$ Street NW,
- Addition of six-foot medians on $21^{\text {st }}$ Street NW between C Street NW and Virginia Avenue
- Blocking C Street NW between $21^{\text {st }}$ Street NW and $23^{\text {rd }}$ Street NW for restricted access,
- Blocking D Street NW between $23^{\text {rd }}$ Street NW and Virginia Avenue for restricted access,
- Relocation of curb on south side of Virginia Avenue between E Street NW and $21^{\text {st }}$ Street NW,
- Any District property used to construct corner markers, guard booths, security pavilions, etc.

The concerns of adjacent building occupants, such as the National Academy of Sciences (NAS), must also be mitigated. In a meeting on June 22, 2007, representatives from NAS shared their concerns with DDOT. The following is a list of concerns which should be addressed and mitigated:

- ADA accessibility to the NAS entrance on C Street
- The Department of State (DOS) is planning to close off C Street to through traffic with retractable bollards and guard posts.
- This is the only ADA accessible entrance to the NAS Building
- C Street is currently closed off now to through traffic, and NAS has raised concerned that this space in effect acts as a parking lot for employees and security vehicles of DOS
- Traffic problems on $22^{\text {nd }}$ Street
- There is no plan for how $22^{\text {nd }}$ Street should function. Problems to normal functioning include:
- Bollards at C Street prevent any through traffic movement
- There is no space dedicated for vehicles to turn around
- Similar to C Street, the street is often blocked by parking of limousines and other DOS visitors. This apparently results because C Street is taken up with security vehicles
- Double and triple parking create dangerous conditions for pedestrians
- The current situation also requires an aesthetic solution
- Loading/unloading on $21^{\text {st }}$ Street south of C Street
- This has the potential (as seen in other areas of the District with similar plans) to disrupt traffic flow and cause potentially dangerous conflicts between turning vehicles, vehicles traveling straight, and pedestrians
- The use of C Street as private parking for employees and security officers is not acceptable
- Lack of drop-off or pick-up zone on $21^{\text {sl }}$ Street (as is currently exists). Vehicles use the curb lane south of C Street as a de facto drop-off/pick-up zone, which blocks the visibility from the NAS Parking Garage for exiting vehicles. This creates the serious potential of conflicts and crashes.

Again, any alteration to the public space requires a public space permit from DDOT. If you have any questions, please contact me, at karina.ricks@dc.gov.

Best Regards,

Karina Ricks
Acting Associate Director

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## United States Department of State

Washington, D.C. 20520

January 8, 2008

Mr. James F. Henchman
General Counsel
2101 Constitution Avenue, NW
Washington, DC 20418
Dear Mr. Henchman:
We appreciate Mr. Papa and you meeting with us on December 3, 2007 to discuss the Harry S Truman (HST) building Perimeter Security Improvements project and the related National Academy of Science (NAS) and American Pharmacists Association (APHA) construction projects. As a follow-up to that meeting, this letter will summarize the status and our understanding of project issues, and respond to issues raised in the April 27, 2007 letter from your consultant, Robins, Kaplan, Miller and Ciresi LLP (RKMC).

In regards to requested consultation on this project indicated in the RKMC letter, let me assure you that NAS will continue to be given every opportunity for consultation on the planning of this project. During the development of the Concept Master Plan, NAS was briefed and given the opportunity to comment on the Concept Plan that was ultimately approved by the National Capital Planning Commission and Fine Arts Commission in December 2004. After funding became available in 2006, the Department of State (DOS) resumed its efforts on the project and began the design planning for the first phases of the project on C and D Streets. In August 2006, NAS was provided the opportunity to comment on the Environmental Assessment scope and subsequently on the Pre-Final Draft in April 2007. In September 2006, a meeting was held with Mr. Ralph Cicerone and you to brief you in more detail on the Master Plan and upcoming design and construction planning. As agreed during that meeting, in 2007 we convened special interagency Working Group Meetings with NAS and APHA to address access to C Street and traffic concerns on $22^{\text {nd }}$ street. NAS will continue to be included as a consulting party during the Section 106 review process of the National Historic Preservation Act and finalization of the Environmental Assessment. NAS reserved the right to be a signatory of the Section 106 Programmatic Agreement for the Master Plan, and will be included as a consulting party for subsequent Section 106 consultation on implementation phases of the Master Plan. The Draft Program Agreement will soon be forwarded to NAS for review.

The comments in the RKMC letter regarding the Environmental Assessment (EA) were reviewed and we are working with our consultants to address each comment and related deficiencies with necessary report revisions and written responses. The EA should provide mitigation measures discussed by DOS and NAS. The revised report will be forwarded to you for review in early 2008, after we meet with the District Department of Transportation.

A major concern of the NAS expressed in our meetings and the RKMC letter is the impact of closing C Street to service vehicles, visitors and employees, and related traffic on 22nd street. As indicated in our recent briefings, sidewalk space on C Street is not restricted to anyone and will be more inviting, safe and attractive with added bench seating and green space. The C Street physical road improvements will not impede access for NAS service delivery vehicles and shuttle buses, which will basically remain the same as it has been operating. Although we previously had already allowed NAS visitors onto C Street with appropriate screening and prearrangements, we recently revised our procedures to further improve access for NAS employees and visitors. On November 26, 2007 our Bureau of Diplomatic Security implemented a new procedure for allowing NAS employees, contract employees, interns, fellows, etc. displaying a valid NAS badge, access to C Street. As a result of our recent Working Group Meetings, we have proposed the enclosed plan, labeled Concept Plan \#1-2B, for alleviating the traffic and safety concerns on $22^{\text {nd }}$ street, and for accommodating necessary taxis. We recently contacted the District of Columbia Government to set up a meeting for the three agencies to discuss the proposal with District Department of Transportation (DDOT).

Another concern expressed in the RKMC letter was the loss of taxi and other vehicle access to the NAS building entrance on C Street, the principal entrance for NAS staff, volunteers and visitors and the only entrance for persons with disabilities. We share your concern about loss of taxi access for drop-off, since DOS is subject to the same restrictions on C Street. However, persons with special needs will continue to be permitted to use your entrance on C Street with our recent access improvements. We were pleased to hear that NAS will pursue the proposed plan for a new drop-off loop and accessibility modifications along $22^{\text {nd }}$ Street, thereby switching the principal entrance to a more convenient and safe location.

While we understand your concern about the closing of C Street and its impact on NAS, we hope you appreciate the Department's security concerns and the need for these restrictions. While the C Street restrictions will have some impact, the previous study by our traffic consultant, Wells and Associates, concluded that reopening of C Street to the general motoring public would only slightly reduce congestion in the Study area. The report stated delays in the immediate area of the HST building would decrease by approximately (3) percent in the AM and PM peak hours. We appreciate the additional concern NAS has with vehicular access restrictions and congestion created on 22nd street.

Another part of the C Street security improvements project are the concept design options we presented to NAS for closing of gaps for penetrating the security zone on the east and west sides of the NAS building. In our recent meeting, you mentioned that the west side options may not be necessary if the NAS new loop road/accessibility ramp is constructed, since it could be designed with integral wall hardening and closure that would comply with DOS security requirements. We are now waiting for NAS to confirm the direction for both sides of the NAS building so that we may proceed with final design. We would like to know NAS preference for how the construction is contracted and administered. Any additional information you can provide on $22^{\text {nd }}$ Street design of the loop road, including curb cut locations, would also be appreciated.

In summary, we appreciate your counsel in planning and constructing the security improvement projects. We are committed to compliance with appropriate historic preservation and environmental regulations, and to work with you and APHA to develop mitigation measures for reducing the impact on employees and visitors of all three agencies, and to provide the same access to C Street as provided for DOS employees. In the meantime, we look forward to your response on the options for closing the gaps and loop road. If you have any further questions, please do not hesitate to call me on 202-736-7827 or Mark Butowsky on 202-647-7455.


Attachment: Concept Plan \#1-2B
cc:
NCPC - Eugene Keller
NAS - Joseph Papa

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Office of the General Counsel

February 1, 2008

Mr. Robert Sanders

Chief, Special Projects Division
U.S. Department of State

Washington, D.C. 20520
Dear Mr. Sanders:
Thank you for your January 8 letter. I apologize for the delay in responding. Unfortunately, we did not receive the letter until January 24. This was probably due, at least in part, to the fact that it was sent through the Postal Service to our Constitution Avenue address with a 20418 zip code. Mail sent to this address is routinely delayed for weeks. We understand that mail to this zip code is processed with mail to some government agencies and is subject to special security procedures. To avoid this problem, please consider hand delivery if that is convenient for you. Alternatively, please send future Postal Service mail to the following address:

James F. Hinchman<br>National Academy of Sciences, NAS 210<br>500 Fifth St., NW<br>Washington, DC 20001

Your letter notes that we have met several times over the last year and a half to discuss the Department's plans for improving perimeter security for the Harry S Truman Building. As you know, at these meetings we have consistently supported the goal of making the Truman Building a safer place. Notably, we have indicated that we are prepared to cooperate with the Department in the construction of barriers on the east and west side of the NAS Building so that our building can be part of the southern security perimeter for the Truman Building. We see it as a contribution we should make to a larger cooperative effort to improve perimeter security for the Truman Building and at the same time mitigate the impact of the improvements on the Department's neighbors.

At our last meeting I think there was general agreement that it made the most sense for the Academy to construct the barriers using funds provided by the government. We are preparing a draft contract along these lines and I will forward it to you as soon as it is ready for your review.

## Robert Sanders

February 1, 2008
Page 2
We have also indicated that we will not object to the Department's plans to permanently close C St., if the Department addresses in its plans the impact that closing C St. has had on the Academy since 2001. At the heart of our concern, as we have said at all the meetings, is the loss of vehicular access to the NAS Building's C St. entrance, which is currently the principal building entrance and the only public entrance that is handicapped accessible.

We appreciate the steps the Department has recently taken to improve vehicle access to C St. for Academy employees and identified visitors. However, these steps do not address the needs of the majority of people coming to the NAS Building. Equally important, we are mindful that the Department controls, and intends to continue to control, access to C. St. The current arrangements are only for the time being and must necessarily be subject to change as the Department's assessment of its security situation changes. Therefore, as I indicated at our last meeting, we have concluded that the only sensible long term solution to the problems created by the closure of C St. is the construction of a new principal entrance on $22^{\text {nd }}$ St.

Any new entrance on $22^{\text {nd }} \mathrm{St}$. will not work unless the traffic problems on that street are solved. These problems are caused largely by the Department's temporary security arrangements, which have closed $22^{\text {nd }}$ St. at its intersection with C St., and at the same time eliminated all other places around the Truman Building where taxi cabs can wait and Department employees can be dropped off and picked up. The result is a confused jumble of pedestrians, taxis, parked and standing private vehicles, and vehicles making $U$ turns in a space crowded with cars and people.

The perimeter security improvement plan on which you are now working will continue the arrangements that are causing the problems on $22^{\text {nd }} \mathrm{St}$., and the problems will only grow worse once the new garage entrance and loading dock for the American Pharmacists Association building addition are opened on the west side of the street. This is the reason we think it is so important to include plans for modifying $22^{\text {nd }}$ St. to mitigate the traffic problems created by the perimeter security improvements in the Environmental Assessment and Program Agreement for the project.

As you know, the Department and the Academy are scheduled to meet with the District of Columbia Department of Transportation on February 14. You have indicated that the purpose of the meeting is to discuss the State Department's perimeter security improvement plan, particularly as it affects C and D Sts. A meaningful part of the mecting should be devoted to a discussion of plans for mitigating the impact of the plan on $22^{\text {nd }} \mathrm{St}$. The drawing of a redesigned $22^{\text {nd }} \mathrm{St}$. enclosed with your letter is a good starting point for this discussion and we expect to have concept drawings for a new $22^{\text {nd }}$ St. entrance to the NAS Building before the $14^{\text {th }}$. These drawings should also be part of the discussion and I hope to share them with you in advance of the meeting. It is also

## Robert Sanders

February 1, 2008
Page 3
important to discuss how improvements to 22nd St. necessitated by the Department's security requirements, and particularly the closure of C St., could be financed.

The Academy continues to be ready to support the Department's plan for improving perimeter security for the Truman Building and assist the Department in implementing this plan in return for adequate mitigation of the impact of the plan, particularly on $22^{\text {nd }}$ St. where a new NAS Building entrance must be created because of the Department's closure of C St. We are therefore eager to see what mitigation plans have been incorporated into the draft Environmental Assessment and Program Agreement you have indicated we will receive shortly.

I look forward to sceing you on the $14^{\text {th }}$. If you have any questions or think it would be useful for us to talk before we meet with the Department of Transportation, please call me at 202-334-2440.


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Pillsbury Winthrop Shaw Pittman LLP
2300 N Street, NW | Washington, DC 20037-1122 | tel 202.663.8000 | fax 202.663.8007

December 22, 2009

Phil T. Feola<br>tel 202.663.8789<br>phil.feola@pillsburylaw.com<br>Christine A. Roddy<br>tel 202.663.9142<br>christine.roddy@pillsburylaw.com

## Via Email and First Class Mail

E. Mitchell Buck

Karn Charuhas Chapman \& Twohey
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036
Re: Draft Environmental Assessment ("EA") Prepared by United States Department of State

Dear Mr. Buck:
We have reviewed the draft Environmental Assessment and the National Academy of Sciences ("NAS") continues to have three main concerns: (1) NAS' access to C Street for parking and loading; (2) the physical design and ultimate operation of $22^{\text {nd }}$ Street as presented in the EA; and (3) traffic management at C and $21^{\text {st }}$ Streets.

## 1. Access to C Street

NAS would like a firm commitment from the State Department to permit vehicular access to C Street for its commercial loading, its shuttle buses and parking. NAS appreciates the security concerns requiring C Street to be closed to the public; however, NAS has an entrance on C Street, as well as its loading docks. NAS does not have a significant loading dock demand; but will require access to C Street for deliveries which currently are approximately 15 per week. NAS has a week day shuttle program to transport its employees to and from public transportation and between offices. It historically has used C Street as the drop off location because of the location of its building entrance on C Street. NAS would like to continue this practice as well as current access for larger bus shuttles utilized by the NAS during any of its annual meetings or other special functions. It is a safe, environmentally friendly method of providing access to NAS' building to minimize additional traffic congestion. Finally, NAS would like access to parking along C Street for select employees and to permit private vehicular traffic to accommodate visitors with special access needs. NAS will work with the State Department in
approving the designated employees and to develop a procedure for notifying State of the need for special access visitors.

## 2. $\quad 22^{\text {nd }}$ Street Design

NAS believes that the design of $22^{\text {nd }}$ Street has progressed since the first proposal; nevertheless, it has a few comments on the current proposal. The new proposal shows three designated "turn-around" areas. Two of the turn-around areas may exacerbate the congestion on $22^{\text {nd }}$ Street. The turn-around at the entrance of $22^{\text {nd }}$ Street and Constitution Avenue will likely create a bottleneck on Constitution and will not help to ease the ingress or egress flow of traffic on $22^{\text {nd }}$ Street. The turn-around at the intersection of $22^{\text {nd }}$ and C Streets continues to block NAS' garage entrance, complicating ingress and egress from the garage. NAS understands the rationale for many of the changes on $22^{\text {nd }}$ Street but the success of the modification depends on enforcing the new traffic design. To that end, NAS asks that the State Department commit to employing a permanent "enforcement officer" who will direct traffic and ensure that there will be no double-parking or standing on the roadway. Failure to provide adequate enforcement/management of $22^{\text {nd }}$ Street will create unacceptable traffic congestion and consequently additional air pollution problems.

## 3. C and $21^{\text {st }}$ Streets

With regard to its third concern, NAS asks that the State Department prohibit employee drop-off at C and $21^{\text {st }}$ Streets. This practice blocks traffic and creates congestion along $21^{\text {st }}$ Street, making it difficult for NAS employees trying to access the eastern entrance to the parking garage.

Finally, NAS would also like to see examples of the security barriers being proposed for its property and it notes that its property is mislabeled on the drawing preceding page 62.

Please feel free to contact us should you want to discuss NAS' concerns in further detail. NAS looks forward to continuing to work with APhA and the State Department as this process continues.

Best regards,


Phil T. Feola


Christine A. Poddy

## cc: Robert Sanders, U.S. Department of State Joseph Papa, NAS (via electronic mail)

## District of Columbia Office of Planking <br> 



May 19, 2009

Robert Sanders
Office of Real Property Management
Special Projects Division - A/OPR/RPM/SP
U.S. Department of State

Washington DC 20520

Re: Perimeter Security Improvements, Harry S. Truman Building

Dear Mr. Sanders:

Thank you for your letter of April 3, 2009 regarding changes to the proposed Security Screening Pavilion on the O Street side of the Harry S. Truman Building. The DC State Historic Preservation Office (SHPO) has reviewed the changes to the design and finds that the work is in conformance with the draft Memorandum of Agreement (MOA) regarding Phase 1-B of the modernization of the Truman Building Extension.

As discussed during consultation, the pavilion will have an adverse effect on this National Register eligible building and mitigative measures will be undertaken per the draft MOA. The redesign does not appear to conflict with the specifications or intent of the draft MOA.

Thank you for providing this office the opportunity to comment, We look forward to continued coordination on this project and to finalizing the agreement documents among our agencies.

Sincerely,


Arne O. Bracket
Architectural Historian, DC SHPO

Cc: Mark Butowsky, DOS
Katry Harris, ACHP
Frederick Lindstrom, CFA
Gene Keller, NCPC

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# GOVERNMENT OF THE DISTRICT OF COLUMBIA DISTRICT DEPARTMENT OF TRANSPORTATION 



TRANSPORTATION PLANNING AND POLICY ADMINISTRATION

Mr. Robert H. Sanders, Chief of Special Projects Division<br>United States Department of State<br>Room 1420<br>Harry S Truman Building<br>2201 C Street, NW<br>Washington, DC 20520

RE: Pre-Final Draft of the Environmental Assessment for Perimeter Security Improvements Project for the Department of State in the Harry S. Truman Building

Dear Mr. Sanders,
Below are the preliminary comments from DDOT on the Pre-Final Draft of the Environmental Assessment for Perimeter Security Improvements Project for the Department of State in the Harry S. Truman Building (EA). Please keep in mind that these are only preliminary, and any permanent or temporary alteration in the public space must have a public space permit and be reviewed and approved by the Public Space Committee.

- The Applicant will have to bear the entire cost of the project. This includes relocating curbs, and any necessary road reconstruction that brings the streets into compliance with DDOT Blue Book standards.
- The Applicant will be accountable for proper strormwater drainage of the entire block on which a curb relocation occurs. This also provides an opportunity to incorporate Low Impact Design, which DDOT expects the Applicant to employ in order to reduce stormwater runoff.
- The closing of the E Street Expressway off-ramp connection to Virginia Avenue/D Street and relocating the ramp away from the HST Building with a new connection to Virginia Avenue/E intersection, even temporarily, will have a far reaching impact on traffic movement and circulation not only on the Foggy Bottom area but also in the Georgetown area. The traffic analysis of the Environmental Assessment does not address the impact of diverting of traffic and the alternative routes the diverted traffic will use. The traffic analysis must include the effect of relocating the ramp on traffic movements in the area
- Air quality assessments do not take into account the effects of altering the E Street Expressway off-ramp, which will most likely result in congestion and traffic
diversion. This EA also makes no mention of the long-range air quality impacts of this alteration.
- The EA states that emissions from construction will be contained locally. There is no technology that can ensure this, and therefore this statement should be eliminated and emissions from construction should be included as local and regional air quality impacts.
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- In order to encourage transit, parking should not be subsidized. Instead, parking should be available at market rate with very limited monthly passes.

In addition, the District of Columbia will need to be compensated for the takings of land required by certain security measures as a long-term public space rental fee. These include, but are not limited to:

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The concerns of adjacent building occupants, such as the National Academy of Sciences (NAS), must also be mitigated. In a meeting on June 22, 2007, representatives from NAS shared their concerns with DDOT. The following is a list of concerns which should be addressed and mitigated:

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- This is the only ADA accessible entrance to the NAS Building
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Again, any alteration to the public space requires a public space permit from DDOT. If you have any questions, please contact me, at karina.ricks@dc.gov.

Best Regards,

Karina Ricks
Acting Associate Director

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RCCT-WASHINGTON, DC

## United States Department of State

Washington, D.C. 20520

January 8, 2008

Mr. James F. Henchman
General Counsel
2101 Constitution Avenue, NW
Washington, DC 20418
Dear Mr. Henchman:
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In summary, we appreciate your counsel in planning and constructing the security improvement projects. We are committed to compliance with appropriate historic preservation and environmental regulations, and to work with you and APHA to develop mitigation measures for reducing the impact on employees and visitors of all three agencies, and to provide the same access to C Street as provided for DOS employees. In the meantime, we look forward to your response on the options for closing the gaps and loop road. If you have any further questions, please do not hesitate to call me on 202-736-7827 or Mark Butowsky on 202-647-7455.


Attachment: Concept Plan \#1-2B
cc:
NCPC - Eugene Keller
NAS - Joseph Papa

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Office of the General Counsel

February 1, 2008

Mr. Robert Sanders

Chief, Special Projects Division
U.S. Department of State

Washington, D.C. 20520
Dear Mr. Sanders:
Thank you for your January 8 letter. I apologize for the delay in responding. Unfortunately, we did not receive the letter until January 24. This was probably due, at least in part, to the fact that it was sent through the Postal Service to our Constitution Avenue address with a 20418 zip code. Mail sent to this address is routinely delayed for weeks. We understand that mail to this zip code is processed with mail to some government agencies and is subject to special security procedures. To avoid this problem, please consider hand delivery if that is convenient for you. Alternatively, please send future Postal Service mail to the following address:

James F. Hinchman<br>National Academy of Sciences, NAS 210<br>500 Fifth St., NW<br>Washington, DC 20001

Your letter notes that we have met several times over the last year and a half to discuss the Department's plans for improving perimeter security for the Harry S Truman Building. As you know, at these meetings we have consistently supported the goal of making the Truman Building a safer place. Notably, we have indicated that we are prepared to cooperate with the Department in the construction of barriers on the east and west side of the NAS Building so that our building can be part of the southern security perimeter for the Truman Building. We see it as a contribution we should make to a larger cooperative effort to improve perimeter security for the Truman Building and at the same time mitigate the impact of the improvements on the Department's neighbors.

At our last meeting I think there was general agreement that it made the most sense for the Academy to construct the barriers using funds provided by the government. We are preparing a draft contract along these lines and I will forward it to you as soon as it is ready for your review.

## Robert Sanders

February 1, 2008
Page 2
We have also indicated that we will not object to the Department's plans to permanently close C St., if the Department addresses in its plans the impact that closing C St. has had on the Academy since 2001. At the heart of our concern, as we have said at all the meetings, is the loss of vehicular access to the NAS Building's C St. entrance, which is currently the principal building entrance and the only public entrance that is handicapped accessible.

We appreciate the steps the Department has recently taken to improve vehicle access to C St. for Academy employees and identified visitors. However, these steps do not address the needs of the majority of people coming to the NAS Building. Equally important, we are mindful that the Department controls, and intends to continue to control, access to C. St. The current arrangements are only for the time being and must necessarily be subject to change as the Department's assessment of its security situation changes. Therefore, as I indicated at our last meeting, we have concluded that the only sensible long term solution to the problems created by the closure of C St. is the construction of a new principal entrance on $22^{\text {nd }}$ St.

Any new entrance on $22^{\text {nd }} \mathrm{St}$. will not work unless the traffic problems on that street are solved. These problems are caused largely by the Department's temporary security arrangements, which have closed $22^{\text {nd }}$ St. at its intersection with C St., and at the same time eliminated all other places around the Truman Building where taxi cabs can wait and Department employees can be dropped off and picked up. The result is a confused jumble of pedestrians, taxis, parked and standing private vehicles, and vehicles making $U$ turns in a space crowded with cars and people.

The perimeter security improvement plan on which you are now working will continue the arrangements that are causing the problems on $22^{\text {nd }} \mathrm{St}$., and the problems will only grow worse once the new garage entrance and loading dock for the American Pharmacists Association building addition are opened on the west side of the street. This is the reason we think it is so important to include plans for modifying $22^{\text {nd }}$ St. to mitigate the traffic problems created by the perimeter security improvements in the Environmental Assessment and Program Agreement for the project.

As you know, the Department and the Academy are scheduled to meet with the District of Columbia Department of Transportation on February 14. You have indicated that the purpose of the meeting is to discuss the State Department's perimeter security improvement plan, particularly as it affects C and D Sts. A meaningful part of the mecting should be devoted to a discussion of plans for mitigating the impact of the plan on $22^{\text {nd }} \mathrm{St}$. The drawing of a redesigned $22^{\text {nd }} \mathrm{St}$. enclosed with your letter is a good starting point for this discussion and we expect to have concept drawings for a new $22^{\text {nd }}$ St. entrance to the NAS Building before the $14^{\text {th }}$. These drawings should also be part of the discussion and I hope to share them with you in advance of the meeting. It is also

## Robert Sanders

February 1, 2008
Page 3
important to discuss how improvements to 22nd St. necessitated by the Department's security requirements, and particularly the closure of C St., could be financed.

The Academy continues to be ready to support the Department's plan for improving perimeter security for the Truman Building and assist the Department in implementing this plan in return for adequate mitigation of the impact of the plan, particularly on $22^{\text {nd }}$ St. where a new NAS Building entrance must be created because of the Department's closure of C St. We are therefore eager to see what mitigation plans have been incorporated into the draft Environmental Assessment and Program Agreement you have indicated we will receive shortly.

I look forward to sceing you on the $14^{\text {th }}$. If you have any questions or think it would be useful for us to talk before we meet with the Department of Transportation, please call me at 202-334-2440.


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Pillsbury Winthrop Shaw Pittman LLP
2300 N Street, NW | Washington, DC 20037-1122 | tel 202.663.8000 | fax 202.663.8007

December 22, 2009

Phil T. Feola<br>tel 202.663.8789<br>phil.feola@pillsburylaw.com<br>Christine A. Roddy<br>tel 202.663.9142<br>christine.roddy@pillsburylaw.com

## Via Email and First Class Mail

E. Mitchell Buck

Karn Charuhas Chapman \& Twohey
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036
Re: Draft Environmental Assessment ("EA") Prepared by United States Department of State

Dear Mr. Buck:
We have reviewed the draft Environmental Assessment and the National Academy of Sciences ("NAS") continues to have three main concerns: (1) NAS' access to C Street for parking and loading; (2) the physical design and ultimate operation of $22^{\text {nd }}$ Street as presented in the EA; and (3) traffic management at C and $21^{\text {st }}$ Streets.

## 1. Access to C Street

NAS would like a firm commitment from the State Department to permit vehicular access to C Street for its commercial loading, its shuttle buses and parking. NAS appreciates the security concerns requiring C Street to be closed to the public; however, NAS has an entrance on C Street, as well as its loading docks. NAS does not have a significant loading dock demand; but will require access to C Street for deliveries which currently are approximately 15 per week. NAS has a week day shuttle program to transport its employees to and from public transportation and between offices. It historically has used C Street as the drop off location because of the location of its building entrance on C Street. NAS would like to continue this practice as well as current access for larger bus shuttles utilized by the NAS during any of its annual meetings or other special functions. It is a safe, environmentally friendly method of providing access to NAS' building to minimize additional traffic congestion. Finally, NAS would like access to parking along C Street for select employees and to permit private vehicular traffic to accommodate visitors with special access needs. NAS will work with the State Department in
approving the designated employees and to develop a procedure for notifying State of the need for special access visitors.

## 2. $\quad 22^{\text {nd }}$ Street Design

NAS believes that the design of $22^{\text {nd }}$ Street has progressed since the first proposal; nevertheless, it has a few comments on the current proposal. The new proposal shows three designated "turn-around" areas. Two of the turn-around areas may exacerbate the congestion on $22^{\text {nd }}$ Street. The turn-around at the entrance of $22^{\text {nd }}$ Street and Constitution Avenue will likely create a bottleneck on Constitution and will not help to ease the ingress or egress flow of traffic on $22^{\text {nd }}$ Street. The turn-around at the intersection of $22^{\text {nd }}$ and C Streets continues to block NAS' garage entrance, complicating ingress and egress from the garage. NAS understands the rationale for many of the changes on $22^{\text {nd }}$ Street but the success of the modification depends on enforcing the new traffic design. To that end, NAS asks that the State Department commit to employing a permanent "enforcement officer" who will direct traffic and ensure that there will be no double-parking or standing on the roadway. Failure to provide adequate enforcement/management of $22^{\text {nd }}$ Street will create unacceptable traffic congestion and consequently additional air pollution problems.

## 3. C and $21^{\text {st }}$ Streets

With regard to its third concern, NAS asks that the State Department prohibit employee drop-off at C and $21^{\text {st }}$ Streets. This practice blocks traffic and creates congestion along $21^{\text {st }}$ Street, making it difficult for NAS employees trying to access the eastern entrance to the parking garage.

Finally, NAS would also like to see examples of the security barriers being proposed for its property and it notes that its property is mislabeled on the drawing preceding page 62.

Please feel free to contact us should you want to discuss NAS' concerns in further detail. NAS looks forward to continuing to work with APhA and the State Department as this process continues.

Best regards,


Phil T. Feola


Christine A. Poddy

## cc: Robert Sanders, U.S. Department of State Joseph Papa, NAS (via electronic mail)

## District of Columbia Office of Planking <br> 



May 19, 2009

Robert Sanders
Office of Real Property Management
Special Projects Division - A/OPR/RPM/SP
U.S. Department of State

Washington DC 20520

Re: Perimeter Security Improvements, Harry S. Truman Building

Dear Mr. Sanders:

Thank you for your letter of April 3, 2009 regarding changes to the proposed Security Screening Pavilion on the O Street side of the Harry S. Truman Building. The DC State Historic Preservation Office (SHPO) has reviewed the changes to the design and finds that the work is in conformance with the draft Memorandum of Agreement (MOA) regarding Phase 1-B of the modernization of the Truman Building Extension.

As discussed during consultation, the pavilion will have an adverse effect on this National Register eligible building and mitigative measures will be undertaken per the draft MOA. The redesign does not appear to conflict with the specifications or intent of the draft MOA.

Thank you for providing this office the opportunity to comment, We look forward to continued coordination on this project and to finalizing the agreement documents among our agencies.

Sincerely,


Arne O. Bracket
Architectural Historian, DC SHPO

Cc: Mark Butowsky, DOS
Katry Harris, ACHP
Frederick Lindstrom, CFA
Gene Keller, NCPC

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## APPENDIX B

## Department of State Transportation Management Plan

Harry S. Truman Building Perimeter Security Improvements Environmental Assessment Transportation Impact Study

Harry S. Truman Building Environmental Assessment Addendum - $22^{\text {nd }}$ Street

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## APPENDIX B

## Department of State Transportation Management Plan

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United States Department of State

# Transportation Management Plan 

Washington, D.C.<br>August 2006

# TRANSPORTATION MANAGEMENT PLAN UPDATE 

# PERIMETER SECURITY IMPROVEMENTS HARRY S TRUMAN BUILDING 

August 2006

## PREFACE

## Transportation Management Plan Update Background

The Department of State (DOS) was selected by the Environmental Protection Agency in FY 2004 as one of the "Best Workplaces for Commuters" due to the excellent commuter benefits provided to employees. The Department won the Silver Award in the "Race to Excellence" of the "Best Workplaces for Commuters" program in FY 2005 by improving existing commuter benefits and adding others. These forms of recognition demonstrate the Department's success in supporting its workforce and public transportation as components of its Transportation Management Plan. In the next year the Department will develop designs for Perimeter Security Improvements at the Harry $S$ Truman building. This update describes this project and presents the Transportation Management Plan implications.

## The Perimeter Security Improvements Project

The Perimeter Security Improvements Project will improve the perimeter security of the Harry S Truman (HST) Building, Department of State headquarters, and help protect its employees and visitors from terrorist explosive attacks, while improving the streetscape with an attractive pedestrian environment. The architecture firm of KCCT developed a Concept Design plan that will guide the implementation of perimeter security improvements. The Department received Concept Design approval in November 2004 from the Commission of Fine Arts and approval in December 2004 from the National Capital Planning Commission.

The Department is conducting an Environmental Assessment of the Concept Design plan, and is developing_portions of it into construction documents. These portions are: Phase 1, 2, 3(a), and 7(a). Phase 1 consists of guard booths and vehicle controls at the $21^{\text {st }}$ Street and $23^{\text {rd }}$ Street ends of C Street, retractable street vehicle obstructions across $22^{\text {nd }}$ Street to the South of the building, and a guard booth and vehicle controls at the $23^{\text {rd }}$ Street end of D Street to the North of the building. Phase 2 consists of the addition of a pavilion to the North entrance of the building at D Street, which will bring out the security screening from the original building's lobby. Phase 3 and Phase 7 portions consist of landscaping and roadwork improvements to C Street between $21^{\text {st }}$ Street and $23^{\text {rd }}$ Street that will align with the perimeter project of the Board of Governors of the Federal Reserve System's Eccles and Martin buildings. The design development commenced in May 2006, and will conclude by June 2007 with final Construction Documents.

## Transportation Management Plan Implications

The new Perimeter Security Improvements project will not increase the parking demand or add more commuters. It will improve the pedestrian experience around the Harry S Truman building, beautify the streets and surrounding grounds, and improve the entrances and security for occupants. The broader transportation issues of the project are covered in the Environmental Assessment, to include discussion of the cumulative effects of potential future projects by the Department's neighbors.

## Introduction:

The Transportation Management Plan documents the Department of State's current programs to foster more efficient employee commuting patterns in Washington, D.C. in accordance with the Federal government's transportation goals as articulated by the National Capital Planning Commission's Comprehensive Plan for Federal Elements.

## Policies:

The Department of State (DOS) implements the policies set forth by the National Capital Planning Commission (NCPC) Federal Plan's Transportation Elements by the use of various tools to encourage commuting habits to achieve its goals. The Department has in place nine tools, described below, to encourage commuting by modes other than single-occupant vehicles. These tools include information campaigns, financial subsidy for use of public transportation networks, and in-city shuttle services between its annexes.

The Department of State's Transportation Management Plan complies with NCPC goals to foster efficient employee commuting patterns, and to meet or exceed parking goals and ratios. It achieves this by executing strategies that reduce traffic congestion and improve air quality, and ensure NCPC target parking ratios are met or improved. By internal and external methods of communication and coordination, the Department manages its strategy implementing programs. It communicates its commitment to reduce parking space demand and to encourage alternate commuting modes, often with customized solutions suitable to surrounding communities.

## Background:

Located primarily in the Foggy Bottom area of Washington, D.C., and in the Arlington, VA area, the Department of State is headquartered in the Harry S Truman building (HST), 2201 C Street NW, Washington, DC. Nearby annexes in, or directly adjacent to the central employment area presently house constituent bureau offices. There are seven annexes in the Foggy Bottom area, six other employee locations elsewhere in the city, plus 24 employee locations in Northern Virginia, and two employee locations in Maryland, for a total of 18,675 employees within the Washington-BaltimoreNorthern Virginia Combined Statistical Area. Of these, 11,391 employees work in the immediate Washington, D. C. area.

The HST headquarters building houses offices and other special spaces, and is comprised of two buildings joined together. These are the Old State section, dedicated the George C. Marshall Wing in 2001, which was completed in 1941 to house the War Department, and the New State section, which was completed in 1961 to house the State Department. Together they were dedicated the Harry S Truman building in 2000.

The HST building is bound by C Street, D Street, $21^{\text {st }}$ Street, and $23^{\text {rd }}$ Street, and accommodates an average 8,000 employees and visitors each day. It is located on an 11acre lot, has 9 floors, a footprint that measures 730 feet long by 510 feet wide, and is 90 feet high. It has a gross area of $2,502,578$ square feet, with a net area of $1,492,260$ square feet. Its loading dock and parking garage are 204,772 square feet, with a capacity for 980 automobiles.

## Transportation Demand Management:

The demand for transportation by DOS employees is for commuting home to work. Since many of the Department's workforce serve overseas, many employees are transient to the city during times of brief tours to Washington, D.C. It is convenient for such Foreign Service employees to locate close to the city, or in the city, during these brief tours, although the Department does not presently record housing data to determine percentage of employees living in DC. The primary demand is for Civil Servants who live in the greater Washington Metropolitan area. Visitors arrive to the building by multiple modes of transportation, although the Department does not track the transportation demand of visitors.

## Commuter Rail, Rail Transit, and Bus Transit:

The Department of State provides information for employees to facilitate use of the primary transit services of the city, including Metro rail and bus and commuter train lines. Subsidies are provided via an annual program with quarterly distributions to the Department's employees to encourage the use of public transportation. METROCheks totaling nearly $\$ 6,000,000$ were distributed to State employees in FY 2005 and there were 6,228 employees in the program as of October 1, 2005.

## Parking:

Parking spaces for DOS employees are provided at various locations to serve the Department in the Foggy Bottom area. The parking locations include the Harry $S$ Truman building, the Columbia Plaza annex, Navy Hill and Potomac Annex (until its use as parking ends when site preparations begin for construction of the new U.S. Peace Institute headquarters building, scheduled for November, 2006). There are 1,522 parking spaces, including 75 for motorcycles, available for the Privately Owned Vehicles (POVs) of State employees in the DC area. Some employees choose to pay to park in commercial facilities, although DOS does not record these numbers. The population of DOS employees in the DC area is 11,391 . Thus, the ratio of DOS provided parking spaces to DOS employees in the DC area is $1: 7$, which surpasses the NCPC goal of 1:5.

## Shuttles and Circulators:

The Department of State's Washington, DC workforce shuttle bus service provides transportation for the conduct of official government business between the Harry S. Truman Building and 20 DOS annexes in the DC area. Department shuttle buses transported 902,591 passengers via 30,754 trips in FY 2005. A display of shuttle bus schedules is located inside the D Street entrance of Harry S Truman Building, where the buses arrive and depart. The shuttle bus schedules are also available as brochures at the transportation kiosk in the basement of the Harry S Truman Building and can be viewed via the A Bureau Intranet Managed Favorites.

## Bicycle Facilities:

The Department of State encourages employees in the DC area to ride bicycles by providing space for bicycle parking. The Department currently has 185 spaces in thirteen bicycle racks to accommodate those who prefer cycling as the mode of transportation.

## Other Infrastructure and Transportation Services:

The Department of State maintains a fleet of vehicles for use by groups for official business. These allow for public transportation commuters to take official group trips without bringing in their own vehicles to transport themselves to places unreachable by public transportation. Occasionally these vehicles do not need to park, so they can operate like a taxi service, dropping groups off for meetings, and then retrieving them. Also, a commercial taxi stand has developed by market forces, in response to demand, where $22^{\text {nd }}$ Street and C Street intersect. Visitors and Department employees take advantage of this market-based service.

## Investment Priorities:

The Department supports the investment in alternative fuel vehicles (AFVs). The Department's domestic covered* fleet of 499 vehicles included 152 AFVs as of the end of FY 2005. Most of those AFVs were located in the area of Washington, DC, including six (6) shuttle buses running on compressed natural gas (CNG).
*"covered" fleet vehicles are all domestic, non law-enforcement, light-duty vehicles operated in a metropolitan statistical area.

## TMP Implementation:

The following nine tools are used by the Department of State to encourage commuting by modes other than single-occupant vehicles. These tools include communications and coordinated efforts with external agencies:

1) A transportation kiosk in the Harry $S$ Truman building provides commuting information on non-single-occupant vehicle modes of transportation to employees
via a touch screen, a map of the METRO subway system and brochures for the Maryland Area Regional Commute (MARC) and Virginia Railway Express (VRE) commuter trains, etc.
2) A carpool driver/passenger matching service is available on the Department's website.
3) Preferred parking is provided for carpools and vanpools.
4) DOS participates in the Department of Transportation (DOT) METROCheks program, encouraging employees to ride mass transit.
5) Secure bicycle parking is available, along with showers and lockers.
6) Compressed work schedules are available to many employees, which alleviate the need for those employees to transit to work at least one day each pay period.
7) The number of employees telecommuting is gradually increasing. There were 1,236 registered teleworkers at the end of 2005 , which further reduces transportation demand.
8) On-site amenities (e.g.: bank, cafeteria, convenience store, dry cleaning, post office, etc.) are provided, reducing transportation demand.
9) Information is provided at events such as the Earth Day celebration, where brochures and a list of websites about commuting options are distributed.

## Related Future Projects:

The American Pharmacists Association (APHA) is planning construction of an addition to their headquarters located at 2215 Constitution Avenue, NW, Washington, D.C. The addition will adjoin the existing building and project towards C Street. It is anticipated to be six stories with two levels of underground parking. The Department of State anticipates tenancy, utilizing 166,000 useable square feet to house approximately 800 employees with 98 available parking spaces. The parking ratio for this facility will be one space for every 8 employees (1:8). DOS occupancy is projected to be in the spring of 2009.

The U.S. Institute of Peace is planning to build a new headquarters at the corner of Constitution Avenue and $23^{\text {rd }}$ Street, NW on a two-and-one-half acre site. DOS employees use a portion of the site known as the Potomac Annex for parking. Construction is scheduled to begin in 2007, and site preparations begin in August 2006 at which time 150 parking spaces currently in use by DOS employees will no longer be available.

Upon completion of the U.S. Institute of Peace and the APHA addition, the parking ratio of employees to spaces for DOS in Washington, D.C. will become 11,391 employees to $1470(1,522+98-150)$ spaces, or one employee to every seven and seventenths (1:7.7) parking space.

## APPENDIX B

## Harry S. Truman Building Perimeter Security Improvements Environmental Assessment Transportation Impact Study

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# HARRY S TRUMAN BUILDING PERIMETER SECURITY IMPROVEMENTS <br> ENVIRONMENTAL ASSESSMENT TRANSPORTATION IMPACT STUDY <br> <br> RECONFIGURATION OF THE <br> <br> RECONFIGURATION OF THE E STREET/VIRGINIA AVENUE INTERSECTION 

 E STREET/VIRGINIA AVENUE INTERSECTION}

Prepared for:<br>KCCT Architects

Prepared by:
Wells \& Associates, LLC

October 06, 2006

# HARRY S TRUMAN BUILDING PERIMETER SECURITY IMPROVEMENTS ENVIRONMENTAL ASSESSMENT TRANSPORTATION IMPACT STUDY 

## RECONFIGURATION OF THE E STREET/VIRGINIA AVENUE INTERSECTION

Table of Contents

Page
Section I:
Introduction ..... I
Study Purpose ..... I
Study Scope ..... 2
Previous Transportation Studies ..... 2
Conclusions ..... 2
Section 2:
Background Data ..... 6
Site Location ..... 6
Building Program ..... 6
Perimeter Security ..... 6
Bicycle Facilities ..... 6
Existing Lane Use and Traffic Control ..... 6
Existing Traffic and Pedestrian Counts ..... 6
Section 3:
Analysis of Existing Conditions ..... 12
Levels of Service ..... 12
Delays ..... 12
Queues ..... 12

Harry S Truman Building
Perimeter Security Improvements
Transportation Impact Study

## E Street/Virginia Avenue Reconfiguration

Section 4:
Analysis of Security Improvements ..... 15
Overview ..... 15
Pipeline Developments ..... 15
Background Traffic Growth ..... 15
Proposed Security Improvements. ..... 15
Affects of Security Improvements ..... 16
Total Future Traffic Forecasts ..... 16
Levels of Service ..... 16
Delays ..... 16
Queues ..... 16
Section 5:
Conclusions ..... 23

# HARRY S TRUMAN BUILDING PERIMETER SECURITY IMPROVEMENTS ENVIRONMENTAL ASSESSMENT TRANSPORTATION IMPACT STUDY 

## RECONFIGURATION OF THE E STREET/VIRGINIA AVENUE INTERSECTION

## List of Figures

Figure ..... Page
I-I Harry S Truman Building Location ..... 3
I-2 Harry S Truman Building Security Improvements: Current Conditions ..... 4
I-3 Harry S Truman Building Security Improvements: Planned Conditions ..... 5
2-I Bicycle Facilities ..... 8
2-2 Existing Lane Use and Traffic Controls ..... 9
2-3 Existing Vehicular Traffic Counts ..... 10
2-4 Existing Pedestrian Counts ..... II
4-I Adjustment of D Street/Virginia Avenue Ramp Traffic ..... 18
4-2 Re-distribution of D Street/Virginia Avenue Ramp Traffic. ..... 19
4-3 Total Future Traffic Forecasts: With Current Ramp Configuration ..... 20
4-4 Total Future Traffic Forecasts: With Proposed Ramp Configuration ..... 21
4-5 Future Lane Use and Traffic Controls ..... 22
List of Tables
Table ..... Page
3-I Intersection Levels of Service and Delays ..... 13
3-2 Intersection Queues ..... 14

# HARRY S TRUMAN BUILDING PERIMETER SECURITY IMPROVEMENTS ENVIRONMENTAL ASSESSMENT TRANSPORTATION IMPACT STUDY 

# RECONFIGURATION OF THE E STREET/VIRGINIA AVENUE INTERSECTION 

## List of Appendices

## Appendix

A Existing Vehicle Counts
B Existing Pedestrian Counts
C Existing Levels of Service
D Descriptions of Levels of Service
E Total Pipeline Development Trip Assignments
F Regional Traffic Growth Volumes
G Future Levels of Service: Current Ramp Configuration
H Future Levels of Service: Proposed Ramp Re-Configuration

## Section I: <br> INTRODUCTION

## Study Purpose

The United States Department of State (DOS), like the nation, is faced with new and unprecedented international threats to security. Accordingly, the department is evaluating acceptable and innovative ways to secure the Harry S Truman Building and its occupants from terrorist actions (see Figure I-I).

The DOS and their consultants have developed a plan to address site security. The plan incorporates many of the recommendations contained in the National Capital Planning Commission's (NCPC's) The National Capital Urban Design and Security Plan and has been coordinated with the neighboring institutions. The plan affects the street architecture, landscaping, and layout of the streets bordering the site.

The object of these changes is to increase the building security perimeter. The major features of the plan include providing security pavilions and guard booths to provide both visitor and vehicular security screening, replacing drop-off and/or parking lanes with additional sidewalk and protective fences, restricting vehicular access at C and D Streets, reconfiguring the ramp from the E Street Expressway on the building's north side, installing retractable security devices in selected streets, revising the existing delivery inspection area, and providing significant landscaping and street furniture.

More specifically, the major features of the plan are as follows:

- Security pavilions will be located at each of the five building entrances in order to remove the visitor security screening process from the building.
- Drop-off and/or parking lanes will be replaced with additional sidewalk and a protective fence along $21^{\text {st }}$ and $23^{\text {rd }}$ Streets and Virginia Avenue to increase the building's perimeter.
- At $2 I^{\text {st }}$ Street, the existing truck inspection area will be redesigned.
- Recessed security barriers will be located near the intersections of $21^{\text {st }}$ Street with both C Street and Virginia Avenue.
- C Street will be redesigned to restrict traffic and will include a landscape median.
- Retractable bollards will be placed at the C Street/22 ${ }^{\text {nd }}$ Street intersection.
- New guard booths will be installed at D and $23^{\text {rd }}$ Streets, D Street and Virginia Avenue, the Truck Inspection area on $21^{\text {st }}$ Street, C and $21^{\text {st }}$ Streets and C and $23^{\text {rd }}$ Streets.
- Significant landscaping and street furniture will be introduced to enhance the pedestrian friendly character of the site.
- The ramp from the E Street Expressway on the building's north side will be reconfigured. A fifth leg will be added to the Virginia Avenue/E Street intersection. Traffic on D Street will be limited to DOS traffic.

With the exception of the E Street off-ramp reconfiguration and removal of a single travel lane on the south side of Virginia Avenue from E Street to $20^{\text {th }}$ Street, all of the measures that will directly affect street capacity have been implemented with temporary Jersey barriers, as shown on Figure I-2. The permanent measures are shown on Figure I-3.

This study provides an update to the October 28, 2004 Harry S Truman Building Perimeter Security Improvements Transportation Impact Study conducted by Wells \& Associates. Specifically, the purpose of this study is to update traffic counts and isolate the impact area to the intersections affected by the reconfiguration to the Virginia Avenue/E Street intersection.

## Study Scope

Eight (8) intersections were analyzed in the area generally bounded by E Street on the north, D Street/Virginia Avenue on the south, $20^{\text {th }}$ Street on the east, and the E Street Expressway off-ramp to the west. Existing intersection levels of service (LOS), delays, and queues during typical weekday morning (AM) and afternoon/evening (PM) peak hours were analyzed.

Changes in levels of service, delays, and queues were evaluated under a future base (future traffic with existing traffic geometrics) and a future design proposal.

## Previous Transportation Studies

This study builds upon the data, analyses, and findings of following previous studies:
I. Wells \& Associates, Harry S Truman Building

Perimeter Security Improvements Transportation Impact Study, October 28, 2004.
2. Wells \& Associates, The George Washington University Foggy Bottom Campus Plan: 2006-2025 Transportation Impact, August 24, 2006.

## Conclusions

The conclusions of this study are as follows:
I. The key study intersections within the vicinity of the proposed roadway realignment currently operate at acceptable levels of service during the AM and PM peak periods. The stop controlled movement at the D Street/Virginia Avenue intersection currently operates at or near capacity.
2. Realigning the eastbound E Street Expressway off-ramp to Virginia Avenue would make the HST Building more secure by removing 350 to 960 peak hour vehicles from the north side of the building.
3. Industry standards indicate a LOS "D" or better provide an acceptable level of service.
4. Creating a fifth leg at the Virginia Avenue/E Street intersection to accommodate E Street Expressway off-ramp traffic bound northwest on Virginia Avenue would introduce a third signal phase and change the overall intersection level of service (LOS) from LOS " $A$ " to LOS " $C$ " during the AM peak hour and from LOS "B" to LOS " $C$ " during the PM peak hour.
5. The key study intersections within the influence area of the proposed realignment and removal of a single travel lane on the south side of Virginia Avenue (between E Street and $20^{\text {th }}$ Street) would continue to operate at consistent levels of service as without the security improvements.
6. Optimizing the signal timings at the Virginia Avenue/2 I ${ }^{\text {st }}$ Street intersection would reduce potential southbound queues on Virginia Avenue during the AM peak hour.
7. Design provisions should incorporate future bicycle lanes along Virginia Avenue per the District's "Proposed Bicycle Facilities Map."

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Harry S Truman Building
Department of State
Perimeter Security Improvements - Site Plan
Figure 1-3

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## Section 2: BACKGROUND DATA

Site Location

The Harry S Truman (HST) Building occupies the entire block bounded by C Street on the south, D Street on the north, $21^{\text {st }}$ Street on the east, and $23^{\text {rd }}$ Street on the west, in the northwest section of Washington, D.C., as shown on Figure I-I. The Old State Department building is located in the northeast corner of the site. The New State Department Building occupies the remainder of the block.

## Building Program

Eight thousand employees work in this seven story, $2,600,000$ square foot building. Approximately 980 parking spaces are located under the building. Thus, one off-street parking space is provided for every 2,653 gross square feet (GSF) of building area. Or, stated in equivalent terms, 0.38 parking spaces are provided for every I,000 GSF.

## Perimeter Security

The State Department perimeter is secured by guards, Jersey barriers, retractable gates, and vehicles, as shown on Figure I-2.

C Street is closed to all traffic, except State Department traffic and vehicles using the National Academy of Sciences and Engineering dock, by the checkpoints at $21^{\text {st }}, 22^{\text {nd }}$, and $23^{\text {rd }}$ Streets.

Similarly, D Street is closed to all traffic, except State Department traffic, between $23^{\text {rd }}$ Street and the D Street/Virginia Avenue off-ramp. Guards, barricades, and the truck checkpoint control access to the parking garage/loading dock driveway on $21^{\text {st }}$ Street.

## Bicycle Facilities

Currently, no designated bicycle lanes or routes exist within the DOS vicinity. Bicyclists must share the roads with vehicular and pedestrian traffic. According to the District of Columbia Master Plan Proposed Bicycle Facilities Map (April 2005), bicycle lanes are proposed along Virginia Avenue and $21^{\text {st }}$ Street in the vicinity of the proposed intersection reconfiguration. In addition, bicycle lanes are proposed on E Street (westbound) between Virginia Avenue and $17^{\text {th }}$ Street (see Figure 2-I).

## Existing Lane Use and Traffic Control

Existing lane use and traffic control are shown on Figure 2-I.

In proximity to the Department of State, Virginia Avenue is a six-lane median divide street. $20^{\text {th }}$ Street north of Virginia Avenue operates one-way northbound. $21^{\text {st }}$ Street north of C Street operates one-way southbound. The south leg of E Street operates one-way eastbound and the north leg operates one-way westbound.

All eastbound traffic must exit the expressway at either the D Street/Virginia Avenue or E Street offramps. All westbound traffic must enter the expressway at the E Street on-ramp at $20^{\text {th }}$ Street.

Motorists bearing right on the Virginia Avenue/D Street ramp currently can turn right or left onto Virginia Avenue. Those bearing left merge with E Street just west of Virginia Avenue. This segment of E Street operates one-way westbound.

## Existing Traffic and Pedestrian Counts

Study Intersections. On Tuesday, September I2, 2006, Wells \& Associates updated traffic counts
during the AM and PM peak periods at the following intersections:
I. E Street Expressway (Eastbound) Offramp/D Street
2. Virginia Avenue/E Street (Westbound)
3. Virginia Avenue/D Street
4. Virginia Avenue/2I ${ }^{\text {st }}$ Street
5. Virginia Avenue/20 ${ }^{\text {th }}$ Street
6. $20^{\text {th }}$ Street/E Street (eastbound)
7. $20^{\text {th }}$ Street/E Street (westbound)
8. $2 I^{\text {st }}$ Street/E Street (westbound)

Peak Hours. Peak hours varied by location and day of the week. The street peak hours generally occurred at 8:15 to 9:15 AM and 5:00 to 6:00 PM.

The effects of potentially closing the Virginia Avenue/D Street ramp and creating an additional traffic leg at the Virginia Avenue/E Street intersection would be most significant during the street peak hours. The following analysis is, therefore, based on a common street peak hour.

Vehicular traffic counts are presented in Appendix A and summarized on Figure 2-2. Pedestrian traffic counts are presented in Appendix $B$ and summarized on Figure 2-3. The Homeland Security Advisory System had a Yellow (Elevated) threat level for Washington, D.C. at the time these counts were taken.

AM and PM peak hour traffic counts on selected links are presented below:

| Street | AM | PM |
| :---: | :---: | :---: |
| D Street bet. E Street (EB) | 585 | 235 |
| Expy off-ramp \& Virginia Ave. |  |  |
| E Street (WB) bet. $21{ }^{\text {st }}$ Street | 239 | 410 |
| \& Virginia Ave. |  |  |
| E Street (WB) bet. Virginia Ave. | 137 | 192 |
| \& E Street (EB) Expy off-ramp |  |  |
| Virginia Ave. bet. E Street \& | I,240 | 933 |
| D Street |  |  |

Approximately 178 AM peak hour and 98 PM peak hour pedestrians cross $D$ Street on the north side of the State Department at the eastern security checkpoint. Currently there is a stop sign that stops traffic exiting from the E Street Expressway to allow
pedestrians to cross to the State Department. The highest numbers of pedestrians were observed on the north side of E Street between $21^{\text {st }}$ and $20^{\text {th }}$ Street.

E Street Expressway Traffic. The eastbound E Street Expressway carried 3,422 vehicles in the AM peak hour and I,446 vehicles in the PM peak hour, in three lanes. The westbound E Street Expressway carried 226 vehicles in the AM peak hour and I,894 vehicles in the PM peak hour, in two lanes.

## E Street Expressway Off-Ramp to D Street/

Virginia Avenue. This ramp was used by 904 vehicles (or 26 percent of all vehicles on the eastbound E Street Expressway) during the AM peak hour, and 330 vehicles (or 23 percent of all vehicles on the eastbound E Street Expressway) during the PM peak hour.

The Virginia Avenue (or rightmost) ramp segment was used by about two-thirds of all ramp traffic, and the E Street (or leftmost) ramp segment was used by about a third of all ramp traffic during the AM peak period.

The E Street (or leftmost) ramp segment was used by 328 vehicles (or 36 percent of all ramp traffic) during the AM peak hour, and 106 vehicles (or 32 percent of all ramp traffic) during the PM peak hour.

The Virginia Avenue (or rightmost) ramp segment was used by 576 vehicles (or 64 percent of all ramp traffic) during the AM peak hour, and 224 vehicles (or 68 percent of all ramp traffic) during the PM peak hour.

State Department traffic on eastbound D Street (including traffic exiting the HST Building garage) added another 17 vehicles during AM peak hour and 23 vehicles during the PM peak hour, to this ramp segment.

During the AM and PM peak hour, the majority of traffic turned right onto Virginia Avenue, 55 and 73 percent respectively.

State Department traffic accounts for little of the traffic on the Virginia Avenue/E Street ramp: less than two (2) percent in the AM peak hour and seven (7) percent in the PM peak hour.


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# Section 3: <br> ANAYSIS OF EXISTING CONDITIONS 

## Levels of Service


#### Abstract

Existing intersection levels of service were calculated at the study intersections based on existing lane use and traffic controls shown on Figure 2-I, existing peak hour vehicular traffic counts shown on Figure 2-2, existing pedestrian counts shown on Figure 2-3, existing traffic signal timings, and the Synchro capacity analysis technique. The results are presented in Appendix $C$ and summarized in Table 3-I. Industry standards indicate a level of service "D" or better provide an acceptable level of service. Descriptions of levels-of-service " $A$ " through " $F$ " for both signalized and unsignalized intersections are provided in Appendix D.


The stop controlled movement at the D Street/Virginia Avenue intersection currently operates near capacity at level of service (LOS) "E" during the AM peak hour.

All other intersections theoretically operate at acceptable LOS "D" or better during both the AM and PM peak hours, as shown in Table 3-I.

## Delays

Total vehicular delay on all public streets in the study area is currently 133 vehicle-hours in the AM peak hour and I 33 vehicle-hours during the PM peak hour.

## Queues

As shown in Table 3-2, average queues at the $E$ Street (Eastbound)/20 ${ }^{\text {th }}$ Street (eastbound through and left, AM) intersection currently exceeds the available storage capacity and, thus, back up beyond available storage.

Table 3-1
State Department Security Improvements
Typical Weekday Intersection Levels of Service Summary (1) (2) (3) (4)

| Location | Operating Condition | Levels of Service |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Existing Base Conditions |  | Future w/o Ramp Config |  | Future w/ Ramp Config |  |
|  |  | AM Peak | PM Peak | AM Peak | PM Peak | AM Peak | PM Peak |
| 1. E Street/Virginia Avenue | Signalized | A | B | A | B | C | C |
|  |  | [7.9] | [11.9] | [7.9] | [11.9] | [26.0] | [28.3] |
|  |  | (0.30) | (0.32) | (0.32) | (0.34) | (0.53) | (0.46) |
| 2. Virginia Avenue/D Street | Unsignalized | E | B | F | B | B | B |
|  |  | [45.7] | [11.6] | [66.7] | [11.9] | [12.0] | [10.0] |
| 3. Virginia Avenue/21st Street | Signalized | B | C | B | C | B | B |
|  |  | [14.4] | [20.1] | [14.5] | [20.2] | [17.1] | [19.7] |
|  |  | (0.30) | (0.34) | (0.31) | (0.36) | (0.42) | (0.44) |
| 4. Virginia Avenue/20th Street | Signalized | B | B | B | B | B | B |
|  |  | [12.4] | [14.3] | [12.8] | [14.5] | [12.7] | [15.4] |
|  |  | (0.39) | (0.34) | (0.40) | (0.35) | (0.45) | (0.36) |
| 5. E Street (EB)/20th Street | Signalized | D | B | D | B | D | B |
|  |  | [35.7] | [15.7] | [41.4] | [15.7] | [41.0] | [16.2] |
|  |  | (0.86) | (0.42) | (0.89) | (0.42) | (0.89) | (0.43) |
| 6. E Street (WB)/20th Street | Signalized | B | C | B | D | B | D |
|  |  | [17.8] | [34.7] | [19.0] | [38.8] | [18.9] | [38.6] |
|  |  | (0.65) | (0.85) | (0.69) | (0.87) | (0.69) | (0.87) |
| 7. E Street (WB)/21st Street | Signalized |  |  |  |  |  |  |
|  |  | $\begin{aligned} & {[22.9]} \\ & (0.15) \end{aligned}$ | $\begin{aligned} & {[17.9]} \\ & (0.35) \end{aligned}$ | $\begin{aligned} & {[22.8]} \\ & (0.16) \end{aligned}$ | [18.2] $(0.36)$ | [22.5] $(0.17)$ | $\begin{aligned} & {[18.0]} \\ & (0.37) \end{aligned}$ |
| 8. E Street Epwy (EB) Off-Ramp/D Street | Unsignalized | * | * | * | * | * | * |
|  |  | * | * | * | * | * | * |

Notes:
(1) Intersection analyses based on Highway Capacity Manual.
(2) Numbers in brackets represent average delays in seconds per vehicle.
(3) Numbers in parentheses reflect overall volume-to-capacity ratios.
(4) "*" Conflict is limited to only pedestrians and Synchro does not provide a result.
Harry S Truman Building


## Section 4: <br> ANALYSIS OF SECURITY IMPROVEMENTS

## Overview

This section evaluates the impact on vehicular mobility of the proposed security improvement plan for the HST Building. Future traffic volumes are forecasted based on existing traffic counts, pipeline development traffic, background traffic growth, and the effect of the improvement plan on existing traffic patterns. Changes to existing intersection levels of service, delays, and queues are evaluated with and without the improvement.

## Pipeline Developments

This study took into explicit account the traffic that will be generated by the following planned developments (i.e., pipeline projects):
I. 2425 L Street, N.W.
2. Allstate Hotel Partnership
3. Columbia House Apartments I and II
4. Square 54: Mixed Use Town Center
5. Square 80: School Without Walls
6. American Pharmacists Association
7. United States Institute of Pease

The total pipeline trip assignments under future base and future design conditions are shown in Appendix E.

## Background Traffic Growth

A background traffic growth rate was used to account for near-term future developments in the District of Columbia and general background traffic growth. A one (1) percent annual growth rate was applied for two (2) years, from 2006 to 2008.

Regional growth volumes under existing and future base conditions are shown in Appendix F.

## Proposed Security Improvements

The following specific security plan improvements will be considered in this study:

- Security pavilions will be located at each of the five building entrances in order to remove the visitor security screening process from the building.
- Drop-off and/or parking lanes will be replaced with additional sidewalk and protective fence along $21^{\text {st }}$ and $23^{\text {rd }}$ Streets and Virginia Avenue to increase the building's perimeter.
- At $21^{\text {st }}$ Street, the existing truck inspection area will be redesigned.
- Recessed security barriers will be located near the intersections of $2{ }^{\text {st }}$ Street with both C Street and Virginia Avenue.
- The ramp from the E Street Expressway on the building's north side will be reconfigured. A fifth leg will be added to the Virginia Avenue/E Street intersection. Traffic on D Street will be limited to DOS traffic.
- C Street will be redesigned to restrict traffic and will include a landscape median.
- Retractable bollards will be placed at the C Street/22 ${ }^{\text {nd }}$ Street intersection.
- New guard booths will be installed at $D$ and $23^{\text {rd }}$ Streets, D Street and Virginia Avenue,


## Levels of Service

the Truck Inspection area on $21^{\text {st }}$ Street, $C$ and $21^{\text {st }}$ Streets and C and $23^{\text {rd }}$ Streets.

- Significant landscaping and street furniture will be introduced to enhance the pedestrian friendly character of the site.

With the exception of the E Street off-ramp reconfiguration and removal of a single travel lane on the south side of Virginia Avenue from E Street to $20^{\text {th }}$ Street, all of the measures that will directly affect street capacity have been implemented with temporary Jersey barriers, as shown on Figure I-2. The permanent measures are shown on Figure 1-3.

## Affects of Security Improvements

Overview. Closing the E Street Expressway offramp connection to Virginia Avenue/D Street and relocating the ramp away from the HST building with a new connection to the Virginia Avenue/E Street intersection would affect existing traffic patterns as presented below.

## E Street Expressway Off-Ramp to D Street/

Virginia Avenue. Figure 4-I shows the adjustments of existing traffic, assuming the ramp traffic would be redistributed to a new connection to the Virginia Avenue/E Street intersection. The resulting redistribution of existing traffic is shown on Figure 42.

This reconfiguration would move 350 to 960 peak hour vehicles away from the north side of the HST Building. It would have the greatest impact on the Virginia Avenue/E Street intersection.

## Total Future Traffic Forecasts

Total future traffic forecasts without and with the proposed design alternatives are presented on Figures 4-3 and 4-4.

Overview. Future intersection levels of service were calculated at the off-site intersections, without and with the proposed E Street Expressway off-ramp and E Street/Virginia Avenue intersection reconfiguration, based on: the traffic forecasts shown on Figures 4-3 and 4-4, respectively; existing traffic signal timings; and the Synchro capacity analysis technique. The results are presented in Appendices G and H , respectively, and summarized in Table 3-I.

The stop controlled movement at the D Street/Virginia Avenue intersection would begin to operate at capacity at LOS " $F$ " during the AM peak hour under the future base scenario described above. Under the future design scenario, the stop controlled movement would improve to an acceptable level of service "A".

All other intersections would theoretically continue to operate at acceptable LOS "D" or better during both the AM and PM peak hours, as shown in Table 3-I.

## Delays

Creating a fifth leg at the Virginia Avenue/E Street intersection to accommodate E Street Expressway off-ramp traffic bound northwest on Virginia Avenue would introduce a third signal phase and change the overall intersection level of service (LOS) from LOS "A" to LOS "C" during the AM peak hour and from LOS "B" to LOS "C" during the PM peak hour.

## Queues

The queues noted today at the E Street (Eastbound) $/ 20^{\text {th }}$ Street intersection would become slightly worse in the future due to the additional traffic that will be generated by other approved projects and ambient traffic growth, as shown in Table 3-2.

Queues of less than 100 feet (or four car lengths)
are projected on the proposed new fifth leg at the Virginia Avenue/E Street intersection. Queues on this new leg would not back up onto the E Street Expressway. Queues on westbound E Street, and in both directions on Virginia Avenue, would increase slightly.

The proposed ramp re-configuration would have no significant impact on queues elsewhere on the local street network.

Removal of a single travel lane on the south side of Virginia Avenue from E Street to $20^{\text {th }}$ Street would increase the queue during the AM peak hour at the Virginia Avenue/21 ${ }^{\text {st }}$ Street intersection on the Virginia Avenue southbound approach. Optimizing the signal timings by allocating a minimum of five (5) seconds of green time from $21^{\text {st }}$ Street to the Virginia Avenue mainline would significantly improve the vehicle queue.

Future lane use and traffic control is shown on Figure 4-5.





Total Future Traffic Forecasts: With Proposed Ramp Configuration


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## Section 5: CONCLUSIONS

The conclusions of this study are as follows:
I. The key study intersections within the vicinity of the proposed roadway realignment currently operate at acceptable levels of service during the AM and PM peak periods. The stop controlled movement at the D Street/Virginia Avenue intersection currently operates at or near capacity.
2. Realigning the eastbound E Street Expressway off-ramp to Virginia Avenue would make the HST Building more secure by removing 350 to 960 peak hour vehicles from the north side of the building.
3. Industry standards indicate a LOS " D " or better provide an acceptable level of service.
4. Creating a fifth leg at the Virginia Avenue/E Street intersection to accommodate E Street Expressway off-ramp traffic bound northwest on Virginia Avenue would introduce a third signal phase and change the overall intersection level of service (LOS) from LOS " $A$ " to LOS " $C$ " during the AM peak hour and from LOS " $B$ " to LOS "C" during the PM peak hour.
5. The key study intersections within the influence area of the proposed realignment and removal of a single travel lane on the south side of Virginia Avenue (between E Street and $20^{\text {th }}$ Street) would continue to operate at consistent levels of service as without the security improvements.
6. Optimizing the signal timings at the Virginia Avenue $/ 2{ }^{\text {st }}$ Street intersection would reduce potential southbound queues on Virginia Avenue during the AM peak hour.
7. Design provisions should incorporate future bicycle lanes along Virginia Avenue per the District's "Proposed Bicycle Facilities Map."

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Appendix A: Existing Vehicle Counts

# Wells \& Associates, LLC <br> <br> McLean, Virginia 

 <br> <br> McLean, Virginia}

Existing Traffic Count

| PROJECT: <br> W \& A JOB NO.: <br> INTERSECTION: <br> LOCATION: |  | DOS - EIS Plan Update 3098 <br> Virginia Ave.\& E Street WB Washington,DC |  |  |  | DATE: $9 / 12 / 2006$ <br> DAY: Tuesday <br> WEATHER: Clear <br> COUNTED BY: Luz \& Mario <br> INPUTED BY: agan |  |  |  |  |  |  | SOUTHBOUND ROAD: NORTHBOUND ROAD: WESTBOUND ROAD: EASTBOUND ROAD: |  |  |  | Virginia Avenue <br> Virginia Avenue E Street Westbound E Street Westbound |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Period | Turning Movements |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Total | PHF | Time Period |
|  | Southbound Virginia Avenue |  |  |  | Westbound <br> E Street Westbound |  |  |  | Northbound Virginia Avenue |  |  |  | Eastbound E Street Westbound |  |  |  | North \& South | $\begin{gathered} \text { East } \\ \text { \& } \\ \text { West } \end{gathered}$ |  |  |  |
|  | $\begin{array}{\|c\|} \hline 1 \\ \text { Right } \end{array}$ | $\begin{gathered} 2 \\ \text { Thru } \end{gathered}$ | $\begin{gathered} 3 \\ \text { Left } \end{gathered}$ | Total | $\begin{gathered} 4 \\ \text { Right } \end{gathered}$ | $\begin{gathered} \hline 5 \\ \text { Thru } \end{gathered}$ | $\begin{gathered} 6 \\ \text { Left } \end{gathered}$ | Total | $\begin{gathered} \hline 7 \\ \text { Right } \end{gathered}$ | $\begin{gathered} \hline 8 \\ \text { Thru } \end{gathered}$ | $\begin{gathered} 9 \\ \text { Left } \end{gathered}$ | Total | $\begin{gathered} 10 \\ \text { Right } \end{gathered}$ | $\begin{gathered} 11 \\ \text { Thru } \end{gathered}$ | $\begin{gathered} \hline 12 \\ \text { Left } \end{gathered}$ | Total |  |  |  |  |  |
| AM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7:00-7:15 | 5 | 50 | 0 | 55 | 21 | 17 | 1 | 39 | 0 | 87 | 8 | 95 | 0 | 0 | 0 | 0 | 150 | 39 | 189 |  | 7:00-7:15 |
| 7:15-7:30 | 3 | 76 | 0 | 79 | 22 | 7 | 0 | 29 | 0 | 76 | 16 | 92 | 0 | 0 | 0 | 0 | 171 | 29 | 200 |  | 7:15-7:30 |
| 7:30-7:45 | 2 | 97 | 0 | 99 | 31 | 14 | 1 | 46 | 0 | 120 | 13 | 133 | 0 | 0 | 0 | 0 | 232 | 46 | 278 |  | 7:30-7:45 |
| 7:45-8:00 | 6 | 107 | 0 | 113 | 34 | 14 | 1 | 49 | 0 | 135 | 28 | 163 | 0 | 0 | 0 | 0 | 276 | 49 | 325 |  | 7:45-8:00 |
| 8:00-8:15 | 3 | 134 | 0 | 137 | 37 | 17 | 2 | 56 | 0 | 142 | 18 | 160 | 0 | 0 | 0 | 0 | 297 | 56 | 353 |  | 8:00-8:15 |
| 8:15-8:30 | 3 | 164 | 0 | 167 | 36 | 17 | 0 | 53 | 0 | 133 | 7 | 140 | 0 | 0 | 0 | 0 | 307 | 53 | 360 |  | 8:15-8:30 |
| 8:30-8:45 | 2 | 142 | 0 | 144 | 42 | 21 | 2 | 65 | 0 | 151 | 18 | 169 | 0 | 0 | 0 | 0 | 313 | 65 | 378 |  | 8:30-8:45 |
| 8:45-9:00 | 5 | 159 | 0 | 164 | 43 | 21 | 3 | 67 | 0 | 149 | 7 | 156 | 0 | 0 | 0 | 0 | 320 | 67 | 387 |  | 8:45-9:00 |
| 9:00-9:15 | 4 | 140 | 0 | 144 | 33 | 19 | 2 | 54 | 0 | 150 | 13 | 163 | 0 | 0 | 0 | 0 | 307 | 54 | 361 |  | 9:00-9:15 |
| 9:15-9:30 | 5 | 132 | 0 | 137 | 65 | 16 | 0 | 81 | 0 | 127 | 11 | 138 | 0 | 0 | 0 | 0 | 275 | 81 | 356 |  | 9:15-9:30 |
| 9:30-9:45 | 8 | 87 | 0 | 95 | 45 | 16 | 2 | 63 | 0 | 83 | 4 | 87 | 0 | 0 | 0 | 0 | 182 | 63 | 245 |  | 9:30-9:45 |
| 9:45-10:00 | 5 | 92 | 0 | 97 | 37 | 26 | 1 | 64 | 0 | 73 | 4 | 77 | 0 | 0 | 0 | 0 | 174 | 64 | 238 |  | 9:45-10:00 |
| 3 Hour |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Totals | 51 | 1,380 | 0 | 1,431 | 446 | 205 | 15 | 666 | 0 | 1,426 | 147 | 1,573 | 0 | 0 | 0 | 0 | 3,004 | 666 | 3,670 |  |  |
| 1 Hour Totals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7:00-8:00 | 16 | 330 | 0 | 346 | 108 | 52 | 3 | 163 | 0 | 418 | 65 | 483 | 0 | 0 | 0 | 0 | 829 | 163 | 992 | 0.76 | 7:00-8:00 |
| 7:15-8:15 | 14 | 414 | 0 | 428 | 124 | 52 | 4 | 180 | 0 | 473 | 75 | 548 | 0 | 0 | 0 | 0 | 976 | 180 | 1,156 | 0.82 | 7:15-8:15 |
| 7:30-8:30 | 14 | 502 | 0 | 516 | 138 | 62 | 4 | 204 | 0 | 530 | 66 | 596 | 0 | 0 | 0 | 0 | 1,112 | 204 | 1,316 | 0.91 | 7:30-8:30 |
| 7:45-8:45 | 14 | 547 | 0 | 561 | 149 | 69 | 5 | 223 | 0 | 561 | 71 | 632 | 0 | 0 | 0 | 0 | 1,193 | 223 | 1,416 | 0.94 | 7:45-8:45 |
| 8:00-9:00 | 13 | 599 | 0 | 612 | 158 | 76 | 7 | 241 | 0 | 575 | 50 | 625 | 0 | 0 | 0 | 0 | 1,237 | 241 | 1,478 | 0.95 | 8:00-9:00 |
| 8:15-9:15 | 14 | 605 | 0 | 619 | 154 | 78 | 7 | 239 | 0 | 583 | 45 | 628 | 0 | 0 | 0 | 0 | 1,247 | 239 | 1,486 | 0.96 | 8:15-9:15 |
| 8:30-9:30 | 16 | 573 | 0 | 589 | 183 | 77 | 7 | 267 | 0 | 577 | 49 | 626 | 0 | 0 | 0 | 0 | 1,215 | 267 | 1,482 | 0.96 | 8:30-9:30 |
| 8:45-9:45 | 22 | 518 | 0 | 540 | 186 | 72 | 7 | 265 | - | 509 | 35 | 544 | 0 | 0 | 0 | 0 | 1,084 | 265 | 1,349 | 0.87 | 8:45-9:45 |
| 9:00-10:00 | 22 | 451 | 0 | 473 | 180 | 77 | 5 | 262 | 0 | 433 | 32 | 465 | 0 | 0 | 0 | 0 | 938 | 262 | 1,200 | 0.83 | 9:00-10:00 |
| AM Peak 8:15-9:15 | 14 | 605 | 0 | 619 | 154 | 78 | 7 | 239 | 0 | 583 | 45 | 628 | 0 | 0 | 0 | 0 | 1,247 | 239 | 1,486 | 0.96 | AM Peak 8:15-9:15 |
| PM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4:00-4:15 | 7 | 98 | 0 | 105 | 52 | 22 | 2 | 76 | 0 | 76 | 17 | 93 | 0 | 0 | 0 | 0 | 198 | 76 | 274 |  | 4:00-4:15 |
| 4:15-4:30 | 3 | 90 | 0 | 93 | 58 | 26 | 6 | 90 | 0 | 71 | 7 | 78 | 0 | 0 | 0 | 0 | 171 | 90 | 261 |  | 4:15-4:30 |
| 4:30-4:45 | 2 | 110 | 0 | 112 | 58 | 33 | 3 | 94 | 0 | 99 | 9 | 108 | 0 | 0 | 0 | 0 | 220 | 94 | 314 |  | 4:30-4:45 |
| 4:45-5:00 | 4 | 96 | 0 | 100 | 50 | 33 | 5 | 88 | 0 | 90 | 6 | 96 | 0 | 0 | 0 | 0 | 196 | 88 | 284 |  | 4:45-5:00 |
| 5:00-5:15 | 6 | 128 | 0 | 134 | 68 | 37 | 4 | 109 | 0 | 105 | 13 | 118 | 0 | 0 | 0 | 0 | 252 | 109 | 361 |  | 5:00-5:15 |
| 5:15-5:30 | 2 | 107 | 0 | 109 | 55 | 36 | 1 | 92 | 0 | 108 | 4 | 112 | 0 | 0 | 0 | 0 | 221 | 92 | 313 |  | 5:15-5:30 |
| 5:30-5:45 | 7 | 108 | 0 | 115 | 82 | 33 | 0 | 115 | 0 | 102 | 14 | 116 | 0 | 0 | 0 | 0 | 231 | 115 | 346 |  | 5:30-5:45 |
| 5:45-6:00 | 2 | 104 | 0 | 106 | 63 | 30 | 1 | 94 | 0 | 126 | 8 | 134 | 0 | 0 | 0 | 0 | 240 | 94 | 334 |  | 5:45-6:00 |
| 6:00-6:15 | 4 | 97 | 0 | 101 | 69 | 37 | 3 | 109 | 0 | 100 | 8 | 108 | 0 | 0 | 0 | 0 | 209 | 109 | 318 |  | 6:00-6:15 |
| 6:15-6:30 | 2 | 89 | 0 | 91 | 86 | 27 | 1 | 114 | 0 | 122 | 6 | 128 | 0 | 0 | 0 | 0 | 219 | 114 | 333 |  | 6:15-6:30 |
| 6:30-6:45 | 3 | 75 | 0 | 78 | 56 | 24 | 0 | 80 | 0 | 115 | 4 | 119 | 0 | 0 | 0 | 0 | 197 | 80 | 277 |  | 6:30-6:45 |
| 6:45-7:00 | 2 | 64 | 0 | 66 | 34 | 23 | 4 | 61 | - | 98 | 9 | 107 | 0 | 0 | 0 | 0 | 173 | 61 | 234 |  | 6:45-7:00 |
| 3 Hour |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Totals | 44 | 1,166 | 0 | 1,210 | 731 | 361 | 30 | 1,122 | 0 | 1,212 | 105 | 1,317 | 0 | 0 | 0 | 0 | 2,527 | 1,122 | 3,649 |  |  |
| 1 Hour Totals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4:00-5:00 | 16 | 394 | 0 | 410 | 218 | 114 | 16 | 348 | 0 | 336 | 39 | 375 | 0 | 0 | 0 | 0 | 785 | 348 | 1,133 | 0.90 | 4:00-5:00 |
| 4:15-5:15 | 15 | 424 | 0 | 439 | 234 | 129 | 18 | 381 | 0 | 365 | 35 | 400 | 0 | 0 | 0 | 0 | 839 | 381 | 1,220 | 0.84 | 4:15-5:15 |
| 4:30-5:30 | 14 | 441 | 0 | 455 | 231 | 139 | 13 | 383 | 0 | 402 | 32 | 434 | 0 | 0 | 0 | 0 | 889 | 383 | 1,272 | 0.88 | 4:30-5:30 |
| 4:45-5:45 | 19 | 439 | 0 | 458 | 255 | 139 | 10 | 404 | 0 | 405 | 37 | 442 | 0 | 0 | 0 | 0 | 900 | 404 | 1,304 | 0.90 | 4:45-5:45 |
| 5:00-6:00 | 17 | 447 | 0 | 464 | 268 | 136 | 6 | 410 | 0 | 441 | 39 | 480 | 0 | 0 | 0 | 0 | 944 | 410 | 1,354 | 0.94 | 5:00-6:00 |
| 5:15-6:15 | 15 | 416 | 0 | 431 | 269 | 136 | 5 | 410 | 0 | 436 | 34 | 470 | 0 | 0 | 0 | 0 | 901 | 410 | 1,311 | 0.95 | 5:15-6:15 |
| 5:30-6:30 | 15 | 398 | 0 | 413 | 300 | 127 | 5 | 432 | 0 | 450 | 36 | 486 | 0 | 0 | 0 | 0 | 899 | 432 | 1,331 | 0.96 | 5:30-6:30 |
| 5:45-6:45 | 11 | 365 | 0 | 376 | 274 | 118 | 5 | 397 | 0 | 463 | 26 | 489 | 0 | 0 | 0 | 0 | 865 | 397 | 1,262 | 0.94 | 5:45-6:45 |
| 6:00-7:00 | 11 | 325 | 0 | 336 | 245 | 111 | 8 | 364 | 0 | 435 | 27 | 462 | 0 | 0 | 0 | 0 | 798 | 364 | 1,162 | 0.87 | 6:00-7:00 |
| PM Peak 5:00-6:00 | 17 | 447 | 0 | 464 | 268 | 136 | 6 | 410 | 0 | 441 | 39 | 480 | 0 | 0 | 0 | 0 | 944 | 410 | 1,354 | 0.94 | PM Peak 5:00-6:00 |

# Wells \& Associates, LLC 

## McLean, Virginia

Existing Traffic Count


# Wells \& Associates, LLC 

## McLean, Virginia

Existing Traffic Count

| PROJECT: <br> W \& A JOB NO.: INTERSECTION: LOCATION: |  | DOS - EIS Plan Update 3098 <br> Virginia Ave.\& 21st St. <br> Washington,DC |  |  | DATE: 9/12/2006 <br> DAY: Tuesday <br> WEATHER: Clear <br> COUNTED BY: Jesi \& Jesenia  <br> INPUTED BY: agan |  |  |  |  |  |  |  | SOUTHBOUND ROAD: NORTHBOUND ROAD: WESTBOUND ROAD: EASTBOUND ROAD: |  |  |  | 21st Street NW <br> 21st Street NW <br> Virginia Avenue NW <br> Virginia Avenue NW |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Period | Turning Movements |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Total | PHF | Time Period |
|  | $\begin{gathered} \text { Southbound } \\ \text { 21st Street NW } \end{gathered}$ |  |  |  | Westbound Virginia Avenue NW |  |  |  | Northbound 21st Street NW |  |  |  | EastboundVirginia Avenue NW |  |  |  | North \& South | $\begin{array}{\|c} \text { East } \\ \& \\ \text { West } \end{array}$ |  |  |  |
|  | $\begin{array}{c\|} \hline 1 \\ \text { Right } \end{array}$ | $\begin{gathered} 2 \\ \text { Thru } \end{gathered}$ | $\begin{gathered} 3 \\ \text { Left } \end{gathered}$ | Total | $\begin{array}{c\|} \hline 4 \\ \text { Right } \end{array}$ | $\begin{gathered} 5 \\ \text { Thru } \end{gathered}$ | $\begin{gathered} 6 \\ \text { Left } \end{gathered}$ | Total | $\begin{array}{c\|} \hline 7 \\ \text { Right } \end{array}$ | $\begin{gathered} \hline 8 \\ \text { Thru } \end{gathered}$ | $\begin{gathered} 9 \\ \text { Left } \end{gathered}$ | Total | $\begin{gathered} 10 \\ \text { Right } \end{gathered}$ | $\begin{gathered} 11 \\ \text { Thru } \end{gathered}$ | $\begin{gathered} \hline 12 \\ \text { Left } \end{gathered}$ | Total |  |  |  |  |  |
| AM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7:00-7:15 | 0 | 21 | 15 | 36 | 0 | 56 | 16 | 72 | 0 | 0 | 0 | 0 | 35 | 59 | 0 | 94 | 36 | 166 | 202 |  | 7:00-7:15 |
| 7:15-7:30 | 0 | 29 | 19 | 48 | 0 | 64 | 19 | 83 | 0 | 0 | 0 | 0 | 49 | 88 | 0 | 137 | 48 | 220 | 268 |  | 7:15-7:30 |
| 7:30-7:45 | 0 | 24 | 12 | 36 | 0 | 79 | 19 | 98 | 0 | 0 | 0 | 0 | 52 | 119 | 0 | 171 | 36 | 269 | 305 |  | 7:30-7:45 |
| 7:45-8:00 | 1 | 33 | 17 | 51 | 0 | 85 | 22 | 107 | 0 | 0 | 0 | 0 | 62 | 105 | 0 | 167 | 51 | 274 | 325 |  | 7:45-8:00 |
| 8:00-8:15 | 0 | 44 | 26 | 70 | 0 | 73 | 16 | 89 | 0 | 0 | 0 | 0 | 53 | 168 | 0 | 221 | 70 | 310 | 380 |  | 8:00-8:15 |
| 8:15-8:30 | 2 | 29 | 22 | 53 | 0 | 82 | 21 | 103 | 0 | 0 | 0 | 0 | 55 | 193 | 0 | 248 | 53 | 351 | 404 |  | 8:15-8:30 |
| 8:30-8:45 | 0 | 27 | 19 | 46 | 0 | 86 | 19 | 105 | 0 | 0 | 0 | 0 | 35 | 186 | 0 | 221 | 46 | 326 | 372 |  | 8:30-8:45 |
| 8:45-9:00 | 1 | 35 | 28 | 64 | 0 | 82 | 14 | 96 | 0 | 0 | 0 | 0 | 45 | 213 | 0 | 258 | 64 | 354 | 418 |  | 8:45-9:00 |
| 9:00-9:15 | 1 | 40 | 19 | 60 | 0 | 86 | 11 | 97 | 0 | 0 | 0 | 0 | 31 | 172 | 0 | 203 | 60 | 300 | 360 |  | 9:00-9:15 |
| 9:15-9:30 | 0 | 36 | 27 | 63 | 0 | 57 | 4 | 61 | 0 | 0 | 0 | 0 | 32 | 184 | 0 | 216 | 63 | 277 | 340 |  | 9:15-9:30 |
| 9:30-9:45 | 2 | 40 | 26 | 68 | 0 | 35 | 4 | 39 | 0 | 0 | 0 | 0 | 13 | 158 | 0 | 171 | 68 | 210 | 278 |  | 9:30-9:45 |
| 9:45-10:00 | 3 | 37 | 13 | 53 | 0 | 49 | 2 | 51 | , | , | 0 | 0 | 22 | 184 | , | 207 | 53 | 258 | 311 |  | 9:45-10:00 |
| Totals | 10 | 395 | 243 | 648 | 0 | 834 | 167 | 1,001 | 0 | 0 | 0 | 0 | 484 | 1,829 | 1 | 2,314 | 648 | 3,315 | 3,963 |  |  |
| 1 Hour Totals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7:00-8:00 | 1 | 107 | 63 | 171 | 0 | 284 | 76 | 360 | 0 | 0 | 0 | 0 | 198 | 371 | 0 | 569 | 171 | 929 | 1,100 | 0.85 | 7:00-8:00 |
| 7:15-8:15 | 1 | 130 | 74 | 205 | 0 | 301 | 76 | 377 | 0 | 0 | 0 | 0 | 216 | 480 | 0 | 696 | 205 | 1,073 | 1,278 | 0.84 | 7:15-8:15 |
| 7:30-8:30 | 3 | 130 | 77 | 210 | 0 | 319 | 78 | 397 | 0 | 0 | 0 | 0 | 222 | 585 | 0 | 807 | 210 | 1,204 | 1,414 | 0.88 | 7:30-8:30 |
| 7:45-8:45 | 3 | 133 | 84 | 220 | 0 | 326 | 78 | 404 | 0 | 0 | 0 | 0 | 205 | 652 | 0 | 857 | 220 | 1,261 | 1,481 | 0.92 | 7:45-8:45 |
| 8:00-9:00 | 3 | 135 | 95 | 233 | 0 | 323 | 70 | 393 | - | 0 | 0 | 0 | 188 | 760 | 0 | 948 | 233 | 1,341 | 1,574 | 0.94 | 8:00-9:00 |
| 8:15-9:15 | 4 | 131 | 88 | 223 | 0 | 336 | 65 | 401 | 0 | 0 | - | 0 | 166 | 764 | 0 | 930 | 223 | 1,331 | 1,554 | 0.93 | 8:15-9:15 |
| 8:30-9:30 | 2 | 138 | 93 | 233 | 0 | 311 | 48 | 359 | , | 0 | 0 | 0 | 143 | 755 | 0 | 898 | 233 | 1,257 | 1,490 | 0.89 | 8:30-9:30 |
| 8:45-9:45 | 4 | 151 | 100 | 255 | 0 | 260 | 33 | 293 | - | 0 | , | 0 | 121 | 727 | 0 | 848 | 255 | 1,141 | 1,396 | 0.83 | 8:45-9:45 |
| 9:00-10:00 | 6 | 153 | 85 | 244 | 0 | 227 | 21 | 248 | 0 | 0 | 0 | 0 | 98 | 698 | 1 | 797 | 244 | 1,045 | 1,289 | 0.90 | 9:00-10:00 |
| AM Peak | 3 | 135 | 95 | 233 | 0 | 323 | 70 | 393 | 0 | 0 | 0 | 0 | 188 | 760 | 0 | 948 | 233 | 1,341 | 1574 | 0.94 | AM Peak 8.00-9:00 |
| PM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4:00-4:15 | 1 | 85 | 30 | 116 | 0 | 75 | 8 | 83 | 0 | 0 | 0 | 0 | 16 | 106 | 0 | 122 | 116 | 205 | 321 |  | 4:00-4:15 |
| 4:15-4:30 | 3 | 88 | 44 | 135 | 0 | 59 | 3 | 62 | 0 | 0 | 0 | 0 | 14 | 131 | 0 | 145 | 135 | 207 | 342 |  | 4:15-4:30 |
| 4:30-4:45 | 1 | 86 | 46 | 133 | 0 | 69 | 5 | 74 | 0 | 0 | 0 | 0 | 4 | 163 | 0 | 167 | 133 | 241 | 374 |  | 4:30-4:45 |
| 4:45-5:00 | 0 | 90 | 33 | 123 | 0 | 82 | 6 | 88 | 0 | 0 | 0 | 0 | 7 | 155 | 0 | 162 | 123 | 250 | 373 |  | 4:45-5:00 |
| 5:00-5:15 | 2 | 116 | 51 | 169 | 0 | 86 | 4 | 90 | 0 | 0 | 0 | 0 | 15 | 175 | 0 | 190 | 169 | 280 | 449 |  | 5:00-5:15 |
| 5:15-5:30 | 1 | 118 | 80 | 199 | 0 | 91 | 4 | 95 | 0 | 0 | 0 | 0 | 12 | 150 | 0 | 162 | 199 | 257 | 456 |  | 5:15-5:30 |
| 5:30-5:45 | 2 | 101 | 47 | 150 | 0 | 101 | 3 | 104 | 0 | 0 | 0 | 0 | 8 | 142 | 0 | 150 | 150 | 254 | 404 |  | 5:30-5:45 |
| 5:45-6:00 | 5 | 127 | 43 | 175 | 0 | 109 | 2 | 111 | 0 | 0 | 0 | 0 | 14 | 150 | 0 | 164 | 175 | 275 | 450 |  | 5:45-6:00 |
| 6:00-6:15 | 1 | 113 | 51 | 165 | 0 | 94 | 4 | 98 | 0 | 0 | 0 | 0 | 7 | 123 | 0 | 130 | 165 | 228 | 393 |  | 6:00-6:15 |
| 6:15-6:30 | 1 | 111 | 28 | 140 | 0 | 116 | 0 | 116 | 0 | 0 | 0 | 0 | 16 | 111 | 0 | 127 | 140 | 243 | 383 |  | 6:15-6:30 |
| 6:30-6:45 | 0 | 86 | 21 | 107 | 0 | 102 | 1 | 103 | 0 | 0 | 0 | 0 | 3 | 71 | 0 | 74 | 107 | 177 | 284 |  | 6:30-6:45 |
| 6:45-7:00 | 5 | 84 | 16 | 105 | 0 | 90 | 1 | 91 | 0 | 0 | 0 | 0 | 13 | 71 | 0 | 84 | 105 | 175 | 280 |  | 6:45-7:00 |
| 3 Hour |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Totals | 22 | 1,205 | 490 | 1,717 | 0 | 1,074 | 41 | 1,115 | 0 | 0 | 0 | 0 | 129 | 1,548 | 0 | 1,677 | 1,717 | 2,792 | 4,509 |  |  |
| 1 Hour Totals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4:00-5:00 | 5 | 349 | 153 | 507 | 0 | 285 | 22 | 307 | 0 | 0 | 0 | 0 | 41 | 555 | 0 | 596 | 507 | 903 | 1,410 | 0.94 | 4:00-5:00 |
| 4:15-5:15 | 6 | 380 | 174 | 560 | 0 | 296 | 18 | 314 | 0 | 0 | 0 | 0 | 40 | 624 | 0 | 664 | 560 | 978 | 1,538 | 0.86 | 4:15-5:15 |
| 4:30-5:30 | 4 | 410 | 210 | 624 | 0 | 328 | 19 | 347 | 0 | 0 | 0 | 0 | 38 | 643 | 0 | 681 | 624 | 1,028 | 1,652 | 0.91 | 4:30-5:30 |
| 4:45-5:45 | 5 | 425 | 211 | 641 | 0 | 360 | 17 | 377 | 0 | 0 | 0 | 0 | 42 | 622 | 0 | 664 | 641 | 1,041 | 1,682 | 0.92 | 4:45-5:45 |
| 5:00-6:00 | 10 | 462 | 221 | 693 | 0 | 387 | 13 | 400 | 0 | 0 | 0 | 0 | 49 | 617 | 0 | 666 | 693 | 1,066 | 1,759 | 0.96 | 5:00-6:00 |
| 5:15-6:15 | 9 | 459 | 221 | 689 | 0 | 395 | 13 | 408 | 0 | 0 | 0 | 0 | 41 | 565 | 0 | 606 | 689 | 1,014 | 1,703 | 0.93 | 5:15-6:15 |
| 5:30-6:30 | 9 | 452 | 169 | 630 | 0 | 420 | 9 | 429 | 0 | 0 | 0 | 0 | 45 | 526 | 0 | 571 | 630 | 1,000 | 1,630 | 0.91 | 5:30-6:30 |
| 5:45-6:45 | 7 | 437 | 143 | 587 | 0 | 421 | 7 | 428 | 0 | 0 | 0 | 0 | 40 | 455 | 0 | 495 | 587 | 923 | 1,510 | 0.84 | 5:45-6:45 |
| 6:00-7:00 | 7 | 394 | 116 | 517 | 0 | 402 | 6 | 408 | 0 | 0 | 0 | 0 | 39 | 376 | 0 | 415 | 517 | 823 | 1,340 | 0.85 | 6:00-7:00 |
| PM Peak 5:00-6:00 | 10 | 462 | 221 | 693 | 0 | 387 | 13 | 400 | 0 | 0 | 0 | 0 | 49 | 617 | 0 | 666 | 693 | 1,066 | 1,759 | 0.96 | PM Peak 5:00-6:00 |

# Wells \& Associates, LLC 

## McLean, Virginia

Existing Traffic Count


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# Wells \& Associates, LLC 

## McLean, Virginia

Existing Traffic Count


Appendix B:
Existing Pedestrian Counts


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| Project Name： | DOS－EIS Plan Update |
| :--- | :--- |
| Project Number： | 3098 |
| Location： | Washington，DC |
| Intersection： | Virginia Ave．\＆D Street |
| Weather： | Clear |
| Date： | 9／12／2006 |
| Surveyor： | Daryl \＆Alicia |















| Project Name: | DOS - EIS Plan Update |
| :--- | :--- |
| Project Number: 3098 |  |
| Location: | Washington, DC |
| Intersection: | Virginia Ave.\& 20th St |
| Weather: | Clear |
| Date: | 9/12/2006 |
| Surveyor: | Jannet \& Homer |








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| Project Name： | DOS－EIS Plan Update |
| :--- | :--- |
| Project Number： | 3098 |
| Location： | Washington，DC |
| Intersection： | 21st St．\＆E Street WB |
| Weather： | Clear |
| Date： | 9／12／2006 |
| Surveyor： | Hugo \＆Lucia |





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| Project Name： | DOS－EIS Plan Update |
| :--- | :--- |
| Project Number： | 3098 |
| Location： | Washington，DC |
| Intersection： | D Street \＆DOS Driveway |
| Weather： | Clear |
| Date： | 9／12／2006 |
| Surveyor： | Milton |

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Hourly Pedestrian Count ̈ㅡㅇ


Appendix C:
Existing Levels of Service

|  | \％ | $\rightarrow$ | T | 5 | $4$ |  |  | － | 4 | 4 | $k$ | ＋ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
| Lane Configurations |  |  |  |  | ＊$\uparrow$ |  |  | 坐乐 | 「 |  | 介个中4 |  |
| Ideal Flow（vphpl） | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width | 10 | 10 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 12 | 12 |
| Total Lost time（s） |  |  |  |  | 4.0 |  |  | 4.0 | 4.0 |  | 4.0 |  |
| Lane Util．Factor |  |  |  |  | 0.95 |  |  | 0.91 | 1.00 |  | 0.91 |  |
| Frpb，ped／bikes |  |  |  |  | 0.87 |  |  | 1.00 | 0.85 |  | 1.00 |  |
| Flpb，ped／bikes |  |  |  |  | 1.00 |  |  | 1.00 | 1.00 |  | 1.00 |  |
| Frt |  |  |  |  | 0.90 |  |  | 1.00 | 0.85 |  | 1.00 |  |
| Flt Protected |  |  |  |  | 1.00 |  |  | 1.00 | 1.00 |  | 1.00 |  |
| Satd．Flow（prot） |  |  |  |  | 2505 |  |  | 4940 | 1305 |  | 4904 |  |
| Flt Permitted |  |  |  |  | 1.00 |  |  | 1.00 | 1.00 |  | 0.85 |  |
| Satd．Flow（perm） |  |  |  |  | 2505 |  |  | 4940 | 1305 |  | 4165 |  |
| Volume（vph） | 0 | 0 | 0 | 7 | 78 | 154 | 0 | 605 | 14 | 45 | 583 | 0 |
| Peak－hour factor，PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj．Flow（vph） | 0 | 0 | 0 | 8 | 87 | 171 | 0 | 672 | 16 | 50 | 648 | 0 |
| RTOR Reduction（vph） | 0 | 0 | 0 | 0 | 113 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Group Flow（vph） | 0 | 0 | 0 | 0 | 153 | 0 | 0 | 672 | 16 | 0 | 698 | 0 |
| Confl．Peds．（\＃／hr） | 106 |  | 34 | 34 |  | 106 | 30 |  | 76 | 76 |  | 30 |
| Turn Type |  |  |  | Perm |  |  |  |  | Perm | Perm |  |  |
| Protected Phases |  |  |  |  | 8 |  |  | 6 |  |  | 2 |  |
| Permitted Phases |  |  |  | 8 |  |  |  |  | 6 | 2 |  |  |
| Actuated Green，G（s） |  |  |  |  | 33.0 |  |  | 57.0 | 57.0 |  | 57.0 |  |
| Effective Green，g（s） |  |  |  |  | 34.0 |  |  | 58.0 | 58.0 |  | 58.0 |  |
| Actuated g／C Ratio |  |  |  |  | 0.34 |  |  | 0.58 | 0.58 |  | 0.58 |  |
| Clearance Time（s） |  |  |  |  | 5.0 |  |  | 5.0 | 5.0 |  | 5.0 |  |
| Lane Grp Cap（vph） |  |  |  |  | 852 |  |  | 2865 | 757 |  | 2416 |  |
| v／s Ratio Prot |  |  |  |  |  |  |  | 0.14 |  |  |  |  |
| v／s Ratio Perm |  |  |  |  | 0.11 |  |  |  | 0.01 |  | c0．17 |  |
| v／c Ratio |  |  |  |  | 0.18 |  |  | 0.23 | 0.02 |  | 0.29 |  |
| Uniform Delay，d1 |  |  |  |  | 23.2 |  |  | 10.2 | 8.9 |  | 10.6 |  |
| Progression Factor |  |  |  |  | 0.43 |  |  | 1.00 | 1.00 |  | 0.39 |  |
| Incremental Delay，d2 |  |  |  |  | 0.5 |  |  | 0.2 | 0.1 |  | 0.3 |  |
| Delay（s） |  |  |  |  | 10.5 |  |  | 10.4 | 9.0 |  | 4.5 |  |
| Level of Service |  |  |  |  | B |  |  | B | A |  | A |  |
| Approach Delay（s） |  | 0.0 |  |  | 10.5 |  |  | 10.4 |  |  | 4.5 |  |
| Approach LOS |  | A |  |  | B |  |  | B |  |  | A |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | 7.9 |  | HCM Lev | el of S | rvice |  | A |  |  |  |
| HCM Volume to Capacity ratio |  |  | 0.30 |  |  |  |  |  |  |  |  |  |
| Actuated Cycle Length（s） |  |  | 100.0 |  | Sum of lost | st time |  |  | 8.0 |  |  |  |
| Intersection Capacity Utilization |  |  | 51．3\％ |  | CU Leve | I of Se | vice |  | A |  |  |  |
| Analysis Period（min） |  |  | 15 | － |  |  |  |  |  |  |  |  |

Analysis Period（min）
15
c Critical Lane Group



| 4 | $\pm$ | $\cdots$ | ＋ | k | 4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement SBL | SBR | SEL | SET | NWT | NWR |  |
| Lane Configurations |  | ＊ | ¢个4 | 种中 |  |  |
| Ideal Flow（vphpl） 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |  |
| Lane Width 10 | 10 | 12 | 12 | 12 | 12 |  |
| Total Lost time（s） |  | 4.0 | 4.0 | 4.0 |  |  |
| Lane Util．Factor |  | 0.86 | 0.86 | 0.91 |  |  |
| Frpb，ped／bikes |  | 1.00 | 1.00 | 0.98 |  |  |
| Flpb，ped／bikes |  | 1.00 | 1.00 | 1.00 |  |  |
| Frt |  | 1.00 | 1.00 | 0.93 |  |  |
| Flt Protected |  | 0.95 | 0.99 | 1.00 |  |  |
| Satd．Flow（prot） |  | 1478 | 4611 | 4504 |  |  |
| Flt Permitted |  | 0.95 | 0.65 | 1.00 |  |  |
| Satd．Flow（perm） |  | 1478 | 3041 | 4504 |  |  |
| Volume（vph） 0 | 0 | 347 | 551 | 471 | 437 |  |
| Peak－hour factor，PHF 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |  |
| Adj．Flow（vph） 0 | 0 | 386 | 612 | 523 | 486 |  |
| RTOR Reduction（vph） 0 | 0 | 0 | 0 | 0 | 0 |  |
| Lane Group Flow（vph） 0 | 0 | 193 | 805 | 1009 | 0 |  |
| Confl．Peds．（\＃／hr） 82 | 3 | 13 |  |  | 13 |  |
| Turn Type |  | ustom |  |  |  |  |
| Protected Phases |  | 34 | 14 | 1 |  |  |
| Permitted Phases |  | 3 |  |  |  |  |
| Actuated Green，G（s） |  | 50.0 | 92.0 | 42.0 |  |  |
| Effective Green，g（s） |  | 50.0 | 92.0 | 42.0 |  |  |
| Actuated g／C Ratio |  | 0.50 | 0.92 | 0.42 |  |  |
| Clearance Time（s） |  |  |  | 4.0 |  |  |
| Lane Grp Cap（vph） |  | 739 | 3583 | 1892 |  |  |
| v／s Ratio Prot |  | c0．13 | 0.11 | c0．22 |  |  |
| v／s Ratio Perm |  |  | 0.09 |  |  |  |
| v／c Ratio |  | 0.26 | 0.22 | 0.53 |  |  |
| Uniform Delay，d1 |  | 14.4 | 0.4 | 21.7 |  |  |
| Progression Factor |  | 0.54 | 0.52 | 1.00 |  |  |
| Incremental Delay，d2 |  | 0.8 | 0.1 | 1.1 |  |  |
| Delay（s） |  | 8.5 | 0.4 | 22.8 |  |  |
| Level of Service |  | A | A | C |  |  |
| Approach Delay（s） 0.0 |  |  | 1.9 | 22.8 |  |  |
| Approach LOS A |  |  | A | C |  |  |
| Intersection Summary |  |  |  |  |  |  |
|  |  | 12.4 |  | HCM Lev | el of Service | B |
| HCM Volume to Capacity ratio |  | 0.39 |  |  |  |  |
| Actuated Cycle Length（s） |  | 100.0 |  | Sum of lo | st time（s） | 8.0 |
| Intersection Capacity Utilization |  | 47．1\％ | ICU Level of Service |  |  | A |
| Analysis Period（min） | 15 |  |  |  |  |  |

c Critical Lane Group


18：E Street（Westbound）\＆20th Street

|  | $\ldots$ |  | 4 | $\cdots$ | 4 | 4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | WBL | WBT | WBR | NBL2 | NBL | NBT |  |
| Lane Configurations | \％${ }^{*}$ | 性 |  |  | \％ | 坐个中 |  |
| Ideal Flow（vphpl） | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |  |
| Total Lost time（s） | 4.0 | 4.0 |  |  | 4.0 | 4.0 |  |
| Lane Util．Factor | 0.97 | 0.95 |  |  | 1.00 | 0.91 |  |
| Frpb，ped／bikes | 1.00 | 0.82 |  |  | 1.00 | 1.00 |  |
| Flpb，ped／bikes | 1.00 | 1.00 |  |  | 0.82 | 1.00 |  |
| Frt | 1.00 | 0.93 |  |  | 1.00 | 1.00 |  |
| Flt Protected | 0.95 | 1.00 |  |  | 0.95 | 1.00 |  |
| Satd．Flow（prot） | 3113 | 2450 |  |  | 1310 | 4611 |  |
| Flt Permitted | 0.95 | 1.00 |  |  | 0.95 | 1.00 |  |
| Satd．Flow（perm） | 3113 | 2450 |  |  | 1310 | 4611 |  |
| Volume（vph） | 194 | 202 | 195 | 32 | 48 | 1751 |  |
| Peak－hour factor，PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |  |
| Adj．Flow（vph） | 216 | 224 | 217 | 36 | 53 | 1946 |  |
| RTOR Reduction（vph） | 0 | 22 | 0 | 0 | 10 | 0 |  |
| Lane Group Flow（vph） | 216 | 419 | 0 | 0 | 79 | 1946 |  |
| Confl．Peds．（\＃／hr） | 49 |  | 298 | 49 | 49 |  |  |
| Parking（\＃／hr） |  |  | 0 |  |  |  |  |
| Turn Type | Prot |  |  | Perm | Perm |  |  |
| Protected Phases | 3 | 8 |  |  |  | 2 |  |
| Permitted Phases |  |  |  | 2 | 2 |  |  |
| Actuated Green，G（s） | 19.0 | 19.0 |  |  | 70.0 | 70.0 |  |
| Effective Green，g（s） | 20.0 | 20.0 |  |  | 72.0 | 72.0 |  |
| Actuated g／C Ratio | 0.20 | 0.20 |  |  | 0.72 | 0.72 |  |
| Clearance Time（s） | 5.0 | 5.0 |  |  | 6.0 | 6.0 |  |
| Lane Grp Cap（vph） | 623 | 490 |  |  | 943 | 3320 |  |
| v／s Ratio Prot | 0.07 | c0．18 |  |  |  | c0．42 |  |
| v／s Ratio Perm |  |  |  |  | 0.07 |  |  |
| v／c Ratio | 0.35 | 1．05dr |  |  | 0.08 | 0.59 |  |
| Uniform Delay，d1 | 34.4 | 38.6 |  |  | 4.2 | 6.8 |  |
| Progression Factor | 1.00 | 1.00 |  |  | 1.10 | 1.09 |  |
| Incremental Delay，d2 | 1.5 | 17.1 |  |  | 0.1 | 0.4 |  |
| Delay（s） | 35.9 | 55.7 |  |  | 4.7 | 7.8 |  |
| Level of Service | D | E |  |  | A | A |  |
| Approach Delay（s） |  | 49.2 |  |  |  | 7.7 |  |
| Approach LOS |  | D |  |  |  | A |  |
| Intersection Summary |  |  |  |  |  |  |  |
| HCM Average Control Delay |  |  | 17.8 |  | HCM Lev | el of Service | B |
| HCM Volume to Capacity ratio |  |  | 0.65 |  |  |  |  |
| Actuated Cycle Length（s） |  |  | 100.0 |  | Sum of los | st time（s） | 8.0 |
| Intersection Capacity Utilization |  |  | 56．6\％ |  | ICU Leve | l of Service | B |
| Analysis Period（min） |  |  | 15 |  |  |  |  |
| dr Defacto Right Lane．Recode with 1 though lane as a right lane． |  |  |  |  |  |  |  |
| c Critical Lane Group |  |  |  |  |  |  |  |



Analysis Period (min)
15
c Critical Lane Group

|  | $\rangle$ |  |  | 5 |  |  |  | $\pm$ | 4 | ＊ | k | ＋ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
| Lane Configurations |  |  |  |  | ＊$\uparrow$ |  |  | 來革 | 「 |  | 介种 |  |
| Ideal Flow（vphpl） | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width | 10 | 10 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 12 | 12 |
| Total Lost time（s） |  |  |  |  | 4.0 |  |  | 4.0 | 4.0 |  | 4.0 |  |
| Lane Util．Factor |  |  |  |  | 0.95 |  |  | 0.91 | 1.00 |  | 0.91 |  |
| Frpb，ped／bikes |  |  |  |  | 0.96 |  |  | 1.00 | 0.90 |  | 1.00 |  |
| Flpb，ped／bikes |  |  |  |  | 1.00 |  |  | 1.00 | 1.00 |  | 1.00 |  |
| Frt |  |  |  |  | 0.90 |  |  | 1.00 | 0.85 |  | 1.00 |  |
| Flt Protected |  |  |  |  | 1.00 |  |  | 1.00 | 1.00 |  | 1.00 |  |
| Satd．Flow（prot） |  |  |  |  | 2771 |  |  | 4940 | 1387 |  | 4904 |  |
| Flt Permitted |  |  |  |  | 1.00 |  |  | 1.00 | 1.00 |  | 0.86 |  |
| Satd．Flow（perm） |  |  |  |  | 2771 |  |  | 4940 | 1387 |  | 4253 |  |
| Volume（vph） | 0 | 0 | 0 | 6 | 136 | 268 | 0 | 447 | 17 | 39 | 441 | 0 |
| Peak－hour factor，PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj．Flow（vph） | 0 | 0 | 0 | 7 | 151 | 298 | 0 | 497 | 19 | 43 | 490 | 0 |
| RTOR Reduction（vph） | 0 | 0 | 0 | 0 | 126 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Group Flow（vph） | 0 | 0 | 0 | 0 | 330 | 0 | 0 | 497 | 19 | 0 | 533 | 0 |
| Confl．Peds．（\＃／hr） |  |  |  | 21 |  | 28 |  |  | 47 | 47 |  |  |
| Turn Type |  |  |  | Perm |  |  |  |  | Perm | Perm |  |  |
| Protected Phases |  |  |  |  | 8 |  |  | 6 |  |  | 2 |  |
| Permitted Phases |  |  |  | 8 |  |  |  |  | 6 | 2 |  |  |
| Actuated Green，G（s） |  |  |  |  | 48.0 |  |  | 42.0 | 42.0 |  | 42.0 |  |
| Effective Green，g（s） |  |  |  |  | 49.0 |  |  | 43.0 | 43.0 |  | 43.0 |  |
| Actuated g／C Ratio |  |  |  |  | 0.49 |  |  | 0.43 | 0.43 |  | 0.43 |  |
| Clearance Time（s） |  |  |  |  | 5.0 |  |  | 5.0 | 5.0 |  | 5.0 |  |
| Lane Grp Cap（vph） |  |  |  |  | 1358 |  |  | 2124 | 596 |  | 1829 |  |
| v／s Ratio Prot |  |  |  |  |  |  |  | 0.10 |  |  |  |  |
| v／s Ratio Perm |  |  |  |  | 0.16 |  |  |  | 0.01 |  | c0．13 |  |
| v／c Ratio |  |  |  |  | 0.24 |  |  | 0.23 | 0.03 |  | 0.29 |  |
| Uniform Delay，d1 |  |  |  |  | 14.8 |  |  | 18.1 | 16.5 |  | 18.6 |  |
| Progression Factor |  |  |  |  | 0.70 |  |  | 1.00 | 1.00 |  | 0.34 |  |
| Incremental Delay，d2 |  |  |  |  | 0.4 |  |  | 0.3 | 0.1 |  | 0.4 |  |
| Delay（s） |  |  |  |  | 10.7 |  |  | 18.3 | 16.6 |  | 6.8 |  |
| Level of Service |  |  |  |  | B |  |  | B | B |  | A |  |
| Approach Delay（s） |  | 0.0 |  |  | 10.7 |  |  | 18.3 |  |  | 6.8 |  |
| Approach LOS |  | A |  |  | B |  |  | B |  |  | A |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |  |  |  |
| HCM Average Control Delay |  |  | 11.9 |  | HCM Lev | el of S | rvice |  | B |  |  |  |
| HCM Volume to Capacity ratio |  |  | 0.32 |  |  |  |  |  |  |  |  |  |
| Actuated Cycle Length（s） |  |  | 100.0 |  | Sum of lost time（s） |  |  |  | 8.0 |  |  |  |
| Intersection Capacity Utilization |  |  | 46．9\％ | ICU Level of Service |  |  |  |  | A |  |  |  |
| Analysis Period（min） |  | 15 |  |  |  |  |  |  |  |  |  |  |

Analysis Period（min）
15
c Critical Lane Group

|  | , | $\lambda$ | $\ldots$ |  | \% | ra |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | SET | SER | NWL | NWT | NEL | NER |  |  |  |
| Lane Configurations | 种4 |  |  |  | \% | F |  |  |  |
| Sign Control | Free |  |  | Free | Stop |  |  |  |  |
| Grade | 0\% |  |  | 0\% | 0\% |  |  |  |  |
| Volume (veh/h) | 466 | 0 | 0 | 398 | 63 | 172 |  |  |  |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |  |  |  |
| Hourly flow rate (vph) | 518 | 0 | 0 | 442 | 70 | 191 |  |  |  |
| Pedestrians | 11 |  |  | 6 | 32 |  |  |  |  |
| Lane Width (ft) | 12.0 |  |  | 12.0 | 10.0 |  |  |  |  |
| Walking Speed (ft/s) | 4.0 |  |  | 4.0 | 4.0 |  |  |  |  |
| Percent Blockage | 1 |  |  | 0 | 2 |  |  |  |  |
| Right turn flare (veh) |  |  |  |  |  |  |  |  |  |
| Median type |  |  |  |  | None |  |  |  |  |
| Median storage veh) |  |  |  |  |  |  |  |  |  |
| Upstream signal (ft) | 280 |  |  | 151 |  |  |  |  |  |
| pX, platoon unblocked |  |  | 0.95 |  | 0.95 | 0.95 |  |  |  |
| vC , conflicting volume |  |  | 550 |  | 708 | 211 |  |  |  |
| vC1, stage 1 conf vol |  |  |  |  |  |  |  |  |  |
| $\mathrm{vC2}$, stage 2 conf vol |  |  |  |  |  |  |  |  |  |
| vCu, unblocked vol |  |  | 416 |  | 583 | 58 |  |  |  |
| tC , single (s) |  |  | 4.2 |  | 6.9 | 7.0 |  |  |  |
| tC, 2 stage (s) |  |  |  |  |  |  |  |  |  |
| tF (s) |  |  | 2.2 |  | 3.6 | 3.4 |  |  |  |
| p0 queue free \% |  |  | 100 |  | 83 | 79 |  |  |  |
| cM capacity (veh/h) |  |  | 1037 |  | 401 | 909 |  |  |  |
| Direction, Lane \# | SE 1 | SE 2 | SE 3 | NW 1 | NW 2 | NW 3 | NE 1 | NE 2 |  |
| Volume Total | 173 | 173 | 173 | 147 | 147 | 147 | 70 | 191 |  |
| Volume Left | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 0 |  |
| Volume Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 191 |  |
| cSH | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 | 401 | 909 |  |
| Volume to Capacity | 0.10 | 0.10 | 0.10 | 0.09 | 0.09 | 0.09 | 0.17 | 0.21 |  |
| Queue Length (ft) | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 20 |  |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15.9 | 10.0 |  |
| Lane LOS |  |  |  |  |  |  | C | B |  |
| Approach Delay (s) | 0.0 |  |  | 0.0 |  |  | 11.6 |  |  |
| Approach LOS |  |  |  |  |  |  | B |  |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |
| Average Delay |  |  | 2.5 |  |  |  |  |  |  |
| Intersection Capacity Utilization |  |  | 30.2\% |  | CU Leve | of Ser | vice |  | A |
| Analysis Period (min) |  |  | 15 |  |  |  |  |  |  |




Analysis Period (min)
15
c Critical Lane Group


c Critical Lane Group


Analysis Period (min)
15
c Critical Lane Group

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Appendix D:
Descriptions of Levels of Service

## Level of Service for Signalized Intersections

Level of service for signalized intersections is defined in terms of delay, which is a measure of driver discomfort and frustration, fuel consumption, and lost travel time. Specifically, level-of-service (LOS) criteria are stated in terms of the average stopped delay per vehicle for a $15-\mathrm{min}$ analysis period. The criteria are given in Exhibit 16-2. Delay may be measured in the field or estimated using procedures presented later in this chapter. Delay is a complex measure and is dependent on a number of variables, including the quality of progression, the cycle length, the green ratio, and the v/c ratio for the lane group in question.

