

# WELLS + ASSOCIATES

## MEMORANDUM



**To:** TDM Planner  
Arlington County Department of Environmental Services

**From:** Michael Pinkoske, PTP  
Evan Gittelman

**Copy:** Andrew A. Painter  
Walsh, Colucci, Lubeley & Walsh, P.C.

**Subject:** 1616 Fort Myer Drive  
Preliminary Transportation Management Plan  
Arlington County, Virginia

**Date:** June 2, 2021

---

1420 Spring Hill Road  
Suite 610  
Tysons, Virginia 22102  
703-917-6620  
703-917-0739 FAX  
[www.mjwells.com](http://www.mjwells.com)

### Introduction

This document presents a preliminary Transportation Management Plan (TMP) for the 1616 Fort Myer Drive redevelopment project. The site is bounded by Fairfax Drive to the south and Fort Myer Drive to the east in the Rosslyn neighborhood of Arlington County, Virginia. The Applicant, Teachers Insurance and Annuity Association of America, has filed a 4.1 Site Plan application to develop the site with approximately 691 multifamily dwelling units. The subject site is well served by ART and Metrobus bus lines and is conveniently located approximately 950 feet from the Rosslyn Metrorail Station which provides service to the Blue, Orange, and Silver lines.

The preliminary TMP has been developed for implementation by the developer/building owner and consists a number of strategies and methods to contribute individually and in combination to achieving objectives outlined as part of the Arlington County Transportation Demand Management (TDM) program.

### Transportation Management Plan

The Developer/Owner agrees to obtain the approval of the County Manager or his designee for such plan prior to the issuance of the first Certificate of Occupancy (CO) for the building. Upon approval of the TMP by the County Manager, the Developer agrees to implement all elements of the plan with assistance, when appropriate, by agencies of the County. Unless otherwise specified, the Developer agrees that all individual elements of this TMP shall be operational prior to issuance of the First Partial Certificate of Occupancy for Tenant Occupancy.



# WELLS + ASSOCIATES

## MEMORANDUM

Should the TMP include annual assessments, they will be adjusted for inflation by the U.S. Department of Labor, Bureau of Labor Statistics Consumer Price Index (CPI) Inflation Calculator from the date of site plan approval.

The TMP will include a schedule and details of implementation, and continued operation of the elements in the plan. The TMP shall include, but not be limited to, the following strategies.

### Participation and Funding

- a. Establish and maintain an active, ongoing relationship with Arlington Transportation Partners (ATP), or successor entity, at no cost to the developer, on behalf of the property owner.
- b. Designate a member of building management as Property Transportation Coordinator (PTC) to be a primary point of contact with the County and undertake the responsibility for coordinating and completing all TMP obligations. The Developer/Owner and/or building management company will provide, and keep current, the name and contact information of the PTC to Arlington County Commuter Services (ACCS). The PTC shall be appropriately trained, to the satisfaction of ACCS, to provide rideshare, transit, and other information provided by Arlington County intended to assist residents of the building with transportation to and from the site.
- c. In addition to supporting the ongoing activities of the PTC and other commitments of this TMP, the Developer/Owner agrees to contribute to the ACCS, or successor, to sustain direct and indirect on-site and off-site services in support of TMP. Payment on this commitment shall begin as a condition of issuance of the First Partial Certificate of Occupancy for Tenant Occupancy for each respective building or phase of construction. Subsequent payments shall be made annually.

### Physical Facilities and Improvements

- a. Provide one (1) transportation information display, which could be electronic, in the residential lobby to provide transportation-related information to employees, residents, guests, and/or visitors. The developer agrees that the required transportation information display will meet the Arlington County Neighborhood Transportation Information Display Standards in effect on the date of the site plan approval, or equivalent as approved by the County Manager.
- b. Comply with requirements of Site Plan conditions to provide bicycle parking/storage facilities, a Parking Management Plan (PMP), a Bicycle Facilities Management Plan, and parking for construction workers.

### Promotions, Services, Policies

- a. Prepare, reproduce, and distribute, in digital or hard copy, materials provided by Arlington County, which includes site-specific transit, bike, walk, and rideshare related information, to each new residential lessee or purchaser, property management employee, or maintenance employee, from initial occupancy through the life of the site plan. These materials shall be



## WELLS + ASSOCIATES

### MEMORANDUM

distributed as a part of prospective tenant marketing materials, as well as communications associated with lease signing, on-boarding, or similar activities.

- b. Provide a one time, per person, to each new residential lessee, property management employee, or maintenance employee, directly employed or contracted, who moves into or begins employment in the buildings throughout initial occupancy, the choice of one of the following:
  - Metro fare (amount to be determined) on a SmarTrip card or successor fare medium;
  - A one-year bikeshare membership;
  - A one-year carshare membership.
- c. Provide, administer, or cause the provision of a sustainable commute benefit program for on-site property management and maintenance employees. The program shall include, at a minimum, pre-tax employee contributions and/or tax-free transit.
- d. Distribute a new-resident package, or similar, as specified by the County TDM planner; material provided by Arlington County which includes site-specific ridesharing and transit-related information to each residential lessee. Packages will be distributed to tenants no later than the day of move-in on-site.
- e. Distribute a new-employee package, or similar, as specified by the County TDM planner; material provided by Arlington County which includes site-specific ridesharing and transit-related information for on-site employees. Packages will be distributed to employees no later than their first week of work on-site.
- f. Provide reference to the Rosslyn Metro station and local bus routes in promotional materials and advertisements for the building.
- g. Cooperate with Arlington County to assist the County in implementing a transit-advertising program that will distribute information four times per year to employees, residents, guests, and visitors.

### Performance and Monitoring

- a. Upon approval of the TMP by the County, the Developer/Owner agrees to implement all elements of the plan with assistance when appropriate by agencies of the County.
- b. During the first year of implementation of the TMP, and on an annual basis thereafter, the Developer/Owner will submit an annual letter to the County Manager, describing completely and correctly, the TDM related activities of the site.
- c. Conduct a transportation performance monitoring study at two (2) years, five (5) years, and each subsequent five (5) years, after issuance of first Certificate of Occupancy. The County will specify the timing and reasonable scope of the study which may include building occupancy



# WELLS + ASSOCIATES

## MEMORANDUM

rates, average vehicle occupancy, average garage occupancy for various day of the week and times of the day, parking availability by time of day, average duration of stay for short term parkers on various days of the week and times of day, pedestrian traffic, a seven-day count of site-generated vehicle traffic, a voluntary mode-split survey, and hourly/monthly/special event parking rates. The building owner and/or operator shall notify, assist, and encourage building occupants and visitors on site to participate in mode-split surveys which may be online or email variety.

### Summary

The elements of the 1616 Fort Myer Drive TMP will influence the travel behavior of residents, employees, guests, and visitors in an effort to maximize the use of the transportation facilities available. The TMP will reduce peak hour vehicle-trips, reduce parking demand, and promote use of alternative transportation modes.



# **1616 N. FORT MYER DRIVE**

## **MULTIMODAL TRAFFIC IMPACT ANALYSIS**

**November 12, 2021**



# 1616 N. Fort Myer Drive

## Multimodal Traffic Impact Analysis

### Arlington County, Virginia

November 12, 2021

Prepared by:

**Wells + Associates**

Michael J. Workosky, PTP, TOPS, TSOS  
Grady Vaughan, P.E.  
Evan S. Gittelman

703-917-6620

[www.WellsAndAssociates.com](http://www.WellsAndAssociates.com)



[@WellsAssoc](https://twitter.com/WellsAssoc)



[@WellsandAssociates](https://www.facebook.com/WellsandAssociates)



[Wells + Associates](https://www.linkedin.com/company/Wells+Associates)

## 1616 N. FORT MYER DRIVE

### SECTION 1 INTRODUCTION

This report presents the results of a Multimodal Traffic Impact Analysis for the proposed redevelopment of 1616 N. Fort Myer Drive, located in Arlington County, Virginia to accompany the 4.1 Site Plan Submittal. As shown in Figure 1-1, the subject site is comprised of one block, bounded by N. Fort Myer to the east and Fairfax Drive to the south.

The Applicant proposes to demolish the existing 300,000 SF office building and redevelop the site with up to 691 residential dwelling units.

The proposed uses would be served by on-site structured parking. Access to the parking and loading facilities would be provided via the two (2) proposed entrances, one (1) located along N. Fort Myer Drive that will be used primarily as pick-up/drop-off to the site and one (1) located along Fairfax Drive at the southwest end of the property that would serve as the main entrance for residents, visitors and loading/deliveries to the site. A copy of the rendered site plan is shown in Figure 1-2.

The current zoning designation for the site is C-O-ROSSLYN (Commercial Office Building, Retail, Hotel, and Multiple-Family Dwelling Districts). The subject parcel is designated as High-Density Office-Apartment-Hotel on the Arlington County General Land Use Plan (GLUP).

#### Study Scope

A scoping meeting was held with Arlington County staff on May 11, 2021 and identified nine (9) study intersections for inclusion in the traffic study. The approved scoping document also identified the parameters of the multimodal traffic study and analysis methods, and is included in Appendix A. For purposes of this study, the buildout year was assumed to be 2025.

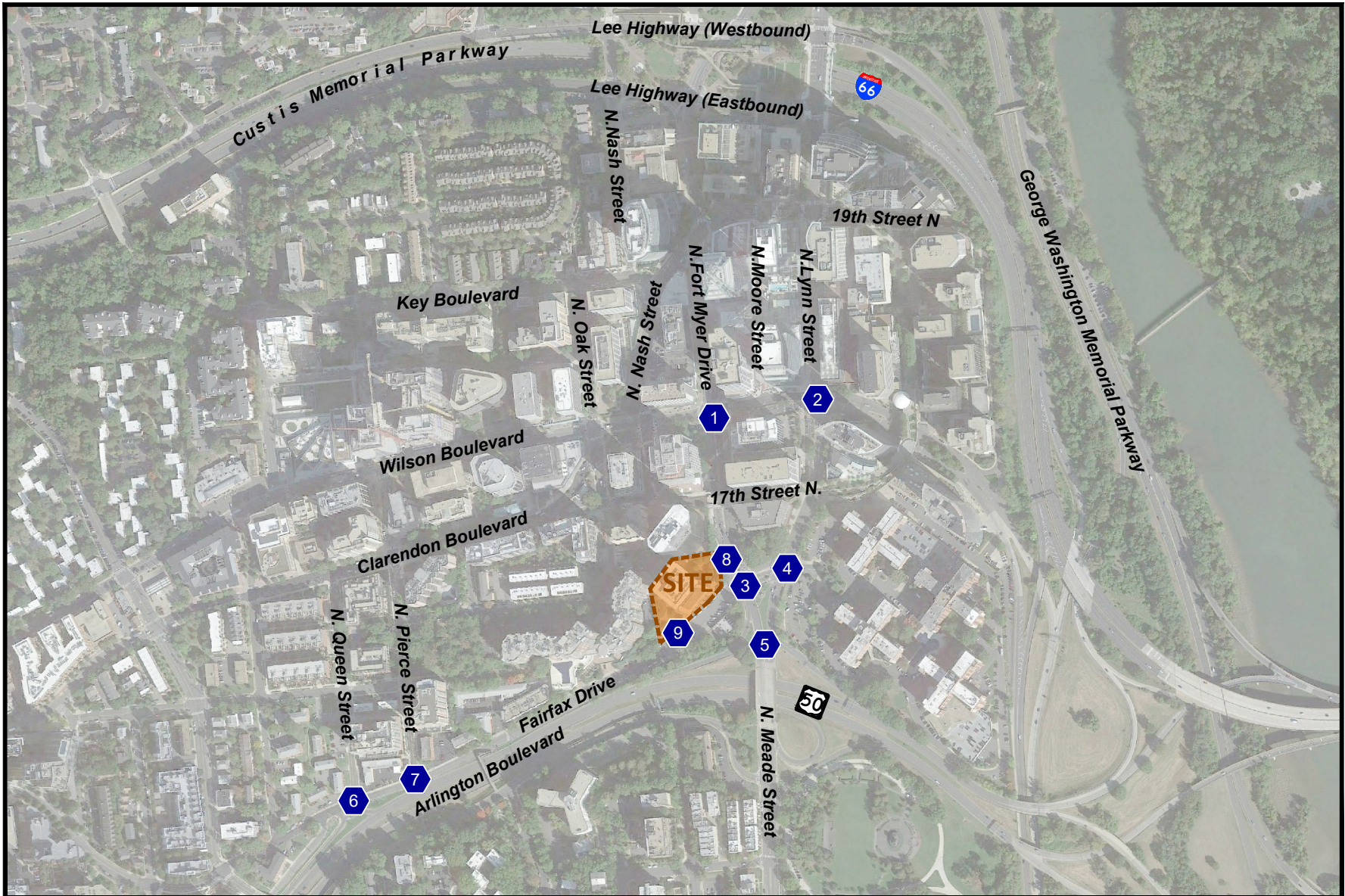
Tasks undertaken in this study include the following:

1. Reviewed proposed development plans, recently completed traffic impact studies in the vicinity, and other background data.
2. Completed a field reconnaissance of existing roadway and intersection geometries, traffic controls, speed limits, and adjacent on-street parking restrictions.
3. Conducted a comprehensive multimodal analysis of the site including transit, walkability, and bicycle facilities. The study determined what options, other than vehicular, are


available to all users of the site. The study includes bus ridership information, metro ridership information, bike-sharing facilities, and pedestrian infrastructure inventory.

4. Established a study scope and specific analysis parameters for the TIA with Arlington County Department of Environmental Services (DES) staff (see Appendix A).
5. Conducted operational analyses of existing levels of service (LOS) and vehicle queues at the study intersections based on the existing peak hour traffic volumes, the existing intersection geometries, and traffic controls.
6. Forecasted future traffic volumes for the year 2025 without the proposed development based on existing traffic volumes with the addition of regional traffic growth and approved pipeline developments.
7. Analyzed 2025 future LOS and queues without the proposed development at the study intersections based on the future forecasts without development, the future intersection geometries, and traffic controls.
8. Estimated the number of peak hour trips that would be generated by the buildout of the proposed development based on standard Institute of Transportation Engineers (ITE) Trip Generation Manual, 10<sup>th</sup> Edition rates and equations.
9. Prepared future traffic forecasts for study year 2025 with the proposed development based on background traffic volumes and traffic associated with the proposed development.
10. Analyzed year 2025 future levels of service and vehicle queues with the proposed development at the study intersections and site driveways, based on the future traffic forecasts and future intersection geometries and traffic controls.
11. Identified traffic improvements/enhancements necessary to mitigate future forecasts as a result of the proposed development for 2025 conditions, if required.
12. Prepared a comprehensive discussion of the safety analysis of the site, including crash data and summary tables.





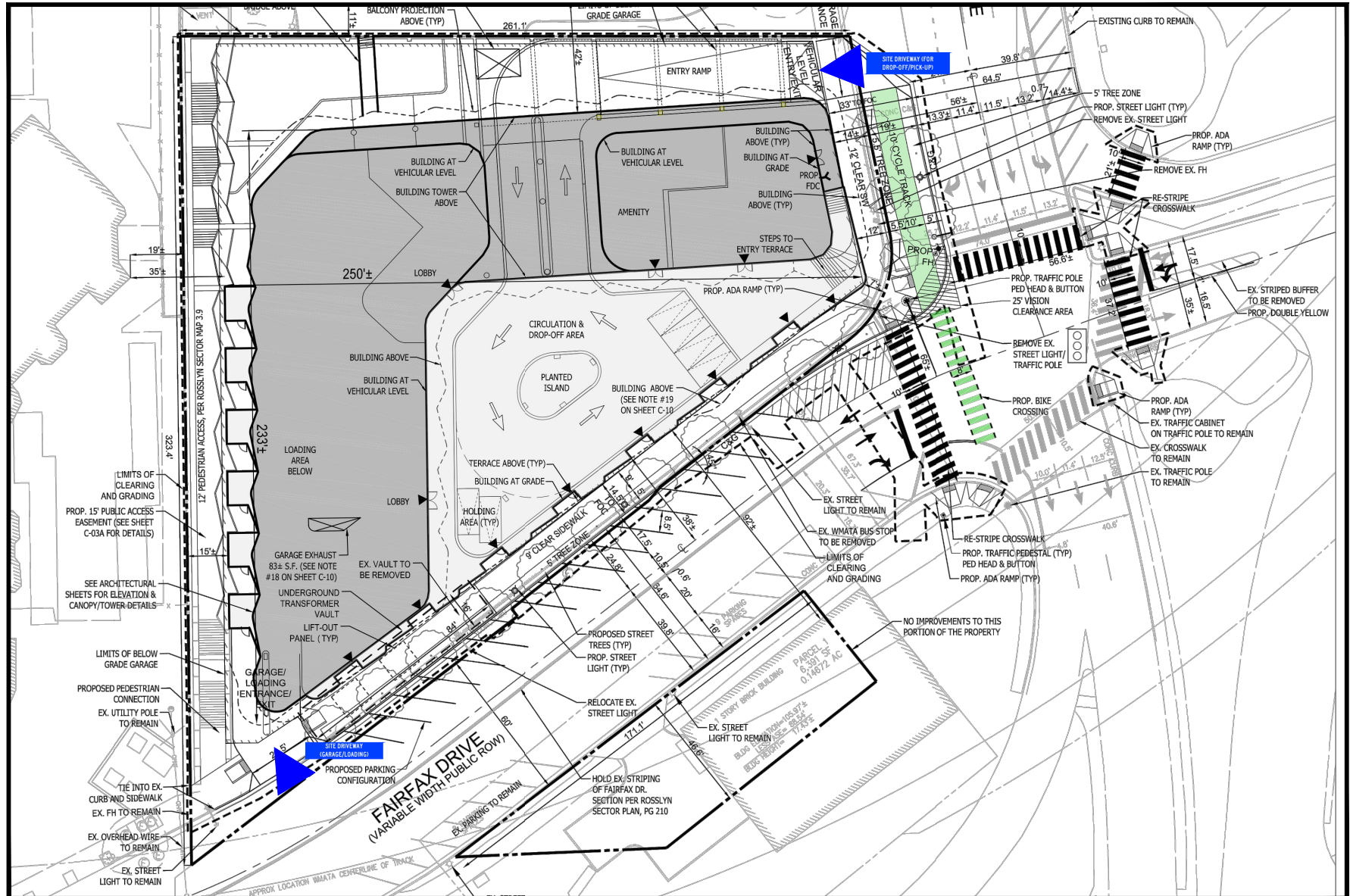
**Figure 1-1**  
Site Location and Study Intersections

 Study Intersection



NORTH

1616 N Fort Myer Drive  
Arlington County, VA



Plan Provided By: VIKA



NORTH

1616 N Fort Myer Drive  
Arlington County, VA

Figure 1-2  
Site Plan



## SECTION 2 BACKGROUND INFORMATION

### Existing Transportation Facilities

Roadway Network. Vehicular access to/from the existing 1616 N. Fort Myer Drive is provided via two (2) curb cuts, one (1) along N. Fort Myer Drive and one (1) on Fairfax Drive. Regional access to/from the site is provided via Lee Highway (US 29), Interstate 66, Jefferson Davis Highway, Arlington Boulevard, and the George Washington Memorial Parkway. Local access to the site is provided via Fairfax Drive, N. Fort Myer Drive/N. Lynn Street, N. Meade Street, and Wilson Boulevard. Existing lane use and traffic controls at the key study intersections are shown on Figure 2-1. A description of each roadway in the vicinity of the site is provided below:

N. Fairfax Drive is classified as a Major Collector with a speed limit of 25 miles per hour (mph). N. Fairfax Drive provides an east-west connection between N. Fort Myer Drive/N. Lynn Street to the east and N. Courthouse Road to the west. The primary access point for the site is located along N. Fairfax Drive.

N. Fort Myer Drive/N. Lynn Street are classified as a Minor Arterial with posted speed limits of 25 miles per hour (mph) in the vicinity of the site. N. Fort Myer Drive and N. Lynn Street each serve one-way traffic and act as the major north-south route through Rosslyn. These roadways provide a connection to the George Washington Memorial Parkway and Francis Scott Key Bridge to the north and Arlington Boulevard (US Route 50) to the south. The pick-up/drop-off access point for the site is located along N. Fort Myer Drive. Modifications are planned for N. Lynn Street between U.S. Route 50 as part of Arlington County's repaving and remarking program. The existing lane markings and bike lane will be modified to create a protected bike lane heading north along N. Lynn Street.

Wilson Boulevard is classified as a Principal Arterial with a posted speed limit of 25 miles per hour (mph) in the vicinity of the site. In the vicinity of the site, Wilson Boulevard serves two-way traffic from N. Nash Street to the east and acts as a major east-west route through Arlington County. Wilson Boulevard provides on-street parking for portions of the roadway and exclusive turn lanes at some study intersections.

N. Meade Street is classified as a Major Collector with a posted speed limit of 30 miles per hour (mph) in the vicinity of the site. N. Meade Street provides a north-south connection between U.S. Route 50 and N. Marshall Drive to the south.

Lee Highway (US 29) is classified as a Principal Arterial with a posted speed limit of 30 miles per hour (mph) in the vicinity of the site. Lee Highway is a major east-west connection through northern Arlington County, spanning from Rosslyn to the east, extending through Falls Church, and continuing into Fairfax County.

Jefferson Davis Highway (US 110) is classified as a Principal Arterial with a posted speed limit of 45 miles per hour (mph). Jefferson Davis Highway is a major north-south connection that provides a route between the City of Alexandria and Arlington County.

Arlington Boulevard (US 50) is classified as a Principal Arterial with a posted speed limit of 45 miles per hour (mph). Jefferson Davis Highway is a major east-west connection that provides a route between Fairfax and Arlington County.

George Washington Memorial Parkway is classified as a Freeway or Expressway with a posted speed limit of 40 miles per hour (mph). The George Washington Memorial Parkway is a major north-south connection through Arlington County, spanning from Mount Vernon in the south to Capital Beltway (I-495) to the north. This roadway provides access to/from Reagan National Airport.

Interstate-66 is classified as an Interstate with a posted speed limit of 55 miles per hour (mph). Interstate-66 is a major east-west connection throughout northern Virginia and connecting to Interstate-81 to the west and terminating in Washington DC to the east. Interstate 66 has always been restricted to HOV 2+ only during peak periods in the peak direction inside the beltway. Recent upgrades have installed tolling systems to permit single occupancy vehicles to pay a flexible toll and use the roadway during peak periods.

Figure 2-2 shows the on-street parking restrictions within close proximity to the site. As shown, limited on-street parking currently exists along the site frontages of N. Fort Myer Drive and Fairfax Drive.

### **General Land Use Plan (GLUP)**

The General Land Use Plan (GLUP) is an element of Arlington County's Comprehensive Plan and is the primary policy guide for future development within the County. The GLUP is used to establish the overall character, extent and location of various land uses. It serves as a guide to communicate the policy of the County Board to citizens, the business community, developers and others in the development of Arlington County.

The subject site is located inside of the Rosslyn Coordinated Redevelopment District on the south side of Wilson Boulevard between N. Fort Myer Drive and Fairfax Drive. The purpose of this district is to encourage the physical and economic development of the Rosslyn area to maximize Rosslyn's potential, to become a competitive first-class urban center which exemplifies superior architecture and excellent urban design. The plan provides a set of vision goals and recommendations that include the following:

- A diverse mix of workplaces, housing, retail, and visitor destinations;
- A physical environment with an emphasis on walkability and the public realm;
- A "Peaks and Valleys" approach to building heights that protects priority view corridors, supports an appealing environment at the ground level, creates an attractive, distinctive

skyline with varied heights, and ensures sensitive transitions to surrounding neighborhoods.

- A diverse network of public parks and open spaces that engage the Potomac waterfront, provide active outdoor recreational opportunities and amenities for all ages and lifestyles, and provide opportunities for informal congregation, reflection, and meditation; and
- A transformed transportation network, including an enhanced system of complete streets, improvements to transit facilities and operations.

As mentioned previously, the site is identified as High Density Office-Apartment-Hotel on the plan. The proposed redevelopment is consistent with the goals established in the GLUP. Refer to Figure 2-3 for a detailed map of the Arlington County GLUP in Rosslyn.

## **Rosslyn Sector Plan (Realize Rosslyn)**

A two-year community planning effort involving a diverse group of residents, property owners, and business representatives, Realize Rosslyn culminated in a comprehensive vision and plan to transform this economic hub of the County into a more walkable, dynamic, live-work-shop-play urban center and vibrant gateway to Arlington. On July 23, 2015, the County Board unanimously voted to adopt the Rosslyn Sector Plan. The plan acts as a guide for future development and includes recommendations for certain parks and transportation related elements.

The plan describes four (4) transportation goals within Rosslyn, as follows:

1. Transform Rosslyn's street system into an enhanced grid of complete streets.
2. Enhance transit facilities, operations and connections serving Rosslyn, and make it one of the premier transit hubs in the region.
3. Transform the pedestrian and bicycle network into a safer, more attractive and more accessible place to walk and bike.
4. Coordinate and manage the most effective and efficient performance of Rosslyn's transportation network to support the area's future growth.

Specific transportation improvements noted in the plan include the conversion of Fort Myer Drive and Lynn Street from one-way to two-way, removal of the Fort Myer Drive tunnel, wider sidewalks, and enhancement of bicycle facilities within the core. The plan also includes the extension of 18<sup>th</sup> Street from its current terminus at Oak Street to extend to Arlington Ridge Road as a primary pedestrian way. The subject proposal includes a portion of the 18<sup>th</sup> Street Corridor through the property in the planned location.

The redevelopment of the site is consistent with the Sector Plan recommendations related to right-of-way, streetscape, and the orientation of land uses. Additionally, the proposal includes an east-west pedestrian connection (18<sup>th</sup> Street Corridor) through the site which is consistent with the Plan.

Figures 2-4 through 2-6 show the recommended vehicular circulation, pedestrian facilities, and bicycle facilities from the Rosslyn Sector Plan, respectively.

## **Core of Rosslyn Transportation Study**

As mentioned in the previous section, the County Board adopted the Rosslyn Sector Plan in 2015. This plan included a series of transportation policies and recommendations which the County's transportation study analyzed further. The transportation study was conducted by Kimley Horn and the preferred alternative is currently being discussed for implementation. Next steps for the project include providing the preferred alternative online and integration of the conclusions into the County budget. As the study continues to advance the improvements will become more refined and constructed.

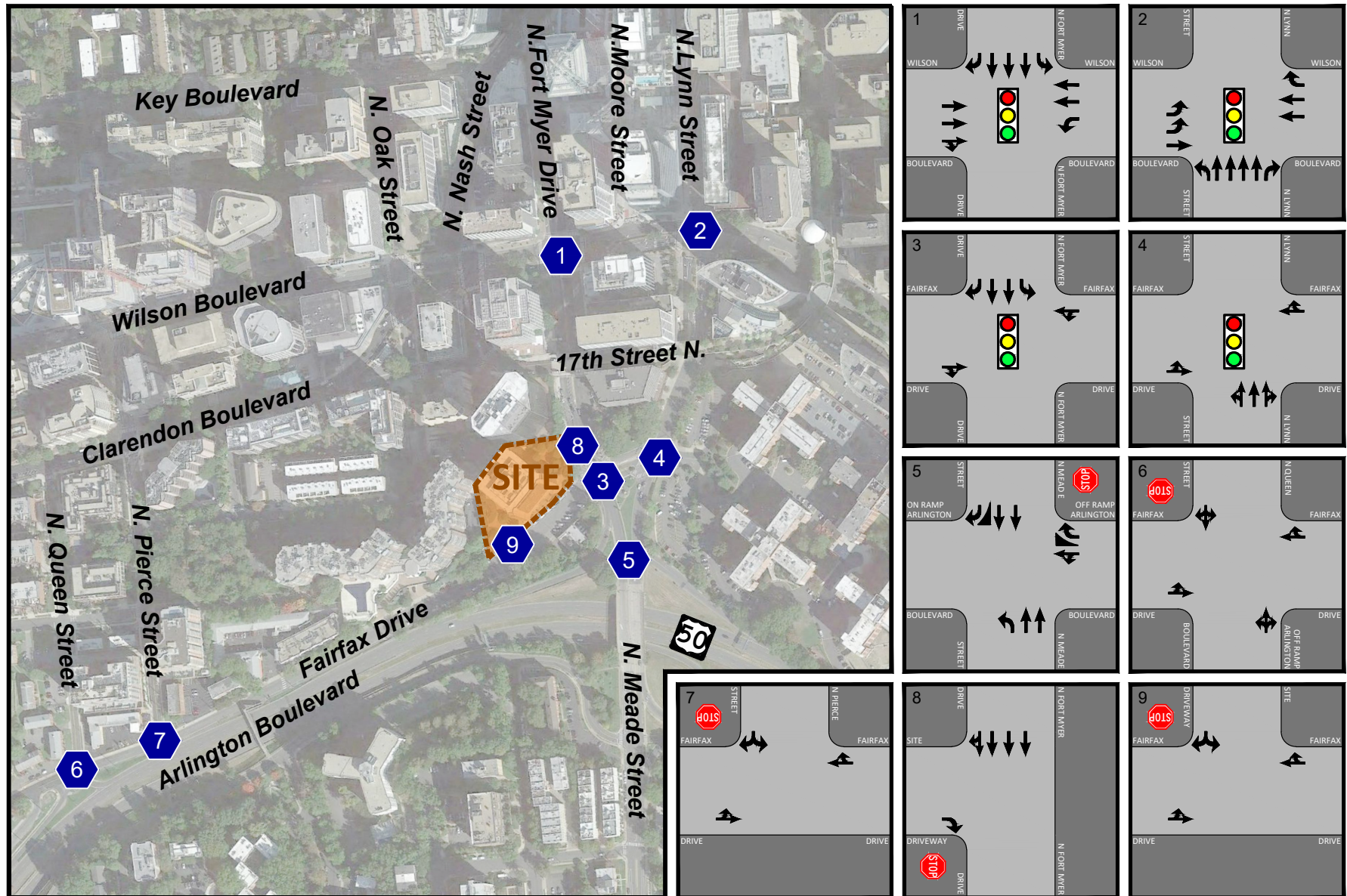


Figure 2-1  
Existing Lane Use and Traffic Control

- ← Represents One Travel Lane
- 🚦 Signalized Intersection
- 🛑 Stop Sign



1616 N Fort Myer Drive  
Arlington County, VA

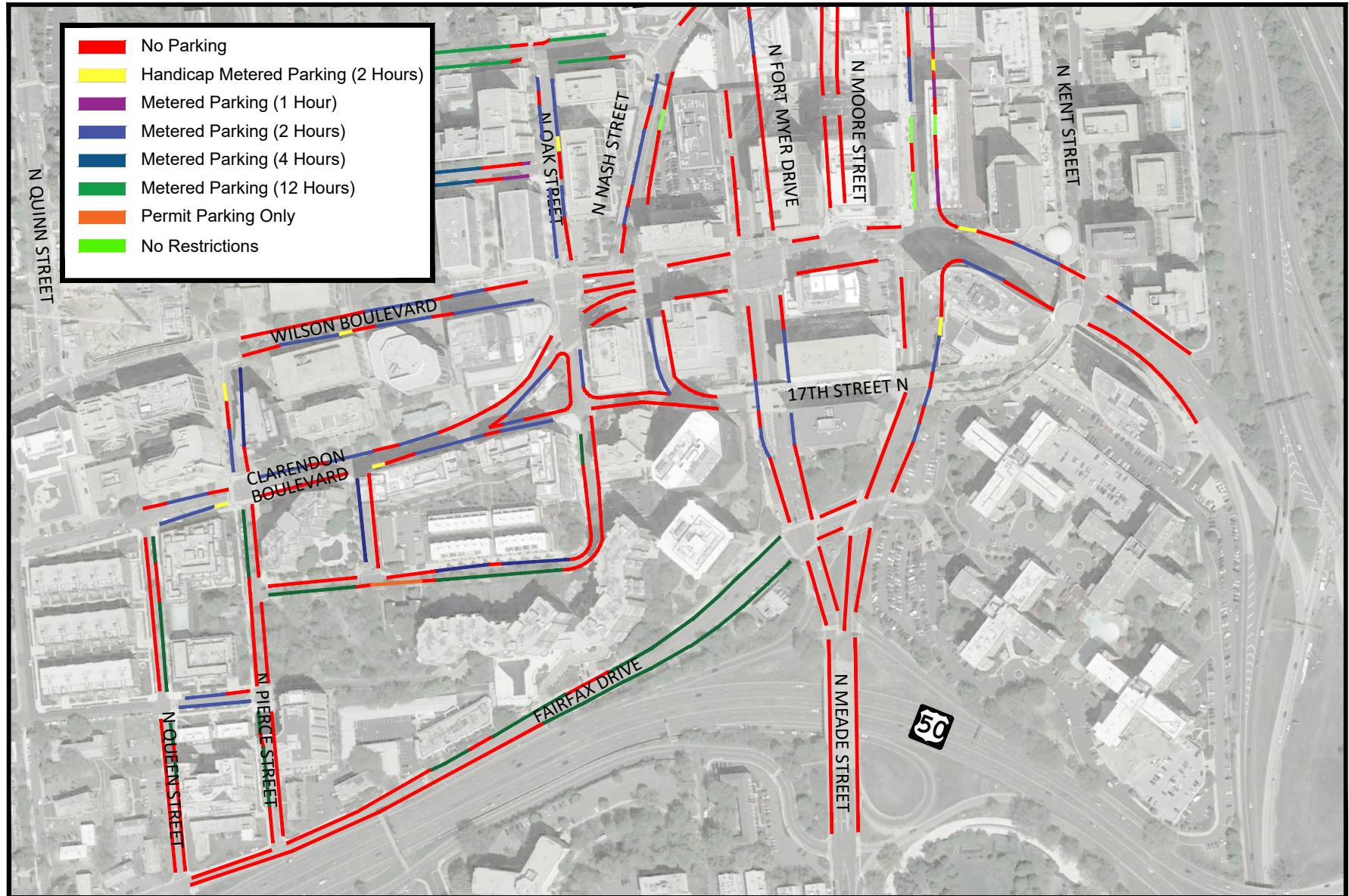


Figure 2-2  
On-Street Parking Restrictions



NORTH

1616 N Fort Myer Drive  
Arlington County, VA



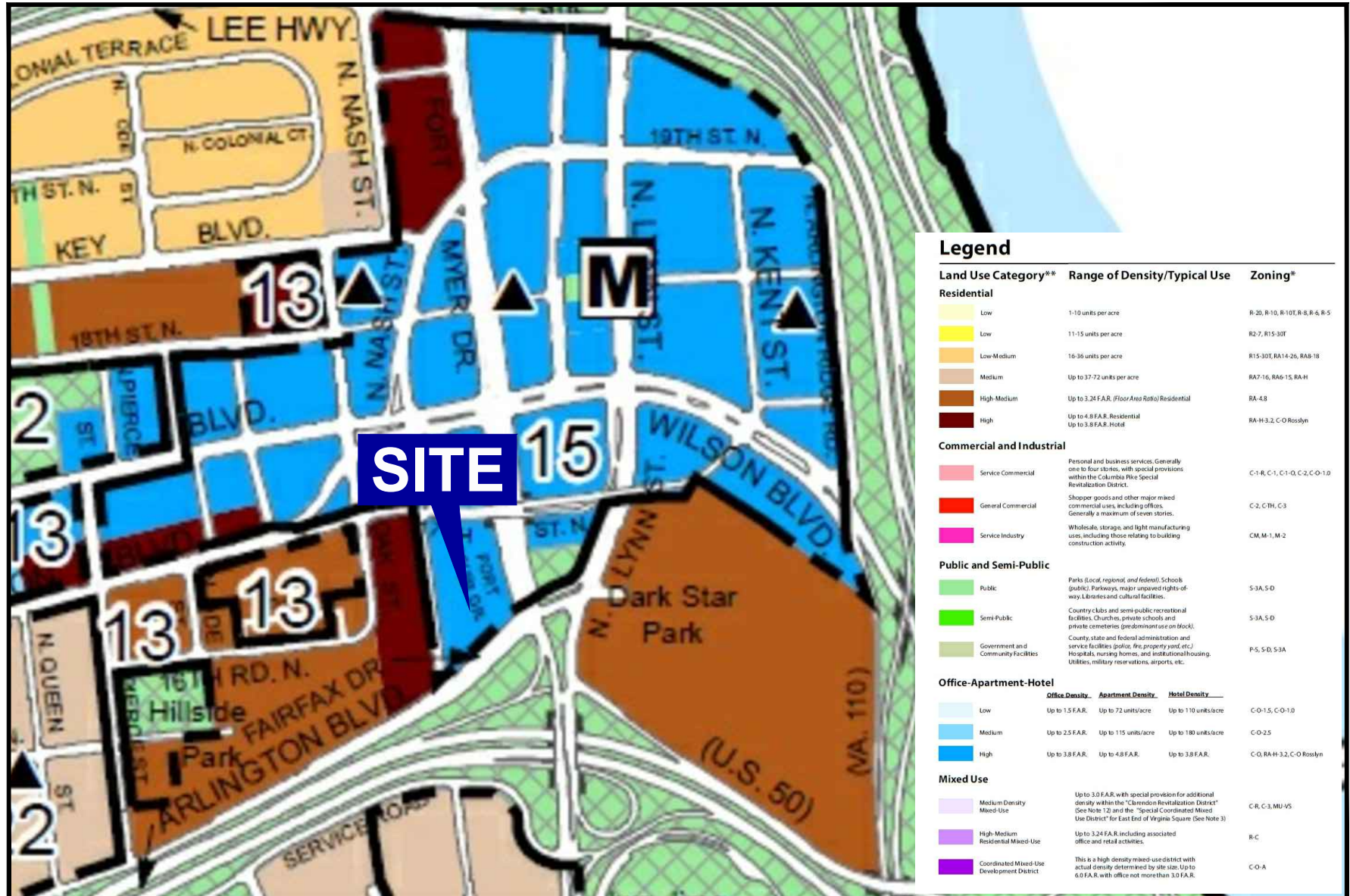


Figure 2-3  
GLUP Map



1616 N Fort Myer Drive  
Arlington County, VA

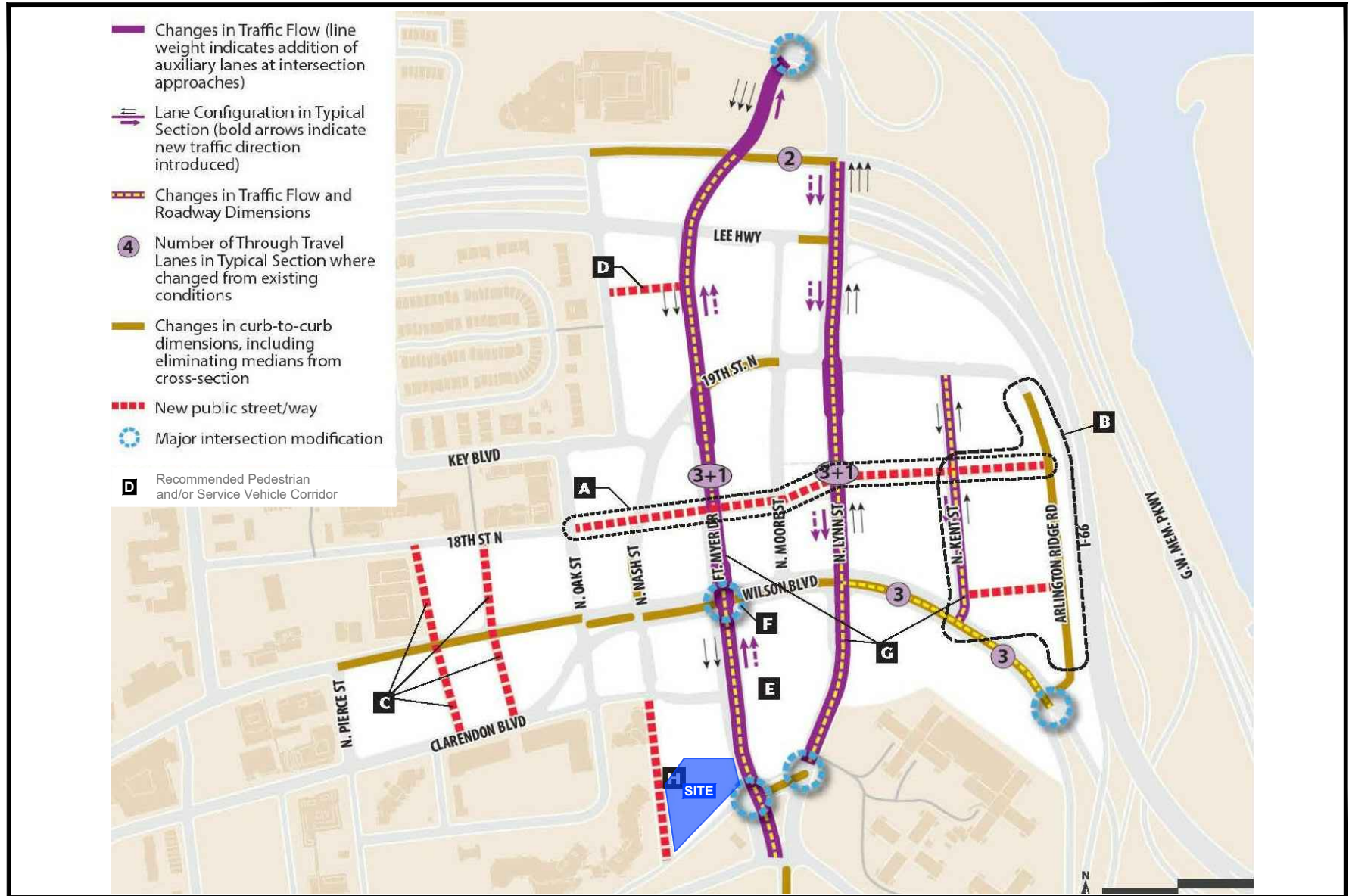


Figure 2-4  
Rosslyn Sector Plan - Roadway Improvements



NORTH

1616 N Fort Myer Drive  
Arlington County, VA

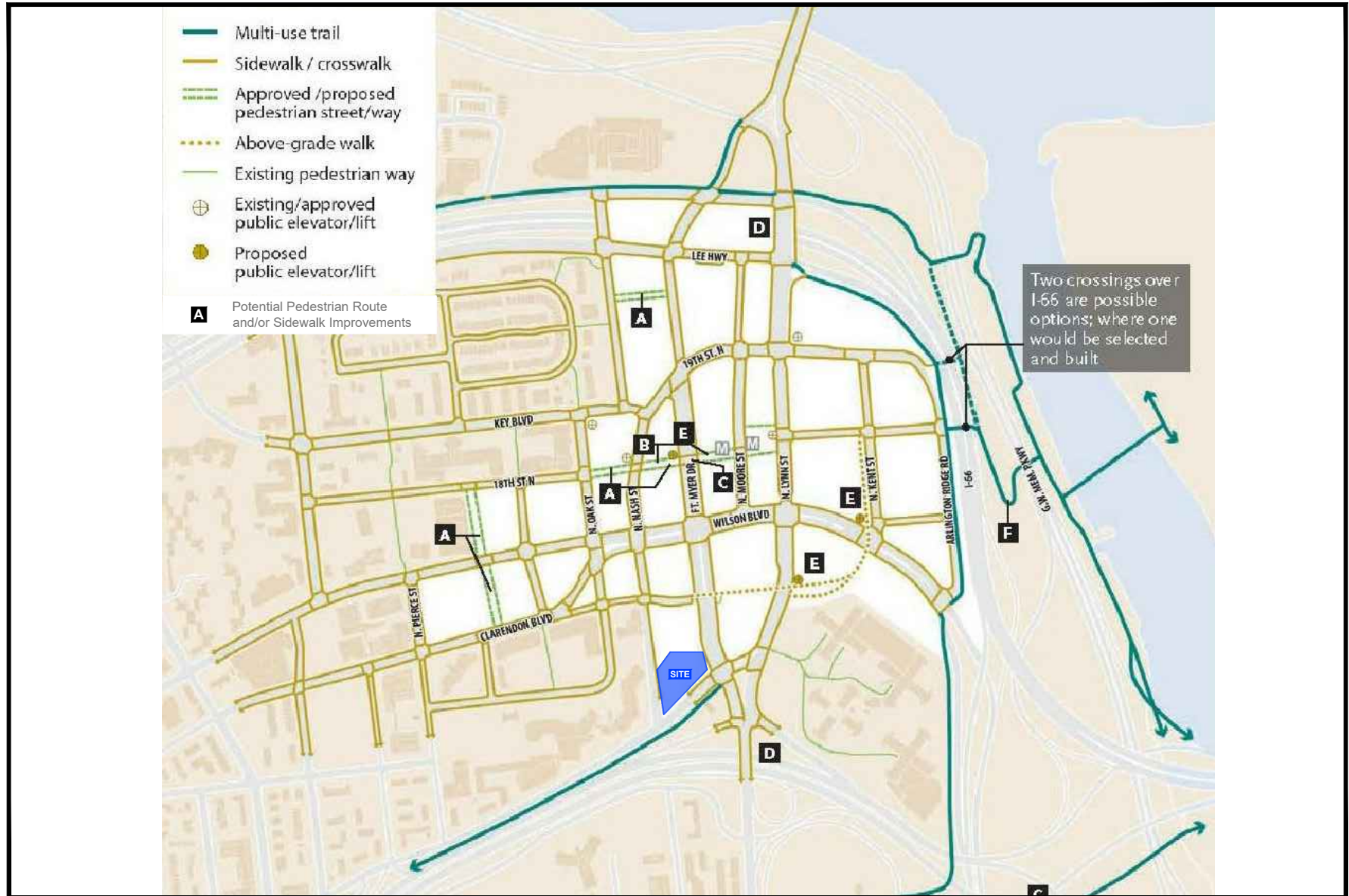


Figure 2-5  
Rosslyn Sector Plan - Planned Pedestrian Network



NORTH

1616 N Fort Myer Drive  
Arlington County, VA

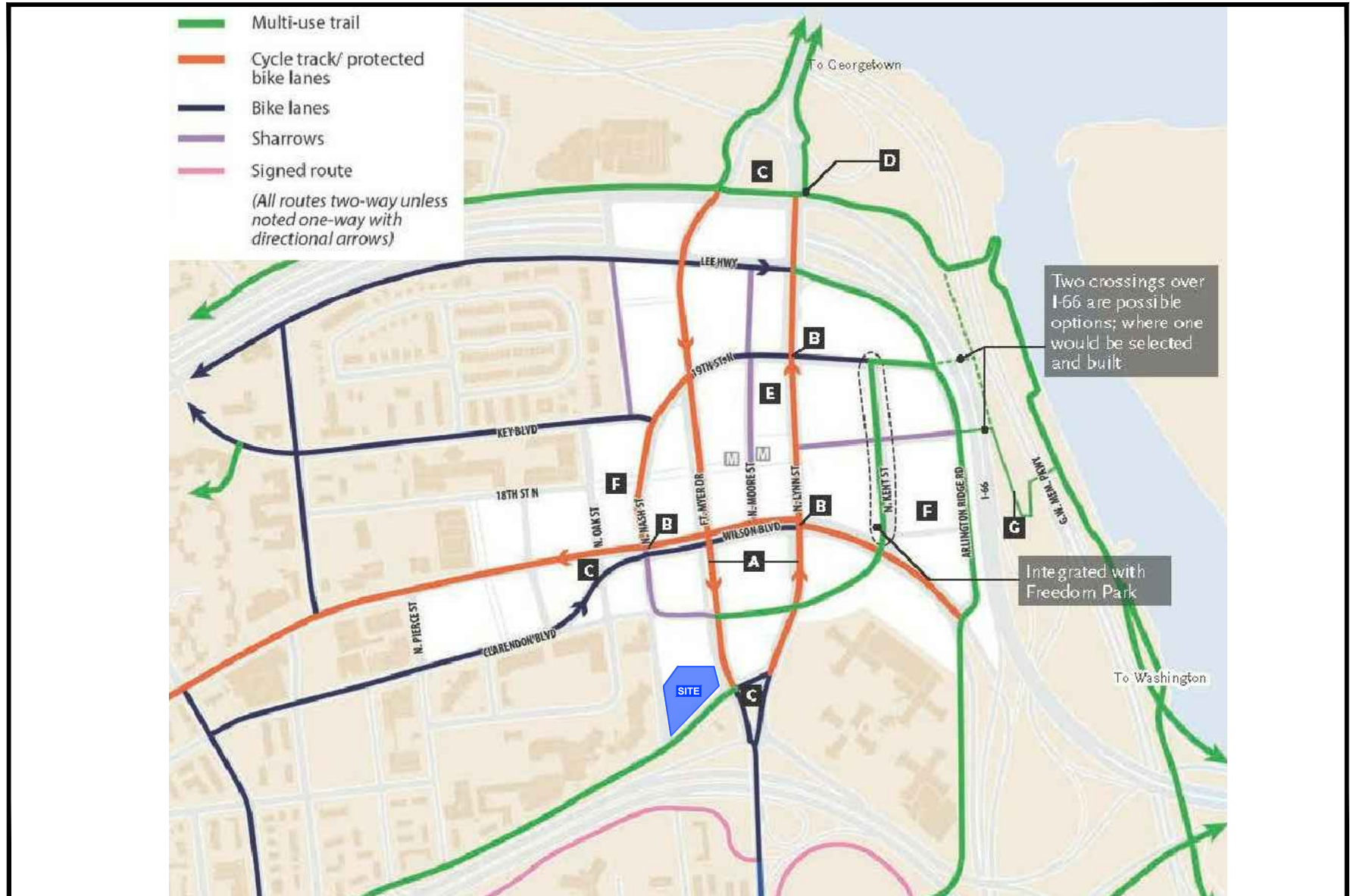


Figure 2-6  
Rosslyn Sector Plan - Planned Bicycle Facilities



NORTH

1616 N Fort Myer Drive  
Arlington County, VA

## SECTION 3 MULTIMODAL TRANSPORTATION FACILITIES

### Overview

The subject site is served by multiple public transportation options including regional bus service; the Washington Metropolitan Area Transit Authority (WMATA) Metrorail system; a connected network of sidewalks and pedestrian crosswalks; car-sharing systems; bike-sharing systems; and on-street and trail bicycle facilities. The subject site is located in the neighborhood of Rosslyn within Arlington County. This neighborhood consists of high-density mixed use with a strong emphasis on non-auto mode share alternatives and complete street initiatives.

### Census Data Mode-Share Information

U.S. Census Data based on the 2015-2019 American Community Survey for census tracts surrounding the site were analyzed to understand travel patterns exhibited by local residents. A total of two (2) census tracts were selected due to their proximity to the site. The average survey results of the selected census tracts indicate that 31% of commuters travel by vehicle, 45% by transit, 14% walk, 4% bike/other, and 5% work from home. Refer to Table 3-1 for a summary and Appendix B for detailed census mode-share information.

### Existing Transit Services

Metrorail Service. The closest Metrorail Station is located approximately 800 feet from the subject site. The Rosslyn Metrorail Station provides access to the Orange, Blue, and Silver lines. The Orange Line runs between New Carrollton and Vienna, the Blue Line between Franconia-Springfield and Largo Town Center and the Silver Line between Largo Town Center and Wiehle-Reston East. Future expansions (anticipated 2022) of the Silver Line will extend service to Loudoun County and Washington Dulles International Airport. Riders can use three (3) lines serving Rosslyn to Metro Center and L'Enfant Plaza for access to the Red, Green, and Yellow lines.

The WMATA Metrorail system operates seven (7) days a week from 5:00 AM to 11:30 PM from Monday to Thursday, 5:00 AM to 1:00 AM on Friday, 7:00 AM to 1:00 AM on Saturdays, and 8:00 AM to 11:00 PM on Sundays. The train headways at the Rosslyn Station range from 8 minutes during peak periods to 12-20 minutes during off-peak periods and weekends.

The Rosslyn Metrorail Station served an average daily ridership of approximately 13,858 passengers in 2019 according to the Metrorail Average Weekday Passenger Boarding's published by WMATA. Refer to Appendix B for Metrorail annual average passenger boarding's at the Rosslyn station.

Bus Service. The 1616 N. Fort Myer site and nearby area are served by numerous bus routes operated by Arlington Rapid Transit (ART), WMATA, and DC Circulator. Below are summaries of the routes that operate in close proximity to the site.

ART Route 43 (Wilson Boulevard – Fort Myer Drive) has stops located approximately 0.15 miles north of the site. This route runs between the Court House Metrorail Station, through the Rosslyn Metrorail Station, and down to the Crystal City Metrorail Station. This bus line operates weekdays with approximately 10-minute headways.

ART Route 45 (N Moore St – Wilson Boulevard) has stops located approximately .15 miles north of the site. This route starts at Columbia Pike, and runs to Courthouse Metrorail station, and the Rosslyn Metrorail Station. This bus line runs operates on weekdays, Saturdays, and Sundays with approximately 20-minute headways during peak periods and 30 minutes otherwise.

ART Route 55 (N Moore St – Wilson Boulevard) has stops located approximately .25 miles north of the site along N. Moore Street. This route runs between the Rosslyn Metrorail Station and the East Falls Church Metrorail Station along Lee Highway (Route 29). The bus line operates on weekdays, Saturdays, and Sundays with 15-minute headways during peak periods.

WMATA Metro Bus 4B (Rosslyn Metrorail Station) has stops located approximately .15 miles north of the site along N. Moore Street. The route runs between the Rosslyn Metrorail Station and the Courthouse Metrorail Station, continues south down to Arlington Boulevard into Fairfax County and ending at Seven Corners Transit Center. The bus line operates on weekdays, Saturdays, and Sundays with 15-minute headways during peak periods.

WMATA Metro Bus 38B (Rosslyn Metrorail Station) has stops located approximately .15 miles north of the site along N. Moore Street. The route runs between the Farragut North Station Metrorail Station near the White House, Farragut West Station Metrorail Station, Foggy Bottom-GWU Metrorail Station, continues south over the Key Bridge to the Rosslyn Metrorail Station, Courthouse Metrorail Station, Clarendon Metrorail Station, Virginia Square-GMU Metrorail Station, and ends at the Ballston-MU Metrorail Station. The bus line operates on weekdays with 15-minute headways.

DC Circulator (Rosslyn Metrorail Station) has stops located approximately .15 miles north of the site along N. Moore Street. The route runs between the Dupont Metrorail Station near Georgetown, and circles south over the Key Bridge to the Rosslyn Metrorail Station. The DC Circulator operates every 10 minutes Monday to Thursday from 6:00 AM to Midnight, Friday from 6:00 AM to 3:00 AM, Saturday from 7:00 AM to 3:00 AM, and Sunday from 7:00 AM to Midnight.

Refer to Figure 3-1 for the locations of bus stops nearby the site and Figure 3-2 for bus routes. Bus stops in the vicinity of the site are detailed in Table 3-2. Specific information for the above listed routes is located in Appendix B.

Average weekday boarding and alighting data was provided by DES staff for five (5) bus stops nearby the site. Ridership data for these stops are summarized in Table 3-3 with the locations identified on Figure 3-1.

**Pedestrian Facilities.** A majority of the streets in Rosslyn provide sidewalks on both sides of the street and marked crosswalks at signalized intersections. The site frontages along N. Fort Myer Drive and N. Nash Street include sidewalks in good repair. Below provides a summary of the pedestrian infrastructure in place at each of the study intersections.

**1. Wilson Boulevard/N. Fort Myer Drive.** The signalized intersection of Wilson Boulevard and N. Fort Myer Drive has marked crosswalks, pedestrian countdown heads, and ramps serving each crosswalk on all four (4) legs of the intersection.

**2. Wilson Boulevard/N. Lynn Street.** The signalized intersection of Wilson Boulevard and N. Lynn Street has pedestrian countdown heads, a marked crosswalk, and ramps serving all four (4) legs of the intersection.

**3. Fairfax Drive/N. Fort Myer Drive.** The signalized intersection of Fairfax Drive and N. Fort Myer Drive has marked crosswalks, pedestrian countdown heads, and ramps serving all four (4) legs of the intersection.

**4. N. Lynn Street/Fairfax Drive.** The signalized intersection of N. Lynn Street and Fairfax Drive has marked crosswalks, pedestrian countdown heads, and ramps serving all four (4) legs of the intersection.

**5. N. Lynn Street/Route 50 On/Off Ramps.** The unsignalized intersection of N. Lynn Street, N. Fort Myer Drive, and the Route 50 On/Off Ramps has marked crosswalks and ramps on two of the four intersection legs.

**6. Fairfax Drive/N. Queen Street.** The unsignalized intersection of Fairfax Drive and N. Queen Street has marked crosswalks and ramps serving the north and south legs of the intersection.

**7. Fairfax Drive/N. Pierce Street.** The unsignalized intersection of Fairfax Drive and N. Pierce Street has marked crosswalks and ramps serving only the north leg of the intersection.

Figure 3-3 shows the pedestrian facilities within the vicinity of the site. Table 3-4 provides a sidewalk width summary adjacent to the site for both the existing and future with development conditions.

In order to provide an assessment of the site's access to pedestrian facilities and nearby amenities, the Walk Score was calculated for the site is included in Appendix B. The Walk Score is an analysis provided by the website and provides scores from 0 (worst) to 100 (best) for walkability. Based on its location, the subject site received a score of 92 which is classified as "Walker's Paradise – Daily errands do not require a car." Further, walk score provides a transit score of 74 which is classified as "Excellent Transit – Transit is convenient for most trips" and a bike score of 70 implying that the site is "Very Bikeable".

The combination of sidewalks in good repair, marked crosswalks at the intersections around the site, installation of ramps to serve the crosswalks, and planting buffers enhance the pedestrian experience around the site and encourage alternative modes of transportation. The site's proximity to the Rosslyn Metrorail station provides for premium transit options for future residents and employees.

**Bicycle Facilities.** According to the 2017 Arlington County Bike Map, cycle tracks are planned to be implemented along both N. Fort Myer Street and Lynn Street. These facilities will provide a critical north-south connection through Rosslyn. The Custis Trail and Wilson Boulevard/Clarendon Boulevard to the north and Fairfax Drive to the south provide major east-west bicycle connection. Refer to Figure 3-4 for the Arlington County Bicycle Facilities Map. As shown, the combination of on-street routes, dedicated bike lanes, off-street trails, nearby Bikeshare, and the on-site bicycle facilities create a bicycle friendly environment and encourage use as a non-auto mode.

Capital Bikeshare is an automated bicycle rental or bicycle sharing program that provides over 4,300 bicycles at 500+ stations across Washington, DC, Maryland, and Virginia. Membership, which is required to use Capital Bikeshare, includes six (6) options for joining: single trip (\$2), 24 hours (\$8), three days (\$17), 30 days (\$28), one year (\$85), or one year with monthly installments (\$96, \$8/month for 12 months). The first 30 minutes of use are free; users then are charged a usage fee for each additional 30-minute period. Bicycles can be returned to any station with an available dock.

Within a ½ mile radius of the site there are three (3) Capital Bikeshare stations, as shown on Figure 3-4, with the closest one located approximately one (1) block northeast of the site at the intersection of N. Lynn Street and Fairfax Drive. A total of 15 docks available at this location. Data provided by Capital Bikeshare indicates that the station was installed in November 2016 and had a peak ridership rate of 3,155 total trips during the summer months. Ridership data for all stations located within the ½ mile radius is summarized in Table 3-5.

In addition to bikeshare, electric-assist scooter sharing, and dock-less bicycles have become readily available throughout the Rosslyn-Ballston Corridor. Users must have an account with the scooter service provider and can then board a scooter wherever available. Fees per ride vary with each service provider, but typically charge a small startup fee and rate per minute. When the user is done with their trip, the scooter is left for the next rider.

## **Safety Analysis**

VDOT published crash data was reviewed in the vicinity of the site and was taken into consideration when determining the safest access scheme into and out of the proposed site. Over the last five (5) year period, there have been zero (0) reported crashes when entering or exiting the two existing driveways that are located on site. While the crash data shows that there were no crashes at the existing site driveways, to the southeast of the site there were multiple crashes along the corridor at the intersection of N. Fort Myer Drive/Fairfax Drive. There were five (5)



crashes that occurred when vehicles were heading south along N. Fort Myer Drive under the overpass and attempted to merge into the other lanes. Two (2) of these crashes were angle crashes while the other three (3) were sideswipe accidents. The closure of the tunnel and bringing N. Fort Myer Drive to grade, should help mitigate the number of conflicts and accidents that occur from the traffic coming off the ramps from Wilson Boulevard and the traffic coming through the tunnel.

All crash data and location graphics are included in Appendix B.

Table 3-1  
 1616 North Fort Myer Drive  
 Neighborhood Modal Split

Mode	Census Tract 1016.03	Census Tract 1017.02	Average
Auto	36%	29%	31%
Transit	46%	44%	45%
Walk	13%	14%	14%
Bike/Other	3%	5%	4%
Worked at Home	1%	9%	5%

Note(s):

1. Based on 2015-2019 American Community Survey 5-Year Estimate Data from the U.S. Census Bureau.

Table 3-2  
 1616 North Fort Myer Drive  
 Bus Stop Summary <sup>1</sup>

Location	Stop ID	Bus Routes Served	Condition
Clarendon Blvd, EB @ N Ode Street	45010	WMATA 38B, WAMATA 4B, ART 45	Sign, Information Case, Shelter with Seating, Overhead Street Lighting, Acceptable Sidewalk Width, Trash Receptacle
Wilson Blvd EB @ Fort Myer Dr	15119	ART 43	Sign, Information Case, No Shelter with Seating, Overhead Street Lighting, Acceptable Sidewalk Width, No Trash Receptacle
Wilson Blvd WB @ N Moore Street	15118	ART 43	Sign, Information Case, No Shelter with Seating, Overhead Street Lighting, Acceptable Sidewalk Width, No Trash Receptacle
N Nash St @ Wilson Blvd	15100	WMATA 38B, WAMATA 4B, ART 45	Sign, Information Case, No Shelter with Seating, Overhead Street Lighting, Acceptable Sidewalk Width, No Trash Receptacle
Wilson Blvd & Oak St	6000702	WMATA 38B, WAMATA 4B	Sign, No Information Case, No Shelter with Seating, Overhead Street Lighting, Acceptable Sidewalk Width, Trash Receptacle

Note(s):

1. Information provided by Arlington County Department of Environmental Services staff, ART, WMATA, Google Earth, and field observations.

Table 3-3  
 1616 North Fort Myer Drive  
 Bus Ridership in the Vicinity<sup>1</sup>

Bus Stop ID	Location	March		April		May		Average	
		Boarding	Alighting	Boarding	Alighting	Boarding	Alighting	Boarding	Alighting
<b>Average Weekday Ridership</b>									
15100	N NASH STREET, NB @ WILSON BOULEVARD, FS	2	14	3	10	2	7	3	11
15103	ROSSLYN METRO BAY E, N MOORE STREET SB @ WILSON, NS	173	144	178	141	156	123	169	136
15118	WILSON BOULEVARD, WB @ N MOORE STREET, FS	15	77	14	77	13	88	14	81
15119	WILSON BOULEVARD, EB @ FORT MYER DRIVE, NS	70	18	74	16	79	14	75	16
45010	CLARENDON BOULEVARD, EB @ N PIERCE STREET, FS	2	13	0	17	4	36	2	22

Note(s):

1. Data provided by Arlington County Department of Environmental Services staff.

Table 3-4  
 1616 North Fort Myer Drive  
 Sidewalk Width Summary<sup>1</sup>

Street Name	Section	Existing Sidewalk Width (feet)	Proposed Sidewalk Width (feet)
N. Fort Myer Drive (West Side)	Wilson Boulevard to Fairfax Drive	10	12
Fairfax Drive (North Side)	N. Pierce Street to N. Fort Myer Drive	7	9

Note(s):

1. Based on Google Earth and field observation.

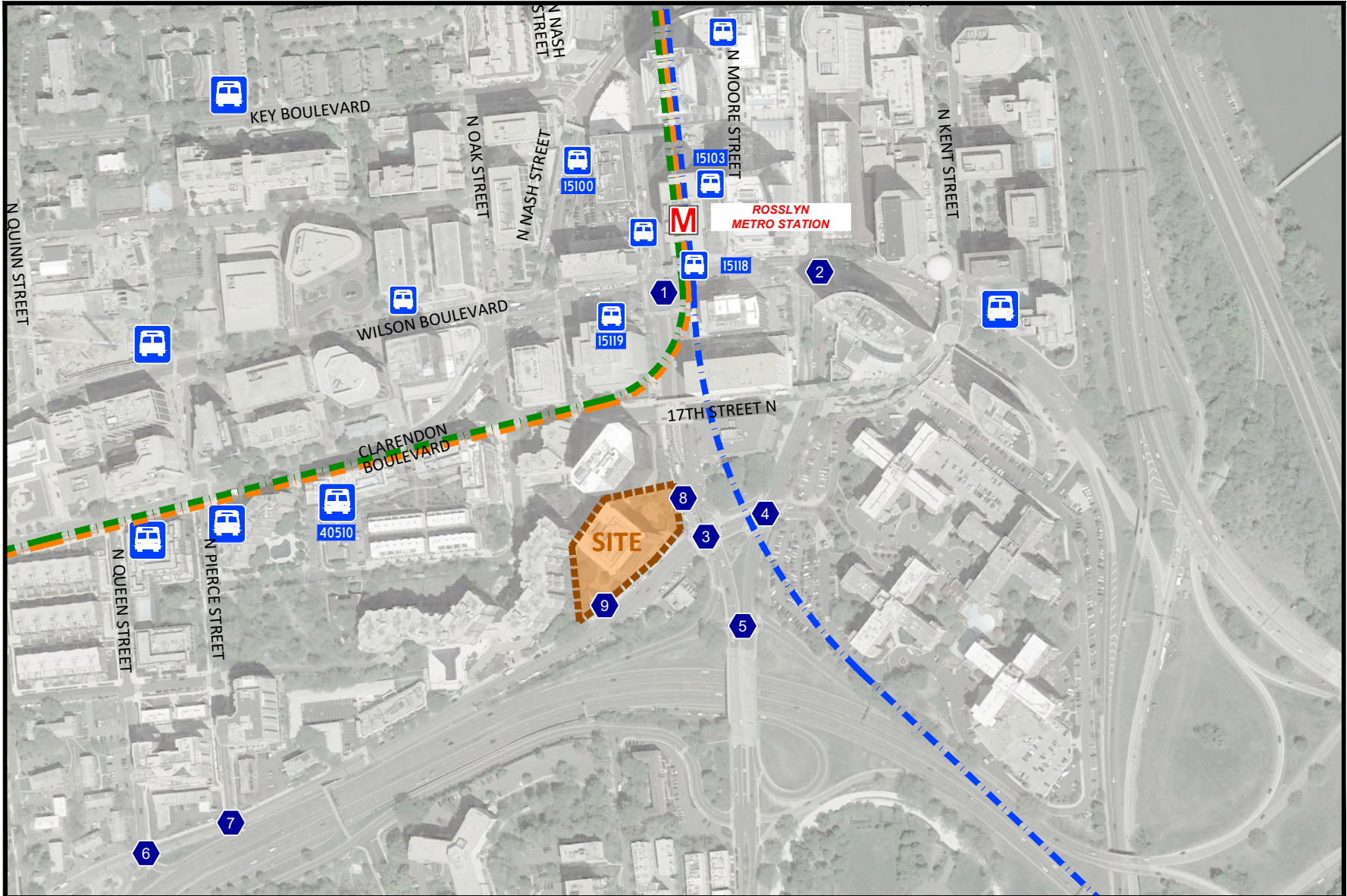


Figure 3-1  
Public Transportation & Carshare



NORTH

1616 N Fort Myer Drive  
Arlington County, VA

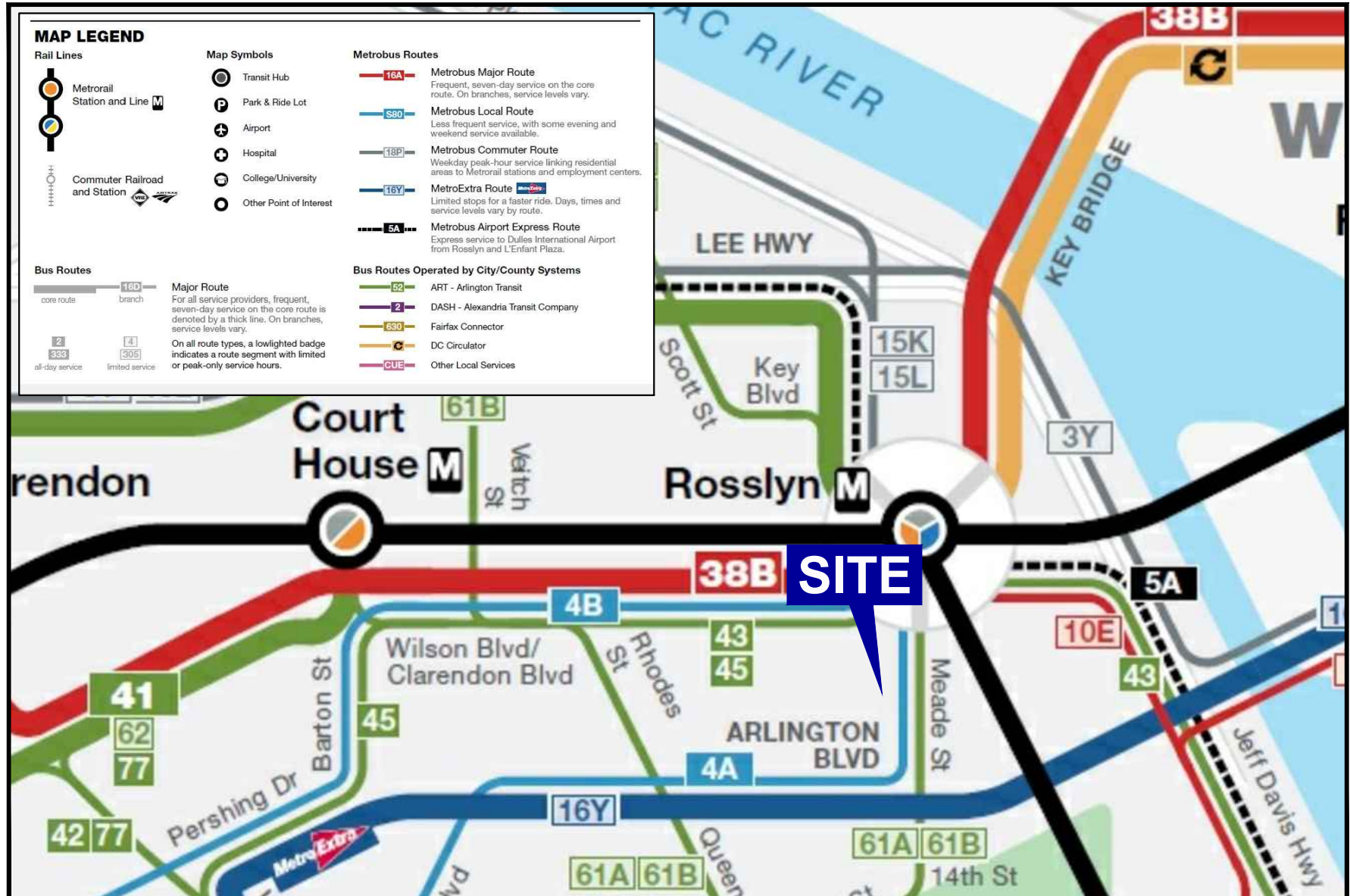


Figure 3-2  
Bus Routes



1616 N Fort Myer Drive  
Arlington County, VA

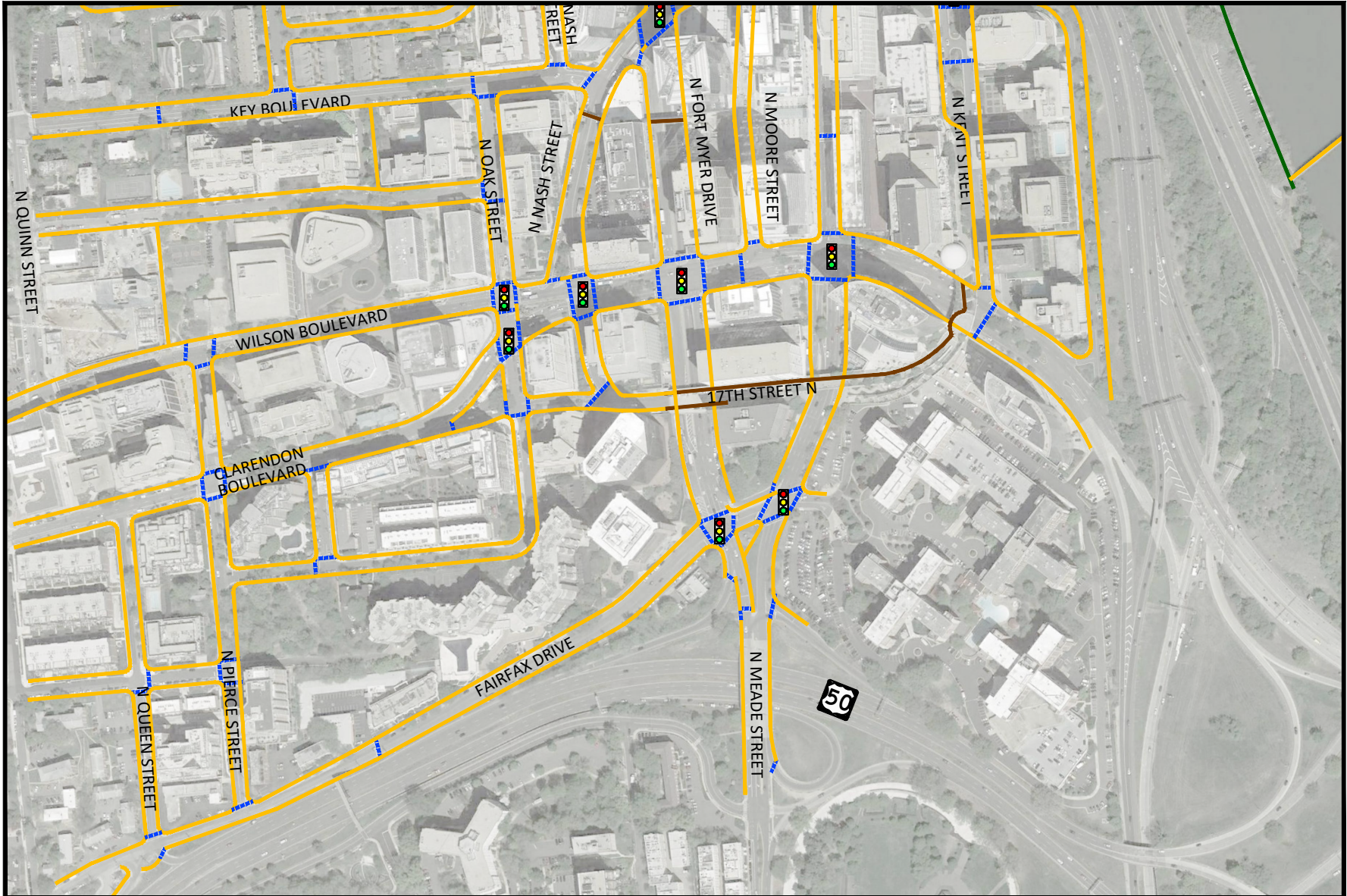


Figure 3-3  
Pedestrian Infrastructure



NORTH

1616 N Fort Myer Drive  
Arlington County, VA



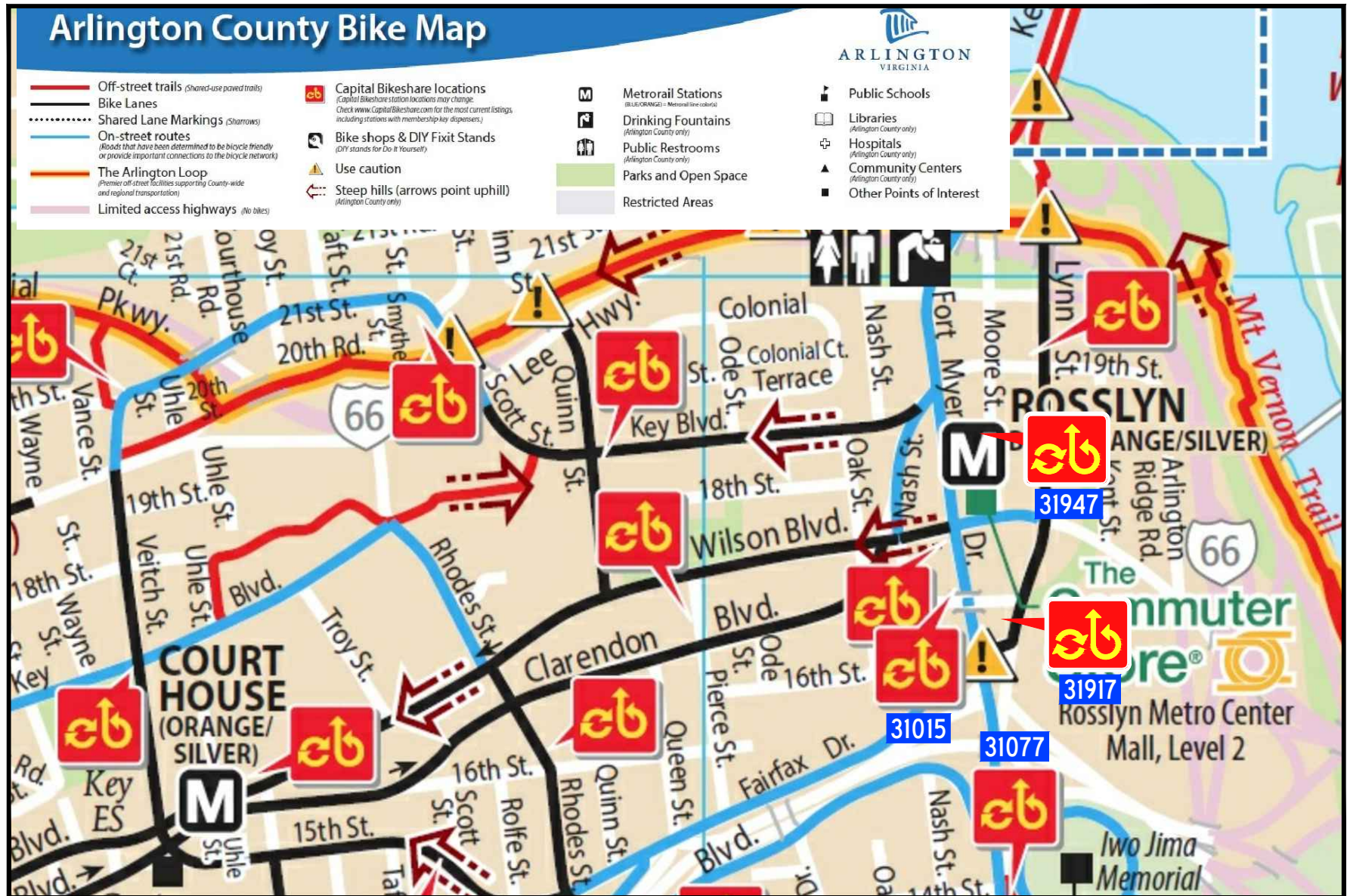


Figure 3-4  
Arlington County Bicycle Facilities Map



1616 N Fort Myer Drive  
Arlington County, VA

## SECTION 4 EXISTING CONDITIONS

### Existing Traffic Counts

Existing vehicular, pedestrian, and bicycle traffic counts were conducted by Wells + Associates on Thursday May 5, 2016, and Thursday, May 30, 2019, from 6:00 to 10:00 AM and 4:00 to 7:00 PM and was provided count data from staff that was conducted by Quality Traffic Data on Tuesday, November 17, 2015, at the following study intersections:

1. Wilson Boulevard/N. Fort Myer Drive
2. Wilson Boulevard/N. Lynn Street
3. Fairfax Drive/N. Fort Myer Drive
4. Fairfax Drive/N. Lynn Street
5. N. Fort Myer Drive/Meade Street/Arlington Boulevard (US 50)
6. Fairfax Drive/N. Queen Street\*\*
7. Fairfax Drive/N. Pierce Street\*\*

\*\* Denotes counts received from staff and conducted by Quality Traffic Data.

