WELLS + ASSOCIATES

GATEWOOD PLAZA

TRAFFIC IMPACT STUDY

CITY OF FAIRFAX, VIRGINIA

May 3, 2024

Gatewood Plaza

Traffic Impact Study

City of Fairfax, Virginia

May 3, 2024

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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 S.F. 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, Baileys Star 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 336 multifamily units and 18,520 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.

Although a traffic impact analysis is not required per 24VAC30-155, the City of Fairfax has requested the submission of a traffic study in conjunction with this development application.

Based on the traffic study scoping form provided in Appendix A, tasks undertaken 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, Baileys Star LLC, and the files and library of Wells + Associates.

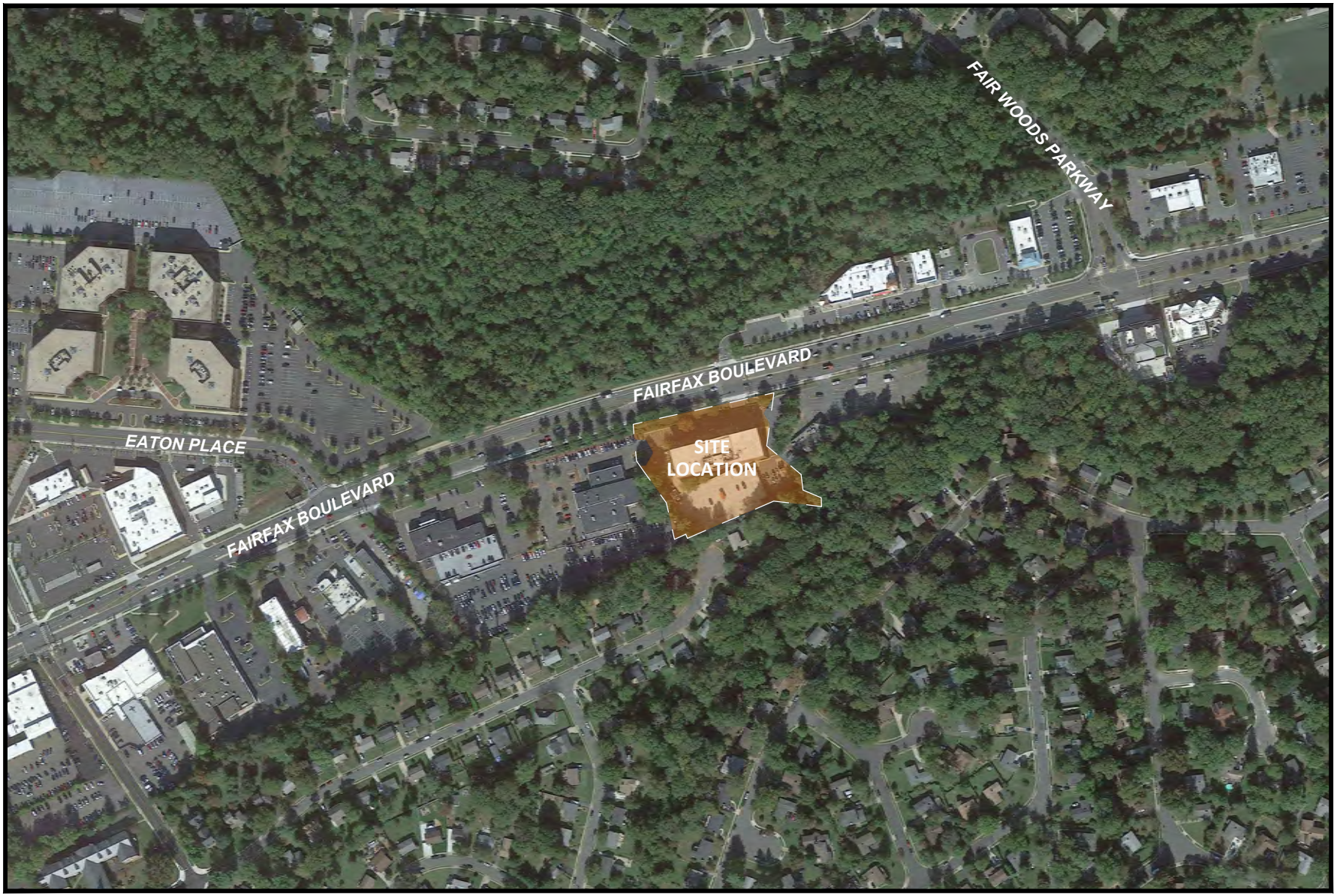

Figure 1-1
Site Location and Study Intersections

NORTH

Gatewood Plaza
City of Fairfax, Virginia

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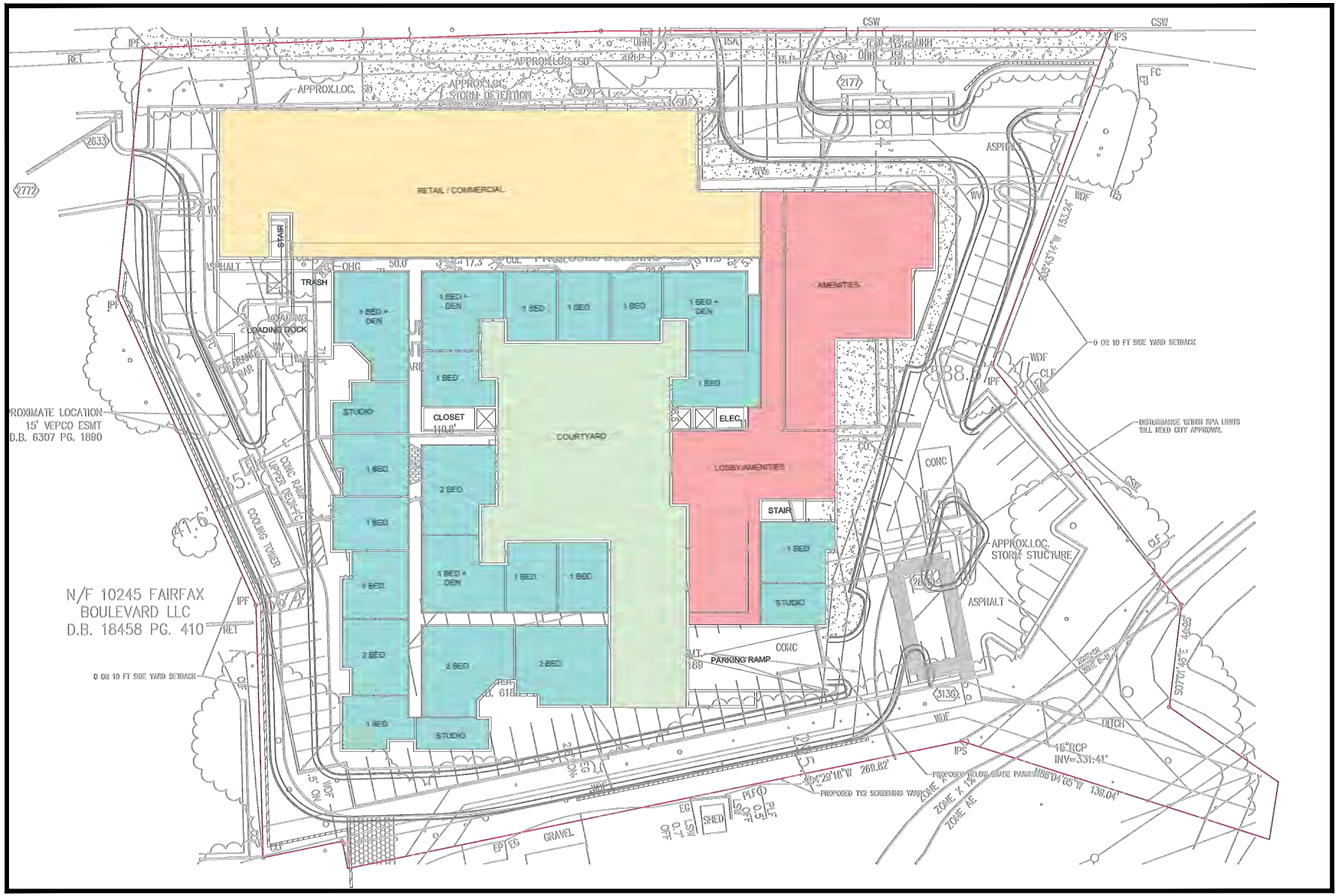

Figure 1-2
Conceptual Site Layout

NORTH

Gatewood Plaza
City of Fairfax, Virginia

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 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 9 FUTURE LAND USE MAP

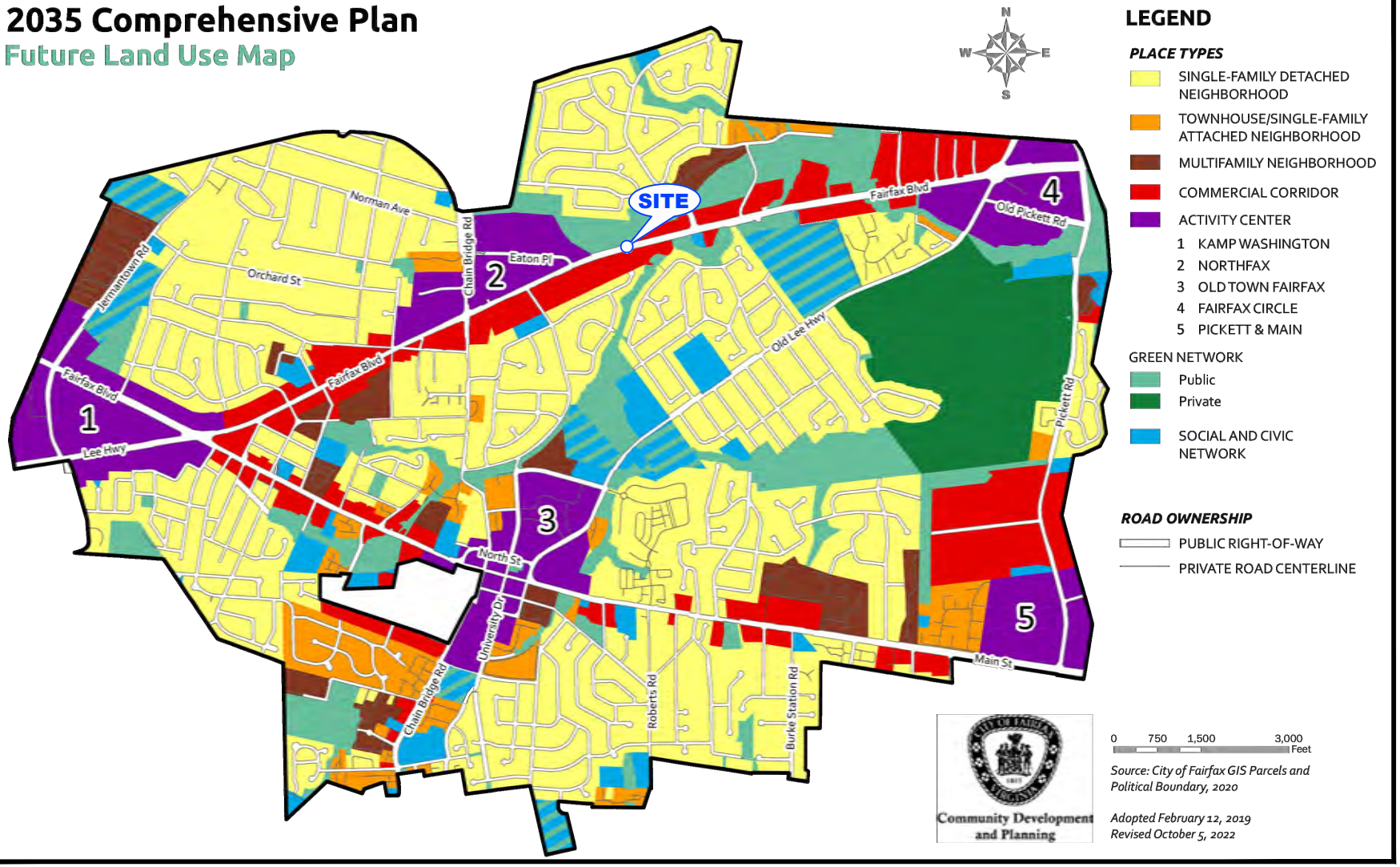

Figure 2-1
2035 Comprehensive Plan

NORTH

Gatewood Plaza
City of Fairfax, Virginia

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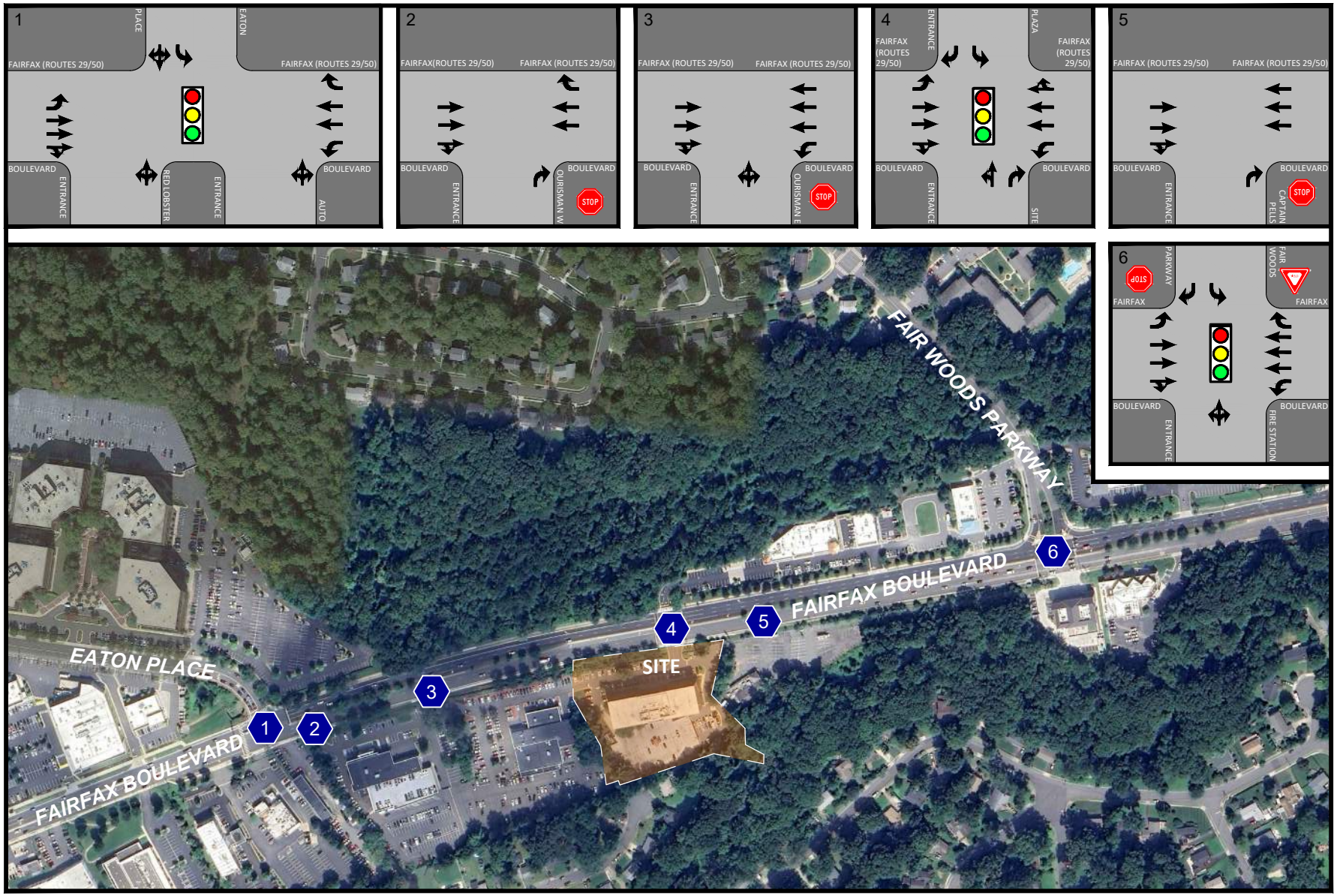

Figure 2-2
Existing, Background, & Total Future
lane Use and Traffic Controls

X Study Intersection

AM PEAK HOUR
PM PEAK HOUR
000 / 000

NORTH

Gatewood Plaza
City of Fairfax, Virginia

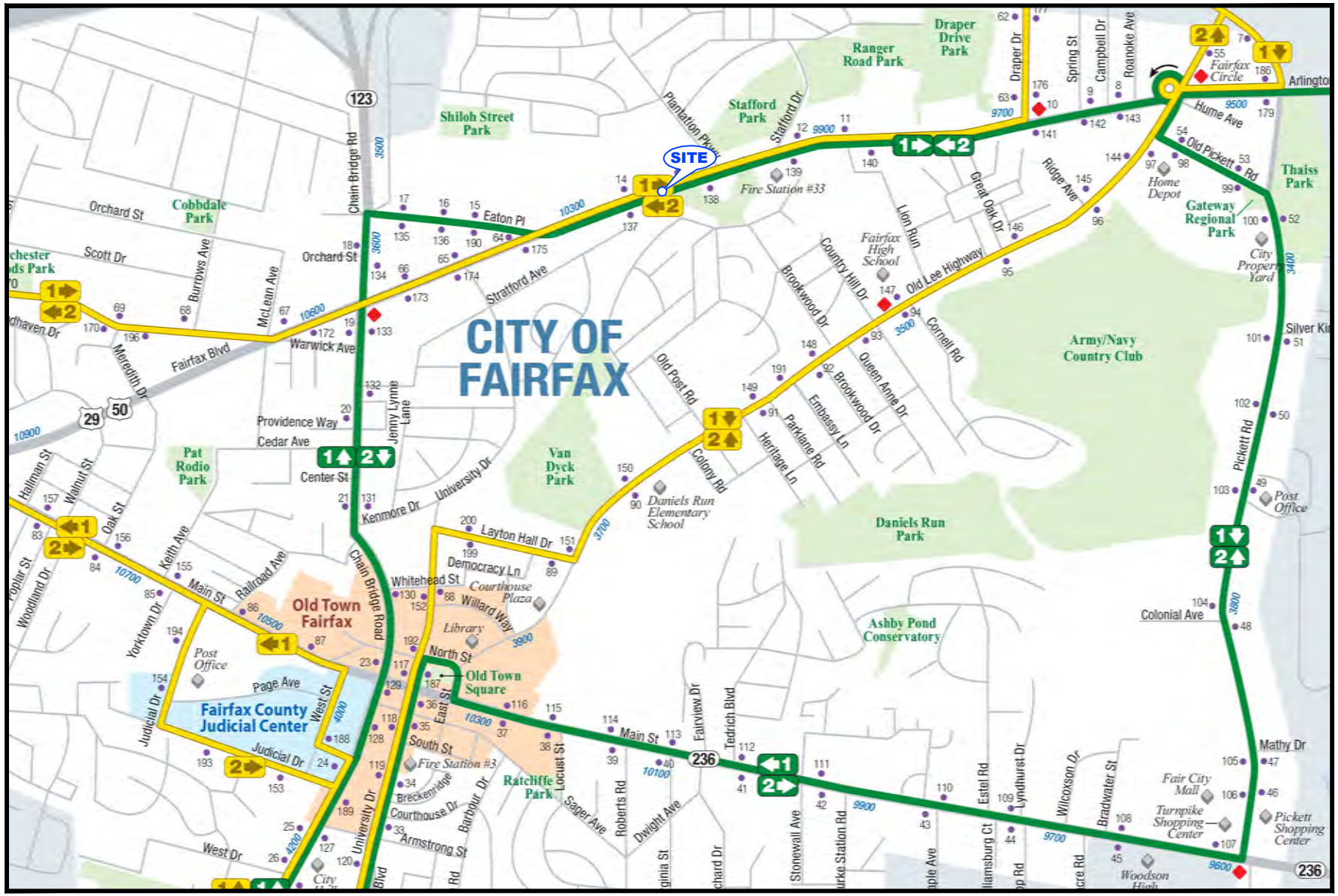

Figure 2-3
CUE Transit Routes

NORTH

Gatewood Plaza
City of Fairfax, Virginia

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 Wells + Associates, City staff, and the Applicant and has been subsequently revised based on plan revisions and discussions with City Staff. 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 development plan includes 336 multi-family residential apartments with 18,520 S.F. of ground-level retail. 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 336 multifamily units and 18,520 GSF of ground floor retail.

