TRAFFIC IMPACT ANALYSIS

GATEWOOD PLAZA

CITY OF FAIRFAX, VIRGINIA

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Section 1: Introduction

This report presents the results of a Traffic Impact Study conducted in support of the proposed development of Gatewood Plaza, located in the City of Fairfax, Virginia. The site is currently developed with an approximate 93,115 gross square feet (GSF) of general office uses in one (1) building that is served by a detached garage and surface parking.

The site is located at 10201 Fairfax Boulevard, Fairfax VA, 22030, on the south side of the signalized intersection of Boulevard Marketplace and Fairfax Boulevard (US Route 50), between Fair Woods Parkway, and Eaton Place in the City of Fairfax, Virginia, as shown in Figure 1-1.

The site is currently zoned Commercial Retail (CR) and Residential Medium (RM). The Applicant, 10201 Fairfax Blvd, LLC proposes to rezone the Residential Medium (RM) portion of the site to be uniform with the existing Commercial Retail and apply for Special Exception applications to allow for a mixed-use redevelopment. The applicant plans to raze the existing office building and redevelop it with a mixed-use building consisting of up to 307 multifamily units and 41,900 GSF of ground-floor retail. Access to the site is currently located and is proposed to remain a signalized intersection along Fairfax Boulevard (Route 50) opposite Boulevard Marketplace. A conceptual layout is provided in Figure 1-2.

This study was conducted in accordance with a scoping agreement developed with the City of Fairfax staff. The study scope was determined by City staff based on a review of key study intersections and roadways that would potentially be affected by the proposed redevelopment and the number of new vehicle trips expected to be generated by the site. The site is expected to be complete by 2028.

According to the 24VAC30-155 (“Chapter 870”) regulations, all development proposals which meet certain specific trip generation thresholds are subject to the regulations as outlined in the Virginia Department of Transportation’s (VDOT) Traffic Impact Analysis Regulations Administrative Guidelines (“Administrative Guidelines”). In January 2012, an amendment to the Administrative Guidelines took effect, which determined a development proposal is considered to substantially impact the transportation network if it generates 5,000 or more net new daily vehicle trips located on, or within 3,000 feet of, a VDOT maintained roadway. Based on the trips anticipated to be generated by the subject development, the development would not require a VDOT Chapter 870 compliant traffic study.

Based on the traffic study scoping form provided in Appendix A, tasks undertaken by the Applicant to prepare this study included the following:

1. Reviewed the applicant’s conceptual plans for the subject site.

2. Field reviewed the subject site to determine existing roadway and intersection geometrics and traffic controls, access opportunities and/or constraints, and general traffic conditions.

3. Conducted peak hour turning movement counts at the following study intersections:

    - Fairfax Boulevard (Routes 29/50)/ Eaton Place
    - Fairfax Boulevard (Routes 29/50)/ Ourisman Dealership West Entrance
    - Fairfax Boulevard (Routes 29/50)/ Ourisman Dealership Main Entrance
    - Fairfax Boulevard (Routes 29/50)/Boulevard Marketplace/Site Entrance
    - Fairfax Boulevard (Routes 29/50)/Captain Pell’s Entrance

- Fairfax Boulevard (Routes 29/50)/Fair Woods Parkway

4. Adjusted the existing traffic counts to establish baseline conditions.

5. Calculated existing AM and PM commuter peak hour intersection levels of service at the study intersections.

6. Identified the number of net new peak hour trips that would be generated by the proposed development based on standard Institute of Transportation Engineers (ITE) Trip Generation, 11th Edition manual rates and equations.

7. Determined future background traffic forecasts based on regional traffic growth and estimates of traffic that would be generated by other approved/planned developments in the site vicinity.

8. Calculated future levels of service with and without the proposed development at the key study intersections for a proposed buildout year of 2028.

Sources of data for this analysis include traffic counts conducted by Wells + Associates Inc., information obtained from the City of Fairfax, the Institute of Transportation Engineers (ITE), VDOT, the Highway Capacity Manual 2000 (Synchro software, version 11), KGD, OFP, Walter L. Phillips, and 10201 Fairfax Blvd, LLC.

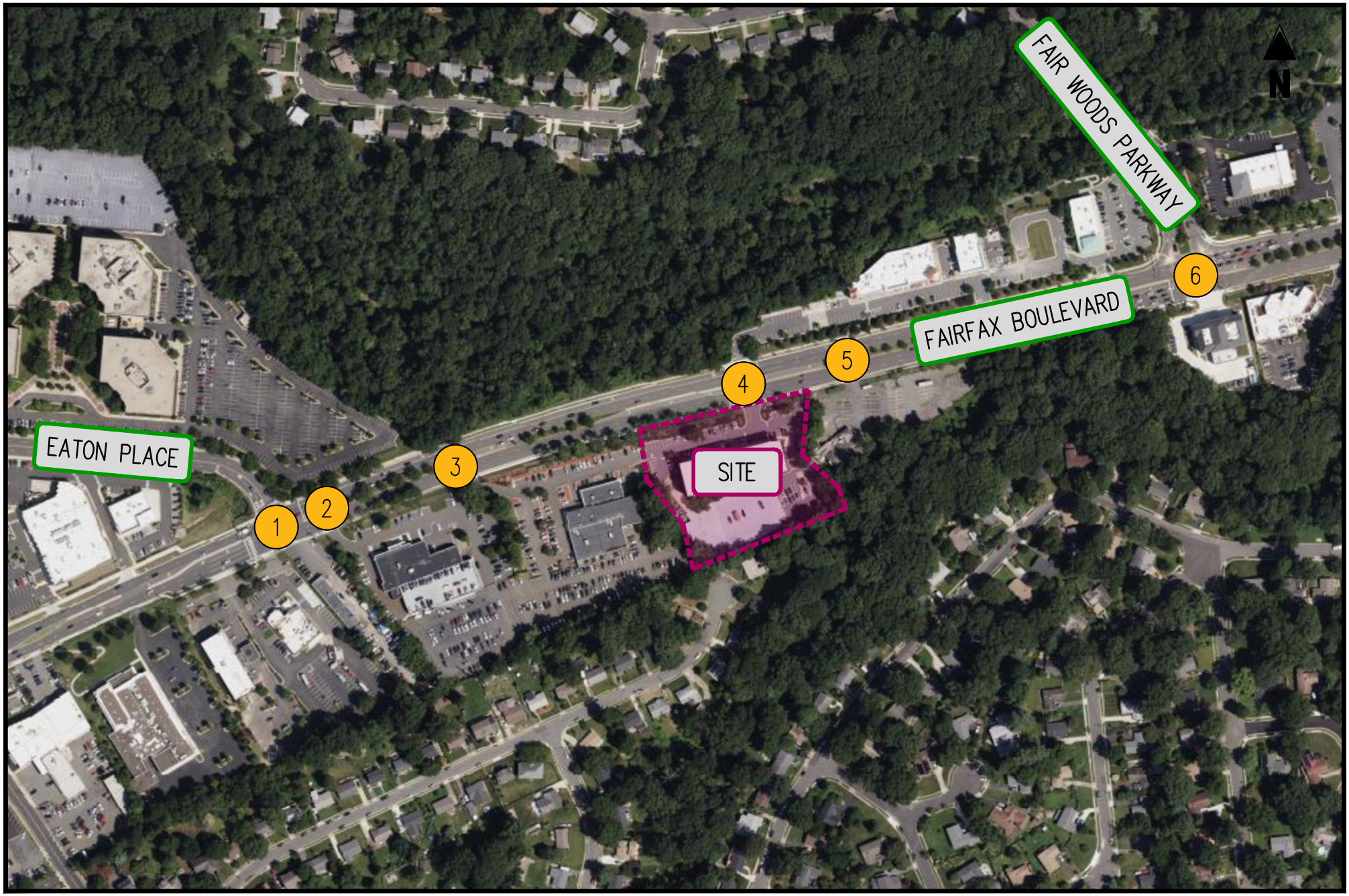

FIGURE 1-1
SITE LOCATION AND STUDY INTERSECTIONS

GATEWOOD PLAZA
CITY OF FAIRFAX, VIRGINIA

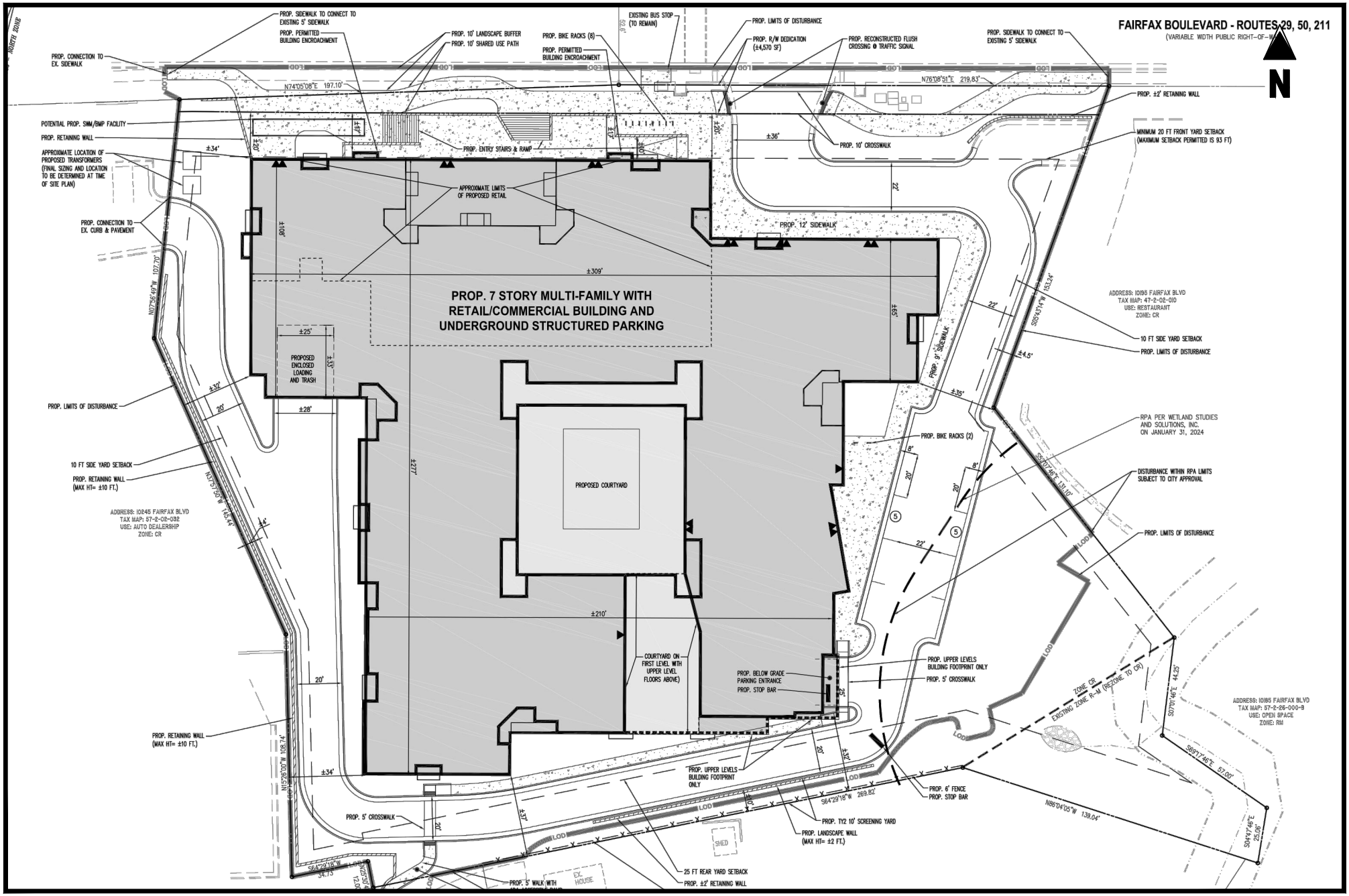

FIGURE 1-2
CONCEPTUAL SITE PLAN

Section 2: Background Information

Site Location and Surrounding Uses

Regional access to the site area is provided via a full-movement interchange on Interstate 66 at Chain Bridge Road (Route 123) northwest of the site, and via Nutley Street to the northeast of the site. Local access is provided by Fairfax Boulevard (Routes 29/50).

To the north and east, the site is bordered by open space that provides a buffer between the site and residential areas. Commercial and Retail uses are located on both sides of the site location, and a residential community without pedestrian connections is located to the south, on Stratford Avenue.

Comprehensive Plan Land Use Recommendations

The City's 2035 Comprehensive Plan (Figure 2-1) identifies the site as part of the Commercial Corridor and recommends a mix of retail, restaurant, service, medical, office, and other commercial uses.

Existing Transportation Network

Existing Road Network.
The following are descriptions of the roadways in the vicinity of the proposed development.

Fairfax Boulevard (US Routes 29/50) is classified as a principal arterial roadway according to the City of Fairfax Comprehensive Plan. Within the vicinity of the subject site, Fairfax Boulevard is constructed as a four-lane, divided roadway with separate turn lanes provided at major intersections. It has a posted speed limit of 35 miles per hour and a traffic signal is provided at Eaton Place, Boulevard Marketplace, and Fair

Fair Woods Parkway. Based on 2022 VDOT average annual daily traffic (AADT) data, Fairfax Boulevard east of Chain Bridge Road to Fair Woods Parkway carries approximately 42,014 vehicles per day (vpd). Fair Woods Parkway is classified as a minor collector roadway according to the City of Fairfax Comprehensive Plan. Fair Woods Parkway is constructed as a two-lane, undivided roadway with a posted speed limit of 25 miles per hour. This roadway mostly serves residential uses

Eaton Place is a local street and is constructed as a four-lane, undivided roadway with a posted speed limit of 25 miles per hour.

Existing, Background, and Total Future Lane use and traffic control at each of the study intersections is shown on Figure 2-2.

Public Transit Service
The site is served by the City of Fairfax's City-University Energy saver (CUE) Bus "Gold Route" along Fairfax Boulevard within the immediate vicinity of the site. The Gold Route provides access between the George Mason University (GMU) campus and the Vienna/Fairfax-GMU Metrorail station, via University Drive, Chain Bridge Road, West Street, Main Street, Lee Highway, Jermantown Road, Orchard Street, Bevan Drive, Warwick Avenue and Fairfax Boulevard.

Metrobus Route 1C provides service between Fair Oaks Mall and Dunn Loring Metrorail Station. Bus stops are located along Fairfax Boulevard (Routes 29/50) near the site location.

The existing transit routes are shown on Figure 2-3 and in Appendix B.

Pedestrian Facilities
A sidewalk is provided along both sides of Fairfax Boulevard (Route 29/50) between Eaton Place and Fair Woods Parkway. Marked crosswalks are provided across the north and west legs of the Fairfax Boulevard (Route 29/50)/Eaton Place signalized intersection, on the north leg of the Fairfax Boulevard (Route 29/50)/Boulevard Marketplace/Site location signalized intersection, and on the north and west legs of the Fairfax Boulevard (Route 29/50)/Fair woods Parkway signalized Intersection.

Future Transportation Network

The City of Fairfax's Comprehensive Plan provides recommended strategies for improving the City's transportation network. The Plan recommends that the city strive to achieve a balance between allowing for the efficient movement of traffic and providing safe and convenient access to City businesses and residences for vehicles, pedestrians, bicycles, and other modes of transport. The city of Fairfax's Future Land Use map can be seen on Figure 2-1, this shows the section of Commercial Corridor the subject site is located within.

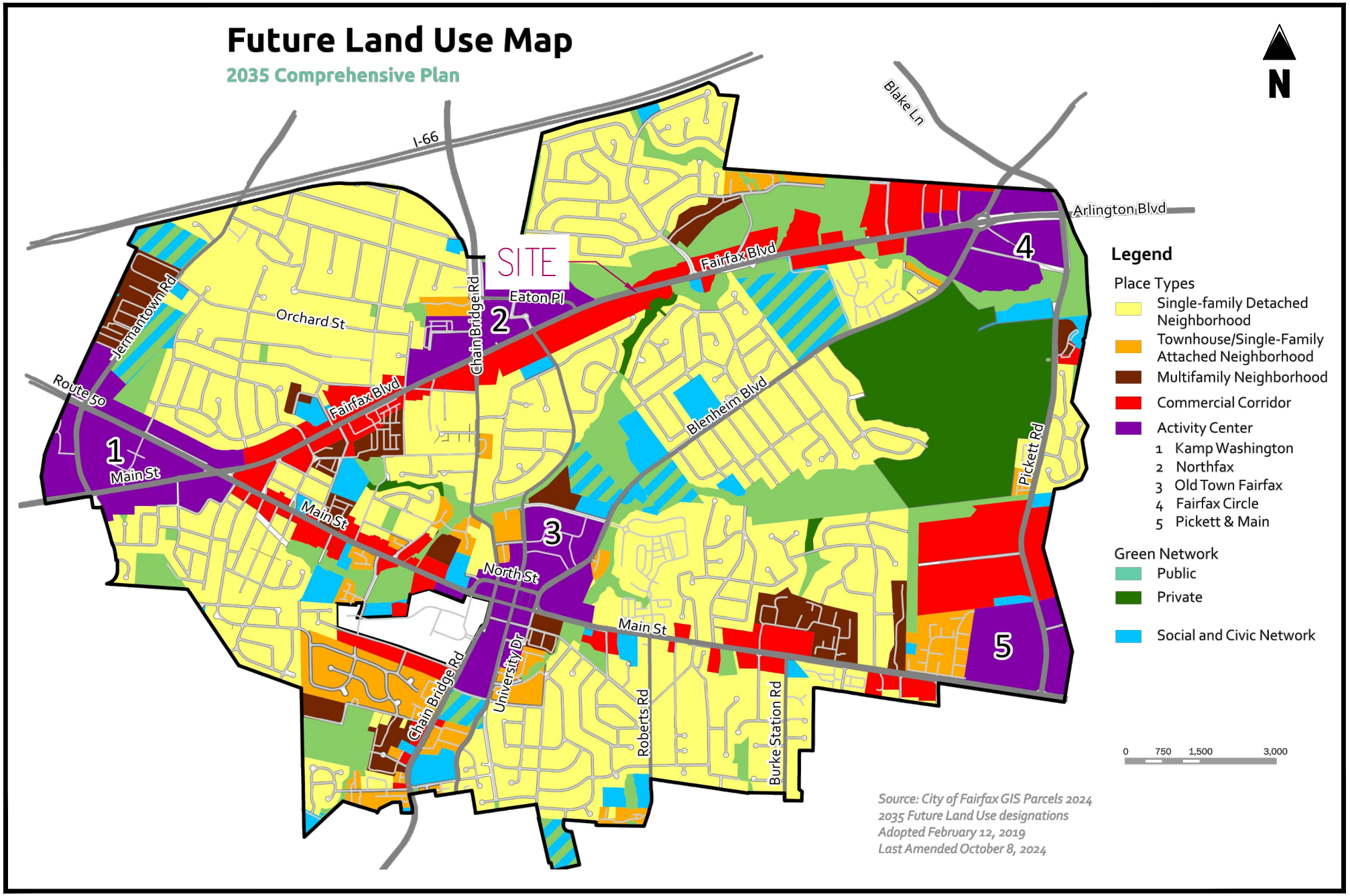

FIGURE 2-1
2035 COMPREHENSIVE PLAN

GATEWOOD PLAZA
CITY OF FAIRFAX, VIRGINIA

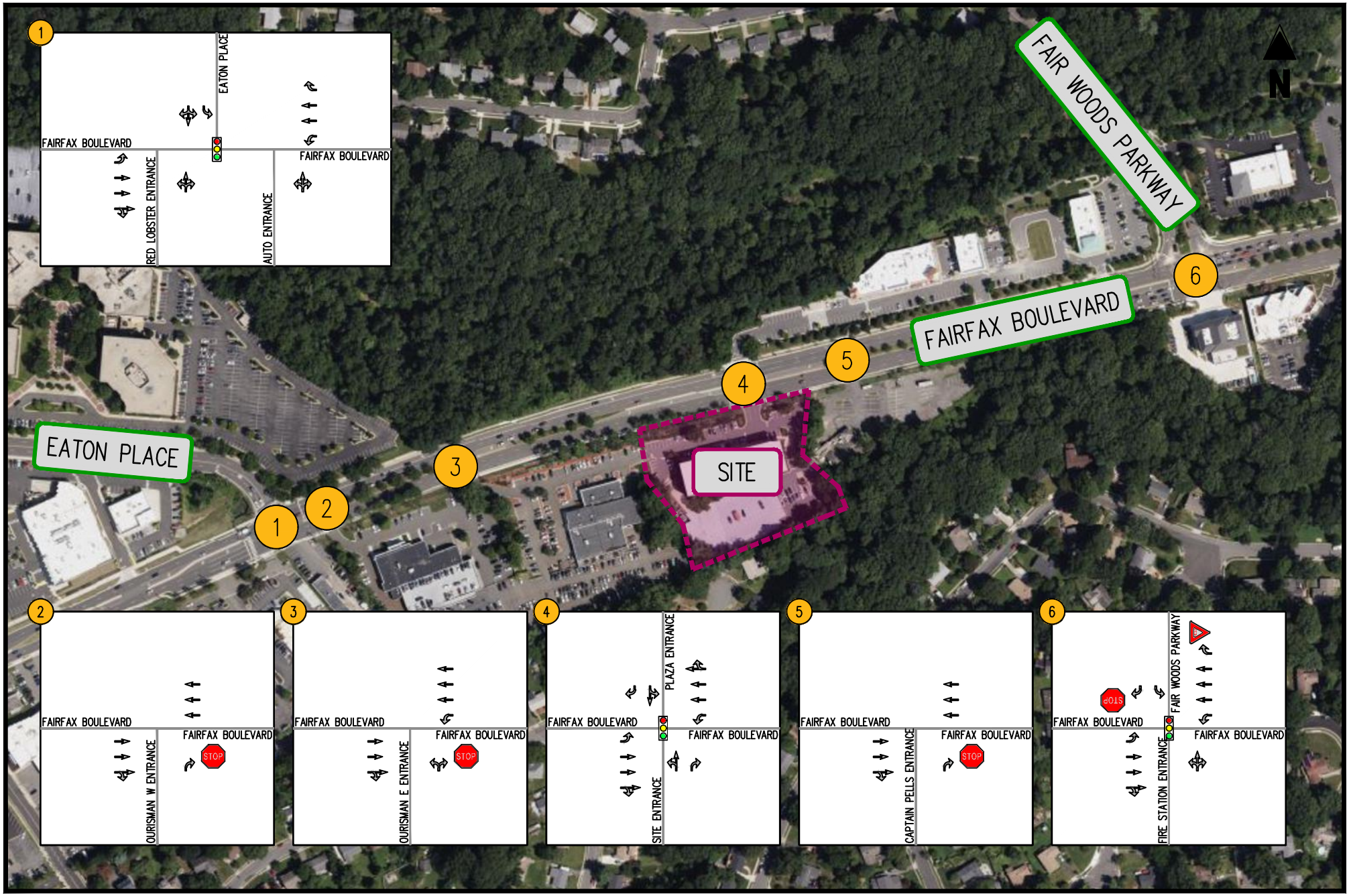

FIGURE 2-2
EXISTING, BACKGROUND, AND TOTAL FUTURE LANE USE AND TRAFFIC CONTROL

MOVEMENT
SIGNALIZED INTERSECTION
STOP SIGN
YIELD SIGN

FIGURE 2-3
CUE TRANSITE ROUTES

Section 3: Study Scope And Analysis Parameters

Overview

The subject site is located at 10201 Fairfax Boulevard, Fairfax VA, 22030, on the south side of the signalized intersection of Boulevard Marketplace and Fairfax Boulevard (Routes 29/50) between Fair Woods Parkway, and Eaton Place. The parcel is currently developed with the Gatewood Plaza office building, consisting of one (1) building that totals 93,115 S.F. of space and is served by surface and garage parking. The site is currently zoned Commercial Retail (CR) and Residential Medium (RM).

The primary objective of this study is to assess the impacts of the proposed development plan on the surrounding street system.

This traffic study was conducted in accordance with the scoping document and discussions with City staff and the Applicant and has been subsequently revised based on plan revisions and program changes. A traffic study scoping meeting was held on January 17th, 2024, and resulted in a scoping form dated January 18th, 2024, that is provided in Appendix A. As previously noted, the current development plan includes 307 multi-family residential apartments with 41,900 GSF. of non-residential use. Access to the site is currently located and it is proposed to remain a signalized intersection along Fairfax Boulevard (Route 50) opposite Boulevard Marketplace.

Study Area

The study area was determined based on the intersections and roadways that potentially would be affected by the implementation of the proposed development plan. The following intersections were selected for analysis and evaluation:

- Fairfax Boulevard (Routes 29/50)/ Eaton Place
- Fairfax Boulevard (Routes 29/50)/ West Entrance to Toyota
- Fairfax Boulevard (Routes 29/50)/ Ourisman Dealership Main Entrance
- Fairfax Boulevard (Routes 29/50)/Boulevard Marketplace/Site Entrance
- Fairfax Boulevard (Routes 29/50)/Captain Pell's Entrance
- Fairfax Boulevard (Routes 29/50)/Fair Woods Parkway

Site Development Program

The applicant plans to raze the existing office building and redevelop it with a mixed-use building consisting of up to 307 multifamily units and 41,900 GSF of non-residential use. For purposes of this TIS, it was assumed that the non-residential use would be developed and occupied with approximately 20,700 GSF of retail use, 11,200 GSF of general office use, and 10,000 GSF of medical office use.

Existing Traffic Volumes

Existing AM and PM commuter peak hour turning movements and pedestrian counts were conducted by Wells + Associates on Tuesday, January 30th, 2024 at the study intersections from 6:00 AM to 9:00 AM and from 4:00 PM to 7:00 PM.

Driveway counts were reviewed to understand the usage of the existing office building. The traffic counts indicated that the site currently generates 49 AM peak hour trips and 79 PM peak hour trips. As shown in Table 3-1, the ITE Trip Generation 11th Edition rate/equations estimate that 93,115 GSF of office would generate 157 AM and 157 PM peak hour trips. Driveway counts show significantly lower volumes than the ITE generated trips for the existing land use which indicate the composition of office tenants and/or other factors result in a lower current trip generation of the site than would be expected. for purposes of this analysis the driveway counts were used to establish the traffic baseline from which future trips were forecasted based on the proposed redevelopment.

The baseline vehicular traffic volumes as described above are provided on Figure 3-1. All existing count data are included in Appendix C.

Table 3-1

Gatewood Plaza

Existing Site Trip Generation

Land Use	Land Use Code	Amount	Units	AM Peak Hour			PM Peak Hour			Average Daily Trips
				In	Out	Total	In	Out	Total	
Existing Uses										
General Office Building (Based on Trip Counts)		93,115	GSF	46	3	49	10	69	79	n/a
General Office Building (Based on ITE Trip Generation (1))	710	93,115	GSF	138	19	157	27	130	157	1,091

Note(s):
(1) Trip generation based on the Institute of Transportation Engineers' Trip Generation Manual, 11th Edition

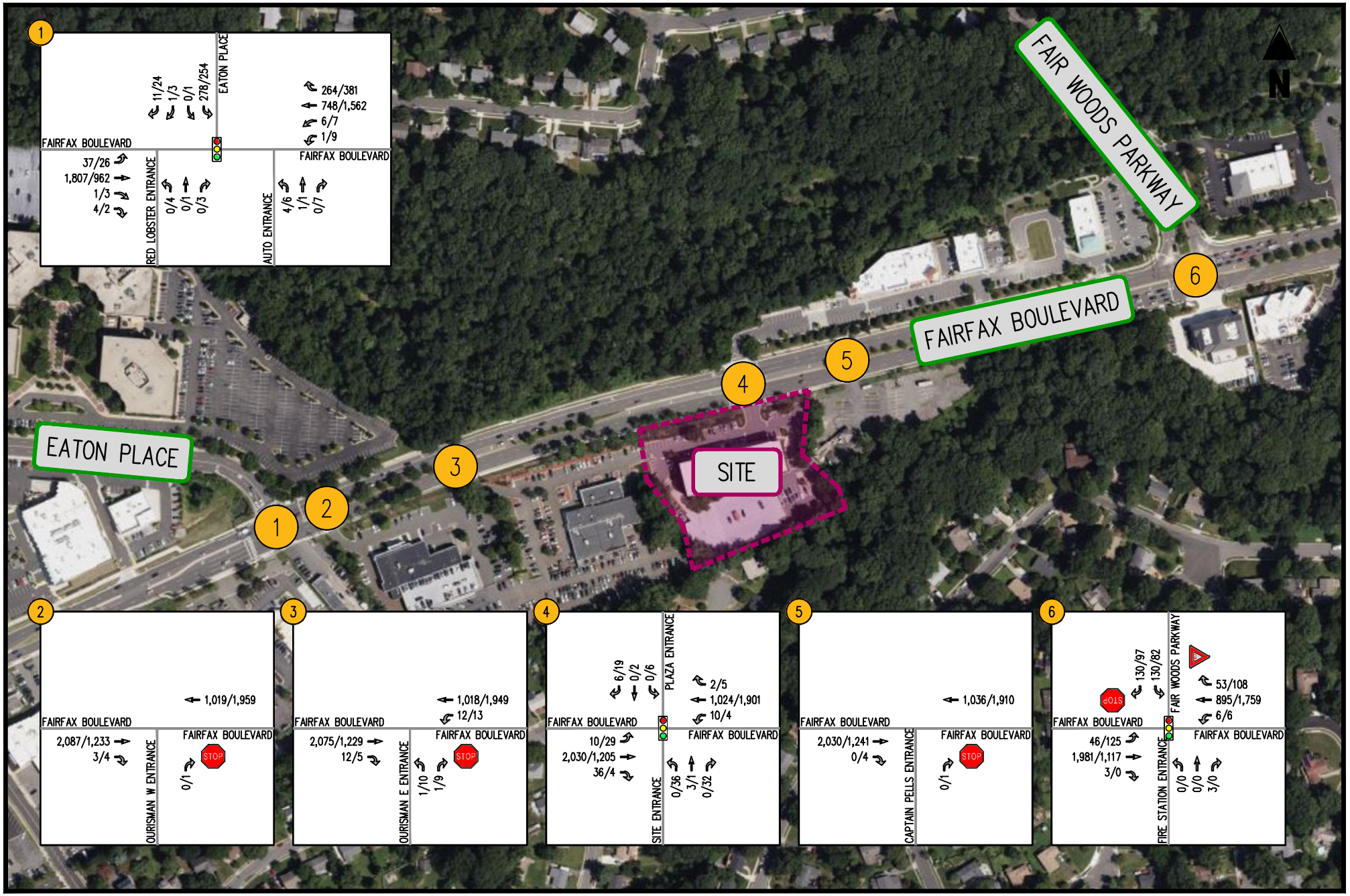

FIGURE 3-1
EXISTING TRAFFIC VOLUMES

GATEWOOD PLAZA
CITY OF FAIRFAX, VIRGINIA

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT
SIGNALIZED INTERSECTION
STOP SIGN
YIELD SIGN

Section 4: Existing Conditions Analysis

Existing Intersection Level of Service

Peak hour levels of service and queues were calculated for the study intersections based on the existing lane use and traffic controls shown on Figure 2-2, the existing traffic volumes shown on Figure 3-1, and the 2000 Highway Capacity Manual (HCM) analysis procedures for signalized and unsignalized intersections. The results are presented in Appendix D and summarized on Tables 4-1 and 4-2. The analyses indicate the following:

1. The signalized Fairfax Boulevard (Routes 29/50)/Eaton Place intersection currently operates at level of service (LOS) “C” during the AM and PM peak. The side-street approaches from southbound Eaton Place and Northeast bound Red Lobster, and northbound Auto Mechanic have level of service (LOS) “F”. These side-street results are due to the signal timing parameters along the Fairfax Boulevard corridor which favor more green time to the mainline movements to maximize throughput.

2. The Fairfax Boulevard (Routes 29/50)/Site Entrance/Boulevard Marketplace signalized intersection currently operates at level of service (LOS) “A” during the AM and PM peak hour.

3. All approaches at the unsignalized intersections serving the site on Fairfax Boulevard currently operate at acceptable levels of service (at LOS “C” or better) during both the AM and PM peak hours except the northbound approach of the eastern driveway of the Ourisman Dealership which operates at LOS “D” in the AM Peak Hour.

4. Queues at existing unsignalized site driveways on Fairfax Boulevard would be four (4) vehicles lengths or less.

5. The Fairfax Boulevard (Routes 29/50)/Site Entrance/Fair Woods Parkway signalized intersection currently operates at level of service (LOS) “B” during the AM and PM peak hour.