LOS A describes operations with very low delay, up to 10 sec per vehicle. This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.

LOS B describes operations with delay greater than 10 and up to 20 sec per vehicle. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.

Exhibit 16-2. Level-of-Service Criteria for Signalized Intersections

| LEVEL OF SERVICE | STOPPED DELAY PER VEHICLE (SEC) |
| :---: | :---: |
| A | $\leq 10.0$ |
| B | $>10.0$ and $\leq 20.0$ |
| C | $>20.0$ and $\leq 35.0$ |
| D | $>35.0$ and $\leq 55.0$ |
| E | $>55.0$ and $\leq 80.0$ |
| F | $>80.0$ |

LOS C describes operations with delay greater than 20 and up to 35 sec per vehicle. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.

LOS $\boldsymbol{D}$ describes operations with delay greater than 35 and up to 55 sec per vehicle. At level $D$, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

LOS E describes operations with delay greater than 55 and up to 80 sec per vehicle. This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.

LOS F describes operations with delay in excess of 80 sec per vehicle. This level, considered to be unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high v/c ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

Source: Highway Capacity Manual, 2000. Transportation Research Board, National Research Council

## Level of Service Criteria for Stop Sign Controlled Intersections

The level of service criteria are given in Table 17-2. As used here, control delay is defined as the total elapsed time from the time a vehicle stops at the end of the queue until the vehicle departs from the stop line; this time includes the time required for the vehicle to travel from the last-in-queue position to the first-in-queue position, including deceleration of vehicles from free-flow speed to the speed of vehicles in queue.

The average total delay for any particular minor movement is a function of the service rate or capacity of the approach and the degree of saturation. .

Table 17-2. Level of Service Criteria for TWSC Intersections

| LEVEL OF SERVICE | AVERAGE CONTROL DELAY <br> (sec/veh) |
| :---: | :---: |
| A | $\leq 10$ |
| B | $>10$ and $\leq 15$ |
| C | $>15$ and $\leq 25$ |
| D | $>25$ and $\leq 35$ |
| E | $>35$ and $\leq 50$ |
| F | $>50$ |

Average total delay less than $10 \mathrm{sec} / \mathrm{veh}$ is defined as Level of Service (LOS) A. Follow-up times of less than 5 sec have been measured when there is no conflicting traffic for a minor street movement, so control delays of less than I0 $\mathrm{sec} / \mathrm{veh}$ are appropriate for low flow conditions. To remain consistent with the AWSC intersection analysis procedure described later in this chapter, a total delay of $50 \mathrm{sec} / \mathrm{veh}$ is assumed as the break point between LOS E and F.

The proposed level of service criteria for TWSC intersections are somewhat different from the criteria used in Chapter 16 for signalized intersections. The primary reason for this difference is that drivers expect different levels of performance from different kinds of transportation facilities. The expectation is that a signalized intersection is designed to carry higher traffic volumes than an unsignalized intersection. Additionally, several driver behavior considerations combine to make delays at signalized intersections less onerous than at unsignalized intersections. For example, drivers at signalized intersections are able to relax during the red interval, where drivers on the minor approaches to unsignalized intersections must remain attentive to the task of identifying acceptable gaps and vehicle conflicts. Also, there is often much more variability in the amount of delay experienced by individual drivers at unsignalized than signalized intersections. For these reasons, it is considered that the total delay threshold for any given level of service is less for an unsignalized intersection than for a signalized intersection. . . .

LOS F exists when there are insufficient gaps of suitable size to allow a side street demand to cross safely through a major street traffic stream. This level of service is generally evident from extremely long total delays experienced by side street traffic and by queueing on the minor approaches. The method, however, is based on a constant critical gap size - that is, the critical gap remains constant, no matter how long the side street motorist waits. LOS F may also appear in the form of side street vehicles' selecting smaller-than-usual gaps. In such cases, safety may be a problem and some disruption to the major traffic stream may result. It is important to note that LOS F may not always result in long queues but may result in adjustments to normal gap acceptance behavior. The latter is more difficult to observe on the field than queueing, which is more obvious.

Source: Highway Capacity Manual, 2000. Transportation Research Board, National Research Council

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Appendix E:
Total Pipeline Development
Trip Assignments

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Appendix F:

## Regional Traffic Growth Volumes

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Figure $\mathrm{F}-1 \mathrm{~A}$
AM PEAK HOUR (8:15-9:15 AM)
Background Regional Traffic Growth (Existing Road Network - 2008)
000/000 PM PEAK HOUR (5:00-6:00 PM) North


Appendix G:
Future Levels of Service: Current Ramp Configuration

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Analysis Period (min) 15
c Critical Lane Group


|  | ＊ |  |  |  |  | W |  |  |  |  |  | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| Lane Configurations |  |  |  | ${ }_{7}$ | 性 |  |  | 恌 |  |  | ＊个个 |  |
| Ideal Flow（vphpl） | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width | 10 | 10 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 12 | 12 |
| Total Lost time（s） |  |  |  | 4.0 | 4.0 |  |  | 4.0 |  |  | 4.0 |  |
| Lane Util．Factor |  |  |  | 1.00 | 0.95 |  |  | 0.91 |  |  | 0.91 |  |
| Frpb，ped／bikes |  |  |  | 1.00 | 1.00 |  |  | 0.99 |  |  | 1.00 |  |
| Flpb，ped／bikes |  |  |  | 0.95 | 1.00 |  |  | 1.00 |  |  | 1.00 |  |
| Frt |  |  |  | 1.00 | 1.00 |  |  | 0.97 |  |  | 1.00 |  |
| Flt Protected |  |  |  | 0.95 | 1.00 |  |  | 1.00 |  |  | 0.99 |  |
| Satd．Flow（prot） |  |  |  | 1530 | 3191 |  |  | 4776 |  |  | 4898 |  |
| Flt Permitted |  |  |  | 0.95 | 1.00 |  |  | 1.00 |  |  | 0.72 |  |
| Satd．Flow（perm） |  |  |  | 1530 | 3191 |  |  | 4776 |  |  | 3549 |  |
| Volume（vph） | 0 | 0 | 0 | 92 | 136 | 4 | 0 | 786 | 171 | 71 | 388 | 0 |
| Peak－hour factor，PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj．Flow（vph） | 0 | 0 | 0 | 102 | 151 | 4 | 0 | 873 | 190 | 79 | 431 | 0 |
| RTOR Reduction（vph） | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 34 | 0 | 0 | 0 | 0 |
| Lane Group Flow（vph） | 0 | 0 | 0 | 102 | 153 | 0 | 0 | 1029 | 0 | 0 | 510 | 0 |
| Confl．Peds．（\＃／hr） | 74 |  | 57 | 57 |  | 74 | 35 |  | 46 | 46 |  | 35 |
| Parking（\＃／hr） |  |  |  |  |  | 0 |  |  |  |  |  |  |
| Turn Type |  |  |  | Perm |  |  |  |  |  | Perm |  |  |
| Protected Phases |  |  |  |  | 2 |  |  | 1 |  |  | 1 |  |
| Permitted Phases |  |  |  | 2 |  |  |  |  |  | 1 |  |  |
| Actuated Green，G（s） |  |  |  | 35.0 | 35.0 |  |  | 53.0 |  |  | 53.0 |  |
| Effective Green，g（s） |  |  |  | 37.0 | 37.0 |  |  | 55.0 |  |  | 55.0 |  |
| Actuated g／C Ratio |  |  |  | 0.37 | 0.37 |  |  | 0.55 |  |  | 0.55 |  |
| Clearance Time（s） |  |  |  | 6.0 | 6.0 |  |  | 6.0 |  |  | 6.0 |  |
| Lane Grp Cap（vph） |  |  |  | 566 | 1181 |  |  | 2627 |  |  | 1952 |  |
| v／s Ratio Prot |  |  |  |  | 0.05 |  |  | c0．22 |  |  |  |  |
| v／s Ratio Perm |  |  |  | 0.07 |  |  |  |  |  |  | 0.14 |  |
| v／c Ratio |  |  |  | 0.18 | 0.13 |  |  | 0.39 |  |  | 0.26 |  |
| Uniform Delay，d1 |  |  |  | 21.3 | 20.8 |  |  | 12.9 |  |  | 11.8 |  |
| Progression Factor |  |  |  | 1.88 | 1.89 |  |  | 0.45 |  |  | 1.57 |  |
| Incremental Delay，d2 |  |  |  | 0.7 | 0.2 |  |  | 0.4 |  |  | 0.3 |  |
| Delay（s） |  |  |  | 40.6 | 39.7 |  |  | 6.3 |  |  | 18.9 |  |
| Level of Service |  |  |  | D | D |  |  | A |  |  | B |  |
| Approach Delay（s） |  | 0.0 |  |  | 40.1 |  |  | 6.3 |  |  | 18.9 |  |
| Approach LOS |  | A |  |  | D |  |  | A |  |  | B |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | 14.5 |  | HCM Le | el of Se | rvice |  | B |  |  |  |
| HCM Average Control Delay HCM Volume to Capacity ratio |  |  | 0.31 |  |  |  |  |  |  |  |  |  |
| Actuated Cycle Length（s） |  |  | 100.0 |  | Sum of | st time |  |  | 8.0 |  |  |  |
| Intersection Capacity Utilization |  |  | 56．3\％ |  | CU Lev | of Ser |  |  | B |  |  |  |
| Analysis Period（min） |  | 15 |  | － |  |  |  |  |  |  |  |  |
| c Critical Lane Group |  |  |  |  |  |  |  |  |


| Movement | SBL | SBR | SEL | SET | NWT | NWR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations |  |  | ${ }^{1}$ | -144 | 4虫 |  |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width | 10 | 10 | 12 | 12 | 12 | 12 |
| Total Lost time (s) |  |  | 4.0 | 4.0 | 4.0 |  |
| Lane Util. Factor |  |  | 0.86 | 0.86 | 0.91 |  |
| Frpb, ped/bikes |  |  | 1.00 | 1.00 | 0.98 |  |
| Flpb, ped/bikes |  |  | 1.00 | 1.00 | 1.00 |  |
| Frt |  |  | 1.00 | 1.00 | 0.93 |  |
| Flt Protected |  |  | 0.95 | 0.99 | 1.00 |  |
| Satd. Flow (prot) |  |  | 1478 | 4612 | 4509 |  |
| Flt Permitted |  |  | 0.95 | 0.65 | 1.00 |  |
| Satd. Flow (perm) |  |  | 1478 | 3045 | 4509 |  |
| Volume (vph) | 0 | 0 | 354 | 571 | 503 | 457 |
| Peak-hour factor, PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 0 | 0 | 393 | 634 | 559 | 508 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 0 | 0 | 199 | 828 | 1067 | 0 |
| Confl. Peds. (\#/hr) | 82 | 3 | 13 |  |  | 13 |

Turn Type custom

| Protected Phases | 34 | 14 |  |
| :--- | ---: | ---: | ---: |
| Permitted Phases | 3 |  |  |
| Actuated Green, G (s) | 50.0 | 92.0 | 42.0 |


| Effective Green, g (s) | 50.0 | 92.0 | 42.0 |
| :--- | :--- | :--- | :--- |
| Actuated g/C Ratio | 0.50 | 0.92 | 0.42 |


| Clearance Time (s) |  |  | 4.0 |
| :--- | ---: | ---: | ---: | ---: |
| Lane Grp Cap (vph) | 739 | 3585 | 1894 |


| v/s Ratio Prot | c0.13 | 0.12 | $\mathrm{c0} .24$ |
| :--- | ---: | ---: | ---: |
| v/s Ratio Perm |  | 0.10 |  |
| v/c Ratio | 0.27 | 0.23 | 0.56 |
| Uniform Delay, d1 | 14.4 | 0.4 | 22.0 |
| Progression Factor | 0.54 | 0.52 | 1.00 |
| Incremental Delay, d2 |  | 0.9 | 0.1 |
| Delay (s) | 8.6 | 0.4 | 23.3 |
| Level of Service |  | A | A | C


| Intersection Summary |  |  |  |
| :--- | ---: | :--- | ---: |
| HCM Average Control Delay | 12.8 | HCM Level of Service | B |
| HCM Volume to Capacity ratio | 0.40 |  | 8.0 |
| Actuated Cycle Length (s) | 100.0 | Sum of lost time (s) | A |
| Intersection Capacity Utilization | $48.6 \%$ | ICU Level of Service |  |
| Analysis Period (min) | 15 |  |  |

c Critical Lane Group

|  |  |  |  |  |  |  |  | $\uparrow$ |  |  | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ${ }^{7}$ | $\uparrow_{\text {¢ }}$ |  |  |  |  |  | 蚛 | 「 |  |  |  |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 4.0 |  |  |  |  |  | 4.0 | 4.0 |  |  |  |
| Lane Util. Factor | 0.91 | 0.91 |  |  |  |  |  | 0.86 | 0.86 |  |  |  |
| Frpb, ped/bikes | 1.00 | 1.00 |  |  |  |  |  | 0.99 | 0.78 |  |  |  |
| Flpb, ped/bikes | 1.00 | 1.00 |  |  |  |  |  | 1.00 | 1.00 |  |  |  |
| Frt | 1.00 | 1.00 |  |  |  |  |  | 0.99 | 0.85 |  |  |  |
| Flt Protected | 0.95 | 0.99 |  |  |  |  |  | 1.00 | 1.00 |  |  |  |
| Satd. Flow (prot) | 1460 | 3035 |  |  |  |  |  | 4259 | 961 |  |  |  |
| Flt Permitted | 0.95 | 0.99 |  |  |  |  |  | 1.00 | 1.00 |  |  |  |
| Satd. Flow (perm) | 1460 | 3035 |  |  |  |  |  | 4259 | 961 |  |  |  |
| Volume (vph) | 1295 | 1314 | 0 | 0 | 0 | 0 | 0 | 624 | 187 | 0 | 0 | 0 |
| Peak-hour factor, PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 1439 | 1460 | 0 | 0 | 0 | 0 | 0 | 693 | 208 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 934 | 1965 | 0 | 0 | 0 | 0 | 0 | 738 | 163 | 0 | 0 | 0 |
| Confl. Peds. (\#/hr) | 16 |  | 47 | 47 |  | 16 | 19 |  | 114 | 114 |  | 19 |
| Turn Type | Split |  |  |  |  |  |  |  | Perm |  |  |  |
| Protected Phases | 4 | 4 |  |  |  |  |  | 2 |  |  |  |  |
| Permitted Phases |  |  |  |  |  |  |  |  | 2 |  |  |  |
| Actuated Green, G (s) | 64.0 | 64.0 |  |  |  |  |  | 25.0 | 25.0 |  |  |  |
| Effective Green, g (s) | 65.0 | 65.0 |  |  |  |  |  | 27.0 | 27.0 |  |  |  |
| Actuated g/C Ratio | 0.65 | 0.65 |  |  |  |  |  | 0.27 | 0.27 |  |  |  |
| Clearance Time (s) | 5.0 | 5.0 |  |  |  |  |  | 6.0 | 6.0 |  |  |  |
| Lane Grp Cap (vph) | 949 | 1973 |  |  |  |  |  | 1150 | 259 |  |  |  |
| v/s Ratio Prot | 0.64 | c0.65 |  |  |  |  |  | c0.17 |  |  |  |  |
| v/s Ratio Perm |  |  |  |  |  |  |  |  | 0.17 |  |  |  |
| v/c Ratio | 0.98 | 1.00 |  |  |  |  |  | 0.64 | 0.63 |  |  |  |
| Uniform Delay, d1 | 17.0 | 17.4 |  |  |  |  |  | 32.2 | 32.1 |  |  |  |
| Progression Factor | 1.00 | 1.00 |  |  |  |  |  | 1.45 | 1.43 |  |  |  |
| Incremental Delay, d2 | 25.6 | 19.3 |  |  |  |  |  | 2.6 | 10.3 |  |  |  |
| Delay (s) | 42.6 | 36.7 |  |  |  |  |  | 49.2 | 56.2 |  |  |  |
| Level of Service | D | D |  |  |  |  |  | D | E |  |  |  |
| Approach Delay (s) |  | 38.6 |  |  | 0.0 |  |  | 50.5 |  |  | 0.0 |  |
| Approach LOS |  | D |  |  | A |  |  | D |  |  | A |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |  |  |  |
| HCM Average Control Delay |  |  | 41.4 |  | HCM Lev | el of S | rvice |  | D |  |  |  |
| HCM Volume to Capacity ratio |  |  | 0.89 |  |  |  |  |  |  |  |  |  |
| Actuated Cycle Length (s) |  |  | 100.0 |  | Sum of lo | st time |  |  | 8.0 |  |  |  |
| Intersection Capacity Utilization |  |  | 74.4\% |  | CU Leve | of Ser | vice |  | D |  |  |  |
| Analysis Period (min) |  |  | 15 |  |  |  |  |  |  |  |  |  |
| c Critical Lane Group |  |  |  |  |  |  |  |  |  |  |  |  |


|  | $\cdots$ |  |  | 4 | 4 | $\dagger$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | WBL | WBT | WBR | NBL2 | NBL | NBT |  |
| Lane Configurations | ${ }^{*}$ | 性 |  |  | \％ | 个触 |  |
| Ideal Flow（vphpl） | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |  |
| Total Lost time（s） | 4.0 | 4.0 |  |  | 4.0 | 4.0 |  |
| Lane Util．Factor | 0.97 | 0.95 |  |  | 1.00 | 0.91 |  |
| Frpb，ped／bikes | 1.00 | 0.83 |  |  | 1.00 | 1.00 |  |
| Flpb，ped／bikes | 1.00 | 1.00 |  |  | 0.98 | 1.00 |  |
| Frt | 1.00 | 0.93 |  |  | 1.00 | 1.00 |  |
| Flt Protected | 0.95 | 1.00 |  |  | 0.95 | 1.00 |  |
| Satd．Flow（prot） | 3113 | 2465 |  |  | 1580 | 4611 |  |
| Flt Permitted | 0.95 | 1.00 |  |  | 0.95 | 1.00 |  |
| Satd．Flow（perm） | 3113 | 2465 |  |  | 1580 | 4611 |  |
| Volume（vph） | 198 | 217 | 202 | 33 | 51 | 1835 |  |
| Peak－hour factor，PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |  |
| Adj．Flow（vph） | 220 | 241 | 224 | 37 | 57 | 2039 |  |
| RTOR Reduction（vph） | 0 | 18 | 0 | 0 | 10 | 0 |  |
| Lane Group Flow（vph） | 220 | 447 | 0 | 0 | 84 | 2039 |  |
| Confl．Peds．（\＃／hr） | 4 |  | 298 | 4 | 4 |  |  |
| Parking（\＃／hr） |  |  | 0 |  |  |  |  |
| Turn Type | Prot |  |  | Perm | Perm |  |  |
| Protected Phases | 3 | 8 |  |  |  | 2 |  |
| Permitted Phases |  |  |  | 2 | 2 |  |  |
| Actuated Green，G（s） | 19.0 | 19.0 |  |  | 70.0 | 70.0 |  |
| Effective Green，g（s） | 20.0 | 20.0 |  |  | 72.0 | 72.0 |  |
| Actuated g／C Ratio | 0.20 | 0.20 |  |  | 0.72 | 0.72 |  |
| Clearance Time（s） | 5.0 | 5.0 |  |  | 6.0 | 6.0 |  |
| Lane Grp Cap（vph） | 623 | 493 |  |  | 1138 | 3320 |  |
| v／s Ratio Prot | 0.07 | c0．19 |  |  |  | c0．44 |  |
| v／s Ratio Perm |  |  |  |  | 0.06 |  |  |
| v／c Ratio | 0.35 | 1．10dr |  |  | 0.07 | 0.61 |  |
| Uniform Delay，d1 | 34.4 | 39.1 |  |  | 4.1 | 7.0 |  |
| Progression Factor | 1.00 | 1.00 |  |  | 1.09 | 1.09 |  |
| Incremental Delay，d2 | 1.6 | 22.8 |  |  | 0.1 | 0.4 |  |
| Delay（s） | 36.0 | 61.9 |  |  | 4.6 | 8.1 |  |
| Level of Service | D | E |  |  | A | A |  |
| Approach Delay（s） |  | 53.6 |  |  |  | 7.9 |  |
| Approach LOS |  | D |  |  |  | A |  |
| Intersection Summary |  |  |  |  |  |  |  |
| HCM Average Control Delay |  |  | 19.0 |  | HCM Lev | el of Service | B |
| HCM Volume to Capacity ratio |  |  | 0.69 |  |  |  |  |
| Actuated Cycle Length（s） |  |  | 100.0 |  | Sum of los | st time（s） | 8.0 |
| Intersection Capacity Utilization |  |  | 58．8\％ |  | ICU Leve | of Service | B |
| Analysis Period（min） |  |  | 15 |  |  |  |  |
| dr Defacto Right Lane．Recode with |  |  | 1 thoug | lane a | as a right | lane． |  |
|  |  |  |  |  |  |  |  |



Analysis Period (min)
15
c Critical Lane Group

|  | $\rangle$ |  | 『 | m |  |  |  | \} | 4 | 4 | $k$ | ＋ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
| Lane Configurations |  |  |  |  | ＊${ }^{\text {a }}$ |  |  | 坐乐 | 「 |  | ＊＊4＊ |  |
| Ideal Flow（vphpl） | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width | 10 | 10 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 12 | 12 |
| Total Lost time（s） |  |  |  |  | 4.0 |  |  | 4.0 | 4.0 |  | 4.0 |  |
| Lane Util．Factor |  |  |  |  | 0.95 |  |  | 0.91 | 1.00 |  | 0.91 |  |
| Frpb，ped／bikes |  |  |  |  | 0.96 |  |  | 1.00 | 0.90 |  | 1.00 |  |
| Flpb，ped／bikes |  |  |  |  | 1.00 |  |  | 1.00 | 1.00 |  | 1.00 |  |
| Frt |  |  |  |  | 0.90 |  |  | 1.00 | 0.85 |  | 1.00 |  |
| Flt Protected |  |  |  |  | 1.00 |  |  | 1.00 | 1.00 |  | 1.00 |  |
| Satd．Flow（prot） |  |  |  |  | 2768 |  |  | 4940 | 1387 |  | 4906 |  |
| Flt Permitted |  |  |  |  | 1.00 |  |  | 1.00 | 1.00 |  | 0.86 |  |
| Satd．Flow（perm） |  |  |  |  | 2768 |  |  | 4940 | 1387 |  | 4252 |  |
| Volume（vph） | 0 | 0 | 0 | 6 | 143 | 286 | 0 | 464 | 17 | 40 | 477 | 0 |
| Peak－hour factor，PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj．Flow（vph） | 0 | 0 | 0 | 7 | 159 | 318 | 0 | 516 | 19 | 44 | 530 | 0 |
| RTOR Reduction（vph） | 0 | 0 | 0 | 0 | 111 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Group Flow（vph） | 0 | 0 | 0 | 0 | 373 | 0 | 0 | 516 | 19 | 0 | 574 | 0 |
| Confl．Peds．（\＃／hr） |  |  |  | 21 |  | 28 |  |  | 47 | 47 |  |  |
| Turn Type |  |  |  | Perm |  |  |  |  | Perm | Perm |  |  |
| Protected Phases |  |  |  |  | 8 |  |  | 6 |  |  | 2 |  |
| Permitted Phases |  |  |  | 8 |  |  |  |  | 6 | 2 |  |  |
| Actuated Green，G（s） |  |  |  |  | 48.0 |  |  | 42.0 | 42.0 |  | 42.0 |  |
| Effective Green，g（s） |  |  |  |  | 49.0 |  |  | 43.0 | 43.0 |  | 43.0 |  |
| Actuated g／C Ratio |  |  |  |  | 0.49 |  |  | 0.43 | 0.43 |  | 0.43 |  |
| Clearance Time（s） |  |  |  |  | 5.0 |  |  | 5.0 | 5.0 |  | 5.0 |  |
| Lane Grp Cap（vph） |  |  |  |  | 1356 |  |  | 2124 | 596 |  | 1828 |  |
| v／s Ratio Prot |  |  |  |  |  |  |  | 0.10 |  |  |  |  |
| v／s Ratio Perm |  |  |  |  | 0.17 |  |  |  | 0.01 |  | c0．13 |  |
| v／c Ratio |  |  |  |  | 0.27 |  |  | 0.24 | 0.03 |  | 0.31 |  |
| Uniform Delay，d1 |  |  |  |  | 15.0 |  |  | 18.1 | 16.5 |  | 18.8 |  |
| Progression Factor |  |  |  |  | 0.68 |  |  | 1.00 | 1.00 |  | 0.35 |  |
| Incremental Delay，d2 |  |  |  |  | 0.5 |  |  | 0.3 | 0.1 |  | 0.4 |  |
| Delay（s） |  |  |  |  | 10.6 |  |  | 18.4 | 16.6 |  | 7.0 |  |
| Level of Service |  |  |  |  | B |  |  | B | B |  | A |  |
| Approach Delay（s） |  | 0.0 |  |  | 10.6 |  |  | 18.3 |  |  | 7.0 |  |
| Approach LOS |  | A |  |  | B |  |  | B |  |  | A |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |  |  |  |
| HCM Average Control Delay |  |  | 11.9 |  | HCM Lev | el of S | rvice |  | B |  |  |  |
| HCM Volume to Capacity ratio |  |  | 0.34 |  |  |  |  |  |  |  |  |  |
| Actuated Cycle Length（s） |  |  | 100.0 |  | Sum of los | st time |  |  | 8.0 |  |  |  |
| Intersection Capacity Utilization |  |  | 48．4\％ |  | CU Level | l of Se | vice |  | A |  |  |  |
| Analysis Period（min） |  |  | 15 |  |  |  |  |  |  |  |  |  |

Analysis Period（min） 15
c Critical Lane Group



| Movement | SBL | SBR | SEL | SET | NWT | NWR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations |  |  | \% | 种 | 种 ${ }^{\text {a }}$ |  |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width | 10 | 10 | 12 | 12 | 12 | 12 |
| Total Lost time (s) |  |  | 4.0 | 4.0 | 4.0 |  |
| Lane Util. Factor |  |  | 1.00 | 0.95 | 0.91 |  |
| Frpb, ped/bikes |  |  | 1.00 | 1.00 | 0.97 |  |
| Flpb, ped/bikes |  |  | 1.00 | 1.00 | 1.00 |  |
| Frt |  |  | 1.00 | 1.00 | 0.95 |  |
| Flt Protected |  |  | 0.95 | 1.00 | 1.00 |  |
| Satd. Flow (prot) |  |  | 1719 | 3438 | 4568 |  |
| Flt Permitted |  |  | 0.95 | 1.00 | 1.00 |  |
| Satd. Flow (perm) |  |  | 1719 | 3438 | 4568 |  |
| Volume (vph) | 0 | 0 | 160 | 748 | 518 | 253 |
| Peak-hour factor, PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 0 | 0 | 178 | 831 | 576 | 281 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 0 | 0 | 178 | 831 | 857 | 0 |
| Confl. Peds. (\#/hr) | 106 | 1 | 39 |  |  | 39 |

Turn Type custom

| Protected Phases | 34 | 14 | 1 |
| :--- | ---: | ---: | ---: |
| Permitted Phases | 3 |  |  |
| Actuated Green, G (s) | 40.0 | 63.0 | 52.0 |


| Effective Green, g (s) | 40.0 | 63.0 | 52.0 |
| :--- | :--- | :--- | :--- |
| Actuated g/C Ratio | 0.40 | 0.63 | 0.52 |


| Clearance Time (s) |  |  | 4.0 |
| :--- | ---: | ---: | ---: | ---: |
| Lane Grp Cap (vph) | 688 | 2166 | 2375 |


| $\mathrm{v} / \mathrm{s}$ Ratio Prot | $\mathrm{c0.10}$ | $\mathrm{c0}$ | 0.24 |
| :--- | :--- | :--- | :--- |


| v/s Ratio Perm |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| v/c Ratio | 0.26 | 0.38 | 0.36 |  |
| Uniform Delay, d1 | 20.1 | 9.0 | 14.2 |  |
| Progression Factor |  | 0.74 | 1.51 | 1.00 |
| Incremental Delay, d2 |  | 0.9 | 0.5 | 0.4 |
| Delay (s) | 15.8 | 14.1 | 14.6 |  |
| Level of Service |  | B | B | B |
| Approach Delay (s) | 0.0 |  | 14.4 | 14.6 |
| Approach LOS | A |  | B | B |


| Intersection Summary |  |  |  |
| :--- | ---: | :--- | ---: |
| HCM Average Control Delay | 14.5 | HCM Level of Service | B |
| HCM Volume to Capacity ratio | 0.35 |  | 8.0 |
| Actuated Cycle Length (s) | 100.0 | Sum of lost time (s) | A |
| Intersection Capacity Utilization | $39.3 \%$ | ICU Level of Service |  |
| Analysis Period (min) | 15 |  |  |

c Critical Lane Group

|  | $\stackrel{ }{*}$ |  |  |  |  |  |  | 4 | 7 |  | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ${ }^{7}$ | $\uparrow \uparrow$ |  |  |  |  |  | 檪 | F |  |  |  |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 4.0 |  |  |  |  |  | 4.0 | 4.0 |  |  |  |
| Lane Util. Factor | 0.91 | 0.91 |  |  |  |  |  | 0.86 | 0.86 |  |  |  |
| Frpb, ped/bikes | 1.00 | 1.00 |  |  |  |  |  | 0.99 | 0.77 |  |  |  |
| Flpb, ped/bikes | 1.00 | 1.00 |  |  |  |  |  | 1.00 | 1.00 |  |  |  |
| Frt | 1.00 | 1.00 |  |  |  |  |  | 0.99 | 0.85 |  |  |  |
| Flt Protected | 0.95 | 1.00 |  |  |  |  |  | 1.00 | 1.00 |  |  |  |
| Satd. Flow (prot) | 1460 | 3074 |  |  |  |  |  | 4250 | 952 |  |  |  |
| Flt Permitted | 0.95 | 1.00 |  |  |  |  |  | 1.00 | 1.00 |  |  |  |
| Satd. Flow (perm) | 1460 | 3074 |  |  |  |  |  | 4250 | 952 |  |  |  |
| Volume (vph) | 278 | 837 | 0 | 0 | 0 | 0 | 0 | 310 | 94 | 0 | 0 | 0 |
| Peak-hour factor, PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 309 | 930 | 0 | 0 | 0 | 0 | 0 | 344 | 104 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 309 | 930 | 0 | 0 | 0 | 0 | 0 | 368 | 80 | 0 | 0 | 0 |
| Confl. Peds. (\#/hr) | 7 |  |  |  |  |  |  |  | 118 |  |  |  |
| Turn Type | Split |  |  |  |  |  |  |  | Perm |  |  |  |
| Protected Phases | 4 | 4 |  |  |  |  |  | 2 |  |  |  |  |
| Permitted Phases |  |  |  |  |  |  |  |  | 2 |  |  |  |
| Actuated Green, G (s) | 60.0 | 60.0 |  |  |  |  |  | 29.0 | 29.0 |  |  |  |
| Effective Green, g (s) | 61.0 | 61.0 |  |  |  |  |  | 31.0 | 31.0 |  |  |  |
| Actuated g/C Ratio | 0.61 | 0.61 |  |  |  |  |  | 0.31 | 0.31 |  |  |  |
| Clearance Time (s) | 5.0 | 5.0 |  |  |  |  |  | 6.0 | 6.0 |  |  |  |
| Lane Grp Cap (vph) | 891 | 1875 |  |  |  |  |  | 1318 | 295 |  |  |  |
| v/s Ratio Prot | 0.21 | c0.30 |  |  |  |  |  | c0.09 |  |  |  |  |
| v/s Ratio Perm |  |  |  |  |  |  |  |  | 0.08 |  |  |  |
| v/c Ratio | 0.35 | 0.50 |  |  |  |  |  | 0.28 | 0.27 |  |  |  |
| Uniform Delay, d1 | 9.6 | 10.9 |  |  |  |  |  | 26.1 | 26.0 |  |  |  |
| Progression Factor | 1.00 | 1.00 |  |  |  |  |  | 1.00 | 1.05 |  |  |  |
| Incremental Delay, d2 | 1.1 | 0.9 |  |  |  |  |  | 0.5 | 2.2 |  |  |  |
| Delay (s) | 10.7 | 11.8 |  |  |  |  |  | 26.7 | 29.4 |  |  |  |
| Level of Service | B | B |  |  |  |  |  | C | C |  |  |  |
| Approach Delay (s) |  | 11.6 |  |  | 0.0 |  |  | 27.2 |  |  | 0.0 |  |
| Approach LOS |  | B |  |  | A |  |  | C |  |  | A |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |  |  |  |
| HCM Average Control Delay |  |  | 15.7 |  | HCM Lev | vel of S | rvice |  | B |  |  |  |
| HCM Volume to Capacity ratio |  |  | 0.42 |  |  |  |  |  |  |  |  |  |
| Actuated Cycle Length (s) |  |  | 100.0 |  | Sum of los | st time |  |  | 8.0 |  |  |  |
| Intersection Capacity Utilization |  |  | 43.1\% |  | CU Leve | of Ser | vice |  | A |  |  |  |
| Analysis Period (min) |  |  | 15 |  |  |  |  |  |  |  |  |  |
| c Critical Lane Group |  |  |  |  |  |  |  |  |  |  |  |  |


|  | $\cdots$ |  |  | 4 | 4 | $\uparrow$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | WBL | WBT | WBR | NBL2 | NBL | NBT |  |
| Lane Configurations | ${ }^{*}{ }^{1}$ | 衡 |  |  | \% | 帆4 |  |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |  |
| Total Lost time (s) | 4.0 | 4.0 |  |  | 4.0 | 4.0 |  |
| Lane Util. Factor | 0.97 | 0.95 |  |  | 1.00 | 0.91 |  |
| Frpb, ped/bikes | 1.00 | 0.92 |  |  | 1.00 | 1.00 |  |
| Flpb, ped/bikes | 1.00 | 1.00 |  |  | 0.92 | 1.00 |  |
| Frt | 1.00 | 0.97 |  |  | 1.00 | 1.00 |  |
| Flt Protected | 0.95 | 1.00 |  |  | 0.95 | 1.00 |  |
| Satd. Flow (prot) | 3113 | 2872 |  |  | 1478 | 4611 |  |
| Flt Permitted | 0.95 | 1.00 |  |  | 0.95 | 1.00 |  |
| Satd. Flow (perm) | 3113 | 2872 |  |  | 1478 | 4611 |  |
| Volume (vph) | 1764 | 281 | 72 | 168 | 55 | 364 |  |
| Peak-hour factor, PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |  |
| Adj. Flow (vph) | 1960 | 312 | 80 | 187 | 61 | 404 |  |
| RTOR Reduction (vph) | 0 | 23 | 0 | 0 | 9 | 0 |  |
| Lane Group Flow (vph) | 1960 | 369 | 0 | 0 | 239 | 404 |  |
| Confl. Peds. (\#/hr) | 21 |  | 349 | 21 | 21 |  |  |
| Parking (\#/hr) |  |  | 0 |  |  |  |  |
| Turn Type | Prot |  |  | Perm | Perm |  |  |
| Protected Phases | 3 | 8 |  |  |  | 2 |  |
| Permitted Phases |  |  |  | 2 | 2 |  |  |
| Actuated Green, G (s) | 60.0 | 60.0 |  |  | 29.0 | 29.0 |  |
| Effective Green, g (s) | 61.0 | 61.0 |  |  | 31.0 | 31.0 |  |
| Actuated g/C Ratio | 0.61 | 0.61 |  |  | 0.31 | 0.31 |  |
| Clearance Time (s) | 5.0 | 5.0 |  |  | 6.0 | 6.0 |  |
| Lane Grp Cap (vph) | 1899 | 1752 |  |  | 458 | 1429 |  |
| v/s Ratio Prot | c0.63 | 0.14 |  |  |  | 0.09 |  |
| v/s Ratio Perm |  |  |  |  | 0.17 |  |  |
| v/c Ratio | 1.03 | 0.21 |  |  | 0.52 | 0.28 |  |
| Uniform Delay, d1 | 19.5 | 8.7 |  |  | 28.4 | 26.1 |  |
| Progression Factor | 1.00 | 1.00 |  |  | 0.93 | 0.89 |  |
| Incremental Delay, d2 | 29.4 | 0.3 |  |  | 4.1 | 0.5 |  |
| Delay (s) | 48.9 | 9.0 |  |  | 30.4 | 23.8 |  |
| Level of Service | D | A |  |  | C | C |  |
| Approach Delay (s) |  | 42.3 |  |  |  | 26.3 |  |
| Approach LOS |  | D |  |  |  | C |  |
| Intersection Summary |  |  |  |  |  |  |  |
| HCM Average Control Delay |  |  | 38.8 |  | HCM Lev | el of Service | D |
|  |  |  | 0.87 |  |  |  |  |
| HCM Volume to Capacity ratioActuated Cycle Length (s) |  |  | 100.0 |  | Sum of los | st time (s) | 8.0 |
| Intersection Capacity Utilization |  |  | 69.3\% | ICU Level of Service |  |  | C |
| Analysis Period (min) |  |  | 15 |  |  |  |  |

Analysis Period (min)
15
c Critical Lane Group

|  | $\rangle$ |  |  |  |  |  |  | $\dagger$ |  |  |  | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  | $\uparrow \uparrow$ |  |  |  |  |  | 个中解 |  |
| Ideal Flow（vphpl） | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time（s） |  |  |  |  | 4.0 |  |  |  |  |  | 4.0 |  |
| Lane Util．Factor |  |  |  |  | 0.95 |  |  |  |  |  | 0.91 |  |
| Frpb，ped／bikes |  |  |  |  | 1.00 |  |  |  |  |  | 0.98 |  |
| Flpb，ped／bikes |  |  |  |  | 0.99 |  |  |  |  |  | 1.00 |  |
| Frt |  |  |  |  | 1.00 |  |  |  |  |  | 0.97 |  |
| Flt Protected |  |  |  |  | 0.99 |  |  |  |  |  | 1.00 |  |
| Satd．Flow（prot） |  |  |  |  | 2991 |  |  |  |  |  | 4387 |  |
| Flt Permitted |  |  |  |  | 0.99 |  |  |  |  |  | 1.00 |  |
| Satd．Flow（perm） |  |  |  |  | 2991 |  |  |  |  |  | 4387 |  |
| Volume（vph） | 0 | 0 | 0 | 59 | 274 | 0 | 0 | 0 | 0 | 0 | 677 | 158 |
| Peak－hour factor，PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj．Flow（vph） | 0 | 0 | 0 | 66 | 304 | 0 | 0 | 0 | 0 | 0 | 752 | 176 |
| RTOR Reduction（vph） | 0 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Group Flow（vph） | 0 | 0 | 0 | 0 | 351 | 0 | 0 | 0 | 0 | 0 | 928 | 0 |
| Confl．Peds．（\＃／hr） | 306 |  | 30 | 30 |  | 306 | 53 |  | 73 | 73 |  | 53 |
| Parking（\＃／hr） |  |  |  |  | 0 |  |  |  |  |  |  |  |
| Turn Type |  |  |  | Perm |  |  |  |  |  |  |  |  |
| Protected Phases |  |  |  |  | 8 |  |  |  |  |  | 6 |  |
| Permitted Phases |  |  |  | 8 |  |  |  |  |  |  |  |  |
| Actuated Green，G（s） |  |  |  |  | 47.0 |  |  |  |  |  | 45.0 |  |
| Effective Green，g（s） |  |  |  |  | 47.0 |  |  |  |  |  | 45.0 |  |
| Actuated g／C Ratio |  |  |  |  | 0.47 |  |  |  |  |  | 0.45 |  |
| Clearance Time（s） |  |  |  |  | 4.0 |  |  |  |  |  | 4.0 |  |
| Lane Grp Cap（vph） |  |  |  |  | 1406 |  |  |  |  |  | 1974 |  |
| v／s Ratio Prot |  |  |  |  |  |  |  |  |  |  | c0．21 |  |
| v／s Ratio Perm |  |  |  |  | 0.12 |  |  |  |  |  |  |  |
| v／c Ratio |  |  |  |  | 0.25 |  |  |  |  |  | 0.47 |  |
| Uniform Delay，d1 |  |  |  |  | 15.9 |  |  |  |  |  | 19.2 |  |
| Progression Factor |  |  |  |  | 0.84 |  |  |  |  |  | 1.00 |  |
| Incremental Delay，d2 |  |  |  |  | 0.4 |  |  |  |  |  | 0.8 |  |
| Delay（s） |  |  |  |  | 13.7 |  |  |  |  |  | 20.0 |  |
| Level of Service |  |  |  |  | B |  |  |  |  |  | B |  |
| Approach Delay（s） |  | 0.0 |  |  | 13.7 |  |  | 0.0 |  |  | 20.0 |  |
| Approach LOS |  | A |  |  | B |  |  | A |  |  | B |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |  |  |  |
| HCM Average Control Delay |  |  | 18.2 |  | HCM Le | el of S | rvice |  | B |  |  |  |
| HCM Volume to Capacity ratio |  |  | 0.36 |  |  |  |  |  |  |  |  |  |
| Actuated Cycle Length（s） |  |  | 100.0 |  | Sum of | st time |  |  | 8.0 |  |  |  |
| Intersection Capacity Utilization |  |  | 37．4\％ | ICU Level of Service |  |  |  |  | A |  |  |  |
| Analysis Period（min） |  |  | 15 |  |  |  |  |  |  |  |  |  |

Analysis Period（min）
15
c Critical Lane Group

Appendix H:
Future Levels of Service: Proposed Ramp Re-Configuration

|  | \ | $\lambda$ | m | $k$ | \% | T |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | SET | SER | NWL | NWT | NEL | NER |  |
| Lane Configurations | 个个 |  |  |  |  | F' |  |
| Sign Control | Free |  |  | Free | Yield |  |  |
| Grade | 0\% |  |  | 0\% | 0\% |  |  |
| Volume (veh/h) | 957 | 0 | 0 | 389 | 0 | 17 |  |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |  |
| Hourly flow rate (vph) | 1063 | 0 | 0 | 432 | 0 | 19 |  |
| Pedestrians | 23 |  |  | 22 | 48 |  |  |
| Lane Width (ft) | 12.0 |  |  | 12.0 | 10.0 |  |  |
| Walking Speed (ft/s) | 4.0 |  |  | 4.0 | 4.0 |  |  |
| Percent Blockage | 2 |  |  | 2 | 3 |  |  |
| Right turn flare (veh) |  |  |  |  |  |  |  |
| Median type |  |  |  |  | None |  |  |
| Median storage veh) |  |  |  |  |  |  |  |
| Upstream signal (ft) | 251 |  |  | 181 |  |  |  |
| pX, platoon unblocked |  |  | 0.83 |  | 0.83 | 0.83 |  |
| vC , conflicting volume |  |  | 1111 |  | 1278 | 602 |  |
| $\mathrm{vC1}$, stage 1 conf vol |  |  |  |  |  |  |  |
| $\mathrm{vC2}$, stage 2 conf vol |  |  |  |  |  |  |  |
| vCu, unblocked vol |  |  | 927 |  | 1129 | 312 |  |
| tC , single (s) |  |  | 4.2 |  | 6.9 | 7.0 |  |
| tC, 2 stage (s) |  |  |  |  |  |  |  |
| tF (s) |  |  | 2.2 |  | 3.6 | 3.4 |  |
| p0 queue free \% |  |  | 100 |  | 100 | 96 |  |
| cM capacity (veh/h) |  |  | 572 |  | 152 | 530 |  |
| Direction, Lane \# | SE 1 | SE 2 | NW 1 | NW 2 | NW 3 | NE 1 |  |
| Volume Total | 532 | 532 | 144 | 144 | 144 | 19 |  |
| Volume Left | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Volume Right | 0 | 0 | 0 | 0 | 0 | 19 |  |
| cSH | 1700 | 1700 | 1700 | 1700 | 1700 | 530 |  |
| Volume to Capacity | 0.31 | 0.31 | 0.08 | 0.08 | 0.08 | 0.04 |  |
| Queue Length (ft) | 0 | 0 | 0 | 0 | 0 | 3 |  |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.0 |  |
| Lane LOS |  |  |  |  |  | B |  |
| Approach Delay (s) | 0.0 |  | 0.0 |  |  | 12.0 |  |
| Approach LOS |  |  |  |  |  | B |  |
| Intersection Summary |  |  |  |  |  |  |  |
| Average Delay |  |  | 0.2 |  |  |  |  |
| Intersection Capacity Utilization |  |  | 41.7\% | ICU Level of Service |  |  | A |
| Analysis Period (min) |  |  | 15 |  |  |  |  |


|  | 5 |  | $\cdots$ | ＋ | $\pm$ | 4 | k | $\dagger$ | rat |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | WBL2 | WBT | WBR | SET | SER2 | NWL | NWT | NEL | NER2 |
| Lane Configurations |  |  |  | 44 | 「 |  | ＊个4 | \％ 1 | 「「で |
| Ideal Flow（vphpl） | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 10 | 10 |
| Total Lost time（s） |  | 4.0 |  | 4.0 | 4.0 |  | 4.0 | 4.0 | 4.0 |
| Lane Util．Factor |  | 0.95 |  | 0.95 | 1.00 |  | 0.91 | 0.97 | 0.88 |
| Frpb，ped／bikes |  | 0.87 |  | 1.00 | 0.85 |  | 1.00 | 1.00 | 1.00 |
| Flpb，ped／bikes |  | 1.00 |  | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |
| Frt |  | 0.90 |  | 1.00 | 0.85 |  | 1.00 | 1.00 | 0.85 |
| Flt Protected |  | 1.00 |  | 1.00 | 1.00 |  | 0.99 | 0.95 | 1.00 |
| Satd．Flow（prot） |  | 2516 |  | 3438 | 1305 |  | 4893 | 3113 | 2527 |
| Flt Permitted |  | 1.00 |  | 1.00 | 1.00 |  | 0.76 | 0.95 | 1.00 |
| Satd．Flow（perm） |  | 2516 |  | 3438 | 1305 |  | 3731 | 3113 | 2527 |
| Volume（vph） | 7 | 92 | 171 | 625 | 14 | 46 | 347 | 284 | 323 |
| Peak－hour factor，PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj．Flow（vph） | 8 | 102 | 190 | 694 | 16 | 51 | 386 | 316 | 359 |
| RTOR Reduction（vph） | 0 | 137 | 0 | 0 | 0 | 0 | 0 | 0 | 158 |
| Lane Group Flow（vph） | 0 | 163 | 0 | 694 | 16 | 0 | 437 | 316 | 201 |
| Confl．Peds．（\＃／hr） | 34 |  | 106 |  | 76 | 76 |  |  |  |
| Turn Type | Perm |  |  |  | Perm | Perm |  |  | Perm |
| Protected Phases |  | 8 |  | 2 |  |  | 2 | 1 |  |
| Permitted Phases | 8 |  |  |  | 2 | 2 |  |  | 1 |
| Actuated Green，G（s） |  | 27.0 |  | 30.0 | 30.0 |  | 30.0 | 28.0 | 28.0 |
| Effective Green，g（s） |  | 28.0 |  | 31.0 | 31.0 |  | 31.0 | 29.0 | 29.0 |
| Actuated g／C Ratio |  | 0.28 |  | 0.31 | 0.31 |  | 0.31 | 0.29 | 0.29 |
| Clearance Time（s） |  | 5.0 |  | 5.0 | 5.0 |  | 5.0 | 5.0 | 5.0 |
| Lane Grp Cap（vph） |  | 704 |  | 1066 | 405 |  | 1157 | 903 | 733 |
| v／s Ratio Prot |  |  |  | c0．20 |  |  |  | 0.10 |  |
| v／s Ratio Perm |  | 0.12 |  |  | 0.01 |  | 0.12 |  | 0.14 |
| v／c Ratio |  | 0.23 |  | 0.65 | 0.04 |  | 0.38 | 0.35 | 0.27 |
| Uniform Delay，d1 |  | 27.7 |  | 29.8 | 24.1 |  | 27.0 | 28.1 | 27.4 |
| Progression Factor |  | 0.98 |  | 1.00 | 1.00 |  | 0.32 | 1.00 | 1.00 |
| Incremental Delay，d2 |  | 0.8 |  | 3.1 | 0.2 |  | 0.9 | 1.1 | 0.9 |
| Delay（s） |  | 28.0 |  | 32.9 | 24.3 |  | 9.5 | 29.1 | 28.3 |
| Level of Service |  | C |  | C | C |  | A | C | C |
| Approach Delay（s） |  | 28.0 |  | 32.7 |  |  | 9.5 | 28.7 |  |
| Approach LOS |  | C |  | C |  |  | A | C |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |
| HCM Average Control Delay |  |  | 26.0 |  | HCM Lev | el of S | rvice |  | C |
| HCM Volume to Capacity ratio |  |  | 0.53 |  |  |  |  |  |  |
| Actuated Cycle Length（s） |  |  | 100.0 |  | Sum of lo | st time |  |  | 12.0 |
| Intersection Capacity Utilization |  |  | Err\％ |  | CU Leve | of Se | vice |  | H |
| Analysis Period（min） |  |  | 15 |  |  |  |  |  |  |

Analysis Period（min）
15
c Critical Lane Group

|  | ＊ |  |  |  |  |  |  |  |  |  |  | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | NBL | NBT | NBR | SBL | SBT | SBR | SEL | SET | SER | NWL | NWT | NWR |
| Lane Configurations |  |  |  | ${ }_{7}$ | 性 |  |  | 性 |  |  | ＊个个 |  |
| Ideal Flow（vphpl） | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width | 10 | 10 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 12 | 12 |
| Total Lost time（s） |  |  |  | 4.0 | 4.0 |  |  | 4.0 |  |  | 4.0 |  |
| Lane Util．Factor |  |  |  | 1.00 | 0.95 |  |  | 0.95 |  |  | 0.91 |  |
| Frpb，ped／bikes |  |  |  | 1.00 | 1.00 |  |  | 0.99 |  |  | 1.00 |  |
| Flpb，ped／bikes |  |  |  | 0.95 | 1.00 |  |  | 1.00 |  |  | 1.00 |  |
| Frt |  |  |  | 1.00 | 1.00 |  |  | 0.97 |  |  | 1.00 |  |
| Flt Protected |  |  |  | 0.95 | 1.00 |  |  | 1.00 |  |  | 0.99 |  |
| Satd．Flow（prot） |  |  |  | 1530 | 3191 |  |  | 3326 |  |  | 4898 |  |
| Flt Permitted |  |  |  | 0.95 | 1.00 |  |  | 1.00 |  |  | 0.71 |  |
| Satd．Flow（perm） |  |  |  | 1530 | 3191 |  |  | 3326 |  |  | 3485 |  |
| Volume（vph） | 0 | 0 | 0 | 92 | 136 | 4 | 0 | 799 | 171 | 71 | 388 | 0 |
| Peak－hour factor，PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj．Flow（vph） | 0 | 0 | 0 | 102 | 151 | 4 | 0 | 888 | 190 | 79 | 431 | 0 |
| RTOR Reduction（vph） | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 18 | 0 | 0 | 0 | 0 |
| Lane Group Flow（vph） | 0 | 0 | 0 | 102 | 153 | 0 | 0 | 1060 | 0 | 0 | 510 | 0 |
| Confl．Peds．（\＃／hr） | 74 |  | 57 | 57 |  | 74 | 35 |  | 46 | 46 |  | 35 |
| Parking（\＃／hr） |  |  |  |  |  | 0 |  |  |  |  |  |  |
| Turn Type |  |  |  | Perm |  |  |  |  |  | Perm |  |  |
| Protected Phases |  |  |  |  | 2 |  |  | 1 |  |  | 1 |  |
| Permitted Phases |  |  |  | 2 |  |  |  |  |  | 1 |  |  |
| Actuated Green，G（s） |  |  |  | 35.0 | 35.0 |  |  | 53.0 |  |  | 53.0 |  |
| Effective Green，g（s） |  |  |  | 37.0 | 37.0 |  |  | 55.0 |  |  | 55.0 |  |
| Actuated g／C Ratio |  |  |  | 0.37 | 0.37 |  |  | 0.55 |  |  | 0.55 |  |
| Clearance Time（s） |  |  |  | 6.0 | 6.0 |  |  | 6.0 |  |  | 6.0 |  |
| Lane Grp Cap（vph） |  |  |  | 566 | 1181 |  |  | 1829 |  |  | 1917 |  |
| v／s Ratio Prot |  |  |  |  | 0.05 |  |  | c0．32 |  |  |  |  |
| v／s Ratio Perm |  |  |  | 0.07 |  |  |  |  |  |  | 0.15 |  |
| v／c Ratio |  |  |  | 0.18 | 0.13 |  |  | 0.58 |  |  | 0.27 |  |
| Uniform Delay，d1 |  |  |  | 21.3 | 20.8 |  |  | 14.9 |  |  | 11.9 |  |
| Progression Factor |  |  |  | 1.87 | 1.89 |  |  | 0.65 |  |  | 1.58 |  |
| Incremental Delay，d2 |  |  |  | 0.7 | 0.2 |  |  | 1.1 |  |  | 0.3 |  |
| Delay（s） |  |  |  | 40.5 | 39.6 |  |  | 10.8 |  |  | 19.0 |  |
| Level of Service |  |  |  | D | D |  |  | B |  |  | B |  |
| Approach Delay（s） |  | 0.0 |  |  | 39.9 |  |  | 10.8 |  |  | 19.0 |  |
| Approach LOS |  | A |  |  | D |  |  | B |  |  | B |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |  |  |  |
| HCM Average Control Delay |  |  | 17.1 |  | HCM Le | el of Se | rvice |  | B |  |  |  |
| HCM Volume to Capacity ratio |  |  | 0.42 |  |  |  |  |  |  |  |  |  |
|  |  |  | 100.0 |  | Sum of | st time |  |  | 8.0 |  |  |  |
| Intersection Capacity Utilization |  |  | 64．9\％ |  | CU Lev | of Ser | vice |  | C |  |  |  |
| Analysis Period（min） |  |  | 15 |  |  |  |  |  |  |  |  |  |
| c Critical Lane Group |  |  |  |  |  |  |  |  |  |  |  |  |


| Movement | SBL | SBR | SEL | SET | NWT | NWR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations |  |  | \% | *4 | 种t |  |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width | 10 | 10 | 12 | 12 | 12 | 12 |
| Total Lost time (s) |  |  | 4.0 | 4.0 | 4.0 |  |
| Lane Util. Factor |  |  | 0.91 | 0.91 | 0.91 |  |
| Frpb, ped/bikes |  |  | 1.00 | 1.00 | 0.98 |  |
| Flpb, ped/bikes |  |  | 1.00 | 1.00 | 1.00 |  |
| Frt |  |  | 1.00 | 1.00 | 0.93 |  |
| Flt Protected |  |  | 0.95 | 0.99 | 1.00 |  |
| Satd. Flow (prot) |  |  | 1564 | 3264 | 4509 |  |
| Flt Permitted |  |  | 0.95 | 0.64 | 1.00 |  |
| Satd. Flow (perm) |  |  | 1564 | 2110 | 4509 |  |
| Volume (vph) | 0 | 0 | 366 | 571 | 503 | 457 |
| Peak-hour factor, PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 0 | 0 | 407 | 634 | 559 | 508 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 0 | 0 | 275 | 766 | 1067 | 0 |
| Confl. Peds. (\#/hr) | 82 | 3 | 13 |  |  | 13 |

Turn Type custom

| Protected Phases | 34 | 14 |  |
| :--- | ---: | ---: | ---: |
| Permitted Phases | 3 |  |  |
| Actuated Green, G (s) | 50.0 | 92.0 | 42.0 |


| Effective Green, g (s) | 50.0 | 92.0 | 42.0 |
| :--- | :--- | :--- | :--- |
| Actuated g/C Ratio | 0.50 | 0.92 | 0.42 |


| Clearance Time (s) |  |  | 4.0 |
| :--- | ---: | :--- | ---: | ---: |
| Lane Grp Cap (vph) | 782 | 2518 | 1894 |


| v/s Ratio Prot | $c 0.18$ | 0.15 | $c 0.24$ |
| :--- | :--- | :--- | :--- |
| $\mathrm{v} / \mathrm{s}$ Ratio Perm |  | 0.13 |  |


| v/c Ratio | 0.35 | 0.30 | 0.56 |
| :--- | ---: | ---: | ---: |
| Uniform Delay, d1 | 15.2 | 0.4 | 22.0 |
| Progression Factor | 0.33 | 0.13 | 1.00 |


| Incremental Delay, d2 | 1.1 | 0.3 | 1.2 |
| :--- | :--- | :--- | :--- |

Delay (s)

| 6.1 | 0.3 | 23.3 |
| :--- | :--- | :--- |


| Level of Service |  | A | A | C |
| :--- | ---: | ---: | ---: | ---: |
| Approach Delay (s) | 0.0 | 1.9 | 23.3 |  |
| Approach LOS | A | A | C |  |


| Intersection Summary |  |  |  |
| :--- | ---: | :--- | ---: |
| HCM Average Control Delay | 12.7 | HCM Level of Service | B |
| HCM Volume to Capacity ratio | 0.45 |  | 8.0 |
| Actuated Cycle Length (s) | 100.0 | Sum of lost time (s) | A |
| Intersection Capacity Utilization | $52.5 \%$ | ICU Level of Service |  |
| Analysis Period (min) | 15 |  |  |

c Critical Lane Group


|  | $\cdots$ |  |  | 4 | 4 | 4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | WBL | WBT | WBR | NBL2 | NBL | NBT |  |
| Lane Configurations | \％${ }^{*}$ | 个 ${ }^{1}$ |  |  | \％ | 个个个 |  |
| Ideal Flow（vphpl） | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |  |
| Total Lost time（s） | 4.0 | 4.0 |  |  | 4.0 | 4.0 |  |
| Lane Util．Factor | 0.97 | 0.95 |  |  | 1.00 | 0.91 |  |
| Frpb，ped／bikes | 1.00 | 0.83 |  |  | 1.00 | 1.00 |  |
| Flpb，ped／bikes | 1.00 | 1.00 |  |  | 0.91 | 1.00 |  |
| Frt | 1.00 | 0.93 |  |  | 1.00 | 1.00 |  |
| Flt Protected | 0.95 | 1.00 |  |  | 0.95 | 1.00 |  |
| Satd．Flow（prot） | 3113 | 2465 |  |  | 1457 | 4611 |  |
| Flt Permitted | 0.95 | 1.00 |  |  | 0.95 | 1.00 |  |
| Satd．Flow（perm） | 3113 | 2465 |  |  | 1457 | 4611 |  |
| Volume（vph） | 198 | 217 | 202 | 33 | 63 | 1835 |  |
| Peak－hour factor，PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |  |
| Adj．Flow（vph） | 220 | 241 | 224 | 37 | 70 | 2039 |  |
| RTOR Reduction（vph） | 0 | 18 | 0 | 0 | 10 | 0 |  |
| Lane Group Flow（vph） | 220 | 447 | 0 | 0 | 97 | 2039 |  |
| Confl．Peds．（\＃／hr） |  |  | 298 |  | 49 |  |  |
| Parking（\＃／hr） |  |  | 0 |  |  |  |  |
| Turn Type | Prot |  |  | Perm | Perm |  |  |
| Protected Phases | 3 | 8 |  |  |  | 2 |  |
| Permitted Phases |  |  |  | 2 | 2 |  |  |
| Actuated Green，G（s） | 19.0 | 19.0 |  |  | 70.0 | 70.0 |  |
| Effective Green，g（s） | 20.0 | 20.0 |  |  | 72.0 | 72.0 |  |
| Actuated g／C Ratio | 0.20 | 0.20 |  |  | 0.72 | 0.72 |  |
| Clearance Time（s） | 5.0 | 5.0 |  |  | 6.0 | 6.0 |  |
| Lane Grp Cap（vph） | 623 | 493 |  |  | 1049 | 3320 |  |
| v／s Ratio Prot | 0.07 | c0．19 |  |  |  | c0．44 |  |
| v／s Ratio Perm |  |  |  |  | 0.07 |  |  |
| v／c Ratio | 0.351 | 1．10dr |  |  | 0.09 | 0.61 |  |
| Uniform Delay，d1 | 34.4 | 39.1 |  |  | 4.2 | 7.0 |  |
| Progression Factor | 1.00 | 1.00 |  |  | 1.08 | 1.08 |  |
| Incremental Delay，d2 | 1.6 | 22.8 |  |  | 0.1 | 0.4 |  |
| Delay（s） | 36.0 | 61.9 |  |  | 4.6 | 8.0 |  |
| Level of Service | D | E |  |  | A | A |  |
| Approach Delay（s） |  | 53.6 |  |  |  | 7.8 |  |
| Approach LOS |  | D |  |  |  | A |  |
| Intersection Summary |  |  |  |  |  |  |  |
|  |  |  | 18.9 |  | HCM Lev | el of Service | B |
| HCM Average Control Delay HCM Volume to Capacity ratio |  |  | 0.69 |  |  |  |  |
| Actuated Cycle Length（s） |  |  | 100.0 |  | Sum of los | st time（s） | 8.0 |
| Intersection Capacity Utilization |  |  | 58．8\％ |  | CU Leve | of Service | B |
| Analysis Period（min） |  |  | 15 |  |  |  |  |
| dr Defacto Right Lane．Recode with |  |  | 1 though | lane as | as a right | lane． |  |
|  |  |  |  |  |  |  |  |


|  | $\stackrel{ }{ }$ |  |  |  |  |  | 4 | $\dagger$ | $p$ |  | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  | $\uparrow \uparrow$ |  |  |  |  |  | 个性 |  |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) |  |  |  |  | 4.0 |  |  |  |  |  | 4.0 |  |
| Lane Util. Factor |  |  |  |  | 0.95 |  |  |  |  |  | 0.91 |  |
| Frpb, ped/bikes |  |  |  |  | 1.00 |  |  |  |  |  | 0.98 |  |
| Flpb, ped/bikes |  |  |  |  | 0.99 |  |  |  |  |  | 1.00 |  |
| Frt |  |  |  |  | 1.00 |  |  |  |  |  | 0.98 |  |
| Flt Protected |  |  |  |  | 0.99 |  |  |  |  |  | 1.00 |  |
| Satd. Flow (prot) |  |  |  |  | 2981 |  |  |  |  |  | 4414 |  |
| Flt Permitted |  |  |  |  | 0.99 |  |  |  |  |  | 1.00 |  |
| Satd. Flow (perm) |  |  |  |  | 2981 |  |  |  |  |  | 4414 |  |
| Volume (vph) | 0 | 0 | 0 | 58 | 218 | 0 | 0 | 0 | 0 | 0 | 173 | 31 |
| Peak-hour factor, PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 0 | 0 | 0 | 64 | 242 | 0 | 0 | 0 | 0 | 0 | 192 | 34 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 0 | 0 | 0 | 0 | 282 | 0 | 0 | 0 | 0 | 0 | 226 | 0 |
| Confl. Peds. (\#/hr) | 184 |  | 30 | 30 |  | 184 | 68 |  | 51 | 51 |  | 68 |
| Parking (\#/hr) |  |  |  |  | 0 |  |  |  |  |  |  |  |
| Turn Type |  |  |  | Perm |  |  |  |  |  |  |  |  |
| Protected Phases |  |  |  |  | 8 |  |  |  |  |  | 6 |  |
| Permitted Phases |  |  |  | 8 |  |  |  |  |  |  |  |  |
| Actuated Green, G (s) |  |  |  |  | 52.0 |  |  |  |  |  | 40.0 |  |
| Effective Green, g (s) |  |  |  |  | 52.0 |  |  |  |  |  | 40.0 |  |
| Actuated g/C Ratio |  |  |  |  | 0.52 |  |  |  |  |  | 0.40 |  |
| Clearance Time (s) |  |  |  |  | 4.0 |  |  |  |  |  | 4.0 |  |
| Lane Grp Cap (vph) |  |  |  |  | 1550 |  |  |  |  |  | 1766 |  |
| v/s Ratio Prot |  |  |  |  |  |  |  |  |  |  | c0.05 |  |
| v/s Ratio Perm |  |  |  |  | 0.10 |  |  |  |  |  |  |  |
| v/c Ratio |  |  |  |  | 0.18 |  |  |  |  |  | 0.13 |  |
| Uniform Delay, d1 |  |  |  |  | 12.7 |  |  |  |  |  | 19.0 |  |
| Progression Factor |  |  |  |  | 1.94 |  |  |  |  |  | 1.00 |  |
| Incremental Delay, d2 |  |  |  |  | 0.2 |  |  |  |  |  | 0.1 |  |
| Delay (s) |  |  |  |  | 24.9 |  |  |  |  |  | 19.1 |  |
| Level of Service |  |  |  |  | C |  |  |  |  |  | B |  |
| Approach Delay (s) |  | 0.0 |  |  | 24.9 |  |  | 0.0 |  |  | 19.1 |  |
| Approach LOS |  | A |  |  | C |  |  | A |  |  | B |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |  |  |  |
| HCM Average Control Delay |  |  | 22.5 |  | HCM Le | el of S | vice |  | C |  |  |  |
| HCM Volume to Capacity ratioActuated Cycle Length (s) |  |  | 0.17 |  |  |  |  |  |  |  |  |  |
|  |  |  | 100.0 |  | Sum of | st time |  |  | 8.0 |  |  |  |
| Intersection Capacity Utilization |  |  | 33.3\% | ICU Level of Service |  |  |  |  | A |  |  |  |
| Analysis Period (min) |  |  | 15 |  |  |  |  |  |  |  |  |  |

Analysis Period (min)
15
c Critical Lane Group

| Movement | WBL2 | WBT | WBR | NBL | NBR2 | SET | SER2 | NWL | NWT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations |  | 㻢 |  | ${ }^{17}$ | 「「゙ | 体 | 「 |  | ＊种 |
| Ideal Flow（vphpl） | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width | 10 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 |
| Total Lost time（s） |  | 4.0 |  | 4.0 | 4.0 | 4.0 | 4.0 |  | 4.0 |
| Lane Util．Factor |  | 0.95 |  | 0.97 | 0.88 | 0.95 | 1.00 |  | 0.91 |
| Frpb，ped／bikes |  | 0.96 |  | 1.00 | 1.00 | 1.00 | 0.90 |  | 1.00 |
| Flpb，ped／bikes |  | 1.00 |  | 1.00 | 1.00 | 1.00 | 1.00 |  | 1.00 |
| Frt |  | 0.90 |  | 1.00 | 0.85 | 1.00 | 0.85 |  | 1.00 |
| Flt Protected |  | 1.00 |  | 0.95 | 1.00 | 1.00 | 1.00 |  | 1.00 |
| Satd．Flow（prot） |  | 2778 |  | 3113 | 2527 | 3438 | 1387 |  | 4904 |
| Flt Permitted |  | 1.00 |  | 0.95 | 1.00 | 1.00 | 1.00 |  | 0.86 |
| Satd．Flow（perm） |  | 2778 |  | 3113 | 2527 | 3438 | 1387 |  | 4217 |
| Volume（vph） | 6 | 155 | 289 | 65 | 167 | 464 | 17 | 40 | 409 |
| Peak－hour factor，PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj．Flow（vph） | 7 | 172 | 321 | 72 | 186 | 516 | 19 | 44 | 454 |
| RTOR Reduction（vph） | 0 | 234 | 0 | 0 | 136 | 0 | 0 | 0 | 0 |
| Lane Group Flow（vph） | 0 | 266 | 0 | 72 | 50 | 516 | 19 | 0 | 498 |
| Confl．Peds．（\＃／hr） | 21 |  | 28 |  |  |  | 47 | 47 |  |
| Turn Type | Perm |  |  |  | Perm |  | Perm | Perm |  |
| Protected Phases |  | 8 |  | 1 |  | 2 |  |  | 2 |
| Permitted Phases | 8 |  |  |  | 1 |  | 2 | 2 |  |
| Actuated Green，G（s） |  | 26.0 |  | 26.0 | 26.0 | 33.0 | 33.0 |  | 33.0 |
| Effective Green，g（s） |  | 27.0 |  | 27.0 | 27.0 | 34.0 | 34.0 |  | 34.0 |
| Actuated g／C Ratio |  | 0.27 |  | 0.27 | 0.27 | 0.34 | 0.34 |  | 0.34 |
| Clearance Time（s） |  | 5.0 |  | 5.0 | 5.0 | 5.0 | 5.0 |  | 5.0 |
| Lane Grp Cap（vph） |  | 750 |  | 841 | 682 | 1169 | 472 |  | 1434 |
| v／s Ratio Prot |  |  |  | 0.02 |  | c0．15 |  |  |  |
| v／s Ratio Perm |  | 0.18 |  |  | 0.07 |  | 0.01 |  | 0.12 |
| v／c Ratio |  | 0.35 |  | 0.09 | 0.07 | 0.44 | 0.04 |  | 0.35 |
| Uniform Delay，d1 |  | 29.5 |  | 27.3 | 27.2 | 25.6 | 22.1 |  | 24.7 |
| Progression Factor |  | 1.71 |  | 1.00 | 1.00 | 1.00 | 1.00 |  | 0.27 |
| Incremental Delay，d2 |  | 1.3 |  | 0.2 | 0.2 | 1.2 | 0.2 |  | 0.7 |
| Delay（s） |  | 51.6 |  | 27.5 | 27.4 | 26.8 | 22.2 |  | 7.2 |
| Level of Service |  | D |  | C | C | C | C |  | A |
| Approach Delay（s） |  | 51.6 |  | 27.4 |  | 26.7 |  |  | 7.2 |
| Approach LOS |  | D |  | C |  | C |  |  | A |
| Intersection Summary |  |  |  |  |  |  |  |  |  |
| HCM Average Control Delay |  |  | 28.3 |  | HCM Le | el of S | ervice |  | C |
| HCM Volume to Capacity ratio |  |  | 0.46 |  |  |  |  |  |  |
| Actuated Cycle Length（s） |  |  | 100.0 |  | Sum of | st time |  |  | 12.0 |
| Intersection Capacity Utilization |  |  | Err\％ |  | CU Lev | I of Se | vice |  | H |
| Analysis Period（min） |  |  | 15 |  |  |  |  |  |  |

Analysis Period（min）
15
c Critical Lane Group

|  |  | Pa | $\backslash$ |  | $\square$ | $k$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | NBL | NBR | SET | SER | NWL | NWT |  |
| Lane Configurations |  | 「 | 个4 |  |  | 个性 |  |
| Sign Control | Stop |  | Free |  |  | Free |  |
| Grade | 0\％ |  | 0\％ |  |  | 0\％ |  |
| Volume（veh／h） | 0 | 23 | 651 | 0 | 0 | 429 |  |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |  |
| Hourly flow rate（vph） | 0 | 26 | 723 | 0 | 0 | 477 |  |
| Pedestrians |  |  |  |  |  | 6 |  |
| Lane Width（ft） |  |  |  |  |  | 12.0 |  |
| Walking Speed（fts） |  |  |  |  |  | 4.0 |  |
| Percent Blockage |  |  |  |  |  | 0 |  |
| Right turn flare（veh） |  |  |  |  |  |  |  |
| Median type | None |  |  |  |  |  |  |
| Median storage veh） |  |  |  |  |  |  |  |
| Upstream signal（ft） |  |  | 280 |  |  | 151 |  |
| pX，platoon unblocked | 0.89 | 0.89 |  |  | 0.89 |  |  |
| vC ，conflicting volume | 882 | 368 |  |  | 723 |  |  |
| vC1，stage 1 conf vol |  |  |  |  |  |  |  |
| $\mathrm{vC2}$ ，stage 2 conf vol |  |  |  |  |  |  |  |
| vCu, unblocked vol | 742 | 164 |  |  | 564 |  |  |
| tC ，single（s） | 6.9 | 7.0 |  |  | 4.2 |  |  |
| tC， 2 stage（s） |  |  |  |  |  |  |  |
| tF（s） | 3.6 | 3.4 |  |  | 2.2 |  |  |
| p0 queue free \％ | 100 | 97 |  |  | 100 |  |  |
| cM capacity（veh／h） | 306 | 745 |  |  | 874 |  |  |
| Direction，Lane \＃ | NB 1 | SE 1 | SE 2 | NW 1 | NW 2 | NW 3 |  |
| Volume Total | 26 | 362 | 362 | 159 | 159 | 159 |  |
| Volume Left | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Volume Right | 26 | 0 | 0 | 0 | 0 | 0 |  |
| cSH | 745 | 1700 | 1700 | 1700 | 1700 | 1700 |  |
| Volume to Capacity | 0.03 | 0.21 | 0.21 | 0.09 | 0.09 | 0.09 |  |
| Queue Length（ft） | 3 | 0 | 0 | 0 | 0 | 0 |  |
| Control Delay（s） | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |
| Lane LOS | B |  |  |  |  |  |  |
| Approach Delay（s） | 10.0 | 0.0 |  | 0.0 |  |  |  |
| Approach LOS | B |  |  |  |  |  |  |
| Intersection Summary |  |  |  |  |  |  |  |
| Average Delay |  |  | 0.2 |  |  |  |  |
| Intersection Capacity Utilization |  |  | 29．8\％ | ICU Level of Service |  |  | A |
| Analysis Period（min） |  |  | 15 |  |  |  |  |




Analysis Period (min)
15
c Critical Lane Group


|  | n |  | 4 | 4 | 4 | $\dagger$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Movement | WBL | WBT | WBR | NBL2 | NBL | NBT |  |
| Lane Configurations | ＊＊ |  |  |  | \％ | 个个个 |  |
| Ideal Flow（vphpl） | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |  |
| Total Lost time（s） | 4.0 | 4.0 |  |  | 4.0 | 4.0 |  |
| Lane Util．Factor | 0.97 | 0.95 |  |  | 1.00 | 0.91 |  |
| Frpb，ped／bikes | 1.00 | 0.92 |  |  | 1.00 | 1.00 |  |
| Flpb，ped／bikes | 1.00 | 1.00 |  |  | 0.96 | 1.00 |  |
| Frt | 1.00 | 0.97 |  |  | 1.00 | 1.00 |  |
| Flt Protected | 0.95 | 1.00 |  |  | 0.95 | 1.00 |  |
| Satd．Flow（prot） | 3113 | 2872 |  |  | 1541 | 4611 |  |
| Flt Permitted | 0.95 | 1.00 |  |  | 0.95 | 1.00 |  |
| Satd．Flow（perm） | 3113 | 2872 |  |  | 1541 | 4611 |  |
| Volume（vph） | 1764 | 281 | 72 | 168 | 70 | 364 |  |
| Peak－hour factor，PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |  |
| Adj．Flow（vph） | 1960 | 312 | 80 | 187 | 78 | 404 |  |
| RTOR Reduction（vph） | 0 | 23 | 0 | 0 | 9 | 0 |  |
| Lane Group Flow（vph） | 1960 | 369 | 0 | 0 | 256 | 404 |  |
| Confl．Peds．（\＃／hr） |  |  | 349 |  | 21 |  |  |
| Parking（\＃／hr） |  |  | 0 |  |  |  |  |
| Turn Type | Prot |  |  | Perm | Perm |  |  |
| Protected Phases | 3 | 8 |  |  |  | 2 |  |
| Permitted Phases |  |  |  | 2 | 2 |  |  |
| Actuated Green，G（s） | 60.0 | 60.0 |  |  | 29.0 | 29.0 |  |
| Effective Green，g（s） | 61.0 | 61.0 |  |  | 31.0 | 31.0 |  |
| Actuated g／C Ratio | 0.61 | 0.61 |  |  | 0.31 | 0.31 |  |
| Clearance Time（s） | 5.0 | 5.0 |  |  | 6.0 | 6.0 |  |
| Lane Grp Cap（vph） | 1899 | 1752 |  |  | 478 | 1429 |  |
| v／s Ratio Prot | c0．63 | 0.14 |  |  |  | 0.09 |  |
| v／s Ratio Perm |  |  |  |  | 0.17 |  |  |
| v／c Ratio | 1.03 | 0.21 |  |  | 0.54 | 0.28 |  |
| Uniform Delay，d1 | 19.5 | 8.7 |  |  | 28.5 | 26.1 |  |
| Progression Factor | 1.00 | 1.00 |  |  | 0.90 | 0.87 |  |
| Incremental Delay，d2 | 29.4 | 0.3 |  |  | 4.1 | 0.5 |  |
| Delay（s） | 48.9 | 9.0 |  |  | 29.9 | 23.2 |  |
| Level of Service | D | A |  |  | C | C |  |
| Approach Delay（s） |  | 42.3 |  |  |  | 25.8 |  |
| Approach LOS |  | D |  |  |  | C |  |
| Intersection Summary |  |  |  |  |  |  |  |
| HCM Average Control Delay |  |  | 38.6 |  | HCM Lev | el of Service | D |
| HCM Volume to Capacity ratio |  |  | 0.87 |  |  |  |  |
|  |  |  | 100.0 |  | Sum of los | st time（s） | 8.0 |
| Intersection Capacity Utilization |  |  | 70．2\％ |  | ICU Leve | of Service | C |
| Analysis Period（min） |  |  | 15 |  |  |  |  |

Analysis Period（min）
15
c Critical Lane Group


Analysis Period (min)
15
c Critical Lane Group

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## APPENDIX B

## Harry S. Truman Building Environmental Assessment Addendum - $22^{\text {nd }}$ Street

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## MEMORANDUM

| TO: | Christopher Ziemann, Transportation Planner Ward 2 District Department of Transportation |
| :---: | :---: |
| FROM: | Kevin R. Fellin |
| CC: | E. Mitchell Buck |
|  | Karn Charuhas Chapman \& Twohey |
|  | Deana Rhodeside |
|  | Rhodeside \& Harwell |
|  | Emily Brodhag |
|  | Rhodeside \& Harwell |
| SUBJECT: | Harry S Truman Building - United States Department of State |
|  | Environmental Assessment Addendum - 22 ${ }^{\text {nd }}$ Street Transportation Element |
|  | December 4, 2009; <br> Washington, D.C. |
| RE: | DDOT Comments discussed at a meeting on Thursday, March 4, 2010. |
| DATE: | April 07, 2010 |

## Introduction

The purpose of this memorandum is to respond to specific transportation comments/concerns identified at a meeting held at DDOT on Thursday, March 4th.

Each of the comments discussed are reproduced with responses below:

## Comment \#I: Page 4: Table I, describe why the mid-day peak hour for 22nd Street/Constitution Avenue was from 3:45-4:45 PM.

Response: A 12-hour traffic count was performed on the segment of 22nd Street, NW from Constitution Avenue, NW to C Street, NW. The peak periods were identified as 7 AM to 10 AM (AM Peak Period), IO AM to 4 PM (Mid-Day Peak Period), and 4 PM to 7 PM (PM Peak Period). Based on the increasing through traffic volumes on Constitution Avenue, NW, the mid-day peak hour was identified as 3:45 PM - 4:45 PM. This is the shoulder hour immediately preceding the first PM Peak Period hour (4:00 PM - 5:00 PM).

## Comment \#2: Page 16: Figure 10, verify the number of weekday daily buses for bus lines HI, LI, and N3.

Response: The number of daily Metrobus' at the bus stop located at the southeast quadrant of 23 rd Street, NW/C Street, NW intersection for bus lines HI, LI, and N3 were verified to be correct as summarized below:

- Line HI: See Appendix page IV-37 from the December 4, 2009 22nd Street Assessment. In the weekday northbound direction, a total of six (6) daily buses between 4:29 PM and 6:20 PM serve this 23 rd Street, NW bus stop.
- Line LI: See Appendix page IV-42 and 43 from the December 4, 2009 22nd Street Assessment. In the weekday northbound direction, a total of seven (7) daily buses between 4:17 PM and 6:36 PM serve this 23 rd Street, NW bus stop.
- Line N3: See Appendix page IV-53 from the December 4, 2009 22nd Street Assessment. In the weekday northbound direction, at total of four (4) daily buses between 4:59 PM and 6:26 PM serve this 23 rd Street, NW bus stop.


## Comment \#3: Page 18: Table 4, describe why vehicles are double parked.

Response: The double parked vehicles summarized in Table 4 were predominately taxis, but at times also included hired vehicles and private vehicles, that are waiting to pick-up passengers.

## Comment \#4: Page 23: Table 6, describe what standing loading vehicles are doing that are not in the loading dock area.

Response: Loading vehicles that were not in the loading area were at times observed standing along the west side curb on $22^{\text {nd }}$ Street, NW at times when the loading area was occupied. This situation is illustrated on page 22, Photo 7 from the December 4, 2009 22 ${ }^{\text {nd }}$ Street Assessment where a delivery box truck is in the loading area, a USPS vehicle had arrived, and a Deer Park water truck is curbside making a local delivery.

## Comment \#5: Page 29: Last paragraph. Can the Department of State provide transportation management elements currently in place?

Response: This information can be found as the first document in Appendix B of the EA and for your convenience included herein as Attachment I to this document.

| Comment \#6: | Page 32: Figure 12, further describe the operation of the proposed APhA vehicle barrier at its garage driveway. Will a vehicle approaching the barrier block a sidewalk or cause conflicts with a vehicle traveling southbound on 22nd Street. |
| :---: | :---: |
| Response: | Currently the existing sidewalk terminates on the immediate north side of the subject driveway. A vehicle approaching the security barrier would not conflict with southbound traffic or block a sidewalk if the approaching vehicle stood approximately $6^{\prime}-0^{\prime \prime}$ from the face of security barrier or the approximate width of the approaching sidewalk. The standing vehicle would be accommodated in the remaining approximate 7 ' -0 " from the outside edge of side walk to face of curb plus 17+ feet of the 34 foot southbound travel lane. The southbound travel lane is approximately 34 feet wide in the vicinity of the subject driveway to accommodate a 17 foot stall depth for angled parking and a 17 foot southbound travel lane immediately south of the subject driveway. |

## Comment \#7: Page 34: Table I0, what attributes to the decrease in delay at the study intersections under proposed future conditions?

Response: The proposed action will replace the retractable barriers and guard booth at the C Street, NW/22nd Street, NW intersection with retractable emergency bollards. Under this condition, DOS site trips will no longer use this site access point and it would be limited to emergencies and high level visitors. The removal of this site access point under the proposed action will remove peak hour vehicles from this segment of $22^{\text {nd }}$ Street and as a result it decreased the calculated vehicle delay.

Please contact myself and/or Michael Workosky at 703-917-6620 with any questions/comments you may have regarding this document.

Enclosure

August 7, 2006
Mr. Enrique Bellini
Karn Caruhas Chapman \& Twohey
1120 Connecticut Avenue, NW Suite 1250
Washington, DC 20036
Re: Contract: S-ALMEC-02-C-0039
Perimeter Security Improvements, Harry S Truman Building
Transportation Management Plan Update

Dear Enrique:
Please find attached for your team's inclusion as an appendix to the
Environmental Assessment per National Capital Planning Commission request, the Transportation Management Plan Update. Steven Wright will email an electronic version to you as an attachment.


Mark M. Butowsky Chief, Special Projects Division

United States Department of State

# Transportation Management Plan 

Washington, D.C.<br>August 2006

# TRANSPORTATION MANAGEMENT PLAN UPDATE <br> PERIMETER SECURITY IMPROVEMENTS HARRY S TRUMAN BUILDING 

August 2006

## PREFACE

## Transportation Management Plan Update Background

The Department of State (DOS) was selected by the Environmental Protection Agency in FY 2004 as one of the "Best Workplaces for Commuters" due to the excellent commuter benefits provided to employees. The Department won the Silver Award in the "Race to Excellence" of the "Best Workplaces for Commuters" program in FY 2005 by improving existing commuter benefits and adding others. These forms of recognition demonstrate the Department's success in supporting its workforce and public transportation as components of its Transportation Management Plan. In the next year the Department will develop designs for Perimeter Security Improvements at the Harry S Truman building. This update describes this project and presents the Transportation Management Plan implications.

## The Perimeter Security Improvements Project

The Perimeter Security Improvements Project will improve the perimeter security of the Harry S Truman (HST) Building, Department of State headquarters, and help protect its employees and visitors from terrorist explosive attacks, while improving the streetscape with an attractive pedestrian environment. The architecture firm of KCCT developed a Concept Design plan that will guide the implementation of perimeter security improvements. The Department received Concept Design approval in November 2004 from the Commission of Fine Arts and approval in December 2004 from the National Capital Planning Commission.

The Department is conducting an Environmental Assessment of the Concept Design plan, and is developing_portions of it into construction documents. These portions are: Phase 1,2,3(a), and 7(a). Phase 1 consists of guard booths and vehicle controls at the $21^{\text {st }}$ Street and $23^{\text {rd }}$ Street ends of C Street, retractable street vehicle obstructions across $22^{\text {nd }}$ Street to the South of the building, and a guard booth and vehicle controls at the $23^{\text {rd }}$ Street end of D Street to the North of the building. Phase 2 consists of the addition of a pavilion to the North entrance of the building at D Street, which will bring out the security screening from the original building's lobby. Phase 3 and Phase 7 portions consist of landscaping and roadwork improvements to C Street between $21^{\text {st }}$ Street and $23^{\text {rd }}$ Street that will align with the perimeter project of the Board of Governors of the Federal Reserve System's Eccles and Martin buildings. The design development commenced in May 2006, and will conclude by June 2007 with final Construction Documents.

## Transportation Management Plan Implications

The new Perimeter Security Improvements project will not increase the parking demand or add more commuters. It will improve the pedestrian experience around the Harry S Truman building, beautify the streets and surrounding grounds, and improve the entrances and security for occupants. The broader transportation issues of the project are covered in the Environmental Assessment, to include discussion of the cumulative effects of potential future projects by the Department's neighbors.

## Introduction:

The Transportation Management Plan documents the Department of State's current programs to foster more efficient employee commuting patterns in Washington, D.C. in accordance with the Federal government's transportation goals as articulated by the National Capital Planning Commission's Comprehensive Plan for Federal Elements.

## Policies:

The Department of State (DOS) implements the policies set forth by the National Capital Planning Commission (NCPC) Federal Plan's Transportation Elements by the use of various tools to encourage commuting habits to achieve its goals. The Department has in place nine tools, described below, to encourage commuting by modes other than single-occupant vehicles. These tools include information campaigns, financial subsidy for use of public transportation networks, and in-city shuttle services between its annexes.

The Department of State's Transportation Management Plan complies with NCPC goals to foster efficient employee commuting patterns, and to meet or exceed parking goals and ratios. It achieves this by executing strategies that reduce traffic congestion and improve air quality, and ensure NCPC target parking ratios are met or improved. By internal and external methods of communication and coordination, the Department manages its strategy implementing programs. It communicates its commitment to reduce parking space demand and to encourage alternate commuting modes, often with customized solutions suitable to surrounding communities.

## Background:

Located primarily in the Foggy Bottom area of Washington, D.C., and in the Arlington, VA area, the Department of State is headquartered in the Harry S Truman building (HST), 2201 C Street NW, Washington, DC. Nearby annexes in, or directly adjacent to the central employment area presently house constituent bureau offices. There are seven annexes in the Foggy Bottom area, six other employee locations elsewhere in the city, plus 24 employee locations in Northern Virginia, and two employee locations in Maryland, for a total of 18,675 employees within the Washington-BaltimoreNorthern Virginia Combined Statistical Area. Of these, 11,391 employees work in the immediate Washington, D. C. area.

The HST headquarters building houses offices and other special spaces, and is comprised of two buildings joined together. These are the Old State section, dedicated the George C. Marshall Wing in 2001, which was completed in 1941 to house the War Department, and the New State section, which was completed in 1961 to house the State Department. Together they were dedicated the Harry S Truman building in 2000.

The HST building is bound by C Street, D Street, $21{ }^{\text {st }}$ Street, and $23^{\text {rd }}$ Street, and accommodates an average 8,000 employees and visitors each day. It is located on an 11acre lot, has 9 floors, a footprint that measures 730 feet long by 510 feet wide, and is 90 feet high. It has a gross area of $2,502,578$ square feet, with a net area of $1,492,260$ square feet. Its loading dock and parking garage are 204,772 square feet, with a capacity for 980 automobiles.

## Transportation Demand Management:

The demand for transportation by DOS employees is for commuting home to work. Since many of the Department's workforce serve overseas, many employees are transient to the city during times of brief tours to Washington, D.C. It is convenient for such Foreign Service employees to locate close to the city, or in the city, during these brief tours, although the Department does not presently record housing data to determine percentage of employees living in DC. The primary demand is for Civil Servants who live in the greater Washington Metropolitan area. Visitors arrive to the building by multiple modes of transportation, although the Department does not track the transportation demand of visitors.

## Commuter Rail, Rail Transit, and Bus Transit:

The Department of State provides information for employees to facilitate use of the primary transit services of the city, including Metro rail and bus and commuter train lines. Subsidies are provided via an annual program with quarterly distributions to the Department's employees to encourage the use of public transportation. METROCheks totaling nearly $\$ 6,000,000$ were distributed to State employees in FY 2005 and there were 6,228 employees in the program as of October 1, 2005.

## Parking:

Parking spaces for DOS employees are provided at various locations to serve the Department in the Foggy Bottom area. The parking locations include the Harry S Truman building, the Columbia Plaza annex, Navy Hill and Potomac Annex (until its use as parking ends when site preparations begin for construction of the new U.S. Peace Institute headquarters building, scheduled for November, 2006). There are 1,522 parking spaces, including 75 for motorcycles, available for the Privately Owned Vehicles (POVs) of State employees in the DC area. Some employees choose to pay to park in commercial facilities, although DOS does not record these numbers. The population of DOS employees in the DC area is 11,391 . Thus, the ratio of DOS provided parking spaces to DOS employees in the DC area is 1:7, which surpasses the NCPC goal of 1:5.

## Shuttles and Circulators:

The Department of State's Washington, DC workforce shuttle bus service provides transportation for the conduct of official government business between the Harry S. Truman Building and 20 DOS annexes in the DC area. Department shuttle buses transported 902,591 passengers via 30,754 trips in FY 2005. A display of shuttle bus schedules is located inside the D Street entrance of Harry S Truman Building, where the buses arrive and depart. The shuttle bus schedules are also available as brochures at the transportation kiosk in the basement of the Harry S Truman Building and can be viewed via the A Bureau Intranet Managed Favorites.

## Bicycle Facilities:

The Department of State encourages employees in the DC area to ride bicycles by providing space for bicycle parking. The Department currently has 185 spaces in thirteen bicycle racks to accommodate those who prefer cycling as the mode of transportation.

## Other Infrastructure and Transportation Services:

The Department of State maintains a fleet of vehicles for use by groups for official business. These allow for public transportation commuters to take official group trips without bringing in their own vehicles to transport themselves to places unreachable by public transportation. Occasionally these vehicles do not need to park, so they can operate like a taxi service, dropping groups off for meetings, and then retrieving them. Also, a commercial taxi stand has developed by market forces, in response to demand, where $22^{\text {nd }}$ Street and C Street intersect. Visitors and Department employees take advantage of this market-based service.

## Investment Priorities:

The Department supports the investment in alternative fuel vehicles (AFVs). The Department's domestic covered* fleet of 499 vehicles included 152 AFVs as of the end of FY 2005. Most of those AFVs were located in the area of Washington, DC, including six (6) shuttle buses running on compressed natural gas (CNG).
*"covered" fleet vehicles are all domestic, non law-enforcement, light-duty vehicles operated in a metropolitan statistical area.

## TMP Implementation:

The following nine tools are used by the Department of State to encourage commuting by modes other than single-occupant vehicles. These tools include communications and coordinated efforts with external agencies:

1) A transportation kiosk in the Harry $S$ Truman building provides commuting information on non-single-occupant vehicle modes of transportation to employees
via a touch screen, a map of the METRO subway system and brochures for the Maryland Area Regional Commute (MARC) and Virginia Railway Express (VRE) commuter trains, etc.
2) A carpool driver/passenger matching service is available on the Department's website.
3) Preferred parking is provided for carpools and vanpools.
4) DOS participates in the Department of Transportation (DOT) METROCheks program, encouraging employees to ride mass transit.
5) Secure bicycle parking is available, along with showers and lockers.
6) Compressed work schedules are available to many employees, which alleviate the need for those employees to transit to work at least one day each pay period.
7) The number of employees telecommuting is gradually increasing. There were 1,236 registered teleworkers at the end of 2005, which further reduces transportation demand.
8) On-site amenities (e.g.: bank, cafeteria, convenience store, dry cleaning, post office, etc.) are provided, reducing transportation demand.
9) Information is provided at events such as the Earth Day celebration, where brochures and a list of websites about commuting options are distributed.

## Related Future Projects:

The American Pharmacists Association (APHA) is planning construction of an addition to their headquarters located at 2215 Constitution Avenue, NW, Washington, D.C. The addition will adjoin the existing building and project towards C Street. It is anticipated to be six stories with two levels of underground parking. The Department of State anticipates tenancy, utilizing 166,000 useable square feet to house approximately 800 employees with 98 available parking spaces. The parking ratio for this facility will be one space for every 8 employees (1:8). DOS occupancy is projected to be in the spring of 2009.

The U.S. Institute of Peace is planning to build a new headquarters at the corner of Constitution Avenue and $23^{\text {rd }}$ Street, NW on a two-and-one-half acre site. DOS employees use a portion of the site known as the Potomac Annex for parking. Construction is scheduled to begin in 2007, and site preparations begin in August 2006 at which time 150 parking spaces currently in use by DOS employees will no longer be available.

Upon completion of the U.S. Institute of Peace and the APHA addition, the parking ratio of employees to spaces for DOS in Washington, D.C. will become 11,391 employees to $1470(1,522+98-150)$ spaces, or one employee to every seven and seventenths (1:7.7) parking space.

## MEMORANDUM

| To: | Project Development Team |
| :--- | :--- |
| CC: | Christopher Ziemann, AICP <br> Transportation Planner, Ward 2 |
| From: | Michael J. Workosky, PTP, TOPS <br> Kevin R. Fellin <br> Wells + Associates, Inc. |
| Date: | December 4, 2009 |
| Subject: | Harry S. Truman Building - United States Department of State <br> Environmental Assessment Addendum - 22nd Street Transportation Element; <br>  <br> Washington, D.C. |

## Introduction

This memorandum presents the transportation element of an Environmental Assessment (EA) for the Harry S. Truman Building - Department of State (DOS). It is in relation to the proposed and ongoing perimeter security improvements and provides an evaluation of $22^{\text {nd }}$ Street, NW from Constitution Avenue, NW to C Street, NW. The Harry S. Truman - Department of State building is located on the north side of C Street, NW as shown on Figure I.

This study was prepared in consultation with District Department of Transportation (DDOT) staff. A copy of the traffic scoping letter for this study is contained in Attachment I. It is also coordinated with the American Pharmacists Association (APhA) Environmental Assessment for proposed perimeter improvements that is being processed concurrently.

Tasks undertaken in this study included the following:
I. Review of $22^{\text {nd }}$ Street, NW current and proposed operations.
2. Meetings with the District Department of Transportation staff regarding the transportation study scope. A copy of the traffic study scoping agreement is contained in Attachment I.
3. Collection of existing traffic counts, parking occupancy, and field observations along $22^{\text {nd }}$ Street, NW and at the C Street, NW and Constitution Avenue, NW intersections.


Figure 1
Site Location and Study Area
4. An evaluation of existing weekday $A M$ and $P M$ peak hour conditions.
5. Preparation of future traffic forecasts with the proposed perimeter improvements planned for 22nd Street, NW.
6. An evaluation of future operations on $22^{\text {nd }}$ Street, NW to reflect the proposed modifications and operational changes.

Sources of data for this analysis include previous traffic studies conducted by Wells + Associates, the District Department of Transportation (DDOT), the Department of State (DOS), the American Pharmacists Association (APhA), National Academy of Sciences (NAS), Karn Charuhas Chapman \& Twohey Architects, and Rhodeside \& Harwell, Inc.

## BACKGROUND INFORMATION

## Study Area and Road Network

Based on the traffic scoping agreement, the following intersections were included as part of this traffic study:
I) $22^{\text {nd }}$ Street, NW/Constitution Avenue, NW.
2) $22^{\text {nd }}$ Street, NW/APhA Driveway.
3) $22^{\text {nd }}$ Street, NW/APhA Loading Dock.
4) $22^{\text {nd }}$ Street, NW/National Academy of Sciences (NAS) Driveway.
5) $22^{\text {nd }}$ Street, NW/C Street, NW.

The subject site area is located within a connected network of arterial, collector, and local streets. Constitution Avenue and C Street are east-west streets. 22nd Street is a north-south street. Each street has a posted or assumed when not posted, speed limit of 25 miles per hour (mph).

DDOT's "Functional Classification Map" classifies each street noted above as the following:

- Constitution Avenue, NW as a "principal arterial".
- $22^{\text {nd }}$ Street, NW and C Street, NW a "local" street.


## FIELD DATA COLLECTION

## Existing Traffic, Pedestrian, and Bicycle Data

Wells + Associates conducted vehicular, pedestrian, and bicycle counts at the previously mentioned intersections on 22 ${ }^{\text {nd }}$ Street, NW on Thursday, October 22, 2009 from 7:00 AM to 7:00 PM and recorded in 15 -minute intervals. The peak hour vehicular traffic volumes for each key intersection are shown on Figure 2. The peak traffic hour for each intersection is summarized below in Table I.

Table I
Existing Traffic Peak Hour Summary
Department of State - 22 ${ }^{\text {nd }}$ Street EA Addendum

| Intersection | Weekday Peak Hours |  |  |
| :--- | :--- | :--- | :---: |
|  | AM | Mid-Day | PM |
| 22nd Street/Constitution Avenue | $8: 00-9: 00 ~ A M$ | $3: 45-4: 45 \mathrm{PM}$ | $5: 00-6: 00 \mathrm{PM}$ |
| 22nd Street/APhA Driveway | $8: 15-9: 15 \mathrm{AM}$ | $1: 45-2: 45 \mathrm{PM}$ | $5: 00-6: 00 \mathrm{PM}$ |
| 22nd Street/APhA Loading Dock | $8: 15-9: 15 \mathrm{AM}$ | $2: 15-3: 15 \mathrm{PM}$ | $4: 30-5: 30 \mathrm{PM}$ |
| 22nd Street/NAS Driveway | $8: 15-9: 15 \mathrm{AM}$ | $10: 00-11: 00 \mathrm{AM}$ | $4: 45-5: 45 \mathrm{PM}$ |
| 22nd Street/DOS C Street Driveway | $7: 00-8: 00 \mathrm{AM}$ | $10: 00-11: 00 \mathrm{AM}$ | $5: 00-6: 00 \mathrm{PM}$ |
| Observed Drop-off/Pick-up | $8: 00-9: 00 \mathrm{AM}$ | $10: 45-11: 45 \mathrm{AM}$ | $4: 30-5: 30 \mathrm{PM}$ |



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- destination trips for the APhA, NAS and DOS driveways;
- passenger pick-up/drop-offs by private vehicle, taxi, hired car, van, and/or other;
- delivery/loading vehicles, and
- vehicles seeking on-street parking spaces.

Traffic Volumes. A driveway traffic summary was developed by tabulating the 12 -hour traffic count data to best quantify the mix of traffic utilizing $22^{\text {nd }}$ Street, NW. The results are presented in Table 2 and shown graphically on Figures 3 thru 7. Table 3 summarizes the pick-up/drop-offs by vehicle classification. The data collected in the field indicates that the majority of traffic utilizing $22^{\text {nd }}$ Street, NW is picking-up and dropping-off passengers with a majority of those dropping off passengers. The overall peak hour traffic periods on $22^{\text {nd }}$ Street, NW based on the traffic to/from Constitution Avenue, NW and 22nd Street, NW occur from 8:15 to 9:15 AM, I2:30 to I:30 PM, and 5:00 to 6:00 PM.

Pedestrian Volumes. Pedestrian movements recorded during the peak traffic hours described above are shown on Figure 8. A detailed pedestrian count summary by hour/approach for each key intersection and corresponding data collection data is provided as Attachment II. The results indicate the majority of pedestrians arriving to/from Constitution Avenue, NW are almost entirely oriented to the east side of $22^{\text {nd }}$ Street, NW. The east side of $22^{\text {nd }}$ Street, NW provides a sidewalk from C Street, NW to Constitution Avenue, NW with a direct connection to the only crosswalk crossing Constitution Avenue, NW at its intersection with $22^{\text {nd }}$ Street, NW. A sidewalk exists on the west side of $22^{\text {nd }}$ Street, NW from C Street, NW to the APhA driveway. A crosswalk does not exist crossing Constitution Avenue, NW on the west side at its intersection with 22 ${ }^{\text {nd }}$ Street, NW. A maximum of 195 pedestrians were observed from 12:00 to 1:00 PM walking in the north-south direction on the east side of the DOS C Street gated driveway.

Bicycle Volumes. Bicycle volumes that occurred during the peak traffic hours described above are shown on Figure 9. A detailed bicycle summary by hour for each key intersection and corresponding data collection data is provided as Attachment III. A maximum of eight (8) peak hour bicycles were observed from 7:45-8:45 AM and 8:00-9:00 AM traveling across Constitution Avenue, NW in the vicinity of the subject area.

## Existing Lane Use, Traffic Control, Curb Survey, and Parking Enforcement

The existing lane use and traffic control devices and curb survey in the site area are shown on Figure 10. Metered on-street parking is permitted along $22^{\text {nd }}$ Street's east and west sides as shown on Figure 10 and summarized below:

22 ${ }^{\text {nd }}$ Street, NW East Side (between C Street, NW and Constitution Avenue, NW)

- 13 metered parallel parking spaces, Two hour parking, Monday-Friday 7:00 AM to 6:30 PM.
- 2 taxi cab stand parallel parking spaces, Monday-Friday 7:00 AM to 6:30 PM.
Table 2
22nd Street Vehicular Count Summary

| Peak Period | Peak <br> Hour | 22nd Street to/from Constitution Avenue |  |  | APhA Driveway to/from 22nd Street |  |  | APhA Loading Dock to/from 22nd Street |  |  | NAS Driveway to/from 22nd Street |  |  | DOS C Street Driveway to/from 22nd Street |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | In | Out | Total | In | Out | Total | In | Out | Total | In | Out | Total | In | Out | Total |
|  | 7:00-8:00 AM | 156 | 59 | 215 | 16 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 72 | 3 | 75 |
|  | 7:15-8:15 AM | 163 | 68 | 231 | 16 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 2 | 72 |
|  | 7:30-8:30 AM | 197 | 83 | 280 | 21 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 2 | 75 |
|  | 7:45-8:45 AM | 218 | 100 | 318 | 27 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 1 | 65 |
|  | 8:00-9:00 AM | 219 | 101 | 320 | 26 | 0 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 56 | 1 | 57 |
|  | 8:15-9:15 AM | 229 | 110 | 339 | 26 | 1 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 3 | 56 |
|  | 8:30-9:30 AM | 209 | 111 | 320 | 20 | 1 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 48 | 5 | 53 |
|  | 8:45-9:45 AM | 181 | 96 | 277 | 12 | 1 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 4 | 49 |
|  | 9:00-10:00 AM | 183 | 115 | 298 | 9 | 1 | 10 | 1 | 1 | 2 | 0 | 0 | 0 | 40 | 5 | 45 |
|  | 9:15-10:15 AM | 171 | 112 | 283 | 9 | 0 | 9 | 2 | 1 | 3 | 0 | 0 | 0 | 31 | 4 | 35 |
|  | 9:30-10:30 AM | 165 | 117 | 282 | 6 | 0 | 6 | 3 | 3 | 6 | 0 | 0 | 0 | 30 | 6 | 36 |
|  | 9:45-10:45 AM | 169 | 121 | 290 | 7 | 0 | 7 | 3 | 3 | 6 | 0 | 0 | 0 | 30 | 7 | 37 |
|  | 10:00-11:00 AM | 181 | 132 | 313 | 5 | 0 | 5 | 4 | 3 | 7 | 0 | 0 | 0 | 34 | 6 | 40 |
|  | 10:15-11:15 AM | 177 | 135 | 312 | 3 | 0 | 3 | 3 | 3 | 6 | 0 | 0 | 0 | 30 | 5 | 35 |
|  | 10:30-11:30 AM | 175 | 131 | 306 | 2 | 0 | 2 | 3 | 2 | 5 | 0 | 0 | 0 | 28 | 3 | 31 |
|  | 10:45-11:45 AM | 157 | 130 | 287 | 1 | 1 | 2 | 3 | 3 | 6 | 0 | 1 | 1 | 21 | 4 | 25 |
|  | 11:00 AM-12:00 PM | 140 | 121 | 261 | 1 | 1 | 2 | 2 | 3 | 5 | 0 | 1 | 1 | 20 | 7 | 27 |
|  | 11:15 AM-12:15 PM | 133 | 119 | 252 | 1 | 1 | 2 | 3 | 3 | 6 | 0 | 2 | 2 | 20 | 10 | 30 |
|  | 11:30 AM-12:30 PM | 126 | 118 | 244 | 1 | 1 | 2 | 4 | 3 | 7 | 0 | 2 | 2 | 18 | 9 | 27 |
|  | 11:45 AM-12:45 PM | 148 | 134 | 282 | 5 | 4 | 9 | 6 | 4 | 10 | 0 | 3 | 3 | 22 | 9 | 31 |
|  | 12:00-1:00 PM | 164 | 152 | 316 | 6 | 5 | 11 | 5 | 4 | 9 | 0 | 5 | 5 | 17 | 7 | 24 |
|  | 12:15-1:15 PM | 167 | 149 | 316 | 5 | 5 | 10 | 4 | 4 | 8 | 0 | 5 | 5 | 18 | 4 | 22 |
|  | 12:30-1:30 PM | 179 | 154 | 333 | 8 | 5 | 13 | 2 | 3 | 5 | 0 | 5 | 5 | 19 | 5 | 24 |
|  | 12:45-1:45 PM | 174 | 141 | 315 | 4 | 2 | 6 | 1 | 1 | 2 | 0 | 3 | 3 | 19 | 5 | 24 |
|  | 1:00-2:00 PM | 160 | 132 | 292 | 4 | 1 | 5 | 1 | 1 | 2 | 0 | 1 | 1 | 19 | 5 | 24 |
|  | 1:15-2:15 PM | 155 | 135 | 290 | 4 | 1 | 5 | 1 | 1 | 2 | 0 | 1 | 1 | 19 | 6 | 25 |
|  | 1:30-2:30 PM | 159 | 130 | 289 | 2 | 1 | 3 | 2 | 3 | 5 | 0 | 2 | 2 | 17 | 7 | 24 |
|  | 1:45-2:45 PM | 160 | 143 | 303 | 3 | 2 | 5 | 2 | 4 | 6 | 0 | 3 | 3 | 18 | 8 | 26 |
|  | 2:00-3:00 PM | 160 | 132 | 292 | 3 | 2 | 5 | 2 | 3 | 5 | 0 | 3 | 3 | 17 | 10 | 27 |
|  | 2:15-3:15 PM | 160 | 131 | 291 | 3 | 3 | 6 | 3 | 4 | 7 | 0 | 2 | 2 | 18 | 13 | 31 |
|  | 2:30-3:30 PM | 156 | 133 | 289 | 3 | 5 | 8 | 3 | 2 | 5 | 0 | 2 | 2 | 18 | 10 | 28 |
|  | 2:45-3:45 PM | 143 | 133 | 276 | 2 | 3 | 5 | 2 | 1 | 3 | 0 | 1 | 1 | 12 | 14 | 26 |
|  | 3:00-4:00 PM | 138 | 128 | 266 | 2 | 4 | 6 | 4 | 2 | 6 | 0 | 3 | 3 | 13 | 13 | 26 |
|  | 3:15-4:15 PM | 132 | 136 | 268 | 2 | 5 | 7 | 3 | 3 | 6 | 0 | 4 | 4 | 11 | 17 | 28 |
|  | 3:30-4:30 PM | 147 | 141 | 288 | 2 | 5 | 7 | 2 | 3 | 5 | 0 | 5 | 5 | 10 | 23 | 33 |
|  | 3:45-4:45 PM | 155 | 142 | 297 | 2 | 7 | 9 | 2 | 3 | 5 | 0 | 6 | 6 | 9 | 21 | 30 |
|  | 4:00-5:00 PM | 139 | 151 | 290 | 2 | 9 | 11 | 0 | 2 | 2 | 0 | 6 | 6 | 5 | 27 | 32 |
|  | 4:15-5:15 PM | 155 | 173 | 328 | 2 | 9 | 11 | 0 | 1 | 1 | 0 | 7 | 7 | 4 | 30 | 34 |
|  | 4:30-5:30 PM | 139 | 200 | 339 | 1 | 11 | 12 | 3 | 2 | 5 | 0 | 7 | 7 | 1 | 30 | 31 |
|  | 4:45-5:45 PM | 129 | 206 | 335 | 1 | 15 | 16 | 3 | 2 | 5 | 0 | 11 | 11 | 1 | 41 | 42 |
|  | 5:00-6:00 PM | 139 | 208 | 347 | 1 | 15 | 16 | 4 | 3 | 7 | 0 | 10 | 10 | 1 | 44 | 45 |
|  | 5:15-6:15 PM | 120 | 186 | 306 | 1 | 19 | 20 | 4 | 2 | 6 | 0 | 8 | 8 | 2 | 43 | 45 |
|  | 5:30-6:30 PM | 102 | 155 | 257 | 2 | 18 | 20 | 1 | 1 | 2 | 0 | 6 | 6 | 2 | 43 | 45 |
|  | 5:45-6:45 PM | 112 | 141 | 253 | 2 | 14 | 16 | 1 | 1 | 2 | 0 | 2 | 2 | 2 | 35 | 37 |
|  | 6:00-7:00 PM | 95 | 125 | 220 | 1 | 13 | 14 | 0 | 0 | 0 | 0 | 5 | 5 | 3 | 33 | 36 |

Note(s):





Table 3
22nd Street Pick-up/Drop-Off Summary
Department of State-22nd Street EA Addendum ${ }^{(1)}$


[^10]



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## 22nd Street, NW West Side (between C Street, NW and Constitution Avenue, NW)

- 8 metered pull-in, back-out angled parking spaces, Two hour parking, Monday-Friday 7:00 to 6:30 PM.

A parking enforcement officer was observed at 9:20 AM, I0:00 AM, and 3:45 PM during the 12-hour count conducted on Thursday, October 22, 2009 from 7:00 AM to 7:00 PM.

## On-Street Parking Occupancy

Parking occupancy counts were collected on both the east and west sides of $22^{\text {nd }}$ Street, NW on Thursday, October 22, 2009 from 7:00 AM to 7:00 PM and recorded in 30 -minute intervals. These counts also include observations of double-parked vehicles. The parking occupancy counts are shown on Table 4 and indicate that peak parking demand occurred at II:00 AM when a peak parking demand of 52 vehicles was observed.

A described earlier, there are a total of 23 legal on-street parking spaces on $22^{\text {nd }}$ Street, NW between Constitution Avenue, NW and C Street, NW.

Of the 52 parked vehicles observed on $22^{\text {nd }}$ Street, NW:

- 23 vehicles were parked legally
o 21 vehicles were parked legally in metered parking spaces ( 13 east side and 8 west side) and
o 2 taxi vehicles were parked legally in taxi cab stand spaces on the east side.
- 29 vehicles were parked illegally
o 10 vehicles were double parked illegally ( 7 east side and 3 west side) and
o 17 vehicles were parked illegally on-street (2 east side and I7 west side).
Illegally parked vehicles are shown on Photos I through 3.
Field observations indicated that illegally parked vehicles inhibit the ability of motorists to turn around in a single maneuver and increase overall delays and create conflicts along $22^{\text {nd }}$ Street. In addition, although motorists that travel on $22^{\text {nd }}$ Street expect conflicts to occur, delays caused by illegally parked vehicles create confusion and driver frustration.

(1) Counts collected by Wells + Associates on Thursday, October 22, 2009 from 7:00 AM to 7:00 PM.
(2) Parking supply on east side of 22nd Street NW includes 13 metered spaces and 2 taxi stand spaces.


Photo I: Illegal Parked Vehicles - West Side 22nd Street

Photo 2: Illegal Parked Vehicles - West Side 22nd Street


Photo 3: Double Parked Vehicles - East Side 22nd Street

## Retractable Barrier Observations, Service Rate, and Queues

The number of vehicles and queues were observed at the existing retractable barrier at the $22^{\text {nd }}$ Street, NW/C Street, NW intersection opposite the DOS building when the other field data was collected.
This data was used to calculate the service flow rate and applied to the retractable barrier proposed for the APhA driveway on $22^{\text {nd }}$ Street, NW.

The data is summarized on Table 5, and indicates that approximately 12 seconds is required to screen a single vehicle. An additional seven (7) to eight (8) seconds are required for the second and third vehicles to be screened. When a fourth consecutive vehicle arrived to be screened, an additional 20 seconds was required due in part to pedestrian conflicts at the gated barrier entry/exit.
Table 5
22nd Street/C Street Barrier Observations and Service Times

| Time Period | Service Times in Seconds per vehicle for each observation |  |  |  |  |  |  |  |  |  |  |  | Average | Number of Observations |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7:00 AM - 7:15 AM | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |  |
| One Vehicle | 12 | 12 | 10 | 11 | 12 | 10 | 13 | - | - | - | - | - | 11.43 seconds | 7 |
| Second Vehicle | 25 | - | - | - | 19 | - | 19 | - | - | - | - | - | 21.00 seconds | 3 |
| Third Vehicle | 32 | - | - | - | 28 | - | 28 | - | - | - | - | - | 29.33 seconds | 3 |
| Fourth Vehicle | - | - | - | - | - | - | - | - | - | - | - | - | - seconds | - |
| 7:15 AM - 7:30 AM | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |  |
| One Vehicle | 9 | 20 | 11 | 10 | 7 | 11 | 7 | - | - | - | - | - | 10.71 seconds | 7 |
| Second Vehicle | - | - | - | - | 16 | - | 14 | - | - | - | - | - | 15.00 seconds | 2 |
| Third Vehicle | - | - | - | - | - | - | - | - | - | - | - | - | - seconds | - |
| Fourth Vehicle | - | - | - | - | - | - | - | - | - | - | - | - | - seconds | - |
| 7:30 AM - 7:45 AM | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |  |
| One Vehicle | 14 | 7 | 13 | 11 | 16 | 8 | 23 | 18 | 11 | - | - | - | 13.44 seconds | 9 |
| Second Vehicle | - | 14 | 20 | 48 | - | - | - | 26 | - | - | - | - | 27.00 seconds | 4 |
| Third Vehicle | - | 23 | 27 | 55 | - | - | - | 35 | - | - | - | - | 35.00 seconds | 4 |
| Fourth Vehicle | - | 27 | - | 68 | - | - | - | - | - | - | - | - | 47.50 seconds | 2 |
| 7:45 AM - 8:00 AM | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |  |
| One Vehicle | 11 | 11 | 7 | 14 | 12 | 12 | 12 | 8 | 16 | 11 | 10 | 15 | 11.58 seconds | 12 |
| Second Vehicle | - | 24 | 13 | - | - | - | - | - | - | - | - | - | 18.50 seconds | 2 |
| Third Vehicle | - | - | 19 | - | - | - | - | - | - | - | - | - | 19.00 seconds | 1 |
| Fourth Vehicle | - | - | - | - | - | - | - | - | - | - | - | - | - seconds | - |
| 8:00 AM - 8:15 AM | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |  |
| One Vehicle | 30 | 14 | 9 | 9 | 11 | 15 | 11 | 10 | 12 | 7 | - | - | 12.80 seconds | 10 |
| Second Vehicle | - | - | - | - | - | - | 24 | 17 | - | - | - | - | 20.50 seconds | 2 |
| Third Vehicle | - | - | - | - | - | - | - | 23 | - | - | - | - | 23.00 seconds | 1 |
| Fourth Vehicle | - | - | - | - | - | - | - | - | - | - | - | - | - seconds | - |
| 8:15 AM - 8:30 AM | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |  |
| One Vehicle | 12 | 9 | 8 | 9 | 11 | 9 | 9 | 16 | - | - | - | - | 10.38 seconds | 8 |
| Second Vehicle | - | - | - | - | - | 17 | 18 | - | - | - | - | - | 17.50 seconds | 2 |
| Third Vehicle | - | - | - | - | - | - | - | - | - | - | - | - | - seconds | - |
| Fourth Vehicle | - | - | - | - | - | - | - | - | - | - | - |  | - seconds | - |
| Summary | Screen | ng Time |  |  |  |  |  |  |  |  |  |  |  |  |
| One Vehicle | 11.72 | Cumulat | Sec | ds per | hicle |  |  |  |  |  |  |  |  |  |
| Second Vehicle | 19.92 | Cumulat | Sec | ds per | hicle | (+ | 8.2 | seconds) |  |  |  |  |  |  |
| Third Vehicle | 26.58 | Cumulativ | Sec | ds per | hicle | (+ |  | seconds) |  |  |  |  |  |  |
| Fourth Vehicle | 47.50 | Cumulat | Sec | ds per | hicle | (+ | 20.9 | seconds) |  |  |  |  |  |  |
| Maximum Queue | 4 | vehicles |  |  |  |  |  |  |  |  |  |  |  |  |
| Peak Hour Demand | 56 | vehicles |  | 00-8:00 |  |  |  |  |  |  |  |  |  |  |
|  | 56 | vehicles |  | 15-8:1 |  |  |  |  |  |  |  |  |  |  |
|  | 57 | vehicles |  | 30-8:30 |  |  |  |  |  |  |  |  |  |  |

(1) Counts collected by Wells + Associates on Thursday, October 22, 2009 from 7:00 AM to 7:00 PM.