Analysis Study Periods

The intersections within the study area were analyzed under AM and PM commuter peak hour conditions.

Existing Traffic Volumes

Existing AM and PM commuter peak hour turning movements and pedestrian counts were conducted 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 77 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 and adjustments are included in Appendix C.

Table 3-1

Gatewood Plaza

Existing Office Trips

Land Use	Units	Size	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**

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

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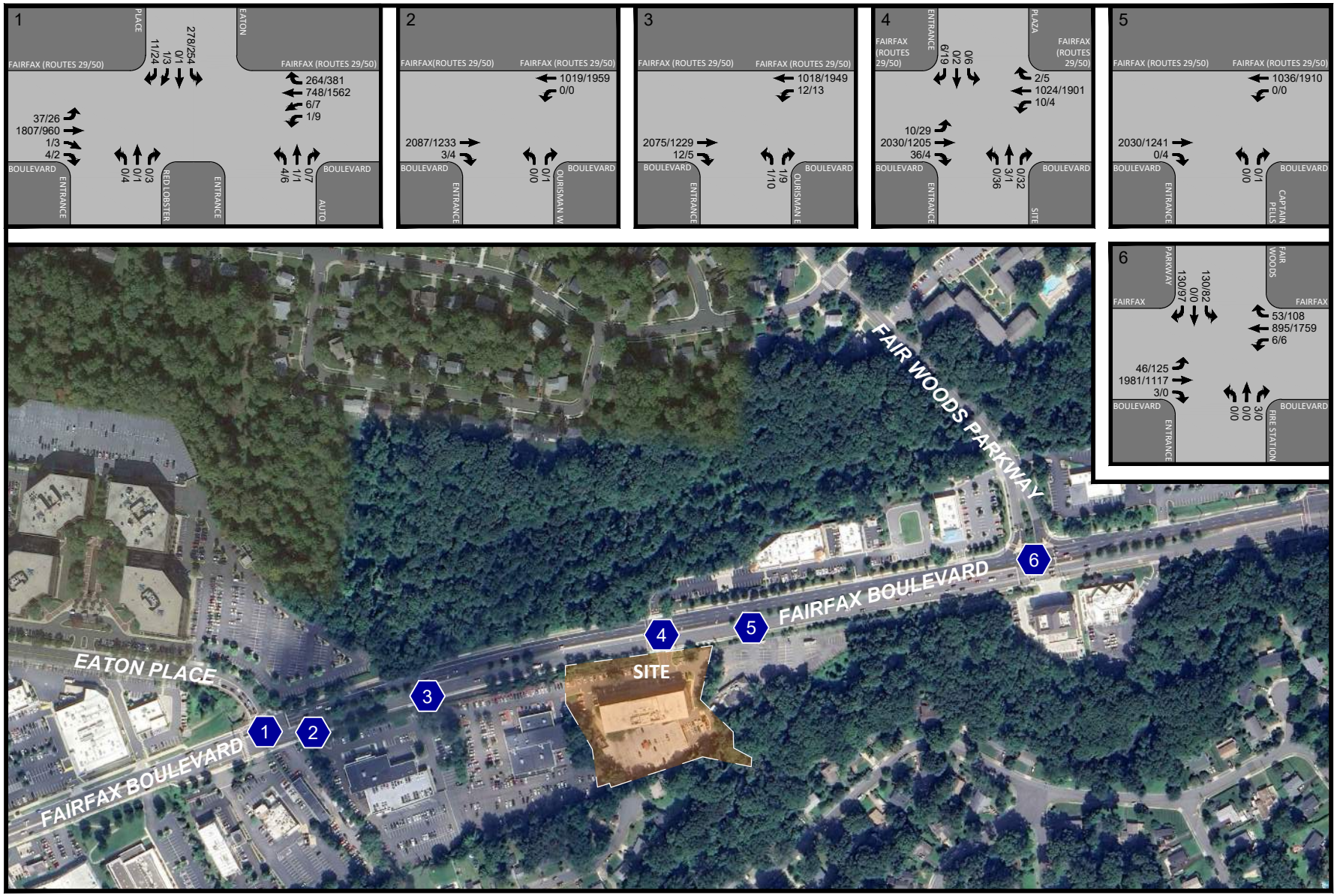

Figure 3-1
Existing Traffic Volumes

X Study Intersection

AM PEAK HOUR
PM PEAK HOUR
000 / 000

NORTH

Gatewood Plaza
City of Fairfax, Virginia

SECTION 4
EXISTING CONDITIONS ANALYSIS

Existing Intersection Levels 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
Existing (2024) Intersection Level of Service [1] [2] [3] [4] [5]

Intersection	Operating Condition	Street Name	Approach/ Movement	2024 Existing AM Peak	2024 Existing PM Peak
1 Fairfax Boulevard (U.S. Route 29/50)/ **Eaton Place/Private Driveways**	Signal	Fairfax Boulevard	EBL	A (8.3)	C (27.4)
		Fairfax Boulevard	EBTR	B (16.9)	B (16.8)
		Fairfax Boulevard	WBL	C (22.4)	A (4.0)
		Fairfax Boulevard	WBT	C (26.9)	C (21.7)
		Fairfax Boulevard	WBR	D (46.2)	A (8.6)
		Auto Shop	NBT	F (94.7)	F (106.4)
		Eaton Place	SBL	F (84.5)	F (106.6)
		Eaton Place	SBT	F (85.4)	F (106.2)
		Red Lobster	NEBLTR	-	F (109.0)
		Overall:		**C (28.0)**	**C (26.6)**
2 Fairfax Boulevard (U.S. Route 29/50)/ **Ourisman W Entrance**	STOP	Fairfax Boulevard	EBTR	A (0.0)	A (0.0)
		Fairfax Boulevard	WBT	A (0.0)	A (0.0)
		Ourisman Dealership	NBR	A (0.0)	A (0.0)
3 Fairfax Boulevard (U.S. Route 29/50)/ **Ourisman E Entrance**	STOP	Fairfax Boulevard	WBL	B (18.0)	B (11.1)
		Ourisman Dealership	NBLR	D (51.8)	C (20.5)
4 Fairfax Boulevard (U.S. Route 29/50)/ **Site Entrance/ Boulevard Marketplace**	Signal	Fairfax Boulevard	EBL	F (96.2)	F (110.2)
		Fairfax Boulevard	EBTR	A (7.9)	A (2.5)
		Fairfax Boulevard	WBL	F (88.8)	F (148.4)
		Fairfax Boulevard	WBT	A (2.2)	A (1.1)
		Site Entrance	NBTL	F (86.5)	F (103.4)
		Site Entrance	NBR	-	F (95.0)
		Boulevard Marketplace	SBT	A (0.0)	F (95.5)
		Boulevard Marketplace	SBR	F (86.0)	F (94.8)
		Overall:		**A (6.8)**	**A (5.6)**
5 Fairfax Boulevard (U.S. Route 29/50)/ **Captain Pells Crab Shack Entrance**	STOP	Fairfax Boulevard	EBT	A (0.0)	A (0.0)
		Fairfax Boulevard	EBR	A (0.0)	A (0.0)
		Fairfax Boulevard	WBT	A (0.0)	A (0.0)
		Captain Pells	NBR	A (0.0)	A (0.0)
6 Fairfax Boulevard (U.S. Route 29/50)/ **Fair Woods Parkway/Fire Station**	Signal	Fairfax Boulevard	EBL	F (109.2)	F (107.4)
		Fairfax Boulevard	EBT	A (5.3)	A (3.2)
		Fairfax Boulevard	WBL	F (95.0)	F (110.6)
		Fairfax Boulevard	WBT	A (9.3)	B (12.0)
		Fairfax Boulevard	WBR	A (0.1)	A (0.1)
		Fire Station	NBT	E (69.7)	-
		Fair Woods Parkway	SBT	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) Analysis performed using Synchro software, version 11

(2) Values in parentheses, ( ), represent signalized delay in seconds

(3) Values in brackets, [ ], represent unsignalized delay in seconds

(4) * - Delay exceeds 999 seconds

(5) Roadway names in bold are considered north/south for purposes of this analysis.

Table 4-2
Gatewood Plaza
Existing (2024) Intersection 95th Percentile Queue Summary (1) (2)

Intersection	Operating Condition	Street Name	Approach/ Movement	Available Storage	2024 Existing AM Peak 95th %-tile	2024 Existing PM Peak 95th %-tile
1 Fairfax Boulevard (U.S. Route 29/50)/ **Eaton Place/Private Driveways**	Signal	Fairfax Boulevard	EBL	260	33	30
		Fairfax Boulevard	EBTR	-	669	337
		Fairfax Boulevard	WBL	140	16	m7
		Fairfax Boulevard	WBT	-	484	1241
		Fairfax Boulevard	WBR	-	240	341
		Auto Shop	NBT	-	26	54
		Eaton Place	SBL	-	276	330
		Eaton Place	SBT	-	282	324
		Red Lobster	NEL	-	-	37
2 Fairfax Boulevard (U.S. Route 29/50)/ **Ourisman W Entrance**	STOP	Fairfax Boulevard	EBTR	-	0	0
		Fairfax Boulevard	WBT	-	0	0
		Ourisman Dealership	NBR	-	0	0
3 Fairfax Boulevard (U.S. Route 29/50)/ **Ourisman E Entrance**		Fairfax Boulevard	WBL	100	4	2
		Ourisman Dealership	NBLR	-	2	7
4 Fairfax Boulevard (U.S. Route 29/50)/ **Site Entrance/ Boulevard Marketplace**	Signal	Fairfax Boulevard	EBL	-	m26	m80
		Fairfax Boulevard	EBTR	-	935	215
		Fairfax Boulevard	WBL	-	39	m14
		Fairfax Boulevard	WBT	-	132	33
		Site Entrance	NBT	-	16	100
		Site Entrance	NBR	-	-	36
		Boulevard Marketplace	SBT	-	-	31
		Boulevard Marketplace	SBR	-	0	9
5 Fairfax Boulevard (U.S. Route 29/50)/ **Captain Pells Crab Shack Entrance**	STOP	Fairfax Boulevard	EBT	-	0	0
		Fairfax Boulevard	EBR	-	0	0
		Fairfax Boulevard	WBT	-	0	0
		Captain Pells	NBR	-	0	0
6 Fairfax Boulevard (U.S. Route 29/50)/ **Fair Woods Parkway/Fire Station**	Signal	Fairfax Boulevard	EBL	450	121	280
		Fairfax Boulevard	EBT	-	4	141
		Fairfax Boulevard	WBL	85	28	29
		Fairfax Boulevard	WBT	-	213	500
		Fair Woods Parkway	SBT	-	252	183
		Fair Woods Parkway	SBR	-	64	65

Notes (1) Analysis performed using Synchro software, version 11

(2) "~" - 50th percentile volume exceeds capacity, queue may be longer.

(3) "#" - 95th percentile volume exceeds capacity, queue may be longer.

(4) "m" - Volume for 95th percentile queue is metered by upstream signal.

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 Summary **(1)**

Pipeline Development	Weekday AM Peak Hour In	Out	Total	Weekday PM Peak Hour In	Out	Total	Weekday ADT
N29 Willowwood Plaza 260 Multifamily Residential 5,000 SF of Retail Plaza	**34**	**85**	**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**	**4961**
Breezway Properties 62 Residential Townhouses 10,010 SF Shopping Center	**13**	**27**	**40**	**74**	**66**	**140**	**1644**
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**	**290**	**438**	**413**	**394**	**807**	**9,354**

Notes:
(1) Trip Generation based on previously prepared traffic studies.

Table 5-2
Gatewood Plaza
Background (2028) Intersection Level of Service [1] [2] [3] [4] [5]

Intersection	Operating Condition	Street Name	Approach/ Movement	2028 Background AM Peak	2028 Background PM Peak
1 Fairfax Boulevard (U.S. Route 29/50)/ **Eaton Place/Private Driveways**	Signal	Fairfax Boulevard	EBL	A (9.2)	C (35.0)
		Fairfax Boulevard	EBTR	B (18.8)	B (17.7)
		Fairfax Boulevard	WBL	C (24.9)	A (4.3)
		Fairfax Boulevard	WBT	C (28.8)	C (24.5)
		Fairfax Boulevard	WBR	D (47.0)	A (8.5)
		Auto Shop	NBT	F (94.7)	F (106.4)
		Eaton Place	SBL	F (84.6)	F (109.6)
		Eaton Place	SBT	F (83.7)	F (109.6)
		Red Lobster	NEBLTR	-	F (109.0)
		Overall:		**C (29.9)**	**C (28.6)**
2 Fairfax Boulevard (U.S. Route 29/50)/ **Ourisman W Entrance**	STOP	Fairfax Boulevard	EBTR	A (0.0)	A (0.0)
		Fairfax Boulevard	WBT	A (0.0)	A (0.0)
		Ourisman Dealership	NBR	A (0.0)	A (0.0)
3 Fairfax Boulevard (U.S. Route 29/50)/ **Ourisman E Entrance**	STOP	Fairfax Boulevard	WBL	B (19.3)	B (11.7)
		Ourisman Dealership	NBLR	E (55.1)	C (21.4)
4 Fairfax Boulevard (U.S. Route 29/50)/ **Site Entrance/ Boulevard Marketplace**	Signal	Fairfax Boulevard	EBL	F (95.9)	F (108.6)
		Fairfax Boulevard	EBTR	A (9.0)	A (2.6)
		Fairfax Boulevard	WBL	F (87.8)	F (150.1)
		Fairfax Boulevard	WBT	A (2.8)	A (1.7)
		Site Entrance	NBTL	F (84.9)	F (103.6)
		Site Entrance	NBR	-	F (95.0)
		Boulevard Marketplace	SBT	F (84.7)	F (96.5)
		Boulevard Marketplace	SBR	F (84.5)	F (94.9)
		Overall:		**A (7.9)**	**A (6.9)**
5 Fairfax Boulevard (U.S. Route 29/50)/ **Captain Pells Crab Shack Entrance**	STOP	Fairfax Boulevard	EBT	A (0.0)	A (0.0)
		Fairfax Boulevard	EBR	A (0.0)	A (0.0)
		Fairfax Boulevard	WBT	A (0.0)	A (0.0)
		Captain Pells	NBR	A (0.0)	A (0.0)
6 Fairfax Boulevard (U.S. Route 29/50)/ **Fair Woods Parkway/Fire Station**	Signal	Fairfax Boulevard	EBL	F (109.2)	F (106.9)
		Fairfax Boulevard	EBT	A (4.9)	A (3.3)
		Fairfax Boulevard	WBL	F (95.0)	F (110.6)
		Fairfax Boulevard	WBT	A (9.4)	B (12.5)
		Fairfax Boulevard	WBR	A (0.1)	A (0.1)
		Fire Station	NBT	E (69.7)	-
		Fair Woods Parkway	SBT	F (92.3)	F (103.8)
		Fair Woods Parkway	SBR	E (70.8)	F (90.3)
		Overall:		**B (13.5)**	**B (16.8)**

Notes (1) Analysis performed using Synchro software, version 11

(2) Values in parentheses, ( ), represent signalized delay in seconds

(3) Values in brackets, [ ], represent unsignalized delay in seconds

(4) * - Delay exceeds 999 seconds

(5) Roadway names in bold are considered north/south for purposes of this analysis.

Table 5-3
Gatewood Plaza
Background (2028) Intersection 95th Percentile Queue Summary (1) (2)

Intersection	Operating Condition	Street Name	Approach/ Movement	Available Storage	2028 Background AM Peak 95th %-tile	2028 Background PM Peak 95th %-tile
1 Fairfax Boulevard (U.S. Route 29/50)/ **Eaton Place/Private Driveways**	Signal	Fairfax Boulevard	EBL	260	35	32
		Fairfax Boulevard	EBTR	-	741	371
		Fairfax Boulevard	WBL	140	17	m5
		Fairfax Boulevard	WBT	-	504	1411
		Fairfax Boulevard	WBR	-	261	306
		Auto Shop	NBT	-	26	54
		Eaton Place	SBL	-	307	361
		Eaton Place	SBT	-	301	354
		Red Lobster	NEL	-	-	37
2 Fairfax Boulevard (U.S. Route 29/50)/ **Ourisman W Entrance**	STOP	Fairfax Boulevard	EBTR	-	0	0
		Fairfax Boulevard	WBT	-	0	0
		Ourisman Dealership	NBR	-	0	0
3 Fairfax Boulevard (U.S. Route 29/50)/ **Ourisman E Entrance**		Fairfax Boulevard	WBL	100	4	2
		Ourisman Dealership	NBLR	-	2	7
4 Fairfax Boulevard (U.S. Route 29/50)/ **Site Entrance/ Boulevard Marketplace**	Signal	Fairfax Boulevard	EBL	-	m32	m115
		Fairfax Boulevard	EBTR	-	1000	226
		Fairfax Boulevard	WBL	-	38	m14
		Fairfax Boulevard	WBT	-	137	35
		Site Entrance	NBT	-	16	100
		Site Entrance	NBR	-	0	36
		Boulevard Marketplace	SBT	-	11	51
		Boulevard Marketplace	SBR	-	0	44
5 Fairfax Boulevard (U.S. Route 29/50)/ **Captain Pells Crab Shack Entrance**	STOP	Fairfax Boulevard	EBT	-	0	0
		Fairfax Boulevard	EBR	-	0	0
		Fairfax Boulevard	WBT	-	0	0
		Captain Pells	NBR	-	0	0
6 Fairfax Boulevard (U.S. Route 29/50)/ **Fair Woods Parkway/Fire Station**	Signal	Fairfax Boulevard	EBL	450	m119	279
		Fairfax Boulevard	EBT	-	4	154
		Fairfax Boulevard	WBL	85	28	29
		Fairfax Boulevard	WBT	-	226	555
		Fair Woods Parkway	SBT	-	252	183
		Fair Woods Parkway	SBR	-	64	65

Notes (1) Analysis performed using Synchro software, version 11

(2) "~" - 50th percentile volume exceeds capacity, queue may be longer.

(3) "#" - 95th percentile volume exceeds capacity, queue may be longer.

(4) "m" - Volume for 95th percentile queue is metered by upstream signal.