Table 4-1
Gatewood Plaza - City of Fairfax, VA
Existing (2024) Intersection Level of Service Summary (1) (2)

Intersection	Operating Condition	Street Name	Approach/ Movement	Existing 2024 AM Peak Hour	Existing 2024 PM Peak Hour
1 Fairfax Boulevard & Eaton Place	SIGNAL	Fairfax Boulevard	EBL	A (8.3)	C (27.4)
			EBTR	B (16.9)	B (16.8)
			WBL	C (22.2)	A (4.0)
		Fairfax Boulevard	WBT	C (26.8)	C (21.5)
			WBR	D (46.2)	A (8.5)
		Red Lobster Entrance	NEBLTR	A (0.0)	F (109.0)
		Auto Entrance	NBLTR	F (94.7)	F (106.6)
			SBL	F (84.5)	F (106.6)
		Eaton Place	SBLTR	F (85.4)	F (106.4)
		Overall		**C (28.0)**	**C (26.4)**
2 Fairfax Boulevard & Ourisman W Entrance	STOP	Fairfax Boulevard	EBTR	A [0.0]	A [0.0]
		Fairfax Boulevard	WBT	A [0.0]	A [0.0]
		Ourisman W Entrance	NBR	A [0.0]	A [9.0]
3 Fairfax Boulevard & Ourisman E Entrance	STOP	Fairfax Boulevard	EBTR	A [0.0]	A [0.0]
		Fairfax Boulevard	WBL	C [18.0]	B [11.1]
			WBT	A [0.0]	A [0.0]
		Ourisman E Entrance	NBLR	F [51.6]	C [20.6]
4 Fairfax Boulevard & Site Entrance	SIGNAL	Fairfax Boulevard	EBL	F (96.6)	F (110.1)
			EBTR	A (7.8)	A (2.5)
		Fairfax Boulevard	WBL	F (88.8)	F (148.3)
			WBTR	A (2.2)	A (1.1)
		Site Entrance	NBLT	F (86.5)	F (103.7)
			NBR	A (0.0)	F (95.1)
		Plaza Entrance	SBLT	A (0.0)	F (95.6)
			SBR	F (86.0)	F (94.9)
		Overall		**A (6.8)**	**A (5.6)**
5 Fairfax Boulevard & Captain Pells Entrance	STOP	Fairfax Boulevard	EBTR	A [0.0]	A [0.0]
		Fairfax Boulevard	WBT	A [0.0]	A [0.0]
		Captain Pells Entrance	NBR	A [0.0]	A [10.0]
6 Fairfax Boulevard & Fair Woods Parkway	SIGNAL	Fairfax Boulevard	EBL	F (109.2)	F (107.4)
			EBTR	A (5.3)	A (3.2)
			WBL	F (95.0)	F (110.6)
		Fairfax Boulevard	WBT	A (9.3)	B (12.0)
			WBR	A (0.1)	A (0.1)
		Fire Station Entrance	NBLTR	E (69.7)	A (0.0)
			SBLT	F (92.3)	F (103.8)
		Fair Woods Parkway	SBR	E (70.8)	F (90.3)
		Overall		**B (14.1)**	**B (17.0)**

Notes : (1) Numbers in brackets [] represent delay at unsignalized intersections in seconds per vehicle.
(2) Numbers in parenthesis () represent delay at signalized intersections in seconds per vehicle.

Table 4-2
Gatewood Plaza - City of Fairfax, VA
Existing (2024) Intersection Queueing Summary (1)

Intersection	Operating Condition	Street Name	Approach/ Movement	Available Storage	Existing 2024 AM Peak Hour	Existing 2024 PM Peak Hour
1 Fairfax Boulevard & Eaton Place	SIGNAL	Fairfax Boulevard	EBL	260	33	30
			EBTR	-	669	337
		Fairfax Boulevard	WBL	140	16	7
			WBT	-	484	1237
			WBR	-	240	343
		Red Lobster Entrance	NEBLTR	-	0	37
		Auto Entrance	NBLTR	-	26	55
		Eaton Place	SBL	-	276	330
			SBT	-	282	324
2 Fairfax Boulevard & Ourisman W Entrance	STOP	Fairfax Boulevard	EBTR	-	0	0
		Fairfax Boulevard	WBT	-	0	0
		Ourisman W Entrance	NBR	-	0	0
3 Fairfax Boulevard & Ourisman E Entrance	STOP	Fairfax Boulevard	EBTR	-	0	0
		Fairfax Boulevard	WBL	100	3	2
			WBT	-	0	0
		Ourisman E Entrance	NBLR	-	2	7
4 Fairfax Boulevard & Site Entrance	SIGNAL	Fairfax Boulevard	EBL	-	26	80
			EBTR	-	931	213
		Fairfax Boulevard	WBL	-	39	14
			WBTR	-	132	33
		Site Entrance	NBLT	-	16	100
			NBR	-	0	36
		Plaza Entrance	SBLT	-	0	31
			SBR	-	0	9
5 Fairfax Boulevard & Captain Pells Entrance	STOP	Fairfax Boulevard	EBTR	-	0	0
		Fairfax Boulevard	WBT	-	0	0
		Captain Pells Entrance	NBR	-	0	0
6 Fairfax Boulevard & Fair Woods Parkway	SIGNAL	Fairfax Boulevard	EBL	450	121	280
			EBTR	-	4	141
		Fairfax Boulevard	WBL	85	28	29
			WBT	-	213	500
			WBR	-	0	0
		Fire Station Entrance	NBLTR	-	0	0
		Fair Woods Parkway	SBLT	-	252	183
			SBR	-	64	65

Notes : (1) Queue length, in feet, is based on the 95th percentile queue as reported by Synchro, Version 12.

Section 5: Analysis Of Future Conditions Without Site Development

Overview

Forecasts for traffic conditions without the development of Gatewood Plaza were estimated at the study intersections based on a composite of baseline traffic volumes, regional traffic growth, and pipeline development trips as described below. Future levels of service under these forecasted conditions were evaluated at the study intersections for the anticipated buildout year of 2028.

Regional Traffic Growth

A review of VDOT AADT volumes along Fairfax Boulevard shows a moderate increase in daily traffic from 37,000 vehicles in 2017 to 42,014 vehicles in 2022. 2020 faced a minor decrease but by 2021 values were back to increasing year over year.

Based on these findings, existing traffic volumes were increased by 0.50% per year to the anticipated buildout of the site in 2028 and are shown on Figure 5-1.

Traffic from Other Approved/Pending Developments

At the request of City staff, the following approved/pending developments were included as approved (i.e., “pipeline”) developments:

- Breezeway Property
  - 62 Residential Townhouses
  - 10,010 SF Shopping Center
- Northfax Development
  - 56 Multifamily Dwelling Units
  - 200 Continuing Care Units
- Paul VI Redevelopment
  - 259 Residential Condominiums/Townhouses
  - 7 Single Family Dwelling Units
  - 24,000 SF of Community Space
  - 20,000 SF of Retail Space
- Willowwood Plaza
  - 260 Multifamily Residential Units
  - 5,000 SF of Retail Space
- Boulevard Marketplace
  - 5,100 SF of Retail/Specialty Food Space

As shown in Table 5-1, these pipeline developments are anticipated to generate 438 AM peak commuter hour trips and 807 PM commuter peak hour trips at full buildout.

Background Traffic Forecasts

The existing traffic volumes depicted on Figure 3-1, regional traffic growth shown on Figure 5-1, and the pipeline trip assignments shown on Figure 5-2 were added together to yield the background future traffic forecasts at the study intersections, shown on Figure 5-3.

Background Future Levels of Service

Peak hour levels of service and queues were calculated for the study intersections based on the future lane use and traffic controls shown on Figure 2-2, background future traffic forecasts, and the 2000 Highway Capacity Manual (HCM) analysis procedures for signalized and unsignalized intersections. The results are provided in Appendix F, and summarized in Tables 5-2 and 5-3. The analyses indicate the following:

1. The signalized Fairfax Boulevard (Routes 29/50)/Eaton Place intersection currently operates at level of service (LOS) “C” during the AM and PM peak the side-street approach of Eaton Place operates at LOS “F” during these periods.

2. The Fairfax Boulevard (U.S. Route 29/50)/Site Entrance/Boulevard Marketplace signalized intersection currently operates at level of service (LOS) “A” during the AM and PM peak hour.

3. All approaches at the unsignalized intersections serving the site on Fairfax Boulevard currently operate at acceptable levels of service (at LOS “C” or better) during both the AM and PM peak hours except the northbound approach of the western driveway of the Ourisman Dealership which operates at LOS “E” during the AM peak hour.

4. Queues at existing unsignalized site driveways on Eaton Place would be four (4) vehicles lengths or less.

5. The Fairfax Boulevard (Routes 29/50)/Site Entrance/Fair Woods Parkway signalized intersection currently operates at level of service (LOS) “B” during the AM and PM peak hour.

Table 5-1
Gatewood Plaza
Pipeline Trip Generation (1)

Land Use	AM Peak Hour			PM Peak Hour			Average Daily Trips
	In	Out	Total	In	Out	Total	
N29 Willowwood Plaza 260 Multifamily Residential 5,000 SF of Retail Plaza	34	84	119	82	60	142	1503
Paul VI Redevelopment 259 Residential Condominiums/Townhouses 7 Single Family Dwelling Units 24,000 SF of Community Space 20,000 SF of Retail Space	71	145	216	202	213	415	4,961
Breezway Properties 62 Residential Townhouses 10,010 SF Shopping Center	13	27	40	74	66	140	1,644
Northfax West Development 56 Multifamily Dwelling Units 200 Continuing Care Units	23	28	51	31	31	62	801
Boulevard Marketplace	7	5	12	24	24	48	445
Total New Trips	148	289	438	413	394	807	9,354

Note(s):
(1) Trip generation based on previously prepared traffic studies.

Table 5-2
Gatewood Plaza - City of Fairfax, VA
Background (2028) Intersection Level of Service Summary (1) (2)

Intersection	Operating Condition	Street Name	Approach/ Movement	Existing 2024 AM Peak Hour	Existing 2024 PM Peak Hour	Background 2028 AM Peak Hour	Background 2028 PM Peak Hour
1 Fairfax Boulevard & Eaton Place	SIGNAL	Fairfax Boulevard	EBL	A (8.3)	C (27.4)	A (8.6)	C (29.4)
			EBTR	B (16.9)	B (16.8)	B (17.3)	B (17.1)
			WBL	C (22.2)	A (4.0)	C (24.1)	A (3.3)
		Fairfax Boulevard	WBT	C (26.8)	C (21.5)	C (28.6)	C (20.9)
			WBR	D (46.2)	A (8.5)	D (51.9)	A (8.3)
		Red Lobster Entrance	NEBLTR	A (0.0)	F (109.0)	A (0.0)	F (108.6)
		Auto Entrance	NBLTR	F (94.7)	F (106.6)	F (94.1)	F (106.6)
		Eaton Place	SBL	F (84.5)	F (106.6)	F (84.8)	F (107.9)
			SBLTR	F (85.4)	F (106.4)	F (84.0)	F (107.8)
		Overall		**C (28.0)**	**C (26.4)**	**C (29.4)**	**C (26.5)**
2 Fairfax Boulevard & Ourisman W Entrance	STOP	Fairfax Boulevard	EBTR	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Fairfax Boulevard	WBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Ourisman W Entrance	NBR	A [0.0]	A [9.0]	A [0.0]	A [0.0]
3 Fairfax Boulevard & Ourisman E Entrance	STOP	Fairfax Boulevard	EBTR	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Fairfax Boulevard	WBL	C [18.0]	B [11.1]	C [19.1]	B [11.7]
			WBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Ourisman E Entrance	NBLR	F [51.6]	C [20.6]	F [56.7]	C [21.5]
4 Fairfax Boulevard & Site Entrance	SIGNAL	Fairfax Boulevard	EBL	F (96.6)	F (110.1)	F (94.3)	F (108.6)
			EBTR	A (7.8)	A (2.5)	A (7.8)	A (2.6)
		Fairfax Boulevard	WBL	F (88.8)	F (148.3)	F (89.4)	F (150.0)
			WBTR	A (2.2)	A (1.1)	A (2.4)	A (1.7)
		Site Entrance	NBLT	F (86.5)	F (103.7)	F (86.5)	F (103.7)
			NBR	A (0.0)	F (95.1)	A (0.0)	F (95.1)
		Plaza Entrance	SBLT	A (0.0)	F (95.6)	F (86.3)	F (96.6)
			SBR	F (86.0)	F (94.9)	F (86.1)	F (95.0)
		Overall		**A (6.8)**	**A (5.6)**	**A (7.0)**	**A (6.9)**
5 Fairfax Boulevard & Captain Pells Entrance	STOP	Fairfax Boulevard	EBTR	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Fairfax Boulevard	WBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Captain Pells Entrance	NBR	A [0.0]	A [10.0]	A [0.0]	B [10.2]
6 Fairfax Boulevard & Fair Woods Parkway	SIGNAL	Fairfax Boulevard	EBL	F (109.2)	F (107.4)	F (110.9)	F (107.0)
			EBTR	A (5.3)	A (3.2)	A (5.0)	A (3.2)
			WBL	F (95.0)	F (110.6)	F (95.0)	F (110.6)
		Fairfax Boulevard	WBT	A (9.3)	B (12.0)	A (9.0)	B (12.5)
			WBR	A (0.1)	A (0.1)	A (0.1)	A (0.1)
		Fire Station Entrance	NBLTR	E (69.7)	A (0.0)	E (70.3)	A (0.0)
			SBLT	F (92.3)	F (103.8)	F (91.5)	F (103.8)
		Fair Woods Parkway	SBR	E (70.8)	F (90.3)	E (71.3)	F (90.3)
		Overall		**B (14.1)**	**B (17.0)**	**B (13.5)**	**B (16.8)**

Notes : (1) Numbers in brackets [] represent delay at unsignalized intersections in seconds per vehicle.
(2) Numbers in parenthesis () represent delay at signalized intersections in seconds per vehicle.

Table 5-3
Gatewood Plaza - City of Fairfax, VA
Background (2028) Intersection Queueing Summary (1)

Intersection	Operating Condition	Street Name	Approach/ Movement	Available Storage	Existing 2024 AM Peak Hour	Existing 2024 PM Peak Hour	Background 2028 AM Peak Hour	Background 2028 PM Peak Hour
1 Fairfax Boulevard & Eaton Place	SIGNAL	Fairfax Boulevard	EBL	260	33	30	34	33
			EBTR	-	669	337	700	361
			WBL	140	16	7	17	4
		Fairfax Boulevard	WBT	-	484	1237	506	1342
			WBR	-	240	343	270	324
		Red Lobster Entrance	NEBLTR	-	0	37	0	34
		Auto Entrance	NBLTR	-	26	55	23	56
		Eaton Place	SBL	-	276	330	305	353
			SBT	-	282	324	297	345
2 Fairfax Boulevard & Ourisman W Entrance	STOP	Fairfax Boulevard	EBTR	-	0	0	0	0
		Fairfax Boulevard	WBT	-	0	0	0	0
		Ourisman W Entrance	NBR	-	0	0	0	0
3 Fairfax Boulevard & Ourisman E Entrance	STOP	Fairfax Boulevard	EBTR	-	0	0	0	0
		Fairfax Boulevard	WBL	100	3	2	4	2
			WBT	-	0	0	0	0
		Ourisman E Entrance	NBLR	-	2	7	2	7
4 Fairfax Boulevard & Site Entrance	SIGNAL	Fairfax Boulevard	EBL	-	26	80	30	115
			EBTR	-	931	213	996	232
		Fairfax Boulevard	WBL	-	39	14	41	14
			WBTR	-	132	33	133	35
		Site Entrance	NBLT	-	16	100	15	100
			NBR	-	0	36	0	36
		Plaza Entrance	SBLT	-	0	31	12	51
			SBR	-	0	9	0	44
5 Fairfax Boulevard & Captain Pells Entrance	STOP	Fairfax Boulevard	EBTR	-	0	0	0	0
		Fairfax Boulevard	WBT	-	0	0	0	0
		Captain Pells Entrance	NBR	-	0	0	0	0
6 Fairfax Boulevard & Fair Woods Parkway	SIGNAL	Fairfax Boulevard	EBL	450	121	280	120	279
			EBTR	-	4	141	0	153
			WBL	85	28	29	28	29
		Fairfax Boulevard	WBT	-	213	500	220	555
			WBR	-	0	0	0	0
		Fire Station Entrance	NBLTR	-	0	0	0	0
		Fair Woods Parkway	SBLT	-	252	183	246	183
			SBR	-	64	65	67	56

Notes : (1) Queue length, in feet, is based on the 95th percentile queue as reported by Synchro, Version 12.

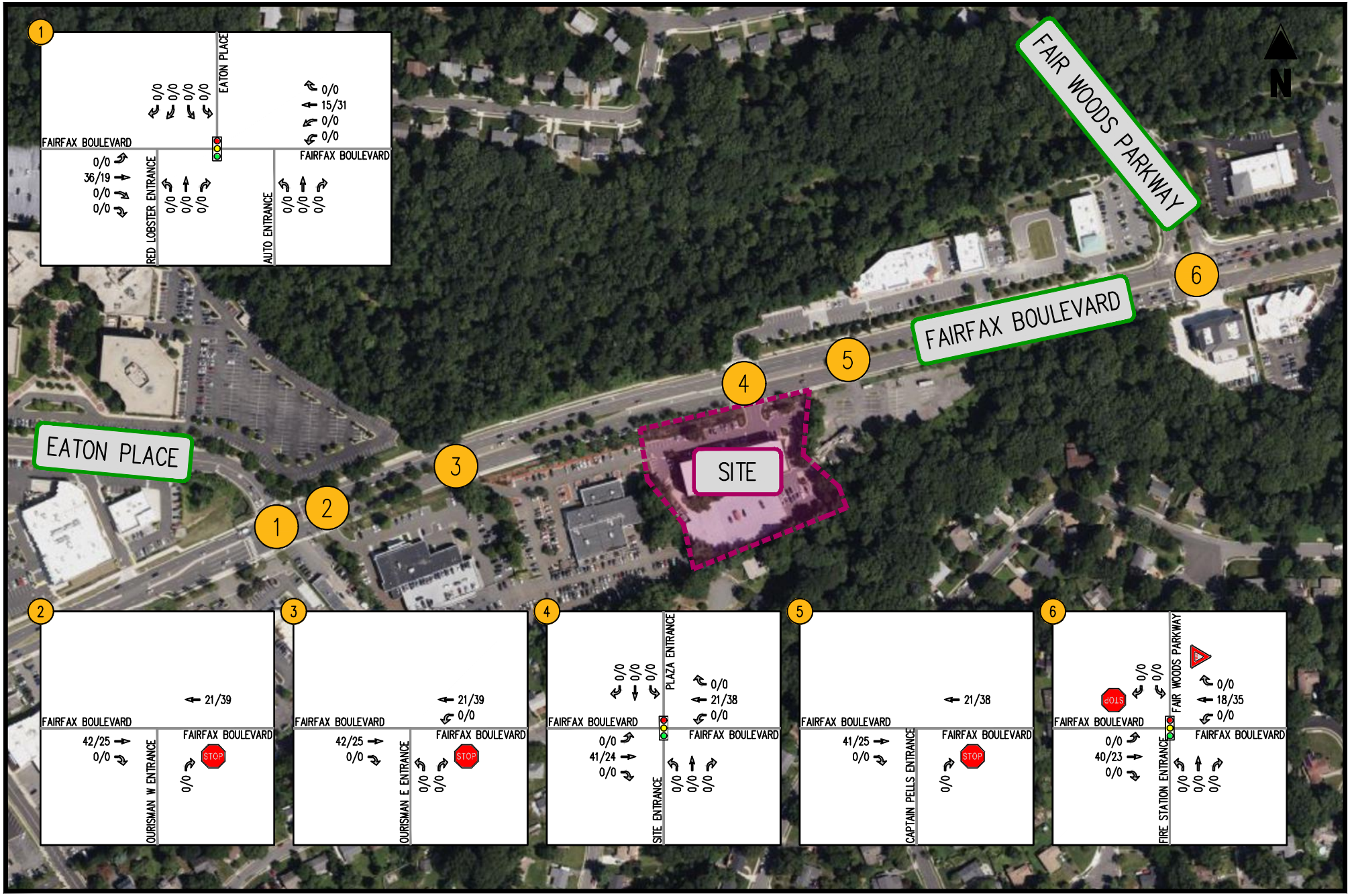

FIGURE 5-1
REGIONAL GROWTH

GATEWOOD PLAZA
CITY OF FAIRFAX, VIRGINIA

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT
SIGNALIZED INTERSECTION
STOP SIGN
YIELD SIGN

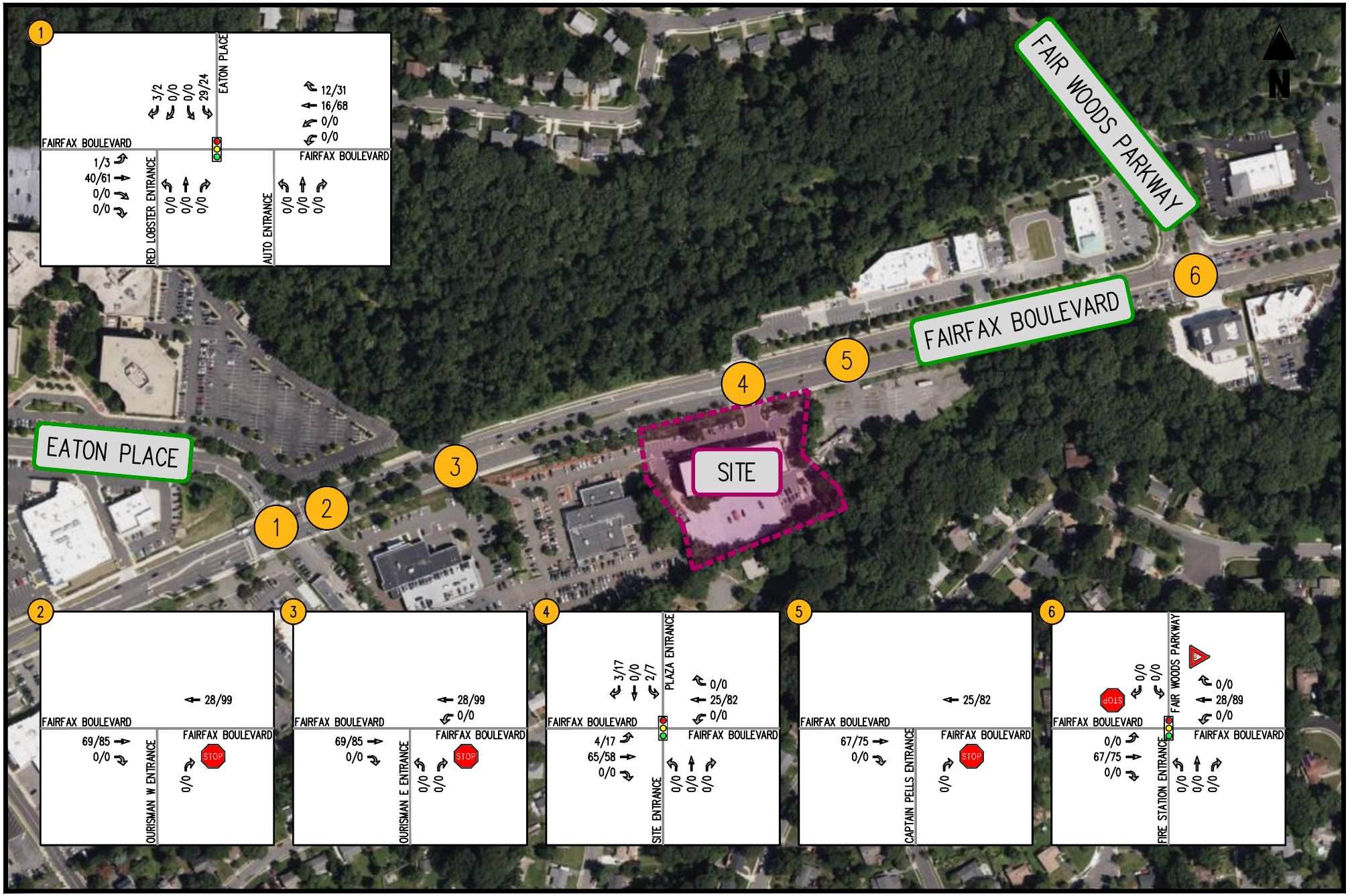

FIGURE 5-2
COMBINED PIPELINE TRIPS

GATEWOOD PLAZA
CITY OF FAIRFAX, VIRGINIA

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT
SIGNALIZED INTERSECTION
STOP SIGN
YIELD SIGN

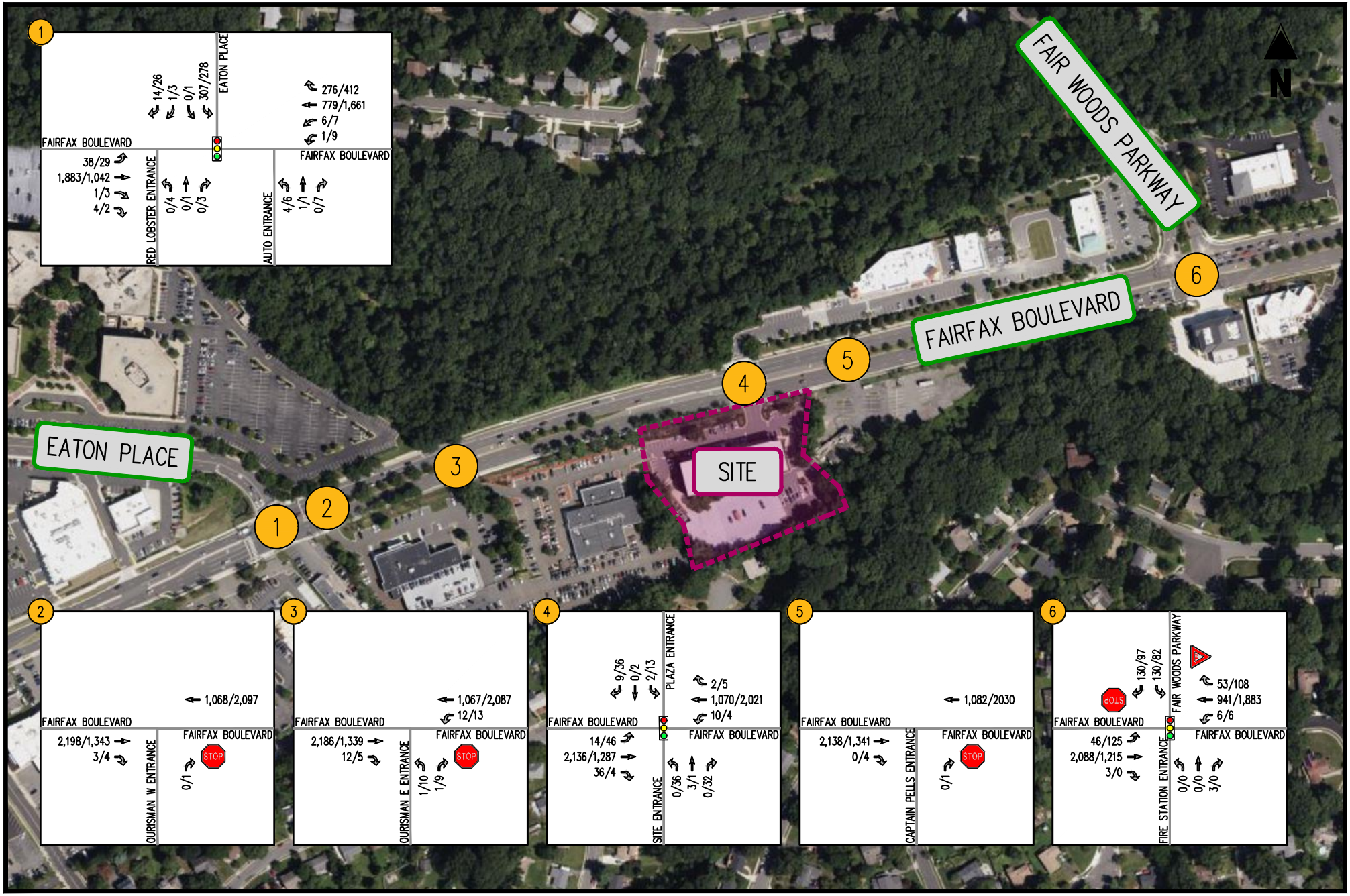

FIGURE 5-3
2028 BACKGROUND FUTURE TRAFFIC FORECASTS

GATEWOOD PLAZA
CITY OF FAIRFAX, VIRGINIA

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT
SIGNALIZED INTERSECTION
STOP SIGN
YIELD SIGN

Background Future Queueing

An analysis of intersection queues was performed at key locations under background future traffic conditions. The results of the queuing analysis are summarized in Table 4-2.

As shown in the table, queues within the study network will increase due to regional traffic growth and pipeline development. Forecasted queues would be contained within their effective storage.

Section 6: Site Analysis

Overview

The number of new vehicle trips anticipated to be generated by the proposed development plan were forecasted and assigned to the surrounding roadway network. The generation, distribution, and assignment of site trips were based on the proposed development plan and existing site entrances in relation to the surrounding roadway network.

Proposed Site Access

The conceptual development plan provided on Figure 1-2 shows that access to the site would continue to be provided via the signalized intersection along Fairfax Boulevard (Route 29/50) opposite Boulevard Marketplace. The site driveways would continue to provide full-movement access. The plan improves upon the existing condition by eliminating the existing throat and the internal parking aisle conflicts associated with the existing office building. The proposed internal driveway provides a seamless circulation around the mixed-use building providing approximately 300 feet of internal queue distance.

Trip Generation

Overview
Trip generation estimates for the AM and PM peak hours, as well as the average daily traffic, were derived from the standard Institute of Transportation Engineers (ITE) trip generation rates, as published in the Trip Generation Manual, 11th edition. The “Multifamily Residential – Mid-Rise” (221) land use code was used for the proposed apartment units while the “Retail Plaza” (822), “General Office Building” (710) and “Medical Office Building” (720) land use codes were used for the commercial component.

The trip generation analysis for the proposed uses is presented in Table 6-1 and indicates that the site would generate 222 AM peak hour trips (101 in and 121 out), 292 PM peak hour trips (143 in and 149 out), and 2,770 daily (24-hour) trips when fully built and occupied in 2028.

The proposed project consists of a mix of residential and commercial uses. There is an inherent synergy between these land use components, and as a result, the analysis assumes an internal trip reduction which represents a portion of trips that will use commercial uses without exiting the site and vice versa. As scoped with city staff and consistent with standard practice and VDOT guidelines, a reduction of 5% for AM, 10% for PM, and 10% for Daily trips. This reduction in trips was applied and is summarized in Table 6-1.

Site Trip Distributions
As agreed upon in the scope with City staff, site trip distribution used in the analysis was based on existing travel patterns and engineering judgment. For purposes of this analysis, the following distribution was used in the forecasting of future site traffic:

To/From:	Commercial and Residential Distribution (AM/PM)
North on Eaton Place:	15%/15%
East on Fairfax Boulevard:	40%/30%
West on Fairfax Boulevard:	45%/55%
TOTAL	**100%**

Site Trip Assignments

The vehicle trip distribution and assignments of the total vehicle trips generated upon the future buildout of the Gatewood Plaza development was based on the above distribution and are depicted on Figure 6-1.