## Loading Dock Observations

The number of loading vehicles, delineated by type, utilizing the APhA loading dock on $22^{\text {nd }}$ Street, NW was recorded on Thursday, October 22, 2009 from 7:00 AM to 7:00 PM. Two (2) loading docks are provided. The results are shown on Table 6 and indicate that a total of 25 vehicles utilized the APhA loading dock during the 12 -hour count period:

- 5 cars.
- 7 vans.
- 7 SU-30 (30 foot box truck).
- 6 SU-40 (40 foot box truck that may or may not be articulated).

The average delivery time took approximately 25 minutes and maximum vehicles present at one time was five (5) vehicles. Examples of delivery vehicles are shown in photos 4 through 7 below:


Photo 4: SU-40 Truck


Photo 6: Delivery Van


Photo 5: SU-30 Truck


Photo 7: Multi-Arrival Delivery Vehicles

Table 6
APhA Loading Dock/Service Vehicle Summary
Department of State - 22nd Street EA Addendum ${ }^{(1)}$

## Site Data:

American Pharmacists Association Building, Washington, D.C.
Loading Dock


## Summary - American Pharmacists Association

Totals by Vehicle Type Average Delivery Time
Cumulative Vehicles Present at Site

| Car | Van | SU-30 | SU-40 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 7 | 7 | 6 | 25 | vehicles |
|  |  |  |  | 25 | minutes |
|  |  |  |  |  |  |

(Maximum present at any one time)
Note(s):
(1) Counts collected by Wells + Associates on Thursday, October 22, 2009 from 7:00 AM to 7:00 PM.
(2) 30 foot box truck.
(3) 40 foot box truck, may or may not be articulated.

## Bicycle Lanes, Routes, and Rack Usage

Currently, no designated bicycle lanes or routes exist within the vicinity of the DOS or APhA buildings. Bicyclists must share the roads with vehicular and pedestrian traffic. According to the District of Columbia Master Plan - Proposed Bicycle Facilities Map (April 2005), bicycle lanes are proposed along Virginia Avenue, NW and 2 Ist Street, NW in the vicinity of the site area (see Figure II).

The number of bike racks and usage along $22^{\text {nd }}$ Street, NW from C Street, NW to Constitution Avenue, NW and within the parking garages for the APhA and NAS buildings was observed on Thursday, October 22, 2009 from 7:00 AM to 7:00 PM and recorded at 60-minute intervals. The results are summarized on Table 7 and indicate that a maximum of 24 bicycles were parked within the APhA ( 6 bicycles) and NAS buildings (I5 bicycles) and three (3) bicycles chained to parking meters/street signs at II:00 AM on the east side of $22^{\text {nd }}$ Street. These results show that both the NAS and APhA buildings provide adequate bicycle parking facilities within their respective parking garages.

## Off-Street Parking

The APhA building is currently served by approximately I7I parking spaces in a sub-grade parking garage beneath the APhA building. Of the approximate I7I parking spaces, 84 spaces are designated for the APhA and the remaining 87 parking spaces are designated for the DOS tenants. A breakdown by use is shown below in Table 8:

Table 8
APhA Building Parking Tabulation
Department of State - 22 ${ }^{\text {nd }}$ Street EA Addendum

| Type | APhA Parking Spaces | DOS Parking Spaces | Total |
| :--- | :---: | :---: | :---: |
| Employee/Vanpool (1) | 79 | 72 | $\mathbf{1 5 1}$ |
| Guest | 5 | 0 | $\mathbf{5}$ |
| Motor pool | 0 | $\mathbf{1 5}$ | $\mathbf{1 5}$ |
| Total | $\mathbf{8 4}$ | $\mathbf{8 7}$ | $\mathbf{1 7 1}$ |

Note(s):
(I) Includes handicap spaces.

Approximately 980 parking spaces are provided beneath the Harry S. Truman Department of State building.

## Public Transportation and Commuter Bus Services

A number of transit buses serve the area surrounding the DOS and APhA buildings.
Metrobus. The subject site also is served directly by 14 weekday Metrobus lines on Constitution Avenue, NW, Virginia Avenue, NW, C Street, NW, and 23rd Street, NW:

Reference: "District of Columbia Master Plan -

North
WA wells + Associates, inc.
Bicycle Parking Inventory and Usage Summary
Department of State-22nd Street EA Addendum

(1) Counts collected by Wells + Associates on Thursday, October 22, 2009 from 7:00 AM to 7:00 PM.

- Constitution Avenue, NW proximate to the subject area is served by four (4) Metrobus lines: 13A, I3B, I3F, and I3G.
o National Airport-Pentagon-Washington Line.
- Virginia Avenue, NW east of the subject area is served by five (5) Metrobus lines: $32,36,39$, 80, and SI.
o Pennsylvania Avenue Line
(MB 32, 36)
o Pennsylvania Avenue Express (MB 39)
o North Capitol Street Line
(MB 80)
0 16th Street-Potomac Park Line (MB SI)
C Street, NW between 2 Ist Street, NW and Virginia Avenue, NW is served by five (5) bus lines: HI, LI, N3, PI, and XI.
o Brookland-Potomac Park Line (MB HI)
o Connecticut Avenue Line (MB LI)
o Massachusetts Avenue Line (MB N3)
o Annocastia-Eckington Line (MB PI)
O Benning Road Line (MB XI)
- 23 rd Street, NW west of the subject area is also served by bus lines HI, LI, and N3.

A summary of the each bus line including the number of weekday daily buses is summarized on Table 9. The Metrobus stops immediately adjacent to the subject area are shown on Figure IO. Metrobus route schedules and ridership information is provided in Attachment IV.

Commuter Bus. The nearby area is served by various "long haul" commuter buses: OmniRide, Loudoun County Transit (LCT), Valley Connector, and MTA Commuter Bus. Each line provides express bus service from regional jurisdictions including Loudoun County, Virginia; Prince William County, Virginia; Manassas, Virginia; Warren County, Virginia; Clarke County, Virginia; Prince George's County, Maryland, Charles County, Maryland; Anne Arundel County, Maryland; and Calvert County, Maryland.

- OmniRide serves the subject site with four (4) commuter bus lines with a stop (drop-off/pickup) located on Virginia Avenue, NW on the northeast perimeter of the Federal Reserve Board Martin Building: RI, R2, R3, and R5.
o Dale City - Washington (RI)
o Lake Ridge - Washington (R2)
o Manassas (R3)
o Route I/South Route I (R5)
OminRide serves commuters from Prince William County, Virginia and Manassas, Virginia.


Loudoun County Transit serves the subject site with five (5) commuter bus lines. The drop-off stop is located on Virginia Avenue, NW along the northeast perimeter of the Federal Reserve Board Martin Building and the pick-up stop is located proximate to the E Street/I9th Street intersection:
o Purcellville to Washington, DC
o Leesburg to Washington DC
o Dulles North Transit Center to Washington, DC
o Dulles South/Stone Ridge to Washington, DC
o Ashburn North to Washington, DC
Loudoun County Transit serves commuters from Loudoun County, Virginia.
Valley Connector serves the subject site with one (I) commuter bus line. The drop-off stop is located on Virginia Avenue, NW along the northeast perimeter of the Federal Reserve Board Martin Building and the pick-up stop is located proximate to the E Street/ 19th Street intersection:
o Front Royal - Washington (Route 57)
Valley Connector serves commuters from Warren County and Clarke County, Virginia.

- Maryland Transit Administration (MTA) serves the subject site with three (3) commuter bus lines with a stop (drop-off/pick-up) located on the south side of C Street between the Federal Reserve Board Martin and Eccles Buildings: MTA 90I, MTA 902, and MTA 903.
o La Plata/Waldorf to Washington, DC (MTA 90I)
o St. Leonard/Prince Frederick to Washington, DC (MTA 902)
o North Beach/Pindell to Washington, DC (MTA 904)
MTA serves commuters from Prince George's County, Maryland; Charles County, Maryland; Anne Arundel County, Maryland; and Calvert County, Maryland.
- A summary of the each commuter bus line including the number of weekday buses is summarized on Table 9. Ridership information is provided in Attachment IV for all commuter buses except the MTA and Valley Connector.


## Transportation Demand Management (TDM)

The DOS encourages their approximately 8,000 employees that work in either the APhA building and/or Harry S. Truman buildings to participate in TDM programs. The Department of State was requested, but unable to participate in an online survey at the time this study was prepared to determine the current modes of travel to work for its employees at either the APhA or Harry S. Truman buildings. Elements of the existing transportation demand management programs for DOS employees has been requested and are forthcoming.

# ANALYSIS OF 22nd STREET SECURITY PERIMETER IMPROVEMENTS 

## Description of Access and Perimeter Improvements

Since the events of September II, 200I, the portion of C Street, NW between 23 rd Street, NW and 22nd Street, NW has been restricted and controlled by the HST - Department of State. As a result, the function of $22^{\text {nd }}$ Street, NW from Constitution Avenue, NW to C Street, NW has been enhanced to provide for numerous functions that include an ad hoc pick-up/drop-off zone, the addition to public onstreet parking, and providing service to driveways and loading for adjacent buildings. Note that the proposed improvements will not change the curbs or curb cuts along 22nd Street, NW under either the DOS or APhA proposals.

The following summarizes the DOS and APhA proposed improvements as part of the concurrent EA's for each with respect to $22{ }^{\text {nd }}$ Street, NW.

Department of State: The DOS in consultation with DDOT, APhA, and National Academy Sciences is evaluating operational improvements on 22 nd Street to best control its enhanced functions. The DOS EA will replace the retractable barriers and guard booth at the C Street/22nd Street intersection with retraceable emergency bollards. Under this condition, DOS site trips will no longer use this site access point and it would be limited to emergencies and high level visitors. A raised median will be installed on the southern half of $22^{\text {nd }}$ Street between C Street and Constitution Avenue, NW to discourage double parking. The angled parking on the east side of $22^{\text {nd }}$ Street will be converted from head-in-parking to the DDOT preferred back-in-parking. In addition, designated taxi stand and pick-up areas will be established. An operational evaluation of $22^{\text {nd }}$ Street will be evaluated between $C$ Street and Constitution Avenue, NW for this EA.

American Pharmacists Association: All site traffic to the APhA will remain the same. The main garage driveway that serves site trips is oriented to $22^{\text {nd }}$ Street between C Street and Constitution Avenue, NW. This EA proposes to install a retractable barrier with a security guard booth at this location. The APhA driveway on 23 rd Street, NW will remain an emergency exit only and also has been proposed for a retractable barrier and guard booth. An evaluation of the service time to process entering vehicles will be provided with respect to the $22^{\text {nd }}$ Street, NW operational evaluation discussed above.

The APhA includes three (3) possible security perimeter alternatives as summarized below:

## No Action Alternative

This alternative includes the location of a 30 " high security wall in a location along 23 rd Street, NW that was previously approved by NCPC in 2005, but has not been constructed.

## Alternative I

Alternative I includes the 23rd Street wall shown in the No Action option, but also includes new guard booths and vehicle barriers at the two garage entrances one on 22nd Street, NW, and

23 rd Street, NW, and the loading dock on $22{ }^{\text {nd }}$ Street, NW. In addition, this alternative shows a new 30 " wall along the APhA property line on $22^{\text {nd }}$ Street, NW.

## Alternative 2

Alternative 2 locates the 23 rd Street, NW wall on the National Park Service western property line, and relocates the sidewalk to the west of the new wall. On $22^{\text {nd }}$ Street, NW, the wall is located on the eastern edge of the existing sidewalk. The locations of the guard booths and vehicle barriers remain as shown for Alternative I.

## Alternative 3

Alternative 3 locates the new $23^{\text {rd }}$ Street, NW wall 24 " east of the existing curb line and the $22^{\text {nd }}$ Street, NW wall 24 " west of the existing curb line. The location of the guard booths and vehicle barriers would be the same as those described in the other two action alternatives.

Note that each of these alternatives includes new guard booths and barriers that are consistent among all of the options and are reflected in this study.

The planned lane use and traffic control associated with these improvements are shown on Figure 12.

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## OPERATIONAL ANALYSIS OF 22nd ${ }^{\text {nd }}$ STREET, NW

## Existing Conditions Capacity Analyses

Existing AM and PM peak hour levels of service were estimated at the existing intersections on $22^{\text {nd }}$ Street, NW between Constitution Avenue, NW and C Street, NW, based on the existing traffic volumes shown on Figure 2, the existing lane usage and traffic control on Figure 10, and the Highway Capacity Manual methodology (Synchro version 7). Signal timing information was obtained from DDOT and included as Attachment V. The results are presented in Attachment VI and summarized in Table 10 and indicate the following:
I. The signalized Constitution Avenue/ $22^{\text {nd }}$ Street intersection currently operates at an overall Level of Service (LOS) "B" during both the AM and PM peak commuter hours. However, Constitution Avenue experiences heavy eastbound traffic during the AM peak hour and westbound traffic during the PM peak hour that is regulated by the progression of vehicles through the system of signalized intersections. Field observations indicate that there are occasions when queuing occurs between intersections and limits the number of vehicles that traverse the intersection during these periods. Thus, calculated delay times for some vehicles may be longer than those reported.
2. All of the turning movements at the unsignalized driveways on $22^{\text {nd }}$ Street currently operate at LOS "C" or better during all of the peak study hours.

Full descriptions of levels-of-service " $A$ " through " $F$ " for both signalized and unsignalized intersections are provided in Attachment VII.

## Modified Traffic Forecasts

The existing traffic data was modified to reflect the anticipated changes along $22^{\text {nd }}$ Street, NW, between Constitution Avenue, NW and C Street, NW. Although no curb changes or driveway changes are anticipated, the existing driveway serving the APhA building was assumed to be operated by a retractable barrier. In addition, traffic currently using the DOS C Street Driveway was reassigned for the conversion of this secured driveway to emergency use only. The current trips utilizing this driveway were reassigned from $22^{\text {nd }}$ Street to other DOS site entrances located at the intersections of 23 rd Street, NW/C Street, NW, $\left.2\right|^{\text {st }}$ Street, NW/C Street, NW, and 23rd Street, NW/D Street, NW. The proposed changes are shown on Figure 12 and the modified traffic forecasts are shown on Figure 13.

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Table 10
Department of State

| Intersection | TrafficControl | Lane Group | Existing Conditions |  |  |  |  |  | Future Conditions |  |  |  |  |  | Difference |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Vehicular Volume |  | Delay (sec) |  | Volume to Capacity (V/c) |  | Vehicular Volume |  | Delay (sec) |  | Volume to Capacity (V/c) |  | Vehicular Volume |  | Delay (sec) |  | Volume to Capacity (v/c) |  |
|  |  |  | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM | AM | PM |
| 1. $22^{\text {nd }}$ Street NWI Constitution Avenue NW | Signal | EBLT WBTR SBL Overal | $\begin{aligned} & 1,794 \\ & 763 \\ & 24 \\ & 2,77 \\ & 2,658 \end{aligned}$ | $\begin{gathered} 1,175 \\ 1,814 \\ 47 \\ \underline{161} \\ \mathbf{3 , 1 9 7} \end{gathered}$ | $\begin{aligned} & \mathrm{B}(10.5) \\ & \mathrm{C}(20.3) \\ & \mathrm{B}(28.0) \\ & \mathrm{B}(13.5) \\ & \mathrm{B}(13.5) \end{aligned}$ | $\begin{aligned} & \mathrm{B}(10.6) \\ & \mathrm{C}(25.1) \\ & \mathrm{C}(25.6) \\ & \mathrm{C}(20.5) \\ & \hline \mathrm{B}(19.6) \end{aligned}$ | $\begin{aligned} & 0.60 \\ & 0.41 \\ & 0.06 \\ & \frac{0.05}{0.05} \\ & 0.43 \end{aligned}$ | $\begin{aligned} & 0.45 \\ & 0.83 \\ & 0.10 \\ & \underline{0.27} \\ & \hline 0.57 \end{aligned}$ | $\begin{gathered} 1,744 \\ 741 \\ 23 \\ \underline{75} \\ \mathbf{2 , 5 8 3} \end{gathered}$ | $\begin{aligned} & 1,174 \\ & 1,814 \\ & 137 \\ & \frac{127}{3,152} \end{aligned}$ | $\mathrm{A}(9.9)$ $\mathrm{C}(20.2)$ $\mathrm{B}(28.0)$ $\mathrm{B}(13.5)$ $\mathrm{B}(13.1)$ | $\mathrm{B}(10.6)$ $\mathrm{C}(255.1)$ $\mathrm{C}(25.3)$ $\mathrm{B}(9.8)$ $\mathrm{B}(19.5)$ | $\begin{aligned} & 0.56 \\ & 0.40 \\ & 0.05 \\ & \frac{0.05}{0.40} \\ & 0.40 \end{aligned}$ | $\begin{aligned} & 0.45 \\ & 0.83 \\ & 0.08 \\ & \mathbf{0 . 2 1} \\ & \mathbf{0 . 5 5} \end{aligned}$ | (50) $(22)$ $(1)$ $(2)$ $(75)$ | $\begin{aligned} & (1) \\ & 0 \\ & 0 \\ & (10) \\ & \frac{34)}{(45)} \end{aligned}$ | $\begin{aligned} & (0.6) \\ & (0.1) \\ & 0.0 \\ & \frac{0.0}{00.4} \\ & \hline 0 \end{aligned}$ | $\begin{aligned} & 0.0 \\ & 0.0 \\ & (0.3) \\ & (0.7) \\ & (0.7) \\ & (0.1) \end{aligned}$ | $\begin{aligned} & (0.04) \\ & (0.01) \\ & (0.01) \\ & 0.00 \\ & (0.03) \\ & \hline 0.0 \end{aligned}$ | $\begin{aligned} & 0.00 \\ & 0.00 \\ & (0.02) \\ & \left(\frac{0.06)}{(0.02)}\right. \end{aligned}$ |
| 2. $22^{\text {nd }}$ Street NW/ <br> American Pharmacists Association (APhA) Garage Entrance <br> Future Conditions: <br> Gated Access to APhA Garage <br> Storage Space for Northbound Left-Turns <br> Pass-by Lane for Northbound Through Movements <br> Taxi U-Turns at Intersection | stop |  | $\begin{gathered} 1 \\ \text { N/A } \\ \text { N/A } \\ 177 \\ 115 \end{gathered}$ | $\begin{aligned} & 15 \\ & \text { N/ } \\ & \text { N/A } \\ & 97 \\ & 152 \end{aligned}$ | $\begin{gathered} \mathrm{B}[10.9] \\ \text { N/A } \\ \text { N/A } \\ \text { A [1.3] } \\ \mathrm{A}[0.0] \end{gathered}$ | $\begin{aligned} & \mathrm{A}[9.2] \\ & \mathrm{N} / \mathrm{A} \\ & \mathrm{~N} / \mathrm{A} \\ & \mathrm{~A}[0.0] \\ & \mathrm{A}[0.0] \end{aligned}$ | 0.00 <br> N/A <br> N/A <br> 0.02 0.07 | $\begin{aligned} & 0.02 \\ & \text { N/A } \\ & \text { N/A } \\ & 0.00 \\ & 0.10 \end{aligned}$ | $\begin{gathered} 1 \\ 19 \\ 26 \\ 79 \\ 99 \end{gathered}$ | 15 13 0 96 95 | $\begin{gathered} \text { C [18.2] } \\ \text { B [11.0] } \\ \text { C [15.6] } \\ \text { A [0.0] } \\ \text { A }[0.0] \end{gathered}$ | C [15.9] <br> B [10.4] <br> B [14.8] <br> A $[0.0]$ A [0.0] | $\begin{aligned} & 0.00 \\ & 0.03 \\ & 0.08 \\ & 0.08 \\ & 0.05 \\ & 0.06 \end{aligned}$ | $\begin{aligned} & 0.05 \\ & 0.02 \\ & 0.00 \\ & 0.00 \\ & 0.06 \\ & 0.06 \end{aligned}$ | $\begin{gathered} 0 / A \\ N / \\ 0 \\ (72) \\ (16) \end{gathered}$ | $\begin{gathered} 0 \\ \text { N/A } \\ 0 \\ (1) \\ (57) \end{gathered}$ | $\begin{aligned} & 7.3 \\ & \text { N/A } \\ & 14.3 \\ & (1.3) \\ & 0.0 \end{aligned}$ | $\begin{aligned} & 6.7 \\ & N / \mathrm{A} \\ & 14.8 \\ & 0.0 \\ & 0.0 \end{aligned}$ | $\begin{aligned} & 0.00 \\ & \text { N/A } \\ & 0.06 \\ & 0.03 \\ & (0.01) \end{aligned}$ | $\begin{aligned} & 0.00 \\ & N / 4 \\ & 0.00 \\ & 0.06 \\ & (0.04) \end{aligned}$ |
| 3. $22^{\text {nd }}$ Street NWI National Academy of Sciences (NAS) Driveway | stop | wBL <br> NBTR <br> SBLT | $\begin{gathered} 0 \\ 107 \\ 45 \end{gathered}$ | $\begin{aligned} & 11 \\ & 19 \\ & 74 \end{aligned}$ | $\begin{aligned} & A[0.0] \\ & A[0.0] \\ & A[0.0] \end{aligned}$ | $\begin{aligned} & \mathrm{B}[10.1] \\ & \mathrm{A}[0.0] \\ & \mathrm{A}[0.0] \end{aligned}$ | $\begin{aligned} & 0.00 \\ & 0.07 \\ & 0.00 \end{aligned}$ | $\begin{aligned} & 0.02 \\ & 0.01 \\ & 0.00 \\ & 0.00 \end{aligned}$ | $\begin{gathered} 0 \\ 35 \\ 35 \end{gathered}$ | $\begin{aligned} & 11 \\ & 18 \\ & 17 \end{aligned}$ | $\begin{aligned} & A[0.0] \\ & A[0.0] \\ & A[0.0] \\ & A[0] \end{aligned}$ | $\begin{aligned} & \mathrm{A}[9.7] \\ & \mathrm{A}[0.0] \\ & \mathrm{A}[0.0] \end{aligned}$ | $\begin{aligned} & 0.00 \\ & 0.02 \\ & 0.00 \\ & 0.02 \end{aligned}$ | $\begin{aligned} & 0.02 \\ & 0.01 \\ & 0.00 \\ & 0.00 \end{aligned}$ | $\begin{aligned} & 0 \\ & (72) \\ & (22) \end{aligned}$ | $\begin{gathered} 0 \\ (1) \\ (57) \end{gathered}$ | $\begin{aligned} & 0.0 \\ & 0.0 \\ & 0.0 \end{aligned}$ | $\begin{aligned} & (0.4) \\ & 0.0 \\ & 0.0 \end{aligned}$ |  | $\begin{aligned} & 0.00 \\ & 0.00 \\ & 0.00 \end{aligned}$ |
| 4. $22^{\text {nd }}$ Street NW/ C Street NW (Gated Entrance) | stop | NBT <br> SBT | $\begin{gathered} 72 \\ 3 \end{gathered}$ | $\begin{aligned} & 1 \\ & 44 \end{aligned}$ | $\begin{aligned} & \mathrm{C}[17.6] \\ & \mathrm{B}[15.0] \end{aligned}$ | $\begin{aligned} & \mathrm{B}[14.9] \\ & \mathrm{C}[16.4] \end{aligned}$ | $\begin{aligned} & 0.22 \\ & 0.01 \end{aligned}$ | $\begin{aligned} & 0.00 \\ & 0.13 \end{aligned}$ | $\underset{N / A}{N / A}$ | $\begin{gathered} N / A \\ N / A \end{gathered}$ | $\begin{aligned} & N / A \\ & N / A \end{aligned}$ | $\begin{gathered} \text { N/A } \\ N A \end{gathered}$ | $\begin{gathered} N / A \\ N / A \end{gathered}$ | $\begin{gathered} \text { N/A } \\ N / A \end{gathered}$ | N/A | N/A | N/A | N/A | N/A | N/A |

(1) Analysis performed using Synchro sottware, version 7 .
(2) Values in parentheses, $($ ), represent signalized delay in seconds.
(4) Delay analysis at tuture gate calibrated based on field observations of the 22 nd Street $/ C$ Stree gated entry.


## Future Conditions Capacity Analyses

Future peak hour levels of service were estimated at the existing intersections on $22^{\text {nd }}$ Street, NW between Constitution Avenue, NW and C Street, NW based on the modified lane use and traffic volumes shown on Figures I2 and I3 and the Highway Capacity Manual methodology (Synchro version 7). The results are presented in Attachment VIII and summarized in Table 10.

The overall results are similar to those discussed under existing conditions, with slight reductions in overall delays at nearly all of the study intersections since access to $C$ Street will be geminately closed. Traffic using this entry/exit point destined for the DOS would use other DOS site entrances located at the intersections of 23rd Street, NW/C Street, NW, 2 Ist Street, NW/C Street, NW, and 23rd Street, NW/D Street, NW. The queuing and progression comments as provided under existing conditions apply to the Constitution Avenue/22 ${ }^{\text {nd }}$ Street intersection.

The planned gated access to the APhA garage would increase delays at this driveway, but are expected to remain within acceptable levels, with all movements operating at LOS " C " or better during the AM and PM peak hours.

## Future Operations Plan

A future operations plan was developed for $22^{\text {nd }}$ Street, NW based on the extensive data collection, field observations, permanent closure of C Street, and the "Urban Design Concept" provided by KCCT.

The elements of this plan are shown on Figure 12 and include the following:
I. Permanently restrict vehicular access to $C$ Street by installing retractable bollards. Maintain pedestrian and bicycle access.
2. Retain the current lane configuration, signalization, traffic control, and pedestrian/bicycle facilities at the Constitution Avenue/22 ${ }^{\text {nd }}$ Street intersection.
3. Install a three (3) foot wide, I 50 foot long raised median on $22^{\text {nd }}$ Street, beginning approximately 60 feet north of Constitution Avenue to separate traffic movements and eliminate double parking in the northbound direction. The median would be terminated south of the APhA garage driveway to allow for through vehicles to bypass APhA traffic entering the garage.
4. Remove all of the existing 13 parallel metered parking spaces on the east side of $22^{\text {nd }}$ Street. Designate seven (7) spaces for a taxi queuing area in the vicinity of the median and a taxi dropoff area to south of the NAS parking garage exit.
5. Provide a taxi pick-up shelter on the east side of $22^{\text {nd }}$ Street just north of the taxi queuing area.
6. Install a retractable barrier and guard booth at the existing APhA loading dock and garage driveway on the west side of $22^{\text {nd }}$ Street.
7. Designate the curb lane between the APhA loading dock and garage entrance for short-term loading only. The DOS/APhA security should manage the loading activities and enforce the use of the loading area.
8. Convert existing angled pull-in parking on the west side of $22^{\text {nd }}$ Street to back-in operation and increase the number of existing metered spaces from eight (8) to 14 spaces. These are located to the south of the APhA garage driveway.
9. Maintain the existing 56 -foot width of $22^{\text {nd }}$ Street that allows for taxi turn around areas just north of Constitution Avenue, south of the APhA garage entrance, and at C Street. These areas will allow vehicles to drop-off and pick-up passengers more efficiently.

These elements are anticipated to increase the efficiency of vehicle maneuvers, reduce vehicle and pedestrian conflicts, and improve overall operations along $22^{\text {nd }}$ Street. The success of these elements depends on the enforcement of the no parking areas in order to achieve the overall goals of the plan, improve operations, and reduce driver confusion.

The Urban Design Concept and service vehicle maneuvering diagrams are contained in Attachment IX.

## Conclusions

The conclusions of this Environmental Assessment are as follows:
I. All of the intersections within study area currently operate at acceptable levels of service during both the AM and PM peak commuter periods. This includes the signalized Constitution Avenue/22 ${ }^{\text {nd }}$ Street intersection and the unsignalized driveways on 22nd Street. Field observations indicate that through traffic along Constitution Avenue is regulated by the progression of traffic the system of signalized intersections and are limited during periods when excessive queuing occurs, resulting in longer delay times than those reported in this study.
2. Field observations indicate that several vehicle conflicts occur along $22^{\text {nd }}$ Street due to the drop-off and pick-up activity that is exacerbated by illegally parked and double-parked vehicles that inhibit the ability of motorists to turn around in a single maneuver and increase overall delays. Further, although motorists that travel on 22 ${ }^{\text {nd }}$ Street expect conflicts to occur, delays caused by illegally parked vehicles create confusion and driver frustration.
3. The permanent closure of $C$ Street to vehicular traffic would have a minimal impact to vehicle delays at the intersections and driveways on $22^{\text {nd }}$ Street, and would slightly reduce these delays since traffic destined for the Department of State building would utilize other driveways to access the site.
4. The proposed operations plan that includes a median on $22^{\text {nd }}$ Street, designated taxi dropoff and pick-up areas, conversion of angled parking, and providing turn around areas will significantly improve traffic operations and reduce vehicle conflicts on $22^{\text {nd }}$ Street. The success of these improvements and modifications depend on the enforcement of the no parking areas in order to achieve the overall goals of the plan, improve operations, and reduce driver confusion.

Questions regarding this document should be directed to Wells + Associates.

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Attachment I

## DDOT Scoping Letter

## WELLS + ASSOCIATES

October 19, 2009

## VIA ELECTRONIC DELIVERY

Christopher Ziemann, AICP<br>Transportation Planner, Ward 2<br>District Department of Transportation (DDOT) 2000 14th Street, NW<br>$6^{\text {th }}$ Floor<br>Washington, DC 20009

Subject: Scoping Letter of Agreement and Project Description for an Environmental Assessment Harry S Truman Building - Department of State and American Pharmacists Association

Dear Chris,
This letter presents a summary our recent meeting held at your offices on Thursday, October 15, 2009 and outlines the transportation study scope being prepared as part of the concurrent Environmental Assessments for Harry S Truman (HST) Department of State (DOS) and the American Pharmacists Association (APhA). The attendance sign-in sheet is included as an attachment to this letter. As discussed at the meeting, the HST - Department of State building is preparing to finalize their ongoing perimeter security Environmental Assessment by including an evaluation of $22^{\text {nd }}$ Street from Constitution Avenue to $C$ Street. On a concurrent path, there is a second perimeter security Environment Assessment for the recently completed APhA building expansion. The lessee of the APhA building expansion is the General Services Administration (GSA) with the Department of State as its tenant. The security level for the APhA building expansion area occupied by the Department of State has been set as a security Level 4 ( 50 foot setback). In comparison, the HST Building has been set to the highest security Level 5 ( 100 foot setback).

Since the events of September II, 200I, the portion of C Street, NW between 23rd Street and 2 I $^{\text {st }}$ Street has been restricted and controlled by the HST - Department of State. As a result, the function of $22^{\text {nd }}$ Street from Constitution Avenue to C Street has been enhanced to include numerous functions that include an ad hoc pick-up/drop-off zone in addition to public on-street parking, and serving driveways and loading for adjacent buildings'.

The scope of the transportation evaluation for each Environmental Assessment will not change the curbs or curb cuts along $22^{\text {nd }}$ Street and 23 rd Streets under either the DOS or APhA proposals. The following improvements are part of the concurrent EA's for each with respect to 22 ${ }^{\text {nd }}$ Street:

Department of State: The DOS in consultation with DDOT, APhA, and National Academy Sciences is evaluating operational improvements on $22^{\text {nd }}$ Street to best control its enhanced functions. The DOS EA will replace the retractable barriers and guard booth at the C Street/22nd Street intersection with
retraceable emergency bollards. Under this condition, DOS site trips will no longer use this site access point and it would be limited to emergencies and high level visitors. A raised median will be installed on the southern half of $22^{\text {nd }}$ Street between C Street and Constitution Avenue to discourage double parking. The angled parking on the east side of $22^{\text {nd }}$ Street will be converted from head-in-parking to the DDOT preferred back-in-parking. In addition, designated taxi stand and pick-up areas will be established. An operational evaluation of $22^{\text {nd }}$ Street will be evaluated between C Street and Constitution Avenue for this EA.

American Pharmacists Association: All site traffic to the APhA will remain the same. The main garage driveway that serves site trips is oriented to $22^{\text {nd }}$ Street between C Street and Constitution Avenue. This EA proposes to install a retractable barrier with a security guard booth at this location. The APhA driveway on 23 rd Street will remain an emergency exit only and also has been proposed for a retractable barrier and guard booth. An evaluation of the service time to process entering vehicles will be provided with respect to the $22^{\text {nd }}$ Street operational evaluation discussed above.

A more detailed description of the APhA security perimeter alternatives was presented at our meeting and summarized for your use below:

## No Action Alternative

This alternative includes the location of a 30 " high security wall in a location along 23 rd Street NW that was previously approved by NCPC in 2005, but has not been constructed.

## Alternative I

Alternative I includes the 23 rd Street wall shown in the No Action option, but also includes new guard booths and vehicle barriers at the two garage entrances one on 22nd Street, and 23rd Street, and the loading dock on $22^{\text {nd }}$ Street. In addition, this alternative shows a new 30 " wall along the APhA property line on $22^{\text {nd }}$ Street.

## Alternative 2

Alternative 2 locates the 23 rd Street wall on the National Park Service western property line, and relocates the sidewalk to the west of the new wall. On $22^{\text {nd }}$ Street, the wall is located on the eastern edge of the existing sidewalk. The locations of the guard booths and vehicle barriers remain as shown for Alternative I.

## Alternative 3

Alternative 3 locates the new $23^{\text {rd }}$ Street wall $24^{\prime \prime}$ east of the existing curb line and the $22^{\text {nd }}$ Street wall 24 " west of the existing curb line. The location of the guard booths and vehicle barriers would be the same as those described in the other two action alternatives.

## Transportation Study Methodology

Study Intersections. The transportation study for the Environmental Assessment will include vehicular, pedestrian, and bicycle counts conducted at the following intersections and driveways a typical weekday from 7 AM to 7 PM:
I) $22^{\text {nd }}$ Street/Constitution Avenue,
2) $22^{\text {nd }}$ Street/APhA Driveway
3) $22^{\text {nd }}$ Street/APhA Loading Dock
4) $22^{\text {nd }}$ Street/NAS Driveway
5) $22^{\text {nd }}$ Street/C Street

APhA Loading Dock. We will count and identify the number loading vehicles at the APhA loading dock on $22^{\text {nd }}$ Street.

On-Street Parking. We will identify the existing number of on-street parking spaces on the east and west sides of $22^{\text {nd }}$ Street and conduct parking occupancy counts at 30 -minute intervals from 7 AM to 7 PM. This count will also include counting the number of standing double parked vehicles along $22^{\text {nd }}$ Street and visual observations of the type of vehicle (taxi, limousine, private vehicle). An observation will also be made on the number of times parking meters are checked by District parking meter enforcement staff.

Curb Survey. A curb survey on $22^{\text {nd }}$ Street between Constitution Avenue and C Street will identify number of parking spaces, parking meters, and parking restrictions.

Off-Street Parking. We will obtain the existing number of garage parking spaces serving the APhA and HST-Building. We will also obtain current parking plans administered by the APhA and HST-Building, if available.

Retractable Barrier. The vehicle service rate and queues for the existing DOS retractable barrier at the $22^{\text {nd }}$ Street/C Street intersection will be measured and utilized as baseline data for the proposed APhA retractable barrier at its $22^{\text {nd }}$ Street driveway.

Bikes racks. We will obtain the existing location and number of bike racks and usage along $22^{\text {nd }}$ Street from C Street to Constitution Avenue as well as the parking garages for the APhA and NAS buildings at one hour intervals from 7 AM to 7 PM. This survey will also include the number of bicycles locked to fixtures other than bicycle racks along $22^{\text {nd }}$ Street (i.e. parking meters, poles, and trees)

Transportation Demand Management (TDM). We will obtain details of existing TDM Plans that are currently in place at both the APhA and HST-Building. The APhA and HST-Building will be inquired if their respective employees could participate in an online survey to determine mode of travel.

Public Transportation and Commuter Bus Services. An inventory of area bus stops and drop-off locations for local public transportation and regional bus services will be collected. Ridership data will be requested for each bus line if available.

Other Items. Other topics of discussion at the meeting included the need and details of public space permits. These include the emergency bollards at the northern end of $22^{\text {nd }}$ Street proximate to $C$ Street for the HST-Building and portions of a security wall for the APhA depending on the preferred alternative. These items will be pursued by the HST-Building/APhA and its contractors separately and will not be included in the traffic report.

Thank you for meeting with us to review and discuss the scope of this project. Please provide any comments within one-week of receiving this information. Otherwise, we will assume that this scope is acceptable to DDOT. It should be noted, pending acceptable weather and coordination with area security, our data collection effort is tentatively scheduled for Thursday, October 22, 2009. If you have any questions or comments, feel free to contact me at 703-917-6620.

Sincerely,


Kevin R. Fellin
Senior Associate

Cc Karina Ricks, District Department of Transportation
Courtney Williams, District Department of Transportation
Faisal Homed, District Department of Transportation
Enrique Bellini, Karn Charuhas Chapman \& Twohey
Mitch Buck, Karn Charuhas Chapman \& Twohey
Deana Rhodeside, Rhodeside \& Harwell, Inc.
Emily Brodhag, Rhodeside \& Harwell, Inc.
Judith Robinson, Robinson \& Associates, Inc.
Tim Kerr, Robinson \& Associates, Inc.
Martin J. Wells, Wells + Associates, Inc.
Falah Alugaily, General Services Administration
Mark Butowsky, Department of State
Michael J. Mallach, Department of State
Michael Fritz, Department of State
Dominic Tondo, Department of State
Elly Goldkind, Department of State
Ann Dubas, American Pharmacists Association
Joe Papa, National Academy of Sciences

Enclosures
SIGN IN SHEET
AGENDA: DOS AND APHA ENVIRONMENTAL ASSESSMENT (EA) SCOPING MEETING
MEETING DATE: OCTOBER 15, 2009 AT 2:30 PM
AGENCY/FIRM
DDOT/TPPA
WEUS + ASSOCIATES
IPARA E NAS: EDC
202-334-1521
703.3637477
703. $683-7447$
202-659-5600
202-659-5600
$202-535-2338$


## Attachment II

## Existing Pedestrian Counts

Table II－1
22nd Street／Consitution Avenue Pedestrian Count Summary

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Note（s）：
（1）Counts collected by Wells＋Associates on Thursday，October 22， 2009 from 7：00 AM to 7：00 PM．
（2）Shaded area represents the peak hour（s）for each key driveway for each peak period
Table II－2
22nd Street／APhA Driveway Pedestrian Count Summary

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Note（s）：
（1）Counts collected by Wells＋Associates on Thursday，October 22， 2009 from 7：00 AM to 7：00 PM．
Table II－3
22nd Street／NAS Driveway Pedestrian Count Summary
Department of State－22nd Street EA Addendum

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Note（s）：
（1）Counts collected by Wells＋Associates on Thursday，October 22， 2009 from 7：00 AM to 7：00 PM．

| Peak Period | Peak Hour | South of Guard Booth Crossing 22nd Street |  |  | East Side Runs Parallel to 22nd Street |  |  | West Side Runs Parallel to 22nd Street |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | East to West | West to East | Total | North to South | South to North | Total | North to South | South to North | Total |
|  | 7:00-8:00 AM | 31 | 9 | 40 | 9 | 80 | 89 | 2 | 14 | 16 |
|  | 7:15-8:15 AM | 35 | 11 | 46 | 7 | 95 | 102 | 0 | 9 | 9 |
|  | 7:30-8:30 AM | 40 | 12 | 52 | 8 | 111 | 119 | 1 | 8 | 9 |
|  | 7:45-8:45 AM | 51 | 17 | 68 | 12 | 114 | 126 | 1 | 9 | 10 |
|  | 8:00-9:00 AM | 59 | 24 | 83 | 16 | 116 | 132 | 1 | 5 | 6 |
|  | 8:15-9:15 AM | 52 | 21 | 73 | 20 | 98 | 118 | 3 | 5 | 8 |
|  | 8:30-9:30 AM | 58 | 24 | 82 | 25 | 90 | 115 | 2 | 2 | 4 |
|  | 8:45-9:45 AM | 52 | 18 | 70 | 26 | 82 | 108 | 4 | 1 | 5 |
|  | $9: 00-10: 00 \mathrm{AM}$ | 42 | 20 | 62 | 34 | 85 | 119 | 5 | 1 | 6 |
|  | 9:15-10:15 AM | 50 | 20 | 70 | 34 | 104 | 138 | 3 | 0 | 3 |
|  | 9:30-10:30 AM | 39 | 16 | 55 | 38 | 96 | 134 | 3 | 0 | 3 |
|  | 9:45-10:45 AM | 32 | 23 | 55 | 36 | 96 | 132 | 1 | 0 | 1 |
|  | 10:00-11:00 AM | 31 | 16 | 47 | 25 | 89 | 114 | 0 | 7 | 7 |
|  | 10:15-11:15 AM | 18 | 16 | 34 | 23 | 72 | 95 | 1 | 7 | 8 |
|  | 10:30-11:30 AM | 16 | 23 | 39 | 24 | 64 | 88 | 1 | 8 | 9 |
|  | 10:45-11:45 AM | 14 | 23 | 37 | 38 | 53 | 91 | 1 | 8 | 9 |
|  | 11:00 AM-12:00 PM | 25 | 35 | 60 | 66 | 45 | 111 | 1 | 1 | 2 |
|  | 11:15 AM-12:15 PM | 22 | 33 | 55 | 61 | 33 | 94 | 0 | 1 | 1 |
|  | 11:30 AM-12:30 PM | 25 | 49 | 74 | 81 | 38 | 119 | 2 | 2 | 4 |
|  | 11:45 AM-12:45 PM | 27 | 72 | 99 | 92 | 37 | 129 | 10 | 5 | 15 |
|  | 12:00-1:00 PM | 36 | 113 | 149 | 120 | 75 | 195 | 13 | 10 | 23 |
|  | 12:15-1:15 PM | 48 | 105 | 153 | 98 | 75 | 173 | 11 | 10 | 21 |
|  | 12:30-1:30 PM | 60 | 81 | 141 | 83 | 76 | 159 | 6 | 8 | 14 |
|  | 12:45-1:45 PM | 65 | 69 | 134 | 82 | 63 | 145 | 5 | 7 | 12 |
|  | 1:00-2:00 PM | 95 | 42 | 137 | 80 | 88 | 168 | 5 | 4 | 9 |
|  | 1:15-2:15 PM | 92 | 39 | 131 | 95 | 83 | 178 | 5 | 2 | 7 |
|  | 1:30-2:30 PM | 84 | 35 | 119 | 95 | 87 | 182 | 2 | 2 | 4 |
|  | 1:45-2:45 PM | 77 | 26 | 103 | 82 | 87 | 169 | 1 | 4 | 5 |
|  | 2:00-3:00 PM | 38 | 39 | 77 | 80 | 45 | 125 | 2 | 7 | 9 |
|  | 2:15-3:15 PM | 32 | 41 | $73$ | 75 | 50 | 125 | 5 | 8 | 13 |
|  | 2:30-3:30 PM | 62 | 51 | 113 | 75 | 46 | 121 | 9 | 7 | 16 |
|  | 2:45-3:45 PM | 62 | 60 | 122 | 67 | 49 | 116 | 8 | 4 | 12 |
|  | 3:00-4:00 PM | 57 | 52 | 109 | 62 | 46 | 108 | 8 | 1 | 9 |
|  | 3:15-4:15 PM | 53 | 52 | 105 | 59 | 44 | 103 | 7 | 2 | 9 |
|  | 3:30-4:30 PM | 19 | 51 | 70 | 53 | 39 | 92 | 7 | 4 | 11 |
|  | 3:45-4:45 PM | 20 | 51 | 71 | 49 | 35 | 84 | 11 | 6 | 17 |
|  | 4:00-5:00 PM | 19 | 49 | 68 | 53 | 28 | 81 | 18 | 9 | 27 |
|  | 4:15-5:15 PM | 34 | 58 | 92 | 77 | 45 | 122 | 28 | 7 | 35 |
|  | 4:30-5:30 PM | 32 | 55 | 87 | 91 | 43 | 134 | 27 | 7 | 34 |
|  | 4:45-5:45 PM | 31 | 56 | 87 | 88 | 44 | 132 | 30 | 8 | 38 |
|  | 5:00-6:00 PM | 52 | 53 | 105 | 77 | 51 | 128 | 23 | 5 | 28 |
|  | 5:15-6:15 PM | 37 | 33 | 70 | 48 | 30 | 78 | 21 | 5 | 26 |
|  | 5:30-6:30 PM | 44 | 26 | 70 | 38 | 31 | 69 | 21 | 3 | 24 |
|  | 5:45-6:45 PM | 44 | 14 | 58 | 43 | 23 | 66 | 15 | 0 | 15 |
|  | 6:00-7:00 PM | 22 | 10 | 32 | 45 | 16 | 61 | 15 | 0 | 15 |

Note(s):
(1) Counts collected by Wells + Associates on Thursday, October 22, 2009 from 7:00 AM to 7:00 PM.
(2) Shaded area represents the peak hour(s) for each key driveway for each peak period
Table II-5
22nd Street/APhA Loading Dock Pedestrian Count Summary Department of State - 22nd Street EA Addendum ${ }^{(1)(2)}$

| Peak Period | Peak <br> Hour | North Side Crossing 22nd Street |  |  | South Side Crossing 22nd Street |  |  | East Side Runs Parallel to 22nd Street |  |  | West Side <br> Crossing APhA Loading Dock |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | East to West | West to East | Total | East to West | West to East | Total | North to South | South to North | Total | North to South | South to North | Total |
|  | 7:00-8:00 AM | 2 | 0 | 2 | 3 | 0 | 3 | 12 | 43 | 55 | 3 | 15 | 18 |
|  | 7:15-8:15 AM | 3 | 1 | 4 | 5 | 1 | 6 | 6 | 43 | 49 | 3 | 14 | 17 |
|  | 7:30-8:30 AM | 2 | 1 | 3 | 4 | 2 | 6 | 6 | 40 | 46 | 3 | 18 | 21 |
|  | 7:45-8:45 AM | 1 | 3 | 4 | 4 | 2 | 6 | 8 | 35 | 43 | 4 | 17 | 21 |
|  | 8:00-9:00 AM | 2 | 3 | 5 | 8 | 2 | 10 | 8 | 35 | 43 | 2 | 16 | 18 |
|  | 8:15-9:15 AM | 2 | 2 | 4 | 6 | 1 | 7 | 11 | 37 | 48 | 2 | 20 | 22 |
|  | 8:30-9:30 AM | 4 | 2 | 6 | 5 | 0 | 5 | 16 | 39 | 55 | 5 | 12 | 17 |
|  | 8:45-9:45 AM | 4 | 0 | 4 | 5 | 0 | 5 | 18 | 43 | 61 | 5 | 13 | 18 |
|  | 9:00-10:00 AM | 3 | 1 | 4 | 1 | 0 | 1 | 22 | 40 | 62 | 5 | 10 | 15 |
|  | 9:15-10:15 AM | 2 | 1 | 3 | 1 | 0 | 1 | 21 | 37 | 58 | 5 | 5 | 10 |
|  | 9:30-10:30 AM | 0 | 1 | 1 | 0 | 0 | 0 | 20 | 37 | 57 | 2 | 4 | 6 |
|  | 9:45-10:45 AM | 0 | 3 | 3 | 0 | 0 | 0 | 19 | 28 | 47 | 1 | 3 | 4 |
|  | 10:00-11:00 AM | 0 | 2 | 2 | 0 | 0 | 0 | 14 | 18 | 32 | 0 | 1 | 1 |
|  | 10:15-11:15 AM | 0 | 2 | 2 | 0 | 0 | 0 | 17 | 19 | 36 | 2 | 4 | 6 |
|  | 10:30-11:30 AM | 0 | 2 | 2 | 0 | 0 | 0 | 19 | 12 | 31 | 2 | 5 | 7 |
|  | 10:45-11:45 AM | 1 | 1 | 2 | 0 | 0 | 0 | 18 | 10 | 28 | 3 | 5 | 8 |
|  | 11:00 AM-12:00 PM | 1 | 1 | 2 | 0 | 0 | 0 | 30 | 17 | 47 | 4 | 4 | 8 |
|  | 11:15 AM-12:15 PM | 1 | 1 | 2 | 0 | 0 | 0 | 24 | 12 | 36 | 2 | 1 | 3 |
|  | 11:30 AM-12:30 PM | 1 | 1 | 2 | 0 | 0 | 0 | 19 | 18 | 37 | 2 | 1 | 3 |
|  | 11:45 AM-12:45 PM | 0 | 0 | 0 | 0 | 1 | 1 | 22 | 26 | 48 | 6 | 2 | 8 |
|  | 12:00-1:00 PM | 2 | 3 | 5 | 1 | 3 | 4 | 29 | 36 | 65 | 8 | 2 | 10 |
|  | 12:15-1:15 PM | 2 | 3 | 5 | 1 | 3 | 4 | 29 | 35 | 64 | 8 | 5 | 13 |
|  | 12:30-1:30 PM | 2 | 3 | 5 | 1 |  | 3 | 27 | 26 | 53 | 5 | 4 | 9 |
|  | 12:45-1:45 PM | 1 | 1 | 2 | 0 | 0 | 0 | 14 | 25 | 39 | 6 | 4 | 10 |
|  | 1:00-2:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 38 | 48 | 6 | 4 | 10 |
|  | 1:15-2:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 35 | 46 | 7 | 0 | 7 |
|  | 1:30-2:30 PM | 0 | 0 | 0 | 2 | 0 | 2 | 7 | 39 | 46 | 5 | 2 | 7 |
|  | 1:45-2:45 PM | 0 | 0 | 0 | 2 | 0 | 2 | 23 | 43 | 66 | 2 | 2 | 4 |
|  | 2:00-3:00 PM | 0 | 0 | 0 | 2 | 1 | 3 | 30 | 20 | 50 | 4 | 2 | 6 |
|  | 2:15-3:15 PM | 0 | 0 | 0 | 3 | 1 | 4 | 37 | 16 | 53 | 3 | 2 | 5 |
|  | 2:30-3:30 PM | 0 | 0 | 0 | 1 | 1 | 2 | 41 | 14 | 55 | 3 | 0 | 3 |
|  | 2:45-3:45 PM | 0 | 1 | 1 | 1 | 1 | 2 | 38 | 10 | 48 | 2 | 0 | 2 |
|  | 3:00-4:00 PM | 0 | 2 | 2 | 1 | 0 | 1 | 39 | 6 | 45 | 6 | 0 | 6 |
|  | 3:15-4:15 PM | 0 | 2 | 2 | 0 | 0 | 0 | 38 | 9 | 47 | 6 | 0 | 6 |
|  | 3:30-4:30 PM | 0 | 2 | 2 | 0 | 0 | 0 | 37 | 9 | 46 | 8 | 0 | 8 |
|  | 3:45-4:45 PM | 0 | 1 | 1 | 0 | 0 | 0 | 27 | 6 | 33 | 11 | 0 | 11 |
|  | 4:00-5:00 PM | 0 | 0 | 0 | 1 | 0 | 1 | 24 | 12 | 36 | 11 | 1 | 12 |
|  | 4:15-5:15 PM | 0 | 4 | 4 | 5 | 0 | 5 | 31 | 10 | 41 | 19 | 2 | 21 |
|  | 4:30-5:30 PM | 0 | 4 | 4 | 6 | 0 | 6 | 32 | 12 | 44 | 19 | 2 | 21 |
|  | 4:45-5:45 PM | 0 | 4 | 4 | 6 | 1 | 7 | 33 | 18 | 51 | 22 | 2 | 24 |
|  | 5:00-6:00 PM | 0 | 4 | 4 | 12 | 1 | 13 | 36 | 12 | 48 | 17 | 2 | 19 |
|  | 5:15-6:15 PM | 0 | 0 | 0 | 8 | 1 | 9 | 33 | 12 | 45 | 13 | 1 | 14 |
|  | 5:30-6:30 PM | 1 | 0 | 1 | 7 | 1 | 8 | 38 | 13 | 51 | 13 | 1 | 14 |
|  | 5:45-6:45 PM | 1 | 0 | 1 | 7 | 0 | 7 | 38 | 10 | 48 | 11 | 1 | 12 |
|  | 6:00-7:00 PM | 1 | 0 | 1 | 0 | 0 | 0 | 35 | 12 | 47 | 12 | 0 | 12 |

Note(s):
(1) Counts collected by Wells + Associates on Thursday, October 22, 2009 from 7:00 AM to 7:00 PM. (2) Shaded area represents the peak hour(s) for each key driveway for each peak period

## Attachment III

## Existing Bicycle Counts

Table III－1
22nd Street／Consitution Avenue Bicycle Count Summary

|  | 000000000 <br> 000000000 <br> 000000000 |  <br> 000000000000000000000000000 <br> 000000 HनH HOOOOOOOOOOOOOOOO | 000000000 <br> 000000000 <br> 000000000 |
| :---: | :---: | :---: | :---: |
|  | N $\downarrow \circ \infty \infty \wedge \wedge+m$ <br>  <br> 000000000 |  <br>  <br> 00000000000000 नrनrनrNm0000 m |  $1000000000$ <br>  |
|  | $\wedge \infty \omega \infty の \infty \infty \wedge$ に <br>  <br> नーOOOOOOO |  $\mid 4 \mathrm{H} 00 \text { O }$ <br>  |  |
|  | $0 \rightarrow N m m N r \circ \circ$ <br> ○OHNNNHO <br> ०नन न | 000000000000000000000000 HNN <br> 0000000000000000 नNMmNनONNNN | の m m m m m N N－ <br> NHOOOOOOO <br> －$N$ m m m m N N－ |
| $\begin{aligned} & \text { 층 } \\ & \text { 운 } \end{aligned}$ |  | $\sum_{贝} \sum_{n} \sum_{贝} \sum_{n}$ <br>  <br>  <br>  <br>  <br>  <br>  |  |
|  | （W $\forall 0 \tau-W \forall L$ ） वOIVヨd YVヨd WV | （Wd st：t－W $\mathrm{St}: 6$ ） aOIUヨd YVヨd スVG－aIW | （Wd L－Wd t） वOIVヨd YVヨd Wd |

Note（s）：
（1）Counts collected by Wells＋Associates on Thursday，October 22， 2009 from 7：00 AM to 7：00 PM．
（2）Shaded area represents the peak hour（s）for each key driveway for each peak period
Table III-2

| Peak Period | Peak Hour | North Side <br> Crossing 22nd Street |  |  | South Side Crossing 22nd Street |  |  | East Side <br> Runs Parallel to 22nd Street |  |  | West Side Crossing APhA Driveway |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | East to West | West to East | Total | East to West | West to East | Total | North to South | South to North | Total | North to South | South to North | Total |
|  | 7:00-8:00 AM | 0 | 0 | 0 | 2 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 |
|  | 7:15-8:15 AM | 0 | 0 | 0 | 2 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 |
|  | 7:30-8:30 AM | 0 | 0 | 0 | 1 | 1 | 2 | 3 | 0 | 3 | 0 | 0 | 0 |
|  | 7:45-8:45 AM | 0 | 0 | 0 | 2 | 2 | 4 | 3 | 1 | 4 | 0 | 0 | 0 |
|  | 8:00-9:00 AM | 0 | 0 | 0 | 1 | 2 | 3 | 3 | 2 | 5 | 1 | 0 | 1 |
|  | 8:15-9:15 AM | 0 | 0 | 0 | 1 | 2 | 3 | 3 | 2 | 5 | 2 | 0 | 2 |
|  | 8:30-9:30 AM | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 4 | 2 | 0 | 2 |
|  | 8:45-9:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 3 | 2 | 0 | 2 |
|  | 9:00-10:00 AM | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 2 |
|  | 9:15-10:15 AM | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 0 | 1 | 1 | 1 | 2 |
|  | 9:30-10:30 AM | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 1 | 1 | 2 |
|  | 9:45-10:45 AM | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 1 | 1 | 2 |
|  | 10:00-11:00 AM | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 |
|  | 10:15-11:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 10:30-11:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 10:45-11:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 11:00 AM-12:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 11:15 AM-12:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 11:30 AM-12:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 11:45 AM-12:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 12:00-1:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 12:15-1:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 12:30-1:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
|  | 12:45-1:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
|  | 1:00-2:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
|  | 1:15-2:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
|  | 1:30-2:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 1:45-2:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 2:00-3:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 |
|  | 2:15-3:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 |
|  | 2:30-3:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 |
|  | 2:45-3:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 |
|  | 3:00-4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
|  | 3:15-4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 3:30-4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 3:45-4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
|  | 4:00-5:00 PM | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 |
|  | 4:15-5:15 PM | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 |
|  | 4:30-5:30 PM | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 |
|  | 4:45-5:45 PM | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
|  | 5:00-6:00 PM | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 3 | 0 | 3 |
|  | 5:15-6:15 PM | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 2 | 3 | 0 | 3 |
|  | 5:30-6:30 PM | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 2 | 3 | 0 | 3 |
|  | 5:45-6:45 PM | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 2 | 3 | 0 | 3 |
|  | 6:00-7:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 1 | 0 | 1 |

Notes.
(1) Counts collected by Wells + Associates on Thursday, October 22,2009 from 7:00 AM to 7:00 PM.
(2) Shaded area represents the peak hour(s) for each key driveway for each peak period.
Table III－3
22nd Street／NAS Driveway Bicycle Count Summary
Department of State－22nd Street EA Addendum

|  | 000000000 <br> 000000000 <br> 000000000 | 0000000000000000 HनH H0000000 <br> 0000000000000000 HनH H0000000 <br> 000000000000000000000000000 | OOONNNOO $000 \text { H H H H O O }$ $000 \text { H H H H O O }$ |
| :---: | :---: | :---: | :---: |
|  | 000000000 <br> ० नHन HOOOO | 000000000000000000000 HHH 00 <br> 000000000000000000000000000 <br> 000000000000000000000 HHAH 0 | 000000000 <br> 000000000 <br> 000000000 |
|  | 000000000 <br> 000000000 <br> 000000000 | 000000000000000000000000000 000000000000000000000000000 000000000000000000000000000 | 000000000 <br> 000000000 <br> 000000000 |
|  | －NNーHOOON <br> ○みन－ <br> H4み00000れ |  | ○○～NMナNNー <br> 000000000 <br> ○○～NMナNNH |
| 芯 |  | $\sum_{i} \sum_{i} \sum_{i} \sum_{i}$ <br>  <br>  <br>  <br>  <br>  |  |
|  | （WV OL－W甘 L） वOIVヨd YVヨd WV | （Wd St：t－WV St：6） <br>  | （ Nd L －Wd t ） वOIVヨd YVヨd Wd |

Note（s）：
（1）Counts collected by Wells＋Associates on Thursday，October 22， 2009 from 7：00 AM to 7：00 PM．
（2）Shaded area represents the peak hour（s）for each key driveway for each peak period

\begin{abstract}
Table III－4
Table III－4
22nd Street／

|  | 000000000 <br> 000000000 <br> 000000000 | 000000000000000000000 HनH Ho O <br> 000000000000000000000000000 <br> 000000000000000000000 HHH H 0 | 00000 r rrr <br> $00000000 r$ |
| :---: | :---: | :---: | :---: |
|  |  <br>  <br> 000000004 | NHNHHHOOOOOHHHHOOOOOOOOOOO <br> HOOOOOOOOOOHनHनOOOOOOOOOOO <br> 4－NサーH000000000000000000000 |  <br> ○○ー N m m N－ <br> OOHーMmNNO |
|  | नHनOOOOOO <br> 000000000 <br> नHनOOOOO | 000000000000000000000 HनH Ho O <br> 000000000000000000000000000 <br> 000000000000000000000 HनH Ho O | 000000000 <br> 00000 － 0 H H |
| $\begin{aligned} & \text { 츨 } \\ & \text { Q 후 } \end{aligned}$ |  |  |  |
|  | （W $\forall 0 \tau-W \forall L$ ） वOIVヨd YVヨd WV | （Wd st：t－WV St：6） aOIyヨd $\forall \forall \exists d$ 人 $\forall$－alw | （Wd L－Wd t） वOIपヨd |

Note（s）：
（1）Counts collected by Wells＋Associates on Thursday，October 22， 2009 from 7：00 AM to 7：00 PM．
（1）Counts collected by Wells＋Associates on Thursday，October 22 ， （2）Shaded area represents the peak hour（s）for each key driveway for each peak period．
Table III－5
22nd Street／APhA Loading Dock Bicycle Count Summary

|  | 000000000 <br> 0 －لrNrrro | 000000000000000000000 HHAHOO <br> 000000000000000000000000000 <br>  | －$\rightarrow$ N の m N N－ <br> 000000000 <br> －- N N m N N－ |
| :---: | :---: | :---: | :---: |
|  | $\sim m \forall n\llcorner\forall \forall N-$ <br> －N M n n ナ ナ N－ Hन |  <br>  <br> 000000000000000000000000000 |  |
|  | 000000000 <br> 000000000 <br> 000000000 | 000000000000000000000000000 <br> 000000000000000000000000000 <br> 000000000000000000000000000 | 000000000 <br> 000000000 <br> 000000000 |
|  | 000000000 <br> 000000000 <br> 000000000 | 000000000000000000000000000 <br> 000000000000000000000000000 <br> 000000000000000000000000000 | 000000000 <br> 000000000 <br> 000000000 |
| ㄷ．． |  |  |  |
| $\begin{aligned} & \text { 드읗 } \\ & \text { © } \end{aligned}$ | （W甘 OL－W L L） वOIVヨd YVヨd WV | （Wd st：t－Wも ST：6） OOIUヨd YVヨd 人VO－aIW | （Wd L－Wd t） वOIVヨd YYヨd Wd |

Note（s）：
（1）Counts collected by Wells＋Associates on Thursday，October 22， 2009 from 7：00 AM to 7：00 PM． （2）Shaded area represents the peak hour（s）for each key driveway for each peak period

## Attachment IV

Metro/Commuter Bus Schedules and Ridership Information

## How to use this timetable

> Use the map to find the stops closest to where you will get on and off the bus.
> Select the schedule (Weekday, Saturday, Sunday) for when you will travel. Along the top of the schedule, find the stop at or nearest the point where you will get on the bus. Follow that column down to the time you want to leave.
> Use the same method to find the times the bus is scheduled to arrive at the stop where you will get off the bus.
> If the bus stop is not listed, use the time shown for the bus stop before it as the time to wait at the stop.
$>$ The end-of-the-line or last stop is listed in ALL CAPS on the schedule.

## Cómo Usar este Horario

> Use este mapa para localizar las paradas más cercanas a donde se subirá y bajará del autobús.
> Seleccione el horario (Entre semana, sábado, domingo) de cuando viajará. A lo largo de la parte superior del horario, localice la parada o el punto más cercano a la parada en la que se subirá al autobús. Siga esa columna hacia abajo hasta la hora en la que desee salir.
> Utilice el mismo método para localizar las horas en que el autobús está programado para llegar a la parada en donde desea bajarse del autobús.

- Si la parada del autobús no está listada use la hora que se muestra en la parada anterior como la hora de espera en la parada.
> El final de la ruta o la última parada del autobús aparece en letras MAYÚSCULAS en el horario.

\&. All Metrobuses are fully accessible and are equipped with lifts or ramps for wheelchair accessibility
Todos los autobuses de Metro son accesibles a personas con impedimentos y están equipados con rampas o elevadores para sillas de ruedas


## Serves these locations-

Brinda servicio a estas ubicaciones
Ronald Reagan Washington National Airport (13F, G)
Crystal City (13F, G)
Pentagon station
Potomac Park
Federal Triangle
Southwest employment area

> Schedule 9-24-06

INFORMATION ANYTIME 202-637-7000
TTY 202-638-3780
MetroOpensDoors.com

## Washington Metropolitan Area Transit Authority

[^11]Reagan National Airport- For route and schedule information Pentagon-Washington Line Call 202-637-7000 Routes 13A,B,F,G


## 13A,B,F,G

National Airport-Pentagon-
Washington Line

| Weekday Clockwise Service Servicio en dirección de las manecillas del reloj los días de semana |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Route Number | Pentagon K | Constitution Ave. $\stackrel{\&}{22 n d}$ St. <br> NW |  | 7th St. $\&$ Indepen- dence Ave. SW | $\begin{gathered} \text { 14th } \\ \& \\ \text { C } \\ \text { Sts. } \\ \text { SW } \end{gathered}$ | PENTAGON |
| AM Service - Servicio matutino |  |  |  |  |  |  |
| 13A | 5:09 | 5:21 | 5:26 | 5:29 | 5:32 | 5:37 |
| 13A | 5:34 | 5:46 | 5:51 | 5:54 | 5:57 | 6:02 |
| 13A | 5:53 | 6:08 | 6:16 | 6:20 | 6:24 | 6:29 |
| 13A | 6:13 | 6:28 | 6:36 | 6:40 | 6:44 | 6:49 |
| 13A | 6:33 | 6:48 | 6:56 | 7:00 | 7:04 | 7:09 |
| 13A | 6:53 | 7:08 | 7:16 | 7:20 | 7:24 | 7:29 |
| 13A | 7:05 | 7:20 | 7:31 | 7:35 | 7:40 | 7:45 |
| 13A | 7:19 | 7:34 | 7:45 | 7:49 | 7:54 | 7:59 |
| 13A | 7:31 | 7:46 | 7:57 | 8:01 | 8:06 | 8:11 |
| 13A | 7:39 | 7:54 | 8:05 | 8:09 | 8:14 | 8:19 |
| 13A | 7:47 | 8:02 | 8:13 | 8:17 | 8:22 | 8:27 |
| 13A | 7:55 | 8:10 | 8:21 | 8:25 | 8:30 | 8:35 |
| 13A | 8:03 | 8:19 | 8:30 | 8:34 | 8:39 | 8:44 |
| 13A | 8:13 | 8:29 | 8:40 | 8:44 | 8:49 | 8:54 |
| 13A | 8:30 | 8:46 | 8:57 | 9:01 | 9:06 | 9:11 |
| 13A | 8:48 | 9:04 | 9:15 | 9:19 | 9:24 | 9:29 |
| 13A | 9:15 | 9:31 | 9:42 | 9:46 | 9:51 | 9:56 |
| PM Service - Servicio vespertino |  |  |  |  |  |  |
| 13A | 3:18 | 3:33 | 3:41 | 3:46 | 3:51 | 3:57 |
| 13A | 3:30 | 3:45 | 3:53 | 3:58 | 4:03 | 4:09 |
| 13A | 3:45 | 4:00 | 4:08 | 4:13 | 4:18 | 4:24 |
| 13A | 4:03 | 4:18 | 4:26 | 4:31 | 4:36 | 4:42 |
| 13A | 4:28 | 4:44 | 4:52 | 4:57 | 5:02 | 5:09 |
| 13A | 4:53 | 5:09 | 5:17 | 5:22 | 5:27 | 5:34 |
| 13A | 5:20 | 5:36 | 5:44 | 5:49 | 5:54 | 6:01 |
| 13A | 5:50 | 6:06 | 6:14 | 6:19 | 6:24 | 6:31 |
| 13A | 6:18 | 6:33 | 6:40 | 6:45 | 6:48 | 6:53 |
| 13A | 6:48 | 7:03 | 7:10 | 7:15 | 7:18 | 7:23 |

Weekday Counterclockwise Service Servicio en dirección contraria a las manedillas del relo' los días de semana

| Route Number | Pentagon M | $\begin{gathered} \text { 14th } \\ \& \\ \text { C } \\ \text { Sts. } \\ \text { SW } \end{gathered}$ |  | $\begin{gathered} \text { 10th } \\ \text { St. } \\ \& \\ \text { Pennsyl- } \\ \text { vania } \\ \text { Ave. } \\ \text { NW } \end{gathered}$ | Constitution Ave. \& 21st St. NW | PENTAGON |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AM Service - Servicio matutino |  |  |  |  |  |  |
| 13B | 5:42 | 5:48 | 5:52 | 5:57 | 6:03 | 6:11 |
| 13B | 6:10 | 6:16 | 6:20 | 6:25 | 6:31 | 6:39 |
| 13B | 6:35 | 6:41 | 6:45 | 6:50 | 6:56 | 7:04 |
| 13B | 6:50 | 6:56 | 7:00 | 7:05 | 7:11 | 7:19 |
| 13B | 7:10 | 7:16 | 7:20 | 7:25 | 7:31 | 7:39 |
| 13B | 7:25 | 7:31 | 7:35 | 7:40 | 7:46 | 7:54 |
| 13B | 7:45 | 7:51 | 7:55 | 8:00 | 8:06 | 8:14 |
| 13B | 8:00 | 8:08 | 8:13 | 8:18 | 8:25 | 8:33 |
| 13B | 8:16 | 8:24 | 8:29 | 8:34 | 8:41 | 8:49 |
| 13B | 8:34 | 8:44 | 8:48 | 8:55 | 9:02 | 9:11 |
| 13B | 8:53 | 9:03 | 9:07 | 9:14 | 9:21 | 9:30 |
| 13B | 9:10 | 9:20 | 9:24 | 9:31 | 9:38 | 9:47 |
| PM Service - Servicio vespertino |  |  |  |  |  |  |
| 13B | 2:55 | 3:01 | 3:06 | 3:12 | 3:20 | 3:31 |
| 13B | 3:25 | 3:31 | 3:36 | 3:42 | 3:50 | 4:01 |
| 13B | 3:40 | 3:46 | 3:51 | 3:57 | 4:05 | 4:16 |
| 13B | 3:57 | 4:02 | 4:08 | 4:14 | 4:23 | 4:34 |
| 13B | 4:12 | 4:18 | 4:23 | 4:29 | 4:41 | 4:53 |
| 13B | 4:25 | 4:31 | 4:36 | 4:42 | 4:54 | 5:06 |
| 13B | 4:38 | 4:44 | 4:49 | 4:55 | 5:07 | 5:19 |
| 13B | - | - | - | 5:01 | 5:13 | 5:25 |
| 13B | 4:50 | 4:56 | 5:01 | 5:06 | 5:18 | 5:28 |
| 13B | 5:02 | 5:08 | 5:13 | 5:18 | 5:30 | 5:40 |
| 13B | 5:15 | 5:21 | 5:26 | 5:31 | 5:43 | 5:53 |
| 13B | 5:30 | 5:36 | 5:41 | 5:46 | 5:58 | 6:08 |
| 13B | 5:45 | 5:51 | 5:56 | 6:01 | 6:13 | 6:23 |
| 13B | 6:10 | 6:16 | 6:21 | 6:26 | 6:38 | 6:48 |
| 13B | 6:40 | 6:45 | 6:48 | 6:54 | 7:03 | 7:13 |

Page 3 of 5

## 13A,B,F,G

National Airport-Pentagon-
Washington Line


NOTE: Routes 13B, F, G operate to and from the upper level terminal (Gate B, Entrance \# 1) at National Airport. NOTA: Las rutas 13B, F, G ofrecen servicio hacia y desde el terminal superior (Puerta B, Entrada \# 1) del Aeropuerto Nacional Ronald Reagan Washington.


## 13A,B,F,G

National Airport-Pentagon-
Washington Line

|  |  |  | nda | C | CK | Se | - | C |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Servi | 才icio | dir | ción | e la | mane | illas | I r | oj los | orn | ngos |
|  |  |  |  | Const | 10th | 7th |  |  |  |  |
|  | Reagan |  |  | tution | St. | St. |  |  |  | REAGAN |
|  | National |  |  | Ave. | \& | \& | 14th |  | S. | NATIONAL |
|  | Airport | S. Eads |  | \& | Pennsyl- | Indepen- | \& |  | Eads | AIRPORT |
|  | (Upper | \& | Pentagon | 22nd | vania | dence | C | PENTAGON | \& | (Upper |
| Route Number | Rdwy. | 18th | $\square$ | St. | Ave. | Ave | Sts. | I | 18th | Rdwy. |
|  | Gate B) | Sts. | Hed | NW | NW | SW | SW | N | Sts. | Gate B) |
| AM Service - Servicio matutino |  |  |  |  |  |  |  |  |  |  |
| 13G | - |  | 5:33 | 5:43 | 5:50 | 5:54 | 5:56 | 6:00 | 6:05 | 6:10 |
| 13G | 6:17 | 6:22 | 6:28 | 6:38 | 6:45 | 6:49 | 6:51 | 6:55 | 7:00 | 7:05 |
| 13G | 7:06 | 7:11 | 7:18 | 7:29 | 7:37 | 7:41 | 7:44 | 7:48 | 7:53 | 7:59 |

NOTE: Routes 13B, F, G operate to and from the upper level terminal (Gate B, Entrance \# 1) at Reagan National Airport.
NOTA:Las rutas 13B, F, G ofrecen servicio hacia y desde el terminal superior (Puerta B, Entrada \# 1) del Aeropuerto Nacional Ronald Reagan Washington.


## How to use this timetable

> Use the map to find the stops closest to where you will get on and off the bus.
> Select the schedule (Weekday, Saturday, Sunday) for when you will travel. Along the top of the schedule, find the stop at or nearest the point where you will get on the bus. Follow that column down to the time you want to leave.
> Use the same method to find the times the bus is scheduled to arrive at the stop where you will get off the bus.
$>$ If the bus stop is not listed, use the time shown for the bus stop before it as the time to wait at the stop.
$>$ The end-of-the-line or last stop is listed in ALL CAPS on the schedule.

## Cómo Usar este Horario

> Use este mapa para localizar las paradas más cercanas a donde se subirá y bajará del autobús.
> Seleccione el horario (Entre semana, sábado, domingo) de cuando viajará. A lo largo de la parte superior del horario, localice la parada o el punto más cercano a la parada en la que se subirá al autobús. Siga esa columna hacia abajo hasta la hora en la que desee salir.
> Utilice el mismo método para localizar las horas en que el autobús está programado para llegar a la parada en donde desea bajarse del autobús.

- Si la parada del autobús no está listada use la hora que se muestra en la parada anterior como la hora de espera en la parada.
> El final de la ruta o la última parada del autobús aparece en letras MAYÚSCULAS en el horario.

English-Español metrobus

## 32,36 weekday only Pennsylvania Avenue Line


d. All Metrobuses are fully accessible and are equipped with lifts or ramps for wheelchair accessibility
Todos los autobuses de Metro son accesibles a personas con impedimentos y están equipados con rampas o elevadores para sillas de ruedas
Serves these locations-
Brinda servicio a estas ubicaciones
Friendship Heights station
Wisconsin Ave. N.W.
Tenleytown-AU station
Washington National Cathedral
Georgetown
White House
Federal Triangle
The National Mall
Capitol Hill
Eastern Market station
Potomac Avenue station
L'Enfant Square
Hillcrest (36)
Naylor and Good Hope Roads, SE (32)
Naylor Road station (36)
Southern Ave station (32)

## Washington <br> Metropolitan Area <br> Transit Authority

[^12]

Page 2 of 6

## 32,36

Weekday only

## Pennsylvania Avenue Line

| Weekday Westbound Entre semana con dirección al oeste |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Route Number | Southern Ave K | Naylor Road 0 | Erie \& 31st Sts. SE (Hillcrest) | Naylor <br>  <br> Good <br> Hope <br> Rds. <br> SE |  | Pennsylvania <br>  <br> 8th St. <br> SE <br> (Eastern <br> Market) <br> 0 | Pennsyl\& 7th St. NW <br> (ArchivesNavy Mem'lPenn <br> Quarter) | 10th St. \& Pennsylvania Ave. NW (Federal Triangle) |  | Virginia Ave. \& 21st <br> St. NW <br> (Potomac Park) |  | Wiscon$\sin \&$ Cathedral Aves. NW (Massachusetts Ave.) | Newark St. \& Wisconsin Ave, NW (MCLEAN GARDENS) | Wisconsin Ave. \& Albemarle St. NW (Tenley-townAU) | FRIENDSHIP HEIGHTS $\square$ |
| 32 AM Service - Servicio matutino 515 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 32 | 4:15 | - | - | 4:25 | 4:31 | 4:37 | 4:46 | - | 4:54 | - | 5:02 | 5:10 | - | 5:15 | 5:20 |
| 32 | 4:40 | - | - | 4:50 | 4:56 | 5:02 | 5:11 | - | 5:19 | - | 5:27 | 5:35 | - | 5:40 | 5:45 |
| 36 | - | 4:54 | 5:01 | - | 5:09 | 5:15 | 5:24 | - | 5:32 | - | 5:40 | 5:48 | - | 5:53 | 5:58 |
| 32 | 5:05 | - | - | 5:15 | 5:21 | 5:27 | 5:36 | - | 5:44 | - | 5:52 | 6:00 | - | 6:05 | 6:10 |
| 36 | - | 5:19 | 5:26 | - | 5:34 | 5:40 | 5:49 | - | 5:57 | - | 6:05 | 6:13 | - | 6:18 | 6:23 |
| 32 | 5:25 | - | - | 5:36 | 5:43 | 5:49 | 5:59 | - | 6:07 | - | 6:17 | 6:27 | - | 6:33 | 6:40 |
| 32/ | 5:36 | - | - | 5:47 | 5:54 | 6:00 | 6:10 | - | 6:18 | 6:28 | - | - | - | - | - |
| 36 | - | 5:40 | 5:47 | - | 5:56 | 6:02 | 6:12 | - | 6:20 | - | 6:30 | 6:40 | - | 6:46 | 6:53 |
| 32/ | 5:45 | - | - | 5:56 | 6:03 | 6:09 | 6:19 | - | 6:27 | 6:37 | - | - | - | - | - |
| 32 | 5:54 | - | - | 6:05 | 6:12 | 6:18 | 6:28 | - | 6:37 | - | 6:47 | 6:57 | - | 7:03 | 7:12 |
| 32/ | 6:03 | - | - | 6:14 | 6:21 | 6:27 | 6:37 | - | 6:46 | 6:56 | - | - | - | - | - |
| 36 | - | 6:04 | 6:12 | - | 6:23 | 6:29 | 6:39 | - | 6:48 | - | 6:58 | 7:08 | - | 7:14 | 7:23 |
| 32 | 6:11 | - | - | 6:24 | 6:32 | 6:39 | 6:50 | - | 6:59 | - | 7:10 | 7:21 | - | 7:29 | 7:37 |
| 361 | - | 6:15 | 6:24 | - | 6:36 | 6:43 | 6:54 | - | 7:03 | 7:14 | - | - | - | - | - |
| 32/ | 6:20 | - | - | 6:33 | 6:41 | 6:48 | 6:59 | - | 7:08 | 7:19 | - | - | - | - | - |
| 36 | - | 6:28 | 6:37 | - | 6:49 | 6:56 | 7:07 | - | 7:16 | - | 7:27 | 7:38 | - | 7:46 | 7:54 |
| 32/ | 6:30 | - | - | 6:43 | 6:51 | 6:58 | 7:09 | - | 7:18 | 7:29 | - | - | - | - | - |
| 32 | 6:38 | - | - | 6:51 | 6:59 | 7:06 | 7:17 | - | 7:26 | - | 7:37 | 7:48 | - | 7:56 | 8:04 |
| 36 | - | 6:44 | 6:54 | - | 7:08 | 7:15 | 7:28 | - | 7:40 | - | 7:52 | 8:05 | - | 8:13 | 8:22 |
| 32/ | 6:48 | - | - | 7:02 | 7:13 | 7:20 | 7:33 | - | 7:45 | 7:57 | - | - | - | - | - |
| 32 | 6:56 | - | - | 7:10 | 7:21 | 7:28 | 7:41 | - | 7:53 | - | 8:05 | 8:18 | - | 8:26 | 8:35 |
| $36 /$ | - | 7:02 | 7:12 | - | 7:26 | 7:33 | 7:46 | - | 7:58 | 8:10 | - | - | - | - | - |
| 32 | 7:03 | - | - | 7:17 | 7:28 | 7:35 | 7:48 | - | 8:00 | - | 8:12 | 8:25 | - | 8:33 | 8:42 |
| 32/ | 7:12 | - | - | 7:26 | 7:37 | 7:44 | 7:57 | - | 8:09 | 8:21 | - | - | - | - | - |
| 36 | - | 7:14 | 7:24 | - | 7:38 | 7:45 | 7:58 | - | 8:10 | - | 8:22 | 8:35 | - | 8:43 | 8:52 |
| 32 | 7:20 | - | - | 7:34 | 7:45 | 7:52 | 8:05 | - | 8:17 | - | 8:29 | 8:42 | - | 8:50 | 8:59 |
| 32 | 7:29 | - | - | 7:43 | 7:54 | 8:01 | 8:14 | - | 8:26 | - | 8:38 | 8:51 | - | 8:59 | 9:08 |
| 36/ | - | 7:32 | 7:42 | - | 7:56 | 8:03 | 8:16 | - | 8:28 | 8:40 | - | - | - | - | - |
| 32 | 7:38 | - | - | 7:52 | 8:03 | 8:10 | 8:23 | - | 8:35 | - | 8:47 | 9:00 | - | 9:08 | 9:17 |
| 36 | - | 7:44 | 7:54 | - | 8:08 | 8:15 | 8:28 | - | 8:40 | - | 8:52 | 9:05 | - | 9:13 | 9:22 |
| 32/ | 7:48 | - | - | 8:02 | 8:13 | 8:20 | 8:33 | - | 8:45 | 8:57 | - | - | - | - | - |
| 32 | 7:58 | - | - | 8:12 | 8:23 | 8:30 | 8:43 | - | 8:55 | - | 9:07 | 9:20 | - | 9:28 | 9:37 |
| 36/ | - | 8:02 | 8:12 | - | 8:26 | 8:33 | 8:46 | - | 8:58 | 9:10 | - | - | - | - | - |
| 36 | - | 8:16 | 8:23 | - | 8:33 | 8:39 | 8:51 | - | 9:04 | - | 9:16 | 9:30 | - | 9:40 | 9:50 |
| 32/ | 8:18 | - | - | 8:30 | 8:39 | 8:45 | 8:57 | - | 9:10 | 9:22 | - | - | - | - | - |
| 36 | - | 8:32 | 8:39 | - | 8:49 | 8:55 | 9:07 | - | 9:20 | - | 9:32 | 9:46 | - | 9:56 | 10:06 |
| 32 | 8:33 | - | - | 8:45 | 8:54 | 9:00 | 9:12 | - | 9:25 | - | 9:37 | 9:51 | - | 10:01 | 10:11 |
| 36 | - | 8:46 | 8:53 | - | 9:03 | 9:09 | 9:21 | - | 9:34 | - | 9:46 | 10:00 | - | 10:10 | 10:20 |
| 32/ | 8:48 | - | - | 9:00 | 9:09 | 9:15 | 9:27 | - | 9:40 | - | - | - | - | - | - |
| 32 | 9:00 | - | - | 9:12 | 9:21 | 9:27 | 9:39 | - | 9:52 | - | 10:04 | 10:18 | - | 10:28 | 10:38 |
| 36 | - | 9:16 | 9:23 | - | 9:33 | 9:39 | 9:51 | - | 10:04 | - | 10:16 | 10:30 | - | 10:40 | 10:50 |
| 32/ | 9:20 | - | - | 9:32 | 9:41 | 9:47 | 9:59 | - | 10:12 | - | - | - | - | - | - |
| 32 | 9:30 | - | - | 9:42 | 9:51 | 9:57 | 10:09 | - | 10:22 | - | 10:34 | 10:48 | - | 10:58 | 11:08 |
| 36 | - | 9:46 | 9:53 | - | 10:03 | 10:09 | 10:21 | - | 10:34 | - | 10:46 | 11:00 | - | 11:10 | 11:20 |
| 32/ | 9:50 | - | - | 10:02 | 10:11 | 10:17 | 10:29 | - | 10:42 | - | - | - | - | - | - |
| 32 | 10:00 | - | - | 10:12 | 10:21 | 10:27 | 10:39 | - | 10:52 | - | 11:04 | 11:18 | - | 11:28 | 11:38 |
| 36 | - | 10:16 | 10:23 | - | 10:33 | 10:39 | 10:51 | - | 11:04 | - | 11:16 | 11:30 | - | 11:40 | 11:50 |
| 32 | 10:30 | - | - | 10:42 | 10:51 | 10:57 | 11:09 | - | 11:22 | - | 11:34 | 11:48 | - | 11:58 | 12:08 |
| 36 | - | 10:46 | 10:53 | - | 11:03 | 11:09 | 11:21 | - | 11:34 | - | 11:46 | 12:00 | - | 12:10 | 12:20 |
| 32 | 11:00 | - | - | 11:12 | 11:21 | 11:27 | 11:39 | - | 11:52 | - | 12:04 | 12:18 | - | 12:28 | 12:38 |
| 36 | - | 11:16 | 11:23 | - | 11:33 | 11:39 | 11:51 | - | 12:04 | - | 12:16 | 12:30 | - | 12:40 | 12:50 |
| 32 | 11:30 | - | - | 11:42 | 11:51 | 11:57 | 12:09 | - | 12:22 | - | 12:34 | 12:48 | - | 12:58 | 1:08 |
| 36 | - | 11:46 | 11:53 | - | 12:03 | 12:09 | 12:21 | - | 12:34 | - | 12:46 | 1:00 | - | 1:10 | 1:20 |
| PM Service - Servicio vespertino |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 32 | 12:00 | - | - | 12:12 | 12:21 | 12:27 | 12:39 | - | 12:52 | - | 1:04 | 1:18 | - | 1:28 | 1:38 |
| 36 | - | 12:16 | 12:23 | - | 12:33 | 12:39 | 12:51 | - | 1:04 | - | 1:16 | 1:30 | - | 1:40 | 1:50 |

- Buses sign FOGGY BOTTOM STATION.

Page 3 of 6

## 32,36

Weekday only
Pennsylvania Avenue Line

| Weekday Westbound Entre semana con dirección al |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Route Number | Southern Ave K | Naylor Road 19 | $\begin{gathered} \text { Erie \& } \\ \text { 31st } \\ \text { Sts. SE } \\ \text { (Hillcrest) } \end{gathered}$ |  <br> Good <br> Hope Rds. SE | $\qquad$ | Pennsylvania Ave. \& 8th St. SE (Eastern Market) Meros | Pennsylvania Ave. \& 7th St. NW <br> (ArchivesNavy Mem'lPenn Quarter) Kato | 10th St. \& Pennsylvania Ave. NW (Federal Triangle) | I <br>  <br> 17th <br> Sts. <br> NW <br> (FARRA- <br> GUT <br> SQUARE) | Virginia Ave. \& 21st <br> St. NW <br> (Potomac Park) |  | Wiscon$\sin \&$ Cathedral Aves. NW (Massachusetts Ave.) | Newark St. \& Wisconsin Ave, NW (MCLEAN GARDENS) | Wiscon$\sin$ Ave. \& Albemarle St. NW (Tenley-town$\mathrm{AU})$ Wat | FRIEND- <br> SHIP <br> HEIGHTS <br> \# |
| PM Service - Servicio vespertino |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 32 | 12:30 | - | - | 12:42 | 12:51 | 12:57 | 1:09 | - | 1:22 | - | 1:34 | 1:48 | - | 1:58 | 2:08 |
| 36 | - | 12:46 | 12:53 | - | 1:03 | 1:09 | 1:21 | - | 1:34 | - | 1:46 | 2:00 | - | 2:10 | 2:20 |
| 32 | 1:00 | - | - | 1:12 | 1:21 | 1:27 | 1:39 | - | 1:52 | - | 2:04 | 2:18 | - | 2:28 | 2:38 |
| 36 |  | 1:16 | 1:23 |  | 1:33 | 1:39 | 1:51 | - | 2:04 | - | 2:16 | 2:30 | - | 2:40 | 2:50 |
| 32 | 1:30 | - | - | 1:42 | 1:51 | 1:57 | 2:09 | - | 2:22 | - | 2:34 | 2:48 | - | 2:58 | 3:08 |
| 36 | - | 1:46 | 1:53 | - | 2:03 | 2:09 | 2:21 | - | 2:34 | - | 2:46 | 3:00 | - | 3:10 | 3:20 |
| 32 | 2:00 | - | - | 2:12 | 2:21 | 2:27 | 2:39 | - | 2:52 | - | 3:04 | 3:18 | - | 3:28 | 3:38 |
| 36 | - | 2:16 | 2:23 |  | 2:33 | 2:39 | 2:51 | - | 3:04 | - | 3:16 | 3:30 | - | 3:40 | 3:50 |
| 32 | 2:30 | - | - | 2:42 | 2:51 | 2:57 | 3:09 | - | 3:22 | - | 3:34 | 3:48 | - | 3:58 | 4:08 |
| 36 | - | 2:50 | 2:56 | - | 3:05 | 3:11 | 3:25 | - | 3:36 | - | 3:48 | 4:02 | - | 4:11 | 4:21 |
| 32 | 3:00 |  | - | 3:11 | 3:20 | 3:26 | 3:40 | - | 3:51 | - | 4:03 | 4:17 | - | 4:26 | 4:36 |
| 36 | - | 3:21 | 3:27 | - | 3:36 | 3:42 | 3:56 | - | 4:07 | - | 4:19 | 4:33 | - | 4:42 | 4:52 |
| 32 | 3:32 | - | - | 3:43 | 3:52 | 3:58 | 4:12 | - | 4:23 | - | 4:35 | 4:49 | - | 4:58 | 5:08 |
| 36 | - | 3:51 | 3:57 | - | 4:06 | 4:12 | 4:26 | - | 4:37 | - | 4:49 | 5:03 | - | 5:12 | 5:22 |
| 32 | 4:00 | - | - | 4:13 | 4:20 | 4:26 | 4:40 | - | 4:54 | - | 5:08 | 5:23 | - | 5:32 | 5:40 |
| 32/ |  | - | - | - | - | - | - | 4:48 | 5:02 | - | 5:16 | 5:31 | 5:34 | - | - |
| 36 | - | 4:19 | 4:26 | - | 4:35 | 4:41 | 4:55 | - | 5:09 | - | 5:23 | 5:38 | - | 5:47 | 5:55 |
| 32/ | - | - | - | - | - | - | - | 5:03 | 5:17 | - | 5:31 | 5:46 | 5:49 | - | - |
| 32 | 4:30 | - | - | 4:43 | 4:50 | 4:56 | 5:10 | - | 5:24 | - | 5:38 | 5:53 | - | 6:02 | 6:10 |
| 32/ | - | - | - | - | - | - | - | 5:18 | 5:32 | - | 5:46 | 6:01 | 6:04 | - | - |
| 36 | - | 4:49 | 4:56 | - | 5:05 | 5:11 | 5:25 | - | 5:39 | - | 5:53 | 6:08 | - | 6:17 | 6:25 |
| 32/ | - | - | - | - | - | - | - | 5:33 | 5:47 | - | 6:01 | 6:16 | 6:19 | - | - |
| 32 | 5:00 | - | - | 5:13 | 5:20 | 5:26 | 5:40 | - | 5:54 | - | 6:08 | 6:23 | - | 6:32 | 6:40 |
| 32/ | - | - | - | - | - | - | - | 5:48 | 6:02 | - | 6:16 | 6:31 | 6:34 | - | - |
| 32/ | 5:17 | - | - | 5:30 | 5:37 | 5:43 | - | - | - | - | - | - | - | - | - |
| 36 | - | 5:18 | 5:25 | - | 5:34 | 5:40 | 5:54 | - | 6:08 | - | 6:22 | 6:37 | - | 6:46 | 6:54 |
| $36 /$ | - | 5:32 | 5:39 | - | 5:48 | 5:54 | - | - | - | - | - | - | - | - | - |
| 32 | 5:32 | - | - | 5:43 | 5:50 | 5:56 | 6:08 | - | 6:22 | - | 6:36 | 6:50 | - | 6:58 | 7:06 |
| 36 | - | 5:48 | 5:55 | - | 6:03 | 6:09 | 6:21 | - | 6:35 | - | 6:49 | 7:03 | - | 7:11 | 7:19 |
| 32/ | 5:52 | - | - | 6:03 | 6:10 | 6:16 | - | - | - | - | - | - | - | - | - |
| 36/ |  | 6:03 | 6:10 | - | 6:18 | 6:24 | - | - | - | - | - | - | - | - | - |
| 32 | 6:02 | - | - | 6:13 | 6:20 | 6:26 | 6:38 | - | 6:52 | - | 7:06 | 7:20 | - | 7:28 | 7:36 |
| 36 | - | 6:18 | 6:25 | - | 6:33 | 6:39 | 6:51 | - | 7:05 | - | 7:19 | 7:33 | - | 7:41 | 7:49 |
| 32 | 6:32 | - | - | 6:43 | 6:50 | 6:56 | 7:08 | - | 7:22 | - | 7:36 | 7:50 | - | 7:58 | 8:06 |
| 36 | - | 6:45 | 6:52 | - | 7:00 | 7:06 | 7:18 | - | 7:32 | - | 7:46 | 8:00 | - | 8:08 | 8:16 |
| 32 | 7:00 | - | - | 7:11 | 7:18 | 7:24 | 7:36 | - | 7:50 | - | 8:04 | 8:18 | - | 8:26 | 8:34 |
| 36 | - | 7:24 | 7:30 | - | 7:36 | 7:42 | 7:51 | - | 8:00 | - | 8:10 | 8:22 | - | 8:29 | 8:36 |
| 32 | 7:40 | - | - | 7:50 | 7:56 | 8:02 | 8:11 | - | 8:20 | - | 8:30 | 8:42 | - | 8:49 | 8:56 |
| 36 | - | 7:59 | 8:05 | - | 8:11 | 8:17 | 8:26 | - | 8:35 | - | 8:45 | 8:57 | - | 9:04 | 9:11 |
| 32 | 8:15 |  | - | 8:25 | 8:31 | 8:37 | 8:46 | - | 8:55 | - | 9:05 | 9:17 | - | 9:24 | 9:31 |
| 36 | - | 8:26 | 8:32 | - | 8:38 | 8:44 | 8:53 | - | 9:02 | - | 9:12 | 9:24 | - | 9:31 | 9:38 |
| 32 | 8:45 | - | - | 8:55 | 9:01 | 9:07 | 9:16 | - | 9:25 | - | 9:35 | 9:47 | - | 9:54 | 10:01 |
| 36 | - | 8:59 | 9:05 | - | 9:11 | 9:17 | 9:26 | - | 9:35 | - | 9:45 | 9:57 | - | 10:04 | 10:11 |
| 32 | 9:15 | - | - | 9:25 | 9:31 | 9:37 | 9:46 | - | 9:55 | - | 10:05 | 10:17 | - | 10:24 | 10:31 |
| 36 | - | 9:34 | 9:40 | - | 9:46 | 9:52 | 10:01 | - | 10:10 | - | 10:20 | 10:32 | - | 10:39 | 10:46 |
| 32 | 9:55 | - | - | 10:04 | 10:09 | 10:15 | 10:23 | - | 10:31 | - | 10:39 | 10:49 | - | 10:56 | 11:03 |
| 36 |  | 10:27 | 10:32 | - | 10:38 | 10:44 | 10:52 | - | 11:00 | - | 11:08 | 11:18 | - | 11:25 | 11:32 |
| 32 | 10:54 | , | 迷 | 11:03 | 11:08 | 11:14 | 11:22 | - | 11:30 | - | 11:38 | 11:48 | - | 11:55 | 12:02 |
| 36 | - | 11:27 | 11:32 | - | 11:38 | 11:44 | 11:52 | - | 12:00 | - | 12:08 | 12:18 | - | 12:25 | 12:32 |
| 32 | 11:54 | - | - | 12:02 | 12:07 | 12:13 | 12:21 | - | 12:28 | - | 12:34 | 12:42 | - | 12:47 | 12:54 |
|  |  |  |  | After | Midnight | Service | e - Servi | icio desp | pués de | la medie | anoche |  |  |  |  |
| 36 | - | 12:27 | 12:32 | - | 12:37 | 12:43 | 12:51 | - | 12:58 |  | 1:04 | 1:12 | - | 1:17 | 1:24 |
| 32 | 12:54 | - | - | 1:02 | 1:07 | 1:13 | 1:21 | - | 1:28 | - | 1:34 | 1:42 | - | 1:47 | 1:54 |
| 36 | , | 1:27 | 1:32 |  | 1:37 | 1:43 | 1:51 | - | 1:58 | - | 2:04 | 2:12 | - | 2:17 | 2:24 |
| 32 | 1:54 | - | - | 2:01 | 2:06 | 2:12 | 2:19 | - | 2:25 | - | 2:30 | 2:36 | - | 2:40 | 2:46 |
| 36 | - | 2:22 | 2:27 | 56 | 2:31 | 2:37 | 2:44 | - | 2:50 | - | 2:55 | 3:01 | - | 3:05 | 3:11 |
| 32 | 2:49 | - | - | 2:56 | 3:01 | 3:07 | 3:14 | - | 3:20 | - | 3:25 | 3:31 | - | 3:35 | 3:41 |

Page 4 of 6

## 32,36

Weekday only

## Pennsylvania Avenue Line

| Weekday Eastbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Route Number | Friendship Heights M | Wisconsin Ave. \& Albemarle St. NW (Tenley-townAU) |  <br> Wisconsin Ave. NW (McLean Gardens) | Wiscon$\sin \&$ Cathedral Aves. NW (Massachusetts Ave.) |  <br> Wisconsin Ave. NW (Georgetown) | Virginia Ave. \& 21st <br> St. NW (Potomac Park) | H St. \& Jackson Pl. NW (Lafayette Square) | Pennsylvania Ave. \& 7th St. NW (ARCHIVESNavy Mem'IPenn Quarter) M | Pennsyl- <br> vania <br>  <br> 8th St. <br> SE <br> (Eastern <br> Market) | Pennsylvania \& Minnesota Aves. SE (L'Enfant Square) | Naylor Rd. \& Alabama Ave. SE | Erie \& 31st Sts. SE (Hillcrest) | NAYLOR ROAD $\$$ | $\begin{gathered} \text { SOUTH- } \\ \text { ERN } \\ \text { AVE } \\ M \end{gathered}$ |
| AM Service - Servicio matutino |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 32 | 4:16 | 4:22 | - | 4:28 | 4:35 | - | 4:41 | 4:49 | 4:58 | 5:03 | 5:08 | - | - | 5:17 |
| 36 | 4:29 | 4:35 | - | 4:41 | 4:48 | - | 4:54 | 5:02 | 5:11 | 5:16 | - | 5:22 | 5:26 | - |
| 32 | 4:41 | 4:47 | - | 4:53 | 5:00 | - | 5:06 | 5:14 | 5:23 | 5:28 | 5:33 | - | - | 5:42 |
| 36 | 4:57 | 5:03 | - | 5:09 | 5:16 | - | 5:22 | 5:30 | 5:39 | 5:44 | - | 5:50 | 5:54 | - |
| 32 | 5:16 | 5:22 | - | 5:28 | 5:35 | - | 5:41 | 5:49 | 5:58 | 6:03 | 6:08 | - | - | 6:17 |
| 36 | 5:30 | 5:36 | - | 5:42 | 5:49 | - | 5:56 | 6:04 | 6:14 | 6:19 | - | 6:26 | 6:30 | - |
| 36 | - | - | - | - | - | - | - | - | 6:29 | 6:34 | - | 6:42 | 6:46 | - |
| 32 | 5:45 | 5:51 | - | 5:57 | 6:04 | - | 6:11 | 6:19 | 6:29 | 6:34 | 6:39 | - | - | 6:48 |
| 36 | 5:59 | 6:05 | - | 6:11 | 6:19 | - | 6:26 | 6:33 | 6:43 | 6:48 | - | 6:56 | 7:00 | - |
| 32 | - | - | - | - | - | - | - | - | 6:45 | 6:51 | 6:57 | - | - | 7:06 |
| 32 | 6:04 | 6:11 | - | 6:18 | 6:27 | - | 6:36 | 6:44 | 6:55 | 7:01 | 7:07 | - | - | 7:16 |
| 36 | - | - | - | - | - | - | - | - | 6:57 | 7:03 | - | 7:10 | 7:16 | - |
| 36 | 6:12 | 6:19 | - | 6:27 | 6:37 | - | 6:49 | 6:58 | 7:08 | 7:14 | - | 7:21 | 7:27 | - |
| 32 | - | - | - | - | - | - | - | - | 7:11 | 7:17 | 7:23 | - | - | 7:35 |
| 32 | 6:25 | 6:32 | - | 6:40 | 6:50 | - | 7:02 | 7:11 | 7:21 | 7:27 | 7:33 | - | - | 7:45 |
| 36 | 6:40 | 6:47 | - | 6:55 | 7:05 | - | 7:17 | 7:26 | 7:36 | 7:42 | - | 7:49 | 7:55 | - |
| 32 | 6:55 | 7:02 | - | 7:10 | 7:20 | - | 7:32 | 7:41 | 7:51 | 7:57 | 8:03 | - | - | 8:15 |
| 36 | 7:04 | 7:13 | - | 7:23 | 7:36 | - | 7:48 | 7:57 | 8:09 | 8:15 | - | 8:25 | 8:31 | - |
| 32 | 7:20 | 7:29 | - | 7:39 | 7:52 | - | 8:04 | 8:13 | 8:25 | 8:31 | 8:38 | - | - | 8:50 |
| 32 | - | - | 7:45 | 7:48 | 8:01 | - | 8:13 | 8:22 | 8:34 | 8:40 | 8:47 | - | - | 8:59 |
| 36 | 7:35 | 7:44 | - | 7:54 | 8:07 | - | 8:19 | 8:28 | 8:40 | 8:46 | - | 8:56 | 9:02 | - |
| 32/ | - | - | 8:00 | 8:03 | 8:16 | - | 8:28 | 8:37 | - | - | - | - | - | - |
| 32 | 7:50 | 7:59 | - | 8:09 | 8:22 | - | 8:34 | 8:43 | 8:55 | 9:01 | 9:08 | - | - | 9:20 |
| 32/ | - | - | 8:15 | 8:18 | 8:31 | - | 8:43 | 8:52 | - | - | - | - | - | - |
| 36 | 8:04 | 8:13 | - | 8:23 | 8:36 | - | 8:48 | 8:57 | 9:09 | 9:15 | - | 9:25 | 9:31 | - |
| 32/ | - | - | 8:30 | 8:33 | 8:48 | - | 9:00 | 9:09 | - | - | - | - | - | - |
| 32 | 8:17 | 8:27 | - | 8:37 | 8:52 | - | 9:04 | 9:13 | 9:25 | 9:31 | 9:37 | - | - | 9:49 |
| 32/ | - | - | 8:44 | 8:47 | 9:01 | - | 9:13 | 9:22 | - | - | - | - | - | - |
| 36 | 8:34 | 8:43 | - | 8:52 | 9:06 | - | 9:18 | 9:27 | 9:40 | 9:46 | - | 9:57 | 10:02 | - |
| 32 | 8:47 | 8:56 | - | 9:05 | 9:19 | - | 9:31 | 9:40 | 9:53 | 9:59 | 10:06 | - | - | 10:18 |
| 36 | 9:02 | 9:11 | - | 9:20 | 9:34 | - | 9:46 | 9:55 | 10:08 | 10:14 | - | 10:25 | 10:30 | - |
| 32 | 9:17 | 9:27 | - | 9:36 | 9:50 | - | 10:02 | 10:13 | 10:26 | 10:32 | 10:39 | - | - | 10:51 |
| 36 | 9:32 | 9:42 | - | 9:51 | 10:05 | - | 10:17 | 10:28 | 10:41 | 10:47 | - | 10:56 | 11:02 | - |
| 32 | 9:47 | 9:57 | - | 10:06 | 10:20 | - | 10:32 | 10:43 | 10:56 | 11:02 | 11:09 | - | - | 11:21 |
| 36 | 9:59 | 10:09 | - | 10:18 | 10:32 | - | 10:44 | 10:55 | 11:08 | 11:14 | - | 11:23 | 11:29 | - |
| 32 | 10:17 | 10:27 | - | 10:36 | 10:50 | - | 11:02 | 11:13 | 11:26 | 11:32 | 11:39 | - | - | 11:51 |
| 36 | 10:29 | 10:39 | - | 10:48 | 11:02 | - | 11:14 | 11:25 | 11:38 | 11:44 | - | 11:53 | 11:59 | - |
| 32 | 10:47 | 10:57 | - | 11:06 | 11:20 | - | 11:32 | 11:43 | 11:56 | 12:02 | 12:09 | - | - | 12:21 |
| 36 | 10:59 | 11:09 | - | 11:18 | 11:32 | - | 11:44 | 11:55 | 12:08 | 12:14 | - | 12:23 | 12:29 | - |
| 32 | 11:17 | 11:27 | - | 11:36 | 11:50 | - | 12:02 | 12:13 | 12:26 | 12:32 | 12:39 | - | - | 12:51 |
| 36 | 11:29 | 11:39 | - | 11:48 | 12:02 | - | 12:14 | 12:25 | 12:38 | 12:44 | - | 12:53 | 12:59 | - |
| 32 | 11:47 | 11:57 | - | 12:06 | 12:20 | - | 12:32 | 12:43 | 12:56 | 1:02 | 1:09 | - | - | 1:21 |
| 36 | 11:59 | 12:09 | - | 12:18 | 12:32 | - | 12:44 | 12:55 | 1:08 | 1:14 | - | 1:23 | 1:29 | - |
| PM Service - Servicio vespertino |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 32 | 12:17 | 12:27 | - | 12:36 | 12:50 | - | 1:02 | 1:13 | 1:26 | 1:32 | 1:39 | - | - | 1:51 |
| 36 | 12:29 | 12:39 | - | 12:48 | 1:02 | - | 1:14 | 1:25 | 1:38 | 1:44 | - | 1:53 | 1:59 | - |
| 32 | 12:47 | 12:57 | - | 1:06 | 1:20 | - | 1:32 | 1:43 | 1:56 | 2:02 | 2:09 | - | - | 2:21 |
| 36 | 12:59 | 1:09 | - | 1:18 | 1:32 | - | 1:44 | 1:55 | 2:08 | 2:14 | - | 2:23 | 2:29 | - |
| 32 | 1:17 | 1:27 | - | 1:36 | 1:50 | - | 2:02 | 2:13 | 2:26 | 2:32 | 2:39 | - | - | 2:51 |
| 36 | 1:29 | 1:39 | - | 1:48 | 2:02 | - | 2:14 | 2:25 | 2:38 | 2:44 | - | 2:53 | 2:59 | - |
| 32 | 1:42 | 1:52 | - | 2:01 | 2:15 | - | 2:29 | 2:40 | 2:53 | 3:00 | 3:10 | - | - | 3:22 |
| 36 | 1:56 | 2:06 | - | 2:15 | 2:29 | - | 2:43 | 2:54 | 3:07 | 3:14 | - | 3:26 | 3:34 | - |
| 32 | - | - | - | - | - | 2:33 | 2:45 | 2:58 | 3:11 | 3:18 | 3:28 | - | - | 3:40 |
| 32 | 2:10 | 2:20 | - | 2:29 | 2:43 | - | 2:57 | 3:08 | 3:21 | 3:28 | 3:38 | - | - | 3:50 |
| 36 | 2:25 | 2:35 | - | 2:44 | 2:58 | - | 3:12 | 3:23 | 3:36 | 3:43 | - | 3:55 | 4:03 | - |
| 32 | - | - | - | - | - | 3:01 | 3:13 | 3:26 | 3:39 | 3:46 | 3:56 | - | - | 4:08 |

Page 5 of 6
IV-IO

## Pennsylvania Avenue Line

| Weekday Fastbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Route Number | Friendship Heights M | Wisconsin Ave. \& Albemarle St. NW (Tenley-townAU ) |  <br> Wisconsin Ave. NW (McLean Gardens) | Wiscon$\sin \&$ Cathedral Aves. NW <br> (Massachusetts Ave.) | M St. <br>  <br> Wisconsin Ave. NW (Georgetown) | Virginia Ave. \& 21st St. NW (Potomac Park) | H St. <br> \& Jackson Pl. NW (Lafayette Square) | Pennsylvania Ave. \& 7th St. NW (ARCHIVESNavy Mem'IPenn Quarter) M | Pennsylvania Ave. \& 8th St. SE (Eastern Market) M | $\begin{gathered} \text { Pennsyl- } \\ \text { vania } \\ \& \\ \text { Minnesota } \\ \text { Aves. SE } \\ \text { (L'Enfant } \\ \text { Square) } \end{gathered}$ | Naylor Rd. \& Alabama Ave. SE | Erie \& 31st Sts. SE (Hillcrest) | NAYLOR ROAD $M$ | $\begin{gathered} \text { SOUTH- } \\ \text { ERN } \\ \text { AVE } \\ M \end{gathered}$ |
| PM Service - Servicio vespertino |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 32 | 2:40 | 2:50 | - | 2:59 | 3:13 | - | 3:27 | 3:38 | 3:51 | 3:58 | 4:08 | - | - | 4:20 |
| 36 | - | - | - | - | - | 3:17 | 3:29 | 3:42 | 3:55 | 4:02 | - | 4:14 | 4:22 | - |
| 36 | 2:54 | 3:04 | - | 3:13 | 3:27 | - | 3:41 | 3:52 | 4:05 | 4:12 | - | 4:24 | 4:32 | - |
| 32 | - | - | - | - | - | 3:31 | 3:43 | 3:56 | 4:09 | 4:16 | 4:26 | - | - | 4:38 |
| 32 | 3:03 | 3:15 | - | 3:27 | 3:41 | - | 3:55 | 4:07 | 4:21 | 4:29 | 4:40 | - | - | 4:52 |
| 36 | - | - | - | - | - | 3:44 | 3:56 | 4:10 | 4:24 | 4:32 | - | 4:46 | 4:55 | - |
| 36 | 3:18 | 3:30 | - | 3:42 | 3:56 | - | 4:10 | 4:22 | 4:36 | 4:44 | - | 4:58 | 5:07 | - |
| 32 | - | - | - | - | - | 3:59 | 4:11 | 4:25 | 4:39 | 4:47 | 4:58 | - | - | 5:10 |
| 32 | 3:33 | 3:45 | - | 3:56 | 4:10 | - | 4:24 | 4:36 | 4:50 | 4:58 | 5:09 | - | - | 5:21 |
| 36 | - | - | - | - | - | 4:13 | 4:25 | 4:39 | 4:53 | 5:01 | - | 5:16 | 5:25 | - |
| 36 | 3:48 | 4:00 | - | 4:11 | 4:25 | - | 4:39 | 4:51 | 5:05 | 5:13 | - | 5:28 | 5:37 | - |
| 32 | - | - | - | - | - | 4:28 | 4:40 | 4:54 | 5:08 | 5:16 | 5:27 | - | - | 5:39 |
| 32 | 4:03 | 4:15 | - | 4:26 | 4:40 | - | 4:54 | 5:06 | 5:20 | 5:28 | 5:39 | - | - | 5:51 |
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| 32 | 5:04 | 5:14 | - | 5:24 | 5:40 | - | 5:56 | 6:08 | 6:20 | 6:27 | 6:35 | - | - | 6:47 |
| 36 | - | - | - | - | - | 5:42 | 5:56 | 6:10 | 6:22 | 6:29 | - | 6:40 | 6:48 | - |
| 36 | 5:20 | 5:30 | - | 5:40 | 5:54 | - | 6:10 | 6:22 | 6:34 | 6:40 | - | 6:51 | 6:58 | - |
| 32 | - | - | - | - | - | 5:58 | 6:12 | 6:26 | 6:38 | 6:44 | 6:53 | - | - | 7:05 |
| 32 | 5:35 | 5:45 | - | 5:55 | 6:09 | - | 6:25 | 6:37 | 6:49 | 6:55 | 7:04 | - | - | 7:16 |
| 36 | 5:50 | 6:00 | - | 6:10 | 6:24 | - | 6:40 | 6:52 | 7:04 | 7:10 | - | 7:21 | 7:28 | - |
| 32 | 6:05 | 6:15 | - | 6:25 | 6:39 | - | 6:55 | 7:07 | 7:19 | 7:25 | 7:34 | - | - | 7:46 |
| 36 | 6:23 | 6:33 | - | 6:43 | 6:56 | - | 7:07 | 7:17 | 7:27 | 7:33 | - | 7:42 | 7:49 | - |
| 32 | 6:35 | 6:45 | - | 6:55 | 7:08 | - | 7:19 | 7:29 | 7:39 | 7:45 | 7:52 | - | - | 8:05 |
| 36 | 6:53 | 7:03 | - | 7:13 | 7:26 | - | 7:37 | 7:47 | 7:57 | 8:03 | - | 8:12 | 8:19 | - |
| 32 | 7:05 | 7:15 | - | 7:25 | 7:38 | - | 7:49 | 7:59 | 8:09 | 8:15 | 8:22 | - | - | 8:35 |
| 36 | 7:23 | 7:33 | - | 7:43 | 7:56 | - | 8:07 | 8:17 | 8:27 | 8:33 | - | 8:42 | 8:49 | - |
| 32 | 7:35 | 7:45 | - | 7:55 | 8:08 | - | 8:19 | 8:29 | 8:39 | 8:45 | 8:52 | - | - | 9:05 |
| 36 | 8:03 | 8:11 | - | 8:19 | 8:30 | - | 8:40 | 8:50 | 8:59 | 9:05 | - | 9:14 | 9:19 | - |
| 32 | 8:25 | 8:33 | - | 8:41 | 8:52 | - | 9:02 | 9:12 | 9:21 | 9:27 | 9:33 | - | - | 9:44 |
| 36 | 8:57 | 9:05 | - | 9:13 | 9:23 | - | 9:33 | 9:42 | 9:50 | 9:55 | - | 10:05 | 10:10 | - |
| 32 | 9:27 | 9:35 | - | 9:43 | 9:53 | - | 10:03 | 10:12 | 10:20 | 10:25 | 10:32 | - | - | 10:42 |
| 36 | 9:57 | 10:05 | - | 10:13 | 10:23 | - | 10:33 | 10:42 | 10:50 | 10:55 | - | 11:05 | 11:10 | - |
| 32 | 10:27 | 10:35 | - | 10:43 | 10:53 | - | 11:03 | 11:12 | 11:20 | 11:25 | 11:32 | - | - | 11:42 |
| 36 | 10:57 | 11:05 | - | 11:13 | 11:23 | - | 11:33 | 11:42 | 11:50 | 11:55 | - | 12:05 | 12:10 | - |
| 32 | 11:40 | 11:48 | - | 11:55 | 12:03 | - | 12:12 | 12:21 | 12:29 | 12:34 | 12:39 | - | - | 12:47 |
| After Midnight Service - Servicio después de la medianoche |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 36 | 12:10 | 12:18 | - | 12:25 | 12:33 | - | 12:42 | 12:51 | 12:59 | 1:04 | - | 1:14 | 1:19 | - |
| 32 | 12:45 | 12:51 | - | 12:56 | 1:03 | - | 1:10 | 1:18 | 1:25 | 1:30 | 1:35 | - | - | 1:42 |
| 36 | 1:15 | 1:20 | - | 1:25 | 1:32 | - | 1:38 | 1:46 | 1:54 | 1:59 | - | 2:05 | 2:10 | - |
| 32 | 1:45 | 1:50 | - | 1:55 | 2:02 | - | 2:08 | 2:16 | 2:24 | 2:29 | 2:33 | - | - | 2:41 |

Page 6 of 6

## How to use this timetable

> Use the map to find the stops closest to where you will get on and off the bus.
> Select the schedule (Weekday, Saturday, Sunday) for when you will travel. Along the top of the schedule, find the stop at or nearest the point where you will get on the bus. Follow that column down to the time you want to leave.
> Use the same method to find the times the bus is scheduled to arrive at the stop where you will get off the bus.
$>$ If the bus stop is not listed, use the time shown for the bus stop before it as the time to wait at the stop.
> The end-of-the-line or last stop is listed in ALL CAPS on the schedule.