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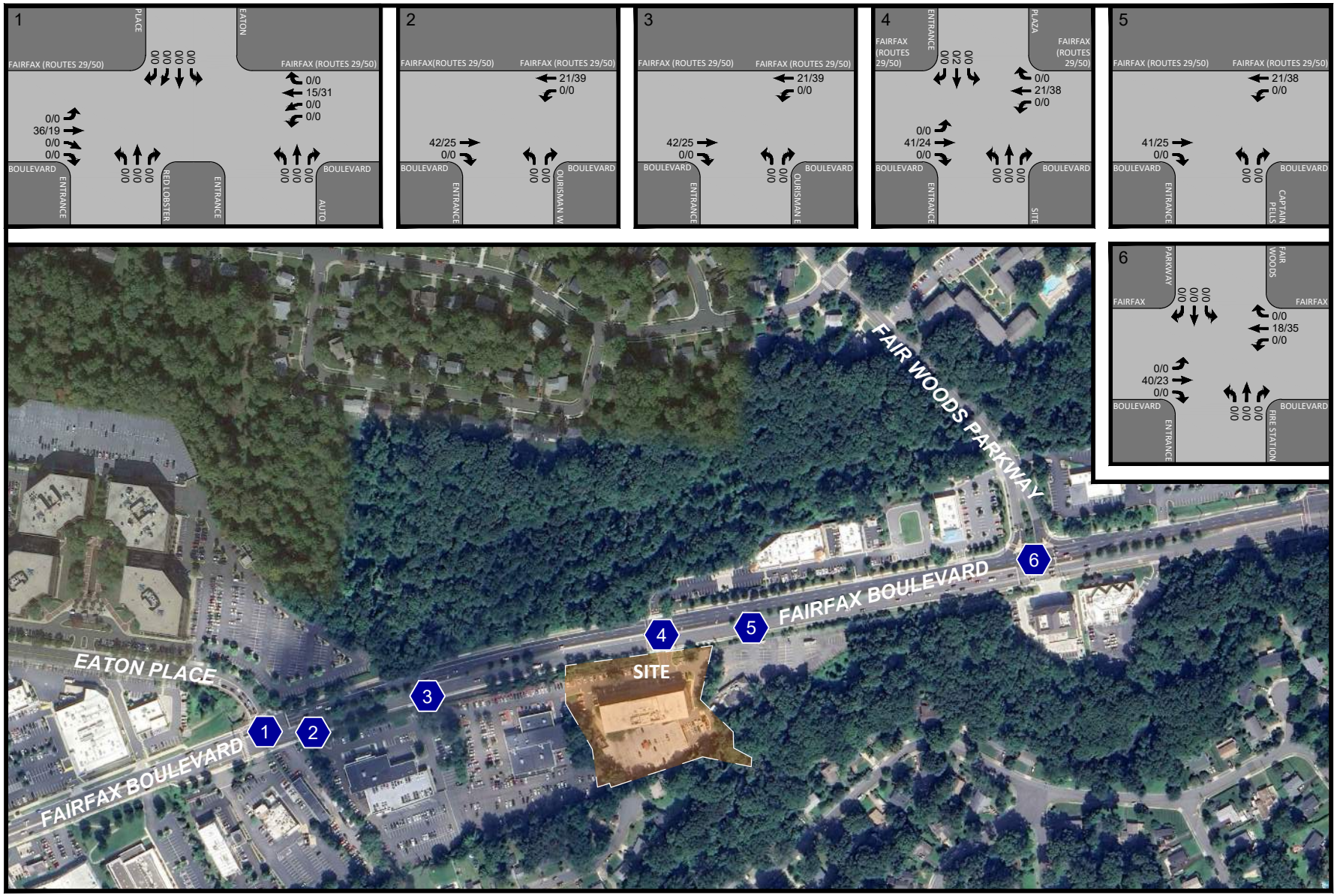

Figure 5-1
Regional Growth

X Study Intersection

AM PEAK HOUR
PM PEAK HOUR
000 / 000

NORTH

Gatewood Plaza
City of Fairfax, Virginia

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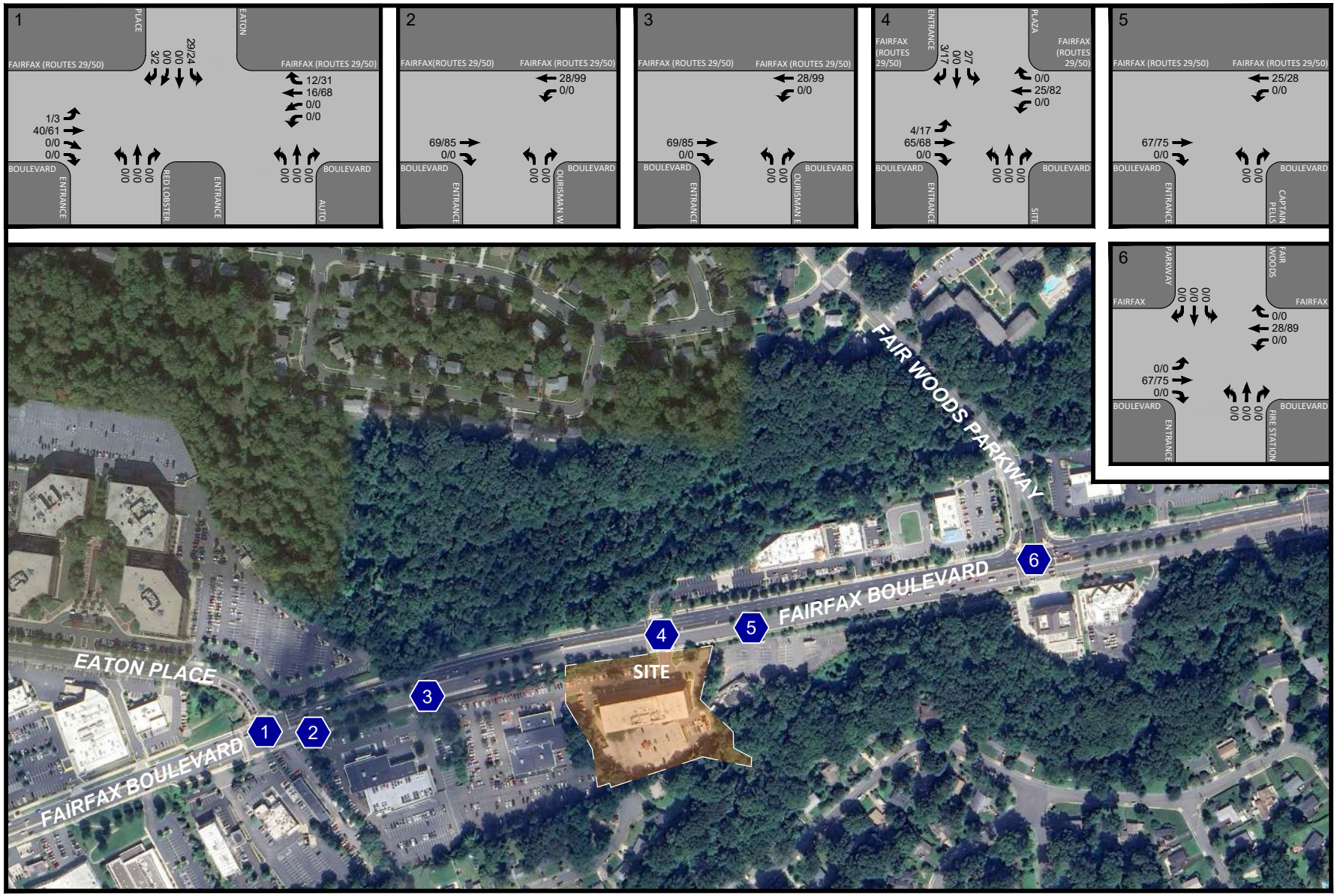

Figure 5-2
Combined Pipeline Trips

X Study Intersection

AM PEAK HOUR
PM PEAK HOUR
000 / 000

NORTH

Gatewood Plaza
City of Fairfax, Virginia

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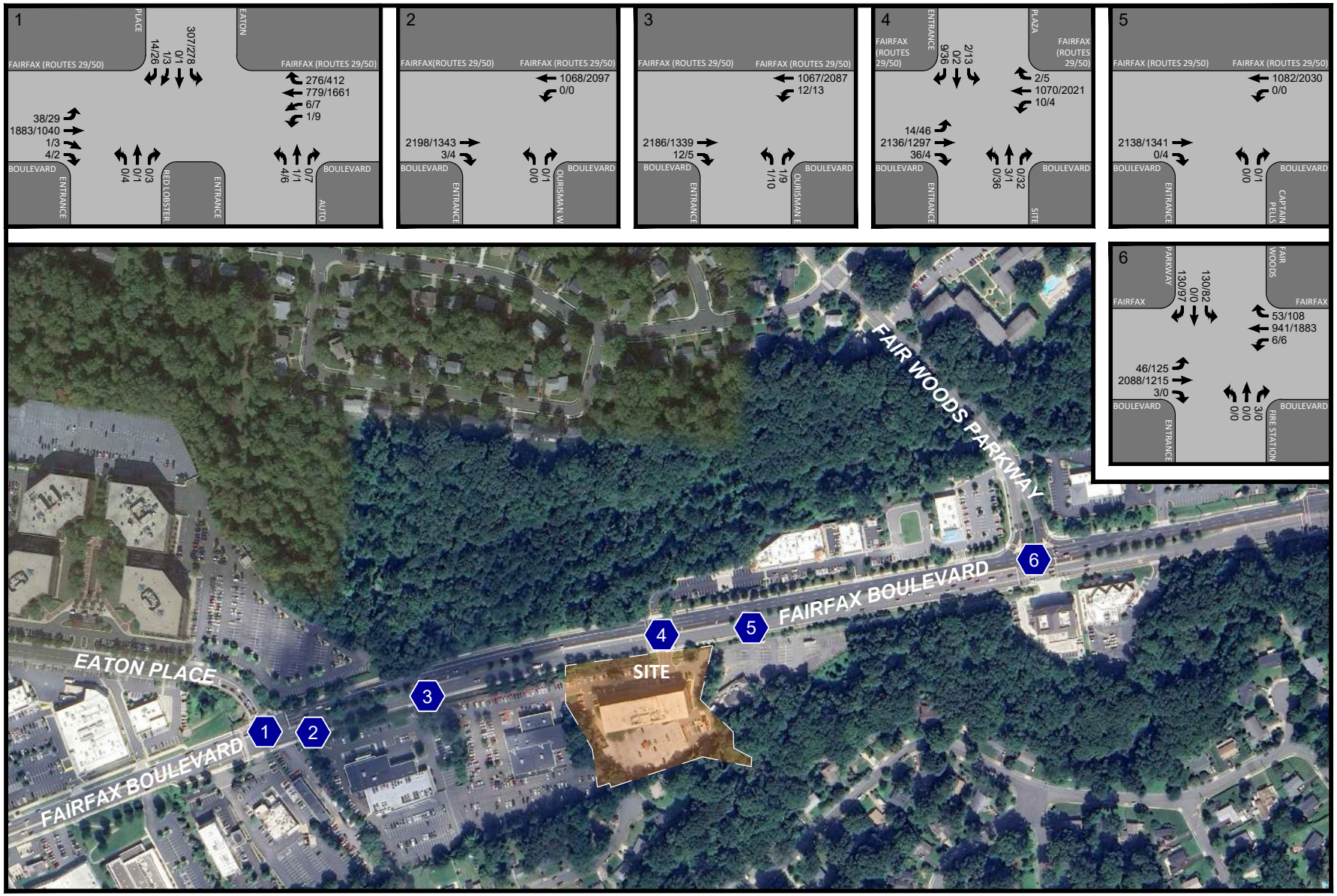

Figure 5-3
2028 Background Future
Traffic Volumes

X Study Intersection

AM PEAK HOUR
PM PEAK HOUR
000 / 000

NORTH

Gatewood Plaza
City of Fairfax, Virginia

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.

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) land use code was 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 175 AM peak hour trips (55 in and 120 out), 230 PM peak hour trips (130 in and 100 out), and 2,263 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. A reduction of 5% for AM, 10% for PM, and 15% for Daily trips. This reduction in trips was applied and is summarized in Table 6-1.

Site Trip Distribution

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 percent
East on Fairfax Boulevard:	40/30 percent
West on Fairfax Boulevard:	45/55 percent
TOTAL	**100 percent**

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	Units	Size	ITE Code	Weekday AM Peak Hour In	Weekday AM Peak Hour Out	Weekday AM Peak Hour Total	Weekday PM Peak Hour In	Weekday PM Peak Hour Out	Weekday PM Peak Hour Total	Weekday ADT
Currently Proposed Development Program										
Multifamily Residential (Mid-Rise)	**336**	**D.U.**	**221**	**31**	**105**	**136**	**80**	**51**	**131**	**1,556**
Residential Subtotal	**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	152
New Residential External Trips				***30***	***104***	***134***	***74***	***46***	***120***	***1,404***
Retail Plaza	**18,520**	**S.F.**	**822**	**26**	**17**	**43**	**61**	**60**	**121**	**1,011**
Internal with Residential (5% AM, 10% PM, 15% Daily)				1	1	2	5	6	11	152
Total Retail External Trips				*25*	*16*	*41*	*56*	*54*	*110*	*859*
				-	-	-	-	-	-	-
New External Retail Trips				***25***	***16***	***41***	***56***	***54***	***110***	***859***
Total New Trips				**55**	**120**	**175**	**130**	**100**	**230**	**2,263**

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

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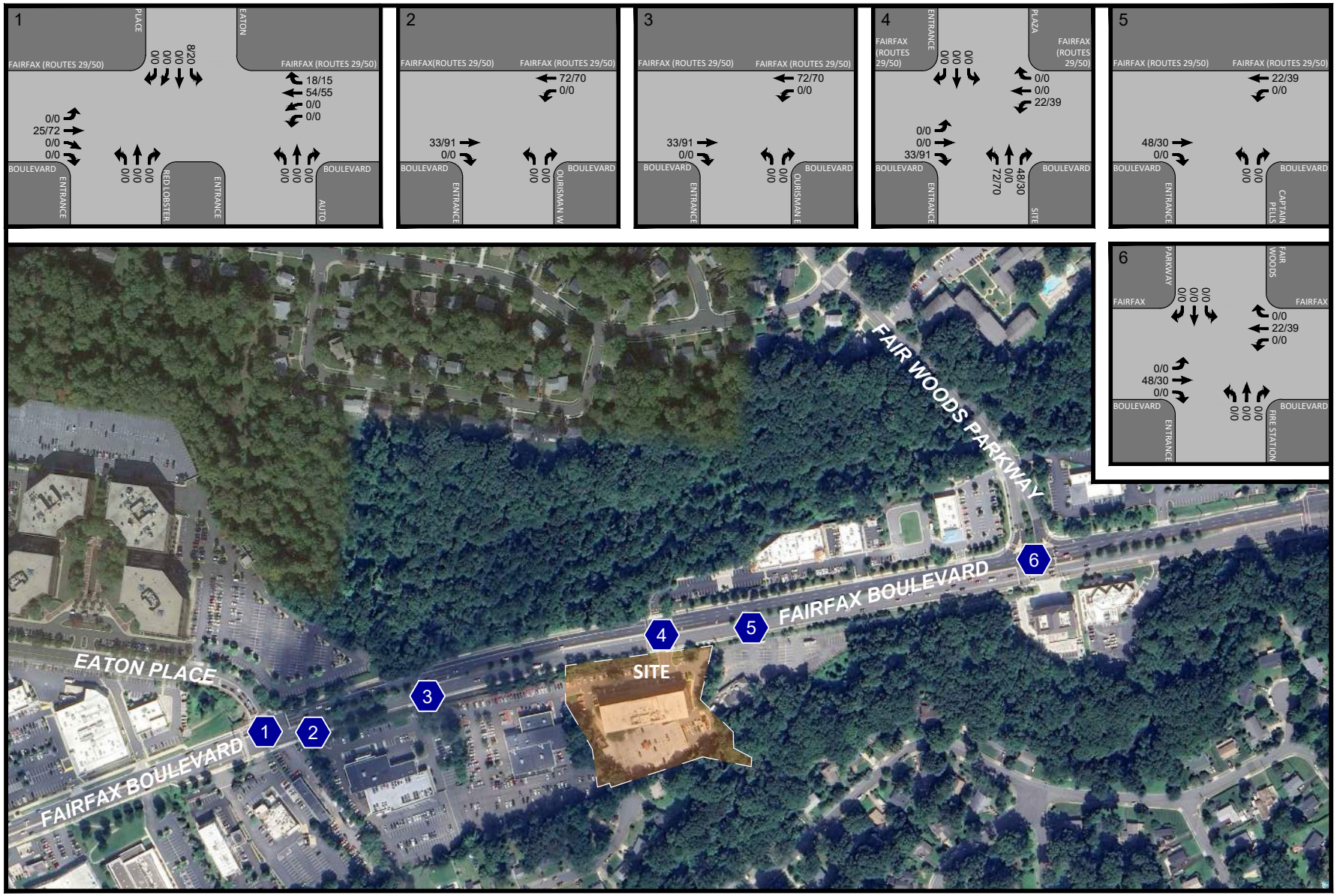

Figure 6-1
Site Trip Assignments

X Study Intersection

AM PEAK HOUR
PM PEAK HOUR
000 / 000

NORTH

Gatewood Plaza
City of Fairfax, Virginia

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
Total Future (2028) Intersection Level of Service [1] [2] [3] [4] [5]

Intersection	Operating Condition	Street Name	Approach/ Movement	2028 Background AM Peak	2028 Background PM Peak
1 Fairfax Boulevard (U.S. Route 29/50)/ **Eaton Place/Private Driveways**	Signal	Fairfax Boulevard	EBL	A (9.5)	D (37.9)
		Fairfax Boulevard	EBTR	B (18.8)	B (18.5)
		Fairfax Boulevard	WBL	C (23.3)	A (4.9)
		Fairfax Boulevard	WBT	C (27.4)	C (26.1)
		Fairfax Boulevard	WBR	D (40.3)	A (8.0)
		Auto Shop	NBT	F (94.7)	F (106.4)
		Eaton Place	SBL	F (84.6)	F (112.8)
		Eaton Place	SBT	F (83.7)	F (111.4)
		Red Lobster	NEBLTR	-	F (109.0)
		Overall:		**C (29.0)**	**C (30.0)**
2 Fairfax Boulevard (U.S. Route 29/50)/ **Ourisman W Entrance**	STOP	Fairfax Boulevard	EBTR	A (0.0)	A (0.0)
		Fairfax Boulevard	WBT	A (0.0)	A (0.0)
		Ourisman Dealership	NBR	A (0.0)	A (9.0)
3 Fairfax Boulevard (U.S. Route 29/50)/ **Ourisman E Entrance**	STOP	Fairfax Boulevard	WBL	B (19.5)	B (12.3)
		Ourisman Dealership	NBLR	D (48.2)	C (23.0)
4 Fairfax Boulevard (U.S. Route 29/50)/ **Site Entrance/ Boulevard Marketplace**	Signal	Fairfax Boulevard	EBL	F (94.0)	F (107.8)
		Fairfax Boulevard	EBTR	B (15.9)	A (5.6)
		Fairfax Boulevard	WBL	F (90.2)	F (144.3)
		Fairfax Boulevard	WBT	A (5.0)	A (2.9)
		Site Entrance	NBTL	F (85.9)	F (102.2)
		Site Entrance	NBR	E (75.8)	F (89.9)
		Boulevard Marketplace	SBT	E (75.0)	F (91.4)
		Boulevard Marketplace	SBR	E (74.9)	F (89.9)
		Overall:		**B (15.7)**	**B (10.7)**
5 Fairfax Boulevard (U.S. Route 29/50)/ **Captain Pells Crab Shack Entrance**	STOP	Fairfax Boulevard	EBT	A (0.0)	A (0.0)
		Fairfax Boulevard	EBR	A (0.0)	A (0.0)
		Fairfax Boulevard	WBT	A (0.0)	A (0.0)
		Captain Pells	NBR	A (0.0)	A (9.3)
6 Fairfax Boulevard (U.S. Route 29/50)/ **Fair Woods Parkway/Fire Station**	Signal	Fairfax Boulevard	EBL	F (121.3)	F (102.7)
		Fairfax Boulevard	EBT	A (2.8)	A (3.3)
		Fairfax Boulevard	WBL	F (95.0)	F (110.6)
		Fairfax Boulevard	WBT	A (9.4)	B (12.7)
		Fairfax Boulevard	WBR	A (0.1)	A (0.1)
		Fire Station	NBT	E (69.7)	-
		Fair Woods Parkway	SBT	F (92.3)	F (103.8)
		Fair Woods Parkway	SBR	E (70.8)	F (90.3)
		Overall:		**B (12.3)**	**B (16.7)**

Notes (1) Analysis performed using Synchro software, version 11

(2) Values in parentheses, ( ), represent signalized delay in seconds

(3) Values in brackets, [ ], represent unsignalized delay in seconds

(4) * - Delay exceeds 999 seconds

(5) Roadway names in bold are considered north/south for purposes of this analysis.