Table 6-1

Gatewood Plaza

Site Trip Generation

Land Use	Land Use Code	Amount	Units	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Average Daily Trips
Currently Proposed Development Program										
Multifamily Residential (Mid-Rise)	221	307	D.U.	28	95	123	73	47	120	1,394
Internal With Retail (5% AM, 10% PM, 10% Daily)				*(1)*	*(1)*	*(2)*	*(7)*	*(5)*	*(12)*	*(111)*
New Residential External Trips				**27**	**94**	**121**	**66**	**42**	**108**	**1,283**
Retail Plaza	822	20,700	GSF	29	19	48	66	65	131	1,103
Internal with Residential (5% AM, 10% PM, 10% Daily)				*(1)*	*(1)*	*(2)*	*(5)*	*(7)*	*(12)*	*(111)*
New Retail External Trips				**28**	**18**	**46**	**61**	**58**	**119**	**992**
General Office Building	710	11,200	GSF	**22**	**3**	**25**	**5**	**22**	**27**	**173**
Medical Office	720	10,000	GSF	**24**	**6**	**30**	**11**	**27**	**38**	**322**
			Total New Trips	**101**	**121**	**222**	**143**	**149**	**292**	**2,770**

Note(s):
(1) Trip generation based on the Institute of Transportation Engineers' Trip Generation Manual, 11th Edition

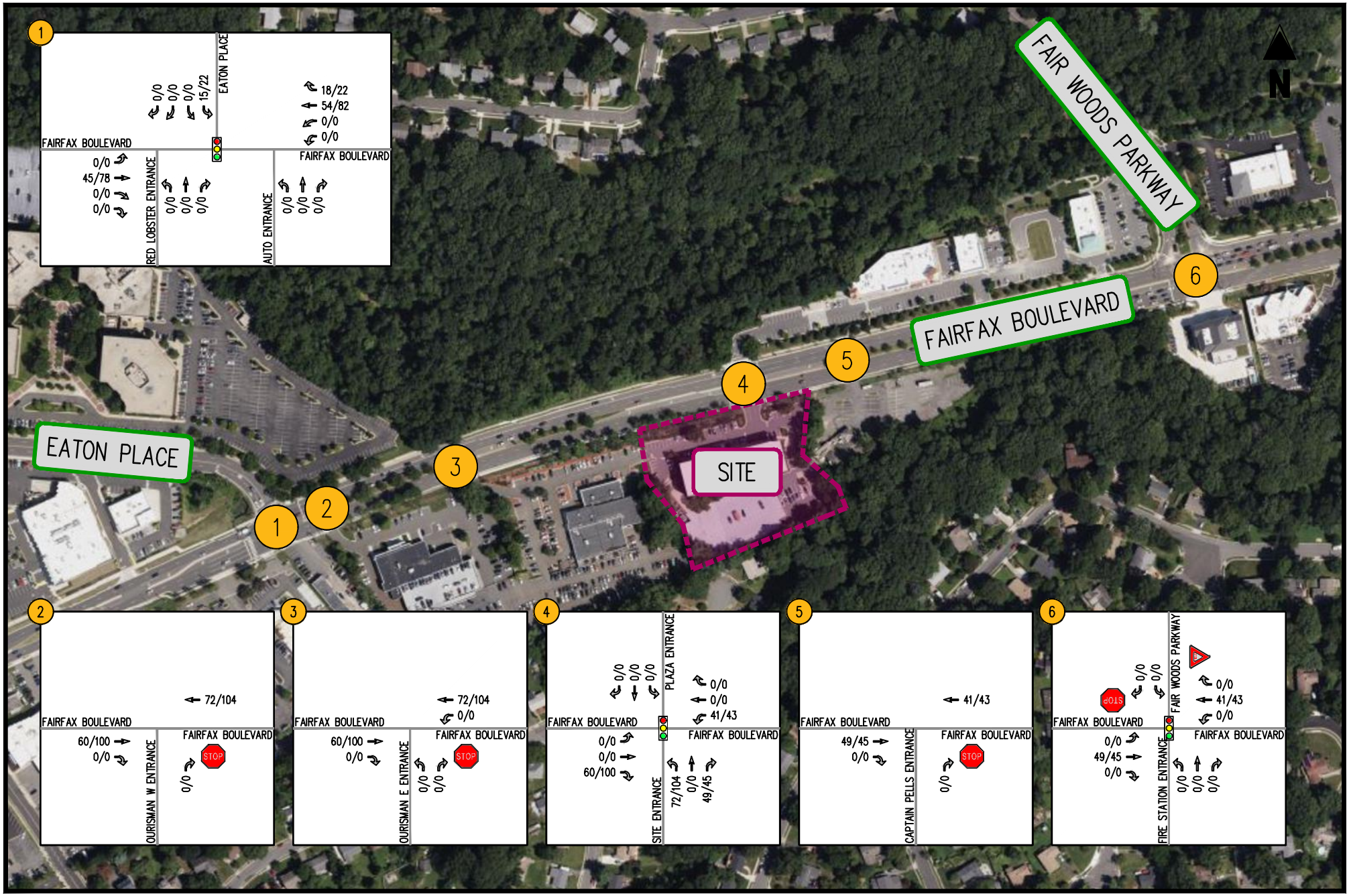

FIGURE 6-1
SITE TRIP ASSIGNMENTS

GATEWOOD PLAZA
CITY OF FAIRFAX, VIRGINIA

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT
SIGNALIZED INTERSECTION
STOP SIGN
YIELD SIGN

Section 7: Analysis of Future Conditions with Site Development

Total Future Traffic Forecasts

Site trip assignments shown on Figure 6-1 were added to the background traffic forecasts to yield 2028 total future traffic forecasts, shown on Figure 7-1. Lane use and traffic control at each of the study intersections for 2028 total future have not changed from the 2024 existing conditions, these can be seen in Figure 2-2.

Total Future Levels of Service with Proposed Development Plan

Future levels of service and queuing with the proposed Phase 1 development plan were determined at the study intersections based on the future traffic volumes and lane use and the 2000 HCM methodologies for signalized and unsignalized intersections calculated using the Synchro 11 traffic analysis software. The results of these analyses are provided in Appendix G and summarized in Tables 7-1 and 7-2.

Study intersections are anticipated to operate as follows:

1. The signalized Fairfax Boulevard (Routes 29/50)/Eaton Place intersection currently operates at level of service (LOS) “C” during the AM and PM peak the side-street approach of Eaton Place operates at LOS “F” during these periods.

2. The Fairfax Boulevard (U.S. Route 29/50)/Site Entrance/Boulevard Marketplace signalized intersection currently operates at level of service (LOS) “B” during the AM and PM peak hour.

3. All approaches at the unsignalized intersections serving the site on Fairfax Boulevard currently operate at acceptable levels of service (at LOS “C” or better) during both the AM and PM peak hours except the northbound approach of the western driveway of the Ourisman Dealership which operates at LOS “D” during the AM peak hour.

4. Queues at existing unsignalized site driveways on Eaton Place would be four (4) vehicles lengths or less.

5. The Fairfax Boulevard (Routes 29/50)/Site Entrance/Fair Woods Parkway signalized intersection currently operates at level of service (LOS) “B” during the AM and PM peak hour.

As shown in Table 7-1, levels of service under future site development conditions would remain generally consistent with future background conditions (i.e., without site development). The site-generated traffic would have a minor increase in delay at the key signalized intersection on Fairfax Boulevard (U.S. Route 29/50)/ Site Entrance/ Boulevard Marketplace of generally seven (7) seconds during the AM peak hour and four (4) during the PM peak hour.

Table 7-1
Gatewood Plaza - City of Fairfax, VA
Total Future (2028) Intersection Level of Service Summary (1) (2)

Intersection	Operating Condition	Street Name	Approach/ Movement	Existing 2024 AM Peak Hour	Existing 2024 PM Peak Hour	Background 2028 AM Peak Hour	Background 2028 PM Peak Hour	Total Future 2028 AM Peak Hour	Total Future 2028 PM Peak Hour
1 Fairfax Boulevard & Eaton Place	SIGNAL	Fairfax Boulevard	EBL	A (8.3)	C (27.4)	A (8.6)	C (29.4)	A (9.0)	C (33.4)
			EBTR	B (16.9)	B (16.8)	B (17.3)	B (17.1)	B (17.7)	B (17.9)
			WBL	C (22.2)	A (4.0)	C (24.1)	A (3.3)	C (23.0)	A (4.3)
		Fairfax Boulevard	WBT	C (26.8)	C (21.5)	C (28.6)	C (20.9)	C (27.3)	C (21.7)
			WBR	D (46.2)	A (8.5)	D (51.9)	A (8.3)	D (44.5)	A (5.4)
		Red Lobster Entrance	NEBLTR	A (0.0)	F (109.0)	A (0.0)	F (108.6)	A (0.0)	F (108.6)
		Auto Entrance	NBLTR	F (94.7)	F (106.6)	F (94.1)	F (106.6)	F (94.1)	F (106.6)
		Eaton Place	SBL	F (84.5)	F (106.6)	F (84.8)	F (107.9)	F (84.8)	F (109.7)
			SBLTR	F (85.4)	F (106.4)	F (84.0)	F (107.8)	F (83.6)	F (110.1)
		Overall		**C (28.0)**	**C (26.4)**	**C (29.4)**	**C (26.5)**	**C (28.8)**	**C (27.1)**
2 Fairfax Boulevard & Ourisman W Entrance	STOP	Fairfax Boulevard	EBTR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Fairfax Boulevard	WBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Ourisman W Entrance	NBR	A [0.0]	A [9.0]	A [0.0]	A [0.0]	A [0.0]	A [8.9]
3 Fairfax Boulevard & Ourisman E Entrance	STOP	Fairfax Boulevard	EBTR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Fairfax Boulevard	WBL	C [18.0]	B [11.1]	C [19.1]	B [11.7]	C [19.4]	B [12.2]
			WBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Ourisman E Entrance	NBLR	F [51.6]	C [20.6]	F [56.7]	C [21.5]	E [49.6]	C [20.6]
4 Fairfax Boulevard & Site Entrance	SIGNAL	Fairfax Boulevard	EBL	F (96.6)	F (110.1)	F (94.3)	F (108.6)	F (92.3)	F (104.4)
			EBTR	A (7.8)	A (2.5)	A (7.8)	A (2.6)	B (16.4)	A (7.9)
		Fairfax Boulevard	WBL	F (88.8)	F (148.3)	F (89.4)	F (150.0)	F (89.5)	F (141.3)
			WBTR	A (2.2)	A (1.1)	A (2.4)	A (1.7)	A (4.6)	A (5.5)
		Site Entrance	NBLT	F (86.5)	F (103.7)	F (86.5)	F (103.7)	F (85.7)	F (103.9)
			NBR	A (0.0)	F (95.1)	A (0.0)	F (95.1)	E (76.0)	F (85.1)
		Plaza Entrance	SBLT	A (0.0)	F (95.6)	F (86.3)	F (96.6)	E (75.7)	F (86.5)
			SBR	F (86.0)	F (94.9)	F (86.1)	F (95.0)	E (75.6)	F (85.0)
		Overall		**A (6.8)**	**A (5.6)**	**A (7.0)**	**A (6.9)**	**B (16.4)**	**B (14.1)**
5 Fairfax Boulevard & Captain Pells Entrance	STOP	Fairfax Boulevard	EBTR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Fairfax Boulevard	WBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Captain Pells Entrance	NBR	A [0.0]	A [10.0]	A [0.0]	B [10.2]	A [0.0]	A [9.0]
6 Fairfax Boulevard & Fair Woods Parkway	SIGNAL	Fairfax Boulevard	EBL	F (109.2)	F (107.4)	F (110.9)	F (107.0)	F (122.2)	F (100.8)
			EBTR	A (5.3)	A (3.2)	A (5.0)	A (3.2)	A (2.4)	A (3.3)
			WBL	F (95.0)	F (110.6)	F (95.0)	F (110.6)	F (95.0)	F (110.6)
		Fairfax Boulevard	WBT	A (9.3)	B (12.0)	A (9.0)	B (12.5)	A (9.0)	B (12.7)
			WBR	A (0.1)	A (0.1)	A (0.1)	A (0.1)	A (0.1)	A (0.1)
		Fire Station Entrance	NBLTR	E (69.7)	A (0.0)	E (70.3)	A (0.0)	E (70.3)	A (0.0)
			SBLT	F (92.3)	F (103.8)	F (91.5)	F (103.8)	F (91.5)	F (103.8)
		Fair Woods Parkway	SBR	E (70.8)	F (90.3)	E (71.3)	F (90.3)	E (71.3)	F (90.3)
		Overall		**B (14.1)**	**B (17.0)**	**B (13.5)**	**B (16.8)**	**B (11.9)**	**B (16.5)**

Notes : (1) Numbers in brackets [] represent delay at unsignalized intersections in seconds per vehicle.
(2) Numbers in parenthesis () represent delay at signalized intersections in seconds per vehicle.

Table 7-2
Gatewood Plaza - City of Fairfax, VA
Total Future (2028) Intersection Queueing Summary (1)

Intersection	Operating Condition	Street Name	Approach/ Movement	Available Storage	Existing 2024 AM Peak Hour	Existing 2024 PM Peak Hour	Background 2028 AM Peak Hour	Background 2028 PM Peak Hour	Total Future 2028 AM Peak Hour	Total Future 2028 PM Peak Hour
1 Fairfax Boulevard & Eaton Place	SIGNAL	Fairfax Boulevard	EBL	260	33	30	34	33	34	33
			EBTR	-	669	337	700	361	717	394
			WBL	140	16	7	17	4	16	4
		Fairfax Boulevard	WBT	-	484	1237	506	1342	522	1437
			WBR	-	240	343	270	324	266	210
		Red Lobster Entrance	NEBLTR	-	0	37	0	34	0	34
		Auto Entrance	NBLTR	-	26	55	23	56	23	56
		Eaton Place	SBL	-	276	330	305	353	310	373
			SBT	-	282	324	297	345	303	372
2 Fairfax Boulevard & Ourisman W Entrance	STOP	Fairfax Boulevard	EBTR	-	0	0	0	0	0	0
		Fairfax Boulevard	WBT	-	0	0	0	0	0	0
		Ourisman W Entrance	NBR	-	0	0	0	0	0	0
3 Fairfax Boulevard & Ourisman E Entrance	STOP	Fairfax Boulevard	EBTR	-	0	0	0	0	0	0
		Fairfax Boulevard	WBL	100	3	2	4	2	4	2
			WBT	-	0	0	0	0	0	0
		Ourisman E Entrance	NBLR	-	2	7	2	7	2	7
4 Fairfax Boulevard & Site Entrance	SIGNAL	Fairfax Boulevard	EBL	-	26	80	30	115	30	113
			EBTR	-	931	213	996	232	1019	292
		Fairfax Boulevard	WBL	-	39	14	41	14	108	125
			WBTR	-	132	33	133	35	132	707
		Site Entrance	NBLT	-	16	100	15	100	149	230
			NBR	-	0	36	0	36	46	47
		Plaza Entrance	SBLT	-	0	31	12	51	12	45
			SBR	-	0	9	0	44	0	43
5 Fairfax Boulevard & Captain Pells Entrance	STOP	Fairfax Boulevard	EBTR	-	0	0	0	0	0	0
		Fairfax Boulevard	WBT	-	0	0	0	0	0	0
		Captain Pells Entrance	NBR	-	0	0	0	0	0	0
6 Fairfax Boulevard & Fair Woods Parkway	SIGNAL	Fairfax Boulevard	EBL	450	121	280	120	279	107	279
			EBTR	-	4	141	0	153	16	155
			WBL	85	28	29	28	29	28	29
		Fairfax Boulevard	WBT	-	213	500	220	555	228	574
			WBR	-	0	0	0	0	0	0
		Fire Station Entrance	NBLTR	-	0	0	0	0	0	0
		Fair Woods Parkway	SBLT	-	252	183	246	183	246	183
			SBR	-	64	65	67	56	67	65

Notes : (1) Queue length, in feet, is based on the 95th percentile queue as reported by Synchro, Version 12.

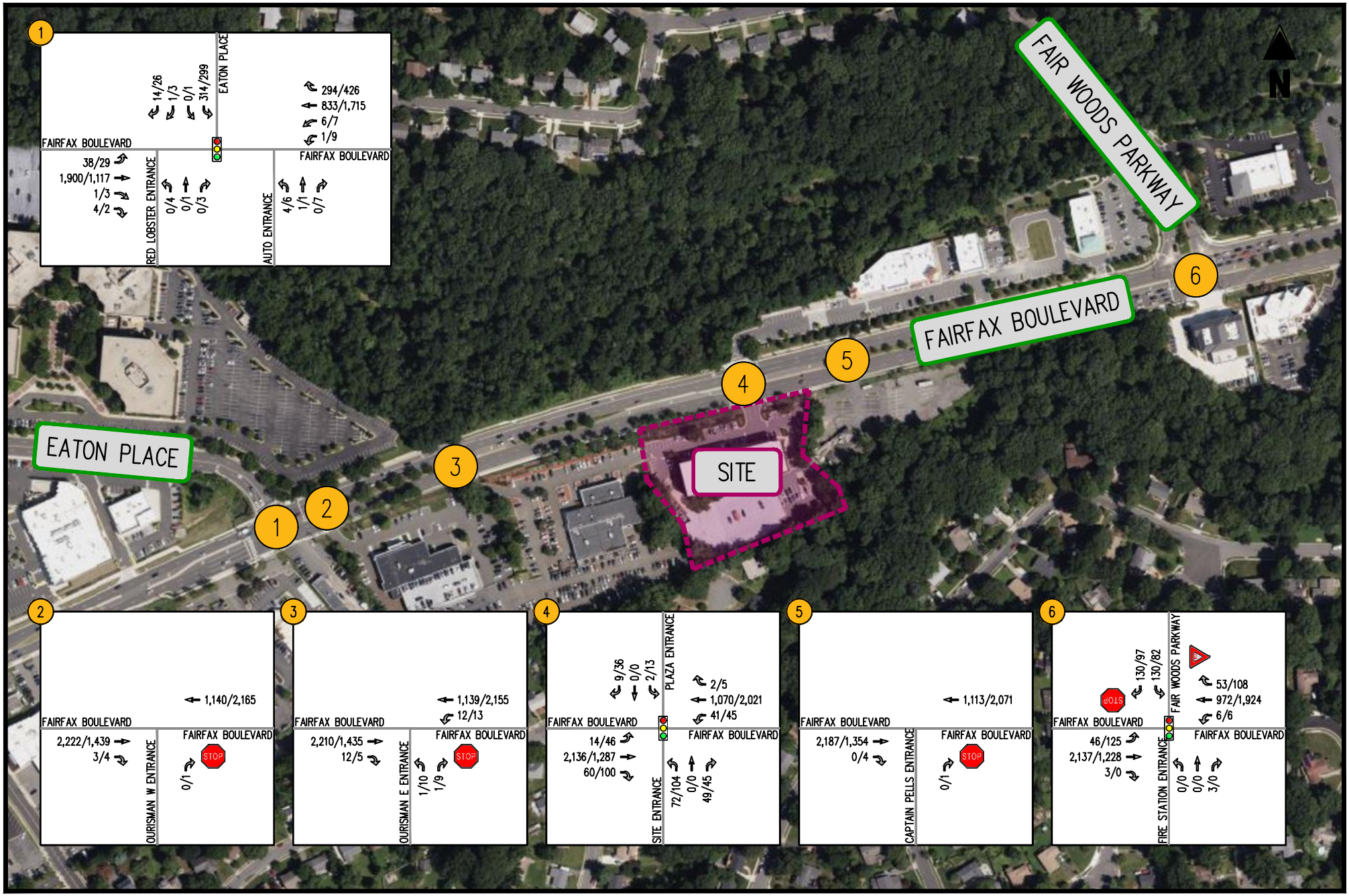

FIGURE 7-1
2028 TOTAL FUTURE TRAFFIC FORECASTS

GATEWOOD PLAZA
CITY OF FAIRFAX, VIRGINIA

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT
SIGNALIZED INTERSECTION
STOP SIGN
YIELD SIGN

Section 8: Conclusions and Recommendations

Conclusions

The following summarizes the conclusions of this traffic impact study:

1. All the signalized intersections studied currently operate at overall acceptable levels of service (LOS “D” or better) with some lane groups operating at or near theoretical capacity.

2. The Breezeway Property, Northfax West Development, Paul VI Redevelopment, Willowwood Plaza, and Boulevard Marketplace approved pipeline developments are anticipated to generate 438 AM commuter peak hour trips and 807 PM commuter peak hour trips at full buildout.

3. Under future 2028 traffic conditions, minimal increases in delay at the study intersections are expected due to the trips generated by approved pipeline developments in the vicinity of the site and overall levels of service would remain generally consistent with existing conditions.

4. Vehicular access to the proposed redevelopment would be provided via the existing signalized intersection of Fairfax Boulevard (Route 29/50)/ and Boulevard Marketplace.

5. The project is estimated to generate 175 AM peak commuter hour trips and 230 PM peak commuter hour trips upon buildout. It is expected to generate 2,263 average daily (24-hour) vehicle trips.

6. Under future 2028 traffic conditions, with the development of the subject site, intersection levels of service would remain generally consistent with existing and background conditions. This is largely due to the fact that there is not a significant increase in site generated trips between the existing uses and proposed redevelopment.

7. All unsignalized intersection and access drive approaches serving Gatewood Plaza will operate at LOS “C” or better during each of the studied peak periods apart from the northbound approach of the western driveway of the Ourisman Dealership. No additional physical roadway improvements are required at the site driveways under future conditions.

Recommendations

1. The Applicant should establish an enhanced streetscape which accommodates improved pedestrian features along the site’s Fairfax Boulevard frontage, consistent with the City’s Comprehensive Plan and vision for the corridor. Pedestrian connections between the sidewalk and the building should be provided to allow integration of the proposed retail uses with the sidewalk/streetscape elements as appropriate.

2. In coordination with City staff, the Applicant should establish a new bus shelter along Fairfax Boulevard in the general location of the existing bus stop.

3. The Applicant should consider Transportation Demand Management (TDM) strategies to leverage current and/or future transit services and opportunities for multimodal trips. These measures may include, but not be limited to the following:

    a. Designate an on-site Transportation Management Coordinator (TMC) who will act as a point of contact for residents/tenants with regard to transportation options and opportunities.
    b. Provide pre-loaded transit fare card (or SmarTrip) for new residents/tenants.
    c. Maintain information (printed and/or digital) on transit services and schedules.
    d. Provide on-site amenities and resources for residents who telework.
    e. Unbundle parking from resident leases.

4. The Applicant should retain interparcel access to adjacent commercial properties to ensure safe and convenient access to/from those properties to Fairfax Boulevard.

5. The Applicant should coordinate with the City Traffic Engineer to consider appropriate signal modifications to mitigate the site driveway approach to Fairfax Boulevard, including the installation of a near side signal head oriented to the internal driveway.

APPENDIX A – City of Fairfax Scoping Agreement

	Number of Multi-Family Units: 336 DU ITE LU Code(s): 221 Retail: 19,602 GSF ITE LU Code(s): 822		_____	
Total Peak Hour Trip Projection:	Less than 100 ☐	100 – 499 ☒	500 – 999 ☐	1,000 or more ☐

Traffic Impact Analysis Assumptions			
Study Period	Existing Year: 2024	Build-out Year: 2028	Design Year: N/A
Study Area Boundaries	North: Fairfax Boulevard (US Route 50)	South:	
	East: Captain Pell's Crab House	West: Ourisman Dealership	
External Factors That Could Affect Project (Planned road improvements, other nearby developments)	Pipeline Developments: Boulevard Marketplace N29 Willowwood Plaza Paul VI Redevelopment Breezeway Property Northfax West Development		
Consistency With Comprehensive Plan (Land use, transportation plan)	The City's 2035 Comprehensive Plan identifies the site as part of the Commercial Corridor and recommends a mix of retail, restaurant, service, medical, office, and other commercial uses. The city of Fairfax Comprehensive Plan Multimodal Transportation chapter designates Fairfax Boulevard as a "Boulevard" and therefore recommends enhancements to the urban streetscape. We will work with staff to ensure that the enhanced streetscape and multimodal facilities recommended in the plan are not precluded.		
Available Traffic Data (Historical, forecasts)	VDOT historical traffic count data indicates: 2022 VDOT Average Annual Daily Traffic (AADT): US Route 29/50: 42,014; Route 123: 35,423 2021 VDOT Average Annual Daily Traffic (AADT): US Route 29/50: 41,000; Route 123: 34,000 2020 VDOT Average Annual Daily Traffic (AADT): US Route 29/50: 27,000; Route 123: 31,000 2019 VDOT Average Annual Daily Traffic (AADT): US Route 29/50: 37,000; Route 123: 39,000 2018 VDOT Average Annual Daily Traffic (AADT): US Route 29/50: 37,000; Route 123: 38,000 2017 VDOT Average Annual Daily Traffic (AADT): US Route 29/50: 37,000; Route 123: 39,000		

Provided By Wells and Associates

	2016 VDOT Average Annual Daily Traffic (AADT): US Route 29/50: 40,000; Route 123: 38,000		
Trip Distribution: AM / PM (See Attachment 1)	From the West: Fairfax Boulevard (US Route 29/50): 45% / 55%	From the East: Fairfax Boulevard (US Route 29/50): 40% / 30%	
AM / PM	From the West: Eaton Place (US Route 29/50): 15% / 15%		
Annual Vehicle Trip Growth Rate:	0.5% or per VDOT AADT counts	Peak Period for Study (check all that apply)	☒ AM ☒ PM ☐ SAT
		Peak Hour of the Generator	N/A
Study Intersections and/or Road Segments	1. Fairfax Boulevard (Route 29/50) / Eaton Place	2. Fairfax Boulevard (Route 29/50)/West Entrance to Toyota	
(See Attachment 1)	3. Fairfax Boulevard (Route 29/50) / Ourisman Dealership Main Entrance	4. Fairfax Boulevard (Route 29/50)/ Boulevard Marketplace/Site Entrance	
	5. Fairfax Boulevard (Route 29/50) / Captain Pell's Entrance	6. Fairfax Boulevard (Route 29/50) / Fair Woods Parkway	
	7. Interparcel between Site and Ourisman Dealership	8. Interparcel between site and Captain Pell's Restaurant (Future).	
Trip Adjustment Factors	Internal allowance: ☒ Yes ☐ No Reduction: 5% AM/10% PM/10% Daily trips	Pass-by allowance: ☐ Yes ☒ No Reduction: n/a % trips	
Software Methodology	☒ Synchro ☐ HCS (v.2000/+) ☐ aaSIDRA ☐ CORSIM ☐ Other Synchro Version 11	change for 12.4.24	
Traffic Signal Proposed or Affected (Analysis software to be used, progression speed, cycle length)	1. Fairfax Boulevard (Route 29/50) / Eaton Place 2. Fairfax Boulevard (Route 29/50)/ Boulevard Marketplace/Site Entrance 3. Fairfax Boulevard (Route 29/50) / Fair Woods Parkway 4. No new traffic signals are anticipated to be implemented at this time.		
Improvement(s) Assumed or to be Considered	1. Potential modifications for interparcel access between the site, dealership, and restaurant.		
Background Traffic Studies Considered	N29 Willowwood Plaza - TIA prepared by Wells + Associates. Paul VI Redevelopment - TIA prepared by Wells + Associates. Breezeway Property - TIA prepared by Wells + Associates. Northfax West Development -TIA prepared by Gorove/Slade Associates Boulevard Marketplace – Change in Retail Use		
Plan Submission	☐ Master Development Plan (MDP) ☒ Generalized Development Plan (GDP) ☐ Preliminary/Sketch Plan ☐ Other Plan type (Final Site, Subd. Plan)		

Additional Issues to be Addressed	☒ Queuing analysis	☐ Actuation/Coordination	☐ Weaving analysis
	☐ Merge analysis	☒ Bike/Ped Accommodations	☒ Intersection(s)
	☒ TDM Measures	☐ Other	

NOTES on ASSUMPTIONS:

1. Synchro 11 will be used to conduct capacity analysis with peak hour factors measured in the field for existing conditions (0.85<PHF). Under background and total future conditions, a minimum PHF of 0.92 will be used for all movements.

SCOPE OF WORK MEETING

ADDITIONS TO THE REQUIRED ELEMENTS, CHANGES TO THE METHODOLOGY OR STANDARD ASSUMPTIONS, AND SIGNATURE PAGE

Any additions to the Required Elements or changes to the Methodology or Standard Assumptions due to special circumstances that are approved by the City of Fairfax:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

AGREED: _____ DATE: 1/18/2024

Consultant

PRINT NAME: William F. Johnson, P.E., PTOE

Consultant

SIGNED: _____ DATE: _____

PRINT NAME: _____

Attachments:

Attachment 1 – Site Location, Study Intersections, and Directional Distributions
Attachment 2 – Conceptual Plan
Attachment 3 – Trip Generation

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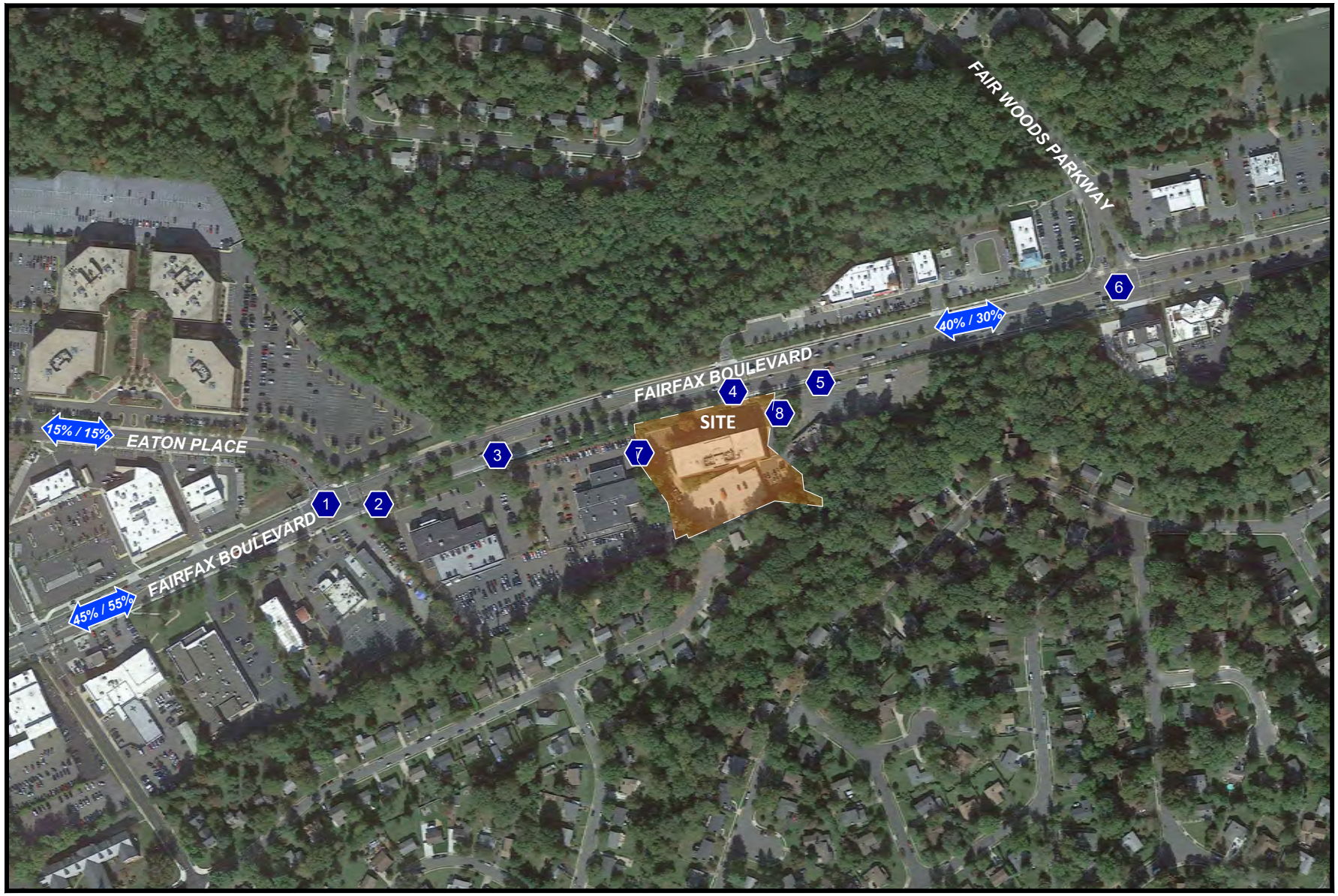

Attachment 1

Site Location and Study Intersections

X Study Intersection

X% / X% Directional Trip Distribution

000 / 000 AM PEAK HOUR / PM PEAK HOUR

NORTH

Gatewood Plaza

City of Fairfax, Virginia

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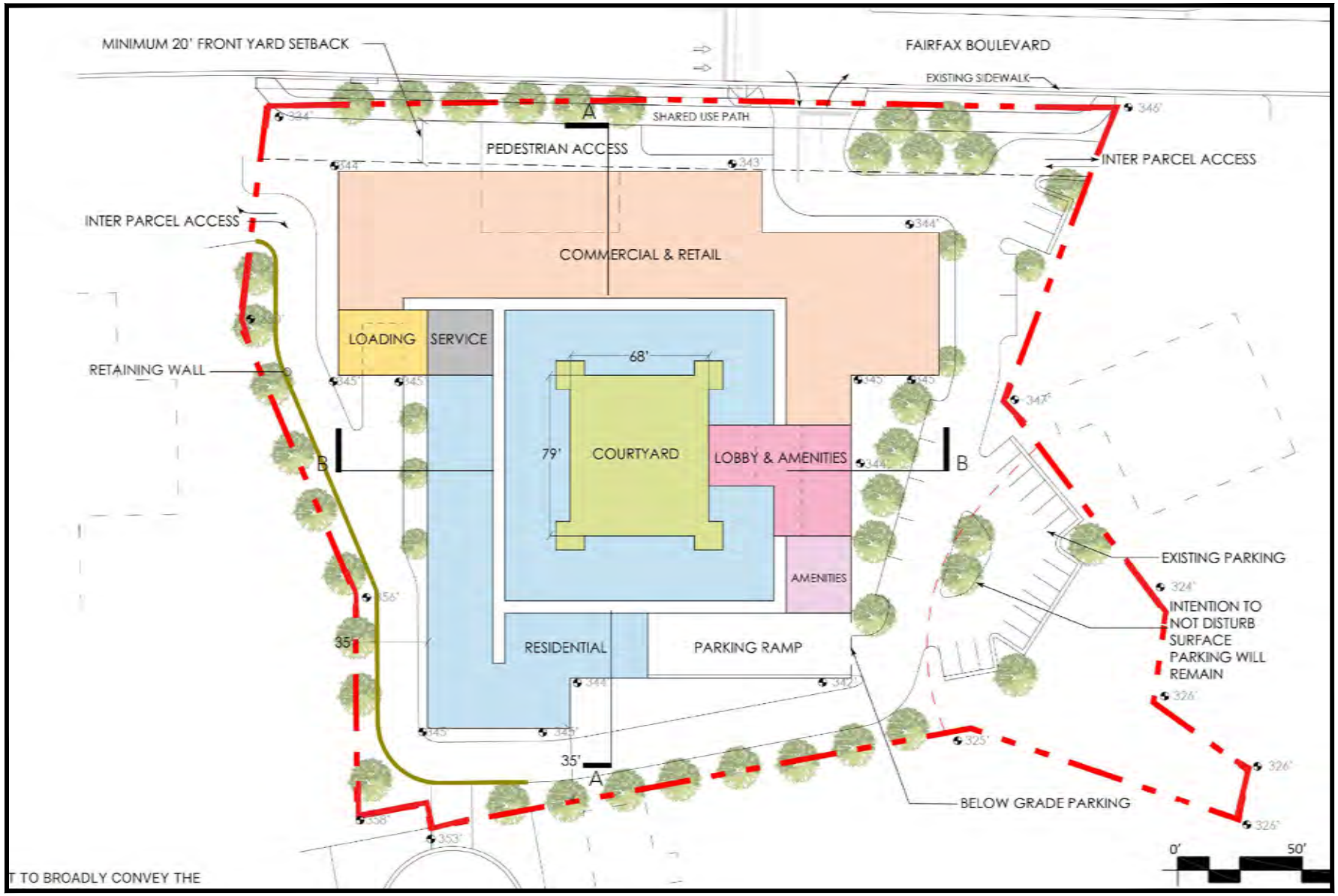


Attachment 2
Proposed Development Plan

NORTH
Gatewood Plaza
City of Fairfax, Virginia

Attachment 3
Gatewood Plaza
Site Trip Generation Comparison **(1)**

Land Use	Size	Units	ITE Code	Weekday AM Peak Hour In	Out	Total	Weekday PM Peak Hour In	Out	Total	Weekday ADT
Existing Uses:										
General Office Building	**93,115**	**S.F.**	**710**	**138**	**19**	**157**	**27**	**130**	**157**	**1,091**
Total Trips				**138**	**19**	**157**	**27**	**130**	**157**	**1,091**
Currently Proposed Development Program										
Multifamily Residential (Mid-Rise)	**336**	**D.U.**	**221**	**31**	**105**	**136**	**80**	**51**	**131**	**1,556**
Internal with Retail (5% AM, 10% PM, 15% Daily)				1	1	2	6	5	11	159
New Residential External Trips				***30***	***104***	***134***	***74***	***46***	***120***	***1,397***
Retail Plaza	**19,602**	**S.F.**	**822**	**27**	**18**	**45**	**63**	**63**	**126**	**1,057**
Internal with Residential (5% AM, 10% PM, 15% Daily)				1	1	2	5	6	11	159
Total Retail External Trips				*26*	*17*	*43*	*58*	*57*	*115*	*898*
				-	-	-	-	-	-	-
New External Retail Trips				***26***	***17***	***43***	***58***	***57***	***115***	***898***
Total New Trips				**56**	**121**	**177**	**132**	**103**	**235**	**2,295**
Difference (Proposed -Existing)				**(82)**	**102**	**20**	**105**	**(27)**	**78**	**1,204**

Notes:
(1) Trip Generation based on ITE's Trip Generation, 11th Edition.