Due to COVID, new counts were unable to be collected, therefore historical counts were used and were adjusted by applying a growth factor estimated at 0.5 percent per year, compounded annually, for all turning movements. This growth rate was applied to all turning movements, with the exception of the movements in/out of driveways in order to create a baseline 2021 existing count. A review of the vehicular count data indicates that the link of Fairfax Drive, adjacent to the site, currently carries approximately 116 AM peak hour trips and 213 PM peak hour trips. The link of N. Fort Myer Drive, adjacent to the site, currently carries approximately 734 AM peak hour trips and 2,179 PM peak hour trips.

### Existing Conditions Operational Analysis

The existing peak hour levels of service (LOS) and queues were estimated at the study intersections based on; the existing lane use and traffic controls shown on Figure 2-1; existing traffic signal phasing/timings obtained from Arlington County; the existing vehicular, pedestrian, and bicycle traffic counts shown on Figures 4-1 through 4-3; and the Highway Capacity Manual (HCM) 2000 methodologies, using Synchro Software, version 10.

Descriptions of LOS “A” through “F” for signalized and unsignalized intersections are included in Appendix D. The results of the existing conditions analysis are presented in Appendix E and summarized in Tables 4-1 and 4-2. In addition to the peak hour volumes the following inputs were coded into Synchro: calculated peak hour factors by approach, lane widths, speed limits, adjacent parking lane, number parking maneuvers, and bus blockages. Additionally, the “Central Business District” designation was selected at all study intersections.

Levels of Service. As shown in Table 4-1 the four (4) signalized study intersections currently operate at overall acceptable LOS “D” or better during the AM and PM peak hours with the exception of the Fairfax Drive/N. Fort Myer Drive intersection that operates beyond capacity (at LOS “F”) during the PM peak hour. Some individual turning movements at the signalized study intersections operate at or beyond capacity during the peak periods along with exception of the westbound left during the AM and PM peak hours and the southbound left during the PM peak hour at the N. Fort Myer Drive/Wilson Boulevard, the eastbound through during the PM peak hour at the intersection of Wilson Boulevard/N. Lynn Street, the eastbound through-right during the AM peak hour and the southbound through during the PM peak hour at the intersection of Fairfax Drive/N. Fort Myer Drive, and the westbound through during the PM peak hour at the intersection of N. Lynn Street/Fairfax Drive.

At the stop-controlled intersections, all lane groups currently operate at acceptable LOS “D” or better during the AM and PM peak hours with the exception of the westbound left-through at the intersection of N. Meade Street/Route 50 Ramps, the northbound approach and the southbound approach during the PM peak hour at the intersection of N. Queen Street/Arlington Boulevard/Fairfax Drive.

Queueing. Existing peak hour queues for study intersection were determined using the 50<sup>th</sup> and 95<sup>th</sup> percentile queues estimated by Synchro Software, version 10. The 50<sup>th</sup> and 95<sup>th</sup> percentile queues of existing conditions are used to establish a datum against which to compare future conditions. The 50<sup>th</sup> percentile (or average) queue is defined as the maximum back of queue associated with a typical signal cycle. The 95<sup>th</sup> percentile queue is defined as the maximum back of queue with 95<sup>th</sup> percentile traffic volumes. The 95<sup>th</sup> percentile queue is not necessarily ever observed, it is simply based on statistical calculations<sup>1</sup>. The results of the queueing analysis are presented in Appendix E and summarized in Table 4-2.

As shown on Table 4-2 and observed in the field, peak hour queuing and the calculated average queues can be accommodated within a majority of available turn lane storage provided at study intersections. Vehicular queueing at the Wilson Boulevard/N. Lynn Street intersection within the northbound left turn lane during the AM peak hour and westbound right turn lane during the PM peak hour would exceed available storage. It is noted that limited turn lane storage bays exist in the area. Most turns are made from shared through lanes and are occasionally blocked due to heavy through traffic queues.

Additionally, vehicular queueing is not fully realized due to the closely spaced intersections in Rosslyn and metered conditions. Queueing, beyond what is shown in the Synchro reports, is likely upstream and downstream as vehicles enter and exit the Rosslyn street grid.

---

<sup>1</sup> Synchro Studio 10, Traffic Signal Software – User Guide

Table 4-1  
 1616 North Fort Myer Drive  
 Existing Conditions Levels of Service Summary<sup>1</sup>

Approach/ Lane Group	Existing Conditions			
	AM Peak Hour		PM Peak Hour	
	LOS	Delay (s)	LOS	Delay (s)
<b>1. N. Fort Myer Drive/Wilson Blvd - Signalized</b>				
EBTR (EBTR)	C	26.4	C	26.4
WBL	F	107.6	F	176.1
WBT (WBTR)	B	12.6	B	16.7
SBL	C	25.4	E	56.5
SBT (SBTR)	B	17.8	B	18.0
SBR	B	17.9	B	17.7
<b>Overall</b>	<b>D</b>	<b>35.2</b>	<b>D</b>	<b>52.9</b>
<b>2. Wilson Blvd/North Lynn Street - Signalized</b>				
EBL	D	37.4	C	31.2
EBT	C	22.6	E	73.2
WBT	D	38.7	C	31.5
WBR	C	26.6	D	40.3
NBL	C	25.6	C	25.3
NBT	C	28.4	C	27.1
NBR	D	50.6	D	36.5
<b>Overall</b>	<b>C</b>	<b>31.9</b>	<b>D</b>	<b>43.0</b>
<b>3. Fairfax Drive/N. Fort Myer Drive - Signalized</b>				
EBTR (EBT) (EBLT)	E	70.3	D	44.1
WBLT (WBLT)	B	14.6	B	14.0
SBL	B	12.5	B	12.8
SBT (SBLT)	B	13.5	F	127.1
SBR	C	31.0	B	18.1
<b>Overall</b>	<b>C</b>	<b>31.1</b>	<b>F</b>	<b>102.1</b>
<b>4. North Lynn Street/Fairfax Drive - Signalized</b>				
EBLT	C	24.8	C	32.9
WBTR	D	54.6	E	59.8
NBLTR	B	14.4	B	11.3
<b>Overall</b>	<b>B</b>	<b>17.7</b>	<b>B</b>	<b>18.7</b>
<b>5. N. Meade St/Route 50 Ramps - Unsignalized<sup>2</sup></b>				
WBLT	F	112.1	F	97.5
WBR	A	0.0	A	0.0
NBL	A	9.0	B	11.5
NBT	A	0.0	A	0.0
SBT	A	0.0	A	0.0
SBR	A	0.0	A	0.0
<b>6. N. Queen Street/Arlington Blvd/Fairfax Drive - Unsignalized</b>				
EBLTR	A	0.2	A	0.3
WBLTR	A	0.0	A	0.0
NBLTR	F	170.9	F	229.7
SBLTR	C	18.1	C	16.6
<b>7. Fairfax Drive/N. Pierce Street - Unsignalized</b>				
EBLT	A	2.3	A	3.7
WBTR	A	0.0	A	0.0
SBLR	B	12.6	B	13.9
<b>8. N. Fort Myer Drive/Site Driveway - Unsignalized</b>				
EBR (EBLR)	B	10.1	C	15.7
SBTR	A	0.0	A	0.0
<b>9. Fairfax Drive/Site Driveway - Unsignalized</b>				
EBLT	A	0.6	A	0.3
WBTR	A	0.0	A	0.0
SBLR	B	11.8	B	12.7

Notes:

1. Capacity analysis based on Highway Capacity Manual 2000 methodology, using Synchro 10.
1. Capacity analysis based on Highway Capacity Manual 2010 methodology, using Synchro 10.

Table 4-2  
1616 North Fort Myer Drive  
Existing Conditions Queuing Summary

Approach/ Lane Group	Storage Length (ft)	Existing Conditions			
		AM Peak Hour		PM Peak Hour	
		50th Percentile	95th Percentile	50th Percentile	95th Percentile
<b>1. N. Fort Myer Drive/Wilson Blvd - Signalized</b>					
EBTR (EBLTR)	-	127	156	156	187
WBL	-	~179	m#357	~242	#424
WBT (WBTR)	-	86	155	92	125
SBL	200	82	142	183	#324
SBT (SBTR)	-	16	27	23	35
SBR	200	0	0	0	0
<b>2. Wilson Blvd/North Lynn Street - Signalized</b>					
EBL	-	91	129	93	m124
EBT	-	171	251	~651	m#838
WBT	-	147	205	95	140
WBR	125	0	0	33	#155
NBL	180	125	m205	83	m140
NBT	-	231	267	157	196
NBR	135	55	m134	30	m78
<b>3. Fairfax Drive/N. Fort Myer Drive - Signalized</b>					
EBTR (EBT) (EBLT)	-	174	#318	126	#240
WBLT (WBLT)	-	24	m35	22	m33
SBL	-	28	m39	43	m68
SBT (SBLT)	-	101	m115	~794	m#814
SBR	-	1	m4	15	m40
<b>4. North Lynn Street/Fairfax Drive - Signalized</b>					
EBLT	-	72	m91	100	m134
WBTR	-	37	#96	41	#109
NBLTR	-	230	280	121	153
<b>5. N. Meade St/Route 50 Ramps - Unsignalized</b>					
WBLT	-	-	54	-	78
WBR	-	-	0	-	0
NBL	180	-	6	-	8
NBT	-	-	0	-	0
SBT	-	-	0	-	0
SBR	-	-	0	-	0
<b>6. N. Queen Street/Arlington Blvd/Fairfax Drive - Unsignalized</b>					
EBLTR	-	-	0	-	1
WBLTR	-	-	0	-	0
NBLTR	-	-	468	-	527
SBLTR	-	-	5	-	8
<b>7. Fairfax Drive/N. Pierce Street - Unsignalized</b>					
EBLT	-	-	6	-	8
WBTR	-	-	0	-	0
SBLR	-	-	14	-	33
<b>8. N. Fort Myer Drive/Site Driveway - Unsignalized</b>					
EBR (EBLR)	-	-	1	-	16
NBLT	-	-	-	-	-
SBTR	-	-	0	-	0
<b>9. Fairfax Drive/Site Driveway - Unsignalized</b>					
EBLT	-	-	1	-	0
WBTR	-	-	0	-	0
SBLR	-	-	3	-	17

1. "~" - 50th percentile volume exceeds capacity, queue may be longer.
2. "#" - 95th percentile volume exceeds capacity, queue may be longer.
3. "m" - Volume for 95th percentile queue is metered by upstream signal.

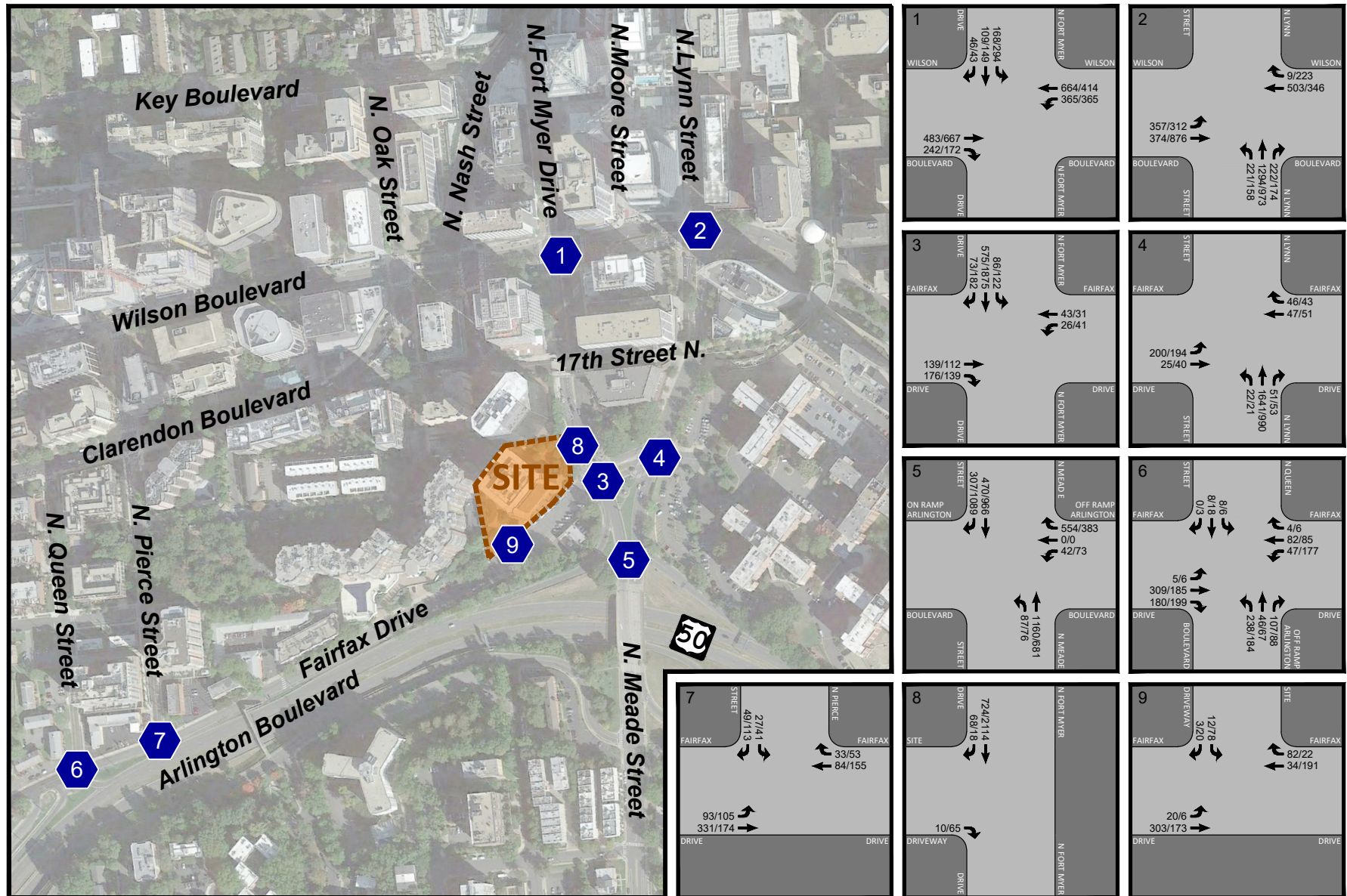


Figure 4-1  
Existing Peak Hour Traffic Counts

AM PEAK HOUR  
PM PEAK HOUR  
000 / 000



NORTH  
1616 N Fort Myer Drive  
Arlington County, VA

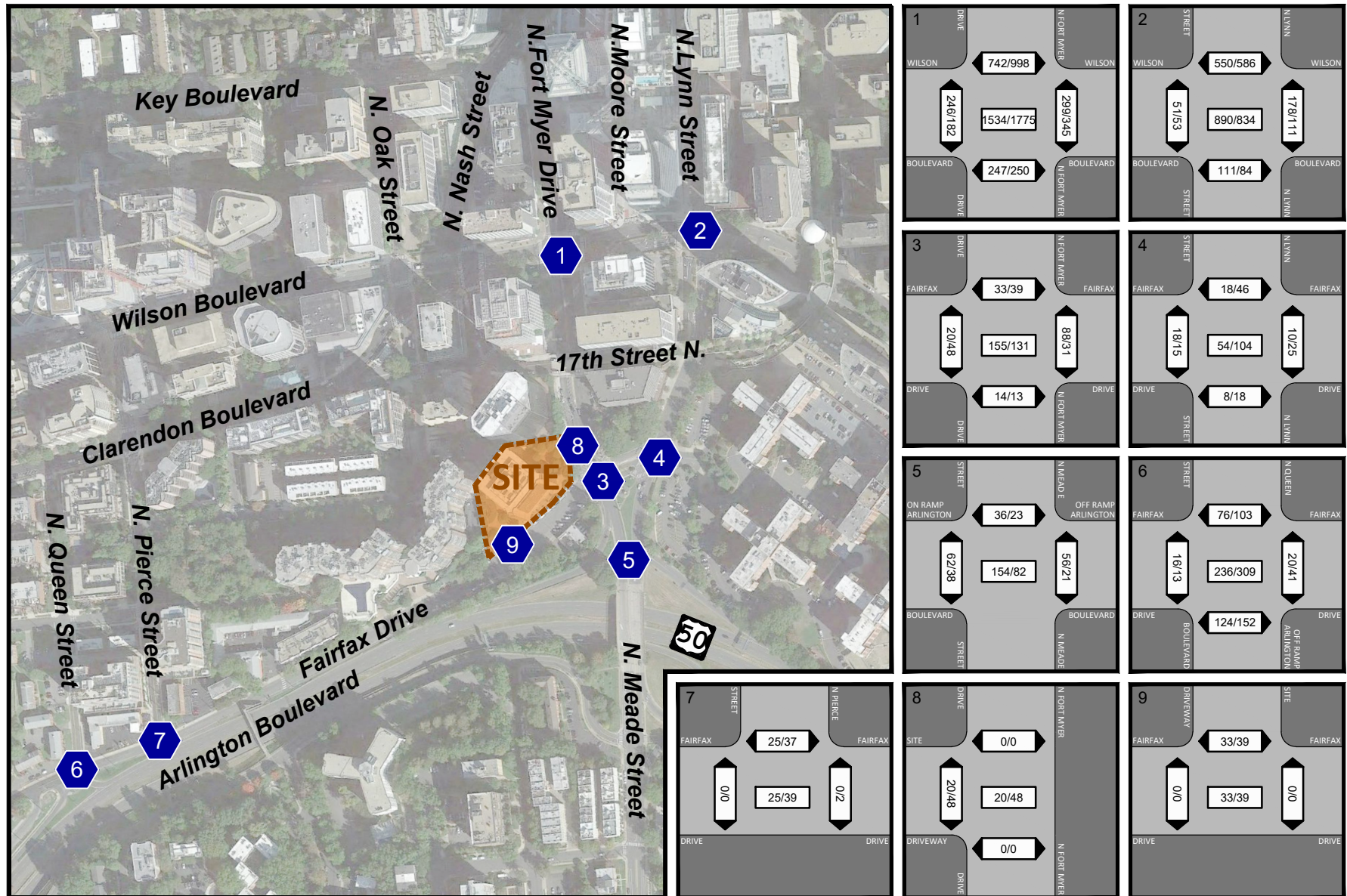


Figure 4-2  
Existing Peak Hour Pedestrian Counts

AM/PM Peak Hour



NORTH

1616 N Fort Myer Drive  
Arlington County, VA

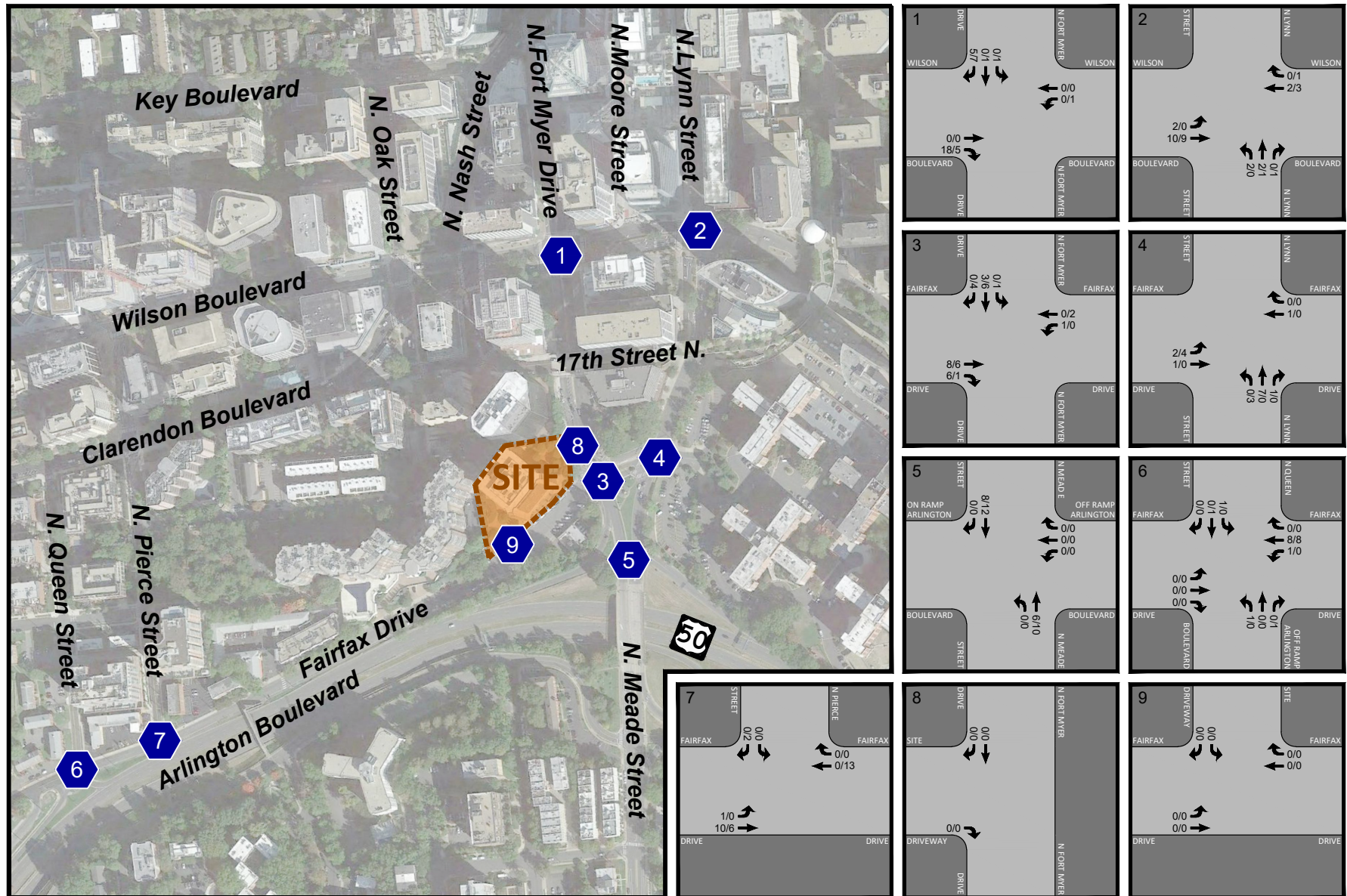


Figure 4-3  
Existing Peak Hour Bicycle Counts

AM PEAK HOUR  
PM PEAK HOUR  
000 / 000



NORTH  
1616 N Fort Myer Drive  
Arlington County, VA



## SECTION 5 FUTURE CONDITIONS WITHOUT DEVELOPMENT (2025)

### Background Conditions

This section presents an analysis of the future transportation conditions including projections of 2025 future traffic forecasts without the proposed development, as well as capacity and queuing analyses under this condition.

Methodology/Assumptions. It was assumed that the proposed redevelopment would be constructed and fully occupied by 2025, as specified in the traffic scoping document. The 2025 future traffic forecasts without site redevelopment were developed based on a composite of existing baseline 2021 traffic volumes, trips generated by nearby pipeline developments, and regional traffic growth.

Pipeline Developments. As outlined in the scoping document, there were eight (8) pipeline developments identified near the site. The following provides a list of the included pipelines and Figure 5-1 shows the location of each development.

- 1401 Wilson Boulevard and 1400 Key Boulevard – 40,000 SF Grocery; 288 DU Residential
- Central Place – 570,549 SF Office; 11,054 SF Retail
- 1812 North Moore Street – 569,739 Office; 11,020 SF Retail
- 1411 Key Boulevard – 67 Condominiums, 6 Townhomes
- 1900 Fort Myer Drive – 502 DU Residential; 375 Room Hotel; 14,412 SF Retail
- Key Bridge Marriott – 445 Room Hotel; 450 DU Residential
- Ames Center - 788 DU Residential; 9,371 SF Retail; 5,853 SF Office
- 1501 Arlington Boulevard – 160 Room Hotel; 64 DU Residential

Table 5-1 shows the trips expected to be generated by each individual development. The pipeline development trips were assigned to the roadway network using distributions provided in their traffic studies. The total pipeline development trips are shown on Figure 5-2 and detailed in Appendix F, and total 2,068 AM peak hour trips, 2,558 PM peak hour trips, and 28,626 daily trips.

It is noted that there are additional approved developments in Rosslyn, including Rosslyn Plaza and Rosslyn Gateway, but were not included in the study since they are not anticipated to be constructed by 2025. This assumption was agreed to with DES staff during the MMTA scoping process.

Regional Growth. An increase in traffic associated with regional growth from 2021 to 2025 was estimated at 0.5 percent per year, compounded annually, for all turning movements as agreed to with DES staff during scoping. This growth rate was applied to all turning movements, with the exception of the movements in/out of the site driveways. This growth accounts for increases in

traffic resulting from potential development and influences outside of the immediate study area. The regional growth at each of the study intersections is shown on Figure 5-3.

The resulting 2025 future traffic forecasts without development are shown on Figure 5-4.

### **Future Conditions without Development Operational Analysis (2025)**

Future peak hour LOS and 50<sup>th</sup> and 95<sup>th</sup> percentile queues without the redevelopment of the 1616 N. Fort Myer Drive site in year 2025 were estimated at the study intersections based on the existing conditions lane use and traffic controls shown on Figure 2-2; existing traffic signal phasing/timings obtained from Arlington County; the future peak hour traffic forecasts without redevelopment are shown on Figure 5-4; and the HCM 2000 methodologies using Synchro Software, version 10. The LOS and queue results are presented in Appendix G and summarized in Tables 5-2 and 5-3.

Levels of Service. As shown in Table 5-2, with increases in traffic due to regional growth and pipeline developments, all signalized study intersections would continue to operate at acceptable overall levels of service (LOS “D” or better) during the AM and PM peak hours with the exception of the Wilson Boulevard/N. Fort Myer Drive intersection that would degrade to LOS “F” during the PM peak hour as well as the Wilson Boulevard/N. Lynn Street intersection which would degrade to LOS “E”. The results indicate minor increases in delay would occur throughout the network as a result of increased traffic with regional growth and pipeline developments.

Each stop-controlled study intersection would continue operate similar to existing conditions. The intersection of N. Meade Street/Route 50 Ramps would require improvements as the westbound left-through movement operates at LOS “F” during the AM and PM peak hours.

Queueing. As shown on Table 5-3, the results of the queueing analysis are similar to those described in under existing conditions with the exception of the northbound left during the PM peak hour at the intersection of Wilson Boulevard/N. Lynn Street which would exceed the available capacity. Some movements would experience greater queueing as a result of increased traffic from regional growth and pipeline developments. Storage bays noted under existing conditions would continue to exceed available capacity.

Metered conditions due to the closely spaced intersections would continue to exist under the future conditions without redevelopment. This limits vehicles from entering and exiting the Rosslyn street grid, thus causing vehicle queuing upstream and downstream.

Table 5-1  
 1616 North Fort Myer Drive  
 Pipeline Trip Generation Analysis <sup>1,2</sup>

Land Use	ITE Code	Size	Unit	Weekday AM Peak Hour			Weekday PM Peak Hour			Weekday Daily Traffic
				Peak Hour of Adjacent Street			Peak Hour of Adjacent Street			
				In	Out	Total	In	Out	Total	
<b>1. 1401 Wilson Boulevard &amp; 1400 Key Boulevard</b>										
<b>Existing Uses</b>										
Office	710	195,472	SF	139	23	162	29	141	170	1,700
Total Existing Trips				139	23	162	29	141	170	1,700
<b>Approved Uses</b>										
Grocery	850	40,000	SF	126	112	238	219	219	438	6,182
Residential	222	288	DU	7	54	61	38	16	54	582
Total Approved Uses				133	166	299	257	235	492	6,764
Net New Trips <sup>3</sup>				(6)	143	137	228	94	322	5,064
<b>2. Central Place</b>										
<b>Approved Uses</b>										
Office	710	570,549	SF	372	60	432	82	400	482	4,820
Retail	820	11,054	SF	15	12	27	26	28	54	540
Total Approved Trips				387	72	459	108	428	536	5,360
<b>3. 1812 North Moore Street</b>										
<b>Approved Uses</b>										
Office	710	569,739	SF	372	60	432	82	399	481	4,810
Retail	820	11,020	SF	15	12	27	26	28	54	540
Total Approved Trips				387	72	459	108	427	535	5,350
<b>4. 1411 Key Boulevard</b>										
<b>Approved Uses</b>										
Condominiums	221	67	DU	2	11	13	9	3	12	174
Townhomes	221	6	DU	0	1	1	1	0	1	16
Total Approved Trips				2	12	14	10	3	13	190
<b>5. 1900 Fort Myer Drive</b>										
<b>Approved Uses</b>										
Multifamily Residential	220	502	DU	42	68	110	67	48	115	1,084
Hotel	310	375	Rooms	62	69	131	77	73	150	2,059
Retail	820	14,412	SF	19	16	35	36	35	71	710
Total Approved Trips				123	153	276	180	156	336	3,853
<b>6. Key Bridge Marriott</b>										
<b>Approved Uses</b>										
Hotel	Observed	445	Rooms	109	70	179	116	93	209	-
Multifamily Residential	222	450	DU	38	61	99	60	44	104	3,636
Total Approved Trips				147	131	278	176	137	313	3,636
<b>7. Ames Center</b>										
<b>Approved Uses</b>										
Multifamily Residential	222	788	DU	66	107	173	105	76	181	1,702
Retail	820	9,371	SF	12	11	23	23	23	46	460
Office	710	5,853	SF	4	1	5	1	4	5	50
Total Approved Trips				82	119	201	129	103	232	2,212
<b>8. 1501 Arlington Boulevard</b>										
<b>Approved Uses</b>										
Hotel	310	160	Rooms	37	26	63	37	35	72	980
Residential	220	64	DU	4	15	19	19	10	29	281
Total Approved Trips				41	41	82	56	45	101	1,261
<b>Summary</b>										
Total Approved Pipeline Trips				1,302	766	2,068	1,023	1,535	2,558	28,626

Notes:

1. Trip Generation based on the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 10th Edition.
2. All development programs taken from approved plans.
3. Reflects actual trips assigned to road network.

Table 5-2  
 1616 North Fort Myer Drive  
 Future Conditions without Development Levels of Service Summary<sup>1</sup>

Approach/ Lane Group	Existing Conditions				2025 Future Conditions without Development			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)
<b>1. N. Fort Myer Drive/Wilson Blvd - Signalized</b>								
EBTR (EBTR)	C	26.4	C	26.4	C	29.3	C	29.2
WBL	F	107.6	F	176.1	F	198.0	F	463.1
WBT (WBTR)	B	12.6	B	16.7	B	14.5	B	16.0
SBL	C	25.4	E	56.5	D	40.9	F	441.0
SBT (SBTR)	B	17.8	B	18.0	B	17.9	B	18.1
SBR	B	17.9	B	17.7	B	18.2	B	18.4
<b>Overall</b>	<b>D</b>	<b>35.2</b>	<b>D</b>	<b>52.9</b>	<b>D</b>	<b>51.3</b>	<b>F</b>	<b>182.7</b>
<b>2. Wilson Blvd/North Lynn Street - Signalized</b>								
EBL	D	37.4	C	31.2	D	47.0	C	27.5
EBT	C	22.6	E	73.2	C	25.3	F	132.1
WBT	D	38.7	C	31.5	D	40.9	C	32.8
WBR	C	26.6	D	40.3	C	28.6	D	51.0
NBL	C	25.6	C	25.3	C	25.7	C	28.9
NBT	C	28.4	C	27.1	C	30.4	C	27.0
NBR	D	50.6	D	36.5	D	37.5	C	34.3
<b>Overall</b>	<b>C</b>	<b>31.9</b>	<b>D</b>	<b>43.0</b>	<b>C</b>	<b>33.7</b>	<b>E</b>	<b>58.8</b>
<b>3. Fairfax Drive/N. Fort Myer Drive - Signalized</b>								
EBTR (EBT) (EBLT)	E	70.3	D	44.1	E	57.9	D	52.7
WBLT (WBLT)	B	14.6	B	14.0	B	14.8	B	14.9
SBL	B	12.5	B	12.8	B	12.7	B	13.5
SBT (SBLT)	B	13.5	F	127.1	B	14.4	F	198.3
SBR	C	31.0	B	18.1	C	28.9	B	19.6
<b>Overall</b>	<b>C</b>	<b>31.1</b>	<b>F</b>	<b>102.1</b>	<b>C</b>	<b>27.4</b>	<b>F</b>	<b>158.4</b>
<b>4. North Lynn Street/Fairfax Drive - Signalized</b>								
EBLT	C	24.8	C	32.9	C	26.4	C	33.5
WBTR	D	54.6	E	59.8	D	54.6	E	59.8
NBLTR	B	14.4	B	11.3	B	17.9	B	12.6
<b>Overall</b>	<b>B</b>	<b>17.7</b>	<b>B</b>	<b>18.7</b>	<b>C</b>	<b>20.4</b>	<b>B</b>	<b>18.8</b>
<b>5. N. Meade St/Route 50 Ramps - Unsignalized<sup>2</sup></b>								
WBLT	F	112.1	F	97.5	F	276.1	F	228.7
WBR	A	0.0	A	0.0	A	0.0	A	0.0
NBL	A	9.0	B	11.5	A	9.2	B	12.4
NBT	A	0.0	A	0.0	A	0.0	A	0.0
SBT	A	0.0	A	0.0	A	0.0	A	0.0
SBR	A	0.0	A	0.0	A	0.0	A	0.0
<b>6. N. Queen Street/Arlington Blvd/Fairfax Drive - Unsignalized</b>								
EBLTR	A	0.2	A	0.3	A	0.2	A	0.3
WBLTR	A	0.0	A	0.0	A	0.0	A	0.0
NBLTR	F	170.9	F	229.7	F	217.9	F	289.5
SBLTR	C	18.1	C	16.6	C	19.8	C	18.0
<b>7. Fairfax Drive/N. Pierce Street - Unsignalized</b>								
EBLT	A	2.3	A	3.7	A	2.3	A	3.5
WBTR	A	0.0	A	0.0	A	0.0	A	0.0
SBLR	B	12.6	B	13.9	B	13.4	B	14.9
<b>8. N. Fort Myer Drive/Site Driveway - Unsignalized</b>								
EBR (EBLR)	B	10.1	C	15.7	B	10.4	C	17.2
SBTR	A	0.0	A	0.0	A	0.0	A	0.0
<b>9. Fairfax Drive/Site Driveway - Unsignalized</b>								
EBLT	A	0.6	A	0.3	A	0.6	A	0.3
WBTR	A	0.0	A	0.0	A	0.0	A	0.0
SBLR	B	11.8	B	12.7	B	12.2	B	13.2

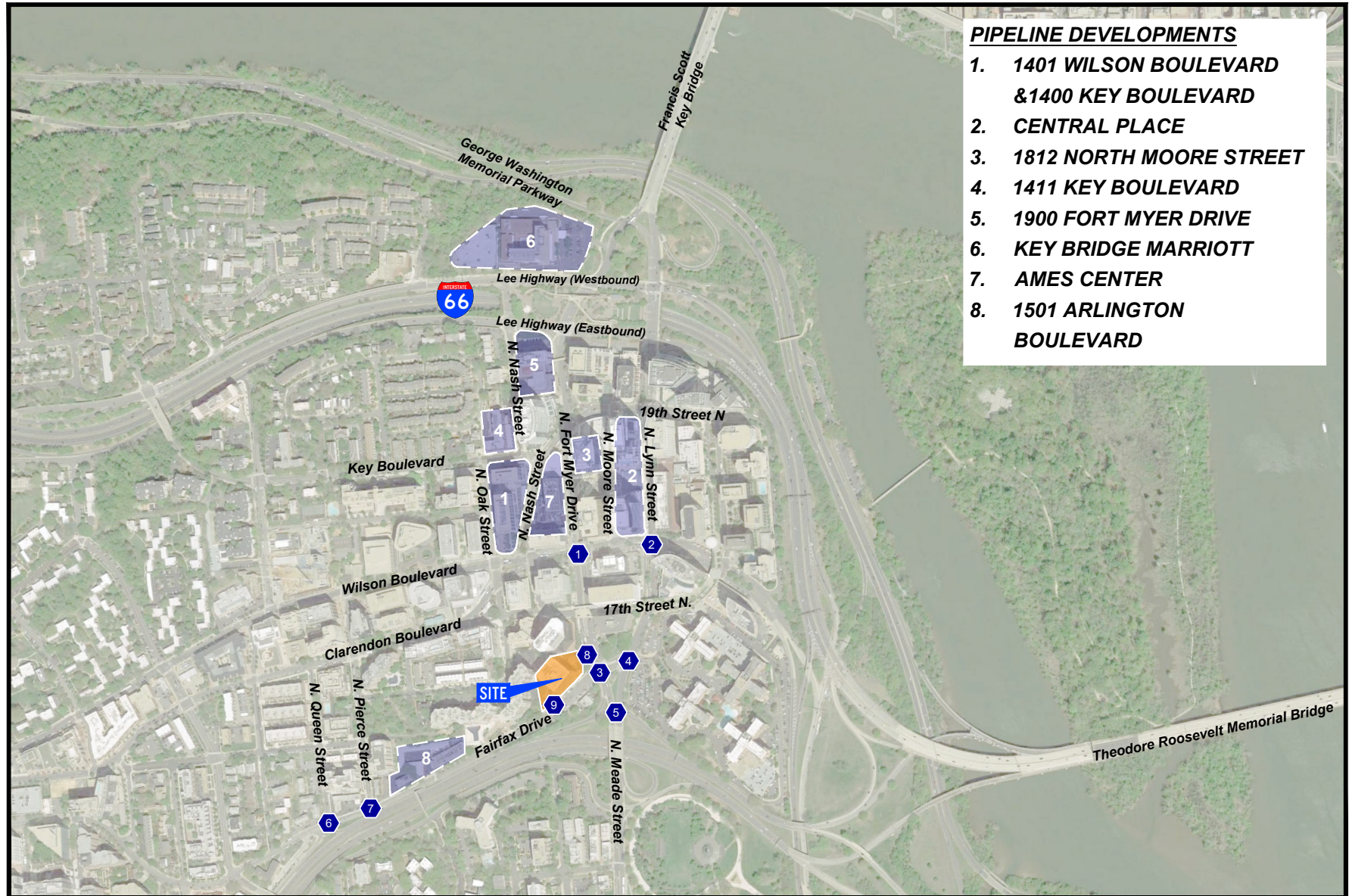
Notes:

1. Capacity analysis based on Highway Capacity Manual 2000 methodology, using Synchro 10.
1. Capacity analysis based on Highway Capacity Manual 2010 methodology, using Synchro 10.

Table 5-3  
 1616 North Fort Myer Drive  
 Future Conditions without Development Queuing Summary

Approach/ Lane Group	Storage Length (ft)	Existing Conditions				2025 Future Conditions without Development			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		50th Percentile	95th Percentile	50th Percentile	95th Percentile	50th Percentile	95th Percentile	50th Percentile	95th Percentile
<b>1. N. Fort Myer Drive/Wilson Blvd - Signalized</b>									
EBTR (EBLTR)	-	127	156	156	187	165	197	189	222
WBL	-	~179	m#357	~242	#424	~256	m#423	~458	#661
WBT (WBTR)	-	86	155	92	125	170	264	124	166
SBL	200	82	142	183	#324	158	#287	~627	#781
SBT (SBTR)	-	16	27	23	35	19	32	26	40
SBR	200	0	0	0	0	0	0	0	0
<b>2. Wilson Blvd/North Lynn Street - Signalized</b>									
EBL	-	91	129	93	m124	140	#190	163	m156
EBT	-	171	251	~651	m#838	226	m305	~839	m#706
WBT	-	147	205	95	140	158	#225	111	159
WBR	125	0	0	33	#155	0	3	56	#204
NBL	180	125	m205	83	m140	169	m222	149	m237
NBT	-	231	267	157	196	296	338	190	233
NBR	135	55	m134	30	m78	70	m111	35	m86
<b>3. Fairfax Drive/N. Fort Myer Drive - Signalized</b>									
EBTR (EBT) (EBLT)	-	174	#318	126	#240	184	#322	148	#285
WBLT (WBLT)	-	24	m35	22	m33	26	m37	25	m38
SBL	-	28	m39	43	m68	29	m38	46	m66
SBT (SBLT)	-	101	m115	~794	m#814	123	m130	~969	m#885
SBR	-	1	m4	15	m40	2	m4	24	m43
<b>4. North Lynn Street/Fairfax Drive - Signalized</b>									
EBLT	-	72	m91	100	m134	74	m100	100	m129
WBTR	-	37	#96	41	#109	37	#96	41	#109
NBLTR	-	230	280	121	153	327	396	167	206
<b>5. N. Meade St/Route 50 Ramps - Unsignalized</b>									
WBLT	-	-	54	-	78	-	84	-	118
WBR	-	-	0	-	0	-	0	-	0
NBL	180	-	6	-	8	-	6	-	10
NBT	-	-	0	-	0	-	0	-	0
SBT	-	-	0	-	0	-	0	-	0
SBR	-	-	0	-	0	-	0	-	0
<b>6. N. Queen Street/Arlington Blvd/Fairfax Drive - Unsignalized</b>									
EBLTR	-	-	0	-	1	-	0	-	1
WBLTR	-	-	0	-	0	-	0	-	0
NBLTR	-	-	468	-	527	-	550	-	617
SBLTR	-	-	5	-	8	-	6	-	9
<b>7. Fairfax Drive/N. Pierce Street - Unsignalized</b>									
EBLT	-	-	6	-	8	-	7	-	9
WBTR	-	-	0	-	0	-	0	-	0
SBLR	-	-	14	-	33	-	16	-	37
<b>8. N. Fort Myer Drive/Site Driveway - Unsignalized</b>									
EBR (EBLR)	-	-	1	-	16	-	1	-	18
NBLT	-	-	-	-	-	-	-	-	-
SBTR	-	-	0	-	0	-	0	-	0
<b>9. Fairfax Drive/Site Driveway - Unsignalized</b>									
EBLT	-	-	1	-	0	-	1	-	0
WBTR	-	-	0	-	0	-	0	-	0
SBLR	-	-	3	-	17	-	3	-	18

1. "~" - 50th percentile volume exceeds capacity, queue may be longer.
2. "#" - 95th percentile volume exceeds capacity, queue may be longer.
3. "m" - Volume for 95th percentile queue is metered by upstream signal.



- PIPELINE DEVELOPMENTS**
1. 1401 WILSON BOULEVARD & 1400 KEY BOULEVARD
  2. CENTRAL PLACE
  3. 1812 NORTH MOORE STREET
  4. 1411 KEY BOULEVARD
  5. 1900 FORT MYER DRIVE
  6. KEY BRIDGE MARRIOTT
  7. AMES CENTER
  8. 1501 ARLINGTON BOULEVARD

Figure 5-1  
Pipeline Development Locations



NORTH

1616 N Fort Myer Drive  
Arlington County, VA

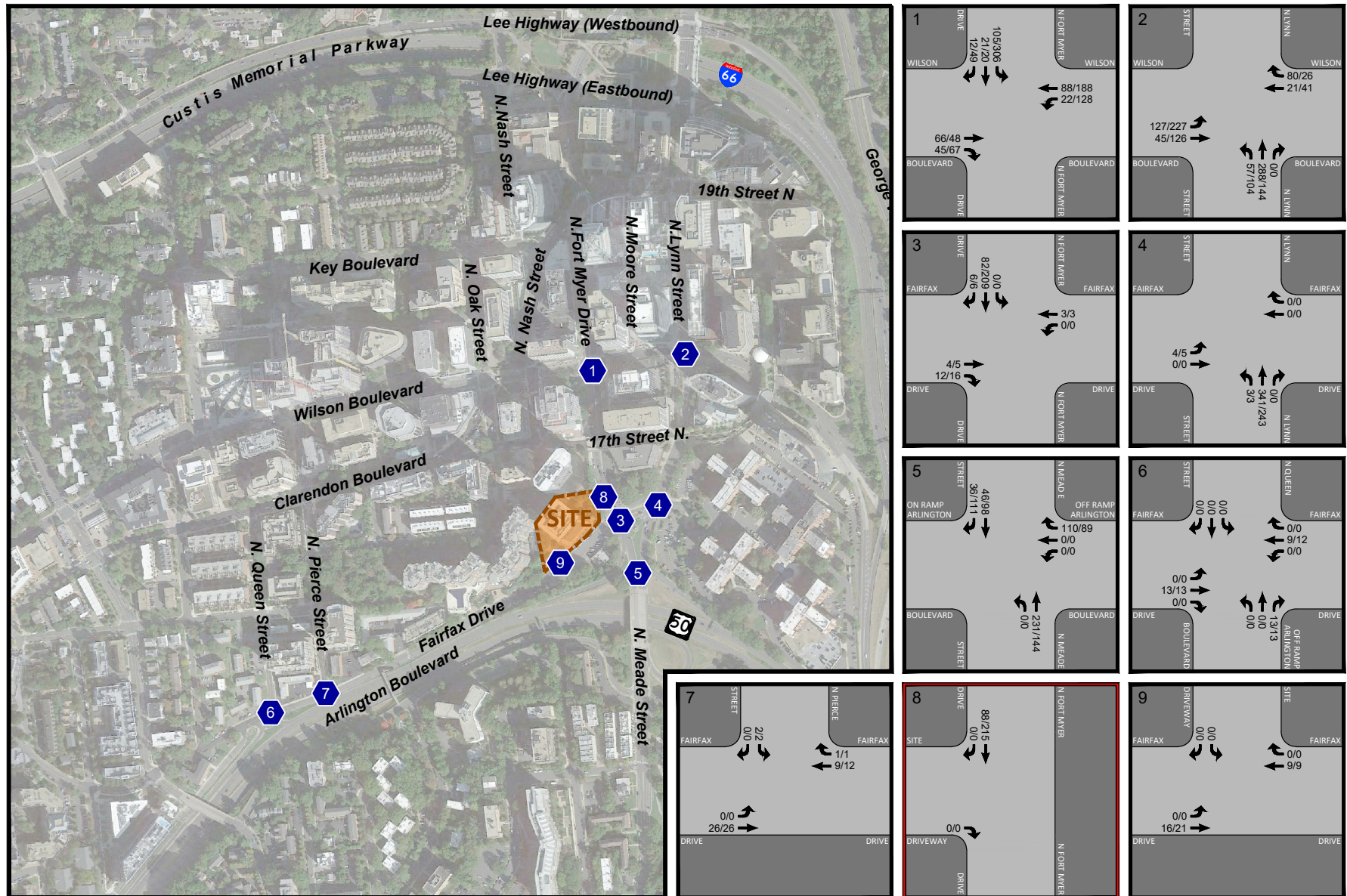


Figure 5-2  
Combined Peak Hour Pipeline Development Traffic Forecasts

AM PEAK HOUR  
PM PEAK HOUR  
000 / 000



NORTH  
1616 N Fort Myer Drive  
Arlington County, VA

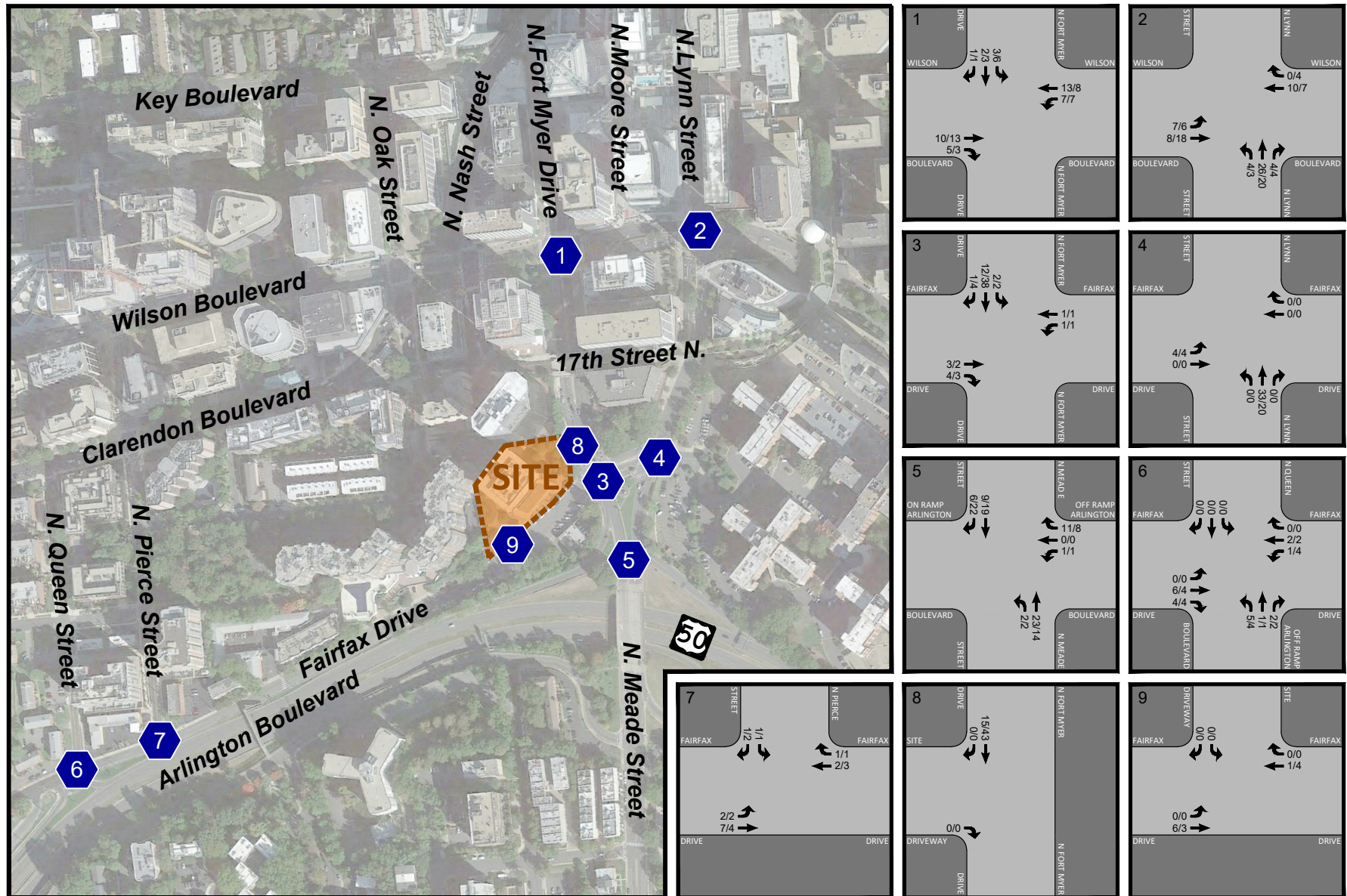


Figure 5-3  
Regional Growth



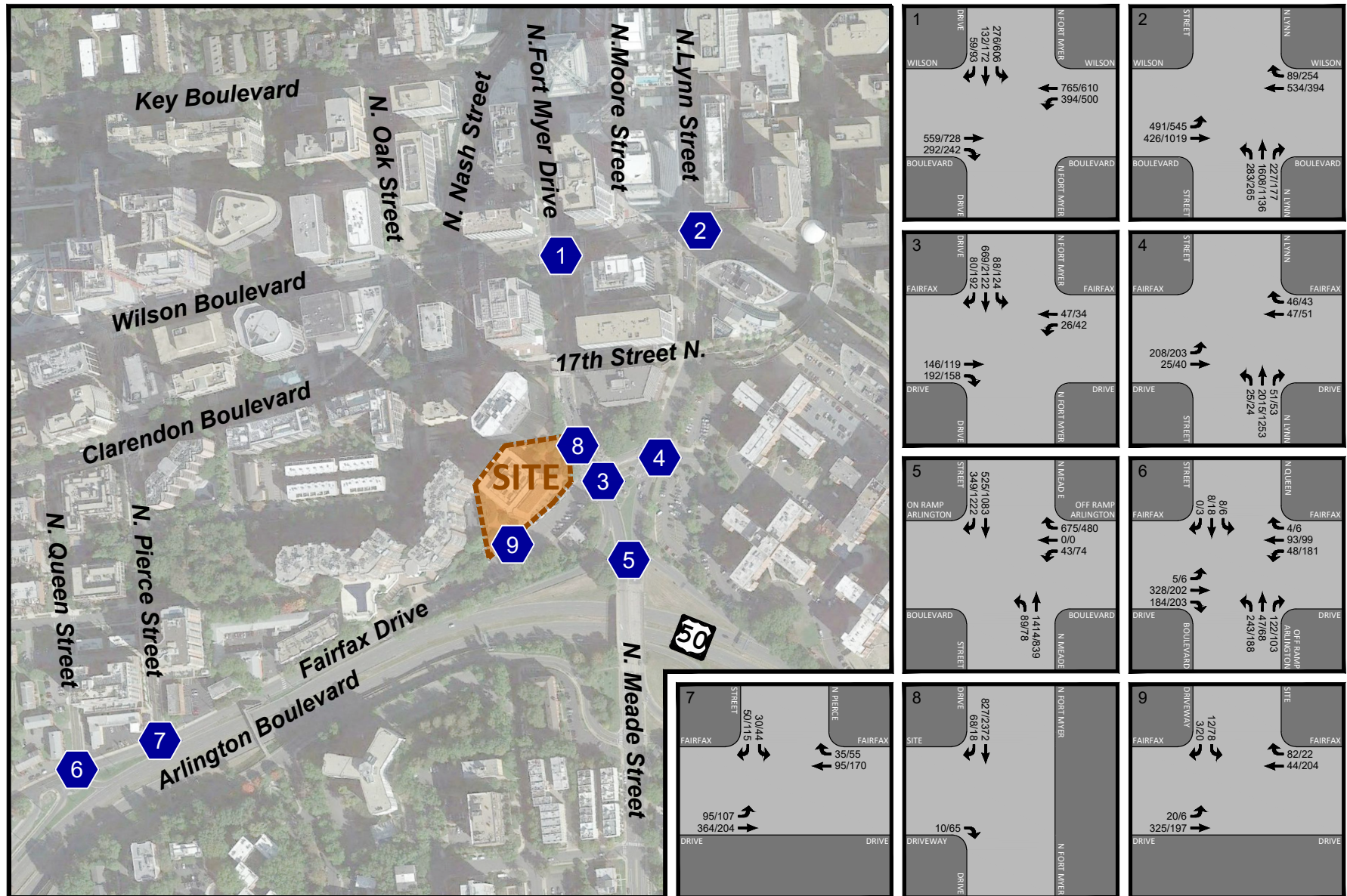


Figure 5-4  
Future Peak Hour Traffic Forecasts without Development

AM PEAK HOUR  
PM PEAK HOUR  
000 / 000



NORTH  
1616 N Fort Myer Drive  
Arlington County, VA

## **SECTION 6**

### **PROPOSED SITE DESCRIPTION, TRIP GENERATION, DISTRIBUTIONS & ASSIGNMENTS**

#### **Proposed Site Redevelopment Description**

The Applicant proposes to redevelop the site into 27 story, 691-unit residential building. Parking for the site is proposed via structured parking. Access to parking and loading is proposed via one (1) driveway on Fairfax Drive. Access to the pick-up/drop-off loop for the site is located via one (1) driveway along N. Fort Myer Drive.

For purposes of this analysis, it is assumed that the redevelopment would occur in a single phase and would be constructed and fully occupied by 2025.

#### **Site Trip Generation Analysis**

As described previously in the report, vehicular traffic counts were conducted by Wells + Associates on Thursday May 5, 2016, and Thursday, May 30, 2019, from 6:00 to 10:00 AM and 4:00 to 7:00 PM and was provided count data from staff that was conducted by Quality Traffic Data on Tuesday, November 17, 2015, at the study intersections. As shown in Table 6-1, the observed peak hour traffic volumes at the two (2) site driveways serving the existing site total 195 AM peak hour trips (170 in and 25 out) and 209 PM peak hour trips (46 in and 163 out).

The Applicant proposes to redevelop the site with 691 residential dwelling units. The number of new site trips anticipated to be generated by the redevelopment was estimated based on ITE's Trip Generation Manual, 10<sup>th</sup> Edition Land Use Code (LUC) 222 (High Rise Residential), LUC 710 (Office), and LUC 820 (Retail). This edition of the manual accounts for the site's proximity to transit and other non-auto modes and provides rates/equations appropriate for its surroundings. A comparison between the city center rates versus the standard rates for a high-rise residential development suggests that an approximate 30% to 33% non-auto mode share.

The new vehicle trips associated with the mixed-use development equates to 132 AM peak hour trips (34 in and 98 out) and 139 PM peak hour trips (82 in and 57 out). The total person trips generated were then delineated into transportation categories using the census data presented in Section 3. As shown in the table, a large majority (32%) of peak hour trips are anticipated to be made via multimodal transportation options. When accounting for traffic generated by the existing site, the proposed program would generate 63 fewer AM peak hour trips and 70 fewer PM peak hour trips overall when compared to the existing development. Refer to Table 6-1 for a summary of the site trip generation.

### Site Trip Distribution and Assignment

The trips associated with the existing office building were removed from the roadway network using the existing driveway counts and intersection splits. Refer to Figure 6-1 for the removal the existing office trips.

The new trips generated by the residential development were assigned to the roadway network using trip distributions developed from the traffic count data, the existing observed intersection splits, and the derived directions of approach. The net new external vehicle trips were assigned to the appropriate site driveways based on the distribution of the parking supply within the garage. These distributions were reaffirmed with County staff through the scoping process.

The directional distribution for new site generated trips is as follows:

To/From the North on GW N. Fort Myer Drive:	15%
To/From the East on Wilson Boulevard:	10%
To/From the East on Arlington Boulevard (US 50):	20%
To/From the South on N. Meade Street:	15%
To/From the West on Arlington Boulevard (US 50):	20%
To/From the West on Fairfax Drive:	10%
From the West on Clarendon Boulevard (One Way):	10%
<u>To the West on Wilson Boulevard (One Way):</u>	<u>10%</u>
	100%
Total:	

Refer to Figure 6-2 for new site trips assignments.

Table 6-1  
 1616 North Fort Myer Drive  
 Trip Generation Analysis <sup>1</sup>

Land Use	ITE Land Use Code	Size	Units	AM Peak Hour			PM Peak Hour			Weekday ADT
				In	Out	Total	In	Out	Total	
<b>Existing Uses</b>										
Office - Dense Multi-Use Urban	710	300,000	SF	326	49	375	88	314	402	4,104
Total Existing				326	49	375	88	314	402	4,104
*Vehicle (52%)				170	25	195	46	163	209	2,134
*Transit (39%)				127	19	146	34	123	157	1,601
*Active (9%)				29	5	34	8	28	36	369
<b>Proposed Program</b>										
Multifamily Housing (High Rise) - Center City Core	222	691	DU	108	308	416	255	178	433	5,590
Total Proposed				108	308	416	255	178	433	5,590
<b>*Vehicle (32%)</b>				<b>34</b>	<b>98</b>	<b>132</b>	<b>82</b>	<b>57</b>	<b>139</b>	<b>1,789</b>
*Transit (59%)				64	182	246	150	105	255	3,298
*Active (9%)				10	28	38	23	16	39	503
<b>Difference: Proposed minus Existing</b>				<b>-218</b>	<b>259</b>	<b>41</b>	<b>167</b>	<b>-136</b>	<b>31</b>	<b>1,486</b>
*Vehicle				-136	73	-63	36	-106	-70	-345
*Transit				-63	163	100	116	-18	98	1,697
*Active				-19	23	4	15	-12	3	134

Notes:

1. Trip Generation based on the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 10th Edition.

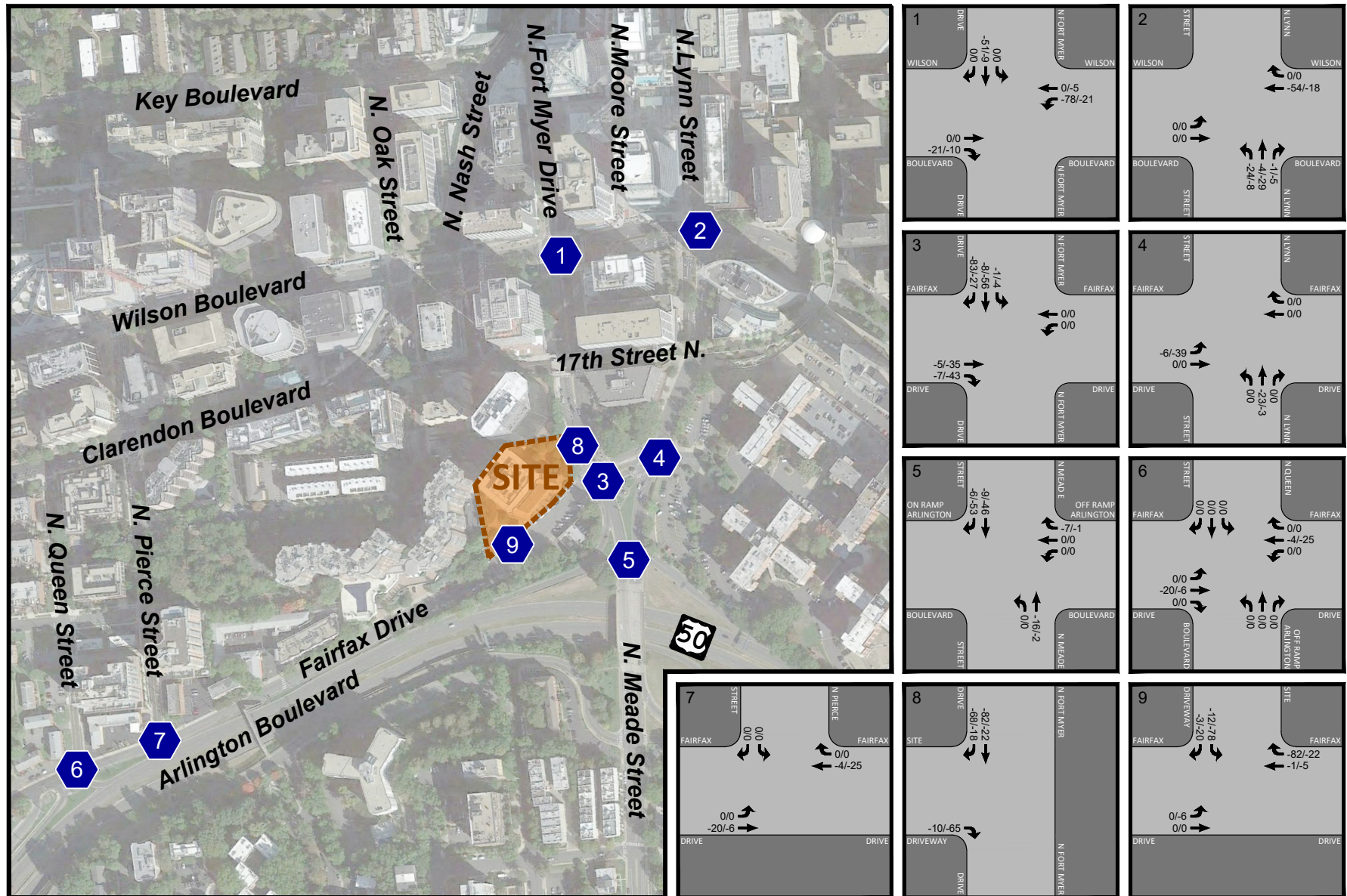


Figure 6-1  
Existing Site Trips Removed

AM PEAK HOUR  
PM PEAK HOUR  
000 / 000



NORTH  
1616 N Fort Myer Drive  
Arlington County, VA

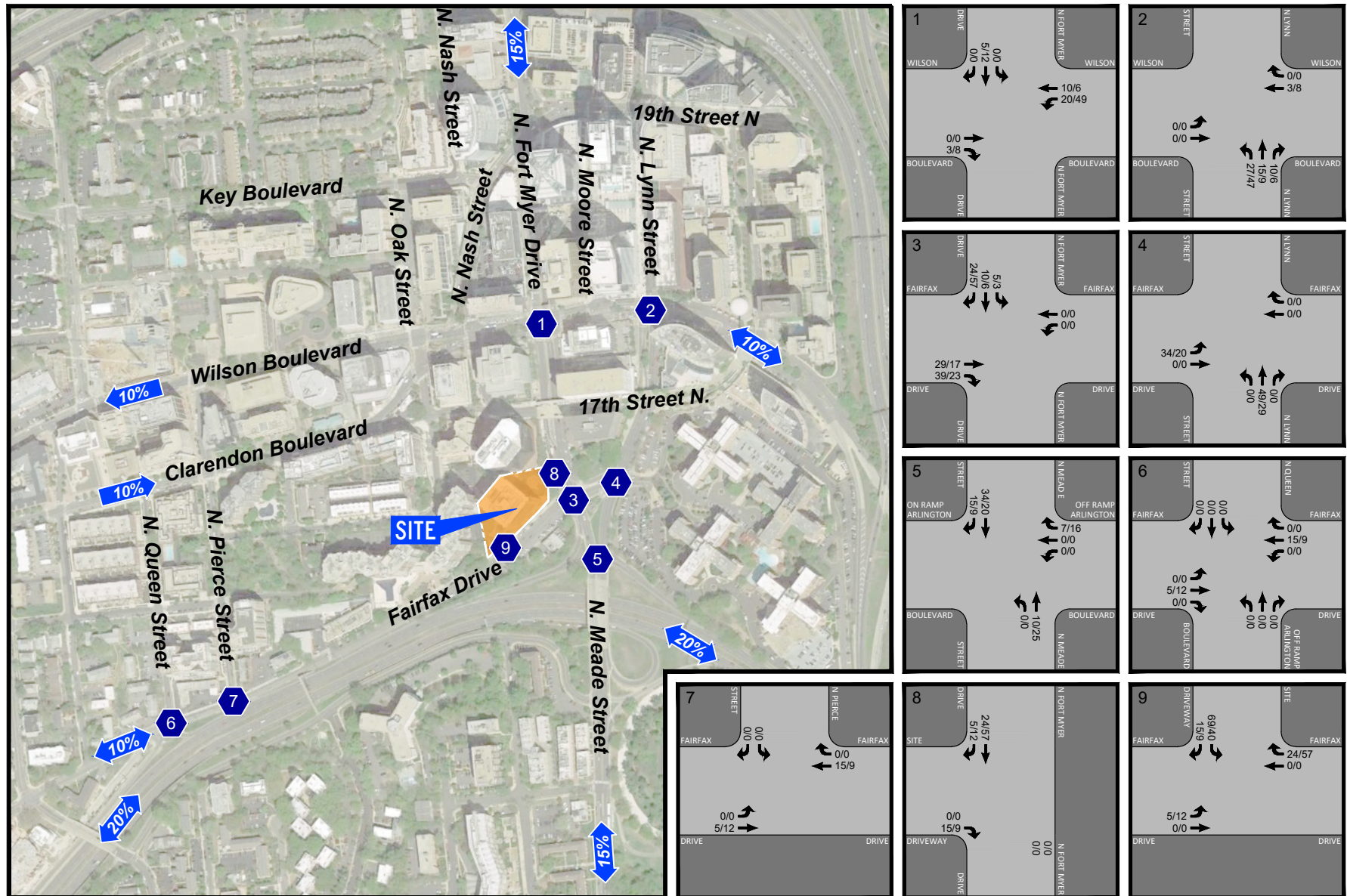


Figure 6-2  
New Site Generated Total Trips

AM PEAK HOUR  
PM PEAK HOUR  
000 / 000



1616 N Fort Myer Drive  
Arlington County, VA

## **SECTION 7**

### **FUTURE CONDITIONS WITH DEVELOPMENT (2025)**

This section presents an analysis of the future conditions including projections of 2025 future traffic forecasts with the proposed development, as well as capacity and queuing analyses.

#### **Future Traffic Forecasts with Development (2025)**

The traffic forecasts described in the previous section and shown on Figures 6-1 and 6-2 were added to the future traffic forecasts without development, shown on Figure 5-4, to arrive at the future traffic forecasts with development and are shown on Figure 7-2.

## Operational Analysis of Future Conditions with the Proposed Development

Future peak hour LOS and 50<sup>th</sup> and 95<sup>th</sup> percentile queues with the proposed development were estimated at the study intersections based on the future peak hour traffic forecasts with redevelopment shown on Figure 7-2, the future conditions with development lane use and traffic controls shown on Figure 7-1; the existing traffic signal phasing/timings obtained from Arlington County; and the HCM 2000 methodologies using Synchro Software, version 10. The results are presented in Appendix H and summarized in Table 7-1 and Table 7-2.

**Levels of Service.** As shown in Table 7-1, with the proposed development, the signalized study intersections would continue to operate at overall acceptable levels of service (LOS “D” or better) during both the AM and PM peak hours with the exception of the Wilson Boulevard/N. Fort Myer Drive, Wilson Boulevard/N. Lynn Street, and Fairfax Drive/N. Fort Myer Drive intersections as noted under future conditions without redevelopment. The unsignalized intersections would also continue to operate consistently with the results of the future without redevelopment. In general, the signalized study intersections would experience increases of 12 seconds or less in overall delay with the redevelopment of the site.

A robust Transportation Demand Management (TDM) program will be implemented to ensure users of the site are familiar and use multimodal transportation options. The site’s location makes it a prime location for multimodal commuting given its excellent transit, pedestrian, and bicycle facilities. The non-auto mode share expected would further aid in minimizing the development’s vehicular impact.

**Queueing.** As shown on Table 7-2, the results of the queueing analysis are similar to those described in under existing conditions and future conditions without development. Increases in the estimated average and 95<sup>th</sup> percentile queues when compared to future conditions would equate to approximately one (1) vehicle or less. Those turn lanes identified under the existing conditions would continue to exceed the available storage on occasion in the future without and with development.

Metered conditions due to the closely spaced intersections would continue to exist under the future conditions with redevelopment. This limits vehicles from entering and exiting the Rosslyn street grid, thus causing vehicle queuing upstream and downstream.



## **N. Fort Myer Drive Tunnel Removal Supplemental Analysis**

As requested by County staff, a supplemental analysis was performed to evaluate the study intersections during the N. Fort Myer Drive tunnel removal. The removal of this tunnel is part of the planned roadway network within the Core of Rosslyn and will ultimately bring Fort Myer Drive to grade and be converted to accommodate two (2) way traffic. Figure 7-3 shows the lane use and traffic controls that will exist once Fort Myer Drive is brought to grade and converted to accommodate two-way traffic.

Traffic Forecasts. Future traffic forecasts were developed for the completed two-way traffic scenario along N. Fort Myer Drive utilizing the Future 2025 Conditions with Redevelopment shown on Figure 7-5. As shown on Figure 7-4, several reroutes were applied to N. Lynn Street, N. Fort Myer Drive, and Wilson Boulevard. Trips were removed from the northbound movement at the intersection of N. Lynn Street/Fairfax Drive and the eastbound movement at the intersection of N. Fort Myer Drive/Fairfax Drive and rerouted north along N. Fort Myer Drive.