Table 7-2
Gatewood Plaza
Total Future (2028) Intersection 95th Percentile Queue Summary (1) (2)

Intersection	Operating Condition	Street Name	Approach/ Movement	Available Storage	2028 Total Future AM Peak 95th %-tile	2028 Total Future PM Peak 95th %-tile
1 Fairfax Boulevard (U.S. Route 29/50)/ **Eaton Place/Private Driveways**	Signal	Fairfax Boulevard	EBL	260	35	32
		Fairfax Boulevard	EBTR	-	737	402
		Fairfax Boulevard	WBL	140	16	m5
		Fairfax Boulevard	WBT	-	527	1457
		Fairfax Boulevard	WBR	-	259	307
		Auto Shop	NBT	-	26	54
		Eaton Place	SBL	-	307	383
		Eaton Place	SBT	-	301	372
		Red Lobster	NEL	-	-	37
2 Fairfax Boulevard (U.S. Route 29/50)/ **Ourisman W Entrance**	STOP	Fairfax Boulevard	EBTR	-	0	0
		Fairfax Boulevard	WBT	-	0	0
		Ourisman Dealership	NBR	-	0	0
3 Fairfax Boulevard (U.S. Route 29/50)/ **Ourisman E Entrance**		Fairfax Boulevard	WBL	100	5	3
		Ourisman Dealership	NBLR	-	2	8
4 Fairfax Boulevard (U.S. Route 29/50)/ **Site Entrance/ Boulevard Marketplace**	Signal	Fairfax Boulevard	EBL	-	m32	m114
		Fairfax Boulevard	EBTR	-	1010	291
		Fairfax Boulevard	WBL	-	61	116
		Fairfax Boulevard	WBT	-	137	35
		Site Entrance	NBT	-	151	163
		Site Entrance	NBR	-	51	32
		Boulevard Marketplace	SBT	-	11	46
		Boulevard Marketplace	SBR	-	0	44
5 Fairfax Boulevard (U.S. Route 29/50)/ **Captain Pells Crab Shack Entrance**	STOP	Fairfax Boulevard	EBT	-	0	0
		Fairfax Boulevard	EBR	-	0	0
		Fairfax Boulevard	WBT	-	0	0
		Captain Pells	NBR	-	0	0
6 Fairfax Boulevard (U.S. Route 29/50)/ **Fair Woods Parkway/Fire Station**	Signal	Fairfax Boulevard	EBL	450	m107	280
		Fairfax Boulevard	EBT	-	21	156
		Fairfax Boulevard	WBL	85	28	29
		Fairfax Boulevard	WBT	-	230	572
		Fair Woods Parkway	SBT	-	252	183
		Fair Woods Parkway	SBR	-	64	65

Notes (1) Analysis performed using Synchro software, version 11

(2) "~" - 50th percentile volume exceeds capacity, queue may be longer.

(3) "#" - 95th percentile volume exceeds capacity, queue may be longer.

(4) "m" - Volume for 95th percentile queue is metered by upstream signal.

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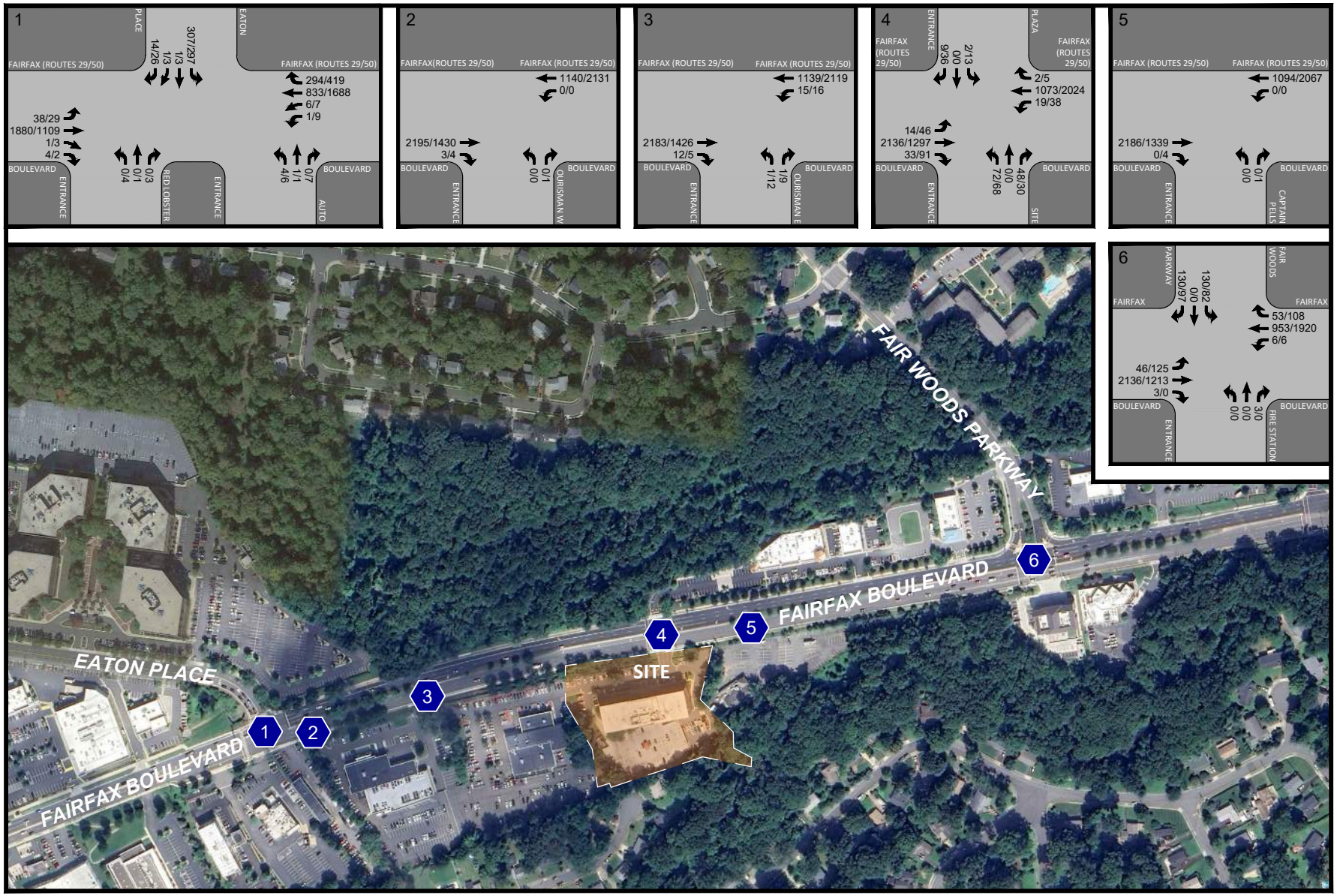

Figure 7-1
2028 Total Future
Traffic Volumes

X Study Intersection

AM PEAK HOUR
PM PEAK HOUR
000 / 000

NORTH

Gatewood Plaza
City of Fairfax, Virginia

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.

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

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APPENDIX A

City of Fairfax Scoping Agreement

SCOPE OF WORK MEETING FORM

Information on the Project
Traffic Impact Analysis Base Assumptions

Gatewood Plaza
CITY OF FAIRFAX, VIRGINIA
January 18, 2024

Contact Information			
Consultant Name: Tele: E-mail:	William F. Johnson, P.E., PTOE, - Wells + Associates, Inc. 703.851.4851 wfjohnson@wells&associates.com		
Developer/Owner Name: Tele: E-mail:	George Hong – Baileys Star LLC 571.643.8256 george.hong1@gmail.com		
Project Information			
Project Name:	Gatewood Plaza	Locality/County:	City of Fairfax
Project Location: (Attach regional and site-specific location map)	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. A 93,115 gross square foot (GSF) office building is currently developed on the site along with a detached parking garage and surface parking. See Attachment 1 for the site location.		
Submission Type	Comp Plan ☐	Rezoning ☒	Site Plan ☐	Subd Plat ☐
Project Description: (Including details on the land use, acreage, phasing, access location, etc. Attach additional sheet if necessary)	The site is currently zoned Commercial Retail (CR) and Residential Medium (RM). The applicant proposes to rezone the 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 with a mixed-use building consisting of up to 336 multifamily units and 19,602 GSF of ground-floor retail. Access to the site is currently located and proposed to remain a signalized intersection along Fairfax Boulevard (Route 50) opposite Boulevard Marketplace. A conceptual layout is provided in Attachment 2.		
Proposed Use(s): (Check all that apply; attach additional pages as necessary)	Residential ☐	Commercial ☐	Mixed Use ☒	Other ☐
(See Attachment 3)	**Existing Uses(s)** Office: 93,115 GSF ITE LU Code(s): 710 **Proposed Uses(s)**		**Other Use(s)** Independent Variable(s): _____ _____	

	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		

	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/15% Daily trips	Pass-by allowance: ☐ Yes ☒ No Reduction: n/a % trips	
Software Methodology	☒ Synchro ☐ HCS (v.2000/+) ☐ aaSIDRA ☐ CORSIM ☐ Other Synchro Version 11		
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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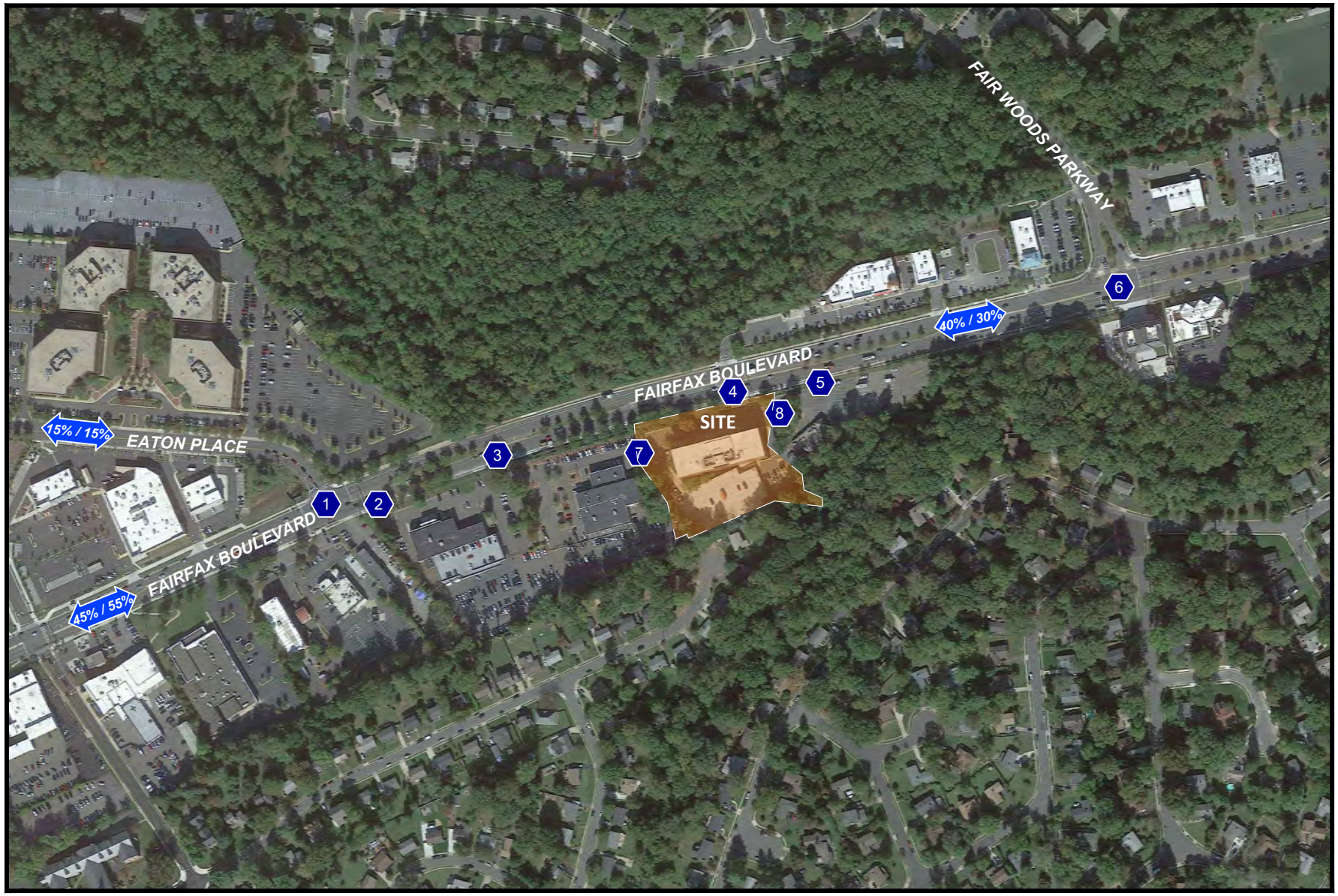

Attachment 1

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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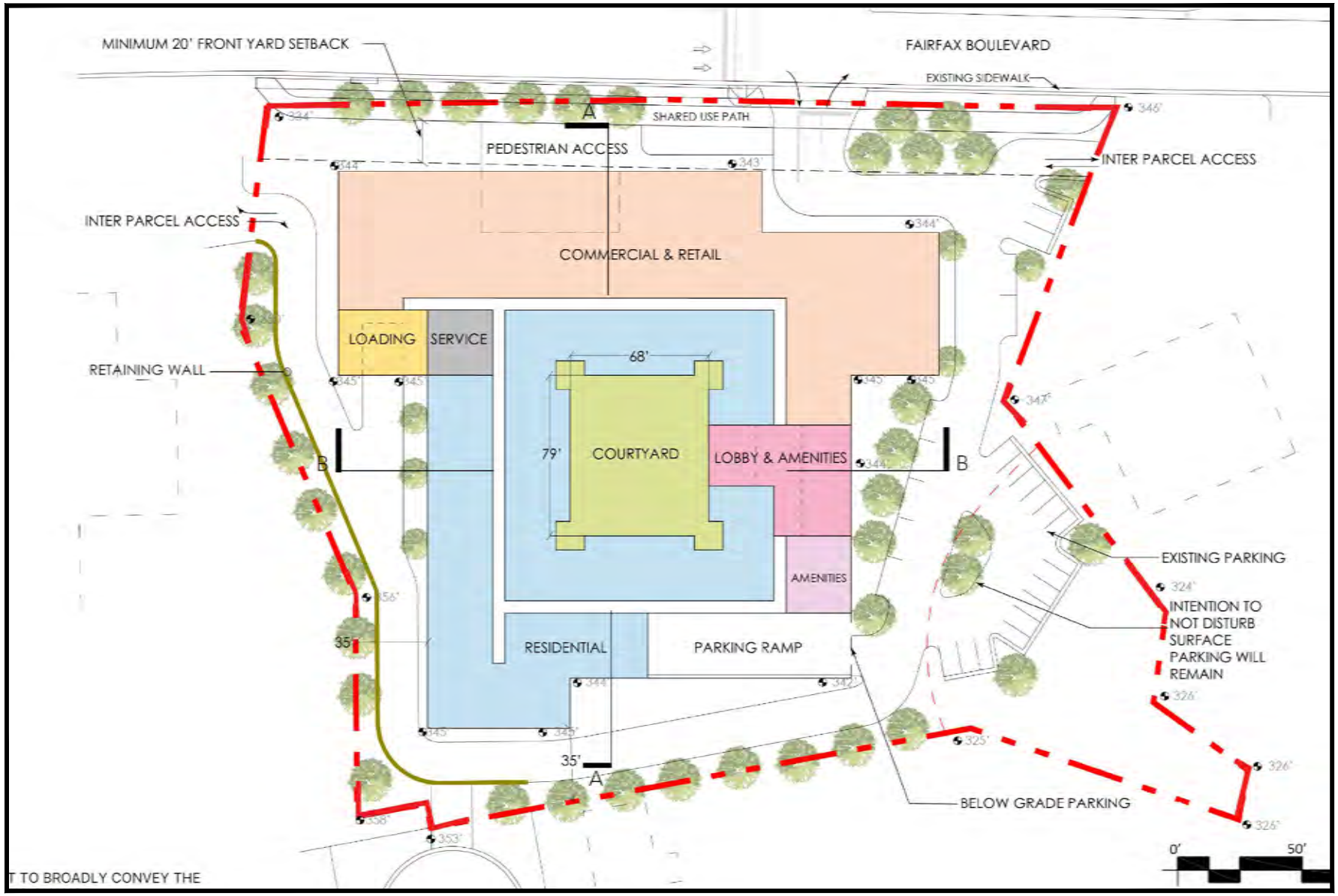


Attachment 2

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	Weekday AM Peak Hour Out	Weekday AM Peak Hour Total	Weekday PM Peak Hour In	Weekday PM Peak Hour Out	Weekday PM Peak Hour 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

Effective August 1, 2022

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

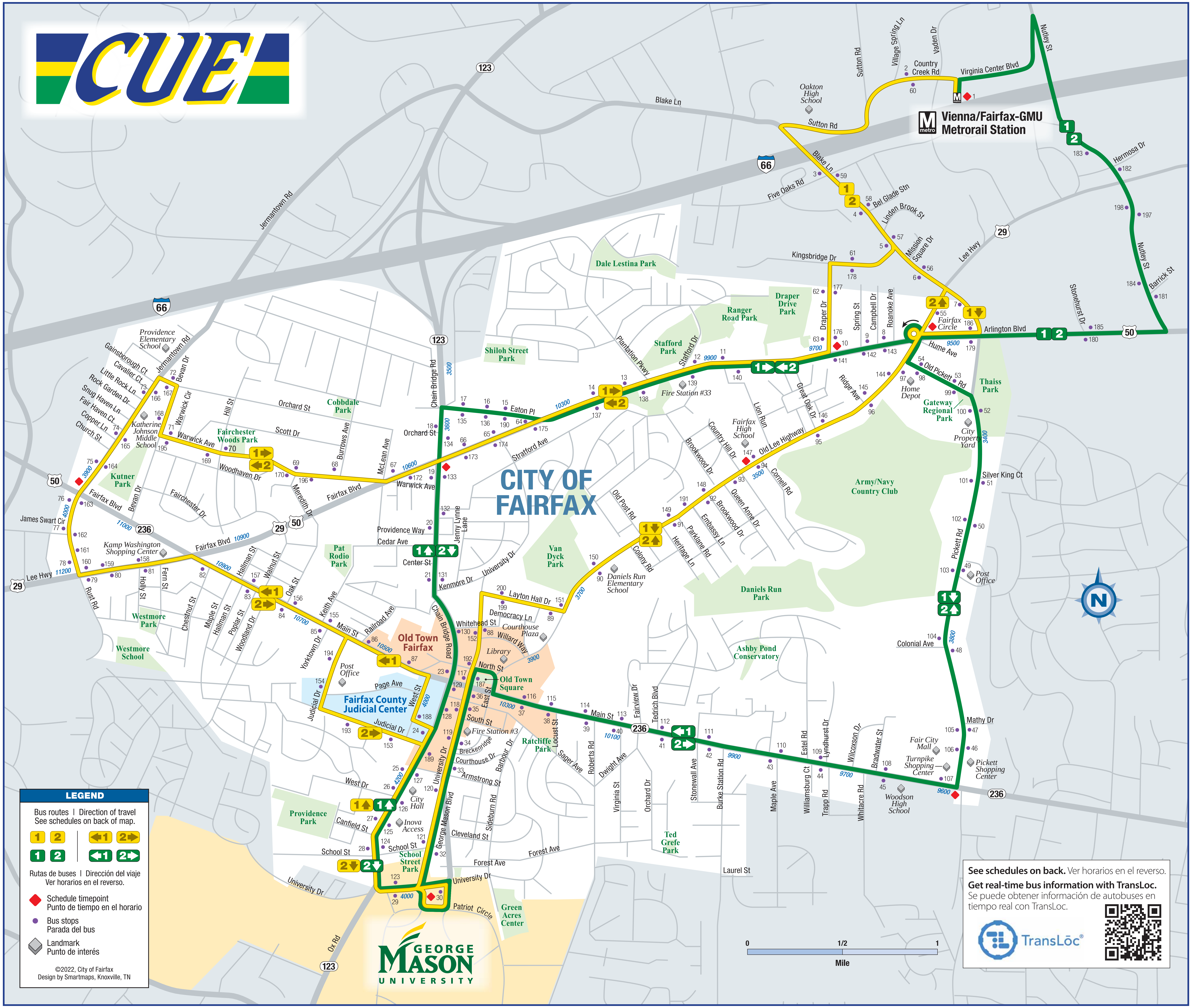
CUE Bus General Information .... 703-385-7859; TTY: 711
City Wheels .... 703-385-7859; TTY: 711
Metro Access .... 301-562-5360; TTY: 711, 301-588-7535
Metro Disability ID ..... 202-962-2700; TTY: 711, 202-628-8973

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!