APPENDIX B – CUE & Metrobus Routes

CITY OF FAIRFAX

Transit Guide

Bus Routes, Schedules & Rider Information

CUE

703-385-7859

FREE TO RIDE

cuebus.org

Check cue.transloc.com for real-time arrivals!

Information for CUE BUS Riders

The CUE Bus service provides free transit service within the City of Fairfax and to the Vienna/Fairfax-GMU Metrorail Station and George Mason University. Buses operate seven days a week according to this schedule.

Información para viajeros de los buses CUE

El servicio de bus CUE ofrece servicio de transporte gratuito dentro de la ciudad de Fairfax y a la estación de Metrorail de Viena / Fairfax-GMU y la Universidad George Mason. Los buses operan siete días a la semana de acuerdo con este horario.

Contact Information

CUE Bus General Information ....703-385-7859; TTY: 711
City Wheels..703-385-7859; TTY: 711
Metro Access.............301-562-5360; TTY: 711, 301-588-7535
Metro Disability ID .....202-962-2700; TTY: 711, 202-628-8973

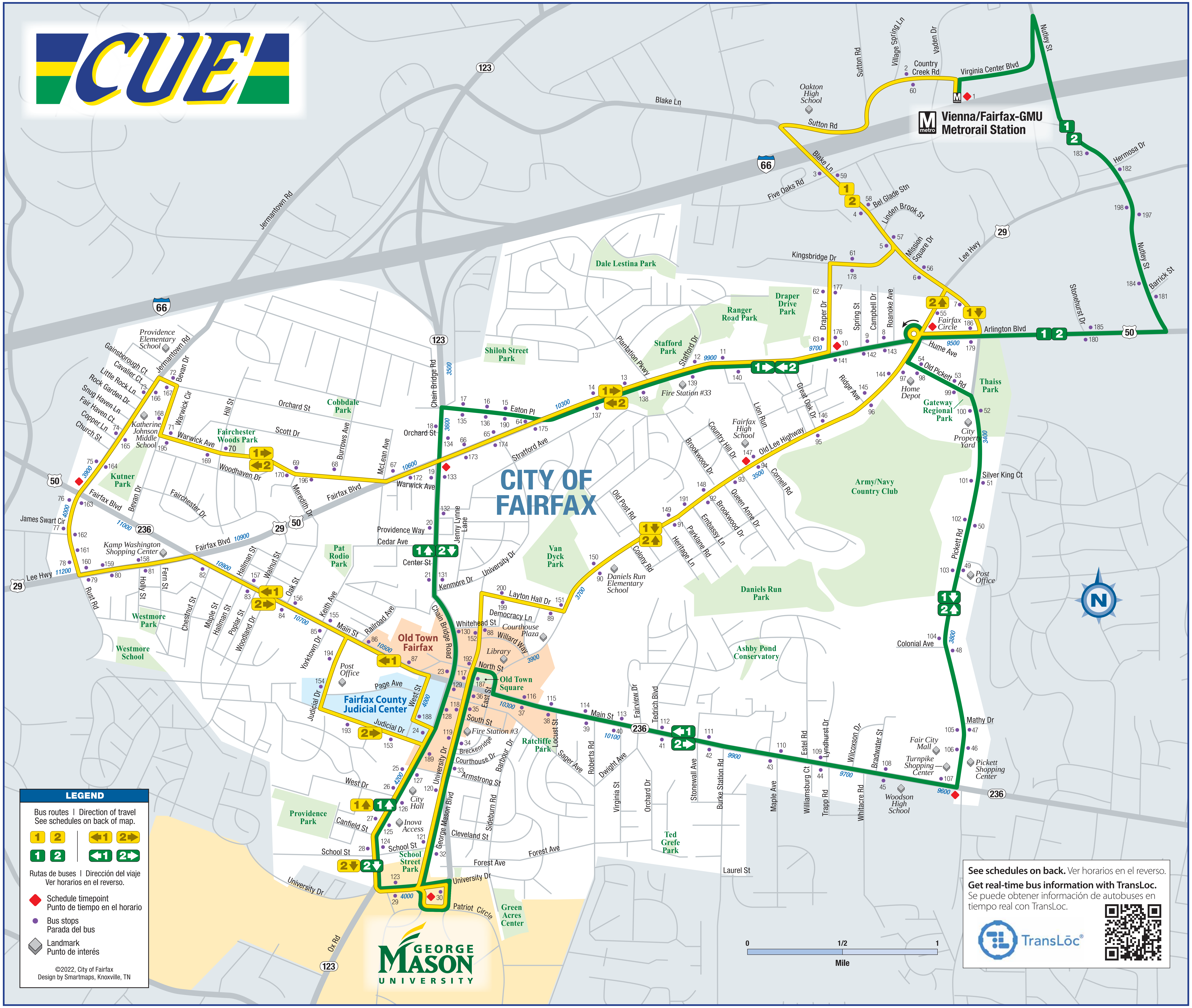
Información de Contacto

Información sobre buses CUE ....703-385-7859; TTY: 711
City Wheels..703-385-7859; TTY: 711
Metro Access.............301-562-5360; TTY: 711, 301-588-7535
Metro Disability ID .....202-962-2700; TTY: 711, 202-628-8973

CUE

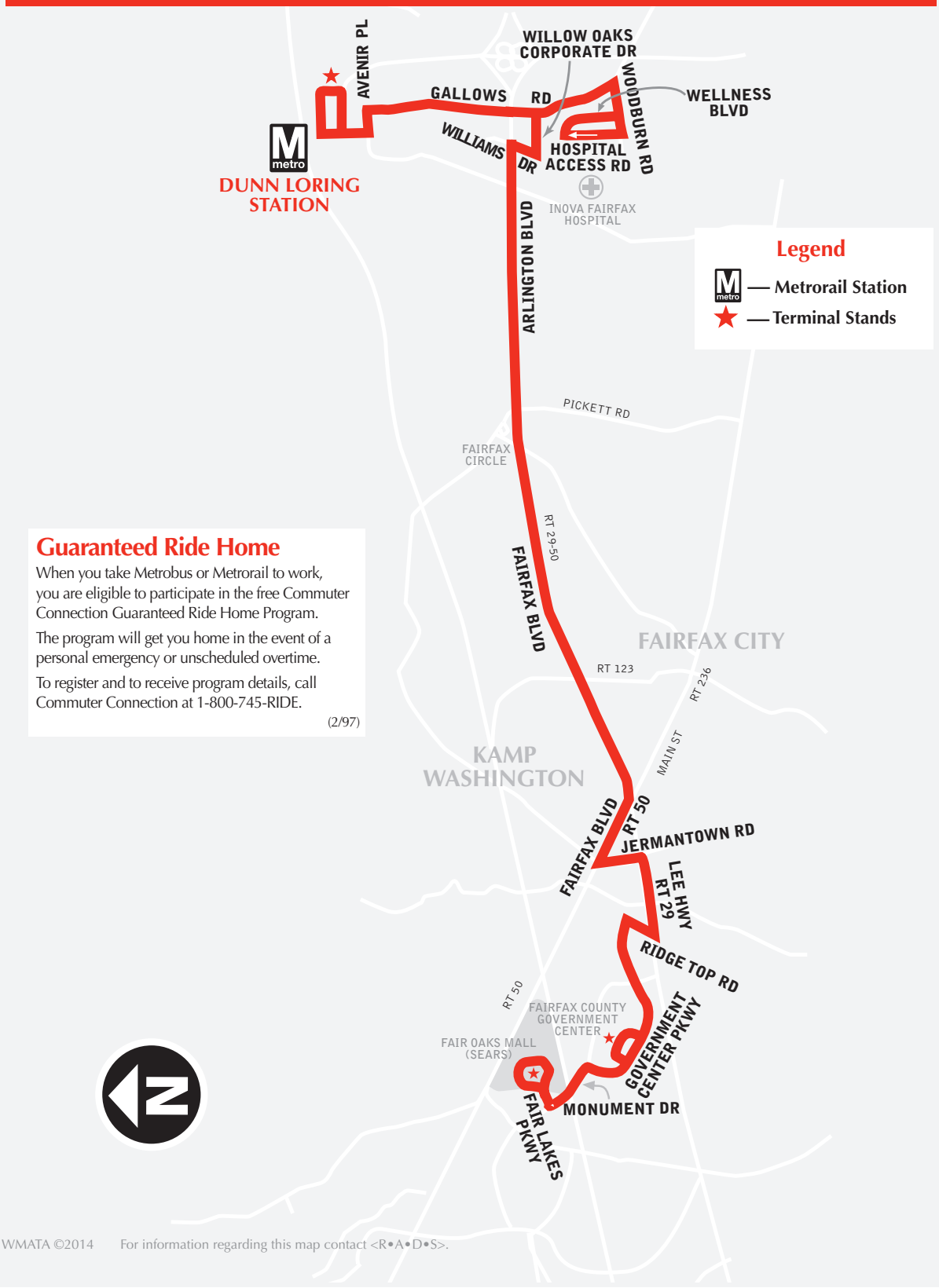
cuebus.org

Check cue.transloc.com for real-time arrivals!



1C
Fair Oaks-Fairfax Boulevard Line

For route and schedule information
Call 202-637-7000
www.wmata.com



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)

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

APPENDIX C – Existing Traffic Count Data

Wells + Associates, Inc.

Tysons, Virginia

Turning Movement Count - Passenger Cars

PROJECT:	Gatewood Plaza	**DATE:**	1/30/2024	**SOUTHBOUND ROAD:**	Eaton Place
W+A JOB NO:	9181	**DAY:**	Tuesday	**NORTHBOUND ROAD:**	Eaton Place
INTERSECTION:	Fairfax Blvd. & Eaton Place	**WEATHER:**	clear	**WESTBOUND ROAD:**	Fairfax Boulevard
LOCATION:	Fairfax County,VA	**COUNTED BY:**	Katie, Michael & Kim	**EASTBOUND ROAD:**	Fairfax Boulevard
		INPUTED BY:	agan	**SOUTHEASTBOUND ROAD:**	Restaurant Entrance

Time	Southbound Eaton Place						Westbound Fairfax Boulevard						Northbound Eaton Place						Eastbound Fairfax Boulevard						Southeastbound Restaurant Entrance						Total
Period	Right	Thru	Left	Hard Right	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Right	Thru	Left	Hard Right	U-Turn	Total	Hard Right	Right	Thru	Left	U-Turn	Total	
15 Minute Volumes																															
6:00 AM - 6:15 AM	0	0	20	1		21	9	51	0	1		61	0	0	0	0		0	0	120	1	0		121	0	0	0	0		0	203
6:15 AM - 6:30 AM	0	0	28	2		30	9	58	0	0		67	0	0	0	0		0	1	163	1	0		165	0	0	0	0		0	262
6:30 AM - 6:45 AM	0	0	31	3		34	24	86	0	0		110	0	0	0	0		0	1	212	4	0		217	0	0	0	0		0	361
6:45 AM - 7:00 AM	0	0	36	1		37	36	92	1	0		129	0	0	0	1		1	0	239	1	0		240	0	0	0	0		0	407
7:00 AM - 7:15 AM	0	0	33	3		36	39	114	1	0		154	1	0	0	1		2	0	271	0	0		271	0	0	0	0		0	463
7:15 AM - 7:30 AM	2	0	57	2		61	44	125	0	0		169	0	0	0	1		1	0	372	7	0		379	0	0	0	1		1	611
7:30 AM - 7:45 AM	0	0	67	0		67	52	144	2	0		198	0	0	0	0		0	1	168	6	0		175	0	0	1	1		2	442
7:45 AM - 8:00 AM	0	1	105	4		110	68	191	0	0		259	0	0	0	0		0	0	414	9	0		423	0	0	0	2		2	794
8:00 AM - 8:15 AM	0	0	56	1		57	69	192	3	1		265	0	0	1	0		1	2	407	8	0		417	0	0	0	0		0	740
8:15 AM - 8:30 AM	0	0	41	3		44	47	151	1	0		199	0	0	0	0		0	0	343	9	0		352	0	0	0	1		1	596
8:30 AM - 8:45 AM	0	0	43	6		49	45	184	1	0		230	0	0	2	1		3	1	304	9	0		314	0	0	0	1		1	597
8:45 AM - 9:00 AM	0	1	79	1		81	62	205	1	0		268	0	0	0	0		0	0	262	11	0		273	0	3	0	1		4	626
4:00 PM - 4:15 PM	0	0	63	16		79	80	377	0	2		459	1	1	0	3		5	1	219	1	0		221	0	2	0	2		4	768
4:15 PM - 4:30 PM	0	0	47	1		48	85	311	2	1		399	0	1	1	2		4	0	211	11	0		222	0	0	1	1		2	675
4:30 PM - 4:45 PM	0	0	63	6		69	97	407	2	3		509	0	0	2	0		2	0	240	6	0		246	0	1	0	3		4	830
4:45 PM - 5:00 PM	1	2	45	3		51	45	234	1	1		281	3	0	0	0		3	1	200	2	0		203	0	2	1	2		5	543
5:00 PM - 5:15 PM	0	0	87	4		91	103	356	3	3		465	0	1	1	3		5	0	220	8	0		228	0	1	0	0		1	790
5:15 PM - 5:30 PM	0	1	59	11		71	88	365	1	2		456	0	0	0	1		1	1	216	7	0		224	0	3	0	1		4	756
5:30 PM - 5:45 PM	0	0	68	7		75	71	325	1	0		397	0	0	0	0		0	0	190	9	0		199	0	2	0	0		2	673
5:45 PM - 6:00 PM	0	0	48	6		54	52	318	1	1		372	0	0	1	0		1	1	177	7	0		185	0	1	0	0		1	613
6:00 PM - 6:15 PM	0	0	51	6		57	85	269	1	0		355	2	0	0	9		11	0	222	5	0		227	0	0	0	0		0	650
6:15 PM - 6:30 PM	0	0	34	2		36	18	108	1	1		128	3	0	1	0		4	1	241	6	0		248	0	1	0	0		1	417
6:30 PM - 6:45 PM	0	0	25	6		31	53	227	1	0		281	0	0	0	1		1	2	186	2	0		190	0	0	0	0		0	503
6:45 PM - 7:00 PM	1	0	59	2		62	43	308	2	0		353	5	0	0	5		10	1	156	0	0		157	0	1	0	0		1	583
Total	4	5	1245	97	0	1351	1324	5198	26	16	0	6564	15	3	9	28	0	55	14	5753	130	0	0	5897	0	17	3	16	0	36	13903
One Hour Volumes																															
6:00 AM - 7:00 AM	0	0	115	7	0	122	78	287	1	1	0	367	0	0	0	1	0	1	2	734	7	0	0	743	0	0	0	0	0	0	1233
6:15 AM - 7:15 AM	0	0	128	9	0	137	108	350	2	0	0	460	1	0	0	2	0	3	2	885	6	0	0	893	0	0	0	0	0	0	1493
6:30 AM - 7:30 AM	2	0	157	9	0	168	143	417	2	0	0	562	1	0	0	3	0	4	1	1094	12	0	0	1107	0	0	0	1	0	1	1842
6:45 AM - 7:45 AM	2	0	193	6	0	201	171	475	4	0	0	650	1	0	0	3	0	4	1	1050	14	0	0	1065	0	0	1	2	0	3	1923
7:00 AM - 8:00 AM	2	1	262	9	0	274	203	574	3	0	0	780	1	0	0	2	0	3	1	1225	22	0	0	1248	0	0	1	4	0	5	2310
7:15 AM - 8:15 AM	2	1	285	7	0	295	233	652	5	1	0	891	0	0	1	1	0	2	3	1361	30	0	0	1394	0	0	1	4	0	5	2587
7:30 AM - 8:30 AM	0	1	269	8	0	278	236	678	6	1	0	921	0	0	1	0	0	1	3	1332	32	0	0	1367	0	0	1	4	0	5	2572
7:45 AM - 8:45 AM	0	1	245	14	0	260	229	718	5	1	0	953	0	0	3	1	0	4	3	1468	35	0	0	1506	0	0	0	4	0	4	2727
8:00 AM - 9:00 AM	0	1	219	11	0	231	223	732	6	1	0	962	0	0	3	1	0	4	3	1316	37	0	0	1356	0	3	0	3	0	6	2559
4:00 PM - 5:00 PM	1	2	218	26	0	247	307	1329	5	7	0	1648	4	2	3	5	0	14	2	870	20	0	0	892	0	5	2	8	0	15	2816
4:15 PM - 5:15 PM	1	2	242	14	0	259	330	1308	8	8	0	1654	3	2	4	5	0	14	1	871	27	0	0	899	0	4	2	6	0	12	2838
4:30 PM - 5:30 PM	1	3	254	24	0	282	333	1362	7	9	0	1711	3	1	3	4	0	11	2	876	23	0	0	901	0	7	1	6	0	14	2919
4:45 PM - 5:45 PM	1	3	259	25	0	288	307	1280	6	6	0	1599	3	1	1	4	0	9	2	826	26	0	0	854	0	8	1	3	0	12	2762
5:00 PM - 6:00 PM	0	1	262	28	0	291	314	1364	6	6	0	1690	0	1	2	4	0	7	2	803	31	0	0	836	0	7	0	1	0	8	2832
5:15 PM - 6:15 PM	0	1	226	30	0	257	296	1277	4	3	0	1580	2	0	1	10	0	13	2	805	28	0	0	835	0	6	0	1	0	7	2692
5:30 PM - 6:30 PM	0	0	201	21	0	222	226	1020	4	2	0	1252	5	0	2	9	0	16	2	830	27	0	0	859	0	4	0	0	0	4	2353
5:45 PM - 6:45 PM	0	0	158	20	0	178	208	922	4	2	0	1136	5	0	2	10	0	17	4	826	20	0	0	850	0	2	0	0	0	2	2183
6:00 PM - 7:00 PM	1	0	169	16	0	186	199	912	5	1	0	1117	10	0	1	15	0	26	4	805	13	0	0	822	0	2	0	0	0	2	2153

Provided By Wells and Associates

Wells + Associates,Inc

Tysons, Virginia

Turning Movement Count - Total Vehicles

PROJECT: Gatewood Plaza
W+A JOB NO: 9181
INTERSECTION: Fairfax Blvd. & Ourisman Dealership West Entr.
LOCATION: Fairfax County,VA

DATE: 1/30/2024
DAY: Tuesday
WEATHER: clear
COUNTED BY: Agan
INPUTED BY: agan

SOUTHBOUND ROAD: 0
NORTHBOUND ROAD: Ourisman Dealership West Entrance
WESTBOUND ROAD: Fairfax Boulevard
EASTBOUND ROAD: Fairfax Boulevard

Time Period	Southbound 0						Westbound Fairfax Boulevard						Northbound Ourisman Dealership West Entrance						Eastbound Fairfax Boulevard						North & South	East & West	Total
	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF			
15 Minute Volumes																											
6:00 AM - 6:15 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	0	0	1		0	1	1
6:15 AM - 6:30 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
6:30 AM - 6:45 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
6:45 AM - 7:00 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	0	0	1		0	1	1
7:00 AM - 7:15 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	0	0	1		0	1	1
8:00 AM - 8:15 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		2	0	0	0	2		0	2	2
8:15 AM - 8:30 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		2	0	0	0	2		0	2	2
8:45 AM - 9:00 AM	0	0	0	0	0		0	0	0	0	0		1	0	0	0	1		2	0	0	0	2		1	2	3
4:00 PM - 4:15 PM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	0	0	1		0	1	1
5:00 PM - 5:15 PM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		2	0	0	0	2		0	2	2
5:15 PM - 5:30 PM	0	0	0	0	0		0	0	0	0	0		1	0	0	0	1		1	0	0	0	1		1	1	2
5:30 PM - 5:45 PM	0	0	0	0	0		0	0	0	0	0		1	0	0	0	1		0	0	0	0	0		1	0	1
5:45 PM - 6:00 PM	0	0	0	0	0		0	0	0	0	0		2	0	0	0	2		6	0	0	0	6		2	6	8
6:00 PM - 6:15 PM	0	0	0	0	0		0	0	0	0	0		1	0	0	0	1		2	0	0	0	2		1	2	3
6:15 PM - 6:30 PM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	0	0	1		0	1	1
6:30 PM - 6:45 PM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	0	0	1		0	1	1
6:45 PM - 7:00 PM	0	0	0	0	0		0	0	0	0	0		1	0	0	0	1		0	0	0	0	0		1	0	1
4:00 AM - 4:15 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
4:15 AM - 4:30 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
4:30 AM - 4:45 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
4:45 AM - 5:00 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
5:00 AM - 5:15 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
5:15 AM - 5:30 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
5:30 AM - 5:45 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
5:45 AM - 6:00 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
Total	0	0	0	0	0		0	0	0	0	0		7	0	0	0	7		23	0	0	0	23		7	23	30
One Hour Volumes																											
6:00 AM - 7:00 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		2	0	0	0	2	0.5	0	2	2
6:15 AM - 7:15 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	0	0	1	0.25	0	1	1
6:30 AM - 7:30 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	0	0	1	0.25	0	1	1
6:45 AM - 7:45 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	0	0	1	0.25	0	1	1
7:00 AM - 8:00 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	0	0	1	0.25	0	1	1
7:15 AM - 8:15 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		3	0	0	0	3	0.38	0	3	3
7:30 AM - 8:30 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		3	0	0	0	3	0.38	0	3	3
7:45 AM - 8:45 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		5	0	0	0	5	0.63	0	5	5
8:00 AM - 9:00 AM	0	0	0	0	0		0	0	0	0	0		1	0	0	0	1	0.25	6	0	0	0	6	0.75	1	6	7
4:00 PM - 5:00 PM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	0	0	1	0.25	0	1	1
4:15 PM - 5:15 PM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		3	0	0	0	3	0.38	0	3	3
4:30 PM - 5:30 PM	0	0	0	0	0		0	0	0	0	0		1	0	0	0	1	0.25	4	0	0	0	4	0.5	1	4	5
4:45 PM - 5:45 PM	0	0	0	0	0		0	0	0	0	0		2	0	0	0	2	0.5	4	0	0	0	4	0.5	2	4	6
5:00 PM - 6:00 PM	0	0	0	0	0		0	0	0	0	0		4	0	0	0	4	0.5	9	0	0	0	9	0.38	4	9	13
5:15 PM - 6:15 PM	0	0	0	0	0		0	0	0	0	0		5	0	0	0	5	0.63	9	0	0	0	9	0.38	5	9	14
5:30 PM - 6:30 PM	0	0	0	0	0		0	0	0	0	0		4	0	0	0	4	0.5	9	0	0	0	9	0.38	4	9	13
5:45 PM - 6:45 PM	0	0	0	0	0		0	0	0	0	0		3	0	0	0	3	0.38	10	0	0	0	10	0.42	3	10	13
6:00 PM - 7:00 PM	0	0	0	0	0		0	0	0	0	0		2	0	0	0	2	0.5	4	0	0	0	4	0.5	2	4	6

Provided By Wells and Associates

Wells + Associates,Inc

Tysons, Virginia

Turning Movement Count - Total Vehicles

PROJECT:	Gatewood Plaza	**DATE:**	1/30/2024	**SOUTHBOUND ROAD:**	0		
W+A JOB NO:	9181	**DAY:**	Tuesday	**NORTHBOUND ROAD:**	Ourisman Dealership East Entrance		
INTERSECTION:	Fairfax Blvd. & Ourisman Dealership East Entr.	**WEATHER:**	clear	**WESTBOUND ROAD:**	Fairfax Boulevard		
LOCATION:	Fairfax County,VA	**COUNTED BY:**	Walter	**EASTBOUND ROAD:**	Fairfax Boulevard		
		INPUTED BY:	agan				

Time	Southbound 0					Westbound Fairfax Boulevard					Northbound Ourisman Dealership East Entrance					Eastbound Fairfax Boulevard					North & South	East & West	Total
Period	Right	Thru	Left	Turn	Total PHF	Right	Thru	Left	Turn	Total PHF	Right	Thru	Left	Turn	Total PHF	Right	Thru	Left	Turn	Total PHF			
15 Minute Volumes																							
6:00 AM - 6:15 AM	0	0	0	0	0	0	63	0	0	63	0	0	0	0	0	0	139	0	0	139	0	202	202
6:15 AM - 6:30 AM	0	0	0	0	0	0	71	0	0	71	0	0	0	0	0	0	193	0	0	193	0	264	264
6:30 AM - 6:45 AM	0	0	0	0	0	0	103	0	0	103	0	0	0	0	0	1	244	0	0	245	0	348	348
6:45 AM - 7:00 AM	0	0	0	0	0	0	120	8	0	128	0	0	0	0	0	0	271	0	0	271	0	399	399
7:00 AM - 7:15 AM	0	0	0	0	0	0	153	2	0	155	0	0	0	0	0	0	310	0	0	310	0	465	465
7:15 AM - 7:30 AM	0	0	0	0	0	0	172	4	0	176	0	0	0	0	0	2	415	0	0	417	0	593	593
7:30 AM - 7:45 AM	0	0	0	0	0	0	214	1	0	215	0	0	1	0	1	3	470	0	0	473	1	688	689
7:45 AM - 8:00 AM	0	0	0	0	0	0	259	5	0	264	0	0	0	0	0	1	515	0	0	516	0	780	780
8:00 AM - 8:15 AM	0	0	0	0	0	0	272	2	0	274	1	0	0	0	1	6	472	0	0	478	1	752	753
8:15 AM - 8:30 AM	0	0	0	0	0	0	208	4	0	212	0	0	0	0	0	2	367	0	0	369	0	581	581
8:30 AM - 8:45 AM	0	0	0	0	0	0	216	2	0	218	0	0	0	0	0	2	318	0	0	320	0	538	538
8:45 AM - 9:00 AM	0	0	0	0	0	0	260	28	0	288	0	0	1	0	1	4	345	0	0	349	1	637	638
4:00 PM - 4:15 PM	0	0	0	0	0	0	449	0	0	449	0	0	5	0	5	1	286	0	0	287	5	736	741
4:15 PM - 4:30 PM	0	0	0	0	0	0	397	2	0	399	4	0	2	0	6	0	251	0	0	251	6	650	656
4:30 PM - 4:45 PM	0	0	0	0	0	0	441	2	0	443	1	0	4	0	5	3	296	0	0	299	5	742	747
4:45 PM - 5:00 PM	0	0	0	0	0	0	438	4	0	442	1	0	1	0	2	0	230	0	0	230	2	672	674
5:00 PM - 5:15 PM	0	0	0	0	0	0	506	3	0	509	5	0	2	0	7	1	298	0	0	299	7	808	815
5:15 PM - 5:30 PM	0	0	0	0	0	0	445	4	0	449	2	0	3	0	5	1	285	0	0	286	5	735	740
5:30 PM - 5:45 PM	0	0	0	0	0	0	480	1	0	481	0	0	5	0	5	1	277	0	0	278	5	759	764
5:45 PM - 6:00 PM	0	0	0	0	0	0	422	1	0	423	2	0	3	0	5	0	250	0	0	250	5	673	678
6:00 PM - 6:15 PM	0	0	0	0	0	0	427	2	0	429	2	0	3	0	5	1	282	0	0	283	5	712	717
6:15 PM - 6:30 PM	0	0	0	0	0	0	373	1	0	374	2	0	0	0	2	2	287	0	0	289	2	663	665
6:30 PM - 6:45 PM	0	0	0	0	0	0	283	1	0	284	1	0	3	0	4	0	236	0	0	236	4	520	524
6:45 PM - 7:00 PM	0	0	0	0	0	0	414	0	0	414	0	0	0	0	0	1	222	0	0	223	0	637	637
Total	0	0	0	0	0	0	7186	77	0	7263	21	0	33	0	54	32	7259	0	0	7291	54	14554	14608
One Hour Volumes																							
6:00 AM - 7:00 AM	0	0	0	0	0	0	357	8	0	365	0.7	0	0	0	0	0		1	847	0	0	848	0.8	0	1213	1213
6:15 AM - 7:15 AM	0	0	0	0	0	0	447	10	0	457	0.7	0	0	0	0	0		1	1018	0	0	1019	0.8	0	1476	1476
6:30 AM - 7:30 AM	0	0	0	0	0	0	548	14	0	562	0.8	0	0	0	0	0		3	1240	0	0	1243	0.7	0	1805	1805
6:45 AM - 7:45 AM	0	0	0	0	0	0	659	15	0	674	0.8	0	0	1	0	1	0.3	5	1466	0	0	1471	0.8	1	2145	2146
7:00 AM - 8:00 AM	0	0	0	0	0	0	798	12	0	810	0.8	0	0	1	0	1	0.3	6	1710	0	0	1716	0.8	1	2526	2527
7:15 AM - 8:15 AM	0	0	0	0	0	0	917	12	0	929	0.8	1	0	1	0	2	0.5	12	1872	0	0	1884	0.9	2	2813	2815
7:30 AM - 8:30 AM	0	0	0	0	0	0	953	12	0	965	0.9	1	0	1	0	2	0.5	12	1824	0	0	1836	0.9	2	2801	2803
7:45 AM - 8:45 AM	0	0	0	0	0	0	955	13	0	968	0.9	1	0	0	0	1	0.3	11	1672	0	0	1683	0.8	1	2651	2652
8:00 AM - 9:00 AM	0	0	0	0	0	0	956	36	0	992	0.9	1	0	1	0	2	0.5	14	1502	0	0	1516	0.8	2	2508	2510
4:00 PM - 5:00 PM	0	0	0	0	0	0	1725	8	0	1733	1	6	0	12	0	18	0.8	4	1063	0	0	1067	0.9	18	2800	2818
4:15 PM - 5:15 PM	0	0	0	0	0	0	1782	11	0	1793	0.9	11	0	9	0	20	0.7	4	1075	0	0	1079	0.9	20	2872	2892
4:30 PM - 5:30 PM	0	0	0	0	0	0	1830	13	0	1843	0.9	9	0	10	0	19	0.7	5	1109	0	0	1114	0.9	19	2957	2976
4:45 PM - 5:45 PM	0	0	0	0	0	0	1869	12	0	1881	0.9	8	0	11	0	19	0.7	3	1090	0	0	1093	0.9	19	2974	2993
5:00 PM - 6:00 PM	0	0	0	0	0	0	1853	9	0	1862	0.9	9	0	13	0	22	0.8	3	1110	0	0	1113	0.9	22	2975	2997
5:15 PM - 6:15 PM	0	0	0	0	0	0	1774	8	0	1782	0.9	6	0	14	0	20	1	3	1094	0	0	1097	1	20	2879	2899
5:30 PM - 6:30 PM	0	0	0	0	0	0	1702	5	0	1707	0.9	6	0	11	0	17	0.9	4	1096	0	0	1100	1	17	2807	2824
5:45 PM - 6:45 PM	0	0	0	0	0	0	1505	5	0	1510	0.9	7	0	9	0	16	0.8	3	1055	0	0	1058	0.9	16	2568	2584
6:00 PM - 7:00 PM	0	0	0	0	0	0	1497	4	0	1501	0.9	5	0	6	0	11	0.6	4	1027	0	0	1031	0.9	11	2532	2543