Capacity Analysis and Queuing. Intersection capacity analysis and vehicular queuing were assessed at the study intersection consistent with the previous sections of this report. Tables 7-1 and 7-2 show the results of the capacity and queuing analysis results at the study intersections for this condition.

As shown in the results tables, a majority of the signalized intersections would continue to operate consistently to those conditions without the diversions with the exception of the eastbound approach at the intersection of N. Fort Myer Drive/Wilson Boulevard which would degrade to LOS "E" during the PM peak hour and the eastbound approach at the site driveway located along N. Fort Myer Drive which would degrade to LOS "F" during the PM peak hour. It is noted that the westbound approach delay is due to the introduction of two-way traffic at this location. Although the reported level of service is deficient, the left turning volume is expected to be fewer than 10 peak hour trips since this driveway primarily serves the drop-off-pick-up area within the site. Refer to Appendix H for the detailed capacity and queuing analyses results.

Table 7-1  
 1616 North Fort Myer Drive  
 Future Conditions with Development Levels of Service Summary<sup>1</sup>

Approach/ Lane Group	Existing Conditions				2025 Future Conditions without Development				2025 Future Conditions with Development				2025 Future Conditions with Development (2-Way Alternative)				
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		
	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	
<b>1. N. Fort Myer Drive/Wilson Blvd - Signalized</b>																	
EBL	-	-	-	-	-	-	-	-	-	-	-	-	-	C	32.6	E	59.7
EBTR (EBTR)	C	26.4	C	26.4	C	29.3	C	29.2	C	28.4	C	29.1	C	28.0	C	28.3	
WBL	F	107.6	F	176.1	F	198.0	F	463.1	F	110.4	F	512.4	F	104.8	F	486.6	
WBTR (WBTR)	B	12.6	B	16.7	B	14.5	B	16.0	B	15.5	B	15.7	B	15.6	B	17.5	
NBL	-	-	-	-	-	-	-	-	-	-	-	-	-	B	13.8	B	13.5
NBTR	-	-	-	-	-	-	-	-	-	-	-	-	-	B	13.5	B	14.5
SBL	C	25.4	E	56.5	D	40.9	F	441.0	D	40.9	F	441.0	F	136.3	F	790.1	
SBTR (SBTR)	B	17.8	B	18.0	B	17.9	B	18.1	B	17.6	B	18.1	B	18.2	B	19.0	
SBR	B	17.9	B	17.7	B	18.2	B	18.4	B	18.2	B	18.4	-	-	-	-	
<b>Overall</b>	<b>D</b>	<b>35.2</b>	<b>D</b>	<b>52.9</b>	<b>D</b>	<b>51.3</b>	<b>F</b>	<b>182.7</b>	<b>D</b>	<b>36.4</b>	<b>F</b>	<b>193.4</b>	<b>D</b>	<b>45.7</b>	<b>F</b>	<b>248.8</b>	
<b>2. Wilson Blvd/North Lynn Street - Signalized</b>																	
EBL	D	37.4	C	31.2	D	47.0	C	27.5	D	46.3	C	27.6	D	43.7	C	26.8	
EBT	C	22.6	E	73.2	C	25.3	F	132.1	C	24.7	F	132.1	C	23.4	F	131.8	
WBTR	D	38.7	C	31.5	D	40.9	C	32.8	D	37.6	C	32.5	D	37.9	C	32.8	
WBR	C	26.6	D	40.3	C	28.6	D	51.0	C	28.6	D	51.0	C	28.5	D	46.0	
NBL	C	25.6	C	25.3	C	25.7	C	28.9	C	25.0	C	31.3	C	24.3	C	31.8	
NBT	C	28.4	C	27.1	C	30.4	C	27.0	C	29.5	C	26.3	C	28.8	C	24.7	
NBR	D	50.6	D	36.5	D	37.5	C	34.3	D	35.4	C	34.6	D	36.2	D	35.2	
<b>Overall</b>	<b>C</b>	<b>31.9</b>	<b>D</b>	<b>43.0</b>	<b>C</b>	<b>33.7</b>	<b>E</b>	<b>58.8</b>	<b>C</b>	<b>32.4</b>	<b>E</b>	<b>58.8</b>	<b>C</b>	<b>31.6</b>	<b>E</b>	<b>58.9</b>	
<b>3. Fairfax Drive/N. Fort Myer Drive - Signalized</b>																	
EBTR (EBT) (EBLT)	E	70.3	D	44.1	E	57.9	D	52.7	C	32.0	C	29.2	C	33.0	C	30.2	
EBR	-	-	-	-	-	-	-	-	C	32.0	C	31.0	C	32.0	C	31.0	
WBTR (WBTR)	B	14.6	B	14.0	B	14.8	B	14.9	B	14.6	B	14.7	C	20.0	C	22.9	
WBR	-	-	-	-	-	-	-	-	-	-	-	-	C	30.8	D	43.3	
SBL	B	12.5	B	12.8	B	12.7	B	13.5	B	13.1	B	13.6	-	-	-	-	
SBTR (SBLT)	B	13.5	F	127.1	B	14.4	F	198.3	B	14.6	F	184.1	B	15.2	F	223.5	
SBR	C	31.0	B	18.1	C	28.9	B	19.6	A	9.0	C	21.3	A	9.0	C	20.3	
<b>Overall</b>	<b>C</b>	<b>31.1</b>	<b>F</b>	<b>102.1</b>	<b>C</b>	<b>27.4</b>	<b>F</b>	<b>158.4</b>	<b>C</b>	<b>20.1</b>	<b>F</b>	<b>145.1</b>	<b>C</b>	<b>21.4</b>	<b>F</b>	<b>181.0</b>	
<b>4. North Lynn Street/Fairfax Drive - Signalized</b>																	
EBLT	C	24.8	C	32.9	C	26.4	C	33.5	C	26.5	C	31.6	C	21.7	B	18.8	
WBTR	D	54.6	E	59.8	D	54.6	E	59.8	D	54.6	E	59.8	D	54.6	E	59.8	
NBLTR	B	14.4	B	11.3	B	17.9	B	12.6	B	18.3	B	12.7	B	18.3	B	12.8	
<b>Overall</b>	<b>B</b>	<b>17.7</b>	<b>B</b>	<b>18.7</b>	<b>C</b>	<b>20.4</b>	<b>B</b>	<b>18.8</b>	<b>C</b>	<b>20.8</b>	<b>B</b>	<b>18.3</b>	<b>C</b>	<b>20.3</b>	<b>B</b>	<b>16.5</b>	
<b>5. N. Meade St/Route 50 Ramps - Unsignalized<sup>2</sup></b>																	
WBTR	F	112.1	F	97.5	F	276.1	F	228.7	F	287.3	F	235.3	F	287.3	F	235.3	
WBR	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	
NBL	A	9.0	B	11.5	A	9.2	B	12.4	A	9.4	B	12.2	A	9.4	B	12.2	
NBT	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	
SBTR	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	
SBR	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	
<b>6. N. Queen Street/Arlington Blvd/Fairfax Drive - Unsignalized</b>																	
EBLTR	A	0.2	A	0.3	A	0.2	A	0.3	A	0.2	A	0.3	A	0.2	A	0.3	
WBTR	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	
NBLTR	F	170.9	F	229.7	F	217.9	F	289.5	F	212.6	F	279.4	F	212.6	F	279.4	
SBLTR	C	18.1	C	16.6	C	19.8	C	18.0	C	19.7	C	17.7	C	19.7	C	17.7	
<b>7. Fairfax Drive/N. Pierce Street - Unsignalized</b>																	
EBLT	A	2.3	A	3.7	A	2.3	A	3.5	A	2.4	A	3.4	A	2.4	A	3.4	
WBTR	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	
SBLR	B	12.6	B	13.9	B	13.4	B	14.9	B	13.4	B	14.6	B	13.4	B	14.6	
<b>8. N. Fort Myer Drive/Site Driveway - Unsignalized</b>																	
EBR (EBLR)	B	10.1	C	15.7	B	10.4	C	17.2	A	10.0	C	15.2	B	14.7	F	328.3	
NBLT	-	-	-	-	-	-	-	-	-	-	-	-	A	1.1	A	5.0	
SBTR	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	
<b>9. Fairfax Drive/Site Driveway - Unsignalized</b>																	
EBLT	A	0.6	A	0.3	A	0.6	A	0.3	A	0.7	A	0.6	A	0.7	A	0.6	
WBTR	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	
SBLR	B	11.8	B	12.7	B	12.2	B	13.2	B	13.4	B	12.7	B	13.4	B	12.7	

Notes:

- Capacity analysis based on Highway Capacity Manual 2000 methodology, using Synchro 10.
- Capacity analysis based on Highway Capacity Manual 2010 methodology, using Synchro 10.

Table 7-2  
 1616 North Fort Myer Drive  
 Future Conditions with Development Queuing Summary

Approach/ Lane Group	Storage Length (ft)	Existing Conditions				2025 Future Conditions without Development				2025 Future Conditions with Development				2025 Future Conditions with Development (Two-Way Alternative)			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		50th Percentile	95th Percentile	50th Percentile	95th Percentile	50th Percentile	95th Percentile	50th Percentile	95th Percentile	50th Percentile	95th Percentile	50th Percentile	95th Percentile	50th Percentile	95th Percentile	50th Percentile	95th Percentile
<b>1. N. Fort Myer Drive/Wilson Blvd - Signalized</b>																	
EBL	175	-	-	-	-	-	-	-	-	-	-	-	-	24	58	59	#142
EBTR (EBLTR)	-	127	156	156	187	165	197	189	222	154	186	189	222	149	180	177	210
WBL	-	~179	m#357	~242	#424	~256	m#423	~458	#661	~374	#351	~496	#704	~170	#346	~487	#695
WBTR (WBTR)	-	86	155	92	125	170	264	124	166	221	292	119	167	228	299	116	170
NBL	-	-	-	-	-	-	-	-	-	-	-	-	-	6	m10	8	22
NBTR	-	-	-	-	-	-	-	-	-	-	-	-	-	16	22	31	63
SBL	200	82	142	183	#324	158	#287	~627	#781	158	#287	~627	#781	~216	#360	~556	#714
SBT (SBTR)	-	16	27	23	35	19	32	26	40	12	23	27	41	21	35	43	60
SBR	200	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
<b>2. Wilson Blvd/North Lynn Street - Signalized</b>																	
EBL	-	91	129	93	m124	140	#190	163	m156	138	#188	163	m156	136	m163	151	m133
EBT	-	171	251	~651	m#838	226	m305	~839	m#706	222	m302	~839	m#706	220	m274	~837	m#609
WBT	-	147	205	95	140	158	#225	111	159	140	196	107	155	142	199	112	160
WBR	125	0	0	33	#155	0	3	56	#204	0	3	56	#204	0	0	46	#184
NBL	180	125	m205	83	m140	169	m222	149	m237	166	m218	175	278	154	m207	181	287
NBT	-	231	267	157	196	296	338	190	233	289	339	185	228	279	327	163	203
NBR	135	55	m134	30	m78	70	m111	35	m86	74	m111	37	m91	76	m118	38	m93
<b>3. Fairfax Drive/N. Fort Myer Drive - Signalized</b>																	
EBTR (EBLT)	-	174	#318	126	#240	184	#322	148	#285	96	152	53	98	97	154	53	100
EBR	200	-	-	-	-	-	-	-	-	27	86	22	75	27	86	22	75
WBTL (WBTL)	-	24	m35	22	m33	26	m37	25	m38	26	m37	25	m38	36	m50	39	m65
WBR	-	-	-	-	-	-	-	-	-	-	-	-	-	4	m15	7	m33
SBL	-	28	m39	43	m68	29	m38	46	m66	30	m41	46	m65	-	-	-	-
SBT (SBTL)	-	101	m115	~794	m#814	123	m130	~969	m#885	122	m138	~932	m#832	140	m157	~1026	m#917
SBR	-	1	m4	15	m40	2	m4	24	m43	0	m0	27	m46	0	m0	31	m51
<b>4. North Lynn Street/Fairfax Drive - Signalized</b>																	
EBLT	-	72	m91	100	m134	74	m100	100	m129	62	#108	90	128	62	97	89	m87
WBTR	-	37	#96	41	#109	37	#96	41	#109	37	#96	41	#109	37	#96	41	#109
NBLTR	-	230	280	121	153	327	396	167	206	334	405	172	212	334	405	172	212
<b>5. N. Meade St/Route 50 Ramps - Unsignalized</b>																	
WBTL	-	-	54	-	78	-	84	-	118	-	86	-	120	-	86	-	120
WBR	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
NBL	180	-	6	-	8	-	6	-	10	-	6	-	10	-	6	-	10
NBT	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
SBT	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
SBR	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
<b>6. N. Queen Street/Arlington Blvd/Fairfax Drive - Unsignalized</b>																	
EBLTR	-	-	0	-	1	-	0	-	1	-	0	-	1	-	0	-	1
WBLTR	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
NBLTR	-	-	468	-	527	-	550	-	617	-	544	-	607	-	544	-	607
SBLTR	-	-	5	-	8	-	6	-	9	-	5	-	8	-	5	-	8
<b>7. Fairfax Drive/N. Pierce Street - Unsignalized</b>																	
EBLT	-	-	6	-	8	-	7	-	9	-	7	-	8	-	7	-	8
WBTR	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
SBLR	-	-	14	-	33	-	16	-	37	-	16	-	36	-	16	-	36
<b>8. N. Fort Myer Drive/Site Driveway - Unsignalized</b>																	
EBR (EBLR)	-	-	1	-	16	-	1	-	18	-	2	-	2	-	5	-	61
NBLT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	5
SBTR	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
<b>9. Fairfax Drive/Site Driveway - Unsignalized</b>																	
EBLT	-	-	1	-	0	-	1	-	0	-	2	-	1	-	2	-	1
WBTR	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
SBLR	-	-	3	-	17	-	3	-	18	-	17	-	8	-	17	-	8

1. "~" - 50th percentile volume exceeds capacity, queue may be longer.  
 2. "#" - 95th percentile volume exceeds capacity, queue may be longer.  
 3. "m" - Volume for 95th percentile queue is metered by upstream signal.

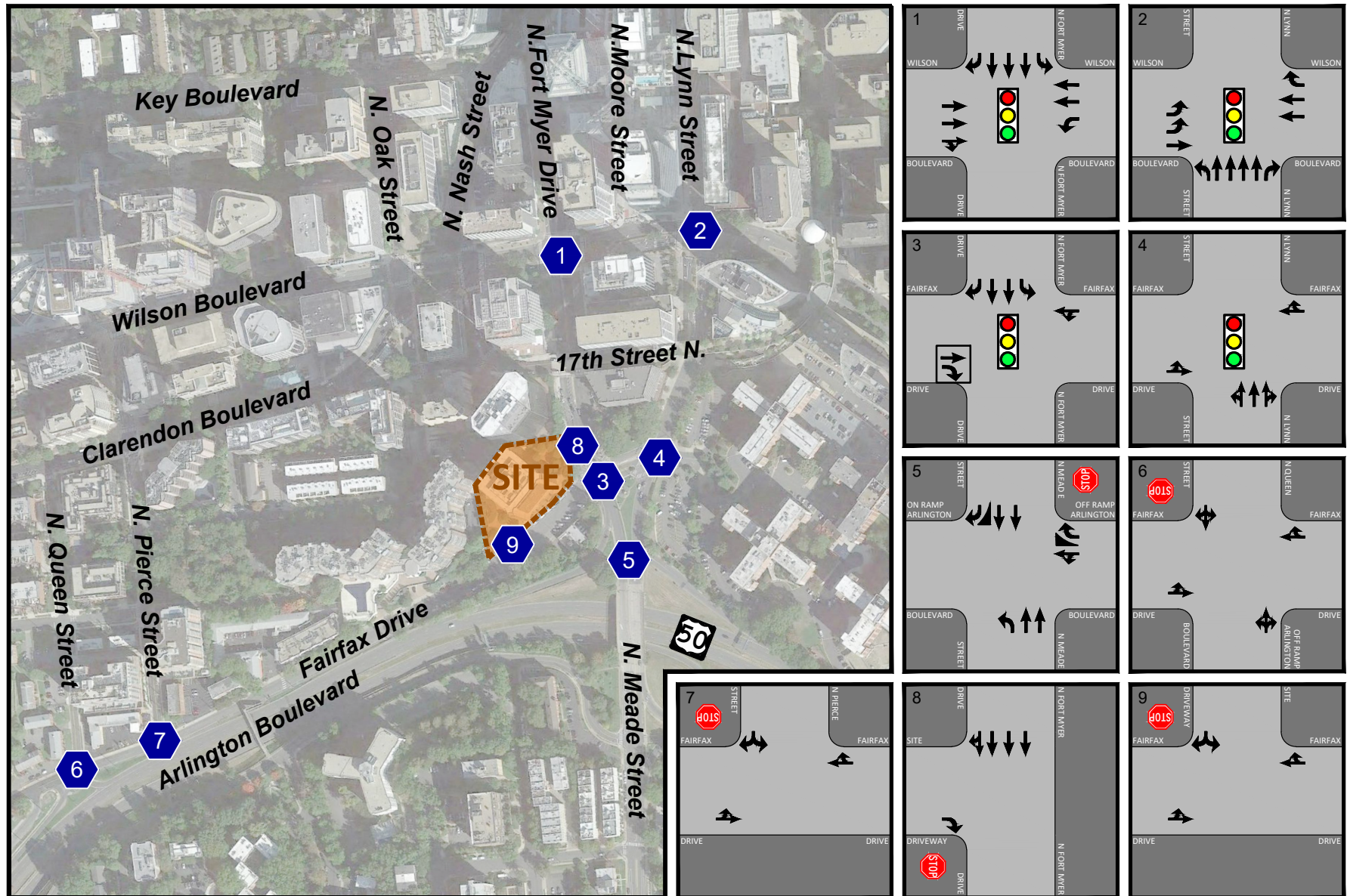


Figure 7-1  
Future Lane Use and Traffic Control with Development

- ← Represents One Travel Lane
- 🚦 Signalized Intersection
- 🛑 Stop Sign
- Lane Use Improvements



NORTH

1616 N Fort Myer Drive  
Arlington County, VA

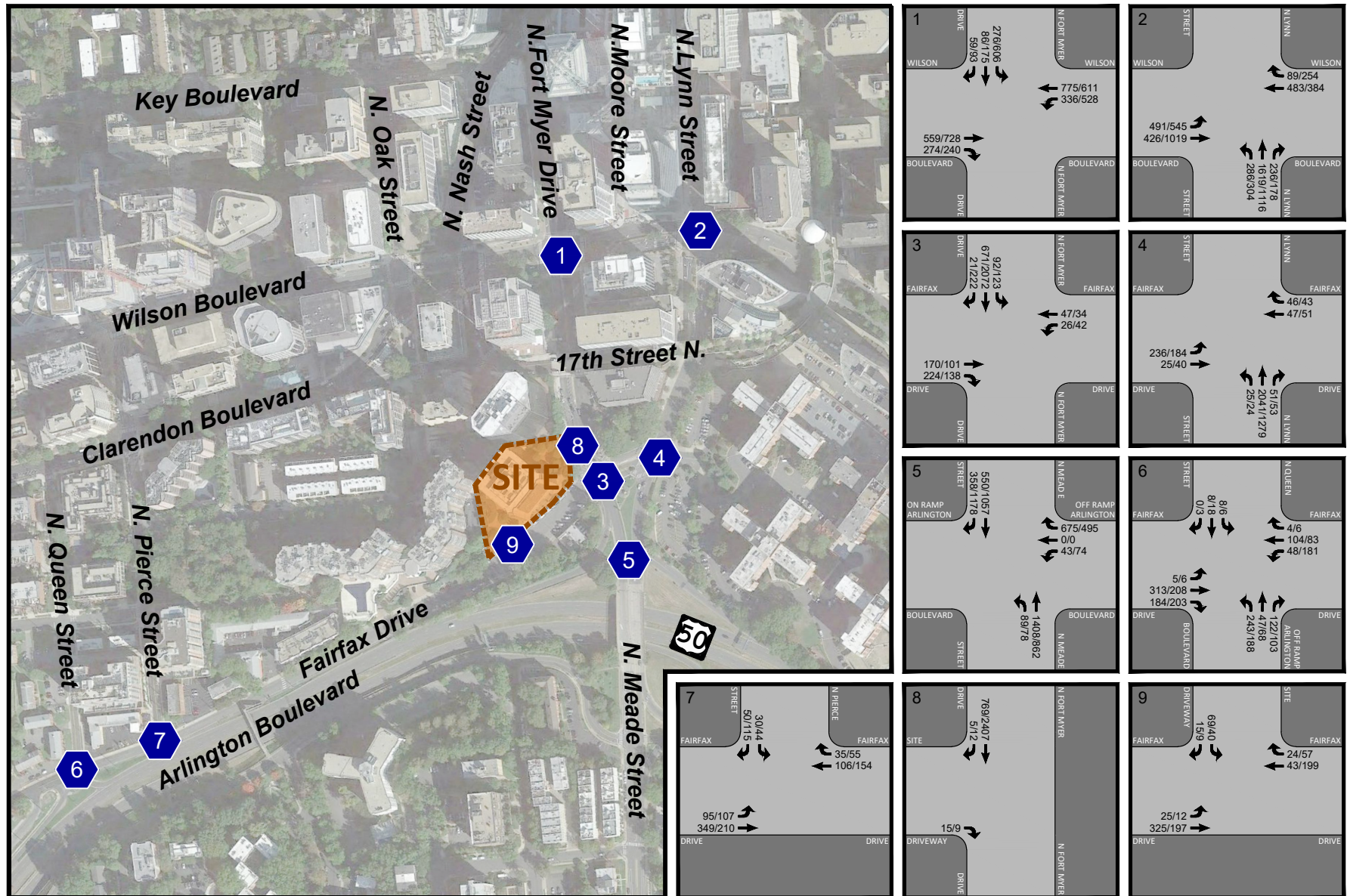
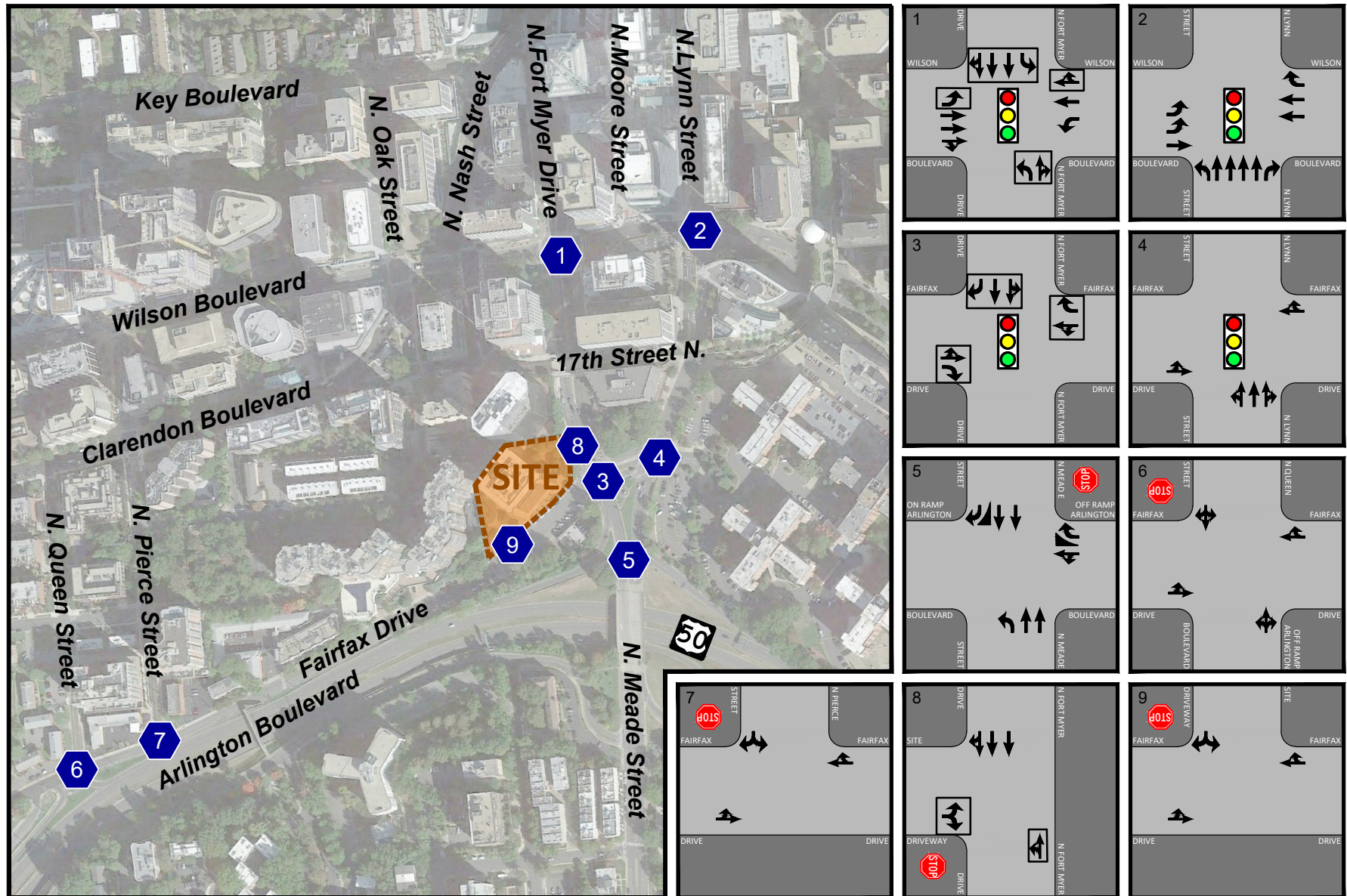


Figure 7-2  
Future Peak Hour Traffic Forecasts with Development

AM PEAK HOUR  
PM PEAK HOUR  
000 / 000



NORTH  
1616 N Fort Myer Drive  
Arlington County, VA



**Figure 7-3**  
 Future Lane Use and Traffic Controls with Development  
 with N. Fort Myer Drive Tunnel Removal

- ← Represents One Travel Lane
- 🚦 Signalized Intersection
- 🛑 Stop Sign
- Lane Use Improvements



1616 N Fort Myer Drive  
 Arlington County, VA

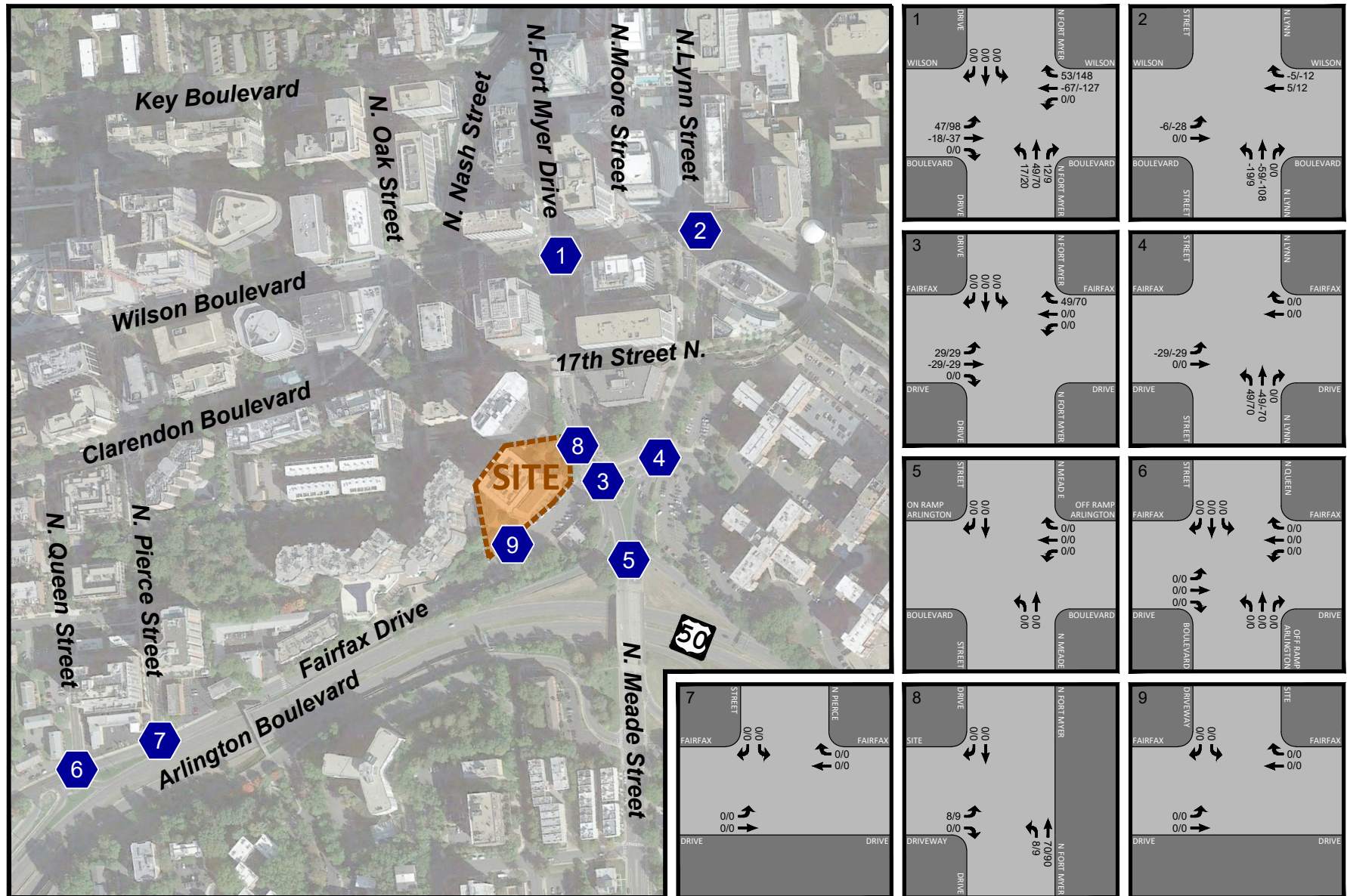


Figure 7-4  
Futru Fort Myer Drive Two-Way Rerouted Traffic Forecast  
with N. Fort Myer Drive Tunnel Removal

AM PEAK HOUR  
PM PEAK HOUR  
000 / 000



NORTH  
1616 N Fort Myer Drive  
Arlington County, VA

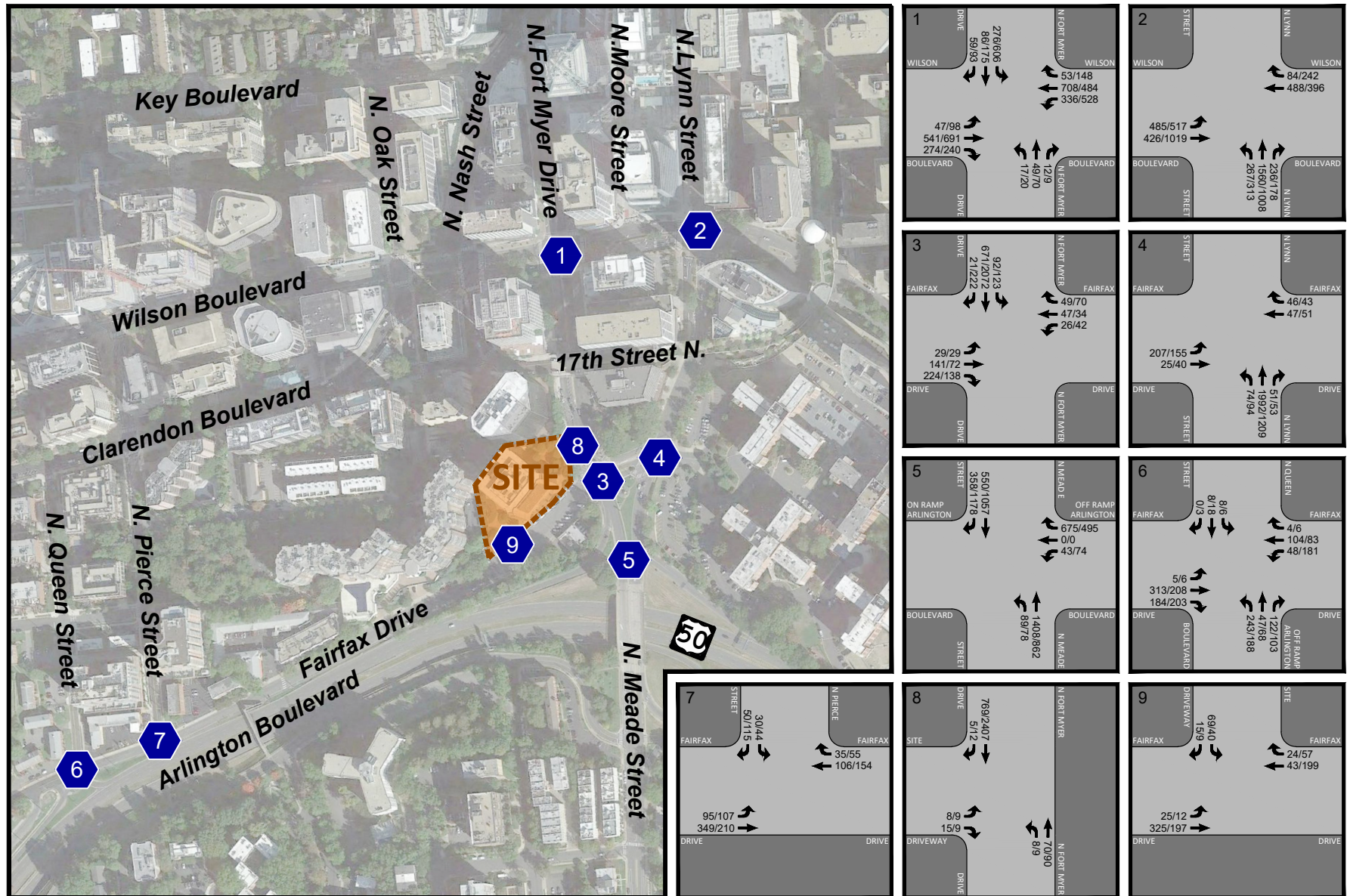


Figure 7-5  
Future Conditions with Development with N. Fort Myer Drive Tunnel Removal

AM PEAK HOUR  
PM PEAK HOUR  
000 / 000



NORTH  
1616 N Fort Myer Drive  
Arlington County, VA



## SECTION 8 CONCLUSIONS AND RECOMMENDATIONS

The conclusions and recommendations of this study are as follows:

1. The site is well-served by a multimodal transportation system that includes arterial, collector, and local streets; a connected network of sidewalks with ramps and pedestrian countdown heads; numerous bus lines; easy access to the Rosslyn Metrorail Station; carsharing; and bicycle facilities.
2. The four (4) signalized study intersections currently operate at overall acceptable LOS “D” or better during the AM and PM peak hours with the exception of the Fairfax Drive/N. Fort Myer Drive intersection during the PM peak hour. However, it is acknowledged that constrained conditions exist in Rosslyn that impact operations and the reported levels of service and queuing during peak hours.
3. In the future without redevelopment the four (4) signalized study intersections would experience increases in delay as a result of approved development and regional growth but would continue to operate consistently with the existing conditions with the exception of the Wilson Boulevard/N. Fort Myer Drive intersection that would degrade to LOS “F” during the PM peak hour as well as the Wilson Boulevard/N. Lynn Street intersection which would degrade to LOS “E”.
4. The Applicant proposes to demolish the existing 300,000 SF office building and redevelop the site with up to 691 residential dwelling units. The proposed uses would be served by on-site structured parking. Access to the parking and loading facilities would be provided via the two (2) proposed entrances, one (1) located along N. Fort Myer Drive that will be used primarily as pick-up/drop-off to the site and one (1) located along Fairfax Drive at the southwest end of the property that would serve as the main entrance for residents, visitors and loading/deliveries to the site.
5. The new vehicle trips associated with the mixed-use development equates to 132 AM peak hour trips (34 in and 98 out) and 139 PM peak hour trips (82 in and 57 out). The total person trips generated were then broken into transportation categories using census data presented in Section 3. As shown in the table, a large majority (32%) of peak hour trips are anticipated to be made via vehicle trips. When accounting for traffic generated by the existing site, the proposal would generate 63 less AM peak hour trips and 70 less PM peak hour trips. Refer to Table 6-1 for a summary of the site trip generation.

6. Under total future conditions with the redevelopment of the site, the four (4) signalized study intersections would continue to operate at overall acceptable levels of service (LOS "D" or better) during both the AM and PM peak hours with the exception of the Wilson Boulevard/N. Fort Myer Drive, Wilson Boulevard/N. Lynn Street, and Fairfax Drive/N. Fort Myer Drive intersections as noted under future conditions without redevelopment. The unsignalized intersections would also continue to operate consistently with the results of the future without redevelopment. In general, the signalized study intersections would experience an increase of 12 seconds or less in overall delay as a result of the redevelopment. All turning movements at the proposed site driveways would operate at acceptable LOS.
7. As requested by County staff, a supplemental analysis was performed to evaluate the study intersections during the N. Fort Myer Drive tunnel removal. The removal of this tunnel is part of the planned roadway network within the Core of Rosslyn and will ultimately bring Fort Myer Drive to grade and be converted to accommodate two (2) way traffic. The results are generally consistent with those under the future with redevelopment condition with the exception of the site driveway along N. Fort Myer Drive. This intersection would experience an increase in delay with the introduction of two-way traffic at this location, but is expected to serve primarily as the pick-up/drop-off driveway for the site with a relatively low volume of peak hour trips.
8. The implementation of a Transportation Management Plan (TMP) would continue to encourage the use of other non-auto modes of transportation including walking, bicycling and public transit as alternative to single occupancy vehicles and minimize the project's vehicular traffic impacts.
9. The proposed redevelopment of 1616 N. Fort Myer Drive would improve the existing outdated office building and bring a vibrant new development to the central core of Rosslyn. This development in particular will aid in planning efforts to increase the amount of residential uses within Rosslyn, lessening the number of office commuters traveling to/from Rosslyn today.

**APPENDIX A**  
**SCOPING AGREEMENT**

SCOPE OF WORK MEETING FORM  
 1616 N. Fort Myer Drive  
 Traffic Impact Analysis Base Assumptions

Contact Information	
Consultant Name:	Mike Pinkoske, PTP & Evan Gittelman
Tele:	703.676.3609
E-mail:	<a href="mailto:mrpinkoske@wellsandassociates.com">mrpinkoske@wellsandassociates.com</a> / <a href="mailto:esgittelman@wellsandassociates.com">esgittelman@wellsandassociates.com</a>
Developer/Owner Name:	Mehegan Easley
Tele:	202.777.2028
E-mail:	<a href="mailto:measley@monumentrealty.com">measley@monumentrealty.com</a>

Project Information						
Project Name:	1616 North Fort Myer Drive					
Project Location:	<p>The existing site is located at 1616 N. Fort Myer Drive and is bounded by N. Fort Myer Drive on the east and Fairfax Drive on the south in Arlington County, Virginia. The Property consists of one (1) tax parcel, identified as Arlington County RPC #17-003-033.</p> <p>The site location is shown on <b>Figure 1</b>.</p>					
Project Description:	<p>As proposed, the existing 16-story 300,000 S.F. office building would be razed and redeveloped with a 27-story, max 680-unit residential building. The site would be served by approximately 370 parking spaces.</p> <p>The subject property would be served by on-site structured parking. There are two (2) proposed access points to the parking and loading facilities. One (1) located along N. Fort Myer Drive that will be used primarily as pick-up/drop-off to the site and one (1) located along Fairfax Drive at the southwest end of the property that would serve as the main entrance for residents, visitors and loading/deliveries to the site.</p> <p>A copy of the concept plan, showing the proposed access scheme, is shown on <b>Figure 2</b>.</p>					
Proposed Use / Trip Generation	<table border="0"> <tr> <td>See <b>Table 1 &amp; 2</b> for Trip Generation Table</td> <td><u>ITE Land Uses</u> Residential – 222, Office – 710</td> </tr> <tr> <td><b>Existing</b> 300,000 S.F. Office</td> <td rowspan="2"><b>Note:</b> The proposed redevelopment <b>would not meet</b> VDOT Chapter 870.</td> </tr> <tr> <td><b>Proposed</b> Max 680 DU Multifamily Housing</td> </tr> </table>	See <b>Table 1 &amp; 2</b> for Trip Generation Table	<u>ITE Land Uses</u> Residential – 222, Office – 710	<b>Existing</b> 300,000 S.F. Office	<b>Note:</b> The proposed redevelopment <b>would not meet</b> VDOT Chapter 870.	<b>Proposed</b> Max 680 DU Multifamily Housing
See <b>Table 1 &amp; 2</b> for Trip Generation Table	<u>ITE Land Uses</u> Residential – 222, Office – 710					
<b>Existing</b> 300,000 S.F. Office	<b>Note:</b> The proposed redevelopment <b>would not meet</b> VDOT Chapter 870.					
<b>Proposed</b> Max 680 DU Multifamily Housing						

SCOPE OF WORK MEETING FORM  
1616 N. Fort Myer Drive  
Traffic Impact Analysis Base Assumptions

Traffic Impact Analysis Assumptions					
Study Period	Existing Year: <u>2021</u>	Build-out Year: <u>2025</u>	Design Year: <u>N/A</u>		
Study Area Boundaries (Attach map)  <b>See Figure 1</b>	North: 17 <sup>th</sup> Street North	South: Fairfax Drive			
	East: N. Fort Myer Drive	West:			
Consistency With Comprehensive Plan	Development would be consistent with the General Land Use Plan (GLUP) for high density apartment development. Development is also consistent with the Rosslyn Sector Plan, adopted July 2015.				
Available Traffic Data (Historical, forecasts)	<u>Published VDOT Average Annual Daily Traffic (AADT) Data:</u> N. Fort Myer Dr. – 2019: 13,000 Wilson Boulevard – 2019: 13,000				
Trip Distribution <b>See Figure 1</b>	Road Name: N. Fort Myer Drive	<b>North: 15%</b>	South:	East:	West:
	Road Name: Wilson Boulevard	North:	South:	<b>East: 10%</b>	<b>West: 10% (One Way)</b>
	Road Name: Clarendon Boulevard	North:	South:	<b>East: 10% (One Way)</b>	West:
	Road Name: Fairfax Drive	North:	South:	East:	<b>West: 10%</b>
	Road Name: Arlington Boulevard	North:	South:	<b>East: 20%</b>	<b>West: 20%</b>
	Road Name: N. Meade Street	North:	<b>South: 15%</b>	East:	West:
Annual Vehicle Trip Growth Rate:	Consistent with other study's, a rate of <b>0.5 - percent</b> will be used, compounded annually.	Peak Period for Study (circle all that apply)		<input checked="" type="checkbox"/> <b>Weekday AM &amp; PM</b>	
Study Intersections  <b>See Figure 1</b>	1. N. Fort Myer Drive/Wilson Blvd	5. N. Meade Street/U.S. Route 50 Ramps			
	2. N. Lynn Street/Wilson Boulevard	6. Fairfax Drive/Queen Street			
	3. N. Fort Myer Drive/Fairfax Dr	7. Fairfax Drive/Pierce Street			
	4. N. Lynn Street/Fairfax Drive	8. N. Fort Myer Drive/Site Driveway			

SCOPE OF WORK MEETING FORM  
1616 N. Fort Myer Drive  
Traffic Impact Analysis Base Assumptions

	9. Fairfax Drive/Site Driveway	
	<i>**Traffic count data will be utilized from recently completed MMTA's, Core of Rosslyn Traffic Study, and/or other available count data that is provided by DES prior to COVID.</i>	
Trip Adjustment Factors	Internal allowance: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Reduction:	Pass-by allowance: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Reduction:
Software Methodology	Synchro version 10 software will be used for intersection analysis.	
Improvement(s) Assumed	<ol style="list-style-type: none"> <li>1. Dark Star Lane closure and park expansion project</li> <li>2. Meade Street Bridge</li> <li>3. Fort Myer Bridge closure</li> <li>4. North Fort Myer Drive Cycle Track</li> <li>5. Master Transportation Plan – Bike Elements Section (Fairfax Drive &amp; N. Fort Myer Drive)</li> <li>6. Core Rosslyn Study</li> </ol>	
Background Traffic Studies Considered	<p>There are seven (7) approved but unbuilt/unoccupied pipeline developments that will be included in this analysis, as confirmed with County staff:</p> <ol style="list-style-type: none"> <li>1. 1401 Wilson Boulevard &amp; 1400 Key Boulevard - 40,000 SF Grocery; 288 DU Residential</li> <li>2. Central Place - 570,549 SF Office; 11,054 SF Retail</li> <li>3. 1812 North Moore Street - 569,739 Office; 11,020 Retail</li> <li>4. 1501 Arlington Boulevard – 160 Hotel Rooms</li> <li>5. 1820 Fort Myer Drive – Ames Center – 9,371 SF Retail; 5,853 SF Office; 788 DU Residential</li> <li>6. 1900 Fort Myer Drive Rosslyn Holiday Inn – 375 Hotel Rooms; 502 DU Residential; 14,412 SF Retail</li> <li>7. 1401 Lee Highway Key Bridge Marriott – 445 Hotel Rooms; 450 DU Residential</li> </ol> <p>A map denoting the locations of the above-mentioned pipeline developments is included as <b>Figure 3</b>.</p>	
Plan Submission	<input checked="" type="checkbox"/> 4.1 Site Plan Submission <input type="checkbox"/> Form Based Code Use Permit <input type="checkbox"/> Preliminary/Sketch Plan	
Additional Issues to be Addressed	<input checked="" type="checkbox"/> Queuing analysis <input type="checkbox"/> Actuation/Coordination <input type="checkbox"/> Weaving analysis <input type="checkbox"/> Merge analysis <input checked="" type="checkbox"/> Bike/Ped Accommodations <input checked="" type="checkbox"/> Intersection(LOS) <input checked="" type="checkbox"/> TDM Measures <input checked="" type="checkbox"/> – Safety Study	
Site Forecast Assumptions	Existing site traffic will be removed from the road network based on ITE estimates. New site traffic will be assigned to the network using the proposed site trip generation table along with the site distributions.	

SCOPE OF WORK MEETING FORM  
1616 N. Fort Myer Drive  
Traffic Impact Analysis Base Assumptions

	Additionally, for informational purposes only, the study will include an alternative analysis and discussion of the future two-way traffic scenario along N. Fort Myer Drive when the tunnel is closed consistent with the Core of Rosslyn Study.
--	---

ADDITIONAL NOTES:

- This 4.1 Site Plan proposal does **not** trigger VDOT 870 trip thresholds of 5,000 total daily trips, as shown in **Table 1**.
- The study will include a discussion regarding the directions of approach for the site trips. Existing driveway counts will be reviewed to verify the retail distributions and/or modified accordingly.
- Field measured PHF's will be used if between 0.85 and higher, if lower, a 0.85 PHF will be used. For future conditions a PHF of 0.92 or higher will be used.
- Level of service calculations for existing and future conditions without and with development shall be in accordance with the Highway Capacity Manual (HCM) 2000 methodologies, as computed by Synchro 10 software. Typical Synchro parameters to be utilized in this analysis will be consistent with VDOT's TOSAM and Arlington County standards.
- Study will include a comprehensive discussion of the multimodal transportation options available in the vicinity of the site including Metrorail, bus, capital bikeshare, bikes, and pedestrians.
- Study will include a comprehensive discussion of the safety analysis of the site, including crash data and summary tables.
- Include discussion and calculation of person trips generated by the proposal broken out into the various mode shares based on census data.

SIGNED:   
Applicant or Consultant

DATE: 5/24/2021

PRINT NAME: Michael Pinkoske, PTP  
Applicant or Consultant

SIGNED: \_\_\_\_\_  
Local Government Representative

DATE: \_\_\_\_\_

PRINT NAME: \_\_\_\_\_  
Local Government Representative

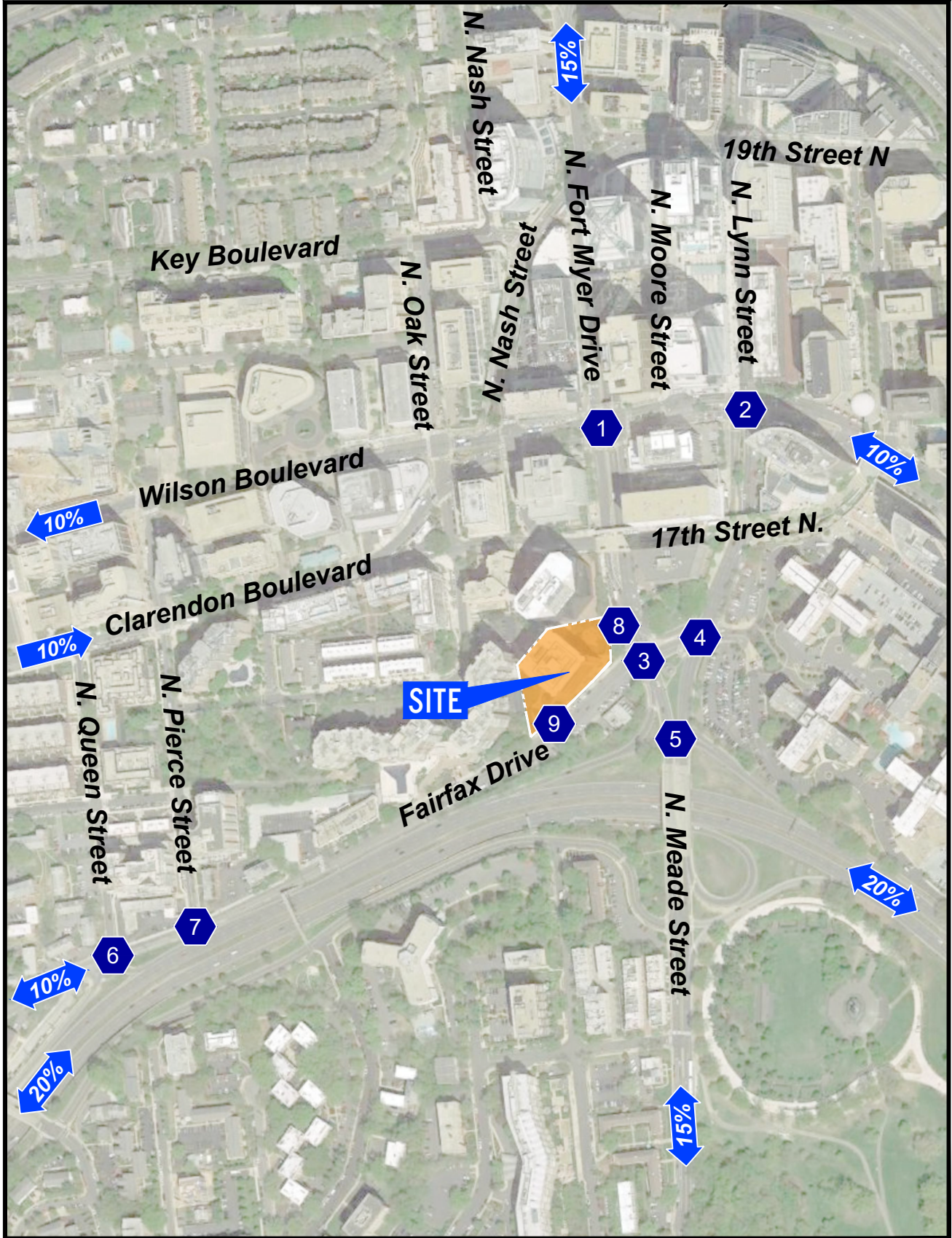


Figure 1  
Site Location, Intersection Locations, Site Distributions



1616 N Fort Myer Drive  
Arlington County, VA



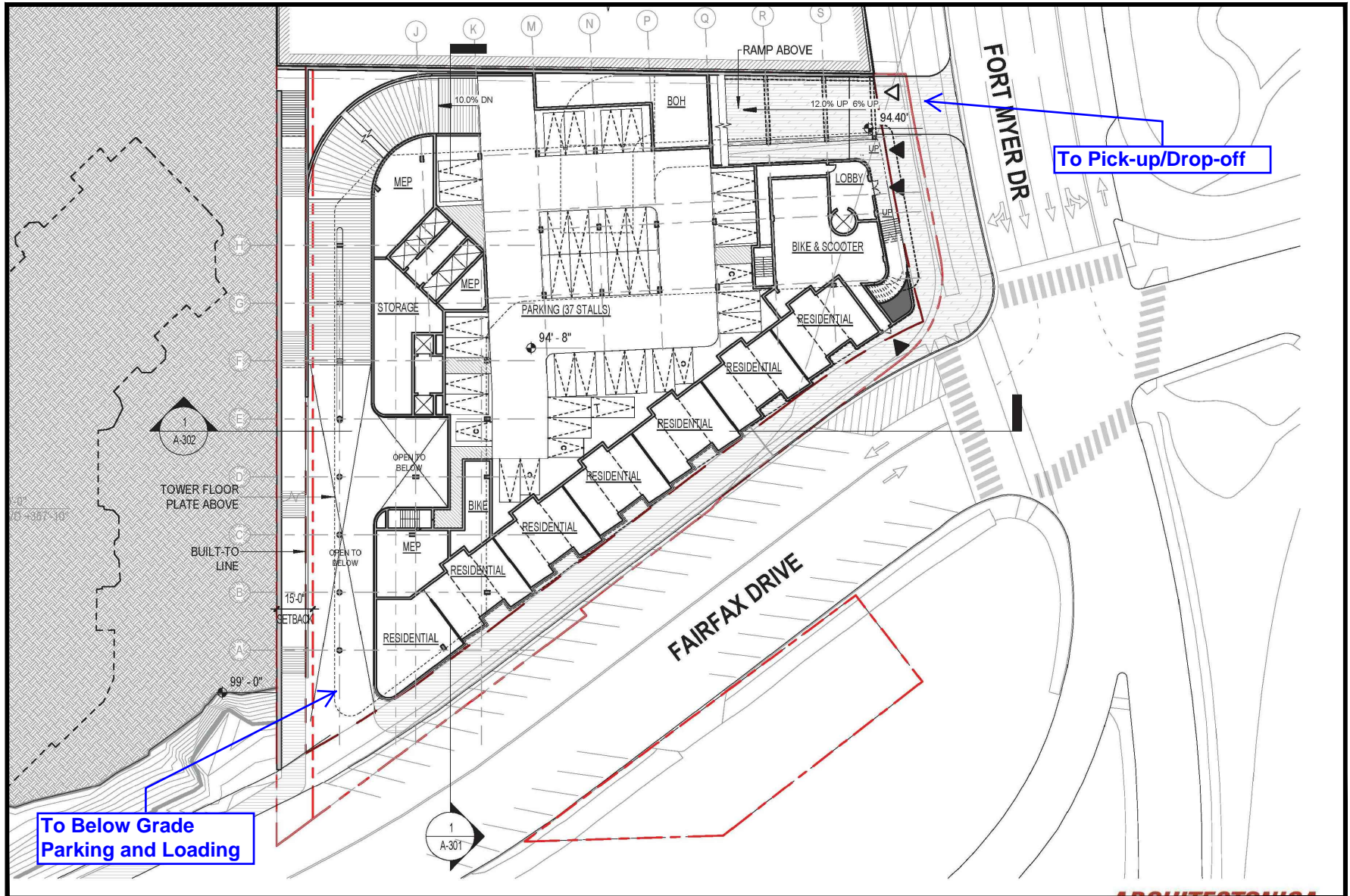


Figure 2  
Site Plan



1616 N Fort Myer Drive  
Arlington County, VA

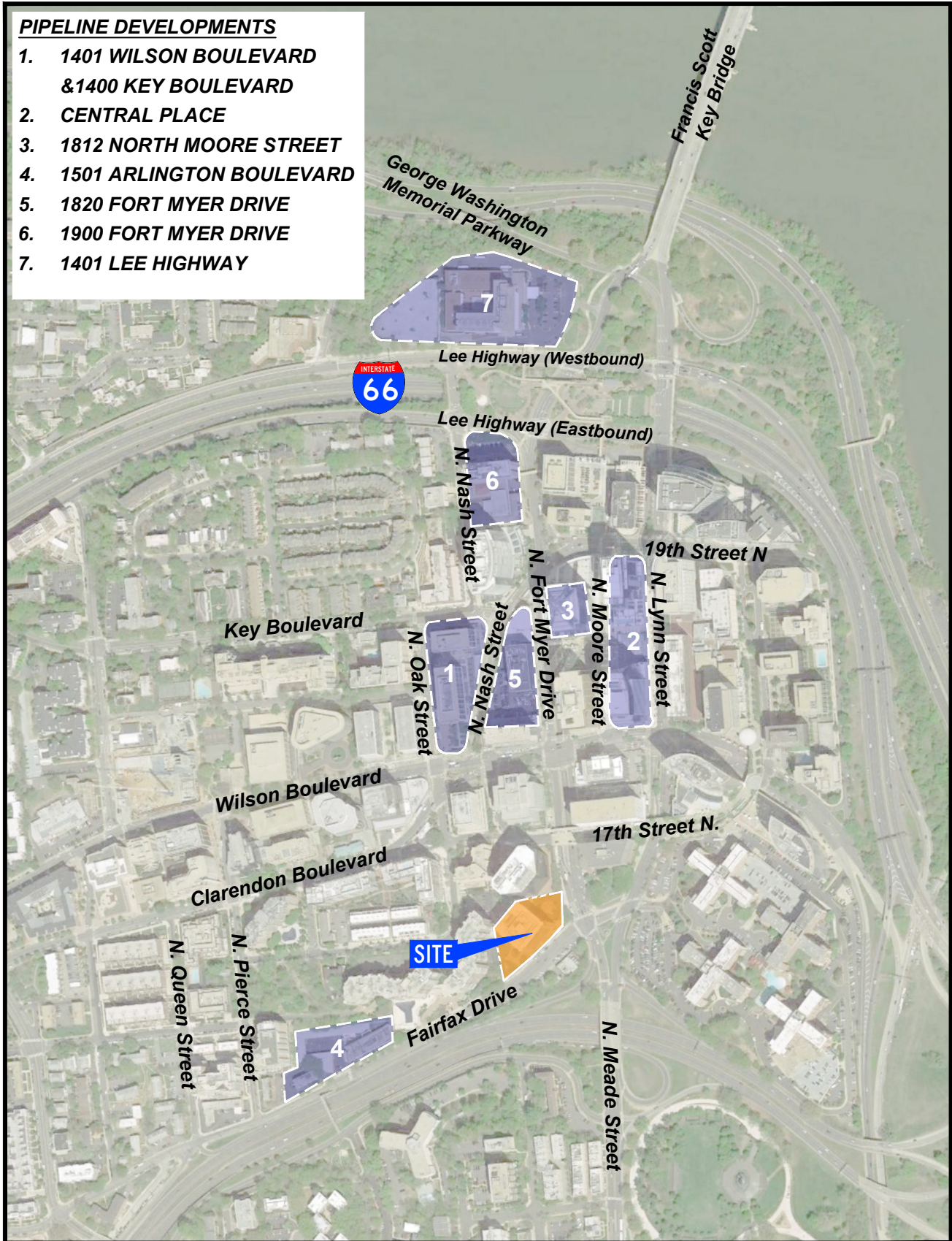


Figure 3  
Pipeline Development Locations



1616 N Fort Myer Drive  
Arlington County, VA



Table 1

1616 North Fort Myer Drive

Trip Generation (Vehicle Trips)<sup>1,2</sup>

Land Use	ITE Land Use Code	Size	Units	AM Peak Hour			PM Peak Hour			Weekday ADT
				In	Out	Total	In	Out	Total	
<b>Existing Use</b>										
Office - Dense Multi-Use Urban	710	300,000	SF	214	35	249	44	217	261	2,610
Total Existing				214	35	249	44	217	261	2,610
<b>Proposed Program</b>										
Multifamily Housing (High Rise) - Center City Core	222	680	DU	57	93	150	90	66	156	1,469
Total Proposed				57	93	150	90	66	156	1,469
<b>Difference: Proposed minus Existing</b>				-157	58	-99	46	-151	-105	-1,141

Notes:

1. Trip Generation based on the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 10th Edition.
2. Rates/equations within the (ITE) Trip Generation Manual, 10th Edition account for location of project. Center City Core rates were assumed due to the project's location in Rosslyn and numerous multimodal options available. Therefore, no additional non-auto mode share reduction was assumed.

Table 2

1616 North Fort Myer Drive

Trip Generation (Person Trips)<sup>1</sup>

Land Use	ITE Land Use Code	Size	Units	AM Peak Hour			PM Peak Hour			Weekday ADT
				In	Out	Total	In	Out	Total	
<b>Existing Uses</b>										
Office - Dense Multi-Use Urban	710	300,000	SF	326	49	375	88	314	402	4,104
Total Existing				326	49	375	88	314	402	4,104
*Vehicle (52%)				170	25	195	46	163	209	2,134
*Transit (39%)				127	19	146	34	123	157	1,601
*Active (9%)				29	5	34	8	28	36	369
<b>Proposed Program</b>										
Multifamily Housing (High Rise) - Center City Core	222	680	DU	107	303	410	251	175	426	5,501
Total Proposed				107	303	410	251	175	426	5,501
*Vehicle (32%)				34	97	131	80	56	136	1,760
*Transit (59%)				63	179	242	148	103	251	3,246
*Active (9%)				10	27	37	23	16	39	495
<b>Difference: Proposed minus Existing</b>				-219	254	35	163	-139	24	1,397
*Vehicle				-136	72	-64	34	-107	-73	-374
*Transit				-64	160	96	114	-20	94	1,645
*Active				-19	22	3	15	-12	3	126

Notes:

1. Trip Generation based on the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 10th Edition.

## **APPENDIX B MULTIMODAL INFORMATION**



## 1616 Fort Myer Drive

Radnor - Fort Myer Heights, (/VA/Arlington/Radnor\_-\_Fort\_Myer\_Heights) Arlington (/VA/Arlington), 22209

[Add scores to your site \(/professional/badges.php?address=1616 Fort Myer Drive Arlington, VA 22209\)](/professional/badges.php?address=1616%20Fort%20Myer%20Drive%20Arlington,%20VA%2022209)

Commute to **[Downtown Arlington \(/compare#edit-commutes\)](/compare#edit-commutes)**

8 min    17 min    16 min    52 min

**Favorite**

**Map**

**[Nearby Apartments \(/apartments/search/1616-fort-myer-dr-arlington-va-22209\)](/apartments/search/1616-fort-myer-dr-arlington-va-22209)**

[Looking for a home for sale in Arlington? \(https://www.redfin.com/city/21282/VA/Arlington\)](https://www.redfin.com/city/21282/VA/Arlington)

Walk Score

**92**

### Walker's Paradise

Daily errands do not require a car.

Transit Score

**74**

### Excellent Transit

Transit is convenient for most trips.

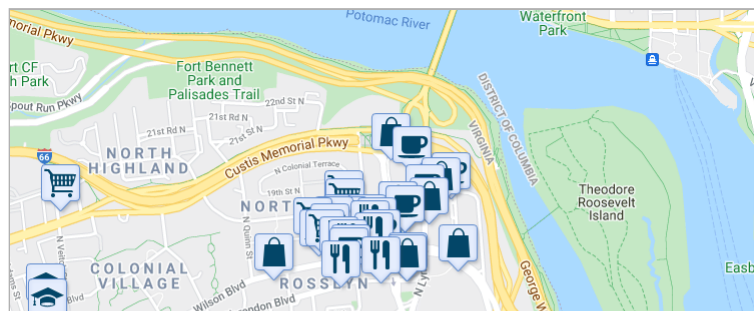
Bike Score

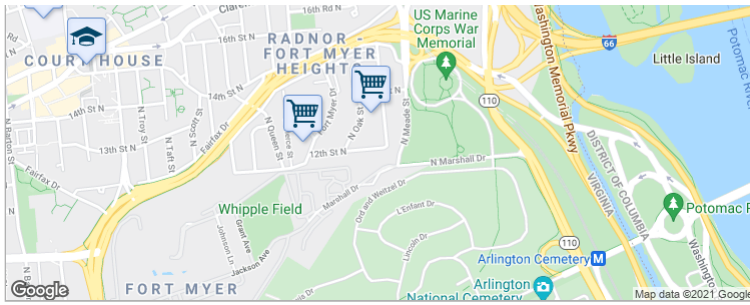
**70**

### Very Bikeable

Biking is convenient for most trips.

About your score





## About this Location



([https://maps.google.com/maps/@38.8928865,-77.04722402,70.2z?gl=us&hl=en&map\\_data=!8m4!1e3!1s1616+Fort+Myer+Drive,+Arlington,+VA+22204+USA&source=apanel](https://maps.google.com/maps/@38.8928865,-77.04722402,70.2z?gl=us&hl=en&map_data=!8m4!1e3!1s1616+Fort+Myer+Drive,+Arlington,+VA+22204+USA&source=apanel))

1616 Fort Myer Drive has a Walk Score of 92 out of 100. This location is a Walker's Paradise so daily errands do not require a car.

1616 Fort Myer Drive is a five minute walk from the Blue Metrorail Blue Line, the Orange Metrorail Orange Line and the Silver Metrorail Silver Line at the ROSSLYN METRO STATION stop.

This location is in the Radnor - Fort Myer Heights neighborhood in Arlington. Nearby parks include Dark Star Park, Freedom Park Trail and US Marine Corps War Memorial.



## Excellent Transit

1616 Fort Myer Drive has excellent transit which means transit is convenient for most trips. Car sharing is available from Zipcar and RelayRides.

### Rail lines:

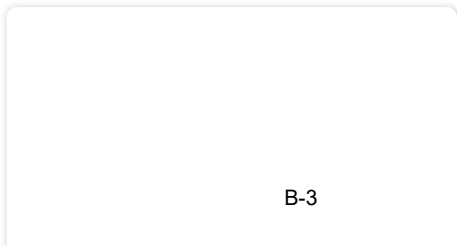
Orange Metrorail Orange Line	0.3 mi	Blue Metrorail Blue Line	0.3 mi
Silver Metrorail Silver Line	0.3 mi		

### Bus lines:

4A	0.0 mi	43 Crystal City-Courthouse	0.1 mi
45 Columbia Pike-DHS/Sequoia-Rosslyn	0.2 mi	38B	0.2 mi
4B	0.2 mi	622 Haymarket to Rosslyn/Ballston	0.2 mi
D-200 Dale City Pentagon Rosslyn Express	0.2 mi		

## Radnor - Fort Myer Heights Arlington Apartments for Rent

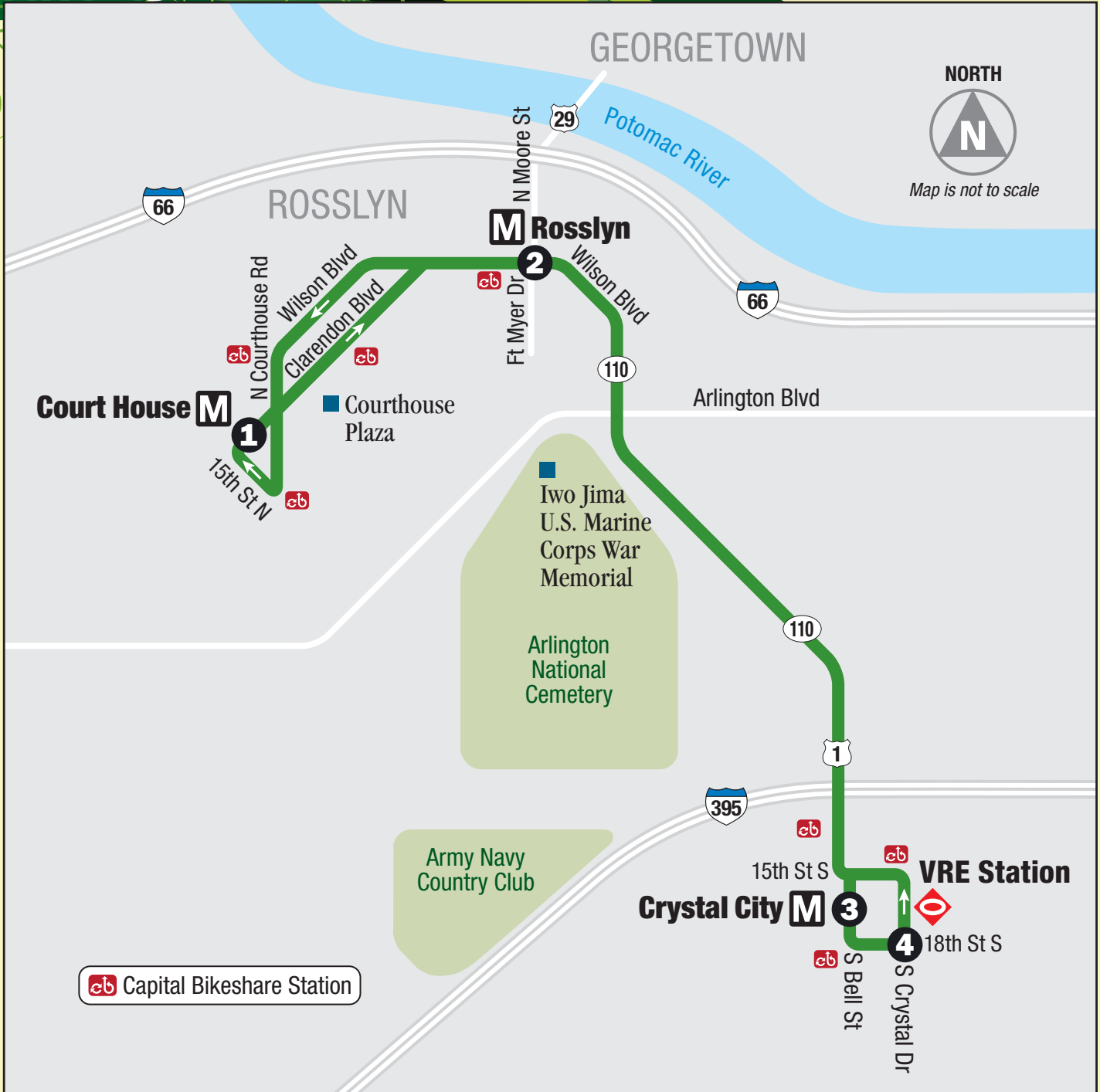
View all [Radnor - Fort Myer Heights apartments \(/apartments/search/VA/Arlington/Radnor - Fort Myer Heights\)](/apartments/search/VA/Arlington/Radnor - Fort Myer Heights) on a map.







# ART 43



## ART 43 Operating Hours

**Monday–Thursday:** 6:01 am – 10:56 pm | **Friday:** 6:01 am – 11:56 pm  
**Saturday:** 7:00 am – 11:56 pm | **Sunday:** 7:00 am – 9:56 pm

**ART 43 does not operate on these Arlington County holidays:** New Year’s Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day

**ART 43 operates on a Saturday schedule on these Arlington County holidays:** Martin Luther King, Jr. Day, Presidents’ Day, Columbus Day, Veterans’ Day, Day After Thanksgiving

## ART 43 Horas de servicio

**Lunes–Jueves:** 6:01 am – 10:56 pm | **Viernes:** 6:01 am – 11:56 pm  
**Sábado:** 7:00 am – 11:56 pm | **Domingo:** 7:00 am – 9:56 pm

**ART 43 no opera durante los siguientes feriados en el Condado de Arlington:** Año Nuevo, Memorial Day, Día de la Independencia, Día del Trabajo, Día de Acción de Gracias, Navidad

**ART 43 opera siguiendo el horario sabatino, durante los siguientes feriados en el Condado de Arlington:** Día de Martin Luther King Jr., Día de los Presidentes, Día de Colón, Día de los Veteranos de Guerra, día posterior al Día de Acción de Gracias





**ART 45**



DEPARTMENT OF ENVIRONMENTAL SERVICES  
Arlington County Commuter Services

ART 45 FARES	Cash Fare	Fare w/ SmarTrip Card	Transfers Using SmarTrip Card*	
			ART to Metrorail or Metrorail to ART	ART to ART or ART to/from Metrobus
Adults	\$2.00	\$2.00	50¢ discount	Free
Senior Citizens (ages 65+)	\$1.00	\$1.00	50¢ discount	Free
People w/ Disabilities (w/WMATA ID or Medicare card)	\$1.00	\$1.00	50¢ discount	Free
K-12 Students (w/school ID)	\$1.00	K-12 students receive the \$1.00 student fare only when paying with cash, a green iRide token or a Student iRide SmarTrip card. Transfer costs between ART and other transit systems may vary for using the Student iRide SmarTrip card.		

\*TRANSFERS MUST BE MADE WITHIN 2 HOURS.

Regular Fares can also be paid with a 7 Day Regional Bus Pass (loaded on SmarTrip), a gold ART token, or a green iRide token. You can buy tokens or purchase SmarTrip cards and add value or a 7 day pass to them at any Commuter Store or Mobile Commuter Store, or online at [commuterdirect.com](http://commuterdirect.com).

**Transbordos usando tarjeta SmarTrip\***

TARIFAS ART 45	Tarifa Regular	Tarifa con SmarTrip	ART a Metrorail o Metrorail a ART	ART a ART o ART a/desde Metrobus
Adultos	\$2.00	\$2.00	50¢ de descuento	gratis
Adultos mayores (65 años a más)	\$1.00	\$1.00	50¢ de descuento	gratis
Personas con discapacidad (con identificación WMATA o tarjeta Medicare)	\$1.00	\$1.00	50¢ de descuento	gratis
Estudiantes jardín a 12 grado (con ID estudiante)	\$1.00	Estudiantes desde jardín infante hasta 12 grado pagan tarifa de estudiante de \$1 en ART cuando pagan en efectivo, con tarjeta iRide SmarTrip color verde o iRide token color verde. Costo de transbordos entre ART y otros servicios de transporte pueden variar con tarjeta iRide SmarTrip.		

\*TRANSBORDOS DEBEN HACERSE DENTRO DE DOS HORAS.

Las tarifas regulares también se pueden pagar con un Pase de Bus Regional de 7 días (cargado en SmarTrip), un token dorado ART o un token verde iRide. Puede comprar pases o tarjetas SmarTrip y cargarles dinero o un pase de 7 días en cualquier tienda Commuter Store o Mobile Commuter Store, o en Internet en [commuterdirect.com](http://commuterdirect.com) (en inglés).


