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July 3, 2023

Community Dev & Planning

Technical Appendix

City Centre West

City of Fairfax, Virginia

GOROVE **SLADE**
Transportation Planners and Engineers

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A. Scoping Document

PRE-SCOPE OF WORK MEETING FORM

Information on the Project Traffic Impact Analysis Base Assumptions

The applicant is responsible for entering the relevant information and submitting the form to VDOT and the locality no less than three (3) business days prior to the meeting. If a form is not received by this deadline, the scope of work meeting may be postponed.

Contact Information

Consultant Name:	Maria Lashinger, Gorove Slade
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E-mail:	maria.lashinger@goroveslade.com
Developer/Owner Name:	Christopher Smith, Ox Hill Realty
Tele:	703-946-5590
E-mail:	csmith@oxhillco.com

Project Information

Project Name:	City Center West		
Project Location: (Attach regional and site specific location map) PLEASE SEE FIGURE 1	The project is located south of Main Street, west of West Street, and east of Judicial Drive in the City of Fairfax, VA. The site is located in the Old Town Fairfax Activity Center and the Old Town Fairfax Transition Overlay District.		
Project Description: (Including details on the land use, acreage, phasing, access location, etc. Attach additional sheet if necessary)	This application is for the proposed City Center West development. The 1.78-acre site consists of three (3) parcels (Parcel IDs 57-4 ((02)) 71, 72, 76). The existing site is currently occupied by a 11,340 SF office, 3,721 SF bank, and 4,408 SF restaurant that are to be removed. The proposed development includes 88 multifamily units, 67,315 SF of general office, 10,835 SF of medical office, 4,634 SF of retail, a 2,702 SF bank, and a 4,634 SF restaurant. The current zoning for the site is CR (Commercial Retail) and CG (Commercial General). Site access is currently provided via four entrances on Main Street. Site access will continue to be provided via Main Street, as well as a new connection via West Street.		
Locality/County:	City of Fairfax, VA		
Proposed Use: (Check all that apply; attach additional pages as necessary)	Residential ☐	Commercial ☐	Mixed Use ☒ Other ☐
	Residential # of Units: Commercial Use Sq Ft: ITE LU Code(s):		Mixed Use: • 88 multifamily units (ITE 221) • 67,315 SF general office (ITE 710) • 10,835 SF medical office (ITE 720) • 4,634 SF retail (ITE 820) • 2,702 SF bank (ITE 912) • 4,634 SF restaurant (ITE 932)

It is important for the applicant to provide sufficient information to county and VDOT staff so that questions regarding geographic scope, alternate methodology, or other issues can be answered at the scoping meeting.

Traffic Impact Analysis Assumptions			
Study Period	Existing Year: 2022	Build-out Year: 2025	Design Year: N/A
Study Area Boundaries (Attach map) PLEASE SEE FIGURE 2	North: Main Street	South: Page Avenue (Fairfax County)	
	East: West Street	West: Judicial Drive	
External Factors That Could Affect Project (Planned road improvements, other nearby developments)	• South Street Extension (not anticipated to be in place by 2025) • Main Street Streetscape Improvements • Chain Bridge Road at Rust Hill Place Sidewalk Improvements (completed) • Fairfax County Judicial Complex – Phase 1		
Consistency With Comprehensive Plan (Land use, transportation Plan)	The site is located in the Old Town Fairfax Activity Center. The Activity Center Place Type applies to locations in the City where pedestrian-oriented, mixed-use development is strongly encouraged.		
Available Traffic Data (Historical, forecasts)	• VDOT AADT Data • Historical Turning Movement Counts (September 2019)		
Trip Distribution (%) (Attach sketch) PLEASE SEE FIGURE 3	Please refer to Figure 3.		
Annual Vehicle Trip Growth Rate: PLEASE SEE TABLE 1	1.0%	Peak Period for Study (check all that apply)	☒ AM ☒ PM ☐ SAT
Study Intersections and/or Road Segments (Attach additional sheets as necessary) PLEASE SEE FIGURE 2	1. Main Street and Judicial Drive 2. Main Street and Funeral Home Driveway West/Mosby Tower Driveway West 3. Main Street and Funeral Home Driveway East 4. Main Street and 10555 Main Street Driveway West 5. Main Street and 10555 Main Street Driveway East 6. Main Street and 10533 Main Street Driveway/Mosby Tower Driveway East 7. Main Street and 10515 Main Street Driveway 8. Main Street and 10501 Main Street Driveway West/Church Driveways 9. Main Street and 10501 Main Street Driveway East 10. Main Street and West Street 11. Future E/W Road and Site Entrance 1 (future) 12. Future E/W Road and Site Entrance 2/Massey Drive Extended (future) 13. Future E/W Road and West Street (future)		
Trip Adjustment Factors PLEASE SEE TABLE 3	Internal allowance: ☒ Yes ☐ No		Pass-by allowance: ☒ Yes ☐ No

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Software Methodology	☒ Synchro ☐ HCS (v.2000/+) ☐ aaSIDRA ☐ CORSIM ☐ VISSIM
Traffic Signal Proposed or Affected (Analysis software to be used, progression speed, cycle length)	From list of study intersections above: 1. Main Street and Judicial Drive 10. Main Street and West Street
Improvement(s) Assumed or to be Considered	• South Street Extension (not anticipated to be in place by 2025) • Main Street Streetscape Improvements • Chain Bridge Road at Rust Hill Place Sidewalk Improvements (completed)
Background Traffic Studies Considered	• Fairfax County Judicial Complex – Phase 1
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 _____

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NOTES on ASSUMPTIONS:

1. Synchro 10.3, HCM 2000 will be used for intersection analysis.
2. A vehicle classification count will be conducted to verify heavy vehicle percentages. The vehicle classification count will include pedestrian and bicycle counts.
3. Peak hour factors will be consistent with VDOT guidelines (VDOT TOSAM v2.0)
 - a. Existing peak hour factors by overall intersection (minimum of 0.85) will be used for existing analysis
 - b. For future year analysis, the PHF will be 0.92 or existing, whichever is higher
4. Analysis procedures consistent with the VDOT Traffic Operations And Safety Analysis Manual Version 2.0 will be used unless otherwise noted.
5. Signal timings will be obtained from the City of Fairfax and/or VDOT.
6. The TIA will include those items described in the "VDOT Checklist: Evaluation of the Submitted VDOT Traffic Impact Analysis" from the *Updated Traffic Impact Analysis Regulations Administrative Guidelines*, December 2018.
7. LOS D is considered to be an acceptable design standard for non-NHS roadways.
8. The site's traffic impact will be mitigated based on Synchro results. SimTraffic results will be provided for informational purposes only.
9. Transportation Demand Management (TDM) discussion will be provided.
10. The study area will evaluate LOS/queue/delay as far east as West Street/Main Street and propose potential mitigation, if required, to the same. City staff may further evaluate the impact to the full downtown grid and propose a solution to ultimately be implemented by the City.
11. Turning movement counts were collected at the study intersections in May 2022 in order to provide a comparison to the 2019 counts. The data shows that on average, 2022 mainline volumes along Main Street are within 10% of pre-pandemic volumes. Hence, 2022 traffic volumes will be used for analysis. The comparison is shown in Table 4.

It is important for the applicant to provide sufficient information to county and VDOT staff so that questions regarding geographic scope, alternate methodology, or other issues can be answered at the scoping meeting.



AGREED: _____
Applicant or Consultant

DATE: 06/09/2022

PRINT NAME: Maria Lashinger, P.E., PTOE, Gorove Slade Associates, Inc.
Applicant or Consultant