Provided By Wells and Associates

Wells + Associates,Inc

Tysons, Virginia

Turning Movement Count - Total Vehicles

PROJECT: Gatewood Plaza
W+A JOB NO: 9181
INTERSECTION: Fairfax Blvd. & Site Entrance
LOCATION: Fairfax County,VA

DATE: 1/30/2024
DAY: Tuesday
WEATHER: clear
COUNTED BY: Agan
INPUTED BY: agan

SOUTHBOUND ROAD: Plaza entrance
NORTHBOUND ROAD: Site Entrance
WESTBOUND ROAD: Fairfax Boulevard
EASTBOUND ROAD: Fairfax Boulevard

Time Period	Southbound Plaza entrance						Westbound Fairfax Boulevard						Northbound Site Entrance						Eastbound Fairfax Boulevard						North & South	East & West	Total
	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF			
15 Minute Volumes																											
6:00 AM - 6:15 AM	0	0	0	0	0		0	63	0	1	64		0	0	0	0	0		0	133	0	0	133		0	197	197
6:15 AM - 6:30 AM	0	0	1	0	1		0	74	0	0	74		0	0	0	0	0		1	181	0	0	182		1	256	257
6:30 AM - 6:45 AM	0	0	0	0	0		1	101	0	0	102		0	0	0	0	0		2	233	0	0	235		0	337	337
6:45 AM - 7:00 AM	0	0	0	0	0		1	134	0	1	136		0	0	0	0	0		3	257	1	0	261		0	397	397
7:00 AM - 7:15 AM	1	0	0	0	1		0	155	0	0	155		0	1	0	0	1		8	302	2	1	313		2	468	470
7:15 AM - 7:30 AM	0	0	1	0	1		0	169	4	0	173		0	0	0	0	0		10	390	1	0	401		1	574	575
7:30 AM - 7:45 AM	2	0	0	0	2		2	219	5	0	226		0	1	0	0	1		5	439	2	0	446		3	672	675
7:45 AM - 8:00 AM	3	0	0	0	3		0	291	3	0	294		0	0	0	0	0		4	551	4	0	559		3	853	856
8:00 AM - 8:15 AM	1	0	0	0	1		0	303	0	0	303		0	1	0	0	1		14	460	0	0	474		2	777	779
8:15 AM - 8:30 AM	0	0	0	0	0		0	211	2	0	213		0	1	0	0	1		13	374	4	0	391		1	604	605
8:30 AM - 8:45 AM	1	0	1	0	2		0	245	7	0	252		0	0	0	0	0		8	299	2	2	311		2	563	565
8:45 AM - 9:00 AM	0	0	0	0	0		1	312	3	0	316		0	0	0	0	0		12	370	3	1	386		0	702	702
4:00 PM - 4:15 PM	1	0	0	0	1		0	441	3	0	444		8	0	11	0	19		2	273	1	0	276		20	720	740
4:15 PM - 4:30 PM	3	0	1	0	4		0	386	0	0	386		3	0	8	0	11		3	248	3	5	259		15	645	660
4:30 PM - 4:45 PM	7	0	1	0	8		1	487	1	0	489		4	0	4	0	8		1	290	3	1	295		16	784	800
4:45 PM - 5:00 PM	6	0	1	0	7		0	418	1	0	419		5	0	9	0	14		0	261	8	1	270		21	689	710
5:00 PM - 5:15 PM	3	0	3	0	6		1	504	0	0	505		15	0	14	0	29		0	307	9	2	318		35	823	858
5:15 PM - 5:30 PM	3	2	1	0	6		3	492	0	2	497		8	1	9	0	18		3	300	3	2	308		24	805	829
5:30 PM - 5:45 PM	4	0	0	0	4		1	475	1	0	477		6	0	13	0	19		0	278	8	3	289		23	766	789
5:45 PM - 6:00 PM	6	0	1	0	7		0	425	0	2	427		4	0	6	0	10		1	260	10	2	273		17	700	717
6:00 PM - 6:15 PM	4	0	3	0	7		1	444	0	0	445		3	0	5	0	8		0	276	6	0	282		15	727	742
6:15 PM - 6:30 PM	2	0	2	0	4		0	370	0	3	373		2	0	2	0	4		0	310	7	4	321		8	694	702
6:30 PM - 6:45 PM	3	0	0	0	3		1	306	2	0	309		3	0	1	0	4		1	246	4	3	254		7	563	570
6:45 PM - 7:00 PM	2	0	1	0	3		1	348	0	4	353		2	1	5	0	8		0	232	7	3	242		11	595	606
Total	52	2	17	0	71		14	7373	32	13	7432		63	6	87	0	156		91	7270	88	30	7479		227	14911	15138
One Hour Volumes																											
6:00 AM - 7:00 AM	0	0	1	0	1	0.3	2	372	0	2	376	0.7	0	0	0	0	0		6	804	1	0	811	0.8	1	1187	1188
6:15 AM - 7:15 AM	1	0	1	0	2	0.5	2	464	0	1	467	0.8	0	1	0	0	1	0.3	14	973	3	1	991	0.8	3	1458	1461
6:30 AM - 7:30 AM	1	0	1	0	2	0.5	2	559	4	1	566	0.8	0	1	0	0	1	0.3	23	1182	4	1	1210	0.8	3	1776	1779
6:45 AM - 7:45 AM	3	0	1	0	4	0.5	3	677	9	1	690	0.8	0	2	0	0	2	0.5	26	1388	6	1	1421	0.8	6	2111	2117
7:00 AM - 8:00 AM	6	0	1	0	7	0.6	2	834	12	0	848	0.7	0	2	0	0	2	0.5	27	1682	9	1	1719	0.8	9	2567	2576
7:15 AM - 8:15 AM	6	0	1	0	7	0.6	2	982	12	0	996	0.8	0	2	0	0	2	0.5	33	1840	7	0	1880	0.8	9	2876	2885
7:30 AM - 8:30 AM	6	0	0	0	6	0.5	2	1024	10	0	1036	0.9	0	3	0	0	3	0.8	36	1824	10	0	1870	0.8	9	2906	2915
7:45 AM - 8:45 AM	5	0	1	0	6	0.5	0	1050	12	0	1062	0.9	0	2	0	0	2	0.5	39	1684	10	2	1735	0.8	8	2797	2805
8:00 AM - 9:00 AM	2	0	1	0	3	0.4	1	1071	12	0	1084	0.9	0	2	0	0	2	0.5	47	1503	9	3	1562	0.8	5	2646	2651
4:00 PM - 5:00 PM	17	0	3	0	20	0.6	1	1732	5	0	1738	0.9	20	0	32	0	52	0.7	6	1072	15	7	1100	0.9	72	2838	2910
4:15 PM - 5:15 PM	19	0	6	0	25	0.8	2	1795	2	0	1799	0.9	27	0	35	0	62	0.5	4	1106	23	9	1142	0.9	87	2941	3028
4:30 PM - 5:30 PM	19	2	6	0	27	0.8	5	1901	2	2	1910	0.9	32	1	36	0	69	0.6	4	1158	23	6	1191	0.9	96	3101	3197
4:45 PM - 5:45 PM	16	2	5	0	23	0.8	5	1889	2	2	1898	0.9	34	1	45	0	80	0.7	3	1146	28	8	1185	0.9	103	3083	3186
5:00 PM - 6:00 PM	16	2	5	0	23	0.8	5	1896	1	4	1906	0.9	33	1	42	0	76	0.7	4	1145	30	9	1188	0.9	99	3094	3193
5:15 PM - 6:15 PM	17	2	5	0	24	0.9	5	1836	1	4	1846	0.9	21	1	33	0	55	0.7	4	1114	27	7	1152	0.9	79	2998	3077
5:30 PM - 6:30 PM	16	0	6	0	22	0.8	2	1714	1	5	1722	0.9	15	0	26	0	41	0.5	1	1124	31	9	1165	0.9	63	2887	2950
5:45 PM - 6:45 PM	15	0	6	0	21	0.8	2	1545	2	5	1554	0.9	12	0	14	0	26	0.7	2	1092	27	9	1130	0.9	47	2684	2731
6:00 PM - 7:00 PM	11	0	6	0	17	0.6	3	1468	2	7	1480	0.8	10	1	13	0	24	0.8	1	1064	24	10	1099	0.9	41	2579	2620

Provided By Wells and Associates

Wells + Associates,Inc

Tysons, Virginia

Turning Movement Count - Total Vehicles

PROJECT: Gatewood Plaza
W+A JOB NO: 9181
INTERSECTION: Fairfax Blvd. & Captain Pells Reastaurant Entr.
LOCATION: Fairfax County,VA

DATE: 1/30/2024
DAY: Tuesday
WEATHER: clear
COUNTED BY: Di
INPUTED BY: agan

SOUTHBOUND ROAD: 0
NORTHBOUND ROAD: Captain Pells Restaurant Entrance
WESTBOUND ROAD: Fairfax Boulevard
EASTBOUND ROAD: Fairfax Boulevard

Time	Southbound 0						Westbound Fairfax Boulevard						Northbound Captain Pells Restaurant Entrance						Eastbound Fairfax Boulevard						North & South	East & West	Total
Period	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF			
15 Minute Volumes																											
6:00 AM - 6:15 AM	0	0	0	0	0		0	66	0	0	66		0	0	0	0	0		0	137	0	0	137		0	203	203
6:15 AM - 6:30 AM	0	0	0	0	0		0	67	0	0	67		0	0	0	0	0		0	187	0	0	187		0	254	254
6:30 AM - 6:45 AM	0	0	0	0	0		0	102	0	0	102		0	0	0	0	0		0	227	0	0	227		0	329	329
6:45 AM - 7:00 AM	0	0	0	0	0		0	134	0	0	134		0	0	0	0	0		0	258	0	0	258		0	392	392
7:00 AM - 7:15 AM	0	0	0	0	0		0	148	0	0	148		0	0	0	0	0		0	297	0	0	297		0	445	445
7:15 AM - 7:30 AM	0	0	0	0	0		0	186	0	0	186		0	0	0	0	0		0	387	0	0	387		0	573	573
7:30 AM - 7:45 AM	0	0	0	0	0		0	213	0	0	213		0	0	0	0	0		0	441	0	0	441		0	654	654
7:45 AM - 8:00 AM	0	0	0	0	0		0	280	0	0	280		0	0	0	0	0		0	531	0	0	531		0	811	811
8:00 AM - 8:15 AM	0	0	0	0	0		0	295	0	0	295		0	0	0	0	0		0	458	0	0	458		0	753	753
8:15 AM - 8:30 AM	0	0	0	0	0		0	207	0	0	207		0	0	0	0	0		0	357	0	0	357		0	564	564
8:30 AM - 8:45 AM	0	0	0	0	0		0	226	0	0	226		0	0	0	0	0		0	309	0	0	309		0	535	535
8:45 AM - 9:00 AM	0	0	0	0	0		0	305	0	0	305		0	0	0	0	0		0	339	0	0	339		0	644	644
4:00 PM - 4:15 PM	0	0	0	0	0		0	424	0	0	424		3	0	0	0	3		0	280	0	0	280		3	704	707
4:15 PM - 4:30 PM	0	0	0	0	0		0	390	0	0	390		0	0	0	0	0		0	239	0	0	239		0	629	629
4:30 PM - 4:45 PM	0	0	0	0	0		0	464	0	0	464		0	0	0	0	0		1	304	0	0	305		0	769	769
4:45 PM - 5:00 PM	0	0	0	0	0		0	440	0	0	440		0	0	0	0	0		0	266	0	0	266		0	706	706
5:00 PM - 5:15 PM	0	0	0	0	0		0	497	0	0	497		1	0	0	0	1		1	330	0	0	331		1	828	829
5:15 PM - 5:30 PM	0	0	0	0	0		0	462	0	0	462		0	0	0	0	0		2	288	0	0	290		0	752	752
5:30 PM - 5:45 PM	0	0	0	0	0		0	441	0	0	441		0	0	0	0	0		3	263	0	0	266		0	707	707
5:45 PM - 6:00 PM	0	0	0	0	0		0	421	0	0	421		0	0	0	0	0		2	259	0	0	261		0	682	682
6:00 PM - 6:15 PM	0	0	0	0	0		0	429	0	0	429		0	0	0	0	0		0	276	0	0	276		0	705	705
6:15 PM - 6:30 PM	0	0	0	0	0		0	391	0	0	391		0	0	0	0	0		3	291	0	0	294		0	685	685
6:30 PM - 6:45 PM	0	0	0	0	0		0	297	0	0	297		2	0	0	0	2		3	234	0	0	237		2	534	536
6:45 PM - 7:00 PM	0	0	0	0	0		0	319	0	0	319		2	0	0	0	2		5	224	0	0	229		2	548	550
4:00 AM - 4:15 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
4:15 AM - 4:30 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
4:30 AM - 4:45 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
4:45 AM - 5:00 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
5:00 AM - 5:15 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
5:15 AM - 5:30 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
5:30 AM - 5:45 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
5:45 AM - 6:00 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
Total	0	0	0	0	0		0	7204	0	0	7204		8	0	0	0	8		20	7182	0	0	7202		8	14406	14414
One Hour Volumes																											
6:00 AM - 7:00 AM	0	0	0	0	0		0	369	0	0	369	0.69	0	0	0	0	0		0	809	0	0	809	0.78	0	1178	1178
6:15 AM - 7:15 AM	0	0	0	0	0		0	451	0	0	451	0.76	0	0	0	0	0		0	969	0	0	969	0.82	0	1420	1420
6:30 AM - 7:30 AM	0	0	0	0	0		0	570	0	0	570	0.77	0	0	0	0	0		0	1169	0	0	1169	0.76	0	1739	1739
6:45 AM - 7:45 AM	0	0	0	0	0		0	681	0	0	681	0.8	0	0	0	0	0		0	1383	0	0	1383	0.78	0	2064	2064
7:00 AM - 8:00 AM	0	0	0	0	0		0	827	0	0	827	0.74	0	0	0	0	0		0	1656	0	0	1656	0.78	0	2483	2483
7:15 AM - 8:15 AM	0	0	0	0	0		0	974	0	0	974	0.83	0	0	0	0	0		0	1817	0	0	1817	0.86	0	2791	2791
7:30 AM - 8:30 AM	0	0	0	0	0		0	995	0	0	995	0.84	0	0	0	0	0		0	1787	0	0	1787	0.84	0	2782	2782
7:45 AM - 8:45 AM	0	0	0	0	0		0	1008	0	0	1008	0.85	0	0	0	0	0		0	1655	0	0	1655	0.78	0	2663	2663
8:00 AM - 9:00 AM	0	0	0	0	0		0	1033	0	0	1033	0.85	0	0	0	0	0		0	1463	0	0	1463	0.8	0	2496	2496
4:00 PM - 5:00 PM	0	0	0	0	0		0	1718	0	0	1718	0.93	3	0	0	0	3	0.25	1	1089	0	0	1090	0.89	3	2808	2811
4:15 PM - 5:15 PM	0	0	0	0	0		0	1791	0	0	1791	0.9	1	0	0	0	1	0.25	2	1139	0	0	1141	0.86	1	2932	2933
4:30 PM - 5:30 PM	0	0	0	0	0		0	1863	0	0	1863	0.94	1	0	0	0	1	0.25	4	1188	0	0	1192	0.9	1	3055	3056
4:45 PM - 5:45 PM	0	0	0	0	0		0	1840	0	0	1840	0.93	1	0	0	0	1	0.25	6	1147	0	0	1153	0.87	1	2993	2994
5:00 PM - 6:00 PM	0	0	0	0	0		0	1821	0	0	1821	0.92	1	0	0	0	1	0.25	8	1140	0	0	1148	0.87	1	2969	2970
5:15 PM - 6:15 PM	0	0	0	0	0		0	1753	0	0	1753	0.95	0	0	0	0	0		7	1086	0	0	1093	0.94	0	2846	2846
5:30 PM - 6:30 PM	0	0	0	0	0		0	1682	0	0	1682	0.95	0	0	0	0	0		8	1089	0	0	1097	0.93	0	2779	2779
5:45 PM - 6:45 PM	0	0	0	0	0		0	1538	0	0	1538	0.9	2	0	0	0	2	0.25	8	1060	0	0	1068	0.91	2	2606	2608
6:00 PM - 7:00 PM	0	0	0	0	0		0	1436	0	0	1436	0.84	4	0	0	0	4	0.5	11	1025	0	0	1036	0.88	4	2472	2476

Provided By Wells and Associates

Wells + Associates,Inc

Tysons, Virginia

Turning Movement Count - Total Vehicles

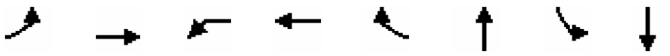
PROJECT: Gatewood Plaza
W+A JOB NO: 9181
INTERSECTION: Fairfax Blvd. & Fair Woods Pkwy.
LOCATION: Fairfax County,VA

DATE: 1/30/2024
DAY: Tuesday
WEATHER: clear
COUNTED BY: Victor & Bianca
INPUTED BY: agan

SOUTHBOUND ROAD: Fair Woods Parkway
NORTHBOUND ROAD: fair Station Driveway
WESTBOUND ROAD: Fairfax Boulevard
EASTBOUND ROAD: Fairfax Boulevard

Time Period	Southbound Fair Woods Parkway					Westbound Fairfax Boulevard					Northbound fair Station Driveway					Eastbound Fairfax Boulevard					North & South	East & West	Total
	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF			
15 Minute Volumes																											
6:00 AM - 6:15 AM	4	1	8	0	13		1	59	1	0	61		0	1	0	0	1		0	125	5	0	130		14	191	205
6:15 AM - 6:30 AM	10	0	8	0	18		5	58	0	0	63		0	0	1	0	1		0	194	1	0	195		19	258	277
6:30 AM - 6:45 AM	17	0	14	0	31		1	84	0	0	85		0	0	0	0	0		0	248	2	0	250		31	335	366
6:45 AM - 7:00 AM	35	0	20	0	55		5	104	1	0	110		0	0	1	0	1		0	279	4	0	283		56	393	449
7:00 AM - 7:15 AM	23	0	9	0	32		5	121	1	2	129		0	0	2	0	2		1	343	4	0	348		34	477	511
7:15 AM - 7:30 AM	28	0	21	0	49		2	149	0	0	151		0	0	1	0	1		0	452	8	0	460		50	611	661
7:30 AM - 7:45 AM	31	0	39	0	70		8	186	0	1	195		1	0	0	0	1		0	481	10	0	491		71	686	757
7:45 AM - 8:00 AM	37	0	40	0	77		16	256	0	2	274		1	0	0	0	1		0	564	9	0	573		78	847	925
8:00 AM - 8:15 AM	32	0	24	0	56		17	258	0	1	276		0	0	0	0	0		0	521	13	0	534		56	810	866
8:15 AM - 8:30 AM	30	0	27	0	57		12	195	0	2	209		1	0	0	0	1		3	415	14	0	432		58	641	699
8:30 AM - 8:45 AM	19	0	16	0	35		3	211	2	0	216		1	0	0	0	1		0	344	6	0	350		36	566	602
8:45 AM - 9:00 AM	28	0	19	0	47		12	282	0	2	296		0	0	0	0	0		0	315	16	0	331		47	627	674
4:00 PM - 4:15 PM	15	0	20	0	35		26	415	0	1	442		1	0	0	0	1		1	292	33	0	326		36	768	804
4:15 PM - 4:30 PM	15	0	12	0	27		22	405	0	0	427		0	1	1	0	2		0	231	38	0	269		29	696	725
4:30 PM - 4:45 PM	33	0	17	0	50		21	424	0	2	447		0	0	0	0	0		0	317	32	0	349		50	796	846
4:45 PM - 5:00 PM	19	0	19	0	38		22	430	0	1	453		0	0	0	0	0		0	249	34	0	283		38	736	774
5:00 PM - 5:15 PM	24	0	20	0	44		26	462	1	2	491		0	0	0	0	0		0	259	39	0	298		44	789	833
5:15 PM - 5:30 PM	21	0	26	0	47		39	443	0	0	482		0	0	0	0	0		0	292	20	0	312		47	794	841
5:30 PM - 5:45 PM	18	0	14	0	32		37	448	0	1	486		0	0	0	0	0		0	274	32	0	306		32	792	824
5:45 PM - 6:00 PM	25	0	10	0	35		34	411	2	2	449		0	0	0	0	0		0	239	36	0	275		35	724	759
6:00 PM - 6:15 PM	19	0	15	0	34		21	417	0	0	438		2	0	0	0	2		1	235	23	0	259		36	697	733
6:15 PM - 6:30 PM	12	0	29	0	41		17	354	0	1	372		0	0	0	0	0		0	239	40	0	279		41	651	692
6:30 PM - 6:45 PM	13	0	15	0	28		19	281	0	2	302		0	0	0	0	0		3	216	30	0	249		28	551	579
6:45 PM - 7:00 PM	30	0	15	0	45		17	311	0	2	330		0	0	0	0	0		0	233	18	0	251		45	581	626
5:45 AM - 6:00 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
Total	538	1	457	0	996		388	6764	8	24	7184		7	2	6	0	15		9	7357	467	0	7833		###	15017	16028
One Hour Volumes																											
6:00 AM - 7:00 AM	66	1	50	0	117	0.5	12	305	2	0	319	0.7	0	1	2	0	3	0.8	0	846	12	0	858	0.8	120	1177	1297
6:15 AM - 7:15 AM	85	0	51	0	136	0.6	16	367	2	2	387	0.8	0	0	4	0	4	0.5	1	1064	11	0	1076	0.8	140	1463	1603
6:30 AM - 7:30 AM	103	0	64	0	167	0.8	13	458	2	2	475	0.8	0	0	4	0	4	0.5	1	1322	18	0	1341	0.7	171	1816	1987
6:45 AM - 7:45 AM	117	0	89	0	206	0.7	20	560	2	3	585	0.8	1	0	4	0	5	0.6	1	1555	26	0	1582	0.8	211	2167	2378
7:00 AM - 8:00 AM	119	0	109	0	228	0.7	31	712	1	5	749	0.7	2	0	3	0	5	0.6	1	1840	31	0	1872	0.8	233	2621	2854
7:15 AM - 8:15 AM	128	0	124	0	252	0.8	43	849	0	4	896	0.8	2	0	1	0	3	0.8	0	2018	40	0	2058	0.9	255	2954	3209
7:30 AM - 8:30 AM	130	0	130	0	260	0.8	53	895	0	6	954	0.9	3	0	0	0	3	0.8	3	1981	46	0	2030	0.9	263	2984	3247
7:45 AM - 8:45 AM	118	0	107	0	225	0.7	48	920	2	5	975	0.9	3	0	0	0	3	0.8	3	1844	42	0	1889	0.8	228	2864	3092
8:00 AM - 9:00 AM	109	0	86	0	195	0.9	44	946	2	5	997	0.8	2	0	0	0	2	0.5	3	1595	49	0	1647	0.8	197	2644	2841
4:00 PM - 5:00 PM	82	0	68	0	150	0.8	91	1674	0	4	1769	1	1	1	1	0	3	0.4	1	1089	137	0	1227	0.9	153	2996	3149
4:15 PM - 5:15 PM	91	0	68	0	159	0.8	91	1721	1	5	1818	0.9	0	1	1	0	2	0.3	0	1056	143	0	1199	0.9	161	3017	3178
4:30 PM - 5:30 PM	97	0	82	0	179	0.9	108	1759	1	5	1873	1	0	0	0	0	0		0	1117	125	0	1242	0.9	179	3115	3294
4:45 PM - 5:45 PM	82	0	79	0	161	0.9	124	1783	1	4	1912	1	0	0	0	0	0		0	1074	125	0	1199	1	161	3111	3272
5:00 PM - 6:00 PM	88	0	70	0	158	0.8	136	1764	3	5	1908	1	0	0	0	0	0		0	1064	127	0	1191	1	158	3099	3257
5:15 PM - 6:15 PM	83	0	65	0	148	0.8	131	1719	2	3	1855	1	2	0	0	0	2	0.3	1	1040	111	0	1152	0.9	150	3007	3157
5:30 PM - 6:30 PM	74	0	68	0	142	0.9	109	1630	2	4	1745	0.9	2	0	0	0	2	0.3	1	987	131	0	1119	0.9	144	2864	3008
5:45 PM - 6:45 PM	69	0	69	0	138	0.8	91	1463	2	5	1561	0.9	2	0	0	0	2	0.3	4	929	129	0	1062	1	140	2623	2763
6:00 PM - 7:00 PM	74	0	74	0	148	0.8	74	1363	0	5	1442	0.8	2	0	0	0	2	0.3	4	923	111	0	1038	0.9	150	2480	2630

APPENDIX D – Existing Capacity Analysis Worksheets



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	43	2083	8	860	303	6	166	168
v/c Ratio	0.09	0.56	0.05	0.35	0.28	0.08	0.67	0.68
Control Delay (s/veh)	7.5	14.2	15.0	24.8	15.3	88.8	88.5	89.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.5	14.2	15.0	24.8	15.3	88.8	88.5	89.2
Queue Length 50th (ft)	11	314	4	366	134	7	209	212
Queue Length 95th (ft)	33	669	16	484	240	26	276	282
Internal Link Dist (ft)		302		61		35		105
Turn Bay Length (ft)	125		65					
Base Capacity (vph)	530	3694	165	2431	1095	94	385	384
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	4	4
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.56	0.05	0.35	0.28	0.06	0.44	0.44

Intersection Summary

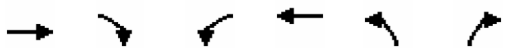
Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	37	1807	1	4	1	6	748	264	4	1	278	0
Future Volume (vph)	37	1807	1	4	1	6	748	264	4	1	278	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0				6.0	6.0	6.0		5.0	5.3	5.3
Lane Util. Factor	1.00	0.91				1.00	0.95	1.00		1.00	0.95	0.95
Frpb, ped/bikes	1.00	1.00				1.00	1.00	0.97		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00				1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00				1.00	1.00	0.85		1.00	1.00	0.99
Flt Protected	0.95	1.00				0.95	1.00	1.00		0.96	0.95	0.96
Satd. Flow (prot)	1769	4985				1770	3438	1460		1788	1603	1599
Flt Permitted	0.28	1.00				0.06	1.00	1.00		0.96	0.95	0.96
Satd. Flow (perm)	527	4985				117	3438	1460		1788	1603	1599
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	43	2077	1	5	1	7	860	303	5	1	320	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	72	0	0	0	0
Lane Group Flow (vph)	43	2083	0	0	0	8	860	231	0	6	166	168
Confl. Peds. (#/hr)	3		1	1	1	1		3				
Heavy Vehicles (%)	2%	4%	2%	2%	2%	2%	5%	7%	2%	2%	7%	2%
Turn Type	pm+pt	NA			pm+pt	pm+pt	NA	Perm	Split	NA	Split	NA
Protected Phases	5	2			1	1	6		7	7	3	3
Permitted Phases	2				6	6		6				
Actuated Green, G (s)	134.0	128.3				127.6	125.1	125.1		1.5	27.4	27.4
Effective Green, g (s)	138.0	130.3				131.6	127.1	127.1		3.5	29.4	29.4
Actuated g/C Ratio	0.73	0.69				0.69	0.67	0.67		0.02	0.15	0.15
Clearance Time (s)	8.0	8.0				8.0	8.0	8.0		7.0	7.3	7.3
Vehicle Extension (s)	3.0	5.0				3.0	5.0	5.0		3.0	5.0	5.0
Lane Grp Cap (vph)	433	3418				120	2299	976		32	248	247
v/s Ratio Prot	c0.00	c0.42				0.00	0.25			c0.00	0.10	c0.11
v/s Ratio Perm	0.07					0.04		0.16				
v/c Ratio	0.10	0.61				0.07	0.37	0.24		0.19	0.67	0.68
Uniform Delay, d1	8.2	16.1				12.4	13.9	12.4		91.8	75.7	75.9
Progression Factor	1.00	1.00				1.78	1.90	3.69		1.00	1.00	1.00
Incremental Delay, d2	0.1	0.8				0.2	0.5	0.6		2.8	8.8	9.5
Delay (s)	8.3	16.9				22.2	26.8	46.2		94.7	84.5	85.4
Level of Service	A	B				C	C	D		F	F	F
Approach Delay (s/veh)		16.8					31.8			94.7		84.9
Approach LOS		B					C			F		F

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	26.9
Intersection Capacity Utilization	53.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR	SBR2	NEL
Lane Configurations			
Traffic Volume (vph)	1	11	0
Future Volume (vph)	1	11	0
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)			
Lane Util. Factor			
Frpb, ped/bikes			
Flpb, ped/bikes			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Peak-hour factor, PHF	0.87	0.87	0.87
Adj. Flow (vph)	1	13	0
RTOR Reduction (vph)	0	0	0
Lane Group Flow (vph)	0	0	0
Confl. Peds. (#/hr)			
Heavy Vehicles (%)	2%	2%	2%
Turn Type			Prot
Protected Phases			4
Permitted Phases			
Actuated Green, G (s)			
Effective Green, g (s)			
Actuated g/C Ratio			
Clearance Time (s)			
Vehicle Extension (s)			
Lane Grp Cap (vph)			
v/s Ratio Prot			
v/s Ratio Perm			
v/c Ratio			
Uniform Delay, d1			
Progression Factor			
Incremental Delay, d2			
Delay (s)			
Level of Service			
Approach Delay (s/veh)			0.0
Approach LOS			A

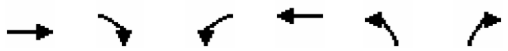
Intersection Summary



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2087	3	0	1019	0	0
Future Volume (Veh/h)	2087	3	0	1019	0	0
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)	2455	4	0	1199	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	141			1021		
pX, platoon unblocked			0.77		0.78	0.77
vC, conflicting volume			2459		2857	820
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1861		2218	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			248		29	839

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	982	982	495	400	400	400	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	4	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.58	0.58	0.29	0.24	0.24	0.24	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			0.0
Approach LOS							A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	43.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2075	12	12	1018	1	1
Future Volume (Veh/h)	2075	12	12	1018	1	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2306	13	13	1131	1	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	496			666		
pX, platoon unblocked			0.78		0.79	0.78
vC, conflicting volume			2319		2716	775
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1688		1966	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			96		98	100
cM capacity (veh/h)			291		42	841

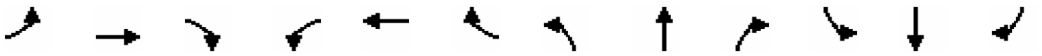
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	922	922	474	13	377	377	377	2
Volume Left	0	0	0	13	0	0	0	1
Volume Right	0	0	13	0	0	0	0	1
cSH	1700	1700	1700	291	1700	1700	1700	79
Volume to Capacity	0.54	0.54	0.28	0.04	0.22	0.22	0.22	0.03
Queue Length 95th (ft)	0	0	0	3	0	0	0	2
Control Delay (s/veh)	0.0	0.0	0.0	18.0	0.0	0.0	0.0	51.6
Lane LOS				C				F
Approach Delay (s/veh)	0.0			0.2				51.6
Approach LOS								F

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	50.4%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBT	SBR
Lane Group Flow (vph)	12	2430	12	1207	4	7
v/c Ratio	0.14	0.54	0.14	0.27	0.03	0.02
Control Delay (s/veh)	93.3	10.1	86.0	2.7	76.3	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	93.3	10.2	86.0	2.7	76.3	0.2
Queue Length 50th (ft)	14	0	15	2	5	0
Queue Length 95th (ft)	m26	931	39	132	16	0
Internal Link Dist (ft)		586		181	73	
Turn Bay Length (ft)	100		100			
Base Capacity (vph)	224	4533	199	4500	403	513
Starvation Cap Reductn	0	266	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	0.05	0.57	0.06	0.27	0.01	0.01

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	2030	36	10	1024	2	0	3	0	0	0	6
Future Volume (vph)	10	2030	36	10	1024	2	0	3	0	0	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.9	3.1		3.6	3.1			4.8				4.8
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00				1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00				0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00				1.00
Frt	1.00	1.00		1.00	1.00			1.00				0.85
Flt Protected	0.95	1.00		0.95	1.00			1.00				1.00
Satd. Flow (prot)	1770	4974		1770	4939			1863				1561
Flt Permitted	0.95	1.00		0.95	1.00			1.00				1.00
Satd. Flow (perm)	1770	4974		1770	4939			1863				1561
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	12	2388	42	12	1205	2	0	4	0	0	0	7
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	7
Lane Group Flow (vph)	12	2430	0	12	1207	0	0	4	0	0	0	0
Confl. Peds. (#/hr)	5		1	1		5	1					1
Heavy Vehicles (%)	2%	4%	2%	2%	5%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	NA		Prot	NA			NA	Perm			Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		4
Actuated Green, G (s)	3.3	161.9		3.3	161.6			7.3				7.3
Effective Green, g (s)	5.3	163.9		5.3	163.6			9.3				9.3
Actuated g/C Ratio	0.03	0.86		0.03	0.86			0.05				0.05
Clearance Time (s)	5.9	5.1		5.6	5.1			6.8				6.8
Vehicle Extension (s)	3.0	4.0		3.0	4.0			5.0				3.0
Lane Grp Cap (vph)	49	4290		49	4252			91				76
v/s Ratio Prot	c0.01	c0.49		0.01	0.24			c0.00				
v/s Ratio Perm												0.00
v/c Ratio	0.24	0.57		0.24	0.28			0.04				0.00
Uniform Delay, d1	90.4	3.5		90.4	2.4			86.1				85.9
Progression Factor	1.04	2.10		0.95	0.83			1.00				1.00
Incremental Delay, d2	2.3	0.5		2.5	0.2			0.4				0.0
Delay (s)	96.6	7.8		88.8	2.2			86.5				86.0
Level of Service	F	A		F	A			F				F
Approach Delay (s/veh)		8.3			3.0			86.5			86.0	
Approach LOS		A			A			F			F	