# ART 45

## Monday–Friday Northbound

### Lunes–Viernes Dirección Norte

\*This trip starts at  
Columbia Pike  
& Greenbrier  
7 minutes earlier

\*Este horario  
empieza 7 minutos  
antes en Columbia  
Pike y Greenbrier

	S Dinwiddie & Columbia Pike	Columbia Pike & Glebe Rd	Sequoia/DHS @ 2nd St S	Rosslyn  N Moore St & Wilson Blvd
	1	2	3	4
*5:40		5:51	5:59	6:23
*6:05		6:16	6:24	6:48
*6:30		6:41	6:49	7:13
*6:55		7:06	7:14	7:38
7:20		7:31	7:39	8:03
7:45		7:56	8:04	8:28
8:10		8:21	8:29	8:53
8:35		8:46	8:54	9:18
9:00		9:09	9:16	9:35
9:30		9:39	9:46	10:05
10:00		10:09	10:16	10:35
10:30		10:39	10:46	11:05
11:00		11:09	11:16	11:35
11:30		11:39	11:46	<b>12:05</b>
<b>12:00</b>		<b>12:09</b>	<b>12:16</b>	<b>12:35</b>
<b>12:30</b>		<b>12:39</b>	<b>12:46</b>	<b>1:05</b>
<b>1:00</b>		<b>1:09</b>	<b>1:16</b>	<b>1:35</b>
<b>1:30</b>		<b>1:39</b>	<b>1:46</b>	<b>2:05</b>
<b>2:00</b>		<b>2:09</b>	<b>2:16</b>	<b>2:35</b>
<b>2:30</b>		<b>2:39</b>	<b>2:46</b>	<b>3:05</b>
<b>3:00</b>		<b>3:09</b>	<b>3:16</b>	<b>3:35</b>
<b>3:30</b>		<b>3:39</b>	<b>3:46</b>	<b>4:05</b>
<b>3:55</b>		<b>4:04</b>	<b>4:11</b>	<b>4:30</b>
<b>4:15</b>		<b>4:25</b>	<b>4:32</b>	<b>4:53</b>
<b>4:40</b>		<b>4:50</b>	<b>4:57</b>	<b>5:18</b>
<b>5:05</b>		<b>5:15</b>	<b>5:22</b>	<b>5:43</b>
<b>5:30</b>		<b>5:40</b>	<b>5:47</b>	<b>6:08</b>
<b>5:55</b>		<b>6:05</b>	<b>6:12</b>	<b>6:33</b>
<b>6:20</b>		<b>6:30</b>	<b>6:37</b>	<b>6:58</b>
<b>6:45</b>		<b>6:55</b>	<b>7:02</b>	<b>7:23</b>
<b>7:10</b>		<b>7:19</b>	<b>7:26</b>	<b>7:45</b>
<b>7:40</b>		<b>7:49</b>	<b>7:56</b>	<b>8:15</b>
<b>8:10</b>		<b>8:19</b>	<b>8:26</b>	<b>8:45</b>
<b>8:40</b>		<b>8:49</b>	<b>8:56</b>	<b>9:15</b>
<b>9:10</b>		<b>9:19</b>	<b>9:26</b>	<b>9:45</b>
<b>9:40</b>		<b>9:49</b>	<b>9:56</b>	<b>10:15</b>
<b>10:10</b>		<b>10:19</b>	<b>10:26</b>	<b>10:45</b>

**Bold Shaded** numerals  
are **PM Times**

**Números sombreados** en  
negrita son **horas PM**

# ART 45

## Monday–Friday Southbound

Lunes–Viernes  
Dirección Sur

Roslyn N Moore St & Wilson Blvd	Sequoia/DHS @ 2nd St S	Columbia Pike & Glebe Rd	S Dinwiddie & Columbia Pike
4	3	2	1
6:28	6:43	6:51	7:08
6:53	7:08	7:16	7:33
7:18	7:33	7:41	7:58
7:43	7:58	8:06	8:23
8:08	8:23	8:31	8:48
8:33	8:48	8:56	9:13
9:08	9:23	9:31	9:48
9:50	10:03	10:10	10:25
10:20	10:33	10:40	10:55
10:50	11:03	11:10	11:25
11:20	11:33	11:40	11:55
11:50	<b>12:03</b>	<b>12:10</b>	<b>12:25</b>
<b>12:20</b>	<b>12:33</b>	<b>12:40</b>	<b>12:55</b>
<b>12:50</b>	<b>1:03</b>	<b>1:10</b>	<b>1:25</b>
<b>1:20</b>	<b>1:33</b>	<b>1:40</b>	<b>1:55</b>
<b>1:50</b>	<b>2:03</b>	<b>2:10</b>	<b>2:25</b>
<b>2:20</b>	<b>2:33</b>	<b>2:40</b>	<b>2:55</b>
<b>2:50</b>	<b>3:03</b>	<b>3:10</b>	<b>3:25</b>
<b>3:20</b>	<b>3:33</b>	<b>3:40</b>	<b>3:55</b>
<b>3:50</b>	<b>4:03</b>	<b>4:10</b>	<b>4:25</b>
<b>4:10</b>	<b>4:25</b>	<b>4:34</b>	<b>4:51</b>
<b>4:35</b>	<b>4:50</b>	<b>4:59</b>	<b>5:16</b>
<b>5:00</b>	<b>5:15</b>	<b>5:24</b>	<b>5:41</b>
<b>5:25</b>	<b>5:40</b>	<b>5:49</b>	<b>6:06</b>
<b>5:50</b>	<b>6:05</b>	<b>6:14</b>	<b>6:31</b>
<b>6:15</b>	<b>6:30</b>	<b>6:39</b>	<b>6:56</b>
<b>6:40</b>	<b>6:55</b>	<b>7:04</b>	<b>7:21</b>
<b>7:05</b>	<b>7:18</b>	<b>7:25</b>	<b>7:40</b>
<b>7:30</b>	<b>7:43</b>	<b>7:50</b>	<b>8:05</b>
<b>8:00</b>	<b>8:13</b>	<b>8:20</b>	<b>8:35</b>
<b>8:30</b>	<b>8:43</b>	<b>8:50</b>	<b>9:05</b>
<b>9:00</b>	<b>9:13</b>	<b>9:20</b>	<b>9:35</b>
<b>9:30</b>	<b>9:43</b>	<b>9:50</b>	<b>10:05</b>
<b>10:00</b>	<b>10:13</b>	<b>10:20</b>	<b>10:35</b>
<b>10:30</b>	<b>10:43</b>	<b>10:50</b>	<b>11:05</b>
<b>11:00</b>	<b>11:13</b>	<b>11:20</b>	<b>11:35</b>

**Bold Shaded** numerals  
are **PM Times**

**Números sombreados** en  
negrita son **horas PM**

# ART 45

## Saturday Northbound


### Sábado Dirección Norte

\*This trip starts at  
Columbia Pike  
& Greenbrier  
7 minutes earlier

\*Este horario  
empieza 7 minutos  
antes en Columbia  
Pike y Greenbrier

**Bold Shaded** numerals  
are **PM Times**


**Números sombreados** en  
negrita son **horas PM**

	S Dinwiddie & Columbia Pike	Columbia Pike & Glebe Rd	Sequoia/DHS @ 2nd St S	Rosslyn  N Moore St & Wilson Blvd
	1	2	3	4
*7:30		7:39	7:46	8:04
*8:00		8:09	8:16	8:34
*8:30		8:39	8:46	9:04
9:00		9:09	9:16	9:34
9:30		9:39	9:46	10:04
10:00		10:09	10:16	10:34
10:30		10:39	10:46	11:04
11:00		11:09	11:16	11:34
11:30		11:39	11:46	<b>12:04</b>
<b>12:00</b>		<b>12:09</b>	<b>12:16</b>	<b>12:34</b>
<b>12:30</b>		<b>12:39</b>	<b>12:46</b>	<b>1:04</b>
<b>1:00</b>		<b>1:09</b>	<b>1:16</b>	<b>1:34</b>
<b>1:30</b>		<b>1:39</b>	<b>1:46</b>	<b>2:04</b>
<b>2:00</b>		<b>2:09</b>	<b>2:16</b>	<b>2:34</b>
<b>2:30</b>		<b>2:39</b>	<b>2:46</b>	<b>3:04</b>
<b>3:00</b>		<b>3:09</b>	<b>3:16</b>	<b>3:34</b>
<b>3:30</b>		<b>3:39</b>	<b>3:46</b>	<b>4:04</b>
<b>4:00</b>		<b>4:09</b>	<b>4:16</b>	<b>4:34</b>
<b>4:30</b>		<b>4:39</b>	<b>4:46</b>	<b>5:04</b>
<b>5:00</b>		<b>5:09</b>	<b>5:16</b>	<b>5:34</b>
<b>5:30</b>		<b>5:39</b>	<b>5:46</b>	<b>6:04</b>
<b>6:00</b>		<b>6:09</b>	<b>6:16</b>	<b>6:34</b>
<b>6:30</b>		<b>6:39</b>	<b>6:46</b>	<b>7:04</b>
<b>7:00</b>		<b>7:09</b>	<b>7:16</b>	<b>7:34</b>
<b>7:30</b>		<b>7:37</b>	<b>7:44</b>	<b>8:01</b>
<b>8:00</b>		<b>8:07</b>	<b>8:14</b>	<b>8:31</b>
<b>8:30</b>		<b>8:37</b>	<b>8:44</b>	<b>9:01</b>
<b>9:00</b>		<b>9:07</b>	<b>9:14</b>	<b>9:31</b>
<b>9:30</b>		<b>9:37</b>	<b>9:44</b>	<b>10:01</b>
<b>10:00</b>		<b>10:07</b>	<b>10:14</b>	<b>10:31</b>
<b>10:30</b>		<b>10:37</b>	<b>10:44</b>	<b>11:01</b>
<b>11:00</b>		<b>11:07</b>	<b>11:14</b>	<b>11:31</b>

# ART 45

## Saturday Southbound

Sábado  
Dirección Sur

	Rosslyn  / N Moore St & Wilson Blvd	Sequoia/DHS @ 2nd St S	Columbia Pike & Glebe Rd	S Dinwiddie & Columbia Pike
	4	3	2	1
8:15	8:29	8:36	8:51	
8:45	8:59	9:06	9:21	
9:15	9:29	9:36	9:51	
9:45	9:59	10:06	10:21	
10:15	10:29	10:36	10:51	
10:45	10:59	11:06	11:21	
11:15	11:29	11:36	11:51	
11:45	11:59	<b>12:06</b>	<b>12:21</b>	
<b>12:15</b>	<b>12:29</b>	<b>12:36</b>	<b>12:51</b>	
<b>12:45</b>	<b>12:59</b>	<b>1:06</b>	<b>1:21</b>	
<b>1:15</b>	<b>1:29</b>	<b>1:36</b>	<b>1:51</b>	
<b>1:45</b>	<b>1:59</b>	<b>2:06</b>	<b>2:21</b>	
<b>2:15</b>	<b>2:29</b>	<b>2:36</b>	<b>2:51</b>	
<b>2:45</b>	<b>2:59</b>	<b>3:06</b>	<b>3:21</b>	
<b>3:15</b>	<b>3:29</b>	<b>3:36</b>	<b>3:51</b>	
<b>3:45</b>	<b>3:59</b>	<b>4:06</b>	<b>4:21</b>	
<b>4:15</b>	<b>4:29</b>	<b>4:36</b>	<b>4:51</b>	
<b>4:45</b>	<b>4:59</b>	<b>5:06</b>	<b>5:21</b>	
<b>5:15</b>	<b>5:29</b>	<b>5:36</b>	<b>5:51</b>	
<b>5:45</b>	<b>5:59</b>	<b>6:06</b>	<b>6:21</b>	
<b>6:15</b>	<b>6:29</b>	<b>6:36</b>	<b>6:51</b>	
<b>6:45</b>	<b>6:59</b>	<b>7:06</b>	<b>7:21</b>	
<b>7:15</b>	<b>7:29</b>	<b>7:36</b>	<b>7:51</b>	
<b>7:45</b>	<b>7:59</b>	<b>8:06</b>	<b>8:21</b>	
<b>8:15</b>	<b>8:29</b>	<b>8:36</b>	<b>8:51</b>	
<b>8:45</b>	<b>8:59</b>	<b>9:06</b>	<b>9:21</b>	
<b>9:15</b>	<b>9:29</b>	<b>9:36</b>	<b>9:51</b>	
<b>9:45</b>	<b>9:59</b>	<b>10:06</b>	<b>10:21</b>	
<b>10:15</b>	<b>10:29</b>	<b>10:36</b>	<b>10:51</b>	
<b>10:45</b>	<b>10:59</b>	<b>11:06</b>	<b>11:21</b>	
<b>11:15</b>	<b>11:29</b>	<b>11:36</b>	<b>11:51</b>	
<b>11:45</b>	<b>11:59</b>	12:06	12:21	

**Bold Shaded** numerals  
are **PM Times**

**Números sombreados** en  
negrita son **horas PM**



# ART 45

## Sunday Northbound


### Domingo Dirección Norte

\*This trip starts at  
Columbia Pike  
& Greenbrier  
7 minutes earlier

\*Este horario  
empieza 7 minutos  
antes en Columbia  
Pike y Greenbrier

**Bold Shaded** numerals  
are **PM Times**


**Números sombreados** en  
negrita son **horas PM**

	S Dinwiddie & Columbia Pike	Columbia Pike & Glebe Rd	Sequoia/DHS @ 2nd St S	Rosslyn  N Moore St & Wilson Blvd
	1	2	3	4
*6:50	6:57	7:04	7:21	
*7:20	7:27	7:34	7:51	
*7:50	7:57	8:04	8:21	
8:20	8:27	8:34	8:51	
8:50	8:57	9:04	9:21	
9:20	9:27	9:34	9:51	
9:50	9:57	10:04	10:21	
10:20	10:27	10:34	10:51	
10:50	10:57	11:04	11:21	
11:20	11:27	11:34	11:51	
11:50	11:57	<b>12:04</b>	<b>12:21</b>	
<b>12:20</b>	<b>12:27</b>	<b>12:34</b>	<b>12:51</b>	
<b>12:50</b>	<b>12:57</b>	<b>1:04</b>	<b>1:21</b>	
<b>1:20</b>	<b>1:27</b>	<b>1:34</b>	<b>1:51</b>	
<b>1:50</b>	<b>1:57</b>	<b>2:04</b>	<b>2:21</b>	
<b>2:20</b>	<b>2:27</b>	<b>2:34</b>	<b>2:51</b>	
<b>2:50</b>	<b>2:57</b>	<b>3:04</b>	<b>3:21</b>	
<b>3:20</b>	<b>3:27</b>	<b>3:34</b>	<b>3:51</b>	
<b>3:50</b>	<b>3:57</b>	<b>4:04</b>	<b>4:21</b>	
<b>4:20</b>	<b>4:27</b>	<b>4:34</b>	<b>4:51</b>	
<b>4:50</b>	<b>4:57</b>	<b>5:04</b>	<b>5:21</b>	
<b>5:20</b>	<b>5:27</b>	<b>5:34</b>	<b>5:51</b>	
<b>5:50</b>	<b>5:57</b>	<b>6:04</b>	<b>6:21</b>	
<b>6:20</b>	<b>6:27</b>	<b>6:34</b>	<b>6:51</b>	
<b>6:50</b>	<b>6:57</b>	<b>7:04</b>	<b>7:21</b>	

# ART 45

## Sunday Southbound

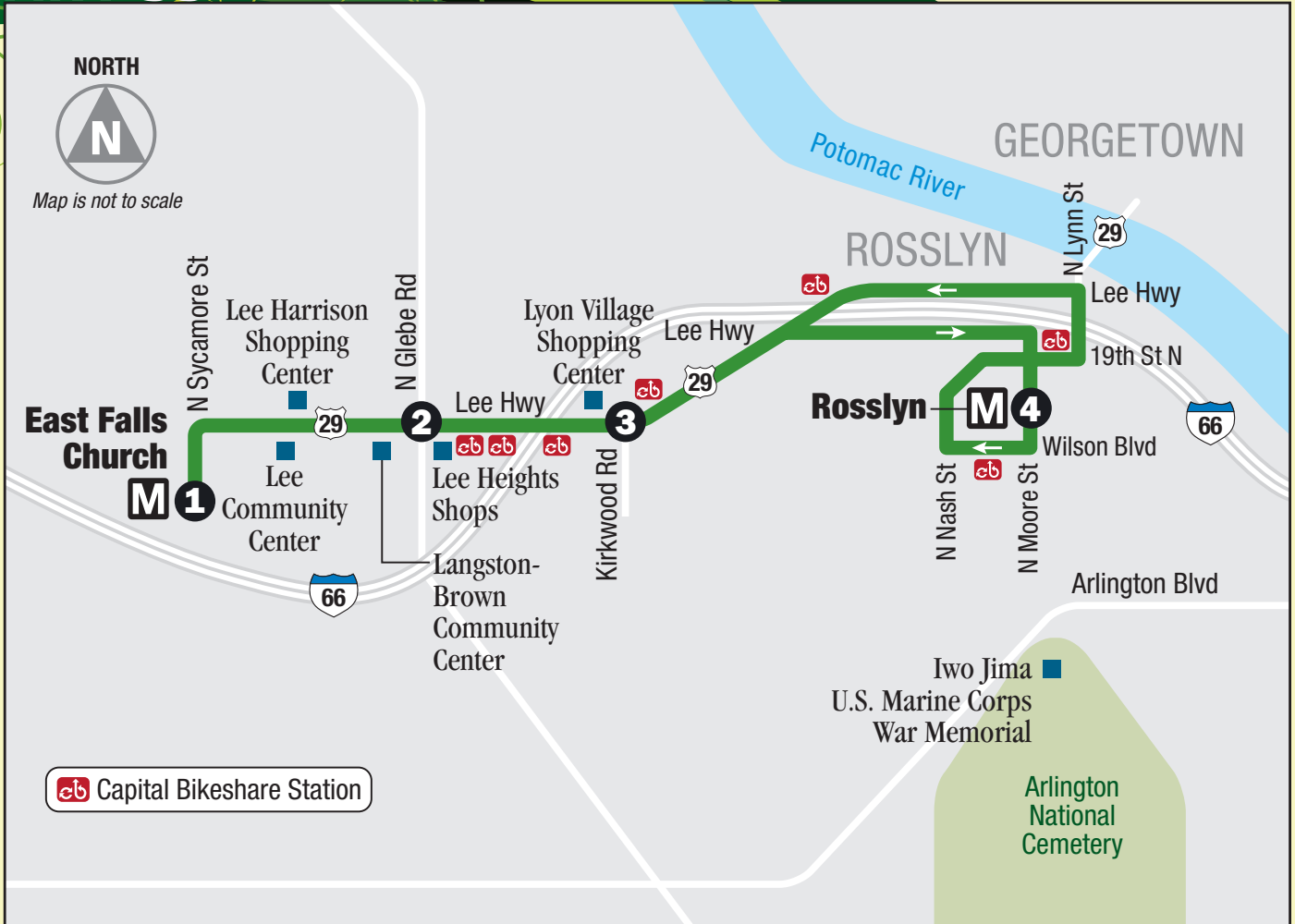
Domingo  
Dirección Sur

	Rosslyn  / N Moore St & Wilson Blvd	Sequoia/DHS @ 2nd St S	Columbia Pike & Glebe Rd	S Dinwiddie & Columbia Pike
	4	3	2	1
7:35	7:49	7:56	8:11	
8:05	8:19	8:26	8:41	
8:35	8:49	8:56	9:11	
9:05	9:19	9:26	9:41	
9:35	9:49	9:56	10:11	
10:05	10:19	10:26	10:41	
10:35	10:49	10:56	11:11	
11:05	11:19	11:26	11:41	
11:35	11:49	11:56	<b>12:11</b>	
<b>12:05</b>	<b>12:19</b>	<b>12:26</b>	<b>12:41</b>	
<b>12:35</b>	<b>12:49</b>	<b>12:56</b>	<b>1:11</b>	
<b>1:05</b>	<b>1:19</b>	<b>1:26</b>	<b>1:41</b>	
<b>1:35</b>	<b>1:49</b>	<b>1:56</b>	<b>2:11</b>	
<b>2:05</b>	<b>2:19</b>	<b>2:26</b>	<b>2:41</b>	
<b>2:35</b>	<b>2:49</b>	<b>2:56</b>	<b>3:11</b>	
<b>3:05</b>	<b>3:19</b>	<b>3:26</b>	<b>3:41</b>	
<b>3:35</b>	<b>3:49</b>	<b>3:56</b>	<b>4:11</b>	
<b>4:05</b>	<b>4:19</b>	<b>4:26</b>	<b>4:41</b>	
<b>4:35</b>	<b>4:49</b>	<b>4:56</b>	<b>5:11</b>	
<b>5:05</b>	<b>5:19</b>	<b>5:26</b>	<b>5:41</b>	
<b>5:35</b>	<b>5:49</b>	<b>5:56</b>	<b>6:11</b>	
<b>6:05</b>	<b>6:19</b>	<b>6:26</b>	<b>6:41</b>	
<b>6:35</b>	<b>6:49</b>	<b>6:56</b>	<b>7:11</b>	
<b>7:05</b>	<b>7:19</b>	<b>7:26</b>	<b>7:41</b>	
<b>7:35</b>	<b>7:49</b>	<b>7:56</b>	<b>8:11</b>	

**Bold Shaded** numerals  
are **PM Times**

**Números sombreados** en  
negrita son **horas PM**

# ART 55



## ART 55 Operating Hours

**Monday - Friday:** 5:00 am - 1:49 am

**Saturday:** 5:45 am - 1:12 am

**Sunday:** 6:20 am - 12:17 am

**ART 55 operates on a Sunday schedule on the following holidays:**

Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day and New Year's Day.

**ART 55 operates on a Saturday schedule on the following holidays:**

Martin Luther King Jr. Day, Presidents' Day, Columbus Day, Veterans Day, Day after Thanksgiving.

## ART 55 Horas de servicio

**Lunes - Viernes:** 5:00 am - 1:49 am

**Sábado:** 5:45 am - 1:12 am

**Domingo:** 6:20 am - 12:17 am

**ART 55 está en servicio, siguiendo el horario dominical, en los siguientes días festivos en el Condado de Arlington:** Día de la Recordación (Memorial), Día de la independencia, Día del Trabajo, Día de Acción de Gracias, Navidad, Año nuevo.

**ART 55 está en servicio, siguiendo el horario sabatino, en los siguientes días festivos en el Condado de Arlington:**



Día de Martin Luther King, Jr., Día de los Presidentes, Día de Colón, Día de los Veteranos de Guerra, Día posterior al día de Acción de Gracias.



# ART 55

## Saturday Eastbound

Sábado  
Dirección Este

	East Falls Church 	Lee Highway & Glebe Rd	Lee Highway & Kirkwood Rd	Rosslyn 
	1	2	3	4
5:45	5:54	6:01	6:08	
6:05	6:14	6:21	6:28	
6:25	6:34	6:41	6:48	
6:45	6:54	7:01	7:08	
7:05	7:14	7:21	7:28	
7:25	7:34	7:41	7:48	
7:45	7:54	8:01	8:08	
8:05	8:14	8:21	8:28	
8:25	8:34	8:41	8:48	
8:45	8:54	9:01	9:08	
9:05	9:14	9:21	9:28	
9:25	9:34	9:41	9:48	
9:45	9:54	10:01	10:08	
10:05	10:14	10:21	10:28	
10:25	10:34	10:41	10:48	
10:45	10:54	11:01	11:08	
11:05	11:14	11:21	11:28	
11:25	11:34	11:41	11:48	
11:45	11:54	<b>12:01</b>	<b>12:08</b>	
<b>12:05</b>	<b>12:14</b>	<b>12:21</b>	<b>12:28</b>	
<b>12:25</b>	<b>12:34</b>	<b>12:41</b>	<b>12:48</b>	
<b>12:45</b>	<b>12:54</b>	<b>1:01</b>	<b>1:08</b>	
<b>1:05</b>	<b>1:14</b>	<b>1:21</b>	<b>1:28</b>	
<b>1:25</b>	<b>1:34</b>	<b>1:41</b>	<b>1:48</b>	
<b>1:45</b>	<b>1:54</b>	<b>2:01</b>	<b>2:08</b>	
<b>2:05</b>	<b>2:14</b>	<b>2:21</b>	<b>2:28</b>	
<b>2:25</b>	<b>2:34</b>	<b>2:41</b>	<b>2:48</b>	
<b>2:45</b>	<b>2:54</b>	<b>3:01</b>	<b>3:08</b>	
<b>3:05</b>	<b>3:14</b>	<b>3:21</b>	<b>3:28</b>	
<b>3:25</b>	<b>3:34</b>	<b>3:41</b>	<b>3:48</b>	
<b>3:45</b>	<b>3:54</b>	<b>4:01</b>	<b>4:08</b>	
<b>4:05</b>	<b>4:14</b>	<b>4:21</b>	<b>4:28</b>	
<b>4:25</b>	<b>4:34</b>	<b>4:41</b>	<b>4:48</b>	
<b>4:45</b>	<b>4:54</b>	<b>5:01</b>	<b>5:08</b>	
<b>5:05</b>	<b>5:14</b>	<b>5:21</b>	<b>5:28</b>	
<b>5:25</b>	<b>5:34</b>	<b>5:41</b>	<b>5:48</b>	
<b>5:45</b>	<b>5:54</b>	<b>6:01</b>	<b>6:08</b>	
<b>6:05</b>	<b>6:14</b>	<b>6:21</b>	<b>6:28</b>	
<b>6:25</b>	<b>6:34</b>	<b>6:41</b>	<b>6:48</b>	
<b>6:45</b>	<b>6:54</b>	<b>7:01</b>	<b>7:08</b>	
<b>7:05</b>	<b>7:14</b>	<b>7:21</b>	<b>7:28</b>	
<b>7:25</b>	<b>7:34</b>	<b>7:41</b>	<b>7:48</b>	
<b>7:45</b>	<b>7:54</b>	<b>8:01</b>	<b>8:08</b>	
<b>8:15</b>	<b>8:24</b>	<b>8:31</b>	<b>8:38</b>	
<b>8:45</b>	<b>8:54</b>	<b>9:01</b>	<b>9:08</b>	
<b>9:15</b>	<b>9:24</b>	<b>9:31</b>	<b>9:38</b>	
<b>9:45</b>	<b>9:54</b>	<b>10:01</b>	<b>10:08</b>	
<b>10:15</b>	<b>10:24</b>	<b>10:31</b>	<b>10:38</b>	
<b>10:45</b>	<b>10:54</b>	<b>11:01</b>	<b>11:08</b>	
<b>11:15</b>	<b>11:24</b>	<b>11:31</b>	<b>11:38</b>	
<b>11:45</b>	<b>11:54</b>	12:01	12:08	
12:15	12:24	12:31	12:38	



**Bold Shaded**  
numerals are  
**PM Times**

**Números**  
**sombreados**  
en **negrita** son  
**horas PM**

# ART 55

## Saturday Westbound

Sábado  
Dirección Oeste

	Rosslyn 	Lee Highway & Spout Run Pkwy	Lee Highway & Glebe Rd	East Falls Church 
	4	3	2	1
6:15	6:24	6:32	6:42	
6:35	6:44	6:52	7:02	
6:55	7:04	7:12	7:22	
7:15	7:24	7:32	7:42	
7:35	7:44	7:52	8:02	
7:55	8:04	8:12	8:22	
8:15	8:24	8:32	8:42	
8:35	8:44	8:52	9:02	
8:55	9:04	9:12	9:22	
9:15	9:24	9:32	9:42	
9:35	9:44	9:52	10:02	
9:55	10:04	10:12	10:22	
10:15	10:24	10:32	10:42	
10:35	10:44	10:52	11:02	
10:55	11:04	11:12	11:22	
11:15	11:24	11:32	11:42	
11:35	11:44	11:52	<b>12:02</b>	
11:55	<b>12:04</b>	<b>12:12</b>	<b>12:22</b>	
<b>12:15</b>	<b>12:24</b>	<b>12:32</b>	<b>12:42</b>	
<b>12:35</b>	<b>12:44</b>	<b>12:52</b>	<b>1:02</b>	
<b>12:55</b>	<b>1:04</b>	<b>1:12</b>	<b>1:22</b>	
<b>1:15</b>	<b>1:24</b>	<b>1:32</b>	<b>1:42</b>	
<b>1:35</b>	<b>1:44</b>	<b>1:52</b>	<b>2:02</b>	
<b>1:55</b>	<b>2:04</b>	<b>2:12</b>	<b>2:22</b>	
<b>2:15</b>	<b>2:24</b>	<b>2:32</b>	<b>2:42</b>	
<b>2:35</b>	<b>2:44</b>	<b>2:52</b>	<b>3:02</b>	
<b>2:55</b>	<b>3:04</b>	<b>3:12</b>	<b>3:22</b>	
<b>3:15</b>	<b>3:24</b>	<b>3:32</b>	<b>3:42</b>	
<b>3:35</b>	<b>3:44</b>	<b>3:52</b>	<b>4:02</b>	
<b>3:55</b>	<b>4:04</b>	<b>4:12</b>	<b>4:22</b>	
<b>4:15</b>	<b>4:24</b>	<b>4:32</b>	<b>4:42</b>	
<b>4:35</b>	<b>4:44</b>	<b>4:52</b>	<b>5:02</b>	
<b>4:55</b>	<b>5:04</b>	<b>5:12</b>	<b>5:22</b>	
<b>5:15</b>	<b>5:24</b>	<b>5:32</b>	<b>5:42</b>	
<b>5:35</b>	<b>5:44</b>	<b>5:52</b>	<b>6:02</b>	
<b>5:55</b>	<b>6:04</b>	<b>6:12</b>	<b>6:22</b>	
<b>6:15</b>	<b>6:24</b>	<b>6:32</b>	<b>6:42</b>	
<b>6:35</b>	<b>6:44</b>	<b>6:52</b>	<b>7:02</b>	
<b>6:55</b>	<b>7:04</b>	<b>7:12</b>	<b>7:22</b>	
<b>7:15</b>	<b>7:24</b>	<b>7:32</b>	<b>7:42</b>	
<b>7:35</b>	<b>7:44</b>	<b>7:52</b>	<b>8:02</b>	
<b>7:55</b>	<b>8:04</b>	<b>8:12</b>	<b>8:22</b>	
<b>8:15</b>	<b>8:24</b>	<b>8:32</b>	<b>8:42</b>	
<b>8:45</b>	<b>8:54</b>	<b>9:02</b>	<b>9:12</b>	
<b>9:15</b>	<b>9:24</b>	<b>9:32</b>	<b>9:42</b>	
<b>9:45</b>	<b>9:54</b>	<b>10:02</b>	<b>10:12</b>	
<b>10:15</b>	<b>10:24</b>	<b>10:32</b>	<b>10:42</b>	
<b>10:45</b>	<b>10:54</b>	<b>11:02</b>	<b>11:12</b>	
<b>11:15</b>	<b>11:24</b>	<b>11:32</b>	<b>11:42</b>	
<b>11:45</b>	<b>11:54</b>	12:02	12:12	
12:15	12:24	12:32	12:42	
12:45	12:54	1:02	1:12	

**Bold Shaded**  
numerals are  
**PM Times**

**Números**  
**sombreados**  
en **negrita** son  
**horas PM**

# ART 55

## Sunday Eastbound

Domingo  
Dirección Este

	1 East Falls Church	2 Lee Highway & Glebe Rd	3 Lee Highway & Kirkwood Rd	4 Rosslyn
6:20	6:29	6:36	6:43	
6:50	6:59	7:06	7:13	
7:20	7:29	7:36	7:43	
7:50	7:59	8:06	8:13	
8:20	8:29	8:36	8:43	
8:50	8:59	9:06	9:13	
9:20	9:29	9:36	9:43	
9:50	9:59	10:06	10:13	
10:20	10:29	10:36	10:43	
10:50	10:59	11:06	11:13	
11:20	11:29	11:36	11:43	
11:50	11:59	<b>12:06</b>	<b>12:13</b>	
<b>12:20</b>	<b>12:29</b>	<b>12:36</b>	<b>12:43</b>	
<b>12:50</b>	<b>12:59</b>	<b>1:06</b>	<b>1:13</b>	
<b>1:20</b>	<b>1:29</b>	<b>1:36</b>	<b>1:43</b>	
<b>1:50</b>	<b>1:59</b>	<b>2:06</b>	<b>2:13</b>	
<b>2:20</b>	<b>2:29</b>	<b>2:36</b>	<b>2:43</b>	
<b>2:50</b>	<b>2:59</b>	<b>3:06</b>	<b>3:13</b>	
<b>3:20</b>	<b>3:29</b>	<b>3:36</b>	<b>3:43</b>	
<b>3:50</b>	<b>3:59</b>	<b>4:06</b>	<b>4:13</b>	
<b>4:20</b>	<b>4:29</b>	<b>4:36</b>	<b>4:43</b>	
<b>4:50</b>	<b>4:59</b>	<b>5:06</b>	<b>5:13</b>	
<b>5:20</b>	<b>5:29</b>	<b>5:36</b>	<b>5:43</b>	
<b>5:50</b>	<b>5:59</b>	<b>6:06</b>	<b>6:13</b>	
<b>6:20</b>	<b>6:29</b>	<b>6:36</b>	<b>6:43</b>	
<b>6:50</b>	<b>6:59</b>	<b>7:06</b>	<b>7:13</b>	
<b>7:20</b>	<b>7:29</b>	<b>7:36</b>	<b>7:43</b>	
<b>7:50</b>	<b>7:59</b>	<b>8:06</b>	<b>8:13</b>	
<b>8:20</b>	<b>8:29</b>	<b>8:36</b>	<b>8:43</b>	
<b>8:50</b>	<b>8:59</b>	<b>9:06</b>	<b>9:13</b>	
<b>9:20</b>	<b>9:29</b>	<b>9:36</b>	<b>9:43</b>	
<b>9:50</b>	<b>9:59</b>	<b>10:06</b>	<b>10:13</b>	
<b>10:20</b>	<b>10:29</b>	<b>10:36</b>	<b>10:43</b>	
<b>10:50</b>	<b>10:59</b>	<b>11:06</b>	<b>11:13</b>	
<b>11:20</b>	<b>11:29</b>	<b>11:36</b>	<b>11:43</b>	

**Bold Shaded numerals are PM Times**

**Números sombreados en negrita son horas PM**

# ART 55

## Sunday Westbound

Domingo  
Dirección Oeste

	4 Rosslyn	3 Lee Highway & Spout Run Pkwy	2 Lee Highway & Glebe Rd	1 East Falls Church
6:50	7:00	7:08	7:17	
7:20	7:30	7:38	7:47	
7:50	8:00	8:08	8:17	
8:20	8:30	8:38	8:47	
8:50	9:00	9:08	9:17	
9:20	9:30	9:38	9:47	
9:50	10:00	10:08	10:17	
10:20	10:30	10:38	10:47	
10:50	11:00	11:08	11:17	
11:20	11:30	11:38	11:47	
11:50	<b>12:00</b>	<b>12:08</b>	<b>12:17</b>	
<b>12:20</b>	<b>12:30</b>	<b>12:38</b>	<b>12:47</b>	
<b>12:50</b>	<b>1:00</b>	<b>1:08</b>	<b>1:17</b>	
<b>1:20</b>	<b>1:30</b>	<b>1:38</b>	<b>1:47</b>	
<b>1:50</b>	<b>2:00</b>	<b>2:08</b>	<b>2:17</b>	
<b>2:20</b>	<b>2:30</b>	<b>2:38</b>	<b>2:47</b>	
<b>2:50</b>	<b>3:00</b>	<b>3:08</b>	<b>3:17</b>	
<b>3:20</b>	<b>3:30</b>	<b>3:38</b>	<b>3:47</b>	
<b>3:50</b>	<b>4:00</b>	<b>4:08</b>	<b>4:17</b>	
<b>4:20</b>	<b>4:30</b>	<b>4:38</b>	<b>4:47</b>	
<b>4:50</b>	<b>5:00</b>	<b>5:08</b>	<b>5:17</b>	
<b>5:20</b>	<b>5:30</b>	<b>5:38</b>	<b>5:47</b>	
<b>5:50</b>	<b>6:00</b>	<b>6:08</b>	<b>6:17</b>	
<b>6:20</b>	<b>6:30</b>	<b>6:38</b>	<b>6:47</b>	
<b>6:50</b>	<b>7:00</b>	<b>7:08</b>	<b>7:17</b>	
<b>7:20</b>	<b>7:30</b>	<b>7:38</b>	<b>7:47</b>	
<b>7:50</b>	<b>8:00</b>	<b>8:08</b>	<b>8:17</b>	
<b>8:20</b>	<b>8:30</b>	<b>8:38</b>	<b>8:47</b>	
<b>8:50</b>	<b>9:00</b>	<b>9:08</b>	<b>9:17</b>	
<b>9:20</b>	<b>9:30</b>	<b>9:38</b>	<b>9:47</b>	
<b>9:50</b>	<b>10:00</b>	<b>10:08</b>	<b>10:17</b>	
<b>10:20</b>	<b>10:30</b>	<b>10:38</b>	<b>10:47</b>	
<b>10:50</b>	<b>11:00</b>	<b>11:08</b>	<b>11:17</b>	
<b>11:20</b>	<b>11:30</b>	<b>11:38</b>	<b>11:47</b>	
<b>11:50</b>	12:00	12:08	12:17	

**Bold Shaded numerals are PM Times**

**Números sombreados en negrita son horas PM**

Transfers Using SmarTrip Card*				
ART 55 FARES	Cash Fare	Fare w/ SmarTrip Card	ART to Metrorail or Metrorail to ART	ART to ART or ART to/from Metrobus
Adults	\$2.00	\$2.00	50¢ discount	Free
Senior Citizens (ages 65+)	\$1.00	\$1.00	50¢ discount	Free
People w/ Disabilities (w/WMATA ID or Medicare card)	\$1.00	\$1.00	50¢ discount	Free
K-12 Students (w/school ID)	\$1.00	K-12 students receive the \$1.00 student fare only when paying with cash, a green iRide token or a Student iRide SmarTrip card. Transfer costs between ART and other transit systems may vary for using the Student iRide SmarTrip card.		

\*TRANSFERS MUST BE MADE WITHIN 2 HOURS.

Regular Fares can also be paid with a 7 Day Regional Bus Pass (loaded on SmarTrip), a gold ART token, or a green iRide token. You can buy tokens or purchase SmarTrip cards and add value or a 7 day pass to them at any Commuter Store or Mobile Commuter Store, or online at commuterdirect.com.

### Transbordos usando tarjeta SmarTrip\*

TARIFAS ART 55	Tarifa Regular	Tarifa con SmarTrip	ART a Metrorail o Metrorail a ART	ART a ART o ART a/desde Metrobus
Adultos	\$2.00	\$2.00	50¢ de descuento	gratis
Adultos mayores (65 años a más)	\$1.00	\$1.00	50¢ de descuento	gratis
Personas con discapacidad (con identificación WMATA o tarjeta Medicare)	\$1.00	\$1.00	50¢ de descuento	gratis
Estudiantes jardín a 12 grado (con ID estudiante)	\$1.00	Estudiantes desde jardín infante hasta 12 grado pagan tarifa de estudiante de \$1 en ART cuando pagan en efectivo, con tarjeta iRide SmarTrip color verde o iRide token color verde. Costo de transbordos entre ART y otros servicios de transporte pueden variar con tarjeta iRide SmarTrip.		

\*TRANSBORDOS DEBEN HACERSE DENTRO DE DOS HORAS.

Las tarifas regulares también se pueden pagar con un Pase de Bus Regional de 7 Días (cargado en SmarTrip), un token dorado ART o un token verde iRide. Puede comprar pases o tarjetas SmarTrip y cargarles dinero o un pase de 7 días en cualquier tienda Commuter Store o Mobile Commuter Store, o en Internet en commuterdirect.com (en inglés).

Table: ACSDT5Y2019.B08141

	Census Tract 1016.03, Arlington County, Virginia		Census Tract 1017.02, Arlington County, Virginia	
Label	Estimate	Margin of Error	Estimate	Margin of Error
Total:	2,704	±267	3,942	±378
No vehicle available	312	±135	856	±216
1 vehicle available	1,525	±257	2,365	±343
2 vehicles available	794	±307	657	±277
3 or more vehicles available	73	±72	64	±91
Car, truck, or van - drove alone:	843	±167	1,131	±275
No vehicle available	16	±26	35	±41
1 vehicle available	470	±165	830	±257
2 vehicles available	346	±148	251	±142
3 or more vehicles available	11	±18	15	±26
Car, truck, or van - carpooled:	139	±95	0	±17
No vehicle available	32	±36	0	±17
1 vehicle available	48	±46	0	±17
2 vehicles available	59	±74	0	±17
3 or more vehicles available	0	±12	0	±17
Public transportation (excluding taxicab):	1,231	±233	1,737	±320
No vehicle available	188	±116	507	±161
1 vehicle available	763	±206	990	±237
2 vehicles available	232	±125	191	±126
3 or more vehicles available	48	±59	49	±71
Walked:	360	±143	552	±149
No vehicle available	76	±73	150	±75
1 vehicle available	132	±84	304	±119
2 vehicles available	138	±114	98	±89
3 or more vehicles available	14	±22	0	±17
Taxicab, motorcycle, bicycle, or other means:	93	±56	183	±94
No vehicle available	0	±12	102	±67
1 vehicle available	93	±56	68	±61

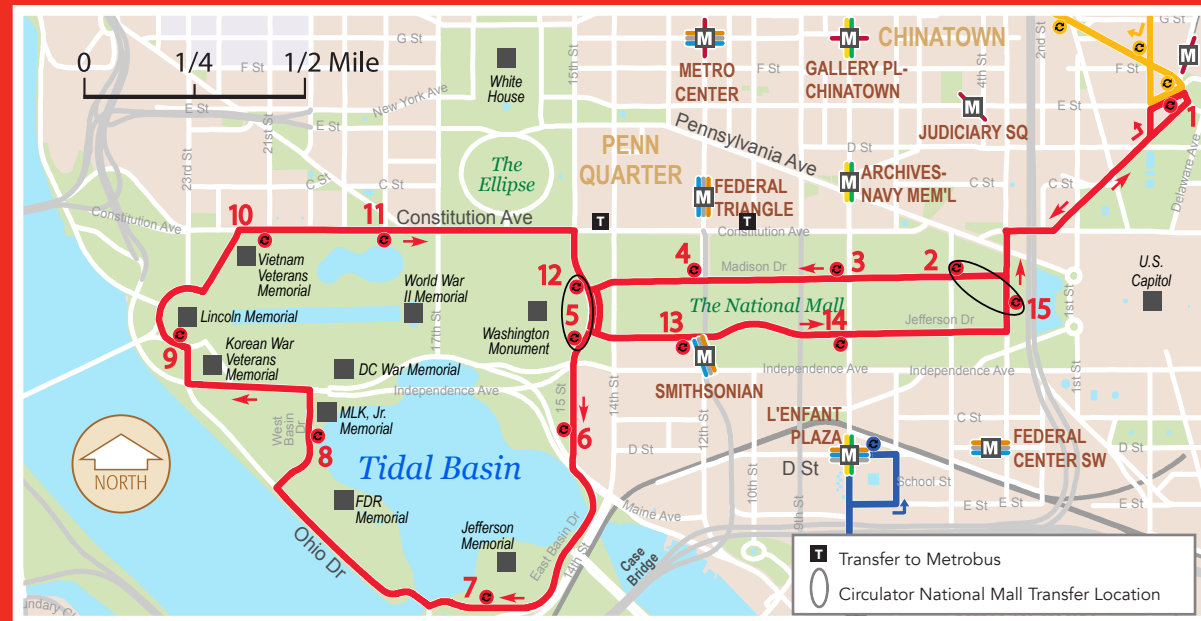
Table: ACSDT5Y2019.B08141

	Census Tract 1016.03, Arlington County, Virginia		Census Tract 1017.02, Arlington County, Virginia	
Label	Estimate	Margin of Error	Estimate	Margin of Error
2 vehicles available	0	±12	13	±21
3 or more vehicles available	0	±12	0	±17
Worked from home:	38	±43	339	±183
No vehicle available	0	±12	62	±41
1 vehicle available	19	±30	173	±155
2 vehicles available	19	±31	104	±93
3 or more vehicles available	0	±12	0	±17



Label	Census Tract 1016.03, Arlington County, Virginia		Census Tract 1017.02, Arlington County, Virginia	
	Estimate	Margin of Error	Estimate	Margin of Error
▼ Total:	2,704	±267	3,942	±378
No vehicle available	312	±135	856	±216
1 vehicle available	1,525	±257	2,365	±343
2 vehicles available	794	±307	657	±277
3 or more vehicles available	78	±72	64	±91
▼ Car, truck, or van - drove alone:	843	±167	1,121	±275
No vehicle available	16	±26	35	±41
1 vehicle available	470	±165	830	±257
2 vehicles available	346	±148	251	±142
3 or more vehicles available	11	±18	15	±26
▼ Car, truck, or van - carpooled:	139	±95	0	±17
No vehicle available	32	±36	0	±17
1 vehicle available	48	±46	0	±17
2 vehicles available	59	±74	0	±17
3 or more vehicles available	0	±12	0	±17
▼ Public transportation (excluding taxicab):	1,231	±233	1,737	±320
No vehicle available	188	±116	507	±161
1 vehicle available	763	±206	990	±237
2 vehicles available	232	±125	191	±126
3 or more vehicles available	48	±59	49	±71
▼ Walked:	360	±143	552	±149
No vehicle available	76	±73	150	±75
1 vehicle available	132	±84	304	±119
2 vehicles available	138	±114	98	±89
3 or more vehicles available	14	±22	0	±17
▼ Taxicab, motorcycle, bicycle, or other means:	93	±56	163	±94
No vehicle available	0	±12	102	±67
1 vehicle available	93	±56	68	±51
2 vehicles available	0	±12	13	±21
3 or more vehicles available	0	±12	0	±17
▼ Worked from home:	38	±43	339	±183
No vehicle available	0	±12	62	±41
1 vehicle available	19	±30	173	±155
2 vehicles available	19	±31	104	±98
3 or more vehicles available	0	±12	0	±17

# DC CIRCULATOR NATIONAL MALL SERVICE



- |   |  |  |
|---|--|--|
| <p><b>1. Union Station</b><br/>E St. NE / Columbus Circle</p> <p><b>2. National Gallery of Art</b><br/>Madison Dr. NW / 4th St.</p> <p><b>3. National Gallery of Art Sculpture Garden</b><br/>Madison Dr. NW / 7th St.</p> <p><b>4. National Museum of American History / National Museum of Natural History</b><br/>Madison Dr. NW / 12th St.</p> <p><b>5. Washington Monument / National Museum of African American History and Culture</b><br/>15th St. SW / Jefferson Dr.</p> | <p><b>6. Holocaust Memorial Museum / Bureau of Engraving and Printing</b><br/>15th St. SW near Maine Ave.</p> <p><b>7. Thomas Jefferson Memorial</b><br/>E. Basin Dr. SW at Jefferson Memorial</p> <p><b>8. Martin Luther King, Jr. Memorial / Franklin Delano Roosevelt Memorial</b><br/>W. Basin Dr. SW near Independence Ave.</p> <p><b>9. Lincoln Memorial / Korean War Veterans Memorial</b><br/>Lincoln Memorial Circle SW</p> <p><b>10. Vietnam Veterans Memorial</b><br/>Constitution Ave. NW / 21st St.</p> | <p><b>11. World War II Memorial / Constitution Gardens</b><br/>Constitution Ave. NW / 18th St.</p> <p><b>12. Washington Monument / National Museum of African American History and Culture</b><br/>15th St. NW / Madison Dr.</p> <p><b>13. Smithsonian Visitor Center</b><br/>Jefferson Dr. SW / 12th St.</p> <p><b>14. National Air and Space Museum / Hirshhorn Museum and Sculpture Garden</b><br/>Jefferson Dr. SW / 7th St.</p> <p><b>15. United States Capitol / U.S. Botanic Garden National Museum of the American Indian</b><br/>3rd St. NW near Madison Dr. NW</p> |
|---|--|--|

irculator



**Free Onboard Wi-Fi Available Now!**  
Connect with us



[dccirculator.com](http://dccirculator.com)

Customer Service/  
Ayuda y Atención al Cliente  
(202) 671-2020

d. GOVERNMENT OF THE DISTRICT OF COLUMBIA  
DC MURIEL BOWSER, MAYOR

## DC Circulator Map & Information Guide

- One Dollar Fare
- Every 10 Minutes
- Onboard Wi-Fi
- USB Chargers
- Electric Buses

irculator

### FARES

- **Regular:** \$1.00
- **Senior/Disabled:** 50¢
- **DC Students (elementary - high school):** free with DC One Card
- **Children under 5:** free with paying adult
- **Transfers:** available only when you pay with a SmarTrip™ card
- **From Metrobus or Circulator (within two hours):** free
- **To Metrobus (within two hours):** 75¢ (or step-up to current Metrobus fare)
- **To Circulator (within two hours):** free
- **To or from Metrorail:** 50¢ discount

### PAYMENT OPTIONS

- **Cash:** exact change required
- **SmarTrip™ Card:** a rechargeable card used to pay for fares on the Circulator, Metrorail and Metrobus. Buy and load SmarTrip™ cards at any Metrorail station.

See website for details [www.dccirculator.com](http://www.dccirculator.com)



# circulator

Buses run every 10 minutes on the following schedule:

**Dupont Circle – Georgetown – Rosslyn**  
 Monday – Thursday: 6am–Midnight  
 Friday: 6am–3am  
 Saturday: 7am–3am  
 Sunday: 7am–Midnight

**Georgetown – Union Station**  
 Monday – Thursday: 6am–Midnight  
 Friday: 6am–3am  
 Saturday: 7am–3am  
 Sunday: 7am–Midnight

**Woodley Park – Adams Morgan – McPherson Square Metro**  
 Monday – Thursday: 6am–Midnight  
 Friday: 6am–3:30am  
 Saturday: 7am–3:30am  
 Sunday: 7am–Midnight

**NEW! Eastern Market – L’Enfant Plaza**  
 Weekdays: 6am–9pm  
 Weekends: 7am–9pm  
 \*Special detours and extended service on Nationals and DC United game days

**NEW! Congress Heights – Union Station**  
 Weekdays: 6am–9pm  
 Weekends: 7am–9pm

**National Mall Route**  
 Winter Hours (October – March):  
 Weekdays: 7am–7pm  
 Saturday – Sunday: 9am–7pm  
 Summer Hours (April – September):  
 Weekdays: 7am–8pm  
 Saturday – Sunday: 9am–8pm



## HOW TO RIDE

1. Each bus stop is marked with the Circulator flag above where you should wait for the bus to arrive.
2. Buses service each stop in 10 minute intervals during normal service conditions.
3. The final destination for each bus is displayed in bright LED lights above the front windshield.
4. Have your payment ready when the bus approaches. See back panel for payment details.
5. Enjoy a comfortable ride! Notify the driver when your stop is approaching by pressing one of the stop buttons located throughout the bus.
6. Gather your belongings and disembark safely.

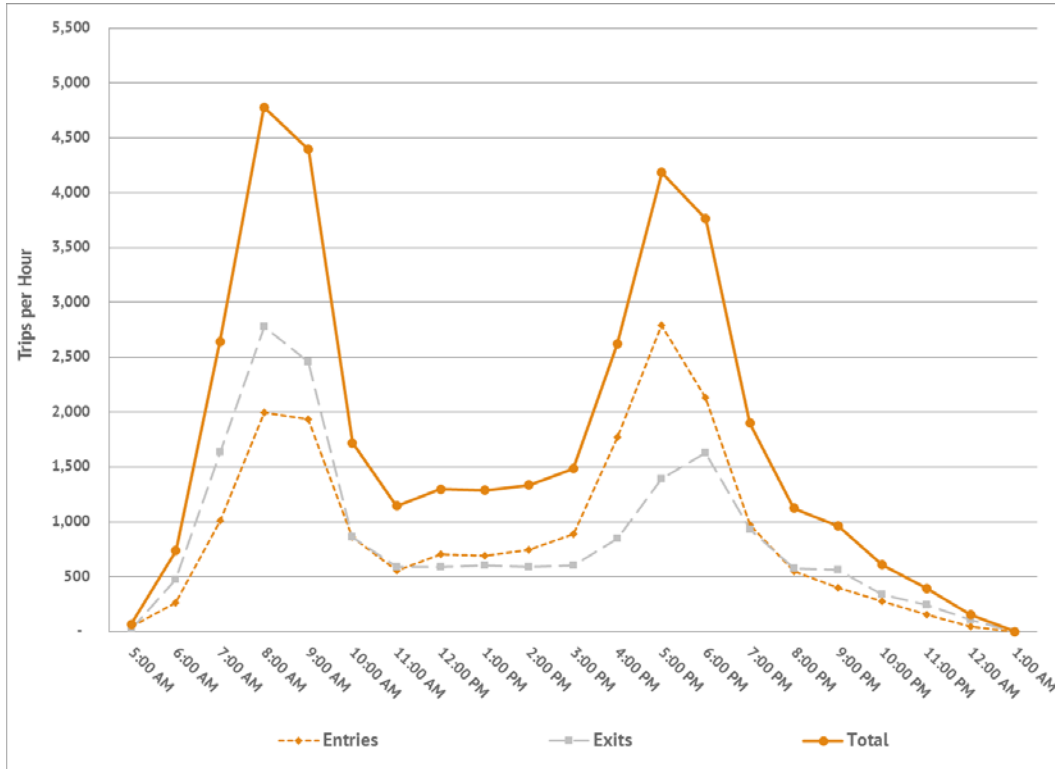
**LEGEND**

- Circulator stop
- Indicates direction the bus travels
- Transfer points to Metrorail

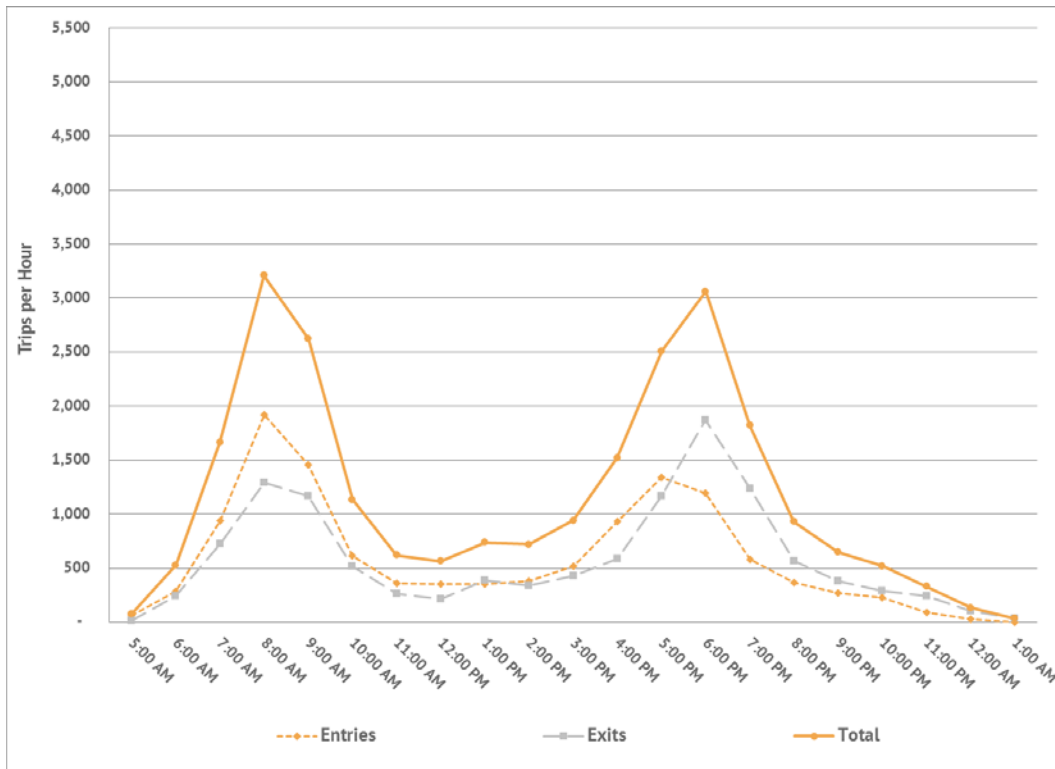


Follow us on Twitter to get real-time service alerts for each route @dccirculator

## Rosslyn – Hourly Metrorail Ridership for Wednesday May 12<sup>th</sup>, 2010



## Ballston - MU – Hourly Metrorail Ridership for Wednesday May 12<sup>th</sup>, 2010



<u>Hour Beginning</u>	<u>Entries</u>	Rosslyn <u>Exits</u>	<u>Total</u>
5:00 AM	46	22	68
6:00 AM	265	473	738
7:00 AM	1,007	1,637	2,644
8:00 AM	1,998	2,780	4,778
9:00 AM	1,934	2,461	4,395
10:00 AM	861	859	1,720
11:00 AM	555	589	1,144
12:00 PM	707	589	1,296
1:00 PM	688	600	1,288
2:00 PM	742	592	1,334
3:00 PM	886	600	1,486
4:00 PM	1,771	848	2,619
5:00 PM	2,790	1,394	4,184
6:00 PM	2,135	1,626	3,761
7:00 PM	970	929	1,899
8:00 PM	546	578	1,124
9:00 PM	401	560	961
10:00 PM	273	334	607
11:00 PM	152	242	394
12:00 AM	43	108	151
<u>1:00 AM</u>	<u>0</u>	<u>0</u>	<u>0</u>
<i>Daily Total</i>	<b>18,770</b>	<b>17,821</b>	<b>36,591</b>

## 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

Effective 6-24-18

# 4A,B

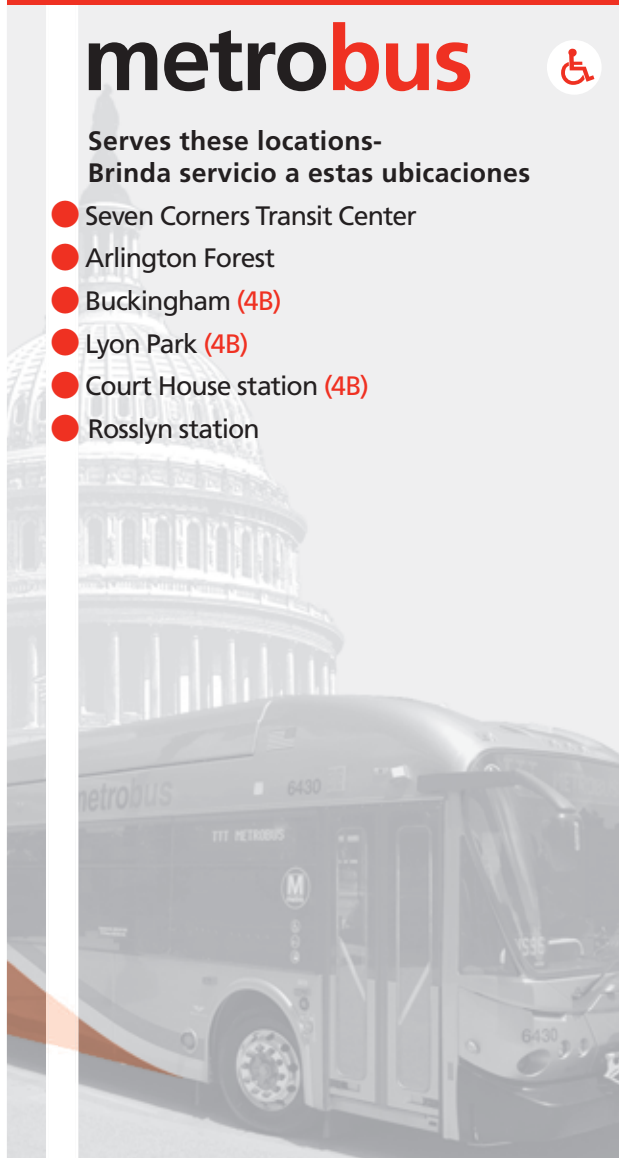
## Pershing Dr.-Arlington Blvd. Line

**metrobus**



**Serves these locations-**  
**Brinda servicio a estas ubicaciones**

- Seven Corners Transit Center
- Arlington Forest
- Buckingham (4B)
- Lyon Park (4B)
- Court House station (4B)
- Rosslyn station



www.wmata.com  
Information Anytime 202-637-7000 TTY 202-962-2033



**Washington  
Metropolitan Area  
Transit Authority**

*A District of Columbia,  
Maryland and Virginia  
Transit Partnership*

# 4A,B

## Pershing Dr.-Arlington Blvd. Line

For route and schedule information

Call 202-637-7000

[www.wmata.com](http://www.wmata.com)





WMATA ©2018 For information regarding this map contact <R•A•D•S>.

# 4A,B

## Pershing Dr.-Arlington Blvd. Line

### ▶ Eastbound To Rosslyn station

#### Monday thru Friday — Lunes a viernes

Route Number	Seven Corners Transit Center	Patrick Henry Dr. & Arlington Blvd.	Arlington Blvd. & Park Dr.	Park Dr. & Arlington Blvd.	Arlington Blvd. Service Rdwy. & George Mason Dr.	Pershing Dr. & Glebe Rd.	Barton St. & Pershing Dr.	Arlington Blvd. & Pershing Dr. (Ft. Myer)	Clarendon Blvd. & Uhle St. (Court House) 	ROSSLYN 
<b>AM Service — Servicio matutino</b>										
4B	5:05	5:10	-	5:16	-	5:22	5:27	-	5:32	5:37
4A	5:20	5:25	5:31	-	5:33	-	-	5:38	-	5:43
4B	5:35	5:40	-	5:46	-	5:52	5:57	-	6:02	6:07
4A	5:50	5:55	6:01	-	6:03	-	-	6:08	-	6:13
4B	6:05	6:10	-	6:16	-	6:22	6:27	-	6:32	6:37
4A	6:20	6:26	6:33	-	6:36	-	-	6:42	-	6:48
4B	6:35	6:40	-	6:47	-	6:54	6:59	-	7:05	7:10
4A	6:50	6:56	7:03	-	7:06	-	-	7:12	-	7:18
4B	7:05	7:10	-	7:17	-	7:24	7:29	-	7:35	7:40
4A	7:20	7:27	7:35	-	7:38	-	-	7:46	-	7:55
4B	7:35	7:42	-	7:50	-	7:58	8:04	-	8:10	8:17
4A	7:50	7:57	8:05	-	8:08	-	-	8:16	-	8:25
4B	8:05	8:12	-	8:20	-	8:28	8:34	-	8:40	8:47
4A	8:20	8:27	8:35	-	8:38	-	-	8:46	-	8:55
4B	8:35	8:42	-	8:50	-	8:58	9:04	-	9:10	9:17
4A	8:50	8:57	9:05	-	9:08	-	-	9:16	-	9:25
4B	9:05	9:11	-	9:17	-	9:24	9:29	-	9:35	9:40
4A	9:20	9:26	9:32	-	9:34	-	-	9:40	-	9:47
4B	9:35	9:41	-	9:47	-	9:54	9:59	-	10:05	10:10
4B	10:05	10:11	-	10:17	-	10:24	10:29	-	10:35	10:40
4B	10:35	10:41	-	10:47	-	10:53	10:58	-	11:03	11:08
4B	11:05	11:11	-	11:17	-	11:23	11:28	-	11:33	11:38
4B	11:35	11:41	-	11:47	-	11:53	11:58	-	12:03	12:08
<b>PM Service — Servicio vespertino</b>										
4B	12:05	12:11	-	12:17	-	12:23	12:28	-	12:33	12:38
4B	12:35	12:41	-	12:47	-	12:53	12:58	-	1:03	1:08
4B	1:05	1:11	-	1:17	-	1:23	1:28	-	1:33	1:38
4B	1:35	1:41	-	1:47	-	1:53	1:58	-	2:03	2:08
4B	2:05	2:11	-	2:17	-	2:23	2:28	-	2:33	2:38
4B	2:35	2:41	-	2:47	-	2:53	2:58	-	3:03	3:08
4B	3:05	3:11	-	3:17	-	3:23	3:28	-	3:33	3:38
4B	3:35	3:41	-	3:47	-	3:53	3:58	-	4:03	4:08
4A	3:50	3:57	4:03	-	4:06	-	-	4:12	-	4:18
4B	4:05	4:12	-	4:19	-	4:26	4:31	-	4:37	4:42
4A	4:20	4:27	4:33	-	4:36	-	-	4:42	-	4:48
4B	4:35	4:42	-	4:49	-	4:56	5:01	-	5:07	5:12
4A	4:50	4:57	5:03	-	5:06	-	-	5:12	-	5:18
4B	5:05	5:12	-	5:19	-	5:26	5:31	-	5:37	5:42
4A	5:20	5:27	5:33	-	5:36	-	-	5:42	-	5:48
4B	5:35	5:42	-	5:49	-	5:56	6:01	-	6:07	6:12
4A	5:50	5:57	6:03	-	6:06	-	-	6:12	-	6:18
4B	6:05	6:12	-	6:19	-	6:26	6:31	-	6:37	6:42
4A	6:20	6:26	6:32	-	6:34	-	-	6:39	-	6:44
4B	6:35	6:41	-	6:47	-	6:53	6:58	-	7:03	7:08
4B	7:05	7:11	-	7:17	-	7:23	7:28	-	7:33	7:38
4B	7:35	7:40	-	7:45	-	7:51	7:55	-	7:59	8:03
4B	8:05	8:10	-	8:15	-	8:21	8:25	-	8:29	8:33
4B	8:35	8:40	-	8:45	-	8:51	8:55	-	8:59	9:03
4B	9:05	9:09	-	9:14	-	9:19	9:23	-	9:27	9:31
4B	9:35	9:39	-	9:44	-	9:49	9:53	-	9:57	10:01
4B	10:05	10:09	-	10:14	-	10:19	10:23	-	10:27	10:31
4B	10:50	10:54	-	10:59	-	11:04	11:08	-	11:12	11:16
4B	11:35	11:39	-	11:44	-	11:49	11:53	-	11:57	12:01



# 4A,B

## Pershing Dr.-Arlington Blvd. Line

### ▶ Westbound to Seven Corners Transit Center

#### Monday thru Friday — Lunes a viernes

Route Number	Rosslyn M	Wilson Blvd. & Veitch St. (Court House) M	Arlington Blvd. & Pershing Dr. (Ft. Myer)	Barton St. & Pershing Dr.	Pershing Dr. & Glebe Rd.	Arlington Blvd. Service Rdwy. & George Mason Dr.	Park Dr. & Arlington Blvd.	Arlington Blvd. & Park Dr.	Patrick Henry Dr. & Arlington Blvd.	SEVEN CORNERS Transit Center
<b>AM Service — Servicio matutino</b>										
4B	5:45	5:51	-	5:55	6:00	-	6:07	-	6:15	6:19
4A	6:00	-	6:05	-	-	6:10	-	6:11	6:19	6:23
4B	6:15	6:21	-	6:25	6:30	-	6:37	-	6:45	6:49
4A	6:30	-	6:35	-	-	6:40	-	6:41	6:49	6:53
4B	6:45	6:51	-	6:55	7:00	-	7:07	-	7:15	7:19
4A	7:00	-	7:05	-	-	7:10	-	7:11	7:19	7:23
4B	7:15	7:21	-	7:25	7:30	-	7:37	-	7:45	7:49
4A	7:30	-	7:35	-	-	7:40	-	7:41	7:52	7:56
4B	7:45	7:53	-	7:57	8:02	-	8:09	-	8:19	8:23
4A	8:00	-	8:05	-	-	8:10	-	8:11	8:22	8:26
4B	8:15	8:23	-	8:27	8:32	-	8:39	-	8:49	8:53
4A	8:30	-	8:35	-	-	8:40	-	8:41	8:52	8:56
4B	8:45	8:53	-	8:57	9:02	-	9:09	-	9:19	9:23
4B	9:15	9:23	-	9:27	9:32	-	9:39	-	9:49	9:53
4B	9:45	9:53	-	9:57	10:02	-	10:09	-	10:19	10:23
4B	10:15	10:23	-	10:27	10:32	-	10:39	-	10:49	10:53
4B	10:45	10:53	-	10:57	11:02	-	11:09	-	11:19	11:23
4B	11:15	11:22	-	11:26	11:31	-	11:38	-	11:46	11:50
4B	11:45	11:52	-	11:56	12:01	-	12:08	-	12:16	12:20
<b>PM Service — Servicio vespertino</b>										
4B	12:15	12:22	-	12:26	12:31	-	12:38	-	12:46	12:50
4B	12:45	12:52	-	12:56	1:01	-	1:08	-	1:16	1:20
4B	1:15	1:22	-	1:26	1:31	-	1:38	-	1:46	1:50
4B	1:45	1:52	-	1:56	2:01	-	2:08	-	2:16	2:20
4B	2:15	2:23	-	2:28	2:34	-	2:42	-	2:51	2:55
4B	2:45	2:53	-	2:58	3:04	-	3:12	-	3:21	3:25
4A	3:00	-	3:05	-	-	3:11	-	3:13	3:22	3:25
4B	3:15	3:23	-	3:28	3:34	-	3:42	-	3:51	3:55
4A	3:30	-	3:35	-	-	3:41	-	3:43	3:52	3:55
4B	3:45	3:53	-	3:58	4:04	-	4:12	-	4:21	4:25
4A	4:00	-	4:06	-	-	4:14	-	4:16	4:27	4:32
4B	4:15	4:23	-	4:28	4:34	-	4:42	-	4:52	4:57
4A	4:30	-	4:36	-	-	4:44	-	4:46	4:57	5:02
4B	4:45	4:53	-	4:58	5:04	-	5:12	-	5:22	5:27
4A	5:00	-	5:06	-	-	5:14	-	5:16	5:27	5:32
4B	5:15	5:23	-	5:28	5:34	-	5:42	-	5:52	5:57
4A	5:30	-	5:36	-	-	5:44	-	5:46	5:57	6:02
4B	5:45	5:53	-	5:58	6:04	-	6:12	-	6:22	6:27
4A	6:00	-	6:06	-	-	6:14	-	6:16	6:27	6:32
4B	6:15	6:22	-	6:27	6:33	-	6:39	-	6:47	6:51
4A	6:30	-	6:35	-	-	6:42	-	6:44	6:52	6:56
4B	6:45	6:52	-	6:57	7:03	-	7:09	-	7:17	7:21
4A	7:00	-	7:05	-	-	7:12	-	7:14	7:22	7:26
4B	7:15	7:22	-	7:27	7:32	-	7:38	-	7:44	7:47
4B	7:45	7:52	-	7:57	8:02	-	8:08	-	8:14	8:17
4B	8:15	8:22	-	8:27	8:32	-	8:38	-	8:44	8:47
4B	8:45	8:52	-	8:57	9:02	-	9:08	-	9:14	9:17
4B	9:15	9:22	-	9:27	9:32	-	9:38	-	9:44	9:47
4B	9:45	9:52	-	9:57	10:02	-	10:08	-	10:14	10:17
4B	10:15	10:21	-	10:25	10:30	-	10:35	-	10:41	10:44
4B	10:45	10:51	-	10:55	11:00	-	11:05	-	11:11	11:14
4B	11:30	11:36	-	11:40	11:45	-	11:50	-	11:56	11:59
<b>After Midnight Service — Servicio después de la medianoche</b>										
4B	12:15	12:21	-	12:25	12:30	-	12:35	-	12:41	12:44

# 4A,B

## Pershing Dr.-Arlington Blvd. Line

### ► Eastbound To Rosslyn station

#### Saturday — En sábados

Route Number	Seven Corners Transit Center	Patrick Henry Dr. & Arlington Blvd.	Park Dr. & Arlington Blvd.	Pershing Dr. & Glebe Rd.	Barton St. & Pershing Dr.	Clarendon Blvd. & Uhle St. (Court House)	ROSSLYN
<b>AM Service — Servicio matutino</b>							
4B	6:20	6:25	6:31	6:37	6:42	6:47	6:52
4B	7:20	7:25	7:31	7:37	7:42	7:47	7:52
4B	8:05	8:10	8:16	8:22	8:27	8:32	8:37
4B	8:50	8:55	9:01	9:07	9:12	9:17	9:22
4B	9:35	9:42	9:48	9:54	9:59	10:04	10:09
4B	10:20	10:27	10:33	10:39	10:44	10:49	10:54
4B	11:05	11:12	11:18	11:24	11:29	11:34	11:39
4B	11:50	11:57	12:03	12:09	12:14	12:19	12:24
<b>PM Service — Servicio vespertino</b>							
4B	12:35	12:42	12:48	12:54	12:59	1:04	1:09
4B	1:20	1:27	1:33	1:39	1:44	1:49	1:54
4B	2:05	2:12	2:18	2:24	2:29	2:34	2:39
4B	2:50	2:57	3:03	3:09	3:14	3:19	3:24
4B	3:35	3:42	3:48	3:54	3:59	4:04	4:09
4B	4:20	4:27	4:33	4:39	4:44	4:49	4:54
4B	5:05	5:12	5:18	5:24	5:29	5:34	5:39
4B	5:50	5:57	6:03	6:09	6:14	6:19	6:24
4B	6:35	6:40	6:46	6:51	6:56	7:01	7:06
4B	7:20	7:25	7:31	7:36	7:41	7:46	7:51
4B	8:05	8:10	8:16	8:21	8:26	8:31	8:36
4B	8:50	8:55	9:01	9:06	9:11	9:16	9:21
4B	9:35	9:39	9:44	9:49	9:53	9:57	10:01
4B	10:20	10:24	10:29	10:34	10:38	10:42	10:46
4B	11:05	11:09	11:14	11:19	11:23	11:27	11:31

### ► Eastbound To Rosslyn station

#### Saturday Supplemental — Sábados suplementario

Route Number	Seven Corners Transit Center	Patrick Henry Dr. & Arlington Blvd.	Arlington Blvd. & Park Dr.	Arlington Blvd. Service Rdwy. & George Mason Dr.	Arlington Blvd. & Pershing Dr.	ROSSLYN
<b>AM Service — Servicio matutino</b>						
4A	6:45	6:51	6:56	6:57	7:01	7:06
4A	7:45	7:51	7:56	7:57	8:01	8:06
4A	8:40	8:46	8:51	8:52	8:56	9:01

*On four Federal holidays, Columbus Day, Veterans' Day, Martin L. King Day, and Presidents' Day, Metrobus will run on a Saturday supplemental schedule. On these holidays, the supplemental trips will operate in addition to the regular Saturday trips.*

# 4A,B

## Pershing Dr.-Arlington Blvd. Line

### ▶ Westbound To Seven Corners Transit Center

#### Saturday — En sábados

Route Number	Rosslyn M	Wilson Blvd. & Veitch St. (Court House) M	Barton St. & Pershing Dr.	Pershing Dr. & Glebe Rd	Park Dr. & Arlington Blvd.	Patrick Henry Dr. & Arlington Blvd.	SEVEN CORNERS Transit Center
<b>AM Service — Servicio matutino</b>							
4B	7:15	7:20	7:24	7:29	7:34	7:40	7:43
4B	8:00	8:06	8:10	8:15	8:21	8:28	8:31
4B	8:45	8:51	8:55	9:00	9:06	9:13	9:16
4B	9:30	9:36	9:40	9:45	9:51	9:58	10:01
4B	10:15	10:21	10:25	10:30	10:36	10:43	10:46
4B	11:00	11:07	11:12	11:17	11:23	11:31	11:35
4B	11:45	11:52	11:57	12:02	12:08	12:16	12:20
<b>PM Service — Servicio vespertino</b>							
4B	12:30	12:37	12:42	12:47	12:53	1:01	1:05
4B	1:15	1:22	1:27	1:32	1:38	1:46	1:50
4B	2:00	2:07	2:12	2:17	2:23	2:31	2:35
4B	2:45	2:52	2:57	3:02	3:08	3:16	3:20
4B	3:30	3:37	3:42	3:47	3:53	4:01	4:05
4B	4:15	4:22	4:27	4:32	4:38	4:46	4:50
4B	5:00	5:07	5:12	5:17	5:23	5:31	5:35
4B	5:45	5:52	5:57	6:02	6:08	6:16	6:20
4B	6:30	6:37	6:42	6:47	6:53	7:01	7:05
4B	7:15	7:21	7:25	7:30	7:36	7:43	7:46
4B	8:00	8:06	8:10	8:15	8:21	8:28	8:31
4B	8:45	8:51	8:55	9:00	9:06	9:13	9:16
4B	9:30	9:36	9:40	9:44	9:49	9:55	9:58
4B	10:15	10:21	10:25	10:29	10:34	10:40	10:43
4B	11:00	11:06	11:10	11:14	11:19	11:25	11:28