SIGNED: Curt McCullough
City of Fairfax

DATE: 8/31/22

PRINT NAME: Curt McCullough
City of Fairfax

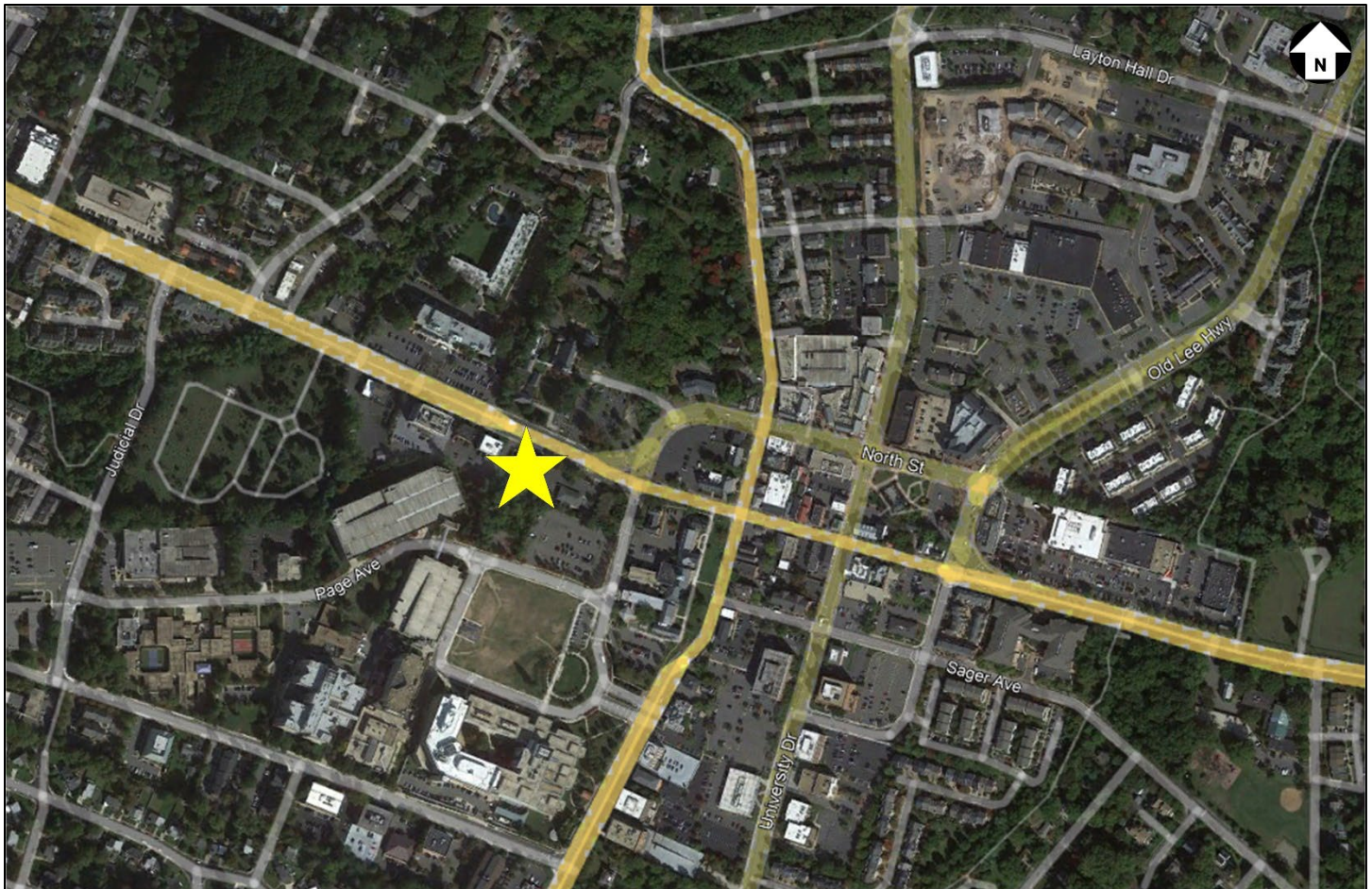
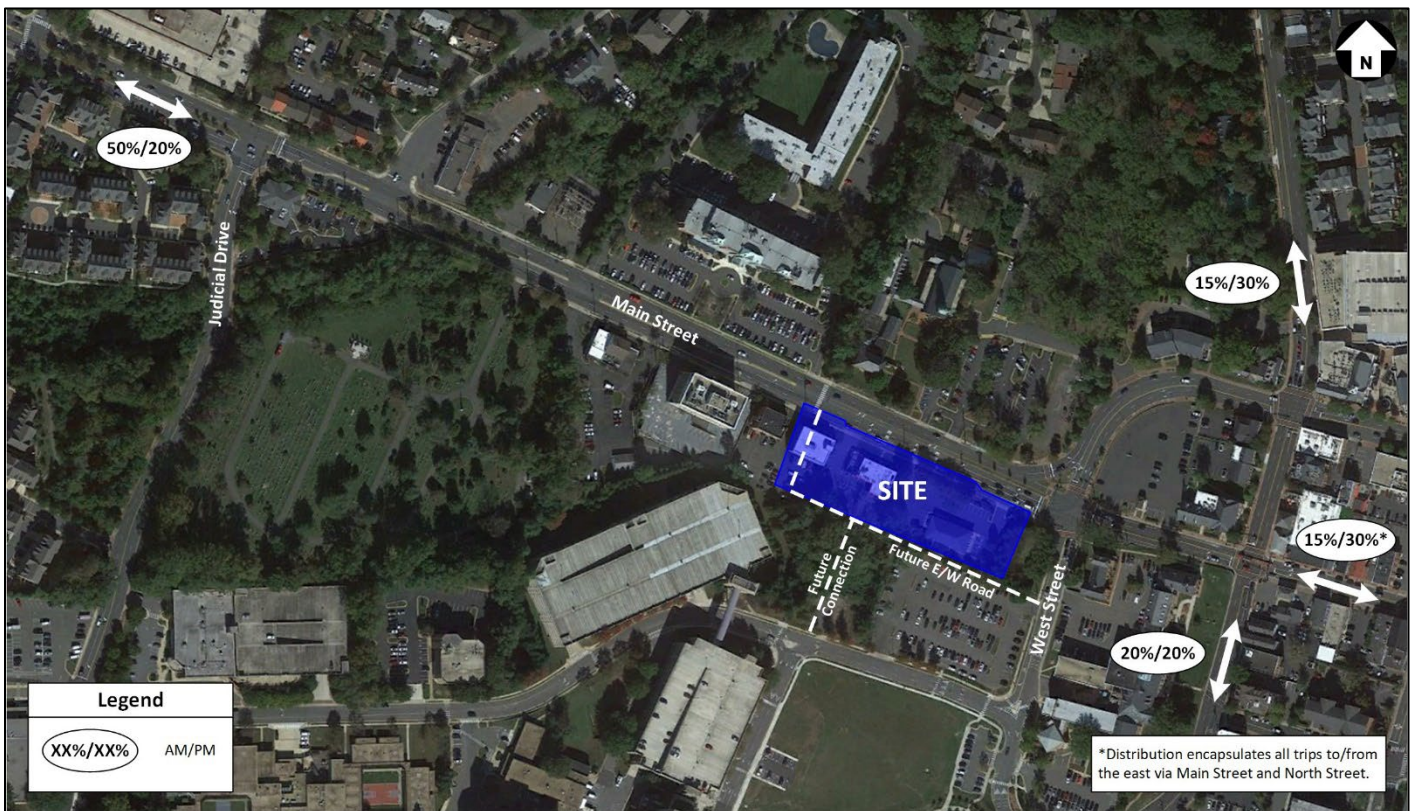
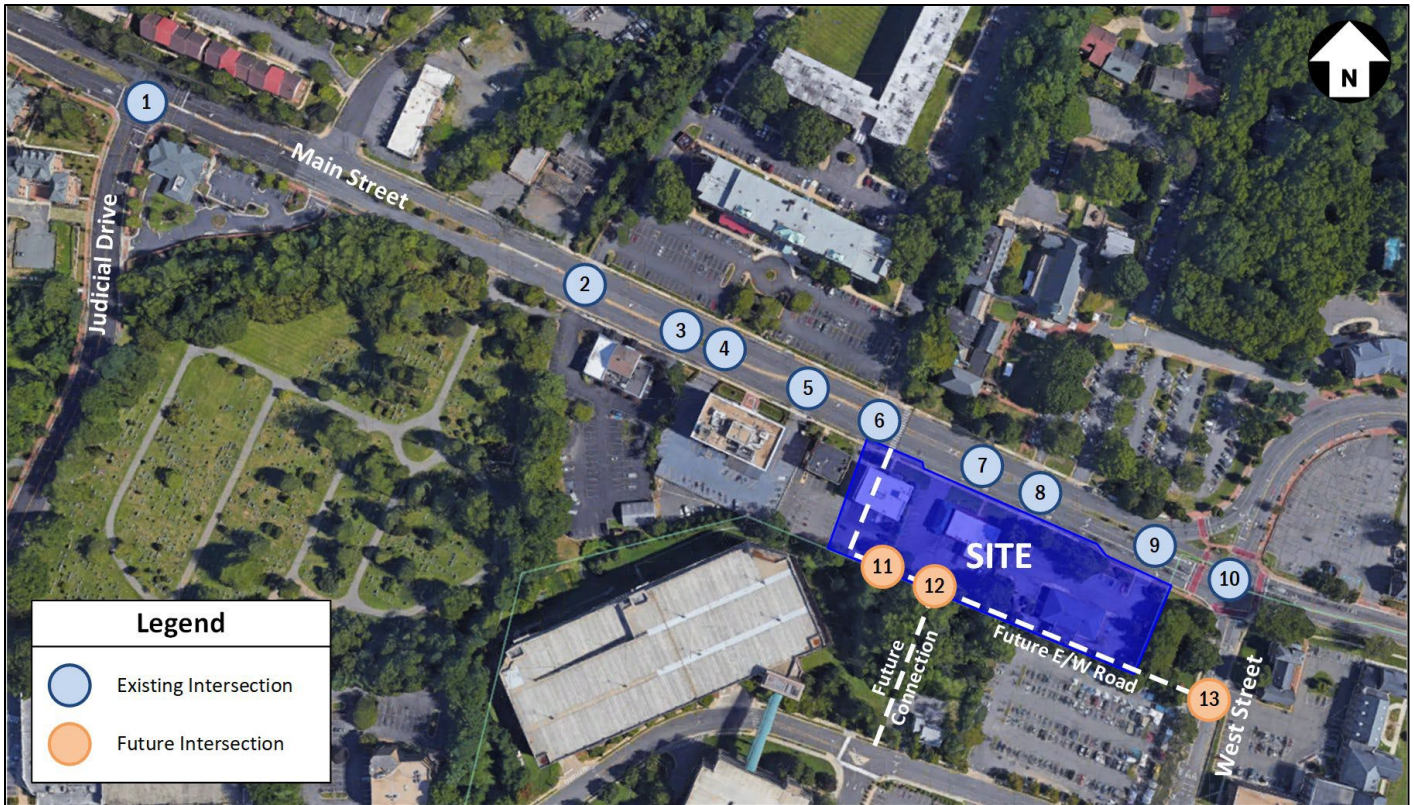


Figure 1: Regional Map

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Table 1: Historic AADT Growth

Route	From	To	AADT					Annual % Change (2015-2019)
			2015	2016	2017	2018	2019	
Main Street	US 50	West St	35,000	35,000	36,000	38,000	38,000	2.1%

Source: VDOT Traffic Data (<http://www.virginiadot.org/info/ct-trafficcounts.asp>)

Table 2: Trip Generation - Without Reductions

ITE Land Use Code <i>Trip Generation, 10th Ed.</i>				----- Weekday -----						
				AM Peak Hour			PM Peak Hour			Daily
				<i>In</i>	<i>Out</i>	<i>Total</i>	<i>In</i>	<i>Out</i>	<i>Total</i>	<i>Total</i>
By-Right (CR and CG)										
Office	710	General Office Building	339,398 SF	298	48	346	58	306	364	3,472
Approved Trips				298	48	346	58	306	364	3,472
Existing Development to Be Removed										
Office	710	General Office Building	11,340 SF	32	5	37	2	12	14	128
Services	912	Drive-in Bank	3,721 SF	20	15	35	38	38	76	425
Services	932	High Turnover (Sit-Down) Restaurant	4,408 SF	24	20	44	27	16	43	494
Existing Trips to Be Removed				76	40	116	67	66	133	1,047
Proposed Development										
Residential	221	Multifamily (Mid-Rise) (Urban/Suburban)	88 DU	8	22	30	24	15	39	478
Office	710	General Office Building	67,315 SF	77	13	90	12	66	78	723
Office	720	Medical-Dental Offices	10,835 SF	24	7	31	11	28	39	329
Retail	820	Shopping Center	4,634 SF	95	59	154	27	29	56	745
Services	912	Drive-in Bank	2,702 SF	15	11	26	28	27	55	341
Services	932	High Turnover (Sit-Down) Restaurant	4,634 SF	25	21	46	28	17	45	520
Proposed Development Site Trips				244	133	377	130	182	312	3,136
Net New Trips (Proposed - Existing)				168	93	261	63	116	179	2,089

Note: Bank includes 2,702 SF of drive-in bank space (LUC 912) and 12,722 SF of office space (LUC 710).

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Table 3: Trip Generation - With Reductions

ITE Land Use Code <i>Trip Generation, 10th Ed.</i>				----- Weekday -----						
				AM Peak Hour			PM Peak Hour			Daily
				<i>In</i>	<i>Out</i>	<i>Total</i>	<i>In</i>	<i>Out</i>	<i>Total</i>	<i>Total</i>
Existing Development to Be Removed										
Office	710	General Office Building	11,340 SF	32	5	37	2	12	14	128
Services	912	Drive-in Bank	3,721 SF	20	15	35	38	38	76	425
Services	932	High Turnover (Sit-Down) Restaurant	4,408 SF	24	20	44	27	16	43	494
Existing Trips to Be Removed				76	40	116	67	66	133	1,047
Proposed Development										
Residential	221	Multifamily (Mid-Rise) (Urban/Suburban)	88 DU	8	22	30	24	15	39	478
		Internal Capture Residential - Office ²	(1)	0	-1	-1	-1	-1	-2	-24
		Internal Capture Residential - Retail ²	(2)	0	-1	-1	-2	-2	-4	-72
		Residential With Internal Reductions		8	20	28	21	12	33	382
		Mode Split/TDM Reduction	5%	0	-1	-1	-1	-1	-2	-19
		Residential Subtotal		8	19	27	20	11	31	363
Office	710	General Office Building	67,315 SF	77	13	90	12	66	78	723
		Internal Capture Office - Residential ²	(1)	-1	0	-1	-1	-1	-2	-24
		Internal Capture Office - Retail ²	(3)	-3	-1	-4	-1	-1	-2	-36
		Office With Internal Reductions		73	12	85	10	64	74	663
		Mode Split/TDM Reduction	5%	-4	-1	-4	-1	-3	-4	-33
		Office Subtotal		69	11	81	9	61	70	630
Office	720	Medical-Dental Offices	10,835 SF	24	7	31	11	28	39	329
Retail	820	Shopping Center	4,634 SF	95	59	154	27	29	56	745
		Internal Capture Retail - Residential ²	(2)	-1	0	-1	-2	-2	-4	-72
		Internal Capture Retail - Office ²	(3)	-1	-3	-4	-1	-1	-2	-36
		Retail With Internal Reductions		93	56	149	24	26	50	637
		Pass-By Reduction ¹ 25%/34%/25%		-23	-14	-37	-8	-9	-17	-159
		Retail Subtotal		70	42	112	16	17	33	478
Services	912	Drive-in Bank	2,702 SF	15	11	26	28	27	55	341
Services	932	High Turnover (Sit-Down) Restaurant	4,634 SF	25	21	46	28	17	45	520
Proposed Development Site Trips				211	111	323	112	161	273	2,661
Net New Trips (Proposed - Existing)				135	71	207	45	95	140	1,614

Note: Bank includes 2,702 SF of drive-in bank space (LUC 912) and 12,722 SF of office space (LUC 710).