## Cómo Usar este Horario

> Use este mapa para localizar las paradas más cercanas a donde se subirá y bajará del autobús.
> Seleccione el horario (Entre semana, sábado, domingo) de cuando viajará. A lo largo de la parte superior del horario, localice la parada o el punto más cercano a la parada en la que se subirá al autobús. Siga esa columna hacia abajo hasta la hora en la que desee salir.
> Utilice el mismo método para localizar las horas en que el autobús está programado para llegar a la parada en donde desea bajarse del autobús.
> Si la parada del autobús no está listada use la hora que se muestra en la parada anterior como la hora de espera en la parada.
> El final de la ruta o la última parada del autobús aparece en letras MAYÚSCULAS en el horario.

English-Español metrobus
32,36
Weekend only
Pennsylvania Avenue Line

\&. All Metrobuses are fully accessible and are equipped with lifts or ramps for wheelchair accessibility
Todos los autobuses de Metro son accesibles a personas con impedimentos y están equipados con rampas o elevadores para sillas de ruedas
Serves these locations-
Brinda servicio a estas ubicaciones
Friendship Heights station
Wisconsin Ave. N.W.
Tenleytown-AU station
Washington National Cathedral
Georgetown
White House
Federal Triangle
The National Mall
Capitol Hill
Eastern Market station
Potomac Avenue station
L'Enfant Square
Hillcrest (36)
Naylor and Good Hope Roads, SE (32)
Naylor Road station (36)
Southern Ave station (32)

[^13]
## Washington <br> Metropolitan Area <br> Transit Authority

[^14]Page 1 of 10


Page 2 of 10

## Weekend only

Pennsylvania Avenue Line
Saturday Westbound - En sábados con dirección al oeste

| Route Number | Southern Ave K | Naylor Road 0 | Erie \& 31st Sts. SE (Hillcrest) |  <br> Good <br> Hope <br> Rds. <br> SE |  | Pennsylvania Ave. \& 8th St. SE (Eastern Market) | Pennsylvania <br>  <br> 7th St. <br> NW (Ar- <br> chives- <br> Navy <br> Mem'l- <br> Penn <br> Quarter) <br> Wols | $\begin{gathered} \text { I } \\ \& \\ \text { 17th } \\ \text { Sts. } \\ \text { NW } \\ \text { (Farra- } \\ \text { gut } \\ \text { Square) } \end{gathered}$ | $\begin{gathered} \text { M } \\ \& \\ \text { 31st } \\ \text { Sts. } \\ \text { NW } \\ \text { (George- } \\ \text { town) } \end{gathered}$ | Wiscon$\sin \&$ Cathedral Aves. NW (Massachusetts Ave.) | Wisconsin Ave. \& Albemarle St. NW (Tenley-townAU ) K | FRIENDSHIP HEIGHTS W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AM Service - Servicio matutino |  |  |  |  |  |  |  |  |  |  |  |  |
| 32 | 4:50 | - | - | 4:59 | 5:03 | 5:09 | 5:17 | 5:25 | 5:32 | 5:39 | 5:45 | 5:50 |
| 36 | - | 5:13 | 5:18 | - | 5:23 | 5:29 | 5:37 | 5:45 | 5:52 | 5:59 | 6:05 | 6:10 |
| 32 | 5:30 | - | - | 5:39 | 5:43 | 5:49 | 5:57 | 6:05 | 6:12 | 6:19 | 6:25 | 6:30 |
| 36 | - | 5:49 | 5:56 | - | 6:02 | 6:08 | 6:17 | 6:25 | 6:33 | 6:41 | 6:47 | 6:53 |
| 32 | 6:10 | - | - | 6:19 | 6:25 | 6:31 | 6:40 | 6:48 | 6:56 | 7:04 | 7:10 | 7:16 |
| 36 | - | 6:24 | 6:31 | - | 6:37 | 6:43 | 6:52 | 7:00 | 7:08 | 7:16 | 7:22 | 7:28 |
| 32 | 6:40 | - | - | 6:49 | 6:55 | 7:01 | 7:10 | 7:18 | 7:26 | 7:34 | 7:40 | 7:46 |
| 36 | - | 6:54 | 7:01 | - | 7:07 | 7:13 | 7:22 | 7:30 | 7:38 | 7:46 | 7:52 | 7:58 |
| 32 | 7:10 | - | - | 7:19 | 7:25 | 7:31 | 7:40 | 7:48 | 7:56 | 8:04 | 8:10 | 8:16 |
| 36 | - | 7:24 | 7:31 | - | 7:37 | 7:43 | 7:52 | 8:00 | 8:08 | 8:16 | 8:22 | 8:28 |
| 32 | 7:40 | - | - | 7:49 | 7:55 | 8:01 | 8:10 | 8:18 | 8:26 | 8:34 | 8:40 | 8:46 |
| 36 | - | 7:48 | 7:55 | - | 8:04 | 8:10 | 8:20 | 8:30 | 8:38 | 8:49 | 8:56 | 9:05 |
| 32 | 8:05 | - | - | 8:15 | 8:22 | 8:28 | 8:38 | 8:48 | 8:56 | 9:07 | 9:14 | 9:23 |
| 36 | - | 8:18 | 8:25 | - | 8:34 | 8:40 | 8:50 | 9:00 | 9:08 | 9:19 | 9:26 | 9:35 |
| 32 | 8:35 | - | - | 8:45 | 8:52 | 8:58 | 9:08 | 9:18 | 9:26 | 9:37 | 9:44 | 9:53 |
| 36 | - | 8:48 | 8:55 | - | 9:04 | 9:10 | 9:20 | 9:30 | 9:38 | 9:49 | 9:56 | 10:05 |
| 32 | 9:05 | - | - | 9:15 | 9:22 | 9:28 | 9:38 | 9:48 | 9:56 | 10:07 | 10:14 | 10:23 |
| 36 | - | 9:16 | 9:24 | - | 9:32 | 9:39 | 9:50 | 10:00 | 10:11 | 10:26 | 10:37 | 10:47 |
| 32 | 9:30 | - | - | 9:40 | 9:48 | 9:55 | 10:06 | 10:16 | 10:27 | 10:42 | 10:53 | 11:03 |
| 36 | - | 9:44 | 9:52 | - | 10:00 | 10:07 | 10:18 | 10:28 | 10:39 | 10:54 | 11:05 | 11:15 |
| 32 | 10:00 | - | - | 10:10 | 10:18 | 10:25 | 10:36 | 10:46 | 10:57 | 11:12 | 11:23 | 11:33 |
| 36 | - | 10:14 | 10:22 | - | 10:30 | 10:37 | 10:48 | 10:58 | 11:09 | 11:24 | 11:35 | 11:45 |
| 32 | 10:30 | - | - | 10:40 | 10:48 | 10:55 | 11:06 | 11:16 | 11:27 | 11:42 | 11:53 | 12:03 |
| 36 | - | 10:44 | 10:52 | - | 11:00 | 11:07 | 11:18 | 11:28 | 11:39 | 11:54 | 12:05 | 12:15 |
| 32 | 11:00 | - | - | 11:10 | 11:18 | 11:25 | 11:36 | 11:46 | 11:57 | 12:12 | 12:23 | 12:33 |
| 36 | - | 11:14 | 11:22 | - | 11:30 | 11:37 | 11:48 | 11:58 | 12:09 | 12:24 | 12:35 | 12:45 |
| 32 | 11:30 | - | - | 11:40 | 11:48 | 11:55 | 12:06 | 12:16 | 12:27 | 12:42 | 12:53 | 1:03 |
| 36 | - | 11:44 | 11:52 | - | 12:00 | 12:07 | 12:18 | 12:28 | 12:39 | 12:54 | 1:05 | 1:15 |

Page 3 of 10

## Weekend only

Pennsylvania Avenue Line
Saturday Westbound - En sábados con dirección al oeste

| Route Number | Southern Ave 0 | Naylor Road $\xrightarrow{1}$ | Erie \& 31st Sts. SE (Hillcrest) |  <br> Good <br> Hope Rds. SE | Pennsylvania \& Minnesota Aves. SE (L'Enfant Square) | Pennsyl- <br> vania <br>  <br> 8th St. <br> SE <br> (Eastern <br> Market) | Pennsylvania Ave. \& 7th St. NW (Ar-chivesNavy Mem'IPenn Quarter) 1 | $\begin{gathered} \text { I } \\ \text { \& } \\ \text { 17th } \\ \text { Sts. } \\ \text { NW } \\ \text { (Farra- } \\ \text { gut } \\ \text { Square) } \end{gathered}$ | $\begin{gathered} \text { M } \\ \& \\ \text { 31st } \\ \text { Sts. } \\ \text { NW } \\ \text { (George- } \\ \text { town) } \end{gathered}$ | Wiscon$\sin \&$ Cathedral Aves. NW (Massachusetts Ave.) |  <br> Albemarle St. NW (Tenley-town$\mathrm{AU})$ Matro | FRIENDSHIP HEIGHTS 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PM Service - Servicio vespertino |  |  |  |  |  |  |  |  |  |  |  |  |
| 32 | 12:00 | - | - | 12:10 | 12:18 | 12:25 | 12:36 | 12:46 | 12:57 | 1:12 | 1:23 | 1:33 |
| 36 | - | 12:14 | 12:22 | - | 12:30 | 12:37 | 12:48 | 12:58 | 1:09 | 1:24 | 1:35 | 1:45 |
| 32 | 12:30 | - | - | 12:40 | 12:48 | 12:55 | 1:06 | 1:16 | 1:27 | 1:42 | 1:53 | 2:03 |
| 36 | - | 12:44 | 12:52 | - | 1:00 | 1:07 | 1:18 | 1:28 | 1:39 | 1:54 | 2:05 | 2:15 |
| 32 | 1:00 | - | - | 1:10 | 1:18 | 1:25 | 1:36 | 1:46 | 1:57 | 2:12 | 2:23 | 2:33 |
| 36 | - | 1:14 | 1:22 | - | 1:30 | 1:37 | 1:48 | 1:58 | 2:09 | 2:24 | 2:35 | 2:45 |
| 32 | 1:30 | - | - | 1:40 | 1:48 | 1:55 | 2:06 | 2:16 | 2:27 | 2:42 | 2:53 | 3:03 |
| 36 | - | 1:44 | 1:52 | - | 2:00 | 2:07 | 2:18 | 2:28 | 2:39 | 2:54 | 3:05 | 3:15 |
| 32 | 2:00 | - | - | 2:10 | 2:18 | 2:25 | 2:36 | 2:46 | 2:57 | 3:12 | 3:23 | 3:33 |
| 36 | - | 2:14 | 2:22 | - | 2:30 | 2:37 | 2:48 | 2:58 | 3:09 | 3:24 | 3:35 | 3:45 |
| 32 | 2:30 | - | - | 2:40 | 2:48 | 2:55 | 3:06 | 3:16 | 3:27 | 3:42 | 3:53 | 4:03 |
| 36 | - | 2:44 | 2:52 | - | 3:00 | 3:07 | 3:18 | 3:28 | 3:39 | 3:54 | 4:05 | 4:15 |
| 32 | 3:00 | - | - | 3:10 | 3:18 | 3:25 | 3:36 | 3:46 | 3:57 | 4:12 | 4:23 | 4:33 |
| 36 | - | 3:14 | 3:22 | - | 3:30 | 3:37 | 3:48 | 3:58 | 4:09 | 4:24 | 4:35 | 4:45 |
| 32 | 3:30 | - | - | 3:40 | 3:48 | 3:55 | 4:06 | 4:16 | 4:27 | 4:42 | 4:53 | 5:03 |
| 36 | - | 3:44 | 3:52 | - | 4:00 | 4:07 | 4:18 | 4:28 | 4:39 | 4:54 | 5:05 | 5:15 |
| 32 | 4:00 | - | - | 4:10 | 4:18 | 4:25 | 4:36 | 4:46 | 4:57 | 5:12 | 5:23 | 5:33 |
| 36 | - | 4:14 | 4:22 | - | 4:30 | 4:37 | 4:48 | 4:58 | 5:09 | 5:24 | 5:35 | 5:45 |
| 32 | 4:30 | - | - | 4:40 | 4:48 | 4:55 | 5:06 | 5:16 | 5:27 | 5:42 | 5:53 | 6:03 |
| 36 | - | 4:44 | 4:52 | - | 5:00 | 5:07 | 5:18 | 5:28 | 5:39 | 5:54 | 6:05 | 6:15 |
| 32 | 5:00 | - | - | 5:10 | 5:18 | 5:25 | 5:36 | 5:46 | 5:57 | 6:12 | 6:23 | 6:33 |
| 36 | - | 5:14 | 5:22 | - | 5:30 | 5:37 | 5:48 | 5:58 | 6:09 | 6:24 | 6:35 | 6:45 |
| 32 | 5:30 | - | - | 5:40 | 5:48 | 5:55 | 6:06 | 6:16 | 6:27 | 6:42 | 6:53 | 7:03 |
| 36 | - | 5:44 | 5:52 | - | 6:00 | 6:07 | 6:18 | 6:28 | 6:39 | 6:54 | 7:05 | 7:15 |
| 32 | 6:02 | - | - | 6:11 | 6:18 | 6:24 | 6:32 | 6:41 | 6:52 | 7:05 | 7:12 | 7:20 |
| 36 | - | 6:16 | 6:21 | - | 6:30 | 6:36 | 6:44 | 6:53 | 7:04 | 7:17 | 7:24 | 7:32 |
| 32 | 6:30 | - | - | 6:39 | 6:46 | 6:52 | 7:00 | 7:09 | 7:20 | 7:33 | 7:40 | 7:48 |
| 36 | - | 6:44 | 6:49 | - | 6:58 | 7:04 | 7:12 | 7:21 | 7:32 | 7:45 | 7:52 | 8:00 |
| 32 | 7:00 | - | - | 7:09 | 7:16 | 7:22 | 7:30 | 7:39 | 7:50 | 8:03 | 8:10 | 8:18 |
| 36 | - | 7:14 | 7:19 | - | 7:28 | 7:34 | 7:42 | 7:51 | 8:02 | 8:15 | 8:22 | 8:30 |
| 32 | 7:31 | - | - | 7:39 | 7:45 | 7:51 | 8:00 | 8:08 | 8:19 | 8:32 | 8:39 | 8:46 |
| 36 | - | 7:45 | 7:50 | - | 7:57 | 8:03 | 8:12 | 8:20 | 8:31 | 8:44 | 8:51 | 8:58 |
| 32 | 8:01 | - | - | 8:09 | 8:15 | 8:21 | 8:30 | 8:38 | 8:49 | 9:02 | 9:09 | 9:16 |
| 36 | - | 8:15 | 8:20 | - | 8:27 | 8:33 | 8:42 | 8:50 | 9:01 | 9:14 | 9:21 | 9:28 |
| 32 | 8:31 | - | - | 8:39 | 8:45 | 8:51 | 9:00 | 9:08 | 9:19 | 9:32 | 9:39 | 9:46 |
| 36 | - | 8:45 | 8:50 | - | 8:57 | 9:03 | 9:12 | 9:20 | 9:31 | 9:44 | 9:51 | 9:58 |
| 32 | 9:01 | - | - | 9:09 | 9:15 | 9:21 | 9:30 | 9:38 | 9:49 | 10:02 | 10:09 | 10:16 |
| 36 | - | 9:25 | 9:30 | - | 9:37 | 9:43 | 9:51 | 10:00 | 10:11 | 10:23 | 10:29 | 10:35 |
| 32 | 9:48 | - | - | 9:55 | 10:01 | 10:07 | 10:15 | 10:24 | 10:35 | 10:47 | 10:53 | 10:59 |
| 36 | - | 10:19 | 10:24 | - | 10:31 | 10:37 | 10:45 | 10:54 | 11:05 | 11:17 | 11:23 | 11:29 |
| 32 | 10:48 | - | - | 10:55 | 11:01 | 11:07 | 11:15 | 11:24 | 11:35 | 11:47 | 11:53 | 11:59 |
| 36 | - | 11:19 | 11:24 | - | 11:31 | 11:37 | 11:45 | 11:54 | 12:05 | 12:17 | 12:23 | 12:29 |
| 32 | 11:48 | - | - | 11:55 | 12:01 | 12:07 | 12:15 | 12:24 | 12:35 | 12:47 | 12:53 | 12:59 |
| After Midnioht Service - Servicio después de la medianoche |  |  |  |  |  |  |  |  |  |  |  |  |
| 36 | - | 12:19 | 12:24 | - | 12:30 | 12:36 | 12:43 | 12:50 | 12:59 | 1:09 | 1:13 | 1:19 |
| 32 | 12:48 | - | - | 12:55 | 1:00 | 1:06 | 1:13 | 1:20 | 1:29 | 1:39 | 1:43 | 1:49 |
| 36 | - | 1:18 | 1:23 | - | 1:29 | 1:35 | 1:42 | 1:49 | 1:58 | 2:08 | 2:12 | 2:18 |
| 32 | 1:47 | - | - | 1:54 | 1:59 | 2:05 | 2:12 | 2:19 | 2:28 | 2:38 | 2:42 | 2:48 |
| 36 | - | 2:18 | 2:23 | - | 2:29 | 2:35 | 2:42 | 2:49 | 2:58 | 3:08 | 3:12 | 3:18 |

## Saturday Eastbound - En sábados con dirección al este

| Route Number | Friendship Heights $M$ | Wisconsin Ave. \& Albemarle St. NW (Tenley-town$\mathrm{AU})$ | Wiscon$\sin \&$ Cathedral Aves. NW (Massachusetts Ave.) | M St. <br>  <br> Wisconsin <br> Ave. <br> NW <br> (Georgetown) | $\begin{gathered} \text { H St. } \\ \text { \& } \\ \text { Jackson Pl. } \\ \text { NW } \\ \text { (Lafay- } \\ \text { ette } \\ \text { Square) } \end{gathered}$ | Pennsylvania Ave. \& 7th St. NW <br> (ArchivesNavy Mem'lPenn Quarter) $M$ | Pennsyl- <br> vania <br>  <br> 8th St. <br> SE <br> (Eastern <br> Market) <br> M |  | Naylor \& Good Hope Rds. SE | Erie \& 31st Sts. SE (Hillcrest) | NAYLOR ROAD $\$$ | $\begin{aligned} & \text { SOUTH- } \\ & \text { ERN } \\ & \text { AVE } \\ & M \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AM Service - Servicio matutino |  |  |  |  |  |  |  |  |  |  |  |  |
| 32 | 4:31 | 4:37 | 4:42 | 4:48 | 4:53 | 5:00 | 5:07 | 5:11 | 5:15 | - | - | 5:22 |
| 36 | 4:46 | 4:52 | 4:57 | 5:03 | 5:08 | 5:15 | 5:22 | 5:26 | - | 5:31 | 5:35 | - |
| 32 | 5:06 | 5:12 | 5:17 | 5:23 | 5:28 | 5:35 | 5:42 | 5:46 | 5:50 | - | - | 5:57 |
| 36 | 5:18 | 5:24 | 5:29 | 5:35 | 5:40 | 5:47 | 5:54 | 5:58 | - | 6:03 | 6:07 | - |
| 32 | 5:30 | 5:36 | 5:42 | 5:49 | 5:55 | 6:03 | 6:11 | 6:15 | 6:20 | - | - | 6:28 |
| 36 | 5:42 | 5:48 | 5:54 | 6:01 | 6:07 | 6:15 | 6:23 | 6:27 | - | 6:33 | 6:37 | - |
| 32 | 6:00 | 6:06 | 6:12 | 6:19 | 6:25 | 6:33 | 6:41 | 6:45 | 6:50 | - | - | 6:58 |
| 36 | 6:12 | 6:18 | 6:24 | 6:31 | 6:37 | 6:45 | 6:53 | 6:57 | - | 7:03 | 7:07 | - |
| 32 | 6:30 | 6:36 | 6:42 | 6:49 | 6:55 | 7:03 | 7:11 | 7:15 | 7:20 | - | - | 7:28 |
| 36 | 6:41 | 6:47 | 6:53 | 7:00 | 7:06 | 7:14 | 7:22 | 7:26 | - | 7:32 | 7:36 | - |
| 32 | 6:49 | 6:56 | 7:02 | 7:11 | 7:18 | 7:26 | 7:35 | 7:40 | 7:45 | - | - | 7:53 |
| 36 | 7:01 | 7:08 | 7:14 | 7:23 | 7:30 | 7:38 | 7:47 | 7:52 | - | 7:58 | 8:03 | - |
| 32 | 7:19 | 7:26 | 7:32 | 7:41 | 7:48 | 7:56 | 8:05 | 8:10 | 8:15 | - | - | 8:23 |
| 36 | 7:29 | 7:36 | 7:42 | 7:51 | 7:58 | 8:06 | 8:15 | 8:20 | - | 8:26 | 8:31 | - |
| 32 | 7:45 | 7:52 | 7:58 | 8:07 | 8:14 | 8:22 | 8:31 | 8:36 | 8:41 | - | - | 8:49 |
| 36 | 7:50 | 7:59 | 8:07 | 8:18 | 8:27 | 8:36 | 8:47 | 8:53 | - | 9:00 | 9:05 | - |
| 32 | 8:00 | 8:09 | 8:17 | 8:28 | 8:37 | 8:46 | 8:57 | 9:03 | 9:09 | - | - | 9:19 |
| 36 | 8:12 | 8:21 | 8:29 | 8:40 | 8:49 | 8:58 | 9:09 | 9:15 | - | 9:22 | 9:27 | - |
| 32 | 8:30 | 8:39 | 8:47 | 8:58 | 9:07 | 9:16 | 9:27 | 9:33 | 9:39 | - | - | 9:49 |
| 36 | 8:42 | 8:51 | 8:59 | 9:10 | 9:19 | 9:28 | 9:39 | 9:45 | - | 9:52 | 9:57 | - |
| 32 | 9:00 | 9:09 | 9:17 | 9:28 | 9:37 | 9:46 | 9:57 | 10:03 | 10:09 | - | - | 10:19 |
| 36 | 9:12 | 9:21 | 9:29 | 9:40 | 9:49 | 9:58 | 10:09 | 10:15 | - | 10:22 | 10:27 | - |
| 32 | 9:30 | 9:39 | 9:47 | 9:58 | 10:07 | 10:16 | 10:27 | 10:33 | 10:39 | - | - | 10:49 |
| 36 | 9:42 | 9:51 | 9:59 | 10:10 | 10:19 | 10:28 | 10:39 | 10:45 | - | 10:52 | 10:57 | - |
| 32 | 9:58 | 10:07 | 10:15 | 10:26 | 10:35 | 10:44 | 10:55 | 11:01 | 11:07 | - | - | 11:17 |
| 36 | 10:03 | 10:14 | 10:26 | 10:42 | 10:53 | 11:03 | 11:15 | 11:21 | - | 11:30 | 11:35 | - |
| 32 | 10:16 | 10:27 | 10:39 | 10:55 | 11:06 | 11:16 | 11:28 | 11:34 | 11:41 | - | - | 11:51 |
| 36 | 10:28 | 10:39 | 10:51 | 11:07 | 11:18 | 11:28 | 11:40 | 11:46 | - | 11:55 | 12:00 | - |
| 32 | 10:46 | 10:57 | 11:09 | 11:25 | 11:36 | 11:46 | 11:58 | 12:04 | 12:11 | - | - | 12:21 |
| 36 | 10:58 | 11:09 | 11:21 | 11:37 | 11:48 | 11:58 | 12:10 | 12:16 | - | 12:25 | 12:30 | - |
| 32 | 11:16 | 11:27 | 11:39 | 11:55 | 12:06 | 12:16 | 12:28 | 12:34 | 12:41 | - | - | 12:51 |
| 36 | 11:28 | 11:39 | 11:51 | 12:07 | 12:18 | 12:28 | 12:40 | 12:46 | - | 12:55 | 1:00 | - |
| 32 | 11:46 | 11:57 | 12:09 | 12:25 | 12:36 | 12:46 | 12:58 | 1:04 | 1:11 | - | - | 1:21 |
| 36 | 11:58 | 12:09 | 12:21 | 12:37 | 12:48 | 12:58 | 1:10 | 1:16 | - | 1:25 | 1:30 | - |

Page 5 of 10

| Route Number | Friendship Heights 1 | Wisconsin Ave. \& Albemarle St. NW (Tenley-townAU ) | Wiscon$\sin$ \& Cathedral Aves. NW (Massachusetts Ave.) | M St. <br>  <br> Wisconsin <br> Ave. <br> NW <br> (Georgetown) | $\begin{gathered} \text { H St. } \\ \text { \& } \\ \text { Jackson Pl. } \\ \text { NW } \\ \text { (Lafay- } \\ \text { ette } \\ \text { Square) } \end{gathered}$ | Pennsylvania Ave. \& 7th St. NW <br> (ArchivesNavy Mem'IPenn Quarter) M | Pennsyl- <br> vania <br>  <br> 8th St. <br> SE <br> (Eastern <br> Market) <br> M | Pennsylvania \& Minnesota Aves. SE (L'Enfant Square) | Naylor \& Good Hope Rds. SE | Erie \& 31st Sts. SE <br> (Hillcrest) | NAYLOR ROAD $M$ | $\begin{aligned} & \text { SOUTH- } \\ & \text { ERN } \\ & \text { AVE } \\ & \text { M } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PM Service - Servicio vespertino |  |  |  |  |  |  |  |  |  |  |  |  |
| 32 | 12:16 | 12:27 | 12:39 | 12:55 | 1:06 | 1:16 | 1:28 | 1:34 | 1:41 | - | - | 1:51 |
| 36 | 12:28 | 12:39 | 12:51 | 1:07 | 1:18 | 1:28 | 1:40 | 1:46 | - | 1:55 | 2:00 | - |
| 32 | 12:46 | 12:57 | 1:09 | 1:25 | 1:36 | 1:46 | 1:58 | 2:04 | 2:11 | - | - | 2:21 |
| 36 | 12:58 | 1:09 | 1:21 | 1:37 | 1:48 | 1:58 | 2:10 | 2:16 | - | 2:25 | 2:30 | - |
| 32 | 1:16 | 1:27 | 1:39 | 1:55 | 2:06 | 2:16 | 2:28 | 2:34 | 2:41 | - | - | 2:51 |
| 36 | 1:28 | 1:39 | 1:51 | 2:07 | 2:18 | 2:28 | 2:40 | 2:46 | - | 2:55 | 3:00 | - |
| 32 | 1:46 | 1:57 | 2:09 | 2:25 | 2:36 | 2:46 | 2:58 | 3:04 | 3:11 | - | - | 3:21 |
| 36 | 1:58 | 2:09 | 2:21 | 2:37 | 2:48 | 2:58 | 3:10 | 3:16 | - | 3:25 | 3:30 | - |
| 32 | 2:16 | 2:27 | 2:39 | 2:55 | 3:06 | 3:16 | 3:28 | 3:34 | 3:41 | - | - | 3:51 |
| 36 | 2:28 | 2:39 | 2:51 | 3:07 | 3:18 | 3:28 | 3:40 | 3:46 | - | 3:55 | 4:00 | - |
| 32 | 2:46 | 2:57 | 3:09 | 3:25 | 3:36 | 3:46 | 3:58 | 4:04 | 4:11 | - | - | 4:21 |
| 36 | 2:58 | 3:09 | 3:21 | 3:37 | 3:48 | 3:58 | 4:10 | 4:16 | - | 4:25 | 4:30 | - |
| 32 | 3:16 | 3:27 | 3:39 | 3:55 | 4:06 | 4:16 | 4:28 | 4:34 | 4:41 | - | - | 4:51 |
| 36 | 3:28 | 3:39 | 3:51 | 4:07 | 4:18 | 4:28 | 4:40 | 4:46 | - | 4:55 | 5:00 | - |
| 32 | 3:46 | 3:57 | 4:09 | 4:25 | 4:36 | 4:46 | 4:58 | 5:04 | 5:11 | - | - | 5:21 |
| 36 | 3:58 | 4:09 | 4:21 | 4:37 | 4:48 | 4:58 | 5:10 | 5:16 | - | 5:25 | 5:30 | - |
| 32 | 4:16 | 4:27 | 4:39 | 4:55 | 5:06 | 5:16 | 5:28 | 5:34 | 5:41 | - | - | 5:51 |
| 36 | 4:28 | 4:39 | 4:51 | 5:07 | 5:18 | 5:28 | 5:40 | 5:46 | - | 5:55 | 6:00 | - |
| 32 | 4:46 | 4:57 | 5:09 | 5:25 | 5:36 | 5:46 | 5:58 | 6:04 | 6:11 | - | - | 6:21 |
| 36 | 4:58 | 5:09 | 5:21 | 5:37 | 5:48 | 5:58 | 6:10 | 6:16 | - | 6:25 | 6:30 | - |
| 32 | 5:16 | 5:27 | 5:39 | 5:55 | 6:06 | 6:16 | 6:28 | 6:34 | 6:41 | - | - | 6:51 |
| 36 | 5:28 | 5:39 | 5:51 | 6:07 | 6:18 | 6:28 | 6:40 | 6:46 | - | 6:55 | 7:00 | - |
| 32 | 5:48 | 5:59 | 6:08 | 6:22 | 6:32 | 6:41 | 6:50 | 6:56 | 7:03 | - | - | 7:12 |
| 36 | 6:02 | 6:13 | 6:22 | 6:36 | 6:46 | 6:55 | 7:04 | 7:10 | - | 7:19 | 7:24 | - |
| 32 | 6:20 | 6:31 | 6:40 | 6:54 | 7:04 | 7:13 | 7:22 | 7:28 | 7:35 | - | - | 7:44 |
| 36 | 6:34 | 6:45 | 6:54 | 7:08 | 7:18 | 7:27 | 7:36 | 7:42 | - | 7:51 | 7:56 | - |
| 32 | 6:54 | 7:05 | 7:14 | 7:28 | 7:38 | 7:47 | 7:56 | 8:02 | 8:09 | - | - | 8:18 |
| 36 | 7:08 | 7:19 | 7:28 | 7:42 | 7:52 | 8:01 | 8:10 | 8:16 | - | 8:25 | 8:30 | - |
| 32 | 7:28 | 7:39 | 7:48 | 8:02 | 8:12 | 8:21 | 8:30 | 8:36 | 8:43 | - | - | 8:52 |
| 36 | 7:50 | 8:01 | 8:10 | 8:24 | 8:34 | 8:43 | 8:52 | 8:58 | - | 9:07 | 9:12 | - |
| 32 | 8:22 | 8:31 | 8:39 | 8:51 | 9:01 | 9:10 | 9:18 | 9:24 | 9:30 | - | - | 9:39 |
| 36 | 8:52 | 9:01 | 9:09 | 9:21 | 9:31 | 9:40 | 9:48 | 9:54 | - | 10:01 | 10:07 | - |
| 32 | 9:26 | 9:35 | 9:43 | 9:55 | 10:05 | 10:12 | 10:20 | 10:25 | 10:31 | - | - | 10:39 |
| 36 | 9:56 | 10:05 | 10:13 | 10:25 | 10:35 | 10:42 | 10:50 | 10:55 | - | 11:02 | 11:07 | - |
| 32 | 10:26 | 10:35 | 10:43 | 10:55 | 11:05 | 11:12 | 11:20 | 11:25 | 11:31 | - | - | 11:39 |
| 36 | 10:56 | 11:05 | 11:13 | 11:25 | 11:35 | 11:42 | 11:50 | 11:55 | - | 12:02 | 12:07 | - |
| 32 | 11:26 | 11:35 | 11:43 | 11:55 | 12:05 | 12:12 | 12:20 | 12:25 | 12:31 | - | - | 12:39 |
| After Midnight Service - Servicio después de la medianoche |  |  |  |  |  |  |  |  |  |  |  |  |
| 36 | 12:10 | 12:17 | 12:23 | 12:31 | 12:38 | 12:44 | 12:51 | 12:55 | - | 1:02 | 1:07 | - |
| 32 | 12:40 | 12:47 | 12:53 | 1:01 | 1:08 | 1:14 | 1:21 | 1:25 | 1:29 | - | - | 1:37 |
| 36 | 1:10 | 1:17 | 1:23 | 1:31 | 1:38 | 1:44 | 1:51 | 1:55 | - | 2:02 | 2:07 | - |
| 32 | 1:40 | 1:47 | 1:53 | 2:01 | 2:08 | 2:14 | 2:21 | 2:25 | 2:29 | - | - | 2:37 |

Page 6 of 10

## Weekend only

## Pennsylvania Avenue Line

Sunday Westbound - En domingo con dirección al oeste

| Route Number | Southern <br> Ave <br> 1 | Naylor Road $\xrightarrow{1}$ | Erie \& 31st Sts. SE (Hillcrest) |  <br> Good <br> Hope Rds. SE | $\begin{gathered} \text { Pennsyl- } \\ \text { vania } \\ \& \\ \text { Minnesota } \\ \text { Aves. SE } \\ \text { (L'Enfant } \\ \text { Square) } \end{gathered}$ | Pennsylvania Ave. \& 8th St. SE (Eastern Market) K | Pennsylvania Ave. \& 7th St. NW (Ar-chivesNavy Mem'lPenn Quarter) 19 | I \& 17th Sts. NW (Farragut Square) | $\begin{gathered} \text { M } \\ \& \\ \text { 31st } \\ \text { Sts. } \\ \text { NW } \\ \text { (George- } \\ \text { town) } \end{gathered}$ | Wiscon$\sin \&$ Cathedral Aves. NW (Massachusetts Ave.) | Wiscon$\sin$ Ave. \& Albemarle St. NW (Tenley-townAU) | FRIENDSHIP HEIGHTS $\xrightarrow{M}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AM Service - Servicio matutino |  |  |  |  |  |  |  |  |  |  |  |  |
| 32 | 4:54 | - | - | 5:01 | 5:05 | 5:11 | 5:19 | 5:28 | 5:35 | 5:43 | 5:48 | 5:55 |
| 36 | - | 5:19 | 5:24 | - | 5:30 | 5:36 | 5:44 | 5:53 | 6:00 | 6:08 | 6:13 | 6:20 |
| 32 | 5:36 | - | - | 5:46 | 5:51 | 5:57 | 6:06 | 6:14 | 6:21 | 6:29 | 6:35 | 6:43 |
| 36 | - | 6:09 | 6:14 | - | 6:21 | 6:27 | 6:36 | 6:44 | 6:51 | 6:59 | 7:05 | 7:13 |
| 32 | 6:21 | - | - | 6:31 | 6:38 | 6:44 | 6:54 | 7:03 | 7:11 | 7:21 | 7:28 | 7:37 |
| 36 | - | 6:46 | 6:52 | - | 6:58 | 7:04 | 7:14 | 7:23 | 7:31 | 7:41 | 7:48 | 7:57 |
| 32 | 7:01 | - | - | 7:11 | 7:18 | 7:24 | 7:34 | 7:43 | 7:51 | 8:01 | 8:08 | 8:17 |
| 36 | - | 7:26 | 7:32 | - | 7:38 | 7:44 | 7:54 | 8:03 | 8:11 | 8:21 | 8:28 | 8:37 |
| 32 | 7:41 | - | - | 7:51 | 7:58 | 8:04 | 8:14 | 8:23 | 8:31 | 8:41 | 8:48 | 8:57 |
| 36 | - | 8:06 | 8:12 | - | 8:18 | 8:24 | 8:34 | 8:43 | 8:51 | 9:01 | 9:08 | 9:17 |
| 32 | 8:21 | - | - | 8:31 | 8:38 | 8:44 | 8:54 | 9:03 | 9:11 | 9:21 | 9:28 | 9:37 |
| 36 | - | 8:38 | 8:44 | - | 8:50 | 8:56 | 9:06 | 9:15 | 9:23 | 9:33 | 9:40 | 9:49 |
| 32 | 8:51 | - | - | 9:03 | 9:10 | 9:16 | 9:26 | 9:36 | 9:46 | 10:00 | 10:09 | 10:18 |
| 36 | - | 9:08 | 9:14 | - | 9:22 | 9:28 | 9:38 | 9:48 | 9:58 | 10:12 | 10:21 | 10:30 |
| 32 | 9:23 | - | - | 9:35 | 9:42 | 9:48 | 9:58 | 10:08 | 10:18 | 10:32 | 10:41 | 10:50 |
| 36 | - | 9:40 | 9:46 | - | 9:54 | 10:00 | 10:10 | 10:20 | 10:30 | 10:44 | 10:53 | 11:02 |
| 32 | 9:53 | - | - | 10:05 | 10:12 | 10:18 | 10:28 | 10:38 | 10:48 | 11:02 | 11:11 | 11:20 |
| 36 | - | 10:10 | 10:16 | - | 10:24 | 10:30 | 10:40 | 10:50 | 11:00 | 11:14 | 11:23 | 11:32 |
| 32 | 10:23 | - | - | 10:35 | 10:42 | 10:48 | 10:58 | 11:08 | 11:18 | 11:32 | 11:41 | 11:50 |
| 36 | - | 10:40 | 10:46 | - | 10:54 | 11:00 | 11:10 | 11:20 | 11:30 | 11:44 | 11:53 | 12:02 |
| 32 | 10:53 | - | - | 11:05 | 11:12 | 11:18 | 11:28 | 11:38 | 11:48 | 12:02 | 12:11 | 12:20 |
| 36 | - | 11:10 | 11:16 | - | 11:24 | 11:30 | 11:40 | 11:50 | 12:00 | 12:14 | 12:23 | 12:32 |
| 32 | 11:25 | - | - | 11:37 | 11:44 | 11:50 | 12:00 | 12:10 | 12:20 | 12:34 | 12:43 | 12:52 |
| 36 | - | 11:42 | 11:48 | - | 11:56 | 12:02 | 12:12 | 12:22 | 12:32 | 12:46 | 12:55 | 1:04 |
| 32 | 11:55 | - | - | 12:07 | 12:14 | 12:20 | 12:30 | 12:40 | 12:50 | 1:04 | 1:13 | 1:22 |

Page 7 of 10

## Weekend only

Pennsylvania Avenue Line

## Sunday Westbound - En domingo con dirección al oeste

| Route Number | Southern Ave K | Naylor Road $\xrightarrow{M}$ | Erie \& 31st <br> Sts. SE <br> (Hillcrest) |  <br> Good <br> Hope Rds. SE |  | Pennsylvania Ave. \& 8th St. SE (Eastern Market) M | Pennsylvania Ave. \& 7th St. NW (Ar-chivesNavy Mem'IPenn Quarter) 0 | $\begin{gathered} \text { I } \\ \text { \& } \\ \text { 17th } \\ \text { Sts. } \\ \text { NW } \\ \text { (Farra- } \\ \text { gut } \\ \text { Square) } \end{gathered}$ |  | Wiscon$\sin$ \& Cathedral Aves. NW (Massachusetts Ave.) | Wisconsin Ave. \& Albemarle St. NW (Tenley-townAU ) Not | FRIENDSHIP HEIGHTS $\underset{y}{M}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PM Service - Servicio vespertino |  |  |  |  |  |  |  |  |  |  |  |  |
| 36 | - | 12:12 | 12:18 | - | 12:26 | 12:32 | 12:42 | 12:52 | 1:02 | 1:16 | 1:25 | 1:34 |
| 32 | 12:27 | - | - | 12:39 | 12:46 | 12:52 | 1:02 | 1:12 | 1:22 | 1:36 | 1:45 | 1:54 |
| 36 | - | 12:44 | 12:50 | - | 12:58 | 1:04 | 1:14 | 1:24 | 1:34 | 1:48 | 1:57 | 2:06 |
| 32 | 12:57 | - | - | 1:09 | 1:16 | 1:22 | 1:32 | 1:42 | 1:52 | 2:06 | 2:15 | 2:24 |
| 36 | - | 1:14 | 1:20 | - | 1:28 | 1:34 | 1:44 | 1:54 | 2:04 | 2:18 | 2:27 | 2:36 |
| 32 | 1:27 | - | - | 1:39 | 1:46 | 1:52 | 2:02 | 2:12 | 2:22 | 2:36 | 2:45 | 2:54 |
| 36 | - | 1:44 | 1:50 | - | 1:58 | 2:04 | 2:14 | 2:24 | 2:34 | 2:48 | 2:57 | 3:06 |
| 32 | 1:57 | - | - | 2:09 | 2:16 | 2:22 | 2:32 | 2:42 | 2:52 | 3:06 | 3:15 | 3:24 |
| 36 | - | 2:14 | 2:20 | - | 2:28 | 2:34 | 2:44 | 2:54 | 3:04 | 3:18 | 3:27 | 3:36 |
| 32 | 2:27 | - | - | 2:39 | 2:46 | 2:52 | 3:02 | 3:12 | 3:22 | 3:36 | 3:45 | 3:54 |
| 36 | - | 2:44 | 2:50 | - | 2:58 | 3:04 | 3:14 | 3:24 | 3:34 | 3:48 | 3:57 | 4:06 |
| 32 | 2:57 | - | - | 3:09 | 3:16 | 3:22 | 3:32 | 3:42 | 3:52 | 4:06 | 4:15 | 4:24 |
| 36 | - | 3:14 | 3:20 | - | 3:28 | 3:34 | 3:44 | 3:54 | 4:04 | 4:18 | 4:27 | 4:36 |
| 32 | 3:27 | - | - | 3:39 | 3:46 | 3:52 | 4:02 | 4:12 | 4:22 | 4:36 | 4:45 | 4:54 |
| 36 | - | 3:44 | 3:50 | - | 3:58 | 4:04 | 4:14 | 4:24 | 4:34 | 4:48 | 4:57 | 5:06 |
| 32 | 3:57 | - | - | 4:09 | 4:16 | 4:22 | 4:32 | 4:42 | 4:52 | 5:06 | 5:15 | 5:24 |
| 36 | - | 4:14 | 4:20 | - | 4:28 | 4:34 | 4:44 | 4:54 | 5:04 | 5:18 | 5:27 | 5:36 |
| 32 | 4:27 | - | - | 4:39 | 4:46 | 4:52 | 5:02 | 5:12 | 5:22 | 5:36 | 5:45 | 5:54 |
| 36 | - | 4:44 | 4:50 | - | 4:58 | 5:04 | 5:14 | 5:24 | 5:34 | 5:48 | 5:57 | 6:06 |
| 32 | 4:57 | - | - | 5:09 | 5:16 | 5:22 | 5:32 | 5:42 | 5:52 | 6:06 | 6:15 | 6:24 |
| 36 | - | 5:14 | 5:20 | - | 5:28 | 5:34 | 5:44 | 5:54 | 6:04 | 6:18 | 6:27 | 6:36 |
| 32 | 5:27 | - | - | 5:39 | 5:46 | 5:52 | 6:02 | 6:12 | 6:22 | 6:36 | 6:45 | 6:54 |
| 36 | - | 5:44 | 5:50 | - | 5:58 | 6:04 | 6:14 | 6:24 | 6:34 | 6:48 | 6:57 | 7:06 |
| 32 | 5:54 | - | - | 6:06 | 6:13 | 6:19 | 6:29 | 6:39 | 6:49 | 7:03 | 7:12 | 7:21 |
| 36 | - | 6:13 | 6:18 | - | 6:25 | 6:31 | 6:39 | 6:47 | 6:55 | 7:05 | 7:11 | 7:18 |
| 32 | 6:28 | - | - | 6:38 | 6:43 | 6:49 | 6:57 | 7:05 | 7:13 | 7:23 | 7:29 | 7:36 |
| 36 | - | 6:43 | 6:48 | - | 6:55 | 7:01 | 7:09 | 7:17 | 7:25 | 7:35 | 7:41 | 7:48 |
| 32 | 6:58 | - | - | 7:08 | 7:13 | 7:19 | 7:27 | 7:35 | 7:43 | 7:53 | 7:59 | 8:06 |
| 36 | - | 7:13 | 7:18 | - | 7:25 | 7:31 | 7:39 | 7:47 | 7:55 | 8:05 | 8:11 | 8:18 |
| 32 | 7:28 | - | - | 7:38 | 7:43 | 7:49 | 7:57 | 8:05 | 8:13 | 8:23 | 8:29 | 8:36 |
| 36 | - | 7:43 | 7:48 | - | 7:55 | 8:01 | 8:09 | 8:17 | 8:25 | 8:35 | 8:41 | 8:48 |
| 32 | 7:58 | - | - | 8:08 | 8:13 | 8:19 | 8:27 | 8:35 | 8:43 | 8:53 | 8:59 | 9:06 |
| 36 | - | 8:13 | 8:18 | - | 8:25 | 8:31 | 8:39 | 8:47 | 8:55 | 9:05 | 9:11 | 9:18 |
| 32 | 8:28 | - | - | 8:38 | 8:43 | 8:49 | 8:57 | 9:05 | 9:13 | 9:23 | 9:29 | 9:36 |
| 36 | - | 8:43 | 8:48 | - | 8:55 | 9:01 | 9:09 | 9:17 | 9:25 | 9:35 | 9:41 | 9:48 |
| 32 | 8:58 | - | - | 9:08 | 9:13 | 9:19 | 9:27 | 9:35 | 9:43 | 9:53 | 9:59 | 10:06 |
| 36 | - | 9:31 | 9:36 | - | 9:43 | 9:49 | 9:57 | 10:05 | 10:13 | 10:23 | 10:29 | 10:36 |
| 32 | 9:58 | - | - | 10:08 | 10:13 | 10:19 | 10:27 | 10:35 | 10:43 | 10:53 | 10:59 | 11:06 |
| 36 | - | 10:29 | 10:34 | - | 10:40 | 10:46 | 10:54 | 11:02 | 11:09 | 11:18 | 11:23 | 11:29 |
| 32 | 10:58 | - | - | 11:05 | 11:10 | 11:16 | 11:24 | 11:32 | 11:39 | 11:48 | 11:53 | 11:59 |
| 36 | - | 11:25 | 11:30 | - | 11:36 | 11:42 | 11:50 | 11:57 | 12:02 | 12:08 | 12:12 | 12:17 |
| 32 | 11:50 | - | - | 11:58 | 12:02 | 12:08 | 12:16 | 12:23 | 12:28 | 12:34 | 12:38 | 12:43 |
| After Midnight Service - Servicio después de la medianoche |  |  |  |  |  |  |  |  |  |  |  |  |
| 36 | - | 12:21 | 12:26 | - | 12:32 | 12:38 | 12:46 | 12:53 | 12:58 | 1:04 | 1:08 | 1:13 |
| 32 | 12:50 | - | - | 12:58 | 1:02 | 1:08 | 1:16 | 1:23 | 1:28 | 1:34 | 1:38 | 1:43 |
| 36 | - | 1:15 | 1:20 | - | 1:26 | 1:32 | 1:40 | 1:47 | 1:52 | 1:58 | 2:02 | 2:07 |
| 32 | 1:40 | - | - | 1:48 | 1:52 | 1:58 | 2:06 | 2:13 | 2:18 | 2:24 | 2:28 | 2:33 |
| 36 | - | 2:10 | 2:15 | - | 2:21 | 2:27 | 2:35 | 2:42 | 2:47 | 2:53 | 2:57 | 3:02 |

## Weekend only

## Pennsylvania Avenue Line

Sunday Eastbound - En domingo con dirección al este

| Route Number | Friendship Heights $\$$ | Wisconsin Ave. \& Albemarle St. NW (Tenley-townAU) | Wiscon$\sin \&$ Cathedral Aves. NW (Massachusetts Ave.) | M St. <br>  <br> Wisconsin Ave. NW (Georgetown) | $\begin{gathered} \text { H St. } \\ \& \\ \text { Jackson Pl. } \\ \text { NW } \\ \text { (Lafay- } \\ \text { ette } \\ \text { Square) } \end{gathered}$ | Pennsylvania Ave. \& 7th St. <br> NW (ArchivesNavy Mem'IPenn Quarter) M | Pennsylvania Ave. \& 8th St. SE (Eastern Market) | Pennsylvania \& Minnesota Aves. SE (L'Enfant Square) | Naylor \& Good Hope Rds. SE | Erie \& 31st Sts. SE (Hillcrest) | NAYLOR ROAD $M$ | $\begin{gathered} \text { SOUTH- } \\ \text { ERN } \\ \text { AVE } \\ \text { M } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AM Service - Servicio matutino |  |  |  |  |  |  |  |  |  |  |  |  |
| 32 | 4:27 | 4:35 | 4:40 | 4:46 | 4:52 | 4:59 | 5:06 | 5:11 | 5:15 | - | - | 5:25 |
| 36 | 4:51 | 4:59 | 5:04 | 5:10 | 5:16 | 5:23 | 5:30 | 5:35 | - | 5:41 | 5:46 | - |
| 32 | 5:11 | 5:19 | 5:24 | 5:30 | 5:36 | 5:43 | 5:50 | 5:55 | 5:59 | - | - | 6:09 |
| 36 | 5:31 | 5:39 | 5:44 | 5:50 | 5:56 | 6:03 | 6:10 | 6:15 | - | 6:21 | 6:26 | - |
| 32 | 5:51 | 5:59 | 6:04 | 6:10 | 6:16 | 6:23 | 6:30 | 6:35 | 6:39 | - | - | 6:49 |
| 36 | 6:11 | 6:19 | 6:24 | 6:30 | 6:36 | 6:43 | 6:50 | 6:55 | - | 7:01 | 7:06 | - |
| 32 | 6:31 | 6:39 | 6:44 | 6:50 | 6:56 | 7:03 | 7:10 | 7:15 | 7:19 | - | - | 7:29 |
| 36 | 6:43 | 6:51 | 6:57 | 7:06 | 7:13 | 7:22 | 7:30 | 7:35 | - | 7:42 | 7:47 | - |
| 32 | 7:01 | 7:09 | 7:15 | 7:24 | 7:31 | 7:40 | 7:48 | 7:53 | 7:58 | - | - | 8:08 |
| 36 | 7:14 | 7:22 | 7:28 | 7:37 | 7:44 | 7:53 | 8:01 | 8:06 | - | 8:13 | 8:18 | - |
| 32 | 7:31 | 7:39 | 7:45 | 7:54 | 8:01 | 8:10 | 8:18 | 8:23 | 8:28 | - | - | 8:38 |
| 36 | 7:43 | 7:51 | 7:57 | 8:06 | 8:13 | 8:22 | 8:30 | 8:35 | - | 8:42 | 8:47 | - |
| 32 | 8:00 | 8:09 | 8:17 | 8:26 | 8:34 | 8:42 | 8:50 | 8:56 | 9:01 | - | - | 9:11 |
| 36 | 8:12 | 8:21 | 8:29 | 8:38 | 8:46 | 8:54 | 9:02 | 9:08 | - | 9:15 | 9:20 | - |
| 32 | 8:30 | 8:39 | 8:47 | 8:56 | 9:04 | 9:12 | 9:20 | 9:26 | 9:31 | - | - | 9:41 |
| 36 | 8:42 | 8:51 | 8:59 | 9:08 | 9:16 | 9:24 | 9:32 | 9:38 | - | 9:45 | 9:50 | - |
| 32 | 9:00 | 9:09 | 9:17 | 9:26 | 9:34 | 9:42 | 9:50 | 9:56 | 10:01 | - | - | 10:11 |
| 36 | 9:12 | 9:21 | 9:29 | 9:38 | 9:46 | 9:54 | 10:02 | 10:08 | - | 10:15 | 10:20 | - |
| 32 | 9:30 | 9:39 | 9:47 | 9:56 | 10:04 | 10:12 | 10:20 | 10:26 | 10:31 | - | - | 10:41 |
| 36 | 9:37 | 9:47 | 9:55 | 10:05 | 10:15 | 10:24 | 10:33 | 10:39 | - | 10:46 | 10:51 | - |
| 32 | 9:55 | 10:05 | 10:13 | 10:23 | 10:33 | 10:42 | 10:51 | 10:57 | 11:05 | - | - | 11:15 |
| 36 | 10:07 | 10:17 | 10:25 | 10:35 | 10:45 | 10:54 | 11:03 | 11:09 | - | 11:16 | 11:21 | - |
| 32 | 10:25 | 10:35 | 10:43 | 10:53 | 11:03 | 11:12 | 11:21 | 11:27 | 11:35 | - | - | 11:45 |
| 36 | 10:35 | 10:45 | 10:53 | 11:03 | 11:13 | 11:22 | 11:31 | 11:37 | - | 11:44 | 11:49 | - |
| 32 | 10:50 | 11:00 | 11:09 | 11:22 | 11:32 | 11:42 | 11:52 | 11:58 | 12:05 | - | - | 12:16 |
| 36 | 11:02 | 11:12 | 11:21 | 11:34 | 11:44 | 11:54 | 12:04 | 12:10 | - | 12:18 | 12:24 | - |
| 32 | 11:20 | 11:30 | 11:39 | 11:52 | 12:02 | 12:12 | 12:22 | 12:28 | 12:35 | - | - | 12:46 |
| 36 | 11:32 | 11:42 | 11:51 | 12:04 | 12:14 | 12:24 | 12:34 | 12:40 | - | 12:48 | 12:54 | - |
| 32 | 11:50 | 12:00 | 12:09 | 12:22 | 12:32 | 12:42 | 12:52 | 12:58 | 1:05 | - | - | 1:16 |

Page 9 of 10

Pennsylvania Avenue Line

## Sunday Eastbound - En domingo con dirección al este

| Route Number | Friendship Heights $M$ | Wisconsin Ave. \& Albemarle St. NW (Tenley-townAU ) | Wiscon$\sin \&$ Cathedral Aves. NW (Massachusetts Ave.) | M St. <br>  <br> Wiscon- <br> sin <br> Ave. <br> NW <br> (Georgetown) | $\begin{gathered} \text { H St. } \\ \text { \& } \\ \text { Jackson Pl. } \\ \text { NW } \\ \text { (Lafay- } \\ \text { ette } \\ \text { Square) } \end{gathered}$ | Pennsylvania Ave. \& 7th St. <br> NW <br> (Archives- <br> Navy <br> Mem'l- <br> Penn <br> Quarter) | Pennsylvania <br>  <br> 8th St. <br> SE <br> (Eastern <br> Market) | Pennsyl- vania $\&$ Minnesota Aves. SE (L'Enfant Square) | Naylor \& Good Hope Rds. SE | Erie \& 31st <br> Sts. SE <br> (Hillcrest) | NAYLOR ROAD M | $\begin{gathered} \text { SOUTH- } \\ \text { ERN } \\ \text { AVE } \\ M \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PM Service - Servicio vespertino |  |  |  |  |  |  |  |  |  |  |  |  |
| 36 | 12:02 | 12:12 | 12:21 | 12:34 | 12:44 | 12:54 | 1:04 | 1:10 | - | 1:18 | 1:24 | - |
| 32 | 12:20 | 12:30 | 12:39 | 12:52 | 1:02 | 1:12 | 1:22 | 1:28 | 1:35 | - | - | 1:46 |
| 36 | 12:32 | 12:42 | 12:51 | 1:04 | 1:14 | 1:24 | 1:34 | 1:40 | - | 1:48 | 1:54 | - |
| 32 | 12:50 | 1:00 | 1:09 | 1:22 | 1:32 | 1:42 | 1:52 | 1:58 | 2:05 | - | - | 2:16 |
| 36 | 1:02 | 1:12 | 1:21 | 1:34 | 1:44 | 1:54 | 2:04 | 2:10 | - | 2:18 | 2:24 | - |
| 32 | 1:20 | 1:30 | 1:39 | 1:52 | 2:02 | 2:12 | 2:22 | 2:28 | 2:35 | - | - | 2:46 |
| 36 | 1:32 | 1:42 | 1:51 | 2:04 | 2:14 | 2:24 | 2:34 | 2:40 | - | 2:48 | 2:54 | - |
| 32 | 1:50 | 2:00 | 2:09 | 2:22 | 2:32 | 2:42 | 2:52 | 2:58 | 3:05 | - | - | 3:16 |
| 36 | 2:02 | 2:12 | 2:21 | 2:34 | 2:44 | 2:54 | 3:04 | 3:10 | - | 3:18 | 3:24 | - |
| 32 | 2:20 | 2:30 | 2:39 | 2:52 | 3:02 | 3:12 | 3:22 | 3:28 | 3:35 | - | - | 3:46 |
| 36 | 2:32 | 2:42 | 2:51 | 3:04 | 3:14 | 3:24 | 3:34 | 3:40 | - | 3:48 | 3:54 | - |
| 32 | 2:50 | 3:00 | 3:09 | 3:22 | 3:32 | 3:42 | 3:52 | 3:58 | 4:05 | - | - | 4:16 |
| 36 | 3:02 | 3:12 | 3:21 | 3:34 | 3:44 | 3:54 | 4:04 | 4:10 | - | 4:18 | 4:24 | - |
| 32 | 3:20 | 3:30 | 3:39 | 3:52 | 4:02 | 4:12 | 4:22 | 4:28 | 4:35 | - | - | 4:46 |
| 36 | 3:32 | 3:42 | 3:51 | 4:04 | 4:14 | 4:24 | 4:34 | 4:40 | - | 4:48 | 4:54 | - |
| 32 | 3:50 | 4:00 | 4:09 | 4:22 | 4:32 | 4:42 | 4:52 | 4:58 | 5:05 | - | - | 5:16 |
| 36 | 4:04 | 4:13 | 4:21 | 4:32 | 4:42 | 4:51 | 5:00 | 5:06 | - | 5:14 | 5:19 | - |
| 32 | 4:24 | 4:33 | 4:41 | 4:52 | 5:02 | 5:11 | 5:20 | 5:26 | 5:32 | - | - | 5:43 |
| 36 | 4:38 | 4:47 | 4:55 | 5:06 | 5:16 | 5:25 | 5:34 | 5:40 | - | 5:48 | 5:53 | - |
| 32 | 4:58 | 5:07 | 5:15 | 5:26 | 5:36 | 5:45 | 5:54 | 6:00 | 6:06 | - | - | 6:17 |
| 36 | 5:10 | 5:19 | 5:27 | 5:38 | 5:48 | 5:57 | 6:06 | 6:12 | - | 6:20 | 6:25 | - |
| 32 | 5:28 | 5:37 | 5:45 | 5:56 | 6:06 | 6:15 | 6:24 | 6:30 | 6:36 | - | - | 6:47 |
| 36 | 5:40 | 5:49 | 5:57 | 6:08 | 6:18 | 6:27 | 6:36 | 6:42 | - | 6:50 | 6:55 | - |
| 32 | 5:58 | 6:07 | 6:15 | 6:26 | 6:36 | 6:45 | 6:54 | 7:00 | 7:06 | - | - | 7:17 |
| 36 | 6:10 | 6:19 | 6:27 | 6:38 | 6:48 | 6:57 | 7:06 | 7:12 | - | 7:20 | 7:25 | - |
| 32 | 6:28 | 6:37 | 6:45 | 6:56 | 7:06 | 7:15 | 7:24 | 7:30 | 7:36 | - | - | 7:47 |
| 36 | 6:40 | 6:49 | 6:57 | 7:08 | 7:18 | 7:27 | 7:36 | 7:42 | - | 7:50 | 7:55 | - |
| 32 | 6:58 | 7:07 | 7:15 | 7:26 | 7:36 | 7:45 | 7:54 | 8:00 | 8:06 | - | - | 8:17 |
| 36 | 7:10 | 7:19 | 7:27 | 7:38 | 7:48 | 7:57 | 8:06 | 8:12 | - | 8:20 | 8:25 | - |
| 32 | 7:28 | 7:37 | 7:45 | 7:56 | 8:06 | 8:15 | 8:24 | 8:30 | 8:36 | - | - | 8:47 |
| 36 | 7:58 | 8:07 | 8:15 | 8:26 | 8:36 | 8:45 | 8:54 | 9:00 | - | 9:08 | 9:13 | - |
| 32 | 8:28 | 8:37 | 8:45 | 8:56 | 9:06 | 9:15 | 9:24 | 9:30 | 9:36 | - | - | 9:47 |
| 36 | 8:58 | 9:07 | 9:15 | 9:26 | 9:36 | 9:45 | 9:54 | 10:00 | - | 10:08 | 10:13 | - |
| 32 | 9:28 | 9:37 | 9:45 | 9:56 | 10:06 | 10:15 | 10:24 | 10:30 | 10:36 | - | - | 10:47 |
| 36 | 10:02 | 10:10 | 10:16 | 10:25 | 10:34 | 10:43 | 10:50 | 10:56 | - | 11:02 | 11:07 | - |
| 32 | 10:32 | 10:40 | 10:46 | 10:55 | 11:04 | 11:13 | 11:20 | 11:26 | 11:31 | - | - | 11:41 |
| 36 | 11:02 | 11:10 | 11:16 | 11:25 | 11:34 | 11:43 | 11:50 | 11:56 | - | 12:02 | 12:07 | - |
| 32 | 11:32 | 11:40 | 11:46 | 11:55 | 12:04 | 12:13 | 12:20 | 12:26 | 12:31 | - | - | 12:41 |
| After Midnight Service - Servicio después de la medianoche |  |  |  |  |  |  |  |  |  |  |  |  |
| 36 | 12:09 | 12:13 | 12:18 | 12:25 | 12:32 | 12:40 | 12:46 | 12:51 | - | 12:56 | 1:00 | - |
| 32 | 12:40 | 12:44 | 12:49 | 12:56 | 1:03 | 1:11 | 1:17 | 1:22 | 1:26 | - | - | 1:34 |
| 36 | 1:10 | 1:14 | 1:19 | 1:26 | 1:33 | 1:41 | 1:47 | 1:52 | - | 1:57 | 2:01 | - |
| 32 | 1:40 | 1:44 | 1:49 | 1:56 | 2:03 | 2:11 | 2:17 | 2:22 | 2:26 | - | - | 2:34 |

## How to use this timetable

> Use the map to find the stops closest to where you will get on and off the bus.
> Select the schedule (Weekday, Saturday, Sunday) for when you will travel. Along the top of the schedule, find the stop at or nearest the point where you will get on the bus. Follow that column down to the time you want to leave.
> Use the same method to find the times the bus is scheduled to arrive at the stop where you will get off the bus.
> If the bus stop is not listed, use the time shown for the bus stop before it as the time to wait at the stop.
> The end-of-the-line or last stop is listed in ALL CAPS on the schedule.

## Cómo Usar este Horario

> Use este mapa para localizar las paradas más cercanas a donde se subirá y bajará del autobús.
> Seleccione el horario (Entre semana, sábado, domingo) de cuando viajará. A lo largo de la parte superior del horario, localice la parada o el punto más cercano a la parada en la que se subirá al autobús. Siga esa columna hacia abajo hasta la hora en la que desee salir.
> Utilice el mismo método para localizar las horas en que el autobús está programado para llegar a la parada en donde desea bajarse del autobús.
> Si la parada del autobús no está listada use la hora que se muestra en la parada anterior como la hora de espera en la parada.
> El final de la ruta o la última parada del autobús aparece en letras MAYÚSCULAS en el horario.

## English-Español

39
Pennsylvania Ave express

Limited-Stop Service

Service every 15 minutes weekdays 6:35
a.m. to 8:39 a.m. westbound and 4:01 p.m. to 6:09 p.m. eastbound

Limited stops. For more frequent stops, please use Metrobus 32, 34 or 36

Same fare as a regular Metrobus

Serves these locations-
Brinda servicio a estas ubicaciones
Naylor Road station
Fairfax Village
L'Enfant Square
Potomac Ave station
Eastern Market station
Capitol Hill
Federal Triangle
McPherson Square
Farragut Square
Foggy Bottom-GWU station Potomac Park/ State Department


[^15]

Washington Metropolitan Area Transit Authority


Page 2 of 3

Pennsylvania Avenue Express
Limited-Stop Service

| Weekday Westbound Entre semana con dirección al oeste |  |  |  |  |  |  |  | Meekday Eastbound Entre semana con dirección al este |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Route Number | Naylor Road $M$ | Pennsylvania Ave. \& Fort Davis St. SE <br> (Alabama Ave.) | Pennsylvania \& Minnesota Aves. SE (L'Enfant Square) | Pennsylvania Ave. \& 8th St. SE (Eastern Market) | Pennsylvania Ave. \& 7th St. NW (ArchivesNavy Mem'lPenn Quarter) | I \& 17th <br> Sts. NW <br> (Farragut <br> Square) | Virginia Ave. \& 21st St. NW (Potomac Park) | Route Number | Virginia Ave. \& 21st St. NW (Potomac Park) | H \& 17th Sts. NW | Pennsylvania Ave. <br> \& 7th <br> St. NW <br> (Archives- <br> Navy <br> Mem'l- <br> Penn <br> Quarter) | Pennsyl- <br> vania <br>  <br> 8th St. SE <br> (Eastern <br> Market) | Pennsylvania \& Minnesota Aves. SE (L'Enfant Square) | Pennsylvania Ave. \& Alabama Ave. SE (Fairfax Village) | NAYLOR ROAD $\underset{\sim}{\text { Kates }}$ |
| AM Service - Servicio matutino |  |  |  |  |  |  |  | PM Service - Servicio vespertino |  |  |  |  |  |  |  |
| 39 | 6:35 | 6:40 | 6:48 | 6:54 | 7:03 | 7:10 | 7:19 | 39 | 4:01 | 4:09 | 4:21 | 4:32 | 4:39 | 4:47 | 4:52 |
| 39 | 6:50 | 6:55 | 7:03 | 7:09 | 7:18 | 7:25 | 7:34 | 39 | 4:17 | 4:25 | 4:38 | 4:49 | 4:56 | 5:05 | 5:10 |
| 39 | 7:05 | 7:10 | 7:21 | 7:27 | 7:38 | 7:47 | 7:57 | 39 | 4:33 | 4:41 | 4:54 | 5:05 | 5:12 | 5:21 | 5:26 |
| 39 | 7:20 | 7:25 | 7:36 | 7:42 | 7:53 | 8:02 | 8:12 | 39 | 4:49 | 4:57 | 5:10 | 5:21 | 5:28 | 5:37 | 5:42 |
| 39 | 7:35 | 7:40 | 7:51 | 7:57 | 8:08 | 8:17 | 8:27 | 39 | 5:05 | 5:15 | 5:29 | 5:40 | 5:46 | 5:55 | 6:00 |
| 39 | 7:50 | 7:55 | 8:06 | 8:12 | 8:23 | 8:32 | 8:42 | 39 | 5:21 | 5:31 | 5:45 | 5:56 | 6:02 | 6:11 | 6:16 |
| 39 | 8:05 | 8:10 | 8:21 | 8:27 | 8:38 | 8:47 | 8:57 | 39 | 5:37 | 5:47 | 6:01 | 6:12 | 6:18 | 6:27 | 6:32 |
| 39 | 8:20 | 8:25 | 8:36 | 8:42 | 8:53 | 9:02 | 9:12 | 39 | 5:53 | 6:03 | 6:16 | 6:26 | 6:32 | 6:40 | 6:45 |
| 39 | 8:39 | 8:44 | 8:52 | 8:57 | 9:07 | 9:17 | 9:27 | 39 | 6:09 | 6:19 | 6:32 | 6:42 | 6:48 | 6:56 | 7:01 |
| - Buses sign FOGGY BOTTOM STATION |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

```
Designated Stops Pennsylvania Avenue Limited trips only serve the following stops:
```

- Virginia Ave. \& 21st St. NW (Potomac Park/State Department)

```
```

Route 39 designated stops-westbound

```
Route 39 designated stops-westbound
- Naylor Road station
- Naylor Road station
- Branch & Southern Aves. (Md.)
- Branch & Southern Aves. (Md.)
- Southern Ave & Suitland Rd. SE
- Southern Ave & Suitland Rd. SE
- Pennsylvania Ave. & Fort Davis St. SE (Alabama Ave.)
- Pennsylvania Ave. & Fort Davis St. SE (Alabama Ave.)
- Pennsylvania & Branch Aves. SE
- Pennsylvania & Branch Aves. SE
- Pennsylvania Ave. & 30th St. SE
- Pennsylvania Ave. & 30th St. SE
- Pennsylvania & Minnesota Aves. SE (L'Enfant Sq.)
- Pennsylvania & Minnesota Aves. SE (L'Enfant Sq.)
- Pennsylvania & Potomac Aves. SE (Potomac Ave station)
- Pennsylvania & Potomac Aves. SE (Potomac Ave station)
- Pennsylvania Ave. & 8th St. SE (Eastern Market station)
- Pennsylvania Ave. & 8th St. SE (Eastern Market station)
- Independence Ave. & 1st St. SE (Capitol Hill)
- Independence Ave. & 1st St. SE (Capitol Hill)
- Independence Ave. & 3rd St. SW
- Independence Ave. & 3rd St. SW
- 7th St. & Independence Ave. SW
- 7th St. & Independence Ave. SW
- Pennsylvania Ave. & 7th St. NW
- Pennsylvania Ave. & 7th St. NW
    (Archives-Navy Mem'l-Penn Quarter station)
    (Archives-Navy Mem'l-Penn Quarter station)
- Pennsylvania Ave. & 12th St. NW (Federal Triangle)
- Pennsylvania Ave. & 12th St. NW (Federal Triangle)
O I (Eye) & 15th Sts. NW (McPherson Square)
O I (Eye) & 15th Sts. NW (McPherson Square)
I (Eye) & 17th Sts. NW (Farragut Square)
I (Eye) & 17th Sts. NW (Farragut Square)
O I (Eye) & 19th Sts. NW
O I (Eye) & 19th Sts. NW
- Pennsylvania Ave. & 22nd St. NW
- Pennsylvania Ave. & 22nd St. NW
23rd & I (Eye) Sts. NW (Foggy Bottom-GWU station)
```