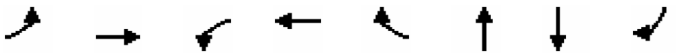
Intersection Summary			
HCM 2000 Control Delay (s/veh)	6.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	52.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2030	0	0	1036	0	0
Future Volume (Veh/h)	2030	0	0	1036	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	2360	0	0	1205	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	261			820		
pX, platoon unblocked			0.87		0.90	0.87
vC, conflicting volume			2360		2762	787
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			2026		2083	208
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			239		41	691

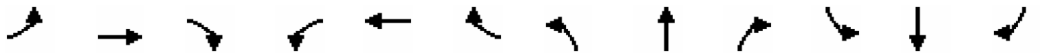
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	944	944	472	402	402	402	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.56	0.56	0.28	0.24	0.24	0.24	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			0.0
Approach LOS							A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	42.6%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT	SBR
Lane Group Flow (vph)	52	2254	7	1017	60	3	148	148
v/c Ratio	0.43	0.57	0.09	0.28	0.04	0.01	0.75	0.42
Control Delay (s/veh)	113.0	4.9	89.0	10.0	0.1	0.0	99.9	12.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	113.0	4.9	89.0	10.0	0.1	0.0	99.9	12.4
Queue Length 50th (ft)	65	420	9	156	0	0	180	0
Queue Length 95th (ft)	121	4	28	213	0	0	252	64
Internal Link Dist (ft)		740		243		205	269	
Turn Bay Length (ft)	400		60		121			250
Base Capacity (vph)	190	3972	163	3583	1425	405	253	407
Starvation Cap Reductn	0	141	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	0.27	0.59	0.04	0.28	0.04	0.01	0.58	0.36

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	1981	3	6	895	53	0	0	3	130	0	130
Future Volume (vph)	46	1981	3	6	895	53	0	0	3	130	0	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	3.6		3.5	3.6	2.0		5.1			5.1	5.1
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00			1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00			1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85		0.87			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		1.00			0.95	1.00
Satd. Flow (prot)	1770	4986		1770	4893	1425		1611			1736	1561
Flt Permitted	0.95	1.00		0.95	1.00	1.00		1.00			0.76	1.00
Satd. Flow (perm)	1770	4986		1770	4893	1425		1611			1381	1561
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	52	2251	3	7	1017	60	0	0	3	148	0	148
RTOR Reduction (vph)	0	0	0	0	0	0	0	3	0	0	0	127
Lane Group Flow (vph)	52	2254	0	7	1017	60	0	0	0	0	148	21
Confl. Peds. (#/hr)	1		2	2		1	1					1
Heavy Vehicles (%)	2%	4%	2%	2%	6%	11%	2%	2%	2%	4%	2%	2%
Turn Type	Prot	NA		Prot	NA	Free		NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases						Free	4			8		8
Actuated Green, G (s)	9.7	144.9		1.6	135.8	190.0		25.3			25.3	25.3
Effective Green, g (s)	11.7	146.9		3.6	137.8	190.0		27.3			27.3	27.3
Actuated g/C Ratio	0.06	0.77		0.02	0.73	1.00		0.14			0.14	0.14
Clearance Time (s)	6.5	5.6		5.5	5.6			7.1			7.1	7.1
Vehicle Extension (s)	3.0	4.0		3.0	4.0			3.0			3.0	3.0
Lane Grp Cap (vph)	108	3854		33	3548	1425		231			198	224
v/s Ratio Prot	c0.03	c0.45		0.00	0.21			0.00				
v/s Ratio Perm						0.04					c0.11	0.01
v/c Ratio	0.48	0.58		0.21	0.29	0.04		0.00			0.75	0.09
Uniform Delay, d1	86.2	8.9		91.8	9.1	0.0		69.7			78.0	70.6
Progression Factor	1.23	0.53		1.00	1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2	2.9	0.6		3.2	0.2	0.1		0.0			14.3	0.2
Delay (s)	109.2	5.3		95.0	9.3	0.1		69.7			92.3	70.8
Level of Service	F	A		F	A	A		E			F	E
Approach Delay (s/veh)		7.6			9.3			69.7			81.6	
Approach LOS		A			A			E			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	13.2
Intersection Capacity Utilization	63.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT	NEL
Lane Group Flow (vph)	30	1096	18	1775	433	16	162	158	9
v/c Ratio	0.20	0.31	0.05	0.74	0.39	0.21	0.74	0.73	0.11
Control Delay (s/veh)	14.5	15.8	4.1	20.6	5.4	107.3	111.6	111.2	102.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.5	15.8	4.1	20.6	5.4	107.3	111.6	111.2	102.0
Queue Length 50th (ft)	11	230	1	882	137	23	241	234	13
Queue Length 95th (ft)	30	337	m7	1237	343	55	330	324	37
Internal Link Dist (ft)		302		61		35		105	41
Turn Bay Length (ft)	125		65						
Base Capacity (vph)	188	3503	395	2414	1109	78	247	243	144
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.31	0.05	0.74	0.39	0.21	0.66	0.65	0.06

Intersection Summary

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

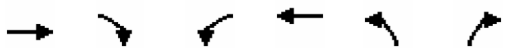
Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	26	960	3	2	9	7	1562	381	6	1	7	254
Future Volume (vph)	26	960	3	2	9	7	1562	381	6	1	7	254
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0				6.0	6.0	6.0		5.0		5.3
Lane Util. Factor	1.00	0.91				1.00	0.95	1.00		1.00		0.95
Frpb, ped/bikes	1.00	1.00				1.00	1.00	0.97		1.00		1.00
Flpb, ped/bikes	1.00	1.00				1.00	1.00	1.00		1.00		1.00
Frt	1.00	1.00				1.00	1.00	0.85		0.93		1.00
Flt Protected	0.95	1.00				0.95	1.00	1.00		0.98		0.95
Satd. Flow (prot)	1770	4984				1741	3505	1528		1700		1665
Flt Permitted	0.06	1.00				0.22	1.00	1.00		0.98		0.95
Satd. Flow (perm)	112	4984				410	3505	1528		1700		1665
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	30	1091	3	2	10	8	1775	433	7	1	8	289
RTOR Reduction (vph)	0	0	0	0	0	0	0	64	0	0	0	0
Lane Group Flow (vph)	30	1096	0	0	0	18	1775	369	0	16	0	162
Confl. Peds. (#/hr)	3		1	1	1	1		3				
Heavy Vehicles (%)	2%	4%	2%	2%	5%	2%	3%	2%	2%	2%	2%	3%
Turn Type	pm+pt	NA			pm+pt	pm+pt	NA	Perm	Split	NA		Split
Protected Phases	5	2			1	1	6		7	7		3
Permitted Phases	2				6	6		6				
Actuated Green, G (s)	148.4	142.8				145.2	141.2	141.2		5.3		27.0
Effective Green, g (s)	152.4	144.8				149.2	143.2	143.2		7.3		29.0
Actuated g/C Ratio	0.69	0.66				0.68	0.65	0.65		0.03		0.13
Clearance Time (s)	8.0	8.0				8.0	8.0	8.0		7.0		7.3
Vehicle Extension (s)	3.0	5.0				3.0	5.0	5.0		3.0		5.0
Lane Grp Cap (vph)	134	3280				314	2281	994		56		219
v/s Ratio Prot	c0.01	0.22				0.00	c0.51			c0.01		c0.10
v/s Ratio Perm	0.15					0.04		0.24				
v/c Ratio	0.22	0.33				0.06	0.78	0.37		0.29		0.74
Uniform Delay, d1	26.5	16.5				12.0	27.2	17.7		103.8		91.9
Progression Factor	1.00	1.00				0.33	0.70	0.43		1.00		1.00
Incremental Delay, d2	0.9	0.3				0.1	2.5	1.0		2.8		14.7
Delay (s)	27.4	16.8				4.0	21.5	8.5		106.6		106.6
Level of Service	C	B				A	C	A		F		F
Approach Delay (s/veh)		17.0					18.8			106.6		
Approach LOS		B					B			F		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	220.0	Sum of lost time (s)	26.9
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR	SBR2	NEL2	NEL	NER
Lane Configurations						
Traffic Volume (vph)	1	3	24	4	1	3
Future Volume (vph)	1	3	24	4	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3				4.6	
Lane Util. Factor	0.95				1.00	
Frpb, ped/bikes	1.00				1.00	
Flpb, ped/bikes	1.00				1.00	
Frt	0.97				0.96	
Flt Protected	0.96				0.97	
Satd. Flow (prot)	1640				1722	
Flt Permitted	0.96				0.97	
Satd. Flow (perm)	1640				1722	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	1	3	27	5	1	3
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	158	0	0	0	9	0
Confl. Peds. (#/hr)						
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%
Turn Type	NA			Prot	Prot	
Protected Phases	3			4	4	
Permitted Phases						
Actuated Green, G (s)	27.0				4.0	
Effective Green, g (s)	29.0				6.0	
Actuated g/C Ratio	0.13				0.03	
Clearance Time (s)	7.3				6.6	
Vehicle Extension (s)	5.0				5.0	
Lane Grp Cap (vph)	216				46	
v/s Ratio Prot	0.10				c0.01	
v/s Ratio Perm						
v/c Ratio	0.73				0.20	
Uniform Delay, d1	91.8				104.6	
Progression Factor	1.00				1.00	
Incremental Delay, d2	14.4				4.3	
Delay (s)	106.2				109.0	
Level of Service	F				F	
Approach Delay (s/veh)	106.4				109.0	
Approach LOS	F				F	

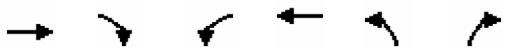
Intersection Summary



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1233	4	0	1959	0	1
Future Volume (Veh/h)	1233	4	0	1959	0	1
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)	1451	5	0	2305	0	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	141			1021		
pX, platoon unblocked			0.90		0.93	0.90
vC, conflicting volume			1456		2222	486
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1135		1342	64
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			553		133	894

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	580	580	295	768	768	768	1
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	5	0	0	0	1
cSH	1700	1700	1700	1700	1700	1700	894
Volume to Capacity	0.34	0.34	0.17	0.45	0.45	0.45	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	9.0
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			9.0
Approach LOS							A

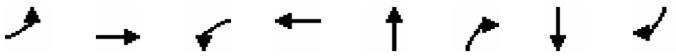
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	41.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1229	5	13	1949	10	9
Future Volume (Veh/h)	1229	5	13	1949	10	9
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	1351	5	14	2142	11	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	496			666		
pX, platoon unblocked			0.91		0.92	0.91
vC, conflicting volume			1356		2096	453
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1044		1238	51
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		93	99
cM capacity (veh/h)			602		152	915

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	540	540	275	14	714	714	714	21
Volume Left	0	0	0	14	0	0	0	11
Volume Right	0	0	5	0	0	0	0	10
cSH	1700	1700	1700	602	1700	1700	1700	251
Volume to Capacity	0.32	0.32	0.16	0.02	0.42	0.42	0.42	0.08
Queue Length 95th (ft)	0	0	0	2	0	0	0	7
Control Delay (s/veh)	0.0	0.0	0.0	11.1	0.0	0.0	0.0	20.6
Lane LOS				B				C
Approach Delay (s/veh)	0.0			0.1				20.6
Approach LOS								C

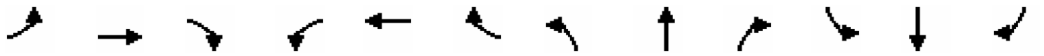
Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	47.7%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	31	1300	4	2049	40	34	8	20
v/c Ratio	0.34	0.29	0.06	0.48	0.37	0.21	0.07	0.13
Control Delay (s/veh)	114.9	2.5	141.0	1.2	103.4	20.1	90.3	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	114.9	2.5	141.0	1.3	103.4	20.1	90.3	5.7
Queue Length 50th (ft)	45	59	5	23	57	0	11	0
Queue Length 95th (ft)	m80	213	m14	33	100	36	31	9
Internal Link Dist (ft)		586		181	73		55	
Turn Bay Length (ft)	100		100					
Base Capacity (vph)	234	4435	212	4241	289	369	325	364
Starvation Cap Reductn	0	0	0	229	0	0	0	0
Spillback Cap Reductn	0	0	0	155	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.29	0.02	0.51	0.14	0.09	0.02	0.05

Intersection Summary

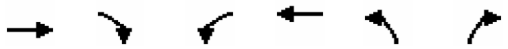
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	1205	4	4	1901	5	36	1	32	6	2	19
Future Volume (vph)	29	1205	4	4	1901	5	36	1	32	6	2	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.9	3.1		3.6	3.1			4.8	4.8		4.8	4.8
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frt	1.00	1.00		1.00	1.00			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00		0.96	1.00
Satd. Flow (prot)	1770	4985		1770	5034			1772	1583		1795	1561
Flt Permitted	0.95	1.00		0.95	1.00			0.73	1.00		0.82	1.00
Satd. Flow (perm)	1770	4985		1770	5034			1349	1583		1518	1561
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	31	1296	4	4	2044	5	39	1	34	6	2	20
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	32	0	0	19
Lane Group Flow (vph)	31	1300	0	4	2049	0	0	40	2	0	8	1
Confl. Peds. (#/hr)	5		1	1		5	1					1
Heavy Vehicles (%)	2%	4%	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		4
Actuated Green, G (s)	8.2	187.2		1.5	180.2			13.8	13.8		13.8	13.8
Effective Green, g (s)	10.2	189.2		3.5	182.2			15.8	15.8		15.8	15.8
Actuated g/C Ratio	0.05	0.86		0.02	0.83			0.07	0.07		0.07	0.07
Clearance Time (s)	5.9	5.1		5.6	5.1			6.8	6.8		6.8	6.8
Vehicle Extension (s)	3.0	4.0		3.0	4.0			5.0	5.0		3.0	3.0
Lane Grp Cap (vph)	82	4287		28	4169			96	113		109	112
v/s Ratio Prot	c0.02	0.26		0.00	c0.41							
v/s Ratio Perm								c0.03	0.00		0.01	0.00
v/c Ratio	0.38	0.30		0.14	0.49			0.42	0.02		0.07	0.01
Uniform Delay, d1	101.8	2.9		106.8	5.5			97.7	94.9		95.3	94.9
Progression Factor	1.05	0.81		1.37	0.13			1.00	1.00		1.00	1.00
Incremental Delay, d2	2.8	0.2		2.1	0.4			6.0	0.2		0.3	0.0
Delay (s)	110.1	2.5		148.3	1.1			103.7	95.1		95.6	94.9
Level of Service	F	A		F	A			F	F		F	F
Approach Delay (s/veh)		5.0			1.4			99.7			95.1	
Approach LOS		A			A			F			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	5.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	220.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	57.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



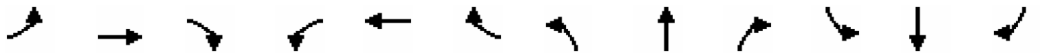
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1241	4	0	1910	0	1
Future Volume (Veh/h)	1241	4	0	1910	0	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1349	4	0	2076	0	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	261			820		
pX, platoon unblocked			0.95		0.88	0.95
vC, conflicting volume			1353		2043	452
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1194		1330	247
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			552		128	717

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	540	540	274	692	692	692	1
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	4	0	0	0	1
cSH	1700	1700	1700	1700	1700	1700	717
Volume to Capacity	0.32	0.32	0.16	0.41	0.41	0.41	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	10.0
Lane LOS							B
Approach Delay (s/veh)	0.0			0.0			10.0
Approach LOS							B

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	40.2%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	WBR	SBT	SBR
Lane Group Flow (vph)	129	1152	6	1813	111	85	100
v/c Ratio	0.71	0.27	0.09	0.48	0.07	0.62	0.41
Control Delay (s/veh)	115.6	3.0	104.5	12.9	0.1	113.1	17.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	115.6	3.0	104.5	12.9	0.1	113.1	17.5
Queue Length 50th (ft)	186	68	9	367	0	121	0
Queue Length 95th (ft)	280	141	29	500	0	183	65
Internal Link Dist (ft)		740		243		269	
Turn Bay Length (ft)	400		60		121		250
Base Capacity (vph)	208	4283	167	3762	1551	210	318
Starvation Cap Reductn	0	0	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	0.62	0.27	0.04	0.48	0.07	0.40	0.31

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	1117	0	6	1759	108	0	0	0	82	0	97
Future Volume (vph)	125	1117	0	6	1759	108	0	0	0	82	0	97
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	3.6		3.5	3.6	2.0					5.1	5.1
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00					1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98					1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00					1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85					1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00					0.95	1.00
Satd. Flow (prot)	1770	5036		1719	5085	1551					1770	1561
Flt Permitted	0.95	1.00		0.95	1.00	1.00					0.76	1.00
Satd. Flow (perm)	1770	5036		1719	5085	1551					1410	1561
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	129	1152	0	6	1813	111	0	0	0	85	0	100
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	90
Lane Group Flow (vph)	129	1152	0	6	1813	111	0	0	0	0	85	10
Confl. Peds. (#/hr)	1		2	2		1	1					1
Heavy Vehicles (%)	2%	3%	2%	5%	2%	2%	2%	2%	2%	2%	5%	2%
Turn Type	Prot	NA		Prot	NA	Free				Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases						Free	4			8		8
Actuated Green, G (s)	20.5	180.7		1.6	160.8	220.0					19.5	19.5
Effective Green, g (s)	22.5	182.7		3.6	162.8	220.0					21.5	21.5
Actuated g/C Ratio	0.10	0.83		0.02	0.74	1.00					0.10	0.10
Clearance Time (s)	6.5	5.6		5.5	5.6						7.1	7.1
Vehicle Extension (s)	3.0	4.0		3.0	4.0						3.0	3.0
Lane Grp Cap (vph)	181	4182		28	3762	1551					137	152
v/s Ratio Prot	c0.07	0.23		0.00	c0.36							
v/s Ratio Perm						0.07					c0.06	0.01
v/c Ratio	0.71	0.28		0.21	0.48	0.07					0.62	0.06
Uniform Delay, d1	95.6	4.1		106.8	11.6	0.0					95.3	90.1
Progression Factor	1.00	0.75		1.00	1.00	1.00					1.00	1.00
Incremental Delay, d2	12.2	0.2		3.8	0.4	0.1					8.4	0.2
Delay (s)	107.4	3.2		110.6	12.0	0.1					103.8	90.3
Level of Service	F	A		F	B	A					F	F
Approach Delay (s/veh)		13.7			11.6			0.0			96.5	
Approach LOS		B			B			A			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	220.0	Sum of lost time (s)	13.2
Intersection Capacity Utilization	57.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

APPENDIX E – Individual Pipeline Development Trip Assignments

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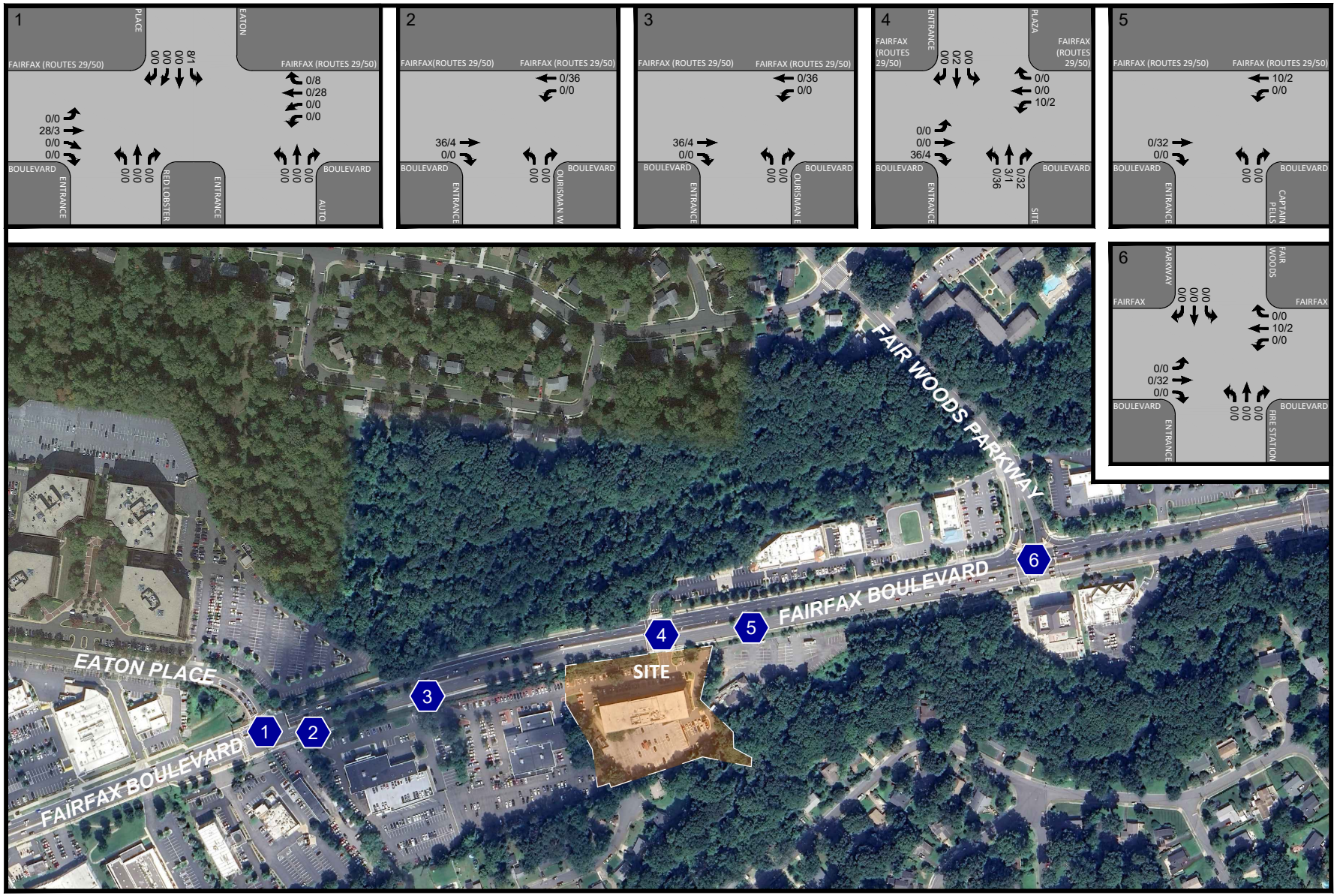

Figure D-1
Existing Site Trips Removed

X Study Intersection

AM PEAK HOUR
PM PEAK HOUR
000 / 000

NORTH

Gatewood Plaza
City of Fairfax, Virginia

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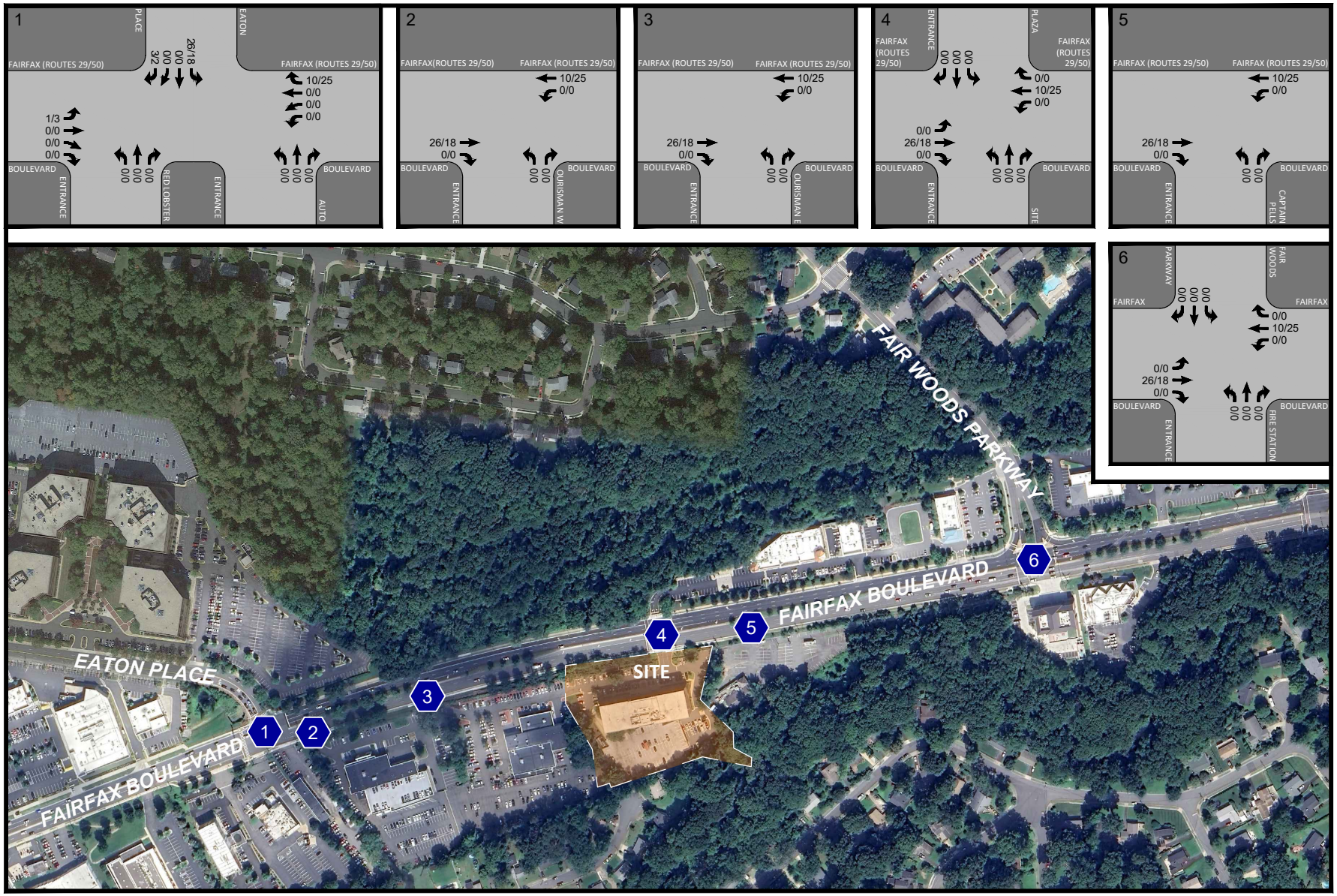

Figure D-2
Willowwood Plaza
Pipeline Trips

X Study Intersection

AM PEAK HOUR
PM PEAK HOUR
000 / 000

NORTH

Gatewood Plaza
City of Fairfax, Virginia

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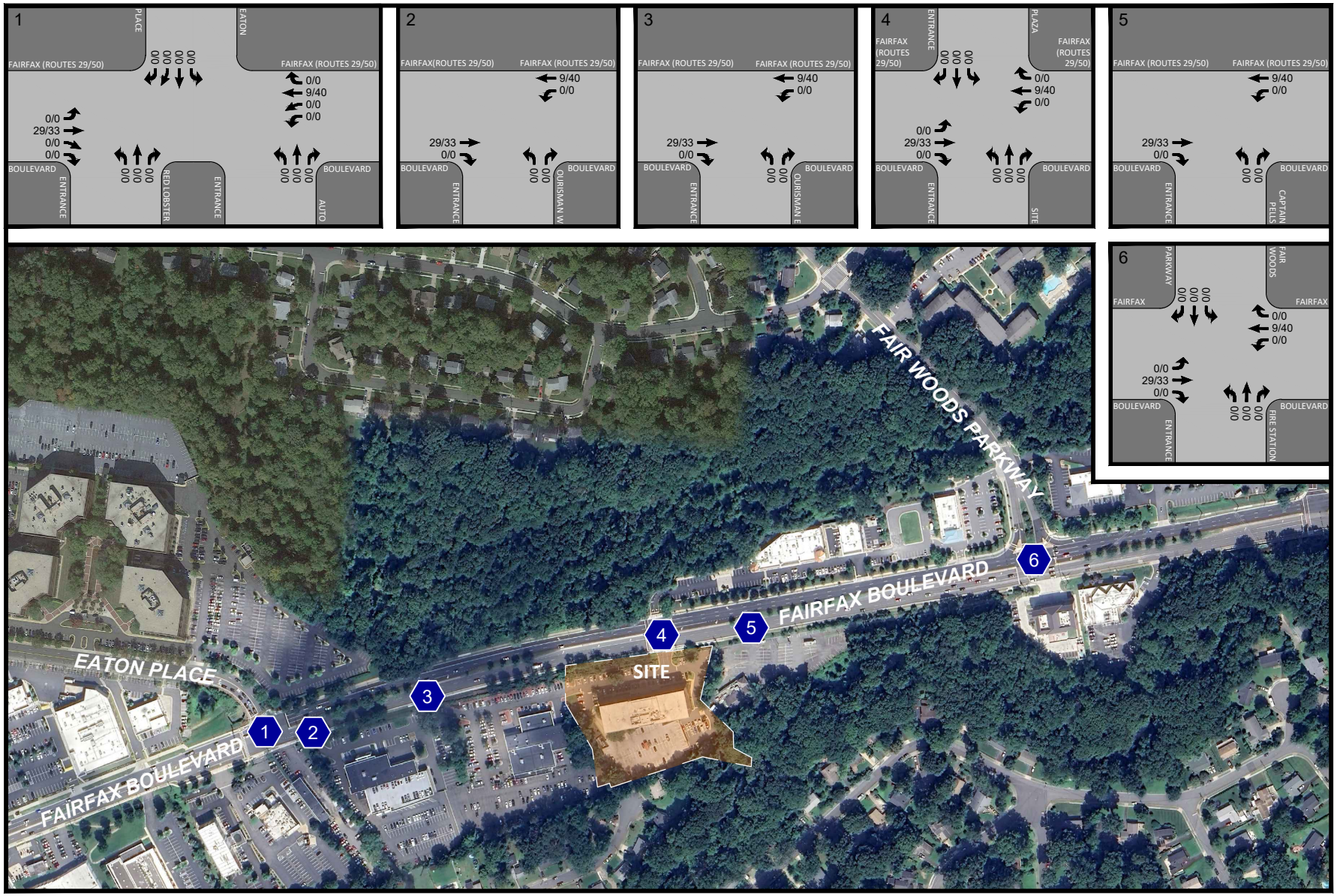

Figure D-3
Paul VI
Pipeline Trips

X Study Intersection

AM PEAK HOUR
PM PEAK HOUR
000 / 000

NORTH

Gatewood Plaza
City of Fairfax, Virginia

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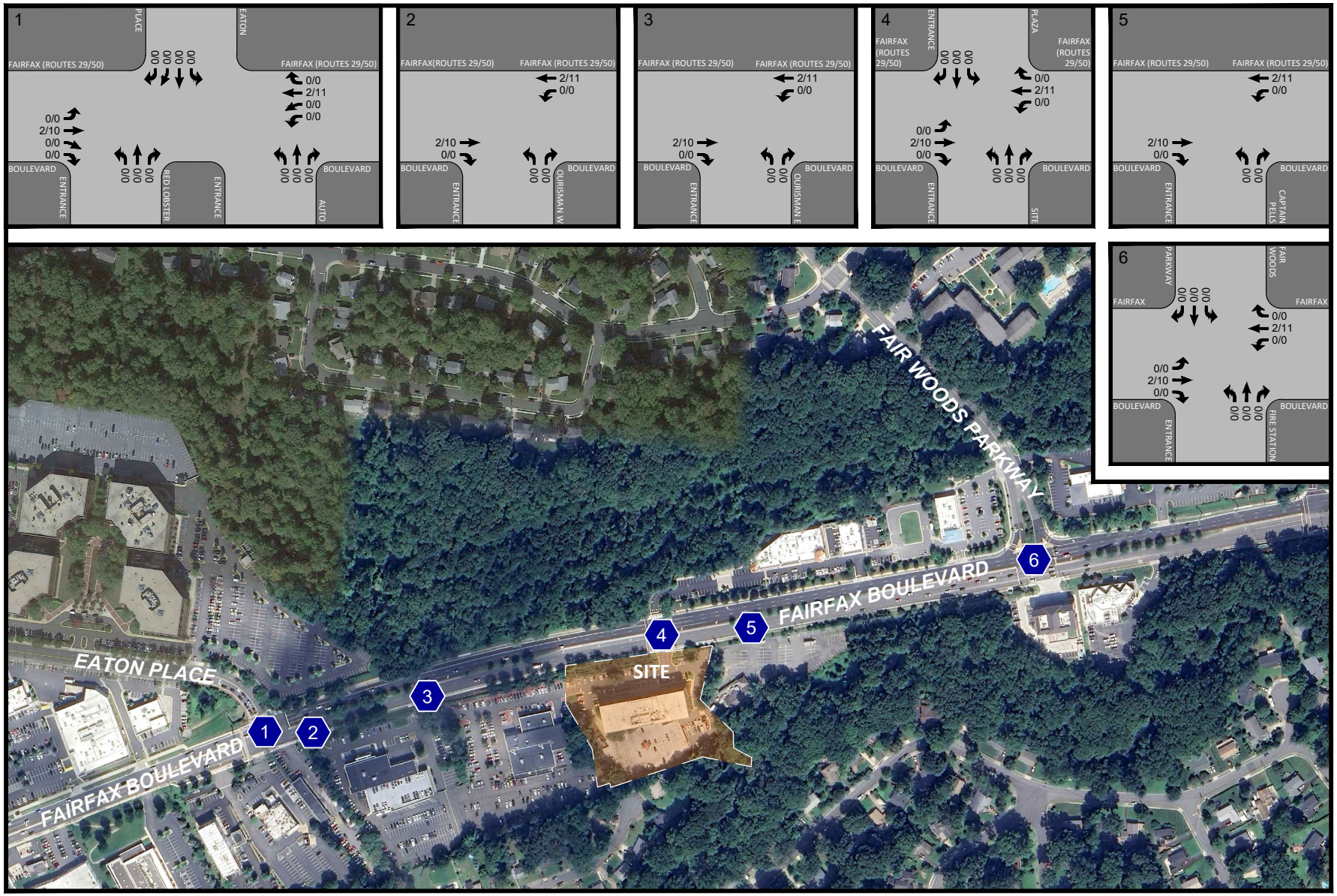