¹ The pass by reduction for Shopping Center is based on the ITE Trip Generation methodology, as provided in the Trip Generation Handbook, 3rd Edition. The average rate for Shopping Centers is 34% for the PM Peak. For all other time periods, the default pass by rate is 25%.

² The internal reduction is based on the VDOT Updated Administrative Guidelines for the Traffic Impact Analysis Regulations:

(1) residential / office - smaller of 5% of residential trips or 5% of office trips

(2) residential / retail - smaller of X% of residential trips or X% of retail trips; AM: X = 5%, PM: X = 10%, Daily: X = 15%

(3) office / retail - smaller of 5% of office trips or 5% of retail trips

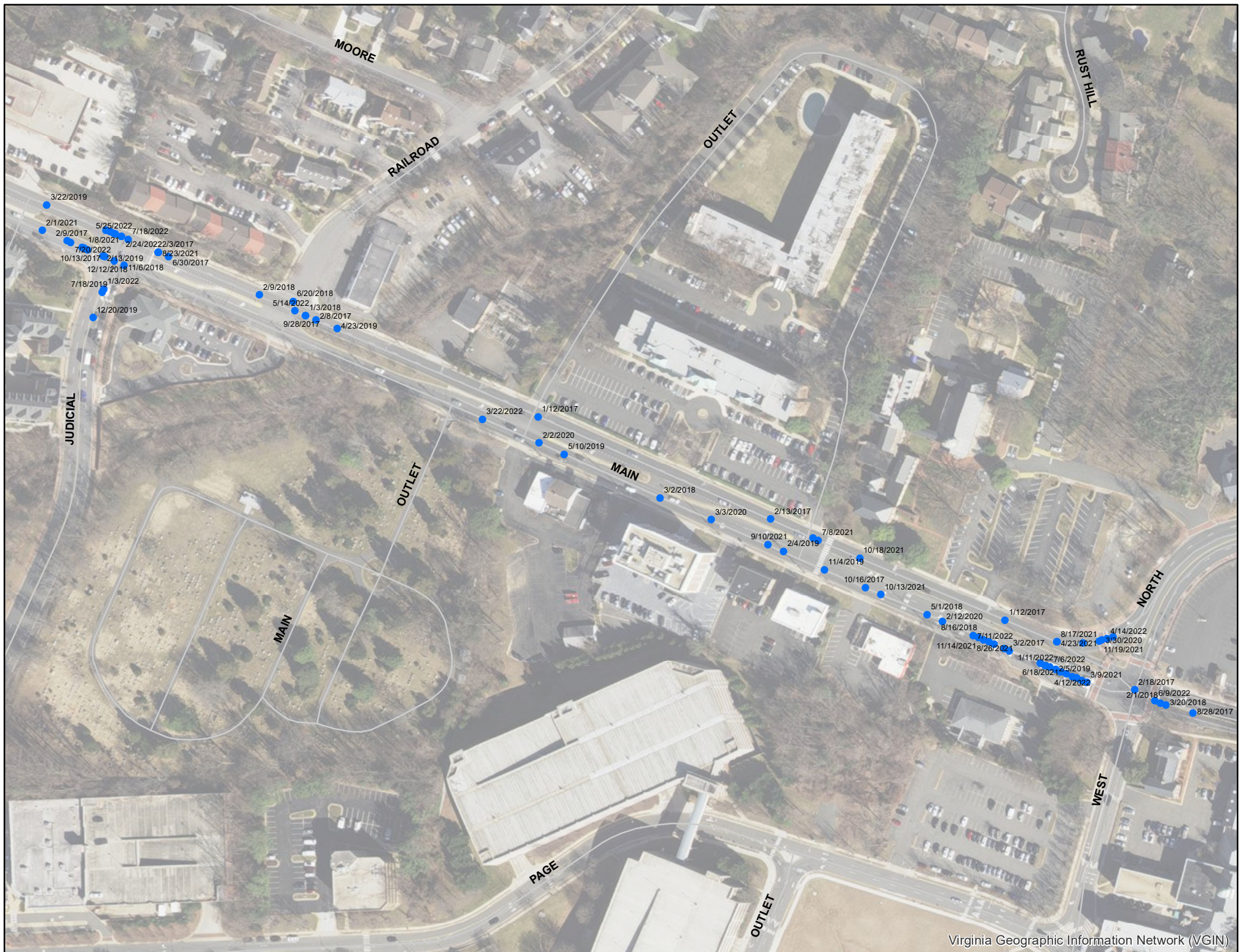
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Table 4: 2019 to 2022 Traffic Volume Comparison

Mainline Volumes Along Main Street (vph)					Factor (2022 to Pre-pandemic)		
Location	2019		2022				
	EB	WB	EB	WB	EB	WB	Total
AM Peak Hour							
Judicial Drive	1337	955	1145	858	1.17	1.11	1.14
Main Street	447	174	404	142	1.11	1.23	1.17
10523 Main Street Entrance	1346	977	1163	873	1.16	1.12	1.14
AM Peak Hour Average					1.14	1.15	1.15
PM Peak Hour							
Judicial Drive	941	1378	842	1275	1.12	1.08	1.10
Main Street	315	231	325	236	0.97	0.98	0.97
10523 Main Street Entrance	993	1368	893	1281	1.11	1.07	1.09
PM Peak Hour Average					1.07	1.04	1.05
Total Average							1.10

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B. Crash Data



Crash Date	Collision Type	KABCO Severity Code	Secondary Location	Route Or Street Name	Crash Severity
1/12/2017	1. Rear End	Possible Injury (C)	JUDICIAL DR	MAIN ST	injury crash
1/12/2017	1. Rear End	No Injury (O)	NORTH ST	MAIN ST	property damage crash
2/3/2017	1. Rear End	No Injury (O)	MAIN ST	JUDICIAL DR	property damage crash
2/9/2017	1. Rear End	No Injury (O)	JUDICIAL DR	MAIN ST	property damage crash
2/13/2017	1. Rear End	Possible Injury (C)	WEST ST	MAIN ST	injury crash
2/18/2017	1. Rear End	No Injury (O)	WEST ST	MAIN ST	property damage crash
3/2/2017	1. Rear End	Possible Injury (C)	NORTH ST	MAIN ST	injury crash
3/27/2017	9. Fixed Object - Off Road	No Injury (O)	JUDICIAL DR	MAIN ST	property damage crash
4/14/2017	2. Angle	No Injury (O)	North St.	10480 MAIN ST	property damage crash
5/20/2017	4. Sideswipe - Same Direction	No Injury (O)	MAIN ST	NORTH ST	property damage crash
6/30/2017	1. Rear End	No Injury (O)	JUDICIAL DR	MAIN ST	property damage crash
8/28/2017	1. Rear End	Possible Injury (C)	NORTH STREET	MAIN ST	injury crash
9/21/2017	1. Rear End	No Injury (O)	YORKTOWN DR	MAIN ST	property damage crash
10/7/2017	1. Rear End	No Injury (O)		MAIN ST	property damage crash
10/10/2017	9. Fixed Object - Off Road	Non-Incapacitating Injury (B)	NORTH ST	10520 MAIN ST	injury crash

Crash Date	Collision Type	KABCO Severity Code	Secondary Location	Route Or Street Name	Crash Severity
10/13/2017	2. Angle	No Injury (O)	JUDICIAL DR	MAIN ST	property damage crash
10/16/2017	1. Rear End	No Injury (O)	NORTH ST	MAIN ST	property damage crash
10/26/2017	2. Angle	No Injury (O)		10560 MAIN ST	property damage crash
12/14/2017	9. Fixed Object - Off Road	Possible Injury (C)	JUDICIAL DR	MAIN ST	injury crash
2/1/2018	15. Backed Into	Possible Injury (C)	NORTH ST	MAIN ST	injury crash
3/2/2018	10. Deer	No Injury (O)		10565 MAIN ST	property damage crash
3/20/2018	1. Rear End	No Injury (O)	NORTH STREET	MAIN ST	property damage crash
4/10/2018	9. Fixed Object - Off Road	No Injury (O)	West ST	MAIN ST	property damage crash
5/1/2018	1. Rear End	No Injury (O)	West Street	MAIN ST	property damage crash
8/16/2018	1. Rear End	No Injury (O)	WEST ST	MAIN ST	property damage crash
10/9/2018	4. Sideswipe - Same Direction	No Injury (O)	WEST STREET	MAIN STREET	property damage crash
10/15/2018	1. Rear End	Possible Injury (C)	JUDICIAL DRIVE	MAIN STREET	injury crash
11/6/2018	2. Angle	No Injury (O)	JUDICIAL DRIVE	MAIN STREET	property damage crash
12/12/2018	2. Angle	Non-Incapacitating Injury (B)	JUDICIAL DR	MAIN ST	injury crash
12/12/2018	1. Rear End	No Injury (O)	WEST ST	MAIN ST	property damage crash

Crash Date	Collision Type	KABCO Severity Code	Secondary Location	Route Or Street Name	Crash Severity
2/4/2019	1. Rear End	Non-Incapacitating Injury (B)	NORTH STREET	MAIN STREET	injury crash
2/5/2019	4. Sideswipe - Same Direction	No Injury (O)	WEST STREET	MAIN STREET	property damage crash
2/13/2019	1. Rear End	No Injury (O)	JUDICIAL DR.	MAIN ST.	property damage crash
3/22/2019	1. Rear End	No Injury (O)	JUDICIAL DR	MAIN ST	property damage crash
5/10/2019	1. Rear End	No Injury (O)	WEST DR	10565 MAIN ST	property damage crash
7/18/2019	1. Rear End	No Injury (O)	ROUTE 236/MAIN ST	JUDICIAL DRIVE	property damage crash
7/25/2019	1. Rear End	No Injury (O)	WEST ST	MAIN ST	property damage crash
11/4/2019	1. Rear End	No Injury (O)	WEST DR	10523 MAIN ST	property damage crash
12/4/2019	2. Angle	No Injury (O)	WEST ST	MAIN ST	property damage crash
12/20/2019	4. Sideswipe - Same Direction	No Injury (O)	MAIN STREET	JUDICIAL DRIVE	property damage crash