23rd \& I (Eye) Sts. NW (Foggy Bottom-GWU station)

```

Route 39 designated stops-eastbound
- Virginia Ave. \& 21st St. NW (Potomac Park/State Department)

23rd \& I (Eye) Sts. NW (Foggy Bottom-GWU station)
- Pennsylvania Ave. \& 21st St. NW
- H \& 17th Sts. NW
- H St. \& Madison PI. NW
- Pennsylvania Ave. \& 12th St. NW (Federal Triangle)
- Pennsylvania Ave. \& 7th St. NW
(Archives-Navy Mem'l-Penn Quarter station)
- Independence Ave. \& 6th St. SW
- Independence Ave. \& 3rd St. SW
- Independence Ave. \& 1st St. SE (Capitol Hill)
- Pennsylvania Ave. \& 8th St. SE (Eastern Market station)
- Pennsylvania \& Potomac Aves. SE (Potomac Ave station)
- Pennsylvania \& Minnesota Aves. SE (L'Enfant Sq.)
- Pennsylvania Ave. \& 30th St. SE
- Pennsylvania \& Branch Aves. SE
- Pennsylvania \& Alabama Aves. SE (Fairfax Village)
- Southern Ave \& Suitland Rd. SE (Fairfax Village)
- Branch \& Southern Aves. (Md.)
- Naylor Road station

\section*{How to use this timetable}
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> Use the same method to find the times the bus is scheduled to arrive at the stop where you will get off the bus.
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\(>\) The end-of-the-line or last stop is listed in ALL CAPS on the schedule.

\section*{Cómo Usar este Horario}
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> Seleccione el horario (Entre semana, sábado, domingo) de cuando viajará. A lo largo de la parte superior del horario, localice la parada o el punto más cercano a la parada en la que se subirá al autobús. Siga esa columna hacia abajo hasta la hora en la que desee salir.
> Utilice el mismo método para localizar las horas en que el autobús está programado para llegar a la parada en donde desea bajarse del autobús.
> Si la parada del autobús no está listada use la hora que se muestra en la parada anterior como la hora de espera en la parada.
\(>\) El final de la ruta o la última parada del autobús aparece en letras MAYÚSCULAS en el horario.

\section*{English-Español metrobus} North Capitol Street Line

\&. All Metrobuses are fully accessible and are equipped with lifts or ramps for wheelchair accessibility
Todos los autobuses de Metro son accesibles a personas con impedimentos y están equipados con rampas o elevadores para sillas de ruedas
Serves these locations-
Brinda servicio a estas ubicaciones
Fort Totten station
Providence Hospital
Brookland-CUA station
Catholic University
Government Printing Office
Union Station
Gallery PI-Chinatown station
Metro Center station
McPherson Square station
Farragut North station
Farragut West station
State Department
Kennedy Center

> Schedule 9-24-06 Reprinted 3-20-07

\section*{Washington \\ Metropolitan Area \\ Transit Authority}
\begin{tabular}{lc} 
North Capitol Street Line & \begin{tabular}{c} 
For route and schedule information \\
Call \(202-637-7000\) \\
Route 80
\end{tabular} \\
www.metropenssoors com
\end{tabular}


\title{
Weekday Southbound - \\ Entre semana con dirección al sur
}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & & & & \\
\hline Route Number & \begin{tabular}{l}
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Totten \\
M
\end{tabular} & \begin{tabular}{l}
12th \& \\
Varnum \\
Sts. NE \\
(Provi- \\
dence \\
Hospital)
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Brookland -CUA \\
4
\end{tabular} & \begin{tabular}{l}
North \\
Capitol \\
St. \& \\
Florida \\
Ave. \\
NW
\end{tabular} & North Capitol \& H Sts. NW (Govt. Printing Office) & \begin{tabular}{l}
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Sts. NW \\
(Gallery Pl-Chinatown) \\
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(W) NW \\
between I \& K Sts. (MCPHERSON SQ)
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St. \& \\
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(Farragut \\
N \& W)
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\text { NEDY } \\
\text { CENTER }
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\hline 80 & 8:35 & 8:41 & 8:48 & 9:02 & 9:09 & 9:17 & 9:21 & - & 9:30 & 9:35 & 9:45 \\
\hline 80 & 8:50 & 8:56 & 9:03 & 9:17 & 9:24 & 9:32 & 9:36 & - & 9:45 & 9:50 & 10:00 \\
\hline 80 & 9:05 & 9:10 & 9:17 & 9:30 & 9:40 & 9:48 & 9:53 & - & 10:01 & 10:06 & 10:15 \\
\hline 80 & 9:20 & 9:25 & 9:32 & 9:45 & 9:55 & 10:03 & 10:08 & - & 10:16 & 10:21 & 10:30 \\
\hline 80 & 9:35 & 9:40 & 9:47 & 10:00 & 10:10 & 10:18 & 10:23 & - & 10:31 & 10:36 & 10:45 \\
\hline 80 & 9:50 & 9:55 & 10:02 & 10:15 & 10:25 & 10:33 & 10:38 & - & 10:46 & 10:51 & 11:00 \\
\hline 80 & 10:05 & 10:10 & 10:17 & 10:30 & 10:40 & 10:48 & 10:53 & - & 11:01 & 11:06 & 11:15 \\
\hline 80 & 10:20 & 10:25 & 10:32 & 10:45 & 10:55 & 11:03 & 11:08 & - & 11:16 & 11:21 & 11:30 \\
\hline 80 & 10:35 & 10:40 & 10:47 & 11:00 & 11:10 & 11:18 & 11:23 & - & 11:31 & 11:36 & 11:45 \\
\hline 80 & 10:50 & 10:55 & 11:02 & 11:15 & 11:25 & 11:33 & 11:38 & - & 11:46 & 11:51 & 12:00 \\
\hline 80 & 11:05 & 11:10 & 11:17 & 11:30 & 11:40 & 11:48 & 11:53 & - & 12:01 & 12:06 & 12:15 \\
\hline 80 & 11:20 & 11:25 & 11:32 & 11:45 & 11:55 & 12:03 & 12:08 & - & 12:16 & 12:21 & 12:30 \\
\hline 80 & 11:35 & 11:40 & 11:47 & 12:00 & 12:10 & 12:18 & 12:23 & - & 12:31 & 12:36 & 12:45 \\
\hline 80 & 11:50 & 11:55 & 12:02 & 12:15 & 12:25 & 12:33 & 12:38 & - & 12:46 & 12:51 & 1:00 \\
\hline
\end{tabular}

Page 3 of 10

\section*{Weekday Southbound - \\ Entre semana con dirección al sur}


Page 4 of 10

\title{
Weekday Northbound \\ Entre semana con dirección al norte
}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route Number & Kennedy Center & \begin{tabular}{l}
Virginia \\
Ave. \& \\
21st \\
St. NW \\
(State \\
Dept.)
\end{tabular} & \begin{tabular}{l}
\[
\begin{gathered}
\text { K } \\
\& \\
\text { 17th } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] \\
(Farragut N \& W) 0
\end{tabular} & \begin{tabular}{l}
15th St. \\
(W) NW between I \& K Sts. (McPherson Sq )
\end{tabular} & \[
\begin{aligned}
& \text { 13th } \\
& \text { \& } \\
& \text { I Sts. } \\
& \text { NW }
\end{aligned}
\] & \begin{tabular}{l}
H \& 7th \\
Sts. NW (Gallery Pl-Chinatown) K
\end{tabular} & North Capitol \& H Sts. NE (Govt. Printing Office) & \begin{tabular}{l}
North \\
Capitol \\
St. \& \\
Florida \\
Ave. \\
NE
\end{tabular} & \begin{tabular}{l}
Brookland \\
-CUA \\
M
\end{tabular} & \[
\begin{aligned}
& \text { 12th } \\
& \& \\
& \text { Varnum } \\
& \text { Sts. NE } \\
& \text { (Provi- } \\
& \text { dence } \\
& \text { Hospital) }
\end{aligned}
\] & \[
\begin{gathered}
\text { FORT } \\
\text { TOTTEN } \\
\text { M }
\end{gathered}
\] \\
\hline \multicolumn{12}{|c|}{AM Service - Servicio matutino} \\
\hline 80 & - & - & - & 5:07 & 5:09 & 5:12 & 5:19 & 5:23 & 5:33 & 5:38 & 5:44 \\
\hline 80 & 5:22 & 5:27 & 5:32 & - & 5:36 & 5:40 & 5:47 & 5:54 & 6:04 & 6:09 & 6:14 \\
\hline 80 & 5:42 & 5:47 & 5:52 & - & 5:56 & 6:00 & 6:07 & 6:14 & 6:24 & 6:29 & 6:34 \\
\hline 80 & 5:58 & 6:03 & 6:08 & - & 6:12 & 6:16 & 6:23 & 6:30 & 6:40 & 6:45 & 6:50 \\
\hline 80 & 6:14 & 6:19 & 6:24 & - & 6:28 & 6:32 & 6:39 & 6:46 & 6:56 & 7:01 & 7:06 \\
\hline 80 & 6:29 & 6:35 & 6:41 & - & 6:46 & 6:50 & 6:58 & 7:05 & 7:15 & 7:21 & 7:27 \\
\hline 80 & 6:44 & 6:50 & 6:56 & - & 7:01 & 7:05 & 7:13 & 7:20 & 7:30 & 7:36 & 7:42 \\
\hline 80 & 6:59 & 7:05 & 7:11 & - & 7:16 & 7:20 & 7:28 & 7:35 & 7:45 & 7:51 & 7:57 \\
\hline 80 & - & - & - & 7:22 & 7:24 & 7:29 & 7:38 & 7:46 & 7:58 & 8:07 & 8:13 \\
\hline 80 & 7:16 & 7:23 & 7:31 & - & 7:37 & 7:42 & 7:51 & 7:59 & 8:11 & 8:20 & 8:26 \\
\hline 80 & 7:30 & 7:37 & 7:45 & - & 7:51 & 7:56 & 8:05 & 8:13 & 8:25 & 8:34 & 8:40 \\
\hline 80 & 7:45 & 7:52 & 8:00 & - & 8:06 & 8:11 & 8:20 & 8:28 & 8:40 & 8:49 & 8:55 \\
\hline 80 & 8:00 & 8:07 & 8:15 & - & 8:21 & 8:26 & 8:35 & 8:43 & 8:55 & 9:04 & 9:10 \\
\hline 80 & 8:15 & 8:22 & 8:30 & - & 8:36 & 8:41 & 8:50 & 8:58 & 9:10 & 9:19 & 9:25 \\
\hline 80 & 8:26 & 8:31 & 8:41 & - & 8:48 & 8:55 & 9:05 & 9:13 & 9:23 & 9:34 & 9:40 \\
\hline 80 & 8:40 & 8:45 & 8:55 & - & 9:02 & 9:09 & 9:19 & 9:27 & 9:37 & 9:48 & 9:54 \\
\hline 80 & 8:55 & 9:00 & 9:10 & - & 9:17 & 9:24 & 9:34 & 9:42 & 9:52 & 10:03 & 10:09 \\
\hline 80 & 9:10 & 9:15 & 9:25 & - & 9:32 & 9:39 & 9:49 & 9:57 & 10:07 & 10:18 & 10:24 \\
\hline 80 & 9:25 & 9:33 & 9:42 & - & 9:49 & 9:55 & 10:05 & 10:14 & 10:24 & 10:32 & 10:38 \\
\hline 80 & 9:40 & 9:48 & 9:57 & - & 10:04 & 10:10 & 10:20 & 10:29 & 10:39 & 10:47 & 10:53 \\
\hline 80 & 9:55 & 10:03 & 10:12 & - & 10:19 & 10:25 & 10:35 & 10:44 & 10:54 & 11:02 & 11:08 \\
\hline 80 & 10:10 & 10:18 & 10:27 & - & 10:34 & 10:40 & 10:50 & 10:59 & 11:09 & 11:17 & 11:23 \\
\hline 80 & 10:25 & 10:33 & 10:42 & - & 10:49 & 10:55 & 11:05 & 11:14 & 11:24 & 11:32 & 11:38 \\
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\hline 80 & 10:55 & 11:03 & 11:12 & - & 11:19 & 11:25 & 11:35 & 11:44 & 11:54 & 12:02 & 12:08 \\
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\hline 80 & 11:40 & 11:48 & 11:57 & - & 12:04 & 12:10 & 12:20 & 12:29 & 12:39 & 12:47 & 12:53 \\
\hline 80 & 11:55 & 12:03 & 12:12 & - & 12:19 & 12:25 & 12:35 & 12:44 & 12:54 & 1:02 & 1:08 \\
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\end{tabular}

Page 5 of 10
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route Number & Kennedy Center & Virginia Ave. \& 21st St. NW (State Dept.) & \[
\begin{gathered}
\text { K } \\
\& \\
\text { 17th } \\
\text { Sts. } \\
\text { NW } \\
\text { (Farragut } \\
\text { N \& W) } \\
\text { K }
\end{gathered}
\] & \begin{tabular}{l}
15th St. \\
(W) NW between I \& K Sts. (McPherson Sq)
\(\square\)
\end{tabular} & \[
\begin{aligned}
& \text { 13th } \\
& \& \\
& \text { I Sts. } \\
& \text { NW }
\end{aligned}
\] & \begin{tabular}{l}
H\& 7th \\
Sts. NW \\
(Gallery \\
Pl-Chinatown)
\end{tabular} & North Capitol \& H Sts. NE (Govt. Printing Office) & \begin{tabular}{l}
North \\
Capitol \\
St. \& \\
Florida \\
Ave. \\
NE
\end{tabular} & Brookland -CUA 19 &  & \[
\begin{gathered}
\text { FORT } \\
\text { TOTTEN } \\
\text { M }
\end{gathered}
\] \\
\hline \multicolumn{12}{|c|}{PM Service - Servicio vespertino} \\
\hline 80 & 12:10 & 12:18 & 12:27 & - & 12:34 & 12:40 & 12:50 & 12:59 & 1:09 & 1:17 & 1:23 \\
\hline 80 & 12:25 & 12:33 & 12:42 & - & 12:49 & 12:55 & 1:05 & 1:14 & 1:24 & 1:32 & 1:38 \\
\hline 80 & 12:40 & 12:48 & 12:57 & - & 1:04 & 1:10 & 1:20 & 1:29 & 1:39 & 1:47 & 1:53 \\
\hline 80 & 12:55 & 1:03 & 1:12 & - & 1:19 & 1:25 & 1:35 & 1:44 & 1:54 & 2:02 & 2:08 \\
\hline 80 & 1:10 & 1:18 & 1:27 & - & 1:34 & 1:40 & 1:50 & 1:59 & 2:09 & 2:17 & 2:23 \\
\hline 80 & 1:25 & 1:33 & 1:42 & - & 1:49 & 1:55 & 2:05 & 2:14 & 2:24 & 2:32 & 2:38 \\
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\hline 80 & 2:25 & 2:32 & 2:44 & - & 2:51 & 2:57 & 3:05 & 3:14 & 3:27 & 3:34 & 3:40 \\
\hline 80 & 2:40 & 2:47 & 2:59 & - & 3:06 & 3:12 & 3:20 & 3:29 & 3:42 & 3:49 & 3:55 \\
\hline 80 & 2:55 & 3:02 & 3:14 & - & 3:21 & 3:27 & 3:35 & 3:44 & 3:57 & 4:04 & 4:10 \\
\hline 80 & - & - & - & 3:28 & 3:31 & 3:37 & 3:45 & 3:54 & 4:07 & 4:14 & 4:20 \\
\hline 80 & 3:15 & 3:22 & 3:34 & - & 3:41 & 3:47 & 3:55 & 4:04 & 4:17 & 4:24 & 4:30 \\
\hline 80 & 3:25 & 3:32 & 3:44 & - & 3:51 & 3:57 & 4:05 & 4:14 & 4:27 & 4:34 & 4:40 \\
\hline 80 & - & - & - & 3:58 & 4:01 & 4:07 & 4:15 & 4:24 & 4:37 & 4:44 & 4:50 \\
\hline 80 & 3:45 & 3:52 & 4:04 & - & 4:11 & 4:17 & 4:25 & 4:34 & 4:47 & 4:54 & 5:00 \\
\hline 80 & 3:55 & 4:02 & 4:14 & - & 4:21 & 4:27 & 4:35 & 4:44 & 4:57 & 5:04 & 5:10 \\
\hline 80 & - & - & - & 4:33 & 4:36 & 4:42 & 4:50 & 4:58 & 5:10 & 5:17 & 5:23 \\
\hline 80 & 4:15 & 4:23 & 4:38 & - & 4:46 & 4:52 & 5:00 & 5:08 & 5:20 & 5:27 & 5:33 \\
\hline 80 & 4:25 & 4:33 & 4:48 & - & 4:56 & 5:02 & 5:10 & 5:18 & 5:30 & 5:37 & 5:43 \\
\hline 80 & - & - & - & 5:03 & 5:06 & 5:12 & 5:20 & 5:28 & 5:40 & 5:47 & 5:53 \\
\hline 80 & 4:45 & 4:53 & 5:08 & - & 5:16 & 5:22 & 5:30 & 5:38 & 5:50 & 5:57 & 6:03 \\
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\hline 80 & - & - & - & 6:04 & 6:07 & 6:15 & 6:25 & 6:32 & 6:44 & 6:51 & 6:58 \\
\hline 80 & 5:42 & 5:53 & 6:08 & - & 6:15 & 6:23 & 6:33 & 6:40 & 6:52 & 6:59 & 7:06 \\
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\hline 80 & 6:21 & 6:30 & 6:42 & - & 6:49 & 6:56 & 7:05 & 7:11 & 7:23 & 7:30 & 7:35 \\
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\hline 80 & 11:25 & 11:32 & 11:38 & - & 11:43 & 11:51 & 11:59 & 12:04 & 12:14 & 12:19 & 12:24 \\
\hline 80 & 11:55 & 12:01 & 12:08 & - & 12:15 & 12:19 & 12:26 & 12:31 & 12:40 & 12:44 & 12:49 \\
\hline \multicolumn{12}{|c|}{After Midnight Service - Servicio después de la medianoche} \\
\hline 80 & 12:25 & 12:31 & 12:38 & - & 12:45 & 12:49 & 12:56 & 1:01 & 1:10 & 1:14 & 1:19 \\
\hline 80 & 12:55 & 1:01 & 1:08 & - & 1:15 & 1:19 & 1:26 & 1:31 & 1:40 & 1:44 & 1:49 \\
\hline 80 & 1:25 & 1:31 & 1:38 & - & 1:45 & 1:49 & 1:56 & 2:01 & 2:10 & 2:14 & 2:19 \\
\hline
\end{tabular}

Page 6 of 10
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{12}{|c|}{Saturday Southbound En sábados con dirección al sur} \\
\hline Route Number & Fort Totten N & \begin{tabular}{l}
12th \& \\
Varnum \\
Sts. NE \\
(Provi- \\
dence \\
Hospital)
\end{tabular} & Brookland -CUA
\(\square\) & \begin{tabular}{l}
North \\
Capitol \\
St. \& \\
Florida \\
Ave. \\
NW
\end{tabular} & \begin{tabular}{l}
North \\
Capitol \\
\& H \\
Sts. \\
NW \\
(Govt. \\
Printing \\
Office)
\end{tabular} & \begin{tabular}{l}
H\&7th \\
Sts. NW \\
(Gallery PI-Chinatown)
\end{tabular} & \[
\begin{gathered}
\text { H } \\
\& \\
\text { 13th } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & \begin{tabular}{l}
15th St. \\
(W) NW between I\&KSts. (MCPHERSON SQ)
\end{tabular} & \begin{tabular}{l}
KSt. \& \\
Connecticut Ave NW (Farragut N\&W)
\end{tabular} & \begin{tabular}{l}
Virginia \\
Ave. \& \\
21st \\
St. NW \\
(State \\
Dept.)
\end{tabular} & KENNEDY CENTER \\
\hline \multicolumn{12}{|c|}{AM Service - Servicio matutino} \\
\hline 80/ & - & - & 4:49 & 4:57 & 5:02 & 5:07 & 5:10 & 5:12 & - & - & - \\
\hline 80 & - & - & 5:20 & 5:28 & 5:33 & 5:38 & 5:41 & - & 5:45 & 5:52 & 5:55 \\
\hline 80 & 5:38 & 5:43 & 5:48 & 5:57 & 6:02 & 6:07 & 6:11 & - & 6:15 & 6:22 & 6:25 \\
\hline 80 & 6:01 & 6:06 & 6:12 & 6:22 & 6:27 & 6:33 & 6:37 & - & 6:42 & 6:49 & 6:53 \\
\hline 80 & 6:26 & 6:31 & 6:37 & 6:47 & 6:52 & 6:58 & 7:02 & - & 7:07 & 7:14 & 7:18 \\
\hline 80 & 6:51 & 6:56 & 7:02 & 7:12 & 7:17 & 7:23 & 7:27 & - & 7:32 & 7:39 & 7:43 \\
\hline 80 & 7:13 & 7:19 & 7:25 & 7:36 & 7:42 & 7:49 & 7:54 & - & 8:00 & 8:08 & 8:12 \\
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\hline 80 & 8:05 & 8:11 & 8:17 & 8:28 & 8:34 & 8:41 & 8:46 & - & 8:52 & 9:00 & 9:04 \\
\hline 80 & 8:31 & 8:37 & 8:43 & 8:54 & 9:00 & 9:07 & 9:12 & - & 9:18 & 9:26 & 9:30 \\
\hline 80 & 8:57 & 9:03 & 9:09 & 9:20 & 9:26 & 9:33 & 9:38 & - & 9:44 & 9:52 & 9:56 \\
\hline 80 & 9:23 & 9:29 & 9:35 & 9:46 & 9:52 & 9:59 & 10:04 & - & 10:10 & 10:18 & 10:22 \\
\hline 80 & 9:49 & 9:55 & 10:01 & 10:12 & 10:18 & 10:25 & 10:30 & - & 10:36 & 10:44 & 10:48 \\
\hline 80 & 10:15 & 10:21 & 10:27 & 10:38 & 10:44 & 10:51 & 10:56 & - & 11:02 & 11:10 & 11:14 \\
\hline 80 & 10:41 & 10:47 & 10:53 & 11:04 & 11:10 & 11:17 & 11:22 & - & 11:28 & 11:36 & 11:40 \\
\hline 80 & 11:07 & 11:13 & 11:19 & 11:30 & 11:36 & 11:43 & 11:48 & - & 11:54 & 12:02 & 12:06 \\
\hline 80 & 11:33 & 11:39 & 11:45 & 11:56 & 12:02 & 12:09 & 12:14 & - & 12:20 & 12:28 & 12:32 \\
\hline 80 & 11:59 & 12:05 & 12:11 & 12:22 & 12:28 & 12:35 & 12:40 & - & 12:46 & 12:54 & 12:58 \\
\hline \multicolumn{12}{|c|}{PM Service - Servicio vespertino} \\
\hline 80 & 12:25 & 12:31 & 12:37 & 12:48 & 12:54 & 1:01 & 1:06 & - & 1:12 & 1:20 & 1:24 \\
\hline 80 & 12:51 & 12:57 & 1:03 & 1:14 & 1:20 & 1:27 & 1:32 & - & 1:38 & 1:46 & 1:50 \\
\hline 80 & 1:17 & 1:23 & 1:29 & 1:40 & 1:46 & 1:53 & 1:58 & - & 2:04 & 2:12 & 2:16 \\
\hline 80 & 1:43 & 1:49 & 1:55 & 2:06 & 2:12 & 2:19 & 2:24 & - & 2:30 & 2:38 & 2:42 \\
\hline 80 & 2:09 & 2:15 & 2:21 & 2:32 & 2:38 & 2:45 & 2:50 & - & 2:56 & 3:04 & 3:08 \\
\hline 80 & 2:35 & 2:41 & 2:47 & 2:58 & 3:04 & 3:11 & 3:16 & - & 3:22 & 3:30 & 3:34 \\
\hline 80 & 3:01 & 3:07 & 3:13 & 3:24 & 3:30 & 3:37 & 3:42 & - & 3:48 & 3:56 & 4:00 \\
\hline 80 & 3:27 & 3:33 & 3:39 & 3:50 & 3:56 & 4:03 & 4:08 & - & 4:14 & 4:22 & 4:26 \\
\hline 80 & 3:53 & 3:59 & 4:05 & 4:16 & 4:22 & 4:29 & 4:34 & - & 4:40 & 4:48 & 4:52 \\
\hline 80 & 4:19 & 4:25 & 4:31 & 4:42 & 4:48 & 4:55 & 5:00 & - & 5:06 & 5:14 & 5:18 \\
\hline 80 & 4:45 & 4:51 & 4:57 & 5:08 & 5:14 & 5:21 & 5:26 & - & 5:32 & 5:40 & 5:44 \\
\hline 80 & 5:11 & 5:17 & 5:23 & 5:34 & 5:40 & 5:47 & 5:52 & - & 5:58 & 6:06 & 6:10 \\
\hline 80 & 5:37 & 5:43 & 5:49 & 6:00 & 6:06 & 6:13 & 6:18 & - & 6:24 & 6:32 & 6:36 \\
\hline 80 & 6:03 & 6:09 & 6:15 & 6:26 & 6:32 & 6:39 & 6:44 & - & 6:50 & 6:58 & 7:02 \\
\hline 80 & 6:31 & 6:36 & 6:41 & 6:52 & 6:57 & 7:03 & 7:08 & - & 7:13 & 7:21 & 7:25 \\
\hline 80 & 6:56 & 7:01 & 7:06 & 7:17 & 7:22 & 7:28 & 7:33 & - & 7:38 & 7:46 & 7:50 \\
\hline 80 & 7:21 & 7:26 & 7:31 & 7:42 & 7:47 & 7:53 & 7:58 & - & 8:03 & 8:11 & 8:15 \\
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\hline 80 & 8:54 & 8:59 & 9:04 & 9:14 & 9:19 & 9:25 & 9:30 & - & 9:34 & 9:41 & 9:45 \\
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\hline 80 & 9:54 & 9:59 & 10:04 & 10:14 & 10:19 & 10:25 & 10:30 & - & 10:34 & 10:41 & 10:45 \\
\hline 80 & 10:24 & 10:29 & 10:34 & 10:44 & 10:49 & 10:55 & 11:00 & - & 11:04 & 11:11 & 11:15 \\
\hline 80 & 10:54 & 10:59 & 11:04 & 11:14 & 11:19 & 11:25 & 11:30 & - & 11:34 & 11:41 & 11:45 \\
\hline 80 & 11:24 & 11:29 & 11:33 & 11:42 & 11:47 & 11:52 & 11:56 & - & 12:00 & 12:07 & 12:10 \\
\hline 80 & 11:54 & 11:59 & 12:03 & 12:12 & 12:17 & 12:22 & 12:26 & - & 12:30 & 12:37 & 12:40 \\
\hline \multicolumn{12}{|c|}{After Midnight Service - Servicio después de la medianoche} \\
\hline 80 & 12:24 & 12:29 & 12:33 & 12:42 & 12:47 & 12:52 & 12:56 & & 1:00 & 1:07 & 1:10 \\
\hline
\end{tabular}

Page 7 of 10
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{12}{|c|}{Saturday Northbound En sábados con dirección al norte} \\
\hline Route Number & Kennedy Center & \begin{tabular}{l}
Virginia \\
Ave. \& \\
21st \\
St. NW \\
(State \\
Dept.)
\end{tabular} & \[
\begin{gathered}
\text { K \& } \\
\text { 17th } \\
\text { Sts. } \\
\text { NW } \\
\text { (Farragut } \\
\text { N \& W) } \\
\text { M }
\end{gathered}
\] & \begin{tabular}{l}
15th St. \\
(W) NW between I \& K Sts. (McPherson Sq)
\end{tabular} & \[
\begin{aligned}
& \text { 13th } \\
& \& \\
& \text { I Sts. } \\
& \text { NW }
\end{aligned}
\] & H \& 7th Sts. NW (Gallery PI-Chinatown) & \begin{tabular}{l}
North \\
Capitol \\
\& H Sts. \\
NE \\
(Govt. \\
Printing \\
Office)
\end{tabular} & North Capitol St. \& Florida Ave. NE & Brookland -CUA & \begin{tabular}{l}
12th
\(\&\)
Varnum \\
Sts. NE (Providence \\
Hospital)
\end{tabular} & \[
\begin{gathered}
\text { FORT } \\
\text { TOTTEN } \\
\text { Kate }
\end{gathered}
\] \\
\hline \multicolumn{12}{|c|}{AM Service - Servicio matutino} \\
\hline 80 & & - & - & 5:23 & 5:25 & 5:27 & 5:31 & 5:35 & 5:44 & 5:48 & 5:53 \\
\hline 80 & & - & - & 6:03 & 6:05 & 6:07 & 6:11 & 6:15 & 6:25 & 6:29 & 6:34 \\
\hline 80 & 6:08 & 6:16 & 6:23 & - & 6:28 & 6:31 & 6:36 & 6:41 & 6:51 & 6:55 & 7:00 \\
\hline 80 & 6:34 & 6:42 & 6:49 & - & 6:54 & 6:57 & 7:02 & 7:07 & 7:17 & 7:21 & 7:26 \\
\hline 80 & 7:00 & 7:08 & 7:15 & - & 7:20 & 7:23 & 7:28 & 7:33 & 7:43 & 7:47 & 7:52 \\
\hline 80 & 7:26 & 7:34 & 7:41 & - & 7:46 & 7:49 & 7:54 & 7:59 & 8:09 & 8:13 & 8:18 \\
\hline 80 & 7:52 & 8:00 & 8:07 & - & 8:12 & 8:15 & 8:20 & 8:25 & 8:35 & 8:39 & 8:44 \\
\hline 80 & 8:18 & 8:26 & 8:33 & - & 8:38 & 8:41 & 8:46 & 8:51 & 9:01 & 9:05 & 9:10 \\
\hline 80 & 8:43 & 8:51 & 8:59 & - & 9:05 & 9:08 & 9:14 & 9:19 & 9:30 & 9:35 & 9:41 \\
\hline 80 & 9:09 & 9:17 & 9:25 & - & 9:31 & 9:34 & 9:40 & 9:45 & 9:56 & 10:01 & 10:07 \\
\hline 80 & 9:35 & 9:43 & 9:51 & - & 9:57 & 10:00 & 10:06 & 10:11 & 10:22 & 10:27 & 10:33 \\
\hline 80 & 10:01 & 10:09 & 10:17 & - & 10:23 & 10:26 & 10:32 & 10:37 & 10:48 & 10:53 & 10:59 \\
\hline 80 & 10:27 & 10:35 & 10:43 & - & 10:49 & 10:52 & 10:58 & 11:03 & 11:14 & 11:19 & 11:25 \\
\hline 80 & 10:53 & 11:01 & 11:09 & - & 11:15 & 11:18 & 11:24 & 11:29 & 11:40 & 11:45 & 11:51 \\
\hline 80 & 11:19 & 11:27 & 11:35 & - & 11:41 & 11:45 & 11:51 & 11:57 & 12:09 & 12:14 & 12:20 \\
\hline 80 & 11:45 & 11:53 & 12:01 & - & 12:07 & 12:11 & 12:17 & 12:23 & 12:35 & 12:40 & 12:46 \\
\hline \multicolumn{12}{|c|}{PM Service - Servicio vespertino} \\
\hline 80 & 12:11 & 12:19 & 12:27 & - & 12:33 & 12:37 & 12:43 & 12:49 & 1:01 & 1:06 & 1:12 \\
\hline 80 & 12:37 & 12:45 & 12:53 & - & 12:59 & 1:03 & 1:09 & 1:15 & 1:27 & 1:32 & 1:38 \\
\hline 80 & 1:03 & 1:11 & 1:19 & - & 1:25 & 1:29 & 1:35 & 1:41 & 1:53 & 1:58 & 2:04 \\
\hline 80 & 1:29 & 1:37 & 1:45 & - & 1:51 & 1:55 & 2:01 & 2:07 & 2:19 & 2:24 & 2:30 \\
\hline 80 & 1:55 & 2:03 & 2:11 & - & 2:17 & 2:21 & 2:27 & 2:33 & 2:45 & 2:50 & 2:56 \\
\hline 80 & 2:21 & 2:29 & 2:37 & - & 2:43 & 2:47 & 2:53 & 2:59 & 3:11 & 3:16 & 3:22 \\
\hline 80 & 2:47 & 2:55 & 3:03 & - & 3:09 & 3:13 & 3:19 & 3:25 & 3:37 & 3:42 & 3:48 \\
\hline 80 & 3:13 & 3:21 & 3:29 & - & 3:35 & 3:39 & 3:45 & 3:51 & 4:03 & 4:08 & 4:14 \\
\hline 80 & 3:39 & 3:47 & 3:55 & - & 4:01 & 4:05 & 4:11 & 4:17 & 4:29 & 4:34 & 4:40 \\
\hline 80 & 4:05 & 4:13 & 4:21 & - & 4:27 & 4:31 & 4:37 & 4:43 & 4:55 & 5:00 & 5:06 \\
\hline 80 & 4:31 & 4:39 & 4:47 & - & 4:53 & 4:57 & 5:03 & 5:09 & 5:21 & 5:26 & 5:32 \\
\hline 80 & 4:57 & 5:05 & 5:13 & - & 5:19 & 5:23 & 5:29 & 5:35 & 5:47 & 5:52 & 5:58 \\
\hline 80 & 5:23 & 5:31 & 5:39 & - & 5:45 & 5:49 & 5:55 & 6:01 & 6:13 & 6:18 & 6:24 \\
\hline 80 & 5:49 & 5:57 & 6:04 & - & 6:09 & 6:12 & 6:18 & 6:23 & 6:34 & 6:39 & 6:45 \\
\hline 80 & 6:15 & 6:23 & 6:30 & - & 6:35 & 6:38 & 6:44 & 6:49 & 7:00 & 7:05 & 7:11 \\
\hline 80 & 6:41 & 6:49 & 6:56 & - & 7:01 & 7:04 & 7:10 & 7:15 & 7:26 & 7:31 & 7:37 \\
\hline 80 & 7:07 & 7:15 & 7:22 & - & 7:27 & 7:30 & 7:36 & 7:41 & 7:52 & 7:57 & 8:03 \\
\hline 80 & 7:32 & 7:40 & 7:47 & - & 7:52 & 7:55 & 8:01 & 8:06 & 8:17 & 8:22 & 8:28 \\
\hline 80 & 7:57 & 8:05 & 8:12 & - & 8:17 & 8:20 & 8:25 & 8:30 & 8:40 & 8:44 & 8:49 \\
\hline 80 & 8:22 & 8:30 & 8:37 & - & 8:42 & 8:45 & 8:50 & 8:55 & 9:05 & 9:09 & 9:14 \\
\hline 80 & 8:52 & 9:00 & 9:07 & - & 9:12 & 9:15 & 9:20 & 9:25 & 9:35 & 9:39 & 9:44 \\
\hline 80 & 9:22 & 9:30 & 9:37 & - & 9:42 & 9:45 & 9:50 & 9:55 & 10:05 & 10:09 & 10:14 \\
\hline 80 & 9:52 & 10:00 & 10:07 & - & 10:12 & 10:15 & 10:20 & 10:25 & 10:35 & 10:39 & 10:44 \\
\hline 80 & 10:22 & 10:30 & 10:37 & - & 10:42 & 10:45 & 10:50 & 10:55 & 11:05 & 11:09 & 11:14 \\
\hline 80 & 10:52 & 11:00 & 11:07 & - & 11:12 & 11:14 & 11:19 & 11:23 & 11:33 & 11:37 & 11:42 \\
\hline 80 & 11:22 & 11:30 & 11:37 & - & 11:42 & 11:44 & 11:49 & 11:53 & 12:03 & 12:07 & 12:12 \\
\hline 80 & 11:52 & 12:00 & 12:07 & - & 12:12 & 12:14 & 12:19 & 12:23 & 12:33 & 12:37 & 12:42 \\
\hline \multicolumn{12}{|c|}{After Midnight Service - Servicio después de la medianoche} \\
\hline 80 & 12:22 & 12:30 & 12:37 & & 12:42 & 12:44 & 12:49 & 12:53 & 1:03 & 1:07 & 1:12 \\
\hline 80 & 12:50 & 12:58 & 1:05 & - & 1:10 & 1:12 & 1:17 & 1:21 & 1:31 & 1:35 & 1:40 \\
\hline 80 & 1:20 & 1:28 & 1:35 & - & 1:40 & 1:42 & 1:47 & 1:51 & 2:01 & 2:05 & 2:10 \\
\hline
\end{tabular}

Page 8 of 10

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{12}{|c|}{\multirow[t]{2}{*}{Sunday Northbound En domingo con dirección al norte}} \\
\hline & & & & & & & & & & & \\
\hline Route Number & Kennedy Center & \begin{tabular}{l}
Virginia \\
Ave. \& \\
21st \\
St. NW \\
(State \\
Dept.)
\end{tabular} &  & \begin{tabular}{l}
15th St. \\
(W) NW \\
between \\
I \& K \\
Sts. \\
(McPher- \\
son Sq ) \\
K
\end{tabular} & \[
\begin{gathered}
\text { 13th } \\
\& \\
\text { I } \\
\text { Sts } \\
\text { NW }
\end{gathered}
\] & H \& 7th Sts. NW (Gallery Pl-Chinatown) 0 & North Capitol \& H Sts. NE (Govt. Printing Office) & North Capitol St. \& Florida Ave. NE & Brookland -CUA K &  & \[
\begin{gathered}
\text { FORT } \\
\text { TOTTEN } \\
\text { N }
\end{gathered}
\] \\
\hline \multicolumn{12}{|c|}{AM Service - Servicio matutino} \\
\hline 80 & - & - & - & 5:21 & 5:23 & 5:26 & 5:31 & 5:35 & 5:42 & 5:46 & 5:51 \\
\hline 80 & - & - & - & 5:55 & 5:57 & 6:00 & 6:05 & 6:09 & 6:16 & 6:20 & 6:25 \\
\hline 80 & 6:15 & 6:22 & 6:27 & - & 6:32 & 6:35 & 6:40 & 6:44 & 6:51 & 6:55 & 7:00 \\
\hline 80 & 6:55 & 7:03 & 7:08 & - & 7:13 & 7:15 & 7:21 & 7:25 & 7:34 & 7:39 & 7:44 \\
\hline 80 & 7:30 & 7:38 & 7:43 & - & 7:48 & 7:50 & 7:56 & 8:00 & 8:09 & 8:14 & 8:19 \\
\hline 80 & 8:00 & 8:08 & 8:15 & - & 8:20 & 8:23 & 8:29 & 8:34 & 8:44 & 8:50 & 8:56 \\
\hline 80 & 8:30 & 8:38 & 8:45 & - & 8:50 & 8:53 & 8:59 & 9:04 & 9:14 & 9:20 & 9:26 \\
\hline 80 & 9:00 & 9:08 & 9:15 & - & 9:20 & 9:23 & 9:29 & 9:34 & 9:44 & 9:50 & 9:56 \\
\hline 80 & 9:30 & 9:38 & 9:45 & - & 9:50 & 9:53 & 9:59 & 10:04 & 10:14 & 10:20 & 10:26 \\
\hline 80 & 10:00 & 10:08 & 10:15 & - & 10:20 & 10:23 & 10:29 & 10:34 & 10:44 & 10:50 & 10:56 \\
\hline 80 & 10:30 & 10:38 & 10:45 & - & 10:50 & 10:53 & 10:59 & 11:04 & 11:14 & 11:20 & 11:26 \\
\hline 80 & 11:00 & 11:08 & 11:15 & - & 11:20 & 11:23 & 11:29 & 11:34 & 11:44 & 11:50 & 11:56 \\
\hline 80 & 11:30 & 11:38 & 11:45 & - & 11:50 & 11:53 & 11:59 & 12:04 & 12:14 & 12:20 & 12:26 \\
\hline \multicolumn{12}{|c|}{PM Service - Servicio vespertino} \\
\hline 80 & 12:00 & 12:08 & 12:15 & - & 12:20 & 12:23 & 12:29 & 12:34 & 12:44 & 12:50 & 12:56 \\
\hline 80 & 12:30 & 12:38 & 12:45 & - & 12:50 & 12:53 & 12:59 & 1:04 & 1:14 & 1:20 & 1:26 \\
\hline 80 & 1:00 & 1:08 & 1:15 & - & 1:20 & 1:23 & 1:29 & 1:34 & 1:44 & 1:50 & 1:56 \\
\hline 80 & 1:30 & 1:38 & 1:45 & - & 1:50 & 1:53 & 1:59 & 2:04 & 2:14 & 2:20 & 2:26 \\
\hline 80 & 2:00 & 2:08 & 2:15 & - & 2:20 & 2:23 & 2:29 & 2:34 & 2:44 & 2:50 & 2:56 \\
\hline 80 & 2:30 & 2:38 & 2:45 & - & 2:50 & 2:53 & 2:59 & 3:04 & 3:14 & 3:20 & 3:26 \\
\hline 80 & 3:00 & 3:08 & 3:15 & - & 3:20 & 3:23 & 3:29 & 3:34 & 3:44 & 3:50 & 3:56 \\
\hline 80 & 3:30 & 3:38 & 3:45 & - & 3:50 & 3:53 & 3:59 & 4:04 & 4:14 & 4:20 & 4:26 \\
\hline 80 & 4:00 & 4:08 & 4:15 & - & 4:20 & 4:23 & 4:29 & 4:34 & 4:44 & 4:50 & 4:56 \\
\hline 80 & 4:30 & 4:38 & 4:45 & - & 4:50 & 4:53 & 4:59 & 5:04 & 5:14 & 5:20 & 5:26 \\
\hline 80 & 5:00 & 5:08 & 5:15 & - & 5:20 & 5:23 & 5:29 & 5:34 & 5:44 & 5:50 & 5:56 \\
\hline 80 & 5:30 & 5:38 & 5:45 & - & 5:50 & 5:53 & 5:59 & 6:04 & 6:14 & 6:20 & 6:26 \\
\hline 80 & 6:00 & 6:08 & 6:15 & - & 6:20 & 6:23 & 6:29 & 6:34 & 6:44 & 6:50 & 6:56 \\
\hline 80 & 6:30 & 6:38 & 6:45 & - & 6:50 & 6:53 & 6:59 & 7:04 & 7:14 & 7:20 & 7:26 \\
\hline 80 & 7:00 & 7:08 & 7:15 & - & 7:20 & 7:23 & 7:29 & 7:34 & 7:44 & 7:50 & 7:56 \\
\hline 80 & 7:30 & 7:38 & 7:44 & - & 7:48 & 7:51 & 7:57 & 8:01 & 8:11 & 8:16 & 8:21 \\
\hline 80 & 8:00 & 8:08 & 8:14 & - & 8:18 & 8:21 & 8:27 & 8:31 & 8:41 & 8:46 & 8:51 \\
\hline 80 & 8:30 & 8:38 & 8:44 & - & 8:48 & 8:51 & 8:57 & 9:01 & 9:11 & 9:16 & 9:21 \\
\hline 80 & 9:05 & 9:13 & 9:19 & - & 9:23 & 9:26 & 9:32 & 9:36 & 9:46 & 9:51 & 9:56 \\
\hline 80 & 9:40 & 9:48 & 9:54 & - & 9:58 & 10:01 & 10:07 & 10:11 & 10:21 & 10:26 & 10:31 \\
\hline 80 & 10:15 & 10:23 & 10:29 & - & 10:33 & 10:36 & 10:42 & 10:46 & 10:56 & 11:01 & 11:06 \\
\hline 80 & 10:50 & 10:57 & 11:02 & - & 11:06 & 11:09 & 11:13 & 11:17 & 11:27 & 11:30 & 11:34 \\
\hline 80 & 11:25 & 11:32 & 11:37 & - & 11:41 & 11:44 & 11:48 & 11:52 & 12:02 & 12:05 & 12:09 \\
\hline \multicolumn{12}{|c|}{After Midnight Service - Servicio después de la medianoche} \\
\hline 80 & 12:00 & 12:07 & 12:12 & - & 12:16 & 12:18 & 12:21 & 12:25 & 12:32 & 12:36 & 12:40 \\
\hline
\end{tabular}

Page 10 of 10

\section*{How to use this timetable}
> Use the map to find the stops closest to where you will get on and off the bus.
> Select the schedule (Weekday, Saturday, Sunday) for when you will travel. Along the top of the schedule, find the stop at or nearest the point where you will get on the bus. Follow that column down to the time you want to leave.
> Use the same method to find the times the bus is scheduled to arrive at the stop where you will get off the bus.
> If the bus stop is not listed, use the time shown for the bus stop before it as the time to wait at the stop.
\(>\) The end-of-the-line or last stop is listed in ALL CAPS on the schedule.

\section*{Cómo Usar este Horario}
> Use este mapa para localizar las paradas más cercanas a donde se subirá y bajará del autobús.
> Seleccione el horario (Entre semana, sábado, domingo) de cuando viajará. A lo largo de la parte superior del horario, localice la parada o el punto más cercano a la parada en la que se subirá al autobús. Siga esa columna hacia abajo hasta la hora en la que desee salir.
> Utilice el mismo método para localizar las horas en que el autobús está programado para llegar a la parada en donde desea bajarse del autobús.
- Si la parada del autobús no está listada use la hora que se muestra en la parada anterior como la hora de espera en la parada.
> El final de la ruta o la última parada del autobús aparece en letras MAYÚSCULAS en el horario.

\& All Metrobuses are fully accessible and are equipped with lifts or ramps for wheelchair accessibility
Todos los autobuses de Metro son accesibles a personas con impedimentos y están equipados con rampas o elevadores para sillas de ruedas

\section*{Serves these locations-}

Brinda servicio a estas ubicaciones
Brookland-CUA station
Columbia Heights station
Adams Morgan
Dupont Circle station
Foggy Bottom-GWU station
Potomac Park/State Dept.

\author{
Schedule 12-30-07
}

\section*{Washington \\ Metropolitan Area Transit Authority}

\footnotetext{
A District of Columbia,
Maryland and Virginia
Transit Partnership
}

Page 1 of 3


\section*{Weekday Southbound Entre semana con dirección al sur}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Route Number & \begin{tabular}{l}
Brookland \\
-CUA \\
M
\end{tabular} & Michigan Ave. \& 1st St. NW & \begin{tabular}{l}
Columbia \\
Rd. \& \\
Georgia \\
Ave. NW
\end{tabular} & \begin{tabular}{l}
Columbia \\
Rd. \& \\
14th St. \\
NW \\
(Colum- \\
bia \\
Heights) \\
K
\end{tabular} & \begin{tabular}{l}
Columbia \\
Rd. \& \\
Biltmore \\
St. NW \\
(18th St.) \\
(Adams \\
Morgan)
\end{tabular} & \[
\begin{gathered}
\text { 20th } \\
\& \\
\text { Q Sts. } \\
\text { NW } \\
\text { (Dupont } \\
\text { Circle) } \\
M
\end{gathered}
\] & \begin{tabular}{l}
23rd \&
I Sts. NW \\
(Foggy \\
Bottom- \\
GWU) \\
M
\end{tabular} & 18th \& E Sts. NW (POTOMAC PARK) \\
\hline \multicolumn{9}{|c|}{AM Service - Servicio matutino} \\
\hline H1 & 6:20 & 6:26 & 6:29 & 6:33 & 6:38 & 6:43 & 6:52 & 7:01 \\
\hline H1 & 6:42 & 6:48 & 6:51 & 6:55 & 7:00 & 7:05 & 7:14 & 7:23 \\
\hline H1 & 7:02 & 7:08 & 7:11 & 7:15 & 7:20 & 7:25 & 7:34 & 7:43 \\
\hline H1 & 7:22 & 7:28 & 7:32 & 7:37 & 7:44 & 7:50 & 7:58 & 8:07 \\
\hline H1 & 7:38 & 7:44 & 7:48 & 7:53 & 8:00 & 8:06 & 8:14 & 8:23 \\
\hline H1 & 7:55 & 8:01 & 8:05 & 8:10 & 8:17 & 8:23 & 8:31 & 8:40 \\
\hline H1 & 8:13 & 8:19 & 8:23 & 8:28 & 8:35 & 8:41 & 8:49 & 8:58 \\
\hline H1 & 8:31 & 8:37 & 8:41 & 8:46 & 8:53 & 8:59 & 9:07 & 9:16 \\
\hline H1 & 8:57 & 9:03 & 9:07 & 9:12 & 9:19 & 9:25 & 9:33 & 9:42 \\
\hline
\end{tabular}

\section*{Weekday Northbound Entre semana con dirección al norte}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \begin{tabular}{l}
Route \\
Number
\end{tabular} & \[
\begin{gathered}
\text { C \& } \\
\text { 17th } \\
\text { Sts. } \\
\text { NW } \\
\text { (Potomac } \\
\text { Park) }
\end{gathered}
\] & \[
\begin{gathered}
23 \mathrm{rd} \\
\& 1 \\
\text { Sts. NW } \\
\text { (Foggy } \\
\text { Bottom- } \\
\text { GWU) } \\
M
\end{gathered}
\] & \begin{tabular}{l}
Massa- \\
chusetts \\
Ave. \& \\
20th St. \\
NW \\
(Dupont \\
Circle)
\end{tabular} & \begin{tabular}{l}
Columbia \\
Rd. \& \\
18th St. \\
NW \\
(Adams \\
Morgan)
\end{tabular} & Irving \& 14th Sts. NW (Columbia Heights) 4 & Irving St. \& Georgia Ave. NW & Michigan Ave. \& 1st St. NW & \[
\begin{aligned}
& \text { BROOK- } \\
& \text { LAND } \\
& \text {-CUA } \\
& \text { N }
\end{aligned}
\] \\
\hline \multicolumn{9}{|c|}{PM Service - Servicio vespertino} \\
\hline H1 & 4:20 & 4:29 & 4:37 & 4:44 & 4:54 & 5:00 & 5:04 & 5:09 \\
\hline H1 & 4:40 & 4:53 & 5:01 & 5:09 & 5:18 & 5:23 & 5:27 & 5:34 \\
\hline H1 & 5:00 & 5:13 & 5:21 & 5:29 & 5:38 & 5:43 & 5:47 & 5:54 \\
\hline H1 & 5:20 & 5:30 & 5:38 & 5:46 & 5:55 & 6:00 & 6:04 & 6:10 \\
\hline H1 & 5:45 & 5:55 & 6:03 & 6:11 & 6:20 & 6:25 & 6:29 & 6:35 \\
\hline H1 & 6:10 & 6:20 & 6:28 & 6:36 & 6:45 & 6:50 & 6:54 & 7:00 \\
\hline
\end{tabular}

Page 3 of 3

\section*{How to use this timetable}
> Use the map to find the stops closest to where you will get on and off the bus.
> Select the schedule (Weekday, Saturday, Sunday) for when you will travel. Along the top of the schedule, find the stop at or nearest the point where you will get on the bus. Follow that column down to the time you want to leave.
> Use the same method to find the times the bus is scheduled to arrive at the stop where you will get off the bus.
> If the bus stop is not listed, use the time shown for the bus stop before it as the time to wait at the stop.
\(>\) The end-of-the-line or last stop is listed in ALL CAPS on the schedule.

\section*{Cómo Usar este Horario}
> Use este mapa para localizar las paradas más cercanas a donde se subirá y bajará del autobús.
> Seleccione el horario (Entre semana, sábado, domingo) de cuando viajará. A lo largo de la parte superior del horario, localice la parada o el punto más cercano a la parada en la que se subirá al autobús. Siga esa columna hacia abajo hasta la hora en la que desee salir.
> Utilice el mismo método para localizar las horas en que el autobús está programado para llegar a la parada en donde desea bajarse del autobús.
> Si la parada del autobús no está listada use la hora que se muestra en la parada anterior como la hora de espera en la parada.
> El final de la ruta o la última parada del autobús aparece en letras MAYÚSCULAS en el horario.


\section*{Washington \\ Metropolitan Area Transit Authority}


\section*{Connecticut Avenue Line}

\section*{Weekday Southbound - Entre semana con dirección al sur}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route Number & \begin{tabular}{l}
Chevy \\
Chase \\
Circle \\
NW
\end{tabular} & Connecticut \& Nebraska Aves. NW & Connecticut Ave. \& Veazey Terr. NW (Van NessUDC) & Connecticut Ave. \& Veazey Terr. NW (Northbound stop) (VAN NESSUDC) & \begin{tabular}{l}
Connecticut \\
Ave. \& \\
Porter St. NW (Cleveland Park)
\end{tabular} & Connecticut Ave. \& Calvert St. NW (Woodley Park-Zoo/ Adams Morgan) & \begin{tabular}{l}
New \\
Hampshire Ave. \& Dupont Circle NW (north side) 4
\end{tabular} & Connecticut Ave. \& 20th St. NW (DUPONT CIRCLE) 4 &  & \[
\begin{gathered}
\text { 23rd } \\
\& 1 \\
\text { Sts. NW } \\
\text { (Foggy } \\
\text { Bottom- } \\
\text { GWU) } \\
M
\end{gathered}
\] & 18th Sts. NW (POTOMAC PARK) & \begin{tabular}{l}
K \&
17th Sts. \\
NW \\
(Farra- \\
gut \\
North \& \\
Farragut \\
West) \\
M
\end{tabular} & \begin{tabular}{l}
15th St. \\
(W) \& \\
K St. NW \\
(MC- \\
PHER- \\
SON \\
SQ) \\
M
\end{tabular} \\
\hline \multicolumn{14}{|c|}{AM Service - Servicio matutino} \\
\hline L2 & 5:05 & 5:09 & 5:12 & - & 5:15 & 5:19 & 5:25 & - & - & - & - & 5:30 & 5:34 \\
\hline L2 & 5:35 & 5:39 & 5:42 & - & 5:45 & 5:49 & 5:55 & - & - & - & - & 6:00 & 6:04 \\
\hline L2 & 5:55 & 5:59 & 6:02 & - & 6:05 & 6:09 & 6:15 & - & - & - & - & 6:20 & 6:24 \\
\hline L2 & 6:12 & 6:16 & 6:20 & - & 6:23 & 6:28 & 6:35 & - & - & - & - & 6:41 & 6:45 \\
\hline L2 & 6:30 & 6:34 & 6:38 & - & 6:41 & 6:46 & 6:53 & - & - & - & - & 6:59 & 7:03 \\
\hline L2 & 6:48 & 6:52 & 6:56 & - & 6:59 & 7:04 & 7:11 & - & - & - & - & 7:17 & 7:21 \\
\hline L1 & 6:58 & 7:03 & 7:09 & - & 7:12 & 7:18 & - & - & 7:23 & 7:29 & 7:38 & - & - \\
\hline L2 & 7:07 & 7:12 & 7:18 & - & 7:21 & 7:27 & 7:36 & - & - & - & - & 7:44 & 7:49 \\
\hline L1 & 7:15 & 7:20 & 7:26 & - & 7:29 & 7:35 & - & - & 7:40 & 7:46 & 7:55 & - & - \\
\hline L2 & 7:22 & 7:27 & 7:33 & - & 7:36 & 7:42 & 7:51 & - & - & - & - & 7:59 & 8:04 \\
\hline L1 & 7:30 & 7:35 & 7:41 & - & 7:44 & 7:50 & - & - & 7:55 & 8:01 & 8:10 & - & - \\
\hline L2 & 7:37 & 7:42 & 7:48 & - & 7:51 & 7:57 & 8:06 & - & - & - & - & 8:14 & 8:19 \\
\hline L1 & 7:45 & 7:51 & 7:57 & - & 8:02 & 8:09 & - & - & 8:14 & 8:22 & 8:30 & - & - \\
\hline L2 & 7:52 & 7:58 & 8:04 & - & 8:09 & 8:16 & 8:25 & - & - & - & - & 8:34 & 8:38 \\
\hline L1 & 7:59 & 8:05 & 8:11 & - & 8:16 & 8:23 & - & - & 8:28 & 8:36 & 8:44 & - & - \\
\hline L2 & 8:05 & 8:11 & 8:17 & - & 8:22 & 8:29 & 8:38 & - & - & - & - & 8:47 & 8:51 \\
\hline L1 & 8:11 & 8:17 & 8:23 & - & 8:28 & 8:35 & - & - & 8:40 & 8:48 & 8:56 & - & - \\
\hline L2 & 8:17 & 8:23 & 8:29 & - & 8:34 & 8:41 & 8:50 & - & - & - & - & 8:59 & 9:03 \\
\hline L1 & 8:23 & 8:29 & 8:35 & - & 8:40 & 8:47 & - & - & 8:52 & 9:00 & 9:08 & - & - \\
\hline L2 & 8:30 & 8:36 & 8:42 & - & 8:47 & 8:54 & 9:03 & - & - & - & - & 9:12 & 9:16 \\
\hline L1 & 8:37 & 8:43 & 8:49 & - & 8:54 & 9:01 & - & - & 9:06 & 9:14 & 9:22 & - & - \\
\hline L2 & 8:47 & 8:54 & 8:59 & - & 9:03 & 9:10 & 9:18 & - & - & - & - & 9:28 & 9:33 \\
\hline L2 & 9:00 & 9:07 & 9:12 & - & 9:16 & 9:23 & 9:31 & - & - & - & - & 9:41 & 9:46 \\
\hline L4 & 9:15 & 9:22 & 9:27 & - & 9:31 & 9:38 & - & 9:43 & - & - & - & - & - \\
\hline L2 & 9:30 & 9:37 & 9:42 & - & 9:46 & 9:53 & 10:01 & - & - & - & - & 10:11 & 10:16 \\
\hline L4 & 9:45 & 9:52 & 9:57 & - & 10:01 & 10:08 & - & 10:13 & - & - & - & - & - \\
\hline L2 & 10:00 & 10:07 & 10:12 & - & 10:16 & 10:23 & 10:31 & - & - & - & - & 10:41 & 10:46 \\
\hline L4 & 10:15 & 10:22 & 10:27 & - & 10:31 & 10:38 & - & 10:43 & - & - & - & - & - \\
\hline L2 & 10:30 & 10:37 & 10:42 & - & 10:46 & 10:53 & 11:01 & - & - & - & - & 11:11 & 11:16 \\
\hline L4 & 10:45 & 10:52 & 10:57 & - & 11:01 & 11:08 & - & 11:13 & - & - & - & - & - \\
\hline L2 & 11:00 & 11:07 & 11:12 & - & 11:16 & 11:23 & 11:31 & - & - & - & - & 11:41 & 11:46 \\
\hline L4 & 11:15 & 11:22 & 11:27 & - & 11:31 & 11:38 & - & 11:43 & - & - & - & - & - \\
\hline L2 & 11:30 & 11:37 & 11:42 & - & 11:46 & 11:53 & 12:01 & - & - & - & - & 12:11 & 12:16 \\
\hline L4 & 11:45 & 11:52 & 11:57 & - & 12:01 & 12:08 & - & 12:13 & - & - & - & - & - \\
\hline \multicolumn{14}{|c|}{PM Service - Servicio vespertino} \\
\hline L2 & 12:00 & 12:07 & 12:12 & - & 12:16 & 12:23 & 12:31 & - & - & - & - & 12:41 & 12:46 \\
\hline L4 & 12:15 & 12:22 & 12:27 & - & 12:31 & 12:38 & - & 12:43 & - & - & - & - & - \\
\hline L2 & 12:30 & 12:37 & 12:42 & - & 12:46 & 12:53 & 1:01 & - & - & - & - & 1:11 & 1:16 \\
\hline L4 & 12:45 & 12:52 & 12:57 & - & 1:01 & 1:08 & - & 1:13 & - & - & - & - & - \\
\hline L2 & 1:00 & 1:07 & 1:12 & - & 1:16 & 1:23 & 1:31 & - & - & - & - & 1:41 & 1:46 \\
\hline L4 & 1:15 & 1:22 & 1:27 & - & 1:31 & 1:38 & - & 1:43 & - & - & - & - & - \\
\hline L2 & 1:30 & 1:37 & 1:42 & - & 1:46 & 1:53 & 2:01 & - & - & - & - & 2:11 & 2:16 \\
\hline L4 & 1:45 & 1:52 & 1:57 & - & 2:01 & 2:08 & - & 2:13 & - & - & - & - & - \\
\hline L2 & 2:00 & 2:07 & 2:12 & - & 2:16 & 2:23 & 2:31 & - & - & - & - & 2:41 & 2:46 \\
\hline L4 & 2:15 & 2:22 & 2:27 & - & 2:31 & 2:38 & - & 2:43 & - & - & - & - & - \\
\hline L2 & 2:30 & 2:37 & 2:42 & - & 2:46 & 2:53 & 3:01 & - & - & - & - & 3:11 & 3:16 \\
\hline L4 & 2:45 & 2:52 & 2:57 & - & 3:01 & 3:08 & - & 3:13 & - & - & - & - & - \\
\hline L2 & 3:00 & 3:05 & 3:10 & - & 3:13 & 3:21 & 3:29 & - & - & - & - & 3:38 & 3:44 \\
\hline L4 & 3:15 & 3:20 & 3:25 & - & 3:28 & 3:36 & - & 3:42 & - & - & - & - & - \\
\hline L2 & 3:30 & 3:35 & 3:40 & - & 3:43 & 3:51 & 3:59 & - & - & - & - & 4:08 & 4:14 \\
\hline L2 & 3:42 & 3:47 & 3:52 & - & 3:55 & 4:03 & 4:11 & - & - & - & - & 4:20 & 4:26 \\
\hline
\end{tabular}

Page 3 of 10

\section*{Connecticut Avenue Line}

\section*{Weekday Southbound - Entre semana con dirección al sur}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route Number & Chevy Chase Circle NW & Connecticut \& Nebraska Aves. NW & Connecticut Ave. \& Veazey Terr. NW (Van NessUDC) & Connecticut Ave. \& Veazey Terr. NW (Northbound stop) (VAN NESSUDC) & \begin{tabular}{l}
Connecticut \\
Ave. \& \\
Porter St. NW (Cleveland Park)
\end{tabular} & Connecticut Ave. \& Calvert St. NW (Woodley Park-Zoo/ Adams Morgan) 4 & \begin{tabular}{l}
New \\
Hampshire Ave. \& Dupont Circle NW (north side) 9
\end{tabular} & Connecticut Ave. \& 20th St. NW (DUPONT CIRCLE) 4 & \begin{tabular}{l}
\[
\begin{aligned}
& \text { 20th } \\
& \text { \& } \\
& \text { Q Sts. } \\
& \text { NW }
\end{aligned}
\] \\
(Dupont Circle)
\end{tabular} & \[
\begin{gathered}
\text { 23rd } \\
\& 1 \\
\text { Sts. NW } \\
\text { (Foggy } \\
\text { Bottom- } \\
\text { GWU) } \\
M
\end{gathered}
\] & 18th Sts. NW (POTOMAC PARK) & \begin{tabular}{l}
K \&
17th Sts. \\
NW \\
(Farra- \\
gut \\
North \& \\
Farragut \\
West) \\
K
\end{tabular} & \begin{tabular}{l}
15th St. \\
(W) \& \\
K St. NW \\
(MC-PHERSON SQ) 0
\end{tabular} \\
\hline \multicolumn{14}{|c|}{PM Service - Servicio vespertino} \\
\hline L4 & 3:52 & 3:57 & 4:02 & - & 4:05 & 4:13 & - & 4:19 & - & - & - & - & - \\
\hline L2 & 4:02 & 4:07 & 4:12 & - & 4:15 & 4:23 & 4:31 & - & - & - & - & 4:40 & 4:46 \\
\hline L4 & 4:12 & 4:17 & 4:22 & - & 4:25 & 4:33 & - & 4:39 & - & - & - & - & - \\
\hline L2 & 4:22 & 4:27 & 4:32 & - & 4:35 & 4:43 & 4:51 & - & - & - & - & 5:00 & 5:06 \\
\hline L4 & 4:32 & 4:38 & 4:43 & - & 4:47 & 4:54 & - & 4:59 & - & - & - & - & - \\
\hline L2 & 4:42 & 4:48 & 4:53 & - & 4:57 & 5:04 & 5:12 & - & - & - & - & 5:24 & 5:29 \\
\hline L2/ & 4:48 & 4:54 & 4:59 & 5:06 & - & - & - & - & - & - & - & - & - \\
\hline L4 & 4:52 & 4:58 & 5:03 & - & 5:07 & 5:14 & - & 5:19 & - & - & - & - & - \\
\hline L2/ & 5:00 & 5:06 & 5:11 & 5:18 & - & - & - & - & - & - & - & - & - \\
\hline L2 & 5:03 & 5:09 & 5:14 & - & 5:18 & 5:25 & 5:33 & - & - & - & - & 5:45 & 5:50 \\
\hline L2/ & 5:13 & 5:19 & 5:24 & 5:31 & - & - & - & - & - & - & - & - & - \\
\hline L4 & 5:15 & 5:21 & 5:26 & - & 5:30 & 5:37 & - & 5:42 & - & - & - & - & - \\
\hline L2/ & 5:23 & 5:29 & 5:34 & 5:41 & - & - & - & - & - & - & - & - & - \\
\hline L2 & 5:30 & 5:36 & 5:41 & - & 5:45 & 5:52 & 6:00 & - & - & - & - & 6:12 & 6:17 \\
\hline L2/ & 5:33 & 5:39 & 5:44 & 5:51 & - & - & - & - & - & - & - & - & - \\
\hline L4 & 5:44 & 5:50 & 5:55 & - & 5:59 & 6:06 & - & 6:10 & - & - & - & - & - \\
\hline L2/ & 5:47 & 5:53 & 5:58 & 6:05 & - & - & - & - & - & - & - & - & - \\
\hline L2/ & 5:55 & 6:01 & 6:06 & 6:13 & - & - & - & - & - & - & - & - & - \\
\hline L2 & 5:58 & 6:04 & 6:09 & - & 6:13 & 6:20 & 6:28 & - & - & - & - & 6:36 & 6:40 \\
\hline L2/ & 6:09 & 6:15 & 6:20 & 6:27 & - & - & - & - & - & - & - & - & - \\
\hline L4 & 6:14 & 6:20 & 6:25 & - & 6:29 & 6:36 & - & 6:40 & - & - & - & - & - \\
\hline L2/ & 6:21 & 6:27 & 6:32 & 6:39 & - & - & - & - & - & - & - & - & - \\
\hline L2 & 6:28 & 6:34 & 6:39 & - & 6:43 & 6:50 & 6:58 & - & - & - & - & 7:06 & 7:10 \\
\hline L2/ & 6:31 & 6:37 & 6:42 & 6:49 & - & - & - & - & - & - & - & - & - \\
\hline L4 & 6:44 & 6:50 & 6:55 & - & 6:59 & 7:06 & - & 7:10 & - & - & - & - & - \\
\hline L2/ & 6:47 & 6:52 & 6:57 & 7:04 & - & - & - & - & - & - & - & - & - \\
\hline L2/ & 6:56 & 7:01 & 7:06 & 7:13 & - & - & - & - & - & - & - & - & - \\
\hline L2 & 7:00 & 7:05 & 7:10 & - & 7:13 & 7:19 & 7:27 & - & - & - & - & 7:34 & 7:38 \\
\hline L2/ & 7:07 & 7:12 & 7:17 & 7:24 & - & - & - & - & - & - & - & - & - \\
\hline L4 & 7:15 & 7:20 & 7:25 & - & 7:28 & 7:34 & - & 7:37 & - & - & - & - & - \\
\hline L2 & 7:30 & 7:35 & 7:40 & - & 7:43 & 7:49 & 7:57 & - & - & - & - & 8:04 & 8:08 \\
\hline L4 & 7:45 & 7:50 & 7:55 & - & 7:58 & 8:04 & - & 8:07 & - & - & - & - & - \\
\hline L2 & 8:00 & 8:05 & 8:10 & - & 8:13 & 8:19 & 8:27 & - & - & - & - & 8:34 & 8:38 \\
\hline L4 & 8:15 & 8:20 & 8:25 & - & 8:28 & 8:34 & - & 8:37 & - & - & - & - & - \\
\hline L2 & 8:30 & 8:34 & 8:38 & - & 8:41 & 8:46 & 8:56 & - & - & - & - & 9:02 & 9:05 \\
\hline L2 & 9:00 & 9:04 & 9:08 & - & 9:11 & 9:16 & 9:26 & - & - & - & - & 9:32 & 9:35 \\
\hline L2 & 9:30 & 9:34 & 9:38 & - & 9:41 & 9:46 & 9:56 & - & - & - & - & 10:02 & 10:05 \\
\hline L2 & 10:00 & 10:04 & 10:08 & - & 10:11 & 10:16 & 10:26 & - & - & - & - & 10:32 & 10:35 \\
\hline L2 & 10:30 & 10:34 & 10:38 & - & 10:41 & 10:46 & 10:56 & - & - & - & - & 11:02 & 11:05 \\
\hline L2 & 11:00 & 11:04 & 11:08 & - & 11:11 & 11:16 & 11:26 & - & - & - & - & 11:32 & 11:35 \\
\hline L2 & 11:25 & 11:29 & 11:33 & - & 11:36 & 11:41 & 11:51 & - & - & - & - & 11:57 & 12:00 \\
\hline \multicolumn{14}{|c|}{After Midnight Service - Servicio después de la medianoche} \\
\hline L2 & 12:00 & 12:03 & 12:05 & - & 12:08 & 12:12 & 12:18 & - & - & - & - & 12:25 & 12:27 \\
\hline
\end{tabular}

\section*{Connecticut Avenue Line}

Weekday Northbound - Entre semana con dirección al norte
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route Number & \begin{tabular}{l}
15th St.(W) \\
\& K St. \\
NW \\
(Mc- \\
Pherson \\
Sq) \\
19
\end{tabular} & \begin{tabular}{l}
K St. \& \\
Connecticut \\
Ave. NW \\
(Farragut North \& Farragut West)
\end{tabular} & \[
\begin{gathered}
\text { C } \\
\& \\
\text { 17th } \\
\text { Sts. } \\
\text { NW } \\
\text { (Potomac } \\
\text { Park) }
\end{gathered}
\] & \begin{tabular}{l}
23rd \\
\& 1 \\
Sts. \\
NW \\
(Foggy \\
Bottom- \\
GWU) \\
Not
\end{tabular} & Connecticut Ave. 20th St. NW (Dupont Circle) & \begin{tabular}{l}
New \\
Hampshire Ave. \& Dupont Circle NW (south side)
\end{tabular} & Massachusetts Ave. \& 20th St. NW (Dupont Circle) & Connecticut Ave. \& Calvert St. NW (Woodley Park-Zoo/ Adams Morgan) M & Connecticut Ave. \& Porter St. NW (Cleveland Park) Mato & Connecticut Ave \& Veazey Terr. NW (Van NessUDC) & \begin{tabular}{l}
Connecticut \& \\
Nebraska Aves. NW
\end{tabular} & \[
\begin{aligned}
& \text { CHEVY } \\
& \text { CHASE } \\
& \text { CIRCLE }
\end{aligned}
\] \\
\hline \multicolumn{13}{|c|}{AM Service - Servicio matutino} \\
\hline L2 & 5:40 & 5:42 & - & - & - & 5:46 & - & 5:52 & 5:55 & 5:57 & 6:01 & 6:05 \\
\hline L2 & 6:10 & 6:12 & - & - & - & 6:17 & - & 6:25 & 6:29 & 6:32 & 6:36 & 6:41 \\
\hline L2 & 6:32 & 6:34 & - & - & - & 6:40 & - & 6:49 & 6:54 & 6:57 & 7:01 & 7:06 \\
\hline L2 & 6:52 & 6:54 & - & - & - & 7:00 & - & 7:09 & 7:14 & 7:17 & 7:21 & 7:26 \\
\hline L2 & 7:11 & 7:13 & - & - & - & 7:19 & - & 7:28 & 7:33 & 7:36 & 7:40 & 7:45 \\
\hline L2 & 7:27 & 7:30 & - & - & - & 7:35 & - & 7:46 & 7:53 & 7:57 & 8:03 & 8:08 \\
\hline L2 & 7:42 & 7:45 & - & - & - & 7:50 & - & 8:01 & 8:08 & 8:12 & 8:18 & 8:23 \\
\hline L2 & 7:57 & 8:00 & - & - & - & 8:05 & - & 8:16 & 8:23 & 8:27 & 8:33 & 8:38 \\
\hline L2 & 8:12 & 8:15 & - & - & - & 8:20 & - & 8:31 & 8:38 & 8:42 & 8:48 & 8:53 \\
\hline L2 & 8:27 & 8:30 & - & - & - & 8:35 & - & 8:46 & 8:53 & 8:57 & 9:03 & 9:08 \\
\hline L4 & - & - & - & - & 8:51 & - & 8:53 & 9:00 & 9:07 & 9:11 & 9:17 & 9:22 \\
\hline L2 & 8:52 & 8:56 & - & - & - & 9:03 & - & 9:14 & 9:20 & 9:24 & 9:29 & 9:35 \\
\hline L4 & - & - & - & - & 9:21 & - & 9:23 & 9:29 & 9:35 & 9:39 & 9:44 & 9:50 \\
\hline L2 & 9:22 & 9:26 & - & - & - & 9:33 & - & 9:44 & 9:50 & 9:54 & 9:59 & 10:05 \\
\hline L4 & - & - & - & - & 9:51 & - & 9:53 & 9:59 & 10:05 & 10:09 & 10:14 & 10:20 \\
\hline L2 & 9:52 & 9:56 & - & - & - & 10:03 & - & 10:14 & 10:20 & 10:24 & 10:29 & 10:35 \\
\hline L4 & - & - & - & - & 10:21 & - & 10:23 & 10:29 & 10:35 & 10:39 & 10:44 & 10:50 \\
\hline L2 & 10:22 & 10:26 & - & - & - & 10:33 & - & 10:44 & 10:50 & 10:54 & 10:59 & 11:05 \\
\hline L4 & - & - & - & - & 10:51 & - & 10:53 & 10:59 & 11:05 & 11:09 & 11:14 & 11:20 \\
\hline L2 & 10:52 & 10:56 & - & - & - & 11:03 & - & 11:14 & 11:20 & 11:24 & 11:29 & 11:35 \\
\hline L4 & - & - & - & - & 11:21 & - & 11:23 & 11:29 & 11:35 & 11:39 & 11:44 & 11:50 \\
\hline L2 & 11:22 & 11:26 & - & - & - & 11:33 & - & 11:44 & 11:50 & 11:54 & 11:59 & 12:05 \\
\hline L4 & - & - & - & - & 11:51 & - & 11:53 & 11:59 & 12:05 & 12:09 & 12:14 & 12:20 \\
\hline L2 & 11:52 & 11:56 & - & - & - & 12:03 & - & 12:14 & 12:20 & 12:24 & 12:29 & 12:35 \\
\hline \multicolumn{13}{|c|}{PM Service - Servicio vespertino} \\
\hline L4 & - & - & - & - & 12:21 & - & 12:23 & 12:29 & 12:35 & 12:39 & 12:44 & 12:50 \\
\hline L2 & 12:22 & 12:26 & - & - & - & 12:33 & - & 12:44 & 12:50 & 12:54 & 12:59 & 1:05 \\
\hline L4 & - & - & - & - & 12:51 & - & 12:53 & 12:59 & 1:05 & 1:09 & 1:14 & 1:20 \\
\hline L2 & 12:52 & 12:56 & - & - & - & 1:03 & - & 1:14 & 1:20 & 1:24 & 1:29 & 1:35 \\
\hline L4 & - & - & - & - & 1:21 & - & 1:23 & 1:29 & 1:35 & 1:39 & 1:44 & 1:50 \\
\hline L2 & 1:22 & 1:26 & - & - & - & 1:33 & - & 1:44 & 1:50 & 1:54 & 1:59 & 2:05 \\
\hline L4 & - & - & - & - & 1:51 & - & 1:53 & 1:59 & 2:05 & 2:09 & 2:14 & 2:20 \\
\hline L2 & 1:52 & 1:56 & - & - & - & 2:03 & - & 2:14 & 2:20 & 2:24 & 2:29 & 2:35 \\
\hline L4 & - & - & - & - & 2:21 & - & 2:23 & 2:29 & 2:35 & 2:39 & 2:44 & 2:50 \\
\hline L2 & 2:22 & 2:25 & - & - & - & 2:33 & - & 2:45 & 2:52 & 2:57 & 3:03 & 3:09 \\
\hline L4 & - & - & - & - & 2:51 & - & 2:53 & 2:59 & 3:06 & 3:11 & 3:17 & 3:23 \\
\hline L2 & 2:52 & 2:55 & - & - & - & 3:03 & - & 3:15 & 3:22 & 3:27 & 3:33 & 3:39 \\
\hline L4 & - & - & - & - & 3:21 & - & 3:23 & 3:29 & 3:36 & 3:41 & 3:47 & 3:53 \\
\hline L2 & 3:22 & 3:25 & - & - & - & 3:33 & - & 3:45 & 3:52 & 3:57 & 4:03 & 4:09 \\
\hline L4 & - & - & - & - & 3:50 & - & 3:52 & 3:58 & 4:05 & 4:10 & 4:16 & 4:22 \\
\hline L2 & 3:52 & 3:56 & - & - & - & 4:03 & - & 4:14 & 4:20 & 4:24 & 4:29 & 4:35 \\
\hline L2 & - & - & - & - & - & - & - & - & - & 4:33 & 4:38 & 4:44 \\
\hline L1 & - & - & 4:09 & 4:17 & - & - & 4:23 & 4:29 & 4:34 & 4:39 & 4:45 & 4:52 \\
\hline L2 & - & - & - & - & - & - & - & - & - & 4:45 & 4:51 & 4:58 \\
\hline L2 & 4:20 & 4:23 & - & - & - & 4:30 & - & 4:42 & 4:47 & 4:52 & 4:58 & 5:05 \\
\hline
\end{tabular}

\section*{Connecticut Avenue Line}

\section*{Weekday Northbound - Entre semana con dirección al norte}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route Number & \begin{tabular}{l}
15th St.(W) \\
\& K St. \\
NW \\
(Mc- \\
Pherson \\
Sq) \\
19
\end{tabular} & \begin{tabular}{l}
K St. \& \\
Connecticut \\
Ave. NW \\
(Farragut \\
North \& \\
Farragut West)
\end{tabular} & C
\&
17th
Sts.
NW
(Potomac
Park) & \begin{tabular}{l}
23rd \\
\& I \\
Sts. \\
NW \\
(Foggy \\
Bottom- \\
GWU) \\
M
\end{tabular} & Connecticut Ave. \& 20th St. NW (Dupont Circle)
\(\square\) & \begin{tabular}{l}
New \\
Hampshire Ave. \& Dupont Circle NW (south side) M
\end{tabular} & Massachusetts Ave. \& 20th St. NW (Dupont Circle) & Connecticut Ave. \& Calvert St. NW (Woodley Park-Zoo/ Adams Morgan) & Connecticut Ave. \& Porter St. NW (Cleveland Park) & Connecticut Ave \& Veazey Terr. NW (Van NessUDC) & \begin{tabular}{l}
Connecticut \& \\
Nebraska Aves. NW
\end{tabular} & CHEVY CHASE CIRCLE \\
\hline \multicolumn{13}{|c|}{PM Service - Servicio vespertino} \\
\hline L2 & - & - & - & - & - & - & - & - & - & 4:58 & 5:04 & 5:11 \\
\hline L1 & - & - & 4:32 & 4:40 & - & - & 4:46 & 4:52 & 4:57 & 5:02 & 5:08 & 5:15 \\
\hline L2 & - & - & - & - & - & - & - & - & - & 5:07 & 5:13 & 5:20 \\
\hline L2 & 4:40 & 4:43 & - & - & - & 4:50 & - & 5:02 & 5:07 & 5:12 & 5:18 & 5:25 \\
\hline L2 & - & - & - & - & - & - & - & - & - & 5:19 & 5:24 & 5:30 \\
\hline L1 & - & - & 4:52 & 4:59 & - & - & 5:07 & 5:15 & 5:21 & 5:24 & 5:29 & 5:35 \\
\hline L2 & - & - & - & - & - & - & - & - & - & 5:32 & 5:37 & 5:43 \\
\hline L2 & 5:00 & 5:03 & - & - & - & 5:12 & - & 5:25 & 5:31 & 5:34 & 5:39 & 5:45 \\
\hline L2 & - & - & - & - & - & - & - & - & - & 5:42 & 5:47 & 5:53 \\
\hline L1 & - & - & 5:12 & 5:19 & - & - & 5:27 & 5:35 & 5:41 & 5:44 & 5:49 & 5:55 \\
\hline L2 & - & - & - & - & - & - & - & - & - & 5:52 & 5:57 & 6:03 \\
\hline L2 & 5:20 & 5:23 & - & - & - & 5:32 & - & 5:45 & 5:51 & 5:54 & 5:59 & 6:05 \\
\hline L1 & - & - & 5:32 & 5:39 & - & - & 5:47 & 5:55 & 6:01 & 6:04 & 6:09 & 6:15 \\
\hline L2 & - & - & - & - & - & - & - & - & - & 6:06 & 6:11 & 6:17 \\
\hline L2 & - & - & - & - & - & - & - & - & - & 6:16 & 6:22 & 6:27 \\
\hline L2 & 5:40 & 5:44 & - & - & - & 5:56 & - & 6:14 & 6:20 & 6:24 & 6:30 & 6:35 \\
\hline L2 & - & - & - & - & - & - & - & - & - & 6:28 & 6:34 & 6:39 \\
\hline L1 & - & - & 5:57 & 6:05 & - & - & 6:13 & 6:21 & 6:27 & 6:31 & 6:37 & 6:42 \\
\hline L2 & - & - & - & - & - & - & - & - & - & 6:40 & 6:46 & 6:51 \\
\hline L2 & 6:00 & 6:04 & - & - & - & 6:16 & - & 6:34 & 6:40 & 6:44 & 6:50 & 6:55 \\
\hline L2 & - & - & - & - & - & - & - & - & - & 6:50 & 6:56 & 7:02 \\
\hline L2 & 6:27 & 6:29 & - & - & - & 6:37 & - & 6:47 & 6:54 & 6:57 & 7:03 & 7:09 \\
\hline L1 & - & - & 6:28 & 6:36 & - & - & 6:44 & 6:52 & 6:59 & 7:02 & 7:08 & 7:13 \\
\hline L2 & - & - & - & - & - & - & - & - & - & 7:05 & 7:11 & 7:17 \\
\hline L4 & - & - & - & - & 6:48 & - & 6:51 & 6:58 & 7:05 & 7:08 & 7:14 & 7:20 \\
\hline L2 & - & - & - & - & - & - & - & - & - & 7:14 & 7:20 & 7:26 \\
\hline L2 & 6:47 & 6:49 & - & - & - & 6:57 & - & 7:07 & 7:14 & 7:17 & 7:23 & 7:29 \\
\hline L2 & - & - & - & - & - & - & - & - & - & 7:25 & 7:31 & 7:37 \\
\hline L4 & - & - & - & - & 7:14 & - & 7:17 & 7:24 & 7:31 & 7:34 & 7:40 & 7:46 \\
\hline L2 & 7:17 & 7:19 & - & - & - & 7:27 & - & 7:37 & 7:44 & 7:47 & 7:53 & 7:59 \\
\hline L4 & - & - & - & - & 7:45 & - & 7:47 & 7:53 & 7:58 & 8:00 & 8:05 & 8:10 \\
\hline L2 & 7:47 & 7:49 & - & - & - & 7:56 & - & 8:06 & 8:11 & 8:13 & 8:18 & 8:23 \\
\hline L4 & - & - & - & - & 8:13 & - & 8:15 & 8:21 & 8:26 & 8:28 & 8:33 & 8:38 \\
\hline L2 & 8:17 & 8:19 & - & - & - & 8:26 & - & 8:36 & 8:41 & 8:43 & 8:48 & 8:53 \\
\hline L4 & - & - & - & - & 8:43 & - & 8:45 & 8:51 & 8:56 & 8:58 & 9:03 & 9:08 \\
\hline L2 & 8:49 & 8:51 & - & - & - & 8:58 & - & 9:08 & 9:13 & 9:15 & 9:20 & 9:25 \\
\hline L2 & 9:15 & 9:17 & - & - & - & 9:24 & - & 9:34 & 9:39 & 9:41 & 9:46 & 9:51 \\
\hline L2 & 9:42 & 9:44 & - & - & - & 9:51 & - & 10:01 & 10:06 & 10:08 & 10:13 & 10:18 \\
\hline L2 & 10:12 & 10:14 & - & - & - & 10:21 & - & 10:31 & 10:36 & 10:38 & 10:43 & 10:48 \\
\hline L2 & 10:42 & 10:44 & - & - & - & 10:51 & - & 11:01 & 11:06 & 11:08 & 11:13 & 11:18 \\
\hline L2 & 11:12 & 11:15 & - & - & - & 11:19 & - & 11:27 & 11:32 & 11:35 & 11:39 & 11:43 \\
\hline L2 & 11:42 & 11:45 & - & - & - & 11:49 & - & 11:57 & 12:02 & 12:05 & 12:09 & 12:13 \\
\hline \multicolumn{13}{|c|}{After Midnight Service - Servicio después de la medianoche} \\
\hline L2 & 12:05 & 12:08 & - & - & - & 12:12 & - & 12:20 & 12:25 & 12:28 & 12:32 & 12:36 \\
\hline L2 & 12:35 & 12:37 & - & - & - & 12:40 & - & 12:48 & 12:51 & 12:53 & 12:56 & 12:58 \\
\hline
\end{tabular}

L1,2,4
Connecticut Avenue Line
Saturday Southbound - En sábados con dirección al sur
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Route Number & \begin{tabular}{l}
Chevy \\
Chase \\
Circle \\
NW
\end{tabular} & \begin{tabular}{l}
Connecti- \\
cut \\
\& \\
Nebraska Aves. NW
\end{tabular} & Connecticut Ave. \& Veazey Terr. NW (Van NessUDC) M & Connecticut Ave. \& Porter St. NW (Cleveland Park) M & \begin{tabular}{l}
Connecticut Ave. \& \\
Calvert St. NW (Woodley Park-Zoo/ Adams Morgan)
\end{tabular} & \begin{tabular}{l}
New \\
Hampshire Ave. \& Dupont Circle NW (north side) \(\square\)
\end{tabular} & \begin{tabular}{l}
K \&
17th Sts. \\
NW \\
(Farragut \\
North \& \\
Farragut \\
West) \\
M
\end{tabular} & \begin{tabular}{l}
15th St. \\
(W) \\
\& K St. \\
NW \\
(MC- \\
PHERSON SQ)
\end{tabular} \\
\hline \multicolumn{9}{|c|}{AM Service - Servicio matutino} \\
\hline L2 & 6:15 & 6:19 & 6:23 & 6:26 & 6:31 & 6:38 & 6:43 & 6:46 \\
\hline L2 & 6:45 & 6:49 & 6:53 & 6:56 & 7:01 & 7:08 & 7:13 & 7:16 \\
\hline L2 & 7:05 & 7:09 & 7:13 & 7:16 & 7:21 & 7:28 & 7:33 & 7:36 \\
\hline L2 & 7:25 & 7:30 & 7:34 & 7:37 & 7:43 & 7:50 & 7:56 & 7:59 \\
\hline L2 & 7:45 & 7:50 & 7:54 & 7:57 & 8:03 & 8:10 & 8:16 & 8:19 \\
\hline L2 & 8:03 & 8:08 & 8:12 & 8:15 & 8:22 & 8:30 & 8:36 & 8:40 \\
\hline L2 & 8:23 & 8:28 & 8:32 & 8:35 & 8:42 & 8:50 & 8:56 & 9:00 \\
\hline L2 & 8:43 & 8:48 & 8:52 & 8:55 & 9:02 & 9:10 & 9:16 & 9:20 \\
\hline L2 & 9:03 & 9:08 & 9:12 & 9:15 & 9:22 & 9:30 & 9:36 & 9:40 \\
\hline L2 & 9:23 & 9:28 & 9:32 & 9:35 & 9:42 & 9:50 & 9:56 & 10:00 \\
\hline L2 & 9:43 & 9:48 & 9:52 & 9:55 & 10:02 & 10:10 & 10:16 & 10:20 \\
\hline L2 & 9:55 & 10:01 & 10:06 & 10:10 & 10:19 & 10:27 & 10:36 & 10:40 \\
\hline L2 & 10:15 & 10:21 & 10:26 & 10:30 & 10:39 & 10:47 & 10:56 & 11:00 \\
\hline L2 & 10:35 & 10:41 & 10:46 & 10:50 & 10:59 & 11:07 & 11:16 & 11:20 \\
\hline L2 & 10:55 & 11:01 & 11:06 & 11:10 & 11:19 & 11:27 & 11:36 & 11:40 \\
\hline L2 & 11:15 & 11:21 & 11:26 & 11:30 & 11:39 & 11:47 & 11:56 & 12:00 \\
\hline L2 & 11:35 & 11:41 & 11:46 & 11:50 & 11:59 & 12:07 & 12:16 & 12:20 \\
\hline L2 & 11:55 & 12:01 & 12:06 & 12:10 & 12:19 & 12:27 & 12:36 & 12:40 \\
\hline \multicolumn{9}{|c|}{PM Service - Servicio vespertino} \\
\hline L2 & 12:15 & 12:21 & 12:26 & 12:30 & 12:39 & 12:47 & 12:56 & 1:00 \\
\hline L2 & 12:35 & 12:41 & 12:46 & 12:50 & 12:59 & 1:07 & 1:16 & 1:20 \\
\hline L2 & 12:55 & 1:01 & 1:06 & 1:10 & 1:19 & 1:27 & 1:36 & 1:40 \\
\hline L2 & 1:15 & 1:21 & 1:26 & 1:30 & 1:39 & 1:47 & 1:56 & 2:00 \\
\hline L2 & 1:35 & 1:41 & 1:46 & 1:50 & 1:59 & 2:07 & 2:16 & 2:20 \\
\hline L2 & 1:55 & 2:01 & 2:06 & 2:10 & 2:19 & 2:27 & 2:36 & 2:40 \\
\hline L2 & 2:15 & 2:21 & 2:26 & 2:30 & 2:39 & 2:47 & 2:56 & 3:00 \\
\hline L2 & 2:35 & 2:41 & 2:46 & 2:50 & 2:59 & 3:07 & 3:16 & 3:20 \\
\hline L2 & 2:55 & 3:01 & 3:06 & 3:10 & 3:19 & 3:27 & 3:36 & 3:40 \\
\hline L2 & 3:15 & 3:21 & 3:26 & 3:30 & 3:39 & 3:47 & 3:56 & 4:00 \\
\hline L2 & 3:35 & 3:41 & 3:46 & 3:50 & 3:59 & 4:07 & 4:16 & 4:20 \\
\hline L2 & 3:55 & 4:01 & 4:06 & 4:10 & 4:19 & 4:27 & 4:36 & 4:40 \\
\hline L2 & 4:15 & 4:21 & 4:26 & 4:30 & 4:39 & 4:47 & 4:56 & 5:00 \\
\hline L2 & 4:35 & 4:41 & 4:46 & 4:50 & 4:59 & 5:07 & 5:16 & 5:20 \\
\hline L2 & 4:55 & 5:01 & 5:06 & 5:10 & 5:19 & 5:27 & 5:36 & 5:40 \\
\hline L2 & 5:15 & 5:21 & 5:26 & 5:30 & 5:39 & 5:47 & 5:56 & 6:00 \\
\hline L2 & 5:35 & 5:41 & 5:46 & 5:50 & 5:59 & 6:07 & 6:16 & 6:20 \\
\hline L2 & 6:06 & 6:12 & 6:16 & 6:20 & 6:26 & 6:34 & 6:42 & 6:45 \\
\hline L2 & 6:36 & 6:42 & 6:46 & 6:50 & 6:56 & 7:04 & 7:12 & 7:15 \\
\hline L2 & 7:08 & 7:14 & 7:18 & 7:22 & 7:28 & 7:36 & 7:44 & 7:47 \\
\hline L2 & 7:38 & 7:44 & 7:48 & 7:52 & 7:58 & 8:06 & 8:14 & 8:17 \\
\hline L2 & 8:08 & 8:14 & 8:18 & 8:22 & 8:28 & 8:36 & 8:44 & 8:47 \\
\hline L2 & 8:38 & 8:44 & 8:48 & 8:52 & 8:58 & 9:06 & 9:14 & 9:17 \\
\hline L2 & 9:08 & 9:14 & 9:18 & 9:22 & 9:28 & 9:36 & 9:44 & 9:47 \\
\hline L2 & 9:38 & 9:44 & 9:48 & 9:52 & 9:58 & 10:06 & 10:14 & 10:17 \\
\hline L2 & 10:08 & 10:14 & 10:18 & 10:22 & 10:28 & 10:36 & 10:44 & 10:47 \\
\hline L2 & 10:38 & 10:44 & 10:48 & 10:52 & 10:58 & 11:06 & 11:14 & 11:17 \\
\hline L2 & 11:08 & 11:14 & 11:18 & 11:22 & 11:28 & 11:36 & 11:44 & 11:47 \\
\hline L2 & 11:38 & 11:44 & 11:48 & 11:52 & 11:58 & 12:06 & 12:14 & 12:17 \\
\hline \multicolumn{9}{|c|}{After Midnight Service - Servicio después de la medianoche} \\
\hline L2 & 12:12 & 12:16 & 12:19 & 12:21 & 12:25 & 12:35 & 12:41 & 12:43 \\
\hline
\end{tabular}

Page 7 of 10

L1,2,4

\section*{Connecticut Avenue Line}

Saturday Northbound - En sábados con dirección al norte
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Route Number & \begin{tabular}{l}
15th St, \\
(W) \& \\
K St. NW \\
(Mc \\
Pherson Sq)
\(\square\)
\end{tabular} & \begin{tabular}{l}
K St. \& \\
Connecti- \\
cut \\
Ave. NW \\
(Farragut \\
North \& \\
Farragut West)
\end{tabular} & \begin{tabular}{l}
New \\
Hampshire Ave. \& Dupont Circle NW (south side)
\end{tabular} & \begin{tabular}{l}
Connecticut Ave. \& \\
Calvert St. NW (Woodley Park-Zoo/ Adams Morgan)
\end{tabular} & \begin{tabular}{l}
Connecticut Ave. \& \\
Porter St. NW (Cleveland Park) N
\end{tabular} & Connecticut Ave. \& Veazey Terr. NW (Van NessUDC) 4 & \begin{tabular}{l}
Connecti- \\
cut \\
\& \\
Nebraska Aves. NW
\end{tabular} & \[
\begin{aligned}
& \text { CHEVY } \\
& \text { CHASE } \\
& \text { CIRCLE }
\end{aligned}
\] \\
\hline \multicolumn{9}{|c|}{AM Service - Servicio matutino} \\
\hline L2 & 6:10 & 6:12 & 6:16 & 6:25 & 6:29 & 6:32 & 6:36 & 6:40 \\
\hline L2 & 6:50 & 6:52 & 6:56 & 7:05 & 7:09 & 7:12 & 7:16 & 7:20 \\
\hline L2 & 7:20 & 7:23 & 7:28 & 7:37 & 7:42 & 7:45 & 7:49 & 7:53 \\
\hline L2 & 7:45 & 7:48 & 7:53 & 8:02 & 8:07 & 8:10 & 8:14 & 8:18 \\
\hline L2 & 8:05 & 8:08 & 8:13 & 8:22 & 8:27 & 8:30 & 8:34 & 8:38 \\
\hline L2 & 8:25 & 8:28 & 8:33 & 8:42 & 8:47 & 8:50 & 8:54 & 8:58 \\
\hline L2 & 8:45 & 8:48 & 8:53 & 9:02 & 9:07 & 9:10 & 9:14 & 9:18 \\
\hline L2 & 9:05 & 9:08 & 9:13 & 9:22 & 9:27 & 9:30 & 9:34 & 9:38 \\
\hline L2 & 9:25 & 9:28 & 9:33 & 9:44 & 9:51 & 9:54 & 9:59 & 10:05 \\
\hline L2 & 9:45 & 9:48 & 9:53 & 10:04 & 10:11 & 10:14 & 10:19 & 10:25 \\
\hline L2 & 10:05 & 10:08 & 10:13 & 10:24 & 10:31 & 10:34 & 10:39 & 10:45 \\
\hline L2 & 10:25 & 10:28 & 10:33 & 10:44 & 10:51 & 10:54 & 10:59 & 11:05 \\
\hline L2 & 10:45 & 10:48 & 10:53 & 11:04 & 11:11 & 11:14 & 11:19 & 11:25 \\
\hline L2 & 11:05 & 11:08 & 11:13 & 11:24 & 11:31 & 11:34 & 11:39 & 11:45 \\
\hline L2 & 11:25 & 11:28 & 11:33 & 11:44 & 11:51 & 11:54 & 11:59 & 12:05 \\
\hline L2 & 11:45 & 11:48 & 11:53 & 12:04 & 12:11 & 12:14 & 12:19 & 12:25 \\
\hline \multicolumn{9}{|c|}{PM Service - Servicio vespertino} \\
\hline L2 & 12:05 & 12:08 & 12:13 & 12:24 & 12:31 & 12:34 & 12:39 & 12:45 \\
\hline L2 & 12:25 & 12:28 & 12:33 & 12:44 & 12:51 & 12:54 & 12:59 & 1:05 \\
\hline L2 & 12:45 & 12:48 & 12:53 & 1:04 & 1:11 & 1:14 & 1:19 & 1:25 \\
\hline L2 & 1:05 & 1:08 & 1:13 & 1:24 & 1:31 & 1:34 & 1:39 & 1:45 \\
\hline L2 & 1:25 & 1:28 & 1:33 & 1:44 & 1:51 & 1:54 & 1:59 & 2:05 \\
\hline L2 & 1:45 & 1:48 & 1:53 & 2:04 & 2:11 & 2:14 & 2:19 & 2:25 \\
\hline L2 & 2:05 & 2:08 & 2:13 & 2:24 & 2:31 & 2:34 & 2:39 & 2:45 \\
\hline L2 & 2:25 & 2:28 & 2:33 & 2:44 & 2:51 & 2:54 & 2:59 & 3:05 \\
\hline L2 & 2:45 & 2:48 & 2:53 & 3:04 & 3:11 & 3:14 & 3:19 & 3:25 \\
\hline L2 & 3:05 & 3:08 & 3:13 & 3:24 & 3:31 & 3:34 & 3:39 & 3:45 \\
\hline L2 & 3:25 & 3:28 & 3:33 & 3:44 & 3:51 & 3:54 & 3:59 & 4:05 \\
\hline L2 & 3:45 & 3:48 & 3:53 & 4:04 & 4:11 & 4:14 & 4:19 & 4:25 \\
\hline L2 & 4:05 & 4:08 & 4:13 & 4:24 & 4:31 & 4:34 & 4:39 & 4:45 \\
\hline L2 & 4:25 & 4:28 & 4:33 & 4:44 & 4:51 & 4:54 & 4:59 & 5:05 \\
\hline L2 & 4:45 & 4:48 & 4:53 & 5:04 & 5:11 & 5:14 & 5:19 & 5:25 \\
\hline L2 & 5:05 & 5:08 & 5:13 & 5:24 & 5:31 & 5:34 & 5:39 & 5:45 \\
\hline L2 & 5:25 & 5:28 & 5:33 & 5:44 & 5:51 & 5:54 & 5:59 & 6:05 \\
\hline L2 & 5:45 & 5:48 & 5:53 & 6:04 & 6:11 & 6:14 & 6:19 & 6:25 \\
\hline L2 & 6:05 & 6:08 & 6:13 & 6:24 & 6:31 & 6:34 & 6:39 & 6:45 \\
\hline L2 & 6:27 & 6:30 & 6:34 & 6:48 & 6:53 & 6:56 & 7:00 & 7:03 \\
\hline L2 & 6:52 & 6:55 & 6:59 & 7:13 & 7:18 & 7:21 & 7:25 & 7:28 \\
\hline L2 & 7:22 & 7:25 & 7:29 & 7:43 & 7:48 & 7:51 & 7:55 & 7:58 \\
\hline L2 & 7:52 & 7:55 & 7:59 & 8:13 & 8:18 & 8:21 & 8:25 & 8:28 \\
\hline L2 & 8:22 & 8:25 & 8:29 & 8:43 & 8:48 & 8:51 & 8:55 & 8:58 \\
\hline L2 & 8:52 & 8:55 & 8:59 & 9:13 & 9:18 & 9:21 & 9:25 & 9:28 \\
\hline L2 & 9:22 & 9:25 & 9:29 & 9:43 & 9:48 & 9:51 & 9:55 & 9:58 \\
\hline L2 & 9:52 & 9:55 & 9:59 & 10:13 & 10:18 & 10:21 & 10:25 & 10:28 \\
\hline L2 & 10:22 & 10:25 & 10:29 & 10:43 & 10:48 & 10:51 & 10:55 & 10:58 \\
\hline L2 & 10:52 & 10:55 & 10:59 & 11:13 & 11:18 & 11:21 & 11:25 & 11:28 \\
\hline L2 & 11:22 & 11:25 & 11:29 & 11:43 & 11:48 & 11:51 & 11:55 & 11:58 \\
\hline L2 & 11:52 & 11:55 & 11:59 & 12:13 & 12:18 & 12:21 & 12:25 & 12:28 \\
\hline \multicolumn{9}{|c|}{After Midnight Service - Servicio después de la medianoche} \\
\hline L2 & 12:22 & 12:25 & 12:29 & 12:43 & 12:48 & 12:51 & 12:55 & 12:58 \\
\hline L2 & 12:49 & 12:52 & 12:56 & 1:10 & 1:15 & 1:18 & 1:22 & 1:25 \\
\hline
\end{tabular}

Page 8 of 10

L1,2,4
Connecticut Avenue Line
Sunday Southbound - En domingo con dirección al sur


Page 9 of 10

L1,2,4
Connecticut Avenue Line
Sunday Northbound - En domingo con dirección al norte
\(\left.\begin{array}{ccccccccc} & & & & \text { Connecti- } \\ \text { cut Ave. }\end{array}\right)\)

Page 10 of 10

\section*{How to use this timetable}
> Use the map to find the stops closest to where you will get on and off the bus.
> Select the schedule (Weekday, Saturday, Sunday) for when you will travel. Along the top of the schedule, find the stop at or nearest the point where you will get on the bus. Follow that column down to the time you want to leave.
> Use the same method to find the times the bus is scheduled to arrive at the stop where you will get off the bus.
> If the bus stop is not listed, use the time shown for the bus stop before it as the time to wait at the stop.
> The end-of-the-line or last stop is listed in ALL CAPS on the schedule.

\section*{Cómo Usar este Horario}
> Use este mapa para localizar las paradas más cercanas a donde se subirá y bajará del autobús.
> Seleccione el horario (Entre semana, sábado, domingo) de cuando viajará. A lo largo de la parte superior del horario, localice la parada o el punto más cercano a la parada en la que se subirá al autobús. Siga esa columna hacia abajo hasta la hora en la que desee salir.
> Utilice el mismo método para localizar las horas en que el autobús está programado para llegar a la parada en donde desea bajarse del autobús.
> Si la parada del autobús no está listada use la hora que se muestra en la parada anterior como la hora de espera en la parada.
> El final de la ruta o la última parada del autobús aparece en letras MAYÚSCULAS en el horario.

d. All Metrobuses are fully accessible and are equipped with lifts or ramps for wheelchair accessibility
Todos los autobuses de Metro son accesibles a personas con impedimentos y están equipados con rampas o elevadores para sillas de ruedas
Serves these locations-
Brinda servicio a estas ubicaciones
Friendship Heights station
Tenleytown-AU station (N2)
American University Park
Spring Valley (N3,N4,N6)
American University
Ward Circle
Wesley Heights (N2,N6)
Berkshire Apts. (N3,N4,N6)
Washington National Cathedral
Massachusetts Ave. Heights
Embassy Row
Dupont Circle (N2,N4,N6)
Farragut North station (N2,N4,N6)
Farragut West station (N2,N4,N6)
Foggy Bottom-GWU station (N3)
Potomac Park/State Dept. (N3)
Federal Triangle station (N3)

\section*{Washington \\ Metropolitan Area \\ Transit Authority}


\section*{Weekday Eastbound - Entre semana con dirección al este}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route Number & Friendship Heights Mas & Wisconsin Ave. \& Albemarle St. NW (Tenley-town-AU) & Westmoreland Circle NW & Nebraska Ave. \& Ward Circle NW (south side) (American University) & \begin{tabular}{l}
Massa- \\
chusetts \\
Ave. \& \\
Ward \\
Circle \\
NW \\
(American \\
University)
\end{tabular} & \begin{tabular}{l}
Cathedral \\
\& New \\
Mexico Aves. \\
NW \\
(Wesley \\
Heights)
\end{tabular} & \begin{tabular}{l}
4200 \\
Massachusetts Ave. NW (opposite Berkshire Apts.)
\end{tabular} & \begin{tabular}{l}
Massa- \\
chusetts \& \\
Wisconsin Aves. NW
\end{tabular} & Massachusetts Ave. \& 20th St. NW (Dupont Circle) & \[
\begin{gathered}
\text { 17th } \\
\text { St. (E) } \\
\& 1 \\
\text { St. NW } \\
\text { (FARRA- } \\
\text { GUT } \\
\text { N\&W) } \\
W
\end{gathered}
\] & \begin{tabular}{l}
23rd \&
I Sts. NW \\
(Foggy BottomGWU)
\end{tabular} & Pennsylvania Ave. \& 10th St. NW (FEDERAL TRIANGLE) \\
\hline \multicolumn{13}{|c|}{AM Service - Servicio matutino} \\
\hline N4 & 5:35 & - & 5:40 & - & 5:43 & - & 5:44 & 5:48 & 5:55 & 6:01 & - & - \\
\hline N2 & 5:48 & 5:54 & - & 5:58 & - & 6:02 & - & 6:06 & 6:13 & 6:19 & - & - \\
\hline N4 & 6:10 & - & 6:15 & - & 6:18 & - & 6:19 & 6:23 & 6:30 & 6:36 & - & - \\
\hline N2 & 6:18 & 6:24 & - & 6:28 & - & 6:32 & - & 6:36 & 6:43 & 6:49 & - & - \\
\hline N4 & 6:35 & - & 6:40 & - & 6:44 & - & 6:45 & 6:48 & 6:56 & 7:02 & - & - \\
\hline N3 & 6:43 & - & 6:48 & - & 6:52 & - & 6:53 & 6:56 & - & - & 7:08 & 7:21 \\
\hline N2 & 6:42 & 6:49 & - & 6:53 & - & 6:57 & - & 7:00 & 7:08 & 7:14 & - & - \\
\hline N4 & 6:53 & - & 6:58 & - & 7:02 & - & 7:03 & 7:06 & 7:14 & 7:20 & - & - \\
\hline N4 & 7:01 & - & 7:06 & - & 7:10 & - & 7:11 & 7:14 & 7:22 & 7:28 & - & - \\
\hline N2 & 7:00 & 7:07 & - & 7:10 & - & 7:16 & - & 7:21 & 7:32 & 7:39 & - & - \\
\hline N3 & 7:06 & - & 7:14 & - & 7:20 & - & 7:21 & 7:26 & - & - & 7:40 & 7:58 \\
\hline N4 & 7:13 & - & 7:21 & - & 7:27 & - & 7:28 & 7:33 & 7:44 & 7:51 & - & - \\
\hline N2 & 7:17 & 7:24 & - & 7:27 & - & 7:33 & - & 7:38 & 7:49 & 7:56 & - & - \\
\hline N4 & 7:28 & - & 7:36 & - & 7:42 & - & 7:43 & 7:48 & 7:59 & 8:06 & - & - \\
\hline N2 & 7:32 & 7:39 & - & 7:42 & - & 7:48 & - & 7:53 & 8:04 & 8:11 & - & - \\
\hline N3 & 7:36 & - & 7:44 & - & 7:50 & - & 7:51 & 7:56 & - & - & 8:10 & 8:28 \\
\hline N4 & 7:41 & - & 7:49 & - & 7:55 & - & 7:56 & 8:01 & 8:12 & 8:19 & - & - \\
\hline N2 & 7:47 & 7:54 & - & 7:57 & - & 8:03 & - & 8:08 & 8:19 & 8:26 & - & - \\
\hline N4 & 7:51 & - & 8:00 & - & 8:05 & - & 8:06 & 8:12 & 8:26 & 8:35 & - & - \\
\hline N4 & 7:59 & - & 8:08 & - & 8:13 & - & 8:14 & 8:20 & 8:34 & 8:43 & - & - \\
\hline N3 & 8:02 & - & 8:11 & - & 8:16 & - & 8:17 & 8:23 & - & - & 8:38 & 8:56 \\
\hline N2 & 8:05 & 8:12 & - & 8:16 & - & 8:21 & - & 8:25 & 8:39 & 8:48 & - & - \\
\hline N4 & 8:07 & - & 8:16 & - & 8:21 & - & 8:22 & 8:28 & 8:42 & 8:51 & - & - \\
\hline N4 & 8:15 & - & 8:24 & - & 8:29 & - & 8:30 & 8:36 & 8:50 & 8:59 & - & - \\
\hline N2 & 8:21 & 8:28 & - & 8:32 & - & 8:37 & - & 8:41 & 8:55 & 9:04 & - & - \\
\hline N4 & 8:23 & - & 8:32 & - & 8:37 & - & 8:38 & 8:44 & 8:58 & 9:07 & - & - \\
\hline N3 & 8:28 & - & 8:37 & - & 8:42 & - & 8:43 & 8:49 & - & - & 9:04 & 9:22 \\
\hline N4 & 8:33 & - & 8:42 & - & 8:47 & - & 8:48 & 8:54 & 9:08 & 9:17 & - & - \\
\hline N2 & 8:37 & 8:44 & - & 8:48 & - & 8:53 & - & 8:57 & 9:11 & 9:20 & - & - \\
\hline N4 & 8:45 & - & 8:54 & - & 8:59 & - & 9:00 & 9:06 & 9:20 & 9:29 & - & - \\
\hline N2 & 8:58 & 9:05 & - & 9:09 & - & 9:13 & - & 9:16 & 9:25 & 9:33 & - & - \\
\hline N4 & 9:05 & - & 9:12 & - & 9:17 & - & 9:18 & 9:21 & 9:30 & 9:38 & - & - \\
\hline N4 & 9:20 & - & 9:27 & - & 9:32 & - & 9:33 & 9:36 & 9:45 & 9:53 & - & - \\
\hline N2 & 9:28 & 9:35 & - & 9:39 & - & 9:43 & - & 9:46 & 9:55 & 10:03 & - & - \\
\hline N4 & 9:45 & - & 9:52 & - & 9:57 & - & 9:58 & 10:01 & 10:10 & 10:18 & - & - \\
\hline N2 & 9:58 & 10:05 & - & 10:09 & - & 10:13 & - & 10:16 & 10:25 & 10:33 & - & - \\
\hline N4 & 10:15 & - & 10:22 & - & 10:27 & - & 10:28 & 10:31 & 10:40 & 10:48 & - & - \\
\hline N2 & 10:28 & 10:35 & - & 10:39 & - & 10:43 & - & 10:46 & 10:55 & 11:03 & - & - \\
\hline N4 & 10:45 & - & 10:52 & - & 10:57 & - & 10:58 & 11:01 & 11:10 & 11:18 & - & - \\
\hline N2 & 10:58 & 11:05 & - & 11:09 & - & 11:13 & - & 11:16 & 11:25 & 11:33 & - & - \\
\hline N4 & 11:15 & - & 11:22 & - & 11:27 & - & 11:28 & 11:31 & 11:40 & 11:48 & - & - \\
\hline N2 & 11:28 & 11:35 & - & 11:39 & - & 11:43 & - & 11:46 & 11:55 & 12:03 & - & - \\
\hline N4 & 11:45 & - & 11:52 & - & 11:57 & - & 11:58 & 12:01 & 12:10 & 12:18 & - & - \\
\hline N2 & 11:58 & 12:05 & - & 12:09 & - & 12:13 & - & 12:16 & 12:25 & 12:33 & - & - \\
\hline
\end{tabular}

Page 3 of 10

\section*{Weekday Eastbound - Entre semana con dirección al este}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route Number & Friendship Heights M & \begin{tabular}{l}
Wisconsin \\
Ave. \& \\
Albemarle \\
St. NW \\
(Tenley- \\
town-AU)
\end{tabular} & Westmoreland Circle NW & \begin{tabular}{l}
Nebraska \\
Ave. \& Ward Circle NW (south side) (American University)
\end{tabular} & \begin{tabular}{l}
Massa- \\
chusetts \\
Ave. \& \\
Ward \\
Circle \\
NW \\
(American University)
\end{tabular} & Cathedral \& New Mexico Aves. NW (Wesley Heights) & \begin{tabular}{l}
4200 \\
Massachusetts Ave. NW (opposite Berkshire Apts.)
\end{tabular} & \begin{tabular}{l}
Massachusetts \& \\
Wisconsin Aves. NW
\end{tabular} & Massachusetts Ave. \& 20th St. NW (Dupont Circle) K & \begin{tabular}{l}
17th \\
St. (E) \\
\& \\
St. NW \\
(FARRA- \\
GUT \\
N\&W) \\
1
\end{tabular} & \begin{tabular}{l}
23rd \&
I Sts. NW \\
(Foggy \\
Bottom- \\
GWU) \\
1
\end{tabular} & \begin{tabular}{l}
Pennsylvania Ave. \& 10th St. \\
NW (FEDERAL TRIANGLE)
\end{tabular} \\
\hline \multicolumn{13}{|c|}{PM Service - Servicio vespertino} \\
\hline N4 & 12:15 & - & 12:22 & - & 12:27 & - & 12:28 & 12:31 & 12:40 & 12:48 & - & - \\
\hline N2 & 12:28 & 12:35 & - & 12:39 & - & 12:43 & - & 12:46 & 12:55 & 1:03 & - & - \\
\hline N4 & 12:45 & - & 12:52 & - & 12:57 & - & 12:58 & 1:01 & 1:10 & 1:18 & - & - \\
\hline N2 & 12:58 & 1:05 & - & 1:09 & - & 1:13 & - & 1:16 & 1:25 & 1:33 & - & - \\
\hline N4 & 1:15 & - & 1:22 & - & 1:27 & - & 1:28 & 1:31 & 1:40 & 1:48 & - & - \\
\hline N2 & 1:28 & 1:35 & - & 1:39 & - & 1:43 & - & 1:46 & 1:55 & 2:03 & - & - \\
\hline N4 & 1:45 & - & 1:52 & - & 1:57 & - & 1:58 & 2:01 & 2:10 & 2:18 & - & - \\
\hline N2 & 1:58 & 2:05 & - & 2:09 & - & 2:13 & - & 2:16 & 2:25 & 2:33 & - & - \\
\hline N4 & 2:15 & - & 2:22 & - & 2:27 & - & 2:28 & 2:31 & 2:40 & 2:48 & - & - \\
\hline N2 & 2:28 & 2:35 & - & 2:39 & - & 2:43 & - & 2:46 & 2:55 & 3:03 & - & - \\
\hline N4 & 2:45 & - & 2:52 & - & 2:57 & - & 2:58 & 3:01 & 3:10 & 3:18 & - & - \\
\hline N2 & 2:58 & 3:05 & - & 3:09 & - & 3:13 & - & 3:16 & 3:25 & 3:33 & - & - \\
\hline N4 & 3:15 & - & 3:22 & - & 3:27 & - & 3:29 & 3:32 & 3:41 & 3:50 & - & - \\
\hline N2 & 3:26 & 3:33 & - & 3:39 & - & 3:44 & - & 3:47 & 3:56 & 4:05 & - & - \\
\hline N4 & 3:41 & - & 3:48 & - & 3:53 & - & 3:55 & 3:58 & 4:07 & 4:16 & - & - \\
\hline N2 & 3:56 & 4:03 & - & 4:09 & - & 4:14 & - & 4:17 & 4:26 & 4:35 & - & - \\
\hline N4 & 4:13 & - & 4:20 & - & 4:25 & - & 4:27 & 4:30 & 4:39 & 4:48 & - & - \\
\hline N2 & 4:19 & 4:26 & - & 4:32 & - & 4:37 & - & 4:40 & 4:49 & 4:58 & - & - \\
\hline N4 & 4:33 & - & 4:40 & - & 4:45 & - & 4:47 & 4:50 & 4:59 & 5:08 & - & - \\
\hline N2 & 4:39 & 4:46 & - & 4:52 & - & 4:57 & - & 5:00 & 5:09 & 5:18 & - & - \\
\hline N4 & 4:53 & - & 5:00 & - & 5:05 & - & 5:07 & 5:10 & 5:19 & 5:28 & - & - \\
\hline N2 & 4:59 & 5:06 & - & 5:12 & - & 5:17 & - & 5:20 & 5:29 & 5:38 & - & - \\
\hline N4 & 5:13 & - & 5:20 & - & 5:25 & - & 5:27 & 5:30 & 5:39 & 5:48 & - & - \\
\hline N2 & 5:23 & 5:30 & - & 5:36 & - & 5:41 & - & 5:44 & 5:53 & 6:02 & - & - \\
\hline N4 & 5:35 & - & 5:42 & - & 5:47 & - & 5:49 & 5:52 & 6:01 & 6:10 & - & - \\
\hline N2 & 5:46 & 5:53 & - & 5:59 & - & 6:04 & - & 6:07 & 6:16 & 6:25 & - & - \\
\hline N4 & 6:03 & - & 6:09 & - & 6:14 & - & 6:16 & 6:19 & 6:26 & 6:33 & - & - \\
\hline N2 & 6:16 & 6:24 & - & 6:28 & - & 6:33 & - & 6:36 & 6:43 & 6:50 & - & - \\
\hline N4 & 6:33 & - & 6:39 & - & 6:44 & - & 6:46 & 6:49 & 6:56 & 7:03 & - & - \\
\hline N2 & 6:46 & 6:54 & - & 6:58 & - & 7:03 & - & 7:06 & 7:13 & 7:20 & - & - \\
\hline N4 & 7:03 & - & 7:09 & - & 7:14 & - & 7:16 & 7:19 & 7:26 & 7:33 & - & - \\
\hline N2 & 7:16 & 7:24 & - & 7:28 & - & 7:33 & - & 7:36 & 7:43 & 7:50 & - & - \\
\hline N4 & 7:33 & - & 7:39 & - & 7:44 & - & 7:46 & 7:49 & 7:56 & 8:03 & - & - \\
\hline N6 & 7:49 & - & 7:55 & - & 8:00 & - 8:05 & 8:09 & 8:12 & 8:19 & 8:26 & - & - \\
\hline N6 & 8:11 & - & 8:17 & - & 8:22 & - 8:27 & 8:31 & 8:34 & 8:41 & 8:48 & - & - \\
\hline N6 & 8:33 & - & 8:39 & - & 8:44 & - 8:49 & 8:53 & 8:56 & 9:03 & 9:10 & - & - \\
\hline N6 & 8:55 & - & 9:01 & - & 9:06 & - 9:11 & 9:15 & 9:18 & 9:25 & 9:32 & - & - \\
\hline N6 & 9:25 & - & 9:31 & - & 9:36 & - 9:41 & 9:45 & 9:48 & 9:55 & 10:02 & - & - \\
\hline N6 & 9:55 & - & 10:01 & - & 10:06 & ■10:11 & 10:15 & 10:18 & 10:25 & 10:32 & - & - \\
\hline N6 & 10:27 & - & 10:33 & - & 10:38 & -10:43 & 10:47 & 10:50 & 10:57 & 11:04 & - & - \\
\hline N6 & 11:02 & - & 11:08 & - & 11:11 & ■11:16 & 11:20 & 11:22 & 11:28 & 11:33 & - & - \\
\hline N6 & 11:32 & - & 11:38 & - & 11:41 & ■11:46 & 11:50 & 11:52 & 11:58 & 12:03 & - & - \\
\hline
\end{tabular}
- N6 eastbound trips operate in a clockwise loop via Idaho, Cathedral, New Mexico, and Nebraska Avenues and serve the same stops as westbound trips.

Weekday Westbound - Entre semana con dirección al oeste
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route Number & \begin{tabular}{l}
12th St. \& \\
Constitution \\
Ave. NW \\
(Federal \\
Triangle)
\end{tabular} & \begin{tabular}{l}
23rd \& I \\
Sts. NW \\
(Foggy \\
Bottom- \\
GWU) \\
\#
\end{tabular} & \begin{tabular}{l}
17th \\
St. (E) \\
\& I \\
St. NW \\
(Farragut \\
N \& W)
\end{tabular} & Massachusetts Ave. \& 20th St. NW (Dupont Circle) & Massachusetts \& Wisconsin Aves. NW & \begin{tabular}{l}
4201 \\
Massachusetts Ave NW (Berkshire Apts.)
\end{tabular} & Catherdal \& New Mexico Aves. NW (Wesley Heights) & Massachuetts Ave. \& Ward Circle NW (American University) & \begin{tabular}{l}
Nebraska \\
Ave. \& Ward \\
Circle NW (south side) (American University)
\end{tabular} & Westmoreland Circle NW & \begin{tabular}{l}
Wisconsin \\
Ave. \& Albemarle St. NW (Tenley-town-AU)
\end{tabular} & FRIENDSHIP HEIGHTS M \\
\hline \multicolumn{13}{|c|}{AM Service - Servicio matutino} \\
\hline N4 & - & - & 5:40 & 5:49 & 5:56 & 5:59 & - & 6:00 & - & 6:04 & - & 6:09 \\
\hline N2 & - & - & 5:55 & 6:04 & 6:11 & - & 6:14 & - & 6:17 & - & 6:21 & 6:27 \\
\hline N4 & - & - & 6:10 & 6:20 & 6:28 & 6:31 & - & 6:32 & - & 6:36 & - & 6:41 \\
\hline N2 & - & - & 6:25 & 6:35 & 6:43 & - & 6:46 & - & 6:50 & - & 6:55 & 7:02 \\
\hline N4 & - & - & 6:40 & 6:50 & 6:58 & 7:01 & - & 7:02 & - & 7:06 & - & 7:11 \\
\hline N2 & - & - & 6:55 & 7:05 & 7:13 & - & 7:16 & - & 7:20 & - & 7:25 & 7:32 \\
\hline N4 & - & - & 7:10 & 7:21 & 7:30 & 7:34 & - & 7:35 & - & 7:39 & - & 7:45 \\
\hline N2 & - & - & 7:27 & 7:38 & 7:47 & - & 7:51 & - & 7:55 & - & 8:00 & 8:06 \\
\hline N4 & - & - & 7:44 & 7:55 & 8:04 & 8:08 & - & 8:09 & - & 8:13 & - & 8:19 \\
\hline N2 & - & - & 7:56 & 8:07 & 8:16 & - & 8:20 & - & 8:24 & - & 8:29 & 8:35 \\
\hline N4 & - & - & 8:07 & 8:19 & 8:29 & 8:33 & - & 8:34 & - & 8:39 & - & 8:46 \\
\hline N2 & - & - & 8:17 & 8:29 & 8:39 & - & 8:42 & - & 8:46 & - & 8:51 & 8:58 \\
\hline N4 & - & - & 8:28 & 8:40 & 8:50 & 8:54 & - & 8:55 & - & 9:00 & - & 9:07 \\
\hline N2 & - & - & 8:40 & 8:52 & 9:02 & - & 9:05 & - & 9:09 & - & 9:14 & 9:21 \\
\hline N4 & - & - & 8:55 & 9:06 & 9:17 & 9:20 & - & 9:22 & - & 9:27 & - & 9:35 \\
\hline N2 & - & - & 9:10 & 9:21 & 9:32 & - & 9:35 & - & 9:39 & - & 9:43 & 9:49 \\
\hline N4 & - & - & 9:25 & 9:36 & 9:47 & 9:50 & - & 9:52 & - & 9:57 & - & 10:05 \\
\hline N2 & - & - & 9:40 & 9:51 & 10:02 & - & 10:05 & - & 10:09 & - & 10:13 & 10:19 \\
\hline N4 & - & - & 9:57 & 10:08 & 10:19 & 10:22 & - & 10:24 & - & 10:29 & - & 10:37 \\
\hline N2 & - & - & 10:10 & 10:21 & 10:32 & - & 10:35 & - & 10:39 & - & 10:43 & 10:49 \\
\hline N4 & - & - & 10:25 & 10:36 & 10:47 & 10:50 & - & 10:52 & - & 10:57 & - & 11:05 \\
\hline N2 & - & - & 10:40 & 10:51 & 11:02 & - & 11:05 & - & 11:09 & - & 11:13 & 11:19 \\
\hline N4 & - & - & 10:55 & 11:06 & 11:17 & 11:20 & - & 11:22 & - & 11:27 & - & 11:35 \\
\hline N2 & - & - & 11:10 & 11:21 & 11:32 & - & 11:35 & - & 11:39 & - & 11:43 & 11:49 \\
\hline N4 & - & - & 11:25 & 11:36 & 11:47 & 11:50 & - & 11:52 & - & 11:57 & - & 12:05 \\
\hline N2 & - & - & 11:40 & 11:51 & 12:02 & - & 12:05 & - & 12:09 & - & 12:13 & 12:19 \\
\hline N4 & - & - & 11:55 & 12:06 & 12:17 & 12:20 & - & 12:22 & - & 12:27 & - & 12:35 \\
\hline
\end{tabular}

\section*{Weekday Westbound - Entre semana con dirección al oeste}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route Number & \begin{tabular}{l}
12th St. \& \\
Constitution Ave. NW (Federal Triangle)
\end{tabular} & \begin{tabular}{l}
23rd \& 1 \\
Sts. NW \\
(Foggy \\
Bottom- \\
GWU) \\
四
\end{tabular} & \begin{tabular}{l}
17th \\
St. (E) \\
\& I \\
St. NW \\
(Farragut \\
N\&W)
\end{tabular} & Massachusetts Ave. \& 20th St. NW (Dupont Circle) & \begin{tabular}{l}
Massachusetts \& \\
Wisconsin Aves. NW
\end{tabular} & \begin{tabular}{l}
4201 \\
Massachusetts Ave NW (Berkshire Apts.)
\end{tabular} & \begin{tabular}{l}
Catherdal \\
\& \\
New \\
Mexico \\
Aves. \\
NW \\
(Wesley \\
Heights)
\end{tabular} & \begin{tabular}{l}
Massachuetts \\
Ave. \& Ward Circle NW (American University)
\end{tabular} & \begin{tabular}{l}
Nebraska \\
Ave. \& \\
Ward \\
Circle NW (south side) \\
(American University)
\end{tabular} & Westmoreland Circle NW & \begin{tabular}{l}
Wisconsin \\
Ave. \& \\
Albemarle \\
St. NW \\
(Tenley- \\
town-AU)
\end{tabular} & \begin{tabular}{l}
FRIENDSHIP HEIGHTS \\

\end{tabular} \\
\hline \multicolumn{13}{|c|}{PM Service - Servicio vespertino} \\
\hline N2 & - & - & 12:10 & 12:21 & 12:32 & - & 12:35 & - & 12:39 & - & 12:43 & 12:49 \\
\hline N4 & - & - & 12:25 & 12:36 & 12:47 & 12:50 & - & 12:52 & - & 12:57 & - & 1:05 \\
\hline N2 & - & - & 12:40 & 12:51 & 1:02 & - & 1:05 & - & 1:09 & - & 1:13 & 1:19 \\
\hline N4 & - & - & 12:55 & 1:06 & 1:17 & 1:20 & - & 1:22 & - & 1:27 & - & 1:35 \\
\hline N2 & - & - & 1:10 & 1:21 & 1:32 & - & 1:35 & - & 1:39 & - & 1:43 & 1:49 \\
\hline N4 & - & - & 1:25 & 1:36 & 1:47 & 1:50 & - & 1:52 & - & 1:57 & - & 2:05 \\
\hline N2 & - & - & 1:40 & 1:51 & 2:02 & - & 2:05 & - & 2:09 & - & 2:13 & 2:19 \\
\hline N4 & - & - & 1:55 & 2:06 & 2:17 & 2:20 & - & 2:22 & - & 2:27 & - & 2:35 \\
\hline N2 & - & - & 2:10 & 2:21 & 2:32 & - & 2:35 & - & 2:39 & - & 2:43 & 2:49 \\
\hline N4 & - & - & 2:25 & 2:36 & 2:47 & 2:50 & - & 2:52 & - & 2:57 & - & 3:05 \\
\hline N2 & - & - & 2:40 & 2:51 & 3:02 & - & 3:05 & - & 3:09 & - & 3:13 & 3:19 \\
\hline N4 & - & - & 2:55 & 3:06 & 3:17 & 3:20 & - & 3:22 & - & 3:27 & - & 3:35 \\
\hline N2 & - & - & 3:10 & 3:21 & 3:32 & - & 3:35 & - & 3:39 & - & 3:43 & 3:49 \\
\hline N4 & - & - & 3:25 & 3:36 & 3:47 & 3:50 & - & 3:52 & - & 3:57 & - & 4:05 \\
\hline N2 & - & - & 3:40 & 3:51 & 4:02 & - & 4:05 & - & 4:09 & - & 4:13 & 4:19 \\
\hline N4 & - & - & 3:55 & 4:08 & 4:18 & 4:21 & - & 4:22 & - & 4:28 & - & 4:37 \\
\hline N2 & - & - & 4:10 & 4:23 & 4:33 & - & 4:36 & - & 4:42 & - & 4:45 & 4:54 \\
\hline N4 & - & - & 4:22 & 4:35 & 4:45 & 4:48 & - & 4:49 & - & 4:55 & - & 5:04 \\
\hline N2 & - & - & 4:32 & 4:45 & 4:55 & - & 4:58 & - & 5:04 & - & 5:07 & 5:16 \\
\hline N4 & - & - & 4:44 & 4:57 & 5:07 & 5:10 & - & 5:11 & - & 5:17 & - & 5:26 \\
\hline N3 & 4:43 & 4:59 & - & - & 5:13 & 5:16 & - & 5:17 & - & 5:23 & - & 5:32 \\
\hline N2 & - & - & 4:54 & 5:07 & 5:17 & - & 5:20 & - & 5:26 & - & 5:29 & 5:38 \\
\hline N4 & - & - & 5:03 & 5:16 & 5:26 & 5:29 & - & 5:30 & - & 5:36 & - & 5:45 \\
\hline N2 & - & - & 5:11 & 5:27 & 5:39 & - & 5:42 & - & 5:47 & - & 5:51 & 5:58 \\
\hline N3 & 5:11 & 5:27 & - & - & 5:41 & 5:45 & - & 5:46 & - & 5:51 & - & 5:59 \\
\hline N4 & - & - & 5:19 & 5:35 & 5:47 & 5:51 & - & 5:52 & - & 5:57 & - & 6:05 \\
\hline N2 & - & - & 5:28 & 5:44 & 5:56 & - & 5:59 & - & 6:04 & - & 6:08 & 6:15 \\
\hline N4 & - & - & 5:37 & 5:53 & 6:05 & 6:09 & - & 6:10 & - & 6:15 & - & 6:23 \\
\hline N3 & 5:40 & 5:56 & - & - & 6:10 & 6:14 & - & 6:15 & - & 6:20 & - & 6:28 \\
\hline N2 & - & - & 5:46 & 6:02 & 6:14 & - & 6:17 & - & 6:22 & - & 6:26 & 6:33 \\
\hline N4 & - & - & 5:55 & 6:11 & 6:23 & 6:27 & - & 6:28 & - & 6:33 & - & 6:41 \\
\hline N2 & - & - & 6:07 & 6:23 & 6:35 & - & 6:38 & - & 6:43 & - & 6:47 & 6:54 \\
\hline N3 & 6:10 & 6:26 & - & - & 6:40 & 6:44 & - & 6:45 & - & 6:50 & - & 6:58 \\
\hline N4 & - & - & 6:17 & 6:33 & 6:45 & 6:49 & - & 6:50 & - & 6:55 & - & 7:03 \\
\hline N2 & - & - & 6:31 & 6:47 & 6:59 & - & 7:02 & - & 7:07 & - & 7:11 & 7:18 \\
\hline N4 & - & - & 6:42 & 6:54 & 7:03 & 7:07 & - & 7:09 & - & 7:14 & - & 7:21 \\
\hline N2 & - & - & 6:56 & 7:08 & 7:17 & - & 7:21 & - & 7:26 & - & 7:30 & 7:37 \\
\hline N4 & - & - & 7:08 & 7:20 & 7:29 & 7:33 & - & 7:35 & - & 7:40 & - & 7:47 \\
\hline N2 & - & - & 7:26 & 7:38 & 7:47 & - & 7:51 & - & 7:56 & - & 8:00 & 8:07 \\
\hline N4 & - & - & 7:38 & 7:50 & 7:59 & 8:03 & - & 8:05 & - & 8:10 & - & 8:17 \\
\hline N2 & - & - & 7:56 & 8:08 & 8:17 & - & 8:21 & - & 8:26 & - & 8:30 & 8:37 \\
\hline N4 & - & - & 8:08 & 8:20 & 8:29 & 8:33 & - & 8:35 & - & 8:40 & - & 8:47 \\
\hline N6 & - & - & 8:32 & 8:40 & 8:48 & 8:52 & 8:57 & 9:01 & - & 9:05 & - & 9:11 \\
\hline N6 & - & - & 8:54 & 9:02 & 9:10 & 9:14 & 9:19 & 9:23 & - & 9:27 & - & 9:33 \\
\hline N6 & - & - & 9:16 & 9:24 & 9:32 & 9:36 & 9:41 & 9:45 & - & 9:49 & - & 9:55 \\
\hline N6 & - & - & 9:38 & 9:46 & 9:54 & 9:58 & 10:03 & 10:07 & - & 10:11 & - & 10:17 \\
\hline N6 & - & - & 10:08 & 10:16 & 10:24 & 10:28 & 10:33 & 10:37 & - & 10:41 & - & 10:47 \\
\hline N6 & - & - & 10:38 & 10:46 & 10:54 & 10:58 & 11:03 & 11:07 & - & 11:11 & - & 11:17 \\
\hline N6 & - & - & 11:10 & 11:16 & 11:24 & 11:27 & 11:31 & 11:35 & - & 11:39 & - & 11:44 \\
\hline N6 & - & - & 11:40 & 11:46 & 11:54 & 11:57 & 12:01 & 12:05 & - & 12:09 & - & 12:14 \\
\hline \multicolumn{13}{|c|}{After Mionight Service - Servicio después de la medianoche} \\
\hline N6 & - & - & 12:10 & 12:16 & 12:24 & 12:27 & 12:31 & 12:35 & - & 12:39 & - & 12:44 \\
\hline
\end{tabular}

Page 6 of 10

\section*{Saturday Eastbound En sábados con dirección al este}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Route Number & Friendship Heights Nos & Westmoreland Circle NW & Massachusetts Ave. \& Ward Circle NW (American University) & Cathedral \& New Mexico Aves. NW (Wesley Heights) & \begin{tabular}{l}
4200 \\
Massachusetts Ave. NW (opposite Berkshire Apts.)
\end{tabular} & Massachusetts \& Wisconsin Aves. NW & Massachusetts Ave. \& 20th St. NW (Dupont Circle) & \begin{tabular}{l}
17th \\
St. (E) \\
\& I \\
St. NW \\
(FARRA- \\
GUT \\
N \& W) \\
4
\end{tabular} \\
\hline \multicolumn{9}{|c|}{AM Service - Servicio matutino} \\
\hline N6 & 5:47 & 5:52 & 5:55 & 5:57 & 6:03 & 6:05 & 6:10 & 6:14 \\
\hline N6 & 6:22 & 6:28 & 6:31 & 6:34 & 6:40 & 6:43 & 6:49 & 6:54 \\
\hline N6 & 7:02 & 7:08 & 7:11 & 7:14 & 7:20 & 7:23 & 7:29 & 7:34 \\
\hline N6 & 7:41 & 7:47 & 7:50 & 7:53 & 7:59 & 8:02 & 8:08 & 8:14 \\
\hline N6 & 8:21 & 8:27 & 8:30 & 8:33 & 8:39 & 8:42 & 8:48 & 8:54 \\
\hline N6 & 8:51 & 8:57 & 9:00 & 9:03 & 9:09 & 9:12 & 9:18 & 9:24 \\
\hline N6 & 9:21 & 9:27 & 9:30 & 9:33 & 9:39 & 9:42 & 9:48 & 9:54 \\
\hline N6 & 9:46 & 9:53 & 9:57 & 10:01 & 10:08 & 10:11 & 10:18 & 10:24 \\
\hline N6 & 10:10 & 10:17 & 10:21 & 10:25 & 10:32 & 10:35 & 10:42 & 10:48 \\
\hline N6 & 10:34 & 10:41 & 10:45 & 10:49 & 10:56 & 10:59 & 11:06 & 11:12 \\
\hline N6 & 10:58 & 11:05 & 11:09 & 11:13 & 11:20 & 11:23 & 11:30 & 11:36 \\
\hline N6 & 11:22 & 11:29 & 11:33 & 11:37 & 11:44 & 11:47 & 11:54 & 12:00 \\
\hline N6 & 11:46 & 11:53 & 11:57 & 12:01 & 12:08 & 12:11 & 12:18 & 12:24 \\
\hline \multicolumn{9}{|c|}{PM Service - Servicio vespertino} \\
\hline N6 & 12:10 & 12:17 & 12:21 & 12:25 & 12:32 & 12:35 & 12:42 & 12:48 \\
\hline N6 & 12:34 & 12:41 & 12:45 & 12:49 & 12:56 & 12:59 & 1:06 & 1:12 \\
\hline N6 & 12:58 & 1:05 & 1:09 & 1:13 & 1:20 & 1:23 & 1:30 & 1:36 \\
\hline N6 & 1:22 & 1:29 & 1:33 & 1:37 & 1:44 & 1:47 & 1:54 & 2:00 \\
\hline N6 & 1:46 & 1:53 & 1:57 & 2:01 & 2:08 & 2:11 & 2:18 & 2:24 \\
\hline N6 & 2:10 & 2:17 & 2:21 & 2:25 & 2:32 & 2:35 & 2:42 & 2:48 \\
\hline N6 & 2:34 & 2:41 & 2:45 & 2:49 & 2:56 & 2:59 & 3:06 & 3:12 \\
\hline N6 & 2:58 & 3:05 & 3:09 & 3:13 & 3:20 & 3:23 & 3:30 & 3:36 \\
\hline N6 & 3:22 & 3:29 & 3:33 & 3:37 & 3:44 & 3:47 & 3:54 & 4:00 \\
\hline N6 & 3:46 & 3:53 & 3:57 & 4:01 & 4:08 & 4:11 & 4:18 & 4:24 \\
\hline N6 & 4:10 & 4:17 & 4:21 & 4:25 & 4:32 & 4:35 & 4:42 & 4:48 \\
\hline N6 & 4:34 & 4:41 & 4:45 & 4:49 & 4:56 & 4:59 & 5:06 & 5:12 \\
\hline N6 & 4:58 & 5:05 & 5:09 & 5:13 & 5:20 & 5:23 & 5:30 & 5:36 \\
\hline N6 & 5:22 & 5:29 & 5:33 & 5:37 & 5:44 & 5:47 & 5:54 & 6:00 \\
\hline N6 & 5:51 & 5:57 & 6:00 & 6:03 & 6:09 & 6:12 & 6:19 & 6:24 \\
\hline N6 & 6:15 & 6:21 & 6:24 & 6:27 & 6:33 & 6:36 & 6:43 & 6:48 \\
\hline N6 & 6:39 & 6:45 & 6:48 & 6:51 & 6:57 & 7:00 & 7:07 & 7:12 \\
\hline N6 & 7:03 & 7:09 & 7:12 & 7:15 & 7:21 & 7:24 & 7:31 & 7:36 \\
\hline N6 & 7:32 & 7:38 & 7:41 & 7:44 & 7:50 & 7:53 & 8:00 & 8:05 \\
\hline N6 & 8:12 & 8:18 & 8:21 & 8:24 & 8:30 & 8:33 & 8:40 & 8:45 \\
\hline N6 & 8:54 & 8:59 & 9:02 & 9:05 & 9:11 & 9:13 & 9:19 & 9:24 \\
\hline N6 & 9:34 & 9:39 & 9:42 & 9:45 & 9:51 & 9:53 & 9:59 & 10:04 \\
\hline N6 & 10:14 & 10:19 & 10:22 & 10:25 & 10:31 & 10:33 & 10:39 & 10:44 \\
\hline N6 & 10:54 & 10:59 & 11:02 & 11:05 & 11:11 & 11:13 & 11:19 & 11:24 \\
\hline N6 & 11:34 & 11:39 & 11:42 & 11:45 & 11:51 & 11:53 & 11:59 & 12:04 \\
\hline
\end{tabular}

■ - N6 eastbound trips operate in a clockwise loop via Idaho, Cathedral, New Mexico, and Nebraska Avenues and serve the same stops as westbound trips.

Saturday Westbound -_
En sábados con dirección al oeste
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Route Number & \begin{tabular}{l}
17th \\
St. (E) \\
\& I \\
St. NW \\
(Farragut \\
N \& W) \\
M
\end{tabular} & Massachusetts Ave. \& 20th St. NW (Dupont Circle) & Massachusetts \& Wisconsin Aves. NW & \begin{tabular}{l}
4201 \\
Massachusetts Ave. NW (Berkshire Apts.)
\end{tabular} & Cathedral \& New Mexico Aves. NW (Wesley Heights) & Massachusetts Ave. \& Ward Circle NW (American University) & Westmoreland Circle NW & FRIENDSHIP HEIGHTS 4 \\
\hline \multicolumn{9}{|c|}{AM Service - Servicio matutino} \\
\hline N6 & 6:20 & 6:29 & 6:35 & 6:37 & 6:41 & 6:45 & 6:48 & 6:52 \\
\hline N6 & 7:00 & 7:09 & 7:15 & 7:17 & 7:21 & 7:25 & 7:28 & 7:32 \\
\hline N6 & 7:40 & 7:50 & 7:58 & 8:00 & 8:04 & 8:08 & 8:11 & 8:15 \\
\hline N6 & 8:20 & 8:30 & 8:40 & 8:42 & 8:46 & 8:51 & 8:54 & 9:00 \\
\hline N6 & 9:00 & 9:10 & 9:20 & 9:22 & 9:26 & 9:31 & 9:34 & 9:40 \\
\hline N6 & 9:30 & 9:40 & 9:50 & 9:52 & 9:56 & 10:01 & 10:04 & 10:10 \\
\hline N6 & 10:00 & 10:10 & 10:19 & 10:22 & 10:27 & 10:31 & 10:35 & 10:41 \\
\hline N6 & 10:30 & 10:40 & 10:49 & 10:52 & 10:57 & 11:01 & 11:05 & 11:11 \\
\hline N6 & 10:54 & 11:04 & 11:13 & 11:16 & 11:21 & 11:25 & 11:29 & 11:35 \\
\hline N6 & 11:18 & 11:28 & 11:37 & 11:40 & 11:45 & 11:49 & 11:53 & 11:59 \\
\hline N6 & 11:42 & 11:52 & 12:01 & 12:04 & 12:09 & 12:13 & 12:17 & 12:23 \\
\hline \multicolumn{9}{|c|}{PM Service - Servicio vespertino} \\
\hline N6 & 12:06 & 12:16 & 12:25 & 12:28 & 12:33 & 12:37 & 12:41 & 12:47 \\
\hline N6 & 12:30 & 12:40 & 12:49 & 12:52 & 12:57 & 1:01 & 1:05 & 1:11 \\
\hline N6 & 12:54 & 1:04 & 1:13 & 1:16 & 1:21 & 1:25 & 1:29 & 1:35 \\
\hline N6 & 1:18 & 1:28 & 1:37 & 1:40 & 1:45 & 1:49 & 1:53 & 1:59 \\
\hline N6 & 1:42 & 1:52 & 2:01 & 2:04 & 2:09 & 2:13 & 2:17 & 2:23 \\
\hline N6 & 2:06 & 2:16 & 2:25 & 2:28 & 2:33 & 2:37 & 2:41 & 2:47 \\
\hline N6 & 2:30 & 2:40 & 2:49 & 2:52 & 2:57 & 3:01 & 3:05 & 3:11 \\
\hline N6 & 2:54 & 3:04 & 3:13 & 3:16 & 3:21 & 3:25 & 3:29 & 3:35 \\
\hline N6 & 3:18 & 3:28 & 3:37 & 3:40 & 3:45 & 3:49 & 3:53 & 3:59 \\
\hline N6 & 3:42 & 3:52 & 4:01 & 4:04 & 4:09 & 4:13 & 4:17 & 4:23 \\
\hline N6 & 4:06 & 4:16 & 4:25 & 4:28 & 4:33 & 4:37 & 4:41 & 4:47 \\
\hline N6 & 4:30 & 4:40 & 4:49 & 4:52 & 4:57 & 5:01 & 5:05 & 5:11 \\
\hline N6 & 4:54 & 5:04 & 5:13 & 5:16 & 5:21 & 5:25 & 5:29 & 5:35 \\
\hline N6 & 5:18 & 5:28 & 5:37 & 5:40 & 5:45 & 5:49 & 5:53 & 5:59 \\
\hline N6 & 5:42 & 5:52 & 6:01 & 6:04 & 6:09 & 6:13 & 6:17 & 6:23 \\
\hline N6 & 6:06 & 6:16 & 6:25 & 6:28 & 6:33 & 6:37 & 6:41 & 6:47 \\
\hline N6 & 6:30 & 6:39 & 6:47 & 6:50 & 6:54 & 6:58 & 7:02 & 7:07 \\
\hline N6 & 6:54 & 7:03 & 7:11 & 7:14 & 7:18 & 7:22 & 7:26 & 7:31 \\
\hline N6 & 7:18 & 7:27 & 7:35 & 7:38 & 7:42 & 7:46 & 7:50 & 7:55 \\
\hline N6 & 7:42 & 7:51 & 7:59 & 8:02 & 8:06 & 8:10 & 8:14 & 8:19 \\
\hline N6 & 8:10 & 8:19 & 8:27 & 8:30 & 8:34 & 8:38 & 8:42 & 8:47 \\
\hline N6 & 8:50 & 8:59 & 9:07 & 9:10 & 9:14 & 9:18 & 9:22 & 9:27 \\
\hline N6 & 9:30 & 9:38 & 9:47 & 9:50 & 9:54 & 9:58 & 10:01 & 10:06 \\
\hline N6 & 10:10 & 10:18 & 10:27 & 10:30 & 10:34 & 10:38 & 10:41 & 10:46 \\
\hline N6 & 10:50 & 10:58 & 11:07 & 11:10 & 11:14 & 11:18 & 11:21 & 11:26 \\
\hline N6 & 11:30 & 11:38 & 11:47 & 11:50 & 11:54 & 11:58 & 12:01 & 12:06 \\
\hline \multicolumn{9}{|c|}{After Midnight Service - Servicio después de la medianoche} \\
\hline N6 & 12:10 & 12:18 & 12:27 & 12:30 & 12:34 & 12:38 & 12:41 & 12:46 \\
\hline
\end{tabular}

Page 8 of 10

Sunday Eastbound En domingo con dirección al este
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Route Number & Friendship Heights M & Westmoreland Circle NW & Massachusetts Ave. \& Ward Circle NW (American University) & Cathedral \& New Mexico Aves. NW (Wesley Heights) & \begin{tabular}{l}
4200 \\
Massa- \\
chusetts \\
Ave. \\
NW \\
(opposite \\
Berkshire \\
Apts.)
\end{tabular} & Massachusetts \& Wisconsin Aves. NW & Massachusetts Ave. \& 20th St. NW (Dupont Circle) &  \\
\hline \multicolumn{9}{|c|}{AM Service - Servicio matutino} \\
\hline N6 & 6:00 & 6:05 & 6:09 & 6:11 & 6:16 & 6:18 & 6:23 & 6:26 \\
\hline N6 & 6:40 & 6:45 & 6:49 & 6:52 & 6:58 & 7:00 & 7:06 & 7:11 \\
\hline N6 & 7:20 & 7:25 & 7:29 & 7:32 & 7:38 & 7:40 & 7:46 & 7:51 \\
\hline N6 & 8:00 & 8:05 & 8:09 & 8:12 & 8:18 & 8:20 & 8:26 & 8:31 \\
\hline N6 & 8:40 & 8:45 & 8:49 & 8:52 & 8:58 & 9:00 & 9:06 & 9:11 \\
\hline N6 & 9:20 & 9:25 & 9:29 & 9:32 & 9:38 & 9:40 & 9:46 & 9:51 \\
\hline N6 & 9:46 & 9:52 & 9:56 & 10:00 & 10:07 & 10:10 & 10:17 & 10:23 \\
\hline N6 & 10:16 & 10:22 & 10:26 & 10:30 & 10:37 & 10:40 & 10:47 & 10:53 \\
\hline N6 & 10:46 & 10:52 & 10:56 & 11:00 & 11:07 & 11:10 & 11:17 & 11:23 \\
\hline N6 & 11:16 & 11:22 & 11:26 & 11:30 & 11:37 & 11:40 & 11:47 & 11:53 \\
\hline N6 & 11:46 & 11:52 & 11:56 & 12:00 & 12:07 & 12:10 & 12:17 & 12:23 \\
\hline \multicolumn{9}{|c|}{PM Service - Servicio vespertino} \\
\hline N6 & 12:16 & 12:22 & 12:26 & 12:30 & 12:37 & 12:40 & 12:47 & 12:53 \\
\hline N6 & 12:46 & 12:52 & 12:56 & 1:00 & 1:07 & 1:10 & 1:17 & 1:23 \\
\hline N6 & 1:16 & 1:22 & 1:26 & 1:30 & 1:37 & 1:40 & 1:47 & 1:53 \\
\hline N6 & 1:46 & 1:52 & 1:56 & 2:00 & 2:07 & 2:10 & 2:17 & 2:23 \\
\hline N6 & 2:16 & 2:22 & 2:26 & 2:30 & 2:37 & 2:40 & 2:47 & 2:53 \\
\hline N6 & 2:46 & 2:52 & 2:56 & 3:00 & 3:07 & 3:10 & 3:17 & 3:23 \\
\hline N6 & 3:18 & 3:24 & 3:28 & 3:31 & 3:38 & 3:41 & 3:47 & 3:52 \\
\hline N6 & 3:48 & 3:54 & 3:58 & 4:01 & 4:08 & 4:11 & 4:17 & 4:22 \\
\hline N6 & 4:18 & 4:24 & 4:28 & 4:31 & 4:38 & 4:41 & 4:47 & 4:52 \\
\hline N6 & 4:48 & 4:54 & 4:58 & 5:01 & 5:08 & 5:11 & 5:17 & 5:22 \\
\hline N6 & 5:18 & 5:24 & 5:28 & 5:31 & 5:38 & 5:41 & 5:47 & 5:52 \\
\hline N6 & 5:48 & 5:54 & 5:58 & 6:01 & 6:08 & 6:11 & 6:17 & 6:22 \\
\hline N6 & 6:18 & 6:24 & 6:28 & 6:31 & 6:38 & 6:41 & 6:47 & 6:52 \\
\hline N6 & 6:48 & 6:54 & 6:58 & 7:01 & 7:08 & 7:11 & 7:17 & 7:22 \\
\hline N6 & 7:28 & 7:34 & 7:38 & 7:41 & 7:48 & 7:51 & 7:57 & 8:02 \\
\hline N6 & 8:12 & 8:18 & 8:22 & 8:25 & 8:32 & 8:35 & 8:41 & 8:46 \\
\hline N6 & 8:53 & 8:59 & 9:03 & 9:07 & 9:13 & 9:15 & 9:20 & 9:24 \\
\hline N6 & 9:33 & 9:39 & 9:43 & 9:47 & 9:53 & 9:55 & 10:00 & 10:04 \\
\hline N6 & 10:13 & 10:19 & 10:23 & 10:27 & 10:33 & 10:35 & 10:40 & 10:44 \\
\hline
\end{tabular}

Page 9 of 10

Sunday Westbound -
En domingo con dirección al oeste
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Route Number & \begin{tabular}{l}
17th \\
St. (E) \\
\& I \\
St. NW \\
(Farragut \\
N \& W) \\
M
\end{tabular} & Massachusetts Ave. \& 20th St. NW (Dupont Circle) & Massachusetts \& Wisconsin Aves. NW & \begin{tabular}{l}
4201 \\
Massachusetts Ave. NW (Berkshire Apts.)
\end{tabular} & Cathedral \& New Mexico Aves. NW (Wesley Heights) & Massachusetts Ave. \& Ward Circle NW (American University) & Westmoreland Circle NW & FRIENDSHIP HEIGHTS \\
\hline \multicolumn{9}{|c|}{AM Service - Servicio matutino} \\
\hline N6 & 6:39 & 6:47 & 6:53 & 6:55 & 6:59 & 7:02 & 7:06 & 7:10 \\
\hline N6 & 7:19 & 7:27 & 7:33 & 7:35 & 7:39 & 7:42 & 7:46 & 7:50 \\
\hline N6 & 7:59 & 8:07 & 8:13 & 8:15 & 8:19 & 8:22 & 8:26 & 8:30 \\
\hline N6 & 8:36 & 8:45 & 8:53 & 8:56 & 9:01 & 9:05 & 9:09 & 9:14 \\
\hline N6 & 9:16 & 9:25 & 9:33 & 9:36 & 9:41 & 9:45 & 9:49 & 9:54 \\
\hline N6 & 9:56 & 10:05 & 10:13 & 10:16 & 10:21 & 10:25 & 10:29 & 10:34 \\
\hline N6 & 10:30 & 10:39 & 10:47 & 10:50 & 10:55 & 10:59 & 11:03 & 11:08 \\
\hline N6 & 11:00 & 11:09 & 11:17 & 11:20 & 11:25 & 11:29 & 11:33 & 11:38 \\
\hline N6 & 11:30 & 11:39 & 11:47 & 11:50 & 11:55 & 11:59 & 12:03 & 12:08 \\
\hline \multicolumn{9}{|c|}{PM Service - Servicio vespertino} \\
\hline N6 & 12:00 & 12:09 & 12:17 & 12:20 & 12:25 & 12:29 & 12:33 & 12:38 \\
\hline N6 & 12:30 & 12:39 & 12:47 & 12:50 & 12:55 & 12:59 & 1:03 & 1:08 \\
\hline N6 & 1:00 & 1:09 & 1:17 & 1:20 & 1:25 & 1:29 & 1:33 & 1:38 \\
\hline N6 & 1:30 & 1:39 & 1:47 & 1:50 & 1:55 & 1:59 & 2:03 & 2:08 \\
\hline N6 & 2:00 & 2:09 & 2:17 & 2:20 & 2:25 & 2:29 & 2:33 & 2:38 \\
\hline N6 & 2:30 & 2:39 & 2:47 & 2:50 & 2:55 & 2:59 & 3:03 & 3:08 \\
\hline N6 & 3:00 & 3:09 & 3:17 & 3:20 & 3:25 & 3:29 & 3:33 & 3:38 \\
\hline N6 & 3:30 & 3:39 & 3:47 & 3:50 & 3:55 & 3:59 & 4:03 & 4:08 \\
\hline N6 & 4:00 & 4:09 & 4:17 & 4:20 & 4:25 & 4:29 & 4:33 & 4:38 \\
\hline N6 & 4:30 & 4:39 & 4:47 & 4:50 & 4:55 & 4:59 & 5:03 & 5:08 \\
\hline N6 & 5:00 & 5:09 & 5:17 & 5:20 & 5:25 & 5:29 & 5:33 & 5:38 \\
\hline N6 & 5:30 & 5:39 & 5:47 & 5:50 & 5:55 & 5:59 & 6:03 & 6:08 \\
\hline N6 & 6:00 & 6:09 & 6:17 & 6:20 & 6:25 & 6:29 & 6:33 & 6:38 \\
\hline N6 & 6:30 & 6:39 & 6:47 & 6:50 & 6:55 & 6:59 & 7:03 & 7:08 \\
\hline N6 & 7:00 & 7:09 & 7:17 & 7:20 & 7:25 & 7:29 & 7:33 & 7:38 \\
\hline N6 & 7:30 & 7:39 & 7:47 & 7:50 & 7:55 & 7:59 & 8:03 & 8:08 \\
\hline N6 & 8:10 & 8:19 & 8:27 & 8:30 & 8:35 & 8:39 & 8:43 & 8:48 \\
\hline N6 & 8:50 & 8:59 & 9:07 & 9:10 & 9:15 & 9:19 & 9:23 & 9:28 \\
\hline N6 & 9:30 & 9:38 & 9:46 & 9:48 & 9:51 & 9:54 & 9:57 & 10:01 \\
\hline N6 & 10:10 & 10:18 & 10:26 & 10:28 & 10:31 & 10:34 & 10:37 & 10:41 \\
\hline N6 & 10:50 & 10:58 & 11:06 & 11:08 & 11:11 & 11:14 & 11:17 & 11:21 \\
\hline
\end{tabular}

Page 10 of 10

\section*{How to use this timetable}
> Use the map to find the stops closest to where you will get on and off the bus.
\(>\) Select the schedule (Weekday, Saturday, Sunday) for when you will travel. Along the top of the schedule, find the stop at or nearest the point where you will get on the bus. Follow that column down to the time you want to leave.
> Use the same method to find the times the bus is scheduled to arrive at the stop where you will get off the bus.
> If the bus stop is not listed, use the time shown for the bus stop before it as the time to wait at the stop.
\(>\) The end-of-the-line or last stop is listed in ALL CAPS on the schedule.

\section*{Cómo Usar este Horario}
> Use este mapa para localizar las paradas más cercanas a donde se subirá y bajará del autobús.
> Seleccione el horario (Entre semana, sábado, domingo) de cuando viajará. A lo largo de la parte superior del horario, localice la parada o el punto más cercano a la parada en la que se subirá al autobús. Siga esa columna hacia abajo hasta la hora en la que desee salir.
> Utilice el mismo método para localizar las horas en que el autobús está programado para llegar a la parada en donde desea bajarse del autobús.
> Si la parada del autobús no está listada use la hora que se muestra en la parada anterior como la hora de espera en la parada.
> El final de la ruta o la última parada del autobús aparece en letras MAYÚSCULAS en el horario.


INFORMATION ANYTIME 202-637-7000
TTY 202-638-3780
MetroOpensDoors.com

\section*{Washington} Metropolitan Area Transit Authority

\section*{Anacostia-Eckington Line}

Routes P1, 2, 6

For route and schedule information
Call 202-637-7000
www.metroopensdoors.com


Page 2 of 10

\section*{P1,2,6}

\section*{Anacostia-Eckington Line}


O - Trip operates Friday only.
Los autobuses funcionan solamente el viernes.
\# - Federal Center SW Station is one block to the south, at 3rd \& D Streets SW.

\section*{Anacostia-Eckington Line}

\section*{Weekday Northbound - \\ Entre semana con dirección al norte}


\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route Number & \[
\begin{gathered}
\text { C \& } \\
\text { 21st } \\
\text { Sts. } \\
\text { NW } \\
\text { (Potomac } \\
\text { Park) }
\end{gathered}
\] & \begin{tabular}{l}
Rhode \\
Island \\
Ave- \\
Brentwood
\end{tabular} & \[
\begin{gathered}
\text { 4th } \\
\& \\
\text { W } \\
\text { Sts. } \\
\text { NE } \\
\text { (Edge- } \\
\text { wood) }
\end{gathered}
\] & \begin{tabular}{l}
North \\
Capitol \\
St. \\
\& \\
Florida \\
Ave. NW
\end{tabular} & \begin{tabular}{l}
H\& 7th Sts. NW (Gallery Pl - \\
Chinatown)
\end{tabular} & \begin{tabular}{l}
10th \\
St. \& \\
Pennsylvania \\
Ave. \\
NW \\
(ARCH- \\
IVES)
\end{tabular} & \begin{tabular}{l}
Pennsylvania Ave. \& 10th St. NW \\
(Archives)
\end{tabular} & \begin{tabular}{l}
D \& 3rd \\
Sts. SW \\
(Federal \\
Center \\
SW) \\
K
\end{tabular} & C
\&
3rd
Sts.
SW
\# & \begin{tabular}{l}
M \& Half \\
Sts. SE (Navy Yard) Mas
\end{tabular} & \[
\begin{gathered}
\text { M } \\
\& \\
9 \text { th } \\
\text { Sts. } \\
\text { SE } \\
\text { (Navy } \\
\text { Yard) }
\end{gathered}
\] &  \\
\hline \multicolumn{13}{|c|}{AM Service - Servicio matutino} \\
\hline P6/ & - & 5:00 & 5:04 & 5:09 & 5:18 & 5:24 & - & - & - & - & - & - \\
\hline P6 & - & 5:19 & 5:23 & 5:28 & 5:37 & - & 5:41 & - & 5:46 & - & 5:56 & 6:02 \\
\hline P6 & - & 5:40 & 5:44 & 5:50 & 5:59 & - & 6:03 & - & 6:08 & - & 6:19 & 6:26 \\
\hline P6 & - & 6:05 & 6:09 & 6:15 & 6:24 & - & 6:28 & - & 6:33 & - & 6:44 & 6:51 \\
\hline P6 & - & 6:25 & 6:29 & 6:36 & 6:47 & - & 6:53 & - & 7:00 & - & 7:11 & 7:18 \\
\hline P6 & - & 6:45 & 6:49 & 6:56 & 7:07 & - & 7:13 & - & 7:20 & - & 7:31 & 7:38 \\
\hline P6 & - & 7:05 & 7:09 & 7:16 & 7:27 & - & 7:33 & - & 7:40 & - & 7:51 & 7:58 \\
\hline P6 & - & 7:25 & 7:29 & 7:36 & 7:47 & - & 7:53 & - & 8:00 & - & 8:11 & 8:18 \\
\hline P6 & - & 7:40 & 7:44 & 7:51 & 8:02 & - & 8:08 & - & 8:15 & - & 8:26 & 8:33 \\
\hline P6 & - & 7:55 & 7:59 & 8:06 & 8:17 & - & 8:23 & - & 8:30 & - & 8:41 & 8:48 \\
\hline P6 & - & 8:10 & 8:14 & 8:21 & 8:32 & - & 8:38 & - & 8:45 & - & 8:56 & 9:03 \\
\hline P6 & - & 8:26 & 8:30 & 8:37 & 8:47 & - & 8:53 & - & 9:01 & - & 9:11 & 9:18 \\
\hline P6 & - & 8:45 & 8:49 & 8:56 & 9:06 & - & 9:12 & - & 9:20 & - & 9:30 & 9:37 \\
\hline P2 & - & - & - & - & - & 9:26 & - & 9:34 & - & 9:41 & 9:45 & 9:52 \\
\hline P6 & - & 9:05 & 9:09 & 9:16 & 9:26 & - & 9:32 & - & 9:40 & - & 9:50 & 9:57 \\
\hline P6 & - & 9:25 & 9:29 & 9:36 & 9:46 & - & 9:52 & - 1 & 10:00 & - & 10:10 & 10:17 \\
\hline P2 & - & - & - & - & - & 9:57 & - & 10:05 & - & 10:12 & 10:16 & 10:23 \\
\hline P6 & - & 9:46 & 9:50 & 9:57 & 10:07 & - & 10:13 & - 1 & 10:21 & - & 10:31 & 10:38 \\
\hline P2 & - & - & - & - & - & 10:28 & - & 10:36 & - & 10:43 & 10:47 & 10:54 \\
\hline P6 & - & 10:16 & 10:20 & 10:27 & 10:37 & - & 10:43 & - 1 & 10:51 & - & 11:01 & 11:08 \\
\hline P2 & - & - & - & - & - & 10:58 & - & 11:06 & - & 11:13 & 11:17 & 11:24 \\
\hline P6 & - & 10:46 & 10:50 & 10:57 & 11:07 & - & 11:13 & - 1 & 11:21 & - & 11:31 & 11:38 \\
\hline P2 & - & - & - & - & - & 11:28 & - & 11:36 & - & 11:43 & 11:47 & 11:54 \\
\hline P6 & - & 11:16 & 11:20 & 11:27 & 11:37 & - & 11:43 & - 1 & 11:51 & - & 12:01 & 12:08 \\
\hline P2 & - & - & - & - & - & 11:58 & - & 12:06 & - & 12:13 & 12:17 & 12:24 \\
\hline P6 & - & 11:46 & 11:50 & 11:57 & 12:07 & - & 12:13 & - 1 & 12:21 & - & 12:31 & 12:38 \\
\hline
\end{tabular}

○ - Trip operates Friday only.
Los autobuses funcionan solamente el viernes.
\# - Federal Center SW Station is one block to the south, at 3rd \& D Streets SW.

\title{
Weekday Southbound Entre semana con dirección al sur
}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route Number & \[
\begin{gathered}
\text { C \& } \\
\text { 21st } \\
\text { Sts. } \\
\text { NW } \\
\text { (Potomac } \\
\text { Park) }
\end{gathered}
\] & \begin{tabular}{l}
Rhode \\
Island AveBrentwood
\end{tabular} & \[
\begin{gathered}
\text { 4th } \\
\& \\
\mathrm{~K} \\
\mathrm{~W} \\
\text { Sts. } \\
\mathrm{NE} \\
\text { (Edge- } \\
\text { wood) }
\end{gathered}
\] & \begin{tabular}{l}
North \\
Capitol St. \& Florida Ave. NW
\end{tabular} & \begin{tabular}{l}
H\&7th \\
Sts. NW (Gallery Pl Chinatown)
\end{tabular} & \begin{tabular}{l}
10th
St. \& \\
Pennsylvania Ave. NW (ARCHIVES)
\end{tabular} & \[
\begin{gathered}
\text { Pennsyl- } \\
\text { vania } \\
\text { Ave. \& } \\
\text { 10th } \\
\text { St. } \\
\text { NW } \\
\text { (Archives) }
\end{gathered}
\] & \begin{tabular}{l}
D \& 3rd \\
Sts. SW \\
(Federal Center SW)
\end{tabular} & \[
\begin{gathered}
\text { C } \\
\& \\
\text { Srd } \\
\text { Sts. } \\
\text { SW } \\
\#
\end{gathered}
\] & \begin{tabular}{l}
M \& \\
Half \\
Sts. SE \\
(Navy \\
Yard) \\
4
\end{tabular} & \[
\begin{gathered}
\text { M } \\
\& \\
\text { \& h } \\
\text { 9ts. } \\
\text { SE } \\
\text { (Navy } \\
\text { Yard) }
\end{gathered}
\] & anacosta M \\
\hline \multicolumn{13}{|c|}{PM Service - Servicio vespertino} \\
\hline P2 & - & - & - & - & - & 12:29 & - & 12:37 & - & 12:44 & 12:48 & 12:55 \\
\hline P6 & - & 12:16 & 12:20 & 12:27 & 12:37 & - & 12:43 & - & 12:51 & - & 1:01 & 1:08 \\
\hline P2 & - & - & - & - & - & 12:59 & - & 1:07 & - & 1:14 & 1:18 & 1:25 \\
\hline P6 & - & 12:46 & 12:50 & 12:57 & 1:07 & & 1:13 & & 1:21 & - & 1:31 & 1:38 \\
\hline P2 & - & - & - & - & - & 1:30 & - & 1:38 & - & 1:45 & 1:49 & 1:56 \\
\hline P6 & - & 1:16 & 1:20 & 1:27 & 1:37 & - & 1:43 & - & 1:51 & - & 2:01 & 2:08 \\
\hline P2 & - & - & - & - & - & 2:00 & - & 2:08 & - & 2:15 & 2:19 & 2:26 \\
\hline P6 & - & 1:46 & 1:50 & 1:57 & 2:07 & - & 2:13 & - & 2:21 & - & 2:31 & 2:38 \\
\hline P2 & - & - & - & - & - & 2:31 & - & 2:39 & - & 2:46 & 2:50 & 2:57 \\
\hline P6 & - & 2:16 & 2:20 & 2:27 & 2:37 & - & 2:43 & - & 2:51 & - & 3:01 & 3:08 \\
\hline P2 & - & - & - & - & - & 3:02 & - & 3:10 & - & 3:17 & 3:21 & 3:28 \\
\hline P6 & - & 2:43 & 2:48 & 2:55 & 3:03 & - & 3:09 & - & 3:17 & - & 3:29 & 3:38 \\
\hline P2 & - & - & - & - & - & 3:24 & - & 3:33 & - & 3:40 & 3:45 & 3:54 \\
\hline P6 & - & 3:13 & 3:18 & 3:25 & 3:33 & & 3:39 & & 3:47 & - & 3:59 & 4:08 \\
\hline P2 & - & - & - & - & - & 3:48 & - & 3:57 & - & 4:04 & 4:09 & 4:18 \\
\hline P6 & - & 3:33 & 3:38 & 3:45 & 3:53 & & 3:59 & & 4:07 & - & 4:19 & 4:28 \\
\hline P1 & 3:56 & - & - & - & - & 4:07 & - & 4:16 & - & 4:24 & 4:29 & 4:38 \\
\hline P6 & - & 3:53 & 3:57 & 4:04 & 4:13 & - & 4:21 & - & 4:29 & - & 4:39 & 4:48 \\
\hline P1 & 4:16 & - & - & - & - & 4:27 & - & 4:36 & - & 4:44 & 4:49 & 4:58 \\
\hline P6 & - & 4:13 & 4:17 & 4:24 & 4:33 & - & 4:41 & - & 4:49 & - & 4:59 & 5:08 \\
\hline P1 & 4:36 & - & - & - & - & 4:47 & - & 4:56 & - & 5:04 & 5:09 & 5:18 \\
\hline P6 & - & 4:33 & 4:37 & 4:44 & 4:53 & - & 5:01 & - & 5:09 & - & 5:19 & 5:28 \\
\hline P1 & 4:56 & - & - & - & - & 5:07 & - & 5:16 & - & 5:24 & 5:29 & 5:38 \\
\hline P6 & - & 4:53 & 4:57 & 5:04 & 5:13 & - & 5:21 & - & 5:29 & - & 5:39 & 5:48 \\
\hline P1 & 5:16 & - & - & - & - & 5:27 & - & 5:36 & - & 5:44 & 5:49 & 5:58 \\
\hline P6 & - & 5:13 & 5:17 & 5:24 & 5:33 & & 5:41 & & 5:49 & - & 5:59 & 6:08 \\
\hline P1 & 5:43 & - & - & - & - & 5:52 & - & 6:00 & - & 6:07 & 6:11 & 6:18 \\
\hline P6 & - & 5:38 & 5:42 & 5:49 & 5:58 & - & 6:05 & - & 6:12 & - & 6:21 & 6:28 \\
\hline P6 & - & 5:56 & 6:00 & 6:07 & 6:16 & - & 6:23 & - & 6:30 & - & 6:39 & 6:46 \\
\hline P2 & - & - & - & - & - & 6:28 & & 6:36 & - & 6:43 & 6:47 & 6:54 \\
\hline P6 & - & 6:19 & 6:23 & 6:30 & 6:39 & - & 6:46 & - & 6:53 & - & 7:02 & 7:09 \\
\hline P2 & - & - & - & - & - & 7:00 & - & 7:08 & - & 7:15 & 7:19 & 7:26 \\
\hline P6 & - & 6:53 & 6:57 & 7:04 & 7:13 & - & 7:20 & - & 7:27 & - & 7:36 & 7:43 \\
\hline P2 & - & - & - & - & - & 7:35 & - & 7:43 & - & 7:50 & 7:54 & 8:01 \\
\hline P6 & - & 7:27 & 7:31 & 7:38 & 7:47 & - & 7:54 & - & 8:01 & - & 8:10 & 8:17 \\
\hline P6 & - & 8:07 & 8:11 & 8:16 & 8:25 & & 8:31 & - & 8:37 & - & 8:46 & 8:52 \\
\hline P6 & - & 8:41 & 8:45 & 8:50 & 8:59 & - & 9:05 & - & 9:11 & - & 9:20 & 9:26 \\
\hline P6 & - & 9:15 & 9:19 & 9:24 & 9:33 & & 9:39 & & 9:45 & - & 9:54 & 10:00 \\
\hline P6 & - & 9:50 & 9:54 & 9:59 & 10:08 & - & 10:14 & - & 10:20 & - & 10:29 & 10:35 \\
\hline P6 & - & 10:24 & 10:28 & 10:33 & 10:42 & & 10:48 & - & 10:54 & - & 11:03 & 11:09 \\
\hline P6 & - & 10:58 & 11:02 & 11:07 & 11:14 & - & 11:19 & - & 11:26 & - & 11:33 & 11:39 \\
\hline P6 & - & 11:27 & 11:31 & 11:36 & 11:43 & - & 11:48 & - & 11:55 & - & 12:02 & 12:08 \\
\hline \multicolumn{13}{|c|}{After Midnight Service - Servicio después de la medianoche} \\
\hline P6/ & - & 12:01 & 12:05 & 12:10 & 12:17 & 12:24 & - & - & - & - & - & - \\
\hline P6/ & - & 12:31 & 12:35 & 12:40 & 12:47 & 12:54 & - & - & - & - & - & - \\
\hline O P6/ & - & 1:01 & 1:05 & 1:10 & 1:17 & 1:24 & - & - & - & - & - & - \\
\hline O P6/ & - & 1:31 & 1:35 & 1:40 & 1:47 & 1:54 & - & - & - & - & - & - \\
\hline O P6/ & - & 2:01 & 2:05 & 2:10 & 2:17 & 2:24 & - & - & - & - & - & - \\
\hline O P6/ & - & 2:31 & 2:35 & 2:40 & 2:47 & 2:54 & - & - & - & - & - & \\
\hline
\end{tabular}

O - Trip operates Friday only.
Los autobuses funcionan solamente el viernes.
\# - Federal Center SW Station is one block to the south, at 3rd \& D Streets SW.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{10}{|c|}{\multirow[t]{2}{*}{Saturday Northbound En sábados con dirección al norte}} \\
\hline & & & & & & & & & \\
\hline Route Number & Anacostia M & \[
\begin{gathered}
\text { I } \\
\& \\
\text { 8th } \\
\text { Sts. } \\
\text { SE } \\
\text { (Navy } \\
\text { Yard) }
\end{gathered}
\] & \[
\begin{gathered}
\text { C } \\
\& \\
\text { 3rd } \\
\text { Sts. } \\
\text { SW } \\
\#
\end{gathered}
\] & \[
\begin{gathered}
\text { 10th } \\
\text { St. \& } \\
\text { Pennsyl- } \\
\text { vania } \\
\text { Ave. } \\
\text { NW } \\
\text { (Ar- } \\
\text { chives) }
\end{gathered}
\] & Pennsylvania Ave. \& 10th St. NW (Archives) & H\& 7th Sts. NW (Gallery PI -Chinatown) & \begin{tabular}{l}
North \\
Capitol \\
St. \\
\& \\
Florida \\
Ave. NE
\end{tabular} & \[
\begin{gathered}
\text { 4th } \\
\& \\
\text { W } \\
\text { Sts. } \\
\text { NE } \\
\text { (Edge- } \\
\text { wood) }
\end{gathered}
\] & \begin{tabular}{l}
RHODE \\
ISLAND AVEBRENTWOOD
\end{tabular} \\
\hline \multicolumn{10}{|c|}{AM Service - Servicio matutino} \\
\hline P6 & - & - & - & 5:48 & - & 5:52 & 6:02 & 6:07 & 6:10 \\
\hline P6 & - & - & - & 6:18 & - & 6:22 & 6:32 & 6:37 & 6:40 \\
\hline P6 & - & - & - & 6:48 & - & 6:52 & 7:02 & 7:07 & 7:10 \\
\hline P6 & - & - & - & 7:18 & - & 7:23 & 7:33 & 7:39 & 7:43 \\
\hline P6 & - & - & - & 7:48 & - & 7:53 & 8:03 & 8:09 & 8:13 \\
\hline P6 & - & - & - & 8:08 & - & 8:13 & 8:23 & 8:29 & 8:33 \\
\hline P6 & 8:12 & 8:22 & 8:30 & & 8:36 & 8:41 & 8:51 & 8:57 & 9:01 \\
\hline P6 & 8:42 & 8:52 & 9:00 & - & 9:06 & 9:11 & 9:21 & 9:27 & 9:31 \\
\hline P6 & 9:12 & 9:22 & 9:30 & - & 9:36 & 9:41 & 9:51 & 9:57 & 10:01 \\
\hline P6 & 9:42 & 9:52 & 10:00 & - & 10:06 & 10:11 & 10:21 & 10:27 & 10:31 \\
\hline P6 & 10:12 & 10:22 & 10:30 & - & 10:36 & 10:41 & 10:51 & 10:57 & 11:01 \\
\hline P6 & 10:42 & 10:52 & 11:00 & - & 11:06 & 11:11 & 11:21 & 11:27 & 11:31 \\
\hline P6 & 11:12 & 11:22 & 11:30 & - & 11:36 & 11:41 & 11:51 & 11:58 & 12:02 \\
\hline P6 & 11:42 & 11:52 & 12:00 & - & 12:06 & 12:11 & 12:21 & 12:28 & 12:32 \\
\hline \multicolumn{10}{|c|}{PM Service - Servicio vespertino} \\
\hline P6 & 12:12 & 12:22 & 12:30 & - & 12:36 & 12:41 & 12:51 & 12:58 & 1:02 \\
\hline P6 & 12:42 & 12:52 & 1:00 & - & 1:06 & 1:11 & 1:21 & 1:28 & 1:32 \\
\hline P6 & 1:12 & 1:22 & 1:30 & - & 1:36 & 1:41 & 1:51 & 1:58 & 2:02 \\
\hline P6 & 1:42 & 1:52 & 2:00 & - & 2:06 & 2:11 & 2:21 & 2:28 & 2:32 \\
\hline P6 & 2:12 & 2:22 & 2:30 & - & 2:36 & 2:41 & 2:51 & 2:58 & 3:02 \\
\hline P6 & 2:42 & 2:52 & 3:00 & - & 3:06 & 3:11 & 3:21 & 3:28 & 3:32 \\
\hline P6 & 3:12 & 3:22 & 3:30 & - & 3:36 & 3:41 & 3:51 & 3:58 & 4:02 \\
\hline P6 & 3:42 & 3:52 & 4:00 & - & 4:06 & 4:11 & 4:21 & 4:28 & 4:32 \\
\hline P6 & 4:12 & 4:22 & 4:30 & - & 4:36 & 4:41 & 4:51 & 4:58 & 5:02 \\
\hline P6 & 4:42 & 4:52 & 5:00 & - & 5:06 & 5:11 & 5:21 & 5:28 & 5:32 \\
\hline P6 & 5:12 & 5:22 & 5:30 & - & 5:36 & 5:41 & 5:51 & 5:58 & 6:02 \\
\hline P6 & 5:42 & 5:52 & 6:00 & - & 6:06 & 6:11 & 6:21 & 6:28 & 6:32 \\
\hline P6 & 6:10 & 6:19 & 6:27 & - & 6:32 & 6:37 & 6:46 & 6:51 & 6:55 \\
\hline P6 & 6:42 & 6:51 & 6:59 & - & 7:04 & 7:09 & 7:18 & 7:23 & 7:27 \\
\hline P6 & 7:15 & 7:24 & 7:32 & - & 7:37 & 7:42 & 7:51 & 7:56 & 8:00 \\
\hline P6 & 7:48 & 7:57 & 8:05 & - & 8:10 & 8:15 & 8:24 & 8:29 & 8:33 \\
\hline P6 & 8:21 & 8:30 & 8:38 & - & 8:43 & 8:48 & 8:57 & 9:02 & 9:06 \\
\hline P6 & 8:54 & 9:03 & 9:11 & - & 9:16 & 9:21 & 9:30 & 9:35 & 9:39 \\
\hline P6 & 9:29 & 9:36 & 9:43 & - & 9:47 & 9:51 & 10:01 & 10:06 & 10:09 \\
\hline P6 & 10:01 & 10:08 & 10:15 & - & 10:19 & 10:23 & 10:33 & 10:38 & 10:41 \\
\hline P6 & 10:34 & 10:41 & 10:48 & - & 10:52 & 10:56 & 11:06 & 11:11 & 11:14 \\
\hline P6 & 11:05 & 11:12 & 11:19 & - & 11:23 & 11:27 & 11:37 & 11:42 & 11:45 \\
\hline P6 & 11:36 & 11:43 & 11:50 & - & 11:54 & 11:58 & 12:08 & 12:13 & 12:16 \\
\hline \multicolumn{10}{|l|}{After Midnight Service - Servicio después de la medianoche} \\
\hline P6 & - & - & - & 12:24 & - & 12:28 & 12:38 & 12:43 & 12:46 \\
\hline P6 & - & - & - & 12:54 & - & 12:58 & 1:08 & 1:13 & 1:16 \\
\hline P6 & - & - & - & 1:24 & - & 1:28 & 1:38 & 1:43 & 1:46 \\
\hline P6 & - & - & - & 1:54 & - & 1:58 & 2:08 & 2:13 & 2:16 \\
\hline P6 & - & - & - & 2:54 & - & 2:58 & 3:08 & 3:13 & 3:16 \\
\hline
\end{tabular}
\# - Federal Center SW Station is one block to the south, at 3rd \& D Streets SW.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{10}{|c|}{\begin{tabular}{l}
Saturday Southbound \\
En sábados con dirección al sur
\end{tabular}} \\
\hline Route Number & Rhode Island AveBrentwood N &  & North Capitol St. \& Florida Ave. NW & H \& 7th Sts. NW (Gallery PI -Chinatown) & \begin{tabular}{l}
10th \\
St. \& \\
Pennsylvania \\
Ave. NW \\
(ARCHIVES)
\end{tabular} & Pennsylvania Ave. \& 10th St. NW (Archives) & \[
\begin{gathered}
\text { C } \\
\& \\
\text { \&rd } \\
\text { Sts. } \\
\text { SW }
\end{gathered}
\] & M \& 9th Sts. SE (Navy Yard) & ANACOSTIA 19 \\
\hline \multicolumn{10}{|c|}{AM Service - Servicio matutino} \\
\hline P6/ & 5:20 & 5:23 & 5:27 & 5:36 & 5:42 & - & - & - & - \\
\hline P6/ & 5:50 & 5:53 & 5:57 & 6:06 & 6:12 & - & - & - & - \\
\hline P6/ & 6:20 & 6:23 & 6:27 & 6:36 & 6:42 & - & - & - & - \\
\hline P6/ & 6:50 & 6:53 & 6:57 & 7:06 & 7:12 & - & - & - & - \\
\hline P6/ & 7:20 & 7:23 & 7:27 & 7:36 & 7:42 & - & - & - & - \\
\hline P6 & 7:48 & 7:52 & 7:58 & 8:07 & - & 8:11 & 8:17 & 8:25 & 8:32 \\
\hline P6 & 8:18 & 8:22 & 8:28 & 8:37 & - & 8:41 & 8:47 & 8:55 & 9:02 \\
\hline P6 & 8:48 & 8:52 & 8:58 & 9:07 & - & 9:11 & 9:17 & 9:25 & 9:32 \\
\hline P6 & 9:18 & 9:22 & 9:28 & 9:37 & - & 9:41 & 9:47 & 9:55 & 10:02 \\
\hline P6 & 9:48 & 9:52 & 9:58 & 10:07 & - & 10:11 & 10:17 & 10:25 & 10:32 \\
\hline P6 & 10:18 & 10:22 & 10:28 & 10:37 & - & 10:41 & 10:47 & 10:55 & 11:02 \\
\hline P6 & 10:46 & 10:50 & 10:56 & 11:06 & - & 11:11 & 11:18 & 11:27 & 11:34 \\
\hline P6 & 11:16 & 11:20 & 11:26 & 11:36 & - & 11:41 & 11:48 & 11:57 & 12:04 \\
\hline P6 & 11:46 & 11:50 & 11:56 & 12:06 & - & 12:11 & 12:18 & 12:27 & 12:34 \\
\hline \multicolumn{10}{|c|}{PM Service - Servicio vespertino} \\
\hline P6 & 12:16 & 12:20 & 12:26 & 12:36 & - & 12:41 & 12:48 & 12:57 & 1:04 \\
\hline P6 & 12:46 & 12:50 & 12:56 & 1:06 & - & 1:11 & 1:18 & 1:27 & 1:34 \\
\hline P6 & 1:16 & 1:20 & 1:26 & 1:36 & - & 1:41 & 1:48 & 1:57 & 2:04 \\
\hline P6 & 1:46 & 1:50 & 1:56 & 2:06 & - & 2:11 & 2:18 & 2:27 & 2:34 \\
\hline P6 & 2:16 & 2:20 & 2:26 & 2:36 & - & 2:41 & 2:48 & 2:57 & 3:04 \\
\hline P6 & 2:46 & 2:50 & 2:56 & 3:06 & - & 3:11 & 3:18 & 3:27 & 3:34 \\
\hline P6 & 3:16 & 3:20 & 3:26 & 3:36 & - & 3:41 & 3:48 & 3:57 & 4:04 \\
\hline P6 & 3:46 & 3:50 & 3:56 & 4:06 & - & 4:11 & 4:18 & 4:27 & 4:34 \\
\hline P6 & 4:16 & 4:20 & 4:26 & 4:36 & - & 4:41 & 4:48 & 4:57 & 5:04 \\
\hline P6 & 4:46 & 4:50 & 4:56 & 5:06 & - & 5:11 & 5:18 & 5:27 & 5:34 \\
\hline P6 & 5:16 & 5:20 & 5:26 & 5:36 & - & 5:41 & 5:48 & 5:57 & 6:04 \\
\hline P6 & 5:49 & 5:53 & 5:59 & 6:09 & - & 6:14 & 6:21 & 6:30 & 6:37 \\
\hline P6 & 6:22 & 6:26 & 6:32 & 6:42 & - & 6:47 & 6:54 & 7:03 & 7:10 \\
\hline P6 & 7:00 & 7:03 & 7:08 & 7:18 & - & 7:22 & 7:28 & 7:36 & 7:43 \\
\hline P6 & 7:33 & 7:36 & 7:41 & 7:51 & - & 7:55 & 8:01 & 8:09 & 8:16 \\
\hline P6 & 8:06 & 8:09 & 8:14 & 8:24 & - & 8:28 & 8:34 & 8:42 & 8:49 \\
\hline P6 & 8:39 & 8:42 & 8:47 & 8:57 & - & 9:01 & 9:07 & 9:15 & 9:22 \\
\hline P6 & 9:12 & 9:15 & 9:20 & 9:30 & - & 9:34 & 9:40 & 9:48 & 9:55 \\
\hline P6 & 9:46 & 9:49 & 9:54 & 10:03 & - & 10:07 & 10:12 & 10:20 & 10:26 \\
\hline P6 & 10:17 & 10:20 & 10:25 & 10:34 & - & 10:38 & 10:43 & 10:51 & 10:57 \\
\hline P6 & 10:48 & 10:51 & 10:56 & 11:05 & - & 11:09 & 11:14 & 11:22 & 11:28 \\
\hline P6 & 11:19 & 11:22 & 11:27 & 11:36 & - & 11:40 & 11:45 & 11:53 & 11:59 \\
\hline P6/ & 11:50 & 11:53 & 11:58 & 12:07 & 12:13 & - & - & - & - \\
\hline \multicolumn{10}{|c|}{After Mionight Service - Servicio después de la medianoche} \\
\hline P6/ & 12:20 & 12:23 & 12:28 & 12:37 & 12:43 & - & - & - & - \\
\hline P6/ & 12:50 & 12:53 & 12:58 & 1:07 & 1:13 & - & - & - & - \\
\hline P6/ & 1:20 & 1:23 & 1:28 & 1:37 & 1:43 & - & - & - & - \\
\hline P6/ & 1:50 & 1:53 & 1:58 & 2:07 & 2:13 & - & - & - & - \\
\hline P6/ & 2:20 & 2:23 & 2:28 & 2:37 & 2:43 & - & - & - & - \\
\hline
\end{tabular}

\footnotetext{
\# - Federal Center SW Station is one block to the south, at 3rd \& D Streets SW.
}

\section*{Page 8 of 10}


\footnotetext{
\# - Federal Center SW Station is one block to the south, at 3rd \& D Streets SW.
}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{10}{|c|}{\multirow[t]{2}{*}{Sunday Southbound}} \\
\hline & & & & & & & & & \\
\hline Route Number & Rhode Island AveBrentwood M & 4th
\(\&\)
W
Sts.
NE
(Edgewood) & \begin{tabular}{l}
North \\
Capitol St. \& \\
Florida Ave. NW
\end{tabular} & \begin{tabular}{l}
H \& 7th \\
Sts. NW \\
(Gallery PI - \\
Chinatown)
\end{tabular} & \begin{tabular}{l}
10th \\
St. \& \\
Pennsyl- \\
vania \\
Ave. \\
NW \\
(ARCHIVES)
\end{tabular} & Pennsylvania Ave. \& 10th St. NW (Archives) & \[
\begin{gathered}
\text { C } \\
\& \\
\text { Srd } \\
\text { Sts. } \\
\text { SW } \\
\#
\end{gathered}
\] & \[
\begin{gathered}
\text { M } \\
\& \\
9 \text { th } \\
\text { Sts. SE } \\
\text { (Navy } \\
\text { Yard) }
\end{gathered}
\] & ANACOSTIA \(\underset{ }{M}\) \\
\hline \multicolumn{10}{|c|}{AM Service - Servicio matutino} \\
\hline P6/ & 6:20 & 6:23 & 6:28 & 6:37 & 6:44 & - & - & - & - \\
\hline P6/ & 6:50 & 6:53 & 6:58 & 7:07 & 7:14 & - & - & - & - \\
\hline P6/ & 7:20 & 7:23 & 7:28 & 7:37 & 7:44 & - & - & - & - \\
\hline P6 & 7:50 & 7:53 & 7:58 & 8:07 & - & 8:12 & 8:17 & 8:23 & 8:28 \\
\hline P6 & 8:25 & 8:28 & 8:33 & 8:42 & - & 8:47 & 8:52 & 8:58 & 9:03 \\
\hline P6 & 8:51 & 8:55 & 9:00 & 9:09 & - & 9:16 & 9:23 & 9:31 & 9:37 \\
\hline P6 & 9:26 & 9:30 & 9:35 & 9:44 & - & 9:51 & 9:58 & 10:06 & 10:12 \\
\hline P6 & 10:01 & 10:05 & 10:10 & 10:19 & - & 10:26 & 10:33 & 10:41 & 10:47 \\
\hline P6 & 10:36 & 10:40 & 10:45 & 10:54 & - & 11:01 & 11:08 & 11:16 & 11:22 \\
\hline P6 & 11:11 & 11:15 & 11:20 & 11:29 & - & 11:36 & 11:43 & 11:51 & 11:57 \\
\hline P6 & 11:46 & 11:50 & 11:55 & 12:04 & - & 12:11 & 12:18 & 12:26 & 12:32 \\
\hline \multicolumn{10}{|c|}{PM Service - Servicio vespertino} \\
\hline P6 & 12:19 & 12:23 & 12:28 & 12:38 & - & 12:45 & 12:52 & 1:01 & 1:08 \\
\hline P6 & 12:55 & 12:59 & 1:04 & 1:14 & - & 1:21 & 1:28 & 1:37 & 1:44 \\
\hline P6 & 1:31 & 1:35 & 1:40 & 1:50 & - & 1:57 & 2:04 & 2:13 & 2:20 \\
\hline P6 & 2:07 & 2:11 & 2:16 & 2:26 & - & 2:33 & 2:40 & 2:49 & 2:56 \\
\hline P6 & 2:43 & 2:47 & 2:52 & 3:02 & - & 3:09 & 3:16 & 3:25 & 3:32 \\
\hline P6 & 3:19 & 3:23 & 3:28 & 3:38 & - & 3:45 & 3:52 & 4:01 & 4:08 \\
\hline P6 & 3:55 & 3:59 & 4:04 & 4:14 & - & 4:21 & 4:28 & 4:37 & 4:44 \\
\hline P6 & 4:31 & 4:35 & 4:40 & 4:50 & - & 4:57 & 5:04 & 5:13 & 5:20 \\
\hline P6 & 5:08 & 5:11 & 5:16 & 5:25 & - & 5:32 & 5:39 & 5:48 & 5:55 \\
\hline P6 & 5:43 & 5:46 & 5:51 & 6:00 & - & 6:07 & 6:14 & 6:23 & 6:30 \\
\hline P6 & 6:18 & 6:21 & 6:26 & 6:35 & - & 6:42 & 6:49 & 6:58 & 7:05 \\
\hline P6 & 6:55 & 6:58 & 7:03 & 7:12 & - & 7:18 & 7:24 & 7:32 & 7:38 \\
\hline P6 & 7:28 & 7:31 & 7:36 & 7:45 & - & 7:51 & 7:57 & 8:05 & 8:11 \\
\hline P6 & 8:01 & 8:04 & 8:09 & 8:18 & - & 8:24 & 8:30 & 8:38 & 8:44 \\
\hline P6 & 8:34 & 8:37 & 8:42 & 8:51 & - & 8:57 & 9:03 & 9:11 & 9:17 \\
\hline P6 & 9:07 & 9:10 & 9:15 & 9:24 & - & 9:30 & 9:36 & 9:44 & 9:50 \\
\hline P6 & 9:40 & 9:43 & 9:48 & 9:57 & - & 10:03 & 10:09 & 10:17 & 10:23 \\
\hline P6 & 10:13 & 10:16 & 10:21 & 10:30 & - & 10:36 & 10:42 & 10:50 & 10:56 \\
\hline P6 & 10:46 & 10:49 & 10:54 & 11:03 & - & 11:09 & 11:15 & 11:23 & 11:29 \\
\hline P6 & 11:19 & 11:22 & 11:27 & 11:36 & - & 11:42 & 11:48 & 11:56 & 12:02 \\
\hline
\end{tabular}
\# - Federal Center SW Station is one block to the south, at 3rd \& D Streets SW.
Note: For early morning and late night service between
Anacostia and Archives, see timetable for Routes A42, A46, A48.

\section*{How to use this timetable}
> Use the map to find the stops closest to where you will get on and off the bus.
> Select the schedule (Weekday, Saturday, Sunday) for when you will travel. Along the top of the schedule, find the stop at or nearest the point where you will get on the bus. Follow that column down to the time you want to leave.
> Use the same method to find the times the bus is scheduled to arrive at the stop where you will get off the bus.
> If the bus stop is not listed, use the time shown for the bus stop before it as the time to wait at the stop.
> The end-of-the-line or last stop is listed in ALL CAPS on the schedule.

\section*{Cómo Usar este Horario}
> Use este mapa para localizar las paradas más cercanas a donde se subirá y bajará del autobús.
> Seleccione el horario (Entre semana, sábado, domingo) de cuando viajará. A lo largo de la parte superior del horario, localice la parada o el punto más cercano a la parada en la que se subirá al autobús. Siga esa columna hacia abajo hasta la hora en la que desee salir.
> Utilice el mismo método para localizar las horas en que el autobús está programado para Ilegar a la parada en donde desea bajarse del autobús.
> Si la parada del autobús no está listada use la hora que se muestra en la parada anterior como la hora de espera en la parada.
> El final de la ruta o la última parada del autobús aparece en letras MAYÚSCULAS en el horario.
```