LEGEND

Bus routes | Direction of travel
See schedules on back of map.

Rutas de buses | Dirección del viaje
Ver horarios en el reverso.

Schedule timepoint
Punto de tiempo en el horario

Bus stops
Parada del bus

Landmark
Punto de interés

Design by Smartmaps, Knoxville, TN

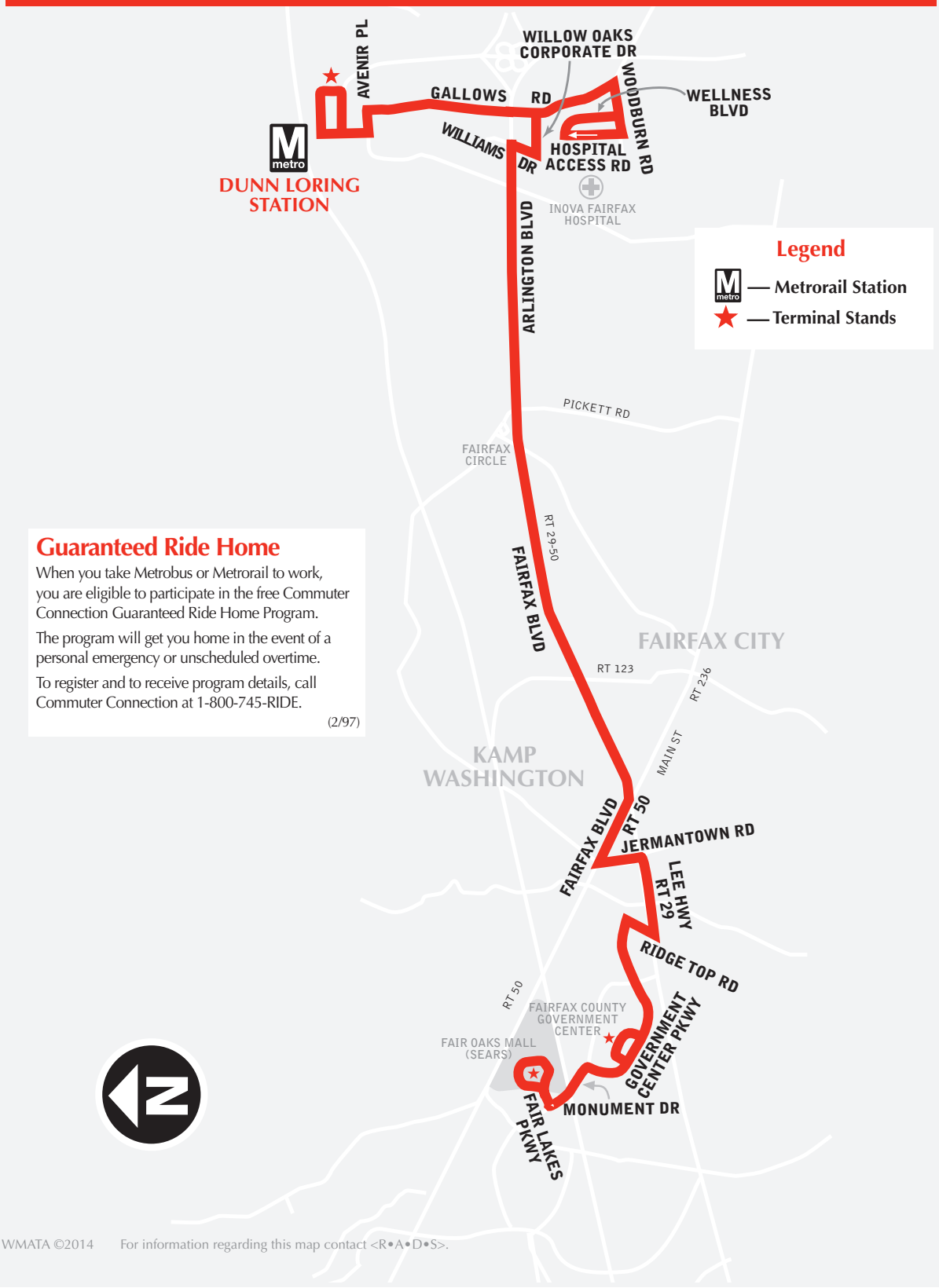
See schedules on back. Ver horarios en el reverso.

Get real-time bus information with TransLoc.
Se puede obtener información de autobuses en tiempo real con TransLoc.

TransLōc

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

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

Wells + Associates,Inc

Tysons, Virginia

Turning Movement Count - Total Vehicles

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

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

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

Time Period	Southbound 0					Westbound Fairfax Boulevard					Northbound Ourisman Dealership East 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	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

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

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 Period	Southbound 0						Westbound Fairfax Boulevard						Northbound Captain Pells Restaurant Entrance						Eastbound Fairfax Boulevard						North & South	East & West	Total
	Right	Thru	Left	I-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	I-Turn	Total	PHF	Right	Thru	Left	I-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

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

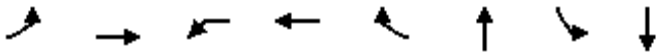
DATE: 1/30/2024
DAY: Tuesday
WEATHER: clear
COUNTED BY: Victor & Bianca
INPUTED BY: agan

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

Time	Southbound Fair Woods Parkway					Westbound Fairfax Boulevard					Northbound fair Station Driveway					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	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

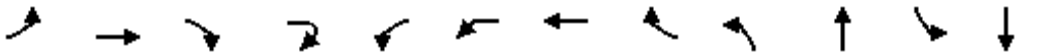
APPENDIX D

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	0.27	0.08	0.67	0.68
Control Delay	7.5	14.2	15.1	24.9	15.3	88.6	88.5	89.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Total Delay	7.5	14.2	15.1	24.9	15.3	88.6	88.6	89.3
Queue Length 50th (ft)	11	314	4	367	134	7	209	212
Queue Length 95th (ft)	33	669	16	484	240	26	276	282
Internal Link Dist (ft)		351		17		127		86
Turn Bay Length (ft)	260							
Base Capacity (vph)	530	3694	165	2430	1109	94	385	384
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	11	11
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.56	0.05	0.35	0.27	0.06	0.44	0.45

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	0.98		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	1480		1788	1603	1599
Flt Permitted	0.28	1.00				0.06	1.00	1.00		0.96	0.95	0.96
Satd. Flow (perm)	526	4985				117	3438	1480		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)	134.1	128.4				127.5	125.1	125.1		1.5	27.4	27.4
Effective Green, g (s)	138.1	130.4				131.5	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)	432	3421				119	2299	990		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	0.23		0.19	0.67	0.68
Uniform Delay, d1	8.2	16.1				12.4	13.9	12.3		91.8	75.7	75.9
Progression Factor	1.00	1.00				1.80	1.90	3.70		1.00	1.00	1.00
Incremental Delay, d2	0.1	0.8				0.2	0.5	0.5		2.8	8.8	9.5
Delay (s)	8.3	16.9				22.4	26.9	46.2		94.7	84.5	85.4
Level of Service	A	B				C	C	D		F	F	F
Approach Delay (s)		16.7					31.8			94.7		84.9
Approach LOS		B					C			F		F

Intersection Summary			
HCM 2000 Control Delay	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)			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)	97			1041		
pX, platoon unblocked			0.77		0.77	0.77
vC, conflicting volume			2459		2757	820
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1863		2248	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		27	839

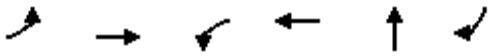
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	982	982	495	300	300	300	300	0
Volume Left	0	0	0	0	0	0	0	0
Volume Right	0	0	4	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.58	0.58	0.29	0.18	0.18	0.18	0.18	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS								A
Approach Delay (s)	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)	466			672		
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			1689		1968	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)			290		41	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	290	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	4	0	0	0	2
Control Delay (s)	0.0	0.0	0.0	18.0	0.0	0.0	0.0	51.8
Lane LOS				C				F
Approach Delay (s)	0.0			0.2				51.8
Approach LOS								F

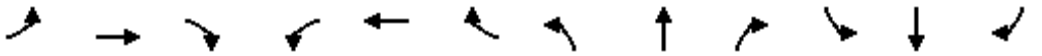
Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	50.4%	ICU Level of Service	A
Analysis Period (min)	15		



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	93.0	10.2	86.0	2.8	76.3	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	93.0	10.2	86.0	2.8	76.3	0.2
Queue Length 50th (ft)	14	0	15	2	5	0
Queue Length 95th (ft)	m26	935	39	132	16	0
Internal Link Dist (ft)		592		165	59	
Turn Bay Length (ft)	280		185			50
Base Capacity (vph)	224	4532	199	4500	403	513
Starvation Cap Reductn	0	278	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	2.11		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)	96.2	7.9		88.8	2.2			86.5				86.0
Level of Service	F	A		F	A			F				F
Approach Delay (s)		8.3			3.0			86.5			86.0	
Approach LOS		A			A			F			F	

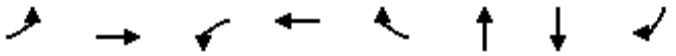
Intersection Summary			
HCM 2000 Control Delay	6.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	52.2%	ICU Level of Service	A
Analysis Period (min)	15		

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					2	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	245			839		
pX, platoon unblocked			0.87		0.90	0.87
vC, conflicting volume			2362		2764	789
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			2029		2087	211
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)			238		41	686

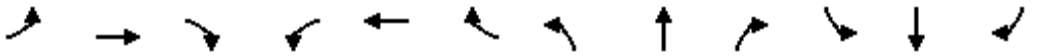
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	944	944	472	402	402	402	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.56	0.56	0.28	0.24	0.24	0.24	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS							A
Approach Delay (s)	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	113.0	5.0	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	113.0	5.0	89.0	10.0	0.1	0.0	99.9	12.4
Queue Length 50th (ft)	65	416	9	156	0	0	180	0
Queue Length 95th (ft)	121	4	28	213	0	0	252	64
Internal Link Dist (ft)		759		717		25	420	
Turn Bay Length (ft)	450		80		145			300
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		0.86			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)		7.7			9.3			69.7			81.6	
Approach LOS		A			A			E			F	

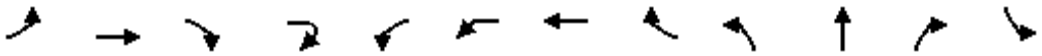
Intersection Summary			
HCM 2000 Control Delay	14.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	13.2
Intersection Capacity Utilization	63.0%	ICU Level of Service	B
Analysis Period (min)	15		

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	14.5	15.8	4.1	20.8	5.4	107.1	111.6	111.2	102.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.5	15.8	4.1	20.8	5.4	107.1	111.6	111.2	102.2
Queue Length 50th (ft)	11	230	1	886	141	23	241	234	13
Queue Length 95th (ft)	30	337	m7	1241	341	54	330	324	37
Internal Link Dist (ft)		351		17		127		86	36
Turn Bay Length (ft)	260								
Base Capacity (vph)	188	3504	395	2414	1124	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	0.98		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	1550		1700		1665
Flt Permitted	0.06	1.00				0.22	1.00	1.00		0.98		0.95
Satd. Flow (perm)	111	4984				410	3505	1550		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)	148.3	142.7				145.1	141.1	141.1		5.4		27.0
Effective Green, g (s)	152.3	144.7				149.1	143.1	143.1		7.4		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	3278				314	2279	1008		57		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		0.28		0.74
Uniform Delay, d1	26.6	16.5				12.0	27.2	17.6		103.7		91.9
Progression Factor	1.00	1.00				0.33	0.71	0.43		1.00		1.00
Incremental Delay, d2	0.9	0.3				0.1	2.5	0.9		2.7		14.7
Delay (s)	27.4	16.8				4.0	21.7	8.6		106.4		106.6
Level of Service	C	B				A	C	A		F		F
Approach Delay (s)		17.1					19.0			106.4		
Approach LOS		B					B			F		

Intersection Summary			
HCM 2000 Control Delay	26.6	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				0.95	
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)	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)	97			1041		
pX, platoon unblocked			0.90		0.95	0.90
vC, conflicting volume			1456		2030	486
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1134		1143	62
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		184	896

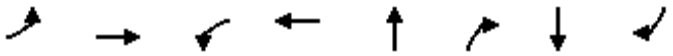
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	580	580	295	576	576	576	576	1
Volume Left	0	0	0	0	0	0	0	0
Volume Right	0	0	5	0	0	0	0	1
cSH	1700	1700	1700	1700	1700	1700	1700	896
Volume to Capacity	0.34	0.34	0.17	0.34	0.34	0.34	0.34	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0
Lane LOS								A
Approach Delay (s)	0.0			0.0				9.0
Approach LOS								A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	33.9%	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)	466			672		
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			1042		1234	49
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)			603		152	917

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	603	1700	1700	1700	253
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)	0.0	0.0	0.0	11.1	0.0	0.0	0.0	20.5
Lane LOS				B				C
Approach Delay (s)	0.0			0.1				20.5
Approach LOS								C

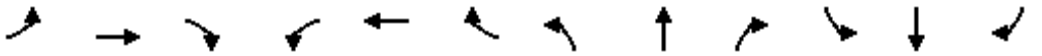
Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	47.7%	ICU Level of Service	A
Analysis Period (min)	15		



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	115.0	2.5	141.2	1.2	103.2	20.1	90.1	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	115.0	2.5	141.2	1.3	103.2	20.1	90.1	5.7
Queue Length 50th (ft)	45	59	5	23	57	0	11	0
Queue Length 95th (ft)	m80	215	m14	33	100	36	31	9
Internal Link Dist (ft)		592		165	59		97	
Turn Bay Length (ft)	280		185			50		50
Base Capacity (vph)	234	4434	212	4240	289	369	326	364
Starvation Cap Reductn	0	0	0	228	0	0	0	0
Spillback Cap Reductn	0	0	0	123	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		1519	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	187.1		1.5	180.1			13.9	13.9		13.9	13.9
Effective Green, g (s)	10.2	189.1		3.5	182.1			15.9	15.9		15.9	15.9
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	4284		28	4166			97	114		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			0.41	0.02		0.07	0.01
Uniform Delay, d1	101.8	2.9		106.8	5.5			97.6	94.8		95.2	94.8
Progression Factor	1.06	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			5.9	0.2		0.3	0.0
Delay (s)	110.2	2.5		148.4	1.1			103.4	95.0		95.5	94.8
Level of Service	F	A		F	A			F	F		F	F
Approach Delay (s)		5.1			1.4			99.6			95.0	
Approach LOS		A			A			F			F	

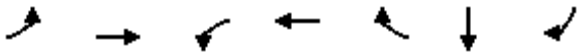
Intersection Summary			
HCM 2000 Control Delay	5.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	220.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	57.1%	ICU Level of Service	B
Analysis Period (min)	15		

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					2	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	245			839		
pX, platoon unblocked			0.95		0.88	0.95
vC, conflicting volume			1355		2045	454
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1195		1331	248
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)			551		128	714

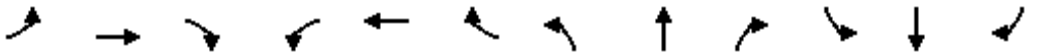
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	540	540	274	692	692	692	1
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	4	0	0	0	1
cSH	1700	1700	1700	1700	1700	1700	714
Volume to Capacity	0.32	0.32	0.16	0.41	0.41	0.41	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	10.0
Lane LOS							B
Approach Delay (s)	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	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	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)		759		717		420	
Turn Bay Length (ft)	450		80		145		300
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)		13.7			11.6			0.0			96.5	
Approach LOS		B			B			A			F	