C. Existing Turning Movement Counts

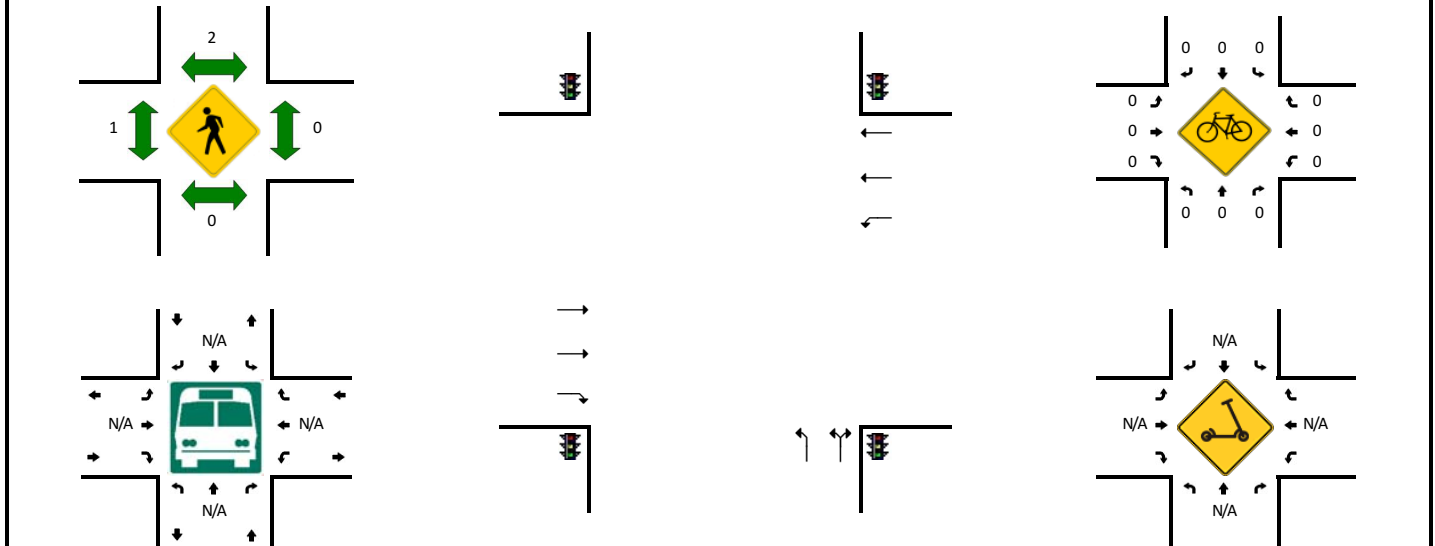
LOCATION: Judicial Dr -- Main St

CITY/STATE: Fairfax, VA

QC JOB #: 15778401

DATE: Thu, May 5 2022

Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

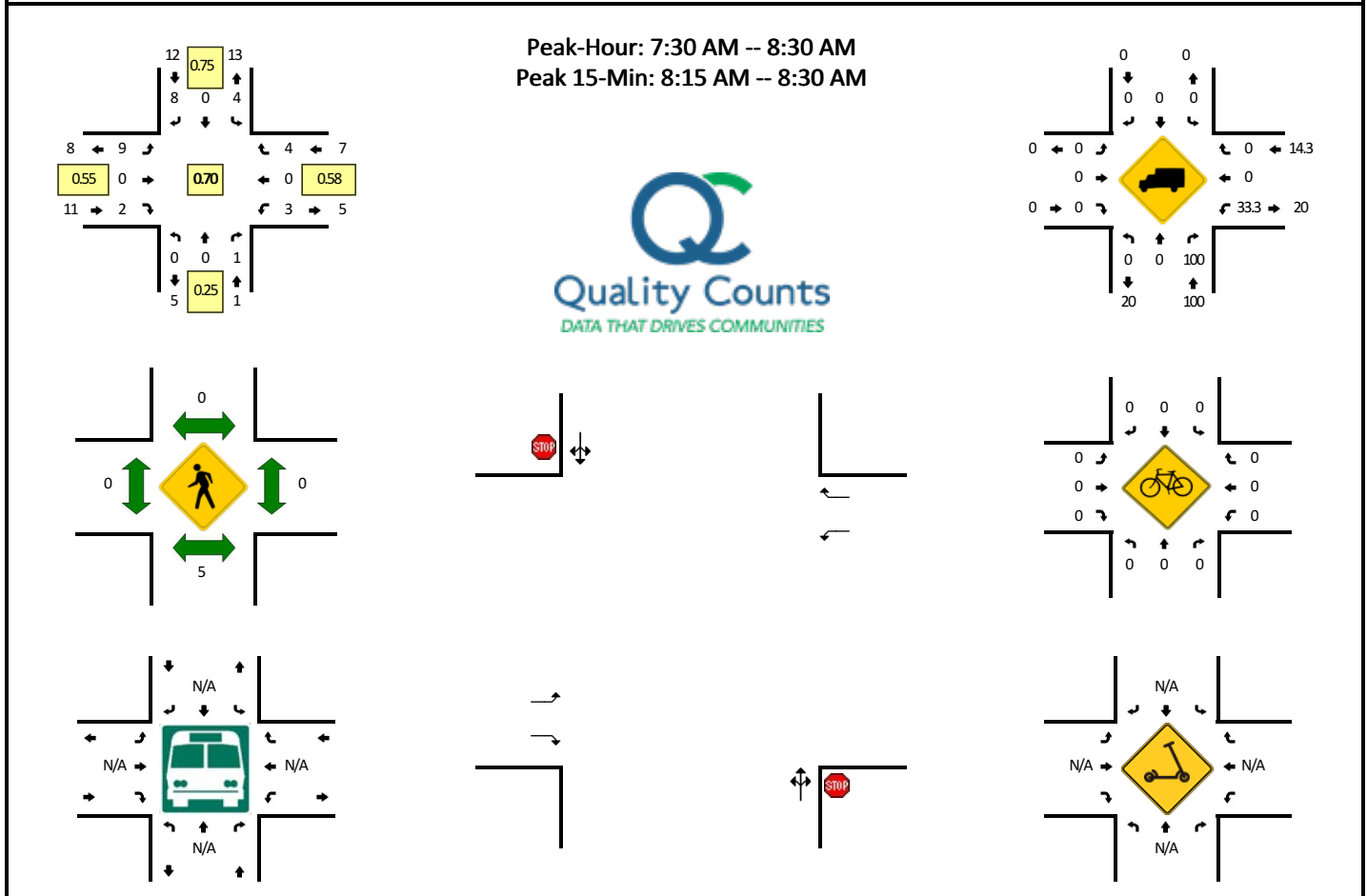


15-Min Count Period Beginning At	Judicial Dr (Northbound)				Judicial Dr (Southbound)				Main St (Eastbound)				Main St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	24	0	0	0	0	0	0	0	0	60	42	1	2	65	0	0	194	
6:15 AM	24	0	4	0	0	0	0	0	0	81	41	0	1	94	0	0	245	
6:30 AM	18	0	7	0	0	0	0	0	0	103	35	1	0	98	0	0	262	
6:45 AM	27	0	6	0	0	0	0	0	0	141	46	0	0	153	0	0	373	1074
7:00 AM	41	0	7	0	0	0	0	0	0	178	45	0	1	149	0	1	422	1302
7:15 AM	36	0	4	0	0	0	0	0	0	229	72	0	5	164	0	0	510	1567
7:30 AM	44	0	6	0	0	0	0	0	0	284	73	0	5	163	0	0	575	1880
7:45 AM	48	0	7	0	0	0	0	0	0	328	92	0	9	243	0	0	727	2234
8:00 AM	51	0	5	0	0	0	0	0	0	257	70	0	5	255	0	1	644	2456
8:15 AM	67	0	5	0	0	0	0	0	0	276	77	0	11	197	0	0	633	2579
8:30 AM	54	0	12	0	0	0	0	0	0	243	111	0	15	175	0	0	610	2614
8:45 AM	46	0	11	0	0	0	0	0	0	251	106	1	14	198	0	0	627	2514
9:00 AM	53	0	15	0	0	0	0	0	0	227	113	1	13	213	0	0	635	2505
9:15 AM	68	0	9	0	0	0	0	0	0	203	90	0	13	227	0	1	611	2483
9:30 AM	46	0	8	0	0	0	0	0	0	214	95	1	14	202	0	2	582	2455
9:45 AM	68	0	14	0	0	0	0	0	0	188	66	0	9	205	0	3	553	2381
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	192	0	28	0	0	0	0	0	0	1312	368	0	36	972	0	0	2908	
Heavy Trucks	4	0	0	0	0	0	0	0	0	24	8	0	4	28	0	0	68	
Buses																		
Pedestrians		0				4				0				0			4	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

Comments: AM and PM periods share footage

LOCATION: 10565 Main St West Dwy/Mosby Tower Entrance West Dwy -- Main St
CITY/STATE: Fairfax, VA