English-Español
S1
16th Street-Potomac Park Line
S2,4
16th Street Line

```

```

d. All Metrobuses are fully accessible and are equipped with lifts or ramps for wheelchair accessibility
Todos los autobuses de Metro son accesibles a personas con impedimentos y están equipados con rampas o elevadores para sillas de ruedas
Serves these locations-
Brinda servicio a estas ubicaciones
Silver Spring station (S2,4)
16th St. and Eastern Ave. N.W. (S2,4)
Alaska Ave. and Kalmia Rd. N.W. (S2)
Walter Reed Army Medical Center (S2,4)
Carter Barron Park \& Ride Lot
McPherson Sq station (S2,4)
Metro Center station (S2,4)
Federal Triangle (S2,4)
(10th St. and Constitution Ave. N.W.) Potomac Park/State Dept. (S1)

```

\section*{Washington \\ Metropolitan Area \\ Transit Authority}

A District of Columbia,
Maryland and Virginia
Transit Partnership
Page 1 of 17


\title{
16th Street-Potomac Park Line Monday thru Friday \\ Lunes por Viernes \\ (except holidays - ex cepto los días festivos)
}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multicolumn{7}{|c|}{Southoound Dirección al sur} \\
\hline Route Number & \begin{tabular}{l}
14th St. \& \\
Missouri Ave. NW
\end{tabular} & ```
    16th
    &
Buchanan
    Sts.
    NW
``` & \[
\begin{gathered}
\text { 16th } \\
\& \\
\text { Irving } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & \[
\begin{gathered}
\text { 16th } \\
\& \\
\text { U } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & \begin{tabular}{l}
K St. \& Connecticut Ave. \\
NW \\
(Farragut N \& W)
\end{tabular} & \begin{tabular}{l}
Virginia \\
22nd \\
St. NW \\
(PO- \\
TOMAC \\
PARK)
\end{tabular} \\
\hline \multicolumn{7}{|c|}{AM Service - Servicio matutino} \\
\hline S1 & 5:50 & 5:55 & 6:01 & 6:04 & 6:10 & 6:17 \\
\hline S1 & 6:03 & 6:08 & 6:14 & 6:17 & 6:23 & 6:30 \\
\hline S1 & 6:18 & 6:24 & 6:30 & 6:35 & 6:41 & 6:50 \\
\hline S1 & 6:31 & 6:37 & 6:43 & 6:48 & 6:54 & 7:03 \\
\hline S1 & 6:43 & 6:49 & 6:55 & 7:00 & 7:06 & 7:15 \\
\hline S1 & 6:55 & 7:01 & 7:07 & 7:12 & 7:18 & 7:27 \\
\hline S1 & 7:05 & 7:11 & 7:17 & 7:22 & 7:28 & 7:37 \\
\hline S1 & 7:12 & 7:18 & 7:24 & 7:29 & 7:35 & 7:44 \\
\hline S1 & 7:17 & 7:23 & 7:30 & 7:35 & 7:41 & 7:51 \\
\hline S1 & 7:23 & 7:29 & 7:36 & 7:42 & 7:49 & 8:00 \\
\hline S1 & 7:28 & 7:34 & 7:41 & 7:47 & 7:54 & 8:05 \\
\hline S1 & 7:33 & 7:39 & 7:46 & 7:52 & 7:59 & 8:10 \\
\hline S1 & 7:38 & 7:44 & 7:51 & 7:57 & 8:04 & 8:15 \\
\hline S1 & 7:43 & 7:49 & 7:56 & 8:02 & 8:09 & 8:20 \\
\hline S1 & 7:48 & 7:54 & 8:01 & 8:07 & 8:14 & 8:25 \\
\hline S1 & 7:53 & 7:59 & 8:06 & 8:12 & 8:19 & 8:30 \\
\hline S1 & 7:58 & 8:04 & 8:11 & 8:17 & 8:24 & 8:35 \\
\hline S1 & 8:03 & 8:09 & 8:16 & 8:22 & 8:29 & 8:40 \\
\hline S1 & 8:08 & 8:14 & 8:21 & 8:27 & 8:34 & 8:45 \\
\hline S1 & 8:13 & 8:19 & 8:26 & 8:32 & 8:39 & 8:50 \\
\hline S1 & 8:18 & 8:24 & 8:31 & 8:37 & 8:44 & 8:55 \\
\hline S1 & 8:23 & 8:29 & 8:36 & 8:42 & 8:49 & 9:00 \\
\hline S1 & 8:28 & 8:34 & 8:41 & 8:47 & 8:54 & 9:05 \\
\hline S1 & 8:34 & 8:40 & 8:47 & 8:53 & 9:00 & 9:11 \\
\hline S1 & 8:42 & 8:48 & 8:55 & 9:00 & 9:07 & 9:18 \\
\hline S1 & 8:52 & 8:58 & 9:05 & 9:10 & 9:17 & 9:28 \\
\hline S1 & 9:07 & 9:13 & 9:20 & 9:25 & 9:32 & 9:43 \\
\hline S1 & 9:22 & 9:28 & 9:35 & 9:40 & 9:47 & 9:58 \\
\hline
\end{tabular}

Northbound
Dirección al norte
\begin{tabular}{ccccccc} 
& \begin{tabular}{c} 
Virginia \\
Ave.
\end{tabular} & \begin{tabular}{c} 
K \& \\
17th Sts.
\end{tabular} & & & & Colorado
\end{tabular}
* — Buses sign "16TH \& COLORADO". Operators will permit passengers on request to remain on the bus as far as Colorado Avenue \& 14th Street.
La señal del autobús dice 16TH y COLORADO. Los choferes permitrán que los pasjeros que lo soliciten permanezcan en el autobús hasta Colorado Avenue y 14th Street.

Weekday Southbound - Entre semana con dirección al sur
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route Number & \begin{tabular}{l}
Wayne \\
\& Dixon Aves. \\
(Silver Spring) \(\pm\)
\end{tabular} & \[
\begin{aligned}
& \text { 16th } \\
& \text { St. \& } \\
& \text { Eastern } \\
& \text { Ave. NW } \\
& \text { (District } \\
& \text { Line) }
\end{aligned}
\] & \begin{tabular}{l}
Eastern Ave. \& 16th St. \\
NW (District Line)
\end{tabular} & \begin{tabular}{l}
Alaska \\
Ave. \& \\
Kalmia \\
Rd. \\
NW
\end{tabular} & \begin{tabular}{l}
16th \\
\& Sheridan Sts. NW
\end{tabular} & \begin{tabular}{l}
14th \\
St. \& \\
Missour Ave. NW
\end{tabular} & 16th
\(\&\)
Buchanan
Sts.
NW & \[
\begin{gathered}
\text { 16th } \\
\text { \& } \\
\text { Irving } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & \[
\begin{aligned}
& \text { 16th } \\
& \& \\
& \text { U } \\
& \text { Sts. } \\
& \text { NW }
\end{aligned}
\] & \begin{tabular}{l}
H \& \\
14th \\
Sts.NW \\
(Mc- \\
Pherson \\
Sg) \\
1
\end{tabular} & \begin{tabular}{l}
I \& 13th \\
Sts. NW \\
(MC- \\
PHER- \\
SON SQ)
\end{tabular} & 14th \& I Sts. NW (MC-PHERSON SQ) M &  \\
\hline \multicolumn{14}{|c|}{AM Service - Servicio matutino} \\
\hline S2 & 4:09 & - & 4:15 & 4:18 & 4:22 & - & 4:27 & 4:34 & 4:38 & 4:46 & - & - & 4:51 \\
\hline S4 & 4:26 & 4:32 & - & - & 4:37 & - & 4:42 & 4:49 & 4:53 & 5:01 & - & - & 5:06 \\
\hline S2 & 4:37 & - & 4:43 & 4:46 & 4:50 & - & 4:55 & 5:02 & 5:06 & 5:14 & - & - & 5:19 \\
\hline S4 & 4:48 & 4:54 & - & - & 4:59 & - & 5:04 & 5:11 & 5:15 & 5:23 & - & - & 5:28 \\
\hline S2 & 4:55 & - & 5:01 & 5:04 & 5:08 & - & 5:13 & 5:20 & 5:24 & 5:32 & - & - & 5:37 \\
\hline S4 & 5:05 & 5:11 & - & - & 5:16 & - & 5:21 & 5:28 & 5:32 & 5:40 & - & - & 5:45 \\
\hline S2 & 5:09 & - & 5:15 & 5:18 & 5:22 & - & 5:27 & 5:34 & 5:38 & 5:46 & - & - & 5:51 \\
\hline S4 & 5:17 & 5:23 & - & - & 5:28 & - & 5:33 & 5:40 & 5:44 & 5:52 & - & - & 5:57 \\
\hline S2 & 5:21 & - & 5:27 & 5:30 & 5:34 & - & 5:39 & 5:46 & 5:50 & 5:58 & - & - & 6:03 \\
\hline S4 & 5:29 & 5:35 & - & - & 5:40 & - & 5:45 & 5:52 & 5:56 & 6:04 & - & - & 6:09 \\
\hline S2/ & - & - & 5:39 & 5:42 & 5:46 & - & 5:51 & 5:58 & 6:02 & - & - & 6:10 & - \\
\hline S2 & 5:40 & - & 5:46 & 5:49 & 5:53 & - & 5:58 & 6:05 & 6:09 & 6:17 & - & - & 6:22 \\
\hline S4 & 5:49 & 5:55 & - & - & 6:00 & - & 6:05 & 6:12 & 6:16 & 6:24 & - & - & 6:29 \\
\hline S2 & - & - & 5:58 & 6:01 & 6:05 & - & 6:10 & 6:17 & 6:21 & 6:29 & - & - & 6:34 \\
\hline S2/ & - & - & - & - & - & 6:11 & 6:16 & 6:23 & 6:28 & - & - & 6:37 & - \\
\hline S2 & 5:59 & - & 6:06 & 6:10 & 6:16 & - & 6:21 & 6:28 & 6:33 & 6:42 & - & - & 6:48 \\
\hline S4 & 6:09 & 6:16 & - & - & 6:21 & - & 6:26 & 6:33 & 6:38 & 6:47 & - & - & 6:53 \\
\hline S2/ & - & - & - & - & - & 6:28 & 6:33 & 6:40 & 6:45 & - & - & 6:54 & - \\
\hline S2 & 6:15 & - & 6:22 & 6:26 & 6:32 & - & 6:37 & 6:44 & 6:49 & 6:58 & - & - & 7:04 \\
\hline S2/ & - & - & - & - & - & 6:36 & 6:42 & 6:49 & 6:55 & - & - & 7:04 & - \\
\hline S4 & 6:25 & 6:33 & - & - & 6:39 & - & 6:45 & 6:52 & 6:58 & 7:07 & - & - & 7:14 \\
\hline S2/ & - & - & - & - & - & 6:47 & 6:53 & 7:00 & 7:06 & - & - & 7:15 & - \\
\hline S2 & 6:32 & - & 6:40 & 6:44 & 6:50 & - & 6:56 & 7:03 & 7:09 & 7:18 & - & - & 7:25 \\
\hline S2/ & - & - & - & - & - & 6:55 & 7:01 & 7:08 & 7:14 & - & - & 7:23 & - \\
\hline S4 & 6:44 & 6:52 & - & - & 6:58 & - & 7:04 & 7:11 & 7:17 & 7:26 & - & - & 7:33 \\
\hline S2/ & - & - & - & - & - & 7:05 & 7:11 & 7:18 & 7:24 & - & - & 7:33 & - \\
\hline S2 & 6:50 & - & 6:58 & 7:02 & 7:08 & - & 7:14 & 7:22 & 7:28 & 7:38 & - & - & 7:45 \\
\hline S4 & 6:58 & 7:06 & - & - & 7:12 & - & 7:18 & 7:26 & 7:32 & 7:42 & - & - & 7:49 \\
\hline S2/ & - & - & 7:09 & 7:13 & 7:19 & - & 7:25 & 7:33 & 7:39 & - & - & 7:49 & - \\
\hline S2 & 7:06 & - & 7:14 & 7:18 & 7:24 & - & 7:30 & 7:38 & 7:45 & 7:55 & - & - & 8:03 \\
\hline S2/ & - & - & - & - & - & 7:29 & 7:35 & 7:43 & 7:50 & - & - & 8:00 & - \\
\hline S4 & 7:17 & 7:25 & - & - & 7:31 & - & 7:37 & 7:45 & 7:52 & 8:02 & - & - & 8:10 \\
\hline S2/ & - & - & - & - & - & 7:36 & 7:42 & 7:50 & 7:57 & - & - & 8:07 & - \\
\hline S2 & 7:21 & - & 7:29 & 7:33 & 7:39 & - & 7:45 & 7:53 & 8:00 & 8:10 & - & - & 8:18 \\
\hline S2/ & - & - & - & - & - & 7:44 & 7:50 & 7:58 & 8:05 & - & - & 8:15 & - \\
\hline S4 & 7:32 & 7:40 & - & - & 7:46 & - & 7:52 & 8:00 & 8:07 & 8:17 & - & - & 8:25 \\
\hline S2/ & - & - & 7:40 & 7:44 & 7:50 & - & 7:56 & 8:04 & 8:11 & - & - & 8:21 & - \\
\hline S2/ & - & - & - & - & - & 7:55 & 8:01 & 8:09 & 8:16 & - & - & 8:26 & - \\
\hline S2 & 7:39 & - & 7:47 & 7:51 & 7:57 & - & 8:03 & 8:11 & 8:18 & 8:28 & - & - & 8:36 \\
\hline S2/ & - & - & - & - & - & 8:01 & 8:07 & 8:15 & 8:22 & - & - & 8:32 & - \\
\hline S4 & 7:49 & 7:57 & - & - & 8:03 & - & 8:09 & 8:17 & 8:24 & 8:34 & - & - & 8:42 \\
\hline S2/ & - & - & 7:55 & 7:59 & 8:05 & - & 8:11 & 8:19 & 8:26 & - & - & 8:36 & - \\
\hline S2/ & - & - & - & - & - & 8:09 & 8:15 & 8:23 & 8:30 & - & - & 8:40 & - \\
\hline S2 & 7:53 & - & 8:01 & 8:05 & 8:11 & - & 8:17 & 8:25 & 8:32 & 8:42 & - & - & 8:50 \\
\hline S2/ & - & - & - & - & - & 8:15 & 8:21 & 8:29 & 8:36 & - & - & 8:46 & - \\
\hline S4 & 8:03 & 8:11 & - & - & 8:17 & - & 8:23 & 8:31 & 8:38 & 8:48 & - & - & 8:56 \\
\hline S2/ & - & - & 8:10 & 8:14 & 8:20 & - & 8:26 & 8:34 & 8:41 & - & - & 8:51 & - \\
\hline S2/ & - & - & - & - & - & 8:23 & 8:29 & 8:37 & 8:44 & - & - & 8:54 & - \\
\hline S2/ & - & - & - & - & - & 8:26 & 8:32 & 8:40 & 8:47 & - & - & 8:57 & - \\
\hline S2 & 8:09 & - & 8:17 & 8:21 & 8:27 & - & 8:33 & 8:41 & 8:48 & 8:58 & - & - & 9:06 \\
\hline S2/ & - & - & - & - & - & 8:30 & 8:36 & 8:44 & 8:51 & - & - & 9:01 & - \\
\hline S4 & 8:18 & 8:26 & - & - & 8:32 & - & 8:38 & 8:46 & 8:53 & 9:03 & - & - & 9:11 \\
\hline S2/ & - & - & - & - & - & 8:37 & 8:43 & 8:51 & 8:58 & - & - & 9:08 & - \\
\hline S2 & 8:26 & - & 8:33 & 8:37 & 8:41 & - & 8:46 & 8:54 & 9:00 & 9:12 & - & - & 9:20 \\
\hline S2/ & - & - & - & - & - & 8:44 & 8:50 & 8:58 & 9:04 & - & - & 9:16 & - \\
\hline S4 & 8:34 & 8:41 & - & - & 8:47 & - & 8:52 & 9:00 & 9:06 & 9:18 & - & - & 9:26 \\
\hline S2/ & - & - & - & - & - & 8:49 & 8:55 & 9:03 & 9:09 & - & - & 9:21 & - \\
\hline S2/ & - & - & - & - & - & 8:53 & 8:59 & 9:07 & 9:13 & - & - & 9:25 & - \\
\hline S2 & 8:41 & - & 8:48 & 8:52 & 8:56 & - & 9:01 & 9:09 & 9:15 & 9:27 & - & - & 9:35 \\
\hline S2/ & - & - & - & - & - & 9:00 & 9:06 & 9:14 & 9:20 & - & - & 9:32 & - \\
\hline S4 & 8:51 & 8:58 & - & - & 9:04 & - & 9:09 & 9:17 & 9:23 & 9:35 & - & - & 9:43 \\
\hline S2/ & - & - & - & - & - & 9:09 & 9:15 & 9:23 & 9:29 & - & - & 9:41 & - \\
\hline
\end{tabular}

\section*{16th Street Line}

Weekday Southbound - Entre semana con dirección al sur
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route Number & Wayne \& Dixon Aves. (Silver Spring) \# & \[
\begin{gathered}
\text { 16th } \\
\text { St. \& } \\
\text { Eastern } \\
\text { Ave. NW } \\
\text { (District } \\
\text { Line) }
\end{gathered}
\] & Eastern Ave. \& 16th St. NW (District Line) & \begin{tabular}{l}
Alaska \\
Ave. \& \\
Kalmia Rd. NW
\end{tabular} & \[
\begin{gathered}
\text { 16th } \\
\& \\
\text { Sheridan } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & \[
\begin{gathered}
\text { 14th } \\
\text { St. \& } \\
\text { Missouri } \\
\text { Ave. } \\
\text { NW }
\end{gathered}
\] & 16th
\(\&\)
i Buchanan
Sts.
NW & \[
\begin{gathered}
\text { 16th } \\
\& \\
\text { Irving } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & \[
\begin{gathered}
\text { 16th } \\
\& \\
\text { U } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & \[
\begin{gathered}
\text { H \& } \\
\text { 14th } \\
\text { Sts.NW } \\
\text { (Mc- } \\
\text { Pherson } \\
\text { Sg) } \\
\mathbf{M}
\end{gathered}
\] & \[
\begin{gathered}
\text { I \& 13th } \\
\text { Sts. NW } \\
\text { (MC- } \\
\text { PHER- } \\
\text { SON SQ) }
\end{gathered}
\] & \[
\begin{gathered}
\text { 14th \& } \\
\text { I Sts. } \\
\text { NW } \\
\text { (MC. } \\
\text { PHER- } \\
\text { SON SQ) } \\
\text { MOM }
\end{gathered}
\] & \[
\begin{gathered}
\text { 10th } \\
\text { St. \& } \\
\text { Consti- } \\
\text { tution } \\
\text { Ave. NW } \\
\text { (FEDERRL } \\
\text { TRI- } \\
\text { ANGLE) }
\end{gathered}
\] \\
\hline \multicolumn{14}{|c|}{AM Service - Servicio matutino} \\
\hline S2 & 8:59 & - & 9:06 & 9:10 & 9:14 & - & 9:19 & 9:27 & 9:33 & 9:45 & - & & 9:53 \\
\hline S21 & - & - & - & & - & 9:19 & 9:25 & 9:33 & 9:39 & & & 9:51 & \\
\hline S4 & 9:10 & 9:17 & - & - & 9:23 & - & 9:28 & 9:36 & 9:42 & 9:54 & - & - & 10:02 \\
\hline S2/ & - & - & - & - & - & 9:29 & 9:35 & 9:43 & 9:49 & - & - & 10:01 & - \\
\hline S2 & 9:18 & - & 9:25 & 9:29 & 9:33 & & 9:38 & 9:46 & 9:52 & 10:04 & - & - & 10:12 \\
\hline S2 & - & - & - & & & 9:40 & 9:46 & 9:54 & 10:00 & 10:12 & - & & 10:20 \\
\hline S4 & 9:32 & 9:39 & - & - & 9:45 & - & 9:50 & 9:58 & 10:04 & 10:16 & - & - & 10:24 \\
\hline S2/ & - & - & - & - & - & 9:49 & 9:55 & 10:03 & 10:09 & - & - & 10:21 & - \\
\hline S2 & 9:39 & - & 9:46 & 9:50 & 9:54 & - & 9:59 & 10:07 & 10:13 & 10:25 & - & - & 10:33 \\
\hline S4 & 9:49 & 9:56 & & & 10:02 & - & 10:07 & 10:15 & 10:21 & 10:33 & & - & 10:41 \\
\hline S2 & 9:55 & - & 10:02 & 10:06 & 10:10 & - & 10:15 & 10:23 & 10:29 & 10:41 & - & - & 10:49 \\
\hline S4 & 10:05 & 10:12 & - & - & 10:18 & - & 10:23 & 10:31 & 10:37 & 10:49 & - & - & 10:57 \\
\hline S2 & 10:11 & - & 10:18 & 10:22 & 10:26 & - & 10:31 & 10:39 & 10:45 & 10:57 & - & - & 11:05 \\
\hline 54 & 10:21 & 10:28 & - & - & 10:34 & & 10:39 & 10:47 & 10:53 & 11:05 & - & - & 11:13 \\
\hline S2 & 10:27 & - & 10:34 & 10:38 & 10:42 & - & 10:47 & 10:55 & 11:01 & 11:13 & - & - & 11:21 \\
\hline S4 & 10:37 & 10:44 & - & & 10:50 & - & 10:55 & 11:03 & 11:09 & 11:21 & - & - & 11:29 \\
\hline S2 & 10:43 & - & 10:50 & 10:54 & 10:58 & - & 11:03 & 11:11 & 11:17 & 11:29 & - & - & 11:37 \\
\hline S4 & 10:53 & 11:00 & - & - & 11:06 & - & 11:11 & 11:19 & 11:25 & 11:37 & - & - & 11:45 \\
\hline S2 & 10:59 & - & 11:06 & 11:10 & 11:14 & - & 11:19 & 11:27 & 11:33 & 11:45 & - & - & 11:53 \\
\hline S4 & 11:09 & 11:16 & - & & 11:22 & - & 11:27 & 11:35 & 11:41 & 11:53 & - & - & 12:01 \\
\hline S2 & 11:15 & - & 11:22 & 11:26 & 11:30 & - & 11:35 & 11:43 & 11:49 & 12:01 & - & - & 12:09 \\
\hline S4 & 11:25 & 11:32 & - & - & 11:38 & - & 11:43 & 11:51 & 11:57 & 12:09 & - & - & 12:17 \\
\hline S2 & 11:31 & - & 11:38 & 11:42 & 11:46 & - & 11:51 & 11:59 & 12:05 & 12:17 & - & - & 12:25 \\
\hline S4 & 11:41 & 11:48 & - & - & 11:54 & - & 11:59 & 12:07 & 12:13 & 12:25 & - & - & 12:33 \\
\hline S2 & 11:47 & - & 11:54 & 11:58 & 12:02 & - & 12:07 & 12:15 & 12:21 & 12:33 & - & - & 12:41 \\
\hline S4 & 11:57 & 12:04 & - & & 12:10 & - & 12:15 & 12:23 & 12:29 & 12:41 & - & - & 12:49 \\
\hline \multicolumn{14}{|c|}{PM Service - Servicio vespertino} \\
\hline S2 & 12:03 & - & 12:10 & 12:14 & 12:18 & - & 12:23 & 12:31 & 12:37 & 12:49 & - & - & 12:57 \\
\hline S4 & 12:13 & 12:20 & - & - & 12:26 & - & 12:31 & 12:39 & 12:45 & 12:57 & - & - & 1:05 \\
\hline S2 & 12:19 & - & 12:26 & 12:30 & 12:34 & - & 12:39 & 12:47 & 12:53 & 1:05 & - & - & 1:13 \\
\hline S4 & 12:29 & 12:36 & - & - & 12:42 & - & 12:47 & 12:55 & 1:01 & 1:13 & - & - & 1:21 \\
\hline S2 & 12:35 & - & 12:42 & 12:46 & 12:50 & - & 12:55 & 1:03 & 1:09 & 1:21 & - & - & 1:29 \\
\hline S4 & 12:45 & 12:52 & - & - & 12:58 & - & 1:03 & 1:11 & 1:17 & 1:29 & - & - & 1:37 \\
\hline S2 & 12:51 & - & 12:58 & 1:02 & 1:06 & - & 1:11 & 1:19 & 1:25 & 1:37 & - & - & 1:45 \\
\hline S4 & 1:00 & 1:07 & - & & 1:13 & - & 1:18 & 1:26 & 1:32 & 1:44 & - & - & 1:52 \\
\hline S2 & 1:06 & - & 1:13 & 1:17 & 1:21 & - & 1:26 & 1:34 & 1:40 & 1:52 & - & - & 2:00 \\
\hline S4 & 1:16 & 1:23 & - & - & 1:29 & - & 1:34 & 1:42 & 1:48 & 2:00 & - & - & 2:08 \\
\hline S2 & 1:22 & - & 1:29 & 1:33 & 1:37 & - & 1:42 & 1:50 & 1:56 & 2:08 & - & - & 2:16 \\
\hline S4 & 1:32 & 1:39 & - & & 1:45 & - & 1:50 & 1:58 & 2:04 & 2:16 & - & - & 2:24 \\
\hline S2 & 1:38 & - & 1:45 & 1:49 & 1:53 & - & 1:58 & 2:06 & 2:12 & 2:24 & - & - & 2:32 \\
\hline S4 & 1:48 & 1:55 & - & & 2:01 & - & 2:06 & 2:14 & 2:20 & 2:32 & - & - & 2:40 \\
\hline S2 & 1:54 & - & 2:01 & 2:05 & 2:09 & - & 2:14 & 2:22 & 2:28 & 2:40 & - & - & 2:48 \\
\hline S4 & 2:03 & 2:10 & - & - & 2:16 & - & 2:21 & 2:29 & 2:35 & 2:47 & - & - & 2:55 \\
\hline S2 & 2:10 & - & 2:17 & 2:21 & 2:25 & - & 2:30 & 2:38 & 2:44 & 2:56 & - & - & 3:04 \\
\hline S4 & 2:20 & 2:27 & - & & 2:33 & - & 2:38 & 2:46 & 2:52 & 3:04 & - & - & 3:12 \\
\hline S2 & 2:26 & - & 2:33 & 2:37 & 2:41 & - & 2:46 & 2:54 & 3:00 & 3:12 & - & - & 3:20 \\
\hline S4 & 2:35 & 2:42 & - & - & 2:48 & - & 2:53 & 3:01 & 3:07 & 3:19 & - & - & 3:27 \\
\hline S2 & 2:41 & - & 2:48 & 2:52 & 2:56 & - & 3:01 & 3:09 & 3:15 & 3:27 & - & - & 3:35 \\
\hline S4 & 2:51 & 2:58 & - & & 3:04 & - & 3:09 & 3:17 & 3:23 & 3:35 & - & - & 3:43 \\
\hline S2 & 2:55 & - & 3:02 & 3:06 & 3:10 & - & 3:15 & 3:23 & 3:29 & 3:41 & - & - & 3:49 \\
\hline S4 & 3:05 & 3:12 & - & - & 3:18 & - & 3:23 & 3:31 & 3:37 & 3:49 & - & - & 3:57 \\
\hline S2 & 3:09 & - & 3:16 & 3:20 & 3:24 & - & 3:29 & 3:37 & 3:43 & 3:55 & - & - & 4:03 \\
\hline S2 & 3:17 & - & 3:26 & 3:29 & 3:34 & - & 3:40 & 3:48 & 3:54 & 4:06 & - & - & 4:14 \\
\hline S4 & 3:28 & 3:37 & - & - & 3:43 & - & 3:49 & 3:57 & 4:03 & 4:15 & - & - & 4:23 \\
\hline S2 & 3:36 & - & 3:45 & 3:48 & 3:53 & - & 3:59 & 4:07 & 4:13 & 4:25 & - & - & 4:33 \\
\hline S4 & 3:45 & 3:54 & - & - & 4:00 & - & 4:06 & 4:14 & 4:20 & 4:32 & - & - & 4:40 \\
\hline S2 & - & - & - & - & - & 4:06 & 4:11 & 4:19 & 4:25 & 4:37 & - & - & 4:45 \\
\hline S2 & 3:54 & - & 4:03 & 4:06 & 4:11 & - & 4:17 & 4:25 & 4:31 & 4:43 & - & - & 4:51 \\
\hline S4 & 4:00 & 4:09 & - & - & 4:15 & - & 4:21 & 4:29 & 4:35 & 4:47 & - & - & 4:55 \\
\hline S2 & 4:04 & - & 4:13 & 4:16 & 4:21 & - & 4:27 & 4:35 & 4:41 & 4:53 & - & - & 5:01 \\
\hline S4 & 4:10 & 4:19 & - & - & 4:25 & - & 4:31 & 4:39 & 4:45 & 4:57 & - & - & 5:05 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline & Route Number & Wayne \& Dixon Aves. (Silver Spring) \(M\) & \begin{tabular}{l}
16th \\
St. \& \\
Eastern \\
Ave. NW \\
(District \\
Line)
\end{tabular} & \begin{tabular}{l}
Eastern \\
Ave. \& \\
16th St. \\
NW \\
(District \\
Line)
\end{tabular} & \begin{tabular}{l}
Alaska \\
Ave. \& \\
Kalmia \\
Rd. \\
NW
\end{tabular} & \[
\begin{gathered}
\text { 16th } \\
\& \\
\text { Sheridan } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & \begin{tabular}{l}
14th \\
St. \& \\
Missouri \\
Ave. \\
NW
\end{tabular} & 16th \& i Buchanan Sts. NW & 16th \& Irving Sts. NW & \[
\begin{aligned}
& \text { 16th } \\
& \& \\
& \text { U } \\
& \text { Sts. } \\
& \text { NW }
\end{aligned}
\] & \begin{tabular}{l}
H \& \\
14th \\
Sts.NW \\
(Mc- \\
Pherson \\
\(\mathrm{Sg})\) \\
M
\end{tabular} & \begin{tabular}{l}
I \& 13th \\
Sts. NW \\
(MC- \\
PHER- \\
SON SQ)
\end{tabular} & 14th \& I Sts. NW (MC-PHERSON SQ) \(M\) & \begin{tabular}{l}
10th \\
St. \& \\
Consti- \\
tution \\
Ave. NW \\
(FEDERAL \\
TRI- \\
ANGLE)
\end{tabular} \\
\hline & \multicolumn{14}{|c|}{PM Service - Servicio vespertino} \\
\hline & S2 & - & - & - & - & - & 4:31 & 4:36 & 4:44 & 4:50 & 5:02 & - & - & 5:10 \\
\hline & S2 & 4:18 & - & 4:27 & 4:30 & 4:35 & - & 4:41 & 4:49 & 4:55 & 5:07 & - & - & 5:15 \\
\hline & S4/ & - & - & - & - & - & 4:38 & 4:43 & 4:51 & 4:57 & - & 5:09 & - & - \\
\hline & S4 & 4:28 & 4:37 & - & - & 4:43 & - & 4:49 & 4:57 & 5:03 & 5:15 & - & - & 5:23 \\
\hline & S2 & - & - & - & - & - & 4:48 & 4:53 & 5:01 & 5:07 & 5:19 & - & - & 5:27 \\
\hline & S2 & 4:34 & - & 4:43 & 4:46 & 4:51 & - & 4:57 & 5:05 & 5:11 & 5:23 & - & - & 5:31 \\
\hline & S4/ & - & - & - & - & - & 4:55 & 5:00 & 5:08 & 5:14 & - & 5:26 & - & - \\
\hline & S4 & 4:42 & 4:51 & - & - & 4:57 & - & 5:03 & 5:11 & 5:17 & 5:29 & - & - & 5:37 \\
\hline & S4/ & - & - & - & - & - & 5:02 & 5:07 & 5:15 & 5:21 & - & 5:33 & - & - \\
\hline & S2 & 4:47 & - & 4:56 & 4:59 & 5:04 & - & 5:10 & 5:18 & 5:24 & 5:36 & - & - & 5:44 \\
\hline & S2 & - & - & - & - & - & 5:08 & 5:13 & 5:21 & 5:27 & 5:39 & - & - & 5:47 \\
\hline & S4 & 4:56 & 5:05 & - & - & 5:11 & - & 5:17 & 5:25 & 5:31 & 5:43 & - & - & 5:51 \\
\hline & S4/ & - & - & - & - & - & 5:15 & 5:20 & 5:28 & 5:34 & - & 5:46 & - & - \\
\hline & S2 & 4:59 & - & 5:08 & 5:11 & 5:16 & - & 5:22 & 5:30 & 5:36 & 5:48 & - & - & 5:56 \\
\hline & S4/ & - & - & - & - & - & 5:23 & 5:28 & 5:36 & 5:42 & - & 5:54 & - & - \\
\hline & S4 & 5:09 & 5:18 & - & - & 5:24 & - & 5:30 & 5:38 & 5:44 & 5:56 & - & - & 6:04 \\
\hline & S2 & 5:12 & - & 5:21 & 5:24 & 5:29 & - & 5:35 & 5:43 & 5:49 & 6:01 & - & - & 6:09 \\
\hline & S41 & - & - & - & - & - & 5:34 & 5:39 & 5:47 & 5:53 & - & 6:05 & - & - \\
\hline & S4 & 5:20 & 5:29 & - & - & 5:35 & - & 5:41 & 5:49 & 5:55 & 6:07 & - & - & 6:15 \\
\hline & S2 & 5:26 & - & 5:35 & 5:39 & 5:44 & - & 5:49 & 5:56 & 6:02 & 6:13 & - & - & 6:20 \\
\hline & S4 & 5:36 & 5:45 & - & - & 5:50 & - & 5:55 & 6:02 & 6:08 & 6:19 & - & - & 6:26 \\
\hline & S2 & 5:41 & - & 5:50 & 5:54 & 5:59 & - & 6:04 & 6:11 & 6:17 & 6:28 & - & - & 6:35 \\
\hline & S4 & 5:49 & 5:58 & - & - & 6:03 & - & 6:08 & 6:15 & 6:21 & 6:32 & - & - & 6:39 \\
\hline & S2 & 5:52 & - & 6:01 & 6:05 & 6:10 & - & 6:15 & 6:22 & 6:28 & 6:39 & - & - & 6:46 \\
\hline & S4 & 6:02 & 6:11 & - & - & 6:16 & - & 6:21 & 6:28 & 6:34 & 6:45 & - & - & 6:52 \\
\hline & S2 & 6:08 & - & 6:17 & 6:21 & 6:26 & - & 6:31 & 6:38 & 6:44 & 6:55 & - & - & 7:02 \\
\hline & S4 & 6:19 & 6:28 & - & - & 6:33 & - & 6:38 & 6:45 & 6:51 & 7:02 & - & - & 7:09 \\
\hline & S2 & 6:24 & - & 6:33 & 6:37 & 6:42 & - & 6:47 & 6:54 & 7:00 & 7:11 & - & - & 7:18 \\
\hline & S4 & 6:34 & 6:43 & - & - & 6:48 & - & 6:53 & 7:00 & 7:06 & 7:17 & - & - & 7:24 \\
\hline & S2 & 6:40 & - & 6:49 & 6:53 & 6:58 & - & 7:03 & 7:10 & 7:16 & 7:27 & - & - & 7:34 \\
\hline & S4 & 6:52 & 7:01 & - & - & 7:06 & - & 7:11 & 7:18 & 7:24 & 7:35 & - & - & 7:42 \\
\hline & S2 & 7:03 & - & 7:10 & 7:14 & 7:18 & - & 7:23 & 7:30 & 7:35 & 7:45 & - & - & 7:51 \\
\hline & S4 & 7:16 & 7:23 & - & - & 7:28 & - & 7:33 & 7:40 & 7:45 & 7:55 & - & - & 8:01 \\
\hline & S2 & 7:24 & - & 7:31 & 7:35 & 7:39 & - & 7:44 & 7:51 & 7:56 & 8:06 & - & - & 8:12 \\
\hline & S4 & 7:37 & 7:44 & - & - & 7:49 & - & 7:54 & 8:01 & 8:06 & 8:16 & - & - & 8:22 \\
\hline & S2 & 7:45 & - & 7:52 & 7:56 & 8:00 & - & 8:05 & 8:12 & 8:17 & 8:27 & - & - & 8:33 \\
\hline & S4 & 7:57 & 8:04 & - & - & 8:09 & - & 8:14 & 8:21 & 8:26 & 8:36 & - & - & 8:42 \\
\hline & S2 & 8:08 & - & 8:15 & 8:19 & 8:23 & - & 8:28 & 8:34 & 8:39 & 8:47 & - & - & 8:53 \\
\hline & S4 & 8:20 & 8:27 & - & - & 8:32 & - & 8:37 & 8:43 & 8:48 & 8:56 & - & - & 9:02 \\
\hline & S2 & 8:29 & - & 8:36 & 8:40 & 8:44 & - & 8:49 & 8:55 & 9:00 & 9:08 & - & - & 9:14 \\
\hline & S4 & 8:41 & 8:48 & - & - & 8:53 & - & 8:58 & 9:04 & 9:09 & 9:17 & - & - & 9:23 \\
\hline & S2 & 8:49 & - & 8:56 & 9:00 & 9:04 & - & 9:09 & 9:15 & 9:20 & 9:28 & - & - & 9:34 \\
\hline & S4 & 9:01 & 9:08 & - & - & 9:13 & - & 9:18 & 9:24 & 9:29 & 9:37 & - & - & 9:43 \\
\hline & S2 & 9:09 & - & 9:16 & 9:20 & 9:24 & - & 9:29 & 9:35 & 9:40 & 9:48 & - & - & 9:54 \\
\hline & S4 & 9:21 & 9:28 & - & - & 9:33 & - & 9:38 & 9:44 & 9:49 & 9:57 & - & - & 10:03 \\
\hline & S2 & 9:29 & - & 9:36 & 9:40 & 9:44 & - & 9:49 & 9:55 & 10:00 & 10:08 & - & - & 10:14 \\
\hline & S4 & 9:49 & 9:55 & - & - & 10:00 & - & 10:04 & 10:09 & 10:13 & 10:20 & - & - & 10:26 \\
\hline & S2 & 10:01 & - & 10:07 & 10:10 & 10:14 & - & 10:18 & 10:23 & 10:27 & 10:34 & - & - & 10:40 \\
\hline & S4 & 10:09 & 10:15 & - & - & 10:20 & - & 10:24 & 10:29 & 10:33 & 10:40 & - & - & 10:46 \\
\hline & S2 & 10:19 & - & 10:25 & 10:28 & 10:32 & - & 10:36 & 10:41 & 10:45 & 10:52 & - & - & 10:58 \\
\hline & S4 & 10:31 & 10:37 & - & - & 10:42 & - & 10:46 & 10:51 & 10:55 & 11:02 & - & - & 11:08 \\
\hline & S2 & 10:43 & - & 10:49 & 10:52 & 10:56 & - & 11:00 & 11:05 & 11:09 & 11:16 & - & - & 11:22 \\
\hline & S4 & 11:02 & 11:08 & - & - & 11:13 & - & 11:17 & 11:22 & 11:26 & 11:33 & - & - & 11:39 \\
\hline & S2 & 11:17 & - & 11:23 & 11:26 & 11:30 & - & 11:34 & 11:39 & 11:43 & 11:50 & - & - & 11:56 \\
\hline & S4 & 11:45 & 11:51 & - & - & 11:55 & - & 11:58 & 12:03 & 12:07 & 12:14 & - & - & 12:19 \\
\hline Friday only & & & & fter Mic & dnight & Service & - Sery & vicio des & pués d & ela m & dianoc & & & \\
\hline \begin{tabular}{l}
Friday only. \\
Los auto-
\end{tabular} & S2 & 12:09 & - & 12:15 & 12:17 & 12:21 & - & 12:24 & 12:29 & 12:33 & 12:40 & - & - & 12:45 \\
\hline buses funcionan & S4 & 12:32 & 12:38 & - & - & 12:42 & - & 12:45 & 12:50 & 12:54 & 1:01 & - & - & 1:06 \\
\hline solamente el & S2 & 1:04 & - & 1:10 & 1:12 & 1:16 & - & 1:19 & 1:24 & 1:28 & 1:35 & - & - & 1:40 \\
\hline viernes. & \(\bigcirc \mathbf{S 2}\) & 1:37 & - & 1:43 & 1:45 & 1:49 & - & 1:52 & 1:57 & 2:01 & 2:08 & - & - & 2:13 \\
\hline & S2 & 2:29 & - & 2:35 & 2:37 & 2:41 & - & 2:44 & 2:49 & 2:53 & 3:00 & - & - & 3:05 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & & & & & & \\
\hline & Route Number &  & I \& 13th Sts. NW (McPherson Sq ) &  & \[
\begin{gathered}
\text { 16th } \\
\& U \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & 16th \& Irving Sts. NW & 16th \& Buchanan Sts. NW & Colorado Ave. \& 16th St. NW * & \begin{tabular}{l}
16th St. \\
\& \\
Somerset PI. NW
\end{tabular} & \begin{tabular}{l}
Alaska \\
Ave. \& \\
Kalmia \\
Rd. \\
NW
\end{tabular} & \begin{tabular}{l}
Eastern \\
Ave. \& \\
16th St. \\
NW \\
(District \\
Line)
\end{tabular} & 16th
St. \&
Eastern
Ave.
NW
(District
Line) & Wayne \& Dixon Aves. (SILVER SPRING M \\
\hline & & & & & AM & ervice & Serv & cio ma & atutino & & & & \\
\hline & S2 & 4:42 & - & 4:50 & 4:58 & 5:02 & 5:08 & - & 5:12 & 5:17 & 5:20 & - & 5:23 \\
\hline & S4 & 4:58 & - & 5:06 & 5:14 & 5:18 & 5:24 & - & 5:28 & - & - & 5:34 & 5:37 \\
\hline & S2 & 5:12 & - & 5:20 & 5:28 & 5:32 & 5:38 & - & 5:42 & 5:47 & 5:50 & - & 5:53 \\
\hline & S4 & 5:24 & - & 5:32 & 5:40 & 5:44 & 5:50 & - & 5:54 & - & - & 6:00 & 6:03 \\
\hline & S2 & 5:34 & - & 5:42 & 5:51 & 5:55 & 6:02 & - & 6:07 & 6:12 & 6:15 & - & 6:18 \\
\hline & S4 & 5:43 & - & 5:51 & 6:00 & 6:04 & 6:11 & - & 6:16 & - & - & 6:22 & 6:25 \\
\hline & S2 & 5:52 & - & 6:00 & 6:09 & 6:13 & 6:20 & - & 6:25 & 6:30 & 6:33 & - & 6:36 \\
\hline & S4 & 5:59 & - & 6:07 & 6:16 & 6:20 & 6:27 & - & 6:32 & - & - & 6:38 & 6:41 \\
\hline & S2 & 6:06 & - & 6:14 & 6:23 & 6:27 & 6:34 & - & 6:39 & 6:44 & 6:47 & - & 6:50 \\
\hline & S4 & 6:12 & - & 6:20 & 6:29 & 6:33 & 6:40 & - & 6:45 & - & - & 6:51 & 6:54 \\
\hline & S2 & 6:20 & - & 6:28 & 6:37 & 6:41 & 6:48 & - & 6:53 & 6:58 & 7:01 & - & 7:04 \\
\hline & S4 & 6:28 & - & 6:36 & 6:46 & 6:51 & 6:58 & - & 7:04 & - & - & 7:10 & 7:14 \\
\hline & S2 & 6:36 & - & 6:44 & 6:54 & 6:59 & 7:06 & - & 7:12 & 7:17 & 7:21 & - & 7:25 \\
\hline & S4 & 6:44 & - & 6:52 & 7:02 & 7:07 & 7:14 & - & 7:20 & - & - & 7:26 & 7:30 \\
\hline & S2 & 6:53 & - & 7:01 & 7:11 & 7:16 & 7:23 & - & 7:29 & 7:34 & 7:38 & - & 7:42 \\
\hline & S4 & 7:00 & - & 7:08 & 7:18 & 7:23 & 7:30 & - & 7:36 & - & - & 7:42 & 7:46 \\
\hline & S2 & 7:10 & - & 7:20 & 7:31 & 7:36 & 7:43 & - & 7:49 & 7:54 & 7:58 & - & 8:02 \\
\hline & S4 & 7:20 & - & 7:30 & 7:41 & 7:46 & 7:53 & - & 7:59 & - & - & 8:05 & 8:09 \\
\hline & S2 & 7:30 & - & 7:40 & 7:51 & 7:56 & 8:03 & - & 8:09 & 8:14 & 8:18 & - & 8:22 \\
\hline & S4 & 7:40 & - & 7:50 & 8:01 & 8:06 & 8:13 & - & 8:19 & - & - & 8:25 & 8:29 \\
\hline & S2 & 7:50 & - & 8:01 & 8:13 & 8:18 & 8:25 & - & 8:31 & 8:35 & 8:39 & - & 8:43 \\
\hline & S4 & 8:00 & - & 8:11 & 8:23 & 8:28 & 8:35 & - & 8:41 & - & - & 8:47 & 8:51 \\
\hline & S2 & 8:10 & - & 8:21 & 8:33 & 8:38 & 8:45 & - & 8:51 & 8:55 & 8:59 & - & 9:03 \\
\hline & S4 & 8:19 & - & 8:30 & 8:42 & 8:47 & 8:54 & - & 9:00 & - & - & 9:06 & 9:10 \\
\hline & S2 & 8:31 & - & 8:42 & 8:54 & 8:59 & 9:06 & - & 9:12 & 9:16 & 9:20 & - & 9:24 \\
\hline & S4 & 8:41 & - & 8:52 & 9:04 & 9:09 & 9:16 & - & 9:22 & - & - & 9:28 & 9:32 \\
\hline & S2 & 8:50 & - & 9:00 & 9:11 & 9:16 & 9:23 & - & 9:28 & 9:32 & 9:36 & - & 9:40 \\
\hline & S4 & 8:58 & - & 9:08 & 9:19 & 9:24 & 9:31 & - & 9:36 & - & - & 9:42 & 9:46 \\
\hline & S2 & 9:06 & - & 9:16 & 9:27 & 9:32 & 9:39 & - & 9:44 & 9:48 & 9:52 & - & 9:56 \\
\hline & S4 & 9:14 & - & 9:24 & 9:35 & 9:40 & 9:47 & - & 9:52 & - & - & 9:58 & 10:02 \\
\hline & S2 & 9:22 & - & 9:32 & 9:43 & 9:48 & 9:55 & - & 10:00 & 10:04 & 10:08 & - & 10:12 \\
\hline & S4 & 9:30 & - & 9:40 & 9:51 & 9:56 & 10:03 & - & 10:08 & - & - & 10:14 & 10:18 \\
\hline & S2 & 9:38 & - & 9:48 & 9:59 & 10:04 & 10:11 & - & 10:16 & 10:20 & 10:24 & - & 10:28 \\
\hline & S4 & 9:46 & - & 9:56 & 10:07 & 10:12 & 10:19 & - & 10:24 & - & - & 10:30 & 10:34 \\
\hline & S2 & 9:54 & - & 10:04 & 10:15 & 10:20 & 10:27 & - & 10:32 & 10:36 & 10:40 & - & 10:44 \\
\hline & S4 & 10:02 & - & 10:12 & 10:23 & 10:28 & 10:35 & - & 10:40 & - & - & 10:46 & 10:50 \\
\hline & S2 & 10:10 & - & 10:20 & 10:31 & 10:36 & 10:43 & - & 10:48 & 10:52 & 10:56 & - & 11:00 \\
\hline & S4 & 10:18 & - & 10:28 & 10:39 & 10:44 & 10:51 & - & 10:56 & - & - & 11:02 & 11:06 \\
\hline & S2 & 10:26 & - & 10:36 & 10:47 & 10:52 & 10:59 & - & 11:04 & 11:08 & 11:12 & - & 11:16 \\
\hline & S4 & 10:34 & - & 10:44 & 10:55 & 11:00 & 11:07 & - & 11:12 & - & - & 11:18 & 11:22 \\
\hline & S2 & 10:42 & - & 10:52 & 11:03 & 11:08 & 11:15 & - & 11:20 & 11:24 & 11:28 & - & 11:32 \\
\hline & S4 & 10:50 & - & 11:00 & 11:11 & 11:16 & 11:23 & - & 11:28 & - & - & 11:34 & 11:38 \\
\hline & S2 & 10:58 & - & 11:08 & 11:19 & 11:24 & 11:31 & - & 11:36 & 11:40 & 11:44 & - & 11:48 \\
\hline & S4 & 11:06 & - & 11:16 & 11:27 & 11:32 & 11:39 & - & 11:44 & - & - & 11:50 & 11:54 \\
\hline & S2 & 11:14 & - & 11:24 & 11:35 & 11:40 & 11:47 & - & 11:52 & 11:56 & 12:00 & - & 12:04 \\
\hline & S4 & 11:22 & - & 11:32 & 11:43 & 11:48 & 11:55 & - & 12:00 & - & - & 12:06 & 12:10 \\
\hline & S2 & 11:30 & - & 11:40 & 11:51 & 11:56 & 12:03 & - & 12:08 & 12:12 & 12:16 & - & 12:20 \\
\hline x - Buses sign "16TH \& & S4 & 11:38 & - & 11:48 & 11:59 & 12:04 & 12:11 & - & 12:16 & - & - & 12:22 & 12:26 \\
\hline COLORADO". Operators & S2 & 11:46 & - & 11:56 & 12:07 & 12:12 & 12:19 & - & 12:24 & 12:28 & 12:32 & - & 12:36 \\
\hline will permit passengers & S4 & 11:54 & - & 12:04 & 12:15 & 12:20 & 12:27 & - & 12:32 & - & - & 12:38 & 12:42 \\
\hline on request to remain on & & & & & PM S & ervice & - Servi & io vesp & pertino & & & & \\
\hline the bus as far as Colorado & S2 & 12:02 & - & 12:12 & 12:23 & 12:28 & 12:35 & - & 12:40 & 12:44 & 12:48 & - & 12:52 \\
\hline Avenue \& 14th Street. & S4 & 12:10 & - & 12:20 & 12:31 & 12:36 & 12:43 & - & 12:48 & - & - & 12:54 & 12:58 \\
\hline La señal del autobús dice & S2 & 12:18 & - & 12:28 & 12:39 & 12:44 & 12:51 & - & 12:56 & 1:00 & 1:04 & - & 1:08 \\
\hline 16TH y COLORADO. & S4 & 12:26 & - & 12:36 & 12:47 & 12:52 & 12:59 & - & 1:04 & - & - & 1:10 & 1:14 \\
\hline Los choferes permitrán & S2 & 12:34 & - & 12:44 & 12:55 & 1:00 & 1:07 & - & 1:12 & 1:16 & 1:20 & - & 1:24 \\
\hline que los pasjeros que lo & S4 & 12:42 & - & 12:52 & 1:03 & 1:08 & 1:15 & - & 1:20 & - & - & 1:26 & 1:30 \\
\hline soliciten permanezcan & S2 & 12:50 & - & 1:00 & 1:11 & 1:16 & 1:23 & - & 1:28 & 1:32 & 1:36 & - & 1:40 \\
\hline en el autobús hasta & S4 & 12:58 & - & 1:08 & 1:19 & 1:24 & 1:31 & - & 1:36 & - & - & 1:42 & 1:46 \\
\hline Colorado Avenue y 14th & S2 & 1:06 & - & 1:16 & 1:27 & 1:32 & 1:39 & - & 1:44 & 1:48 & 1:52 & - & 1:56 \\
\hline Street. & S4 & 1:14 & - & 1:24 & 1:35 & 1:40 & 1:47 & - & 1:52 & - & - & 1:58 & 2:02 \\
\hline & S2 & 1:22 & - & 1:32 & 1:43 & 1:48 & 1:55 & - & 2:00 & 2:04 & 2:08 & - & 2:12 \\
\hline & S4 & 1:30 & - & 1:40 & 1:51 & 1:56 & 2:03 & - & 2:08 & - & - & 2:14 & 2:18 \\
\hline
\end{tabular}

Page 7 of 17

\section*{16th Street Line}

Weekday Northbound - Entre semana con dirección al norte
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline & & 10th & & & & & & & & & & & \\
\hline & Route Number & St. \&
Consti-
tution
Ave.
NW
(Federal
Triangle) & I \& 13th Sts. NW (McPherson Sq ) & \[
\begin{gathered}
\text { I \& } \\
\text { 14th } \\
\text { Sts. NW } \\
\text { (McPher- } \\
\text { son Sq) }
\end{gathered}
\] & \begin{tabular}{l}
16th \\
\& U \\
Sts. \\
NW
\end{tabular} & \[
\begin{gathered}
\text { 16th } \\
\& \\
\text { Irving } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & 16th \& Buchanan Sts. NW & Colorado Ave. \& 16th St. NW
\(\qquad\) & \begin{tabular}{l}
16th St. \\
\& Somerset PI.
\end{tabular} & \begin{tabular}{l}
Alaska \\
Ave. \& \\
Kalmia \\
Rd. \\
NW
\end{tabular} & \begin{tabular}{l}
Eastern \\
Ave. \& \\
16th St. \\
NW \\
(District \\
Line)
\end{tabular} & \begin{tabular}{l}
16th
St. \& \\
Eastern \\
Ave. \\
NW \\
(District Line)
\end{tabular} & Wayne \& Dixon Aves. (SILVER SPRING) M \\
\hline & \multicolumn{13}{|c|}{PM Service - Servicio vespertino} \\
\hline & S2 & 1:38 & - & 1:48 & 1:59 & 2:04 & 2:11 & - & 2:16 & 2:20 & 2:24 & - & 2:28 \\
\hline & S4 & 1:45 & - & 1:55 & 2:06 & 2:11 & 2:18 & - & 2:23 & - & - & 2:29 & 2:33 \\
\hline & S2 & 1:52 & - & 2:02 & 2:13 & 2:19 & 2:26 & - & 2:32 & 2:37 & 2:41 & - & 2:45 \\
\hline & S4 & 1:59 & - & 2:09 & 2:20 & 2:26 & 2:33 & - & 2:39 & - & - & 2:45 & 2:49 \\
\hline & S2 & 2:06 & - & 2:16 & 2:27 & 2:33 & 2:40 & - & 2:46 & 2:51 & 2:55 & - & 2:59 \\
\hline & S2/ & 2:15 & - & 2:25 & 2:36 & 2:42 & 2:49 & 2:51 & - & - & - & - & - \\
\hline & S4 & 2:20 & - & 2:30 & 2:41 & 2:47 & 2:54 & - & 3:00 & - & - & 3:06 & 3:10 \\
\hline & S2 & 2:27 & - & 2:37 & 2:48 & 2:54 & 3:01 & - & 3:07 & 3:12 & 3:16 & - & 3:20 \\
\hline & S2/ & 2:36 & - & 2:46 & 2:57 & 3:03 & 3:10 & 3:12 & - & - & - & - & - \\
\hline & S4 & 2:40 & - & 2:50 & 3:01 & 3:07 & 3:14 & - & 3:20 & - & - & 3:26 & 3:30 \\
\hline & S2 & 2:46 & - & 2:56 & 3:07 & 3:13 & 3:20 & - & 3:26 & 3:31 & 3:35 & - & 3:39 \\
\hline & S2/ & 2:53 & - & 3:03 & 3:14 & 3:20 & 3:27 & 3:29 & - & - & - & - & - \\
\hline & S4 & - & 3:07 & 3:08 & 3:19 & 3:25 & 3:32 & - & 3:38 & - & - & 3:44 & 3:48 \\
\hline & S2 & 3:02 & - & 3:12 & 3:23 & 3:29 & 3:36 & - & 3:42 & 3:47 & 3:51 & - & 3:55 \\
\hline & S2 & 3:09 & - & 3:19 & 3:30 & 3:36 & 3:43 & - & 3:49 & 3:54 & 3:58 & - & 4:02 \\
\hline & S4 & - & 3:26 & 3:27 & 3:38 & 3:44 & 3:51 & - & 3:57 & - & - & 4:03 & 4:07 \\
\hline & S2/ & 3:22 & - & 3:32 & 3:44 & 3:49 & 3:56 & 3:59 & - & - & - & - & - \\
\hline & S2 & 3:28 & - & 3:38 & 3:50 & 3:55 & 4:02 & - & 4:08 & 4:13 & 4:17 & - & 4:22 \\
\hline & S4 & - & 3:42 & 3:43 & 3:55 & 4:00 & 4:07 & - & 4:13 & - & - & 4:21 & 4:26 \\
\hline & S2/ & 3:38 & - & 3:48 & 4:00 & 4:05 & 4:12 & 4:15 & - & - & - & - & - \\
\hline & S2 & 3:42 & - & 3:52 & 4:04 & 4:09 & 4:16 & , & 4:22 & 4:27 & 4:31 & - & 4:36 \\
\hline & S4 & & 3:57 & 3:58 & 4:10 & 4:15 & 4:22 & - & 4:28 & - & - & 4:36 & 4:41 \\
\hline & S2/ & 3:52 & - & 4:02 & 4:14 & 4:19 & 4:26 & 4:29 & - & - & - & - & - \\
\hline & S2 & 3:56 & - & 4:06 & 4:18 & 4:23 & 4:30 & - & 4:36 & 4:41 & 4:45 & - & 4:50 \\
\hline & S4 & - & 4:09 & 4:10 & 4:22 & 4:27 & 4:34 & - & 4:40 & - & - & 4:48 & 4:53 \\
\hline & S2/ & 4:05 & - & 4:15 & 4:27 & 4:32 & 4:39 & 4:42 & - & - & - & - & - \\
\hline & S2 & 4:09 & - & 4:19 & 4:31 & 4:36 & 4:43 & - & 4:49 & 4:54 & 4:58 & - & 5:03 \\
\hline & & & & & PM S & rvice & Servi & io vesp & oertino & & & & \\
\hline & S4 & - & 4:21 & 4:22 & 4:34 & 4:39 & 4:46 & - & 4:52 & - & - & 5:00 & 5:05 \\
\hline & S2/ & 4:17 & - & 4:27 & 4:39 & 4:44 & 4:51 & 4:54 & - & - & - & - & - \\
\hline & S2 & 4:20 & - & 4:30 & 4:42 & 4:47 & 4:54 & - & 5:00 & 5:05 & 5:09 & - & 5:14 \\
\hline & S4 & - & 4:32 & 4:33 & 4:45 & 4:50 & 4:57 & - & 5:03 & - & - & 5:11 & 5:16 \\
\hline & S2/ & 4:28 & - & 4:38 & 4:50 & 4:55 & 5:02 & 5:05 & - & - & - & - & - \\
\hline & S2 & 4:31 & - & 4:41 & 4:53 & 4:58 & 5:05 & - & 5:11 & 5:16 & 5:20 & - & 5:25 \\
\hline & S4 & - & 4:43 & 4:44 & 4:56 & 5:01 & 5:08 & - & 5:14 & - & - & 5:22 & 5:27 \\
\hline & S2/ & 4:37 & - & 4:48 & 5:00 & 5:05 & 5:12 & 5:15 & - & - & - & - & - \\
\hline & S2 & 4:40 & - & 4:51 & 5:03 & 5:08 & 5:15 & - & 5:21 & 5:27 & 5:31 & - & 5:36 \\
\hline & S4 & - & 4:54 & 4:55 & 5:07 & 5:12 & 5:19 & - & 5:25 & - & - & 5:33 & 5:38 \\
\hline & S2/ & 4:47 & - & 4:58 & 5:10 & 5:15 & 5:22 & 5:25 & - & - & - & - & - \\
\hline & S2 & 4:51 & - & 5:02 & 5:14 & 5:19 & 5:26 & - & 5:32 & 5:38 & 5:42 & - & 5:47 \\
\hline & S4 & - & 5:04 & 5:05 & 5:17 & 5:22 & 5:29 & - & 5:35 & - & - & 5:43 & 5:48 \\
\hline & S2/ & 4:58 & - & 5:09 & 5:21 & 5:26 & 5:33 & 5:36 & - & - & - & - & - \\
\hline & S2 & 5:01 & - & 5:12 & 5:24 & 5:29 & 5:36 & - & 5:42 & 5:48 & 5:52 & - & 5:57 \\
\hline & S4 & - & 5:14 & 5:15 & 5:27 & 5:32 & 5:39 & - & 5:45 & - & - & 5:53 & 5:58 \\
\hline & S2/ & 5:08 & - & 5:19 & 5:31 & 5:36 & 5:43 & 5:46 & - & - & - & - & - \\
\hline & S2 & 5:11 & - & 5:22 & 5:34 & 5:39 & 5:46 & - & 5:52 & 5:58 & 6:02 & - & 6:07 \\
\hline & S4 & - & 5:24 & 5:25 & 5:37 & 5:42 & 5:49 & - & 5:55 & - & - & 6:03 & 6:08 \\
\hline * - Buses sign "16TH \& & S2/ & 5:18 & - & 5:29 & 5:41 & 5:46 & 5:53 & 5:56 & - & - & - & - & - \\
\hline COLORADO". Operators & S2 & 5:21 & - & 5:32 & 5:44 & 5:49 & 5:56 & - & 6:02 & 6:08 & 6:12 & - & 6:17 \\
\hline will permit passengers & S4 & - & 5:34 & 5:35 & 5:47 & 5:52 & 5:59 & - & 6:05 & - & - & 6:13 & 6:18 \\
\hline on request to remain on & S2/ & 5:30 & - & 5:39 & 5:51 & 5:56 & 6:03 & 6:06 & - & - & - & - & - \\
\hline the bus as far as Colorado & S2 & 5:33 & - & 5:42 & 5:54 & 5:59 & 6:06 & - & 6:12 & 6:17 & 6:21 & - & 6:25 \\
\hline Avenue \& 14th Street. & S4 & - & 5:44 & 5:45 & 5:57 & 6:02 & 6:09 & - & 6:15 & - & - & 6:22 & 6:26 \\
\hline La señal del autobús dice & S2/ & 5:40 & - & 5:49 & 6:01 & 6:06 & 6:13 & 6:16 & - & - & - & - & - \\
\hline \(16 T H\) y COLORADO. & S2 & 5:43 & - & 5:52 & 6:04 & 6:09 & 6:16 & - & 6:22 & 6:26 & 6:30 & - & 6:34 \\
\hline Los choferes permitrán & S4 & - & 5:54 & 5:55 & 6:07 & 6:12 & 6:19 & - & 6:25 & - & - & 6:31 & 6:35 \\
\hline que los pasjeros que lo & S2/ & 5:50 & - & 5:59 & 6:11 & 6:16 & 6:23 & 6:26 & - & - & - & - & - \\
\hline soliciten permanezcan & S2 & 5:53 & - & 6:02 & 6:14 & 6:19 & 6:26 & - & 6:32 & 6:36 & 6:40 & - & 6:44 \\
\hline en el autobús hasta & S4 & - & 6:04 & 6:05 & 6:17 & 6:22 & 6:29 & - & 6:35 & - & - & 6:41 & 6:45 \\
\hline Colorado Avenue y 14th & S2/ & 6:00 & - & 6:09 & 6:21 & 6:26 & 6:33 & 6:36 & - & - & - & - & - \\
\hline Street. & S2 & 6:03 & - & 6:12 & 6:24 & 6:29 & 6:36 & - & 6:42 & 6:46 & 6:50 & - & 6:54 \\
\hline
\end{tabular}

Page 8 of 17


Page 9 of 17
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route Number & Wayne \& Dixon Aves. (Silver Spring) M & 16th St. \& Eastern Ave. NW (D.C. Line) & \begin{tabular}{l}
Eastern \\
Ave. \& \\
16th St. \\
NW \\
(D.C. Line)
\end{tabular} & \begin{tabular}{l}
Alaska \\
Ave. \& Kalmia Rd. NW
\end{tabular} & \[
\begin{gathered}
\text { 16th } \\
\& \\
\text { Sheridan } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & \[
\begin{gathered}
\text { 16th } \\
\& \\
\text { Buchanan } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & 16th \& Irving Sts. NW & \[
\begin{gathered}
\text { 16th } \\
\& \\
\text { U Sts. } \\
\text { NW }
\end{gathered}
\] & H \& 14th Sts. NW (McPherson Sq) 1 & \begin{tabular}{l}
10th \\
Consti- \\
tution \\
Ave. NW \\
(FED. \\
TRI- \\
ANGLE)
\end{tabular} \\
\hline \multicolumn{11}{|c|}{AM Service - Servicio matutino} \\
\hline S2 & 4:17 & - & 4:23 & 4:26 & 4:31 & 4:34 & 4:39 & 4:43 & 4:50 & 4:58 \\
\hline S4 & 4:37 & 4:43 & - & - & 4:48 & 4:51 & 4:56 & 5:00 & 5:07 & 5:15 \\
\hline S2 & 4:49 & - & 4:55 & 4:58 & 5:03 & 5:06 & 5:11 & 5:15 & 5:22 & 5:30 \\
\hline S4 & 5:05 & 5:11 & - & - & 5:16 & 5:19 & 5:24 & 5:28 & 5:35 & 5:43 \\
\hline S2 & 5:15 & - & 5:21 & 5:24 & 5:29 & 5:32 & 5:37 & 5:41 & 5:48 & 5:56 \\
\hline S4 & 5:28 & 5:34 & - & - & 5:39 & 5:42 & 5:47 & 5:51 & 5:58 & 6:06 \\
\hline S2 & 5:35 & - & 5:41 & 5:44 & 5:49 & 5:52 & 5:57 & 6:01 & 6:08 & 6:16 \\
\hline S4 & 5:46 & 5:52 & - & - & 5:57 & 6:00 & 6:05 & 6:09 & 6:16 & 6:24 \\
\hline S2 & 5:53 & - & 5:59 & 6:02 & 6:07 & 6:10 & 6:15 & 6:19 & 6:26 & 6:34 \\
\hline S4 & 6:04 & 6:10 & - & - & 6:15 & 6:18 & 6:23 & 6:27 & 6:34 & 6:42 \\
\hline S2 & 6:11 & - & 6:17 & 6:20 & 6:25 & 6:28 & 6:33 & 6:37 & 6:44 & 6:52 \\
\hline S4 & 6:20 & 6:26 & - & - & 6:32 & 6:35 & 6:40 & 6:45 & 6:52 & 7:01 \\
\hline S2 & 6:27 & - & 6:33 & 6:36 & 6:42 & 6:45 & 6:50 & 6:55 & 7:02 & 7:11 \\
\hline S4 & 6:34 & 6:41 & - & - & 6:47 & 6:51 & 6:57 & 7:03 & 7:11 & 7:20 \\
\hline S2 & 6:39 & - & 6:46 & 6:49 & 6:55 & 6:59 & 7:05 & 7:11 & 7:19 & 7:28 \\
\hline S4 & 6:50 & 6:57 & - & - & 7:03 & 7:07 & 7:13 & 7:19 & 7:27 & 7:36 \\
\hline S2 & 6:55 & - & 7:02 & 7:05 & 7:11 & 7:15 & 7:21 & 7:27 & 7:35 & 7:44 \\
\hline S4 & 7:05 & 7:12 & - & - & 7:18 & 7:22 & 7:28 & 7:34 & 7:42 & 7:51 \\
\hline S2 & 7:10 & - & 7:17 & 7:20 & 7:26 & 7:30 & 7:36 & 7:42 & 7:50 & 7:59 \\
\hline S4 & 7:20 & 7:27 & - & - & 7:33 & 7:37 & 7:43 & 7:49 & 7:57 & 8:06 \\
\hline S2 & 7:25 & - & 7:32 & 7:35 & 7:41 & 7:45 & 7:51 & 7:57 & 8:05 & 8:14 \\
\hline S4 & 7:35 & 7:42 & - & - & 7:48 & 7:52 & 7:58 & 8:04 & 8:12 & 8:21 \\
\hline S2 & 7:40 & - & 7:47 & 7:50 & 7:56 & 8:00 & 8:06 & 8:12 & 8:20 & 8:29 \\
\hline S4 & 7:47 & 7:55 & - & - & 8:01 & 8:05 & 8:12 & 8:18 & 8:27 & 8:37 \\
\hline S2 & 7:52 & - & 8:00 & 8:03 & 8:10 & 8:14 & 8:21 & 8:27 & 8:36 & 8:46 \\
\hline S4 & 8:02 & 8:10 & - & - & 8:16 & 8:20 & 8:27 & 8:33 & 8:42 & 8:52 \\
\hline S2 & 8:07 & - & 8:15 & 8:18 & 8:25 & 8:29 & 8:36 & 8:42 & 8:51 & 9:01 \\
\hline S4 & 8:17 & 8:25 & - & - & 8:31 & 8:35 & 8:42 & 8:48 & 8:57 & 9:07 \\
\hline S2 & 8:22 & - & 8:30 & 8:33 & 8:40 & 8:44 & 8:51 & 8:57 & 9:06 & 9:16 \\
\hline S4 & 8:32 & 8:40 & - & - & 8:46 & 8:50 & 8:57 & 9:03 & 9:12 & 9:22 \\
\hline S2 & 8:37 & - & 8:45 & 8:48 & 8:55 & 8:59 & 9:06 & 9:12 & 9:21 & 9:31 \\
\hline S4 & 8:47 & 8:55 & - & - & 9:01 & 9:05 & 9:12 & 9:18 & 9:27 & 9:37 \\
\hline S2 & 8:52 & - & 9:00 & 9:03 & 9:10 & 9:14 & 9:21 & 9:27 & 9:36 & 9:46 \\
\hline S4 & 9:02 & 9:10 & - & - & 9:16 & 9:20 & 9:27 & 9:33 & 9:42 & 9:52 \\
\hline S2 & 9:07 & - & 9:15 & 9:18 & 9:25 & 9:29 & 9:36 & 9:42 & 9:51 & 10:01 \\
\hline S4 & 9:17 & 9:25 & - & - & 9:31 & 9:35 & 9:42 & 9:48 & 9:57 & 10:07 \\
\hline S2 & 9:22 & - & 9:30 & 9:33 & 9:40 & 9:44 & 9:51 & 9:57 & 10:06 & 10:16 \\
\hline S4 & 9:32 & 9:40 & - & - & 9:46 & 9:50 & 9:57 & 10:03 & 10:12 & 10:22 \\
\hline S2 & 9:37 & - & 9:45 & 9:48 & 9:55 & 9:59 & 10:06 & 10:12 & 10:21 & 10:31 \\
\hline S4 & 9:47 & 9:55 & - & - & 10:01 & 10:05 & 10:12 & 10:18 & 10:27 & 10:37 \\
\hline S2 & 9:52 & - & 10:00 & 10:03 & 10:10 & 10:14 & 10:21 & 10:27 & 10:36 & 10:46 \\
\hline S4 & 10:02 & 10:10 & - & - & 10:16 & 10:20 & 10:27 & 10:33 & 10:42 & 10:52 \\
\hline S2 & 10:07 & - & 10:15 & 10:18 & 10:25 & 10:29 & 10:36 & 10:42 & 10:51 & 11:01 \\
\hline S4 & 10:17 & 10:25 & - & - & 10:31 & 10:35 & 10:42 & 10:48 & 10:57 & 11:07 \\
\hline S2 & 10:22 & - & 10:30 & 10:33 & 10:40 & 10:44 & 10:51 & 10:57 & 11:06 & 11:16 \\
\hline S4 & 10:32 & 10:40 & - & - & 10:46 & 10:50 & 10:57 & 11:03 & 11:12 & 11:22 \\
\hline S2 & 10:37 & - & 10:45 & 10:48 & 10:55 & 10:59 & 11:06 & 11:12 & 11:21 & 11:31 \\
\hline S4 & 10:47 & 10:55 & - & - & 11:01 & 11:05 & 11:12 & 11:18 & 11:27 & 11:37 \\
\hline S2 & 10:52 & - & 11:00 & 11:03 & 11:10 & 11:14 & 11:21 & 11:27 & 11:36 & 11:46 \\
\hline S4 & 11:02 & 11:10 & - & - & 11:16 & 11:20 & 11:27 & 11:33 & 11:42 & 11:52 \\
\hline S2 & 11:07 & - & 11:15 & 11:18 & 11:25 & 11:29 & 11:36 & 11:42 & 11:51 & 12:01 \\
\hline S4 & 11:17 & 11:25 & - & - & 11:31 & 11:35 & 11:42 & 11:48 & 11:57 & 12:07 \\
\hline S2 & 11:22 & - & 11:30 & 11:33 & 11:40 & 11:44 & 11:51 & 11:57 & 12:06 & 12:16 \\
\hline S4 & 11:32 & 11:40 & - & - & 11:46 & 11:50 & 11:57 & 12:03 & 12:12 & 12:22 \\
\hline S2 & 11:37 & - & 11:45 & 11:48 & 11:55 & 11:59 & 12:06 & 12:12 & 12:21 & 12:31 \\
\hline S4 & 11:47 & 11:55 & - & - & 12:01 & 12:05 & 12:12 & 12:18 & 12:27 & 12:37 \\
\hline S2 & 11:52 & - & 12:00 & 12:03 & 12:10 & 12:14 & 12:21 & 12:27 & 12:36 & 12:46 \\
\hline \multicolumn{11}{|c|}{PM Service - Servicio vespertino} \\
\hline S4 & 12:02 & 12:10 & - & - & 12:16 & 12:20 & 12:27 & 12:33 & 12:42 & 12:52 \\
\hline S2 & 12:07 & - & 12:15 & 12:18 & 12:25 & 12:29 & 12:36 & 12:42 & 12:51 & 1:01 \\
\hline S4 & 12:17 & 12:25 & - & - & 12:31 & 12:35 & 12:42 & 12:48 & 12:57 & 1:07 \\
\hline S2 & 12:22 & - & 12:30 & 12:33 & 12:40 & 12:44 & 12:51 & 12:57 & 1:06 & 1:16 \\
\hline S4 & 12:32 & 12:40 & - & - & 12:46 & 12:50 & 12:57 & 1:03 & 1:12 & 1:22 \\
\hline S2 & 12:37 & - & 12:45 & 12:48 & 12:55 & 12:59 & 1:06 & 1:12 & 1:21 & 1:31 \\
\hline S4 & 12:47 & 12:55 & - & - & 1:01 & 1:05 & 1:12 & 1:18 & 1:27 & 1:37 \\
\hline S2 & 12:52 & - & 1:00 & 1:03 & 1:10 & 1:14 & 1:21 & 1:27 & 1:36 & 1:46 \\
\hline S4 & 1:02 & 1:10 & - & - & 1:16 & 1:20 & 1:27 & 1:33 & 1:42 & 1:52 \\
\hline S2 & 1:07 & - & 1:15 & 1:18 & 1:25 & 1:29 & 1:36 & 1:42 & 1:51 & 2:01 \\
\hline
\end{tabular}

\section*{Page 10 of 17}

16th Street Line Weekend/ Holiday Only
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route Number & Wayne \& Dixon Aves. (Silver Spring) M & 16th St. \& Eastern Ave. NW (D.C. Line) & \begin{tabular}{l}
Eastern \\
Ave. \& \\
16th St. \\
NW \\
(D.C. Line)
\end{tabular} & \begin{tabular}{l}
Alaska \\
Ave. \& Kalmia Rd. NW
\end{tabular} & \[
\begin{gathered}
\text { 16th } \\
\& \\
\text { Sheridan } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & 16th
\(\&\)
Buchanan
Sts.
NW & \[
\begin{gathered}
\text { 16th } \\
\& \\
\text { Irving } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & \[
\begin{aligned}
& \text { 16th } \\
& \& \\
& \text { U Sts. } \\
& \text { NW }
\end{aligned}
\] & H \& 14th Sts. NW (McPherson Sq) \(\$\) & 10th St. \& Constitution Ave. NW (FED. TRIANGLE) \\
\hline \multicolumn{11}{|c|}{PM Service - Servicio vespertino} \\
\hline S4 & 1:17 & 1:25 & - & - & 1:31 & 1:35 & 1:42 & 1:48 & 1:57 & 2:07 \\
\hline S2 & 1:22 & - & 1:30 & 1:33 & 1:40 & 1:44 & 1:51 & 1:57 & 2:06 & 2:16 \\
\hline S4 & 1:32 & 1:40 & - & - & 1:46 & 1:50 & 1:57 & 2:03 & 2:12 & 2:22 \\
\hline S2 & 1:37 & - & 1:45 & 1:48 & 1:55 & 1:59 & 2:06 & 2:12 & 2:21 & 2:31 \\
\hline S4 & 1:47 & 1:55 & - & - & 2:01 & 2:05 & 2:12 & 2:18 & 2:27 & 2:37 \\
\hline S2 & 1:52 & - & 2:00 & 2:03 & 2:10 & 2:14 & 2:21 & 2:27 & 2:36 & 2:46 \\
\hline S4 & 2:02 & 2:10 & - & - & 2:16 & 2:20 & 2:27 & 2:33 & 2:42 & 2:52 \\
\hline S2 & 2:07 & - & 2:15 & 2:18 & 2:25 & 2:29 & 2:36 & 2:42 & 2:51 & 3:01 \\
\hline S4 & 2:17 & 2:25 & - & - & 2:31 & 2:35 & 2:42 & 2:48 & 2:57 & 3:07 \\
\hline S2 & 2:22 & - & 2:30 & 2:33 & 2:40 & 2:44 & 2:51 & 2:57 & 3:06 & 3:16 \\
\hline S4 & 2:32 & 2:40 & - & - & 2:46 & 2:50 & 2:57 & 3:03 & 3:12 & 3:22 \\
\hline S2 & 2:37 & - & 2:45 & 2:48 & 2:55 & 2:59 & 3:06 & 3:12 & 3:21 & 3:31 \\
\hline S4 & 2:47 & 2:55 & - & - & 3:01 & 3:05 & 3:12 & 3:18 & 3:27 & 3:37 \\
\hline S2 & 2:52 & - & 3:00 & 3:03 & 3:10 & 3:14 & 3:21 & 3:27 & 3:36 & 3:46 \\
\hline S4 & 3:02 & 3:10 & - & - & 3:16 & 3:20 & 3:27 & 3:33 & 3:42 & 3:52 \\
\hline S2 & 3:07 & - & 3:15 & 3:18 & 3:25 & 3:29 & 3:36 & 3:42 & 3:51 & 4:01 \\
\hline S4 & 3:17 & 3:25 & - & - & 3:31 & 3:35 & 3:42 & 3:48 & 3:57 & 4:07 \\
\hline S2 & 3:22 & - & 3:30 & 3:33 & 3:40 & 3:44 & 3:51 & 3:57 & 4:06 & 4:16 \\
\hline S4 & 3:32 & 3:40 & - & - & 3:46 & 3:50 & 3:57 & 4:03 & 4:12 & 4:22 \\
\hline S2 & 3:37 & - & 3:45 & 3:48 & 3:55 & 3:59 & 4:06 & 4:12 & 4:21 & 4:31 \\
\hline S4 & 3:47 & 3:55 & - & - & 4:01 & 4:05 & 4:12 & 4:18 & 4:27 & 4:37 \\
\hline S2 & 3:52 & - & 4:00 & 4:03 & 4:10 & 4:14 & 4:21 & 4:27 & 4:36 & 4:46 \\
\hline S4 & 4:02 & 4:10 & - & - & 4:16 & 4:20 & 4:27 & 4:33 & 4:42 & 4:52 \\
\hline S2 & 4:07 & - & 4:15 & 4:18 & 4:25 & 4:29 & 4:36 & 4:42 & 4:51 & 5:01 \\
\hline S4 & 4:17 & 4:25 & - & - & 4:31 & 4:35 & 4:42 & 4:48 & 4:57 & 5:07 \\
\hline S2 & 4:22 & - & 4:30 & 4:33 & 4:40 & 4:44 & 4:51 & 4:57 & 5:06 & 5:16 \\
\hline S4 & 4:32 & 4:40 & - & - & 4:46 & 4:50 & 4:57 & 5:03 & 5:12 & 5:22 \\
\hline S2 & 4:37 & - & 4:45 & 4:48 & 4:55 & 4:59 & 5:06 & 5:12 & 5:21 & 5:31 \\
\hline S4 & 4:47 & 4:55 & - & - & 5:01 & 5:05 & 5:12 & 5:18 & 5:27 & 5:37 \\
\hline S2 & 4:53 & - & 5:01 & 5:04 & 5:11 & 5:15 & 5:22 & 5:28 & 5:37 & 5:47 \\
\hline S4 & 5:06 & 5:14 & - & - & 5:20 & 5:24 & 5:31 & 5:37 & 5:46 & 5:56 \\
\hline S2 & 5:13 & - & 5:21 & 5:24 & 5:31 & 5:35 & 5:42 & 5:48 & 5:57 & 6:07 \\
\hline S4 & 5:26 & 5:34 & - & - & 5:40 & 5:44 & 5:51 & 5:57 & 6:06 & 6:16 \\
\hline S2 & 5:38 & - & 5:45 & 5:48 & 5:54 & 5:58 & 6:04 & 6:10 & 6:18 & 6:27 \\
\hline S4 & 5:51 & 5:58 & - & - & 6:04 & 6:08 & 6:14 & 6:20 & 6:28 & 6:37 \\
\hline S2 & 5:59 & - & 6:06 & 6:09 & 6:15 & 6:19 & 6:25 & 6:31 & 6:39 & 6:48 \\
\hline S4 & 6:11 & 6:18 & - & - & 6:24 & 6:28 & 6:34 & 6:40 & 6:48 & 6:57 \\
\hline S2 & 6:22 & - & 6:29 & 6:32 & 6:38 & 6:42 & 6:48 & 6:54 & 7:02 & 7:11 \\
\hline S4 & 6:38 & 6:45 & - & - & 6:51 & 6:55 & 7:01 & 7:07 & 7:15 & 7:24 \\
\hline S2 & 6:50 & - & 6:57 & 7:00 & 7:06 & 7:10 & 7:16 & 7:22 & 7:30 & 7:39 \\
\hline S4 & 7:07 & 7:14 & - & - & 7:20 & 7:24 & 7:30 & 7:36 & 7:44 & 7:53 \\
\hline S2 & 7:20 & - & 7:27 & 7:30 & 7:36 & 7:40 & 7:46 & 7:52 & 8:00 & 8:09 \\
\hline S4 & 7:37 & 7:44 & - & - & 7:50 & 7:54 & 8:00 & 8:06 & 8:14 & 8:23 \\
\hline S2 & 7:50 & - & 7:57 & 8:00 & 8:06 & 8:10 & 8:16 & 8:22 & 8:30 & 8:39 \\
\hline S4 & 8:07 & 8:14 & - & - & 8:20 & 8:24 & 8:30 & 8:36 & 8:44 & 8:53 \\
\hline S2 & 8:20 & - & 8:27 & 8:30 & 8:36 & 8:40 & 8:46 & 8:52 & 9:00 & 9:09 \\
\hline S4 & 8:37 & 8:44 & - & - & 8:50 & 8:54 & 9:00 & 9:06 & 9:14 & 9:23 \\
\hline S2 & 8:50 & - & 8:57 & 9:00 & 9:06 & 9:10 & 9:16 & 9:22 & 9:30 & 9:39 \\
\hline S4 & 9:11 & 9:18 & - & - & 9:24 & 9:28 & 9:34 & 9:40 & 9:48 & 9:57 \\
\hline S2 & 9:32 & - & 9:39 & 9:42 & 9:47 & 9:50 & 9:56 & 10:02 & 10:09 & 10:17 \\
\hline S4 & 9:54 & 10:01 & - & - & 10:07 & 10:10 & 10:16 & 10:22 & 10:29 & 10:37 \\
\hline S2 & 10:12 & - & 10:19 & 10:22 & 10:27 & 10:30 & 10:36 & 10:42 & 10:49 & 10:57 \\
\hline S4 & 10:34 & 10:41 & - & - & 10:47 & 10:50 & 10:56 & 11:02 & 11:09 & 11:17 \\
\hline S2 & 10:54 & - & 11:01 & 11:04 & 11:09 & 11:12 & 11:18 & 11:23 & 11:30 & 11:38 \\
\hline S4 & 11:17 & 11:24 & - & - & 11:30 & 11:33 & 11:39 & 11:44 & 11:51 & 11:59 \\
\hline S2 & 11:35 & - & 11:42 & 11:45 & 11:50 & 11:53 & 11:59 & 12:04 & 12:11 & 12:19 \\
\hline S4 & 11:57 & 12:04 & - & - & 12:10 & 12:13 & 12:19 & 12:24 & 12:31 & 12:39 \\
\hline \multicolumn{11}{|c|}{After Midnight Service - Servicio después de la medianoche} \\
\hline S2 & 12:26 & - & 12:32 & 12:35 & 12:40 & 12:42 & 12:48 & 12:54 & 12:58 & 1:06 \\
\hline S4 & 12:56 & 1:02 & - & - & 1:08 & 1:10 & 1:16 & 1:22 & 1:26 & 1:34 \\
\hline S2 & 1:29 & - & 1:35 & 1:38 & 1:43 & 1:45 & 1:51 & 1:57 & 2:01 & 2:09 \\
\hline S2 & 2:24 & - & 2:30 & 2:33 & 2:38 & 2:40 & 2:46 & 2:52 & 2:56 & 3:04 \\
\hline
\end{tabular}