Intersection Summary			
HCM 2000 Control Delay	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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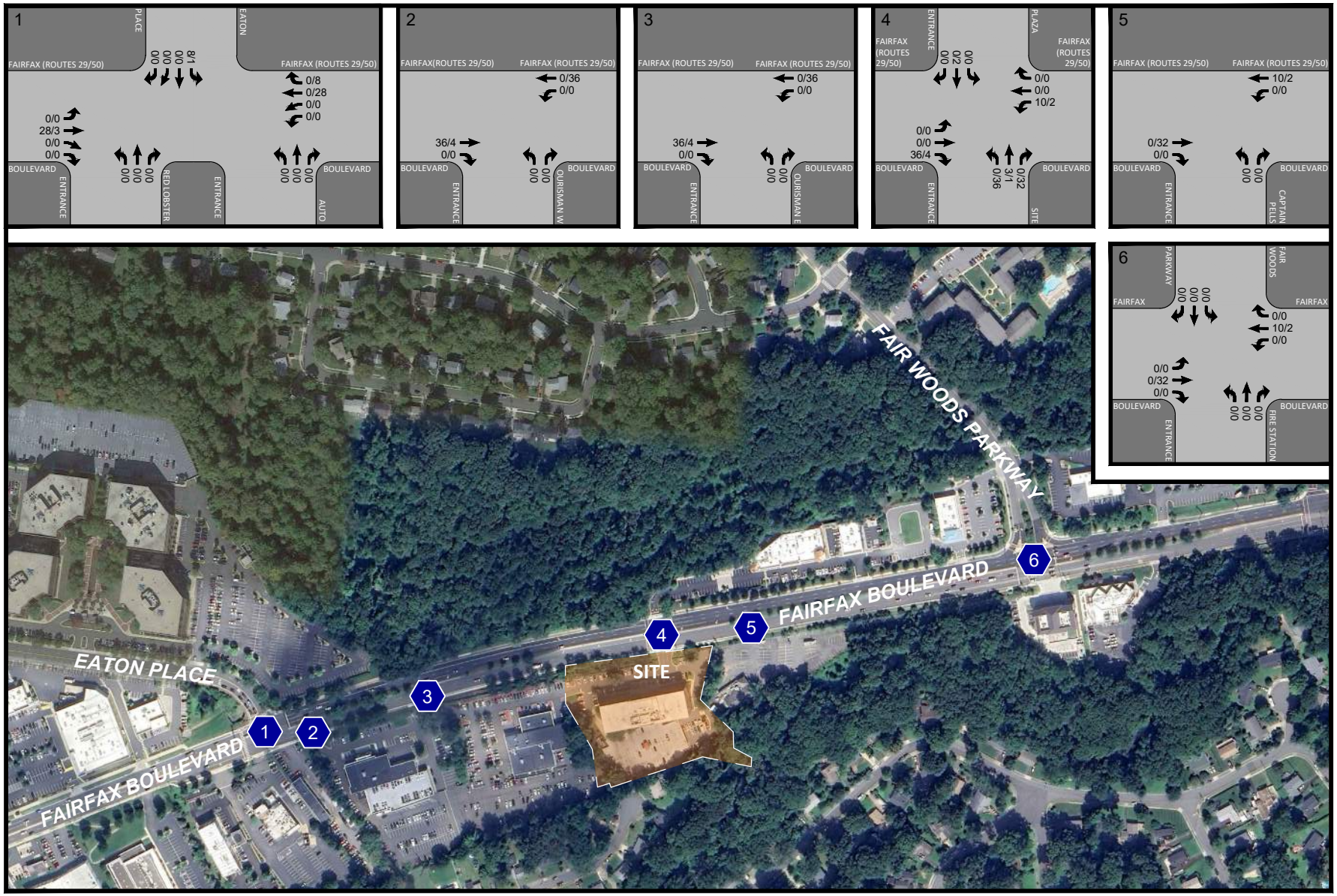

Figure D-1
Existing Site Trips Removed

X Study Intersection

AM PEAK HOUR
PM PEAK HOUR
000 / 000

NORTH

Gatewood Plaza
City of Fairfax, Virginia

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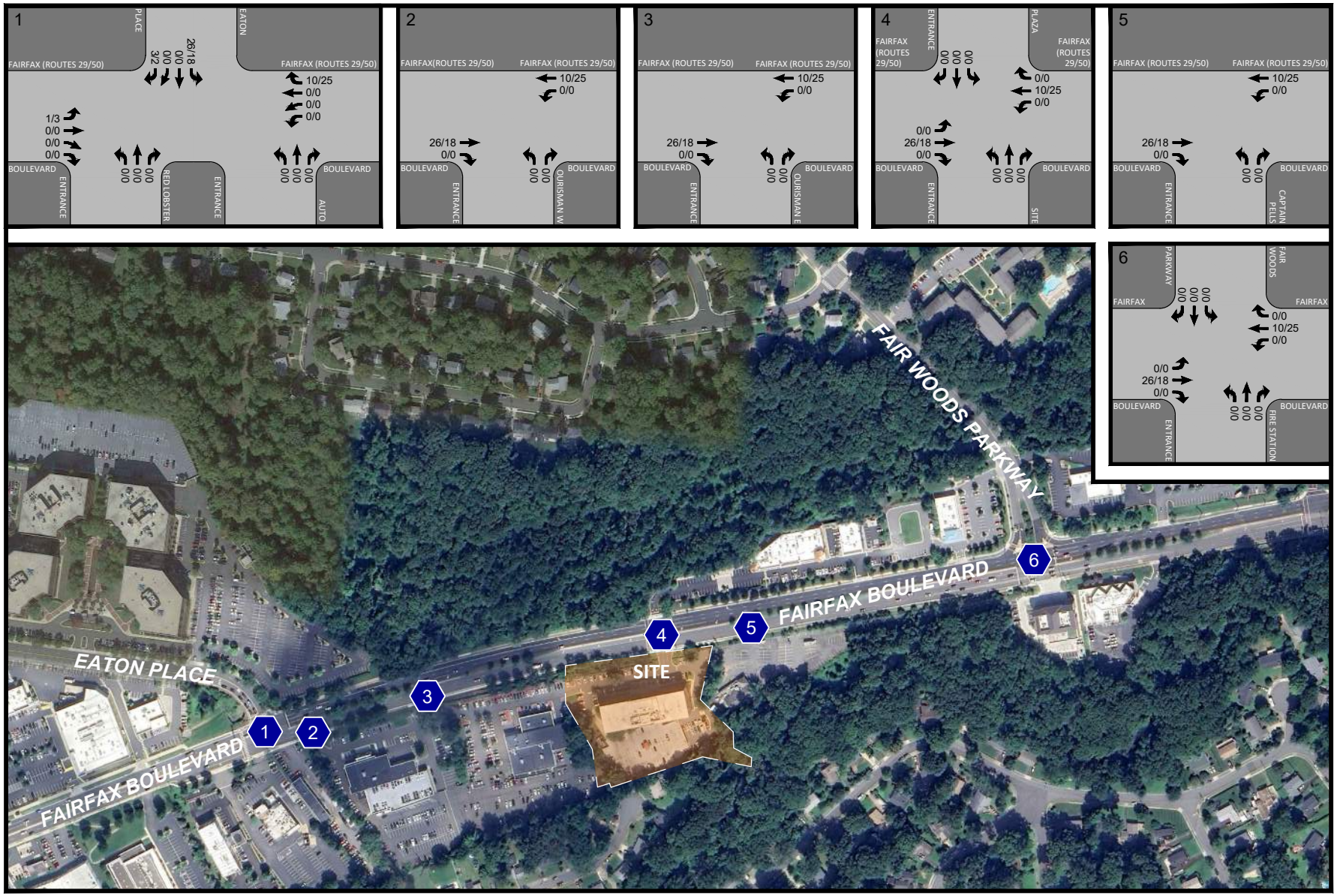

Figure D-2
Willowwood Plaza
Pipeline Trips

Study Intersection

AM PEAK HOUR
PM PEAK HOUR
000 / 000

NORTH

Gatewood Plaza
City of Fairfax, Virginia

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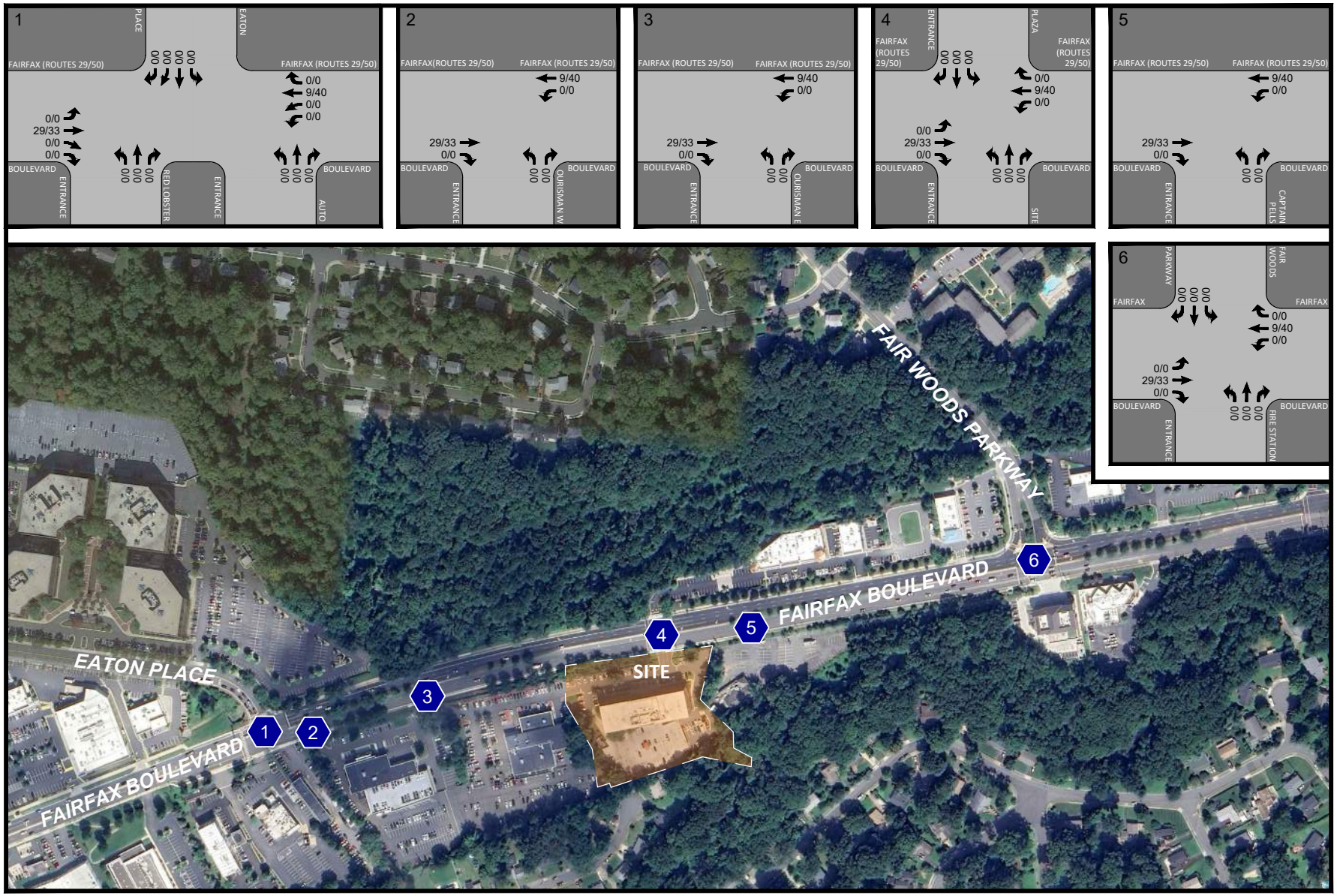

Figure D-3
Paul VI
Pipeline Trips

Study Intersection

AM PEAK HOUR
PM PEAK HOUR
000 / 000

NORTH

Gatewood Plaza
City of Fairfax, Virginia

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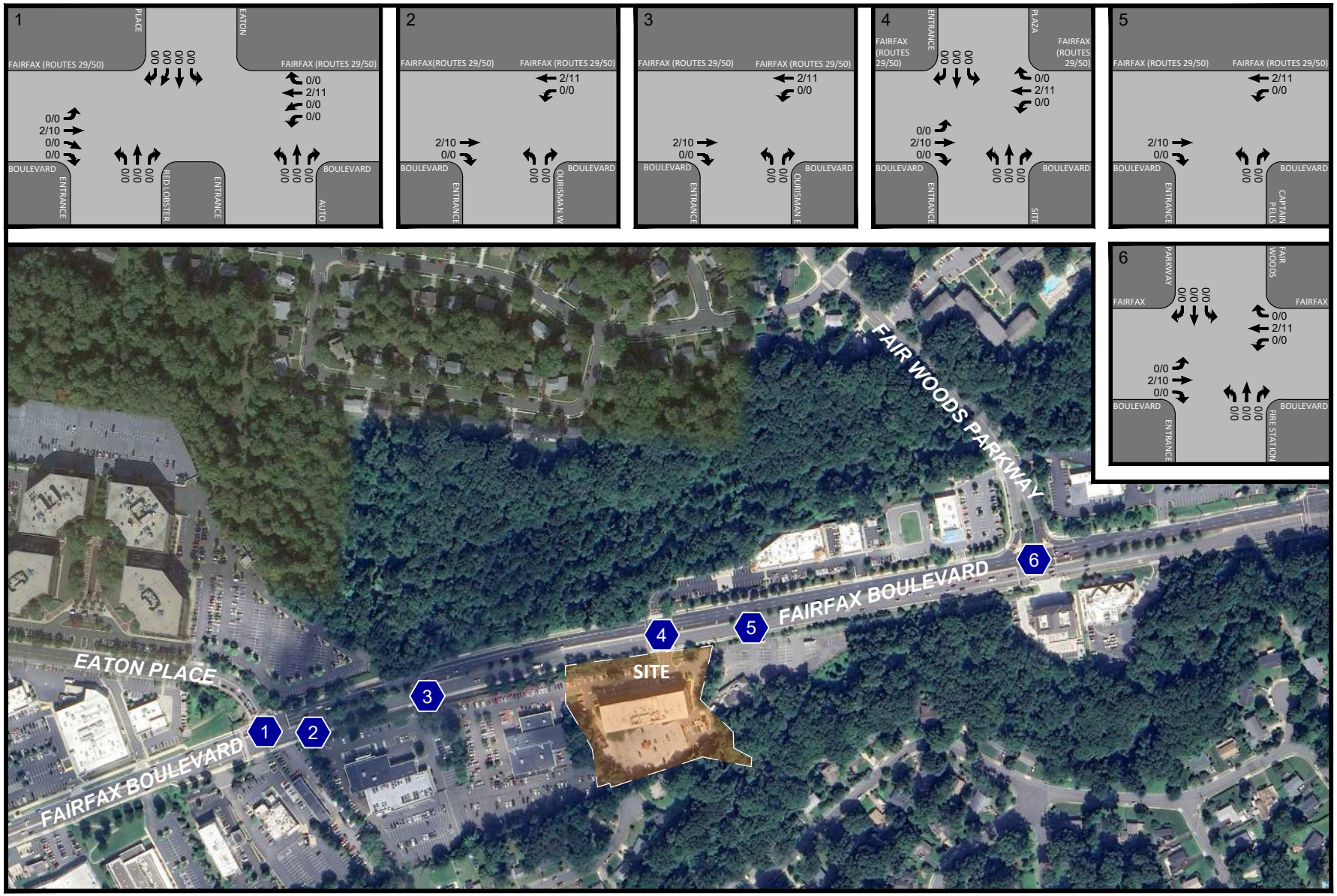

Figure D-4
Breezway Properties
Pipeline Trips

X Study Intersection

AM PEAK HOUR
PM PEAK HOUR
000 / 000

NORTH

Gatewood Plaza
City of Fairfax, Virginia

R:\PROJECTS\9181 GATEWOOD PLAZA\GRAPHICS\24.4.30 GATEWOOD PLAZA GRAPHICS.DWG

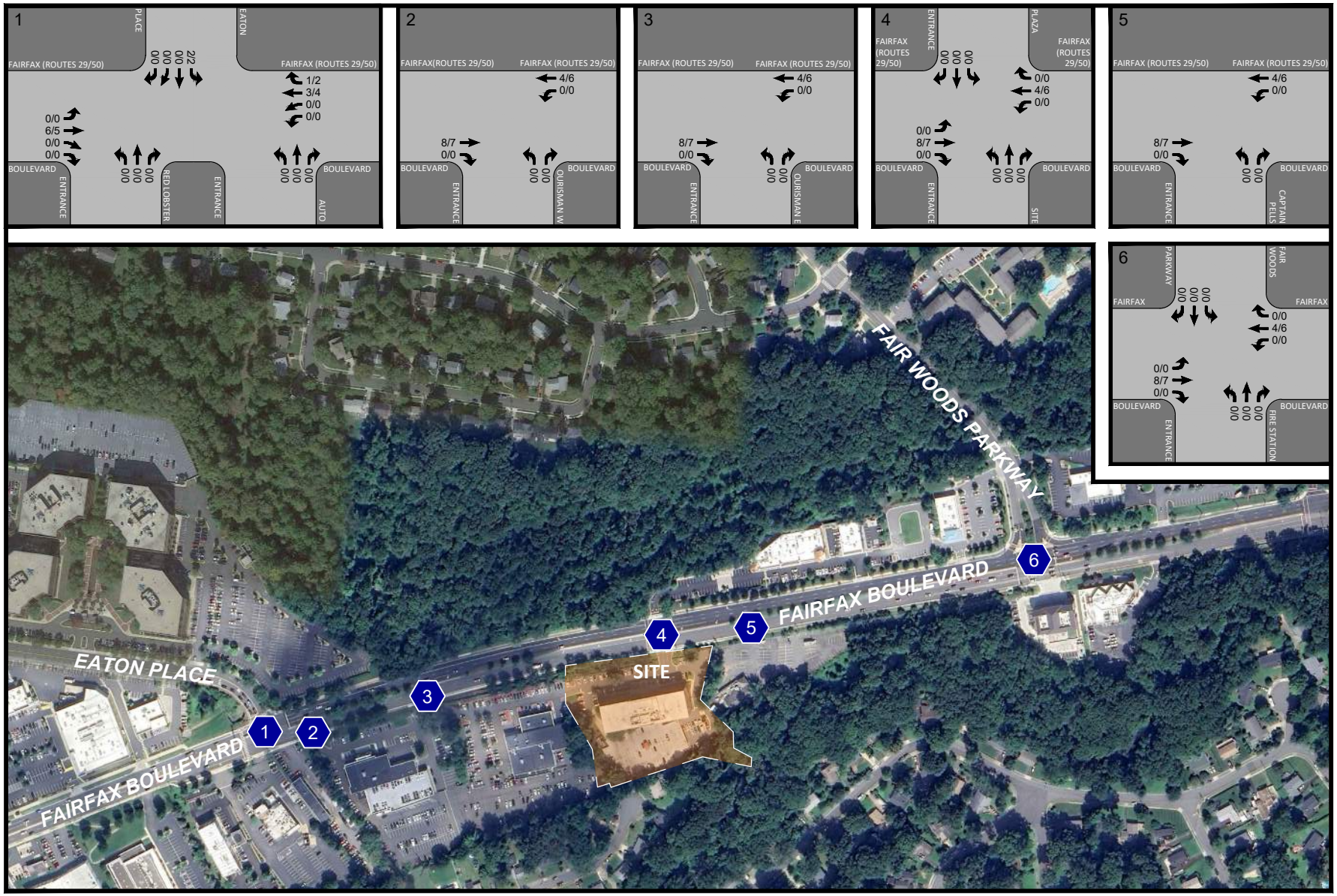

Figure D-5
Northfax West
Pipeline Trips

X Study Intersection

AM PEAK HOUR
PM PEAK HOUR
000 / 000

NORTH

Gatewood Plaza
City of Fairfax, Virginia

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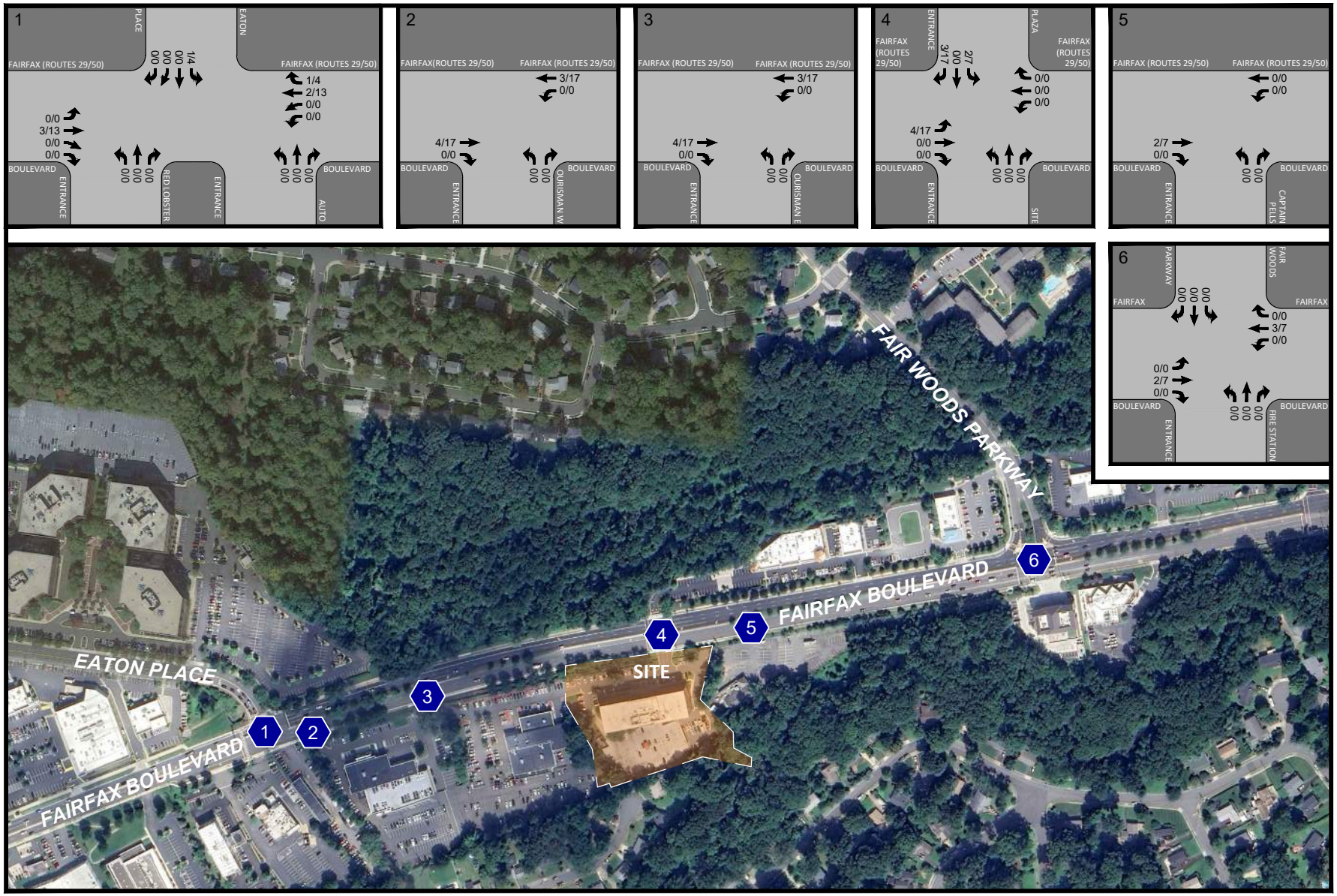