QC JOB #: 15778415
DATE: Thu, May 5 2022

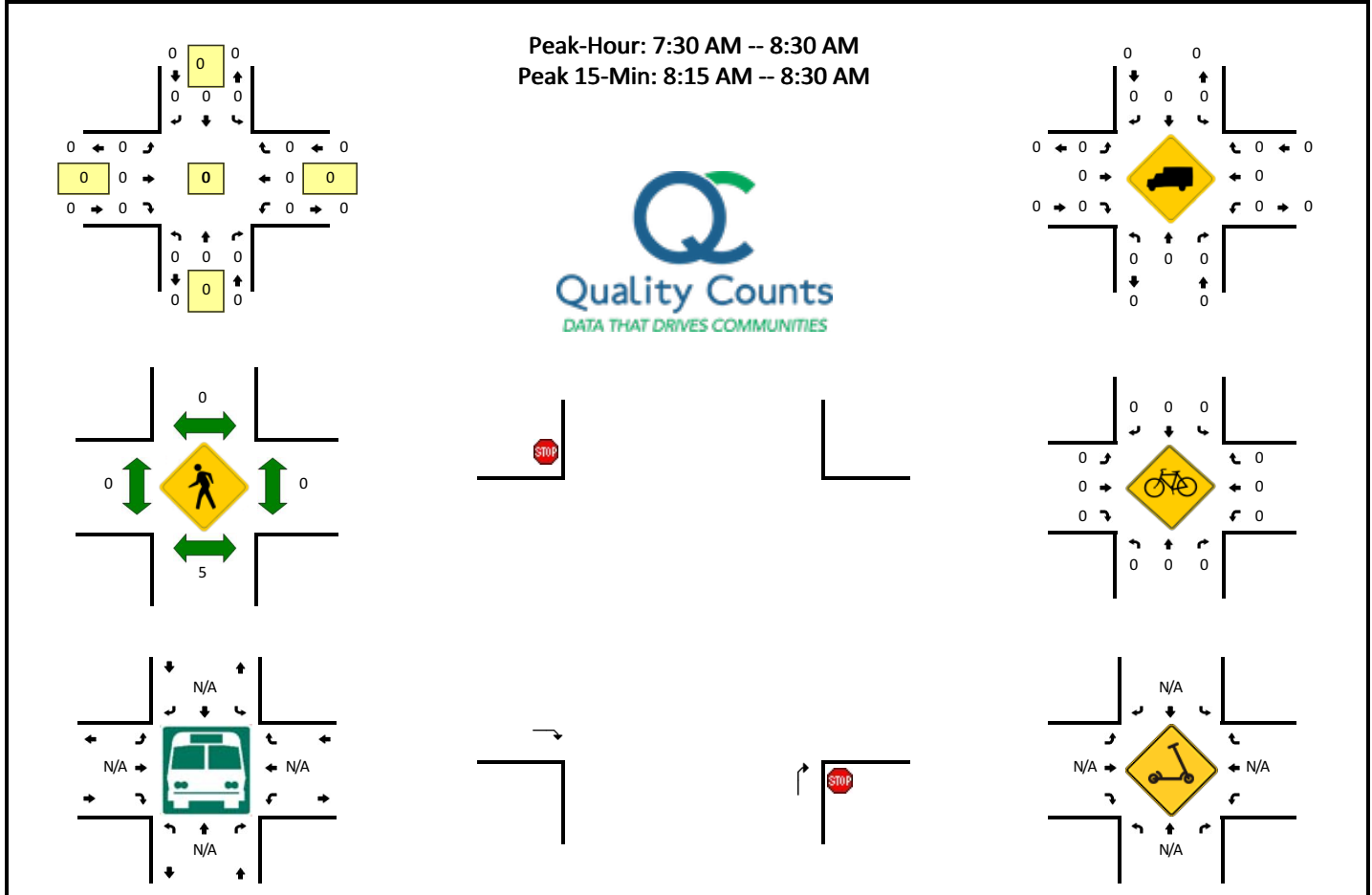


15-Min Count Period Beginning At	10565 Main St West Dwy/Mosby Tower Entrance West Dwy (Northbound)				10565 Main St West Dwy/Mosby Tower Entrance West Dwy (Southbound)				Main St (Eastbound)				Main St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	
6:15 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	
6:30 AM	0	0	0	0	1	0	2	0	1	0	0	0	0	0	0	0	4	
6:45 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	3	11
7:00 AM	0	0	0	0	1	0	2	0	1	0	0	0	0	0	0	0	4	13
7:15 AM	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	4	15
7:30 AM	0	0	0	0	0	0	3	0	1	0	0	0	0	0	3	0	7	18
7:45 AM	0	0	0	0	1	0	2	0	2	0	0	0	0	0	0	0	5	20
8:00 AM	0	0	0	0	1	0	1	0	2	0	1	0	3	0	0	0	8	24
8:15 AM	0	0	1	0	2	0	2	0	4	0	1	0	0	0	1	0	11	31
8:30 AM	0	0	0	0	1	0	2	0	3	0	2	0	0	0	0	0	8	32
8:45 AM	0	0	1	0	1	0	4	0	11	0	2	0	4	0	4	0	27	54
9:00 AM	0	0	0	0	3	0	6	0	11	0	0	0	1	0	2	0	23	69
9:15 AM	1	0	0	0	1	0	4	0	11	0	0	0	0	0	1	0	18	76
9:30 AM	0	0	0	0	1	0	4	0	9	0	0	0	1	0	3	0	18	86
9:45 AM	0	0	0	0	3	0	5	0	6	0	0	0	3	0	2	0	19	78
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	4	0	8	0	8	0	16	0	4	0	0	0	4	0	44	
Heavy Trucks	0	0	4		0	0	0		0	0	0		0	0	0		4	
Buses																		
Pedestrians		0				0				0				0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

Comments: AM and PM periods share footage

LOCATION: 10565 Main St East Dwy -- Main St
CITY/STATE: Fairfax, VA

QC JOB #: 15778417
DATE: Thu, May 5 2022

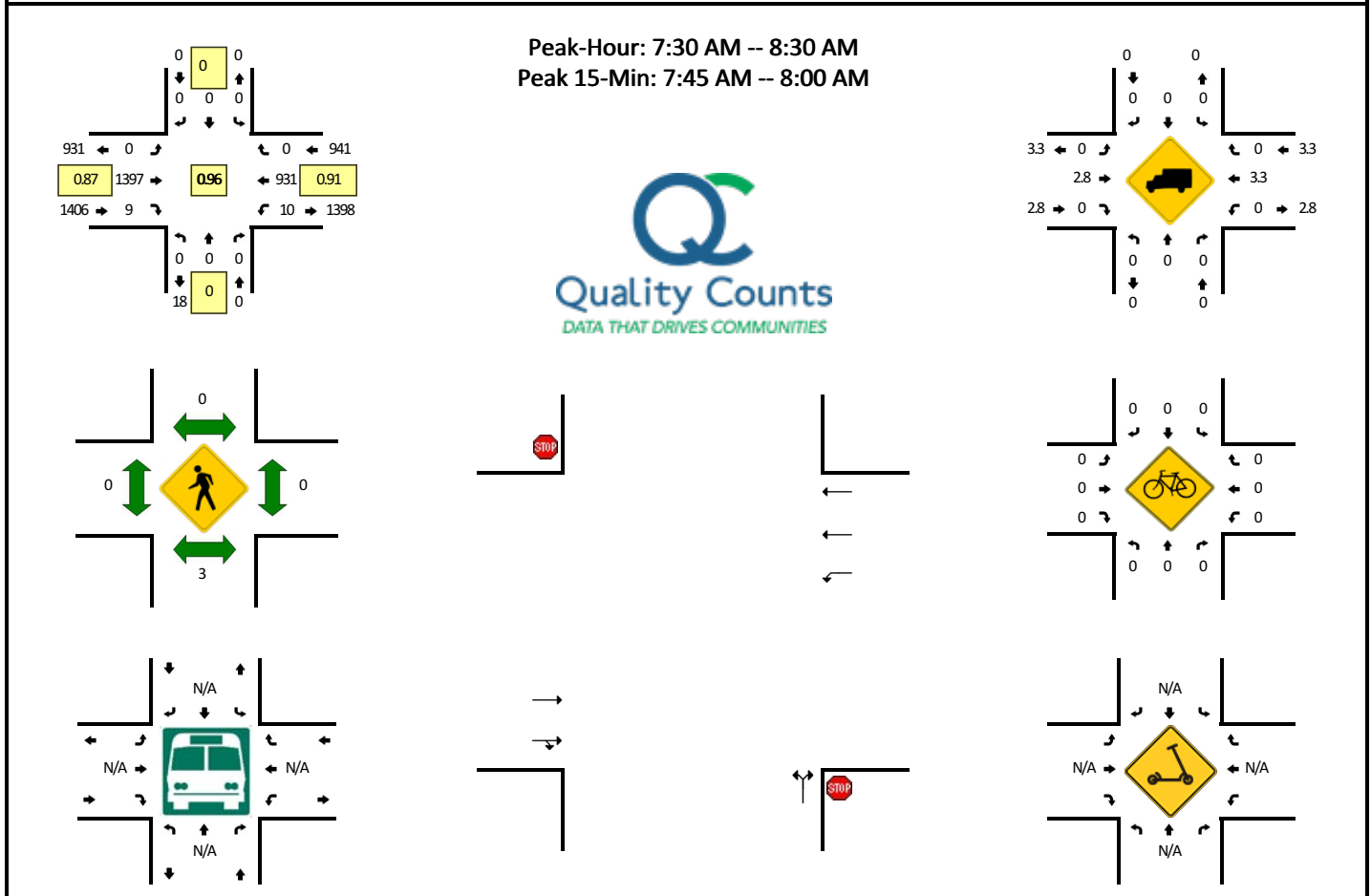


15-Min Count Period Beginning At	10565 Main St East Dwy (Northbound)				10565 Main St East Dwy (Southbound)				Main St (Eastbound)				Main St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
9:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4
9:15 AM	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	3	7
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Buses																		
Pedestrians		0				0				0				0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