Page 11 of 17
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route Number & \begin{tabular}{l}
10th St. \& \\
Constitution Ave. NW (Federal Triangle)
\end{tabular} & \begin{tabular}{l}
I \& 14th \\
Sts. NW (McPherson Sq)
\end{tabular} & \[
\begin{gathered}
\text { 16th } \\
\& \\
\text { U } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & \[
\begin{gathered}
\text { 16th } \\
\& \\
\text { Irving } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & 16th
\(\&\)
Buchanan
Sts.
NW & \begin{tabular}{l}
16th St. \\
\& \\
Somerset Pl. NW
\end{tabular} & \begin{tabular}{l}
Alaska \\
Ave. \& \\
Kalmia \\
Rd. \\
NW
\end{tabular} & \begin{tabular}{l}
Eastern \\
Ave. \& \\
16th St. \\
NW \\
(D.C. Line)
\end{tabular} & 16th
St. \&
Eastern
Ave.
NW
(D.C. Line) & \begin{tabular}{l}
Wayne \\
\& Dixon Aves (SILVER SPRING) \\
\(M\)
\end{tabular} \\
\hline \multicolumn{11}{|c|}{AM Service - Servicio matutino} \\
\hline S2 & 5:05 & 5:11 & 5:17 & 5:21 & 5:26 & 5:29 & 5:33 & 5:36 & - & 5:39 \\
\hline S4 & 5:20 & 5:26 & 5:32 & 5:36 & 5:41 & 5:44 & - & - & 5:50 & 5:53 \\
\hline S2 & 5:37 & 5:43 & 5:49 & 5:53 & 5:58 & 6:01 & 6:05 & 6:08 & - & 6:11 \\
\hline S4 & 5:48 & 5:55 & 6:03 & 6:07 & 6:13 & 6:16 & - & - & 6:23 & 6:26 \\
\hline S2 & 6:01 & 6:08 & 6:16 & 6:20 & 6:26 & 6:29 & 6:34 & 6:37 & - & 6:40 \\
\hline S4 & 6:11 & 6:18 & 6:26 & 6:30 & 6:36 & 6:39 & - & - & 6:46 & 6:49 \\
\hline S2 & 6:21 & 6:28 & 6:36 & 6:40 & 6:46 & 6:49 & 6:54 & 6:57 & - & 7:00 \\
\hline S4 & 6:30 & 6:37 & 6:45 & 6:49 & 6:55 & 6:58 & - & - & 7:05 & 7:08 \\
\hline S2 & 6:39 & 6:47 & 6:55 & 6:59 & 7:05 & 7:08 & 7:13 & 7:16 & - & 7:19 \\
\hline S4 & 6:48 & 6:56 & 7:04 & 7:08 & 7:14 & 7:17 & - & - & 7:23 & 7:26 \\
\hline S2 & 6:58 & 7:06 & 7:14 & 7:18 & 7:24 & 7:27 & 7:32 & 7:35 & - & 7:38 \\
\hline S4 & 7:08 & 7:16 & 7:24 & 7:28 & 7:34 & 7:37 & - & - & 7:43 & 7:46 \\
\hline S2 & 7:18 & 7:26 & 7:34 & 7:38 & 7:44 & 7:47 & 7:52 & 7:55 & - & 7:58 \\
\hline S4 & 7:26 & 7:35 & 7:44 & 7:49 & 7:55 & 7:59 & - & - & 8:07 & 8:10 \\
\hline S2 & 7:34 & 7:43 & 7:52 & 7:57 & 8:03 & 8:07 & 8:12 & 8:16 & - & 8:19 \\
\hline S4 & 7:42 & 7:51 & 8:00 & 8:05 & 8:11 & 8:15 & - & - & 8:23 & 8:26 \\
\hline S2 & 7:50 & 7:59 & 8:08 & 8:13 & 8:19 & 8:23 & 8:28 & 8:32 & - & 8:35 \\
\hline S4 & 7:58 & 8:07 & 8:16 & 8:21 & 8:27 & 8:31 & - & - & 8:39 & 8:42 \\
\hline S2 & 8:06 & 8:15 & 8:24 & 8:29 & 8:35 & 8:39 & 8:44 & 8:48 & - & 8:51 \\
\hline S4 & 8:14 & 8:23 & 8:32 & 8:37 & 8:43 & 8:47 & - & - & 8:55 & 8:58 \\
\hline S2 & 8:22 & 8:31 & 8:40 & 8:45 & 8:51 & 8:55 & 9:00 & 9:04 & - & 9:07 \\
\hline S4 & 8:29 & 8:38 & 8:47 & 8:52 & 8:58 & 9:02 & - & - & 9:10 & 9:13 \\
\hline S2 & 8:37 & 8:46 & 8:55 & 9:00 & 9:06 & 9:10 & 9:15 & 9:19 & - & 9:22 \\
\hline S4 & 8:44 & 8:53 & 9:02 & 9:07 & 9:13 & 9:17 & - & - & 9:25 & 9:28 \\
\hline S2 & 8:52 & 9:01 & 9:10 & 9:15 & 9:21 & 9:25 & 9:30 & 9:34 & - & 9:37 \\
\hline S4 & 8:59 & 9:08 & 9:17 & 9:22 & 9:28 & 9:32 & - & - & 9:40 & 9:43 \\
\hline S2 & 9:07 & 9:16 & 9:25 & 9:30 & 9:36 & 9:40 & 9:45 & 9:49 & - & 9:52 \\
\hline S4 & 9:14 & 9:23 & 9:32 & 9:37 & 9:43 & 9:47 & - & - & 9:55 & 9:58 \\
\hline S2 & 9:22 & 9:31 & 9:40 & 9:45 & 9:51 & 9:55 & 10:00 & 10:04 & - & 10:07 \\
\hline S4 & 9:29 & 9:38 & 9:47 & 9:52 & 9:58 & 10:02 & - & - & 10:10 & 10:13 \\
\hline S2 & 9:37 & 9:46 & 9:55 & 10:00 & 10:06 & 10:10 & 10:15 & 10:19 & - & 10:22 \\
\hline S4 & 9:44 & 9:53 & 10:02 & 10:07 & 10:13 & 10:17 & - & - & 10:25 & 10:28 \\
\hline S2 & 9:52 & 10:01 & 10:10 & 10:15 & 10:21 & 10:25 & 10:30 & 10:34 & - & 10:37 \\
\hline S4 & 9:59 & 10:08 & 10:17 & 10:22 & 10:28 & 10:32 & - & - & 10:40 & 10:43 \\
\hline S2 & 10:07 & 10:16 & 10:25 & 10:30 & 10:36 & 10:40 & 10:45 & 10:49 & - & 10:52 \\
\hline S4 & 10:14 & 10:23 & 10:32 & 10:37 & 10:43 & 10:47 & - & - & 10:55 & 10:58 \\
\hline S2 & 10:22 & 10:31 & 10:40 & 10:45 & 10:51 & 10:55 & 11:00 & 11:04 & - & 11:07 \\
\hline S4 & 10:29 & 10:38 & 10:47 & 10:52 & 10:58 & 11:02 & - & - & 11:10 & 11:13 \\
\hline S2 & 10:37 & 10:46 & 10:55 & 11:00 & 11:06 & 11:10 & 11:15 & 11:19 & - & 11:22 \\
\hline S4 & 10:44 & 10:53 & 11:02 & 11:07 & 11:13 & 11:17 & - & - & 11:25 & 11:28 \\
\hline S2 & 10:52 & 11:01 & 11:10 & 11:15 & 11:21 & 11:25 & 11:30 & 11:34 & - & 11:37 \\
\hline S4 & 10:59 & 11:08 & 11:17 & 11:22 & 11:28 & 11:32 & - & - & 11:40 & 11:43 \\
\hline S2 & 11:07 & 11:16 & 11:25 & 11:30 & 11:36 & 11:40 & 11:45 & 11:49 & - & 11:52 \\
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\hline S2 & 11:22 & 11:31 & 11:40 & 11:45 & 11:51 & 11:55 & 12:00 & 12:04 & - & 12:07 \\
\hline S4 & 11:29 & 11:38 & 11:47 & 11:52 & 11:58 & 12:02 & - & - & 12:10 & 12:13 \\
\hline S2 & 11:37 & 11:47 & 11:57 & 12:03 & 12:09 & 12:13 & 12:18 & 12:22 & - & 12:25 \\
\hline S4 & 11:44 & 11:54 & 12:04 & 12:10 & 12:16 & 12:20 & - & - & 12:28 & 12:31 \\
\hline S2 & 11:52 & 12:02 & 12:12 & 12:18 & 12:24 & 12:28 & 12:33 & 12:37 & - & 12:40 \\
\hline S4 & 11:59 & 12:09 & 12:19 & 12:25 & 12:31 & 12:35 & - & - & 12:43 & 12:46 \\
\hline \multicolumn{11}{|c|}{PM Service - Servicio vespertino} \\
\hline S2 & 12:07 & 12:17 & 12:27 & 12:33 & 12:39 & 12:43 & 12:48 & 12:52 & - & 12:55 \\
\hline S4 & 12:14 & 12:24 & 12:34 & 12:40 & 12:46 & 12:50 & - & - & 12:58 & 1:01 \\
\hline S2 & 12:22 & 12:32 & 12:42 & 12:48 & 12:54 & 12:58 & 1:03 & 1:07 & - & 1:10 \\
\hline S4 & 12:29 & 12:39 & 12:49 & 12:55 & 1:01 & 1:05 & - & - & 1:13 & 1:16 \\
\hline S2 & 12:37 & 12:47 & 12:57 & 1:03 & 1:09 & 1:13 & 1:18 & 1:22 & - & 1:25 \\
\hline S4 & 12:44 & 12:54 & 1:04 & 1:10 & 1:16 & 1:20 & - & - & 1:28 & 1:31 \\
\hline S2 & 12:52 & 1:02 & 1:12 & 1:18 & 1:24 & 1:28 & 1:33 & 1:37 & - & 1:40 \\
\hline S4 & 12:59 & 1:09 & 1:19 & 1:25 & 1:31 & 1:35 & - & - & 1:43 & 1:46 \\
\hline S2 & 1:07 & 1:17 & 1:27 & 1:33 & 1:39 & 1:43 & 1:48 & 1:52 & - & 1:55 \\
\hline S4 & 1:14 & 1:24 & 1:34 & 1:40 & 1:46 & 1:50 & - & - & 1:58 & 2:01 \\
\hline S2 & 1:22 & 1:32 & 1:42 & 1:48 & 1:54 & 1:58 & 2:03 & 2:07 & - & 2:10 \\
\hline S4 & 1:29 & 1:39 & 1:49 & 1:55 & 2:01 & 2:05 & - & - & 2:13 & 2:16 \\
\hline S2 & 1:37 & 1:47 & 1:57 & 2:03 & 2:09 & 2:13 & 2:18 & 2:22 & - & 2:25 \\
\hline S4 & 1:44 & 1:54 & 2:04 & 2:10 & 2:16 & 2:20 & - & - & 2:28 & 2:31 \\
\hline S2 & 1:52 & 2:02 & 2:12 & 2:18 & 2:24 & 2:28 & 2:33 & 2:37 & - & 2:40 \\
\hline S4 & 1:59 & 2:09 & 2:19 & 2:25 & 2:31 & 2:35 & - & - & 2:43 & 2:46 \\
\hline S2 & 2:07 & 2:17 & 2:27 & 2:33 & 2:39 & 2:43 & 2:48 & 2:52 & - & 2:55 \\
\hline
\end{tabular}

16th Street Line Weekend/ Holiday Only
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route Number & \begin{tabular}{l}
10th St. \& \\
Constitution \\
Ave. NW \\
(Federal \\
Triangle)
\end{tabular} & \begin{tabular}{l}
I \& 14th \\
Sts. NW (McPherson Sq) M
\end{tabular} & \[
\begin{gathered}
\text { 16th } \\
\& \\
\text { U } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & \[
\begin{gathered}
\text { 16th } \\
\text { \& } \\
\text { Irving } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & \[
\begin{aligned}
& \text { 16th } \\
& \& \\
& \text { Buchanan } \\
& \text { Sts. } \\
& \text { NW }
\end{aligned}
\] & 16th St. \& Somerset Pl. NW & \begin{tabular}{l}
Alaska \\
Ave. \& \\
Kalmia \\
Rd. \\
NW
\end{tabular} & \begin{tabular}{l}
Eastern \\
Ave. \& 16th St. NW (D.C. Line)
\end{tabular} & 16th St. \& Eastern Ave. NW D.C. Line) & \begin{tabular}{l}
Wayne \\
\& Dixon \\
Aves \\
(SILVER \\
SPRING)
\end{tabular} \\
\hline \multicolumn{11}{|c|}{PM Service - Servicio vespertino} \\
\hline S4 & 2:14 & 2:24 & 2:34 & 2:40 & 2:46 & 2:50 & - & - & 2:58 & 3:01 \\
\hline S2 & 2:22 & 2:32 & 2:42 & 2:48 & 2:54 & 2:58 & 3:03 & 3:07 & - & 3:10 \\
\hline S4 & 2:29 & 2:39 & 2:49 & 2:55 & 3:01 & 3:05 & - & - & 3:13 & 3:16 \\
\hline S2 & 2:37 & 2:47 & 2:57 & 3:03 & 3:09 & 3:13 & 3:18 & 3:22 & - & 3:25 \\
\hline S4 & 2:44 & 2:54 & 3:04 & 3:10 & 3:16 & 3:20 & - & - & 3:28 & 3:31 \\
\hline S2 & 2:52 & 3:02 & 3:12 & 3:18 & 3:24 & 3:28 & 3:33 & 3:37 & - & 3:40 \\
\hline S4 & 2:59 & 3:09 & 3:19 & 3:25 & 3:31 & 3:35 & - & - & 3:43 & 3:46 \\
\hline S2 & 3:07 & 3:17 & 3:27 & 3:33 & 3:39 & 3:43 & 3:48 & 3:52 & - & 3:55 \\
\hline S4 & 3:14 & 3:24 & 3:34 & 3:40 & 3:46 & 3:50 & - & - & 3:58 & 4:01 \\
\hline S2 & 3:22 & 3:32 & 3:42 & 3:48 & 3:54 & 3:58 & 4:03 & 4:07 & - & 4:10 \\
\hline S4 & 3:29 & 3:39 & 3:49 & 3:55 & 4:01 & 4:05 & - & - & 4:13 & 4:16 \\
\hline S2 & 3:37 & 3:47 & 3:57 & 4:03 & 4:09 & 4:13 & 4:18 & 4:22 & - & 4:25 \\
\hline S4 & 3:44 & 3:54 & 4:04 & 4:10 & 4:16 & 4:20 & - & - & 4:28 & 4:31 \\
\hline S2 & 3:52 & 4:02 & 4:13 & 4:19 & 4:25 & 4:29 & 4:34 & 4:38 & - & 4:41 \\
\hline S4 & 3:59 & 4:09 & 4:20 & 4:26 & 4:32 & 4:36 & - & - & 4:44 & 4:47 \\
\hline S2 & 4:07 & 4:17 & 4:28 & 4:34 & 4:40 & 4:44 & 4:49 & 4:53 & - & 4:56 \\
\hline S4 & 4:14 & 4:24 & 4:35 & 4:41 & 4:47 & 4:51 & - & - & 4:59 & 5:02 \\
\hline S2 & 4:22 & 4:32 & 4:43 & 4:49 & 4:55 & 4:59 & 5:04 & 5:08 & - & 5:11 \\
\hline S4 & 4:29 & 4:39 & 4:50 & 4:56 & 5:02 & 5:06 & - & - & 5:14 & 5:17 \\
\hline S2 & 4:37 & 4:47 & 4:58 & 5:04 & 5:10 & 5:14 & 5:19 & 5:23 & - & 5:26 \\
\hline S4 & 4:44 & 4:54 & 5:05 & 5:11 & 5:17 & 5:21 & - & - & 5:29 & 5:32 \\
\hline S2 & 4:52 & 5:02 & 5:13 & 5:19 & 5:25 & 5:29 & 5:34 & 5:38 & - & 5:41 \\
\hline S4 & 4:59 & 5:09 & 5:20 & 5:26 & 5:32 & 5:36 & - & - & 5:44 & 5:47 \\
\hline S2 & 5:07 & 5:17 & 5:28 & 5:34 & 5:40 & 5:44 & 5:49 & 5:53 & - & 5:56 \\
\hline S4 & 5:14 & 5:24 & 5:35 & 5:41 & 5:47 & 5:51 & - & - & 5:59 & 6:02 \\
\hline S2 & 5:22 & 5:32 & 5:43 & 5:49 & 5:55 & 5:59 & 6:04 & 6:08 & - & 6:11 \\
\hline S4 & 5:29 & 5:39 & 5:50 & 5:56 & 6:02 & 6:06 & - & - & 6:14 & 6:17 \\
\hline S2 & 5:37 & 5:47 & 5:58 & 6:04 & 6:10 & 6:14 & 6:19 & 6:23 & - & 6:26 \\
\hline S4 & 5:45 & 5:55 & 6:06 & 6:12 & 6:18 & 6:22 & - & - & 6:30 & 6:33 \\
\hline S2 & 5:54 & 6:04 & 6:15 & 6:21 & 6:27 & 6:31 & 6:36 & 6:40 & - & 6:43 \\
\hline S4 & 6:04 & 6:14 & 6:24 & 6:30 & 6:36 & 6:40 & - & - & 6:48 & 6:51 \\
\hline S2 & 6:14 & 6:24 & 6:34 & 6:40 & 6:46 & 6:50 & 6:55 & 6:59 & - & 7:02 \\
\hline S4 & 6:24 & 6:34 & 6:44 & 6:50 & 6:56 & 7:00 & - & - & 7:08 & 7:11 \\
\hline S2 & 6:34 & 6:44 & 6:54 & 7:00 & 7:06 & 7:10 & 7:15 & 7:19 & - & 7:22 \\
\hline S4 & 6:44 & 6:54 & 7:04 & 7:10 & 7:16 & 7:20 & - & - & 7:28 & 7:31 \\
\hline S2 & 6:54 & 7:04 & 7:14 & 7:20 & 7:26 & 7:30 & 7:35 & 7:39 & - & 7:42 \\
\hline S4 & 7:04 & 7:14 & 7:24 & 7:30 & 7:36 & 7:40 & - & - & 7:48 & 7:51 \\
\hline S2 & 7:17 & 7:27 & 7:37 & 7:43 & 7:49 & 7:53 & 7:58 & 8:02 & - & 8:05 \\
\hline S4 & 7:30 & 7:39 & 7:49 & 7:54 & 8:00 & 8:04 & - & - & 8:10 & 8:13 \\
\hline S2 & 7:45 & 7:54 & 8:04 & 8:09 & 8:15 & 8:19 & 8:24 & 8:27 & - & 8:30 \\
\hline S4 & 8:00 & 8:09 & 8:19 & 8:24 & 8:30 & 8:34 & - & - & 8:40 & 8:43 \\
\hline S2 & 8:15 & 8:24 & 8:34 & 8:39 & 8:45 & 8:49 & 8:54 & 8:57 & - & 9:00 \\
\hline S4 & 8:30 & 8:39 & 8:49 & 8:54 & 9:00 & 9:04 & - & - & 9:10 & 9:13 \\
\hline S2 & 8:45 & 8:53 & 9:02 & 9:07 & 9:13 & 9:17 & 9:21 & 9:24 & - & 9:27 \\
\hline S4 & 9:00 & 9:08 & 9:17 & 9:22 & 9:28 & 9:32 & - & - & 9:38 & 9:41 \\
\hline S2 & 9:15 & 9:23 & 9:32 & 9:37 & 9:43 & 9:47 & 9:51 & 9:54 & - & 9:57 \\
\hline S4 & 9:30 & 9:38 & 9:47 & 9:52 & 9:58 & 10:02 & - & - & 10:08 & 10:11 \\
\hline S2 & 9:45 & 9:53 & 10:02 & 10:07 & 10:13 & 10:17 & 10:21 & 10:24 & - & 10:27 \\
\hline S4 & 10:03 & 10:11 & 10:20 & 10:25 & 10:31 & 10:35 & - & - & 10:41 & 10:44 \\
\hline S2 & 10:23 & 10:31 & 10:40 & 10:45 & 10:51 & 10:55 & 10:59 & 11:02 & - & 11:05 \\
\hline S4 & 10:43 & 10:51 & 11:00 & 11:05 & 11:11 & 11:15 & - & - & 11:21 & 11:24 \\
\hline S2 & 11:03 & 11:11 & 11:20 & 11:25 & 11:31 & 11:35 & 11:39 & 11:42 & - & 11:45 \\
\hline S4 & 11:23 & 11:31 & 11:40 & 11:45 & 11:51 & 11:55 & - & - & 12:01 & 12:04 \\
\hline S2 & 11:44 & 11:52 & 12:01 & 12:06 & 12:12 & 12:16 & 12:20 & 12:23 & - & 12:26 \\
\hline \multicolumn{11}{|c|}{After Midnight Service - Servicio después de la medianoche} \\
\hline S4 & 12:05 & 12:13 & 12:22 & 12:27 & 12:33 & 12:37 & - & - & 12:43 & 12:46 \\
\hline S2 & 12:25 & 12:33 & 12:41 & 12:45 & 12:51 & 12:54 & 12:58 & 1:01 & - & 1:04 \\
\hline S4 & 12:45 & 12:53 & 1:01 & 1:05 & 1:11 & 1:14 & - & - & 1:20 & 1:23 \\
\hline S2 & 1:12 & 1:20 & 1:28 & 1:32 & 1:38 & 1:41 & 1:45 & 1:48 & - & 1:51 \\
\hline S4 & 1:40 & 1:46 & 1:53 & 1:56 & 2:01 & 2:04 & - & - & 2:10 & 2:13 \\
\hline S2 & 2:15 & 2:21 & 2:28 & 2:31 & 2:36 & 2:39 & 2:43 & 2:46 & - & 2:49 \\
\hline S2 & 3:10 & 3:16 & 3:23 & 3:26 & 3:31 & 3:34 & 3:38 & 3:41 & - & 3:44 \\
\hline
\end{tabular}

Page 13 of 17

S2,4
16th Street Line Weekend/ Holiday Only

Sunday Southbound -_
En domingo con dirección al sur
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route Number & Wayne \& Dixon Aves. (Silver Spring) & \[
\begin{gathered}
\text { 16th } \\
\text { St. \& } \\
\text { Eastern } \\
\text { Ave. } \\
\text { NW } \\
\text { (District } \\
\text { Line) }
\end{gathered}
\] & Eastern Ave. \& 16th St. NW (District Line) & \begin{tabular}{l}
Alaska \\
Ave. \& \\
Kalmia \\
Rd. \\
NW
\end{tabular} & 16th \& Sheridan Sts. NW & 16th
\(\&\) Buchanan Sts. NW & \[
\begin{gathered}
\text { 16th } \\
\text { \& } \\
\text { Irving } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & \[
\begin{aligned}
& \text { 16th } \\
& \& \\
& \text { U } \\
& \text { Sts. } \\
& \text { NW }
\end{aligned}
\] & \begin{tabular}{l}
H \& \\
14th \\
Sts. NW \\
(Mc- \\
Pherson Sq ) \\
\(\$\)
\end{tabular} &  \\
\hline \multicolumn{11}{|c|}{AM Service - Servicio matutino} \\
\hline S2 & 4:33 & - & 4:39 & 4:42 & 4:45 & 4:49 & 4:55 & 4:59 & 5:06 & 5:12 \\
\hline S4 & 4:51 & 4:57 & - & - & 5:01 & 5:05 & 5:11 & 5:15 & 5:22 & 5:28 \\
\hline S2 & 5:05 & - & 5:11 & 5:14 & 5:17 & 5:21 & 5:27 & 5:31 & 5:38 & 5:44 \\
\hline S4 & 5:25 & 5:31 & - & - & 5:35 & 5:39 & 5:45 & 5:49 & 5:56 & 6:02 \\
\hline S2 & 5:37 & - & 5:43 & 5:46 & 5:49 & 5:53 & 5:59 & 6:03 & 6:10 & 6:16 \\
\hline S4 & 5:53 & 5:59 & - & - & 6:03 & 6:07 & 6:13 & 6:17 & 6:24 & 6:30 \\
\hline S2 & 6:05 & - & 6:11 & 6:14 & 6:17 & 6:21 & 6:27 & 6:31 & 6:38 & 6:44 \\
\hline S4 & 6:21 & 6:27 & - & - & 6:31 & 6:35 & 6:41 & 6:45 & 6:52 & 6:58 \\
\hline S2 & 6:28 & - & 6:35 & 6:38 & 6:43 & 6:47 & 6:54 & 6:59 & 7:06 & 7:12 \\
\hline S4 & 6:46 & 6:53 & - & - & 6:57 & 7:01 & 7:08 & 7:13 & 7:20 & 7:26 \\
\hline S2 & 6:56 & - & 7:03 & 7:06 & 7:11 & 7:15 & 7:22 & 7:27 & 7:34 & 7:40 \\
\hline S4 & 7:13 & 7:20 & - & - & 7:24 & 7:28 & 7:35 & 7:40 & 7:47 & 7:53 \\
\hline S2 & 7:22 & - & 7:29 & 7:32 & 7:37 & 7:41 & 7:48 & 7:53 & 8:00 & 8:06 \\
\hline S4 & 7:38 & 7:45 & - & - & 7:49 & 7:53 & 8:00 & 8:05 & 8:12 & 8:18 \\
\hline S2 & 7:48 & - & 7:55 & 7:58 & 8:03 & 8:07 & 8:14 & 8:19 & 8:26 & 8:32 \\
\hline S4 & 8:04 & 8:11 & - & - & 8:15 & 8:19 & 8:26 & 8:31 & 8:38 & 8:44 \\
\hline S2 & 8:14 & - & 8:21 & 8:24 & 8:29 & 8:33 & 8:40 & 8:45 & 8:52 & 8:58 \\
\hline S4 & 8:29 & 8:36 & - & - & 8:40 & 8:44 & 8:51 & 8:56 & 9:03 & 9:09 \\
\hline S2 & 8:35 & - & 8:42 & 8:45 & 8:50 & 8:54 & 9:01 & 9:06 & 9:13 & 9:19 \\
\hline S4 & 8:48 & 8:55 & - & - & 8:59 & 9:03 & 9:10 & 9:15 & 9:22 & 9:28 \\
\hline S2 & 8:52 & - & 8:59 & 9:02 & 9:07 & 9:11 & 9:18 & 9:23 & 9:30 & 9:36 \\
\hline S4 & 8:59 & 9:06 & - & - & 9:11 & 9:16 & 9:26 & 9:31 & 9:39 & 9:46 \\
\hline S2 & 9:06 & - & 9:13 & 9:16 & 9:20 & 9:25 & 9:35 & 9:40 & 9:48 & 9:55 \\
\hline S4 & 9:18 & 9:25 & - & - & 9:30 & 9:35 & 9:45 & 9:50 & 9:58 & 10:05 \\
\hline S2 & 9:27 & - & 9:34 & 9:37 & 9:41 & 9:46 & 9:56 & 10:01 & 10:09 & 10:16 \\
\hline S4 & 9:39 & 9:46 & - & - & 9:51 & 9:56 & 10:06 & 10:11 & 10:19 & 10:26 \\
\hline S2 & 9:47 & - & 9:54 & 9:57 & 10:01 & 10:06 & 10:16 & 10:21 & 10:29 & 10:36 \\
\hline S4 & 10:00 & 10:07 & - & - & 10:12 & 10:17 & 10:27 & 10:32 & 10:40 & 10:47 \\
\hline S2 & 10:08 & - & 10:15 & 10:18 & 10:22 & 10:27 & 10:37 & 10:42 & 10:50 & 10:57 \\
\hline S4 & 10:20 & 10:27 & - & - & 10:32 & 10:37 & 10:47 & 10:52 & 11:00 & 11:07 \\
\hline S2 & 10:29 & - & 10:36 & 10:39 & 10:43 & 10:48 & 10:58 & 11:03 & 11:11 & 11:18 \\
\hline S4 & 10:41 & 10:48 & - & - & 10:53 & 10:58 & 11:08 & 11:13 & 11:21 & 11:28 \\
\hline S2 & 10:50 & - & 10:57 & 11:00 & 11:04 & 11:09 & 11:19 & 11:24 & 11:32 & 11:39 \\
\hline S4 & 10:59 & 11:06 & - & - & 11:11 & 11:17 & 11:27 & 11:33 & 11:42 & 11:49 \\
\hline S2 & 11:07 & - & 11:15 & 11:18 & 11:22 & 11:28 & 11:38 & 11:44 & 11:53 & 12:00 \\
\hline S4 & 11:20 & 11:27 & - & - & 11:32 & 11:38 & 11:48 & 11:54 & 12:03 & 12:10 \\
\hline S2 & 11:28 & - & 11:36 & 11:39 & 11:43 & 11:49 & 11:59 & 12:05 & 12:14 & 12:21 \\
\hline S4 & 11:41 & 11:48 & - & - & 11:53 & 11:59 & 12:09 & 12:15 & 12:24 & 12:31 \\
\hline S2 & 11:49 & - & 11:57 & 12:00 & 12:04 & 12:10 & 12:20 & 12:26 & 12:35 & 12:42 \\
\hline
\end{tabular}

Page 14 of 17

Sunday Southbound -
En domingo con direccion al sur
16th Street Line Weekend/ Holiday Only
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route Number & \begin{tabular}{l}
Wayne \\
\& Dixon Aves. (Silver Spring)
\end{tabular} & \begin{tabular}{l}
16th \\
St. \& \\
Eastern Ave. NW (District Line)
\end{tabular} & \begin{tabular}{l}
Eastern \\
Ave. \& 16th St. NW (District Line)
\end{tabular} & \begin{tabular}{l}
Alaska \\
Ave. \& \\
Kalmia \\
Rd. \\
NW
\end{tabular} & 16th \& Sheridan Sts. NW & 16th \& Buchanan Sts. NW & 16th \& Irving Sts. NW & \[
\begin{aligned}
& \text { 16th } \\
& \& \\
& \text { U } \\
& \text { Sts. } \\
& \text { NW }
\end{aligned}
\] & \begin{tabular}{l}
H \& \\
14th \\
Sts. NW \\
(Mc- \\
Pherson \\
Sq) \\
1
\end{tabular} & 10th
St. \&
Consti-
tution
Ave. NW
(FED.
TRI-
ANGLE) \\
\hline \multicolumn{11}{|c|}{PM Service - Servicio vespertino} \\
\hline S4 & 12:02 & 12:09 & - & - & 12:14 & 12:20 & 12:30 & 12:36 & 12:45 & 12:52 \\
\hline S2 & 12:09 & - & 12:17 & 12:20 & 12:24 & 12:30 & 12:40 & 12:46 & 12:55 & 1:02 \\
\hline S4 & 12:22 & 12:29 & - & - & 12:34 & 12:40 & 12:50 & 12:56 & 1:05 & 1:12 \\
\hline S2 & 12:30 & - & 12:38 & 12:41 & 12:45 & 12:51 & 1:01 & 1:07 & 1:16 & 1:23 \\
\hline S4 & 12:43 & 12:50 & - & - & 12:55 & 1:01 & 1:11 & 1:17 & 1:26 & 1:33 \\
\hline S2 & 12:51 & - & 12:59 & 1:02 & 1:06 & 1:12 & 1:22 & 1:28 & 1:37 & 1:44 \\
\hline S4 & 1:04 & 1:11 & - & - & 1:16 & 1:22 & 1:32 & 1:38 & 1:47 & 1:54 \\
\hline S2 & 1:11 & - & 1:19 & 1:22 & 1:26 & 1:32 & 1:42 & 1:48 & 1:57 & 2:04 \\
\hline S4 & 1:24 & 1:31 & - & - & 1:36 & 1:42 & 1:52 & 1:58 & 2:07 & 2:14 \\
\hline S2 & 1:31 & - & 1:39 & 1:42 & 1:46 & 1:52 & 2:02 & 2:08 & 2:17 & 2:24 \\
\hline S4 & 1:44 & 1:51 & - & - & 1:56 & 2:02 & 2:12 & 2:18 & 2:27 & 2:34 \\
\hline S2 & 1:51 & - & 1:59 & 2:02 & 2:06 & 2:12 & 2:22 & 2:28 & 2:37 & 2:44 \\
\hline S4 & 2:04 & 2:11 & - & - & 2:16 & 2:22 & 2:32 & 2:38 & 2:47 & 2:54 \\
\hline S2 & 2:11 & - & 2:19 & 2:22 & 2:26 & 2:32 & 2:42 & 2:48 & 2:57 & 3:04 \\
\hline S4 & 2:24 & 2:31 & - & - & 2:36 & 2:42 & 2:52 & 2:58 & 3:07 & 3:14 \\
\hline S2 & 2:34 & - & 2:42 & 2:45 & 2:49 & 2:55 & 3:04 & 3:09 & 3:18 & 3:24 \\
\hline S4 & 2:47 & 2:54 & - & - & 2:59 & 3:05 & 3:14 & 3:19 & 3:28 & 3:34 \\
\hline S2 & 2:54 & - & 3:02 & 3:05 & 3:09 & 3:15 & 3:24 & 3:29 & 3:38 & 3:44 \\
\hline S4 & 3:07 & 3:14 & - & - & 3:19 & 3:25 & 3:34 & 3:39 & 3:48 & 3:54 \\
\hline S2 & 3:14 & - & 3:22 & 3:25 & 3:29 & 3:35 & 3:44 & 3:49 & 3:58 & 4:04 \\
\hline S4 & 3:27 & 3:34 & - & - & 3:39 & 3:45 & 3:54 & 3:59 & 4:08 & 4:14 \\
\hline S2 & 3:34 & - & 3:42 & 3:45 & 3:49 & 3:55 & 4:04 & 4:09 & 4:18 & 4:24 \\
\hline S4 & 3:47 & 3:54 & - & - & 3:59 & 4:05 & 4:14 & 4:19 & 4:28 & 4:34 \\
\hline S2 & 3:54 & - & 4:02 & 4:05 & 4:09 & 4:15 & 4:24 & 4:29 & 4:38 & 4:44 \\
\hline S4 & 4:07 & 4:14 & - & - & 4:19 & 4:25 & 4:34 & 4:39 & 4:48 & 4:54 \\
\hline S2 & 4:14 & - & 4:22 & 4:25 & 4:29 & 4:35 & 4:44 & 4:49 & 4:58 & 5:04 \\
\hline S4 & 4:27 & 4:34 & - & - & 4:39 & 4:45 & 4:54 & 4:59 & 5:08 & 5:14 \\
\hline S2 & 4:34 & - & 4:42 & 4:45 & 4:49 & 4:55 & 5:04 & 5:09 & 5:18 & 5:24 \\
\hline S4 & 4:47 & 4:54 & - & - & 4:59 & 5:05 & 5:14 & 5:19 & 5:28 & 5:34 \\
\hline S2 & 4:54 & - & 5:02 & 5:05 & 5:09 & 5:15 & 5:24 & 5:29 & 5:38 & 5:44 \\
\hline S4 & 5:07 & 5:14 & - & - & 5:19 & 5:25 & 5:34 & 5:39 & 5:48 & 5:54 \\
\hline S2 & 5:18 & - & 5:25 & 5:28 & 5:32 & 5:37 & 5:44 & 5:49 & 5:57 & 6:04 \\
\hline S4 & 5:30 & 5:37 & - & - & 5:42 & 5:47 & 5:54 & 5:59 & 6:07 & 6:14 \\
\hline S2 & 5:38 & - & 5:45 & 5:48 & 5:52 & 5:57 & 6:04 & 6:09 & 6:17 & 6:24 \\
\hline S4 & 5:54 & 6:01 & - & - & 6:06 & 6:11 & 6:18 & 6:23 & 6:31 & 6:38 \\
\hline S2 & 6:07 & - & 6:14 & 6:17 & 6:21 & 6:26 & 6:33 & 6:38 & 6:46 & 6:53 \\
\hline S4 & 6:24 & 6:31 & - & - & 6:36 & 6:41 & 6:48 & 6:53 & 7:01 & 7:08 \\
\hline S2 & 6:37 & - & 6:44 & 6:47 & 6:51 & 6:56 & 7:03 & 7:08 & 7:16 & 7:23 \\
\hline S4 & 6:54 & 7:01 & - & - & 7:06 & 7:11 & 7:18 & 7:23 & 7:31 & 7:38 \\
\hline S2 & 7:11 & - & 7:18 & 7:21 & 7:25 & 7:30 & 7:37 & 7:42 & 7:50 & 7:57 \\
\hline S4 & 7:39 & 7:45 & - & - & 7:50 & 7:54 & 8:00 & 8:05 & 8:12 & 8:17 \\
\hline S2 & 7:57 & - & 8:03 & 8:06 & 8:10 & 8:14 & 8:20 & 8:25 & 8:32 & 8:37 \\
\hline S4 & 8:19 & 8:25 & - & - & 8:30 & 8:34 & 8:40 & 8:45 & 8:52 & 8:57 \\
\hline S2 & 8:37 & - & 8:43 & 8:46 & 8:50 & 8:54 & 9:00 & 9:05 & 9:12 & 9:17 \\
\hline S4 & 8:59 & 9:05 & - & - & 9:10 & 9:14 & 9:20 & 9:25 & 9:32 & 9:37 \\
\hline S2 & 9:17 & - & 9:23 & 9:26 & 9:30 & 9:34 & 9:40 & 9:45 & 9:52 & 9:57 \\
\hline S4 & 9:39 & 9:45 & - & - & 9:50 & 9:54 & 10:00 & 10:05 & 10:12 & 10:17 \\
\hline S2 & 9:57 & - & 10:03 & 10:06 & 10:10 & 10:14 & 10:20 & 10:25 & 10:32 & 10:37 \\
\hline S4 & 10:19 & 10:25 & - & - & 10:30 & 10:34 & 10:40 & 10:45 & 10:52 & 10:57 \\
\hline S2 & 10:42 & - & 10:48 & 10:50 & 10:54 & 10:57 & 11:02 & 11:06 & 11:12 & 11:17 \\
\hline S4 & 11:07 & 11:13 & - & - & 11:18 & 11:21 & 11:26 & 11:30 & 11:36 & 11:41 \\
\hline S2 & 11:29 & - & 11:35 & 11:37 & 11:41 & 11:44 & 11:49 & 11:53 & 11:59 & 12:04 \\
\hline S4 & 11:48 & 11:54 & - & - & 11:59 & 12:02 & 12:07 & 12:11 & 12:17 & 12:22 \\
\hline \multicolumn{11}{|r|}{After Midnight Service - Servicio después de la medianoche} \\
\hline S2 & 12:06 & - & 12:12 & 12:14 & 12:18 & 12:21 & 12:26 & 12:30 & 12:36 & 12:41 \\
\hline S4 & 12:30 & 12:36 & - & - & 12:41 & 12:44 & 12:49 & 12:53 & 12:59 & 1:04 \\
\hline S2 & 1:05 & - & 1:11 & 1:13 & 1:17 & 1:20 & 1:25 & 1:29 & 1:35 & 1:40 \\
\hline
\end{tabular}

Page 15 of 17

S2,4
16th Street Line Weekend/ Holiday Only

Sunday Northbound -
En domingo con dirección al norte
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route Number & \begin{tabular}{l}
10th \\
Constitution Ave. NW (Fed. Triangle)
\end{tabular} & I \& 14th Sts. NW (McPherson Sg) M & \[
\begin{gathered}
\text { 16th } \\
\& \\
\text { U } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & \[
\begin{aligned}
& \text { 16th } \\
& \text { \& } \\
& \text { Irving } \\
& \text { Sts. } \\
& \text { NW }
\end{aligned}
\] & 16th \& Buchanan Sts. NW & 16th St. \& Somerset Pl. NW & \begin{tabular}{l}
Alaska \\
Ave. \& \\
Kalmia \\
Rd. \\
NW
\end{tabular} & \begin{tabular}{l}
Eastern \\
Ave. \& \\
16th St. \\
NW \\
(District \\
Line)
\end{tabular} & \begin{tabular}{l}
16th \\
St. \& \\
Eastern \\
Ave. \\
NW \\
(District \\
Line)
\end{tabular} & Wayne \& Dixon Aves (SILVER SPRING) \\
\hline \multicolumn{11}{|c|}{AM Service - Servicio matutino} \\
\hline S2 & 5:17 & 5:23 & 5:29 & 5:33 & 5:38 & 5:41 & 5:44 & 5:48 & - & 5:51 \\
\hline S4 & 5:33 & 5:39 & 5:45 & 5:49 & 5:54 & 5:57 & - & - & 6:02 & 6:05 \\
\hline S2 & 5:49 & 5:57 & 6:05 & 6:09 & 6:15 & 6:19 & 6:22 & 6:25 & - & 6:28 \\
\hline S4 & 6:07 & 6:15 & 6:23 & 6:27 & 6:33 & 6:37 & - & - & 6:41 & 6:44 \\
\hline S2 & 6:22 & 6:30 & 6:38 & 6:42 & 6:48 & 6:52 & 6:55 & 6:58 & - & 7:01 \\
\hline S4 & 6:36 & 6:44 & 6:52 & 6:56 & 7:02 & 7:06 & - & - & 7:10 & 7:13 \\
\hline S2 & 6:50 & 6:58 & 7:06 & 7:10 & 7:16 & 7:20 & 7:23 & 7:26 & - & 7:29 \\
\hline S4 & 7:04 & 7:12 & 7:20 & 7:24 & 7:30 & 7:34 & - & - & 7:38 & 7:41 \\
\hline S2 & 7:18 & 7:26 & 7:34 & 7:38 & 7:44 & 7:48 & 7:51 & 7:54 & - & 7:57 \\
\hline S4 & 7:32 & 7:40 & 7:48 & 7:52 & 7:58 & 8:02 & - & - & 8:06 & 8:09 \\
\hline S2 & 7:46 & 7:54 & 8:02 & 8:06 & 8:12 & 8:16 & 8:19 & 8:22 & - & 8:25 \\
\hline S4 & 7:59 & 8:07 & 8:16 & 8:21 & 8:28 & 8:33 & - & - & 8:39 & 8:43 \\
\hline S2 & 8:12 & 8:20 & 8:29 & 8:34 & 8:41 & 8:46 & 8:51 & 8:55 & - & 8:59 \\
\hline S4 & 8:24 & 8:32 & 8:41 & 8:46 & 8:53 & 8:58 & - & - & 9:04 & 9:08 \\
\hline S2 & 8:37 & 8:45 & 8:54 & 8:59 & 9:06 & 9:11 & 9:16 & 9:20 & - & 9:24 \\
\hline S4 & 8:50 & 8:58 & 9:07 & 9:12 & 9:19 & 9:24 & - & - & 9:30 & 9:34 \\
\hline S2 & 9:03 & 9:11 & 9:20 & 9:25 & 9:32 & 9:37 & 9:42 & 9:46 & - & 9:50 \\
\hline S4 & 9:16 & 9:24 & 9:33 & 9:38 & 9:45 & 9:50 & - & - & 9:56 & 10:00 \\
\hline S2 & 9:26 & 9:34 & 9:43 & 9:48 & 9:55 & 10:00 & 10:05 & 10:09 & - & 10:13 \\
\hline S4 & 9:35 & 9:43 & 9:52 & 9:57 & 10:04 & 10:09 & - & - & 10:15 & 10:19 \\
\hline S2 & 9:44 & 9:52 & 10:01 & 10:06 & 10:13 & 10:18 & 10:23 & 10:27 & - & 10:31 \\
\hline S4 & 9:53 & 10:01 & 10:10 & 10:15 & 10:22 & 10:27 & - & - & 10:33 & 10:37 \\
\hline S2 & 10:01 & 10:11 & 10:21 & 10:27 & 10:36 & 10:42 & 10:46 & 10:50 & - & 10:53 \\
\hline S4 & 10:11 & 10:21 & 10:31 & 10:37 & 10:46 & 10:52 & - & - & 10:58 & 11:01 \\
\hline S2 & 10:22 & 10:32 & 10:42 & 10:48 & 10:57 & 11:03 & 11:07 & 11:11 & - & 11:14 \\
\hline S4 & 10:32 & 10:42 & 10:52 & 10:58 & 11:07 & 11:13 & - & - & 11:19 & 11:22 \\
\hline S2 & 10:42 & 10:52 & 11:02 & 11:08 & 11:17 & 11:23 & 11:27 & 11:31 & - & 11:34 \\
\hline S4 & 10:53 & 11:03 & 11:13 & 11:19 & 11:28 & 11:34 & - & - & 11:40 & 11:43 \\
\hline S2 & 11:03 & 11:13 & 11:23 & 11:29 & 11:38 & 11:44 & 11:48 & 11:52 & - & 11:55 \\
\hline S4 & 11:13 & 11:23 & 11:33 & 11:39 & 11:48 & 11:54 & - & - & 12:00 & 12:03 \\
\hline S2 & 11:24 & 11:34 & 11:44 & 11:50 & 11:59 & 12:05 & 12:09 & 12:13 & - & 12:16 \\
\hline S4 & 11:34 & 11:44 & 11:54 & 12:00 & 12:09 & 12:15 & - & - & 12:21 & 12:24 \\
\hline S2 & 11:45 & 11:55 & 12:05 & 12:11 & 12:20 & 12:26 & 12:30 & 12:34 & - & 12:37 \\
\hline S4 & 11:55 & 12:05 & 12:15 & 12:21 & 12:30 & 12:36 & - & - & 12:42 & 12:45 \\
\hline
\end{tabular}

Page 16 of 17

Sunday Northbound En domingo con dirección al norte
16th Street Line
Weekend/ Holiday Only
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route &  & \begin{tabular}{l}
I \& 14th \\
Sts. NW (McPherson Sq
M
\end{tabular} & \[
\begin{gathered}
\text { 16th } \\
\& \\
\text { U } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & \[
\begin{gathered}
\text { 16th } \\
\& \\
\text { Irving } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & \[
\begin{gathered}
\text { 16th } \\
\text { \& } \\
\text { Buch- } \\
\text { anan } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & \[
\begin{gathered}
\text { 16th } \\
\& \\
\text { Sheri- } \\
\text { dan } \\
\text { Sts. } \\
\text { NW }
\end{gathered}
\] & \begin{tabular}{l}
Alaska \\
Ave. \& \\
Kalmia \\
Rd. \\
NW
\end{tabular} & Eastern Ave. \& 16th St. NW (District Line) & \begin{tabular}{l}
16th \\
St. \& Eastern Ave. NW (District Line)
\end{tabular} & \begin{tabular}{l}
SILVER
SPRING \\
M
\end{tabular} \\
\hline \multicolumn{11}{|c|}{PM Service - Servicio vespertino} \\
\hline S2 & 12:06 & 12:16 & 2:26 & 12:32 & 12:41 & 12:47 & 12:51 & 12:55 & & 12:58 \\
\hline S4 & 12:16 & 12:26 & 12:36 & 12:42 & 12:51 & 12:57 & & & 1:03 & 1:06 \\
\hline S2 & 12:27 & 12:37 & 12:47 & 12:53 & 1:01 & 1:06 & 1:10 & 1:13 & - & 1:16 \\
\hline 54 & 12:37 & 12:47 & 12:57 & 1:03 & 1:11 & 1:16 & & & 1:22 & 1:25 \\
\hline S2 & 12:48 & 12:58 & 1:08 & 1:14 & 1:22 & 1:27 & 1:31 & 1:34 & - & 1:37 \\
\hline S4 & 12:58 & 1:08 & 1:18 & 1:24 & 1:32 & 1:37 & & & 1:43 & 1:46 \\
\hline S2 & 1:08 & 1:18 & 1:28 & 1:34 & 1:42 & 1:47 & 1:51 & 1:54 & - & 1:57 \\
\hline S4 & 1:18 & 1:28 & 1:38 & 1:44 & 1:52 & 1:57 & & & 2:03 & 2:06 \\
\hline S2 & 1:29 & 1:39 & 1:49 & 1:55 & 2:03 & 2:08 & 2:12 & 2:15 & - & 2:18 \\
\hline S4 & 1:39 & 1:49 & 1:59 & 2:05 & 2:13 & 2:18 & - & - & 2:24 & 2:27 \\
\hline S2 & 1:50 & 2:00 & 2:10 & 2:16 & 2:24 & 2:29 & 2:33 & 2:36 & - & 2:39 \\
\hline S4 & 2:00 & 2:10 & 2:20 & 2:26 & 2:34 & 2:39 & - & - & 2:45 & 2:48 \\
\hline S2 & 2:10 & 2:20 & 2:30 & 2:36 & 2:44 & 2:49 & 2:53 & 2:56 & - & 2:59 \\
\hline S4 & 2:20 & 2:30 & 2:40 & 2:46 & 2:54 & 2:59 & - & - & 3:05 & 3:08 \\
\hline S2 & 2:30 & 2:40 & 2:50 & 2:56 & 3:04 & 3:09 & 3:13 & 3:16 & - & 3:19 \\
\hline S4 & 2:40 & 2:50 & 3:00 & 3:06 & 3:14 & 3:19 & - & - & 3:25 & 3:28 \\
\hline S2 & 2:50 & 3:00 & 3:10 & 3:16 & 3:24 & 3:29 & 3:33 & 3:36 & - & 3:39 \\
\hline S4 & 3:00 & 3:10 & 3:20 & 3:26 & 3:34 & 3:39 & - & - & 3:45 & 3:48 \\
\hline S2 & 3:10 & 3:20 & 3:30 & 3:36 & 3:44 & 3:49 & 3:53 & 3:56 & - & 3:59 \\
\hline S4 & 3:20 & 3:30 & 3:40 & 3:46 & 3:54 & 3:59 & - & - & 4:05 & 4:08 \\
\hline S2 & 3:30 & 3:40 & 3:50 & 3:56 & 4:04 & 4:09 & 4:13 & 4:16 & - & 4:19 \\
\hline S4 & 3:40 & 3:50 & 4:00 & 4:06 & 4:14 & 4:19 & & & 4:25 & 4:28 \\
\hline S2 & 3:50 & 4:00 & 4:10 & 4:16 & 4:24 & 4:29 & 4:33 & 4:36 & - & 4:39 \\
\hline S4 & 4:00 & 4:10 & 4:20 & 4:26 & 4:34 & 4:39 & - & - & 4:45 & 4:48 \\
\hline S2 & 4:10 & 4:20 & 4:30 & 4:36 & 4:44 & 4:49 & 4:53 & 4:56 & - & 4:59 \\
\hline S4 & 4:20 & 4:30 & 4:40 & 4:46 & 4:54 & 4:59 & - & - & 5:05 & 5:08 \\
\hline S2 & 4:30 & 4:40 & 4:50 & 4:56 & 5:04 & 5:09 & 5:13 & 5:16 & - & 5:19 \\
\hline S4 & 4:40 & 4:50 & 5:00 & 5:06 & 5:14 & 5:19 & - & - & 5:25 & 5:28 \\
\hline S2 & 4:50 & 5:00 & 5:10 & 5:16 & 5:24 & 5:29 & 5:33 & 5:36 & - & 5:39 \\
\hline S4 & 5:00 & 5:10 & 5:20 & 5:26 & 5:34 & 5:39 & - & & 5:45 & 5:48 \\
\hline S2 & 5:10 & 5:20 & 5:30 & 5:36 & 5:44 & 5:49 & 5:53 & 5:56 & - & 5:59 \\
\hline S4 & 5:20 & 5:30 & 5:40 & 5:46 & 5:54 & 5:59 & - & - & 6:05 & 6:08 \\
\hline S2 & 5:30 & 5:40 & 5:50 & 5:56 & 6:04 & 6:09 & 6:13 & 6:16 & - & 6:19 \\
\hline S4 & 5:40 & 5:50 & 6:00 & 6:06 & 6:14 & 6:19 & - & - & 6:25 & 6:28 \\
\hline S2 & 5:50 & 5:59 & 6:08 & 6:14 & 6:21 & 6:25 & 6:29 & 6:33 & - & 6:36 \\
\hline S4 & 6:00 & 6:09 & 6:18 & 6:24 & 6:31 & 6:35 & - & & 6:40 & 6:43 \\
\hline S2 & 6:10 & 6:19 & 6:28 & 6:34 & 6:41 & 6:45 & 6:49 & 6:53 & - & 6:56 \\
\hline S4 & 6:20 & 6:29 & 6:38 & 6:44 & 6:51 & 6:55 & - & - & 7:00 & 7:03 \\
\hline S2 & 6:30 & 6:39 & 6:48 & 6:54 & 7:01 & 7:05 & 7:09 & 7:13 & - & 7:16 \\
\hline S4 & 6:44 & 6:53 & 7:02 & 7:08 & 7:15 & 7:19 & - & - & 7:24 & 7:27 \\
\hline S2 & 6:59 & 7:08 & 7:17 & 7:23 & 7:30 & 7:34 & 7:38 & 7:42 & - & 7:45 \\
\hline S4 & 7:14 & 7:23 & 7:32 & 7:38 & 7:45 & 7:49 & & & 7:54 & 7:57 \\
\hline S2 & 7:29 & 7:38 & 7:47 & 7:53 & 8:00 & 8:04 & 8:08 & 8:12 & & 8:15 \\
\hline S4 & 7:44 & 7:53 & 8:02 & 8:08 & 8:15 & 8:19 & - & - & 8:24 & 8:27 \\
\hline S2 & 8:03 & 8:12 & 8:21 & 8:27 & 8:34 & 8:38 & 8:42 & 8:46 & - & 8:49 \\
\hline S4 & 8:23 & 8:32 & 8:41 & 8:45 & 8:51 & 8:55 & - & - & 8:59 & 9:02 \\
\hline S2 & 8:43 & 8:52 & 9:01 & 9:05 & 9:11 & 9:15 & 9:18 & 9:21 & - & 9:24 \\
\hline S4 & 9:03 & 9:12 & 9:21 & 9:25 & 9:31 & 9:35 & - & - & 9:39 & 9:42 \\
\hline S2 & 9:23 & 9:32 & 9:41 & 9:45 & 9:51 & 9:55 & 9:58 & 10:01 & - & 10:04 \\
\hline S4 & 9:43 & 9:52 & 10:01 & 10:05 & 10:11 & 10:15 & & & 10:19 & 10:22 \\
\hline S2 & 10:03 & 10:12 & 10:21 & 10:25 & 10:31 & 10:35 & 10:38 & 10:41 & - & 10:44 \\
\hline S4 & 10:23 & 10:32 & 10:41 & 10:45 & 10:51 & 10:55 & - & - & 10:59 & 11:02 \\
\hline S2 & 10:43 & 10:52 & 11:01 & 11:05 & 11:11 & 11:15 & 11:18 & 11:21 & - & 11:24 \\
\hline S4 & 11:03 & 11:12 & 11:21 & 11:25 & 11:31 & 11:35 & - & - & 11:39 & 11:42 \\
\hline S2 & 11:23 & 11:30 & 11:37 & 11:41 & 11:47 & 11:50 & 11:54 & 11:56 & - & 11:59 \\
\hline S4 & 11:47 & 11:54 & 12:01 & 12:05 & 12:11 & 12:14 & & & 12:18 & 12:21 \\
\hline \multicolumn{11}{|c|}{After Midnight Service - Servicio después de la medianoche} \\
\hline S2 & 12:10 & 12:17 & 12:24 & 12:28 & 12:34 & 12:37 & 12:41 & 12:43 & - & 12:46 \\
\hline S4 & 12:28 & 12:35 & 12:41 & 12:44 & 12:49 & 12:52 & - & - & 12:56 & 12:58 \\
\hline S2 & 12:47 & 12:54 & 1:00 & 1:03 & 1:08 & 1:11 & 1:14 & 1:16 & - & 1:18 \\
\hline S4 & 1:10 & 1:17 & 1:23 & 1:26 & 1:31 & 1:34 & - & - & 1:38 & 1:40 \\
\hline S2 & 1:45 & 1:52 & 1:58 & 2:01 & 2:06 & 2:09 & 2:12 & 2:14 & - & 2:16 \\
\hline
\end{tabular}

Page 17 of 17

\section*{How to use this timetable}
> Use the map to find the stops closest to where you will get on and off the bus.
> Select the schedule (Weekday, Saturday, Sunday) for when you will travel. Along the top of the schedule, find the stop at or nearest the point where you will get on the bus. Follow that column down to the time you want to leave.
> Use the same method to find the times the bus is scheduled to arrive at the stop where you will get off the bus.
> If the bus stop is not listed, use the time shown for the bus stop before it as the time to wait at the stop.
\(>\) The end- of- the- line or last stop is listed in ALL CAPS on the schedule.

\section*{Cómo Usar este Horario}
> Use este mapa para localizar las paradas más cercanas a donde se subirá y bajará del autobús.
> Seleccione el horario (Entre semana, sábado, domingo) de cuando viajará. A lo largo de la parte superior del horario, localice la parada o el punto más cercano a la parada en la que se subirá al autobús. Siga esa columna hacia abajo hasta la hora en la que desee salir.
> Utilice el mismo método para localizar las horas en que el autobús está programado para llegar a la parada en donde desea bajarse del autobús.
> Si la parada del autobús no está listada use la hora que se muestra en la parada anterior como la hora de espera en la parada.
\(>\) El final de la ruta o la última parada del autobús aparece en letras MAYÚSCULAS en el horario.

d. All Metrobuses are fully accessible and are equipped with lifts or ramps for wheelchair accessibility
Todos los autobuses de Metro son accesibles a personas con impedimentos y están equipados con rampas o elevadores para sillas de ruedas

Serves these locations-
Brinda servicio a estas ubicaciones
Minnesota Ave station
Benning Rd. N.E.
Hechinger Mall
H St. N.E. (X1)
Government Printing Office (X1)
Federal Triangle (X1)
Potomac Park/State Dept. (X1)
Gallaudet University (X3)
New York Ave-Florida Ave-Gallaudet U station (X3)
U St/African-Amer Civil War Memorial/ Cardozo station (X3)
Reeves Center (X3)
Adams Morgan (X3)
Woodley Park-Zoo/
Adams Morgan station (X3)
McLean Gardens (X3)

Washington
Metropolitan Area Transit Authority

A District of Columbia,
Maryland and Virginia
Transit Partnership

\section*{Benning Road Line}

Routes X1,3
For route and schedule information
Call 202-637-7000
www.metroopensdoors.com


\section*{Weekday Westbound - Entre semana con dirección al oeste}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route Number & \begin{tabular}{l}
Minne- \\
sota \\
Ave \\
\(M\)
\end{tabular} & \begin{tabular}{l}
Benning \\
Rd. \& 16th St. NE (Hechinger Mall)
\end{tabular} & \begin{tabular}{l}
H \\
\& \\
8th \\
Sts. \\
NE
\end{tabular} & \begin{tabular}{l}
Florida Ave. \& \\
North \\
Capitol \\
St. NW
\end{tabular} & North Capitol St. \& G Pl. NW (Govt. Printing Office) & Florida \& Georgia Aves. NW & \begin{tabular}{l}
U \& 14th \\
Sts. NW \\
(Reeves \\
Center)
\end{tabular} & \begin{tabular}{l}
Constitution \\
Ave. \& 10th St. NW
\end{tabular} & Duke Ellington Bridge & \[
\begin{gathered}
\text { C \& } \\
21 \text { st } \\
\text { Sts. NW } \\
\text { (POTOMAC } \\
\text { PARK) }
\end{gathered}
\] & Newark St. \& Wisconsin Ave. NW (MCLEAN GARDENS) \\
\hline \multicolumn{12}{|c|}{AM Service - Servicio matutino} \\
\hline X3 & 6:00 & 6:08 & - & 6:20 & - & 6:24 & 6:28 & - & 6:36 & - & 6:48 \\
\hline X1 & 6:06 & 6:14 & 6:19 & - & 6:23 & - & - & 6:31 & - & 6:40 & - \\
\hline X1 & 6:23 & 6:31 & 6:36 & - & 6:40 & - & - & 6:48 & - & 6:57 & - \\
\hline X3 & 6:28 & 6:38 & - & 6:50 & - & 6:55 & 7:00 & - & 7:08 & - & 7:22 \\
\hline X1 & 6:38 & 6:48 & 6:53 & - & 6:58 & - & - & 7:07 & - & 7:16 & - \\
\hline X3 & 6:50 & 7:00 & - & 7:12 & - & 7:17 & 7:22 & - & 7:30 & - & 7:44 \\
\hline X1 & 6:53 & 7:03 & 7:08 & - & 7:13 & - & - & 7:22 & - & 7:31 & - \\
\hline X1 & 7:08 & 7:18 & 7:23 & - & 7:28 & - & - & 7:37 & - & 7:46 & - \\
\hline X3 & 7:13 & 7:23 & - & 7:35 & - & 7:40 & 7:45 & - & 7:53 & - & 8:07 \\
\hline X1 & 7:26 & 7:36 & 7:41 & - & 7:46 & - & - & 7:55 & - & 8:04 & - \\
\hline X3 & 7:33 & 7:43 & - & 7:55 & - & 8:00 & 8:05 & - & 8:13 & - & 8:27 \\
\hline X1 & 7:40 & 7:52 & 7:58 & - & 8:04 & - & - & 8:13 & - & 8:22 & - \\
\hline X3 & 7:58 & 8:10 & - & 8:24 & - & 8:30 & 8:35 & - & 8:45 & - & 8:58 \\
\hline X1 & 8:00 & 8:12 & 8:18 & - & 8:24 & - & - & 8:33 & - & 8:42 & - \\
\hline X1 & 8:17 & 8:29 & 8:35 & - & 8:41 & - & - & 8:50 & - & 8:59 & - \\
\hline X3 & 8:19 & 8:31 & - & 8:45 & - & 8:51 & 8:56 & - & 9:06 & - & 9:19 \\
\hline X1 & 8:39 & 8:51 & 8:57 & - & 9:03 & - & - & 9:12 & - & 9:21 & - \\
\hline
\end{tabular}

\section*{Weekday Fastbound - Entre semana con dirección al este}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & North & & & & & \\
\hline Route Number & Newark St. \& Wisconsin Ave. NW (McLean Gardens) & \[
\begin{gathered}
\text { C \& } \\
\text { 21st } \\
\text { Sts. NW } \\
\text { (Potomac } \\
\text { Park) }
\end{gathered}
\] & Duke Ellington Bridge & Constitution Ave. \& 10th St. NW & \[
\begin{gathered}
\text { U \& } \\
\text { 14th } \\
\text { Sts. NW } \\
\text { (Reeves } \\
\text { Center) }
\end{gathered}
\] & Capitol \& H Sts. NE (Govt. Printing Office) & \begin{tabular}{l}
Florida \\
Ave. \& \\
7th St. \\
NW
\end{tabular} & \begin{tabular}{l}
Florida \\
Ave. \& \\
North \\
Capitol \\
St. NW
\end{tabular} & \[
\begin{aligned}
& \text { H } \\
& \text { \& 8th } \\
& \text { Sts. } \\
& \text { NE }
\end{aligned}
\] & \[
\begin{aligned}
& \text { Benning } \\
& \text { Rd. \& } \\
& \text { 15th St. } \\
& \text { NE } \\
& \text { (Hechinger } \\
& \text { Mall) }
\end{aligned}
\] & MINNESOTA AVE Nos \\
\hline \multicolumn{12}{|c|}{PM Service - Servicio vespertino} \\
\hline X1 & - & 3:40 & - & 3:50 & - & 4:01 & - & - & 4:07 & 4:13 & 4:26 \\
\hline X3 & 3:40 & - & 3:51 & - & 3:59 & - & 4:04 & 4:10 & - & 4:24 & 4:37 \\
\hline X1 & - & 4:05 & - & 4:15 & - & 4:26 & - & - & 4:32 & 4:38 & 4:51 \\
\hline X3 & 4:00 & - & 4:11 & - & 4:19 & - & 4:24 & 4:30 & - & 4:44 & 4:57 \\
\hline X 1 & - & 4:30 & - & 4:40 & - & 4:51 & - & - & 4:57 & 5:03 & 5:16 \\
\hline X3 & 4:34 & - & 4:45 & - & 4:53 & - & 4:58 & 5:06 & - & 5:19 & 5:34 \\
\hline X1 & - & 4:55 & - & 5:07 & - & 5:19 & - & - & 5:25 & 5:31 & 5:46 \\
\hline X3 & 5:08 & - & 5:19 & - & 5:27 & - & 5:32 & 5:40 & - & 5:53 & 6:08 \\
\hline X1 & - & 5:20 & - & 5:32 & - & 5:44 & - & - & 5:50 & 5:56 & 6:11 \\
\hline X1 & - & 5:45 & - & 5:54 & - & 6:01 & - & - & 6:06 & 6:11 & 6:24 \\
\hline X3 & 5:45 & - & 5:56 & - & 6:04 & - & 6:10 & 6:16 & - & 6:26 & 6:39 \\
\hline
\end{tabular}

Page 3 of 3
Fares

\section*{Effective January 12, 2009 \\ RUS}

\section*{LA PLATA, charles countr WALDORF, charles countr WASHINGTON, D.C.}

\section*{E}
EXPRESS SERVICE VIA MD 210 TO: La Plata Park \& Ride
South Potomac Church Smallwood Village Center Southern Maryland Blue Crabs Stadium U.S. 301 Park \& Ride St. Charles Towne Center Mall
L'Enfant Plaza
Federal Triangle
Farragut Square
George Washington University
State Department St. Charles Towne Center Mall
L'Enfant Plaza
Federal Triangle
Farragut Square
George Washington University
State Department St. Charles Towne Center Mall
L'Enfant Plaza
Federal Triangle
Farragut Square
George Washington University
State Department St. Charles Towne Center Mall
L'Enfant Plaza
Federal Triangle
Farragut Square
George Washington University
State Department St. Charles Towne Center Mall
L'Enfant Plaza
Federal Triangle
Farragut Square
George Washington University
State Department State Department

www.mtamaryland.com
410-539-5000 • 1-866-RIDE-
 Keller Transportation, Inc. • 1-800-273-8618
\(\begin{array}{lr}\text { From LaPlata and Waldorf to Washington, D.C. is Zone } 3 . \\ & \underline{Z} \text { Zone } 3 \\ \text { One-Way Full Fare } & \$ 4.25 \\ \text { One-Way Senior/Disability Fare } & \$ 3.20 \\ \text { Ten-Trip Ticket } & \$ 38.25 \\ \text { Sen./Dis. Ten-Trip } & \$ 32.00 \\ \text { Monthly Pass } & \$ 144.50 \\ \text { Transit Link Card } & \$ 219.50 \\ \text { - Exact fare is required. No change will be given if you overpay. }\end{array}\) - One-way fares and ten-trip tickets may be purchased on the bus. Contact the MTA to purchase monthly passes. MTA Commuter Choice Maryland Vouchers and WMATA
SmartBenefit Vouchers are accepted on this service.
Reduced fares are available for senior citizens (65+), persons
with disabilities, and Medicare Cardholders. To be eligible, you
must show one of the following; a valid MTA Senior/Disability photo ID card, or any valid government issued photo ID with proof of age, or a valid disability ID from another transit agency with any valid government issued photo ID, or a Medicare
card with any valid government photo ID.
Transit Link Cards allow for unlimited use of MTA Commuter
Bus (up to the indicated zone), Metrorail, Metrobus, and RideOn during the indicated month.
- Riders may transfer free of charge at the U.S. 301 Park \& Ride to southbound trips heading towards Smallwood Village Center, Southern Maryland Blue Crabs Stadium, South Potomac Church, or La Plata.
Wheelchair Accessible Service
- All coaches are wheelchair accessible.

\section*{MTA Telephone Numbers}
Information (410) 539-5000 or 1 (866) RIDE-MTA Internet Address www.mtamaryland.com E-Mail Comment Line commuterbus@mtamaryland.com TTY (hearing/speech impaired) (410) 539-3497 Directory Assistance 1 (888) 218-2267 Monthly Pass Credit Card Sales (410) 454-7039 Commuter Choice Maryland Info. (410) 767-8755

\section*{Other Telephone Numbers}

\footnotetext{
8เ98-६L乙 (008) เ 000L-LE9 (ZOZ)


Keller Transportation, Inc.
WMATA Metrorail and Metrobus
Prince George's TheBus
Tri-County Council

}

MARYLAND TRANSIT ADMINISTRATION

 Effective January 12, 2009 Trip No.

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline 7th St. bet. E \& D Sts., S.W. (HUD) & 7:24 & 7:32 & 7:39 & 7:45 & 7:52 & 7:59 & 8:00 & 8:06 & 8:13 & 8:20 & 8:29 & 8:39 & 8:49 & 8:59 & 9:11 \\
\hline 7th St. \& Maryland Ave., S.W. (L'Enfant Plaza (V) & 7:26 & 7:34 & 7:41 & 7:47 & 7:54 & 8:01 & 8:02 & 8:08 & 8:15 & 8:22 & 8:31 & 8:41 & 8:51 & 9:01 & 9:13 \\
\hline Pennsylvania Ave. \& 7th St., N.W. (Archives (M) & 7:29 & 7:37 & 7:44 & 7:50 & 7:57 & 8:04 & 8:05 & 8:11 & 8:18 & 8:25 & 8:34 & 8:44 & 8:54 & 9:04 & 9:16 \\
\hline Pennsylvania Ave. \& 10th St., N.W. (FBI, Justice) & 7:31 & 7:39 & 7:46 & 7:52 & 7:59 & 8:06 & 8:07 & 8:13 & 8:20 & 8:27 & 8:36 & 8:46 & 8:56 & 9:06 & 9:18 \\
\hline Pennsylvania Ave. \& 12th St., N.W. (Fed Triangle) & 7:33 & 7:41 & 7:48 & 7:54 & 8:01 & 8:08 & 8:09 & 8:15 & 8:22 & 8:29 & 8:38 & 8:48 & 8:58 & 9:08 & 9:20 \\
\hline 12th St. \& G St., N.W. (Metro Center (M) & 7:35 & 7:43 & 7:50 & 7:56 & 8:03 & 8:10 & 8:11 & 8:17 & 8:24 & 8:31 & 8:40 & 8:50 & 9:00 & 9:10 & 9:22 \\
\hline K St. \& 14th St., N.W. & 7:38 & 7:46 & 7:53 & 7:59 & 8:06 & 8:13 & 8:14 & 8:20 & 8:27 & 8:34 & 8:43 & 8:53 & 9:03 & 9:13 & 9:25 \\
\hline K St. \& 16th St., N.W. & 7:40 & 7:48 & 7:55 & 8:01 & 8:08 & 8:15 & 8:16 & 8:22 & 8:29 & 8:36 & 8:45 & 8:55 & 9:05 & 9:15 & 9:27 \\
\hline K St. \& 18th St., N.W. & 7:42 & 7:50 & 7:57 & 8:03 & 8:10 & 8:17 & 8:18 & 8:24 & 8:31 & 8:38 & 8:47 & 8:57 & 9:07 & 9:17 & 9:29 \\
\hline K St. \& 20th St., N.W. & 7:44 & 7:52 & 7:59 & 8:05 & 8:12 & 8:19 & 8:20 & 8:26 & 8:33 & 8:40 & 8:49 & 8:59 & 9:09 & 9:19 & 9:31 \\
\hline K St. \& 22nd St., N.W. & 7:46 & 7:54 & 8:01 & 8:07 & 8:14 & 8:21 & 8:22 & 8:28 & 8:35 & 8:42 & 8:51 & 9:01 & 9:11 & 9:21 & 9:33 \\
\hline 23rd St. \& I (Eye) St., N.W. (Foggy Bottom-GWU(M) & 7:48 & 7:56 & 8:03 & 8:09 & 8:16 & 8:23 & 8:24 & 8:30 & 8:37 & 8:44 & 8:53 & 9:03 & 9:13 & 9:23 & 9:35 \\
\hline 21st St. \& C St., N.W. (State Department) & 7:51 & 7:59 & 8:06 & 8:12 & 8:19 & 8:26 & 8:27 & 8:33 & 8:40 & 8:47 & 8:56 & 9:06 & 9:16 & 9:26 & 9:38 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{17}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
ve January 12, 2009 \\
NO. 901 LINE \\
SOUTHBOUND FROM WASHINGTON, D.C. TO WALDORF/LA PLATA (P.M.)
\end{tabular}}} \\
\hline & & & & & & & & & & & & & & & & \\
\hline Trip No. & \[
\begin{aligned}
& \mathrm{S} \\
& 31
\end{aligned}
\] & \[
\begin{aligned}
& L \\
& 32
\end{aligned}
\] & \[
\begin{gathered}
\mathrm{S} \\
33
\end{gathered}
\] & 34 & \[
\begin{aligned}
& \hline \mathrm{S} \\
& 35
\end{aligned}
\] & \[
\begin{aligned}
& L \\
& \hline
\end{aligned}
\] & \[
\begin{aligned}
& \hline \mathrm{S} \\
& 37
\end{aligned}
\] & 38 & \[
\begin{aligned}
& \mathrm{S} \\
& 39
\end{aligned}
\] & \[
\begin{aligned}
& L \\
& 40
\end{aligned}
\] & \[
\begin{aligned}
& \hline \mathrm{S} \\
& 41
\end{aligned}
\] & 42 & \[
\begin{aligned}
& \mathrm{S} \\
& 43
\end{aligned}
\] & 44 & \[
\begin{aligned}
& \mathrm{L} / \mathrm{S} \\
& \hline 5
\end{aligned}
\] & 46 \\
\hline \multicolumn{17}{|l|}{WASHINGTON D.C.} \\
\hline C St. \& 21st St., N.W. (State Department) & 12:20 & 2:40 & 2:52 & 3:04 & 3:16 & 3:26 & 3:32 & 3:38 & 3:44 & 3:50 & 3:56 & 4:03 & 4:10 & 4:15 & 4:17 & 4:24 \\
\hline 23rd St. \& I (Eye) St., N.W. (Foggy Bottom-GWU(U) & 12:22 & 2:43 & 2:55 & 3:07 & 3:19 & 3:29 & 3:35 & 3:41 & 3:47 & 3:53 & 3:59 & 4:06 & 4:13 & 4:18 & 4:20 & 4:27 \\
\hline K St. \& 22nd St., N.W. & 12:24 & 2:46 & 2:58 & 3:10 & 3:22 & 3:32 & 3:38 & 3:44 & 3:50 & 3:56 & 4:02 & 4:09 & 4:16 & 4:21 & 4:23 & 4:30 \\
\hline K St. \& 20th St., N.W. & 12:26 & 2:48 & 3:00 & 3:12 & 3:24 & 3:34 & 3:40 & 3:46 & 3:52 & 3:58 & 4:04 & 4:11 & 4:18 & 4:23 & 4:25 & 4:32 \\
\hline K St. \& 18th St., N.W. & 12:28 & 2:50 & 3:02 & 3:14 & 3:26 & 3:36 & 3:42 & 3:48 & 3:54 & 4:00 & 4:06 & 4:13 & 4:20 & 4:25 & 4:27 & 4:34 \\
\hline K St. \& 16th St., N.W. & 12:30 & 2:52 & 3:04 & 3:16 & 3:28 & 3:38 & 3:44 & 3:50 & 3:56 & 4:02 & 4:08 & 4:15 & 4:22 & 4:27 & 4:29 & 4:36 \\
\hline K St. \& 14th St., N.W. & 12:32 & 2:54 & 3:06 & 3:18 & 3:30 & 3:40 & 3:46 & 3:52 & 3:58 & 4:04 & 4:10 & 4:17 & 4:24 & 4:29 & 4:31 & 4:38 \\
\hline 11th St. \& H St., N.W. (Metro Center (M) & 12:35 & 2:58 & 3:10 & 3:22 & 3:34 & 3:44 & 3:50 & 3:56 & 4:02 & 4:08 & 4:14 & 4:21 & 4:28 & 4:33 & 4:35 & 4:42 \\
\hline Pennsylvania Ave. \& 10th St., N.W. (FBI, Justice) & 12:38 & 3:02 & 3:14 & 3:26 & 3:38 & 3:48 & 3:54 & 4:00 & 4:06 & 4:12 & 4:18 & 4:25 & 4:32 & 4:37 & 4:39 & 4:46 \\
\hline Pennsylvania Ave. \& 9th St., N.W. & 12:39 & 3:03 & 3:15 & 3:27 & 3:39 & 3:49 & 3:55 & 4:01 & 4:07 & 4:13 & 4:19 & 4:26 & 4:33 & 4:38 & 4:40 & 4:47 \\
\hline 7th St. \& Maryland Ave., S.W. (L'Enfant Plaza (U) & 12:43 & 3:08 & 3:20 & 3:32 & 3:44 & 3:54 & 4:00 & 4:06 & 4:12 & 4:18 & 4:24 & 4:31 & 4:38 & 4:43 & 4:45 & 4:52 \\
\hline 7th St. bet. D \& E Sts., S.W. (HUD) & 12:45 & 3:10 & 3:22 & 3:34 & 3:46 & 3:56 & 4:02 & 4:08 & 4:14 & 4:20 & 4:26 & 4:33 & 4:40 & 4:45 & 4:47 & 4:54 \\
\hline \multicolumn{17}{|l|}{CHARLES COUNTY} \\
\hline St. Charles Towne Mall (JC Penney) & 1:25 & 3:52 & 4:05 & 4:18 & 4:31 & 4:44 & 4:51 & 4:58 & 5:04 & 5:10 & 5:16 & 5:24 & 5:31 & -- & 5:39 & 5:46 \\
\hline St. Charles Towne Mall (Dick's Sporting Goods) & 1:29 & 3:56 & 4:09 & 4:22 & 4:35 & 4:48 & 4:55 & 5:02 & 5:08 & 5:14 & 5:20 & 5:28 & 5:35 & -- & 5:43 & 5:50 \\
\hline U.S. 301 Park \& Ride (U.S 301 \& Smallwood Dr.) & 1:31 & 3:58 & 4:11 & 4:24 & 4:37 & 4:50 & 4:57 & 5:04 & 5:10 & 5:16 & 5:22 & 5:30 & 5:37 & -- & 5:45 & 5:52 \\
\hline St. Charles Towne Plaza (behind Jo-Ann's) & * & -- & -- & -- & -- & -- & -- & -- & -- & -- & -- & -- & -- & -- & -- & -- \\
\hline Smallwood Village Center & 1:37 & -- & -- & 4:30 & -- & 4:56 & -- & -- & 5:16 & -- & -- & 5:36 & -- & 5:35 & -- & -- \\
\hline Southern Md. Blue Crabs Stadium (Piney Church Rd.) & * & -- & -- & 4:38 & -- & 5:04 & -- & -- & 5:24 & -- & -- & 5:44 & -- & -- & -- & -- \\
\hline South Potomac Church (U.S. 301, White Plains) & 1:50 & 4:08 & 4:21 & -- & 4:47 & -- & 5:07 & 5:14 & -- & 5:26 & 5:32 & -- & -- & 5:48 & -- & 6:02 \\
\hline La Plata Park \& Ride (Washington Ave.) & 1:54 & 4:12 & 4:25 & -- & 4:51 & -- & 5:11 & 5:18 & -- & 5:30 & 5:36 & -- & -- & 5:52 & -- & 6:06 \\
\hline
\end{tabular}

\section*{Effective January 12, 2009}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{16}{|l|}{NO. 901 LINE
SOUTHBOUND FROM WASHINGTON, D.C. TO WALDORF/LA PLATA (P.M.)} \\
\hline Trip No. & \[
\begin{gathered}
\mathrm{S} \\
47
\end{gathered}
\] & \[
\stackrel{L}{48}
\] & \[
\begin{array}{r}
\mathrm{S} \\
49
\end{array}
\] & 50 & \[
\begin{gathered}
\mathrm{L} / \mathrm{S} \\
51 \\
\hline
\end{gathered}
\] & 52 & \[
\begin{gathered}
\mathrm{S} \\
53
\end{gathered}
\] & \[
\begin{aligned}
& L \\
& 54
\end{aligned}
\] & \[
\begin{gathered}
\mathrm{S} \\
55
\end{gathered}
\] & 56 & \[
\begin{gathered}
\text { L/S } \\
57
\end{gathered}
\] & 58 & \[
\begin{gathered}
\hline \mathrm{S} \\
59
\end{gathered}
\] & 60 & \[
\begin{gathered}
\mathrm{L} / \mathrm{S} \\
61
\end{gathered}
\] \\
\hline \multicolumn{16}{|l|}{WASHINGTON D.C.} \\
\hline C St. \& 21st St., N.W. (State Department) & 4:31 & 4:38 & 4:44 & 4:50 & 4:56 & 5:02 & 5:05 & 5:08 & 5:14 & 5:20 & 5:30 & 5:40 & 5:50 & 6:00 & 6:30 \\
\hline 23rd St. \& I (Eye) St., N.W. (Foggy Bottom-GWU(M) & 4:34 & 4:41 & 4:47 & 4:53 & 4:59 & 5:05 & 5:08 & 5:11 & 5:17 & 5:23 & 5:33 & 5:43 & 5:53 & 6:03 & 6:33 \\
\hline K St. \& 22nd St., N.W. & 4:37 & 4:44 & 4:50 & 4:56 & 5:02 & 5:08 & 5:11 & 5:14 & 5:20 & 5:26 & 5:36 & 5:46 & 5:56 & 6:06 & 6:36 \\
\hline K St. \& 20th St., N.W. & 4:39 & 4:46 & 4:52 & 4:58 & 5:04 & 5:10 & 5:13 & 5:16 & 5:22 & 5:28 & 5:38 & 5:48 & 5:58 & 6:08 & 6:38 \\
\hline K St. \& 18th St., N.W. & 4:41 & 4:48 & 4:54 & 5:00 & 5:06 & 5:12 & 5:15 & 5:18 & 5:24 & 5:30 & 5:40 & 5:50 & 6:00 & 6:10 & 6:40 \\
\hline K St. \& 16th St., N.W. & 4:43 & 4:50 & 4:56 & 5:02 & 5:08 & 5:14 & 5:17 & 5:20 & 5:26 & 5:32 & 5:42 & 5:52 & 6:02 & 6:12 & 6:42 \\
\hline K St. \& 14th St., N.W. & 4:45 & 4:52 & 4:58 & 5:04 & 5:10 & 5:16 & 5:19 & 5:22 & 5:28 & 5:34 & 5:44 & 5:54 & 6:04 & 6:14 & 6:44 \\
\hline 11th St. \& H St., N.W. (Metro Center (U) & 4:49 & 4:56 & 5:02 & 5:08 & 5:14 & 5:20 & 5:23 & 5:26 & 5:32 & 5:38 & 5:48 & 5:58 & 6:08 & 6:18 & 6:48 \\
\hline Pennsylvania Ave. \& 10th St., N.W. (FBI, Justice) & 4:53 & 5:00 & 5:06 & 5:12 & 5:18 & 5:24 & 5:27 & 5:30 & 5:36 & 5:42 & 5:52 & 6:02 & 6:12 & 6:22 & 6:52 \\
\hline Pennsylvania Ave. \& 9th St., N.W. & 4:54 & 5:01 & 5:07 & 5:13 & 5:19 & 5:25 & 5:28 & 5:31 & 5:37 & 5:43 & 5:53 & 6:03 & 6:13 & 6:23 & 6:53 \\
\hline 7th St. \& Maryland Ave., S.W. (L'Enfant Plaza (M) & 4:59 & 5:06 & 5:12 & 5:18 & 5:24 & 5:30 & 5:33 & 5:36 & 5:42 & 5:48 & 5:58 & 6:08 & 6:18 & 6:28 & 6:58 \\
\hline 7th St. bet. D \& E Sts., S.W. (HUD) & 5:01 & 5:08 & 5:14 & 5:20 & 5:26 & 5:32 & 5:35 & 5:38 & 5:44 & 5:50 & 6:00 & 6:10 & 6:20 & 6:30 & 7:00 \\
\hline \multicolumn{16}{|l|}{CHARLES COUNTY} \\
\hline St. Charles Towne Mall (JC Penney) & 5:53 & 6:00 & 6:06 & 6:12 & 6:18 & 6:24 & -- & 6:30 & 6:36 & 6:42 & 6:50 & 6:58 & 7:08 & 7:16 & 7:38 \\
\hline St. Charles Towne Mall (Dick's Sporting Goods) & 5:57 & 6:04 & 6:10 & 6:16 & 6:22 & 6:28 & -- & 6:34 & 6:40 & 6:46 & 6:54 & 7:02 & 7:12 & 7:20 & 7:42 \\
\hline U.S. 301 Park \& Ride (U.S 301 \& Smallwood Dr.) & 5:59 & 6:06 & 6:12 & 6:18 & 6:24 & 6:30 & -- & 6:36 & 6:42 & 6:48 & 6:56 & 7:04 & 7:14 & 7:22 & 7:44 \\
\hline St. Charles Towne Plaza (behind Jo-Ann's) & -- & -- & -- & -- & -- & -- & -- & -- & -- & & * & & * & * & * \\
\hline Smallwood Village Center & 6:05 & -- & -- & 6:24 & -- & -- & 6:25 & -- & -- & 6:54 & -- & 7:10 & -- & -- & 7:50 \\
\hline Southern Md. Blue Crabs Stadium (Piney Church Rd.) & 6:13 & -- & -- & 6:32 & -- & -- & -- & -- & -- & 7:02 & -- & 7:18 & -- & -- & * \\
\hline South Potomac Church (U.S. 301, White Plains) & -- & 6:16 & 6:22 & -- & 6:34 & -- & 6:38 & -- & 6:52 & -- & 7:06 & -- & 7:24 & 7:32 & 8:03 \\
\hline La Plata Park \& Ride (Washington Ave.) & -- & 6:20 & 6:26 & -- & 6:38 & -- & 6:42 & -- & 6:56 & -- & 7:10 & -- & 7:28 & 7:36 & 8:07 \\
\hline
\end{tabular}
The No. 901 line operates Monday thru Friday. It does not
operate on Saturdays, Sundays, and the following observed holidays:
New Year's Day, Martin Luther King Day, President's Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day, Friday after Thanksgiving and Christmas Day.
Periodically, the MTA will operate Commuter Bus Services on reduced schedules in an effort to accommodate fewer riders when demand for these buses is significantly lower.
Trips marked with "L" denote the "Limited Service Schedule." On Limited Service Days only, those trips designated with the "L" will operate.
Trips marked with " S " denote the "Special Service Schedule."
On Special Service Days only, those trips designated with the
"S" will operate.
Connecting Transit Services
C
(V) Metro Blue and Orange Lines at 7th \& Maryland (L'Enfant
Plaza), 12th below Constitution (Federal Triangle), 11th \& \(G\) Plaza), 12th below Constitution (Federal Triangle), 11 th \& G
(Metro Center), 14 th \& 1 (McPherson Square), 18 th \& I (Farragut West), and 23rd \& । (Foggy Bottom-GWU)
(1) Metro Green and Yellow Lines at 7th \& Maryland (L'Enfant Plaza) and 7 th \& Pennsylvania (Archives)
(1) Metro Red Line at 11th \& G (Metro Center) and at Connecticut \& K (Farragut North)
Metrobus at most Downtown Washington stops.

\section*{Additional Service}
No. 907 line operates between LaPlata, Waldorf, and Downtown Washington D.C.
Nos. 903 and 905 lines operate between Waldorf
Mattawoman-Beantown Park \& Ride) and downtown
Washington, D.C. No. 903 line also serves the Suitland Washington, D.C. No. 900 line also serves the Suitland
Green Line Metro Station. A Guaranteed Ride Home program is available for personal emergencies and unscheduled overtime. Participants must
register with Commuter Connections at (800) \(745-7433\) to use this service.
 change or deviation in the morning schedule, announcements will be made on radio stations WBAL (1090 AM Baltimore), WMAL ( 630 AM Washington), and WSMD (98.3 Star FM). If the morning service does not operate, then the afternoon service will not operate.

Should the U.S. Office of Personnel Management authorize an early release of federal workers due to inclement weather or miscellaneous events, the MTA will determine if coaches are available to depart according to a modified schedule.

Commuters should understand that the MTA requires sufficient advance notice in order to mobilize coaches for early departures with individual service providers.
\(\begin{aligned} & \text { Before 1:00 p.m., buses will depart at } 1: 00,1: 05,1: 10, \\ & 1: 15,1: 20,1: 25,1: 30,1: 35,1: 40,1: 50,2: 00,2: 10,2: 20,2: 30,\end{aligned}\)
\(\begin{aligned} & 1: 15,1: 20,1: 25,1: 30,1: 35,1: 40,1: 50,2: 00,2: 0,2.20,2: 30, \\ & 2: 40,2: 50,3: 00,3: 10,3: 20,3: 30,3: 40,3: 50, ~ 4: 00, ~ 4: 10,4: 20,\end{aligned}\)
4:40, 5:00, 5:30, 6:00, and 6:30 p.m.
- Before 2:00 p.m., buses will depart at 2:00, 2:05, 2:10, 2:15,
5:20, 5:30, 6:00, and 6:30 p.m.

After 2:00 p.m., coaches will operate on their regular schedules.
Midday service will operate on its regular schedule.
 301 Park \& Ride, Smallwood Village Center, Southern Maryland Blue Crabs Stadium, South Potomac Church, and La Plata
Park \& Ride.

Commuter Bus Service Update Center online once changes in service occur.

Standee Policy riders, the MTA prohibits standes on
commuter buses except under the following circumstances:
- If the last evening bus has a full seated load; disabled porte; or
- In emergency situations, such as severe inclement weather or
civil defense events.
Please note that a patron's need to reach his or her destination by a certain time is not considered an "emergency" for these purposes. Drivers are required to enforce this policy and to deny boarding to additional passengers once the bus has achieved a
full seated load.

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{18}{|l|}{NO. 902 LINE
NORTHBOUND FROM ST. LEONARD / PRINCE FREDERICK TO WASHINGTON, D.C. (A.M.)} \\
\hline Trip No. & \[
\begin{aligned}
& \mathrm{S} \\
& 1
\end{aligned}
\] & \[
2
\] & \[
\begin{aligned}
& \mathrm{S} \\
& 3
\end{aligned}
\] & 4 & \[
\begin{gathered}
\mathrm{L} / \mathrm{S} \\
5
\end{gathered}
\] & 6 & \[
\begin{aligned}
& \mathrm{S} \\
& 7
\end{aligned}
\] & \[
8
\] & \[
\begin{aligned}
& \mathrm{S} \\
& \mathbf{9}
\end{aligned}
\] & 10 & \[
\begin{gathered}
\mathrm{L} / \mathrm{S} \\
11
\end{gathered}
\] & 12 & \[
\begin{gathered}
\mathrm{S} \\
13
\end{gathered}
\] & \[
\begin{gathered}
L \\
14
\end{gathered}
\] & \[
\begin{gathered}
\mathrm{S} \\
15
\end{gathered}
\] & 16 & \[
\begin{gathered}
\hline \text { L/S } \\
\hline 17
\end{gathered}
\] \\
\hline \multicolumn{18}{|l|}{CALVERT COUNTY} \\
\hline St. Leonard (Crossroad Church, MD 2-4 \& Ball Rd.) & 4:35 & -- & 4:53 & -- & 5:11 & & 5:29 & & 5:46 & - & 6:02 & & 6:18 & - & 6:34 & - & 6:50 \\
\hline Calvert County Fairgrounds (MD 231) & -- & 4:51 & & 5:09 & & 5:27 & & 5:45 & & 6:01 & & 6:17 & & 6:33 & & 6:49 & -- \\
\hline Prince Frederick Park \& Ride (Fairgrounds \& Armory Rds.) & 4:50 & 4:59 & 5:08 & 5:17 & 5:26 & 5:35 & 5:44 & 5:53 & 6:01 & 6:09 & 6:17 & 6:25 & 6:33 & 6:41 & 6:49 & 6:57 & 7:05 \\
\hline Sunderland Park \& Ride (MD 2 near MD 4 \& MD 262) & 5:05 & 5:14 & 5:23 & 5:32 & 5:41 & 5:50 & 5:59 & 6:08 & 6:16 & 6:24 & 6:32 & 6:40 & 6:48 & 6:56 & 7:04 & 7:12 & 7:20 \\
\hline Dunkirk Park \& Ride (Ferry Landing Rd.) & 5:15 & 5:24 & 5:33 & 5:42 & 5:51 & 6:00 & 6:09 & 6:18 & 6:26 & 6:34 & 6:42 & 6:50 & 6:58 & 7:06 & 7:14 & 7:22 & 7:30 \\
\hline \multicolumn{18}{|l|}{WASHINGTON D.C.} \\
\hline Independence Ave. \& 1 St., S.E. (Library of Congress) & 5:55 & 6:05 & 6:15 & 6:25 & 6:36 & 6:46 & 6:56 & 7:06 & 7:15 & 7:24 & 7:33 & 7:42 & 7:50 & 7:58 & 8:06 & 8:14 & 8:22 \\
\hline Independence Ave. \& 4th St., S.W. (HHS, Voice of America) & 5:57 & 6:07 & 6:17 & 6:27 & 6:38 & 6:48 & 6:58 & 7:08 & 7:17 & 7:26 & 7:35 & 7:45 & 7:53 & 8:01 & 8:09 & 8:17 & 8:25 \\
\hline Maryland Ave. \& 7th St., S.W. (L'Enfant Plaza M) & 5:59 & 6:09 & 6:19 & 6:29 & 6:40 & 6:50 & 7:00 & 7:10 & 7:19 & 7:28 & 7:37 & 7:48 & 7:56 & 8:04 & 8:12 & 8:20 & 8:28 \\
\hline Pennsylvania Ave. \& 7th St., N.W. (Archives (M)) & 6:02 & 6:12 & 6:22 & 6:32 & 6:43 & 6:53 & 7:03 & 7:13 & 7:22 & 7:31 & 7:40 & 7:51 & 7:59 & 8:07 & 8:15 & 8:23 & 8:31 \\
\hline Pennsylvania Ave. \& 10th St., N.W. (FBI, Dept. of Justice) & 6:04 & 6:14 & 6:24 & 6:34 & 6:45 & 6:55 & 7:05 & 7:15 & 7:24 & 7:33 & 7:42 & 7:54 & 8:02 & 8:10 & 8:18 & 8:26 & 8:34 \\
\hline Pennsylvania Ave. \& 12th St., N.W. (Federal Triangle) & 6:05 & 6:15 & 6:25 & 6:35 & 6:46 & 6:56 & 7:06 & 7:16 & 7:25 & 7:34 & 7:43 & 7:56 & 8:04 & 8:12 & 8:20 & 8:28 & 8:36 \\
\hline 12th \& G Sts., N.W. (Metro Center (V) & 6:07 & 6:17 & 6:27 & 6:37 & 6:48 & 6:58 & 7:08 & 7:18 & 7:27 & 7:36 & 7:45 & 8:00 & 8:08 & 8:16 & 8:24 & 8:32 & 8:40 \\
\hline K \& 13th Sts., N.W. & 6:09 & 6:19 & 6:29 & 6:39 & 6:50 & 7:00 & 7:10 & 7:20 & 7:29 & 7:38 & 7:47 & 8:03 & 8:11 & 8:19 & 8:27 & 8:35 & 8:43 \\
\hline K \& 15th Sts., N.W. & 6:10 & 6:20 & 6:30 & 6:40 & 6:51 & 7:01 & 7:11 & 7:21 & 7:30 & 7:39 & 7:48 & 8:05 & 8:13 & 8:21 & 8:29 & 8:37 & 8:45 \\
\hline K \& 17th/Connecticut Ave., N.W. (Farragut (V) & 6:11 & 6:21 & 6:31 & 6:41 & 6:52 & 7:02 & 7:12 & 7:22 & 7:31 & 7:40 & 7:49 & 8:06 & 8:14 & 8:22 & 8:30 & 8:38 & 8:46 \\
\hline K \& 19th Sts., N.W. & 6:12 & 6:22 & 6:32 & 6:42 & 6:53 & 7:03 & 7:13 & 7:23 & 7:32 & 7:41 & 7:50 & 8:08 & 8:16 & 8:24 & 8:32 & 8:40 & 8:48 \\
\hline 21 St \& M Sts., N.W. & 6:14 & 6:24 & 6:34 & 6:44 & 6:55 & 7:05 & 7:15 & 7:25 & 7:34 & 7:43 & 7:52 & 8:10 & 8:18 & 8:26 & 8:34 & 8:42 & 8:50 \\
\hline 19th St. bet. Penn. Ave. \& H St., N.W. (World Bank) & 6:16 & 6:26 & 6:36 & 6:46 & 6:57 & 7:07 & 7:17 & 7:27 & 7:36 & 7:45 & 7:54 & 8:12 & 8:20 & 8:28 & 8:36 & 8:44 & 8:52 \\
\hline 19th \& E Sts., N.W. (Office of Personnel Mgmt.) & 6:18 & 6:28 & 6:38 & 6:48 & 6:59 & 7:09 & 7:19 & 7:29 & 7:38 & 7:47 & 7:56 & 8:14 & 8:22 & 8:30 & 8:38 & 8:46 & 8:54 \\
\hline 21st St \& C Sts., N.W. (State Department) & 6:20 & 6:30 & 6:40 & 6:50 & 7:01 & 7:11 & 7:21 & 7:31 & 7:40 & 7:49 & 7:58 & 8:16 & 8:24 & 8:32 & 8:40 & 8:48 & 8:56 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{19}{|l|}{NO. 902 LINE
SOUTHBOUND FROM WASHINGTON, D.C. TO PRINCE FREDERICK / ST. LEONARD (P.M.)} \\
\hline Trip No. & \[
\begin{gathered}
\hline \text { L/S } \\
18
\end{gathered}
\] & \[
\begin{gathered}
\mathrm{S} \\
19
\end{gathered}
\] & \[
20
\] & \[
\begin{gathered}
\mathrm{L} / \mathrm{S} \\
21
\end{gathered}
\] & 22 & \[
\begin{gathered}
\mathrm{S} \\
23 \\
\hline
\end{gathered}
\] & \[
\begin{array}{r}
\mathrm{L} \\
24 \\
\hline
\end{array}
\] & \[
\begin{array}{r}
\mathrm{S} \\
25 \\
\hline
\end{array}
\] & 26 & \[
\begin{aligned}
& \text { L/S } \\
& 27 \\
& \hline
\end{aligned}
\] & 28 & \[
\begin{gathered}
\mathrm{S} \\
29 \\
\hline
\end{gathered}
\] & \[
\begin{aligned}
& \mathrm{L} \\
& 30 \\
& \hline
\end{aligned}
\] & \[
\begin{array}{r}
\mathrm{S} \\
31 \\
\hline
\end{array}
\] & \[
\begin{aligned}
& L \\
& 32 \\
& \hline
\end{aligned}
\] & \[
\begin{array}{r}
\mathrm{S} \\
33 \\
\hline
\end{array}
\] & 34 & \[
\begin{array}{r}
\text { L/S } \\
35 \\
\hline
\end{array}
\] \\
\hline \multicolumn{19}{|l|}{WASHINGTON D.C.} \\
\hline C \& 21st Sts., N.W. (State Department) & 12:05 & 2:45 & 2:55 & 3:10 & 3:25 & 3:40 & 3:50 & 4:00 & 4:09 & 4:18 & 4:27 & 4:36 & 4:44 & 4:52 & 5:00 & 5:08 & 5:20 & 5:40 \\
\hline 20th \& E Sts., N.W. (Office of Personnel Mgmt.) & 12:07 & 2:48 & 2:58 & 3:13 & 3:28 & 3:43 & 3:53 & 4:03 & 4:12 & 4:21 & 4:30 & 4:39 & 4:47 & 4:55 & 5:03 & 5:11 & 5:23 & 5:43 \\
\hline 20th St. \& Pennsylvania Ave., N.W. & 12:09 & 2:50 & 3:00 & 3:15 & 3:30 & 3:45 & 3:55 & 4:05 & 4:14 & 4:23 & 4:32 & 4:41 & 4:49 & 4:57 & 5:05 & 5:13 & 5:25 & 5:45 \\
\hline K \& 19th Sts., N.W. & 12:10 & 2:52 & 3:02 & 3:17 & 3:32 & 3:47 & 3:57 & 4:07 & 4:16 & 4:25 & 4:34 & 4:43 & 4:51 & 4:59 & 5:07 & 5:15 & 5:27 & 5:47 \\
\hline K \& 17th St./Connecticut Ave., N.W. (Farragut (M) & 12:12 & 2:55 & 3:05 & 3:20 & 3:35 & 3:50 & 4:00 & 4:10 & 4:19 & 4:28 & 4:37 & 4:46 & 4:54 & 5:02 & 5:10 & 5:18 & 5:30 & 5:50 \\
\hline K \& 15th Sts., N.W. & 12:14 & 2:57 & 3:07 & 3:22 & 3:37 & 3:52 & 4:02 & 4:12 & 4:21 & 4:30 & 4:39 & 4:48 & 4:56 & 5:04 & 5:12 & 5:20 & 5:32 & 5:52 \\
\hline K \& 13th Sts., N.W. & 12:16 & 2:59 & 3:09 & 3:24 & 3:39 & 3:54 & 4:04 & 4:14 & 4:23 & 4:32 & 4:41 & 4:50 & 4:58 & 5:06 & 5:14 & 5:22 & 5:34 & 5:54 \\
\hline 11th \& H Sts., N.W. & 12:18 & 3:01 & 3:11 & 3:26 & 3:41 & 3:56 & 4:06 & 4:16 & 4:25 & 4:34 & 4:43 & 4:52 & 5:00 & 5:08 & 5:16 & 5:24 & 5:36 & 5:56 \\
\hline 11th \& E Sts., N.W. & 12:19 & 3:03 & 3:13 & 3:28 & 3:43 & 3:58 & 4:08 & 4:18 & 4:27 & 4:36 & 4:45 & 4:54 & 5:02 & 5:10 & 5:18 & 5:26 & 5:38 & 5:58 \\
\hline Pennsylvania Ave. \& 10th St., N.W. (FBI, Dept. of Justice) & 12:22 & 3:07 & 3:17 & 3:32 & 3:47 & 4:02 & 4:12 & 4:22 & 4:31 & 4:40 & 4:49 & 4:58 & 5:06 & 5:14 & 5:22 & 5:30 & 5:42 & 6:02 \\
\hline Pennsylvania Ave. \& 9th St., N.W. & 12:23 & 3:08 & 3:18 & 3:33 & 3:48 & 4:03 & 4:13 & 4:23 & 4:32 & 4:41 & 4:50 & 4:59 & 5:07 & 5:15 & 5:23 & 5:31 & 5:43 & 6:03 \\
\hline Maryland Ave. \& 7th St., S.W. (L'Enfant Plaza(M) & 12:27 & 3:13 & 3:23 & 3:38 & 3:53 & 4:08 & 4:18 & 4:28 & 4:37 & 4:46 & 4:55 & 5:04 & 5:12 & 5:20 & 5:28 & 5:36 & 5:48 & 6:08 \\
\hline Ind. Ave. bet. 4th \& 3rd Sts., S.W. (HHS, Voice of America) & 12:29 & 3:15 & 3:25 & 3:40 & 3:55 & 4:10 & 4:20 & 4:30 & 4:39 & 4:48 & 4:57 & 5:06 & 5:14 & 5:22 & 5:30 & 5:38 & 5:50 & 6:10 \\
\hline Independence Ave. \& 1st St., S.E. (Library of Congress) & 12:32 & 3:19 & 3:29 & 3:44 & 3:59 & 4:14 & 4:24 & 4:34 & 4:43 & 4:52 & 5:01 & 5:10 & 5:18 & 5:26 & 5:34 & 5:42 & 5:54 & 6:14 \\
\hline \multicolumn{19}{|l|}{CALVERT COUNTY} \\
\hline Dunkirk Park \& Ride (Ferry Landing Rd.) & 1:09 & 3:56 & 4:06 & 4:23 & 4:39 & 4:56 & 5:08 & 5:18 & 5:27 & 5:36 & 5:45 & 5:54 & 6:02 & 6:10 & 6:18 & 6:26 & 6:38 & 6:54 \\
\hline Sunderland Park \& Ride (MD 2 near MD 4 \& MD 262) & 1:19 & 4:06 & 4:16 & 4:33 & 4:49 & 5:06 & 5:18 & 5:28 & 5:37 & 5:46 & 5:55 & 6:04 & 6:12 & 6:20 & 6:28 & 6:36 & 6:48 & 7:04 \\
\hline Prince Frederick Park \& Ride (Fairgrounds \& Armory Rds.) & 1:33 & 4:19 & 4:29 & 4:46 & 5:02 & 5:19 & 5:31 & 5:41 & 5:50 & 5:59 & 6:08 & 6:17 & 6:25 & 6:33 & 6:41 & 6:49 & 7:01 & 7:17 \\
\hline Calvert County Fairgrounds (MD 231) & 1:40 & -- & 4:36 & -- & 5:09 & -- & 5:38 & -- & 5:57 & -- & 6:15 & -- & 6:32 & -- & 6:48 & -- & -- & 7:24 \\
\hline St. Leonard (Crossroad Church, MD 2-4 \& Ball Rd.) & 1:50 & 4:31 & -- & 4:58 & -- & 5:31 & -- & 5:53 & -- & 6:11 & -- & 6:29 & -- & 6:45 & -- & 7:01 & 7:13 & 7:34 \\
\hline
\end{tabular}

Weather \& Emergency Plan
In the event that adverse weather conditions necessitate a change or deviation in the morning schedule, announcements will be made on radio stations WBAL (1090 AM

 afternoon service will not operate.

Should the U.S. Office of Personnel Management authorize an early release of federal workers due to inclement weather or miscellaneous events, the MTA will determine if coaches are available to depart according to a modified schedule.

Commuters should understand that the MTA requires sufficient advance notice in order to mobilize coaches for early departures with individual service providers.

If the early release is:
- Before 1:00 p.m., buses will depart at 12:05, 1:00, 1:10: \(1: 20,1: 30,1: 40,1: 50,2: 00,2: 10,2: 20,2: 30,2: 45,3: 00\)
\(3: 30,4: 00,4: 30,5: 00\), and \(5: 40\) p.m \(3: 30,4: 00,4: 30,5: 00\), and \(5: 40\) p.m.
- Before 2:00 p.m., buses will depart at 12:05, 2:00, 2:10, \(2: 20,2: 30,2: 40,2: 50,3: 00,3: 10,3: 20,3: 30,3: 40,3: 50\),
\(4: 00,4: 15,4: 30,5: 00\), and \(5: 40\) p.m.
- After 2:00 p.m., buses will operate on their regular schedules.

Midday service will operate on its regular schedule.
When the early release plan is in effect, all buses will stop at both the Calvert County Fairgrounds and St. Leonard stops.

\section*{Standee Policy}

For the safety of our riders, the MTA prohibits standees on
 - If the last evening bus has a full seated load;
- To accommodate passengers from another bus that has become disabled en-route; or
- In emergency situations, such as severe inclement weather or civil defense events.

Please note that a patron's need to reach his or her destination by a certain time is not considered an "emergency" for these purposes. Drivers are required to enforce this policy and to deny boarding to additional passengers once the bus
has achieved a full seated load.
 operate on Saturdays, Sundays, and the following observed holidays:

New Year's Day, Martin Luther King Day, President's Day, Memorial Day, Independence Day, Labor Day, Columbus Day,

Veteran's Day, Thanksgiving Day, Friday after Thanksgiving and Christmas Day.

Periodically, the MTA will operate Commuter Bus Services on reduced schedules in an effort to accommodate fewer riders when demand for these buses is significantly lower.

Trips marked with "L" denote the "Limited Service Schedule." On Limited Service Days only, those trips designated with the "L" will operate.

Trips marked with "S" denote the "Special Service Schedule. On Special Service Days only, those trips designated with the
"S" will operate
Additional Service
No. 904 line operates from North Beach, Owings, Pindell, and points north to Downtown Washington, D.C.

\footnotetext{
Guaranteed Ride Home Program is available for personal
 this service.
}


\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{15}{|l|}{NO. 904 LINE
NORTHBOUND FROM NORTH BEACH/PINDELL TO WASHINGTON, D.C. (A.M.)} \\
\hline & \multicolumn{3}{|l|}{L/S} & \multicolumn{3}{|l|}{L/S} & \multicolumn{2}{|l|}{L/S} & \multicolumn{2}{|l|}{L/S} & \multicolumn{2}{|l|}{L/S} & \multicolumn{2}{|l|}{L/S} \\
\hline Trip No. & 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 & 11 & 12 & 13 & 14 \\
\hline \multicolumn{15}{|l|}{CALVERT COUNTY} \\
\hline North Beach (Municipal Lot, 5th St. \& Chesapeake Ave.) & & 5:15 & - & - & 5:45 & - & 6:15 & - & - & 6:45 & - & 6:57 & - & 7:21 \\
\hline Owings (Dash-In, MD 2 \& MD 260) & - & 5:24 & - & - & 5:54 & - & 6:24 & - & - & 6:54 & - & 7:06 & - & 7:30 \\
\hline \multicolumn{15}{|l|}{ANNE ARUNDEL COUNTY} \\
\hline Pindell Park \& Ride (MD 4 \& Lower Pindell Rd.) & 5:15 & 5:30 & 5:40 & 5:50 & 6:00 & 6:15 & * & 6:30 & 6:45 & * & 7:00 & 7:12 & 7:24 & 7:36 \\
\hline Bristol Park \& Ride (MD 4 \& MD 258) & 5:20 & 5:35 & 5:45 & 5:55 & 6:05 & 6:20 & * & 6:35 & 6:50 & * & 7:05 & 7:17 & 7:29 & 7:41 \\
\hline Wayson's Corner Park \& Ride (MD 4 near MD 408) & 5:25 & 5:40 & 5:50 & 6:00 & 6:10 & 6:25 & * & 6:40 & 6:55 & * & 7:10 & 7:22 & 7:34 & 7:46 \\
\hline \multicolumn{15}{|l|}{PRINCE GEORGE S COUNTY} \\
\hline Equestrian Center (MD 4 west of U.S. 301, Upper Marlboro) & 5:33 & 5:48 & 5:58 & 6:08 & 6:18 & 6:33 & 6:40 & 6:48 & 7:03 & 7:10 & 7:18 & 7:30 & 7:42 & 7:54 \\
\hline \multicolumn{15}{|l|}{WASHINGTON, D.C.} \\
\hline Independence Ave. \& 1st St., S.E. (Library of Congress) & 6:05 & 6:22 & 6:33 & 6:43 & 6:54 & 7:11 & 7:20 & 7:29 & 7:48 & 7:56 & 8:06 & 8:18 & 8:30 & 8:42 \\
\hline Independence Ave. \& 4th St., S.W. (HHS, Voice of America) & 6:07 & 6:25 & 6:36 & 6:46 & 6:57 & 7:14 & 7:23 & 7:32 & 7:51 & 7:59 & 8:09 & 8:21 & 8:33 & 8:45 \\
\hline Maryland Ave. \& 7th St., S.W. (L'Enfant Plaza (M) & 6:09 & 6:27 & 6:38 & 6:48 & 6:59 & 7:16 & 7:25 & 7:34 & 7:54 & 8:02 & 8:12 & 8:24 & 8:36 & 8:48 \\
\hline Pennsylvania Ave. \& 7th St., N.W. (Archives (M) & 6:12 & 6:30 & 6:41 & 6:51 & 7:02 & 7:18 & 7:28 & 7:37 & 7:57 & 8:05 & 8:15 & 8:27 & 8:39 & 8:51 \\
\hline Pennsylvania Ave. \& 10th St., N.W. (FBI, Dept. of Justice) & 6:14 & 6:32 & 6:43 & 6:53 & 7:04 & 7:20 & 7:30 & 7:39 & 8:00 & 8:08 & 8:18 & 8:30 & 8:42 & 8:54 \\
\hline Pennsylvania Ave. \& 12th St., N.W. (Federal Triangle) & 6:15 & 6:33 & 6:44 & 6:54 & 7:05 & 7:22 & 7:32 & 7:41 & 8:02 & 8:10 & 8:20 & 8:32 & 8:44 & 8:56 \\
\hline 12th \& G Sts., N.W. (Metro Center (M) & 6:17 & 6:35 & 6:46 & 6:56 & 7:08 & 7:25 & 7:35 & 7:44 & 8:05 & 8:13 & 8:23 & 8:35 & 8:47 & 8:59 \\
\hline K \& 13th Sts., N.W. & 6:19 & 6:37 & 6:48 & 6:58 & 7:11 & 7:28 & 7:38 & 7:47 & 8:08 & 8:16 & 8:26 & 8:38 & 8:50 & 9:02 \\
\hline K \& 15th Sts., N.W. & 6:20 & 6:38 & 6:49 & 6:59 & 7:12 & 7:29 & 7:39 & 7:48 & 8:09 & 8:18 & 8:28 & 8:40 & 8:52 & 9:04 \\
\hline K St. \& 17th St./Connecticut Ave., N.W. (Farragut M) & 6:21 & 6:39 & 6:50 & 7:00 & 7:13 & 7:30 & 7:40 & 7:49 & 8:10 & 8:19 & 8:29 & 8:41 & 8:53 & 9:05 \\
\hline K \& 19th Sts., N.W. & 6:22 & 6:40 & 6:52 & 7:02 & 7:15 & 7:32 & 7:42 & 7:51 & 8:12 & 8:21 & 8:31 & 8:43 & 8:55 & 9:07 \\
\hline 21st \& M Sts., N.W. & 6:24 & 6:42 & 6:54 & 7:04 & 7:17 & 7:34 & 7:44 & 7:53 & 8:14 & 8:23 & 8:33 & 8:45 & 8:57 & 9:09 \\
\hline 19th St. bet. Penn. Ave. \& H St., N.W. (World Bank) & 6:26 & 6:44 & 6:56 & 7:06 & 7:19 & 7:36 & 7:46 & 7:55 & 8:16 & 8:25 & 8:35 & 8:47 & 8:59 & 9:11 \\
\hline 19th \& E Sts., N.W. (Office of Personnel Mgmt.) & 6:28 & 6:46 & 6:58 & 7:08 & 7:21 & 7:38 & 7:48 & 7:57 & 8:18 & 8:27 & 8:37 & 8:49 & 9:01 & 9:13 \\
\hline 21st \& C Sts., N.W. (State Department) & 6:30 & 6:48 & 7:00 & 7:10 & 7:23 & 7:40 & 7:50 & 7:59 & 8:20 & 8:29 & 8:39 & 8:51 & 9:03 & 9:15 \\
\hline
\end{tabular}

\footnotetext{
* On Limited/Special Service days ONLY, trips 7 \& 10 will make all stops.
}

\section*{Connecting Transit Services}
M Metro Blue and Orange Lines at 7th \& Maryland (L'Enfant Plaza),
11th \& G (Metro Center), 14th \& I (McPherson) Square), and 18th
11th \& G (Metro Center), 14th \& I (McPherson) Square), and 18th
\& I (Farragut West)
(M) Metro Green and Yellow Lines at 7th \& Maryland (L'Enfant Plaza), and 7th \& Pennsylvania (Archives)
(M) Metro Red Line at 11th \& G (Metro Center) and at Connecticut \& K (Farragut North)
Metrobus at most Downtown Washington stops.
Prince George's TheBus at Prince George's Equestrian Center.

Additional Service
No. 902 line operates from Dunkirk and points south to Downtown Washington, D.C.
Prince George's TheBus Route 21 operates between the Equestrian Center and New Carrollton Metrorail Station with connecting service to
downtown Washington, D.C. via Metro Orange Line. downtown Washington, D.C. via Metro Orange Line.
Guaranteed Ride Home Program is available for personal emergencies
and unscheduled overtime. Participants must register with Commuter Connections at (800) 745-7433 to use this service.

\footnotetext{


The No. 904 line operates Monday thru Friday. It does not operate on
Saturdays, Sundays, and the following observed holidays:
New Year's Day, Martin Luther King Day, President's Day, Memorial Day,
Independence Day, Labor Day, Columbus Day, Veteran's Day,
Thanksgiving Day, Friday after Thanksgiving and Christmas Day.
Periodically, the MTA will operate Commuter Bus Services on reduced schedules in an effort to accommodate fewer riders when demand for these buses is significantly lower.

Trips marked with " \(\llcorner\) " denote the "Limited Service Schedule." On Limited Service Days only, those trips designated with the "L" will operate.