Figure D-6
Boulevard Marketplace
Pipeline Trips

X Study Intersection

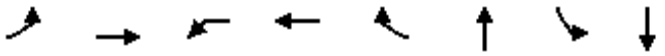
AM PEAK HOUR
PM PEAK HOUR
000 / 000

NORTH

Gatewood Plaza
City of Fairfax, Virginia

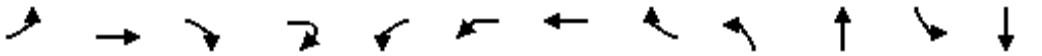
APPENDIX F

Background Future Capacity Analysis Worksheets



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	44	2170	8	895	317	6	187	183
v/c Ratio	0.10	0.60	0.06	0.37	0.29	0.08	0.70	0.69
Control Delay	8.3	16.0	16.1	26.9	16.6	88.6	88.0	87.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3
Total Delay	8.3	16.0	16.1	26.9	16.6	88.6	88.4	87.4
Queue Length 50th (ft)	12	358	4	398	148	7	235	230
Queue Length 95th (ft)	35	741	17	504	261	26	307	301
Internal Link Dist (ft)		351		17		127		86
Turn Bay Length (ft)	260							
Base Capacity (vph)	504	3633	153	2387	1094	94	385	384
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	4	0	0	0	0	28	28
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.60	0.05	0.37	0.29	0.06	0.52	0.51

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	0.98		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	1480		1788	1603	1598
Flt Permitted	0.27	1.00				0.05	1.00	1.00		0.96	0.95	0.96
Satd. Flow (perm)	497	4985				100	3438	1480		1788	1603	1598
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)	44	2164	1	5	1	7	895	317	5	1	353	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	75	0	0	0	0
Lane Group Flow (vph)	44	2170	0	0	0	8	895	242	0	6	187	183
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)	131.9	126.1				125.1	122.7	122.7		1.5	29.7	29.7
Effective Green, g (s)	135.9	128.1				129.1	124.7	124.7		3.5	31.7	31.7
Actuated g/C Ratio	0.72	0.67				0.68	0.66	0.66		0.02	0.17	0.17
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)	407	3360				106	2256	971		32	267	266
v/s Ratio Prot	c0.00	c0.44				0.00	0.26			c0.00	c0.12	0.11
v/s Ratio Perm	0.07					0.05		0.16				
v/c Ratio	0.11	0.65				0.08	0.40	0.25		0.19	0.70	0.69
Uniform Delay, d1	9.1	17.9				14.2	15.2	13.4		91.8	74.7	74.5
Progression Factor	1.00	1.00				1.74	1.87	3.46		1.00	1.00	1.00
Incremental Delay, d2	0.1	1.0				0.3	0.5	0.6		2.8	10.0	9.2
Delay (s)	9.2	18.8				24.9	28.8	47.0		94.7	84.6	83.7
Level of Service	A	B				C	C	D		F	F	F
Approach Delay (s)		18.6					33.5			94.7		84.2
Approach LOS		B					C			F		F

Intersection Summary			
HCM 2000 Control Delay	29.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
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	0.87	0.87	0.87
Adj. Flow (vph)	1	16	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)			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	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	2586	4	0	1256	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)	97			1041		
pX, platoon unblocked			0.75		0.75	0.75
vC, conflicting volume			2590		2902	864
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1945		2363	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)			222		22	811

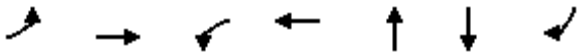
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	1034	1034	521	314	314	314	314	0
Volume Left	0	0	0	0	0	0	0	0
Volume Right	0	0	4	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.61	0.61	0.31	0.18	0.18	0.18	0.18	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS								A
Approach Delay (s)	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	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2429	13	13	1186	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)	466			672		
pX, platoon unblocked			0.75		0.77	0.75
vC, conflicting volume			2442		2857	816
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1753		1992	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)			265		39	812

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	972	972	499	13	395	395	395	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	265	1700	1700	1700	74
Volume to Capacity	0.57	0.57	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)	0.0	0.0	0.0	19.3	0.0	0.0	0.0	55.1
Lane LOS				C				F
Approach Delay (s)	0.0			0.2				55.1
Approach LOS								F

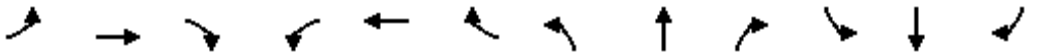
Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	16	2555	12	1261	4	2	11
v/c Ratio	0.18	0.58	0.14	0.29	0.03	0.02	0.07
Control Delay	95.1	11.2	85.1	3.5	76.3	75.5	1.0
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay	95.1	11.3	85.1	3.5	76.3	75.5	1.0
Queue Length 50th (ft)	20	276	15	107	5	2	0
Queue Length 95th (ft)	m32	1000	38	137	16	11	0
Internal Link Dist (ft)		592		165	59	97	
Turn Bay Length (ft)	280		185				50
Base Capacity (vph)	224	4443	199	4332	403	304	372
Starvation Cap Reductn	0	684	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	0.68	0.06	0.29	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			1407	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)	16	2513	42	12	1259	2	0	4	0	2	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	10
Lane Group Flow (vph)	16	2555	0	12	1261	0	0	4	0	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			NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		4
Actuated Green, G (s)	5.0	160.3		3.3	158.3			8.9			8.9	8.9
Effective Green, g (s)	7.0	162.3		5.3	160.3			10.9			10.9	10.9
Actuated g/C Ratio	0.04	0.85		0.03	0.84			0.06			0.06	0.06
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)	65	4249		49	4166			106			80	89
v/s Ratio Prot	c0.01	c0.51		0.01	0.26			c0.00				
v/s Ratio Perm											0.00	0.00
v/c Ratio	0.25	0.60		0.24	0.30			0.04			0.03	0.01
Uniform Delay, d1	88.9	4.2		90.4	3.1			84.6			84.5	84.4
Progression Factor	1.06	2.04		0.94	0.85			1.00			1.00	1.00
Incremental Delay, d2	1.7	0.5		2.5	0.2			0.3			0.1	0.0
Delay (s)	95.9	9.0		87.8	2.8			84.9			84.7	84.5
Level of Service	F	A		F	A			F			F	F
Approach Delay (s)		9.5			3.6			84.9			84.5	
Approach LOS		A			A			F			F	

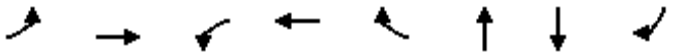
Intersection Summary			
HCM 2000 Control Delay	7.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

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	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	2486	0	0	1258	0	0
Pedestrians					2	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	245			839		
pX, platoon unblocked			0.84		0.88	0.84
vC, conflicting volume			2488		2907	831
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			2108		2151	138
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)			215		36	743

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	994	994	497	419	419	419	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	0.58	0.58	0.29	0.25	0.25	0.25	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS							A
Approach Delay (s)	0.0			0.0			0.0
Approach LOS							A

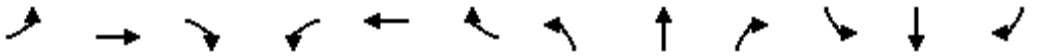
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	44.6%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT	SBR
Lane Group Flow (vph)	52	2376	7	1069	60	3	148	148
v/c Ratio	0.43	0.60	0.09	0.30	0.04	0.01	0.75	0.42
Control Delay	112.8	4.5	89.0	10.1	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	112.8	4.6	89.0	10.1	0.1	0.0	99.9	12.4
Queue Length 50th (ft)	58	500	9	166	0	0	180	0
Queue Length 95th (ft)	m119	4	28	226	0	0	252	64
Internal Link Dist (ft)		759		717		25	420	
Turn Bay Length (ft)	450		80		145			300
Base Capacity (vph)	190	3972	163	3583	1425	403	253	407
Starvation Cap Reductn	0	112	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	0.62	0.04	0.30	0.04	0.01	0.58	0.36

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	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		0.86			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	0.88	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	2373	3	7	1069	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	2376	0	7	1069	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	3855		33	3548	1425		231			198	224
v/s Ratio Prot	c0.03	c0.48		0.00	0.22			0.00				
v/s Ratio Perm						0.04					c0.11	0.01
v/c Ratio	0.48	0.62		0.21	0.30	0.04		0.00			0.75	0.09
Uniform Delay, d1	86.2	9.3		91.8	9.2	0.0		69.7			78.0	70.6
Progression Factor	1.23	0.46		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			14.3	0.2
Delay (s)	109.2	4.9		95.0	9.4	0.1		69.7			92.3	70.8
Level of Service	F	A		F	A	A		E			F	E
Approach Delay (s)		7.1			9.4			69.7			81.6	
Approach LOS		A			A			E			F	

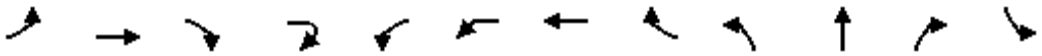
Intersection Summary			
HCM 2000 Control Delay	13.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	13.2
Intersection Capacity Utilization	63.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT	NEL
Lane Group Flow (vph)	33	1187	18	1888	468	16	177	173	9
v/c Ratio	0.26	0.34	0.06	0.79	0.42	0.21	0.78	0.78	0.11
Control Delay	16.6	16.5	4.3	22.8	5.5	107.1	114.7	114.5	102.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.6	16.5	4.3	22.8	5.5	107.1	114.7	114.5	102.2
Queue Length 50th (ft)	12	263	1	1036	187	23	263	256	13
Queue Length 95th (ft)	32	371	m5	1411	306	54	361	354	37
Internal Link Dist (ft)		351		17		127		86	36
Turn Bay Length (ft)	260								
Base Capacity (vph)	165	3480	362	2394	1117	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	0.20	0.34	0.05	0.79	0.42	0.21	0.72	0.71	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	0.98		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	1550		1700		1665
Flt Permitted	0.04	1.00				0.20	1.00	1.00		0.98		0.95
Satd. Flow (perm)	78	4984				365	3505	1550		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)	33	1182	3	2	10	8	1888	468	7	1	8	316
RTOR Reduction (vph)	0	0	0	0	0	0	0	66	0	0	0	0
Lane Group Flow (vph)	33	1187	0	0	0	18	1888	402	0	16	0	177
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)	147.5	141.7				143.9	139.9	139.9		5.4		28.0
Effective Green, g (s)	151.5	143.7				147.9	141.9	141.9		7.4		30.0
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)	113	3255				282	2260	999		57		227
v/s Ratio Prot	c0.01	0.24				0.00	c0.54			c0.01		c0.11
v/s Ratio Perm	0.19					0.04		0.26				
v/c Ratio	0.29	0.36				0.06	0.84	0.40		0.28		0.78
Uniform Delay, d1	33.6	17.4				12.6	30.1	18.7		103.7		91.8
Progression Factor	1.00	1.00				0.34	0.70	0.39		1.00		1.00
Incremental Delay, d2	1.4	0.3				0.1	3.5	1.1		2.7		17.8
Delay (s)	35.0	17.7				4.3	24.5	8.5		106.4		109.6
Level of Service	D	B				A	C	A		F		F
Approach Delay (s)		18.2					21.2			106.4		
Approach LOS		B					C			F		

Intersection Summary			
HCM 2000 Control Delay	28.6	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	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)	1639				1722	
Flt Permitted	0.96				0.97	
Satd. Flow (perm)	1639				1722	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	1	3	30	5	1	3
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	173	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)	28.0				4.0	
Effective Green, g (s)	30.0				6.0	
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)	223				46	
v/s Ratio Prot	0.11				c0.01	
v/s Ratio Perm						
v/c Ratio	0.78				0.20	
Uniform Delay, d1	91.8				104.6	
Progression Factor	1.00				1.00	
Incremental Delay, d2	17.8				4.3	
Delay (s)	109.6				109.0	
Level of Service	F				F	
Approach Delay (s)	109.6				109.0	
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	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	1580	5	0	2467	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)	97			1041		
pX, platoon unblocked			0.89		0.94	0.89
vC, conflicting volume			1585		2199	529
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1233		1107	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 %			100		100	100
cM capacity (veh/h)			500		192	899

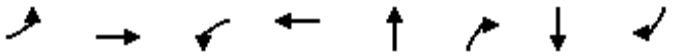
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	632	632	321	617	617	617	617	1
Volume Left	0	0	0	0	0	0	0	0
Volume Right	0	0	5	0	0	0	0	1
cSH	1700	1700	1700	1700	1700	1700	1700	899
Volume to Capacity	0.37	0.37	0.19	0.36	0.36	0.36	0.36	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0
Lane LOS								A
Approach Delay (s)	0.0			0.0				9.0
Approach LOS								A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	36.0%	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	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	1471	5	14	2293	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)	466			672		
pX, platoon unblocked			0.90		0.90	0.90
vC, conflicting volume			1476		2266	493
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1129		1257	33
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)			551		144	926

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	588	588	299	14	764	764	764	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	551	1700	1700	1700	240
Volume to Capacity	0.35	0.35	0.18	0.03	0.45	0.45	0.45	0.09
Queue Length 95th (ft)	0	0	0	2	0	0	0	7
Control Delay (s)	0.0	0.0	0.0	11.7	0.0	0.0	0.0	21.4
Lane LOS				B				C
Approach Delay (s)	0.0			0.1				21.4
Approach LOS								C

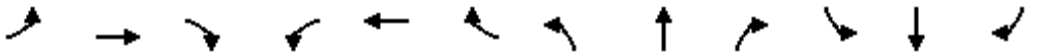
Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		



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	0.37	0.21	0.15	0.25
Control Delay	117.2	2.6	142.8	1.8	103.4	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	117.2	2.6	142.8	1.9	103.4	20.1	93.5	23.8
Queue Length 50th (ft)	72	65	6	24	57	0	22	0
Queue Length 95th (ft)	m115	226	m14	35	100	36	51	44
Internal Link Dist (ft)		592		165	59		97	
Turn Bay Length (ft)	280		185			50		50
Base Capacity (vph)	234	4434	212	4123	287	369	300	365
Starvation Cap Reductn	0	0	0	228	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		1400	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	187.1		1.5	176.7			13.9	13.9		13.9	13.9
Effective Green, g (s)	13.6	189.1		3.5	178.7			15.9	15.9		15.9	15.9
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	4284		28	4088			96	114		101	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			97.6	94.8		95.8	94.8
Progression Factor	1.06	0.79		1.39	0.18			1.00	1.00		1.00	1.00
Incremental Delay, d2	2.7	0.2		2.1	0.5			6.0	0.2		0.7	0.1
Delay (s)	108.6	2.6		150.1	1.7			103.6	95.0		96.5	94.9
Level of Service	F	A		F	A			F	F		F	F
Approach Delay (s)		6.2			1.9			99.7			95.4	
Approach LOS		A			A			F			F	

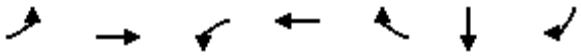
Intersection Summary			
HCM 2000 Control Delay	6.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	220.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	59.5%	ICU Level of Service	B
Analysis Period (min)	15		

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					2	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	245			839		
pX, platoon unblocked			0.95		0.86	0.95
vC, conflicting volume			1464		2198	490
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1291		1408	262
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)			503		112	696

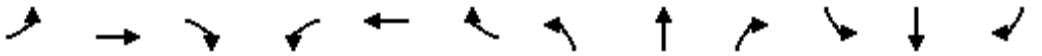
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	583	583	296	736	736	736	1
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	4	0	0	0	1
cSH	1700	1700	1700	1700	1700	1700	696
Volume to Capacity	0.34	0.34	0.17	0.43	0.43	0.43	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	10.2
Lane LOS							B
Approach Delay (s)	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	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	115.1	3.1	104.5	13.5	0.1	113.1	17.5
Queue Length 50th (ft)	187	76	9	409	0	121	0
Queue Length 95th (ft)	279	154	29	555	0	183	65
Internal Link Dist (ft)		759		717		420	
Turn Bay Length (ft)	450		80		145		300
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



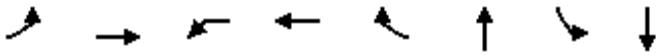
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	1215	0	6	1883	108	0	0	0	82	0	97
Future Volume (vph)	125	1215	0	6	1883	108	0	0	0	82	0	97
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	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	0.74		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)	106.9	3.3		110.6	12.5	0.1					103.8	90.3
Level of Service	F	A		F	B	A					F	F
Approach Delay (s)		13.0			12.2			0.0			96.5	
Approach LOS		B			B			A			F	

Intersection Summary			
HCM 2000 Control Delay	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