Figure D-4
Breezway Properties
Pipeline Trips

Study Intersection

AM PEAK HOUR
PM PEAK HOUR
000 / 000

NORTH

Gatewood Plaza
City of Fairfax, Virginia

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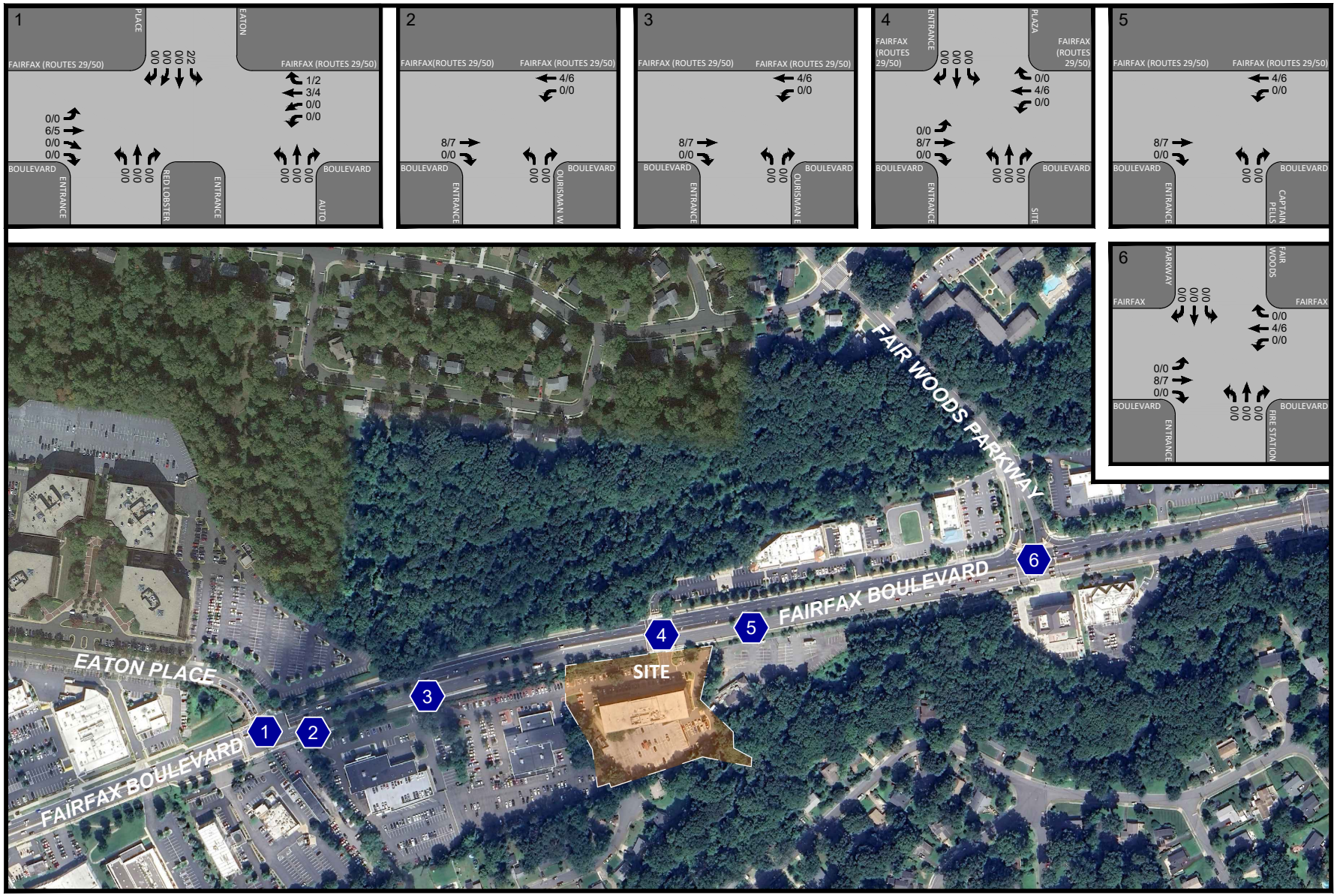

Figure D-5
Northfax West
Pipeline Trips

Study Intersection

AM PEAK HOUR
PM PEAK HOUR
000 / 000

NORTH

Gatewood Plaza
City of Fairfax, Virginia

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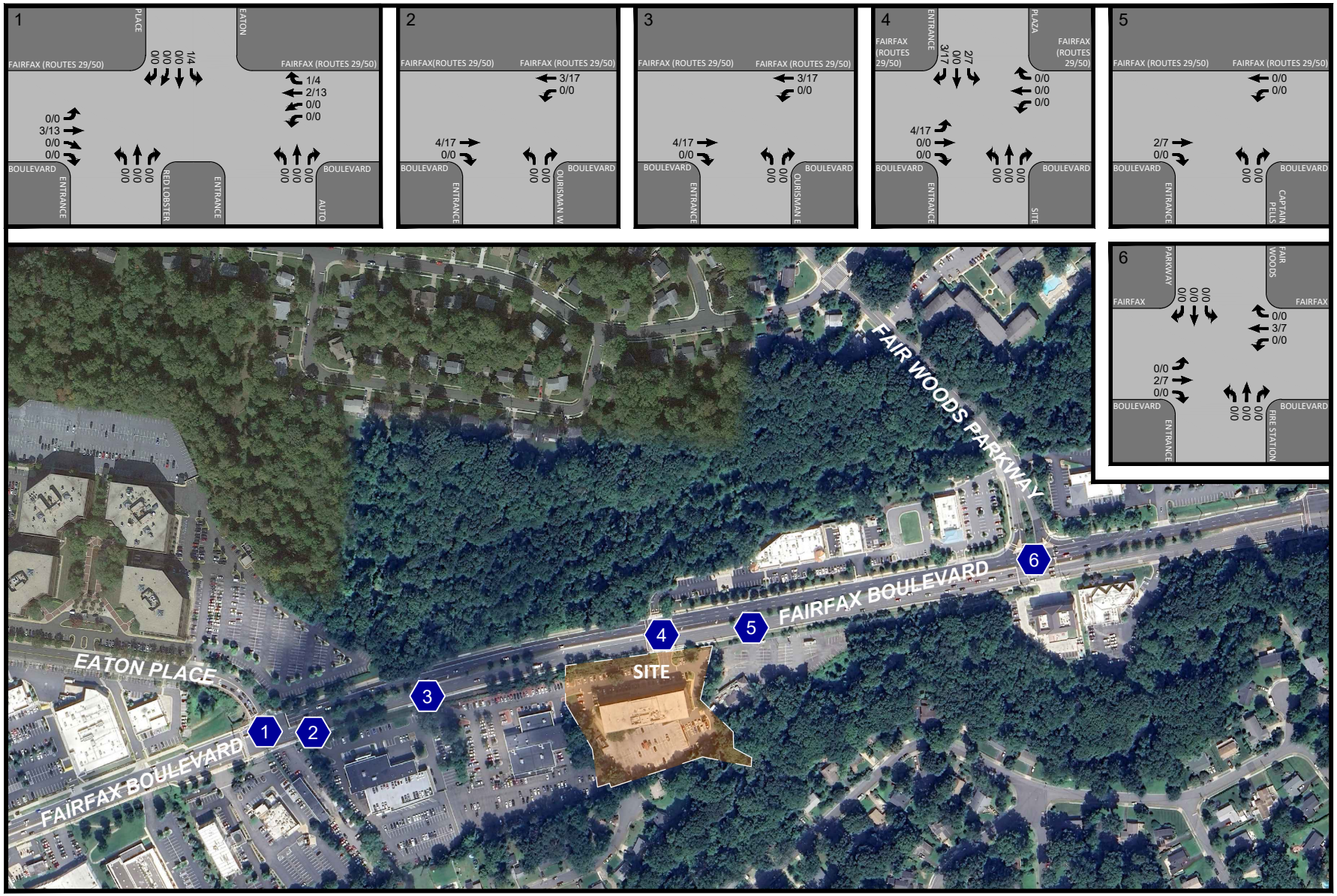


Figure D-6
Boulevard Marketplace
Pipeline Trips

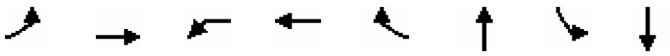
X Study Intersection

AM PEAK HOUR
PM PEAK HOUR
000 / 000

NORTH

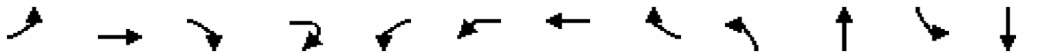
Gatewood Plaza
City of Fairfax, Virginia

APPENDIX F – Background Future Capacity Analysis Worksheets



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	41	2052	8	847	300	5	177	173
v/c Ratio	0.09	0.56	0.05	0.35	0.28	0.06	0.69	0.68
Control Delay (s/veh)	7.8	14.6	16.4	26.6	16.8	88.6	88.4	87.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.8	14.6	16.4	26.6	16.8	88.6	88.4	87.4
Queue Length 50th (ft)	10	315	4	378	141	6	224	217
Queue Length 95th (ft)	34	700	17	506	270	23	305	297
Internal Link Dist (ft)		302		61		35		105
Turn Bay Length (ft)	125		65					
Base Capacity (vph)	532	3665	167	2412	1089	94	385	384
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	0.08	0.56	0.05	0.35	0.28	0.05	0.46	0.45

Intersection Summary



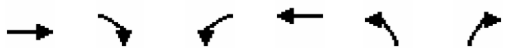
Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	38	1883	1	4	1	6	779	276	4	1	307	0
Future Volume (vph)	38	1883	1	4	1	6	779	276	4	1	307	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0				6.0	6.0	6.0		5.0	5.3	5.3
Lane Util. Factor	1.00	0.91				1.00	0.95	1.00		1.00	0.95	0.95
Frpb, ped/bikes	1.00	1.00				1.00	1.00	0.97		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00				1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00				1.00	1.00	0.85		1.00	1.00	0.99
Flt Protected	0.95	1.00				0.95	1.00	1.00		0.96	0.95	0.96
Satd. Flow (prot)	1769	4986				1770	3438	1460		1791	1603	1598
Flt Permitted	0.29	1.00				0.07	1.00	1.00		0.96	0.95	0.96
Satd. Flow (perm)	534	4986				121	3438	1460		1791	1603	1598
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	41	2047	1	4	1	7	847	300	4	1	334	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	73	0	0	0	0
Lane Group Flow (vph)	41	2052	0	0	0	8	847	227	0	5	177	173
Confl. Peds. (#/hr)	3		1	1	1	1		3				
Heavy Vehicles (%)	2%	4%	2%	2%	2%	2%	5%	7%	2%	2%	7%	2%
Turn Type	pm+pt	NA			pm+pt	pm+pt	NA	Perm	Split	NA	Split	NA
Protected Phases	5	2			1	1	6		7	7	3	3
Permitted Phases	2				6	6		6				
Actuated Green, G (s)	132.8	127.2				126.6	124.1	124.1		1.5	28.5	28.5
Effective Green, g (s)	136.8	129.2				130.6	126.1	126.1		3.5	30.5	30.5
Actuated g/C Ratio	0.72	0.68				0.69	0.66	0.66		0.02	0.16	0.16
Clearance Time (s)	8.0	8.0				8.0	8.0	8.0		7.0	7.3	7.3
Vehicle Extension (s)	3.0	5.0				3.0	5.0	5.0		3.0	5.0	5.0
Lane Grp Cap (vph)	433	3390				122	2281	968		32	257	256
v/s Ratio Prot	c0.00	c0.41				0.00	0.25			c0.00	c0.11	0.11
v/s Ratio Perm	0.06					0.04		0.16				
v/c Ratio	0.09	0.61				0.07	0.37	0.23		0.16	0.69	0.68
Uniform Delay, d1	8.6	16.5				12.6	14.3	12.7		91.8	75.3	75.1
Progression Factor	1.00	1.00				1.89	1.98	4.04		1.00	1.00	1.00
Incremental Delay, d2	0.1	0.8				0.2	0.5	0.6		2.3	9.5	8.9
Delay (s)	8.6	17.3				24.1	28.6	51.9		94.1	84.8	84.0
Level of Service	A	B				C	C	D		F	F	F
Approach Delay (s/veh)		17.2					34.6			94.1		84.4
Approach LOS		B					C			F		F

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	26.9
Intersection Capacity Utilization	56.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR	SBR2	NEL
Lane Configurations			
Traffic Volume (vph)	1	14	0
Future Volume (vph)	1	14	0
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)			
Lane Util. Factor			
Frpb, ped/bikes			
Flpb, ped/bikes			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Peak-hour factor, PHF	0.92	0.92	0.92
Adj. Flow (vph)	1	15	0
RTOR Reduction (vph)	0	0	0
Lane Group Flow (vph)	0	0	0
Confl. Peds. (#/hr)			
Heavy Vehicles (%)	2%	2%	2%
Turn Type			Prot
Protected Phases			4
Permitted Phases			
Actuated Green, G (s)			
Effective Green, g (s)			
Actuated g/C Ratio			
Clearance Time (s)			
Vehicle Extension (s)			
Lane Grp Cap (vph)			
v/s Ratio Prot			
v/s Ratio Perm			
v/c Ratio			
Uniform Delay, d1			
Progression Factor			
Incremental Delay, d2			
Delay (s)			
Level of Service			
Approach Delay (s/veh)			0.0
Approach LOS			A

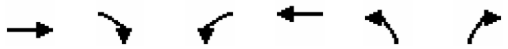
Intersection Summary



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2198	3	0	1068	0	0
Future Volume (Veh/h)	2198	3	0	1068	0	0
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)	2389	3	0	1161	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	141			1021		
pX, platoon unblocked			0.78		0.79	0.78
vC, conflicting volume			2392		2778	798
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1780		2079	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			267		36	840

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	956	956	481	387	387	387	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	3	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.56	0.56	0.28	0.23	0.23	0.23	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			0.0
Approach LOS							A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	45.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2186	12	12	1067	1	1
Future Volume (Veh/h)	2186	12	12	1067	1	1
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)	2376	13	13	1160	1	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	496			666		
pX, platoon unblocked			0.77		0.79	0.77
vC, conflicting volume			2389		2795	799
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1770		2031	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			95		97	100
cM capacity (veh/h)			269		37	838

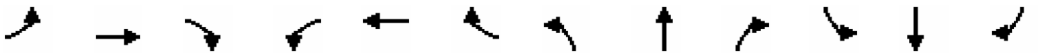
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	950	950	488	13	387	387	387	2
Volume Left	0	0	0	13	0	0	0	1
Volume Right	0	0	13	0	0	0	0	1
cSH	1700	1700	1700	269	1700	1700	1700	72
Volume to Capacity	0.56	0.56	0.29	0.05	0.23	0.23	0.23	0.03
Queue Length 95th (ft)	0	0	0	4	0	0	0	2
Control Delay (s/veh)	0.0	0.0	0.0	19.1	0.0	0.0	0.0	56.7
Lane LOS				C				F
Approach Delay (s/veh)	0.0			0.2				56.7
Approach LOS								F

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	15	2361	11	1165	3	2	10
v/c Ratio	0.17	0.52	0.13	0.26	0.02	0.02	0.07
Control Delay (s/veh)	93.4	10.1	86.6	2.9	75.7	75.5	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	93.4	10.2	86.6	2.9	75.7	75.5	0.9
Queue Length 50th (ft)	17	0	13	39	4	2	0
Queue Length 95th (ft)	m30	996	m41	133	15	12	0
Internal Link Dist (ft)		586		181	73	55	
Turn Bay Length (ft)	100		100				
Base Capacity (vph)	224	4540	199	4412	403	305	372
Starvation Cap Reductn	0	272	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	0.07	0.55	0.06	0.26	0.01	0.01	0.03

Intersection Summary

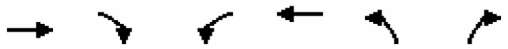
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	2136	36	10	1070	2	0	3	0	2	0	9
Future Volume (vph)	14	2136	36	10	1070	2	0	3	0	2	0	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.9	3.1		3.6	3.1			4.8			4.8	4.8
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Frt	1.00	1.00		1.00	1.00			1.00			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.95	1.00
Satd. Flow (prot)	1770	4975		1770	4939			1863			1770	1561
Flt Permitted	0.95	1.00		0.95	1.00			1.00			0.76	1.00
Satd. Flow (perm)	1770	4975		1770	4939			1863			1408	1561
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	2322	39	11	1163	2	0	3	0	2	0	10
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	10
Lane Group Flow (vph)	15	2361	0	11	1165	0	0	3	0	0	2	0
Confl. Peds. (#/hr)	5		1	1		5	1					1
Heavy Vehicles (%)	2%	4%	2%	2%	5%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	NA		Prot	NA			NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		4
Actuated Green, G (s)	4.9	162.0		3.3	160.1			7.2			7.2	7.2
Effective Green, g (s)	6.9	164.0		5.3	162.1			9.2			9.2	9.2
Actuated g/C Ratio	0.04	0.86		0.03	0.85			0.05			0.05	0.05
Clearance Time (s)	5.9	5.1		5.6	5.1			6.8			6.8	6.8
Vehicle Extension (s)	3.0	4.0		3.0	4.0			5.0			3.0	3.0
Lane Grp Cap (vph)	64	4294		49	4213			90			68	75
v/s Ratio Prot	c0.01	c0.47		0.01	0.24			c0.00				
v/s Ratio Perm											0.00	0.00
v/c Ratio	0.23	0.55		0.22	0.28			0.03			0.03	0.01
Uniform Delay, d1	89.0	3.4		90.3	2.7			86.2			86.1	86.0
Progression Factor	1.04	2.19		0.96	0.83			1.00			1.00	1.00
Incremental Delay, d2	1.6	0.4		2.3	0.2			0.3			0.2	0.0
Delay (s)	94.3	7.8		89.4	2.4			86.5			86.3	86.1
Level of Service	F	A		F	A			F			F	F
Approach Delay (s/veh)		8.4			3.2			86.5			86.1	
Approach LOS		A			A			F			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	7.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

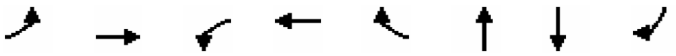
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2138	0	0	1082	0	0
Future Volume (Veh/h)	2138	0	0	1082	0	0
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)	2324	0	0	1176	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	261			820		
pX, platoon unblocked			0.87		0.90	0.87
vC, conflicting volume			2324		2716	775
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			2007		2058	232
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			245		43	672

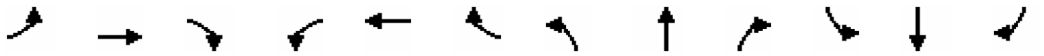
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	930	930	465	392	392	392	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.55	0.55	0.27	0.23	0.23	0.23	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			0.0
Approach LOS							A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	44.6%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT	SBR
Lane Group Flow (vph)	50	2273	7	1023	58	3	141	141
v/c Ratio	0.42	0.57	0.09	0.28	0.04	0.01	0.73	0.42
Control Delay (s/veh)	114.7	4.7	89.0	9.7	0.1	0.0	99.0	12.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	114.7	4.7	89.0	9.7	0.1	0.0	99.0	12.6
Queue Length 50th (ft)	62	436	9	153	0	0	172	0
Queue Length 95th (ft)	120	0	28	220	0	0	246	67
Internal Link Dist (ft)		740		243		205	269	
Turn Bay Length (ft)	400		60		121			250
Base Capacity (vph)	190	3990	163	3606	1425	405	253	401
Starvation Cap Reductn	0	120	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	0.26	0.59	0.04	0.28	0.04	0.01	0.56	0.35

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	2088	3	6	941	53	0	0	3	130	0	130
Future Volume (vph)	46	2088	3	6	941	53	0	0	3	130	0	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	3.6		3.5	3.6	2.0		5.1			5.1	5.1
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00			1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00			1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85		0.87			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		1.00			0.95	1.00
Satd. Flow (prot)	1770	4986		1770	4893	1425		1611			1736	1561
Flt Permitted	0.95	1.00		0.95	1.00	1.00		1.00			0.76	1.00
Satd. Flow (perm)	1770	4986		1770	4893	1425		1611			1381	1561
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	50	2270	3	7	1023	58	0	0	3	141	0	141
RTOR Reduction (vph)	0	0	0	0	0	0	0	3	0	0	0	121
Lane Group Flow (vph)	50	2273	0	7	1023	58	0	0	0	0	141	20
Confl. Peds. (#/hr)	1		2	2		1	1					1
Heavy Vehicles (%)	2%	4%	2%	2%	6%	11%	2%	2%	2%	4%	2%	2%
Turn Type	Prot	NA		Prot	NA	Free		NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases						Free	4			8		8
Actuated Green, G (s)	9.5	145.6		1.6	136.7	190.0		24.6			24.6	24.6
Effective Green, g (s)	11.5	147.6		3.6	138.7	190.0		26.6			26.6	26.6
Actuated g/C Ratio	0.06	0.78		0.02	0.73	1.00		0.14			0.14	0.14
Clearance Time (s)	6.5	5.6		5.5	5.6			7.1			7.1	7.1
Vehicle Extension (s)	3.0	4.0		3.0	4.0			3.0			3.0	3.0
Lane Grp Cap (vph)	107	3873		33	3571	1425		225			193	218
v/s Ratio Prot	c0.03	c0.46		0.00	0.21			0.00				
v/s Ratio Perm						0.04					c0.10	0.01
v/c Ratio	0.47	0.59		0.21	0.29	0.04		0.00			0.73	0.09
Uniform Delay, d1	86.3	8.7		91.8	8.8	0.0		70.3			78.3	71.2
Progression Factor	1.25	0.51		1.00	1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2	2.8	0.6		3.2	0.2	0.1		0.0			13.3	0.2
Delay (s)	110.9	5.0		95.0	9.0	0.1		70.3			91.5	71.3
Level of Service	F	A		F	A	A		E			F	E
Approach Delay (s/veh)		7.3			9.0			70.3			81.4	
Approach LOS		A			A			E			F	

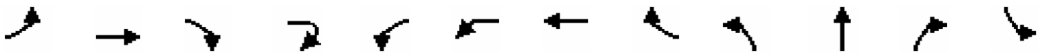
Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	13.2
Intersection Capacity Utilization	63.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT	NEL
Lane Group Flow (vph)	32	1135	18	1805	448	16	169	165	8
v/c Ratio	0.23	0.32	0.05	0.75	0.41	0.21	0.76	0.75	0.10
Control Delay (s/veh)	15.0	16.1	3.4	19.9	5.3	107.3	113.0	112.6	101.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.0	16.1	3.4	19.9	5.3	107.3	113.0	112.6	101.9
Queue Length 50th (ft)	12	244	1	926	164	23	251	245	11
Queue Length 95th (ft)	33	361	m4	1342	324	56	353	345	34
Internal Link Dist (ft)		302		61		35		105	41
Turn Bay Length (ft)	125		65						
Base Capacity (vph)	181	3494	380	2406	1106	78	247	243	143
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.32	0.05	0.75	0.41	0.21	0.68	0.68	0.06

Intersection Summary

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



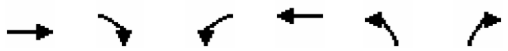
Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	29	1040	3	2	9	7	1661	412	6	1	7	278
Future Volume (vph)	29	1040	3	2	9	7	1661	412	6	1	7	278
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0				6.0	6.0	6.0		5.0		5.3
Lane Util. Factor	1.00	0.91				1.00	0.95	1.00		1.00		0.95
Frpb, ped/bikes	1.00	1.00				1.00	1.00	0.97		1.00		1.00
Flpb, ped/bikes	1.00	1.00				1.00	1.00	1.00		1.00		1.00
Frt	1.00	1.00				1.00	1.00	0.85		0.93		1.00
Flt Protected	0.95	1.00				0.95	1.00	1.00		0.98		0.95
Satd. Flow (prot)	1770	4984				1741	3505	1528		1700		1665
Flt Permitted	0.05	1.00				0.21	1.00	1.00		0.98		0.95
Satd. Flow (perm)	102	4984				391	3505	1528		1700		1665
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	32	1130	3	2	10	8	1805	448	7	1	8	302
RTOR Reduction (vph)	0	0	0	0	0	0	0	65	0	0	0	0
Lane Group Flow (vph)	32	1135	0	0	0	18	1805	383	0	16	0	169
Confl. Peds. (#/hr)	3		1	1	1	1		3				
Heavy Vehicles (%)	2%	4%	2%	2%	5%	2%	3%	2%	2%	2%	2%	3%
Turn Type	pm+pt	NA			pm+pt	pm+pt	NA	Perm	Split	NA		Split
Protected Phases	5	2			1	1	6		7	7		3
Permitted Phases	2				6	6		6				
Actuated Green, G (s)	148.1	142.4				144.7	140.7	140.7		5.3		27.5
Effective Green, g (s)	152.1	144.4				148.7	142.7	142.7		7.3		29.5
Actuated g/C Ratio	0.69	0.66				0.68	0.65	0.65		0.03		0.13
Clearance Time (s)	8.0	8.0				8.0	8.0	8.0		7.0		7.3
Vehicle Extension (s)	3.0	5.0				3.0	5.0	5.0		3.0		5.0
Lane Grp Cap (vph)	128	3271				301	2273	991		56		223
v/s Ratio Prot	c0.01	0.23				0.00	c0.52			c0.01		c0.10
v/s Ratio Perm	0.16					0.04		0.25				
v/c Ratio	0.25	0.35				0.06	0.79	0.39		0.29		0.76
Uniform Delay, d1	28.4	16.8				12.2	28.0	18.1		103.8		91.8
Progression Factor	1.00	1.00				0.26	0.65	0.40		1.00		1.00
Incremental Delay, d2	1.0	0.3				0.1	2.6	1.0		2.8		16.1
Delay (s)	29.4	17.1				3.3	20.9	8.3		106.6		107.9
Level of Service	C	B				A	C	A		F		F
Approach Delay (s/veh)		17.4					18.3			106.6		
Approach LOS		B					B			F		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	220.0	Sum of lost time (s)	26.9
Intersection Capacity Utilization	78.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR	SBR2	NEL2	NEL	NER
Lane Configurations						
Traffic Volume (vph)	1	3	26	4	1	3
Future Volume (vph)	1	3	26	4	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3				4.6	
Lane Util. Factor	0.95				1.00	
Frpb, ped/bikes	1.00				1.00	
Flpb, ped/bikes	1.00				1.00	
Frt	0.97				0.95	
Flt Protected	0.96				0.97	
Satd. Flow (prot)	1640				1715	
Flt Permitted	0.96				0.97	
Satd. Flow (perm)	1640				1715	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	3	28	4	1	3
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	165	0	0	0	8	0
Confl. Peds. (#/hr)						
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%
Turn Type	NA			Prot	Prot	
Protected Phases	3			4	4	
Permitted Phases						
Actuated Green, G (s)	27.5				3.9	
Effective Green, g (s)	29.5				5.9	
Actuated g/C Ratio	0.13				0.03	
Clearance Time (s)	7.3				6.6	
Vehicle Extension (s)	5.0				5.0	
Lane Grp Cap (vph)	219				45	
v/s Ratio Prot	0.10				c0.00	
v/s Ratio Perm						
v/c Ratio	0.75				0.18	
Uniform Delay, d1	91.7				104.7	
Progression Factor	1.00				1.00	
Incremental Delay, d2	16.0				3.9	
Delay (s)	107.8				108.6	
Level of Service	F				F	
Approach Delay (s/veh)	107.8				108.6	
Approach LOS	F				F	

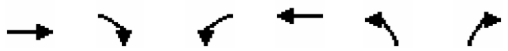
Intersection Summary



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1343	4	0	2097	0	1
Future Volume (Veh/h)	1343	4	0	2097	0	1
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)	1460	4	0	2279	0	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	141			1021		
pX, platoon unblocked			0.90		0.90	0.90
vC, conflicting volume			1464		2222	489
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1126		1216	41
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			555		156	918

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	584	584	296	760	760	760	1
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	4	0	0	0	1
cSH	1700	1700	1700	1700	1700	1700	918
Volume to Capacity	0.34	0.34	0.17	0.45	0.45	0.45	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	8.9
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			8.9
Approach LOS							A

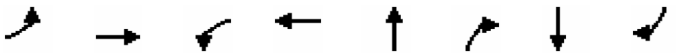
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	43.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1339	5	13	2087	10	9
Future Volume (Veh/h)	1339	5	13	2087	10	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)	1455	5	14	2268	11	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	496			666		
pX, platoon unblocked			0.90		0.90	0.90
vC, conflicting volume			1460		2242	488
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1128		1257	50
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			97		92	99
cM capacity (veh/h)			554		143	909

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	582	582	296	14	756	756	756	21
Volume Left	0	0	0	14	0	0	0	11
Volume Right	0	0	5	0	0	0	0	10
cSH	1700	1700	1700	554	1700	1700	1700	239
Volume to Capacity	0.34	0.34	0.17	0.03	0.44	0.44	0.44	0.09
Queue Length 95th (ft)	0	0	0	2	0	0	0	7
Control Delay (s/veh)	0.0	0.0	0.0	11.7	0.0	0.0	0.0	21.5
Lane LOS				B				C
Approach Delay (s/veh)	0.0			0.1				21.5
Approach LOS								C

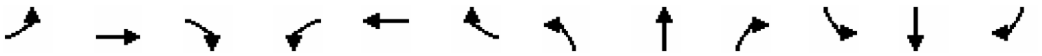
Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	49	1399	4	2178	40	34	16	39
v/c Ratio	0.45	0.32	0.06	0.53	0.38	0.21	0.15	0.25
Control Delay (s/veh)	117.2	2.6	142.8	1.8	103.6	20.1	93.5	23.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	117.2	2.6	142.8	1.9	103.6	20.1	93.5	23.8
Queue Length 50th (ft)	72	64	6	24	57	0	22	0
Queue Length 95th (ft)	m115	232	m14	35	100	36	51	44
Internal Link Dist (ft)		586		181	73		55	
Turn Bay Length (ft)	100		100					
Base Capacity (vph)	234	4435	212	4124	287	369	300	365
Starvation Cap Reductn	0	0	0	229	0	0	0	0
Spillback Cap Reductn	0	0	0	171	0	0	0	1
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.32	0.02	0.56	0.14	0.09	0.05	0.11

Intersection Summary

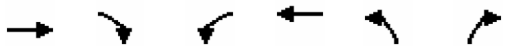
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	1297	4	4	2021	5	36	1	32	13	2	36
Future Volume (vph)	46	1297	4	4	2021	5	36	1	32	13	2	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.9	3.1		3.6	3.1			4.8	4.8		4.8	4.8
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frt	1.00	1.00		1.00	1.00			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00		0.96	1.00
Satd. Flow (prot)	1770	4985		1770	5034			1772	1583		1785	1561
Flt Permitted	0.95	1.00		0.95	1.00			0.72	1.00		0.75	1.00
Satd. Flow (perm)	1770	4985		1770	5034			1338	1583		1399	1561
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	49	1395	4	4	2173	5	39	1	34	14	2	39
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	32	0	0	36
Lane Group Flow (vph)	49	1399	0	4	2178	0	0	40	2	0	16	3
Confl. Peds. (#/hr)	5		1	1		5	1					1
Heavy Vehicles (%)	2%	4%	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		4
Actuated Green, G (s)	11.6	187.2		1.5	176.8			13.8	13.8		13.8	13.8
Effective Green, g (s)	13.6	189.2		3.5	178.8			15.8	15.8		15.8	15.8
Actuated g/C Ratio	0.06	0.86		0.02	0.81			0.07	0.07		0.07	0.07
Clearance Time (s)	5.9	5.1		5.6	5.1			6.8	6.8		6.8	6.8
Vehicle Extension (s)	3.0	4.0		3.0	4.0			5.0	5.0		3.0	3.0
Lane Grp Cap (vph)	109	4287		28	4091			96	113		100	112
v/s Ratio Prot	c0.03	0.28		0.00	c0.43							
v/s Ratio Perm								c0.03	0.00		0.01	0.00
v/c Ratio	0.45	0.33		0.14	0.53			0.42	0.02		0.16	0.03
Uniform Delay, d1	99.6	3.0		106.8	6.8			97.7	94.9		95.9	94.9
Progression Factor	1.06	0.79		1.39	0.18			1.00	1.00		1.00	1.00
Incremental Delay, d2	2.8	0.2		2.1	0.4			6.0	0.2		0.8	0.1
Delay (s)	108.6	2.6		150.0	1.7			103.7	95.1		96.6	95.0
Level of Service	F	A		F	A			F	F		F	F
Approach Delay (s/veh)		6.2			1.9			99.7			95.5	
Approach LOS		A			A			F			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	6.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	220.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	59.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