### ▶ Westbound To Seven Corners Transit Center

#### Saturday Supplemental — Sábados suplementario

Route Number	Rosslyn M	Arlington Blvd. & Pershing Dr.	Arlington Blvd. Service Rdwy. & George Mason Dr.	Arlington Blvd. & Park Dr.	Patrick Henry Dr. & Arlington Blvd.	SEVEN CORNERS Transit Center
<b>PM Service — Servicio vespertino</b>						
4A	4:30	4:35	4:39	4:41	4:46	4:50
4A	5:30	5:35	5:39	5:41	5:46	5:50
4A	6:20	6:25	6:29	6:31	6:36	6:40



*On four Federal holidays, Columbus Day, Veterans' Day, Martin L. King Day, and Presidents' Day, Metrobus will run on a Saturday supplemental schedule. On these holidays, the supplemental trips will operate in addition to the regular Saturday trips.*

# 4A,B

## Pershing Dr.-Arlington Blvd. Line



### ▶ Eastbound To Rosslyn station

#### Sunday — En domingo

Route Number	Seven Corners Transit Center	Patrick Henry Dr. & Arlington Blvd.	Park Dr. & Arlington Blvd.	Pershing Dr. & Glebe Rd.	Barton St. & Pershing Dr.	Clarendon Blvd. & Uhle St. (Court House) 	ROSSLYN 
<b>AM Service — Servicio matutino</b>							
<b>4B</b>	6:35	6:39	6:44	6:49	6:53	6:57	7:02
<b>4B</b>	7:35	7:39	7:44	7:49	7:53	7:57	8:02
<b>4B</b>	8:35	8:39	8:44	8:49	8:53	8:57	9:02
<b>4B</b>	9:35	9:39	9:44	9:49	9:53	9:57	10:02
<b>4B</b>	10:35	10:39	10:44	10:49	10:53	10:57	11:02
<b>4B</b>	11:35	11:41	11:47	11:53	11:57	12:02	12:07
<b>PM Service — Servicio vespertino</b>							
<b>4B</b>	12:35	12:41	12:47	12:53	12:57	1:02	1:07
<b>4B</b>	1:35	1:41	1:47	1:53	1:57	2:02	2:07
<b>4B</b>	2:35	2:41	2:47	2:53	2:57	3:02	3:07
<b>4B</b>	3:35	3:41	3:47	3:53	3:57	4:02	4:07
<b>4B</b>	4:35	4:41	4:47	4:53	4:57	5:02	5:07
<b>4B</b>	5:35	5:40	5:45	5:50	5:54	5:59	6:03
<b>4B</b>	6:35	6:40	6:45	6:50	6:54	6:59	7:03
<b>4B</b>	7:35	7:40	7:45	7:50	7:54	7:59	8:03
<b>4B</b>	8:35	8:40	8:45	8:50	8:54	8:59	9:03

### ▶ Westbound To Seven Corners Transit Center

#### Sunday — En domingo

Route Number	Rosslyn 	Wilson Blvd. & Veitch St. (Court House) 	Barton St. & Pershing Dr.	Pershing Dr. & Glebe Rd.	Park Dr. & Arlington Blvd.	Patrick Henry Dr. & Arlington Blvd.	SEVEN CORNERS Transit Center
<b>AM Service — Servicio matutino</b>							
<b>4B</b>	7:15	7:20	7:24	7:29	7:34	7:41	7:44
<b>4B</b>	8:15	8:20	8:24	8:29	8:34	8:41	8:44
<b>4B</b>	9:15	9:20	9:24	9:29	9:34	9:41	9:44
<b>4B</b>	10:15	10:20	10:24	10:29	10:34	10:41	10:44
<b>4B</b>	11:15	11:20	11:24	11:29	11:34	11:41	11:44
<b>PM Service — Servicio vespertino</b>							
<b>4B</b>	12:15	12:22	12:27	12:33	12:39	12:46	12:49
<b>4B</b>	1:15	1:22	1:27	1:33	1:39	1:46	1:49
<b>4B</b>	2:15	2:22	2:27	2:33	2:39	2:46	2:49
<b>4B</b>	3:15	3:22	3:27	3:33	3:39	3:46	3:49
<b>4B</b>	4:15	4:22	4:27	4:33	4:39	4:46	4:49
<b>4B</b>	5:15	5:22	5:27	5:33	5:39	5:46	5:49
<b>4B</b>	6:15	6:22	6:27	6:33	6:39	6:46	6:49
<b>4B</b>	7:15	7:22	7:27	7:33	7:39	7:46	7:49
<b>4B</b>	8:15	8:21	8:25	8:30	8:35	8:41	8:44
<b>4B</b>	9:15	9:21	9:25	9:30	9:35	9:41	9:44

## 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

Effective 6-25-17

# 38B

## Ballston-Farragut Square Line

# metrobus



**Serves these locations-**  
**Brinda servicio a estas ubicaciones**

- Ballston-MU station
- Clarendon station
- Court House station
- Rosslyn station
- Georgetown
- Farragut North station
- Farragut West station



www.wmata.com  
Information Anytime 202-637-7000 TTY 202-962-2033





**Washington  
Metropolitan Area  
Transit Authority**

*A District of Columbia,  
Maryland and Virginia  
Transit Partnership*

**38B**  
Ballston-Farragut Square Line

For route and schedule information  
**Call 202-637-7000**  
[www.wmata.com](http://www.wmata.com)

**Legend**

-  Metrorail Station
-  Terminal Stands



**Guaranteed Ride Home**

When you take Metrobus or Metrorail to work, you are eligible to participate in the free Commuter Connection Guaranteed Ride Home Program. The program will get you home in the event of a personal emergency or unscheduled overtime. To register and to receive program details, call Commuter Connection at 1-800-745-RIDE. (2/97)



WMATA ©2016 For information regarding this map contact <R+A+D+S>

# 38B

## Ballston-Farragut Square Line

### ▶ Westbound To Ballston-MU station

#### Monday thru Friday — Lunes a viernes

Route Number	17th (E) & I Sts. NW (Farragut N&W)	Pennsylvania Ave. & 24th St. NW	M St. & Wisconsin Ave. NW (Georgetown)	Rosslyn	Court House	Clarendon	Washington Blvd. & Quincy St.	BALLSTON-MU
<b>AM Service — Servicio matutino</b>								
38B	5:20	5:25	5:30	5:37	5:42	5:44	5:47	5:55
38B	5:50	5:55	6:00	6:07	6:12	6:14	6:17	6:25
38B	6:15	6:20	6:25	6:32	6:37	6:39	6:42	6:50
38B	6:40	6:46	6:52	7:00	7:06	7:09	7:12	7:20
38B	7:00	7:06	7:12	7:20	7:26	7:29	7:32	7:40
38B	7:15	7:21	7:27	7:35	7:41	7:44	7:47	7:55
38B	7:30	7:38	7:44	7:52	7:59	8:02	8:06	8:14
38B	7:42	7:50	7:56	8:04	8:11	8:14	8:18	8:26
38B	7:55	8:03	8:09	8:17	8:24	8:27	8:31	8:39
38B	8:10	8:18	8:24	8:32	8:39	8:42	8:46	8:54
38B	8:25	8:33	8:39	8:47	8:54	8:57	9:01	9:09
38B	8:40	8:48	8:54	9:02	9:09	9:12	9:16	9:24
38B	8:55	9:01	9:07	9:14	9:20	9:24	9:27	9:34
38B	9:10	9:16	9:22	9:29	9:35	9:39	9:42	9:49
38B	9:30	9:36	9:42	9:49	9:55	9:59	10:02	10:09
38B	9:50	9:56	10:02	10:09	10:15	10:19	10:22	10:29
38B	10:10	10:16	10:22	10:29	10:35	10:39	10:42	10:49
38B	10:30	10:36	10:42	10:49	10:55	10:59	11:02	11:09
38B	10:50	10:56	11:02	11:09	11:15	11:19	11:22	11:29
38B	11:10	11:16	11:22	11:29	11:35	11:39	11:42	11:49
38B	11:30	11:36	11:42	11:49	11:55	11:59	12:02	12:09
38B	11:50	11:56	12:02	12:09	12:15	12:19	12:22	12:29
<b>PM Service — Servicio vespertino</b>								
38B	12:10	12:16	12:22	12:29	12:35	12:39	12:42	12:49
38B	12:30	12:36	12:42	12:49	12:55	12:59	1:02	1:09
38B	12:50	12:56	1:02	1:09	1:15	1:19	1:22	1:29
38B	1:10	1:16	1:22	1:29	1:35	1:39	1:42	1:49
38B	1:30	1:36	1:42	1:49	1:55	1:59	2:02	2:09
38B	1:50	1:56	2:02	2:09	2:15	2:19	2:22	2:29
38B	2:10	2:16	2:22	2:29	2:35	2:39	2:42	2:49
38B	2:30	2:36	2:42	2:49	2:55	2:59	3:02	3:09
38B	2:50	2:57	3:04	3:13	3:20	3:24	3:28	3:35
38B	3:10	3:17	3:24	3:33	3:40	3:44	3:48	3:55
38B	3:30	3:37	3:44	3:53	4:00	4:04	4:08	4:15
38B	3:50	3:57	4:04	4:13	4:20	4:24	4:28	4:35
38B	4:05	4:12	4:19	4:28	4:35	4:39	4:43	4:50
38B	4:20	4:27	4:34	4:43	4:50	4:54	4:58	5:05
38B	4:35	4:42	4:49	4:58	5:05	5:09	5:13	5:20
38B	4:50	4:57	5:04	5:13	5:20	5:24	5:28	5:35
38B	5:07	5:16	5:26	5:36	5:44	5:48	5:52	5:59
38B	5:20	5:29	5:39	5:49	5:57	6:01	6:05	6:12
38B	5:35	5:44	5:54	6:04	6:12	6:16	6:20	6:27
38B	5:50	5:59	6:09	6:19	6:27	6:31	6:35	6:42
38B	6:05	6:14	6:24	6:34	6:42	6:46	6:50	6:57
38B	6:20	6:27	6:35	6:43	6:50	6:54	6:58	7:05
38B	6:35	6:42	6:50	6:58	7:05	7:09	7:13	7:20
38B	6:50	6:57	7:05	7:13	7:20	7:24	7:28	7:35
38B	7:10	7:16	7:22	7:30	7:36	7:40	7:44	7:51
38B	7:30	7:36	7:42	7:50	7:56	8:00	8:04	8:11
38B	7:50	7:56	8:02	8:10	8:16	8:20	8:24	8:31
38B	8:15	8:21	8:27	8:35	8:41	8:45	8:49	8:56
38B	8:45	8:50	8:56	9:02	9:08	9:11	9:14	9:21
38B	9:15	9:20	9:26	9:32	9:38	9:41	9:44	9:51
38B	9:45	9:50	9:56	10:02	10:08	10:11	10:14	10:21
38B	10:15	10:20	10:26	10:32	10:38	10:41	10:44	10:51
38B	10:45	10:50	10:56	11:02	11:08	11:11	11:14	11:21
38B	11:15	11:20	11:26	11:32	11:38	11:41	11:44	11:51
38B	11:45	11:50	11:56	12:02	12:08	12:11	12:14	12:21
<b>After Midnight Service — Servicio después de la medianoche</b>								
38B	12:15	12:19	12:23	12:29	12:34	12:37	12:40	12:47
38B	12:45	12:49	12:53	12:59	1:04	1:07	1:10	1:17
38B	1:15	1:19	1:23	1:29	1:34	1:37	1:40	1:47
○ 38B	1:45	1:49	1:53	1:59	2:04	2:07	2:10	2:17
○ 38B	2:15	2:19	2:23	2:29	2:34	2:37	2:40	2:47

○ — Trip operates Friday only.  
 Los autobuses funcionan solamente el viernes.

# 38B

## Ballston-Farragut Square Line

### ▶ Eastbound To Farragut North/Farragut West stations

#### Monday thru Friday — Lunes a viernes

Route Number	Ballston-MU M	Quincy & N. 13th Sts.	Washington Blvd. & Quincy St.	Clarendon M	Court House M	Rosslyn M	M St. & Wisconsin Ave. NW (Georgetown)	Pennsylvania Ave. & 24th St. NW	17th (E) & I Sts. NW (Farragut N&W) # M
<b>AM Service — Servicio matutino</b>									
38B	5:25	-	5:29	5:33	5:36	5:44	5:48	5:52	5:58
38B	5:50	-	5:54	5:58	6:01	6:09	6:13	6:17	6:23
38B	6:10	-	6:14	6:18	6:21	6:29	6:33	6:37	6:43
38B	6:28	-	6:32	6:36	6:39	6:47	6:51	6:55	7:01
38B	6:40	-	6:45	6:49	6:52	7:00	7:06	7:11	7:18
38B	6:53	-	6:58	7:02	7:05	7:13	7:19	7:24	7:31
38B	7:06	-	7:11	7:15	7:18	7:26	7:32	7:37	7:44
38B	7:16	-	7:22	7:26	7:30	7:39	7:46	7:52	8:00
38B	7:29	-	7:35	7:39	7:43	7:52	7:59	8:05	8:13
38B	7:41	-	7:47	7:51	7:55	8:04	8:11	8:17	8:25
38B	7:53	-	7:59	8:03	8:07	8:16	8:23	8:29	8:37
38B	8:03	-	8:09	8:14	8:18	8:28	8:38	8:45	8:55
38B	8:14	-	8:20	8:25	8:29	8:39	8:49	8:56	9:06
38B	8:24	-	8:30	8:35	8:39	8:49	8:59	9:06	9:16
38B	8:36	-	8:42	8:47	8:51	9:01	9:11	9:18	9:28
38B	8:48	-	8:54	8:59	9:03	9:13	9:23	9:30	9:40
38B	9:00	-	9:06	9:11	9:15	9:25	9:35	9:42	9:52
38B	9:20	-	9:25	9:29	9:33	9:40	9:46	9:51	9:59
38B	9:40	-	9:45	9:49	9:53	10:00	10:06	10:11	10:19
38B	10:00	-	10:05	10:09	10:13	10:20	10:26	10:31	10:39
38B	10:20	-	10:25	10:29	10:33	10:40	10:46	10:51	10:59
38B	10:40	-	10:45	10:49	10:53	11:00	11:06	11:11	11:19
38B	11:00	-	11:05	11:09	11:13	11:20	11:26	11:31	11:39
38B	11:20	-	11:25	11:29	11:33	11:40	11:46	11:51	11:59
38B	11:40	-	11:45	11:49	11:53	12:00	12:06	12:11	12:19
<b>PM Service — Servicio vespertino</b>									
38B	12:00	-	12:05	12:09	12:13	12:20	12:26	12:31	12:39
38B	12:20	-	12:25	12:29	12:33	12:40	12:46	12:51	12:59
38B	12:40	-	12:45	12:49	12:53	1:00	1:06	1:11	1:19
38B	1:00	-	1:05	1:09	1:13	1:20	1:26	1:31	1:39
38B	1:20	-	1:25	1:29	1:33	1:40	1:46	1:51	1:59
38B	1:40	-	1:45	1:49	1:53	2:00	2:06	2:11	2:19
38B	2:00	-	2:05	2:09	2:13	2:20	2:26	2:31	2:39
38B	2:20	-	2:25	2:29	2:33	2:40	2:46	2:51	2:59
38B	2:40	-	2:45	2:49	2:53	3:00	3:06	3:11	3:19
38B	3:00	-	3:05	3:09	3:13	3:20	3:26	3:31	3:39
▲ 38B	-	3:16	3:17	3:21	3:25	3:32	3:38	3:43	3:51
38B	3:20	-	3:25	3:29	3:33	3:40	3:46	3:51	3:59
▲ 38B	-	-	3:36	3:40	3:44	3:51	3:57	4:02	4:10
38B	3:40	-	3:45	3:49	3:53	4:00	4:06	4:11	4:19
38B	4:00	-	4:06	4:11	4:15	4:23	4:29	4:35	4:47
38B	4:15	-	4:21	4:26	4:30	4:38	4:44	4:50	5:02
38B	4:30	-	4:36	4:41	4:45	4:54	5:02	5:10	5:25
38B	4:45	-	4:51	4:56	5:00	5:09	5:17	5:25	5:40
38B	5:00	-	5:06	5:11	5:15	5:24	5:32	5:40	5:55
38B	5:15	-	5:21	5:26	5:30	5:39	5:47	5:55	6:10
38B	5:30	-	5:36	5:41	5:45	5:54	6:02	6:10	6:25
38B	5:45	-	5:51	5:56	6:00	6:09	6:17	6:25	6:40
38B	6:05	-	6:10	6:15	6:19	6:27	6:34	6:40	6:50
38B	6:30	-	6:35	6:40	6:44	6:52	6:59	7:05	7:15
38B	7:00	-	7:05	7:09	7:13	7:20	7:24	7:29	7:34
38B	7:30	-	7:35	7:39	7:43	7:50	7:54	7:59	8:04
38B	8:00	-	8:05	8:09	8:13	8:20	8:24	8:29	8:34
38B	8:30	-	8:35	8:39	8:43	8:50	8:54	8:59	9:04
38B	9:00	-	9:05	9:09	9:13	9:20	9:24	9:29	9:34
38B	9:30	-	9:35	9:39	9:43	9:50	9:54	9:59	10:04
38B	10:00	-	10:05	10:09	10:13	10:20	10:24	10:29	10:34
38B	10:30	-	10:35	10:39	10:43	10:50	10:54	10:59	11:04
38B	11:00	-	11:05	11:09	11:13	11:20	11:24	11:29	11:34
38B	11:30	-	11:35	11:39	11:43	11:50	11:54	11:59	12:04
<b>After Midnight Service — Servicio después de la medianoche</b>									
38B	12:00	-	12:04	12:08	12:11	12:17	12:21	12:25	12:30
38B	12:30	-	12:34	12:38	12:41	12:47	12:51	12:55	1:00
38B	1:00	-	1:04	1:08	1:11	1:17	1:21	1:25	1:30
○ 38B	1:30	-	1:34	1:38	1:41	1:47	1:51	1:55	2:00
○ 38B	2:00	-	2:04	2:08	2:11	2:17	2:21	2:25	2:30

○ — Trip operates Friday only.  
Los autobuses funcionan solamente el viernes.

# — Buses are signed FARRAGUT SQUARE

▲ — Trip operates only from March thru May when public schools are open.








# 38B

## Ballston-Farragut Square Line

### ► Westbound To Ballston-MU station






#### Saturday Supplemental — Sábados suplementario

Route Number	17th (E) & I Sts. NW (Farragut N&W) 	Pennsylvania Ave. & 24th St. NW	M St. & Wisconsin Ave. NW (Georgetown)	Rosslyn 	Court House 	Clarendon 	Washington Blvd. & Quincy St.	BALLSTON-MU 
<b>AM Service — Servicio matutino</b>								
<b>38B</b>	7:00	7:05	7:09	7:15	7:20	7:22	7:25	7:32
<b>38B</b>	7:30	7:35	7:39	7:45	7:50	7:52	7:55	8:02
<b>38B</b>	8:00	8:05	8:11	8:18	8:23	8:26	8:29	8:36
<b>38B</b>	8:30	8:35	8:41	8:48	8:53	8:56	8:59	9:06
<b>PM Service — Servicio vespertino</b>								
<b>38B</b>	4:00	4:06	4:13	4:22	4:29	4:34	4:38	4:46
<b>38B</b>	4:30	4:36	4:43	4:52	4:59	5:04	5:08	5:16
<b>38B</b>	5:00	5:06	5:13	5:22	5:29	5:34	5:38	5:46
<b>38B</b>	5:30	5:36	5:43	5:52	5:59	6:04	6:08	6:16
<b>38B</b>	6:00	6:06	6:13	6:22	6:29	6:34	6:38	6:46

On four Federal holidays, Columbus Day, Veterans' Day, Martin L. King Day, and Presidents' Day, Metrobus will run on a Saturday supplemental schedule. On these holidays, the supplemental trips will operate in addition to the regular Saturday trips.

### ► Eastbound To Farragut North/Farragut West stations

#### Saturday Supplemental — Sábados suplementario

Route Number	Ballston-MU 	Washington Blvd. & Quincy St.	Clarendon 	Court House 	Rosslyn 	M St. & Wisconsin Ave. NW (Georgetown)	Pennsylvania Ave. & 24th St. NW	17th (E) & I Sts. NW (Farragut N&W) # 
<b>AM Service — Servicio matutino</b>								
<b>38B</b>	6:45	6:49	6:52	6:55	7:01	7:04	7:08	7:13
<b>38B</b>	7:15	7:19	7:23	7:27	7:34	7:39	7:44	7:49
<b>38B</b>	7:45	7:49	7:53	7:57	8:04	8:09	8:14	8:19
<b>38B</b>	8:15	8:19	8:23	8:27	8:34	8:39	8:44	8:49
<b>38B</b>	8:45	8:49	8:53	8:57	9:04	9:09	9:14	9:19
<b>PM Service — Servicio vespertino</b>								
<b>38B</b>	4:15	4:20	4:24	4:28	4:35	4:43	4:48	4:54
<b>38B</b>	4:45	4:50	4:54	4:58	5:05	5:13	5:18	5:24
<b>38B</b>	5:15	5:20	5:24	5:28	5:35	5:43	5:48	5:54
<b>38B</b>	5:45	5:50	5:54	5:58	6:05	6:13	6:18	6:24






On four Federal holidays, Columbus Day, Veterans' Day, Martin L. King Day, and Presidents' Day, Metrobus will run on a Saturday supplemental schedule. On these holidays, the supplemental trips will operate in addition to the regular Saturday trips.

# 38B

## Ballston-Farragut Square Line

### ▶ Westbound To Ballston-MU station

#### Saturday — En sábados






Route Number	17th (E) & I Sts. NW (Farragut N&W) 	Pennsylvania Ave. & 24th St. NW	M St. & Wisconsin Ave. NW (Georgetown)	Rosslyn 	Court House 	Clarendon 	Washington Blvd. & Quincy St.	BALLSTON-MU 
<b>AM Service — Servicio matutino</b>								
38B	5:45	5:50	5:54	6:00	6:05	6:07	6:10	6:17
38B	6:15	6:20	6:24	6:30	6:35	6:37	6:40	6:47
38B	6:45	6:50	6:54	7:00	7:05	7:07	7:10	7:17
38B	7:15	7:20	7:24	7:30	7:35	7:37	7:40	7:47
38B	7:45	7:50	7:54	8:00	8:05	8:07	8:10	8:17
38B	8:15	8:20	8:26	8:33	8:38	8:41	8:44	8:51
38B	8:45	8:50	8:56	9:03	9:08	9:11	9:14	9:21
38B	9:15	9:20	9:26	9:33	9:38	9:41	9:44	9:51
38B	9:45	9:50	9:56	10:03	10:08	10:11	10:14	10:21
38B	10:15	10:20	10:26	10:33	10:38	10:41	10:44	10:51
38B	10:45	10:50	10:56	11:03	11:08	11:11	11:14	11:21
38B	11:15	11:20	11:26	11:34	11:40	11:44	11:47	11:54
38B	11:45	11:50	11:56	12:04	12:10	12:14	12:17	12:24
<b>PM Service — Servicio vespertino</b>								
38B	12:15	12:20	12:26	12:34	12:40	12:44	12:47	12:54
38B	12:45	12:50	12:56	1:04	1:10	1:14	1:17	1:24
38B	1:15	1:20	1:26	1:34	1:40	1:44	1:47	1:54
38B	1:45	1:50	1:56	2:04	2:10	2:14	2:17	2:24
38B	2:15	2:20	2:26	2:34	2:40	2:44	2:47	2:54
38B	2:45	2:51	2:58	3:07	3:14	3:19	3:23	3:31
38B	3:15	3:21	3:28	3:37	3:44	3:49	3:53	4:01
38B	3:45	3:51	3:58	4:07	4:14	4:19	4:23	4:31
38B	4:15	4:21	4:28	4:37	4:44	4:49	4:53	5:01
38B	4:45	4:51	4:58	5:07	5:14	5:19	5:23	5:31
38B	5:15	5:21	5:28	5:37	5:44	5:49	5:53	6:01
38B	5:45	5:51	5:58	6:07	6:14	6:19	6:23	6:31
38B	6:15	6:21	6:28	6:37	6:44	6:49	6:53	7:01
38B	6:45	6:51	6:58	7:07	7:14	7:19	7:23	7:31
38B	7:15	7:21	7:28	7:37	7:44	7:49	7:53	8:01
38B	7:45	7:51	7:58	8:07	8:14	8:19	8:23	8:31
38B	8:15	8:21	8:28	8:37	8:44	8:49	8:53	9:01
38B	8:45	8:50	8:56	9:03	9:09	9:13	9:16	9:23
38B	9:15	9:20	9:26	9:33	9:39	9:43	9:46	9:53
38B	9:45	9:50	9:56	10:03	10:09	10:13	10:16	10:23
38B	10:15	10:20	10:26	10:33	10:39	10:43	10:46	10:53
38B	10:45	10:50	10:56	11:03	11:09	11:13	11:16	11:23
38B	11:15	11:20	11:26	11:33	11:39	11:43	11:46	11:53
38B	11:45	11:50	11:56	12:03	12:09	12:13	12:16	12:23
<b>After Midnight Service — Servicio después de la medianoche</b>								
38B	12:15	12:20	12:26	12:33	12:39	12:43	12:46	12:53
38B	12:45	12:49	12:54	1:00	1:05	1:09	1:12	1:18
38B	1:15	1:19	1:24	1:30	1:35	1:39	1:42	1:48
38B	1:45	1:49	1:54	2:00	2:05	2:09	2:12	2:18
38B	2:15	2:19	2:24	2:30	2:35	2:39	2:42	2:48

# 38B

## Ballston-Farragut Square Line

### ► Eastbound To Farragut North/Farragut West stations

#### Saturday — En sábados

Route Number	Ballston-MU 	Washington Blvd. & Quincy St.	Clarendon 	Court House 	Rosslyn 	M St. & Wisconsin Ave. NW (Georgetown)	Pennsylvania Ave. & 24th St. NW	17th (E) & I Sts. NW (Farragut N&W) # 
<b>AM Service — Servicio matutino</b>								
38B	5:30	5:34	5:37	5:40	5:46	5:49	5:53	5:58
38B	6:00	6:04	6:07	6:10	6:16	6:19	6:23	6:28
38B	6:30	6:34	6:37	6:40	6:46	6:49	6:53	6:58
38B	7:00	7:04	7:07	7:10	7:16	7:19	7:23	7:28
38B	7:30	7:34	7:38	7:42	7:49	7:54	7:59	8:04
38B	8:00	8:04	8:08	8:12	8:19	8:24	8:29	8:34
38B	8:30	8:34	8:38	8:42	8:49	8:54	8:59	9:04
38B	9:00	9:04	9:08	9:12	9:19	9:24	9:29	9:34
38B	9:30	9:34	9:38	9:42	9:49	9:54	9:59	10:04
38B	10:00	10:04	10:08	10:12	10:19	10:24	10:29	10:34
38B	10:30	10:34	10:38	10:42	10:49	10:54	10:59	11:04
38B	11:00	11:04	11:08	11:12	11:19	11:24	11:29	11:34
38B	11:30	11:34	11:38	11:42	11:49	11:54	11:59	12:04
<b>PM Service — Servicio vespertino</b>								
38B	12:00	12:04	12:08	12:12	12:19	12:24	12:29	12:34
38B	12:30	12:34	12:38	12:42	12:49	12:54	12:59	1:04
38B	1:00	1:04	1:08	1:12	1:19	1:24	1:29	1:34
38B	1:30	1:35	1:39	1:43	1:50	1:58	2:03	2:09
38B	2:00	2:05	2:09	2:13	2:20	2:28	2:33	2:39
38B	2:30	2:35	2:39	2:43	2:50	2:58	3:03	3:09
38B	3:00	3:05	3:09	3:13	3:20	3:28	3:33	3:39
38B	3:30	3:35	3:39	3:43	3:50	3:58	4:03	4:09
38B	4:00	4:05	4:09	4:13	4:20	4:28	4:33	4:39
38B	4:30	4:35	4:39	4:43	4:50	4:58	5:03	5:09
38B	5:00	5:05	5:09	5:13	5:20	5:28	5:33	5:39
38B	5:30	5:35	5:39	5:43	5:50	5:58	6:03	6:09
38B	6:00	6:05	6:09	6:13	6:20	6:28	6:33	6:39
38B	6:30	6:35	6:39	6:43	6:50	6:58	7:03	7:09
38B	7:00	7:04	7:08	7:11	7:17	7:22	7:27	7:32
38B	7:30	7:34	7:38	7:41	7:47	7:52	7:57	8:02
38B	8:00	8:04	8:08	8:11	8:17	8:22	8:27	8:32
38B	8:30	8:34	8:38	8:41	8:47	8:52	8:57	9:02
38B	9:00	9:04	9:08	9:11	9:17	9:22	9:27	9:32
38B	9:30	9:34	9:38	9:41	9:47	9:52	9:57	10:02
38B	10:00	10:04	10:08	10:11	10:17	10:22	10:27	10:32
38B	10:30	10:34	10:38	10:41	10:47	10:52	10:57	11:02
38B	11:00	11:04	11:08	11:11	11:17	11:22	11:27	11:32
38B	11:30	11:34	11:38	11:41	11:47	11:52	11:57	12:02
<b>After Midnight Service — Servicio después de la medianoche</b>								
38B	12:00	12:04	12:08	12:11	12:16	12:19	12:23	12:28
38B	12:30	12:34	12:38	12:41	12:46	12:49	12:53	12:58
38B	1:00	1:04	1:08	1:11	1:16	1:19	1:23	1:28
38B	1:30	1:34	1:38	1:41	1:46	1:49	1:53	1:58
38B	2:00	2:04	2:08	2:11	2:16	2:19	2:23	2:28






# — Buses are signed FARRAGUT SQUARE.

# 38B

## Ballston-Farragut Square Line

### ▶ Westbound To Ballston-MU station

#### Sunday — En domingo






Route Number	17th (E) & I Sts. NW (Farragut N&W) 	Pennsylvania Ave. & 24th St. NW	M St. & Wisconsin Ave. NW (Georgetown)	Rosslyn 	Court House 	Clarendon 	Washington Blvd. & Quincy St.	BALLSTON-MU 
<b>AM Service — Servicio matutino</b>								
<b>38B</b>	5:45	5:49	5:54	6:00	6:05	6:08	6:11	6:18
<b>38B</b>	6:15	6:19	6:24	6:30	6:35	6:38	6:41	6:48
<b>38B</b>	6:45	6:49	6:54	7:00	7:05	7:08	7:11	7:18
<b>38B</b>	7:15	7:19	7:24	7:30	7:35	7:38	7:41	7:48
<b>38B</b>	7:45	7:49	7:54	8:00	8:05	8:08	8:11	8:18
<b>38B</b>	8:15	8:19	8:24	8:30	8:35	8:38	8:41	8:48
<b>38B</b>	8:45	8:49	8:54	9:00	9:05	9:08	9:11	9:18
<b>38B</b>	9:15	9:19	9:24	9:30	9:35	9:38	9:41	9:48
<b>38B</b>	9:45	9:49	9:54	10:00	10:05	10:08	10:11	10:18
<b>38B</b>	10:15	10:19	10:24	10:30	10:35	10:38	10:41	10:48
<b>38B</b>	10:45	10:50	10:56	11:03	11:09	11:13	11:17	11:24
<b>38B</b>	11:15	11:20	11:26	11:33	11:39	11:43	11:47	11:54
<b>38B</b>	11:45	11:50	11:56	12:03	12:09	12:13	12:17	12:24
<b>PM Service — Servicio vespertino</b>								
<b>38B</b>	12:15	12:20	12:26	12:33	12:39	12:43	12:47	12:54
<b>38B</b>	12:45	12:50	12:57	1:05	1:11	1:15	1:19	1:26
<b>38B</b>	1:15	1:20	1:27	1:35	1:41	1:45	1:49	1:56
<b>38B</b>	1:45	1:50	1:57	2:05	2:11	2:15	2:19	2:26
<b>38B</b>	2:15	2:20	2:27	2:35	2:41	2:45	2:49	2:56
<b>38B</b>	2:45	2:50	2:57	3:05	3:11	3:15	3:19	3:26
<b>38B</b>	3:15	3:20	3:27	3:35	3:41	3:45	3:49	3:56
<b>38B</b>	3:45	3:50	3:57	4:05	4:11	4:15	4:19	4:26
<b>38B</b>	4:15	4:20	4:27	4:35	4:41	4:45	4:49	4:56
<b>38B</b>	4:45	4:50	4:57	5:05	5:11	5:15	5:19	5:26
<b>38B</b>	5:15	5:20	5:27	5:35	5:41	5:45	5:49	5:56
<b>38B</b>	5:45	5:50	5:57	6:05	6:11	6:15	6:19	6:26
<b>38B</b>	6:15	6:20	6:27	6:35	6:41	6:45	6:49	6:56
<b>38B</b>	6:45	6:50	6:57	7:05	7:11	7:15	7:19	7:26
<b>38B</b>	7:15	7:19	7:24	7:30	7:36	7:39	7:42	7:49
<b>38B</b>	7:45	7:49	7:54	8:00	8:06	8:09	8:12	8:19
<b>38B</b>	8:15	8:19	8:24	8:30	8:36	8:39	8:42	8:49
<b>38B</b>	8:45	8:49	8:54	9:00	9:06	9:09	9:12	9:19
<b>38B</b>	9:15	9:19	9:24	9:30	9:36	9:39	9:42	9:49
<b>38B</b>	9:45	9:49	9:54	10:00	10:06	10:09	10:12	10:19
<b>38B</b>	10:15	10:19	10:24	10:30	10:36	10:39	10:42	10:49
<b>38B</b>	10:45	10:49	10:54	11:00	11:06	11:09	11:12	11:19
<b>38B</b>	11:15	11:19	11:24	11:30	11:36	11:39	11:42	11:49
<b>38B</b>	11:45	11:49	11:54	12:00	12:06	12:09	12:12	12:19
<b>After Midnight Service — Servicio después de la medianoche</b>								
<b>38B</b>	12:20	12:24	12:29	12:35	12:41	12:44	12:47	12:54

# 38B

## Ballston-Farragut Square Line

### ► Eastbound To Farragut North/Farragut West stations

#### Sunday — En domingo

Route Number	Ballston-MU 	Washington Blvd. & Quincy St.	Clarendon 	Court House 	Rosslyn 	M St. & Wisconsin Ave. NW (Georgetown)	Pennsylvania Ave. & 24th St. NW	17th (E) & I Sts. NW (Farragut N&W) # 
<b>AM Service — Servicio matutino</b>								
<b>38B</b>	5:30	5:33	5:36	5:39	5:45	5:48	5:52	5:57
<b>38B</b>	6:00	6:03	6:06	6:09	6:15	6:18	6:22	6:27
<b>38B</b>	6:30	6:33	6:36	6:39	6:45	6:48	6:52	6:57
<b>38B</b>	7:00	7:03	7:06	7:09	7:15	7:18	7:22	7:27
<b>38B</b>	7:30	7:33	7:36	7:39	7:45	7:48	7:52	7:57
<b>38B</b>	8:00	8:03	8:06	8:09	8:15	8:18	8:22	8:27
<b>38B</b>	8:30	8:33	8:36	8:39	8:45	8:48	8:52	8:57
<b>38B</b>	9:00	9:03	9:06	9:09	9:15	9:18	9:22	9:27
<b>38B</b>	9:30	9:33	9:36	9:39	9:45	9:48	9:52	9:57
<b>38B</b>	10:00	10:05	10:09	10:13	10:20	10:26	10:31	10:36
<b>38B</b>	10:30	10:35	10:39	10:43	10:50	10:56	11:01	11:06
<b>38B</b>	11:00	11:05	11:09	11:13	11:20	11:26	11:31	11:36
<b>38B</b>	11:30	11:35	11:39	11:43	11:50	11:56	12:01	12:06
<b>PM Service — Servicio vespertino</b>								
<b>38B</b>	12:00	12:05	12:09	12:13	12:20	12:26	12:31	12:36
<b>38B</b>	12:30	12:35	12:39	12:43	12:50	12:56	1:01	1:06
<b>38B</b>	1:00	1:05	1:09	1:13	1:20	1:26	1:31	1:36
<b>38B</b>	1:30	1:35	1:39	1:43	1:50	1:56	2:01	2:06
<b>38B</b>	2:00	2:05	2:09	2:13	2:20	2:26	2:31	2:36
<b>38B</b>	2:30	2:35	2:39	2:43	2:50	2:56	3:01	3:06
<b>38B</b>	3:00	3:05	3:09	3:13	3:20	3:26	3:31	3:36
<b>38B</b>	3:30	3:35	3:39	3:43	3:50	3:56	4:01	4:06
<b>38B</b>	4:00	4:05	4:09	4:13	4:20	4:26	4:31	4:36
<b>38B</b>	4:30	4:35	4:39	4:43	4:50	4:56	5:01	5:06
<b>38B</b>	5:00	5:05	5:09	5:13	5:20	5:26	5:31	5:36
<b>38B</b>	5:30	5:35	5:39	5:43	5:50	5:56	6:01	6:06
<b>38B</b>	6:00	6:05	6:09	6:13	6:20	6:26	6:31	6:36
<b>38B</b>	6:30	6:34	6:38	6:41	6:48	6:53	6:58	7:03
<b>38B</b>	7:00	7:04	7:08	7:11	7:18	7:23	7:28	7:33
<b>38B</b>	7:30	7:34	7:38	7:41	7:48	7:53	7:58	8:03
<b>38B</b>	8:00	8:04	8:08	8:11	8:18	8:23	8:28	8:33
<b>38B</b>	8:30	8:34	8:38	8:41	8:48	8:53	8:58	9:03
<b>38B</b>	9:00	9:04	9:08	9:11	9:18	9:23	9:28	9:33
<b>38B</b>	9:30	9:34	9:37	9:40	9:46	9:49	9:53	9:58
<b>38B</b>	10:00	10:04	10:07	10:10	10:16	10:19	10:23	10:28
<b>38B</b>	10:30	10:34	10:37	10:40	10:46	10:49	10:53	10:58
<b>38B</b>	11:00	11:04	11:07	11:10	11:16	11:19	11:23	11:28
<b>38B</b>	11:30	11:33	11:36	11:38	11:44	11:47	11:50	11:54
<b>After Midnight Service — Servicio después de la medianoche</b>								
<b>38B</b>	12:00	12:03	12:06	12:08	12:14	12:17	12:20	12:24
<b>38B</b>	12:30	12:33	12:36	12:38	12:44	12:47	12:50	12:54

# — Buses are signed FARRAGUT SQUARE.

**APPENDIX C**  
**VEHICLE, PEDESTRIAN, AND BICYCLE COUNTS**





# Wells + Associates, Inc.

McLean, Virginia

## Turning Movement Count - Bicycles

<b>PROJECT:</b> Ames Site (1820 N. Fort Myer Drive)		<b>DATE:</b> 5/30/2019				<b>SOUTHBOUND ROAD:</b> North Fort Myer Drive															
<b>W+A JOB NO:</b> 7804		<b>DAY:</b> Thursday				<b>NORTHBOUND ROAD:</b> North Fort Myer Drive															
<b>INTERSECTION:</b> Wilson Blvd. & N. Fort Myer Dr.- East		<b>WEATHER:</b> clear				<b>WESTBOUND ROAD:</b> Wilson Boulevard															
<b>LOCATION:</b> Arlington County,VA		<b>COUNTED BY:</b> 0				<b>EASTBOUND ROAD:</b> Wilson Boulevard															
		<b>INPUT BY:</b> agan																			
Time Period	Southbound North Fort Myer Drive				Westbound Wilson Boulevard				Northbound North Fort Myer Drive				Eastbound Wilson Boulevard				North & South	East & West	Total		
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total					
<b>AM 15 Minute Volumes</b>																					
6:00 AM - 6:15 AM				0				0				0				0	0	0			
6:15 AM - 6:30 AM				0				0				0				0	0	0			
6:30 AM - 6:45 AM				0				0				0				0	0	0			
6:45 AM - 7:00 AM				0				0				0				0	0	0			
7:00 AM - 7:15 AM				0				0				0				0	0	0			
7:15 AM - 7:30 AM				0				0				0				0	0	0			
7:30 AM - 7:45 AM				0				0				0				0	0	0			
7:45 AM - 8:00 AM				0				0				0				0	0	0			
8:00 AM - 8:15 AM				0				0				0				0	0	0			
8:15 AM - 8:30 AM				0				0				0				0	0	0			
8:30 AM - 8:45 AM				0				0				0				0	0	0			
8:45 AM - 9:00 AM				0				0				0				0	0	0			
9:00 AM - 9:15 AM				0				0				0				0	0	0			
9:15 AM - 9:30 AM				0				0				0				0	0	0			
9:30 AM - 9:45 AM				0				0				0				0	0	0			
9:45 AM - 10:00 AM				0				0				0				0	0	0			
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
<b>AM One Hour Volumes</b>																					
6:00 AM - 7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
6:15 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
6:30 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
6:45 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:00 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:15 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
<b>7:30 AM - 8:30 AM</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>			
7:45 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:00 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:15 AM - 9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:30 AM - 9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:45 AM - 9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
9:00 AM - 10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
<b>PM 15 Minute Volumes</b>																					
4:00 PM - 4:15 PM				0				0				0				0	0	0			
4:15 PM - 4:30 PM				0				0				0				0	0	0			
4:30 PM - 4:45 PM				0				0				0				0	0	0			
4:45 PM - 5:00 PM				0				0				0				0	0	0			
5:00 PM - 5:15 PM				0				0				0				0	0	0			
5:15 PM - 5:30 PM				0				0				0				0	0	0			
5:30 PM - 5:45 PM				0				0				0				0	0	0			
5:45 PM - 6:00 PM				0				0				0				0	0	0			
6:00 PM - 6:15 PM				0				0				0				0	0	0			
6:15 PM - 6:30 PM				0				0				0				0	0	0			
6:30 PM - 6:45 PM				0				0				0				0	0	0			
6:45 PM - 7:00 PM				0				0				0				0	0	0			
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
<b>PM One Hour Volumes</b>																					
4:00 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
4:15 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
<b>4:45 PM - 5:45 PM</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>			
5:00 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
5:15 PM - 6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
5:30 PM - 6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
5:45 PM - 6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
6:00 PM - 7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			



# Wells + Associates, Inc.

McLean, Virginia

## Pedestrian Volume Survey

<p><b>PROJECT:</b> Ames Site (1820 N. Fort Myer Drive)  <b>W+A JOB NO:</b> 7804  <b>INTERSECTION:</b> Wilson Blvd. &amp; N. Fort Myer Dr.- East  <b>LOCATION:</b> Arlington County, VA  <b>DATE:</b> 5/30/2019  <b>DAY:</b> Thursday  <b>WEATHER:</b> clear  <b>COUNTED BY:</b> 0  <b>INPUTED BY:</b> agan</p>	<p style="text-align: center;">North ↑</p>
--	--

Time Period	Movement								1 + 2	3 + 4	5 + 6	7 + 8	Total
	1	2	3	4	5	6	7	8					
<b>AM 15 Minute Volumes</b>													
6:00 AM - 6:15 AM													
6:15 AM - 6:30 AM													
6:30 AM - 6:45 AM													
6:45 AM - 7:00 AM													
7:00 AM - 7:15 AM													
7:15 AM - 7:30 AM													
7:30 AM - 7:45 AM													
7:45 AM - 8:00 AM													
8:00 AM - 8:15 AM													
8:15 AM - 8:30 AM													
8:30 AM - 8:45 AM													
8:45 AM - 9:00 AM													
9:00 AM - 9:15 AM													
9:15 AM - 9:30 AM													
9:30 AM - 9:45 AM													
9:45 AM - 10:00 AM													
<b>Total</b>	0	0	0	0	0	0	0	0	0				
<b>AM One Hour Volumes</b>													
6:00 AM - 7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>7:30 AM - 8:30 AM</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
7:45 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM - 10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	0	0	0	0	0	0	0	0	0				
<b>PM 15 Minute Volumes</b>													
4:00 PM - 4:15 PM													
4:15 PM - 4:30 PM													
4:30 PM - 4:45 PM													
4:45 PM - 5:00 PM													
5:00 PM - 5:15 PM													
5:15 PM - 5:30 PM													
5:30 PM - 5:45 PM													
5:45 PM - 6:00 PM													
6:00 PM - 6:15 PM													
6:15 PM - 6:30 PM													
6:30 PM - 6:45 PM													
6:45 PM - 7:00 PM													
<b>Total</b>	0	0	0	0	0	0	0	0	0				
<b>PM One Hour Volumes</b>													
4:00 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>4:45 PM - 5:45 PM</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
5:00 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM - 7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	0	0	0	0	0	0	0	0	0				





# Wells + Associates, Inc.

McLean, Virginia

## Pedestrian Volume Survey

<p><b>PROJECT:</b> Ames Site (1820 N. Fort Myer Drive)  <b>W+A JOB NO:</b> 7804  <b>INTERSECTION:</b> Wilson Blvd. &amp; N. Fort Myer Dr.- West  <b>LOCATION:</b> Arlington County, VA  <b>DATE:</b> 5/30/2019  <b>DAY:</b> Thursday  <b>WEATHER:</b> clear  <b>COUNTED BY:</b> Muris  <b>INPUTED BY:</b> agan</p>	
--	--

Time Period	Movement								1 + 2	3 + 4	5 + 6	7 + 8	Total
	1	2	3	4	5	6	7	8					
<b>AM 15 Minute Volumes</b>													
6:00 AM - 6:15 AM	11	16	6	4	5	7	3	3					
6:15 AM - 6:30 AM	24	22	7	15	9	5	8	9					
6:30 AM - 6:45 AM	37	44	4	12	6	18	9	13					
6:45 AM - 7:00 AM	57	44	11	28	10	21	9	15					
7:00 AM - 7:15 AM	74	63	22	31	27	28	25	15					
7:15 AM - 7:30 AM	65	62	22	19	7	29	16	18					
7:30 AM - 7:45 AM	64	108	27	35	19	29	28	18					
7:45 AM - 8:00 AM	45	136	31	45	21	23	37	22					
8:00 AM - 8:15 AM	95	125	38	45	15	63	17	40					
8:15 AM - 8:30 AM	66	103	50	28	12	65	46	38					
8:30 AM - 8:45 AM	69	198	43	34	10	52	35	30					
8:45 AM - 9:00 AM	135	103	23	72	34	6	19	50					
9:00 AM - 9:15 AM	80	74	45	27	28	33	28	29					
9:15 AM - 9:30 AM	42	72	23	33	23	32	9	14					
9:30 AM - 9:45 AM	35	76	28	25	13	20	7	10					
9:45 AM - 10:00 AM	34	49	19	22	14	26	12	7					
<b>Total</b>	933	1295	399	475	253	457	308	331					
<b>AM One Hour Volumes</b>													
6:00 AM - 7:00 AM	129	126	28	59	30	51	29	40	255	87	81	69	492
6:15 AM - 7:15 AM	192	173	44	86	52	72	51	52	365	130	124	103	722
6:30 AM - 7:30 AM	233	213	59	90	50	96	59	61	446	149	146	120	861
6:45 AM - 7:45 AM	260	277	82	113	63	107	78	66	537	195	170	144	1046
7:00 AM - 8:00 AM	248	369	102	130	74	109	106	73	617	232	183	179	1211
7:15 AM - 8:15 AM	269	431	118	144	62	144	98	98	700	262	206	196	1364
<b>7:30 AM - 8:30 AM</b>	<b>270</b>	<b>472</b>	<b>146</b>	<b>153</b>	<b>67</b>	<b>180</b>	<b>128</b>	<b>118</b>	<b>742</b>	<b>299</b>	<b>247</b>	<b>246</b>	<b>1534</b>
7:45 AM - 8:45 AM	275	562	162	152	58	203	135	130	837	314	261	265	1677
8:00 AM - 9:00 AM	365	529	154	179	71	186	117	158	894	333	257	275	1759
8:15 AM - 9:15 AM	350	478	161	161	84	156	128	147	828	322	240	275	1665
8:30 AM - 9:30 AM	326	447	134	166	95	123	91	123	773	300	218	214	1505
8:45 AM - 9:45 AM	292	325	119	157	98	91	63	103	617	276	189	166	1248
9:00 AM - 10:00 AM	395	572	181	213	122	169	110	140	967	394	291	250	1902
<b>PM 15 Minute Volumes</b>													
4:00 PM - 4:15 PM	31	40	49	14	15	45	9	9					
4:15 PM - 4:30 PM	45	67	41	19	20	20	23	14					
4:30 PM - 4:45 PM	108	77	52	23	19	34	15	28					
4:45 PM - 5:00 PM	94	103	73	15	13	34	26	13					
5:00 PM - 5:15 PM	151	154	47	25	32	34	22	18					
5:15 PM - 5:30 PM	130	102	73	41	39	41	23	23					
5:30 PM - 5:45 PM	134	130	35	36	24	33	25	32					
5:45 PM - 6:00 PM	121	88	28	33	33	27	19	13					
6:00 PM - 6:15 PM	167	74	54	22	22	47	21	19					
6:15 PM - 6:30 PM	141	70	17	35	30	23	13	24					
6:30 PM - 6:45 PM	92	79	13	22	11	15	20	18					
6:45 PM - 7:00 PM	57	45	9	12	14	22	10	13					
<b>Total</b>	993	742	276	226	205	242	153	160					
<b>PM One Hour Volumes</b>													
4:00 PM - 5:00 PM	278	287	215	71	67	133	73	64	565	286	200	137	1188
4:15 PM - 5:15 PM	398	401	213	82	84	122	86	73	799	295	206	159	1459
4:30 PM - 5:30 PM	483	436	245	104	103	143	86	82	919	349	246	168	1682
<b>4:45 PM - 5:45 PM</b>	<b>509</b>	<b>489</b>	<b>228</b>	<b>117</b>	<b>108</b>	<b>142</b>	<b>96</b>	<b>86</b>	<b>998</b>	<b>345</b>	<b>250</b>	<b>182</b>	<b>1775</b>
5:00 PM - 6:00 PM	536	474	183	135	128	135	89	86	1010	318	263	175	1766
5:15 PM - 6:15 PM	552	394	190	132	118	148	88	87	946	322	266	175	1709
5:30 PM - 6:30 PM	563	362	134	126	109	130	78	88	925	260	239	166	1590
5:45 PM - 6:45 PM	521	311	112	112	96	112	73	74	832	224	208	147	1411
6:00 PM - 7:00 PM	457	268	93	91	77	107	64	74	725	184	184	138	1231





# Wells + Associates, Inc.

McLean, Virginia

## Pedestrian Volume Survey

<b>PROJECT:</b> Ames Site (1820 N. Fort Myer Drive) <b>W+A JOB NO:</b> 7804 <b>INTERSECTION:</b> Wilson Blvd. & N. Lynn St. <b>LOCATION:</b> Arlington County, VA <b>DATE:</b> 5/30/2019 <b>DAY:</b> Thursday <b>WEATHER:</b> clear <b>COUNTED BY:</b> Laura <b>INPUTED BY:</b> agan													
Time Period	Movement								1 + 2	3 + 4	5 + 6	7 + 8	Total
	1	2	3	4	5	6	7	8					
<b>AM 15 Minute Volumes</b>													
6:00 AM - 6:15 AM	14	19	4	2	5	7	3	0					
6:15 AM - 6:30 AM	17	26	2	4	3	8	4	0					
6:30 AM - 6:45 AM	21	30	4	5	6	10	4	4					
6:45 AM - 7:00 AM	38	27	8	7	10	15	4	4					
7:00 AM - 7:15 AM	37	38	14	12	15	13	1	3					
7:15 AM - 7:30 AM	41	47	6	9	4	25	9	2					
7:30 AM - 7:45 AM	53	49	32	10	7	17	3	3					
7:45 AM - 8:00 AM	76	63	37	9	1	28	12	6					
8:00 AM - 8:15 AM	65	70	20	14	7	15	5	7					
8:15 AM - 8:30 AM	75	99	36	20	4	32	13	2					
8:30 AM - 8:45 AM	99	111	37	26	3	23	9	5					
8:45 AM - 9:00 AM	104	76	27	11	5	21	6	1					
9:00 AM - 9:15 AM	84	54	10	18	13	14	7	6					
9:15 AM - 9:30 AM	40	63	12	15	4	10	7	0					
9:30 AM - 9:45 AM	46	47	17	5	3	10	8	0					
9:45 AM - 10:00 AM	40	49	7	15	10	21	3	3					
<b>Total</b>	850	868	273	182	100	269	98	46					
<b>AM One Hour Volumes</b>													
6:00 AM - 7:00 AM	90	102	18	18	24	40	15	8	192	36	64	23	315
6:15 AM - 7:15 AM	113	121	28	28	34	46	13	11	234	56	80	24	394
6:30 AM - 7:30 AM	137	142	32	33	35	63	18	13	279	65	98	31	473
6:45 AM - 7:45 AM	169	161	60	38	36	70	17	12	330	98	106	29	563
7:00 AM - 8:00 AM	207	197	89	40	27	83	25	14	404	129	110	39	682
7:15 AM - 8:15 AM	235	229	95	42	19	85	29	18	464	137	104	47	752
<b>7:30 AM - 8:30 AM</b>	<b>269</b>	<b>281</b>	<b>125</b>	<b>53</b>	<b>19</b>	<b>92</b>	<b>33</b>	<b>18</b>	<b>550</b>	<b>178</b>	<b>111</b>	<b>51</b>	<b>890</b>
7:45 AM - 8:45 AM	315	343	130	69	15	98	39	20	658	199	113	59	1029
8:00 AM - 9:00 AM	343	356	120	71	19	91	33	15	699	191	110	48	1048
8:15 AM - 9:15 AM	362	340	110	75	25	90	35	14	702	185	115	49	1051
8:30 AM - 9:30 AM	327	304	86	70	25	68	29	12	631	156	93	41	921
8:45 AM - 9:45 AM	274	240	66	49	25	55	28	7	514	115	80	35	744
9:00 AM - 10:00 AM	413	400	110	90	38	99	40	15	813	200	137	55	1205
<b>PM 15 Minute Volumes</b>													
4:00 PM - 4:15 PM	12	23	16	3	2	4	6	0					
4:15 PM - 4:30 PM	19	44	17	4	10	4	3	0					
4:30 PM - 4:45 PM	51	70	29	5	7	5	7	0					
4:45 PM - 5:00 PM	66	67	18	7	15	4	7	2					
5:00 PM - 5:15 PM	94	85	37	13	12	10	14	6					
5:15 PM - 5:30 PM	73	74	13	5	14	6	11	8					
5:30 PM - 5:45 PM	78	49	10	8	16	7	4	1					
5:45 PM - 6:00 PM	89	64	11	7	17	3	6	3					
6:00 PM - 6:15 PM	89	63	11	12	13	16	3	3					
6:15 PM - 6:30 PM	87	59	6	13	24	5	1	1					
6:30 PM - 6:45 PM	83	68	5	5	1	9	4	5					
6:45 PM - 7:00 PM	52	47	6	8	9	10	4	2					
<b>Total</b>	645	509	99	71	106	66	47	29					
<b>PM One Hour Volumes</b>													
4:00 PM - 5:00 PM	148	204	80	19	34	17	23	2	352	99	51	25	527
4:15 PM - 5:15 PM	230	266	101	29	44	23	31	8	496	130	67	39	732
4:30 PM - 5:30 PM	284	296	97	30	48	25	39	16	580	127	73	55	835
<b>4:45 PM - 5:45 PM</b>	<b>311</b>	<b>275</b>	<b>78</b>	<b>33</b>	<b>57</b>	<b>27</b>	<b>36</b>	<b>17</b>	<b>586</b>	<b>111</b>	<b>84</b>	<b>53</b>	<b>834</b>
5:00 PM - 6:00 PM	334	272	71	33	59	26	35	18	606	104	85	53	848
5:15 PM - 6:15 PM	329	250	45	32	60	32	24	15	579	77	92	39	787
5:30 PM - 6:30 PM	343	235	38	40	70	31	14	8	578	78	101	22	779
5:45 PM - 6:45 PM	348	254	33	37	55	33	14	12	602	70	88	26	786
6:00 PM - 7:00 PM	311	237	28	38	47	40	12	11	548	66	87	23	724





# Wells + Associates, Inc.

McLean, Virginia

## Turning Movement Count - Bicycles

PROJECT: 1501 Arlington Road W+A JOB NO: 6802 INTERSECTION: Fairfax Dr. & Ft. Myer Dr. LOCATION: Arlington County, VA		DATE: 5/5/2016 DAY: Thursday WEATHER: clear COUNTED BY: Anita INPUTED BY: agan		SOUTHBOUND ROAD: Ft. Myer Drive NORTHBOUND ROAD: Ft. Myer Drive WESTBOUND ROAD: Fairfax Drive EASTBOUND ROAD: Fairfax Drive															
Time Period	Southbound Ft. Myer Drive				Westbound Fairfax Drive				Northbound Ft. Myer Drive				Eastbound Fairfax Drive				North & South	East & West	Total
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total			
<b>AM 15 Minute Volumes</b>																			
7:00 AM - 7:15 AM	1			1				0			1	1			1	1	2	1	3
7:15 AM - 7:30 AM				0				0			2	2			1	1	2	1	3
7:30 AM - 7:45 AM				0			1	1			1	1			2	1	3	4	5
7:45 AM - 8:00 AM	1			1				0			1	1	2	2	1	5	2	5	7
8:00 AM - 8:15 AM				0				0			2	2	2	2		6	2	2	4
8:15 AM - 8:30 AM		2		2				0			2	2	2	4		6	4	6	10
8:30 AM - 8:45 AM				0				0			0	0	1	1	1	3	0	3	3
8:45 AM - 9:00 AM				0				0			0	0	1			1	0	1	1
9:00 AM - 9:15 AM				0				0			0	0	1	2		3	0	3	3
9:15 AM - 9:30 AM	1			1				0			2	2			1	1	3	1	4
9:30 AM - 9:45 AM				0				0			0	0	2		1	3	0	3	3
9:45 AM - 10:00 AM				0				0			0	0	2	2		2	0	2	2
<b>Total</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>11</b>	<b>11</b>	<b>14</b>	<b>6</b>	<b>31</b>	<b>16</b>	<b>32</b>	<b>48</b>
<b>AM One Hour Volumes</b>																			
7:00 AM - 8:00 AM	1	1	0	2	0	0	1	1	0	5	0	5	2	5	3	10	7	11	18
7:15 AM - 8:15 AM	0	1	0	1	0	0	1	1	0	6	0	6	4	5	2	11	7	12	19
<b>7:30 AM - 8:30 AM</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>6</b>	<b>6</b>	<b>8</b>	<b>2</b>	<b>16</b>	<b>9</b>	<b>17</b>	<b>26</b>
7:45 AM - 8:45 AM	0	3	0	3	0	0	0	0	0	5	0	5	7	7	2	16	8	16	24
8:00 AM - 9:00 AM	0	2	0	2	0	0	0	0	0	4	0	4	6	5	1	12	6	12	18
8:15 AM - 9:15 AM	0	2	0	2	0	0	0	0	0	2	0	2	5	7	1	13	4	13	17
8:30 AM - 9:30 AM	1	0	0	1	0	0	0	0	0	2	0	2	3	3	2	8	3	8	11
8:45 AM - 9:45 AM	1	0	0	1	0	0	0	0	0	2	0	2	4	2	2	8	3	8	11
9:00 AM - 10:00 AM	1	0	0	1	0	0	0	0	0	2	0	2	3	4	2	9	3	9	12
<b>Total</b>	<b>13</b>	<b>17</b>	<b>3</b>	<b>33</b>	<b>2</b>	<b>6</b>	<b>3</b>	<b>11</b>	<b>1</b>	<b>6</b>	<b>4</b>	<b>11</b>	<b>4</b>	<b>13</b>	<b>2</b>	<b>19</b>	<b>44</b>	<b>30</b>	<b>74</b>
<b>PM 15 Minute Volumes</b>																			
4:00 PM - 4:15 PM	1			1				0			0	0			0	1	0	1	1
4:15 PM - 4:30 PM		1		1				0			0	0			1	1	1	1	2
4:30 PM - 4:45 PM	1	1		2		1	1	2					2			2	2	4	6
4:45 PM - 5:00 PM	1			1				0		1	1		1	1		2	2	2	4
5:00 PM - 5:15 PM	1	3		4		2		2			1	1		1		5	3	3	8
5:15 PM - 5:30 PM				0				0			0	0				0	0	0	0
5:30 PM - 5:45 PM	2	3	1	6				0		1	1	2		4	1	5	8	5	13
5:45 PM - 6:00 PM	1	1		2		2		2			1	1	2	1		3	3	5	8
6:00 PM - 6:15 PM	3	3	1	7		1		1		1	2	3	1	2		3	10	4	14
6:15 PM - 6:30 PM	1			1			1	1			2	1	3			0	4	1	5
6:30 PM - 6:45 PM	1	4		5		2		1				0				0	5	3	8
6:45 PM - 7:00 PM	1	1	1	3				0				0		2		2	3	2	5
<b>Total</b>	<b>13</b>	<b>17</b>	<b>3</b>	<b>33</b>	<b>2</b>	<b>6</b>	<b>3</b>	<b>11</b>	<b>1</b>	<b>6</b>	<b>4</b>	<b>11</b>	<b>4</b>	<b>13</b>	<b>2</b>	<b>19</b>	<b>44</b>	<b>30</b>	<b>74</b>
<b>PM One Hour Volumes</b>																			
4:00 PM - 5:00 PM	3	2	0	5	0	1	1	2	0	1	0	1	1	3	1	5	6	7	13
4:15 PM - 5:15 PM	3	5	0	8	0	3	1	4	0	1	1	2	1	4	1	6	10	10	20
4:30 PM - 5:30 PM	3	4	0	7	0	3	1	4	0	1	1	2	1	4	0	5	9	9	18
<b>4:45 PM - 5:45 PM</b>	<b>4</b>	<b>6</b>	<b>1</b>	<b>11</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>6</b>	<b>1</b>	<b>8</b>	<b>15</b>	<b>10</b>	<b>25</b>
5:00 PM - 6:00 PM	4	7	1	12	0	4	0	4	0	1	3	4	2	6	1	9	16	13	29
5:15 PM - 6:15 PM	6	7	2	15	0	3	0	3	1	3	2	6	3	7	1	11	21	14	35
5:30 PM - 6:30 PM	7	7	2	16	0	3	1	4	1	5	3	9	3	7	1	11	25	15	40
5:45 PM - 6:45 PM	6	8	1	15	2	3	2	7	1	4	2	7	3	3	0	6	22	13	35
6:00 PM - 7:00 PM	6	8	2	16	2	1	2	5	1	4	1	6	1	4	0	5	22	10	32

# Wells + Associates, Inc.

McLean, Virginia

## Pedestrian Volume Survey

<p><b>PROJECT:</b> 1501 Arlington Road  <b>W+A JOB NO:</b> 6802  <b>INTERSECTION:</b> Fairfax Dr. &amp; Ft. Myer Dr.  <b>LOCATION:</b> Arlington County, VA  <b>DATE:</b> 5/5/2016  <b>DAY:</b> Thursday  <b>WEATHER:</b> clear  <b>COUNTED BY:</b> Maria  <b>INPUTED BY:</b> agan</p>	
--	--

Time Period	Movement								1 + 2	3 + 4	5 + 6	7 + 8	Total
	1	2	3	4	5	6	7	8					
<b>AM 15 Minute Volumes</b>													
7:00 AM - 7:15 AM	1	2	7	1	3			6	3				
7:15 AM - 7:30 AM	2	5	8		1				1				
7:30 AM - 7:45 AM	1		18	5	5	2							
7:45 AM - 8:00 AM	1	7	17	2		1	7						
8:00 AM - 8:15 AM	2	11	21	4	2	1	5						
8:15 AM - 8:30 AM	3	8	21		2	1	7	1					
8:30 AM - 8:45 AM	6	8	30	1			5	3					
8:45 AM - 9:00 AM	9	5	21	4	1		6	2					
9:00 AM - 9:15 AM	1	14	9	3	2		6	1					
9:15 AM - 9:30 AM	6	19	10	1			7						
9:30 AM - 9:45 AM	5	5	7				2	1					
9:45 AM - 10:00 AM	3	2	5	3	1	2	3						
<b>Total</b>	<b>40</b>	<b>86</b>	<b>174</b>	<b>24</b>	<b>17</b>	<b>7</b>	<b>54</b>	<b>12</b>					
<b>AM One Hour Volumes</b>													
7:00 AM - 8:00 AM	5	14	50	8	9	3	13	4	19	58	12	17	106
7:15 AM - 8:15 AM	6	23	64	11	8	4	12	1	29	75	12	13	129
<b>7:30 AM - 8:30 AM</b>	<b>7</b>	<b>26</b>	<b>77</b>	<b>11</b>	<b>9</b>	<b>5</b>	<b>19</b>	<b>1</b>	<b>33</b>	<b>88</b>	<b>14</b>	<b>20</b>	<b>155</b>
7:45 AM - 8:45 AM	12	34	89	7	4	3	24	4	46	96	7	28	177
8:00 AM - 9:00 AM	20	32	93	9	5	2	23	6	52	102	7	29	190
8:15 AM - 9:15 AM	19	35	81	8	5	1	24	7	54	89	6	31	180
8:30 AM - 9:30 AM	22	46	70	9	3	0	24	6	68	79	3	30	180
8:45 AM - 9:45 AM	21	43	47	8	3	0	21	4	64	55	3	25	147
9:00 AM - 10:00 AM	15	40	31	7	3	2	18	2	55	38	5	20	118
<b>PM 15 Minute Volumes</b>													
4:00 PM - 4:15 PM		6	5	2	5	1	1	8					
4:15 PM - 4:30 PM	6	5	6	5		1	4	8					
4:30 PM - 4:45 PM	6	2	4	4			4	4					
4:45 PM - 5:00 PM	3	7	1	5			4	12					
5:00 PM - 5:15 PM	1	5	1	7		3	2	5					
5:15 PM - 5:30 PM	8	4	4	6	4	1	2	8					
5:30 PM - 5:45 PM	4	7	2	5	2	3	3	12					
5:45 PM - 6:00 PM	5	3	2	10	2	3	8	7					
6:00 PM - 6:15 PM	2	8	2	5			7	8					
6:15 PM - 6:30 PM	15	3	1	7	4	1	6	4					
6:30 PM - 6:45 PM	7	3	6	7	1	1	16	4					
6:45 PM - 7:00 PM	3	2	1	5	1	1	11	11					
<b>Total</b>	<b>60</b>	<b>55</b>	<b>35</b>	<b>68</b>	<b>19</b>	<b>15</b>	<b>68</b>	<b>91</b>					
<b>PM One Hour Volumes</b>													
4:00 PM - 5:00 PM	15	20	16	16	5	2	13	32	35	32	7	45	119
4:15 PM - 5:15 PM	16	19	12	21	0	4	14	29	35	33	4	43	115
4:30 PM - 5:30 PM	18	18	10	22	4	4	12	29	36	32	8	41	117
<b>4:45 PM - 5:45 PM</b>	<b>16</b>	<b>23</b>	<b>8</b>	<b>23</b>	<b>6</b>	<b>7</b>	<b>11</b>	<b>37</b>	<b>39</b>	<b>31</b>	<b>13</b>	<b>48</b>	<b>131</b>
5:00 PM - 6:00 PM	18	19	9	28	8	10	15	32	37	37	18	47	139
5:15 PM - 6:15 PM	19	22	10	26	8	7	20	35	41	36	15	55	147
5:30 PM - 6:30 PM	26	21	7	27	8	7	24	31	47	34	15	55	151
5:45 PM - 6:45 PM	29	17	11	29	7	5	37	23	46	40	12	60	158
6:00 PM - 7:00 PM	27	16	10	24	6	3	40	27	43	34	9	67	153





# Wells + Associates, Inc.

McLean, Virginia

## Pedestrian Volume Survey

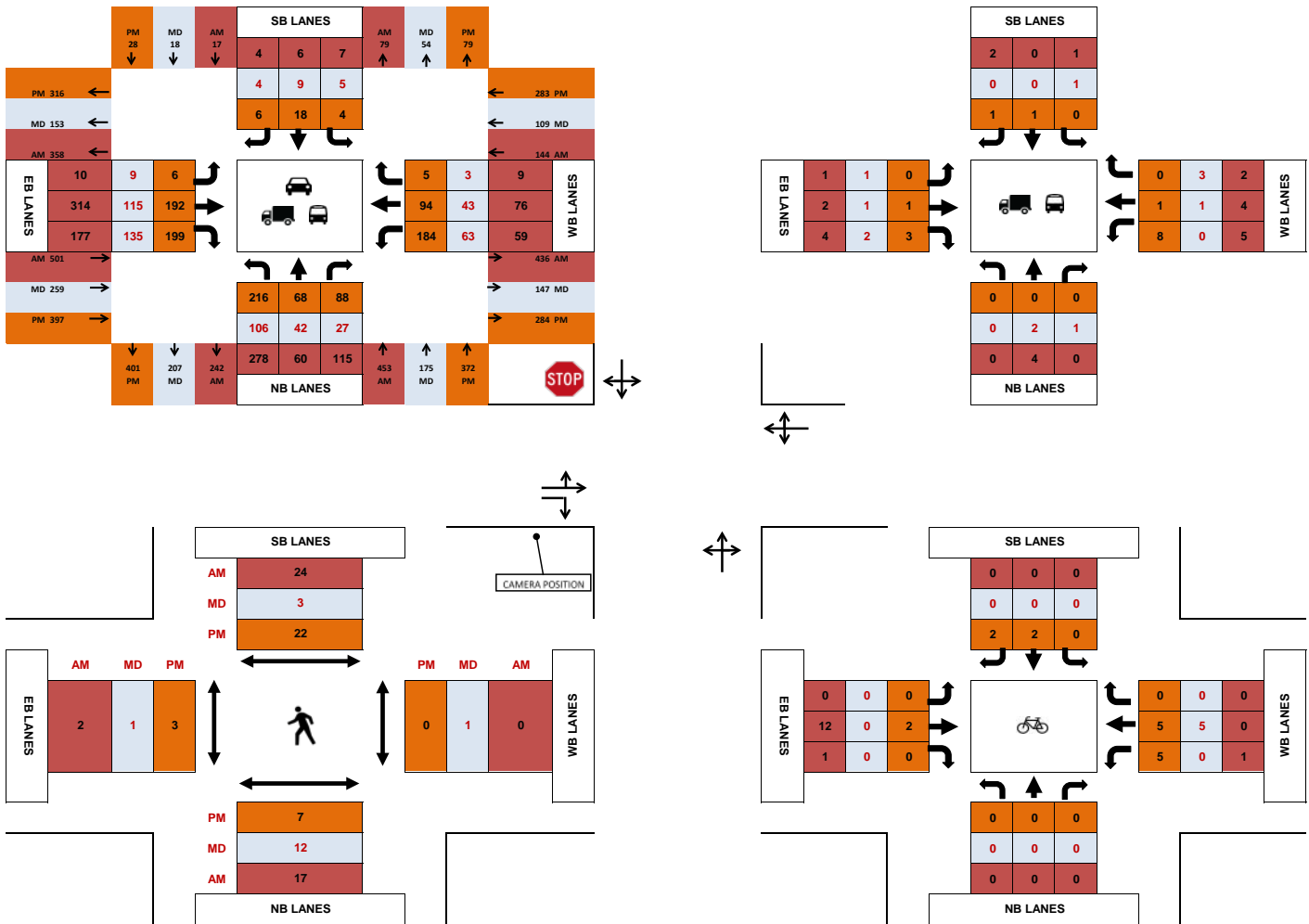
<p><b>PROJECT:</b> 1501 Arlington Road  <b>W+A JOB NO:</b> 6802  <b>INTERSECTION:</b> Fairfax Dr. &amp; N. Lynn St.  <b>LOCATION:</b> Arlington County, VA  <b>DATE:</b> 5/5/2016  <b>DAY:</b> Thursday  <b>WEATHER:</b> clear  <b>COUNTED BY:</b> Tyler  <b>INPUTED BY:</b> agan</p>	<p style="text-align: center;">North Lynn Street</p> <p style="text-align: center;">Fairfax Drive</p> <p style="text-align: center;">Fairfax Drive</p> <p style="text-align: center;">North Lynn Street</p> <p style="text-align: center;">North</p>
---	--

Time Period	Movement								1+2	3+4	5+6	7+8	Total
	1	2	3	4	5	6	7	8					
<b>AM 15 Minute Volumes</b>													
7:00 AM - 7:15 AM	5	1	7	4	2		1						
7:15 AM - 7:30 AM	2	1	3				1		2				
7:30 AM - 7:45 AM	2	3	1		1		2	1					
7:45 AM - 8:00 AM	2	3	2		1	1	2						
8:00 AM - 8:15 AM	2	3	1	1	2		4	1					
8:15 AM - 8:30 AM	2	1	3	2	1	2	6	2					
8:30 AM - 8:45 AM	4	2	1	4	2	7	3	1					
8:45 AM - 9:00 AM	3		2	6	3	1	5						
9:00 AM - 9:15 AM	1	1		6	4		2	3					
9:15 AM - 9:30 AM	2	3	4	2		3	3						
9:30 AM - 9:45 AM	3			1	2								
9:45 AM - 10:00 AM				2									
<b>Total</b>	<b>28</b>	<b>18</b>	<b>24</b>	<b>28</b>	<b>18</b>	<b>15</b>	<b>28</b>	<b>10</b>					
<b>AM One Hour Volumes</b>													
7:00 AM - 8:00 AM	11	8	13	4	4	2	5	3	19	17	6	8	50
7:15 AM - 8:15 AM	8	10	7	1	4	2	8	4	18	8	6	12	44
<b>7:30 AM - 8:30 AM</b>	<b>8</b>	<b>10</b>	<b>7</b>	<b>3</b>	<b>5</b>	<b>3</b>	<b>14</b>	<b>4</b>	<b>18</b>	<b>10</b>	<b>8</b>	<b>18</b>	<b>54</b>
7:45 AM - 8:45 AM	10	9	7	7	6	10	15	4	19	14	16	19	68
8:00 AM - 9:00 AM	11	6	7	13	8	10	18	4	17	20	18	22	77
8:15 AM - 9:15 AM	10	4	6	18	10	10	16	6	14	24	20	22	80
8:30 AM - 9:30 AM	10	6	7	18	9	11	13	4	16	25	20	17	78
8:45 AM - 9:45 AM	9	4	6	15	9	4	10	3	13	21	13	13	60
9:00 AM - 10:00 AM	6	4	4	11	6	3	5	3	10	15	9	8	42
<b>PM 15 Minute Volumes</b>													
4:00 PM - 4:15 PM	1	3		2	1	1		3					
4:15 PM - 4:30 PM	2	7	3	3	1		4						
4:30 PM - 4:45 PM	6	8	2	2	1	2		2					
4:45 PM - 5:00 PM	3	7	3	2	1			1					
5:00 PM - 5:15 PM	5	10	5	5	1	3	2	4					
5:15 PM - 5:30 PM	7	7	1	4	3	3		7					
5:30 PM - 5:45 PM	4	3	2	3	4	3		1					
5:45 PM - 6:00 PM	7	4	4	1	1	1	2	3					
6:00 PM - 6:15 PM	6	6		4	3			4					
6:15 PM - 6:30 PM	8	11	2	2	3	3	1	7					
6:30 PM - 6:45 PM	9	1	3	3	3	2		7					
6:45 PM - 7:00 PM	5	5	3	5	1	1	2	5					
<b>Total</b>	<b>63</b>	<b>72</b>	<b>28</b>	<b>36</b>	<b>23</b>	<b>19</b>	<b>11</b>	<b>44</b>					
<b>PM One Hour Volumes</b>													
4:00 PM - 5:00 PM	12	25	8	9	4	3	4	6	37	17	7	10	71
4:15 PM - 5:15 PM	16	32	13	12	4	5	6	7	48	25	9	13	95
4:30 PM - 5:30 PM	21	32	11	13	6	8	2	14	53	24	14	16	107
<b>4:45 PM - 5:45 PM</b>	<b>19</b>	<b>27</b>	<b>11</b>	<b>14</b>	<b>9</b>	<b>9</b>	<b>2</b>	<b>13</b>	<b>46</b>	<b>25</b>	<b>18</b>	<b>15</b>	<b>104</b>
5:00 PM - 6:00 PM	23	24	12	13	9	10	4	15	47	25	19	19	110
5:15 PM - 6:15 PM	24	20	7	12	11	7	2	15	44	19	18	17	98
5:30 PM - 6:30 PM	25	24	8	10	11	7	3	15	49	18	18	18	103
5:45 PM - 6:45 PM	30	22	9	10	10	6	3	21	52	19	16	24	111
6:00 PM - 7:00 PM	28	23	8	14	10	6	3	23	51	22	16	26	115