Comments: AM and PM periods share footage

LOCATION: 10555 Main St Dwy West -- Main St
CITY/STATE: Fairfax, VA

QC JOB #: 15056205
DATE: Tue, Sep 10 2019

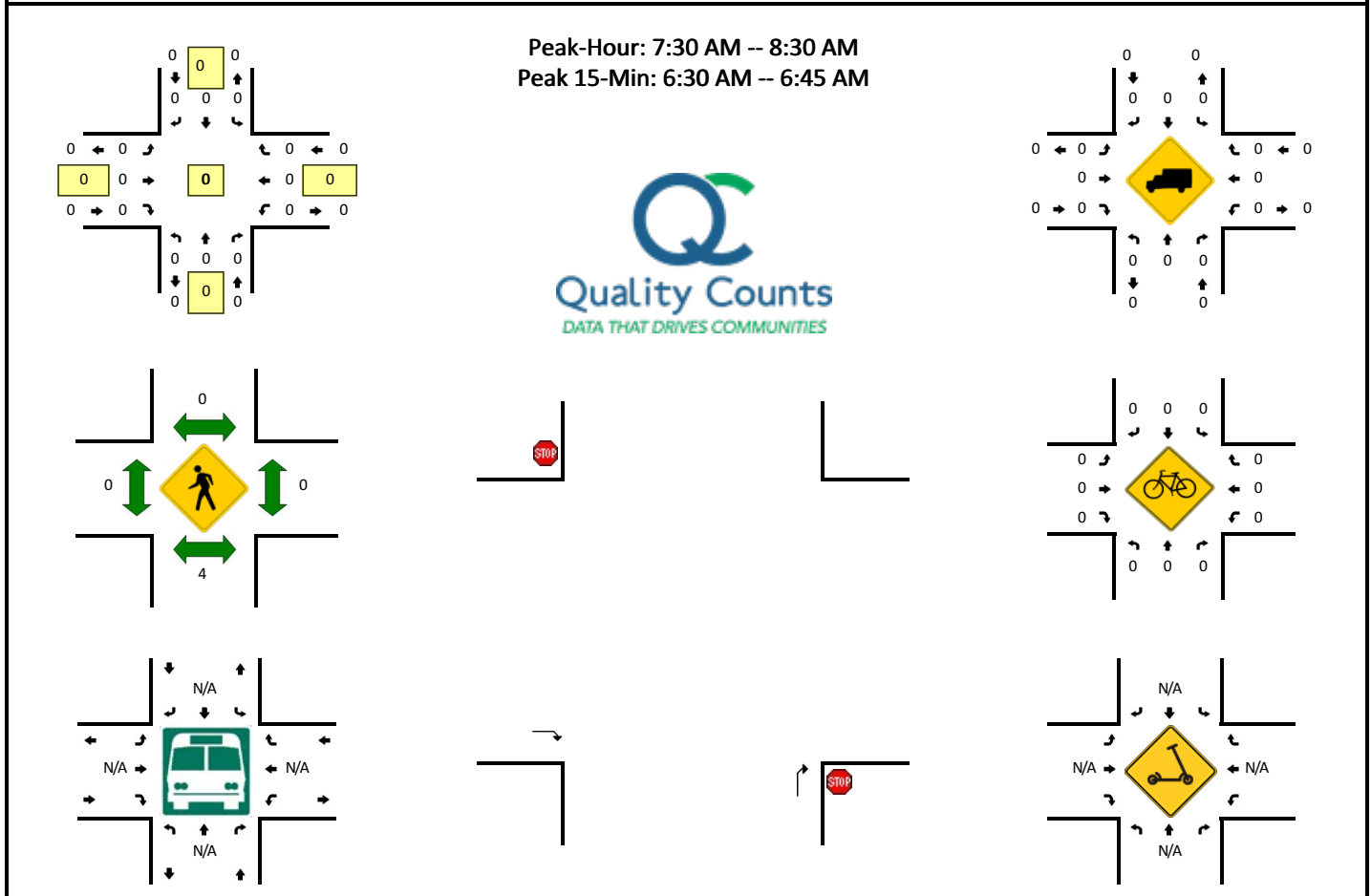


15-Min Count Period Beginning At	10555 Main St Dwy West (Northbound)				10555 Main St Dwy West (Southbound)				Main St (Eastbound)				Main St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	0	0	0	0	0	0	0	0	0	197	0	0	0	106	0	0	303	
6:45 AM	0	0	0	0	0	0	0	0	0	251	1	0	0	163	0	0	415	
7:00 AM	0	0	0	0	0	0	0	0	0	267	0	0	0	172	0	1	440	
7:15 AM	0	0	0	0	0	0	0	0	0	299	1	0	0	216	0	0	516	1674
7:30 AM	0	0	0	0	0	0	0	0	0	400	3	0	0	189	0	0	592	1963
7:45 AM	0	0	0	0	0	0	0	0	0	361	2	0	2	248	0	0	613	2161
8:00 AM	0	0	0	0	0	0	0	0	0	314	2	0	3	255	0	0	574	2295
8:15 AM	0	0	0	0	0	0	0	0	0	322	2	0	4	239	0	1	568	2347
8:30 AM	0	0	1	0	0	0	0	0	0	347	11	0	4	227	0	0	590	2345
8:45 AM	0	0	0	0	0	0	0	0	0	281	5	0	4	194	0	0	484	2216
9:00 AM	0	0	0	0	0	0	0	0	0	337	8	0	0	233	0	1	579	2221
9:15 AM	0	0	0	0	0	0	0	0	0	309	2	0	4	206	0	0	521	2174
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	0	0	0	0	0	1444	8	0	8	992	0	0	2452	
Heavy Trucks	0	0	0	0	0	0	0	0	0	56	0	0	0	16	0	0	72	
Buses																		
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scooters																		

Comments:

LOCATION: 10555 Main St Dwy East -- Main St
CITY/STATE: Fairfax, VA

QC JOB #: 15056215
DATE: Tue, Sep 10 2019

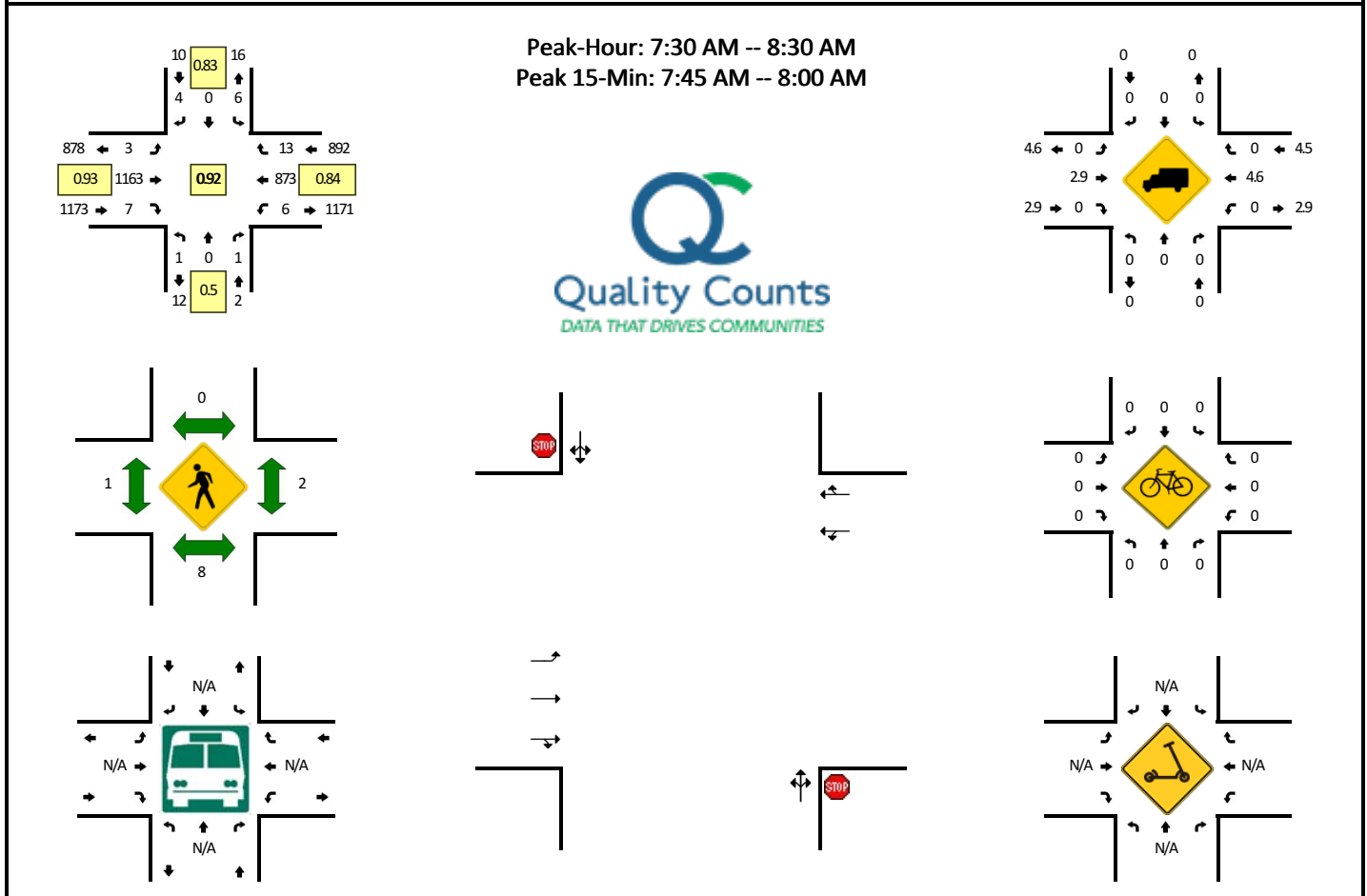


15-Min Count Period Beginning At	10555 Main St Dwy East (Northbound)				10555 Main St Dwy East (Southbound)				Main St (Eastbound)				Main St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
9:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
9:15 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Buses																		
Pedestrians		4				0				0				0			4	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scooters																		

Comments:

LOCATION: 10523 Main St Entrance/Mosby Tower Entrance -- Main St
CITY/STATE: Fairfax, VA

QC JOB #: 15778405
DATE: Thu, May 5 2022

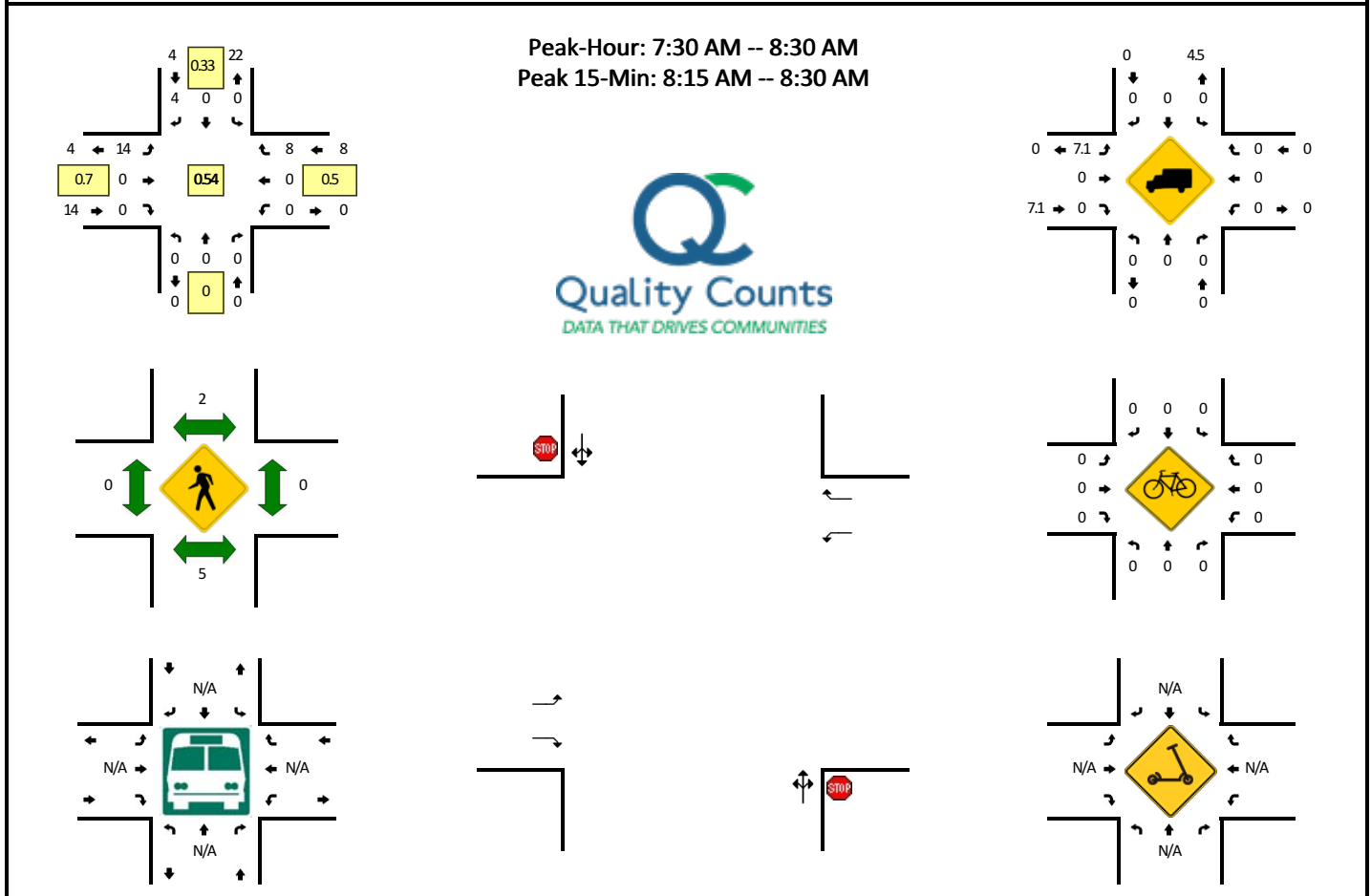


15-Min Count Period Beginning At	10523 Main St Entrance/Mosby Tower Entrance (Northbound)				10523 Main St Entrance/Mosby Tower Entrance (Southbound)				Main St (Eastbound)				Main St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	0	0	1	0	0	0	0	49	0	0	0	64	1	0	115	778
6:15 AM	0	0	0	0	1	0	0	0	0	87	0	0	0	94	2	0	184	
6:30 AM	0	0	0	0	4	0	0	0	0	108	0	0	0	94	0	0	206	
6:45 AM	0	0	0	0	2	0	1	0	0	124	0	0	0	144	2	0	273	
7:00 AM	0	0	0	0	2	0	0	0	1	189	0	0	0	157	0	0	349	
7:15 AM	0	0	0	0	0	0	1	0	1	229	0	0	0	158	1	0	390	
7:30 AM	0	0	0	0	2	0	0	0	0	294	0	0	0	176	3	0	475	
7:45 AM	0	0	0	0	1	0	2	0	0	314	2	0	4	237	2	0	562	1776
8:00 AM	0	0	1	0	2	0	1	0	1	262	3	0	0	261	5	1	537	1964
8:15 AM	1	0	0	0	1	0	1	0	2	293	2	0	1	199	3	0	503	2077
8:30 AM	0	0	1	0	1	0	2	0	0	246	5	0	1	187	4	0	447	2049
8:45 AM	0	0	0	0	2	0	0	0	1	229	1	0	1	211	2	0	447	1934
9:00 AM	1	0	2	0	0	0	0	0	5	227	2	0	0	227	6	0	470	1867
9:15 AM	0	0	1	0	1	0	3	0	2	213	0	0	1	227	8	1	457	1821
9:30 AM	0	0	0	0	0	0	1	0	3	199	0	0	0	210	9	1	423	1797
9:45 AM	0	0	0	0	3	0	3	0	1	209	1	0	0	210	6	0	433	1783
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	4	0	8	0	0	1256	8	0	16	948	8	0	2248	
Heavy Trucks	0	0	0	0	0	0	0	0	0	24	0	0	0	36	0	0	60	
Buses																		
Pedestrians		8				0				0				0			8	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scooters																		