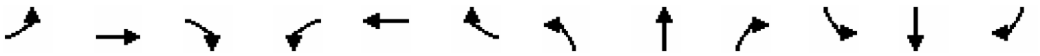
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1341	4	0	2030	0	1
Future Volume (Veh/h)	1341	4	0	2030	0	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1458	4	0	2207	0	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	261			820		
pX, platoon unblocked			0.95		0.86	0.95
vC, conflicting volume			1462		2196	488
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1290		1408	261
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			505		112	698

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	583	583	296	736	736	736	1
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	4	0	0	0	1
cSH	1700	1700	1700	1700	1700	1700	698
Volume to Capacity	0.34	0.34	0.17	0.43	0.43	0.43	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	10.2
Lane LOS							B
Approach Delay (s/veh)	0.0			0.0			10.2
Approach LOS							B

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	42.6%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	WBR	SBT	SBR
Lane Group Flow (vph)	129	1253	6	1941	111	85	100
v/c Ratio	0.71	0.29	0.09	0.52	0.07	0.62	0.41
Control Delay (s/veh)	115.1	3.1	104.5	13.5	0.1	113.1	17.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	115.1	3.1	104.5	13.5	0.1	113.1	17.5
Queue Length 50th (ft)	187	75	9	409	0	121	0
Queue Length 95th (ft)	279	153	29	555	0	183	65
Internal Link Dist (ft)		740		243		269	
Turn Bay Length (ft)	400		60		121		250
Base Capacity (vph)	208	4283	167	3762	1551	210	318
Starvation Cap Reductn	0	0	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	0.62	0.29	0.04	0.52	0.07	0.40	0.31

Intersection Summary

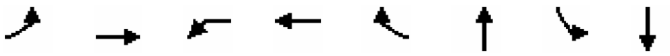


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	1215	0	6	1883	108	0	0	0	82	0	97
Future Volume (vph)	125	1215	0	6	1883	108	0	0	0	82	0	97
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	3.6		3.5	3.6	2.0					5.1	5.1
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00					1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98					1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00					1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85					1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00					0.95	1.00
Satd. Flow (prot)	1770	5036		1719	5085	1551					1770	1561
Flt Permitted	0.95	1.00		0.95	1.00	1.00					0.76	1.00
Satd. Flow (perm)	1770	5036		1719	5085	1551					1410	1561
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	129	1253	0	6	1941	111	0	0	0	85	0	100
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	90
Lane Group Flow (vph)	129	1253	0	6	1941	111	0	0	0	0	85	10
Confl. Peds. (#/hr)	1		2	2		1	1					1
Heavy Vehicles (%)	2%	3%	2%	5%	2%	2%	2%	2%	2%	2%	5%	2%
Turn Type	Prot	NA		Prot	NA	Free				Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases						Free	4			8		8
Actuated Green, G (s)	20.5	180.7		1.6	160.8	220.0					19.5	19.5
Effective Green, g (s)	22.5	182.7		3.6	162.8	220.0					21.5	21.5
Actuated g/C Ratio	0.10	0.83		0.02	0.74	1.00					0.10	0.10
Clearance Time (s)	6.5	5.6		5.5	5.6						7.1	7.1
Vehicle Extension (s)	3.0	4.0		3.0	4.0						3.0	3.0
Lane Grp Cap (vph)	181	4182		28	3762	1551					137	152
v/s Ratio Prot	c0.07	0.25		0.00	c0.38							
v/s Ratio Perm						0.07					c0.06	0.01
v/c Ratio	0.71	0.30		0.21	0.52	0.07					0.62	0.06
Uniform Delay, d1	95.6	4.2		106.8	12.0	0.0					95.3	90.1
Progression Factor	0.99	0.73		1.00	1.00	1.00					1.00	1.00
Incremental Delay, d2	12.1	0.2		3.8	0.5	0.1					8.4	0.2
Delay (s)	107.0	3.2		110.6	12.5	0.1					103.8	90.3
Level of Service	F	A		F	B	A					F	F
Approach Delay (s/veh)		12.9			12.2			0.0			96.5	
Approach LOS		B			B			A			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	16.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	220.0	Sum of lost time (s)	13.2
Intersection Capacity Utilization	59.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

APPENDIX G – Total Future Capacity Analysis Worksheets



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	41	2070	8	905	320	5	181	176
v/c Ratio	0.10	0.57	0.05	0.38	0.29	0.06	0.69	0.68
Control Delay (s/veh)	8.1	14.9	15.6	25.4	15.9	88.6	88.2	87.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Total Delay (s/veh)	8.1	14.9	15.6	25.4	15.9	88.6	88.4	87.2
Queue Length 50th (ft)	11	324	4	382	142	6	228	222
Queue Length 95th (ft)	34	717	16	522	266	23	310	303
Internal Link Dist (ft)		302		61		35		105
Turn Bay Length (ft)	125		65					
Base Capacity (vph)	504	3653	164	2403	1085	94	385	384
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	12	12
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.57	0.05	0.38	0.29	0.05	0.49	0.47

Intersection Summary

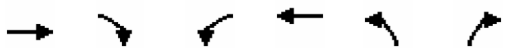
Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	38	1900	1	4	1	6	833	294	4	1	314	0
Future Volume (vph)	38	1900	1	4	1	6	833	294	4	1	314	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0				6.0	6.0	6.0		5.0	5.3	5.3
Lane Util. Factor	1.00	0.91				1.00	0.95	1.00		1.00	0.95	0.95
Frpb, ped/bikes	1.00	1.00				1.00	1.00	0.97		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00				1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00				1.00	1.00	0.85		1.00	1.00	0.99
Flt Protected	0.95	1.00				0.95	1.00	1.00		0.96	0.95	0.96
Satd. Flow (prot)	1769	4986				1770	3438	1460		1791	1603	1598
Flt Permitted	0.27	1.00				0.06	1.00	1.00		0.96	0.95	0.96
Satd. Flow (perm)	494	4986				117	3438	1460		1791	1603	1598
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	41	2065	1	4	1	7	905	320	4	1	341	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	74	0	0	0	0
Lane Group Flow (vph)	41	2070	0	0	0	8	905	246	0	5	181	176
Confl. Peds. (#/hr)	3		1	1	1	1		3				
Heavy Vehicles (%)	2%	4%	2%	2%	2%	2%	5%	7%	2%	2%	7%	2%
Turn Type	pm+pt	NA			pm+pt	pm+pt	NA	Perm	Split	NA	Split	NA
Protected Phases	5	2			1	1	6		7	7	3	3
Permitted Phases	2				6	6		6				
Actuated Green, G (s)	132.3	126.7				126.1	123.6	123.6		1.5	29.0	29.0
Effective Green, g (s)	136.3	128.7				130.1	125.6	125.6		3.5	31.0	31.0
Actuated g/C Ratio	0.72	0.68				0.68	0.66	0.66		0.02	0.16	0.16
Clearance Time (s)	8.0	8.0				8.0	8.0	8.0		7.0	7.3	7.3
Vehicle Extension (s)	3.0	5.0				3.0	5.0	5.0		3.0	5.0	5.0
Lane Grp Cap (vph)	405	3377				119	2272	965		32	261	260
v/s Ratio Prot	c0.00	c0.42				0.00	0.26			c0.00	c0.11	0.11
v/s Ratio Perm	0.07					0.04		0.17				
v/c Ratio	0.10	0.61				0.07	0.40	0.26		0.16	0.69	0.68
Uniform Delay, d1	8.9	16.9				13.0	14.8	13.1		91.8	75.0	74.8
Progression Factor	1.00	1.00				1.76	1.81	3.34		1.00	1.00	1.00
Incremental Delay, d2	0.1	0.8				0.2	0.5	0.6		2.3	9.7	8.8
Delay (s)	9.0	17.7				23.0	27.3	44.5		94.1	84.8	83.6
Level of Service	A	B				C	C	D		F	F	F
Approach Delay (s/veh)		17.6					31.8			94.1		84.2
Approach LOS		B					C			F		F

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	26.9
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR	SBR2	NEL
Lane Configurations			
Traffic Volume (vph)	1	14	0
Future Volume (vph)	1	14	0
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)			
Lane Util. Factor			
Frpb, ped/bikes			
Flpb, ped/bikes			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Peak-hour factor, PHF	0.92	0.92	0.92
Adj. Flow (vph)	1	15	0
RTOR Reduction (vph)	0	0	0
Lane Group Flow (vph)	0	0	0
Confl. Peds. (#/hr)			
Heavy Vehicles (%)	2%	2%	2%
Turn Type			Prot
Protected Phases			4
Permitted Phases			
Actuated Green, G (s)			
Effective Green, g (s)			
Actuated g/C Ratio			
Clearance Time (s)			
Vehicle Extension (s)			
Lane Grp Cap (vph)			
v/s Ratio Prot			
v/s Ratio Perm			
v/c Ratio			
Uniform Delay, d1			
Progression Factor			
Incremental Delay, d2			
Delay (s)			
Level of Service			
Approach Delay (s/veh)			0.0
Approach LOS			A

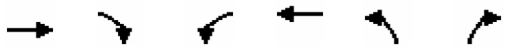
Intersection Summary



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2222	3	0	1140	0	0
Future Volume (Veh/h)	2222	3	0	1140	0	0
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)	2415	3	0	1239	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	141			1021		
pX, platoon unblocked			0.77		0.80	0.77
vC, conflicting volume			2418		2830	807
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1795		1964	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			262		44	835

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	966	966	486	413	413	413	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	3	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.57	0.57	0.29	0.24	0.24	0.24	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			0.0
Approach LOS							A

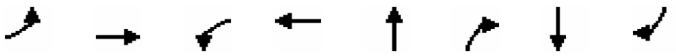
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	46.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2210	12	12	1139	1	1
Future Volume (Veh/h)	2210	12	12	1139	1	1
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)	2402	13	13	1238	1	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	496			666		
pX, platoon unblocked			0.77		0.80	0.77
vC, conflicting volume			2415		2847	807
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1785		1937	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			95		98	100
cM capacity (veh/h)			264		44	833

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	961	961	493	13	413	413	413	2
Volume Left	0	0	0	13	0	0	0	1
Volume Right	0	0	13	0	0	0	0	1
cSH	1700	1700	1700	264	1700	1700	1700	83
Volume to Capacity	0.57	0.57	0.29	0.05	0.24	0.24	0.24	0.02
Queue Length 95th (ft)	0	0	0	4	0	0	0	2
Control Delay (s/veh)	0.0	0.0	0.0	19.4	0.0	0.0	0.0	49.6
Lane LOS				C				E
Approach Delay (s/veh)	0.0			0.2				49.6
Approach LOS								E

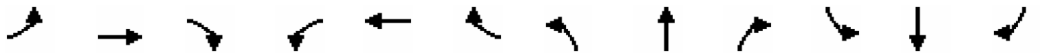
Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	15	2387	45	1165	78	53	2	10
v/c Ratio	0.17	0.62	0.39	0.29	0.51	0.24	0.02	0.05
Control Delay (s/veh)	91.6	18.1	94.2	4.9	90.4	18.1	71.0	0.4
Queue Delay	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	91.6	18.3	94.2	4.9	90.4	18.1	71.0	0.4
Queue Length 50th (ft)	19	452	56	103	94	0	2	0
Queue Length 95th (ft)	m30	1019	108	132	149	46	12	0
Internal Link Dist (ft)		586		181	73		55	
Turn Bay Length (ft)	100		100					
Base Capacity (vph)	224	3869	199	3978	305	384	245	372
Starvation Cap Reductn	0	523	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	0.07	0.71	0.23	0.29	0.26	0.14	0.01	0.03

Intersection Summary

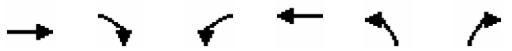
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	2136	60	41	1070	2	72	0	49	2	0	9
Future Volume (vph)	14	2136	60	41	1070	2	72	0	49	2	0	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.9	3.1		3.6	3.1			4.8	4.8		4.8	4.8
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frt	1.00	1.00		1.00	1.00			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00		0.95	1.00
Satd. Flow (prot)	1770	4966		1770	4939			1766	1583		1770	1561
Flt Permitted	0.95	1.00		0.95	1.00			0.76	1.00		0.61	1.00
Satd. Flow (perm)	1770	4966		1770	4939			1406	1583		1132	1561
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	2322	65	45	1163	2	78	0	53	2	0	10
RTOR Reduction (vph)	0	1	0	0	0	0	0	0	47	0	0	9
Lane Group Flow (vph)	15	2386	0	45	1165	0	0	78	6	0	2	1
Confl. Peds. (#/hr)	5		1	1		5	1					1
Heavy Vehicles (%)	2%	4%	2%	2%	5%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		4
Actuated Green, G (s)	4.9	144.9		9.0	148.7			18.6	18.6		18.6	18.6
Effective Green, g (s)	6.9	146.9		11.0	150.7			20.6	20.6		20.6	20.6
Actuated g/C Ratio	0.04	0.77		0.06	0.79			0.11	0.11		0.11	0.11
Clearance Time (s)	5.9	5.1		5.6	5.1			6.8	6.8		6.8	6.8
Vehicle Extension (s)	3.0	4.0		3.0	4.0			5.0	5.0		3.0	3.0
Lane Grp Cap (vph)	64	3839		102	3917			152	171		122	169
v/s Ratio Prot	0.01	c0.48		c0.03	0.24							
v/s Ratio Perm								c0.06	0.00		0.00	0.00
v/c Ratio	0.23	0.62		0.44	0.30			0.51	0.03		0.02	0.01
Uniform Delay, d1	89.0	9.4		86.5	5.3			80.0	75.8		75.7	75.6
Progression Factor	1.02	1.67		1.00	0.84			1.00	1.00		1.00	1.00
Incremental Delay, d2	1.6	0.6		2.9	0.2			5.7	0.2		0.1	0.0
Delay (s)	92.3	16.4		89.5	4.6			85.7	76.0		75.7	75.6
Level of Service	F	B		F	A			F	E		E	E
Approach Delay (s/veh)		16.8			7.8			81.7			75.6	
Approach LOS		B			A			F			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	16.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	62.9%	ICU Level of Service	B
Analysis Period (min)	15		

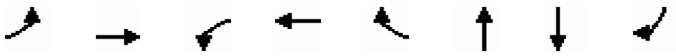
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2187	0	0	1113	0	0
Future Volume (Veh/h)	2187	0	0	1113	0	0
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)	2377	0	0	1210	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	261			820		
pX, platoon unblocked			0.79		0.82	0.79
vC, conflicting volume			2377		2780	792
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1802		1857	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			266		53	853

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	951	951	475	403	403	403	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.56	0.56	0.28	0.24	0.24	0.24	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			0.0
Approach LOS							A

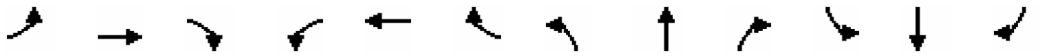
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	45.6%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT	SBR
Lane Group Flow (vph)	50	2326	7	1057	58	3	141	141
v/c Ratio	0.42	0.58	0.09	0.29	0.04	0.01	0.73	0.42
Control Delay (s/veh)	125.2	2.2	89.0	9.8	0.1	0.0	99.0	12.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	125.2	2.3	89.0	9.8	0.1	0.0	99.0	12.6
Queue Length 50th (ft)	66	108	9	160	0	0	172	0
Queue Length 95th (ft)	m107	16	28	228	0	0	246	67
Internal Link Dist (ft)		740		243		205	269	
Turn Bay Length (ft)	400		60		121			250
Base Capacity (vph)	190	3990	163	3606	1425	404	253	401
Starvation Cap Reductn	0	74	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	0.26	0.59	0.04	0.29	0.04	0.01	0.56	0.35

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	2137	3	6	972	53	0	0	3	130	0	130
Future Volume (vph)	46	2137	3	6	972	53	0	0	3	130	0	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	3.6		3.5	3.6	2.0		5.1			5.1	5.1
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00			1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00			1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85		0.87			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		1.00			0.95	1.00
Satd. Flow (prot)	1770	4987		1770	4893	1425		1611			1736	1561
Flt Permitted	0.95	1.00		0.95	1.00	1.00		1.00			0.76	1.00
Satd. Flow (perm)	1770	4987		1770	4893	1425		1611			1381	1561
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	50	2323	3	7	1057	58	0	0	3	141	0	141
RTOR Reduction (vph)	0	0	0	0	0	0	0	3	0	0	0	121
Lane Group Flow (vph)	50	2326	0	7	1057	58	0	0	0	0	141	20
Confl. Peds. (#/hr)	1		2	2		1	1					1
Heavy Vehicles (%)	2%	4%	2%	2%	6%	11%	2%	2%	2%	4%	2%	2%
Turn Type	Prot	NA		Prot	NA	Free		NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases						Free	4			8		8
Actuated Green, G (s)	9.5	145.6		1.6	136.7	190.0		24.6			24.6	24.6
Effective Green, g (s)	11.5	147.6		3.6	138.7	190.0		26.6			26.6	26.6
Actuated g/C Ratio	0.06	0.78		0.02	0.73	1.00		0.14			0.14	0.14
Clearance Time (s)	6.5	5.6		5.5	5.6			7.1			7.1	7.1
Vehicle Extension (s)	3.0	4.0		3.0	4.0			3.0			3.0	3.0
Lane Grp Cap (vph)	107	3874		33	3571	1425		225			193	218
v/s Ratio Prot	c0.03	c0.47		0.00	0.22			0.00				
v/s Ratio Perm						0.04					c0.10	0.01
v/c Ratio	0.47	0.60		0.21	0.30	0.04		0.00			0.73	0.09
Uniform Delay, d1	86.3	8.9		91.8	8.8	0.0		70.3			78.3	71.2
Progression Factor	1.39	0.21		1.00	1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2	2.6	0.6		3.2	0.2	0.1		0.0			13.3	0.2
Delay (s)	122.2	2.4		95.0	9.0	0.1		70.3			91.5	71.3
Level of Service	F	A		F	A	A		E			F	E
Approach Delay (s/veh)		4.9			9.1			70.3			81.4	
Approach LOS		A			A			E			F	

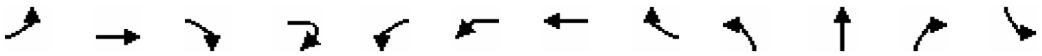
Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	13.2
Intersection Capacity Utilization	63.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT	NEL
Lane Group Flow (vph)	32	1219	18	1864	463	16	179	178	8
v/c Ratio	0.25	0.35	0.06	0.78	0.42	0.21	0.78	0.79	0.10
Control Delay (s/veh)	16.0	16.7	4.2	20.3	3.6	107.3	114.6	115.4	101.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.0	16.7	4.2	20.3	3.6	107.3	114.6	115.4	101.9
Queue Length 50th (ft)	12	274	2	1038	40	23	266	264	11
Queue Length 95th (ft)	33	394	m4	1437	210	56	373	372	34
Internal Link Dist (ft)		302		61		35		105	41
Turn Bay Length (ft)	125		65						
Base Capacity (vph)	168	3475	352	2393	1102	78	247	244	143
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.35	0.05	0.78	0.42	0.21	0.72	0.73	0.06

Intersection Summary

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



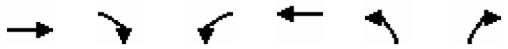
Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	29	1117	3	2	9	7	1715	426	6	1	7	299
Future Volume (vph)	29	1117	3	2	9	7	1715	426	6	1	7	299
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0				6.0	6.0	6.0		5.0		5.3
Lane Util. Factor	1.00	0.91				1.00	0.95	1.00		1.00		0.95
Frpb, ped/bikes	1.00	1.00				1.00	1.00	0.97		1.00		1.00
Flpb, ped/bikes	1.00	1.00				1.00	1.00	1.00		1.00		1.00
Frt	1.00	1.00				1.00	1.00	0.85		0.93		1.00
Flt Protected	0.95	1.00				0.95	1.00	1.00		0.98		0.95
Satd. Flow (prot)	1770	4984				1741	3505	1528		1700		1665
Flt Permitted	0.05	1.00				0.19	1.00	1.00		0.98		0.95
Satd. Flow (perm)	84	4984				350	3505	1528		1700		1665
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	32	1214	3	2	10	8	1864	463	7	1	8	325
RTOR Reduction (vph)	0	0	0	0	0	0	0	66	0	0	0	0
Lane Group Flow (vph)	32	1219	0	0	0	18	1864	397	0	16	0	179
Confl. Peds. (#/hr)	3		1	1	1	1		3				
Heavy Vehicles (%)	2%	4%	2%	2%	5%	2%	3%	2%	2%	2%	2%	3%
Turn Type	pm+pt	NA			pm+pt	pm+pt	NA	Perm	Split	NA		Split
Protected Phases	5	2			1	1	6		7	7		3
Permitted Phases	2				6	6		6				
Actuated Green, G (s)	147.2	141.5				144.0	139.9	139.9		5.3		28.3
Effective Green, g (s)	151.2	143.5				148.0	141.9	141.9		7.3		30.3
Actuated g/C Ratio	0.69	0.65				0.67	0.65	0.65		0.03		0.14
Clearance Time (s)	8.0	8.0				8.0	8.0	8.0		7.0		7.3
Vehicle Extension (s)	3.0	5.0				3.0	5.0	5.0		3.0		5.0
Lane Grp Cap (vph)	116	3250				274	2260	985		56		229
v/s Ratio Prot	c0.01	0.24				0.00	c0.53			c0.01		0.11
v/s Ratio Perm	0.18					0.04		0.26				
v/c Ratio	0.28	0.38				0.07	0.82	0.40		0.29		0.78
Uniform Delay, d1	32.1	17.6				12.6	29.6	18.7		103.8		91.7
Progression Factor	1.00	1.00				0.33	0.63	0.23		1.00		1.00
Incremental Delay, d2	1.3	0.3				0.1	3.1	1.0		2.8		18.1
Delay (s)	33.4	17.9				4.3	21.7	5.4		106.6		109.7
Level of Service	C	B				A	C	A		F		F
Approach Delay (s/veh)		18.3					18.3			106.6		
Approach LOS		B					B			F		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	220.0	Sum of lost time (s)	26.9
Intersection Capacity Utilization	80.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR	SBR2	NEL2	NEL	NER
Lane Configurations						
Traffic Volume (vph)	1	3	26	4	1	3
Future Volume (vph)	1	3	26	4	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3				4.6	
Lane Util. Factor	0.95				1.00	
Frpb, ped/bikes	1.00				1.00	
Flpb, ped/bikes	1.00				1.00	
Frt	0.97				0.95	
Flt Protected	0.96				0.97	
Satd. Flow (prot)	1642				1715	
Flt Permitted	0.96				0.97	
Satd. Flow (perm)	1642				1715	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	3	28	4	1	3
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	178	0	0	0	8	0
Confl. Peds. (#/hr)						
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%
Turn Type	NA			Prot	Prot	
Protected Phases	3			4	4	
Permitted Phases						
Actuated Green, G (s)	28.3				3.9	
Effective Green, g (s)	30.3				5.9	
Actuated g/C Ratio	0.14				0.03	
Clearance Time (s)	7.3				6.6	
Vehicle Extension (s)	5.0				5.0	
Lane Grp Cap (vph)	226				45	
v/s Ratio Prot	c0.11				c0.00	
v/s Ratio Perm						
v/c Ratio	0.79				0.18	
Uniform Delay, d1	91.7				104.7	
Progression Factor	1.00				1.00	
Incremental Delay, d2	18.8				3.9	
Delay (s)	110.5				108.6	
Level of Service	F				F	
Approach Delay (s/veh)	110.1				108.6	
Approach LOS	F				F	

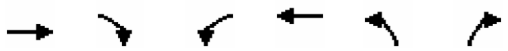
Intersection Summary



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1439	4	0	2165	0	1
Future Volume (Veh/h)	1439	4	0	2165	0	1
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)	1564	4	0	2353	0	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	141			1021		
pX, platoon unblocked			0.89		0.87	0.89
vC, conflicting volume			1568		2350	523
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1199		1150	23
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			513		166	931

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	626	626	317	784	784	784	1
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	4	0	0	0	1
cSH	1700	1700	1700	1700	1700	1700	931
Volume to Capacity	0.37	0.37	0.19	0.46	0.46	0.46	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	8.9
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			8.9
Approach LOS							A

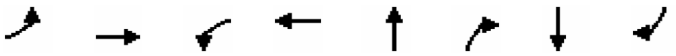
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	45.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1435	5	13	2155	10	9
Future Volume (Veh/h)	1435	5	13	2155	10	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)	1560	5	14	2342	11	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	496			666		
pX, platoon unblocked			0.89		0.87	0.89
vC, conflicting volume			1565		2371	523
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1202		1193	31
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			97		93	99
cM capacity (veh/h)			513		152	922

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	624	624	317	14	781	781	781	21
Volume Left	0	0	0	14	0	0	0	11
Volume Right	0	0	5	0	0	0	0	10
cSH	1700	1700	1700	513	1700	1700	1700	252
Volume to Capacity	0.37	0.37	0.19	0.03	0.46	0.46	0.46	0.08
Queue Length 95th (ft)	0	0	0	2	0	0	0	7
Control Delay (s/veh)	0.0	0.0	0.0	12.2	0.0	0.0	0.0	20.6
Lane LOS				B				C
Approach Delay (s/veh)	0.0			0.1				20.6
Approach LOS								C

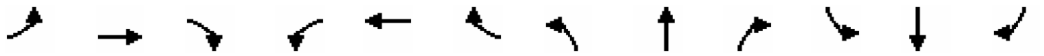
Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	51.6%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	49	1492	48	2178	112	48	14	39
v/c Ratio	0.45	0.40	0.44	0.57	0.66	0.20	0.13	0.17
Control Delay (s/veh)	112.9	8.5	148.9	5.9	109.3	19.0	85.3	20.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	112.9	8.5	148.9	6.0	109.3	19.0	85.3	20.1
Queue Length 50th (ft)	69	272	70	560	158	0	18	0
Queue Length 95th (ft)	m113	292	125	707	230	47	45	43
Internal Link Dist (ft)		586		181	73		55	
Turn Bay Length (ft)	100		100					
Base Capacity (vph)	234	3768	212	3836	298	377	192	365
Starvation Cap Reductn	0	0	0	229	0	0	0	0
Spillback Cap Reductn	0	0	0	198	0	0	0	1
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.40	0.23	0.60	0.38	0.13	0.07	0.11

Intersection Summary

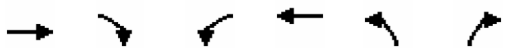
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	1287	100	45	2021	5	104	0	45	13	0	36
Future Volume (vph)	46	1287	100	45	2021	5	104	0	45	13	0	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.9	3.1		3.6	3.1			4.8	4.8		4.8	4.8
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frt	1.00	0.99		1.00	1.00			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00		0.95	1.00
Satd. Flow (prot)	1770	4931		1770	5034			1766	1583		1770	1561
Flt Permitted	0.95	1.00		0.95	1.00			0.75	1.00		0.48	1.00
Satd. Flow (perm)	1770	4931		1770	5034			1391	1583		897	1561
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	49	1384	108	48	2173	5	112	0	48	14	0	39
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	42	0	0	34
Lane Group Flow (vph)	49	1490	0	48	2178	0	0	112	6	0	14	5
Confl. Peds. (#/hr)	5		1	1		5	1					1
Heavy Vehicles (%)	2%	4%	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		4
Actuated Green, G (s)	11.6	166.1		11.4	165.6			25.0	25.0		25.0	25.0
Effective Green, g (s)	13.6	168.1		13.4	167.6			27.0	27.0		27.0	27.0
Actuated g/C Ratio	0.06	0.76		0.06	0.76			0.12	0.12		0.12	0.12
Clearance Time (s)	5.9	5.1		5.6	5.1			6.8	6.8		6.8	6.8
Vehicle Extension (s)	3.0	4.0		3.0	4.0			5.0	5.0		3.0	3.0
Lane Grp Cap (vph)	109	3767		107	3834			170	194		110	191
v/s Ratio Prot	c0.03	0.30		0.03	c0.43							
v/s Ratio Perm								c0.08	0.00		0.02	0.00
v/c Ratio	0.45	0.40		0.45	0.57			0.66	0.03		0.13	0.03
Uniform Delay, d1	99.6	8.8		99.7	11.0			92.1	85.0		86.0	84.9
Progression Factor	1.02	0.87		1.39	0.45			1.00	1.00		1.00	1.00
Incremental Delay, d2	2.7	0.3		2.7	0.5			11.8	0.1		0.5	0.1
Delay (s)	104.4	7.9		141.3	5.5			103.9	85.1		86.5	85.0
Level of Service	F	A		F	A			F	F		F	F
Approach Delay (s/veh)		11.0			8.5			98.2			85.4	
Approach LOS		B			A			F			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	220.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	61.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



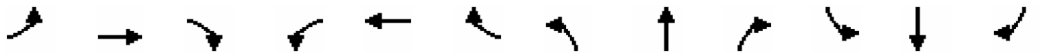
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1354	4	0	2071	0	1
Future Volume (Veh/h)	1354	4	0	2071	0	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1472	4	0	2251	0	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	261			820		
pX, platoon unblocked			0.90		0.88	0.90
vC, conflicting volume			1476		2224	493
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1143		1147	51
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			547		169	906

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	589	589	298	750	750	750	1
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	4	0	0	0	1
cSH	1700	1700	1700	1700	1700	1700	906
Volume to Capacity	0.35	0.35	0.18	0.44	0.44	0.44	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	9.0
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			9.0
Approach LOS							A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	43.3%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	WBR	SBT	SBR
Lane Group Flow (vph)	129	1266	6	1984	111	85	100
v/c Ratio	0.71	0.30	0.09	0.53	0.07	0.62	0.41
Control Delay (s/veh)	108.8	3.1	104.5	13.7	0.1	113.1	17.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	108.8	3.1	104.5	13.7	0.1	113.1	17.5
Queue Length 50th (ft)	187	76	9	424	0	121	0
Queue Length 95th (ft)	279	155	29	574	0	183	65
Internal Link Dist (ft)		740		243		269	
Turn Bay Length (ft)	400		60		121		250
Base Capacity (vph)	208	4283	167	3762	1551	210	318
Starvation Cap Reductn	0	0	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	0.62	0.30	0.04	0.53	0.07	0.40	0.31

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	1228	0	6	1924	108	0	0	0	82	0	97
Future Volume (vph)	125	1228	0	6	1924	108	0	0	0	82	0	97
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	3.6		3.5	3.6	2.0					5.1	5.1
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00					1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98					1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00					1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85					1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00					0.95	1.00
Satd. Flow (prot)	1770	5036		1719	5085	1551					1770	1561
Flt Permitted	0.95	1.00		0.95	1.00	1.00					0.76	1.00
Satd. Flow (perm)	1770	5036		1719	5085	1551					1410	1561
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	129	1266	0	6	1984	111	0	0	0	85	0	100
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	90
Lane Group Flow (vph)	129	1266	0	6	1984	111	0	0	0	0	85	10
Confl. Peds. (#/hr)	1		2	2		1	1					1
Heavy Vehicles (%)	2%	3%	2%	5%	2%	2%	2%	2%	2%	2%	5%	2%
Turn Type	Prot	NA		Prot	NA	Free				Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases						Free	4			8		8
Actuated Green, G (s)	20.5	180.7		1.6	160.8	220.0					19.5	19.5
Effective Green, g (s)	22.5	182.7		3.6	162.8	220.0					21.5	21.5
Actuated g/C Ratio	0.10	0.83		0.02	0.74	1.00					0.10	0.10
Clearance Time (s)	6.5	5.6		5.5	5.6						7.1	7.1
Vehicle Extension (s)	3.0	4.0		3.0	4.0						3.0	3.0
Lane Grp Cap (vph)	181	4182		28	3762	1551					137	152
v/s Ratio Prot	c0.07	0.25		0.00	c0.39							
v/s Ratio Perm						0.07					c0.06	0.01
v/c Ratio	0.71	0.30		0.21	0.53	0.07					0.62	0.06
Uniform Delay, d1	95.6	4.2		106.8	12.2	0.0					95.3	90.1
Progression Factor	0.93	0.73		1.00	1.00	1.00					1.00	1.00
Incremental Delay, d2	11.8	0.2		3.8	0.5	0.1					8.4	0.2
Delay (s)	100.8	3.3		110.6	12.7	0.1					103.8	90.3
Level of Service	F	A		F	B	A					F	F
Approach Delay (s/veh)		12.3			12.3			0.0			96.5	
Approach LOS		B			B			A			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	16.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	220.0	Sum of lost time (s)	13.2
Intersection Capacity Utilization	60.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group