# SUMMARY PAGE

#006 N. Queen Street - MINOR & Fairfax Drive - MAJOR

LOCATION#:	006	QTD PROJ#:	2015277	AM PEAK HOUR:	815 AM - 915 AM
NORTH / SOUTH:	N. Queen Street - MINOR	COUNT DATE:	Tuesday, November 17, 2015	MD PEAK HOUR:	100 PM - 200 PM
EAST / WEST:	Fairfax Drive - MAJOR	VICINITY:	VA	PM PEAK HOUR:	500 PM - 600 PM
WEATHER:	NORMAL / CLEAR	AM TOTAL PHF:	0.933	AM PEAK 15-Min:	845 AM - 900 AM
		MD TOTAL PHF:	0.940	MD PEAK 15-Min:	1200 PM - 1215 PM
		PM TOTAL PHF:	0.948	PM PEAK 15-Min:	515 PM - 530 PM



COMMENTS:

AM COUNT	7:00 AM	TO	10:00 AM
MD COUNT	12:00 PM	TO	2:00 PM
PM COUNT	4:00PM	TO	7:00PM







### PEDESTRIAN CROSSWALK COUNTS

#006 N. Queen Street - MINOR & Fairfax Drive - MAJOR - AM PEAK

LOCATION#:	006	QTD PROJ#:	2015277
NORTH / SOUTH:	N. Queen Street - MINOR	DATE:	Tuesday, November 17, 2015
EAST / WEST:	Fairfax Drive - MAJOR	VICINITY:	VA

DIRECTION:	EASTERN CROSSWALK	WESTERN CROSSWALK	SOUTHERN CROSSWALK	NORTHERN CROSSWALK	TOTALS
7:00 AM	0	1	0	2	3
7:15 AM	1	0	7	5	13
7:30 AM	0	4	6	7	17
7:45 AM	0	0	5	8	13
8:00 AM	0	0	1	4	5
8:15 AM	0	0	6	9	15
8:30 AM	0	1	6	4	11
8:45 AM	0	0	3	7	10
9:00 AM	0	1	2	4	7
9:15 AM	0	1	2	5	8
9:30 AM	0	1	2	3	6
9:45 AM	0	2	4	4	10

VOLUME STATS:	EASTERN CROSSWALK	WESTERN CROSSWALK	SOUTHERN CROSSWALK	NORTHERN CROSSWALK	TOTALS
TOTAL:	1	11	44	62	118
P.H.V.: 1	0	4	18	28	50
P.H.F.: 2	0.000	0.250	0.750	0.778	0.735

- (1) Peak Hour Volume (Peak Hour - 815 AM - 915 AM)
- (2) Peak Hour Factor
- (3) Peak 15m: 845 AM - 900 AM

### PEDESTRIAN CROSSWALK COUNTS

#006 N. Queen Street - MINOR & Fairfax Drive - MAJOR - MD PEAK

LOCATION#:	006	QTD PROJ#:	2015277
NORTH / SOUTH:	N. Queen Street - MINOR	DATE:	Tuesday, November 17, 2015
EAST / WEST:	Fairfax Drive - MAJOR	VICINITY:	VA

DIRECTION:	EASTERN CROSSWALK	WESTERN CROSSWALK	SOUTHERN CROSSWALK	NORTHERN CROSSWALK	TOTALS
12:00 PM	0	0	0	1	1
12:15 PM	0	0	0	2	2
12:30 PM	0	0	3	5	8
12:45 PM	1	1	1	3	6
1:00 PM	0	0	0	1	1
1:15 PM	0	1	3	0	4
1:30 PM	0	0	4	0	4
1:45 PM	1	0	5	2	8

VOLUME STATS:	EASTERN CROSSWALK	WESTERN CROSSWALK	SOUTHERN CROSSWALK	NORTHERN CROSSWALK	TOTALS
TOTAL:	2	2	16	14	34
P.H.V.: 1	1	2	7	9	19
P.H.F.: 2	0.250	0.500	0.583	0.450	0.594

- (1) Peak Hour Volume (Peak Hour - 100 PM - 200 PM)
- (2) Peak Hour Factor
- (3) Peak 15m: 1200 PM - 1215 PM

### PEDESTRIAN CROSSWALK COUNTS

#006 N. Queen Street - MINOR & Fairfax Drive - MAJOR - PM PEAK

LOCATION#:	006	QTD PROJ#:	2015277
NORTH / SOUTH:	N. Queen Street - MINOR	DATE:	Tuesday, November 17, 2015
EAST / WEST:	Fairfax Drive - MAJOR	VICINITY:	VA

DIRECTION:	EASTERN CROSSWALK	WESTERN CROSSWALK	SOUTHERN CROSSWALK	NORTHERN CROSSWALK	TOTALS
4:00 PM	1	0	7	5	13
4:15 PM	1	2	2	6	11
4:30 PM	0	2	5	5	12
4:45 PM	1	2	5	2	10
5:00 PM	0	1	3	3	7
5:15 PM	0	0	0	8	8
5:30 PM	0	2	2	5	9
5:45 PM	0	0	2	6	8
6:00 PM	0	1	2	7	10
6:15 PM	0	0	6	2	8
6:30 PM	0	1	1	4	6
6:45 PM	1	0	8	3	12

VOLUME STATS:	EASTERN CROSSWALK	WESTERN CROSSWALK	SOUTHERN CROSSWALK	NORTHERN CROSSWALK	TOTALS
TOTAL:	4	11	43	56	114
P.H.V.: 1	1	4	21	35	61
P.H.F.: 2	0.250	0.500	0.656	1.094	1.271

- (1) Peak Hour Volume (Peak Hour - 500 PM - 600 PM)
- (2) Peak Hour Factor
- (3) Peak 15m: 515 PM - 530 PM



QUALITY TRAFFIC DATA, LLC  
 9701 W Pico Blvd, Suite 205, Los Angeles, CA 90035  
 Phone: 310-341-0019 Fax: 310-807-9247 Info@QualityTrafficData.com





# Wells + Associates, Inc.

McLean, Virginia

## Turning Movement Count - Bicycles

<b>PROJECT:</b> 1501 Arlington Road				<b>DATE:</b> 5/5/2016				<b>SOUTHBOUND ROAD:</b> North Pierce Street											
<b>W+A JOB NO:</b> 6802				<b>DAY:</b> Thursday				<b>NORTHBOUND ROAD:</b> 0											
<b>INTERSECTION:</b> Fairfax Dr. & N. Pierce St.				<b>WEATHER:</b> clear				<b>WESTBOUND ROAD:</b> Fairfax Drive											
<b>LOCATION:</b> Arlington County, VA				<b>COUNTED BY:</b> Vanessa				<b>EASTBOUND ROAD:</b> Fairfax Drive											
				<b>INPUTED BY:</b> agan															
Time Period	Southbound North Pierce Street				Westbound Fairfax Drive				Northbound 0				Eastbound Fairfax Drive				North & South	East & West	Total
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total			
<b>AM 15 Minute Volumes</b>																			
7:00 AM - 7:15 AM				0			1	1				0				0	0	0	1
7:15 AM - 7:30 AM				0			1	1				0			2	2	2	0	3
7:30 AM - 7:45 AM				0				0				0			1	1	1	0	1
7:45 AM - 8:00 AM				0				0				0			2	2	2	0	2
8:00 AM - 8:15 AM				0				0				0			4	4	5	0	5
8:15 AM - 8:30 AM				0				0				0			3	3	3	0	3
8:30 AM - 8:45 AM				0				0				0			6	6	6	0	6
8:45 AM - 9:00 AM				0				0				0			3	3	3	0	3
9:00 AM - 9:15 AM				0				0				0			4	4	4	0	4
9:15 AM - 9:30 AM				0				0				0			1	1	1	0	1
9:30 AM - 9:45 AM				0				0				0			3	3	3	0	3
9:45 AM - 10:00 AM				0				0				0			2	2	2	0	2
<b>Total</b>	0	0	0	0	0	2	0	2	0	0	0	0	0	31	1	32	0	34	34
<b>AM One Hour Volumes</b>																			
7:00 AM - 8:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	5	0	5	0	7	7
7:15 AM - 8:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	9	1	10	0	11	11
<b>7:30 AM - 8:30 AM</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>1</b>	<b>11</b>	<b>0</b>	<b>11</b>	<b>11</b>
7:45 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	15	1	16	0	16	16
8:00 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	16	1	17	0	17	17
8:15 AM - 9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	16	0	16	16
8:30 AM - 9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	14	0	14	14
8:45 AM - 9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	11	0	11	11
9:00 AM - 10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	10	0	10	10
<b>PM 15 Minute Volumes</b>																			
4:00 PM - 4:15 PM				0				0				0				0	0	0	0
4:15 PM - 4:30 PM				0			1	1				0			1	1	0	2	2
4:30 PM - 4:45 PM				0			2	2				0			3	3	0	5	5
4:45 PM - 5:00 PM			1	1			2	2				0			1	1	1	3	4
5:00 PM - 5:15 PM				0			4	4				0			1	1	0	5	5
5:15 PM - 5:30 PM				0			2	2				0				0	0	2	2
5:30 PM - 5:45 PM				1			5	5				0			4	4	1	9	10
5:45 PM - 6:00 PM				0			3	3				0			2	2	0	5	5
6:00 PM - 6:15 PM				1			4	4				0			3	3	1	7	8
6:15 PM - 6:30 PM				0			1	1				0				0	0	1	1
6:30 PM - 6:45 PM				0			1	2				0				1	0	4	4
6:45 PM - 7:00 PM				0			1	1				0			2	2	0	3	3
<b>Total</b>	3	0	0	3	1	27	0	28	0	0	0	0	0	17	1	18	3	46	49
<b>PM One Hour Volumes</b>																			
4:00 PM - 5:00 PM	1	0	0	1	0	5	0	5	0	0	0	0	0	5	0	5	1	10	11
4:15 PM - 5:15 PM	1	0	0	1	0	9	0	9	0	0	0	0	0	6	0	6	1	15	16
4:30 PM - 5:30 PM	1	0	0	1	0	10	0	10	0	0	0	0	0	5	0	5	1	15	16
<b>4:45 PM - 5:45 PM</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>6</b>	<b>2</b>	<b>19</b>	<b>21</b>
5:00 PM - 6:00 PM	1	0	0	1	0	14	0	14	0	0	0	0	0	7	0	7	1	21	22
5:15 PM - 6:15 PM	2	0	0	2	0	14	0	14	0	0	0	0	0	9	0	9	2	23	25
5:30 PM - 6:30 PM	2	0	0	2	0	13	0	13	0	0	0	0	0	9	0	9	2	22	24
5:45 PM - 6:45 PM	1	0	0	1	1	10	0	11	0	0	0	0	0	5	1	6	1	17	18
6:00 PM - 7:00 PM	1	0	0	1	1	8	0	9	0	0	0	0	0	5	1	6	1	15	16

# Wells + Associates, Inc.

McLean, Virginia

## Pedestrian Volume Survey

<p><b>PROJECT:</b> 1501 Arlington Road  <b>W+A JOB NO:</b> 6802  <b>INTERSECTION:</b> Fairfax Dr. &amp; N. Pierce St.  <b>LOCATION:</b> Arlington County, VA  <b>DATE:</b> 5/5/2016  <b>DAY:</b> Thursday  <b>WEATHER:</b> clear  <b>COUNTED BY:</b> Vanessa  <b>INPUTED BY:</b> agan</p>	<p style="text-align: center;">North Pierce Street</p> <p style="text-align: center;">Fairfax Drive</p> <p style="text-align: center;">Fairfax Drive</p> <p style="text-align: center;">North</p>
---	---

Time Period	Movement								1+2	3+4	5+6	7+8	Total
	1	2	3	4	5	6	7	8					
<b>AM 15 Minute Volumes</b>													
7:00 AM - 7:15 AM	6	1			1								
7:15 AM - 7:30 AM	3	2	1										
7:30 AM - 7:45 AM	3	4						2					
7:45 AM - 8:00 AM		2			1			1					
8:00 AM - 8:15 AM	1	6						5					
8:15 AM - 8:30 AM	2	7						3					
8:30 AM - 8:45 AM	2	5		1				1					
8:45 AM - 9:00 AM	1	6			1			3					
9:00 AM - 9:15 AM	1	11											
9:15 AM - 9:30 AM	1	4						1					
9:30 AM - 9:45 AM	1	2			1			2	1			1	
9:45 AM - 10:00 AM	2	3						1					
<b>Total</b>	<b>23</b>	<b>53</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>19</b>	<b>1</b>	<b>1</b>					
<b>AM One Hour Volumes</b>													
7:00 AM - 8:00 AM	12	9	1	0	2	3	0	0	21	1	5	0	27
7:15 AM - 8:15 AM	7	14	1	0	1	8	0	0	21	1	9	0	31
<b>7:30 AM - 8:30 AM</b>	<b>6</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>37</b>
7:45 AM - 8:45 AM	5	20	0	1	1	10	0	0	25	1	11	0	37
8:00 AM - 9:00 AM	6	24	0	1	1	12	0	0	30	1	13	0	44
8:15 AM - 9:15 AM	6	29	0	1	1	7	0	0	35	1	8	0	44
8:30 AM - 9:30 AM	5	26	0	1	1	5	0	0	31	1	6	0	38
8:45 AM - 9:45 AM	4	23	0	0	2	6	1	1	27	0	8	2	37
9:00 AM - 10:00 AM	5	20	0	0	1	4	1	1	25	0	5	2	32
<b>PM 15 Minute Volumes</b>													
4:00 PM - 4:15 PM		9						3					
4:15 PM - 4:30 PM	1	6											
4:30 PM - 4:45 PM	1	3	1					3					
4:45 PM - 5:00 PM	6	5		1	1								
5:00 PM - 5:15 PM	4	1						1					
5:15 PM - 5:30 PM	5	5		1	1								
5:30 PM - 5:45 PM	10	1				3	2						
5:45 PM - 6:00 PM	9					4	1						
6:00 PM - 6:15 PM	6	3				1	1						
6:15 PM - 6:30 PM	8	3				2	1						
6:30 PM - 6:45 PM	8	5				1	1						
6:45 PM - 7:00 PM	6					4	3						
<b>Total</b>	<b>64</b>	<b>41</b>	<b>1</b>	<b>2</b>	<b>17</b>	<b>16</b>	<b>0</b>	<b>0</b>					
<b>PM One Hour Volumes</b>													
4:00 PM - 5:00 PM	8	23	1	1	1	6	0	0	31	2	7	0	40
4:15 PM - 5:15 PM	12	15	1	1	1	4	0	0	27	2	5	0	34
4:30 PM - 5:30 PM	16	14	1	2	2	4	0	0	30	3	6	0	39
<b>4:45 PM - 5:45 PM</b>	<b>25</b>	<b>12</b>	<b>0</b>	<b>2</b>	<b>5</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>37</b>	<b>2</b>	<b>8</b>	<b>0</b>	<b>47</b>
5:00 PM - 6:00 PM	28	7	0	1	8	4	0	0	35	1	12	0	48
5:15 PM - 6:15 PM	30	9	0	1	9	4	0	0	39	1	13	0	53
5:30 PM - 6:30 PM	33	7	0	0	10	5	0	0	40	0	15	0	55
5:45 PM - 6:45 PM	31	11	0	0	8	4	0	0	42	0	12	0	54
6:00 PM - 7:00 PM	28	11	0	0	8	6	0	0	39	0	14	0	53

**APPENDIX D**  
**LOS DESCRIPTIONS**

## 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-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 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 (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 sec/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 10 sec/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 sec/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



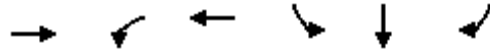
**APPENDIX E**  
**EXISTING (2019) LEVEL OF SERVICE AND QUEUE**  
**SYNCHRO WORKSHEETS**

APPENDIX E: EXISTING SYNCHRO WORKSHEETS

Queues

1: Fort Myer Drive & Wilson Boulevard

1616 North Fort Myer Drive



Lane Group	EBT	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	853	401	730	193	125	53
v/c Ratio	0.62	1.20	0.43	0.49	0.08	0.13
Control Delay	23.5	133.9	12.8	26.4	17.9	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.5	133.9	12.8	26.4	17.9	0.7
Queue Length 50th (ft)	127	~179	86	82	16	0
Queue Length 95th (ft)	156	m#357	155	142	27	0
Internal Link Dist (ft)	299		201		520	
Turn Bay Length (ft)						200
Base Capacity (vph)	1377	334	1686	393	1526	403
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.62	1.20	0.43	0.49	0.08	0.13

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

# HCM Signalized Intersection Capacity Analysis

## 1: Fort Myer Drive & Wilson Boulevard

1616 North Fort Myer Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↖	↑↑					↘	↑↑↑	↗
Traffic Volume (vph)	0	483	242	365	664	0	0	0	0	168	109	46
Future Volume (vph)	0	483	242	365	664	0	0	0	0	168	109	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	1.0					4.5	4.5	4.5
Lane Util. Factor		0.91		1.00	0.95					1.00	0.91	1.00
Frbp, ped/bikes		0.91		1.00	1.00					1.00	1.00	0.78
Flpb, ped/bikes		1.00		0.99	1.00					0.75	1.00	1.00
Frt		0.95		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3790		1531	3036					1026	3981	839
Flt Permitted		1.00		0.22	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3790		347	3036					1026	3981	839
Peak-hour factor, PHF	0.85	0.85	0.85	0.91	0.91	0.91	0.85	0.85	0.85	0.87	0.87	0.87
Adj. Flow (vph)	0	568	285	401	730	0	0	0	0	193	125	53
RTOR Reduction (vph)	0	71	0	0	0	0	0	0	0	0	0	33
Lane Group Flow (vph)	0	782	0	401	730	0	0	0	0	193	125	20
Confl. Peds. (#/hr)	742		247	247		742	246		299	299		246
Confl. Bikes (#/hr)			22			1			4			5
Heavy Vehicles (%)	2%	8%	2%	5%	7%	2%	2%	2%	2%	3%	11%	18%
Parking (#/hr)										6	12	6
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		28.0		47.0	47.0					32.0	32.0	32.0
Effective Green, g (s)		31.0		50.0	50.0					34.5	34.5	34.5
Actuated g/C Ratio		0.34		0.56	0.56					0.38	0.38	0.38
Clearance Time (s)		7.0		7.0	4.0					7.0	7.0	7.0
Lane Grp Cap (vph)		1305		350	1686					393	1526	321
v/s Ratio Prot		0.21		c0.15	0.24						0.03	
v/s Ratio Perm				c0.48						c0.19		0.02
v/c Ratio		0.60		1.15	0.43					0.49	0.08	0.06
Uniform Delay, d1		24.4		14.4	11.7					21.1	17.7	17.5
Progression Factor		1.00		1.09	1.01					1.00	1.00	1.00
Incremental Delay, d2		2.0		92.0	0.7					4.3	0.1	0.4
Delay (s)		26.4		107.6	12.6					25.4	17.8	17.9
Level of Service		C		F	B					C	B	B
Approach Delay (s)		26.4			46.3			0.0			21.8	
Approach LOS		C			D			A			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			35.2			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.92									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			12.5			
Intersection Capacity Utilization			81.3%			ICU Level of Service				D		
Analysis Period (min)			15									
c Critical Lane Group												

Queues

2: Wilson Boulevard & North Lynn Street

1616 North Fort Myer Drive


























Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	420	440	529	9	238	1391	239
v/c Ratio	0.61	0.57	0.74	0.03	0.43	0.68	0.46
Control Delay	37.8	23.4	39.2	0.2	26.2	28.7	13.7
Queue Delay	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Total Delay	37.8	23.6	39.2	0.2	26.2	28.7	13.7
Queue Length 50th (ft)	91	171	147	0	125	231	55
Queue Length 95th (ft)	129	251	205	0	m205	267	m134
Internal Link Dist (ft)		118	624			760	
Turn Bay Length (ft)				125	180		135
Base Capacity (vph)	686	777	715	310	554	2048	518
Starvation Cap Reductn	0	36	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.59	0.74	0.03	0.43	0.68	0.46

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis  
 2: Wilson Boulevard & North Lynn Street

1616 North Fort Myer Drive

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	 				 			  					
Traffic Volume (vph)	357	374	0	0	503	9	221	1294	222	0	0	0	
Future Volume (vph)	357	374	0	0	503	9	221	1294	222	0	0	0	
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	4.0	4.0	4.0				
Lane Util. Factor	0.97	1.00			0.95	1.00	1.00	0.86	1.00				
Frbp, ped/bikes	1.00	1.00			1.00	0.59	1.00	1.00	0.84				
Flpb, ped/bikes	1.00	1.00			1.00	1.00	0.96	1.00	1.00				
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85				
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00				
Satd. Flow (prot)	3090	1555			3065	773	1511	5587	1052				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	1.00	1.00				
Satd. Flow (perm)	3090	1555			3065	773	1511	5587	1052				
Peak-hour factor, PHF	0.85	0.85	0.85	0.95	0.95	0.95	0.93	0.93	0.93	0.85	0.85	0.85	
Adj. Flow (vph)	420	440	0	0	529	9	238	1391	239	0	0	0	
RTOR Reduction (vph)	0	0	0	0	0	7	0	0	132	0	0	0	
Lane Group Flow (vph)	420	440	0	0	529	2	238	1391	107	0	0	0	
Confl. Peds. (#/hr)	550		111	111		550	51		178	178		51	
Confl. Bikes (#/hr)			12			2			4			3	
Heavy Vehicles (%)	2%	10%	2%	2%	6%	11%	3%	2%	2%	2%	2%	2%	
Parking (#/hr)								5	5				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm				
Protected Phases	5	2			6			8					
Permitted Phases						6	8		8				
Actuated Green, G (s)	17.5	42.0			18.0	18.0	30.0	30.0	30.0				
Effective Green, g (s)	20.0	45.0			21.0	21.0	33.0	33.0	33.0				
Actuated g/C Ratio	0.22	0.50			0.23	0.23	0.37	0.37	0.37				
Clearance Time (s)	6.5	7.0			7.0	7.0	7.0	7.0	7.0				
Lane Grp Cap (vph)	686	777			715	180	554	2048	385				
v/s Ratio Prot	0.14	c0.28			c0.17			c0.25					
v/s Ratio Perm						0.00	0.16		0.10				
v/c Ratio	0.61	0.57			0.74	0.01	0.43	0.68	0.28				
Uniform Delay, d1	31.5	15.7			32.0	26.5	21.4	24.0	20.1				
Progression Factor	1.08	1.28			1.00	1.00	1.11	1.13	2.45				
Incremental Delay, d2	3.5	2.6			6.8	0.1	1.8	1.4	1.3				
Delay (s)	37.4	22.6			38.7	26.6	25.6	28.4	50.6				
Level of Service	D	C			D	C	C	C	D				
Approach Delay (s)		29.8			38.5			30.9			0.0		
Approach LOS		C			D			C			A		
<b>Intersection Summary</b>													
HCM 2000 Control Delay			31.9		HCM 2000 Level of Service				C				
HCM 2000 Volume to Capacity ratio			0.68										
Actuated Cycle Length (s)			90.0		Sum of lost time (s)				15.0				
Intersection Capacity Utilization			81.3%		ICU Level of Service				D				
Analysis Period (min)			15										
c	Critical Lane Group												

Queues

3: Fairfax Drive & Fort Myer Drive

1616 North Fort Myer Drive



Lane Group	EBT	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	371	82	97	646	82
v/c Ratio	0.95	0.18	0.15	0.38	0.10
Control Delay	64.5	16.8	12.9	13.7	2.7
Queue Delay	6.9	2.0	0.1	0.0	0.0
Total Delay	71.4	18.8	13.0	13.7	2.7
Queue Length 50th (ft)	174	24	28	101	1
Queue Length 95th (ft)	#318	m35	m39	m115	m4
Internal Link Dist (ft)	362	87		79	
Turn Bay Length (ft)					
Base Capacity (vph)	389	466	658	1718	790
Starvation Cap Reductn	0	280	0	0	0
Spillback Cap Reductn	14	0	168	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.99	0.44	0.20	0.38	0.10

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.


















Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

# HCM Signalized Intersection Capacity Analysis

## 3: Fairfax Drive & Fort Myer Drive

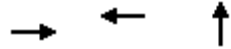
1616 North Fort Myer Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	139	176	26	43	0	0	0	0	86	575	73
Future Volume (vph)	0	139	176	26	43	0	0	0	0	86	575	73
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	4.0
Lane Util. Factor		1.00			1.00					1.00	0.95	1.00
Frbp, ped/bikes		0.98			1.00					1.00	1.00	0.95
Flpb, ped/bikes		1.00			1.00					0.87	1.00	1.00
Frt		0.92			1.00					1.00	1.00	0.85
Flt Protected		1.00			0.98					0.95	1.00	1.00
Satd. Flow (prot)		1325			1565					1186	3094	1326
Flt Permitted		1.00			0.79					0.95	1.00	1.00
Satd. Flow (perm)		1325			1266					1186	3094	1326
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.89	0.89	0.89
Adj. Flow (vph)	0	164	207	31	51	0	0	0	0	97	646	82
RTOR Reduction (vph)	0	51	0	0	0	0	0	0	0	0	0	36
Lane Group Flow (vph)	0	320	0	0	82	0	0	0	0	97	646	46
Confl. Peds. (#/hr)	33		14	14		33	20			88	88	20
Confl. Bikes (#/hr)			10			1				6		3
Heavy Vehicles (%)	2%	2%	2%	2%	10%	2%	2%	2%	2%	4%	5%	4%
Parking (#/hr)		5	5							5		
Turn Type		NA		custom		NA				Perm	NA	Perm
Protected Phases		8		7	4	7					2	
Permitted Phases				4						2		2
Actuated Green, G (s)		20.5			32.5					48.5	48.5	48.5
Effective Green, g (s)		23.0			35.0					50.0	50.0	50.0
Actuated g/C Ratio		0.26			0.39					0.56	0.56	0.56
Clearance Time (s)		6.5								5.5	5.5	5.5
Lane Grp Cap (vph)		338			518					658	1718	736
v/s Ratio Prot		c0.24			c0.01						c0.21	
v/s Ratio Perm					0.05					0.08		0.03
v/c Ratio		0.95			0.16					0.15	0.38	0.06
Uniform Delay, d1		32.9			17.9					9.7	11.2	9.2
Progression Factor		1.00			0.79					1.26	1.16	3.35
Incremental Delay, d2		37.4			0.5					0.3	0.4	0.1
Delay (s)		70.3			14.6					12.5	13.5	31.0
Level of Service		E			B					B	B	C
Approach Delay (s)		70.3			14.6			0.0			15.1	
Approach LOS		E			B			A			B	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			31.1			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.53									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			11.5			
Intersection Capacity Utilization			59.9%			ICU Level of Service			B			
Analysis Period (min)			15									
c	Critical Lane Group											

Queues

4: North Lynn Street & Fairfax Drive

1616 North Fort Myer Drive



Lane Group	EBT	WBT	NBT
Lane Group Flow (vph)	264	109	1748
v/c Ratio	0.66	0.65	0.67
Control Delay	23.7	44.4	14.5
Queue Delay	20.9	0.0	0.0
Total Delay	44.7	44.4	14.5
Queue Length 50th (ft)	72	37	230
Queue Length 95th (ft)	m91	#96	280
Internal Link Dist (ft)	87	77	164
Turn Bay Length (ft)			
Base Capacity (vph)	398	168	2628
Starvation Cap Reductn	126	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.97	0.65	0.67

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.


















Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



HCM Signalized Intersection Capacity Analysis  
4: North Lynn Street & Fairfax Drive

1616 North Fort Myer Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  				
Traffic Volume (vph)	200	25	0	0	47	46	22	1641	51	0	0	0
Future Volume (vph)	200	25	0	0	47	46	22	1641	51	0	0	0
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				
Lane Util. Factor		1.00			1.00			0.91				
Frbp, ped/bikes		1.00			0.96			1.00				
Flpb, ped/bikes		1.00			1.00			1.00				
Frt		1.00			0.93			1.00				
Flt Protected		0.96			1.00			1.00				
Satd. Flow (prot)		1588			1457			4543				
Flt Permitted		0.36			1.00			1.00				
Satd. Flow (perm)		600			1457			4543				
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.98	0.98	0.98	0.85	0.85	0.85
Adj. Flow (vph)	235	29	0	0	55	54	22	1674	52	0	0	0
RTOR Reduction (vph)	0	0	0	0	39	0	0	3	0	0	0	0
Lane Group Flow (vph)	0	264	0	0	70	0	0	1745	0	0	0	0
Confl. Peds. (#/hr)	18		8	8		18	18		10	10		18
Confl. Bikes (#/hr)			3			1			7			
Heavy Vehicles (%)	2%	8%	3%	2%	9%	2%	2%	2%	4%	2%	2%	2%
Turn Type	custom	NA			NA		Perm	NA				
Protected Phases	7	4 7			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		28.0			6.0			49.0				
Effective Green, g (s)		30.0			8.0			52.0				
Actuated g/C Ratio		0.33			0.09			0.58				
Clearance Time (s)					6.0			7.0				
Lane Grp Cap (vph)		392			129			2624				
v/s Ratio Prot		c0.13			0.05							
v/s Ratio Perm		c0.09						0.38				
v/c Ratio		0.67			0.54			0.66				
Uniform Delay, d1		25.8			39.2			13.0				
Progression Factor		0.70			1.00			1.00				
Incremental Delay, d2		6.9			15.3			1.3				
Delay (s)		24.8			54.6			14.4				
Level of Service		C			D			B				
Approach Delay (s)		24.8			54.6			14.4			0.0	
Approach LOS		C			D			B			A	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			17.7				HCM 2000 Level of Service		B			
HCM 2000 Volume to Capacity ratio			0.71									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)		14.5			
Intersection Capacity Utilization			68.4%				ICU Level of Service		C			
Analysis Period (min)			15									
c	Critical Lane Group											

















---

Intersection has too many legs for HCM analysis.

---

HCM Unsignalized Intersection Capacity Analysis  
 6: N. Queen Street/Arlington Boulevard & Fairfax Drive

1616 North Fort Myer Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	309	0	0	129	4	238	46	107	8	0	8
Future Volume (Veh/h)	5	309	0	0	129	4	238	46	107	8	0	8
Sign Control		Free			Free			Yield			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.88	0.88	0.88	0.89	0.89	0.89	0.95	0.95	0.95	0.85	0.85	0.85
Hourly flow rate (vph)	6	351	0	0	145	4	251	48	113	9	0	9
Pedestrians		16			20			124			76	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			2			10			6	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	225			475			659	712	495	743	710	239
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	225			475			659	712	495	743	710	239
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			13	84	78	95	100	99
cM capacity (veh/h)	1258			975			288	299	507	182	300	739
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>								
Volume Total	357	149	412	18								
Volume Left	6	0	251	9								
Volume Right	0	4	113	9								
cSH	1258	1700	328	292								
Volume to Capacity	0.00	0.09	1.26	0.06								
Queue Length 95th (ft)	0	0	468	5								
Control Delay (s)	0.2	0.0	170.9	18.1								
Lane LOS	A		F	C								
Approach Delay (s)	0.2	0.0	170.9	18.1								
Approach LOS			F	C								
<b>Intersection Summary</b>												
Average Delay			75.6									
Intersection Capacity Utilization			61.0%		ICU Level of Service				B			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis  
 7: Fairfax Drive & N. Pierce Street

1616 North Fort Myer Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Volume (veh/h)	93	331	84	33	27	49
Future Volume (Veh/h)	93	331	84	33	27	49
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	109	389	99	39	32	58
Pedestrians					25	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					2	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	163				750	144
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	163				750	144
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	92				91	93
cM capacity (veh/h)	1386				339	885
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>			
Volume Total	498	138	90			
Volume Left	109	0	32			
Volume Right	0	39	58			
cSH	1386	1700	563			
Volume to Capacity	0.08	0.08	0.16			
Queue Length 95th (ft)	6	0	14			
Control Delay (s)	2.3	0.0	12.6			
Lane LOS	A		B			
Approach Delay (s)	2.3	0.0	12.6			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			3.2			
Intersection Capacity Utilization		43.4%		ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
 8: Fort Myer Drive & Site Driveway

1616 North Fort Myer Drive



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	10	0	0	724	68
Future Volume (Veh/h)	0	10	0	0	724	68
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	0	12	0	0	852	80
Pedestrians	20					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	2					
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)				159	674	
pX, platoon unblocked						
vC, conflicting volume	912	273	952			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	912	273	952			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	269	713	705			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3	SB 4	
Volume Total	12	243	243	243	202	
Volume Left	0	0	0	0	0	
Volume Right	12	0	0	0	80	
cSH	713	1700	1700	1700	1700	
Volume to Capacity	0.02	0.14	0.14	0.14	0.12	
Queue Length 95th (ft)	1	0	0	0	0	
Control Delay (s)	10.1	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.1	0.0				
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			23.2%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
 9: Fairfax Drive & Site Driveway

1616 North Fort Myer Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	20	303	34	82	12	3
Future Volume (Veh/h)	20	303	34	82	12	3
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	24	356	40	96	14	4
Pedestrians					33	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					3	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			442			
pX, platoon unblocked						
vC, conflicting volume	169				525	121
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	169				525	121
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				97	100
cM capacity (veh/h)	1370				490	905
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>			
Volume Total	380	136	18			
Volume Left	24	0	14			
Volume Right	0	96	4			
cSH	1370	1700	546			
Volume to Capacity	0.02	0.08	0.03			
Queue Length 95th (ft)	1	0	3			
Control Delay (s)	0.6	0.0	11.8			
Lane LOS	A		B			
Approach Delay (s)	0.6	0.0	11.8			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			0.9			
Intersection Capacity Utilization			35.6%	ICU Level of Service		A
Analysis Period (min)			15			

Intersection														
Int Delay, s/veh	2.6													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations					↕		↕	↕↕			↕↕	↕		
Traffic Vol, veh/h	0	0	0	42	0	0	87	1160	0	0	470	307	0	0
Future Vol, veh/h	0	0	0	42	0	0	87	1160	0	0	470	307	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	62	0	56	56	0	62	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	-	-	-	-	-	-	Yield	-	-
Storage Length	-	-	-	-	-	0	180	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-	16974	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	46	0	0	95	1261	0	0	511	334	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1707	2024	-	573	0	-
Stage 1	1451	1451	-	-	-	-
Stage 2	256	573	-	-	-	-
Critical Hdwy	6.84	6.54	-	4.14	-	-
Critical Hdwy Stg 1	5.84	5.54	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-	-	-	-
Follow-up Hdwy	3.52	4.02	-	2.22	-	-
Pot Cap-1 Maneuver	82	57	0	996	-	0
Stage 1	182	194	0	-	0	0
Stage 2	763	502	0	-	0	0
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	74	0	-	996	-	-
Mov Cap-2 Maneuver	74	0	-	-	-	-
Stage 1	165	0	-	-	-	-
Stage 2	763	0	-	-	-	-

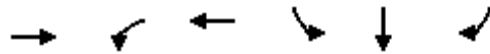
Approach	WB	NB	SB
HCM Control Delay, s	112.1	0.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBTWBLn1WBLn2	SBT	SBR
Capacity (veh/h)	996	- 74	-	-
HCM Lane V/C Ratio	0.095	- 0.617	-	-
HCM Control Delay (s)	9	- 112.1	0	-
HCM Lane LOS	A	- F	A	-
HCM 95th %tile Q(veh)	0.3	- 2.7	-	-

Queues

1: Fort Myer Drive & Wilson Boulevard

1616 North Fort Myer Drive



Lane Group	EBT	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	987	401	455	346	175	51
v/c Ratio	0.65	1.34	0.27	0.92	0.11	0.11
Control Delay	24.7	198.9	16.9	59.0	18.1	0.4
Queue Delay	0.3	0.0	0.0	47.3	0.0	0.0
Total Delay	25.0	198.9	16.9	106.4	18.1	0.4
Queue Length 50th (ft)	156	~242	92	183	23	0
Queue Length 95th (ft)	187	#424	125	#324	35	0
Internal Link Dist (ft)	299		201		520	
Turn Bay Length (ft)						200
Base Capacity (vph)	1512	299	1671	376	1644	479
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	123	0	0	70	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.71	1.34	0.27	1.13	0.11	0.11

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.













Queue shown is maximum after two cycles.



# HCM Signalized Intersection Capacity Analysis

## 1: Fort Myer Drive & Wilson Boulevard

1616 North Fort Myer Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↙	↑↑					↘	↑↑↑	↙
Traffic Volume (vph)	0	667	172	365	414	0	0	0	0	294	149	43
Future Volume (vph)	0	667	172	365	414	0	0	0	0	294	149	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	1.0					4.5	4.5	4.5
Lane Util. Factor		0.91		1.00	0.95					1.00	0.91	1.00
Frbp, ped/bikes		0.94		1.00	1.00					1.00	1.00	0.84
Flpb, ped/bikes		1.00		0.99	1.00					0.71	1.00	1.00
Frt		0.97		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		4113		1552	3008					982	4291	1036
Flt Permitted		1.00		0.17	1.00					0.95	1.00	1.00
Satd. Flow (perm)		4113		284	3008					982	4291	1036
Peak-hour factor, PHF	0.85	0.85	0.85	0.91	0.91	0.91	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	0	785	202	401	455	0	0	0	0	346	175	51
RTOR Reduction (vph)	0	50	0	0	0	0	0	0	0	0	0	31
Lane Group Flow (vph)	0	937	0	401	455	0	0	0	0	346	175	20
Confl. Peds. (#/hr)	998		250	250		998	182		345	345		182
Confl. Bikes (#/hr)			22			1			4			5
Heavy Vehicles (%)	2%	3%	6%	4%	8%	2%	2%	2%	2%	2%	3%	2%
Parking (#/hr)										6	12	6
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		29.0		47.0	47.0					32.0	32.0	32.0
Effective Green, g (s)		32.0		50.0	50.0					34.5	34.5	34.5
Actuated g/C Ratio		0.36		0.56	0.56					0.38	0.38	0.38
Clearance Time (s)		7.0		7.0	4.0					7.0	7.0	7.0
Lane Grp Cap (vph)		1462		312	1671					376	1644	397
v/s Ratio Prot		0.23		c0.16	0.15						0.04	
v/s Ratio Perm				c0.55						c0.35		0.02
v/c Ratio		0.64		1.29	0.27					0.92	0.11	0.05
Uniform Delay, d1		24.2		16.7	10.5					26.4	17.8	17.4
Progression Factor		1.00		1.57	1.56					1.00	1.00	1.00
Incremental Delay, d2		2.2		150.0	0.4					30.1	0.1	0.2
Delay (s)		26.4		176.1	16.7					56.5	18.0	17.7
Level of Service		C		F	B					E	B	B
Approach Delay (s)		26.4			91.4			0.0			41.2	
Approach LOS		C			F			A			D	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			52.9			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			1.19									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			12.5			
Intersection Capacity Utilization			87.0%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

## Queues

### 2: Wilson Boulevard & North Lynn Street

1616 North Fort Myer Drive



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	351	984	372	240	168	1035	185
v/c Ratio	0.44	1.08	0.49	0.73	0.35	0.57	0.42
Control Delay	31.5	74.8	31.8	24.7	25.9	27.3	10.6
Queue Delay	0.0	9.5	0.0	0.0	0.0	0.0	0.0
Total Delay	31.5	84.3	31.8	24.7	25.9	27.3	10.6
Queue Length 50th (ft)	93	~651	95	33	83	157	30
Queue Length 95th (ft)	m124	m#838	140	#155	m140	196	m78
Internal Link Dist (ft)		118	624			760	
Turn Bay Length (ft)				125	180		135
Base Capacity (vph)	789	912	756	330	478	1800	444
Starvation Cap Reductn	0	156	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	1.30	0.49	0.73	0.35	0.57	0.42

#### Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.
























Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

# HCM Signalized Intersection Capacity Analysis

## 2: Wilson Boulevard & North Lynn Street

1616 North Fort Myer Drive

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	 				 			  					
Traffic Volume (vph)	312	876	0	0	346	223	158	973	174	0	0	0	
Future Volume (vph)	312	876	0	0	346	223	158	973	174	0	0	0	
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	4.0	4.0	4.0				
Lane Util. Factor	0.97	1.00			0.95	1.00	1.00	0.86	1.00				
Frbp, ped/bikes	1.00	1.00			1.00	0.58	1.00	1.00	0.88				
Flpb, ped/bikes	1.00	1.00			1.00	1.00	0.95	1.00	1.00				
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85				
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00				
Satd. Flow (prot)	3090	1676			3094	826	1485	5587	1023				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	1.00	1.00				
Satd. Flow (perm)	3090	1676			3094	826	1485	5587	1023				
Peak-hour factor, PHF	0.89	0.89	0.89	0.93	0.93	0.93	0.94	0.94	0.94	0.85	0.85	0.85	
Adj. Flow (vph)	351	984	0	0	372	240	168	1035	185	0	0	0	
RTOR Reduction (vph)	0	0	0	0	0	128	0	0	115	0	0	0	
Lane Group Flow (vph)	351	984	0	0	372	112	168	1035	70	0	0	0	
Confl. Peds. (#/hr)	586		84	84		586	53		111	111		53	
Confl. Bikes (#/hr)			12			2			4			3	
Heavy Vehicles (%)	2%	2%	2%	2%	5%	2%	4%	2%	10%	2%	2%	2%	
Parking (#/hr)								5	5				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm				
Protected Phases	5	2			6			8					
Permitted Phases						6	8		8				
Actuated Green, G (s)	20.5	46.0			19.0	19.0	26.0	26.0	26.0				
Effective Green, g (s)	23.0	49.0			22.0	22.0	29.0	29.0	29.0				
Actuated g/C Ratio	0.26	0.54			0.24	0.24	0.32	0.32	0.32				
Clearance Time (s)	6.5	7.0			7.0	7.0	7.0	7.0	7.0				
Lane Grp Cap (vph)	789	912			756	201	478	1800	329				
v/s Ratio Prot	0.11	c0.59			0.12			c0.19					
v/s Ratio Perm						0.13	0.11		0.07				
v/c Ratio	0.44	1.08			0.49	0.56	0.35	0.57	0.21				
Uniform Delay, d1	28.1	20.5			29.2	29.7	23.3	25.4	22.2				
Progression Factor	1.06	1.11			1.00	1.00	1.01	1.02	1.59				
Incremental Delay, d2	1.4	50.4			2.3	10.6	1.8	1.2	1.3				
Delay (s)	31.2	73.2			31.5	40.3	25.3	27.1	36.5				
Level of Service	C	E			C	D	C	C	D				
Approach Delay (s)		62.2			35.0			28.1			0.0		
Approach LOS		E			C			C			A		
<b>Intersection Summary</b>													
HCM 2000 Control Delay			43.0									HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			0.93										
Actuated Cycle Length (s)			90.0									Sum of lost time (s)	15.0
Intersection Capacity Utilization			87.0%									ICU Level of Service	E
Analysis Period (min)			15										
c Critical Lane Group													

Queues

3: Fairfax Drive & Fort Myer Drive

1616 North Fort Myer Drive



Lane Group	EBT	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	285	84	140	2155	209
v/c Ratio	0.76	0.18	0.19	1.22	0.26
Control Delay	40.8	16.1	13.2	128.2	4.9
Queue Delay	1.4	2.0	1.5	0.0	0.0
Total Delay	42.2	18.1	14.7	128.2	4.9
Queue Length 50th (ft)	126	22	43	~794	15
Queue Length 95th (ft)	#240	m33	m68	m#814	m40
Internal Link Dist (ft)	362	87		79	
Turn Bay Length (ft)					
Base Capacity (vph)	374	465	731	1769	790
Starvation Cap Reductn	0	276	0	0	0
Spillback Cap Reductn	19	0	440	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.80	0.44	0.48	1.22	0.26



















Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

# HCM Signalized Intersection Capacity Analysis

## 3: Fairfax Drive & Fort Myer Drive

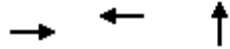
1616 North Fort Myer Drive

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations											 		
Traffic Volume (vph)	0	112	139	41	31	0	0	0	0	122	1875	182	
Future Volume (vph)	0	112	139	41	31	0	0	0	0	122	1875	182	
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	4.0	
Lane Util. Factor		1.00			1.00					1.00	0.95	1.00	
Frbp, ped/bikes		0.98			1.00					1.00	1.00	0.91	
Flpb, ped/bikes		1.00			1.00					0.95	1.00	1.00	
Frt		0.93			1.00					1.00	1.00	0.85	
Flt Protected		1.00			0.97					0.95	1.00	1.00	
Satd. Flow (prot)		1329			1589					1316	3185	1277	
Flt Permitted		1.00			0.77					0.95	1.00	1.00	
Satd. Flow (perm)		1329			1257					1316	3185	1277	
Peak-hour factor, PHF	0.88	0.88	0.88	0.85	0.85	0.85	0.85	0.85	0.85	0.87	0.87	0.87	
Adj. Flow (vph)	0	127	158	48	36	0	0	0	0	140	2155	209	
RTOR Reduction (vph)	0	35	0	0	0	0	0	0	0	0	0	81	
Lane Group Flow (vph)	0	250	0	0	84	0	0	0	0	140	2155	128	
Confl. Peds. (#/hr)	39		13	13		39	48		31	31		48	
Confl. Bikes (#/hr)			7			2			4			7	
Heavy Vehicles (%)	2%	2%	2%	2%	7%	2%	2%	2%	2%	3%	2%	3%	
Parking (#/hr)		5	5							5			
Turn Type		NA		custom		NA				Perm	NA	Perm	
Protected Phases		8		7	4	7					2		
Permitted Phases				4						2		2	
Actuated Green, G (s)		20.5			32.5					48.5	48.5	48.5	
Effective Green, g (s)		23.0			35.0					50.0	50.0	50.0	
Actuated g/C Ratio		0.26			0.39					0.56	0.56	0.56	
Clearance Time (s)		6.5								5.5	5.5	5.5	
Lane Grp Cap (vph)		339			518					731	1769	709	
v/s Ratio Prot		c0.19			c0.01						c0.68		
v/s Ratio Perm					0.05					0.11		0.10	
v/c Ratio		0.74			0.16					0.19	1.22	0.18	
Uniform Delay, d1		30.7			17.9					9.9	20.0	9.9	
Progression Factor		1.00			0.75					1.23	1.18	1.78	
Incremental Delay, d2		13.4			0.5					0.6	103.5	0.5	
Delay (s)		44.1			14.0					12.8	127.1	18.1	
Level of Service		D			B					B	F	B	
Approach Delay (s)		44.1			14.0			0.0			111.6		
Approach LOS		D			B			A			F		
<b>Intersection Summary</b>													
HCM 2000 Control Delay			102.1									HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio			1.01										
Actuated Cycle Length (s)			90.0									Sum of lost time (s)	11.5
Intersection Capacity Utilization			106.6%									ICU Level of Service	G
Analysis Period (min)			15										
c	Critical Lane Group												

Queues

4: North Lynn Street & Fairfax Drive

1616 North Fort Myer Drive



Lane Group	EBT	WBT	NBT
Lane Group Flow (vph)	273	111	1131
v/c Ratio	0.68	0.69	0.44
Control Delay	31.4	50.9	11.3
Queue Delay	27.9	0.0	0.0
Total Delay	59.3	50.9	11.3
Queue Length 50th (ft)	100	41	121
Queue Length 95th (ft)	m134	#109	153
Internal Link Dist (ft)	87	77	164
Turn Bay Length (ft)			
Base Capacity (vph)	400	160	2572
Starvation Cap Reductn	128	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	1.00	0.69	0.44

Intersection Summary


















# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis  
 4: North Lynn Street & Fairfax Drive

1616 North Fort Myer Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  				
Traffic Volume (vph)	194	40	0	0	51	43	21	990	53	0	0	0
Future Volume (vph)	194	40	0	0	51	43	21	990	53	0	0	0
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				
Lane Util. Factor		1.00			1.00			0.91				
Frb, ped/bikes		1.00			0.92			1.00				
Flpb, ped/bikes		0.99			1.00			1.00				
Frt		1.00			0.94			0.99				
Flt Protected		0.96			1.00			1.00				
Satd. Flow (prot)		1592			1424			4441				
Flt Permitted		0.36			1.00			1.00				
Satd. Flow (perm)		603			1424			4441				
Peak-hour factor, PHF	0.86	0.86	0.86	0.85	0.85	0.85	0.94	0.94	0.94	0.85	0.85	0.85
Adj. Flow (vph)	226	47	0	0	60	51	22	1053	56	0	0	0
RTOR Reduction (vph)	0	0	0	0	34	0	0	6	0	0	0	0
Lane Group Flow (vph)	0	273	0	0	77	0	0	1125	0	0	0	0
Confl. Peds. (#/hr)	46		18	18		46	15		25	25		15
Confl. Bikes (#/hr)			4						3			
Heavy Vehicles (%)	2%	3%	2%	2%	6%	2%	2%	4%	2%	2%	2%	2%
Turn Type	custom	NA			NA		Perm	NA				
Protected Phases	7	4 7			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		28.0			6.0			49.0				
Effective Green, g (s)		30.0			8.0			52.0				
Actuated g/C Ratio		0.33			0.09			0.58				
Clearance Time (s)					6.0			7.0				
Lane Grp Cap (vph)		393			126			2565				
v/s Ratio Prot		c0.13			0.05							
v/s Ratio Perm		c0.10						0.25				
v/c Ratio		0.69			0.61			0.44				
Uniform Delay, d1		26.0			39.5			10.7				
Progression Factor		0.92			1.00			1.00				
Incremental Delay, d2		8.9			20.3			0.5				
Delay (s)		32.9			59.8			11.3				
Level of Service		C			E			B				
Approach Delay (s)		32.9			59.8			11.3			0.0	
Approach LOS		C			E			B			A	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			18.7				HCM 2000 Level of Service			B		
HCM 2000 Volume to Capacity ratio			0.57									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)		14.5			
Intersection Capacity Utilization			54.5%				ICU Level of Service			A		
Analysis Period (min)			15									
c	Critical Lane Group											

---

















Intersection has too many legs for HCM analysis.

---



HCM Unsignalized Intersection Capacity Analysis  
 6: N. Queen Street/Arlington Boulevard & Fairfax Drive

1616 North Fort Myer Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	185	0	0	262	6	184	67	88	6	0	21
Future Volume (Veh/h)	6	185	0	0	262	6	184	67	88	6	0	21
Sign Control		Free			Free			Yield			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.88	0.88	0.88	0.89	0.89	0.89	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	7	210	0	0	294	7	216	79	104	7	0	25
Pedestrians		13			41			152			103	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			3			13			9	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	404			362			712	780	403	809	776	414
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	404			362			712	780	403	809	776	414
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			11	70	81	95	100	96
cM capacity (veh/h)	1056			1045			242	259	546	139	260	578
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	217	301	399	32								
Volume Left	7	0	216	7								
Volume Right	0	7	104	25								
cSH	1056	1700	287	341								
Volume to Capacity	0.01	0.18	1.39	0.09								
Queue Length 95th (ft)	1	0	527	8								
Control Delay (s)	0.3	0.0	229.7	16.6								
Lane LOS	A		F	C								
Approach Delay (s)	0.3	0.0	229.7	16.6								
Approach LOS			F	C								
Intersection Summary												
Average Delay			97.2									
Intersection Capacity Utilization			51.6%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis  
 7: Fairfax Drive & N. Pierce Street

1616 North Fort Myer Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Volume (veh/h)	105	174	155	53	41	113
Future Volume (Veh/h)	105	174	155	53	41	113
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.85	0.85	0.87	0.87	0.85	0.85
Hourly flow rate (vph)	124	205	178	61	48	133
Pedestrians			2		37	
Lane Width (ft)			12.0		12.0	
Walking Speed (ft/s)			4.0		4.0	
Percent Blockage			0		3	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	276				700	246
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	276				700	246
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	90				86	83
cM capacity (veh/h)	1247				353	769
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>			
Volume Total	329	239	181			
Volume Left	124	0	48			
Volume Right	0	61	133			
cSH	1247	1700	586			
Volume to Capacity	0.10	0.14	0.31			
Queue Length 95th (ft)	8	0	33			
Control Delay (s)	3.7	0.0	13.9			
Lane LOS	A		B			
Approach Delay (s)	3.7	0.0	13.9			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			5.0			
Intersection Capacity Utilization			50.3%	ICU Level of Service		A
Analysis Period (min)			15			

# HCM Unsignalized Intersection Capacity Analysis

## 8: Fort Myer Drive & Site Driveway

1616 North Fort Myer Drive



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	65	0	0	2114	18
Future Volume (Veh/h)	0	65	0	0	2114	18
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	71	0	0	2298	20
Pedestrians	48					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	4					
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)				159	674	
pX, platoon unblocked						
vC, conflicting volume	2356	632	2366			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2356	632	2366			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	83	100			
cM capacity (veh/h)	29	406	195			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3	SB 4	
Volume Total	71	657	657	657	348	
Volume Left	0	0	0	0	0	
Volume Right	71	0	0	0	20	
cSH	406	1700	1700	1700	1700	
Volume to Capacity	0.17	0.39	0.39	0.39	0.20	
Queue Length 95th (ft)	16	0	0	0	0	
Control Delay (s)	15.7	0.0	0.0	0.0	0.0	
Lane LOS	C					
Approach Delay (s)	15.7	0.0				
Approach LOS	C					
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			45.5%	ICU Level of Service	A	
Analysis Period (min)			15			

# HCM Unsignalized Intersection Capacity Analysis

## 9: Fairfax Drive & Site Driveway

1616 North Fort Myer Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	6	173	191	22	78	20
Future Volume (Veh/h)	6	173	191	22	78	20
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	188	208	24	85	22
Pedestrians					39	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					3	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			442			
pX, platoon unblocked						
vC, conflicting volume	271				461	259
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	271				461	259
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				84	97
cM capacity (veh/h)	1250				537	754
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>			
Volume Total	195	232	107			
Volume Left	7	0	85			
Volume Right	0	24	22			
cSH	1250	1700	571			
Volume to Capacity	0.01	0.14	0.19			
Queue Length 95th (ft)	0	0	17			
Control Delay (s)	0.3	0.0	12.7			
Lane LOS	A		B			
Approach Delay (s)	0.3	0.0	12.7			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			2.7			
Intersection Capacity Utilization			28.3%	ICU Level of Service		A
Analysis Period (min)			15			

Intersection														
Int Delay, s/veh	2.8													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations					↔		↔	↕			↕	↕		
Traffic Vol, veh/h	0	0	0	73	0	0	76	681	0	0	966	1089	0	0
Future Vol, veh/h	0	0	0	73	0	0	76	681	0	0	966	1089	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	38	0	21	21	0	38	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	-	-	-	-	-	-	Yield	-	-
Storage Length	-	-	-	-	-	0	180	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-	16974	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	79	0	0	83	740	0	0	1050	1184	0	0

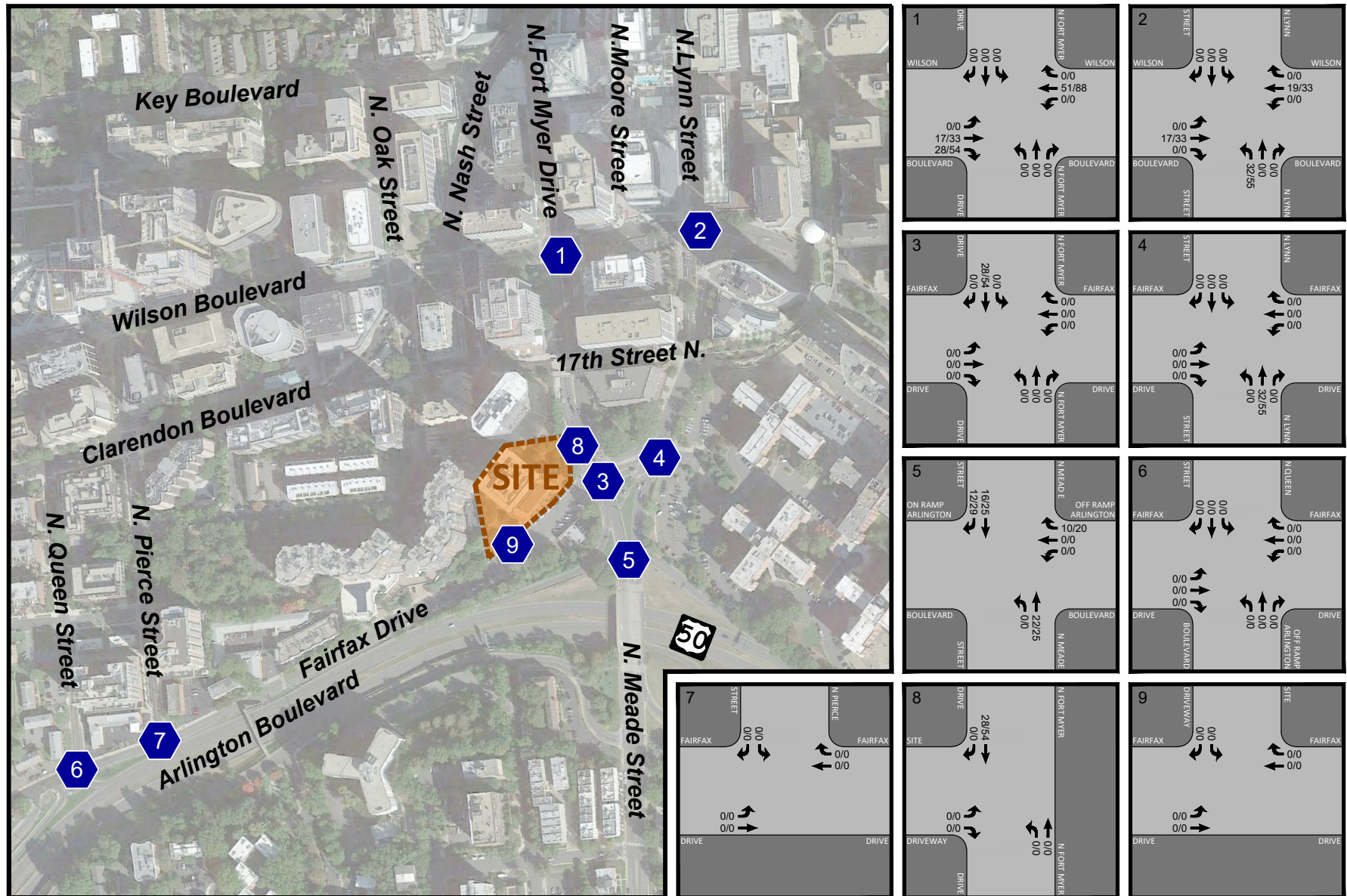
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1431	1994	-	1088	0	-
Stage 1	906	906	-	-	-	-
Stage 2	525	1088	-	-	-	-
Critical Hdwy	6.84	6.54	-	4.14	-	-
Critical Hdwy Stg 1	5.84	5.54	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-	-	-	-
Follow-up Hdwy	3.52	4.02	-	2.22	-	-
Pot Cap-1 Maneuver	125	60	0	637	-	0
Stage 1	355	353	0	-	0	0
Stage 2	558	290	0	-	0	0
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	109	0	-	637	-	-
Mov Cap-2 Maneuver	109	0	-	-	-	-
Stage 1	309	0	-	-	-	-
Stage 2	558	0	-	-	-	-

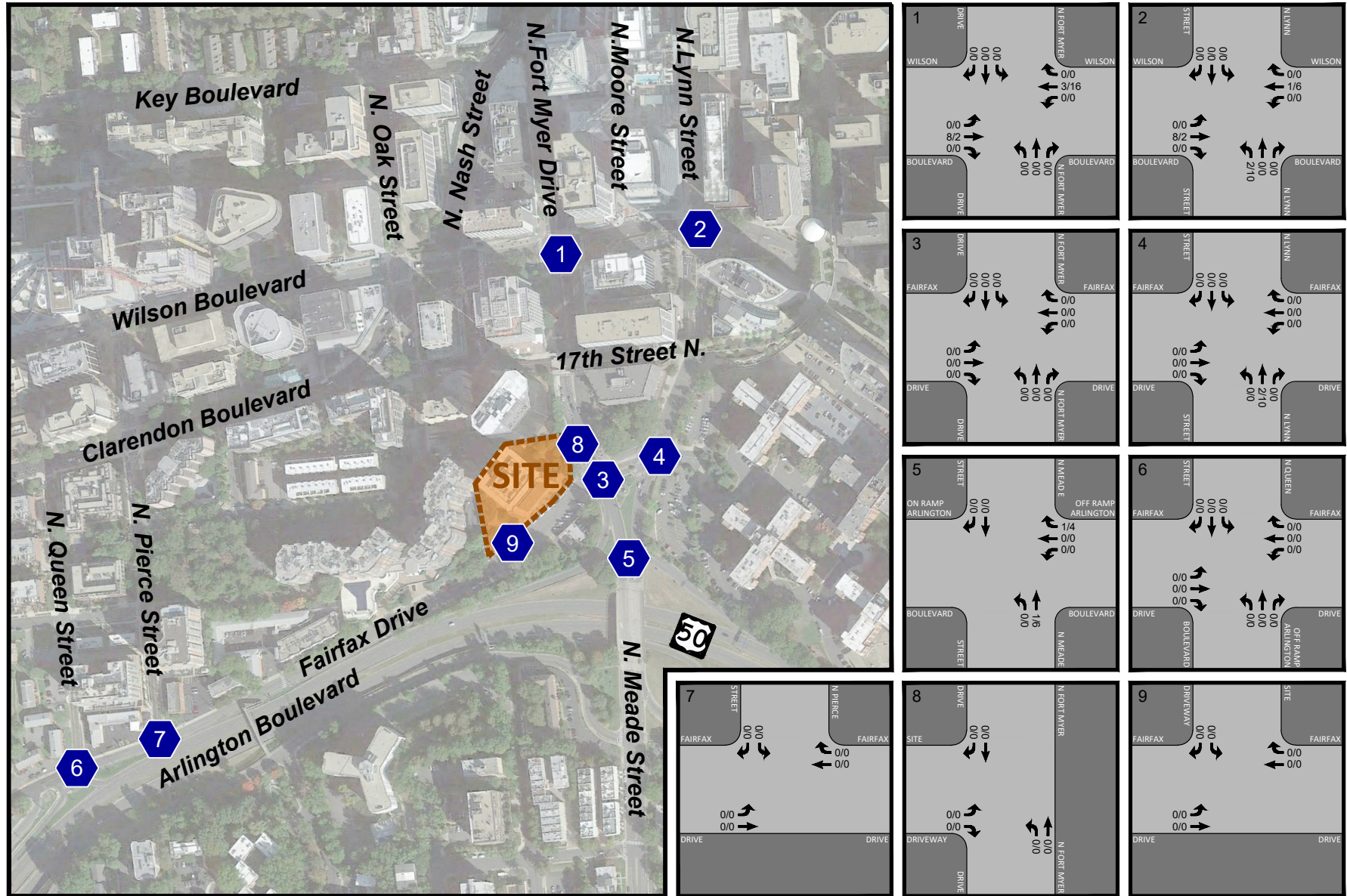
Approach	WB	NB	SB
HCM Control Delay, s	97.5	1.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBTWBLn1WBLn2	SBT	SBR
Capacity (veh/h)	637	- 109	-	-
HCM Lane V/C Ratio	0.13	- 0.728	-	-
HCM Control Delay (s)	11.5	- 97.5	0	-
HCM Lane LOS	B	- F	A	-
HCM 95th %tile Q(veh)	0.4	- 3.9	-	-

**APPENDIX F**  
**INDIVIDUAL PIPELINE PEAK HOUR TRAFFIC FORECASTS**







**Figure F-2**  
1401 Wilson Boulevard & 1400 Key Boulevard  
(Residential)

AM PEAK HOUR  
PM PEAK HOUR  
000 / 000



1616 N Fort Myer Drive  
Arlington County, VA





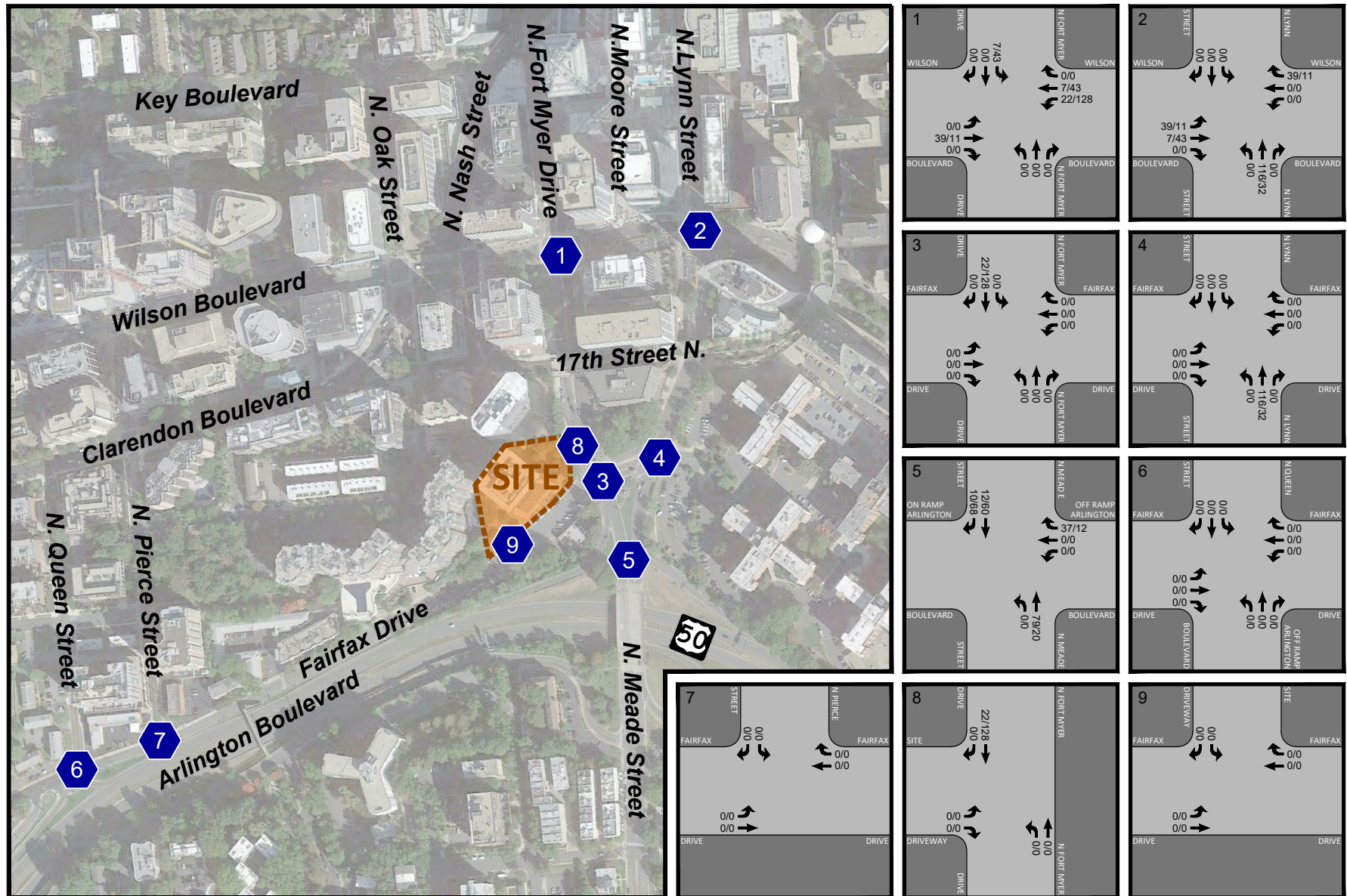


Figure F-3  
Central Place

AM PEAK HOUR  
PM PEAK HOUR  
000 / 000



NORTH  
1616 N Fort Myer Drive  
Arlington County, VA

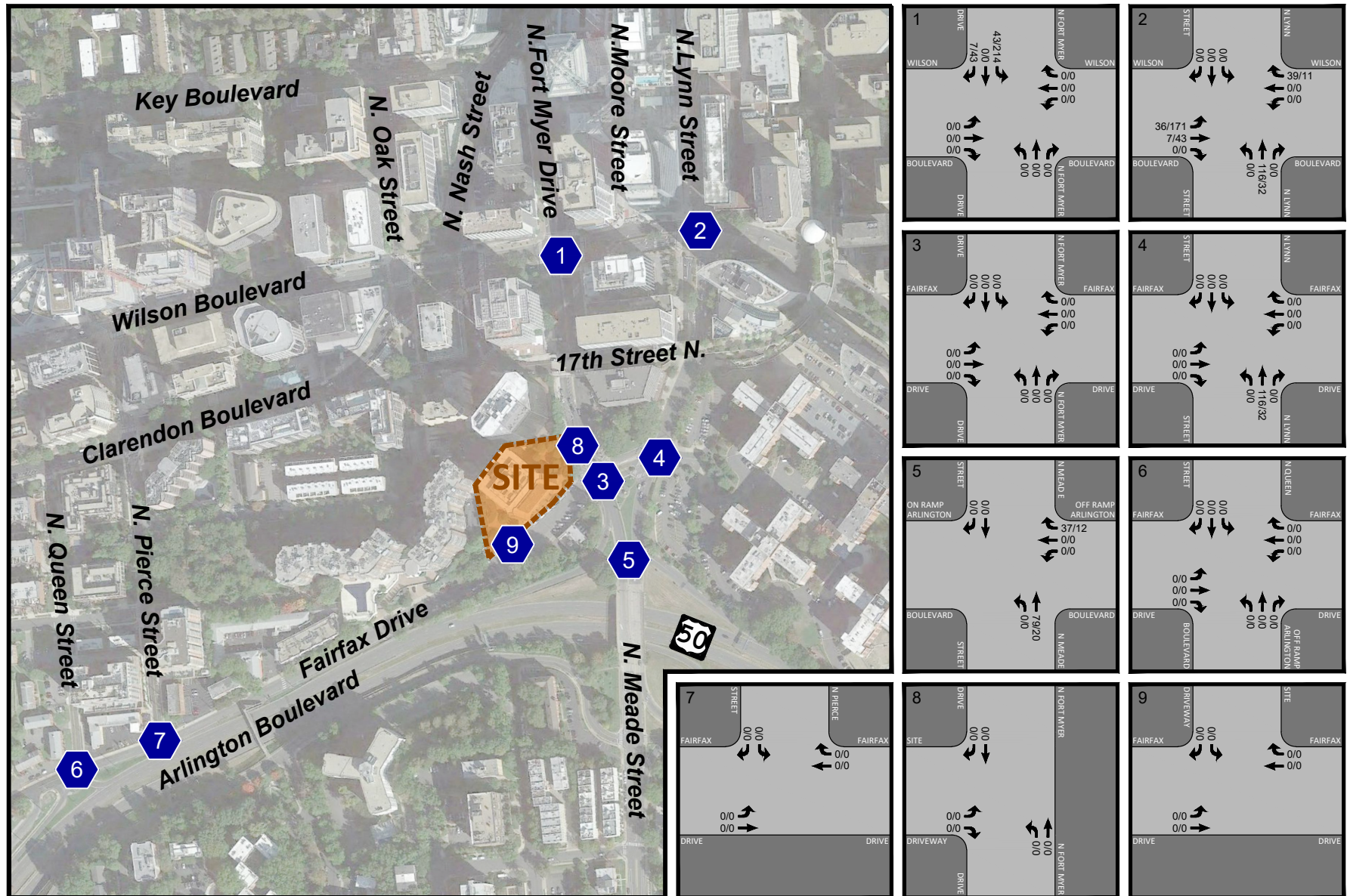


Figure F-4  
1812 North Moore Street

AM PEAK HOUR  
PM PEAK HOUR  
000 / 000



NORTH  
1616 N Fort Myer Drive  
Arlington County, VA

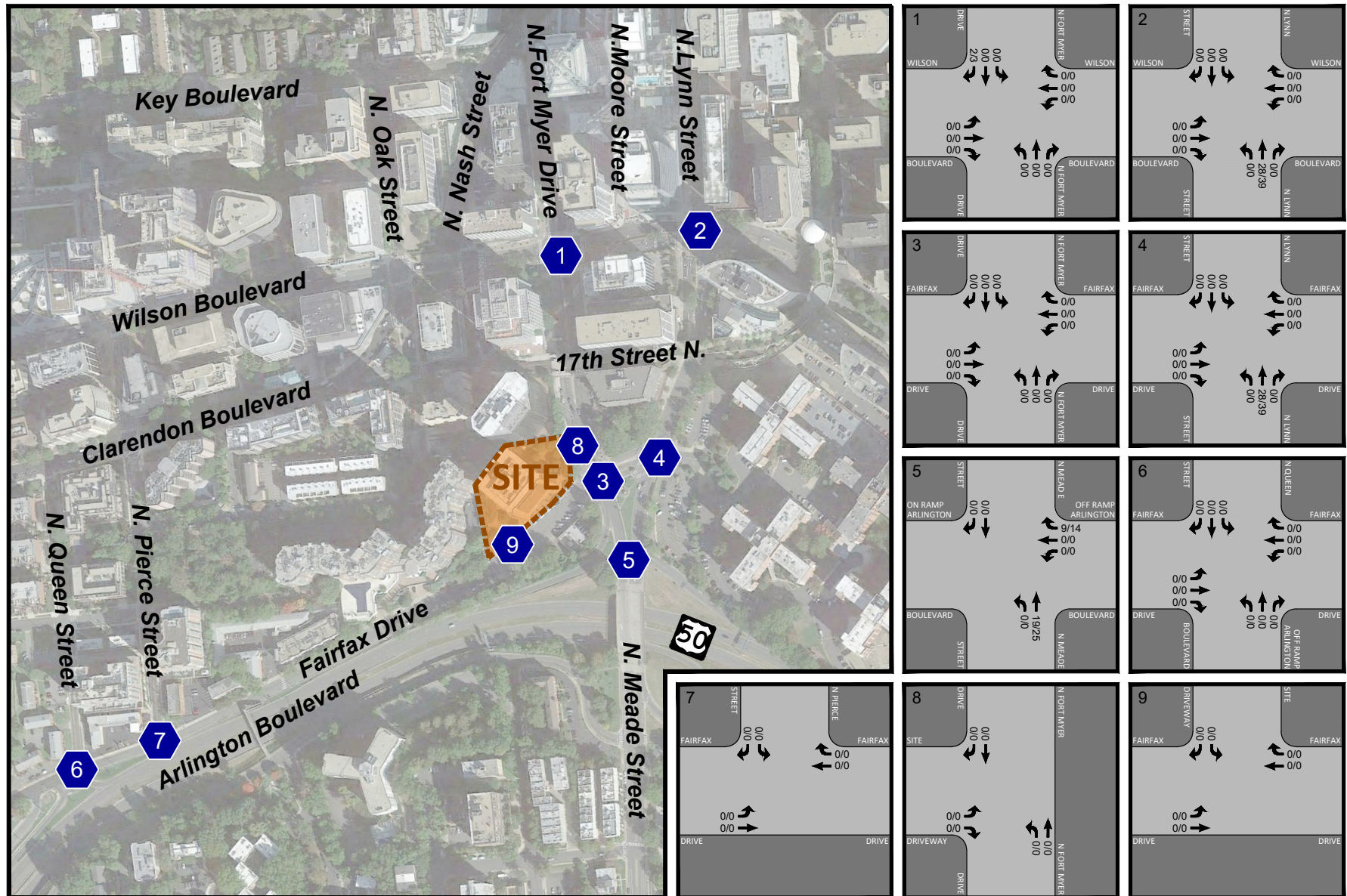
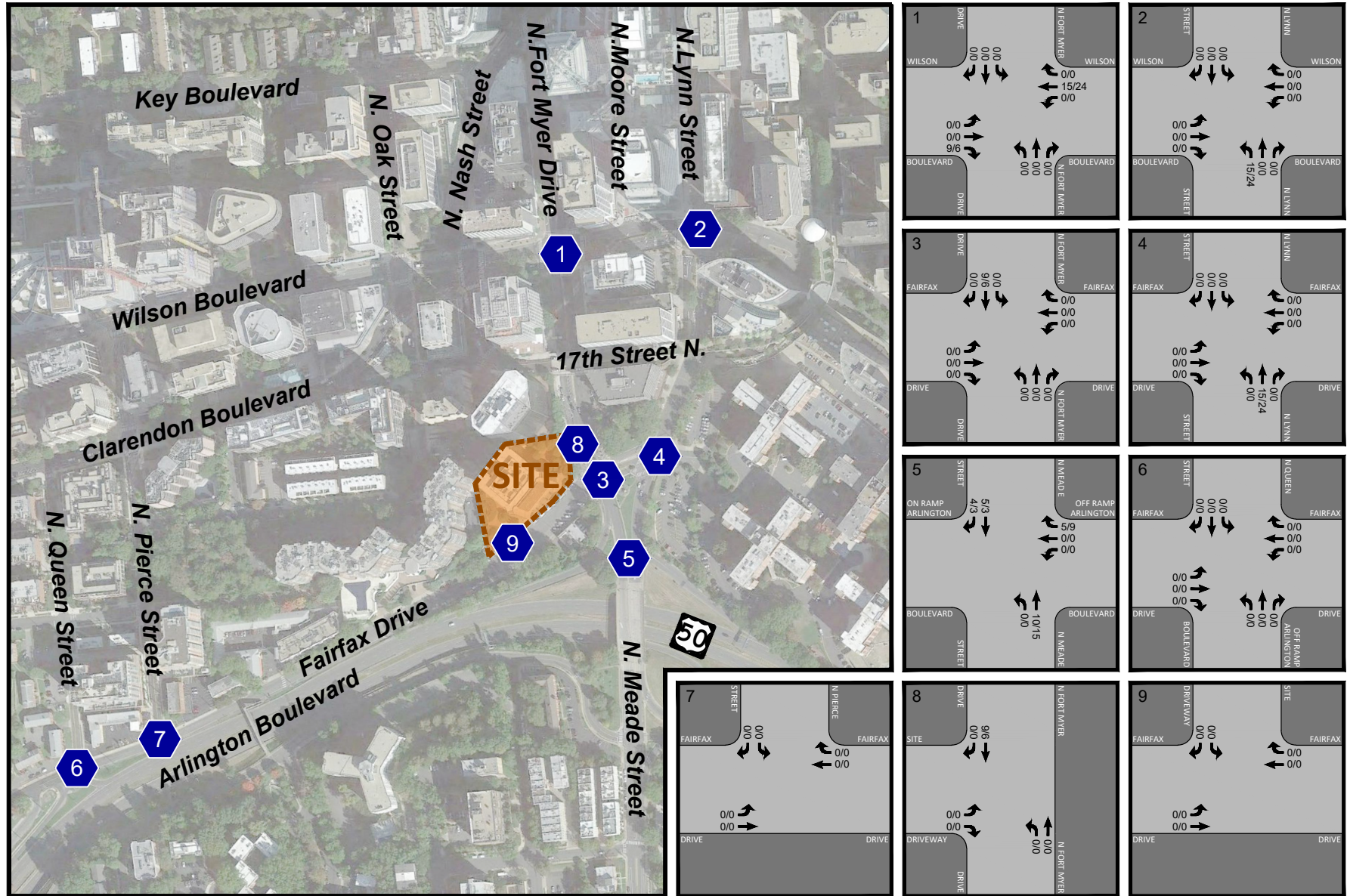