Comments: AM and PM periods share footage

LOCATION: Church Dwys -- Main St
CITY/STATE: Fairfax, VA

QC JOB #: 15778423
DATE: Thu, May 5 2022



15-Min Count Period Beginning At	Church Dwys (Northbound)				Church Dwys (Southbound)				Main St (Eastbound)				Main St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
7:15 AM	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	3	4
7:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	5
7:45 AM	0	0	0	0	0	0	0	0	4	0	0	0	0	0	2	0	6	11
8:00 AM	0	0	0	0	0	0	1	0	4	0	0	0	0	0	2	0	7	17
8:15 AM	0	0	0	0	0	0	3	0	5	0	0	0	0	0	4	0	12	26
8:30 AM	0	0	0	0	1	0	0	0	5	0	0	0	0	0	1	0	7	32
8:45 AM	0	0	0	0	0	0	2	0	16	0	0	0	0	0	6	0	24	50
9:00 AM	0	0	0	0	3	0	17	0	14	0	0	0	0	0	10	0	44	87
9:15 AM	0	0	0	0	0	0	11	0	9	0	0	0	0	0	0	0	20	95
9:30 AM	0	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	9	97
9:45 AM	0	0	0	0	0	0	2	0	4	0	0	0	0	0	2	0	8	81
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	0	0	12	0	20	0	0	0	0	0	16	0	48	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Buses																		
Pedestrians		4				4				0				0			8	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

Comments: AM and PM periods share footage

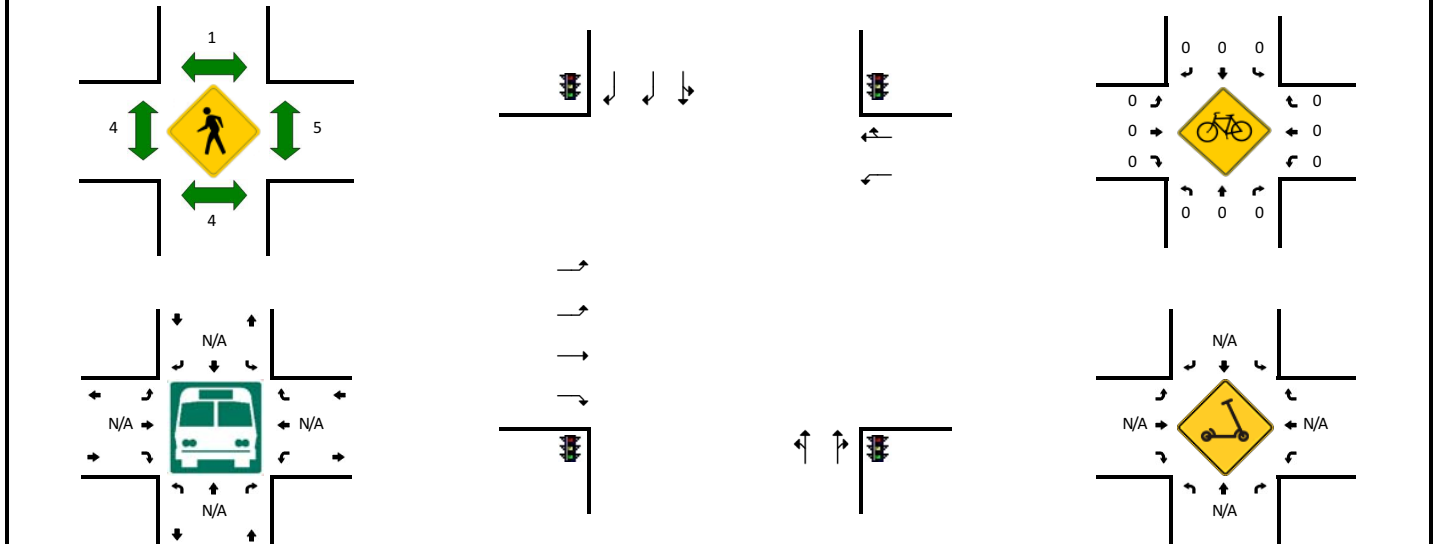
LOCATION: West St -- Main St

CITY/STATE: Fairfax, VA

QC JOB #: 15778407

DATE: Thu, May 5 2022

Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:45 AM -- 8:00 AM



15-Min Count Period Beginning At	West St (Northbound)				West St (Southbound)				Main St (Eastbound)				Main St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	5	0	1	0	0	9	53	0	24	22	2	0	2	6	0	0	124	
6:15 AM	6	2	0	0	0	5	71	0	41	43	2	0	3	15	0	0	188	
6:30 AM	7	0	2	0	0	4	69	0	70	43	3	0	4	22	0	0	224	
6:45 AM	9	0	1	0	1	4	120	0	70	50	3	0	2	18	0	0	278	814
7:00 AM	20	0	3	0	0	5	106	0	108	72	6	0	3	24	0	0	347	1037
7:15 AM	4	0	0	0	4	11	131	0	152	64	12	0	3	30	0	0	411	1260
7:30 AM	6	0	0	0	1	8	141	0	160	95	5	0	1	35	0	0	452	1488
7:45 AM	10	0	1	0	2	12	189	0	247	99	8	0	7	43	0	0	618	1828
8:00 AM	16	0	3	0	2	13	215	0	147	106	2	0	5	34	0	0	543	2024
8:15 AM	15	3	6	0	3	15	163	0	179	104	3	0	2	30	0	0	523	2136
8:30 AM	9	3	3	0	3	19	147	0	135	96	9	0	2	33	0	0	459	2143
8:45 AM	21	4	6	0	1	14	149	0	124	85	8	0	5	49	0	0	466	1991
9:00 AM	21	3	9	0	6	20	188	0	131	86	3	0	5	28	0	0	500	1948
9:15 AM	15	1	1	0	2	16	161	0	102	74	9	0	8	40	0	0	429	1854
9:30 AM	8	3	4	0	3	15	179	0	117	98	8	0	1	38	0	0	474	1869
9:45 AM	23	0	1	0	1	14	147	0	106	84	2	0	3	40	0	0	421	1824
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	40	0	4	0	8	48	756	0	988	396	32	0	28	172	0	0	2472	
Heavy Trucks	0	0	0	0	0	0	40	0	24	8	0	0	0	4	0	0	76	
Buses																		
Pedestrians		4				4				0				8			16	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scooters																		

Comments: AM and PM periods share footage

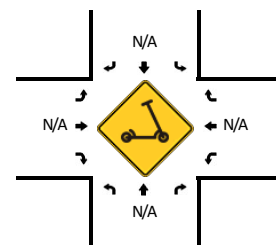
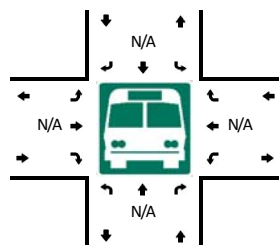
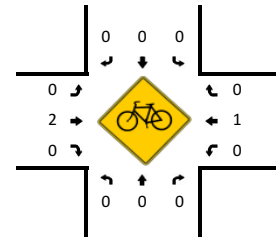
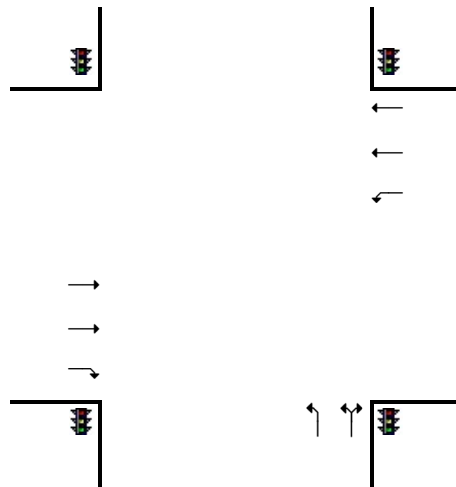
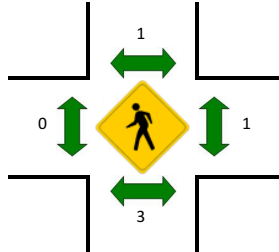
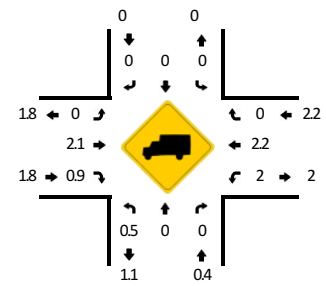
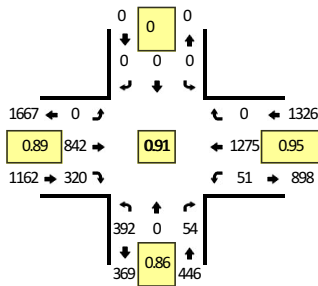
LOCATION: Judicial Dr -- Main St