Trips marked with "S" denote the "Special Service Schedule." On Special
Service Days only, those trips designated with the "S" will operate.
}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{16}{|l|}{NO. 904 LINE
SOUTHBOUND FROM WASHINGTON, D.C. TO PINDELL/NORTH BEACH (P.M.)} \\
\hline Trip No. & \[
\begin{gathered}
\text { L/S } \\
15
\end{gathered}
\] & \[
\begin{gathered}
\text { L/S } \\
16
\end{gathered}
\] & 17 & \[
\begin{gathered}
\text { L/S } \\
18
\end{gathered}
\] & 19 & \[
\begin{gathered}
\mathrm{L} / \mathrm{S} \\
20
\end{gathered}
\] & 21 & 22 & \[
\begin{gathered}
\mathrm{L} / \mathrm{S} \\
23
\end{gathered}
\] & 24 & 25 & \[
\begin{gathered}
\mathrm{L} / \mathrm{S} \\
26
\end{gathered}
\] & 27 & \[
\begin{gathered}
\mathrm{L} / \mathrm{S} \\
28
\end{gathered}
\] & 29 \\
\hline \multicolumn{16}{|l|}{WASHINGTON, D.C.} \\
\hline C \& 21st Sts., N.W. (State Department) & 12:15 & 3:00 & 3:15 & 3:30 & 3:45 & 4:00 & 4:10 & 4:20 & 4:30 & 4:40 & 4:50 & 5:00 & 5:10 & 5:20 & 5:40 \\
\hline 20th \& E Sts., N.W. (Office of Personnel Mgmt.) & 12:17 & 3:03 & 3:18 & 3:33 & 3:48 & 4:03 & 4:13 & 4:23 & 4:33 & 4:43 & 4:53 & 5:03 & 5:13 & 5:23 & 5:43 \\
\hline 20th St. \& Pennsylvania Ave., N.W. & 12:19 & 3:05 & 3:20 & 3:35 & 3:50 & 4:05 & 4:15 & 4:25 & 4:35 & 4:45 & 4:55 & 5:05 & 5:15 & 5:25 & 5:45 \\
\hline K \& 19th Sts., N.W. & 12:20 & 3:07 & 3:22 & 3:37 & 3:52 & 4:07 & 4:17 & 4:27 & 4:37 & 4:47 & 4:57 & 5:07 & 5:17 & 5:27 & 5:47 \\
\hline K St. \& 17th St./Connecticut Ave., N.W. (Farragut M ) & 12:22 & 3:10 & 3:25 & 3:40 & 3:55 & 4:10 & 4:20 & 4:30 & 4:40 & 4:50 & 5:00 & 5:10 & 5:20 & 5:30 & 5:50 \\
\hline K \& 15th Sts., N.W. & 12:24 & 3:12 & 3:27 & 3:42 & 3:57 & 4:12 & 4:22 & 4:32 & 4:42 & 4:52 & 5:02 & 5:12 & 5:22 & 5:32 & 5:52 \\
\hline K \& 13th Sts., N.W. & 12:26 & 3:14 & 3:29 & 3:44 & 3:59 & 4:14 & 4:24 & 4:34 & 4:44 & 4:54 & 5:04 & 5:14 & 5:24 & 5:34 & 5:54 \\
\hline 11th \& H Sts., N.W. & 12:28 & 3:16 & 3:31 & 3:46 & 4:01 & 4:16 & 4:26 & 4:36 & 4:46 & 4:56 & 5:06 & 5:16 & 5:26 & 5:36 & 5:56 \\
\hline 11th \& E Sts., N.W. & 12:29 & 3:18 & 3:33 & 3:48 & 4:03 & 4:18 & 4:28 & 4:38 & 4:48 & 4:58 & 5:08 & 5:18 & 5:28 & 5:38 & 5:58 \\
\hline Pennsylvania Ave. \& 10th St., N.W. (FBI, Dept. of Justice) & 12:32 & 3:22 & 3:37 & 3:52 & 4:07 & 4:22 & 4:32 & 4:42 & 4:52 & 5:02 & 5:12 & 5:22 & 5:32 & 5:42 & 6:02 \\
\hline Pennsylvania Ave. \& 9th St., N.W. & 12:33 & 3:23 & 3:38 & 3:53 & 4:08 & 4:23 & 4:33 & 4:43 & 4:53 & 5:03 & 5:13 & 5:23 & 5:33 & 5:43 & 6:03 \\
\hline Maryland Ave. \& 7th St., S.W. (L'Enfant Plaza M ) & 12:37 & 3:28 & 3:43 & 3:58 & 4:13 & 4:28 & 4:38 & 4:48 & 4:58 & 5:08 & 5:18 & 5:28 & 5:38 & 5:48 & 6:08 \\
\hline Ind. Ave. bet. 4th \& 3rd Sts., S.W. (HHS, Voice of America) & 12:39 & 3:30 & 3:45 & 4:00 & 4:15 & 4:30 & 4:40 & 4:50 & 5:00 & 5:10 & 5:20 & 5:30 & 5:40 & 5:50 & 6:10 \\
\hline Independence Ave. \& 1st St., S.E. (Library of Congress) & 12:42 & 3:34 & 3:49 & 4:04 & 4:19 & 4:34 & \(4: 44\) & 4:54 & 5:04 & 5:14 & 5:24 & 5:34 & 5:44 & 5:54 & 6:14 \\
\hline \multicolumn{16}{|l|}{PRINCE GEORGE'S COUNTY} \\
\hline Equestrian Center (MD 4 west of U.S. 301, Upper Marlboro) & \(1: 12\) & 4:07 & 4:22 & 4:37 & 4:52 & 5:07 & 5:17 & 5:27 & 5:37 & 5:47 & 5:57 & 6:07 & 6:17 & 6:27 & 6:47 \\
\hline \multicolumn{16}{|l|}{ANNE ARUNDEL COUNTY} \\
\hline Wayson's Corner Park \& Ride (MD 4 near MD 408) & 1:19 & 4:14 & 4:29 & 4:44 & 4:59 & 5:14 & 5:24 & 5:34 & ** & 5:54 & 6:04 & 6:14 & 6:24 & ** & 6:54 \\
\hline Bristol Park \& Ride (MD 4 \& MD 258) & 1:23 & 4:18 & 4:33 & 4:48 & 5:03 & 5:18 & 5:28 & 5:38 & ** & 5:58 & 6:08 & 6:18 & 6:28 & ** & 6:58 \\
\hline Pindell Park \& Ride (MD 4 \& Lower Pindell Rd.) & 1:26 & 4:21 & 4:36 & 4:51 & 5:06 & 5:21 & 5:31 & 5:41 & ** & 6:01 & 6:11 & 6:21 & 6:31 & ** & 7:01 \\
\hline \multicolumn{16}{|l|}{CALVERT COUNTY} \\
\hline Owings (Dash-In, MD 2 \& MD 260) & 1:32 & 4:27 & - & 4:57 & - & 5:27 & - & - & 5:51 & - & - & 6:27 & - & 6:41 & - \\
\hline North Beach (Municipal Lot, 5th St. \& Chesapeake Ave.) & 1:40 & 4:35 & - & 5:05 & - & 5:35 & - & - & 5:59 & - & - & 6:35 & - & 6:49 & - \\
\hline
\end{tabular}
* On Limited/Special Service days ONLY, trips 23 \& 28 will make all stops.


\section*{Weather \& Emergency Plan}
(1090 AM Baltimore), WMAL ( 630 AM Washington), and WSMD ( 98.3 Star FM). If the morning service does not operate, then the afternoon service will not
operate.
Should the U.S. Office of Personnel Management authorize an early release of federal workers due to inclement weather or miscellaneous events, the MTA will
determine if coaches are available to depart according to a modified schedule.
Commuters should understand that the MTA requires sufficient advance notice in order to mobilize coaches for early departures with individual service providers. If the early release is:
- Before 1:00 p.m., buses will depart at 1:00 (NB), 1:10: 1:20 (NB), 1:30, 1:40 (NB), 1:50, 2:00, 2:30 (NB), 3:00, 3:30, 4:00 (NB), 4:30, 5:00 (NB), and 5:40 p.m. - Before 2:00 p.m., buses will depart at 2:00 (NB), 2:10, 2:20 (NB), 2:30, 2:40 (NB), 2:50, 3:00, 3:10 (NB), 3:20, 3:30, 4:00 (NB), 4:30, 5:00 (NB), and 5:40 p.m. - After 2:00 p.m., buses will operate on their regular schedules. Midday service will operate on its regular schedule. (NB) trip operates to North Beach.
All trips to Pindell and North Beach will make all intermediate stops. Standee Policy
For the safety of our riders, the MTA prohibits standees on commuter buses except under the following circumstances:
- If the last evening bus has a full seated load;
- To accommodate passengers from another bus that has become disabled en-route; or
- In emergency situations, such as severe inclement weather or civil defense events.
 required to enforce this policy and to deny boarding to additional passengers once the bus has achieved a full seated load.
Downtown Washington, D.C.


\section*{DALE CITY - WASHINGTON}

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline Trip Number & \begin{tabular}{l}
1 \\
BUS STARTS \\
at \\
Lindendale \\
Commuter Lot
\end{tabular} & \begin{tabular}{l}
2 \\
Bus \\
Leaves from Dale City Commuter Lot
\end{tabular} & \begin{tabular}{l}
3 \\
Bus \\
Leaves from Cloverdale \& Dale Blvd.
\end{tabular} & \begin{tabular}{l}
4 \\
Bus Leaves from PRTC Transit Center
\end{tabular} & \begin{tabular}{l}
5 \\
Bus \\
Leaves from \\
Horner Rd./ l-95 \\
Commuter Lot
\end{tabular} & \begin{tabular}{l}
6 \\
Bus \\
Leaves from 14th St and Indep (Agri Dept)
\end{tabular} & \begin{tabular}{l}
7 \\
Bus \\
Leaves from \\
14th St and New York
\end{tabular} & \begin{tabular}{l}
8 \\
Bus Leaves from 19th St and HSt
\end{tabular} & \begin{tabular}{l}
9 \\
BUS \\
ENDS \\
at \\
Virginia and 21st St (State Dept)
\end{tabular} \\
\hline \multicolumn{10}{|c|}{WEEKDAYS} \\
\hline D-101 A.M. & 4:20 & 4:27 & 4:31 & 4:38 & 4:50 & 5:13 & 5:19 & 5:26 & 5:31 \\
\hline D-102T & - & - & - & 4:54 & 5:06 & 5:36 & 5:42 & 5:49 & 5:54 \\
\hline D-103C & - & 4:53 & 4:57 & 5:04 & 5:16 & 5:48 & 5:54 & 6:01 & 6:06 \\
\hline D-104 & 5:03 & 5:12 & 5:16 & 5:23 & 5:35 & 6:07 & 6:13 & 6:20 & 6:25 \\
\hline D-105C & - & 5:23 & 5:28 & 5:37 & 5:51 & 6:21 & 6:28 & 6:35 & 6:40 \\
\hline D-106T & - & - & - & 5:48 & 6:02 & 6:34 & 6:41 & 6:49 & 6:54 \\
\hline D-107 & 5:32 & 5:42 & 5:47 & 5:56 & 6:10 & 6:40 & 6:47 & 6:54 & 6:59 \\
\hline D-108C & - & 5:49 & 5:54 & 6:03 & 6:17 & 6:47 & 6:54 & 7:01 & 7:06 \\
\hline D-109 & 5:44 & 5:54 & 5:59 & 6:08 & 6:22 & 6:52 & 6:59 & 7:06 & 7:11 \\
\hline D-110C & - & 6:02 & 6:07 & 6:16 & 6:30 & 7:00 & 7:07 & 7:14 & 7:19 \\
\hline D-111 & 5:59 & 6:09 & 6:14 & 6:23 & 6:37 & 7:09 & 7:16 & 7:24 & 7:29 \\
\hline D-112C & - & 6:17 & 6:22 & 6:31 & 6:45 & 7:15 & 7:22 & 7:29 & 7:34 \\
\hline D-113T & - & - & - & 6:38 & 6:52 & 7:24 & 7:31 & 7:39 & 7:44 \\
\hline D-114 & 6:20 & 6:30 & 6:35 & 6:44 & 6:58 & 7:30 & 7:37 & 7:45 & 7:50 \\
\hline D-115C & - & 6:38 & 6:43 & 6:52 & 7:06 & 7:38 & 7:45 & 7:53 & 7:58 \\
\hline D-116T & - & - & - & 6:59 & 7:13 & 7:45 & 7:52 & 8:00 & 8:05 \\
\hline D-117 & 6:40 & 6:51 & 6:56 & 7:05 & 7:19 & 7:51 & 7:58 & 8:06 & 8:11 \\
\hline D-118C & - & 7:02 & 7:07 & 7:14 & 7:28 & 8:05 & 8:14 & 8:22 & 8:27 \\
\hline D-119 & 7:02 & 7:11 & 7:16 & 7:23 & 7:37 & 8:14 & 8:23 & 8:31 & 8:36 \\
\hline D-120C & - & 7:27 & 7:32 & 7:39 & 7:53 & 8:30 & 8:39 & 8:47 & 8:52 \\
\hline D-121 & 7:37 & 7:46 & 7:51 & 7:58 & 8:12 & 8:49 & 8:58 & 9:06 & 9:11 \\
\hline MX-1 & See note ab & on map & - & 11:20 & - & - & - & 12:07 & - \\
\hline
\end{tabular}

Shaded trips operate on Modified Holidays - See below. See other side for trip to Dale City.
INSTRUCTIONS
For your safety, do not run along side or after buses

The route always runs from left to right. The map and timetable are also read from left to right.

The bus stops here at listed times. Look for the matching symbol below the map.

Transfer point. Shows where you may transfer to another bus. Buses will only wait for transferring passengers at pickup locations. At drop off ocations, buses will drop and go.

The bus stops at each of the times listed below the symbol.


The bus loops here sometimes. Tip: Look for questions and answers below the map.

Indicates Commuter Lots available along the bus route.

Indicates points of interest along the route.

The timetable shows WHEN the bus stops. Times
are always approximate and depend upon traffic and weather conditions. Shaded trips operate on modified holidays.
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Exact cash fare or SmarTrip is required; the driver does not carry cash

\section*{Regular Fares}

One-way cash fare to/from Pentagon, Crystal City, Washington.......................................\$ 6.50
One-way SmarTrip fare................................................................................................................ 4.75
Local destinations within Prince William (Cash Only) ........................................................\$ 1.10
Local Bus Day Pass-Cash Only (see below) ........
Reduced Fares
(See below for eligibility) 9:30 AM to 3PM and after 7 PM
MUST BE PAID WITH CASH OR WMATA issued Senior (65+)/Disabled SmarTrip card
One-way cash fare
................................................ \(\$ 3.25\)
FREE Fares
Valid VRE Ticket or Pass (to or from bus stop nearest a VRE Station)
Children 5 \& under ( 2 per paying adult, children 8 and under cannot ride unattended)
Local Bus Day Pass may be purchased on buses. Passes are good for travel within Prince William,
Manassas and Manassas Park all day on the date issued. DAY PASSES MUST BE PURCHASED

\section*{WITH CASH.}

Reduced Fare Eligibility is applicable to adults 60 years and older, persons with a disability or persons presenting a valid Medicare card. Senior citizen verification may be required. Riders eligible for reduced fares on PRTC buses MUST PAY WITH CASH or WMATA issued Senior (65+)/Disabled SmarTrip Card.

Passengers meeting reduced fare eligibility may apply for a Reduced Fare Eligibility Card by contacting PRTC's Customer Service

TRANSFER OPTIONS Transfers good for 3 hours on the day issued. Please request when you board. Using a SmarTrip Card - The electronic farebox will calculate and automatically deduct the correct fare from your SmarTrip card.
Local bus to local bus-NO FREE transfers (except between Potomac Mills Mall and PRTC Transit Center), purchase Day Pass, pay separate fares on each bus or pay fare for entire trip on the first bus and request transfer.
Local bus to/from OmniRide Commuter Bus-For cash fare, pay and request transfer.
Local bus to/from Metro Direct - For cash fare, pay and request transfer.
OmniRide to/from OmniRide-FREE with transfer
OmniRide or Metro Direct to/from other regional bus-FREE with transfer to other bus systems. Cost varies for return trip. Some regional bus services have eliminated paper transfers. Call Customer Service to determine the cost of your trip.

HOLIDAY SERVICE
Modified Holiday Service - The buses that operate on modified holidays are noted with shaded times on the schedule. OmniRide will provide limited service on Martin Luther King, Jr. Day, Presidents' Day, Columbus Day, Veteran's Day, Thanksgiving Friday, and Christmas Eve
Holiday Schedule - No service on: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

\section*{DALE CITY - WASHINGTON}



Shaded trips operate on Modified Holidays - see instruction panel. See other side for trip from Dale City.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline Trip Number & \begin{tabular}{l}
10 \\
BUS STARTS \\
at \\
Virginia and 21st St (State Dept)
\end{tabular} & \begin{tabular}{l}
11 \\
Bus Leaves from 18th St and Penn
\end{tabular} & 12
Bus
Leaves
from
14th St
and Penn
(Commerce Dept) & \begin{tabular}{l}
Bus \\
Leaves from Pentagon (Bus Bay L1near Metro)
\end{tabular} & \begin{tabular}{l}
20 \\
Bus Leaves from 123 \& 1-95 Commuter Lot
\end{tabular} & \begin{tabular}{l}
14 \\
Bus \\
Leaves from \\
Horner Rd./ I-95 \\
Commuter Lot
\end{tabular} & \begin{tabular}{l}
15 \\
BUS \\
ENDS \\
at \\
PRTC \\
Transit \\
Center
\end{tabular} & \begin{tabular}{l}
17 \\
Bus \\
Leaves from Dale City Commuter Lot
\end{tabular} & \begin{tabular}{l}
21 \\
BUS \\
ENDS \\
at \\
Dale and Birchdale
\end{tabular} \\
\hline \multicolumn{10}{|c|}{WEEKDAYS COMBINED LAKE RIDGE / DALE CITY TRIPS (SEE NOTES ON MAP)} \\
\hline DL-1 P.M. & 6:45 & 6:51 & 7:02 & 7:13 & 7:42 & - & - & 8:12 & 8:14 \\
\hline DL-1X & - & - & - & - & 7:42 & 7:45 & 7:53 & - & - \\
\hline DL-2 & 7:10 & 7:16 & 7:27 & 7:38 & 8:07 & - & - & 8:37 & 8:39 \\
\hline DL-2X & - & - & - & - & 8:07 & 8:10 & 8:18 & - & - \\
\hline
\end{tabular}

Shaded trips operate on Modified Holidays - see instruction panel.

\section*{Welcome Aboard!}

What is OmniRide?
OmniRide offers commuters weekday rush hour service (excluding holidays) from locations throughout Prince William County and the City of Manassas to destinations that include the Vienna, West Falls Church and FranconiaSpringfield Metro Stations, the Pentagon, Crystal City, Rosslyn/Ballston, downtown Washington, DC, Capitol Hill, Washington Navy Yard, Bolling AFB and Anacostia NAS.

Customer Service
PRTC Customer Service Office is open Monday-Friday, 5:30 AM to 8:30
PM (except some holidays). To contact us:
- Call (703) 730-6664 or (888) 730-6664
- Email Omni@OmniRide.com
- Write to 14700 Potomac Mills Road, Woodbridge, VA 22192

Schedules and other service related information is available on the web at www.PRTCtransit.org. For the latest service updates by email, subscribe to our Rider Express email list at PRTCtransit.org.

Emergency Service Policy
Pick up a copy of the Emergency Service Plan brochure, which details procedures for snow and non-weather related emergencies. The plan is also available at PRTCtransit.org or call Customer Service to have a brochure mailed to you.

Lost and Found
Items found on buses will be held at the OmniRide Transit Center at 14700 Potomac Mills Road, Woodbridge, VA for 30 days. To inquire about a lost item, please call (703) 730-6664 or email to Omni@OmniRide.com.

\section*{Other PRTC Services}

Metro Direct offers three routes to connect you with nearby Metrorail stations. Prince William-Metro Direct connects eastern Prince William with the Franconia-Springfield Metro Station, with stops at OmniRide Transfer Center, Potomac Mills Mall and Route 1 in Woodbridge. Manassas Metro Direct connects Manassas with the West Falls Church Metro Station, with stops at Manassas Mall and Manassas VRE Station. And the Linton Hall Metro Direct serves stops along the Linton Hall Corridor then travels express on I-66 to the West Falls Church Metro Station.
Omnilink" local (demand responsive) buses serve six routes in Prince William and the Manassas area. With advanced notice, buses can leave the route to serve locations up to \(3 / 4\) mile off the route.
Cross Country Connector connects Eastern Prince William and the Manassas area, with transfers to local OmniLink buses and OmniRide commuter buses.
OmniMatch" is a FREE ridematching service that matches you with a carpool or vanpool that best suits your commute needs.

\section*{Connecting Service}

OmniRide connects to these other regional transit providers.
Metrorail and Metrobus system provides service throughout the Washington Metropolitan area. (202) 637-7000
Fairfax Connector buses serve northern Virginia, including shuttles to Tysons Corner from West Falls Church Metro Station. (703) 339-7200
Virginia Railway Express has six commuter rail stations in the Prince William and Manassas areas. (800) RIDE-VRE

Priority Seating and Special Needs
Front row "Priority Seating" has been designated on every Metro Direct bus. Please accommodate the special needs of mobility-impaired passengers by giving up those seats as needed.
Passengers requiring lift-equipped buses are requested to confirm travel arrangements with Customer Service at (703) 730-6664 24 hours prior to their trip. For Virginia Relay Center-TDD call 711

SmarTrip \({ }^{\circledR}\) Sales Locations
PRTC Transit Center
Adin - Rosslyn
Administrative Office ( 6 AM - 8 PM) 1700 N. Moore Street, Suite 235
14700 Potomac Mills Rd.
Woodbridge, VA
(703) 730-6664

The Commuter Stores
- Ballston

4238 Wilson Blvd., Suite 1244
Arlington, VA
(703) 528-3541
- Crystal City

1615-B Crystal Square Arcade
Arlington, VA
(703) 413-4287

Arlington, VA
(703) 525-1995

Manassas Area Giant Grocery Stores
- Westgate Plaza 8025 Sudley Rd.
- Manassas Junction 8819 Centerville Rd.
- Wellington Station 10100 Dumfries Rd.

Vending machines located at the FranconiaSpringfield, Vienna and West Falls Church Metro Stations and other locations with large parking facilities.

Online at SmarTrip.com and CommuterPage.com.

Other Commuter Services
OmniRide also participates in these regional commuter programs:
SmartBenefits \({ }^{\circledR}\) is a tax-free, employer-sponsored transit benefit. It is electronically paid monthly and can be downloaded to SmarTrip cards. (202) 962-1326.

Guaranteed Ride Home (GRH)-This program relieves commuters of the fear of being stranded in the event of a personal emergency or unscheduled overtime by providing up to four free rides home per year. (800) 745-RIDE

\section*{Passenger Conduct}

PRTC reserves the right to deny entry to, expel and/or temporarily or permanently ban any person from PRTC property and/or vehicles, who in the judgement of the PRTC management or its agent, is imperiling public safety or being a public nuisance. Actions that could imperil public safety or quality as a public nuisance include, but are not limited to, 1) verbal or physical intimidation; 2) disrespecting the rights of other PRTC patrons; 3) use of profanity; 4) lewd behavior; 5) refusal to pay a fare; and 6) defacing or otherwise damaging PRTC-owned assets.

\section*{Title VI Policy}

In compliance with Title VI of the Civil Rights Act of 1964, it is PRTC's policy to use its best efforts to assure that no person shall be excluded from participation or denied the benefits of PRTC's services, on the grounds of race, color or national origin. To file a complaint, contact PRTC's Customer Service or visit the "Passenger Rights" page at PRTCtransit.org.

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Trip Number & \begin{tabular}{l}
1 \\
BUS STARTS \\
at \\
Dale City \\
Commuter Lot
\end{tabular} & \begin{tabular}{l}
2 \\
Bus \\
Leaves \\
from \\
Old Bridge \\
and \\
Titania
\end{tabular} & \begin{tabular}{l}
3 \\
BUS STARTS \\
at Festival at Old Bridge (Dollar Tree)
\end{tabular} & \begin{tabular}{l}
4 \\
Bus Leaves from Oakwood and Old Bridge
\end{tabular} & \begin{tabular}{l}
5 \\
Bus \\
Leaves from \\
Tackett's Mill Commuter Lot
\end{tabular} & \begin{tabular}{l}
6 \\
Bus \\
Leaves from \\
Rt 123 and I-95 \\
Commuter Lot
\end{tabular} & Bus Leaves from Pentagon (Bus Bay L2) & \begin{tabular}{l}
8 \\
Bus \\
Leaves from 14th and Indep (Agric Dept)
\end{tabular} & \begin{tabular}{l}
9 \\
Bus \\
Leaves from 14th and New York
\end{tabular} & \begin{tabular}{l}
10 \\
Bus Leaves from 19th and H
\end{tabular} & \begin{tabular}{l}
11 \\
BUS \\
ENDS \\
at \\
Virginia and 21st (State Dept)
\end{tabular} \\
\hline \multicolumn{12}{|c|}{WEEKDAYS-(AM)} \\
\hline L-101 & - & - & 5:15 & 5:27 & 5:35 & 5:47 & - & 6:13 & 6:19 & 6:26 & 6:31 \\
\hline L-102C & - & - & - & - & 5:55 & 6:09 & - & 6:39 & 6:46 & 6:53 & 6:58 \\
\hline L-103 & - & - & 5:55 & 6:07 & 6:15 & 6:29 & - & 6:59 & 7:06 & 7:13 & 7:18 \\
\hline L-104C & - & - & - & - & 6:36 & 6:50 & - & 7:20 & 7:27 & 7:35 & 7:40 \\
\hline L-105 & - & - & 6:35 & 6:48 & 6:56 & 7:12 & - & 7:42 & 7:49 & 7:57 & 8:02 \\
\hline L-106C & - & - & - & - & 7:16 & 7:32 & - & 8:02 & 8:09 & 8:17 & 8:22 \\
\hline L-107 & - & - & 7:15 & 7:28 & 7:36 & 7:50 & - & 8:22 & 8:31 & 8:39 & 8:44 \\
\hline L-108C & - & - & - & - & 7:56 & 8:10 & - & 8:42 & 8:51 & 8:59 & 9:04 \\
\hline LX-1 & 7:43 & 7:51 & - & 7:56 & 8:06 & 8:20 & 8:54 & 9:06 & 9:13 & 9:21 & 9:26 \\
\hline LX-2 & 8:28 & 8:36 & - & 8:41 & 8:51 & 9:05 & 9:39 & 9:51 & 9:58 & 10:06 & 10:11 \\
\hline MX-1 & See note above & on map & - & - & - & 11:35 & - & - & - & - & 12:07 \\
\hline
\end{tabular}

\section*{Shaded trips operate on Modified Holidays - see other side. See other side for trip to Lake Ridge.}

\section*{INSTRUCTIONS}

The route always runs from left to right. The map and timetable are also read from left to right.

The bus stops here at listed times. Look for the matching symbol below the map.

Transfer point. Shows where you may transfer to another bus. Buses will only wait for transferring passengers at pickup locations. At drop off locations, buses will drop and go.

The bus stops at each of the times listed below the symbol.

For your safety, do not run along side or after buses

FARES, SMARTRIP® AND TRANSFERS
Exact cash fare or SmarTrip is required; the driver does not carry cash
Regular Fares
One-way cash fare to/from Pentagon, Crystal City, Washington ................................................\$6.50 One-way SmarTrip fare ............................................................................................................. 4.75 Local destinations within Prince William (Cash Only)................................................................\$ 1.10 Local Bus Day Pass—Cash Only (see below) ............................................................................................. 2.5
Reduced Fares
(See below for eligibility) 9:30 AM to 3PM and after 7 PM
MUST BE PAID WITH CASH OR WMATA issued Senior (65+)/Disabled SmarTrip card One-way cash fare
Local Bus Day Pass (see below)
REE Fares
Valid VRE Ticket or Pass (to or from bus stop nearest a VRE Station)
Children 5 \& under (2 per paying adult, children 8 and under cannot ride unattended)
Local Bus Day Pass may be purchased on buses. Passes are good for travel within Prince William, Manassas and Manassas Park all day on the date issued. DAY PASSES MUST BE PURCHASED WITH CASH.
Reduced Fare Eligibility is applicable to adults 60 years and older, persons with a disability or persons presenting a valid Medicare card. Senior citizen verification may be required. Riders eligible for reduced fares
on PRTC buses MUST PAY WITH CASH or WMATA issued Senior (65+)/Disabled SmarTrip Card. Passengers meeting reduced fare eligibility may apply for a Reduced Fare Eligibility Card by contacting PRTC's Customer Service.

TRANSFER OPTIONS Transfers good for 3 hours on the day issued. Please request when you board. Using a SmarTrip Card - The electronic farebox will calculate and automatically deduct the correct fare from your SmarTrip card.
Local bus to local bus - NO FREE transfers (except between Potomac Mills Mall and PRTC Transit Center), purchase Day Pass, pay separate fares on each bus or pay fare for entire trip on the first bus and request transfer.
Local bus to/from OmniRide Commuter Bus - For cash fare, pay and request transfer.
Local bus to/from Metro Direct - For cash fare, pay and request transfer.
OmniRide to/from OmniRide-FREE with transfer
OmniRide or Metro Direct to/from other regional bus-FREE with transfer to other bus systems. Cost varies for return trip. Some regional bus services have eliminated paper transfers. Call Customer Service to determine the cost of your trip.
HOLIDAY SERVICE
Modified Holiday Service - The buses that operate on modified holidays are noted with shaded times on the schedule. OmniRide will provide limited service on Martin Luther King, Jr. Day, Presidents' Day, Columbus Day, Veteran's Day, Thanksgiving Friday, and Christmas Eve.
Holiday Schedule - No service on: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

\section*{Welcome Aboard!}

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- Call (703) 730-6664 or (888) 730-6664
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Pick up a copy of the Emergency Service Plan brochure, which details procedures for snow and nonweather related emergencies. The plan is also available at PRTCtransit.org or call Customer Service to have a brochure mailed to you.

SmarTrip \({ }^{\circledR}\) Sales Location
PRTC Transit Center
Administrative Office (6 AM - 8 PM) 14700 Potomac Mills Rd.
Woodbridge, VA
(703) 730-6664

\section*{The Commuter Stores}
- Ballston

4238 Wilson Blvd., Suite 1244
Arlington, VA
(703) 528-3541
- Crystal City

1615-B Crystal Square Arcade
Arlington, VA
(703) 413-4287
- Rosslyn

1700 N. Moore Street, Suite 235
Arlington, VA
(703) 525-1995

Manassas Area Giant Grocery Stores
- Westgate Plaza, 8025 Sudley Rd.
- Manassas Junction, 8819 Centerville Rd.
- Wellington Station, 10100 Dumfries Rd.

Vending machines located at the FranconiaSpringfield, Vienna and West Falls Church Metro Stations and other locations with large parking facilities.

Online at SmarTrip.com and CommuterPage.com.

\section*{LAKE RIDGE - WASHINGTON}

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline Trip Number & \begin{tabular}{l}
11 \\
BUS STARTS at Virginia and 21st St (State Dept)
\end{tabular} & \begin{tabular}{l}
12 \\
Bus \\
Leaves from 18th St and Penn Pe
\end{tabular} & \begin{tabular}{l}
13 \\
Bus Leaves from 14th St and ennsylvania
\end{tabular} & \begin{tabular}{l}
14 \\
Bus Leaves from Pentagon (Bus Bay L2)
\end{tabular} & \begin{tabular}{l}
15 \\
Bus \\
Leaves \\
from \\
Rt 123 \\
and I-95 \\
Commuter Lot
\end{tabular} & \begin{tabular}{l}
16 \\
Bus \\
Leaves from Tackett's Mill \\
Commuter Lot
\end{tabular} & \begin{tabular}{l}
17 \\
Bus Leaves from Oakwood and Old Bridge
\end{tabular} &  & \begin{tabular}{l}
19 \\
BUS \\
ENDS at \\
Old Bridge and Touchstone
\end{tabular} \\
\hline \multicolumn{10}{|c|}{WEEKDAYS-(PM)} \\
\hline MX-3 & 12:07 & 12:13 & 12:19 & 12:34 & 1:00 & 1:13 & 1:19 & 1:26 & - \\
\hline D-101 & 1:50 & 1:56 & 2:05 & \multicolumn{5}{|l|}{2:17 Lake Ridge passengers must transfer to L-201 at Pentagon-See notes on map} & - \\
\hline L-201 & \multicolumn{2}{|l|}{Originates in Crystal City-See notes on map} & p & 2:17 & \multicolumn{2}{|l|}{2:41 \(2: 56\)} & 3:05 & 3:13 & - \\
\hline L-101 & 3:20 & 3:26 & 3:35 & - & 4:12 & 4:26 & 4:35 & 4:43 & - \\
\hline L-102 & 3:40 & 3:46 & 3:55 & 4:06 & 4:32 & 4:46 & 4:55 & 5:03 & - \\
\hline L-103 & 4:00 & 4:06 & 4:18 & - & 4:57 & 5:11 & 5:21 & 5:29 & - \\
\hline L-104 & 4:15 & 4:21 & 4:33 & - & 5:12 & 5:26 & 5:36 & 5:44 & - \\
\hline L-105 & 4:30 & 4:36 & 4:48 & - & 5:27 & 5:41 & 5:51 & 5:59 & - \\
\hline L-106 & 4:40 & 4:46 & 4:58 & - & 5:37 & 5:51 & 6:01 & 6:09 & - \\
\hline L-107 & 4:50 & 4:56 & 5:08 & - & 5:47 & 6:01 & 6:11 & 6:19 & - \\
\hline L-108 & 5:00 & 5:06 & 5:21 & - & 6:02 & 6:16 & 6:26 & 6:35 & - \\
\hline L-109 & 5:10 & 5:16 & 5:31 & - & 6:12 & 6:26 & 6:36 & 6:45 & - \\
\hline L-110 & 5:20 & 5:26 & 5:41 & - & 6:22 & 6:36 & 6:46 & 6:55 & - \\
\hline L-111 & 5:30 & 5:36 & 5:51 & - & 6:32 & 6:46 & 6:56 & 7:05 & - \\
\hline L-112 & 5:40 & 5:46 & 6:01 & 6:16 & 6:48 & 7:00 & 7:10 & 7:19 & - \\
\hline L-113 & 5:55 & 6:01 & 6:16 & 6:28 & 7:03 & 7:15 & 7:25 & 7:34 & - \\
\hline L-208 & Originates in C & City-See notes on map & p & 6:50 & 7:18 & 7:29 & 7:39 & 7:47 & - \\
\hline D-120 & 6:15 & 6:21 & 6:36 & 6:50 & Passengers bound for Lake & Ridge must transter to & 2t at Pentagon; & 20 continues to Dale City & - \\
\hline DL-1 & 6:45 & 6:51 & 7:02 & 7:13 & 7:42 & 7:54 & - & - & 8:02 \\
\hline DL-2 & 7:10 & 7:16 & 7:27 & 7:38 & 8:07 & 8:19 & - & - & 8:27 \\
\hline NX-1 & 7:34 & 7:39 & 7:50 & 8:00 & Passengers bound for Lake & Ridge must transier to & 2 at Pentagon; N & 1 continues to Dale City & - \\
\hline NX-2 & Originates in C & City-See notes on map & p - & 8:00 & 8:29 & 8:40 & 8:50 & 8:58 & - \\
\hline
\end{tabular}

\section*{Shaded trips operate on Modified Holidays - see other side. See other side for trip from Lake Ridge. For late evening service, see note on}

Lost and Found
Items found on buses will be held at the OmniRide Transit Center at 14700 Potomac Mills Road, Woodbridge, VA for 30 days. To inquire about a lost item, please call (703) 730-6664 or email to Omni@OmniRide.com.

Other PRTC Services
Metro Direct offers three routes to connect you with nearby Metrorail stations. Prince William-Metro Direct connects eastern Prince William with the Franconia-Springfield Metro Station, with stops at OmniRide Transfer Center, Potomac Mills Mall and Route 1 in Woodbridge. Manassas Metro Direct connects Manassas with the West Falls Church Metro Station, with stops at Manassas Mall and
Manassas VRE Station And the Linton Hall Metro Direct serves stops along the Linton Hall Corridor then travels express on I-66 to the West Falls Church Metro Station.
Omnilink" local (demand responsive) buses serve six routes in Prince William and the Manassas area. With advanced notice, buses can leave the route to serve locations up to \(3 / 4\) mile off the route.
Cross County Connector connects Eastern Prince William and the Manassas area, with transfers to local OmniLink buses and OmniRide commuter buses.
OmniMatch" is a FREE ridematching service that matches you with a carpool or vanpool that best suits your commute needs.

Connecting Service
OmniRide connects to these other regional transit providers.
Metrorail and Metrobus system provides service throughout the Washington Metropolitan area.

\section*{202) 637-7000}

Fairfax Connector buses serve northern Virginia, including shuttles to Tysons Corner from West Falls Church Metro Station. (703) 339-7200
Virginia Railway Express has six commuter rail stations in the Prince William and Manassas areas. (800) RIDE-VRE
map.
Other Commuter Service
OmniRide also participates in these regional commuter programs:
SmartBenefits \({ }^{\circledR}\) is a tax-free, employer-sponsored transit benefit. It is electronically paid monthly and can be downloaded to SmarTrip cards. (202) 962-1326.
Guaranteed Ride Home (GRH) - This program relieves commuters of the fear of being stranded in the event of a personal emergency or unscheduled overtime by providing up to four free rides home per year. (800) 745-RIDE

Priority Seating and Special Needs
Front row "Priority Seating" has been designated on every Metro Direct bus. Please accommodate the special needs of mobility-impaired passengers by giving up those seats as needed.
Passengers requiring lift-equipped buses are requested to confirm travel arrangements with Customer
Service at (703) 730-6664 24 hours prior to their trip. For Virginia Relay Center-TDD call 711
Passenger Conduct
PRTC reserves the right to deny entry to, expel and/or temporarily or permanently ban any person from PRTC property and/or vehicles, who in the judgement of the PRTC management or its agent, is imperiling public safety or being a public nuisance. Actions that could imperil public safety or quality as a public nuisance include, but are not limited to, 1) verbal or physical intimidation; 2) disrespecting the rights of other PRTC patrons; 3) use of profanity; 4) lewd behavior; 5) refusal to pay a fare; and 6) defacing or otherwise damaging PRTC-owned assets.

Title VI Policy
In compliance with Title VI of the Civil Rights Act of 1964, it is PRTC's policy to use its best efforts to assure that no person shall be excluded from participation or denied the benefits of PRTC's services, on the grounds of race, color or national origin. To filea complaint, contact PRTC's Customer Service or visit the "Passenger Rights" page at PRTCtransit.org


\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{13}{|c|}{WEEKDAYS} \\
\hline M-1 A.M. 4:45 & 4:48 & 4:57 & Rt. 110 & 5:34 & 5:41 & 5:46 & 5:52 & 5:57 & - & - & - & - \\
\hline M-2 5:00 & 5:03 & 5:12 & Rt 110 & 5:49 & 5:56 & 6:01 & 6:07 & 6:12 & - & - & - & - \\
\hline M-3 5:15 & 5:19 & 5:28 & Rt 110 & 6:08 & 6:16 & 6:22 & 6:28 & 6:33 & - & - & - & - \\
\hline M-4 5:30 & 5:34 & 5:43 & Rt 110 & 6:23 & 6:31 & 6:38 & 6:46 & 6:51 & - & - & - & - \\
\hline M-5 5:45 & 5:49 & 5:59 & Rt 110 & 6:44 & 6:53 & 7:00 & 7:06 & 7:11 & - & - & - & - \\
\hline M-6 6:00 & 6:04 & 6:14 & Rt 110 & 6:59 & 7:08 & 7:15 & 7:21 & 7:26 & - & - & - & - \\
\hline M-7R 6:15 & 6:21 & 6:30 & Roosevelt & - & - & - & - & - & 7:36 & 7:40 & 7:49 & 7:58 \\
\hline M-8 6:30 & 6:34 & 6:43 & Rt 110 & 7:43 & 7:57 & 8:05 & 8:12 & 8:17 & - & - & - & - \\
\hline M-9 6:45 & 6:49 & 6:58 & Rt 110 & 7:58 & 8:12 & 8:20 & 8:27 & 8:32 & - & - & - & - \\
\hline M-10 7:00 & 7:04 & 7:13 & Rt 110 & 8:18 & 8:32 & 8:41 & 8:50 & 8:55 & - & - & - & - \\
\hline M-11R 7:15 & 7:21 & 7:30 & Roosevelt & - & - & - & - & - & 8:36 & 8:40 & 8:49 & 8:58 \\
\hline
\end{tabular}

\section*{Shaded trips operate on Modified Holidays - see below.}

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Passengers meeting reduced fare eligibility may apply for a Reduced Fare Eligibility Card by contacting PRTC's Customer Service.

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\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \begin{tabular}{l}
Trip \\
Number
\end{tabular} & \begin{tabular}{l}
8 \\
BUS STARTS at Virginia and 21st St (State Dept)
\end{tabular} & \begin{tabular}{l}
9 \\
Bus Leaves from 18th St and Penn
\end{tabular} & \begin{tabular}{l}
10 \\
Bus \\
Leaves from 14th St and Penn mmerce Dept)
\end{tabular} & \begin{tabular}{l}
11 \\
Bus Leaves from Pentagon (Bus Bay L-2)
\end{tabular} & \begin{tabular}{l}
Bus \\
Leaves from \\
Williamson and Stonehouse
\end{tabular} & \begin{tabular}{l}
13 \\
Bus Leaves from Manassas Mall (Sears)
\end{tabular} & \begin{tabular}{l}
14 \\
BUS \\
ENDS \\
at \\
Portsmouth Commuter Lot
\end{tabular} \\
\hline \multicolumn{8}{|c|}{WEEKDAYS} \\
\hline MX-3 P.M. & 12:07 & 12:13 & 12:19 & 12:34 For & For continuing service to Ma & nsfer to MX- & ntagon-See note on map \\
\hline MX-6 & - & \multicolumn{2}{|l|}{Originates at the Navy Yard} & 12:34 & 1:13 & 1:19 & 1:23 \\
\hline D-101 & 1:50 & 1:56 & 2:05 & \multicolumn{4}{|l|}{2:17 For continuing service to Manassas, transfer to MB-1 at the Pentagon-See note on map} \\
\hline MB-1 & - & Originates at the Navy Yard & - & 2:17 & 3:00 & 3:10 & 3:16 \\
\hline M-1 & 3:05 & 3:11 & 3:20 & 3:31 & 4:16 & 4:26 & 4:32 \\
\hline M-2 & 3:30 & 3:36 & 3:45 & 3:56 & 4:41 & 4:51 & 4:57 \\
\hline M-3P & - & - & - & 4:10 & 5:01 & 5:11 & 5:17 \\
\hline M-4 & 3:55 & 4:01 & 4:13 & 4:24 & 5:13 & 5:23 & 5:29 \\
\hline M-5 & 4:20 & 4:26 & 4:38 & 4:49 & 5:38 & 5:48 & 5:54 \\
\hline M-6P & - & - & - & 5:00 & 5:51 & 6:01 & 6:07 \\
\hline M-7 & 4:45 & 4:51 & 5:03 & 5:14 & 6:10 & 6:20 & 6:26 \\
\hline M-8P & - & - & - & 5:30 & 6:21 & 6:31 & 6:37 \\
\hline M-9 & 5:10 & 5:16 & 5:31 & 5:43 & 6:34 & 6:44 & 6:50 \\
\hline M-10 & 5:35 & 5:41 & 5:56 & 6:08 & 6:59 & 7:09 & 7:15 \\
\hline M-11 & 6:00 & 6:06 & 6:21 & 6:33 & 7:24 & 7:34 & 7:40 \\
\hline NX-1 & 7:34 & 7:39 & 7:50 & 8:00 & For service to Manassa & er to NX-4 at the & on-See note on map \\
\hline NX-4 & - & - & - & 8:00 & 8:45 & 8:52 & 8:56 \\
\hline
\end{tabular}

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\section*{ROUTE 1 / SOUTH ROUTE 1}
- From fioute I and South fioute it To



Shaded trips operate on Modified Holidays - See other side for trip to Fox Lair Apartments and Southbridge.


Shaded trips operate on Modified Holidays - See other side for trip to Triangle, Dumfries.
The route always runs from left to right. The
map and timetable are also read from left to
The bus stops here at listed times. Look for
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\begin{tabular}{l} 
Transfer point. Shows where you may transfer \\
to another bus. Buses will only wait for \\
transferring passengers at pickup locations. At \\
drop off locations, buses will drop and go. \\
The bus stops at each of the times listed below \\
the symbol.
\end{tabular}

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(See below for eligibility) 9:30 AM to 3PM and after 7 PM
MUST BE PAID WITH CASH OR WMATA issued Senior (65+)/Disabled SmarTrip card
One-way cash fare ...
....................
Local Bus Day Pass (see below)......................................................................................................................................................................... E Fares
Valid VRE Ticket or Pass (to or from bus stop nearest a VRE Station)
Children 5 \& under ( 2 per paying adult, children 8 and under cannot ride unattended)
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\section*{SmarTrip \({ }^{\text {® }}\) Sales Locations}

PRTC Transit Center
Administrative Office ( 6 AM - 8 PM)
14700 Potomac Mills Rd.
Woodbridge, VA
(703) \(730-6664\)
(703) 730-6664

The Commuter Stores
- Ballston

4238 Wilson Blvd., Suite 1244
Arlington, VA
(703) 528-3541
- Crystal City

1615-B Crystal Square Arcade
Arlington, VA
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\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & 14 & 15 & 16 & 18 & 19 & 20 & (21) & 22 \\
\hline & BUS & Bus & Bus & Bus & Bus & Bus & Bus & BUS \\
\hline & \[
\underset{\text { at }}{\text { STARTS }}
\] & Leaves from & Leaves from & Leaves from & Leaves from & Leaves from & Leaves from & \[
\underset{\text { at }}{\text { ENDS }}
\] \\
\hline Trip & D Stand & 7th St and & 14th St and & Pentagon & 1-95 and & Rt 234 and & Wayside and & Route 1 and \\
\hline Number & 7th St, SW & Pennsylvania & FSt. & (Bus Bay L2) & Rt. 123 Lot & Rt 1 Lot & Route 1 & River Ridge \\
\hline & & & SOUTH R & OUTE 1 W & KDAYS- & & & \\
\hline P.M. MX-5 & 12:06 & 12:14 & 12:22 & 12:34 & - & 1:04 & MX-5 continues to M & Itclair-See notes on map \\
\hline MX-5X & - & - & - & - & - & 1:04 & 1:10 & 1:20 \\
\hline MC-1 & 1:49 & 1:57 & 2:05 & 2:17 & - & 2:47 & MC-1 continues to M & tclair-See notes on map \\
\hline RS-X & - & - & - & - & - & 2:47 & 2:53 & 3:03 \\
\hline RS-1 & 3:10 & 3:20 & 3:29 & 3:41 & - & 4:17 & 4:23 & 4:33 \\
\hline RS-2 & 3:50 & 3:59 & 4:09 & 4:21 & - & 4:57 & 5:03 & 5:13 \\
\hline RS-3 & 4:35 & 4:44 & 4:53 & 5:05 & - & 5:45 & 5:51 & 5:59 \\
\hline MC-8P & - & - & - & 5:26 & - & 6:13 M & MC-8P continues to N & ntclair-See notes on map \\
\hline RS-4 & 5:12 & 5:22 & 5:32 & 5:45 & - & 6:25 & 6:31 & 6:39 \\
\hline RS-5 & 6:18 & 6:28 & 6:38 & 6:50 & - & 7:30 & 7:36 & 7:44 \\
\hline NX-3 & 7:27 & 7:35 & 7:44 & 8:00 & - & 8:35 NX & \(N X-3\) continues to M & tclair-See notes on map \\
\hline DL-2X & Meets DL & from Washingto & ee notes on map & - & 8:07 & 8:35 & 8:41 & 8:46 \\
\hline Shaded trips & rate on M & fied Holiday & See other side & for trip from & Lair Apts & outhbridge & ge. See note on & late evening service. \\
\hline
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\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline & 12 & 13 & (17) & 18 & 23 & 24 & 25 & 26 & 27 \\
\hline & BUS & Bus & Bus & Bus & Bus & Bus & Bus & Bus & BUS \\
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\hline & Virginia and & 18th St and & 14th St and & Pentagon & Wendy's in & River Ridge and & Blackburn and & Route 1 and & \(1-95\) \& 123 \\
\hline Number & 21st St & Pennsylvania & Pennsylvania & (Bus Bay L2) & Triangle & Route 1 & Maryland & Mt. Pleasant & Commuter Lot \\
\hline \multicolumn{10}{|c|}{ROUTE 1 WEEKDAYS-(PM)} \\
\hline P.M. RT-1 & 5:08 & 5:14 & 5:29 & 5:41 & 6:24 & 6:29 & 6:43 & 6:49 & 6:57 \\
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\end{tabular}

\section*{Shaded trips operate on Modified Holidays - See other side for trip from Triangle, Dumfries.}

Other PRTC Services
Metro Direct offers three routes to connect you with nearby Metrorail stations. Prince WilliamMetro Direct connects eastern Prince William with the Franconia-Springfield Metro Station, with stops at OmniRide Transfer Center, Potomac Mills Mall and Route 1 in Woodbridge. Manassas Metro Direct connects Manassas with the West Falls Church Metro Station, with stops at Manassas Mall Dird Manassas VRE Station. And the Linton Hall Metro Direct serves stops along the Linton Hall Corridor then travels express on I-66 to the West Falls Church Metro Station.

Omnilink" local (demand responsive) buses serve six routes in Prince William and the Manassas area. With advanced notice, buses can leave the route to serve locations up to \(3 / 4\) mile off the route.

Cross County Connector connects Eastern Prince William and the Manassas area, with transfers to local OmniLink buses and OmniRide commuter buses.

OmniMatch" is a FREE ridematching service that matches you with a carpool or vanpool that best suits your commute needs.

Connecting Service
OmniRide connects to these other regional transit providers.
Metrorail and Metrobus system provides service throughout the Washington Metropolitan area. (202) 637-7000

Fairfax Connector buses serve northern Virginia, including shuttles to Tysons Comer from West Falls Church Metro Station. (703) 339-7200
Virginia Railway Express has six commuter rail stations in the Prince William and Manassas areas. (800) RIDE-VRE

Other Commuter Services
OmniRide also participates in these regional commuter programs:
SmartBenefits \({ }^{\circledR}\) is a tax-free, employer-sponsored transit benefit. It is electronically paid monthly and can be downloaded to SmarTrip cards. (202) 962-1326.
Guaranteed Ride Home (GRH)-This program relieves commuters of the fear of being stranded in the event of a personal emergency or unscheduled overtime by providing up to four free rides home per year. (800) 745 -RIDE

Lost and Found
Items found on buses will be held at the OmniRide Transit Center at 14700 Potomac Mills Road, Woodbridge, VA for 30 days. To inquire about a lost item, please call (703) 730-6664 or email to Omni@OmniRide.com.

Passenger Conduct
PRTC reserves the right to deny entry to, expel and/or temporarily or permanently ban any person from PRTC property and/or vehicles, who in the judgement of the PRTC management or its agent, is imperiling public safety or being a public nuisance. Actions that could imperil public safety or quality as a public nuisance include, but are not limited to, 1) verbal or physical intimidation; 2) disrespecting the rights of other PRTC patrons; 3) use of profanity; 4) lewd behavior;5) refusal to pay a fare; and 6) defacing or otherwise damaging PRTC-owned assets.

Title VI Policy
In compliance with Title VI of the Civil Rights Act of 1964, it is PRTC's policy to use its best efforts to assure that no person shal be excluded from participation or denied the benefits of PRTC's services, on the grounds of race, color or national origin. To file a complaint, contact PRTC's Customer Service or visit the "Passenger Rights" page at PRTCtransit.org
\begin{tabular}{|c|}
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Schedule Effective - August 31, 2009 \\
Bus Service from Purcellville to \\
Rosslyn, Crystal City, The Pentagon, Washington DC \& West Falls Church Metro
\end{tabular} \\
\hline \begin{tabular}{l}
Fare Structure \\
SmarTrip Card - \$7.00 one-way Cash -\$8.00 one-way (exact amount) \\
With the exception of West Falls Church Connection (M1, M2, and M3) SmarTrip Card - \$1.75 one-way Cash - \(\$ 2.25\) one-way (exact amount) \\
IntraCounty: Cash only - \(\$ 1.00\) (exact amount) \\
For SmarTrip card issues call 1-888-762-7874. SmarTrip cards can be loaded at any Metro Station.
\end{tabular} \\
\hline Passenger Information Regarding Service \\
\hline Service is weekday only. Schedule varies for certain holidays. \\
\hline Once doors close and bus begins departing each stop, the bus will not open the doors for late arriving passengers. \\
\hline Posted times on this schedule indicate arrivals and departures and are subject to traffic conditions and can vary by 5 to 10 minutes. \\
\hline For safety reasons drivers are not permitted to pick up or drop off passengers other than at designated stops. \\
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Service Alert Systems
Kıunoכ unopno \(\begin{gathered}\text { əul } \\ \text { əsn nok tl }\end{gathered}\) Commuter Bus Service you need to sign up for both of the following:

BUS BIZ - To sign up to receive email messages called Bus Biz from the
 service disruptions, send us

\(\frac{\text { Rideshare@loudoun.gov }}{\text { LC ALERT - To sign up to }}\) receive text messages regarding immediate service disruptions go to the website and look for LC Alert.

Guaranteed Ride Home Information: 1-800-745-RIDE www.commuterconnections.org
 and depend

If no time is listed, the run will not serve that point.
Park \& Ride symbol indicates locations in Loudoun County where commuters can park or pick up the buses.

Metro symbols indicate stops with access to Metro Rail Stations.

\section*{Contact Information}

\section*{8:30AM - 5:00PM}

1-877-GO-LCBUS
Before 8:30AM and after 5:00PM (Emergencies) Veolia Dispatch 443-506-9499

Loudoun County Office of Transportation Services 1 Harrison Street, SE 4th Floor, Mail Stop 69 Leesburg, VA 20175 Website: www.loudoun.gov/bus

Email Address:
rideshare@loudoun.gov
* These buses bypass the Dulles North Transit Center.
** This bus goes directly into Rosslyn \& DC - it does not stop at Leesburg or at the Dulles North Transit Center.

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Afternoon departures from Washington DC，The Pentagon，Rosslyn and Crystal



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The RED ARROWS indicate the
direction for exiting the park \& ride lot.

\section*{Patrick Henry College Park \& Ride Lot Information 1 Patrick Henry Circle
Purcellville VA 20132} Please follow the exterior road parking lot and park only in the spaces that are painted yellow.

The BLUE ARROWS indicate the direction for entering the park
Fare Structure

\begin{tabular}{l} 
With the exception of West Falls Church Connection（M1，M2，and M3）SmarTrip Card－\＄1．75 one－way \\
Cash－\(\$ 2.25\) one－way（exact amount） \\
IntraCounty：Cash only－\＄1．00（exact amount） \\
For SmarTrip card issues call 1－888－762－7874．SmarTrip cards can be loaded at any Metro Station． \\
\hline \multicolumn{1}{|c|}{ Passenger Information Regarding Service } \\
\hline Service is weekday only．Schedule varies for certain holidays． \\
\hline Once doors close and bus begins departing each stop，the bus will not open the doors for late arriving passengers． \\
\hline \begin{tabular}{l} 
Posted times on this schedule indicate arrivals and departures and are subject to traffic conditions and can vary by 5 to \\
minutes．
\end{tabular} \\
\hline For safety reasons drivers are not permitted to pick up or drop off passengers other than at designated stops． \\
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Service Alert Systems Kıunoう unopnō əцł əsn noK t Commuter Bus Service you need to sign up for both of the following：

BUS BIZ－To sign up to receive email messages called Bus Biz from the əınınя бu！pıебəィ Kıunoつ
service disruptions，send us an email at

Rideshare＠loudoun．gov
LC ALERT－To sign up to receive text messages
 disruptions go to the website and look for LC Alert．

Guaranteed Ride Home
Information：
1－800－745－RIDE
www．commuterconnections．org



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8：30AM－5：00PM Local－703－771－5665

1－877－GO－LCBUS
Before 8：30AM and after 5：00PM（Emergencies）

Veolia Dispatch
443－506－9499
Loudoun County Office of
Transportation Services
1 Harrison Street，SE 4th Floor，Mail Stop 69 Leesburg，VA 20175

Website：
www．loudoun．gov／bus
Email Address： rideshare＠loudoun．gov
Morning departures from Leesburg to Crystal City, Rosslyn, The Pentagon, Washington DC \& West Falls Church Metro Station

* These buses bypass the Dulles North Transit Center.


Via Route 7 Bypass

\section*{From the East}
 turn right at the end of the ramp onto King Street Proceed straight through the traffic light at the intersection of Davis Ave and King Street．Turn right at the traffic light at Catoctin Circle．Turn left at the traffic light on Harrison Street．Turn right into the park and ride lot．

\section*{7SЭМ ӨЧ7 ひO』』}
 turn left onto Clubhouse Drive．Turn left onto King
 traffic light at the intersection of Davis Ave and King
 Turn left at the traffic light on Harrison Street．Turn right into the park and ride lot．

\section*{Via Route 15}

\section*{From the North}
 J ames Monroe Highway which becomes King Street．
 and King Street．Turn left at the traffic light at Loudoun Street．At the bottom of the hill，turn right on to

Harrison Street．Pass by Raflo Park and turn left at the park and ride lot sign．

\section*{From the South}

 through the traffic light at King Street and Clubhouse Drive．Proceed straight through the traffic light at King Street and Davis Ave．Turn right at the traffic light at Catoctin Circle．Turn left at the traffic light on Harrison Street．Turn right into the park and ride lot．

\section*{Via the Dulles Greenway}

Travel north on Dulles Greenway（267）towards Leesburg．Take exit 1AVUS－15 South／VA 7 West onto US－15 bypass south towards Leesburg／Warrenton．Take the King Street North exit（US－15 business）and turn right at the end of the ramp onto King Street．Proceed straight through the traffic light at the intersection of
 at Catoctin Circle．Turn left at the traffic light on

Harrison Street．Turn right into the park and ride lot．

\section*{Directions to the Leesburg Park \＆Ride Lot} 110 Catoctin Circle SE，Leesburg VA

The Leesburg Park and Ride lot is located at 110 Catoctin Circle，SE，Leesburg VA 20175．It is located at the old Barber and Ross site at the intersection of Catoctin Circle，SE and Harrison Street behind the Middleburg Bank．The park and ride lot has 365 parking spaces．


\section*{Fare Structure}
 Cash -\$8.00 one-way (exact amount)

\section*{With the exception of West Falls Church Connection (M1, M2, M3) SmarTrip Card - \$1.75 one-way} Cash - \(\$ 2.25\) one-way (exact amount)

IntraCounty: Cash only - \(\$ 1.00\) (exact amount)
For SmarTrip card issues call 1-888-762-7874. SmarTrip cards can be loaded at any Metro Station. Passenger Information Regarding Service

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Service Alert Systems
If you use the Loudoun County Commuter Bus Service you need to sign up for both of the
following: following:

BUS BIZ - To sign up to receive email messages called Bus Biz from the County regarding future
service disruptions, send us an email at
Rideshare@l

Rideshare@loudoun.gov
LC ALERT - To sign up to
receive text messages
regarding immediate service disruptions go to the website and look for LC Alert.

Guaranteed Ride Home Information:

1-800-745-RIDE
www.commuterconnections.org
*Run originates at the Dulles North Transit Center
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The Dulles North Transit Center is located at The Dulles North Transit Center is located at the intersection of Route 606 and Route
634 , next to the Dulles Greenway. The Center opened in the summer of 2001 with 750 parking spaces

\section*{Via the Dulles Greenway}
Take the Dulles Toll Road (267) west toward Leesburg. Continue west onto the
Greenway. From the Greenway Toll Plaza, go west for 1.1 miles and take Exit 8B/Old Ox Road/Route 606. At the signal, go be on the left at the top of the hill.
 Dulles Airport/ Washington. Take Exi 8B light onto Moran Road/Route 634. The park-and-ride lot will be on the left at the top of the hill.

\section*{Via Waxpool Road}
Take Waxpool Road (Route 625) east toward Route 28. Take a right on Broderick Road. Broderick Road will dead end into Moran Road (634). Make a right onto Moran Road. Parking lot is straight ahead

\section*{}

SCHEDULE EFFECTI VE - August 31, 2009
Bus Service from Dulles South/Stone Ridge to Rosslyn, Crystal City, The Pentagon and Washington DC
Fare Structure
SmarTrip Card - \(\$ 7.00\) one-way
Cash \(-\$ 8.00\) one-way (exact amount)
IntraCounty: Cash only - \(\$ 1.00\) (exact amount)
Service Alert Systems
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 need to sign up for both of the following:
BUS BIZ - To sign up to receive email messages called Bus Biz from the County regarding future service disruptions, send us

Rideshare@loudoun.gov
LC ALERT - To sign up to receivetextmessages . regarding immediate service disruptions go to the website and look for LC Alert.
Guaranteed Ride Home Information: 1-800-745-RIDE www.commuterconnections.org

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8:30AM - 5:00PM Local - 703-771-5665

1-877-GO-LCBUS
Before 8:30AM and after 5:00PM (Emergencies) Veolia Dispatch
443-506-9499 443-506-9499

Loudoun County Office of Transportation Services 1 Harrison Street, SE 4th Floor, Mail Stop 69 Leesburg, VA 20175

Website:
www.loudoun.gov/bus
Email Address:
rideshare@loudoun.gov


The Dulles South Park \& Ride lot is located in the Stone Ridge Village Center, Aldie VA 20105 (near the Harris Teeter) at the intersection of Village Center Plaza and Millstream Drive. There are 250 parking spaces located behind the Urgent Care and Glory Days.
VI A ROUTE 50 From the East Millstream Drive and go 0.1 miles. Turn right onto Village Center Plaza. Turn left at the first entrance into the parking lot From the West

Take Route 50 west (J ohn S. Mosby Highway) towards Stone Ridge. Turn left onto Stone Springs Blvd and go 0.2 miles. Turn right onto Take Route 50 west (J ohn S. Mosby Highway) towards Stone Ridge. Turn left onto Stone Springs Blva and go 0.2 miles. Turn right onto Turn right onto Millstream Drive and go 0.1 miles. Turn right onto Village Center Plaza. Turn left at the first entrance into the parking lot.

Service Alert Systems
If you use the Loudoun County Commuter Bus Service you
need to sign up for both of the following:
BUS BIZ - To sign up to receive email messages called Bus Biz from the County regarding future service disruptions, send us an email at Rideshare@loudoun.gov
LC ALERT - To sign up to receive text messages
 disruptions go to the website and look for LC Alert.
Guaranteed Ride Home
Information:
1-800-745-RIDE
www.commuterconnections.org
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\hline \multicolumn{1}{|c|}{ How to read this schedule } \\
- The first column on the left is the run number, which will be displayed on the \\
passenger side of the bus above the dash board. \\
- The top row shows pick up points and the destinations of the buses. \\
- The timetable shows when the bus stops. Times are always approximate and depend \\
upon traffic and weather conditions. It is recommended to be at the stop early. \\
- If no time is listed, the run will not serve that point. \\
- \begin{tabular}{l} 
Park \& Ride symbol indicates locations in Loudoun County where commuters can park \\
or pick up the buses. \\
- \\
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\end{tabular} Metro symbols indicate stops with access to Metro Rail Stations. \\
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8:30AM - 5:00PM Local-703-771-5665 1-877-GO-LCBUS

Before 8:30AM and after 5:00PM (Emergencies) Veolia Dispatch

443-506-9499
Loudoun County Office of
Transportation Services 1 Harrison Street,
4th Floor, Mail Stop 69 Leesburg, VA 20175

Website:
www.loudoun.gov/bus
Email Address:
rideshare@loudoun.gov

or pick up the buses.



Afternoon departures from Washington DC，Rosslyn and the West Falls Church Metro Station to Ashburn North


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The Ashburn North Park \＆Ride lot is ocated south of Strayer University， 45150 s south of Route 7 （Harry Byrd Highway）

 parking spaces available．

\section*{Via Route 7}

\section*{From the East（Sterling）}
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 at Russell Branch Parkway．You will see
the park \＆ride lot on the right．
From the West（Leesburg）
Take Route 7 east towards Sterling．Once you pass Belmont Ridge Road you will
travel 3.88 miles and turn right onto
George Washington Blvd／Richfield Way． Turn left onto Russell Branch Parkway You will see the park \＆ride lot on the right．
Via Loudoun County Pkwy From the South
Take Loudoun County Pkwy north to Route 7．Turn right onto Rt 7 East．Travel \(1 / 2\)
mile and turn right onto Richfield Way． Turn left onto Russell Branch Pkwy．You will see the park \＆ride lot on the right．


\author{
Valley Connector \\ Updated August 15, 2009
}
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\hline Route 46 & \\
\hline Morning Service & \(4: 10\) \\
\hline Woodstock & \(4: 40\) \\
\hline Front Royal & \(4: 55\) \\
\hline Linden & \(5: 55\) \\
\hline Rosslyn Station & \(6: 00\) \\
\hline Pentagon / Pentagon City & \(6: 05\) \\
\hline 14th and Independence & \(6: 07\) \\
\hline 12th \& Constitution & \(6: 12\) \\
\hline 7th \& Independence & \(6: 15\) \\
\hline 4th St SW and E St SW & \(6: 20\) \\
\hline Navy Yard Metro Station & \(6: 30\) \\
\hline H St NW and 4th St NW & \(6: 35\) \\
\hline H St and 11th St & \(6: 38\) \\
\hline K St and 12th St & \(6: 40\) \\
\hline K St and 15th St & \(6: 42\) \\
\hline K St and 18th St & \\
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Route 48
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\hline Front Royal & \(4: 50\) \\
\hline Vienna & \(5: 50\) \\
\hline McLean VA & \(6: 20\) \\
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\hline Route 69 & \\
\hline Morning Service & \(4: 40\) \\
\hline Winchester & \(5: 00\) \\
\hline Waterloo & \(5: 20\) \\
\hline Front Royal & \(6: 30\) \\
\hline Ballston & \(6: 40\) \\
\hline Rosslyn Station & \(6: 45\) \\
\hline Pentagon / Pentagon City & \(6: 50\) \\
\hline 14th and Independence & \(6: 56\) \\
\hline 12th \& Constitution & \(7: 00\) \\
\hline 7th \& Independence & \(7: 05\) \\
\hline 4th St SW and E St SW & \(7: 06\) \\
\hline Navy Yard Metro Station & \(7: 17\) \\
\hline Capital South & \(7: 20\) \\
\hline Union Station & \(7: 23\) \\
\hline H St NW and 4th St NW & \(7: 25\) \\
\hline H St and 9th St & \\
\hline K St and 12th St & \\
\hline K St and 15th St & \\
\hline
\end{tabular}

\section*{Commuter Bus Schedule}

Effective August 17, 2009
\begin{tabular}{|l|l|}
\hline Evening Service & \\
\hline K St and 18th St & \(3: 45\) \\
\hline K St and 15th St & \(3: 48\) \\
\hline K St and 12th St & \(3: 50\) \\
\hline H St and 9th St & \(3: 52\) \\
\hline H St NW and 4th St NW & \(3: 55\) \\
\hline 4th St SW and E St SW & \(4: 05\) \\
\hline Navy Yard Metro Station & \(4: 10\) \\
\hline 7th \& Independence & \(4: 15\) \\
\hline 12th \& Constitution & \(4: 22\) \\
\hline Pentagon / Pentagon City & \(4: 35\) \\
\hline Rosslyn Station & \(4: 45\) \\
\hline Linden & \(6: 00\) \\
\hline Front Royal & \(6: 10\) \\
\hline Woodstock & \(6: 40\) \\
\hline
\end{tabular}

Evening Service
\begin{tabular}{|l|l|}
\hline McLean VA & \(3: 30\) \\
\hline Vienna & \(4: 00\) \\
\hline Front Royal & \(5: 00\) \\
\hline
\end{tabular}
\begin{tabular}{|l|l|}
\hline Evening Service & \\
\hline K St and 18th St & \(3: 10\) \\
\hline K St and 15th St & \(3: 12\) \\
\hline K St and 12th St & \(3: 15\) \\
\hline H St and 9th St & \(3: 18\) \\
\hline H St NW and 4th St NW & \(3: 20\) \\
\hline Union Station & \(3: 25\) \\
\hline 4th St SW and E St SW & \(3: 33\) \\
\hline Navy Yard Metro Station & \(3: 40\) \\
\hline Capital South & \(3: 41\) \\
\hline 7th \& Independence & \(3: 47\) \\
\hline 12th \& Constitution & \(3: 55\) \\
\hline Pentagon / Pentagon City & \(4: 05\) \\
\hline Rosslyn Station & \(4: 15\) \\
\hline Ballston & \(4: 20\) \\
\hline Linden & \(5: 35\) \\
\hline Front Royal & \(5: 45\) \\
\hline Waterloo & \(6: 05\) \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline K St and 18th St & 7:28 & Winchester & 6:25 \\
\hline \multicolumn{4}{|l|}{Route 57} \\
\hline Morning Service & & Evening Service & \\
\hline Front Royal & 5:40 & H St NW and 4th St NW & 4:30 \\
\hline Waterloo & 6:00 & Union Station & 4:33 \\
\hline Berryville & 6:15 & Navy Yard Metro Station & 4:48 \\
\hline Ballston & 7:20 & 4th St SW and E St SW & 4:54 \\
\hline Rosslyn Station & 7:25 & 7th \& Independence & 4:59 \\
\hline State Dept & 7:30 & Pennsylvania \&7th & 5:03 \\
\hline K St and 18th St & 7:35 & Pennsylvania \&10th (FBI) & 5:04 \\
\hline K St and 14th St & 7:38 & 14th \& F Streets, NW & 5:08 \\
\hline 11th \& H & 7:40 & I St and 15th St & 5:12 \\
\hline 11th \& F & 7:42 & I St and 18th St & 5:16 \\
\hline Pennsylvania \&10th (FBI) & 7:44 & 19th \& E Streets, NW & 5:20 \\
\hline Pennsylvania \& 7th & 7:45 & Rosslyn Station & 5:30 \\
\hline Independence \& 7th & 7:47 & Ballston & 5:40 \\
\hline 4th St SW and E St SW & 7:49 & Berryville & 6:50 \\
\hline Navy Yard Metro Station & 7:54 & Waterloo & 7:05 \\
\hline Union Station & 8:04 & Front Royal & 7:25 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline Morning Service & 46 & 69 & 57 \\
\hline Woodstock & 4:10 & & \\
\hline Winchester & & 4:40 & \\
\hline Waterloo & & 5:00 & 6:00 \\
\hline Front Royal & 4:40 & 5:20 & 5:40 \\
\hline Linden & 4:55 & & \\
\hline Berryville & & & 6:15 \\
\hline Ballston & & 6:30 & 7:20 \\
\hline Rosslyn Station & 5:55 & 6:40 & 7:25 \\
\hline Pentagon / Pentagon City & 6:00 & 6:45 & \\
\hline 14th and Independence & 6:05 & 6:50 & \\
\hline 12th \& Constitution & 6:07 & 6:53 & \\
\hline State Dept & & & 7:30 \\
\hline 11th \& H & & & 7:40 \\
\hline 11th \& F & & & 7:42 \\
\hline Pennsylvania \&10th (FBI) & & & 7:44 \\
\hline Pennsylvania \& 7th & & & 7:45 \\
\hline Independence \& 7th & 6:12 & 6:56 & 7:47 \\
\hline 4th St SW and E St SW & 6:15 & 7:00 & 7:49 \\
\hline Navy Yard Metro Station & 6:20 & 7:05 & 7:54 \\
\hline Captal South & & 7:06 & \\
\hline Union Station & & 7:12 & 8:04 \\
\hline H St NW and 4th St NW & 6:30 & 7:17 & \\
\hline H St and 11th St & 6:35 & 7:20 & \\
\hline K St and 12th St & 6:38 & 7:23 & \\
\hline K St and 15th St & 6:40 & 7:25 & 7:38 \\
\hline K St and 18th St & 6:42 & 7:28 & 7:35 \\
\hline
\end{tabular}
\begin{tabular}{|l|c|c|c|}
\hline Evening Service & 69 & 46 & 57 \\
\hline K St and 18th St & \(3: 10\) & \(3: 45\) & \\
\hline K St and 15th St & \(3: 12\) & \(3: 48\) & \\
\hline K St and 12th St & \(3: 15\) & \(3: 50\) & \\
\hline H St NW and 9th St NW & \(3: 18\) & \(3: 52\) & \\
\hline H St NW and 4th St NW & \(3: 20\) & \(3: 55\) & \(4: 30\) \\
\hline Union Station & \(3: 25\) & & \(4: 33\) \\
\hline 4th St SW and E St SW & \(3: 33\) & \(4: 05\) & \(4: 54\) \\
\hline Navy Yard Metro Station & \(3: 40\) & \(4: 12\) & \(4: 48\) \\
\hline Capital South & \(3: 41\) & & \\
\hline 7th \& Independence & \(3: 47\) & \(4: 17\) & \(4: 59\) \\
\hline 12th \& Constitution & \(3: 55\) & \(4: 25\) & \\
\hline Pennsylvania \&10th (FBI) & & & \(5: 04\) \\
\hline 14th \& F Streets, NW & & & \(5: 08\) \\
\hline ISt and 15th St & & & \(5: 12\) \\
\hline I St and 18th St & & & \(5: 16\) \\
\hline 19th \& E Streets, NW & & & \(5: 20\) \\
\hline Rosslyn Station & \(4: 15\) & \(4: 45\) & \(5: 30\) \\
\hline Ballston & \(4: 20\) & & \(5: 40\) \\
\hline & & & \\
\hline Linden & \(5: 35\) & \(6: 00\) & \\
\hline Front Royal & \(5: 45\) & \(6: 10\) & \(7: 25\) \\
\hline Waterloo & \(6: 05\) & & \(7: 05\) \\
\hline Winchester & \(6: 25\) & & \\
\hline Berryville & & & \(6: 50\) \\
\hline Woodstock & & \(6: 40\) & \\
\hline
\end{tabular}
Table IV-I
Metro Bus Ridership Summary
Department of State - 22nd Street EA Addendum (I)
\begin{tabular}{|c|c|c|c|}
\hline Route & Name & Total Monthly Ridership & Average Weekday Ridership \\
\hline Metro Bus 13 A,B,F,G & National Airport-Pentagon-Washington Line & 19,846 & 873 \\
\hline Metro Bus 32, 36 & Pennsylvania Avenue Line & 333,139 & 12,534 \\
\hline Metro Bus 39 & Pennsylvania Avenue Express & 12,190 & 580 \\
\hline Metro Bus 80 & North Capitol Street Line & 195,223 & 8,074 \\
\hline Metro Bus HI & Brookland-Potomac Park Line & 11,159 & 531 \\
\hline Metro Bus LI, L2, L4 & Connecticut Avenue Line & 103,835 & 4,166 \\
\hline Metro Bus N2, N3, N4, N6 & Massachusetts Avenue Line & 91,053 & 3,840 \\
\hline Metro Bus PI, P2, P6 & Anacostia-Eckington Line & 84,412 & 3,458 \\
\hline Metro Bus SI & 16th Street-Potomac Park Line & 32,512 & 1,548 \\
\hline Metro Bus XI, X3 & Benning Road-Line & 21,510 & 1,024 \\
\hline Metro Bus Subtotal & & 904,879 & 36,628 \\
\hline
\end{tabular}
Table IV-2
PRCT OmniRide Bus Ridership Summary
Department of State - 22 nd Street EA A
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Route & Name & \multicolumn{12}{|l|}{Total Monthly Ridership} & \multicolumn{2}{|l|}{Average Weekday Ridership} \\
\hline & & July 2008 & August 2008 & September 2008 & October 2008 & November 2008 & December 2008 & lanuary 2009 & February 2009 & March 2009 & April 2009 & May 2009 & June 2009 & FY 2008 & FY 2009 \\
\hline OmniRide RI & Dale City - Washington & 39,291 & 36,293 & 37,683 & 39,518 & 30,224 & 31,829 & 31,309 & 32,846 & 36,492 & 38,566 & 34,815 & 37,270 & 1,497 & 1,671 \\
\hline OmniRide R2 & Lake Ridge - Washington & 18,685 & 16,278 & 17,824 & 18,829 & 14,503 & 15,645 & 15,262 & 16,011 & 18,414 & 17,925 & 15,738 & 16,150 & 702 & 789 \\
\hline OmniRide R3 & Manassas & 17,414 & 17,194 & 17,943 & 19,024 & 14.913 & 16,267 & 15,601 & 16,528 & 19,143 & 18,621 & 16,666 & 16,984 & 632 & 809 \\
\hline OmniRide R5 & Route I/ South Route I & 740 & 781 & 949 & 1,014 & 892 & 727 & 388 & 325 & 563 & 697 & 667 & 780 & \(\underline{36}\) & 33 \\
\hline Total OmniRide Ridership & & 76,130 & 70,546 & 74,399 & 78,385 & 60,532 & 64,468 & 62,560 & 65,710 & 74,612 & 75,809 & 67,886 & 71,184 & 2,867 & 3,303 \\
\hline
\end{tabular}
Table IV-3
Table IV-3


Attachment V

DDOT Signal Timing Sheets

TS- 768-B TIMING PLAN SCHEDULE
\begin{tabular}{|l|l|c|}
\hline PLAN & \multicolumn{1}{|c|}{ PERIOD } & DATE \\
\hline 1 & OFF PEAK -80 & \\
\hline 2 & AM PEAK -80 & \\
\hline 3 & PM PEAK -80 & \\
\hline 4 & OFF PEAK -100 & \\
\hline 5 & AM PEAK -100 & \\
\hline 6 & PM PEAK -100 & \\
\hline 7 & AM PEAK -120 & \\
\hline 8 & PM PEAK -120 & \\
\hline 9 & EVACUATION & \\
\hline
\end{tabular}

9 EVACUATION
DESCRIPTION (INTERSECTION / STREET ION )

CONSTITUTION AVENUE GREEN +W
CONSTITUTION AVENUE GREEN + W \(S=\) Seconds





INTERVAL NO. 4

TRAFFIC SIGNAL OPERATION
22ND STREET AND CONSTITUTION AVENUE N.W.












\section*{Attachment VI}

\section*{Existing Capacity Analysis}



\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline & 4 & \(\rightarrow\) & \% & 7 & \(\leftarrow\) & 4 & 4 & \(\uparrow\) & 7 & \(\downarrow\) & \(\downarrow\) & \(\downarrow\) \\
\hline Movement & EBL & EBT & EBR & WBL & WBT & WBR & NBL & NBT & NBR & SBL & SBT & SBR \\
\hline Lane Configurations & & ¢ & & & \(\uparrow\) & & & ¢ & & & \(\uparrow\) & \\
\hline Volume (veh/h) & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 72 & 0 & 0 & 3 & 0 \\
\hline Sign Control & & Free & & & Free & & & Stop & & & Stop & \\
\hline Grade & & 0\% & & & 0\% & & & 0\% & & & 0\% & \\
\hline Peak Hour Factor & 0.92 & 0.92 & 0.92 & 0.92 & 0.92 & 0.92 & 0.92 & 0.92 & 0.92 & 0.92 & 0.92 & 0.92 \\
\hline Hourly flow rate (vph) & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 78 & , & 0 & 3 & 0 \\
\hline
\end{tabular}

\section*{Pedestrians \\ Lane Width ( t )}

Walking Speed (tt/s)
Percent Blockage

\(\mathrm{vC1}\), stage 1 conf vol
\(\mathrm{vC2}\), stage 2 conf vol
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline vCu, unblocked vol & 0 & 0 & 2 & 0 & 0 & 39 & 0 & 0 \\
\hline tC , single (s) & 4.1 & 4.1 & 7.2 & 6.6 & 6.3 & 7.1 & 6.5 & 6.2 \\
\hline \multicolumn{9}{|l|}{\(\mathrm{tC}, 2\) stage (s)} \\
\hline tF ( s ) & 2.2 & 2.2 & 3.6 & *9.9 & 3.4 & 3.5 & *9.9 & 3.3 \\
\hline p0 queue free \% & 100 & 100 & 100 & 78 & 100 & 100 & 99 & 100 \\
\hline cM capacity (veh/h) & 1623 & 1623 & 1004 & 364 & 1073 & 810 & 364 & 1091 \\
\hline
\end{tabular}
\begin{tabular}{lrrrr} 
Direction, Lane \# & EB 1 & WB 1 & NB 1 & SB 1 \\
\hline Volume Total & 0 & 0 & 78 & 3 \\
Volume Left & 0 & 0 & 0 & 0 \\
Volume Right & 0 & 0 & 0 & 0 \\
cSH & 1700 & 1700 & 364 & 364 \\
Volume to Capacity & 0.00 & 0.00 & 0.22 & 0.01 \\
Queue Length 95th (ft) & 0 & 0 & 20 & 1 \\
Control Delay (s) & 0.0 & 0.0 & 17.6 & 15.0 \\
Lane LOS & & & C & B \\
Approach Delay (s) & 0.0 & 0.0 & 17.6 & 15.0 \\
Approach LOS & & & C & B
\end{tabular}

\section*{Intersection Summary}
\begin{tabular}{lr}
\hline Average Delay & 17.5 \\
Intersection Capacity Utilization & \(7.1 \%\) \\
\hline
\end{tabular}

Analysis Period (min)
15

\footnotetext{
* User Entered Value
}

\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & 4 & & 4 & \(\dagger\) & 1 & \(\downarrow\) & \\
\hline Movement & EBL & EBR & NBL & NBT & SBT & SBR & \\
\hline Lane Configurations & * & & & \(\uparrow\) & F & & \\
\hline Volume (veh/h) & 0 & 15 & 0 & 97 & 151 & 1 & \\
\hline Sign Control & Stop & & & Free & Free & & \\
\hline Grade & 0\% & & & 0\% & 0\% & & \\
\hline Peak Hour Factor & 0.90 & 0.90 & 0.90 & 0.90 & 0.90 & 0.90 & \\
\hline Hourly flow rate (vph) & 0 & 17 & 0 & 108 & 168 & 1 & \\
\hline Pedestrians & 5 & & & 4 & 2 & & \\
\hline Lane Width (ft) & 12.0 & & & 12.0 & 12.0 & & \\
\hline Walking Speed (ft/s) & 4.0 & & & 4.0 & 4.0 & & \\
\hline Percent Blockage & 0 & & & 0 & 0 & & \\
\hline Right turn flare (veh) & & & & & & & \\
\hline Median type & & & & None & None & & \\
\hline Median storage veh) & & & & & & & \\
\hline Upstream signal ( ft ) & & & & 309 & & & \\
\hline pX, platoon unblocked & & & & & & & \\
\hline vC, conflicting volume & 283 & 177 & 174 & & & & \\
\hline \(\mathrm{vC1}\), stage 1 conf vol & & & & & & & \\
\hline vC 2 , stage 2 conf vol & & & & & & & \\
\hline vCu, unblocked vol & 283 & 177 & 174 & & & & \\
\hline tC , single (s) & 6.4 & 6.2 & 4.1 & & & & \\
\hline \(\mathrm{tC}, 2\) stage (s) & & & & & & & \\
\hline tF (s) & 3.5 & 3.3 & 2.2 & & & & \\
\hline p0 queue free \% & 100 & 98 & 100 & & & & \\
\hline cM capacity (veh/h) & 707 & 864 & 1391 & & & & \\
\hline Direction, Lane \# & EB 1 & NB 1 & SB 1 & & & & \\
\hline Volume Total & 17 & 108 & 169 & & & & \\
\hline Volume Left & 0 & 0 & 0 & & & & \\
\hline Volume Right & 17 & 0 & 1 & & & & \\
\hline cSH & 864 & 1391 & 1700 & & & & \\
\hline Volume to Capacity & 0.02 & 0.00 & 0.10 & & & & \\
\hline Queue Length 95th (ft) & 1 & 0 & 0 & & & & \\
\hline Control Delay (s) & 9.2 & 0.0 & 0.0 & & & & \\
\hline Lane LOS & A & & & & & & \\
\hline Approach Delay (s) & 9.2 & 0.0 & 0.0 & & & & \\
\hline \multicolumn{8}{|l|}{Approach LOS A} \\
\hline \multicolumn{8}{|l|}{Intersection Summary} \\
\hline \multicolumn{3}{|l|}{Average Delay} & 0.5 & & & & \\
\hline \multicolumn{3}{|l|}{Intersection Capacity Utilization} & 20.1\% & & CU Level o & Service & A \\
\hline \multicolumn{2}{|l|}{Analysis Period (min)} & & 15 & & & & \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline & 4 & \(\rightarrow\) & \(\geqslant\) & 7 & & 4 & 4 & 4 & \(p\) & & \(\downarrow\) & \(\downarrow\) \\
\hline Movement & EBL & EBT & EBR & WBL & WBT & WBR & NBL & NBT & NBR & SBL & SBT & SBR \\
\hline Lane Configurations & & \(\dagger\) & & & \$ & & & ¢ & & & \$ & \\
\hline Volume (veh/h) & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 & 44 & 0 \\
\hline Sign Control & & Free & & & Free & & & Stop & & & Stop & \\
\hline Grade & & 0\% & & & 0\% & & & 0\% & & & 0\% & \\
\hline Peak Hour Factor & 0.92 & 0.92 & 0.92 & 0.92 & 0.92 & 0.92 & 0.92 & 0.92 & 0.92 & 0.92 & 0.92 & 0.92 \\
\hline Hourly flow rate (vph) & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 & 48 & 0 \\
\hline
\end{tabular}

\section*{Pedestrians \\ Lane Width ( t )}

Walking Speed (tt/s)
Percent Blockage

\(\mathrm{vC1}\), stage 1 conf vol
\(\mathrm{vC2}\), stage 2 conf vol
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline vCu, unblocked vol & 0 & 0 & 24 & 0 & 0 & 1 & 0 & 0 \\
\hline tC , single (s) & 4.1 & 4.1 & 7.2 & 6.6 & 6.3 & 7.1 & 6.5 & 6.2 \\
\hline \multicolumn{9}{|l|}{\(\mathrm{tC}, 2\) stage (s)} \\
\hline tF ( s ) & 2.2 & 2.2 & 3.6 & *9.9 & 3.4 & 3.5 & *9.9 & 3.3 \\
\hline p0 queue free \% & 100 & 100 & 100 & 100 & 100 & 100 & 87 & 100 \\
\hline cM capacity (veh/h) & 1623 & 1623 & 879 & 364 & 1073 & 1025 & 364 & 1091 \\
\hline
\end{tabular}
\begin{tabular}{lrrrr} 
Direction, Lane \# & EB 1 & WB 1 & NB 1 & SB 1 \\
\hline Volume Total & 0 & 0 & 1 & 48 \\
Volume Left & 0 & 0 & 0 & 0 \\
Volume Right & 0 & 0 & 0 & 0 \\
CSH & 1700 & 1700 & 364 & 364 \\
Volume to Capacity & 0.00 & 0.00 & 0.00 & 0.13 \\
Queue Length 95th (ft) & 0 & 0 & 0 & 11 \\
Control Delay (s) & 0.0 & 0.0 & 14.9 & 16.4 \\
Lane LOS & & & B & C \\
Approach Delay (s) & 0.0 & 0.0 & 14.9 & 16.4 \\
Approach LOS & & & B & C
\end{tabular}

\section*{Intersection Summary}
\begin{tabular}{lr}
\hline Average Delay & 16.4 \\
Intersection Capacity Utilization & \(6.7 \%\) \\
\hline
\end{tabular}
6.7\% ICU Level of Service A

Analysis Period (min)
15
* User Entered Value

State Department/APhA
Wells + Associates, Inc.

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\section*{Attachment VII}

Levels of Service Descriptions

\section*{Level of Service for Signalized Intersections}

Level of service for signalized intersections is defined in terms of delay, which is a measure of driver discomfort and frustration, fuel consumption, and lost travel time. Specifically, level-of-service (LOS) criteria are stated in terms of the average stopped delay per vehicle for a \(15-\mathrm{min}\) analysis period. The criteria are given in Exhibit \(16-2\). Delay may be measured in the field or estimated using procedures presented later in this chapter. Delay is a complex measure and is dependent on a number of variables, including the quality of progression, the cycle length, the green ratio, and the \(\mathrm{V} / \mathrm{C}\) ratio for the lane group in question.

LOS A describes operations with very low delay, up to 10 sec per vehicle. This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.

LO S B describes operations with delay greater than 10 and up to 20 sec per vehicle. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.

Exhibit 16-2. Level-of-Service Criteria for Signalized Intersections
\begin{tabular}{|c|c|}
\hline LEVEL OF SERVICE & STOPPED DELAY PER VEHICLE (SEC) \\
\hline A & \(\leq 10.0\) \\
\hline B & \(>10.0\) and \(\leq 20.0\) \\
\hline C & \(>20.0\) and \(\leq 35.0\) \\
\hline D & \(>35.0\) and \(\leq 55.0\) \\
\hline E & \(>55.0\) and \(\leq 80.0\) \\
\hline F & \(>80.0\) \\
\hline
\end{tabular}

LOS C describes operations with delay greater than 20 and up to 35 sec per vehicle. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.

LOS D describes operations with delay greater than 35 and up to 55 sec per vehicle. At level \(D\), the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high \(v / C\) ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

LOS E describes operations with delay greater than 55 and up to 80 sec per vehicle. This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.

LOS F describes operations with delay in excess of 80 sec per vehicle. This level, considered to be unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high v/c ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

Source: Highway Capacity Manual, 2000. Transportation Research Board, National Research Council

\section*{Level of Service Criteria for Stop Sign Controlled Intersections}

The level of service criteria are given in Table 17-2. As used here, control delay is defined as the total elapsed time from the time a vehicle stops at the end of the queue until the vehicle departs from the stop line; this time includes the time required for the vehicle to travel from the last-in-queue position to the first-in-queue position, including deceleration of vehicles from free-flow speed to the speed of vehicles in queue.

The average total delay for any particular minor movement is a function of the service rate or capacity of the approach and the degree of saturation. .

Table 17-2. Level of Service Criteria for TWSC Intersections
\begin{tabular}{|c|c|}
\hline LEVEL OF SERVICE & \begin{tabular}{c} 
AVERAGE CONTROL DELAY \\
(sec/veh)
\end{tabular} \\
\hline A & \(\leq 10\) \\
\hline B & \(>10\) and \(\leq 15\) \\
\hline C & \(>15\) and \(\leq 25\) \\
\hline D & \(>25\) and \(\leq 35\) \\
\hline E & \(>35\) and \(\leq 50\) \\
\hline F & \(>50\) \\
\hline
\end{tabular}

Average total delay less than \(10 \mathrm{sec} / \mathrm{veh}\) is defined as Level of Service (LOS) A. Follow-up times of less than 5 sec have been measured when there is no conflicting traffic for a minor street movement, so control delays of less than IO \(\mathrm{sec} / \mathrm{veh}\) are appropriate for low flow conditions. To remain consistent with the AWSC intersection analysis procedure described later in this chapter, a total delay of \(50 \mathrm{sec} / \mathrm{veh}\) is assumed as the break point between LOS E and F.

The proposed level of service criteria for TWSC intersections are somewhat different from the criteria used in Chapter 16 for signalized intersections. The primary reason for this difference is that drivers expect different levels of performance from different kinds of transportation facilities. The expectation is that a signalized intersection is designed to carry higher traffic volumes than an unsignalized intersection. Additionally, several driver behavior considerations combine to make delays at signalized intersections less onerous than at unsignalized intersections. For example, drivers at signalized intersections are able to relax during the red interval, where drivers on the minor approaches to unsignalized intersections must remain attentive to the task of identifying acceptable gaps and vehicle conflicts. Also, there is often much more variability in the amount of delay experienced by individual drivers at unsignalized than signalized intersections. For these reasons, it is considered that the total delay threshold for any given level of service is less for an unsignalized intersection than for a signalized intersection. . . .

LOS F exists when there are insufficient gaps of suitable size to allow a side street demand to cross safely through a major street traffic stream. This level of service is generally evident from extremely long total delays experienced by side street traffic and by queueing on the minor approaches. The method, however, is based on a constant critical gap size - that is, the critical gap remains constant, no matter how long the side street motorist waits. LOS F may also appear in the form of side street vehicles' selecting smaller-than-usual gaps. In such cases, safety may be a problem and some disruption to the major traffic stream may result. It is important to note that LOS F may not always result in long queues but may result in adjustments to normal gap acceptance behavior. The latter is more difficult to observe on the field than queueing, which is more obvious.

Source: Highway Capacity Manual, 2000. Transportation Research Board, National Research Council

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\section*{Attachment VIII}

\section*{Future Capacity Analysis}

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline & 4 & \(\rightarrow\) & \(\checkmark\) & 7 & & 4 & 4 & 4 & \(p\) & & \(\downarrow\) & 4 \\
\hline Movement & EBL & EBT & EBR & WBL & WBT & WBR & NBL & NBT & NBR & SBL & SBT & SBR \\
\hline Lane Configurations & & * & & \({ }^{*}\) & & & \({ }^{1}\) & 4 & & & F & \\
\hline Volume (veh/h) & 1 & 0 & 0 & 19 & 0 & 0 & 26 & 79 & 0 & 0 & 99 & 0 \\
\hline Sign Control & & Stop & & & Stop & & & Free & & & Free & \\
\hline Grade & & 0\% & & & 0\% & & & 0\% & & & 0\% & \\
\hline Peak Hour Factor & 0.92 & 0.95 & 0.92 & 0.95 & 0.95 & 0.95 & 0.92 & 0.92 & 0.95 & 0.95 & 0.92 & 0.92 \\
\hline Hourly flow rate (vph) & 1 & 0 & 0 & 20 & 0 & 0 & 28 & 86 & 0 & 0 & 108 & 0 \\
\hline Pedestrians & & 18 & & & & & & 24 & & & 7 & \\
\hline Lane Width (ft) & & 12.0 & & & & & & 12.0 & & & 12.0 & \\
\hline Walking Speed (ft/s) & & 4.0 & & & & & & 4.0 & & & 4.0 & \\
\hline \multicolumn{2}{|l|}{Percent Blockage} & \multicolumn{2}{|l|}{1} & & & & & \multicolumn{2}{|l|}{2} & & \multicolumn{2}{|l|}{1} \\
\hline \multicolumn{13}{|l|}{Right turn flare (veh)} \\
\hline Median type & & & & & & & & \multicolumn{3}{|l|}{None} & \multicolumn{2}{|l|}{None} \\
\hline \multicolumn{13}{|l|}{Median storage veh)} \\
\hline Upstream signal (ft) & & & & & & & & \multicolumn{5}{|l|}{311} \\
\hline \multicolumn{13}{|l|}{pX, platoon unblocked} \\
\hline vC, conflicting volume & 275 & 268 & 150 & 274 & 268 & 93 & 126 & & & 86 & & \\
\hline \multicolumn{13}{|l|}{\(\mathrm{vC1}\), stage 1 conf vol} \\
\hline \multicolumn{13}{|l|}{vC 2 , stage 2 conf vol} \\
\hline vCu , unblocked vol & 275 & 268 & 150 & 274 & 268 & 93 & 126 & & & 86 & & \\
\hline tC, single (s) & 7.1 & 6.5 & 6.2 & 7.1 & 6.5 & 6.2 & 4.1 & & & 4.1 & & \\
\hline \multicolumn{13}{|l|}{tC, 2 stage (s)} \\
\hline \(\mathrm{tF}(\mathrm{s})\) & *9.9 & 4.0 & 3.3 & 3.5 & 4.0 & 3.3 & *9.9 & & & 2.2 & & \\
\hline p0 queue free \% & 100 & 100 & 100 & 97 & 100 & 100 & 92 & & & 100 & & \\
\hline cM capacity (veh/h) & 275 & 580 & 871 & 619 & 580 & 959 & 367 & & & 1510 & & \\
\hline Direction, Lane \# & EB 1 & WB 1 & NB 1 & NB 2 & SB 1 & & & & & & & \\
\hline Volume Total & 1 & 20 & 28 & 86 & 108 & & & & & & & \\
\hline Volume Left & 1 & 20 & 28 & 0 & 0 & & & & & & & \\
\hline Volume Right & 0 & 0 & 0 & 0 & 0 & & & & & & & \\
\hline cSH & 275 & 619 & 367 & 1700 & 1700 & & & & & & & \\
\hline Volume to Capacity & 0.00 & 0.03 & 0.08 & 0.05 & 0.06 & & & & & & & \\
\hline Queue Length 95th (ft) & 0 & 3 & 6 & 0 & 0 & & & & & & & \\
\hline Control Delay (s) & 18.2 & 11.0 & 15.6 & 0.0 & 0.0 & & & & & & & \\
\hline Lane LOS & C & B & C & & & & & & & & & \\
\hline Approach Delay (s) & 18.2 & 11.0 & 3.9 & & 0.0 & & & & & & & \\
\hline Approach LOS & C & B & & & & & & & & & & \\
\hline \multicolumn{13}{|l|}{Intersection Summary} \\
\hline Average Delay & & & 2.8 & & & & & & & & & \\
\hline Intersection Capacity Utilization & & & 24.4\% & & CU Level & Service & & & A & & & \\
\hline Analysis Period (min) & & & 15 & & & & & & & & & \\
\hline
\end{tabular}
* User Entered Value

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & \(\pm\) & 4 & & & & ＊ & \(\downarrow\) & \\
\hline Movement & EBU & EBL & EBT & WBT & WBR & SBL & SBR & \\
\hline Lane Configurations & & & ¢才† & 虾 & & \({ }^{1}\) & 「 & \\
\hline Volume（vph） & 3 & 82 & 1089 & 1758 & 56 & 37 & 127 & \\
\hline Ideal Flow（vphpl） & 1900 & 1900 & 1900 & 1900 & 1900 & 1900 & 1900 & \\
\hline Lane Width & 10 & 10 & 10 & 10 & 10 & 12 & 12 & \\
\hline Total Lost time（s） & & & 4.0 & 4.0 & & 4.0 & 5.0 & \\
\hline Lane Util．Factor & & & 0.86 & 0.91 & & 1.00 & 1.00 & \\
\hline Frpb，ped／bikes & & & 1.00 & 1.00 & & 1.00 & 1.00 & \\
\hline Flpb，ped／bikes & & & 1.00 & 1.00 & & 1.00 & 1.00 & \\
\hline Frt & & & 1.00 & 1.00 & & 1.00 & 0.85 & \\
\hline Flt Protected & & & 1.00 & 1.00 & & 0.95 & 1.00 & \\
\hline Satd．Flow（prot） & & & 5947 & 4718 & & 1770 & 1583 & \\
\hline Flt Permitted & & & 0.72 & 1.00 & & 0.95 & 1.00 & \\
\hline Satd．Flow（perm） & & & 4325 & 4718 & & 1770 & 1583 & \\
\hline Peak－hour factor，PHF & 0.92 & 0.92 & 0.92 & 0.92 & 0.92 & 0.92 & 0.92 & \\
\hline Adj．Flow（vph） & 3 & 89 & 1184 & 1911 & 61 & 40 & 138 & \\
\hline RTOR Reduction（vph） & 0 & 0 & 0 & 4 & 0 & 0 & 2 & \\
\hline Lane Group Flow（vph） & 0 & 0 & 1276 & 1969 & 0 & 40 & 136 & \\
\hline Confl．Peds．（\＃／hr） & 21 & 21 & & & 21 & 39 & 1 & \\
\hline Confl．Bikes（\＃／hr） & & & & & 3 & & & \\
\hline Bus Blockages（\＃／hr） & 0 & 0 & 2 & 0 & 0 & 0 & 0 & \\
\hline Turn Type & Perm & pm＋pt & & & & & pt＋ov & \\
\hline Protected Phases & & 5 & 2 & 6 & & 4 & 45 ！ & \\
\hline Permitted Phases & \(2!\) & 2 & & & & & & \\
\hline Actuated Green，G（s） & & & 61.0 & 50.0 & & 29.0 & 41.0 & \\
\hline Effective Green，g（s） & & & 62.0 & 50.0 & & 30.0 & 41.0 & \\
\hline Actuated g／C Ratio & & & 0.62 & 0.50 & & 0.30 & 0.41 & \\
\hline Clearance Time（s） & & & 5.0 & 4.0 & & 5.0 & & \\
\hline Lane Grp Cap（vph） & & & 2811 & 2359 & & 531 & 649 & \\
\hline v／s Ratio Prot & & & c0．04 & c0．42 & & 0.02 & c0．09 & \\
\hline v／s Ratio Perm & & & 0.25 & & & & & \\
\hline v／c Ratio & & & 0.45 & 0.83 & & 0.08 & 0.21 & \\
\hline Uniform Delay，d1 & & & 10.0 & 21.4 & & 25.1 & 19.0 & \\
\hline Progression Factor & & & 1.00 & 1.00 & & 1.00 & 1.00 & \\
\hline Incremental Delay，d2 & & & 0.5 & 3.7 & & 0.3 & 0.7 & \\
\hline Delay（s） & & & 10.6 & 25.1 & & 25.3 & 19.8 & \\
\hline Level of Service & & & B & C & & C & B & \\
\hline Approach Delay（s） & & & 10.6 & 25.1 & & 21.0 & & \\
\hline Approach LOS & & & B & C & & C & & \\
\hline \multicolumn{9}{|l|}{Intersection Summary} \\
\hline \multicolumn{3}{|l|}{HCM Average Control Delay} & 19.5 & & HCM Lev & Service & & B \\
\hline \multicolumn{3}{|l|}{HCM Volume to Capacity ratio} & 0.55 & & & & & \\
\hline \multicolumn{3}{|l|}{Actuated Cycle Length（s）} & 100.0 & & Sum of lo & me（s） & & 4.0 \\
\hline \multicolumn{3}{|l|}{Intersection Capacity Utilization} & 93．7\％ & & ICU Level & Service & & F \\
\hline \multicolumn{3}{|l|}{Analysis Period（min）} & 15 & & & & & \\
\hline \multicolumn{9}{|l|}{！Phase conflict between lane groups．} \\
\hline \multicolumn{2}{|l|}{c Critical Lane Group} & & & & & & & \\
\hline
\end{tabular}



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\section*{Attachment IX}
\(22^{\mathrm{ND}}\) Street NW Plan Sheets




\section*{Harry S Truman Building} Department of State Perimeter Security Improvements 22nd Street - 30'-Truck Movement
1. Provide New Asphalt Paving from Constitution Ave to C Street
2. Provide New Street Signs Including Taxi Stand and Parking
\[
\text { Scale: } 1 "=50^{\prime} \bigoplus^{\text {North }}
\]

\section*{APPENDIX C}

\section*{Draft Programmatic Agreement}

\title{
April 7, 2010 Draft \\ PROGRAMMATIC AGREEMENT AMONG \\ THE GENERAL SERVICES ADMINISTRATION, THE DEPARTMENT OF STATE, THE District Of Columbia STATE HISTORIC PRESERVATION OFFICE, THE ADVISORY COUNCIL ON HISTORIC PRESERVATION, THE NATIONAL PARK SERVICE, THE NATIONAL ACADEMY OF SCIENCES, AND THE AMERICAN PHARMACISTS ASSOCIATION REGARDING THE PERIMETER SECURITY IMPROVEMENT PROJECT AT THE HARRY S TRUMAN BUILDING, WASHINGTON, D.C.
}

This Programmatic Agreement (PA) is made as of this \(\qquad\) day of 2010, by and among the United States General Services Administration (GSA), the United States Department of State (DOS), the National Park Service (NPS), the National Academy of Sciences (NAS), the American Pharmacists Association (APHA), the Advisory Council on Historic Preservation (ACHP), and the District of Columbia State Historic Preservation Officer (SHPO) (referred to collectively herein as the "Parties" or "Signatories" or individually as a "Party" or "Signatory") pursuant to Section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. 470f, and its implementing regulations 36 CFR Part 800 and section 110 of the NHPA.

WHEREAS, the Undertaking, which is defined as the Perimeter Security Concept Plan, illustrated in Appendices A and B, will be implemented through a multi-phase design and construction program as funding becomes available, and in accordance with the renovation phasing schedule and security requirements of the Harry S Truman Building; and

WHEREAS, DOS has developed a Concept Plan for the perimeter security of the Harry S Truman Building at 2201 C Street, N.W., in Washington, D.C. and has determined that the Undertaking encompasses both primary and secondary Areas of Potential Effect (APE; Appendix D) that include, but are not limited to, the following properties, all of which are listed in or have been determined eligible for the National Register of Historic Places: the Harry S Truman Building, the headquarters of the APHA, the NAS, the Northwest Rectangle Historic District, and the L'Enfant and McMillan Plans of the City of Washington; and

WHEREAS, DOS has completed the Harry S Truman Building Perimeter Security Improvements Plan Section 106 Summary (Appendix D), which outlines historic resources, effects, and mitigations for the Undertaking, and will serve as a guide to the implementation of this PA; and

WHEREAS, DOS will serve as the lead agency for the Section 106 consultation because the Undertaking is funded by DOS and is intended to satisfy DOS security
requirements and GSA will serve as a secondary agency as Federal owner of the Truman building; and

WHEREAS, in accordance with 36CFR 800.6(a) (1) DOS and GSA have notified the ACHP of its potential adverse effects determination with the specified documentation and the ACHP has chosen to participate in the consultation pursuant to 36CFR 800.6(a) (1) (iii); and

WHEREAS, DOS is conducting an Environmental Assessment (EA) for the Undertaking and has coordinated its Section 106 consultation with the National Environmental Policy Act (NEPA) in accordance with 36 CFR Part 800.8 and in addition to the Signatories has included the Federal Reserve Board, Advisory Neighborhood Council 2A06, the DC Preservation League, the Committee of 100 for the Federal City, the National Coalition to Save Our Mall, the Foggy Bottom Association, the National Capital Planning Commission, the Commission of Fine Arts, the DC Office of Planning and the DC Department of Transportation in the consultation as consulting parties

WHEREAS, DOS and GSA have determined that there is a low probability for impacts to Archeological Resources due to the previous ground disturbance at the site, however in the event of an unanticipated discovery, GSA will notify the DC State Archeologist to initiate consultation and proceed in accordance with the "Guidelines for Archaeological Investigations in the District of Columbia", if it is determined that pre-historic resource will be impacted DOS will notify the appropriate Tribal Historic Preservation Officers; and

WHEREAS, the Concept Plan was reviewed by the SHPO and the ACHP and approved by the U.S. Commission of Fine Arts (CFA) on November 18, 2004, and by the National Capital Planning Commission (NCPC) on December 2, 2004; and

WHEREAS, pursuant to 36 CFR § 800.14, this Programmatic Agreement (PA) sets forth the process by which DOS and GSA will meet their responsibilities under Section 106 of the NHPA;

NOW THEREFORE, the Signatories agree that the Undertaking shall be administered in accordance with the following stipulations to take into account the Undertaking's effect on historic resources.

\section*{STIPULATIONS}

DOS and GSA shall ensure that the following measures are carried out:

\section*{I. Project Outline:}
A. Phasing:

The project will be implemented in several phases over an approximate ten year period and will be coordinated with the building's modernization for the construction of the entry pavilions and streetscape security improvements. Each phase will require a separate design submission and consultation with the Signatories and consulting parties, resulting in Memorandums of Agreement (MOA) for each consultation.

\section*{II. Design Review}
A. All design elements of the Harry S Truman Building Perimeter Security Project will conform to the design concept plan approved by CFA and NCPC illustrated in Appendix A, with the understanding that specific elements of the concept plan will be further developed as the phases of the Project are funded.
B. DOS will develop design documents for each phase of the project, and for submission to the signatories and consulting parties for review. Each phase submission and consultation will be subject to 36 CFR Part 800 for the assessment and resolution of adverse effects to the Truman Building, the grounds of American Pharmaceutical Association (APHA) and the National Academy of Sciences (NAS), the Northwest Rectangle Historic District and the L'Enfant and McMillan Plans of the City of Washington
C. Restoration as well as any additions to the Truman building and all site improvements surrounding the building will adhere to The Secretary of the Interior's Standards for the Treatment of Historic Properties and are consistent with the Historic Structure Report and Preservation Manual for the State Department, which is on file with the SHPO and ACHP. Chapter IX of the Historic Structure Report addresses issues of maintenance, restoration, and alteration of the Truman Building and is attached to the PA as Appendix C.
D. The design of the new entrance pavilions, constructed to replace existing canopies, will be contemporary and appropriate to the required security functions. They will emulate the character of original canopies by their lightness and transparency, and by the use of original materials such as stainless steel, ceramic mosaic tile and granite. The new pavilions will follow consistent design principles at each of the five entrances to the Truman Building.
E. DOS shall submit to the Signatories and consulting parties for their review and comment design documents at the 65 percent design development levels of completion. DOS and GSA will also ensure that the DCSHPO, NCPC, ACHP, and CFA are invited to participate in a multi-agency review of the design at the 35 and 65 percent levels of design development or at
completion levels agreed to by the SHPO and ACHP. A 30 day comment period will be allowed for each submission.
F. Consultations for each phase of design will conclude with a Historic Preservation Report (HPR), summarizing the design elements, identifying the adverse effects and the corresponding actions taken to avoid, minimize or mitigate the effects. The HPR will be attached to the MOA to document the agreed upon design and mitigation.
III. Mitigations for Foreseeable Adverse Effects
A. Lobby Restoration

To mitigate the demolition of the entry canopies and other original features of the Truman Building entrance sequence, the interior lobbies will be restored to their original treatment. The lobby restoration will take place under the GSA interior modernization project, which is subject to Section 106 review.
B. Documentation
1. Prior to demolition or alteration of the entry canopies and other original features of the Truman Building entrance sequence, DOS shall ensure that the building is documented to Historic American Buildings Survey (HABS)/Historic American Engineering (HAER) standards. DOS and GSA will contact the NPS to determine the level and kind of documentation required.

\author{
Ms. Kathleen Catalano Milley, National Park Service, Philadelphia Support Office, U.S. Custom House, 200 Chestnut Street, \(3^{\text {rd }}\) Floor, Philadelphia, PA 19106
}
2. All Documentation must be accepted by NPS. DOS and GSA will notify ACHP and the SHPO of HABS/HAER documentation acceptance, prior to the demolition of the canopies. Copies of the HABS/HAER documentation will be provided to the SHPO within 30 days of acceptance of the HABS/HAER documentation by NPS
C. D.C. Inventory and National Register Nomination
"Old State" was determined eligible for the National Register in 1992, and the Harry S Truman Building is included as a contributing building in the Northwest Rectangle Historic District. To further document the building's significance, GSA will complete documentation to nominate the Harry S

Truman Building to the D.C. Inventory of Historic Sites and the National Register of Historic Places.

IV Roles and Responsibilities
A: DOS/GSA
1. DOS and GSA shall ensure that the requirements of Section 106 are met for the proposed Project, including identification of effects to National Register-listed or -eligible resources in the area of potential effects and involvement of signatories to this agreement and consulting parties in subsequent consultation as the Project's phases are implemented.
2. DOS and GSA shall ensure that in completing the necessary provisions of the PA it will employ or contract with the appropriate, qualified professionals who meet The Secretary of Interior's Professional Qualifications Standards at 36 CFR 61 (Professional Qualifications).
3. DOS shall take the lead on arranging meetings or using other means to involve the Section 106 consulting parties in identifying and addressing issues related to the Undertaking's potential impacts to National Register listed or eligible resources, including the development of avoidance/minimization/mitigation measures.
4. DOS shall respond to information requests from the consulting parties pertaining to the Project's impact to National Register-listed or eligible resources.
5. DOS and GSA in future consultation with the Signatories and consulting parties, will prepare individual MOAs to address specific measures to avoid, minimize or mitigate any adverse effects identified as the Undertaking's phases are funded, designed and executed.
B. NPS (for issues/actions affecting land and resources under their jurisdiction) will:
1. Attend meetings or participate by other means of involving the Section 106 consulting parties in identifying and addressing issues related to the Undertaking's potential impacts to National Register listed or eligible resources under the jurisdiction of NPS.
2. Be responsible for guiding decisions associated with improvements to lands under NPS jurisdiction and obtain written approval from the Secretary of the Interior, where and if required by law, with respect to components of the Undertaking that may affect NPS properties;

\section*{C. NAS and APHA will:}

Participate in design reviews as outlined in the PA on aspects of the Project that impact their properties
D. Consulting Parties:
1. Attend meetings or participate by other means to consult on issues related to the Undertaking's potential impacts.
2. Upon invitation by DOS, GSA will review and provide comments on subsequent memoranda of agreement.

\section*{V. Dispute Resolution}

Objections: Should any party to this PA object to any action carried out or proposed by DOS with respect to the implementation of this PA, DOS and GSA shall consult with the objecting Party to resolve the objection.
1. If, after initiating such consultation, DOS and GSA determines that the objection cannot be resolved through consultation, DOS and GSA shall forward all documentation including without limit, documentation of DOS and GSA's responses to the objections, as submitted by the Party or Parties relevant to the objection, to the ACHP, in accordance with 36 CFR 800.2(b)(2). Within 30 days after receipt of all adequate documentation, the ACHP shall exercise one of the following options:
a. Upon receipt of documentation from DOS and GSA, the ACHP shall review and advise DOS and GSA on the resolution of the objection. Any comment provided by the ACHP, and all comments from the parties to the PA, will be taken into account by DOS and GSA in reaching a final decision regarding the dispute.
b. If the ACHP does not provide written comments to DOS and GSA regarding the dispute within 30 days after receipt of adequate documentation, DOS and GSA may render a decision regarding the dispute. In reaching its decision, DOS and GSA will take into account all comments regarding the dispute from the parties to the PA.
2. DOS and GSA's responsibility to carry out all other actions subject to the terms of this PA that are not subject to the dispute, remain unchanged. DOS and GSA will notify all Parties of its decision in writing before implementing that portion of the Undertaking subject to dispute under this stipulation. DOS and GSA's decision will be final.
VI. Amendments

If any Signatory to this PA determines that its terms will not or cannot be carried out or that an amendment to its terms must be made, that party shall immediately consult with the other parties to develop an amendment to the PA pursuant to 36 CFR Part 800.(c)(8). The amendment will be effective on the date a copy signed by all of the original signatories is filed with the ACHP. If the Signatories cannot agree to appropriate terms to amend the PA, any Signatory may terminate the agreement in accordance with Stipulation V.
VII. Termination

If the PA is not amended following the consultation set out in Stipulation IV, it may be terminated by any signatory. Within 30 days following termination, DOS and GSA shall notify the Signatories if it will initiate consultation to execute a new PA with the signatories under 36 CFR Part 800.6(c) (7) and 800.6(c) (8), or request the comments of the ACHP under 36 CFR Part 800.7(a), and proceed accordingly.
VIII. Execution

DOS and GSA will carry out their commitments as outlined in the PA; however this PA is subject to applicable laws and regulations. As to the Signatories only, fulfillment of this PA is subject, pursuant to the Anti-Deficiency Act, 31 U . S.C. 1341 et seq., to the availability of funds. This PA is not an obligation of funds in advance of an appropriation of such funds, and it does not constitute authority for the expenditure of funds. If a Signatory does not have sufficient funds available to fulfill the stipulations of this PA, such Signatory shall so notify the other Signatories and shall take such actions as are necessary to comply with all requirements of 36 CFR Part 800 . Nothing in this PA shall be deemed to authorize an expenditure of funds in violation of the Anti-Deficiency Act U.S.C. 1341 et seq.
IX. Duration

This PA will be null and void if its terms are not carried out within 15 years from the date of its execution. Prior to such time, DOS GSA may consult with the other Signatories to reconsider the terms of the PA and amend it in accordance with Stipulation IV.
X. Monitoring and Reporting

Following the execution of this PA until it expires or is terminated, DOS shall provide all the signatories to this PA a summary report detailing work undertaken pursuant to its terms at the completion of each phase. Such report shall include any scheduling changes proposed, any problems encountered,
and any disputes and objections received in DOS and GSA's efforts to carry out the terms of this PA.
XI. Signatures

Execution and implementation of this PA by the Signatories and implementation of its terms, evidence that DOS and GSA has afforded SHPO and ACHP an opportunity to comment on the Undertaking, and that DOS and GSA have considered the effects of its action on historic properties and fully complies with 36CFR Part 800, and Sections 110 and 111 of the NHPA.
(Please see the following page for signatures)

\section*{FOR THE DEPARTMENT OF STATE}
\(B y\) :

Adam H. Bodner
Date
Director
Office of Real Property Management
FOR THE GENERAL SERVICES ADMINISTRATION
By:

Bart Bush
Date
Regional Commissioner
Public Buildings Service
National Capital
\(B y:\)

\author{
Beth Savage \\ Federal Preservation Officer \\ Office of Chief Architect \\ Public Buildings Service \\ National Office
}

FOR THE District Of Columbia STATE HISTORIC PRESERVATION OFFICE \(B y:\)

David Maloney
Date
State Historic Preservation Officer
FOR THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
\(B y:\)

John Fowler
Date
Executive Director

FOR THE NATIONAL ACADEMY OF SCIENCES
\(B y:\) \(\qquad\)
Date: \(\qquad\)

FOR THE AMERICAN PHARMACEUTICAL ASSOCIATION
\(B y:\) \(\qquad\)
Date: \(\qquad\)

FOR THE NATIONAL PARK SERVICE
By: \(\qquad\)
Date: \(\qquad\)

\section*{APPENDIX D}

\section*{Corner Marker Partial Plan and Rendering}

Partial Plans and Exterior Elevations for the Proposed Perimeter Security Elements at NAS


Partial Plan-23rd and C Street


\section*{23rd and C Street Redering}

Corner Marker Partial Plan and Rendering



National Academy of Sciences KEY PLAN
\(\overbrace{0}^{\text {Noph }}\)

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[^0]:    ${ }^{1}$ As specified in the 2004 Concept Plan, railings are planned as security measures around the perimeter of the Harry S Truman Building. This is subject to change during phases of construction.

[^1]:    ${ }^{2}$ As specified in the 2004 Concept Plan, railings are planned as security measures around the perimeter of the Harry S Truman Building. This is subject to change during later phases of construction.

[^2]:    ${ }^{3}$ As specified in the 2004 Concept Plan, railings are planned as security measures around the perimeter of the Harry S Truman Building. This is subject to change during later phases of construction.

[^3]:    ${ }^{4}$ As specified in the 2004 Concept Plan, railings are planned as security measures around the perimeter of the Harry S Truman Building. This is subject to change during phases of construction.

[^4]:    ${ }^{5}$ The Baist real estate maps for 1957 and 1965 show the width of the cartway of $21^{\text {st }}$ Street between C Street and Virginia Avenue as 43 feet, although it depicts the street as wider near Virginia Avenue. Streetwidth records from the District of Columbia Department of Transportation, however, indicate that the cartway of $21^{\text {st }}$ Street in this area in 1965 was 48 feet wide.

[^5]:    ${ }^{6}$ The discussion of visual resources in Section 3.3.2 includes information relevant to Section 3.2.1, which addresses historically significant visual resources.

[^6]:    ${ }^{7}$ Information on street widths was taken from the 1932 and 1965 Baist's Real Estate Atlas of Surveys of Washington, D.C., at the Library of Congress and from a 2006 site survey by Edwards \& Kelsey. This information was compiled in graphic form by Rhodeside \& Harwell for this project.

[^7]:    ${ }^{8}$ Within the project area, D Street is not a contributing element of the L'Enfant and McMillan plan National Register designation.

[^8]:    $110015^{\text {m }}$ Street. NW. Suite 400 * Washington, DC 20005-1707 • 202628-4410 • Fax: 202 783-2351 mww.aphanet.org • www.pharmacist.com

[^9]:    cc: James F. Henchman, Esq.
    David Maloney, DC SHPO
    Nancy Witherell, NCPC

[^10]:    (1) Counts collected by Wells + Associates on Thursday, October 22, 2009 from 7:00 AM to 7:00 PM.
    (2) 30 foot box truck.
    (3) 40 foot box truck, may or may not be articulated

[^11]:    A District of Columbia, Maryland and Virginia Transit Partnership

[^12]:    A District of Columbia,
    Maryland and Virginia
    Transit Partnership

[^13]:    Schedule 7-20-08

[^14]:    A District of Columbia,
    Maryland and Virginia
    Transit Partnership

[^15]:    Schedule 6-29-08 Reprinted 7-14-09