Figure F-5  
Holiday Inn Hotel Tower

AM PEAK HOUR  
PM PEAK HOUR  
000 / 000

NORTH  
1616 N Fort Myer Drive  
Arlington County, VA





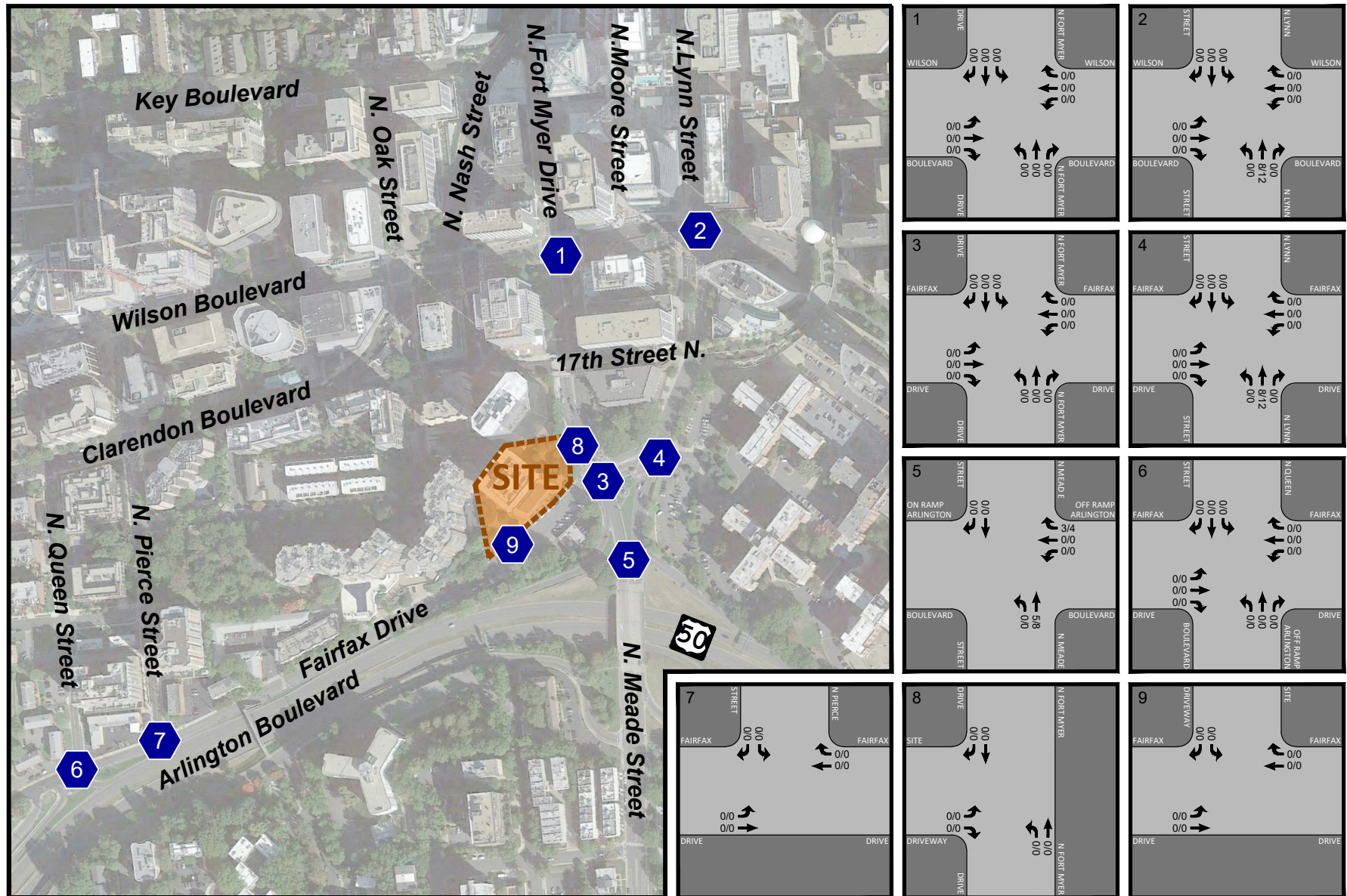


Figure F-7  
Key Bridge Residential Trips

— AM PEAK HOUR  
- - - PM PEAK HOUR  
000 / 000



NORTH  
1616 N Fort Myer Drive  
Arlington County, VA

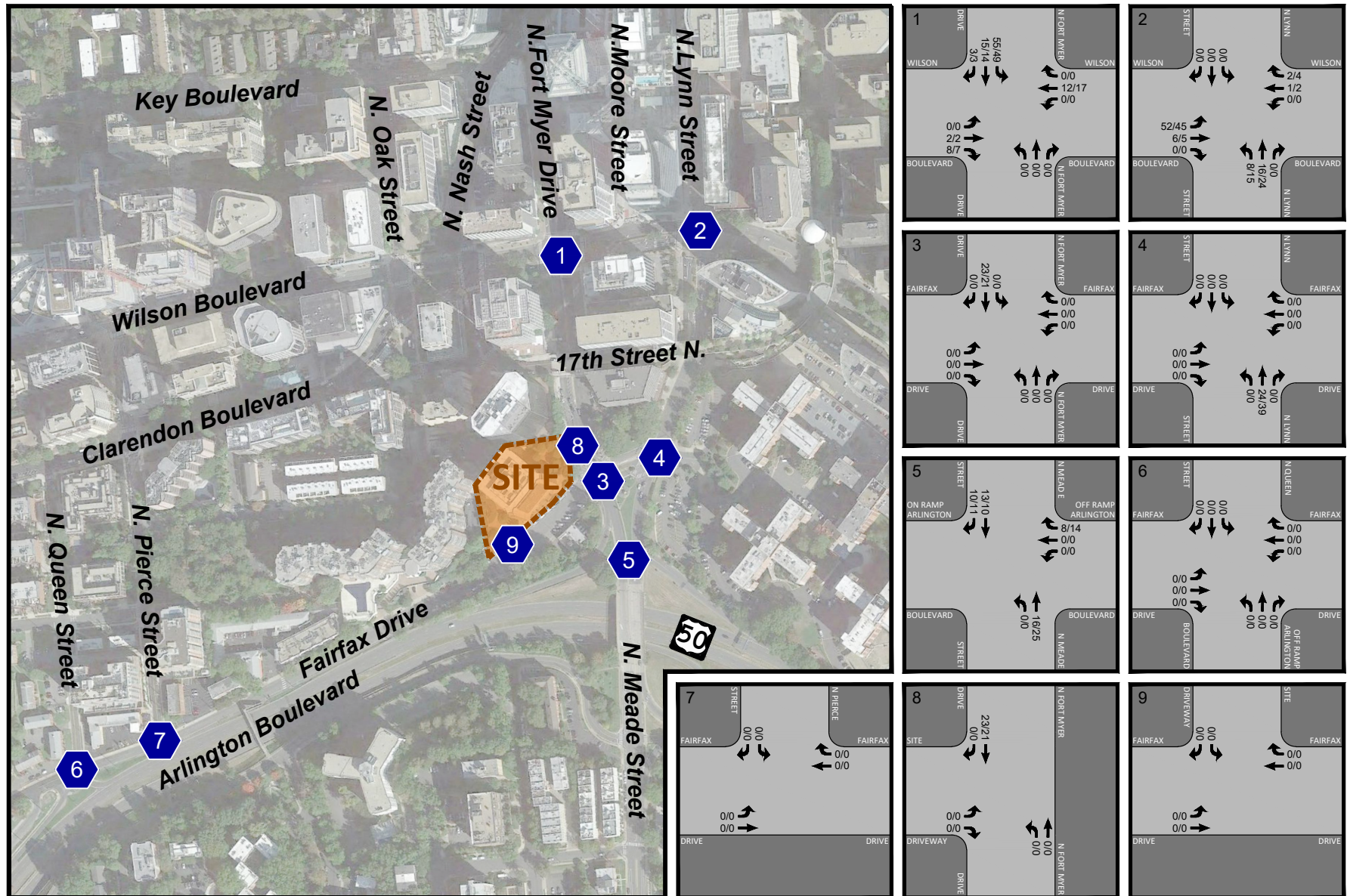


Figure F-8  
Ames Center

AM PEAK HOUR  
PM PEAK HOUR  
000 / 000



NORTH

1616 N Fort Myer Drive  
Arlington County, VA



APPENDIX F: INDIVIDUAL PIPELINE TRIPS

O:\PROJECTS\8001-8500\8286 1616 N. FORT MYER\GRAPHICS\21.0525 GRAPHICS.DWG

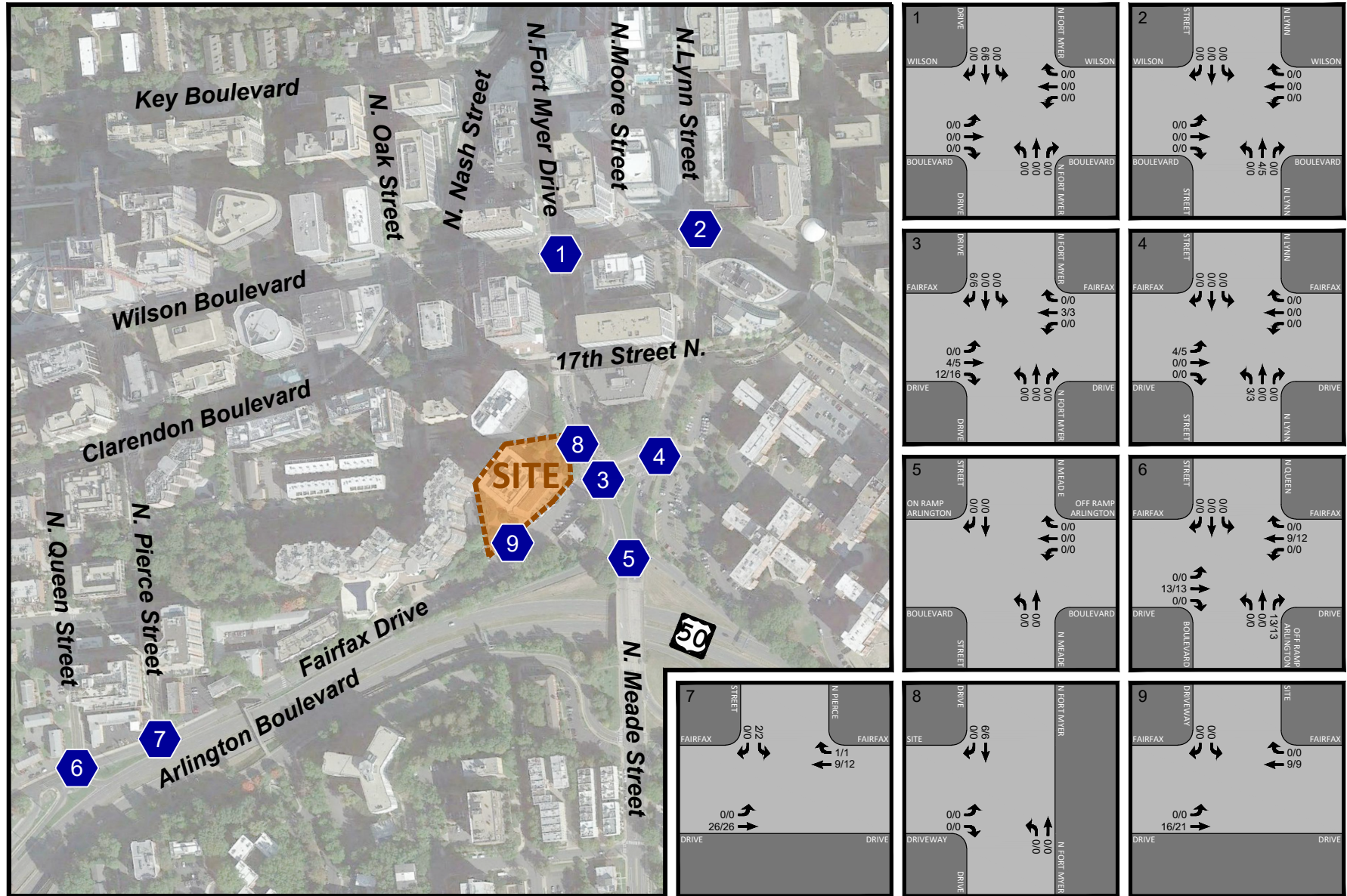


Figure F-9  
1501 Arlington Boulevard

AM PEAK HOUR  
PM PEAK HOUR  
000 / 000



NORTH

1616 N Fort Myer Drive  
Arlington County, VA



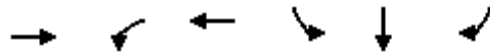
**APPENDIX G**  
**FUTURE (2025) WITHOUT DEVELOPMENT LEVEL OF SERVICE AND**  
**QUEUE SYNCHRO WORKSHEETS**



Queues

1: Fort Myer Drive & Wilson Boulevard

1616 North Fort Myer Drive



Lane Group	EBT	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	1002	433	841	317	152	68
v/c Ratio	0.74	1.42	0.50	0.81	0.10	0.17
Control Delay	27.2	225.5	14.8	42.9	18.1	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.2	225.5	14.8	42.9	18.1	1.0
Queue Length 50th (ft)	165	~256	170	158	19	0
Queue Length 95th (ft)	197	m#423	264	#287	32	0
Internal Link Dist (ft)	299		201		520	
Turn Bay Length (ft)						200
Base Capacity (vph)	1362	305	1686	393	1526	403
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.74	1.42	0.50	0.81	0.10	0.17

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.













Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

# HCM Signalized Intersection Capacity Analysis

## 1: Fort Myer Drive & Wilson Boulevard

1616 North Fort Myer Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↔	↑↑					↔	↑↑↑	↔
Traffic Volume (vph)	0	559	292	394	765	0	0	0	0	276	132	59
Future Volume (vph)	0	559	292	394	765	0	0	0	0	276	132	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	1.0					4.5	4.5	4.5
Lane Util. Factor		0.91		1.00	0.95					1.00	0.91	1.00
Frbp, ped/bikes		0.90		1.00	1.00					1.00	1.00	0.78
Flpb, ped/bikes		1.00		0.99	1.00					0.75	1.00	1.00
Frt		0.95		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3776		1538	3036					1026	3981	839
Flt Permitted		1.00		0.16	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3776		267	3036					1026	3981	839
Peak-hour factor, PHF	0.85	0.85	0.85	0.91	0.91	0.91	0.85	0.85	0.85	0.87	0.87	0.87
Adj. Flow (vph)	0	658	344	433	841	0	0	0	0	317	152	68
RTOR Reduction (vph)	0	61	0	0	0	0	0	0	0	0	0	42
Lane Group Flow (vph)	0	941	0	433	841	0	0	0	0	317	152	26
Confl. Peds. (#/hr)	742		247	247		742	246		299	299		246
Confl. Bikes (#/hr)			22			1			4			5
Heavy Vehicles (%)	2%	8%	2%	5%	7%	2%	2%	2%	2%	3%	11%	18%
Parking (#/hr)										6	12	6
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		28.0		47.0	47.0					32.0	32.0	32.0
Effective Green, g (s)		31.0		50.0	50.0					34.5	34.5	34.5
Actuated g/C Ratio		0.34		0.56	0.56					0.38	0.38	0.38
Clearance Time (s)		7.0		7.0	4.0					7.0	7.0	7.0
Lane Grp Cap (vph)		1300		317	1686					393	1526	321
v/s Ratio Prot		0.25		c0.18	0.28						0.04	
v/s Ratio Perm				c0.58						c0.31		0.03
v/c Ratio		0.72		1.37	0.50					0.81	0.10	0.08
Uniform Delay, d1		25.8		18.6	12.3					24.8	17.8	17.7
Progression Factor		1.00		0.87	1.11					1.00	1.00	1.00
Incremental Delay, d2		3.5		181.8	0.9					16.1	0.1	0.5
Delay (s)		29.3		198.0	14.5					40.9	17.9	18.2
Level of Service		C		F	B					D	B	B
Approach Delay (s)		29.3			76.9			0.0			31.5	
Approach LOS		C			E			A			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			51.3			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			1.19									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			12.5			
Intersection Capacity Utilization			86.6%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

Queues

2: Wilson Boulevard & North Lynn Street

1616 North Fort Myer Drive



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	578	501	562	94	304	1729	244
v/c Ratio	0.84	0.64	0.79	0.30	0.55	0.84	0.49
Control Delay	47.8	26.3	41.5	2.7	26.4	30.8	13.6
Queue Delay	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Total Delay	47.8	26.7	41.5	2.7	26.4	30.8	13.6
Queue Length 50th (ft)	140	226	158	0	169	296	70
Queue Length 95th (ft)	#190	m305	#225	3	m222	338	m111
Internal Link Dist (ft)		118	624			760	
Turn Bay Length (ft)				125	180		135
Base Capacity (vph)	686	777	715	310	554	2048	501
Starvation Cap Reductn	0	51	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.69	0.79	0.30	0.55	0.84	0.49

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

























Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

# HCM Signalized Intersection Capacity Analysis

## 2: Wilson Boulevard & North Lynn Street

1616 North Fort Myer Drive

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	 				 			  					
Traffic Volume (vph)	491	426	0	0	534	89	283	1608	227	0	0	0	
Future Volume (vph)	491	426	0	0	534	89	283	1608	227	0	0	0	
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	4.0	4.0	4.0				
Lane Util. Factor	0.97	1.00			0.95	1.00	1.00	0.86	1.00				
Frbp, ped/bikes	1.00	1.00			1.00	0.59	1.00	1.00	0.84				
Flpb, ped/bikes	1.00	1.00			1.00	1.00	0.96	1.00	1.00				
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85				
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00				
Satd. Flow (prot)	3090	1555			3065	773	1511	5587	1052				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	1.00	1.00				
Satd. Flow (perm)	3090	1555			3065	773	1511	5587	1052				
Peak-hour factor, PHF	0.85	0.85	0.85	0.95	0.95	0.95	0.93	0.93	0.93	0.85	0.85	0.85	
Adj. Flow (vph)	578	501	0	0	562	94	304	1729	244	0	0	0	
RTOR Reduction (vph)	0	0	0	0	0	72	0	0	115	0	0	0	
Lane Group Flow (vph)	578	501	0	0	562	22	304	1729	129	0	0	0	
Confl. Peds. (#/hr)	550		111	111		550	51		178	178		51	
Confl. Bikes (#/hr)			12			2			4			3	
Heavy Vehicles (%)	2%	10%	2%	2%	6%	11%	3%	2%	2%	2%	2%	2%	
Parking (#/hr)								5	5				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm				
Protected Phases	5	2			6			8					
Permitted Phases						6	8		8				
Actuated Green, G (s)	17.5	42.0			18.0	18.0	30.0	30.0	30.0				
Effective Green, g (s)	20.0	45.0			21.0	21.0	33.0	33.0	33.0				
Actuated g/C Ratio	0.22	0.50			0.23	0.23	0.37	0.37	0.37				
Clearance Time (s)	6.5	7.0			7.0	7.0	7.0	7.0	7.0				
Lane Grp Cap (vph)	686	777			715	180	554	2048	385				
v/s Ratio Prot	c0.19	0.32			c0.18			c0.31					
v/s Ratio Perm						0.03	0.20		0.12				
v/c Ratio	0.84	0.64			0.79	0.12	0.55	0.84	0.33				
Uniform Delay, d1	33.5	16.6			32.4	27.2	22.6	26.1	20.6				
Progression Factor	1.14	1.35			1.00	1.00	1.04	1.06	1.76				
Incremental Delay, d2	8.9	3.0			8.5	1.4	2.3	2.7	1.4				
Delay (s)	47.0	25.3			40.9	28.6	25.7	30.4	37.5				
Level of Service	D	C			D	C	C	C	D				
Approach Delay (s)		37.0			39.1			30.6			0.0		
Approach LOS		D			D			C			A		
<b>Intersection Summary</b>													
HCM 2000 Control Delay			33.7		HCM 2000 Level of Service				C				
HCM 2000 Volume to Capacity ratio			0.82										
Actuated Cycle Length (s)			90.0		Sum of lost time (s)				15.0				
Intersection Capacity Utilization			86.6%		ICU Level of Service				E				
Analysis Period (min)			15										
c	Critical Lane Group												

Queues

3: Fairfax Drive & Fort Myer Drive

1616 North Fort Myer Drive



Lane Group	EBT	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	398	86	99	752	90
v/c Ratio	0.91	0.19	0.15	0.44	0.11
Control Delay	53.4	17.2	13.1	14.6	3.1
Queue Delay	4.4	2.2	0.2	0.0	0.0
Total Delay	57.8	19.3	13.2	14.6	3.1
Queue Length 50th (ft)	184	26	30	123	2
Queue Length 95th (ft)	#322	m37	m37	m131	m4
Internal Link Dist (ft)	362	87		79	
Turn Bay Length (ft)					
Base Capacity (vph)	439	445	658	1718	790
Starvation Cap Reductn	0	258	0	0	0
Spillback Cap Reductn	18	0	199	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.95	0.46	0.22	0.44	0.11

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.


















Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

# HCM Signalized Intersection Capacity Analysis

## 3: Fairfax Drive & Fort Myer Drive

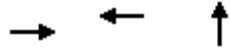
1616 North Fort Myer Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	146	192	26	47	0	0	0	0	88	669	80
Future Volume (vph)	0	146	192	26	47	0	0	0	0	88	669	80
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	4.0
Lane Util. Factor		1.00			1.00					1.00	0.95	1.00
Frb, ped/bikes		0.98			1.00					1.00	1.00	0.95
Flpb, ped/bikes		1.00			1.00					0.87	1.00	1.00
Frt		0.92			1.00					1.00	1.00	0.85
Flt Protected		1.00			0.98					0.95	1.00	1.00
Satd. Flow (prot)		1512			1565					1186	3094	1326
Flt Permitted		1.00			0.75					0.95	1.00	1.00
Satd. Flow (perm)		1512			1195					1186	3094	1326
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.89	0.89	0.89
Adj. Flow (vph)	0	172	226	31	55	0	0	0	0	99	752	90
RTOR Reduction (vph)	0	53	0	0	0	0	0	0	0	0	0	40
Lane Group Flow (vph)	0	345	0	0	86	0	0	0	0	99	752	50
Confl. Peds. (#/hr)	33		14	14		33	20			88	88	20
Confl. Bikes (#/hr)			10			1				6		3
Heavy Vehicles (%)	2%	2%	2%	2%	10%	2%	2%	2%	2%	4%	5%	4%
Parking (#/hr)										5		
Turn Type		NA		custom	NA					Perm	NA	Perm
Protected Phases		8		7	4 7						2	
Permitted Phases				4						2		2
Actuated Green, G (s)		20.5			32.5					48.5	48.5	48.5
Effective Green, g (s)		23.0			35.0					50.0	50.0	50.0
Actuated g/C Ratio		0.26			0.39					0.56	0.56	0.56
Clearance Time (s)		6.5								5.5	5.5	5.5
Lane Grp Cap (vph)		386			497					658	1718	736
v/s Ratio Prot		c0.23			c0.02						c0.24	
v/s Ratio Perm					0.05					0.08		0.04
v/c Ratio		0.89			0.17					0.15	0.44	0.07
Uniform Delay, d1		32.3			18.0					9.7	11.7	9.2
Progression Factor		1.00			0.79					1.28	1.19	3.11
Incremental Delay, d2		25.6			0.6					0.3	0.4	0.1
Delay (s)		57.9			14.8					12.7	14.4	28.8
Level of Service		E			B					B	B	C
Approach Delay (s)		57.9			14.8			0.0			15.6	
Approach LOS		E			B			A			B	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			27.4			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.56									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			11.5			
Intersection Capacity Utilization			60.0%			ICU Level of Service			B			
Analysis Period (min)			15									
c	Critical Lane Group											

Queues

4: North Lynn Street & Fairfax Drive

1616 North Fort Myer Drive



Lane Group	EBT	WBT	NBT
Lane Group Flow (vph)	274	109	2134
v/c Ratio	0.69	0.65	0.81
Control Delay	25.3	44.4	18.3
Queue Delay	21.0	0.0	0.0
Total Delay	46.3	44.4	18.3
Queue Length 50th (ft)	74	37	327
Queue Length 95th (ft)	m100	#96	396
Internal Link Dist (ft)	87	77	164
Turn Bay Length (ft)			
Base Capacity (vph)	398	168	2628
Starvation Cap Reductn	117	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.98	0.65	0.81

Intersection Summary


















# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis  
4: North Lynn Street & Fairfax Drive

1616 North Fort Myer Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  				
Traffic Volume (vph)	208	25	0	0	47	46	25	2015	51	0	0	0
Future Volume (vph)	208	25	0	0	47	46	25	2015	51	0	0	0
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				
Lane Util. Factor		1.00			1.00			0.91				
Frbp, ped/bikes		1.00			0.96			1.00				
Flpb, ped/bikes		1.00			1.00			1.00				
Frt		1.00			0.93			1.00				
Flt Protected		0.96			1.00			1.00				
Satd. Flow (prot)		1588			1457			4549				
Flt Permitted		0.36			1.00			1.00				
Satd. Flow (perm)		599			1457			4549				
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.98	0.98	0.98	0.85	0.85	0.85
Adj. Flow (vph)	245	29	0	0	55	54	26	2056	52	0	0	0
RTOR Reduction (vph)	0	0	0	0	39	0	0	3	0	0	0	0
Lane Group Flow (vph)	0	274	0	0	70	0	0	2131	0	0	0	0
Confl. Peds. (#/hr)	18		8	8		18	18		10	10		18
Confl. Bikes (#/hr)			3			1			7			
Heavy Vehicles (%)	2%	8%	3%	2%	9%	2%	2%	2%	4%	2%	2%	2%
Turn Type	custom	NA			NA		Perm	NA				
Protected Phases	7	4 7			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		28.0			6.0			49.0				
Effective Green, g (s)		30.0			8.0			52.0				
Actuated g/C Ratio		0.33			0.09			0.58				
Clearance Time (s)					6.0			7.0				
Lane Grp Cap (vph)		391			129			2628				
v/s Ratio Prot		c0.14			0.05							
v/s Ratio Perm		c0.10						0.47				
v/c Ratio		0.70			0.54			0.81				
Uniform Delay, d1		26.1			39.2			15.1				
Progression Factor		0.71			1.00			1.00				
Incremental Delay, d2		8.0			15.3			2.8				
Delay (s)		26.4			54.6			17.9				
Level of Service		C			D			B				
Approach Delay (s)		26.4			54.6			17.9			0.0	
Approach LOS		C			D			B			A	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			20.4				HCM 2000 Level of Service		C			
HCM 2000 Volume to Capacity ratio			0.82									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)		14.5			
Intersection Capacity Utilization			76.5%				ICU Level of Service		D			
Analysis Period (min)			15									

c Critical Lane Group



















---

Intersection has too many legs for HCM analysis.

---

HCM Unsignalized Intersection Capacity Analysis  
 6: N. Queen Street/Arlington Boulevard & Fairfax Drive

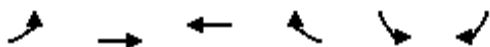
1616 North Fort Myer Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	328	0	0	141	4	243	47	122	8	0	8
Future Volume (Veh/h)	5	328	0	0	141	4	243	47	122	8	0	8
Sign Control		Free			Free			Yield			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.88	0.88	0.88	0.89	0.89	0.89	0.95	0.95	0.95	0.85	0.85	0.85
Hourly flow rate (vph)	6	373	0	0	158	4	256	49	128	9	0	9
Pedestrians		16			20			124			76	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			2			10			6	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	238			497			694	747	517	794	745	252
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	238			497			694	747	517	794	745	252
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			6	83	74	94	100	99
cM capacity (veh/h)	1245			957			273	285	492	159	286	727
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>								
Volume Total	379	162	433	18								
Volume Left	6	0	256	9								
Volume Right	0	4	128	9								
cSH	1245	1700	316	261								
Volume to Capacity	0.00	0.10	1.37	0.07								
Queue Length 95th (ft)	0	0	550	6								
Control Delay (s)	0.2	0.0	217.9	19.8								
Lane LOS	A		F	C								
Approach Delay (s)	0.2	0.0	217.9	19.8								
Approach LOS			F	C								
<b>Intersection Summary</b>												
Average Delay			95.5									
Intersection Capacity Utilization			63.5%		ICU Level of Service				B			
Analysis Period (min)			15									

# HCM Unsignalized Intersection Capacity Analysis

## 7: Fairfax Drive & N. Pierce Street

1616 North Fort Myer Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Volume (veh/h)	95	364	95	35	30	50
Future Volume (Veh/h)	95	364	95	35	30	50
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	112	428	112	41	35	59
Pedestrians					25	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					2	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	178				810	158
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	178				810	158
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	92				89	93
cM capacity (veh/h)	1369				312	869
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>			
Volume Total	540	153	94			
Volume Left	112	0	35			
Volume Right	0	41	59			
cSH	1369	1700	522			
Volume to Capacity	0.08	0.09	0.18			
Queue Length 95th (ft)	7	0	16			
Control Delay (s)	2.3	0.0	13.4			
Lane LOS	A		B			
Approach Delay (s)	2.3	0.0	13.4			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			3.2			
Intersection Capacity Utilization			53.6%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
 8: Fort Myer Drive & Site Driveway

1616 North Fort Myer Drive



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	10	0	0	827	68
Future Volume (Veh/h)	0	10	0	0	827	68
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	0	12	0	0	973	80
Pedestrians	20					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	2					
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)				159	674	
pX, platoon unblocked						
vC, conflicting volume	1033	303	1073			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1033	303	1073			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	224	681	635			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3	SB 4	
Volume Total	12	278	278	278	219	
Volume Left	0	0	0	0	0	
Volume Right	12	0	0	0	80	
cSH	681	1700	1700	1700	1700	
Volume to Capacity	0.02	0.16	0.16	0.16	0.13	
Queue Length 95th (ft)	1	0	0	0	0	
Control Delay (s)	10.4	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.4	0.0				
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			24.7%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
 9: Fairfax Drive & Site Driveway

1616 North Fort Myer Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	20	325	44	82	12	3
Future Volume (Veh/h)	20	325	44	82	12	3
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	24	382	52	96	14	4
Pedestrians					33	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					3	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			442			
pX, platoon unblocked						
vC, conflicting volume	181				563	133
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	181				563	133
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				97	100
cM capacity (veh/h)	1356				466	891
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>			
Volume Total	406	148	18			
Volume Left	24	0	14			
Volume Right	0	96	4			
cSH	1356	1700	521			
Volume to Capacity	0.02	0.09	0.03			
Queue Length 95th (ft)	1	0	3			
Control Delay (s)	0.6	0.0	12.2			
Lane LOS	A		B			
Approach Delay (s)	0.6	0.0	12.2			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			0.8			
Intersection Capacity Utilization		45.8%		ICU Level of Service		A
Analysis Period (min)			15			

Intersection														
Int Delay, s/veh	5.2													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations					↕		↕	↕↕			↕↕	↕		
Traffic Vol, veh/h	0	0	0	43	0	0	89	1414	0	0	525	349	0	0
Future Vol, veh/h	0	0	0	43	0	0	89	1414	0	0	525	349	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	62	0	56	56	0	62	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	-	-	-	-	-	-	Yield	-	-
Storage Length	-	-	-	-	-	0	180	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-	16974	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	47	0	0	97	1537	0	0	571	379	0	0

Major/Minor	Minor1		Major1		Major2		
Conflicting Flow All	2017	2364	-	633	0	-	0
Stage 1	1731	1731	-	-	-	-	-
Stage 2	286	633	-	-	-	-	-
Critical Hdwy	6.84	6.54	-	4.14	-	-	-
Critical Hdwy Stg 1	5.84	5.54	-	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	-	2.22	-	-	-
Pot Cap-1 Maneuver	51	35	0	946	-	0	-
Stage 1	128	141	0	-	0	0	-
Stage 2	737	472	0	-	0	0	-
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	~ 46	0	-	946	-	-	-
Mov Cap-2 Maneuver	~ 46	0	-	-	-	-	-
Stage 1	115	0	-	-	-	-	-
Stage 2	737	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	276.1	0.5	0
HCM LOS	F		

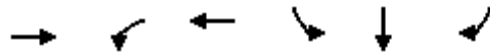
Minor Lane/Major Mvmt	NBL	NBTWBLn1	WBLn2	SBT	SBR
Capacity (veh/h)	946	-	46	-	-
HCM Lane V/C Ratio	0.102	-	1.016	-	-
HCM Control Delay (s)	9.2	-	276.1	0	-
HCM Lane LOS	A	-	F	A	-
HCM 95th %tile Q(veh)	0.3	-	4.2	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Queues

1: Fort Myer Drive & Wilson Boulevard

1616 North Fort Myer Drive



Lane Group	EBT	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	1141	549	670	713	202	109
v/c Ratio	0.76	2.01	0.40	1.90	0.12	0.23
Control Delay	27.2	488.5	16.2	435.9	18.2	3.5
Queue Delay	0.2	0.0	0.0	2.3	0.0	0.0
Total Delay	27.5	488.5	16.2	438.1	18.2	3.5
Queue Length 50th (ft)	189	~458	124	~627	26	0
Queue Length 95th (ft)	222	#661	166	#781	40	19
Internal Link Dist (ft)	299		201		520	
Turn Bay Length (ft)						200
Base Capacity (vph)	1497	273	1671	376	1644	479
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	54	0	0	70	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.79	2.01	0.40	2.33	0.12	0.23

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.













Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis  
 1: Fort Myer Drive & Wilson Boulevard

1616 North Fort Myer Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↖	↑↑					↗	↑↑↑	↖
Traffic Volume (vph)	0	728	242	500	610	0	0	0	0	606	172	93
Future Volume (vph)	0	728	242	500	610	0	0	0	0	606	172	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	1.0					4.5	4.5	4.5
Lane Util. Factor		0.91		1.00	0.95					1.00	0.91	1.00
Frbp, ped/bikes		0.93		1.00	1.00					1.00	1.00	0.84
Flpb, ped/bikes		1.00		1.00	1.00					0.71	1.00	1.00
Frt		0.96		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		4024		1557	3008					982	4291	1036
Flt Permitted		1.00		0.13	1.00					0.95	1.00	1.00
Satd. Flow (perm)		4024		214	3008					982	4291	1036
Peak-hour factor, PHF	0.85	0.85	0.85	0.91	0.91	0.91	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	0	856	285	549	670	0	0	0	0	713	202	109
RTOR Reduction (vph)	0	66	0	0	0	0	0	0	0	0	0	67
Lane Group Flow (vph)	0	1075	0	549	670	0	0	0	0	713	202	42
Confl. Peds. (#/hr)	998		250	250		998	182		345	345		182
Confl. Bikes (#/hr)			22			1			4			5
Heavy Vehicles (%)	2%	3%	6%	4%	8%	2%	2%	2%	2%	2%	3%	2%
Parking (#/hr)										6	12	6
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		29.0		47.0	47.0					32.0	32.0	32.0
Effective Green, g (s)		32.0		50.0	50.0					34.5	34.5	34.5
Actuated g/C Ratio		0.36		0.56	0.56					0.38	0.38	0.38
Clearance Time (s)		7.0		7.0	4.0					7.0	7.0	7.0
Lane Grp Cap (vph)		1430		283	1671					376	1644	397
v/s Ratio Prot		0.27		c0.24	0.22						0.05	
v/s Ratio Perm				c0.84						c0.73		0.04
v/c Ratio		0.75		1.94	0.40					1.90	0.12	0.11
Uniform Delay, d1		25.5		21.1	11.4					27.8	18.0	17.8
Progression Factor		1.00		1.32	1.34					1.00	1.00	1.00
Incremental Delay, d2		3.7		435.2	0.7					413.2	0.2	0.5
Delay (s)		29.2		463.1	16.0					441.0	18.1	18.4
Level of Service		C		F	B					F	B	B
Approach Delay (s)		29.2			217.4			0.0			312.6	
Approach LOS		C			F			A			F	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			182.7			HCM 2000 Level of Service				F		
HCM 2000 Volume to Capacity ratio			2.02									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			12.5			
Intersection Capacity Utilization			102.9%			ICU Level of Service			G			
Analysis Period (min)			15									
c Critical Lane Group												



Queues

2: Wilson Boulevard & North Lynn Street

1616 North Fort Myer Drive



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	612	1145	424	273	282	1209	188
v/c Ratio	0.78	1.26	0.56	0.83	0.59	0.67	0.42
Control Delay	28.1	136.0	33.1	35.2	29.6	27.2	10.3
Queue Delay	0.0	1.2	0.0	0.0	0.0	0.0	0.0
Total Delay	28.1	137.2	33.1	35.2	29.6	27.2	10.3
Queue Length 50th (ft)	163	~839	111	56	149	190	35
Queue Length 95th (ft)	m156	m#706	159	#204	m237	233	m86
Internal Link Dist (ft)		118	624			760	
Turn Bay Length (ft)				125	180		135
Base Capacity (vph)	789	912	756	330	478	1800	444
Starvation Cap Reductn	0	172	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.78	1.55	0.56	0.83	0.59	0.67	0.42
























Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

# HCM Signalized Intersection Capacity Analysis

## 2: Wilson Boulevard & North Lynn Street

1616 North Fort Myer Drive

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	 				 			  					
Traffic Volume (vph)	545	1019	0	0	394	254	265	1136	177	0	0	0	
Future Volume (vph)	545	1019	0	0	394	254	265	1136	177	0	0	0	
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	4.0	4.0	4.0				
Lane Util. Factor	0.97	1.00			0.95	1.00	1.00	0.86	1.00				
Frbp, ped/bikes	1.00	1.00			1.00	0.58	1.00	1.00	0.88				
Flpb, ped/bikes	1.00	1.00			1.00	1.00	0.95	1.00	1.00				
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85				
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00				
Satd. Flow (prot)	3090	1676			3094	826	1485	5587	1023				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	1.00	1.00				
Satd. Flow (perm)	3090	1676			3094	826	1485	5587	1023				
Peak-hour factor, PHF	0.89	0.89	0.89	0.93	0.93	0.93	0.94	0.94	0.94	0.85	0.85	0.85	
Adj. Flow (vph)	612	1145	0	0	424	273	282	1209	188	0	0	0	
RTOR Reduction (vph)	0	0	0	0	0	128	0	0	115	0	0	0	
Lane Group Flow (vph)	612	1145	0	0	424	145	282	1209	73	0	0	0	
Confl. Peds. (#/hr)	586		84	84		586	53		111	111		53	
Confl. Bikes (#/hr)			12			2			4			3	
Heavy Vehicles (%)	2%	2%	2%	2%	5%	2%	4%	2%	10%	2%	2%	2%	
Parking (#/hr)								5	5				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm				
Protected Phases	5	2			6			8					
Permitted Phases						6	8		8				
Actuated Green, G (s)	20.5	46.0			19.0	19.0	26.0	26.0	26.0				
Effective Green, g (s)	23.0	49.0			22.0	22.0	29.0	29.0	29.0				
Actuated g/C Ratio	0.26	0.54			0.24	0.24	0.32	0.32	0.32				
Clearance Time (s)	6.5	7.0			7.0	7.0	7.0	7.0	7.0				
Lane Grp Cap (vph)	789	912			756	201	478	1800	329				
v/s Ratio Prot	0.20	c0.68			0.14			c0.22					
v/s Ratio Perm						0.17	0.19		0.07				
v/c Ratio	0.78	1.26			0.56	0.72	0.59	0.67	0.22				
Uniform Delay, d1	31.1	20.5			29.8	31.2	25.5	26.4	22.3				
Progression Factor	0.86	0.79			1.00	1.00	0.96	0.96	1.48				
Incremental Delay, d2	0.7	115.8			3.0	19.8	4.4	1.7	1.3				
Delay (s)	27.5	132.1			32.8	51.0	28.9	27.0	34.3				
Level of Service	C	F			C	D	C	C	C				
Approach Delay (s)		95.7			39.9			28.1			0.0		
Approach LOS		F			D			C			A		
<b>Intersection Summary</b>													
HCM 2000 Control Delay			58.8		HCM 2000 Level of Service				E				
HCM 2000 Volume to Capacity ratio			1.08										
Actuated Cycle Length (s)			90.0		Sum of lost time (s)				15.0				
Intersection Capacity Utilization			102.9%		ICU Level of Service				G				
Analysis Period (min)			15										
c Critical Lane Group													

Queues

3: Fairfax Drive & Fort Myer Drive

1616 North Fort Myer Drive



Lane Group	EBT	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	315	89	143	2439	221
v/c Ratio	0.85	0.20	0.20	1.38	0.28
Control Delay	49.9	17.2	13.9	198.6	6.4
Queue Delay	3.1	2.2	1.9	0.0	0.0
Total Delay	53.0	19.4	15.7	198.6	6.4
Queue Length 50th (ft)	148	25	46	~969	24
Queue Length 95th (ft)	#285	m38	m66	m#885	m43
Internal Link Dist (ft)	362	87		79	
Turn Bay Length (ft)					
Base Capacity (vph)	371	440	731	1769	785
Starvation Cap Reductn	0	251	0	0	0
Spillback Cap Reductn	18	0	454	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.89	0.47	0.52	1.38	0.28




















Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

# HCM Signalized Intersection Capacity Analysis

## 3: Fairfax Drive & Fort Myer Drive

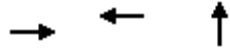
1616 North Fort Myer Drive

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations											  		
Traffic Volume (vph)	0	119	158	42	34	0	0	0	0	124	2122	192	
Future Volume (vph)	0	119	158	42	34	0	0	0	0	124	2122	192	
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	4.0	
Lane Util. Factor		1.00			1.00					1.00	0.95	1.00	
Frbp, ped/bikes		0.98			1.00					1.00	1.00	0.91	
Flpb, ped/bikes		1.00			1.00					0.95	1.00	1.00	
Frt		0.92			1.00					1.00	1.00	0.85	
Flt Protected		1.00			0.97					0.95	1.00	1.00	
Satd. Flow (prot)		1325			1591					1316	3185	1277	
Flt Permitted		1.00			0.72					0.95	1.00	1.00	
Satd. Flow (perm)		1325			1175					1316	3185	1277	
Peak-hour factor, PHF	0.88	0.88	0.88	0.85	0.85	0.85	0.85	0.85	0.85	0.87	0.87	0.87	
Adj. Flow (vph)	0	135	180	49	40	0	0	0	0	143	2439	221	
RTOR Reduction (vph)	0	33	0	0	0	0	0	0	0	0	0	76	
Lane Group Flow (vph)	0	282	0	0	89	0	0	0	0	143	2439	145	
Confl. Peds. (#/hr)	39		13	13		39	48		31	31		48	
Confl. Bikes (#/hr)			7			2			4			7	
Heavy Vehicles (%)	2%	2%	2%	2%	7%	2%	2%	2%	2%	3%	2%	3%	
Parking (#/hr)		5	5							5			
Turn Type		NA		custom		NA				Perm	NA	Perm	
Protected Phases		8		7	4	7					2		
Permitted Phases				4						2		2	
Actuated Green, G (s)		20.5			32.5					48.5	48.5	48.5	
Effective Green, g (s)		23.0			35.0					50.0	50.0	50.0	
Actuated g/C Ratio		0.26			0.39					0.56	0.56	0.56	
Clearance Time (s)		6.5								5.5	5.5	5.5	
Lane Grp Cap (vph)		338			493					731	1769	709	
v/s Ratio Prot		c0.21			c0.02						c0.77		
v/s Ratio Perm					0.05					0.11		0.11	
v/c Ratio		0.84			0.18					0.20	1.38	0.21	
Uniform Delay, d1		31.7			18.1					10.0	20.0	10.0	
Progression Factor		1.00			0.79					1.30	1.23	1.89	
Incremental Delay, d2		21.0			0.6					0.5	173.7	0.6	
Delay (s)		52.7			14.9					13.5	198.3	19.6	
Level of Service		D			B					B	F	B	
Approach Delay (s)		52.7			14.9			0.0			174.8		
Approach LOS		D			B			A			F		
<b>Intersection Summary</b>													
HCM 2000 Control Delay			158.4									HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio			1.14										
Actuated Cycle Length (s)			90.0									Sum of lost time (s)	11.5
Intersection Capacity Utilization			115.4%									ICU Level of Service	H
Analysis Period (min)			15										
c Critical Lane Group													

Queues

4: North Lynn Street & Fairfax Drive

1616 North Fort Myer Drive



Lane Group	EBT	WBT	NBT
Lane Group Flow (vph)	283	111	1415
v/c Ratio	0.71	0.69	0.55
Control Delay	31.9	50.9	12.7
Queue Delay	45.5	0.0	0.0
Total Delay	77.4	50.9	12.7
Queue Length 50th (ft)	100	41	167
Queue Length 95th (ft)	m129	#109	206
Internal Link Dist (ft)	87	77	164
Turn Bay Length (ft)			
Base Capacity (vph)	400	160	2575
Starvation Cap Reductn	134	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	1.06	0.69	0.55

Intersection Summary


















# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis  
4: North Lynn Street & Fairfax Drive

1616 North Fort Myer Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  				
Traffic Volume (vph)	203	40	0	0	51	43	24	1253	53	0	0	0
Future Volume (vph)	203	40	0	0	51	43	24	1253	53	0	0	0
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				
Lane Util. Factor		1.00			1.00			0.91				
Frb, ped/bikes		1.00			0.92			1.00				
Flpb, ped/bikes		0.99			1.00			1.00				
Frt		1.00			0.94			0.99				
Flt Protected		0.96			1.00			1.00				
Satd. Flow (prot)		1591			1424			4450				
Flt Permitted		0.36			1.00			1.00				
Satd. Flow (perm)		602			1424			4450				
Peak-hour factor, PHF	0.86	0.86	0.86	0.85	0.85	0.85	0.94	0.94	0.94	0.85	0.85	0.85
Adj. Flow (vph)	236	47	0	0	60	51	26	1333	56	0	0	0
RTOR Reduction (vph)	0	0	0	0	34	0	0	5	0	0	0	0
Lane Group Flow (vph)	0	283	0	0	77	0	0	1410	0	0	0	0
Confl. Peds. (#/hr)	46		18	18		46	15		25	25		15
Confl. Bikes (#/hr)			4						3			
Heavy Vehicles (%)	2%	3%	2%	2%	6%	2%	2%	4%	2%	2%	2%	2%
Turn Type	custom	NA			NA		Perm	NA				
Protected Phases	7	4 7			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		28.0			6.0			49.0				
Effective Green, g (s)		30.0			8.0			52.0				
Actuated g/C Ratio		0.33			0.09			0.58				
Clearance Time (s)					6.0			7.0				
Lane Grp Cap (vph)		392			126			2571				
v/s Ratio Prot		c0.14			0.05							
v/s Ratio Perm		c0.10						0.32				
v/c Ratio		0.72			0.61			0.55				
Uniform Delay, d1		26.3			39.5			11.7				
Progression Factor		0.90			1.00			1.00				
Incremental Delay, d2		9.7			20.3			0.8				
Delay (s)		33.5			59.8			12.6				
Level of Service		C			E			B				
Approach Delay (s)		33.5			59.8			12.6			0.0	
Approach LOS		C			E			B			A	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			18.8					HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio			0.65									
Actuated Cycle Length (s)			90.0					Sum of lost time (s)		14.5		
Intersection Capacity Utilization			60.2%					ICU Level of Service		B		
Analysis Period (min)			15									

c Critical Lane Group

















---

Intersection has too many legs for HCM analysis.

---

HCM Unsignalized Intersection Capacity Analysis  
 6: N. Queen Street/Arlington Boulevard & Fairfax Drive

1616 North Fort Myer Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	202	0	0	280	6	188	68	103	6	0	21
Future Volume (Veh/h)	6	202	0	0	280	6	188	68	103	6	0	21
Sign Control		Free			Free			Yield			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.88	0.88	0.88	0.89	0.89	0.89	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	7	230	0	0	315	7	221	80	121	7	0	25
Pedestrians		13			41			152			103	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			3			13			9	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	425			382			752	821	423	868	818	434
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	425			382			752	821	423	868	818	434
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			2	67	77	94	100	96
cM capacity (veh/h)	1037			1027			226	245	532	118	246	562
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	237	322	422	32								
Volume Left	7	0	221	7								
Volume Right	0	7	121	25								
cSH	1037	1700	276	309								
Volume to Capacity	0.01	0.19	1.53	0.10								
Queue Length 95th (ft)	1	0	617	9								
Control Delay (s)	0.3	0.0	289.5	18.0								
Lane LOS	A		F	C								
Approach Delay (s)	0.3	0.0	289.5	18.0								
Approach LOS			F	C								
Intersection Summary												
Average Delay			121.2									
Intersection Capacity Utilization			54.0%		ICU Level of Service				A			
Analysis Period (min)			15									



HCM Unsignalized Intersection Capacity Analysis  
 7: Fairfax Drive & N. Pierce Street

1616 North Fort Myer Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Volume (veh/h)	107	204	170	55	44	115
Future Volume (Veh/h)	107	204	170	55	44	115
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.85	0.85	0.87	0.87	0.85	0.85
Hourly flow rate (vph)	126	240	195	63	52	135
Pedestrians			2		37	
Lane Width (ft)			12.0		12.0	
Walking Speed (ft/s)			4.0		4.0	
Percent Blockage			0		3	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	295				758	264
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	295				758	264
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	90				84	82
cM capacity (veh/h)	1227				326	751
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>			
Volume Total	366	258	187			
Volume Left	126	0	52			
Volume Right	0	63	135			
cSH	1227	1700	551			
Volume to Capacity	0.10	0.15	0.34			
Queue Length 95th (ft)	9	0	37			
Control Delay (s)	3.5	0.0	14.9			
Lane LOS	A		B			
Approach Delay (s)	3.5	0.0	14.9			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			5.0			
Intersection Capacity Utilization			53.5%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
 8: Fort Myer Drive & Site Driveway

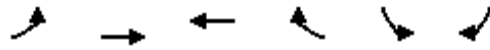
1616 North Fort Myer Drive



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	65	0	0	2372	18
Future Volume (Veh/h)	0	65	0	0	2372	18
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	71	0	0	2578	20
Pedestrians	48					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	4					
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)				159	674	
pX, platoon unblocked						
vC, conflicting volume	2636	702	2646			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2636	702	2646			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	81	100			
cM capacity (veh/h)	18	365	151			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3	SB 4	
Volume Total	71	737	737	737	388	
Volume Left	0	0	0	0	0	
Volume Right	71	0	0	0	20	
cSH	365	1700	1700	1700	1700	
Volume to Capacity	0.19	0.43	0.43	0.43	0.23	
Queue Length 95th (ft)	18	0	0	0	0	
Control Delay (s)	17.2	0.0	0.0	0.0	0.0	
Lane LOS	C					
Approach Delay (s)	17.2	0.0				
Approach LOS	C					
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			49.7%	ICU Level of Service	A	
Analysis Period (min)	15					

HCM Unsignalized Intersection Capacity Analysis  
 9: Fairfax Drive & Site Driveway

1616 North Fort Myer Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	6	197	204	22	78	20
Future Volume (Veh/h)	6	197	204	22	78	20
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	214	222	24	85	22
Pedestrians					39	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					3	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			442			
pX, platoon unblocked						
vC, conflicting volume	285				501	273
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	285				501	273
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				83	97
cM capacity (veh/h)	1236				510	741
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>			
Volume Total	221	246	107			
Volume Left	7	0	85			
Volume Right	0	24	22			
cSH	1236	1700	544			
Volume to Capacity	0.01	0.14	0.20			
Queue Length 95th (ft)	0	0	18			
Control Delay (s)	0.3	0.0	13.2			
Lane LOS	A		B			
Approach Delay (s)	0.3	0.0	13.2			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			2.6			
Intersection Capacity Utilization			29.7%	ICU Level of Service		A
Analysis Period (min)			15			

Intersection														
Int Delay, s/veh	5.4													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations					↕		↕	↕↕			↕↕	↕		
Traffic Vol, veh/h	0	0	0	74	0	0	78	839	0	0	1083	1222	0	0
Future Vol, veh/h	0	0	0	74	0	0	78	839	0	0	1083	1222	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	38	0	21	21	0	38	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	-	-	-	-	-	-	Yield	-	-
Storage Length	-	-	-	-	-	0	180	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-	16974	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	80	0	0	85	912	0	0	1177	1328	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1671	2297	-	1215	0	-
Stage 1	1082	1082	-	-	-	-
Stage 2	589	1215	-	-	-	-
Critical Hdwy	6.84	6.54	-	4.14	-	-
Critical Hdwy Stg 1	5.84	5.54	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-	-	-	-
Follow-up Hdwy	3.52	4.02	-	2.22	-	-
Pot Cap-1 Maneuver	87	38	0	570	-	0
Stage 1	287	292	0	-	0	0
Stage 2	517	252	0	-	0	0
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	~ 74	0	-	570	-	-
Mov Cap-2 Maneuver	~ 74	0	-	-	-	-
Stage 1	244	0	-	-	-	-
Stage 2	517	0	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	228.7	1.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBTWBLn1WBLn2	SBT	SBR
Capacity (veh/h)	570	- 74	-	-
HCM Lane V/C Ratio	0.149	- 1.087	-	-
HCM Control Delay (s)	12.4	- 228.7	0	-
HCM Lane LOS	B	- F	A	-
HCM 95th %tile Q(veh)	0.5	- 5.9	-	-

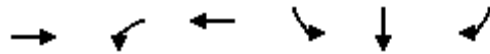
Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

**APPENDIX H**  
**FUTURE (2025) WITH DEVELOPMENT LEVEL OF SERVICE AND QUEUE**  
**SYNCHRO WORKSHEETS**

Queues

1: Fort Myer Drive & Wilson Boulevard

1616 North Fort Myer Drive



Lane Group	EBT	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	980	369	852	317	99	68
v/c Ratio	0.71	1.19	0.51	0.81	0.06	0.17
Control Delay	25.6	131.8	15.7	42.9	17.8	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.6	131.8	15.7	42.9	17.8	1.0
Queue Length 50th (ft)	154	~174	221	158	12	0
Queue Length 95th (ft)	186	#351	292	#287	23	0
Internal Link Dist (ft)	299		201		520	
Turn Bay Length (ft)						200
Base Capacity (vph)	1386	310	1686	393	1526	403
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.71	1.19	0.51	0.81	0.06	0.17

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

# HCM Signalized Intersection Capacity Analysis

## 1: Fort Myer Drive & Wilson Boulevard

1616 North Fort Myer Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑	↑↑					↑	↑↑↑	↑
Traffic Volume (vph)	0	559	274	336	775	0	0	0	0	276	86	59
Future Volume (vph)	0	559	274	336	775	0	0	0	0	276	86	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	1.0					4.5	4.5	4.5
Lane Util. Factor		0.91		1.00	0.95					1.00	0.91	1.00
Frbp, ped/bikes		0.91		1.00	1.00					1.00	1.00	0.78
Flpb, ped/bikes		1.00		0.99	1.00					0.75	1.00	1.00
Frt		0.95		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3799		1538	3036					1026	3981	839
Flt Permitted		1.00		0.17	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3799		278	3036					1026	3981	839
Peak-hour factor, PHF	0.85	0.85	0.85	0.91	0.91	0.91	0.85	0.85	0.85	0.87	0.87	0.87
Adj. Flow (vph)	0	658	322	369	852	0	0	0	0	317	99	68
RTOR Reduction (vph)	0	77	0	0	0	0	0	0	0	0	0	42
Lane Group Flow (vph)	0	903	0	369	852	0	0	0	0	317	99	26
Confl. Peds. (#/hr)	742		247	247		742	246		299	299		246
Confl. Bikes (#/hr)			22			1			4			5
Heavy Vehicles (%)	2%	8%	2%	5%	7%	2%	2%	2%	2%	3%	11%	18%
Parking (#/hr)										6	12	6
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		28.0		47.0	47.0					32.0	32.0	32.0
Effective Green, g (s)		31.0		50.0	50.0					34.5	34.5	34.5
Actuated g/C Ratio		0.34		0.56	0.56					0.38	0.38	0.38
Clearance Time (s)		7.0		7.0	4.0					7.0	7.0	7.0
Lane Grp Cap (vph)		1308		322	1686					393	1526	321
v/s Ratio Prot		0.24		c0.15	0.28						0.02	
v/s Ratio Perm				c0.48						c0.31		0.03
v/c Ratio		0.69		1.15	0.51					0.81	0.06	0.08
Uniform Delay, d1		25.4		18.0	12.4					24.8	17.5	17.7
Progression Factor		1.00		0.92	1.17					1.00	1.00	1.00
Incremental Delay, d2		3.0		93.8	1.0					16.1	0.1	0.5
Delay (s)		28.4		110.4	15.5					40.9	17.6	18.2
Level of Service		C		F	B					D	B	B
Approach Delay (s)		28.4			44.2			0.0			32.9	
Approach LOS		C			D			A			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			36.4			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			1.06									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			12.5			
Intersection Capacity Utilization			86.1%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

Queues

2: Wilson Boulevard & North Lynn Street

1616 North Fort Myer Drive



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	578	501	508	94	308	1741	254
v/c Ratio	0.84	0.64	0.71	0.30	0.56	0.85	0.51
Control Delay	47.1	25.6	38.1	2.7	25.7	29.9	13.7
Queue Delay	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Total Delay	47.1	26.0	38.1	2.7	25.7	29.9	13.7
Queue Length 50th (ft)	138	222	140	0	166	289	74
Queue Length 95th (ft)	#188	m302	196	3	m218	339	m111
Internal Link Dist (ft)		118	624			760	
Turn Bay Length (ft)				125	180		135
Base Capacity (vph)	686	777	715	310	554	2048	501
Starvation Cap Reductn	0	48	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.69	0.71	0.30	0.56	0.85	0.51

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.
























Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



HCM Signalized Intersection Capacity Analysis  
 2: Wilson Boulevard & North Lynn Street

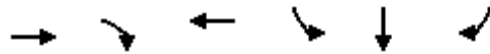
1616 North Fort Myer Drive

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	 				 			  					
Traffic Volume (vph)	491	426	0	0	483	89	286	1619	236	0	0	0	
Future Volume (vph)	491	426	0	0	483	89	286	1619	236	0	0	0	
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	4.0	4.0	4.0				
Lane Util. Factor	0.97	1.00			0.95	1.00	1.00	0.86	1.00				
Frbp, ped/bikes	1.00	1.00			1.00	0.59	1.00	1.00	0.84				
Flpb, ped/bikes	1.00	1.00			1.00	1.00	0.96	1.00	1.00				
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85				
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00				
Satd. Flow (prot)	3090	1555			3065	773	1511	5587	1052				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	1.00	1.00				
Satd. Flow (perm)	3090	1555			3065	773	1511	5587	1052				
Peak-hour factor, PHF	0.85	0.85	0.85	0.95	0.95	0.95	0.93	0.93	0.93	0.85	0.85	0.85	
Adj. Flow (vph)	578	501	0	0	508	94	308	1741	254	0	0	0	
RTOR Reduction (vph)	0	0	0	0	0	72	0	0	115	0	0	0	
Lane Group Flow (vph)	578	501	0	0	508	22	308	1741	139	0	0	0	
Confl. Peds. (#/hr)	550		111	111		550	51		178	178		51	
Confl. Bikes (#/hr)			12			2			4			3	
Heavy Vehicles (%)	2%	10%	2%	2%	6%	11%	3%	2%	2%	2%	2%	2%	
Parking (#/hr)								5	5				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm				
Protected Phases	5	2			6			8					
Permitted Phases						6	8		8				
Actuated Green, G (s)	17.5	42.0			18.0	18.0	30.0	30.0	30.0				
Effective Green, g (s)	20.0	45.0			21.0	21.0	33.0	33.0	33.0				
Actuated g/C Ratio	0.22	0.50			0.23	0.23	0.37	0.37	0.37				
Clearance Time (s)	6.5	7.0			7.0	7.0	7.0	7.0	7.0				
Lane Grp Cap (vph)	686	777			715	180	554	2048	385				
v/s Ratio Prot	c0.19	0.32			c0.17			c0.31					
v/s Ratio Perm						0.03	0.20		0.13				
v/c Ratio	0.84	0.64			0.71	0.12	0.56	0.85	0.36				
Uniform Delay, d1	33.5	16.6			31.7	27.2	22.7	26.2	20.8				
Progression Factor	1.11	1.30			1.00	1.00	1.00	1.03	1.63				
Incremental Delay, d2	9.2	3.0			5.9	1.4	2.2	2.7	1.5				
Delay (s)	46.3	24.7			37.6	28.6	25.0	29.5	35.4				
Level of Service	D	C			D	C	C	C	D				
Approach Delay (s)		36.3			36.2			29.6			0.0		
Approach LOS		D			D			C			A		
<b>Intersection Summary</b>													
HCM 2000 Control Delay			32.4									HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.80										
Actuated Cycle Length (s)			90.0									Sum of lost time (s)	15.0
Intersection Capacity Utilization			86.1%									ICU Level of Service	E
Analysis Period (min)			15										
c	Critical Lane Group												

Queues

3: Fairfax Drive & Fort Myer Drive

1616 North Fort Myer Drive



Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	200	264	86	103	754	24
v/c Ratio	0.47	0.56	0.17	0.16	0.44	0.03
Control Delay	32.6	13.3	16.8	13.5	14.9	0.0
Queue Delay	0.0	0.0	2.2	0.1	0.0	0.0
Total Delay	32.6	13.3	19.0	13.6	14.9	0.0
Queue Length 50th (ft)	96	27	26	30	122	0
Queue Length 95th (ft)	152	86	m37	m41	m138	m0
Internal Link Dist (ft)	362		87		79	
Turn Bay Length (ft)		200				
Base Capacity (vph)	428	469	508	658	1718	790
Starvation Cap Reductn	0	0	321	0	0	0
Spillback Cap Reductn	1	0	0	83	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.56	0.46	0.18	0.44	0.03



















Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

# HCM Signalized Intersection Capacity Analysis

## 3: Fairfax Drive & Fort Myer Drive

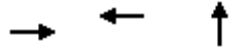
1616 North Fort Myer Drive

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	0	170	224	26	47	0	0	0	0	92	671	21	
Future Volume (vph)	0	170	224	26	47	0	0	0	0	92	671	21	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)		4.0	6.5		4.0					4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00					1.00	0.95	1.00	
Frbp, ped/bikes		1.00	0.96		1.00					1.00	1.00	0.95	
Flpb, ped/bikes		1.00	1.00		1.00					0.87	1.00	1.00	
Frt		1.00	0.85		1.00					1.00	1.00	0.85	
Flt Protected		1.00	1.00		0.98					0.95	1.00	1.00	
Satd. Flow (prot)		1676	1365		1561					1186	3094	1326	
Flt Permitted		1.00	1.00		0.89					0.95	1.00	1.00	
Satd. Flow (perm)		1676	1365		1407					1186	3094	1326	
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.89	0.89	0.89	
Adj. Flow (vph)	0	200	264	31	55	0	0	0	0	103	754	24	
RTOR Reduction (vph)	0	0	159	0	0	0	0	0	0	0	0	11	
Lane Group Flow (vph)	0	200	105	0	86	0	0	0	0	103	754	13	
Confl. Peds. (#/hr)	33		14	14		33	20			88	88	20	
Confl. Bikes (#/hr)			10			1				6		3	
Heavy Vehicles (%)	2%	2%	2%	2%	10%	2%	2%	2%	2%	4%	5%	4%	
Parking (#/hr)										5			
Turn Type		NA	Perm	custom	NA					Perm	NA	Perm	
Protected Phases		8		7	4 7						2		
Permitted Phases			8	4						2		2	
Actuated Green, G (s)		20.5	20.5		32.5					48.5	48.5	48.5	
Effective Green, g (s)		23.0	20.5		35.0					50.0	50.0	50.0	
Actuated g/C Ratio		0.26	0.23		0.39					0.56	0.56	0.56	
Clearance Time (s)		6.5	6.5							5.5	5.5	5.5	
Lane Grp Cap (vph)		428	310		560					658	1718	736	
v/s Ratio Prot		c0.12			c0.01						c0.24		
v/s Ratio Perm			0.08		0.05					0.09		0.01	
v/c Ratio		0.47	0.34		0.15					0.16	0.44	0.02	
Uniform Delay, d1		28.3	29.1		17.9					9.7	11.8	9.0	
Progression Factor		1.00	1.00		0.80					1.31	1.20	1.00	
Incremental Delay, d2		3.6	2.9		0.4					0.3	0.5	0.0	
Delay (s)		32.0	32.0		14.6					13.1	14.6	9.0	
Level of Service		C	C		B					B	B	A	
Approach Delay (s)		32.0			14.6			0.0			14.3		
Approach LOS		C			B			A			B		
<b>Intersection Summary</b>													
HCM 2000 Control Delay			20.1									HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.43										
Actuated Cycle Length (s)			90.0									Sum of lost time (s)	11.5
Intersection Capacity Utilization			77.2%									ICU Level of Service	D
Analysis Period (min)			15										
c	Critical Lane Group												

Queues

4: North Lynn Street & Fairfax Drive

1616 North Fort Myer Drive




















Lane Group	EBT	WBT	NBT
Lane Group Flow (vph)	307	109	2161
v/c Ratio	0.77	0.65	0.82
Control Delay	26.1	44.4	18.6
Queue Delay	0.6	0.0	0.0
Total Delay	26.8	44.4	18.6
Queue Length 50th (ft)	62	37	334
Queue Length 95th (ft)	#108	#96	405
Internal Link Dist (ft)	87	77	164
Turn Bay Length (ft)			
Base Capacity (vph)	398	168	2629
Starvation Cap Reductn	10	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.79	0.65	0.82

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis  
4: North Lynn Street & Fairfax Drive

1616 North Fort Myer Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  				
Traffic Volume (vph)	236	25	0	0	47	46	25	2041	51	0	0	0
Future Volume (vph)	236	25	0	0	47	46	25	2041	51	0	0	0
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				
Lane Util. Factor		1.00			1.00			0.91				
Frb, ped/bikes		1.00			0.96			1.00				
Flpb, ped/bikes		1.00			1.00			1.00				
Frt		1.00			0.93			1.00				
Flt Protected		0.96			1.00			1.00				
Satd. Flow (prot)		1588			1457			4549				
Flt Permitted		0.36			1.00			1.00				
Satd. Flow (perm)		597			1457			4549				
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.98	0.98	0.98	0.85	0.85	0.85
Adj. Flow (vph)	278	29	0	0	55	54	26	2083	52	0	0	0
RTOR Reduction (vph)	0	0	0	0	39	0	0	3	0	0	0	0
Lane Group Flow (vph)	0	307	0	0	70	0	0	2158	0	0	0	0
Confl. Peds. (#/hr)	18		8	8		18	18		10	10		18
Confl. Bikes (#/hr)			3			1			7			
Heavy Vehicles (%)	2%	8%	3%	2%	9%	2%	2%	2%	4%	2%	2%	2%
Turn Type	custom	NA			NA		Perm	NA				
Protected Phases	7	4 7			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		28.0			6.0			49.0				
Effective Green, g (s)		30.0			8.0			52.0				
Actuated g/C Ratio		0.33			0.09			0.58				
Clearance Time (s)					6.0			7.0				
Lane Grp Cap (vph)		391			129			2628				
v/s Ratio Prot		c0.15			0.05							
v/s Ratio Perm		c0.11						0.47				
v/c Ratio		0.79			0.54			0.82				
Uniform Delay, d1		27.1			39.2			15.3				
Progression Factor		0.46			1.00			1.00				
Incremental Delay, d2		14.0			15.3			3.0				
Delay (s)		26.5			54.6			18.3				
Level of Service		C			D			B				
Approach Delay (s)		26.5			54.6			18.3			0.0	
Approach LOS		C			D			B			A	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			20.8				HCM 2000 Level of Service		C			
HCM 2000 Volume to Capacity ratio			0.86									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)		14.5			
Intersection Capacity Utilization			77.2%				ICU Level of Service		D			
Analysis Period (min)			15									

c Critical Lane Group

















---

Intersection has too many legs for HCM analysis.