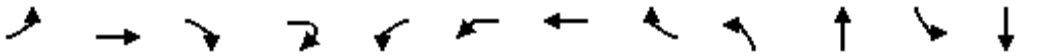
APPENDIX G

Total Future Capacity Analysis Worksheets



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	44	2165	8	957	338	6	187	183
v/c Ratio	0.11	0.60	0.06	0.40	0.31	0.08	0.70	0.69
Control Delay	8.3	15.9	15.1	25.5	15.7	88.6	88.0	87.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4
Total Delay	8.3	15.9	15.1	25.5	15.7	88.6	88.4	87.5
Queue Length 50th (ft)	12	357	4	401	149	7	235	230
Queue Length 95th (ft)	35	737	16	527	259	26	307	301
Internal Link Dist (ft)		351		17		127		86
Turn Bay Length (ft)	260							
Base Capacity (vph)	478	3633	153	2387	1094	94	385	384
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	2	0	0	0	0	33	33
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.60	0.05	0.40	0.31	0.06	0.53	0.52

Intersection Summary



Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	38	1878	1	4	1	6	833	294	4	1	307	0
Future Volume (vph)	38	1878	1	4	1	6	833	294	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	0.98		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)	1770	4985				1770	3438	1480		1788	1603	1598
Flt Permitted	0.25	1.00				0.05	1.00	1.00		0.96	0.95	0.96
Satd. Flow (perm)	458	4985				101	3438	1480		1788	1603	1598
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)	44	2159	1	5	1	7	957	338	5	1	353	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	75	0	0	0	0
Lane Group Flow (vph)	44	2165	0	0	0	8	957	263	0	6	187	183
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)	131.9	126.1				125.1	122.7	122.7		1.5	29.7	29.7
Effective Green, g (s)	135.9	128.1				129.1	124.7	124.7		3.5	31.7	31.7
Actuated g/C Ratio	0.72	0.67				0.68	0.66	0.66		0.02	0.17	0.17
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)	381	3360				107	2256	971		32	267	266
v/s Ratio Prot	c0.00	c0.43				0.00	0.28			c0.00	c0.12	0.11
v/s Ratio Perm	0.08					0.05		0.18				
v/c Ratio	0.12	0.64				0.07	0.42	0.27		0.19	0.70	0.69
Uniform Delay, d1	9.4	17.8				14.1	15.6	13.6		91.8	74.7	74.5
Progression Factor	1.00	1.00				1.63	1.72	2.90		1.00	1.00	1.00
Incremental Delay, d2	0.1	1.0				0.3	0.6	0.7		2.8	10.0	9.2
Delay (s)	9.5	18.8				23.3	27.4	40.3		94.7	84.6	83.7
Level of Service	A	B				C	C	D		F	F	F
Approach Delay (s)		18.6					30.7			94.7		84.2
Approach LOS		B					C			F		F

Intersection Summary			
HCM 2000 Control Delay	29.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	26.9
Intersection Capacity Utilization	56.0%	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	0.87	0.87	0.87
Adj. Flow (vph)	1	16	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)			0.0
Approach LOS			A

Intersection Summary

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2195	3	0	1140	0	0
Future Volume (Veh/h)	2195	3	0	1140	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)	2582	4	0	1341	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)	97			1041		
pX, platoon unblocked			0.75		0.75	0.75
vC, conflicting volume			2586		2919	863
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1944		2269	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)			223		26	812

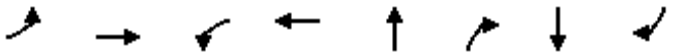
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	1033	1033	520	335	335	335	335	0
Volume Left	0	0	0	0	0	0	0	0
Volume Right	0	0	4	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.61	0.61	0.31	0.20	0.20	0.20	0.20	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS								A
Approach Delay (s)	0.0			0.0				0.0
Approach LOS								A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	45.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2183	12	15	1138	1	1
Future Volume (Veh/h)	2183	12	15	1138	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)	2426	13	17	1264	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)	466			672		
pX, platoon unblocked			0.75		0.78	0.75
vC, conflicting volume			2439		2888	815
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1753		1893	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 %			94		98	100
cM capacity (veh/h)			265		45	813

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	970	970	498	17	421	421	421	2
Volume Left	0	0	0	17	0	0	0	1
Volume Right	0	0	13	0	0	0	0	1
cSH	1700	1700	1700	265	1700	1700	1700	85
Volume to Capacity	0.57	0.57	0.29	0.06	0.25	0.25	0.25	0.02
Queue Length 95th (ft)	0	0	0	5	0	0	0	2
Control Delay (s)	0.0	0.0	0.0	19.5	0.0	0.0	0.0	48.2
Lane LOS				C				E
Approach Delay (s)	0.0			0.3				48.2
Approach LOS								E

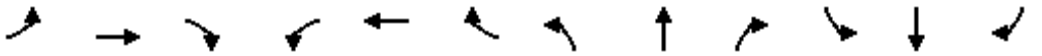
Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	52.4%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	16	2552	22	1264	85	56	2	11
v/c Ratio	0.18	0.64	0.24	0.32	0.54	0.25	0.02	0.05
Control Delay	93.4	17.0	90.5	5.2	91.0	24.0	70.5	0.4
Queue Delay	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	93.4	17.2	90.5	5.2	91.0	24.0	70.5	0.4
Queue Length 50th (ft)	20	524	29	113	103	9	2	0
Queue Length 95th (ft)	m32	1010	61	137	151	51	11	0
Internal Link Dist (ft)		592		165	59		97	
Turn Bay Length (ft)	280		185			50		50
Base Capacity (vph)	224	3978	199	3957	305	380	236	372
Starvation Cap Reductn	0	567	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	0.75	0.11	0.32	0.28	0.15	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	33	19	1073	2	72	0	48	2	0	9
Future Volume (vph)	14	2136	33	19	1073	2	72	0	48	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	4976		1770	4939			1766	1583		1770	1561
Flt Permitted	0.95	1.00		0.95	1.00			0.76	1.00		0.59	1.00
Satd. Flow (perm)	1770	4976		1770	4939			1406	1583		1090	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)	16	2513	39	22	1262	2	85	0	56	2	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	43	0	0	10
Lane Group Flow (vph)	16	2552	0	22	1264	0	0	85	13	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)	5.0	147.6		5.5	147.8			19.4	19.4		19.4	19.4
Effective Green, g (s)	7.0	149.6		7.5	149.8			21.4	21.4		21.4	21.4
Actuated g/C Ratio	0.04	0.79		0.04	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)	65	3917		69	3894			158	178		122	175
v/s Ratio Prot	0.01	c0.51		c0.01	0.26							
v/s Ratio Perm								c0.06	0.01		0.00	0.00
v/c Ratio	0.25	0.65		0.32	0.32			0.54	0.08		0.02	0.01
Uniform Delay, d1	88.9	8.8		88.8	5.7			79.6	75.4		74.9	74.9
Progression Factor	1.04	1.72		0.99	0.83			1.00	1.00		1.00	1.00
Incremental Delay, d2	1.7	0.7		2.6	0.2			6.3	0.4		0.1	0.0
Delay (s)	94.0	15.9		90.2	5.0			85.9	75.8		75.0	74.9
Level of Service	F	B		F	A			F	E		E	E
Approach Delay (s)		16.3			6.4			81.9			74.9	
Approach LOS		B			A			F			E	

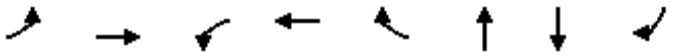
Intersection Summary			
HCM 2000 Control Delay	15.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2186	0	0	1093	0	0
Future Volume (Veh/h)	2186	0	0	1093	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)	2542	0	0	1271	0	0
Pedestrians					2	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	245			839		
pX, platoon unblocked			0.77		0.81	0.77
vC, conflicting volume			2544		2968	849
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1964		2013	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)			225		41	835

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1017	1017	508	424	424	424	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	0.60	0.60	0.30	0.25	0.25	0.25	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS							A
Approach Delay (s)	0.0			0.0			0.0
Approach LOS							A

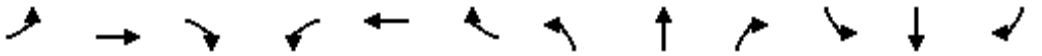
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	45.6%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT	SBR
Lane Group Flow (vph)	52	2430	7	1082	60	3	148	148
v/c Ratio	0.43	0.61	0.09	0.30	0.04	0.01	0.75	0.42
Control Delay	124.3	2.6	89.0	10.2	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	124.3	2.6	89.0	10.2	0.1	0.0	99.9	12.4
Queue Length 50th (ft)	68	106	9	169	0	0	180	0
Queue Length 95th (ft)	m107	21	28	230	0	0	252	64
Internal Link Dist (ft)		759		717		25	420	
Turn Bay Length (ft)	450		80		145			300
Base Capacity (vph)	190	3972	163	3583	1425	402	253	407
Starvation Cap Reductn	0	104	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	0.63	0.04	0.30	0.04	0.01	0.58	0.36

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	2136	3	6	952	53	0	0	3	130	0	130
Future Volume (vph)	46	2136	3	6	952	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		0.86			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	0.88	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	2427	3	7	1082	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	2430	0	7	1082	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	3855		33	3548	1425		231			198	224
v/s Ratio Prot	c0.03	c0.49		0.00	0.22			0.00				
v/s Ratio Perm						0.04					c0.11	0.01
v/c Ratio	0.48	0.63		0.21	0.30	0.04		0.00			0.75	0.09
Uniform Delay, d1	86.2	9.5		91.8	9.2	0.0		69.7			78.0	70.6
Progression Factor	1.38	0.23		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			14.3	0.2
Delay (s)	121.3	2.8		95.0	9.4	0.1		69.7			92.3	70.8
Level of Service	F	A		F	A	A		E			F	E
Approach Delay (s)		5.3			9.5			69.7			81.6	
Approach LOS		A			A			E			F	

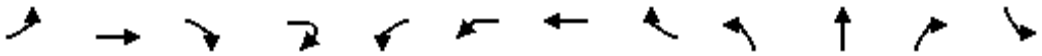
Intersection Summary			
HCM 2000 Control Delay	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	13.2
Intersection Capacity Utilization	63.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT	NEL
Lane Group Flow (vph)	33	1265	18	1918	476	16	189	183	9
v/c Ratio	0.28	0.37	0.06	0.81	0.43	0.21	0.81	0.80	0.11
Control Delay	17.4	17.0	4.8	23.9	5.2	107.1	116.9	115.8	102.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.4	17.0	4.8	23.9	5.2	107.1	116.9	115.8	102.2
Queue Length 50th (ft)	12	288	2	1091	137	23	282	272	13
Queue Length 95th (ft)	32	402	m5	1457	307	54	383	372	37
Internal Link Dist (ft)		351		17		127		86	36
Turn Bay Length (ft)	260								
Base Capacity (vph)	158	3462	338	2381	1112	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	0.21	0.37	0.05	0.81	0.43	0.21	0.77	0.75	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	1109	3	2	9	7	1688	419	6	1	7	297
Future Volume (vph)	29	1109	3	2	9	7	1688	419	6	1	7	297
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	0.98		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	1550		1700		1665
Flt Permitted	0.04	1.00				0.18	1.00	1.00		0.98		0.95
Satd. Flow (perm)	68	4984				330	3505	1550		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)	33	1260	3	2	10	8	1918	476	7	1	8	338
RTOR Reduction (vph)	0	0	0	0	0	0	0	66	0	0	0	0
Lane Group Flow (vph)	33	1265	0	0	0	18	1918	410	0	16	0	189
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)	146.7	140.9				143.1	139.1	139.1		5.4		28.8
Effective Green, g (s)	150.7	142.9				147.1	141.1	141.1		7.4		30.8
Actuated g/C Ratio	0.68	0.65				0.67	0.64	0.64		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)	106	3237				259	2247	994		57		233
v/s Ratio Prot	c0.01	0.25				0.00	c0.55			c0.01		c0.11
v/s Ratio Perm	0.20					0.04		0.26				
v/c Ratio	0.31	0.39				0.07	0.85	0.41		0.28		0.81
Uniform Delay, d1	36.2	18.1				13.1	31.3	19.2		103.7		91.8
Progression Factor	1.00	1.00				0.37	0.71	0.36		1.00		1.00
Incremental Delay, d2	1.7	0.4				0.1	3.9	1.1		2.7		21.1
Delay (s)	37.9	18.5				4.9	26.1	8.0		106.4		112.8
Level of Service	D	B				A	C	A		F		F
Approach Delay (s)		19.0					22.4			106.4		
Approach LOS		B					C			F		

Intersection Summary			
HCM 2000 Control Delay	30.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	220.0	Sum of lost time (s)	26.9
Intersection Capacity Utilization	79.9%	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)	1641				1722	
Flt Permitted	0.96				0.97	
Satd. Flow (perm)	1641				1722	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	1	3	30	5	1	3
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	183	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)	28.8				4.0	
Effective Green, g (s)	30.8				6.0	
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)	229				46	
v/s Ratio Prot	0.11				c0.01	
v/s Ratio Perm						
v/c Ratio	0.80				0.20	
Uniform Delay, d1	91.6				104.6	
Progression Factor	1.00				1.00	
Incremental Delay, d2	19.8				4.3	
Delay (s)	111.4				109.0	
Level of Service	F				F	
Approach Delay (s)	112.1				109.0	
Approach LOS	F				F	

Intersection Summary

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1430	4	0	2131	0	1
Future Volume (Veh/h)	1430	4	0	2131	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)	1682	5	0	2507	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)	97			1041		
pX, platoon unblocked			0.88		0.93	0.88
vC, conflicting volume			1687		2311	563
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1309		1067	34
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)			462		201	910

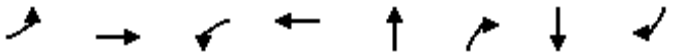
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	673	673	341	627	627	627	627	1
Volume Left	0	0	0	0	0	0	0	0
Volume Right	0	0	5	0	0	0	0	1
cSH	1700	1700	1700	1700	1700	1700	1700	910
Volume to Capacity	0.40	0.40	0.20	0.37	0.37	0.37	0.37	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0
Lane LOS								A
Approach Delay (s)	0.0			0.0				9.0
Approach LOS								A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	37.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1426	5	16	2119	12	9
Future Volume (Veh/h)	1426	5	16	2119	12	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)	1567	5	18	2329	13	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)	466			672		
pX, platoon unblocked			0.89		0.89	0.89
vC, conflicting volume			1572		2382	525
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1195		1253	14
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		91	99
cM capacity (veh/h)			514		141	942

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	627	627	318	18	776	776	776	23
Volume Left	0	0	0	18	0	0	0	13
Volume Right	0	0	5	0	0	0	0	10
cSH	1700	1700	1700	514	1700	1700	1700	223
Volume to Capacity	0.37	0.37	0.19	0.04	0.46	0.46	0.46	0.10
Queue Length 95th (ft)	0	0	0	3	0	0	0	8
Control Delay (s)	0.0	0.0	0.0	12.3	0.0	0.0	0.0	23.0
Lane LOS				B				C
Approach Delay (s)	0.0			0.1				23.0
Approach LOS								C

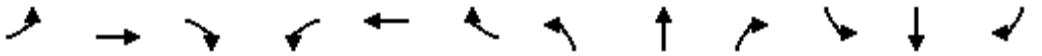
Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	50.9%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	49	1493	41	2181	73	32	14	39
v/c Ratio	0.45	0.38	0.41	0.55	0.54	0.17	0.13	0.21
Control Delay	116.3	6.1	148.7	3.1	108.1	17.2	90.4	22.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	116.3	6.1	148.7	3.1	108.1	17.2	90.4	22.2
Queue Length 50th (ft)	71	225	62	28	103	0	19	0
Queue Length 95th (ft)	m114	291	116	35	163	32	46	44
Internal Link Dist (ft)		592		165	59		97	
Turn Bay Length (ft)	280		185			50		50
Base Capacity (vph)	234	3971	212	3965	298	369	235	365
Starvation Cap Reductn	0	0	0	229	0	0	0	0
Spillback Cap Reductn	0	0	0	212	0	0	0	1
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.38	0.19	0.58	0.24	0.09	0.06	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	91	38	2024	5	68	0	30	13	0	36
Future Volume (vph)	46	1297	91	38	2024	5	68	0	30	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	4936		1770	5034			1766	1583		1770	1561
Flt Permitted	0.95	1.00		0.95	1.00			0.75	1.00		0.59	1.00
Satd. Flow (perm)	1770	4936		1770	5034			1391	1583		1100	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	98	41	2176	5	73	0	32	14	0	39
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	29	0	0	35
Lane Group Flow (vph)	49	1491	0	41	2181	0	0	73	3	0	14	4
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	173.8		9.3	171.2			19.4	19.4		19.4	19.4
Effective Green, g (s)	13.6	175.8		11.3	173.2			21.4	21.4		21.4	21.4
Actuated g/C Ratio	0.06	0.80		0.05	0.79			0.10	0.10		0.10	0.10
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	3944		90	3963			135	153		107	151
v/s Ratio Prot	c0.03	c0.30		0.02	c0.43							
v/s Ratio Perm								c0.05	0.00		0.01	0.00
v/c Ratio	0.45	0.38		0.46	0.55			0.54	0.02		0.13	0.03
Uniform Delay, d1	99.6	6.4		101.4	8.8			94.6	89.8		90.8	89.9
Progression Factor	1.06	0.84		1.39	0.27			1.00	1.00		1.00	1.00
Incremental Delay, d2	2.7	0.3		3.2	0.5			7.6	0.1		0.6	0.1
Delay (s)	107.8	5.6		144.3	2.9			102.2	89.9		91.4	89.9
Level of Service	F	A		F	A			F	F		F	F
Approach Delay (s)		8.9			5.5			98.5			90.3	
Approach LOS		A			A			F			F	

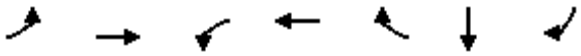
Intersection Summary			
HCM 2000 Control Delay	10.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	220.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	59.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1339	4	0	2067	0	1
Future Volume (Veh/h)	1339	4	0	2067	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)	1455	4	0	2247	0	1
Pedestrians					2	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	245			839		
pX, platoon unblocked			0.92		0.87	0.92
vC, conflicting volume			1461		2208	489
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1181		1218	119
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)			537		151	832

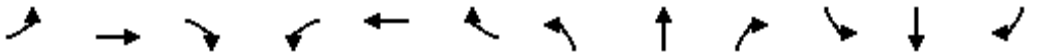
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	582	582	295	749	749	749	1
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	4	0	0	0	1
cSH	1700	1700	1700	1700	1700	1700	832
Volume to Capacity	0.34	0.34	0.17	0.44	0.44	0.44	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3
Lane LOS							A
Approach Delay (s)	0.0			0.0			9.3
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	1251	6	1979	111	85	100
v/c Ratio	0.71	0.29	0.09	0.53	0.07	0.62	0.41
Control Delay	110.7	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	110.7	3.1	104.5	13.7	0.1	113.1	17.5
Queue Length 50th (ft)	187	75	9	423	0	121	0
Queue Length 95th (ft)	280	156	29	572	0	183	65
Internal Link Dist (ft)		759		717		420	
Turn Bay Length (ft)	450		80		145		300
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	0.53	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	1213	0	6	1920	108	0	0	0	82	0	97
Future Volume (vph)	125	1213	0	6	1920	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	1251	0	6	1979	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	1251	0	6	1979	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	0.95	0.75		1.00	1.00	1.00					1.00	1.00
Incremental Delay, d2	11.9	0.2		3.8	0.5	0.1					8.4	0.2
Delay (s)	102.7	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)		12.6			12.3			0.0			96.5	
Approach LOS		B			B			A			F	

Intersection Summary			
HCM 2000 Control Delay	16.7	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