---

HCM Unsignalized Intersection Capacity Analysis  
 6: N. Queen Street/Arlington Boulevard & Fairfax Drive

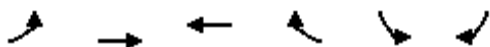
1616 North Fort Myer Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	313	0	0	152	4	243	47	122	8	0	8
Future Volume (Veh/h)	5	313	0	0	152	4	243	47	122	8	0	8
Sign Control		Free			Free			Yield			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.88	0.88	0.88	0.89	0.89	0.89	0.95	0.95	0.95	0.85	0.85	0.85
Hourly flow rate (vph)	6	356	0	0	171	4	256	49	128	9	0	9
Pedestrians		16			20			124			76	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			2			10			6	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	251			480			690	743	500	790	741	265
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	251			480			690	743	500	790	741	265
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			7	83	75	94	100	99
cM capacity (veh/h)	1231			971			274	287	503	161	288	715
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>								
Volume Total	362	175	433	18								
Volume Left	6	0	256	9								
Volume Right	0	4	128	9								
cSH	1231	1700	319	263								
Volume to Capacity	0.00	0.10	1.36	0.07								
Queue Length 95th (ft)	0	0	544	5								
Control Delay (s)	0.2	0.0	212.6	19.7								
Lane LOS	A		F	C								
Approach Delay (s)	0.2	0.0	212.6	19.7								
Approach LOS			F	C								
<b>Intersection Summary</b>												
Average Delay			93.6									
Intersection Capacity Utilization			62.6%		ICU Level of Service				B			
Analysis Period (min)			15									

# HCM Unsignalized Intersection Capacity Analysis

## 7: Fairfax Drive & N. Pierce Street

1616 North Fort Myer Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	95	349	106	35	30	50
Future Volume (Veh/h)	95	349	106	35	30	50
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	112	411	125	41	35	59
Pedestrians					25	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					2	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	191				806	170
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	191				806	170
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	92				89	93
cM capacity (veh/h)	1354				313	855
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>			
Volume Total	523	166	94			
Volume Left	112	0	35			
Volume Right	0	41	59			
cSH	1354	1700	520			
Volume to Capacity	0.08	0.10	0.18			
Queue Length 95th (ft)	7	0	16			
Control Delay (s)	2.4	0.0	13.4			
Lane LOS	A		B			
Approach Delay (s)	2.4	0.0	13.4			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			3.2			
Intersection Capacity Utilization			53.0%		ICU Level of Service	A
Analysis Period (min)			15			



HCM Unsignalized Intersection Capacity Analysis  
 8: Fort Myer Drive & Site Driveway

1616 North Fort Myer Drive



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	15	0	0	769	5
Future Volume (Veh/h)	0	15	0	0	769	5
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	0	18	0	0	905	6
Pedestrians	20					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	2					
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)				159	674	
pX, platoon unblocked						
vC, conflicting volume	928	249	931			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	928	249	931			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	262	738	718			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3	SB 4	
Volume Total	18	259	259	259	135	
Volume Left	0	0	0	0	0	
Volume Right	18	0	0	0	6	
cSH	738	1700	1700	1700	1700	
Volume to Capacity	0.02	0.15	0.15	0.15	0.08	
Queue Length 95th (ft)	2	0	0	0	0	
Control Delay (s)	10.0	0.0	0.0	0.0	0.0	
Lane LOS	A					
Approach Delay (s)	10.0	0.0				
Approach LOS	A					
Intersection Summary						
Average Delay	0.2					
Intersection Capacity Utilization	22.9%			ICU Level of Service	A	
Analysis Period (min)	15					

HCM Unsignalized Intersection Capacity Analysis  
 9: Fairfax Drive & Site Driveway

1616 North Fort Myer Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	25	325	43	24	69	15
Future Volume (Veh/h)	25	325	43	24	69	15
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	29	382	51	28	81	18
Pedestrians					33	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					3	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			442			
pX, platoon unblocked						
vC, conflicting volume	112				538	98
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	112				538	98
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				83	98
cM capacity (veh/h)	1437				480	932
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>			
Volume Total	411	79	99			
Volume Left	29	0	81			
Volume Right	0	28	18			
cSH	1437	1700	527			
Volume to Capacity	0.02	0.05	0.19			
Queue Length 95th (ft)	2	0	17			
Control Delay (s)	0.7	0.0	13.4			
Lane LOS	A		B			
Approach Delay (s)	0.7	0.0	13.4			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			2.8			
Intersection Capacity Utilization			39.1%	ICU Level of Service		A
Analysis Period (min)			15			

Queues

1: Fort Myer Drive & Wilson Boulevard

1616 North Fort Myer Drive



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	55	958	369	836	20	72	317	167
v/c Ratio	0.40	0.69	1.18	0.52	0.06	0.13	1.17	0.13
Control Delay	34.7	25.2	127.1	15.6	14.1	11.6	137.6	18.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.7	25.2	127.1	15.6	14.1	11.6	137.6	18.0
Queue Length 50th (ft)	24	149	~170	228	6	16	~216	21
Queue Length 95th (ft)	58	180	#346	299	m10	22	#360	35
Internal Link Dist (ft)		299		201		594		520
Turn Bay Length (ft)	175						200	
Base Capacity (vph)	139	1383	313	1603	329	565	271	1275
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.69	1.18	0.52	0.06	0.13	1.17	0.13

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

# HCM Signalized Intersection Capacity Analysis

## 1: Fort Myer Drive & Wilson Boulevard

1616 North Fort Myer Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	541	274	336	708	53	17	49	12	276	86	59
Future Volume (vph)	47	541	274	336	708	53	17	49	12	276	86	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	4.0		4.0	1.0		6.0	6.0		4.5	4.5	
Lane Util. Factor	1.00	0.91		1.00	0.95		1.00	1.00		1.00	0.91	
Frbp, ped/bikes	1.00	0.91		1.00	0.95		1.00	0.93		1.00	0.91	
Flpb, ped/bikes	0.79	1.00		0.99	1.00		0.84	1.00		0.69	1.00	
Frt	1.00	0.95		1.00	0.99		1.00	0.97		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1260	3787		1537	2874		1331	1518		949	3322	
Flt Permitted	0.34	1.00		0.18	1.00		0.64	1.00		0.71	1.00	
Satd. Flow (perm)	447	3787		289	2874		899	1518		709	3322	
Peak-hour factor, PHF	0.85	0.85	0.85	0.91	0.91	0.91	0.85	0.85	0.85	0.87	0.87	0.87
Adj. Flow (vph)	55	636	322	369	778	58	20	58	14	317	99	68
RTOR Reduction (vph)	0	78	0	0	6	0	0	9	0	0	2	0
Lane Group Flow (vph)	55	880	0	369	830	0	20	63	0	317	165	0
Confl. Peds. (#/hr)	742		247	247		742	246		299	299		246
Confl. Bikes (#/hr)			22			1			4			5
Heavy Vehicles (%)	2%	8%	2%	5%	7%	2%	2%	2%	2%	3%	11%	18%
Parking (#/hr)										6	12	6
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	28.0	28.0		47.0	47.0		33.0	33.0		32.0	32.0	
Effective Green, g (s)	28.0	31.0		50.0	50.0		33.0	33.0		34.5	34.5	
Actuated g/C Ratio	0.31	0.34		0.56	0.56		0.37	0.37		0.38	0.38	
Clearance Time (s)	7.0	7.0		7.0	4.0		6.0	6.0		7.0	7.0	
Lane Grp Cap (vph)	139	1304		326	1596		329	556		271	1273	
v/s Ratio Prot		0.23		c0.15	0.29			0.04			0.05	
v/s Ratio Perm	0.12			c0.48			0.02			c0.45		
v/c Ratio	0.40	0.67		1.13	0.52		0.06	0.11		1.17	0.13	
Uniform Delay, d1	24.4	25.2		17.3	12.5		18.5	18.8		27.8	18.0	
Progression Factor	1.00	1.00		0.94	1.15		0.73	0.69		1.00	1.00	
Incremental Delay, d2	8.2	2.8		88.5	1.1		0.3	0.4		108.6	0.2	
Delay (s)	32.6	28.0		104.8	15.6		13.8	13.5		136.3	18.2	
Level of Service	C	C		F	B		B	B		F	B	
Approach Delay (s)		28.3			42.9			13.5			95.6	
Approach LOS		C			D			B			F	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			45.7				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			1.23									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)		14.0			
Intersection Capacity Utilization			79.0%				ICU Level of Service			D		
Analysis Period (min)			15									
c Critical Lane Group												

Queues

2: Wilson Boulevard & North Lynn Street

1616 North Fort Myer Drive



























Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	571	501	514	88	287	1677	254
v/c Ratio	0.83	0.64	0.72	0.28	0.52	0.82	0.51
Control Delay	44.5	24.3	38.4	2.3	25.0	29.1	14.1
Queue Delay	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Total Delay	44.5	24.7	38.4	2.3	25.0	29.1	14.1
Queue Length 50th (ft)	136	220	142	0	154	279	76
Queue Length 95th (ft)	m163	m274	199	0	m207	327	m118
Internal Link Dist (ft)		118	624			760	
Turn Bay Length (ft)				125	180		135
Base Capacity (vph)	686	777	715	310	554	2048	501
Starvation Cap Reductn	0	48	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.69	0.72	0.28	0.52	0.82	0.51

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis  
 2: Wilson Boulevard & North Lynn Street

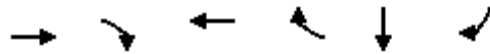
1616 North Fort Myer Drive

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	 				 			  					
Traffic Volume (vph)	485	426	0	0	488	84	267	1560	236	0	0	0	
Future Volume (vph)	485	426	0	0	488	84	267	1560	236	0	0	0	
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	4.0	4.0	4.0				
Lane Util. Factor	0.97	1.00			0.95	1.00	1.00	0.86	1.00				
Frbp, ped/bikes	1.00	1.00			1.00	0.59	1.00	1.00	0.84				
Flpb, ped/bikes	1.00	1.00			1.00	1.00	0.96	1.00	1.00				
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85				
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00				
Satd. Flow (prot)	3090	1555			3065	773	1511	5587	1052				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	1.00	1.00				
Satd. Flow (perm)	3090	1555			3065	773	1511	5587	1052				
Peak-hour factor, PHF	0.85	0.85	0.85	0.95	0.95	0.95	0.93	0.93	0.93	0.85	0.85	0.85	
Adj. Flow (vph)	571	501	0	0	514	88	287	1677	254	0	0	0	
RTOR Reduction (vph)	0	0	0	0	0	67	0	0	115	0	0	0	
Lane Group Flow (vph)	571	501	0	0	514	21	287	1677	139	0	0	0	
Confl. Peds. (#/hr)	550		111	111		550	51		178	178		51	
Confl. Bikes (#/hr)			12			2			4			3	
Heavy Vehicles (%)	2%	10%	2%	2%	6%	11%	3%	2%	2%	2%	2%	2%	
Parking (#/hr)								5	5				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm				
Protected Phases	5	2			6			8					
Permitted Phases						6	8		8				
Actuated Green, G (s)	17.5	42.0			18.0	18.0	30.0	30.0	30.0				
Effective Green, g (s)	20.0	45.0			21.0	21.0	33.0	33.0	33.0				
Actuated g/C Ratio	0.22	0.50			0.23	0.23	0.37	0.37	0.37				
Clearance Time (s)	6.5	7.0			7.0	7.0	7.0	7.0	7.0				
Lane Grp Cap (vph)	686	777			715	180	554	2048	385				
v/s Ratio Prot	c0.18	0.32			c0.17			c0.30					
v/s Ratio Perm						0.03	0.19		0.13				
v/c Ratio	0.83	0.64			0.72	0.11	0.52	0.82	0.36				
Uniform Delay, d1	33.4	16.6			31.8	27.2	22.3	25.8	20.8				
Progression Factor	1.08	1.25			1.00	1.00	1.00	1.03	1.67				
Incremental Delay, d2	7.5	2.6			6.1	1.3	2.0	2.2	1.5				
Delay (s)	43.7	23.4			37.9	28.5	24.3	28.8	36.2				
Level of Service	D	C			D	C	C	C	D				
Approach Delay (s)		34.2			36.5			29.1			0.0		
Approach LOS		C			D			C			A		
<b>Intersection Summary</b>													
HCM 2000 Control Delay			31.6		HCM 2000 Level of Service				C				
HCM 2000 Volume to Capacity ratio			0.78										
Actuated Cycle Length (s)			90.0		Sum of lost time (s)				15.0				
Intersection Capacity Utilization			66.4%		ICU Level of Service				C				
Analysis Period (min)			15										
c	Critical Lane Group												

Queues

3: Fairfax Drive & Fort Myer Drive

1616 North Fort Myer Drive



Lane Group	EBT	EBR	WBT	WBR	SBT	SBR
Lane Group Flow (vph)	200	264	86	58	857	24
v/c Ratio	0.50	0.56	0.17	0.12	0.51	0.03
Control Delay	33.8	13.3	22.9	10.7	15.4	0.0
Queue Delay	0.0	0.0	3.5	1.3	0.1	0.0
Total Delay	33.8	13.3	26.4	12.0	15.5	0.0
Queue Length 50th (ft)	97	27	36	4	140	0
Queue Length 95th (ft)	154	86	m50	m15	m157	m0
Internal Link Dist (ft)	362		87		79	
Turn Bay Length (ft)		200				
Base Capacity (vph)	399	469	508	471	1683	790
Starvation Cap Reductn	0	0	346	294	0	0
Spillback Cap Reductn	1	0	0	0	102	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.56	0.53	0.33	0.54	0.03



















Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

# HCM Signalized Intersection Capacity Analysis

## 3: Fairfax Drive & Fort Myer Drive

1616 North Fort Myer Drive

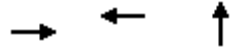
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	141	224	26	47	49	0	0	0	92	671	21
Future Volume (vph)	29	141	224	26	47	49	0	0	0	92	671	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	6.5		4.0	6.5					4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00					0.95	1.00
Frbp, ped/bikes		1.00	0.96		1.00	0.93					1.00	0.95
Flpb, ped/bikes		0.99	1.00		1.00	1.00					0.98	1.00
Frt		1.00	0.85		1.00	0.85					1.00	0.85
Flt Protected		0.99	1.00		0.98	1.00					0.99	1.00
Satd. Flow (prot)		1649	1365		1561	1321					3030	1326
Flt Permitted		0.94	1.00		0.89	1.00					0.99	1.00
Satd. Flow (perm)		1562	1365		1407	1321					3030	1326
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.89	0.89	0.89
Adj. Flow (vph)	34	166	264	31	55	58	0	0	0	103	754	24
RTOR Reduction (vph)	0	0	159	0	0	37	0	0	0	0	0	11
Lane Group Flow (vph)	0	200	105	0	86	21	0	0	0	0	857	13
Confl. Peds. (#/hr)	33		14	14		33	20		88	88		20
Confl. Bikes (#/hr)			10			1			6			3
Heavy Vehicles (%)	2%	2%	2%	2%	10%	2%	2%	2%	2%	4%	5%	4%
Parking (#/hr)										5		
Turn Type	Perm	NA	Perm	custom	NA	Perm				Perm	NA	Perm
Protected Phases		8		7	4 7						2	
Permitted Phases	8		8	4		4 7				2		2
Actuated Green, G (s)		20.5	20.5		32.5	32.5					48.5	48.5
Effective Green, g (s)		23.0	20.5		35.0	32.5					50.0	50.0
Actuated g/C Ratio		0.26	0.23		0.39	0.36					0.56	0.56
Clearance Time (s)		6.5	6.5								5.5	5.5
Lane Grp Cap (vph)		399	310		560	477					1683	736
v/s Ratio Prot					c0.01							
v/s Ratio Perm		c0.13	0.08		0.05	0.02					0.28	0.01
v/c Ratio		0.50	0.34		0.15	0.04					0.51	0.02
Uniform Delay, d1		28.6	29.1		17.9	18.7					12.4	9.0
Progression Factor		1.00	1.00		1.10	1.64					1.16	1.00
Incremental Delay, d2		4.4	2.9		0.4	0.1					0.7	0.0
Delay (s)		33.0	32.0		20.0	30.8					15.2	9.0
Level of Service		C	C		C	C					B	A
Approach Delay (s)		32.5			24.4			0.0			15.0	
Approach LOS		C			C			A			B	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			21.4									HCM 2000 Level of Service C
HCM 2000 Volume to Capacity ratio			0.49									
Actuated Cycle Length (s)			90.0							11.5		
Intersection Capacity Utilization			77.2%									ICU Level of Service D
Analysis Period (min)			15									
c Critical Lane Group												



Queues

4: North Lynn Street & Fairfax Drive

1616 North Fort Myer Drive



Lane Group	EBT	WBT	NBT
Lane Group Flow (vph)	273	109	2161
v/c Ratio	0.69	0.65	0.82
Control Delay	20.9	44.4	18.7
Queue Delay	1.8	0.0	0.0
Total Delay	22.7	44.4	18.7
Queue Length 50th (ft)	62	37	334
Queue Length 95th (ft)	97	#96	405
Internal Link Dist (ft)	87	77	164
Turn Bay Length (ft)			
Base Capacity (vph)	398	168	2626
Starvation Cap Reductn	41	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.76	0.65	0.82


















Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

# HCM Signalized Intersection Capacity Analysis

## 4: North Lynn Street & Fairfax Drive

1616 North Fort Myer Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  				
Traffic Volume (vph)	207	25	0	0	47	46	74	1992	51	0	0	0
Future Volume (vph)	207	25	0	0	47	46	74	1992	51	0	0	0
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				
Lane Util. Factor		1.00			1.00			0.91				
Frbp, ped/bikes		1.00			0.96			1.00				
Flpb, ped/bikes		1.00			1.00			1.00				
Frt		1.00			0.93			1.00				
Flt Protected		0.96			1.00			1.00				
Satd. Flow (prot)		1588			1457			4543				
Flt Permitted		0.36			1.00			1.00				
Satd. Flow (perm)		600			1457			4543				
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.98	0.98	0.98	0.85	0.85	0.85
Adj. Flow (vph)	244	29	0	0	55	54	76	2033	52	0	0	0
RTOR Reduction (vph)	0	0	0	0	39	0	0	3	0	0	0	0
Lane Group Flow (vph)	0	273	0	0	70	0	0	2158	0	0	0	0
Confl. Peds. (#/hr)	18		8	8		18	18		10	10		18
Confl. Bikes (#/hr)			3			1			7			
Heavy Vehicles (%)	2%	8%	3%	2%	9%	2%	2%	2%	4%	2%	2%	2%
Turn Type	custom	NA			NA		Perm	NA				
Protected Phases	7	4 7			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		28.0			6.0			49.0				
Effective Green, g (s)		30.0			8.0			52.0				
Actuated g/C Ratio		0.33			0.09			0.58				
Clearance Time (s)					6.0			7.0				
Lane Grp Cap (vph)		392			129			2624				
v/s Ratio Prot		c0.14			0.05							
v/s Ratio Perm		c0.10						0.48				
v/c Ratio		0.70			0.54			0.82				
Uniform Delay, d1		26.0			39.2			15.3				
Progression Factor		0.50			1.00			1.00				
Incremental Delay, d2		8.7			15.3			3.1				
Delay (s)		21.7			54.6			18.3				
Level of Service		C			D			B				
Approach Delay (s)		21.7			54.6			18.3			0.0	
Approach LOS		C			D			B			A	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			20.3				HCM 2000 Level of Service		C			
HCM 2000 Volume to Capacity ratio			0.83									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)		14.5			
Intersection Capacity Utilization			77.1%				ICU Level of Service		D			
Analysis Period (min)			15									

c Critical Lane Group

---

















Intersection has too many legs for HCM analysis.

---

# HCM Unsignalized Intersection Capacity Analysis

## 6: N. Queen Street/Arlington Boulevard & Fairfax Drive

1616 North Fort Myer Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	313	0	0	152	4	243	47	122	8	0	8
Future Volume (Veh/h)	5	313	0	0	152	4	243	47	122	8	0	8
Sign Control	Free			Free			Yield			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.88	0.88	0.88	0.89	0.89	0.89	0.95	0.95	0.95	0.85	0.85	0.85
Hourly flow rate (vph)	6	356	0	0	171	4	256	49	128	9	0	9
Pedestrians	16			20			124			76		
Lane Width (ft)	12.0			12.0			12.0			12.0		
Walking Speed (ft/s)	4.0			4.0			4.0			4.0		
Percent Blockage	1			2			10			6		
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	251			480			690	743	500	790	741	265
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	251			480			690	743	500	790	741	265
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			7	83	75	94	100	99
cM capacity (veh/h)	1231			971			274	287	503	161	288	715
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	362	175	433	18								
Volume Left	6	0	256	9								
Volume Right	0	4	128	9								
cSH	1231	1700	319	263								
Volume to Capacity	0.00	0.10	1.36	0.07								
Queue Length 95th (ft)	0	0	544	5								
Control Delay (s)	0.2	0.0	212.6	19.7								
Lane LOS	A		F	C								
Approach Delay (s)	0.2	0.0	212.6	19.7								
Approach LOS			F	C								
Intersection Summary												
Average Delay			93.6									
Intersection Capacity Utilization			62.6%	ICU Level of Service	B							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis  
 7: Fairfax Drive & N. Pierce Street

1616 North Fort Myer Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	95	349	106	35	30	50
Future Volume (Veh/h)	95	349	106	35	30	50
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	112	411	125	41	35	59
Pedestrians					25	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					2	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	191				806	170
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	191				806	170
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	92				89	93
cM capacity (veh/h)	1354				313	855
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>			
Volume Total	523	166	94			
Volume Left	112	0	35			
Volume Right	0	41	59			
cSH	1354	1700	520			
Volume to Capacity	0.08	0.10	0.18			
Queue Length 95th (ft)	7	0	16			
Control Delay (s)	2.4	0.0	13.4			
Lane LOS	A		B			
Approach Delay (s)	2.4	0.0	13.4			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			3.2			
Intersection Capacity Utilization			53.0%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
 8: Fort Myer Drive & Site Driveway

1616 North Fort Myer Drive



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	8	15	8	70	769	5
Future Volume (Veh/h)	8	15	8	70	769	5
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	9	18	9	82	905	6
Pedestrians	20					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	2					
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)				159	674	
pX, platoon unblocked						
vC, conflicting volume	1028	325	931			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1028	325	931			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	96	97	99			
cM capacity (veh/h)	223	660	718			
Direction, Lane #	EB 1	NB 1	SB 1	SB 2	SB 3	
Volume Total	27	91	362	362	187	
Volume Left	9	9	0	0	0	
Volume Right	18	0	0	0	6	
cSH	399	718	1700	1700	1700	
Volume to Capacity	0.07	0.01	0.21	0.21	0.11	
Queue Length 95th (ft)	5	1	0	0	0	
Control Delay (s)	14.7	1.1	0.0	0.0	0.0	
Lane LOS	B	A				
Approach Delay (s)	14.7	1.1	0.0			
Approach LOS	B					
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			26.6%	ICU Level of Service	A	
Analysis Period (min)			15			

# HCM Unsignalized Intersection Capacity Analysis

## 9: Fairfax Drive & Site Driveway

1616 North Fort Myer Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	25	325	43	24	69	15
Future Volume (Veh/h)	25	325	43	24	69	15
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	29	382	51	28	81	18
Pedestrians					33	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					3	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			442			
pX, platoon unblocked						
vC, conflicting volume	112				538	98
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	112				538	98
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				83	98
cM capacity (veh/h)	1437				480	932
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>			
Volume Total	411	79	99			
Volume Left	29	0	81			
Volume Right	0	28	18			
cSH	1437	1700	527			
Volume to Capacity	0.02	0.05	0.19			
Queue Length 95th (ft)	2	0	17			
Control Delay (s)	0.7	0.0	13.4			
Lane LOS	A		B			
Approach Delay (s)	0.7	0.0	13.4			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			2.8			
Intersection Capacity Utilization			39.1%		ICU Level of Service	A
Analysis Period (min)			15			

Intersection														
Int Delay, s/veh	5.4													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations					↕		↕	↕↕			↕↕	↕		
Traffic Vol, veh/h	0	0	0	43	0	0	89	1408	0	0	550	358	0	0
Future Vol, veh/h	0	0	0	43	0	0	89	1408	0	0	550	358	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	62	0	56	56	0	62	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	-	-	-	-	-	-	Yield	-	-
Storage Length	-	-	-	-	-	0	180	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-	16974	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	47	0	0	97	1530	0	0	598	389	0	0

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	2023	2384	- 660
Stage 1	1724	1724	- -
Stage 2	299	660	- -
Critical Hdwy	6.84	6.54	- 4.14
Critical Hdwy Stg 1	5.84	5.54	- -
Critical Hdwy Stg 2	5.84	5.54	- -
Follow-up Hdwy	3.52	4.02	- 2.22
Pot Cap-1 Maneuver	50	34	0 924
Stage 1	129	142	0 -
Stage 2	726	458	0 -
Platoon blocked, %			- -
Mov Cap-1 Maneuver	~ 45	0	- 924
Mov Cap-2 Maneuver	~ 45	0	- -
Stage 1	115	0	- -
Stage 2	726	0	- -

Approach	WB	NB	SB
HCM Control Delay, s	287.3	0.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBTWBLn1WBLn2	SBT	SBR
Capacity (veh/h)	924	- 45	- -	-
HCM Lane V/C Ratio	0.105	- 1.039	- -	-
HCM Control Delay (s)	9.4	- 287.3	0 -	-
HCM Lane LOS	A	- F	A -	-
HCM 95th %tile Q(veh)	0.3	- 4.3	- -	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon



Intersection														
Int Delay, s/veh	5.4													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations					↕		↕	↕↕			↕↕	↕		
Traffic Vol, veh/h	0	0	0	43	0	0	89	1408	0	0	550	358	0	0
Future Vol, veh/h	0	0	0	43	0	0	89	1408	0	0	550	358	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	62	0	56	56	0	62	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	-	-	-	-	-	-	Yield	-	-
Storage Length	-	-	-	-	-	0	180	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-	16974	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	47	0	0	97	1530	0	0	598	389	0	0

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	2023	2384	- 660
Stage 1	1724	1724	- -
Stage 2	299	660	- -
Critical Hdwy	6.84	6.54	- 4.14
Critical Hdwy Stg 1	5.84	5.54	- -
Critical Hdwy Stg 2	5.84	5.54	- -
Follow-up Hdwy	3.52	4.02	- 2.22
Pot Cap-1 Maneuver	50	34	0 924
Stage 1	129	142	0 -
Stage 2	726	458	0 -
Platoon blocked, %			- -
Mov Cap-1 Maneuver	~ 45	0	- 924
Mov Cap-2 Maneuver	~ 45	0	- -
Stage 1	115	0	- -
Stage 2	726	0	- -

Approach	WB	NB	SB
HCM Control Delay, s	287.3	0.6	0
HCM LOS	F		

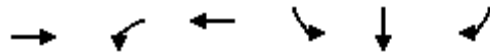
Minor Lane/Major Mvmt	NBL	NBTWBLn1WBLn2	SBT	SBR
Capacity (veh/h)	924	- 45	- -	-
HCM Lane V/C Ratio	0.105	- 1.039	- -	-
HCM Control Delay (s)	9.4	- 287.3	0 -	-
HCM Lane LOS	A	- F	A -	-
HCM 95th %tile Q(veh)	0.3	- 4.3	- -	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Queues

1: Fort Myer Drive & Wilson Boulevard

1616 North Fort Myer Drive



Lane Group	EBT	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	1138	580	671	713	206	109
v/c Ratio	0.76	2.12	0.40	1.90	0.13	0.23
Control Delay	27.1	535.0	15.9	435.9	18.3	3.5
Queue Delay	0.2	0.0	0.0	2.3	0.0	0.0
Total Delay	27.4	535.0	15.9	438.1	18.3	3.5
Queue Length 50th (ft)	189	~496	119	~627	27	0
Queue Length 95th (ft)	222	#704	167	#781	41	19
Internal Link Dist (ft)	299		201		520	
Turn Bay Length (ft)						200
Base Capacity (vph)	1497	274	1671	376	1644	479
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	54	0	0	70	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.79	2.12	0.40	2.33	0.13	0.23

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.




























# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

# HCM Signalized Intersection Capacity Analysis

## 1: Fort Myer Drive & Wilson Boulevard

1616 North Fort Myer Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  		 	 					  	  	 
Traffic Volume (vph)	0	728	240	528	611	0	0	0	0	606	175	93
Future Volume (vph)	0	728	240	528	611	0	0	0	0	606	175	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	1.0					4.5	4.5	4.5
Lane Util. Factor		0.91		1.00	0.95					1.00	0.91	1.00
Frbp, ped/bikes		0.93		1.00	1.00					1.00	1.00	0.84
Flpb, ped/bikes		1.00		1.00	1.00					0.71	1.00	1.00
Frt		0.96		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		4028		1557	3008					982	4291	1036
Flt Permitted		1.00		0.13	1.00					0.95	1.00	1.00
Satd. Flow (perm)		4028		215	3008					982	4291	1036
Peak-hour factor, PHF	0.85	0.85	0.85	0.91	0.91	0.91	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	0	856	282	580	671	0	0	0	0	713	206	109
RTOR Reduction (vph)	0	66	0	0	0	0	0	0	0	0	0	67
Lane Group Flow (vph)	0	1072	0	580	671	0	0	0	0	713	206	42
Confl. Peds. (#/hr)	998		250	250		998	182		345	345		182
Confl. Bikes (#/hr)			22			1			4			5
Heavy Vehicles (%)	2%	3%	6%	4%	8%	2%	2%	2%	2%	2%	3%	2%
Parking (#/hr)										6	12	6
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		29.0		47.0	47.0					32.0	32.0	32.0
Effective Green, g (s)		32.0		50.0	50.0					34.5	34.5	34.5
Actuated g/C Ratio		0.36		0.56	0.56					0.38	0.38	0.38
Clearance Time (s)		7.0		7.0	4.0					7.0	7.0	7.0
Lane Grp Cap (vph)		1432		283	1671					376	1644	397
v/s Ratio Prot		0.27		c0.25	0.22						0.05	
v/s Ratio Perm				c0.89						c0.73		0.04
v/c Ratio		0.75		2.05	0.40					1.90	0.13	0.11
Uniform Delay, d1		25.5		21.0	11.4					27.8	18.0	17.8
Progression Factor		1.00		1.36	1.31					1.00	1.00	1.00
Incremental Delay, d2		3.6		483.8	0.7					413.2	0.2	0.5
Delay (s)		29.1		512.4	15.7					441.0	18.1	18.4
Level of Service		C		F	B					F	B	B
Approach Delay (s)		29.1			246.0			0.0			311.4	
Approach LOS		C			F			A			F	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			193.4			HCM 2000 Level of Service				F		
HCM 2000 Volume to Capacity ratio			2.09									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			12.5			
Intersection Capacity Utilization			103.1%			ICU Level of Service			G			
Analysis Period (min)			15									
c	Critical Lane Group											

Queues

2: Wilson Boulevard & North Lynn Street

1616 North Fort Myer Drive


























Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	612	1145	413	273	323	1187	189
v/c Ratio	0.78	1.26	0.55	0.83	0.68	0.66	0.43
Control Delay	28.1	136.1	32.8	35.2	32.1	26.5	10.4
Queue Delay	0.0	1.2	0.0	0.0	0.0	0.0	0.0
Total Delay	28.1	137.2	32.8	35.2	32.1	26.5	10.4
Queue Length 50th (ft)	163	~839	107	56	175	185	37
Queue Length 95th (ft)	m156	m#706	155	#204	278	228	m91
Internal Link Dist (ft)		118	624			760	
Turn Bay Length (ft)				125	180		135
Base Capacity (vph)	789	912	756	330	478	1800	444
Starvation Cap Reductn	0	172	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.78	1.55	0.55	0.83	0.68	0.66	0.43

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis  
 2: Wilson Boulevard & North Lynn Street

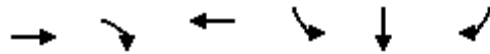
1616 North Fort Myer Drive

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	 				 			  					
Traffic Volume (vph)	545	1019	0	0	384	254	304	1116	178	0	0	0	
Future Volume (vph)	545	1019	0	0	384	254	304	1116	178	0	0	0	
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	4.0	4.0	4.0				
Lane Util. Factor	0.97	1.00			0.95	1.00	1.00	0.86	1.00				
Frbp, ped/bikes	1.00	1.00			1.00	0.58	1.00	1.00	0.88				
Flpb, ped/bikes	1.00	1.00			1.00	1.00	0.95	1.00	1.00				
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85				
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00				
Satd. Flow (prot)	3090	1676			3094	826	1485	5587	1023				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	1.00	1.00				
Satd. Flow (perm)	3090	1676			3094	826	1485	5587	1023				
Peak-hour factor, PHF	0.89	0.89	0.89	0.93	0.93	0.93	0.94	0.94	0.94	0.85	0.85	0.85	
Adj. Flow (vph)	612	1145	0	0	413	273	323	1187	189	0	0	0	
RTOR Reduction (vph)	0	0	0	0	0	128	0	0	115	0	0	0	
Lane Group Flow (vph)	612	1145	0	0	413	145	323	1187	74	0	0	0	
Confl. Peds. (#/hr)	586		84	84		586	53		111	111		53	
Confl. Bikes (#/hr)			12			2			4			3	
Heavy Vehicles (%)	2%	2%	2%	2%	5%	2%	4%	2%	10%	2%	2%	2%	
Parking (#/hr)								5	5				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm				
Protected Phases	5	2			6			8					
Permitted Phases						6	8		8				
Actuated Green, G (s)	20.5	46.0			19.0	19.0	26.0	26.0	26.0				
Effective Green, g (s)	23.0	49.0			22.0	22.0	29.0	29.0	29.0				
Actuated g/C Ratio	0.26	0.54			0.24	0.24	0.32	0.32	0.32				
Clearance Time (s)	6.5	7.0			7.0	7.0	7.0	7.0	7.0				
Lane Grp Cap (vph)	789	912			756	201	478	1800	329				
v/s Ratio Prot	0.20	c0.68			0.13			0.21					
v/s Ratio Perm						0.17	c0.22		0.07				
v/c Ratio	0.78	1.26			0.55	0.72	0.68	0.66	0.22				
Uniform Delay, d1	31.1	20.5			29.6	31.2	26.4	26.3	22.3				
Progression Factor	0.86	0.80			1.00	1.00	0.94	0.94	1.49				
Incremental Delay, d2	0.7	115.8			2.8	19.8	6.3	1.6	1.3				
Delay (s)	27.6	132.1			32.5	51.0	31.3	26.3	34.6				
Level of Service	C	F			C	D	C	C	C				
Approach Delay (s)		95.7			39.8			28.2			0.0		
Approach LOS		F			D			C			A		
<b>Intersection Summary</b>													
HCM 2000 Control Delay			58.8									HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			1.08										
Actuated Cycle Length (s)			90.0									Sum of lost time (s)	15.0
Intersection Capacity Utilization			103.1%									ICU Level of Service	G
Analysis Period (min)			15										
c Critical Lane Group													

Queues

3: Fairfax Drive & Fort Myer Drive

1616 North Fort Myer Drive



Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	115	157	89	141	2382	255
v/c Ratio	0.31	0.44	0.18	0.19	1.35	0.32
Control Delay	29.8	15.1	16.8	14.0	184.4	6.5
Queue Delay	0.0	0.0	2.3	0.7	0.0	0.0
Total Delay	29.8	15.1	19.1	14.7	184.4	6.5
Queue Length 50th (ft)	53	22	25	46	~932	27
Queue Length 95th (ft)	98	75	m38	m65	m#832	m46
Internal Link Dist (ft)	362		87		79	
Turn Bay Length (ft)		200				
Base Capacity (vph)	374	357	497	731	1769	798
Starvation Cap Reductn	0	0	308	0	0	0
Spillback Cap Reductn	1	0	0	366	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.44	0.47	0.39	1.35	0.32



















Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

# HCM Signalized Intersection Capacity Analysis

## 3: Fairfax Drive & Fort Myer Drive

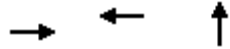
1616 North Fort Myer Drive

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations														
Traffic Volume (vph)	0	101	138	42	34	0	0	0	0	123	2072	222		
Future Volume (vph)	0	101	138	42	34	0	0	0	0	123	2072	222		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Total Lost time (s)		4.0	6.5		4.0					4.0	4.0	4.0		
Lane Util. Factor		1.00	1.00		1.00					1.00	0.95	1.00		
Frbp, ped/bikes		1.00	0.96		1.00					1.00	1.00	0.91		
Flpb, ped/bikes		1.00	1.00		0.99					0.95	1.00	1.00		
Frt		1.00	0.85		1.00					1.00	1.00	0.85		
Flt Protected		1.00	1.00		0.97					0.95	1.00	1.00		
Satd. Flow (prot)		1467	1200		1584					1316	3185	1277		
Flt Permitted		1.00	1.00		0.84					0.95	1.00	1.00		
Satd. Flow (perm)		1467	1200		1364					1316	3185	1277		
Peak-hour factor, PHF	0.88	0.88	0.88	0.85	0.85	0.85	0.85	0.85	0.85	0.87	0.87	0.87		
Adj. Flow (vph)	0	115	157	49	40	0	0	0	0	141	2382	255		
RTOR Reduction (vph)	0	0	84	0	0	0	0	0	0	0	0	89		
Lane Group Flow (vph)	0	115	73	0	89	0	0	0	0	141	2382	166		
Confl. Peds. (#/hr)	39		13	13		39	48		31	31		48		
Confl. Bikes (#/hr)			7			2			4			7		
Heavy Vehicles (%)	2%	2%	2%	2%	7%	2%	2%	2%	2%	3%	2%	3%		
Parking (#/hr)		5	5							5				
Turn Type		NA	Perm	custom	NA					Perm	NA	Perm		
Protected Phases		8		7	4 7						2			
Permitted Phases			8	4						2		2		
Actuated Green, G (s)		20.5	20.5		32.5					48.5	48.5	48.5		
Effective Green, g (s)		23.0	20.5		35.0					50.0	50.0	50.0		
Actuated g/C Ratio		0.26	0.23		0.39					0.56	0.56	0.56		
Clearance Time (s)		6.5	6.5							5.5	5.5	5.5		
Lane Grp Cap (vph)		374	273		550					731	1769	709		
v/s Ratio Prot		c0.08			c0.01						c0.75			
v/s Ratio Perm			0.06		0.05					0.11		0.13		
v/c Ratio		0.31	0.27		0.16					0.19	1.35	0.23		
Uniform Delay, d1		27.1	28.6		17.9					10.0	20.0	10.2		
Progression Factor		1.00	1.00		0.79					1.32	1.24	2.02		
Incremental Delay, d2		2.1	2.4		0.5					0.5	159.3	0.7		
Delay (s)		29.2	31.0		14.7					13.6	184.1	21.3		
Level of Service		C	C		B					B	F	C		
Approach Delay (s)		30.2			14.7			0.0			160.5			
Approach LOS		C			B			A			F			
<b>Intersection Summary</b>														
HCM 2000 Control Delay			145.1									HCM 2000 Level of Service	F	
HCM 2000 Volume to Capacity ratio			0.97											
Actuated Cycle Length (s)			90.0								11.5			
Intersection Capacity Utilization			114.1%										ICU Level of Service	H
Analysis Period (min)			15											
c Critical Lane Group														

Queues

4: North Lynn Street & Fairfax Drive

1616 North Fort Myer Drive



Lane Group	EBT	WBT	NBT
Lane Group Flow (vph)	261	111	1443
v/c Ratio	0.65	0.69	0.56
Control Delay	30.1	50.9	12.8
Queue Delay	6.7	0.0	0.0
Total Delay	36.8	50.9	12.8
Queue Length 50th (ft)	90	41	172
Queue Length 95th (ft)	128	#109	212
Internal Link Dist (ft)	87	77	164
Turn Bay Length (ft)			
Base Capacity (vph)	400	160	2575
Starvation Cap Reductn	95	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.86	0.69	0.56


















Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.



HCM Signalized Intersection Capacity Analysis  
 4: North Lynn Street & Fairfax Drive

1616 North Fort Myer Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  				
Traffic Volume (vph)	184	40	0	0	51	43	24	1279	53	0	0	0
Future Volume (vph)	184	40	0	0	51	43	24	1279	53	0	0	0
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				
Lane Util. Factor		1.00			1.00			0.91				
Frb, ped/bikes		1.00			0.92			1.00				
Flpb, ped/bikes		0.99			1.00			1.00				
Frt		1.00			0.94			0.99				
Flt Protected		0.96			1.00			1.00				
Satd. Flow (prot)		1592			1424			4450				
Flt Permitted		0.36			1.00			1.00				
Satd. Flow (perm)		605			1424			4450				
Peak-hour factor, PHF	0.86	0.86	0.86	0.85	0.85	0.85	0.94	0.94	0.94	0.85	0.85	0.85
Adj. Flow (vph)	214	47	0	0	60	51	26	1361	56	0	0	0
RTOR Reduction (vph)	0	0	0	0	34	0	0	5	0	0	0	0
Lane Group Flow (vph)	0	261	0	0	77	0	0	1438	0	0	0	0
Confl. Peds. (#/hr)	46		18	18		46	15		25	25		15
Confl. Bikes (#/hr)			4						3			
Heavy Vehicles (%)	2%	3%	2%	2%	6%	2%	2%	4%	2%	2%	2%	2%
Turn Type	custom	NA			NA		Perm	NA				
Protected Phases	7	4 7			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		28.0			6.0			49.0				
Effective Green, g (s)		30.0			8.0			52.0				
Actuated g/C Ratio		0.33			0.09			0.58				
Clearance Time (s)					6.0			7.0				
Lane Grp Cap (vph)		393			126			2571				
v/s Ratio Prot		c0.13			0.05							
v/s Ratio Perm		c0.09						0.32				
v/c Ratio		0.66			0.61			0.56				
Uniform Delay, d1		25.7			39.5			11.9				
Progression Factor		0.90			1.00			1.00				
Incremental Delay, d2		8.4			20.3			0.9				
Delay (s)		31.6			59.8			12.7				
Level of Service		C			E			B				
Approach Delay (s)		31.6			59.8			12.7			0.0	
Approach LOS		C			E			B			A	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			18.3					HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio			0.64									
Actuated Cycle Length (s)			90.0					Sum of lost time (s)		14.5		
Intersection Capacity Utilization			60.8%					ICU Level of Service		B		
Analysis Period (min)			15									

c Critical Lane Group

















---

Intersection has too many legs for HCM analysis.

---

HCM Unsignalized Intersection Capacity Analysis  
 6: N. Queen Street/Arlington Boulevard & Fairfax Drive

1616 North Fort Myer Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	208	0	0	264	6	188	68	103	6	0	21
Future Volume (Veh/h)	6	208	0	0	264	6	188	68	103	6	0	21
Sign Control		Free			Free			Yield			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.88	0.88	0.88	0.89	0.89	0.89	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	7	236	0	0	297	7	221	80	121	7	0	25
Pedestrians		13			41			152			103	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			3			13			9	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	407			388			740	809	429	856	806	416
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	407			388			740	809	429	856	806	416
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			4	68	77	94	100	96
cM capacity (veh/h)	1053			1022			231	249	528	121	250	575
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	243	304	422	32								
Volume Left	7	0	221	7								
Volume Right	0	7	121	25								
cSH	1053	1700	280	316								
Volume to Capacity	0.01	0.18	1.51	0.10								
Queue Length 95th (ft)	1	0	607	8								
Control Delay (s)	0.3	0.0	279.4	17.7								
Lane LOS	A		F	C								
Approach Delay (s)	0.3	0.0	279.4	17.7								
Approach LOS			F	C								
Intersection Summary												
Average Delay			118.4									
Intersection Capacity Utilization			54.4%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis  
 7: Fairfax Drive & N. Pierce Street

1616 North Fort Myer Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Volume (veh/h)	107	210	154	55	44	115
Future Volume (Veh/h)	107	210	154	55	44	115
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.85	0.85	0.87	0.87	0.85	0.85
Hourly flow rate (vph)	126	247	177	63	52	135
Pedestrians			2		37	
Lane Width (ft)			12.0		12.0	
Walking Speed (ft/s)			4.0		4.0	
Percent Blockage			0		3	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	277				746	246
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	277				746	246
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	90				84	82
cM capacity (veh/h)	1246				331	769
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>			
Volume Total	373	240	187			
Volume Left	126	0	52			
Volume Right	0	63	135			
cSH	1246	1700	562			
Volume to Capacity	0.10	0.14	0.33			
Queue Length 95th (ft)	8	0	36			
Control Delay (s)	3.4	0.0	14.6			
Lane LOS	A		B			
Approach Delay (s)	3.4	0.0	14.6			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			5.0			
Intersection Capacity Utilization			53.0%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
 8: Fort Myer Drive & Site Driveway

1616 North Fort Myer Drive



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	9	0	0	2407	12
Future Volume (Veh/h)	0	9	0	0	2407	12
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	10	0	0	2616	13
Pedestrians	48					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	4					
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)				159	674	
pX, platoon unblocked						
vC, conflicting volume	2670	708	2677			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2670	708	2677			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	97	100			
cM capacity (veh/h)	17	362	146			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3	SB 4	
Volume Total	10	747	747	747	387	
Volume Left	0	0	0	0	0	
Volume Right	10	0	0	0	13	
cSH	362	1700	1700	1700	1700	
Volume to Capacity	0.03	0.44	0.44	0.44	0.23	
Queue Length 95th (ft)	2	0	0	0	0	
Control Delay (s)	15.2	0.0	0.0	0.0	0.0	
Lane LOS	C					
Approach Delay (s)	15.2	0.0				
Approach LOS	C					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			49.0%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
 9: Fairfax Drive & Site Driveway

1616 North Fort Myer Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	12	197	199	57	40	9
Future Volume (Veh/h)	12	197	199	57	40	9
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	214	216	62	43	10
Pedestrians					39	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					3	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			442			
pX, platoon unblocked						
vC, conflicting volume	317				526	286
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	317				526	286
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				91	99
cM capacity (veh/h)	1203				490	729
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>			
Volume Total	227	278	53			
Volume Left	13	0	43			
Volume Right	0	62	10			
cSH	1203	1700	522			
Volume to Capacity	0.01	0.16	0.10			
Queue Length 95th (ft)	1	0	8			
Control Delay (s)	0.6	0.0	12.7			
Lane LOS	A		B			
Approach Delay (s)	0.6	0.0	12.7			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			1.4			
Intersection Capacity Utilization			32.4%		ICU Level of Service	A
Analysis Period (min)			15			

Queues

1: Fort Myer Drive & Wilson Boulevard

1616 North Fort Myer Drive



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	115	1095	580	695	24	93	713	315
v/c Ratio	0.78	0.73	2.06	0.51	0.08	0.16	2.67	0.21
Control Delay	63.7	26.1	511.3	16.3	13.8	13.6	780.3	19.1
Queue Delay	0.0	0.2	0.0	0.0	0.0	0.0	2.8	0.0
Total Delay	63.7	26.3	511.3	16.3	13.8	13.6	783.0	19.1
Queue Length 50th (ft)	59	177	~487	116	8	31	~556	43
Queue Length 95th (ft)	#142	210	#695	170	22	63	#714	60
Internal Link Dist (ft)		299		201		594		520
Turn Bay Length (ft)	175						200	
Base Capacity (vph)	148	1494	281	1370	306	582	267	1476
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	49	0	0	0	0	49	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.78	0.76	2.06	0.51	0.08	0.16	3.27	0.21

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

# HCM Signalized Intersection Capacity Analysis

## 1: Fort Myer Drive & Wilson Boulevard

1616 North Fort Myer Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	98	691	240	528	484	148	20	70	9	606	175	93	
Future Volume (vph)	98	691	240	528	484	148	20	70	9	606	175	93	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	7.0	4.0		4.0	1.0		6.0	6.0		4.5	4.5		
Lane Util. Factor	1.00	0.91		1.00	0.95		1.00	1.00		1.00	0.91		
Frbp, ped/bikes	1.00	0.93		1.00	0.82		1.00	0.96		1.00	0.94		
Flpb, ped/bikes	0.71	1.00		1.00	1.00		0.90	1.00		0.69	1.00		
Frt	1.00	0.96		1.00	0.96		1.00	0.98		1.00	0.95		
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00		
Satd. Flow (prot)	1132	4008		1556	2414		1435	1576		952	3849		
Flt Permitted	0.39	1.00		0.14	1.00		0.55	1.00		0.70	1.00		
Satd. Flow (perm)	462	4008		233	2414		835	1576		698	3849		
Peak-hour factor, PHF	0.85	0.85	0.85	0.91	0.91	0.91	0.85	0.85	0.85	0.85	0.85	0.85	
Adj. Flow (vph)	115	813	282	580	532	163	24	82	11	713	206	109	
RTOR Reduction (vph)	0	70	0	0	29	0	0	5	0	0	1	0	
Lane Group Flow (vph)	115	1025	0	580	666	0	24	88	0	713	314	0	
Confl. Peds. (#/hr)	998		250	250		998	182		345	345		182	
Confl. Bikes (#/hr)			22			1			4			5	
Heavy Vehicles (%)	2%	3%	6%	4%	8%	2%	2%	2%	2%	2%	3%	2%	
Parking (#/hr)										6	12	6	
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA		
Protected Phases		2		1	6			8			4		
Permitted Phases	2			6			8			4			
Actuated Green, G (s)	29.0	29.0		47.0	47.0		33.0	33.0		32.0	32.0		
Effective Green, g (s)	29.0	32.0		50.0	50.0		33.0	33.0		34.5	34.5		
Actuated g/C Ratio	0.32	0.36		0.56	0.56		0.37	0.37		0.38	0.38		
Clearance Time (s)	7.0	7.0		7.0	4.0		6.0	6.0		7.0	7.0		
Lane Grp Cap (vph)	148	1425		291	1341		306	577		267	1475		
v/s Ratio Prot		0.26		c0.24	0.28			0.06			0.08		
v/s Ratio Perm	0.25			c0.86			0.03			c1.02			
v/c Ratio	0.78	0.72		1.99	0.50		0.08	0.15		2.67	0.21		
Uniform Delay, d1	27.6	25.1		19.8	12.3		18.6	19.1		27.8	18.6		
Progression Factor	1.00	1.00		1.43	1.33		0.70	0.73		1.00	1.00		
Incremental Delay, d2	32.1	3.2		458.4	1.2		0.5	0.6		762.3	0.3		
Delay (s)	59.7	28.3		486.6	17.5		13.5	14.5		790.1	19.0		
Level of Service	E	C		F	B		B	B		F	B		
Approach Delay (s)		31.3			230.9			14.3			553.8		
Approach LOS		C			F			B			F		
<b>Intersection Summary</b>													
HCM 2000 Control Delay			248.8									HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio			2.45										
Actuated Cycle Length (s)			90.0									Sum of lost time (s)	14.0
Intersection Capacity Utilization			109.8%									ICU Level of Service	H
Analysis Period (min)			15										
c Critical Lane Group													



Queues

2: Wilson Boulevard & North Lynn Street

1616 North Fort Myer Drive



























Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	581	1145	426	260	333	1072	189
v/c Ratio	0.74	1.26	0.56	0.79	0.70	0.60	0.43
Control Delay	27.1	135.8	33.2	30.6	32.7	24.9	10.6
Queue Delay	0.0	1.4	0.0	0.0	0.0	0.0	0.0
Total Delay	27.1	137.3	33.2	30.6	32.7	24.9	10.6
Queue Length 50th (ft)	151	~837	112	46	181	163	38
Queue Length 95th (ft)	m133	m#609	160	#184	287	203	m93
Internal Link Dist (ft)		118	624			760	
Turn Bay Length (ft)				125	180		135
Base Capacity (vph)	789	912	756	330	478	1800	444
Starvation Cap Reductn	0	199	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.74	1.61	0.56	0.79	0.70	0.60	0.43

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis  
 2: Wilson Boulevard & North Lynn Street

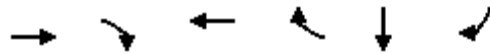
1616 North Fort Myer Drive

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	 				 			  					
Traffic Volume (vph)	517	1019	0	0	396	242	313	1008	178	0	0	0	
Future Volume (vph)	517	1019	0	0	396	242	313	1008	178	0	0	0	
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	4.0	4.0	4.0				
Lane Util. Factor	0.97	1.00			0.95	1.00	1.00	0.86	1.00				
Frbp, ped/bikes	1.00	1.00			1.00	0.58	1.00	1.00	0.88				
Flpb, ped/bikes	1.00	1.00			1.00	1.00	0.95	1.00	1.00				
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85				
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00				
Satd. Flow (prot)	3090	1676			3094	826	1485	5587	1023				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	1.00	1.00				
Satd. Flow (perm)	3090	1676			3094	826	1485	5587	1023				
Peak-hour factor, PHF	0.89	0.89	0.89	0.93	0.93	0.93	0.94	0.94	0.94	0.85	0.85	0.85	
Adj. Flow (vph)	581	1145	0	0	426	260	333	1072	189	0	0	0	
RTOR Reduction (vph)	0	0	0	0	0	128	0	0	115	0	0	0	
Lane Group Flow (vph)	581	1145	0	0	426	132	333	1072	74	0	0	0	
Confl. Peds. (#/hr)	586		84	84		586	53		111	111		53	
Confl. Bikes (#/hr)			12			2			4			3	
Heavy Vehicles (%)	2%	2%	2%	2%	5%	2%	4%	2%	10%	2%	2%	2%	
Parking (#/hr)								5	5				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm				
Protected Phases	5	2			6			8					
Permitted Phases						6	8		8				
Actuated Green, G (s)	20.5	46.0			19.0	19.0	26.0	26.0	26.0				
Effective Green, g (s)	23.0	49.0			22.0	22.0	29.0	29.0	29.0				
Actuated g/C Ratio	0.26	0.54			0.24	0.24	0.32	0.32	0.32				
Clearance Time (s)	6.5	7.0			7.0	7.0	7.0	7.0	7.0				
Lane Grp Cap (vph)	789	912			756	201	478	1800	329				
v/s Ratio Prot	0.19	c0.68			0.14			0.19					
v/s Ratio Perm						0.16	c0.22		0.07				
v/c Ratio	0.74	1.26			0.56	0.65	0.70	0.60	0.22				
Uniform Delay, d1	30.7	20.5			29.8	30.6	26.7	25.6	22.3				
Progression Factor	0.85	0.78			1.00	1.00	0.93	0.92	1.52				
Incremental Delay, d2	0.6	115.8			3.0	15.4	7.0	1.2	1.3				
Delay (s)	26.8	131.8			32.8	46.0	31.8	24.7	35.2				
Level of Service	C	F			C	D	C	C	D				
Approach Delay (s)		96.4			37.8			27.4			0.0		
Approach LOS		F			D			C			A		
<b>Intersection Summary</b>													
HCM 2000 Control Delay			58.9		HCM 2000 Level of Service				E				
HCM 2000 Volume to Capacity ratio			1.09										
Actuated Cycle Length (s)			90.0		Sum of lost time (s)				15.0				
Intersection Capacity Utilization			85.5%		ICU Level of Service				E				
Analysis Period (min)			15										
c Critical Lane Group													

Queues

3: Fairfax Drive & Fort Myer Drive

1616 North Fort Myer Drive



Lane Group	EBT	EBR	WBT	WBR	SBT	SBR
Lane Group Flow (vph)	115	157	89	82	2523	255
v/c Ratio	0.35	0.44	0.18	0.17	1.44	0.32
Control Delay	30.9	15.1	26.2	13.0	223.4	6.9
Queue Delay	0.0	0.0	4.2	1.7	0.4	0.0
Total Delay	30.9	15.1	30.4	14.7	223.9	6.9
Queue Length 50th (ft)	53	22	39	7	~1026	31
Queue Length 95th (ft)	100	75	m65	m33	m#917	m51
Internal Link Dist (ft)	362		87		79	
Turn Bay Length (ft)		200				
Base Capacity (vph)	333	357	497	483	1758	793
Starvation Cap Reductn	0	0	340	287	0	0
Spillback Cap Reductn	1	0	0	0	230	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.44	0.57	0.42	1.65	0.32

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

# HCM Signalized Intersection Capacity Analysis

## 3: Fairfax Drive & Fort Myer Drive

1616 North Fort Myer Drive

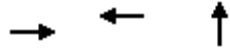


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗					↖↗	↗
Traffic Volume (vph)	29	72	138	42	34	70	0	0	0	123	2072	222
Future Volume (vph)	29	72	138	42	34	70	0	0	0	123	2072	222
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	6.5		4.0	6.5					4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00					0.95	1.00
Frbp, ped/bikes		1.00	0.96		1.00	0.92					1.00	0.91
Flpb, ped/bikes		0.98	1.00		0.99	1.00					1.00	1.00
Frt		1.00	0.85		1.00	0.85					1.00	0.85
Flt Protected		0.99	1.00		0.97	1.00					1.00	1.00
Satd. Flow (prot)		1423	1200		1584	1306					3166	1277
Flt Permitted		0.90	1.00		0.84	1.00					1.00	1.00
Satd. Flow (perm)		1303	1200		1364	1306					3166	1277
Peak-hour factor, PHF	0.88	0.88	0.88	0.85	0.85	0.85	0.85	0.85	0.85	0.87	0.87	0.87
Adj. Flow (vph)	33	82	157	49	40	82	0	0	0	141	2382	255
RTOR Reduction (vph)	0	0	84	0	0	52	0	0	0	0	0	84
Lane Group Flow (vph)	0	115	73	0	89	30	0	0	0	0	2523	171
Confl. Peds. (#/hr)	39		13	13		39	48		31	31		48
Confl. Bikes (#/hr)			7			2			4			7
Heavy Vehicles (%)	2%	2%	2%	2%	7%	2%	2%	2%	2%	3%	2%	3%
Parking (#/hr)		5	5							5		
Turn Type	Perm	NA	Perm	custom	NA	Perm				Perm	NA	Perm
Protected Phases		8		7	4 7						2	
Permitted Phases	8		8	4		4 7				2		2
Actuated Green, G (s)		20.5	20.5		32.5	32.5					48.5	48.5
Effective Green, g (s)		23.0	20.5		35.0	32.5					50.0	50.0
Actuated g/C Ratio		0.26	0.23		0.39	0.36					0.56	0.56
Clearance Time (s)		6.5	6.5								5.5	5.5
Lane Grp Cap (vph)		332	273		550	471					1758	709
v/s Ratio Prot					c0.01							
v/s Ratio Perm		c0.09	0.06		0.05	0.02					0.80	0.13
v/c Ratio		0.35	0.27		0.16	0.06					1.44	0.24
Uniform Delay, d1		27.4	28.6		17.9	18.8					20.0	10.3
Progression Factor		1.00	1.00		1.25	2.29					1.24	1.91
Incremental Delay, d2		2.8	2.4		0.5	0.2					198.7	0.7
Delay (s)		30.2	31.0		22.9	43.3					223.5	20.3
Level of Service		C	C		C	D					F	C
Approach Delay (s)		30.6			32.7			0.0			204.9	
Approach LOS		C			C			A			F	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			181.0									F
HCM 2000 Volume to Capacity ratio			1.03									
Actuated Cycle Length (s)			90.0							11.5		
Intersection Capacity Utilization			118.0%									H
Analysis Period (min)			15									
c Critical Lane Group												

Queues

4: North Lynn Street & Fairfax Drive

1616 North Fort Myer Drive



Lane Group	EBT	WBT	NBT
Lane Group Flow (vph)	227	111	1442
v/c Ratio	0.57	0.69	0.56
Control Delay	18.1	50.9	12.8
Queue Delay	7.0	0.0	0.0
Total Delay	25.1	50.9	12.8
Queue Length 50th (ft)	89	41	172
Queue Length 95th (ft)	m87	#109	212
Internal Link Dist (ft)	87	77	164
Turn Bay Length (ft)			
Base Capacity (vph)	401	160	2571
Starvation Cap Reductn	128	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.83	0.69	0.56

Intersection Summary


















# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis  
 4: North Lynn Street & Fairfax Drive

1616 North Fort Myer Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  				
Traffic Volume (vph)	155	40	0	0	51	43	94	1209	53	0	0	0
Future Volume (vph)	155	40	0	0	51	43	94	1209	53	0	0	0
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				
Lane Util. Factor		1.00			1.00			0.91				
Frb, ped/bikes		1.00			0.92			1.00				
Flpb, ped/bikes		0.99			1.00			1.00				
Frt		1.00			0.94			0.99				
Flt Protected		0.96			1.00			1.00				
Satd. Flow (prot)		1594			1424			4441				
Flt Permitted		0.37			1.00			1.00				
Satd. Flow (perm)		611			1424			4441				
Peak-hour factor, PHF	0.86	0.86	0.86	0.85	0.85	0.85	0.94	0.94	0.94	0.85	0.85	0.85
Adj. Flow (vph)	180	47	0	0	60	51	100	1286	56	0	0	0
RTOR Reduction (vph)	0	0	0	0	34	0	0	5	0	0	0	0
Lane Group Flow (vph)	0	227	0	0	77	0	0	1437	0	0	0	0
Confl. Peds. (#/hr)	46		18	18		46	15		25	25		15
Confl. Bikes (#/hr)			4						3			
Heavy Vehicles (%)	2%	3%	2%	2%	6%	2%	2%	4%	2%	2%	2%	2%
Turn Type	custom	NA			NA		Perm	NA				
Protected Phases	7	4 7			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		28.0			6.0			49.0				
Effective Green, g (s)		30.0			8.0			52.0				
Actuated g/C Ratio		0.33			0.09			0.58				
Clearance Time (s)					6.0			7.0				
Lane Grp Cap (vph)		394			126			2565				
v/s Ratio Prot		c0.11			0.05							
v/s Ratio Perm		c0.08						0.32				
v/c Ratio		0.58			0.61			0.56				
Uniform Delay, d1		24.8			39.5			11.9				
Progression Factor		0.74			1.00			1.00				
Incremental Delay, d2		0.6			20.3			0.9				
Delay (s)		18.8			59.8			12.8				
Level of Service		B			E			B				
Approach Delay (s)		18.8			59.8			12.8			0.0	
Approach LOS		B			E			B			A	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			16.5					HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio			0.60									
Actuated Cycle Length (s)			90.0					Sum of lost time (s)		14.5		
Intersection Capacity Utilization			60.9%					ICU Level of Service		B		
Analysis Period (min)			15									

c Critical Lane Group

---


















Intersection has too many legs for HCM analysis.

---

# HCM Unsignalized Intersection Capacity Analysis

## 6: N. Queen Street/Arlington Boulevard & Fairfax Drive

1616 North Fort Myer Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	208	0	0	264	6	188	68	103	6	0	21
Future Volume (Veh/h)	6	208	0	0	264	6	188	68	103	6	0	21
Sign Control		Free			Free			Yield			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.88	0.88	0.88	0.89	0.89	0.89	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	7	236	0	0	297	7	221	80	121	7	0	25
Pedestrians		13			41			152			103	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			3			13			9	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	407			388			740	809	429	856	806	416
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	407			388			740	809	429	856	806	416
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			4	68	77	94	100	96
cM capacity (veh/h)	1053			1022			231	249	528	121	250	575
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>								
Volume Total	243	304	422	32								
Volume Left	7	0	221	7								
Volume Right	0	7	121	25								
cSH	1053	1700	280	316								
Volume to Capacity	0.01	0.18	1.51	0.10								
Queue Length 95th (ft)	1	0	607	8								
Control Delay (s)	0.3	0.0	279.4	17.7								
Lane LOS	A		F	C								
Approach Delay (s)	0.3	0.0	279.4	17.7								
Approach LOS			F	C								
<b>Intersection Summary</b>												
Average Delay			118.4									
Intersection Capacity Utilization			54.4%		ICU Level of Service				A			
Analysis Period (min)			15									



HCM Unsignalized Intersection Capacity Analysis  
 7: Fairfax Drive & N. Pierce Street

1616 North Fort Myer Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	107	210	154	55	44	115
Future Volume (Veh/h)	107	210	154	55	44	115
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.85	0.85	0.87	0.87	0.85	0.85
Hourly flow rate (vph)	126	247	177	63	52	135
Pedestrians			2		37	
Lane Width (ft)			12.0		12.0	
Walking Speed (ft/s)			4.0		4.0	
Percent Blockage			0		3	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	277				746	246
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	277				746	246
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	90				84	82
cM capacity (veh/h)	1246				331	769
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>			
Volume Total	373	240	187			
Volume Left	126	0	52			
Volume Right	0	63	135			
cSH	1246	1700	562			
Volume to Capacity	0.10	0.14	0.33			
Queue Length 95th (ft)	8	0	36			
Control Delay (s)	3.4	0.0	14.6			
Lane LOS	A		B			
Approach Delay (s)	3.4	0.0	14.6			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			5.0			
Intersection Capacity Utilization			53.0%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
 8: Fort Myer Drive & Site Driveway

1616 North Fort Myer Drive



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	9	9	9	90	2407	12
Future Volume (Veh/h)	9	9	9	90	2407	12
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	10	10	98	2616	13
Pedestrians	48					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	4					
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)				159	674	
pX, platoon unblocked						
vC, conflicting volume	2788	926	2677			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2788	926	2677			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	25	96	93			
cM capacity (veh/h)	13	260	146			
Direction, Lane #	EB 1	NB 1	SB 1	SB 2	SB 3	
Volume Total	20	108	1046	1046	536	
Volume Left	10	10	0	0	0	
Volume Right	10	0	0	0	13	
cSH	25	146	1700	1700	1700	
Volume to Capacity	0.79	0.07	0.62	0.62	0.32	
Queue Length 95th (ft)	61	5	0	0	0	
Control Delay (s)	328.3	5.0	0.0	0.0	0.0	
Lane LOS	F	A				
Approach Delay (s)	328.3	5.0	0.0			
Approach LOS	F					
Intersection Summary						
Average Delay			2.6			
Intersection Capacity Utilization			62.0%	ICU Level of Service	B	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
 9: Fairfax Drive & Site Driveway

1616 North Fort Myer Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	
Traffic Volume (veh/h)	12	197	199	57	40	9
Future Volume (Veh/h)	12	197	199	57	40	9
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	214	216	62	43	10
Pedestrians					39	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					3	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			442			
pX, platoon unblocked						
vC, conflicting volume	317				526	286
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	317				526	286
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				91	99
cM capacity (veh/h)	1203				490	729
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>			
Volume Total	227	278	53			
Volume Left	13	0	43			
Volume Right	0	62	10			
cSH	1203	1700	522			
Volume to Capacity	0.01	0.16	0.10			
Queue Length 95th (ft)	1	0	8			
Control Delay (s)	0.6	0.0	12.7			
Lane LOS	A		B			
Approach Delay (s)	0.6	0.0	12.7			
Approach LOS			B			
<b>Intersection Summary</b>						
Average Delay			1.4			
Intersection Capacity Utilization			32.4%		ICU Level of Service	A
Analysis Period (min)			15			

Intersection														
Int Delay, s/veh	5.6													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations					↕		↕	↕↕			↕↕	↕		
Traffic Vol, veh/h	0	0	0	74	0	0	78	862	0	0	1057	1178	0	0
Future Vol, veh/h	0	0	0	74	0	0	78	862	0	0	1057	1178	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	38	0	21	21	0	38	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	-	-	-	-	-	-	Yield	-	-
Storage Length	-	-	-	-	-	0	180	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-	16974	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	80	0	0	85	937	0	0	1149	1280	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1682	2294	-	1187	0	-
Stage 1	1107	1107	-	-	-	-
Stage 2	575	1187	-	-	-	-
Critical Hdwy	6.84	6.54	-	4.14	-	-
Critical Hdwy Stg 1	5.84	5.54	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-	-	-	-
Follow-up Hdwy	3.52	4.02	-	2.22	-	-
Pot Cap-1 Maneuver	85	39	0	584	-	0
Stage 1	278	284	0	-	0	0
Stage 2	526	260	0	-	0	0
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	~ 73	0	-	584	-	-
Mov Cap-2 Maneuver	~ 73	0	-	-	-	-
Stage 1	237	0	-	-	-	-
Stage 2	526	0	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	235.3	1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBTWBLn1WBLn2	SBT	SBR
Capacity (veh/h)	584	- 73	-	-
HCM Lane V/C Ratio	0.145	- 1.102	-	-
HCM Control Delay (s)	12.2	- 235.3	0	-
HCM Lane LOS	B	- F	A	-
HCM 95th %tile Q(veh)	0.5	- 6	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Intersection														
Int Delay, s/veh	5.6													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations					↕		↕	↕↕			↕↕	↕		
Traffic Vol, veh/h	0	0	0	74	0	0	78	862	0	0	1057	1178	0	0
Future Vol, veh/h	0	0	0	74	0	0	78	862	0	0	1057	1178	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	38	0	21	21	0	38	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	-	-	-	-	-	-	Yield	-	-
Storage Length	-	-	-	-	-	0	180	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-	16974	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	80	0	0	85	937	0	0	1149	1280	0	0

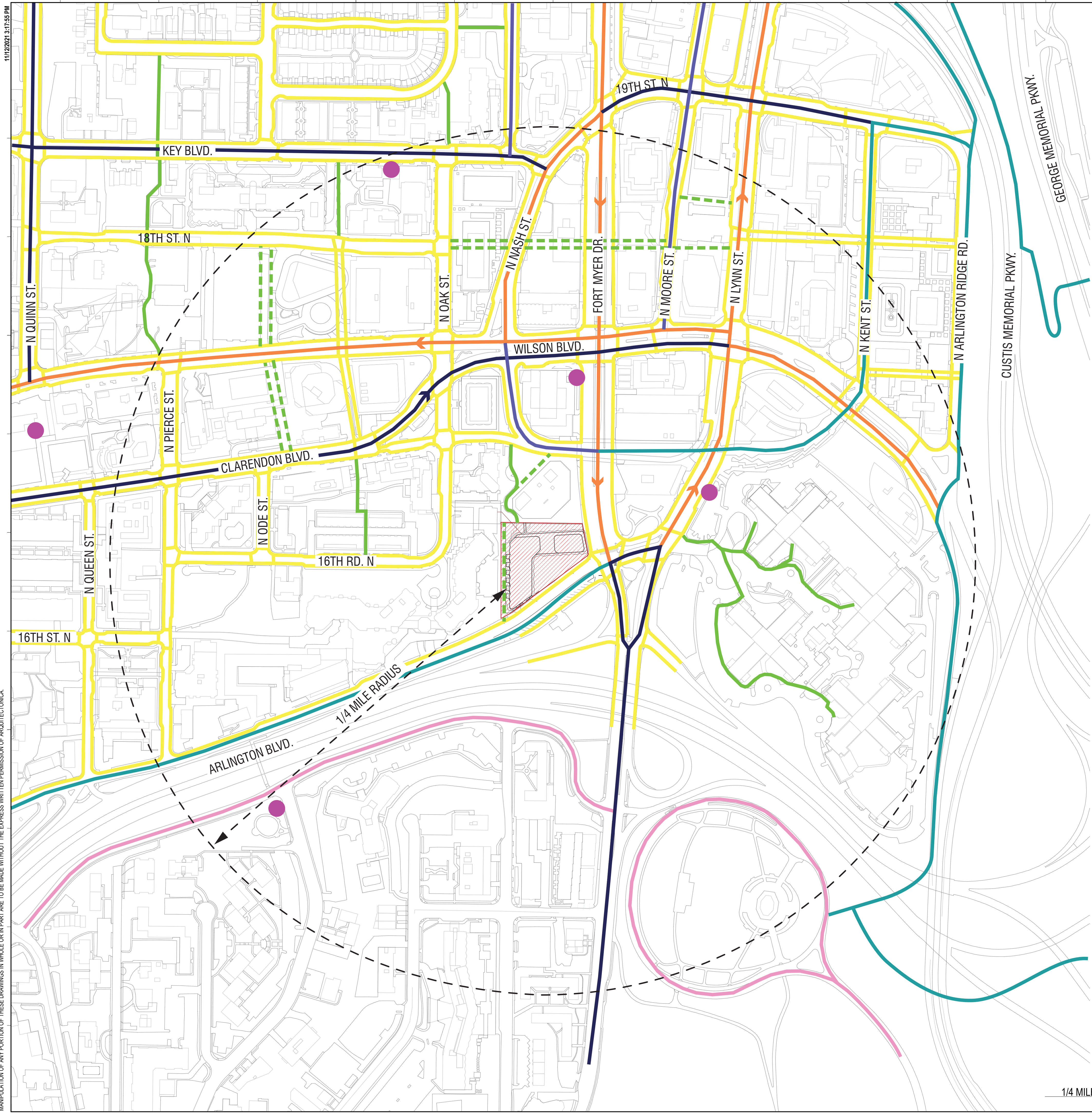
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1682	2294	-	1187	0	-
Stage 1	1107	1107	-	-	-	-
Stage 2	575	1187	-	-	-	-
Critical Hdwy	6.84	6.54	-	4.14	-	-
Critical Hdwy Stg 1	5.84	5.54	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-	-	-	-
Follow-up Hdwy	3.52	4.02	-	2.22	-	-
Pot Cap-1 Maneuver	85	39	0	584	-	0
Stage 1	278	284	0	-	0	0
Stage 2	526	260	0	-	0	0
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	~ 73	0	-	584	-	-
Mov Cap-2 Maneuver	~ 73	0	-	-	-	-
Stage 1	237	0	-	-	-	-
Stage 2	526	0	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	235.3	1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBTWBLn1WBLn2	SBT	SBR
Capacity (veh/h)	584	- 73	-	-
HCM Lane V/C Ratio	0.145	- 1.102	-	-
HCM Control Delay (s)	12.2	- 235.3	0	-
HCM Lane LOS	B	- F	A	-
HCM 95th %tile Q(veh)	0.5	- 6	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

ALL DESIGNS INDICATED IN THESE DRAWINGS ARE THE PROPERTY OF ARCHITECTONICA. ALL COPYRIGHTS RESERVED. NO COPIES, TRANSMISSIONS, REPRODUCTIONS OR ELECTRONIC MANIPULATION OF ANY PORTION OF THESE DRAWINGS IN WHOLE OR IN PART ARE TO BE MADE WITHOUT THE EXPRESS WRITTEN PERMISSION OF ARCHITECTONICA.



1/4 MILE CIRCULATION EXHIBIT | 1  
1" = 150'-0" | EXH-101

**1616 NORTH FORT MYER DRIVE**  
ARLINGTON, VA

OWNER  
TEACHERS INSURANCE AND ANNUITY ASSOC. OF AMERICA  
730 3RD AVE  
NEW YORK, NY 10017  
TEL: 202-777-2012

CIVIL ENGINEER:  
VKA  
8180 Greensboro Dr. Suite 200  
Tysons, VA 22102  
TEL: 703-760-4677

ARCHITECT:  
ARCHITECTONICA  
104 Fifth Avenue, 6th Floor  
New York, NY 10011  
www.architectonica.com  
TEL: 212-254-2700

STRUCTURAL ENGINEER:  
SK&A  
1155 Connecticut Avenue, NW, Suite 800  
Washington, D.C.  
TEL: 202-659-2520

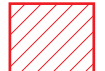






MEP ENGINEER  
Dewberry  
8401 Arlington Blvd Suite 600  
Fairfax, VA 22031  
TEL: 703-698-9440

TRAFFIC CONSULTANT:  
Wells + Associates  
1420 Spring Hill Road, Suite 610  
Tysons, VA 22102  
TEL: 703-917-6620




SUSTAINABILITY CONSULTANT:  
Sustainable Building Partners  
2701 Prosperity Avenue, Suite 100  
Fairfax, Virginia 22031  
TEL: 703-970-2890

LANDSCAPE ARCHITECT  
ARCHITECTONICA  
104 Fifth Avenue, 6th Floor  
New York, NY 10011  
TEL: 212-254-2700

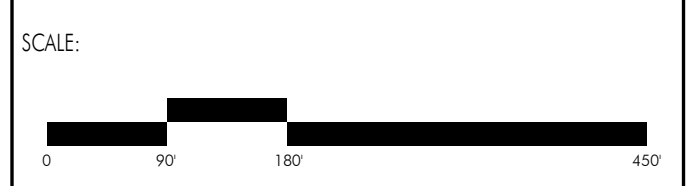
**PEDESTRIAN/BIKE NETWORK LEGEND**

-  Project Site
- Bike Facilities**
-  Multi-use Trail
-  Cycle Track/Protected Bike Lanes
-  Sharrows
-  Bike Lanes
-  Signed Route
-  Capital Bike Share Location

Note: All routes two-way unless noted one-way with directional arrows.

- Pedestrian Facilities**
-  Sidewalk/Crosswalk
-  Existing Pedestrian Way
-  Proposed Pedestrian Way

Note: Pedestrian & Bike network information from Rosslyn Sector Plan



NOT FOR CONSTRUCTION

KEY PLAN:

DESCRIPTION	DATE

DRAWING TITLE  
**CIRCULATION EXHIBIT**

COUNTY APPROVAL STAMP:

SEAL/SIGNATURE: \_\_\_\_\_ PROJECT NUMBER: XXXXXX

DRAWN BY: Author  
CHECKED BY: Approver  
SCALE: 1" = 150'-0"  
SHEET NO:  
**EXH-101**