QC JOB #: 15778402

CITY/STATE: Fairfax, VA

DATE: Thu, May 5 2022

Peak-Hour: 4:15 PM -- 5:15 PM
Peak 15-Min: 4:30 PM -- 4:45 PM

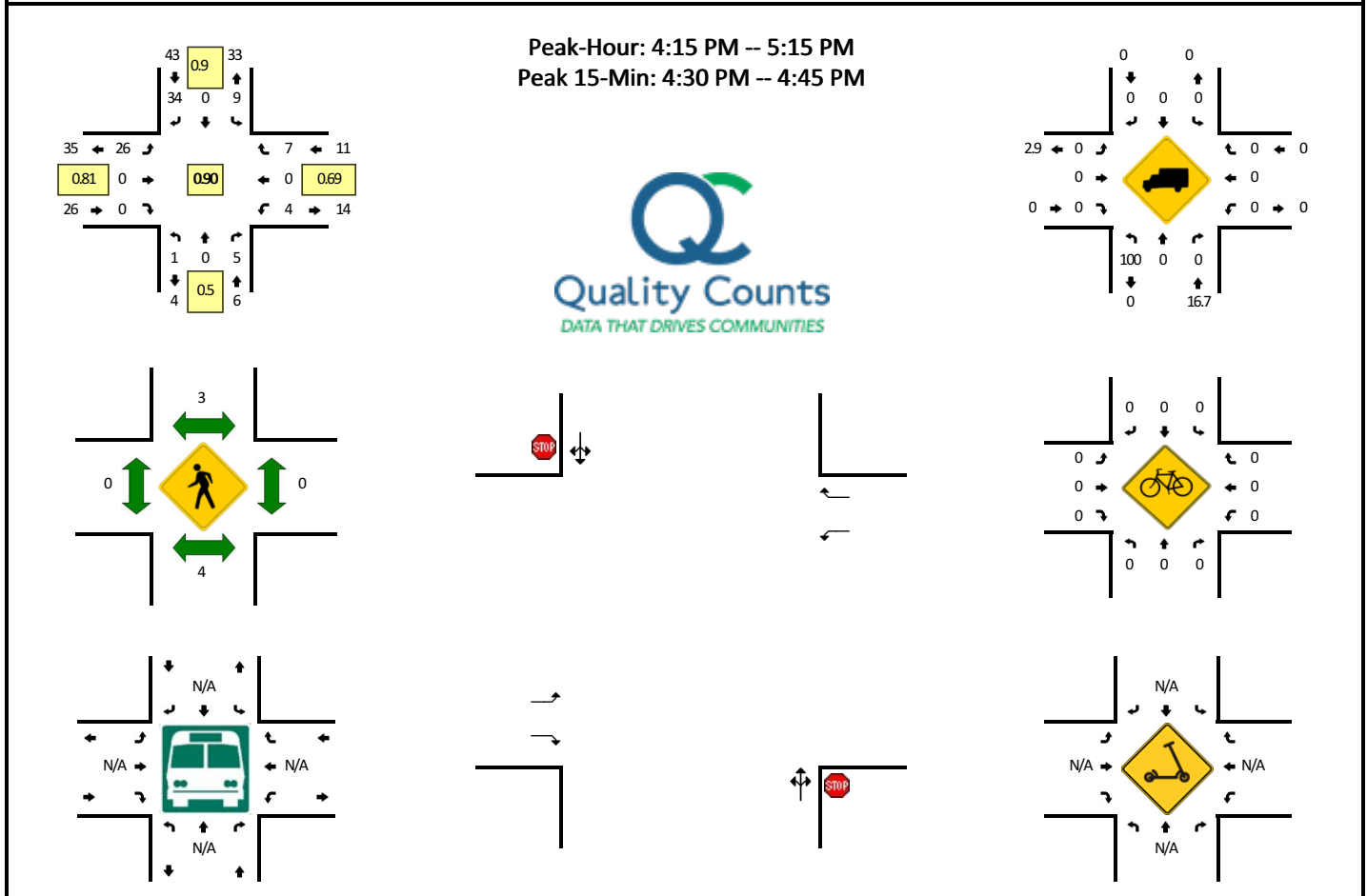


15-Min Count Period Beginning At	Judicial Dr (Northbound)				Judicial Dr (Southbound)				Main St (Eastbound)				Main St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	88	0	10	0	0	0	0	0	0	203	68	0	15	298	0	0	682	
3:45 PM	80	0	10	0	0	0	0	0	0	214	82	0	10	309	0	0	705	
4:00 PM	90	0	7	0	0	0	0	0	0	196	90	1	18	323	0	0	725	
4:15 PM	74	0	15	0	0	0	0	0	0	215	76	0	13	317	0	1	711	2823
4:30 PM	112	0	18	0	0	0	0	0	0	226	102	0	13	335	0	0	806	2947
4:45 PM	106	0	12	0	0	0	0	0	0	198	81	0	13	295	0	1	706	2948
5:00 PM	100	0	9	0	0	0	0	0	0	203	61	0	10	328	0	0	711	2934
5:15 PM	82	0	8	0	0	0	0	0	0	209	59	0	11	343	0	1	713	2936
5:30 PM	65	0	7	0	0	0	0	0	0	231	70	1	13	313	0	2	702	2832
5:45 PM	84	0	22	0	0	0	0	0	0	230	83	0	11	333	0	0	763	2889
6:00 PM	95	0	13	0	0	0	0	0	0	193	51	0	12	345	0	0	709	2887
6:15 PM	59	0	6	0	0	0	0	0	0	209	50	0	5	321	0	0	650	2824
6:30 PM	42	0	3	0	0	0	0	0	0	203	54	0	5	272	0	0	579	2701
6:45 PM	44	0	2	0	0	0	0	0	0	167	49	1	7	226	0	0	496	2434
7:00 PM	56	0	7	0	0	0	0	0	0	200	83	1	7	241	0	1	596	2321
7:15 PM	40	0	7	0	0	0	0	0	0	133	60	0	6	228	0	0	474	2145
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	448	0	72	0	0	0	0	0	0	904	408	0	52	1340	0	0	3224	
Heavy Trucks	0	0	0	0	0	0	0	0	0	24	4	0	0	28	0	0	56	
Buses																		
Pedestrians		4				0				0				0			4	
Bicycles	0	0	0		0	0	0		0	4	0		0	0	0		4	
Scoters																		

Comments: AM and PM periods share footage

LOCATION: 10565 Main St West Dwy/Mosby Tower Entrance West Dwy -- Main St
CITY/STATE: Fairfax, VA

QC JOB #: 15778416
DATE: Thu, May 5 2022

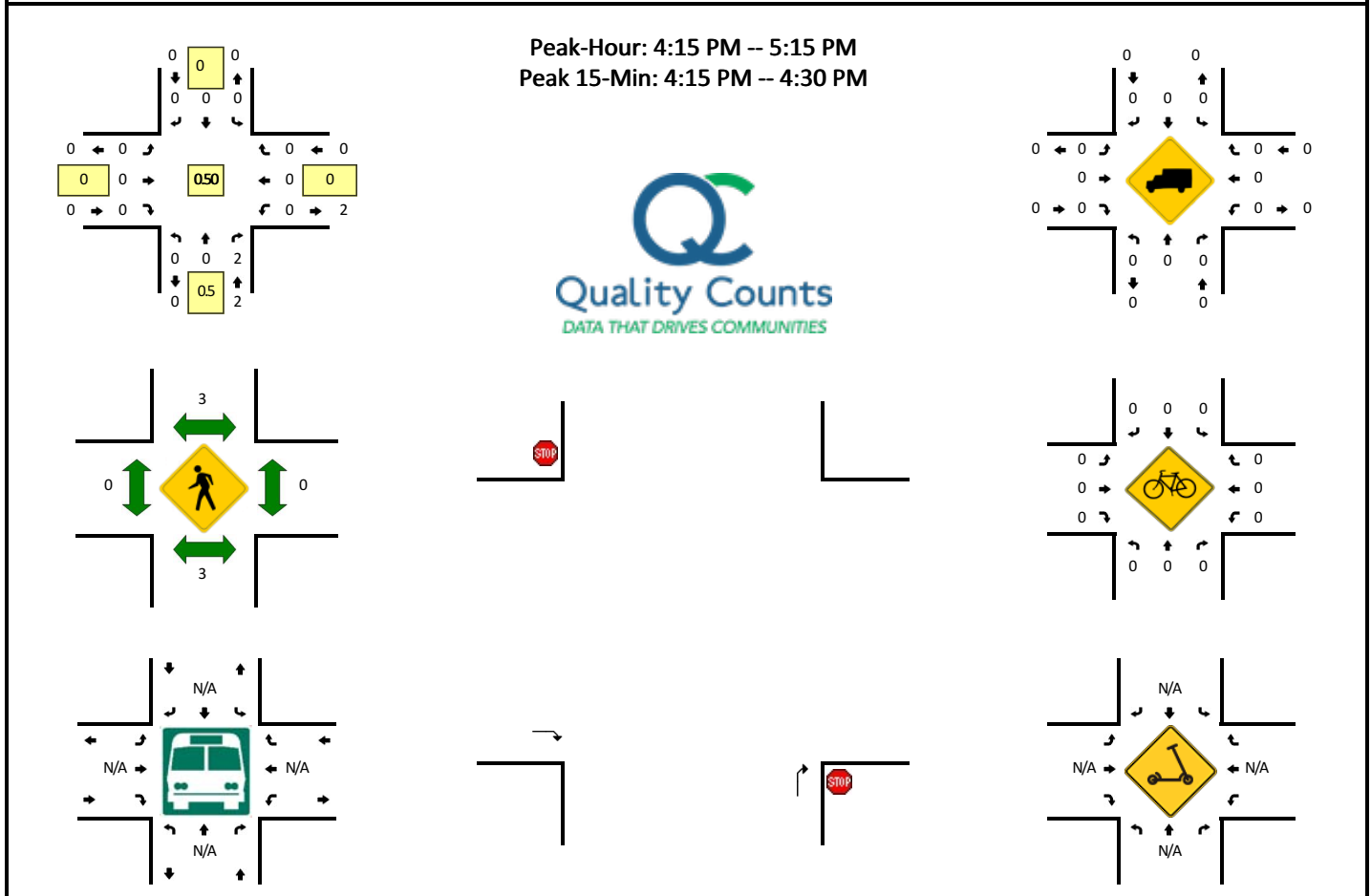


15-Min Count Period Beginning At	10565 Main St West Dwy/Mosby Tower Entrance West Dwy (Northbound)				10565 Main St West Dwy/Mosby Tower Entrance West Dwy (Southbound)				Main St (Eastbound)				Main St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	0	0	0	0	2	0	7	0	4	0	1	0	0	0	1	0	15	
3:45 PM	0	0	1	0	1	0	8	0	7	0	1	0	3	0	3	0	24	
4:00 PM	0	0	0	0	5	0	12	0	6	0	0	0	0	0	0	0	23	
4:15 PM	0	0	1	0	1	0	10	0	6	0	0	0	2	0	2	0	22	84
4:30 PM	0	0	2	0	5	0	7	0	7	0	0	0	2	0	1	0	24	93
4:45 PM	0	0	0	0	2	0	7	0	8	0	0	0	0	0	2	0	19	88
5:00 PM	1	0	2	0	1	0	10	0	5	0	0	0	0	0	2	0	21	86
5:15 PM	0	0	0	0	6	0	11	0	5	0	1	0	1	0	0	0	24	88
5:30 PM	0	0	0	0	1	0	5	0	10	0	0	0	0	0	3	0	19	83
5:45 PM	0	0	1	0	0	0	9	0	7	0	0	0	0	0	1	0	18	82
6:00 PM	0	0	0	0	1	0	13	0	4	0	0	0	0	0	1	0	19	80
6:15 PM	0	0	0	0	2	0	2	0	6	0	0	0	0	0	3	0	13	69
6:30 PM	0	0	0	0	4	0	5	0	10	0	0	0	0	0	0	0	19	69
6:45 PM	0	0	0	0	2	0	10	0	1	0	0	0	0	0	0	0	13	64
7:00 PM	0	0	0	0	1	0	7	0	11	0	1	0	0	0	5	0	25	70
7:15 PM	1	0	0	0	0	0	7	0	6	0	0	0	0	0	3	0	17	74
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	8	0	20	0	28	0	28	0	0	0	8	0	4	0	96	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Buses																		
Pedestrians	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scoters																		

Comments: AM and PM periods share footage

LOCATION: 10565 Main St East Dwy -- Main St
CITY/STATE: Fairfax, VA

QC JOB #: 15778418
DATE: Thu, May 5 2022

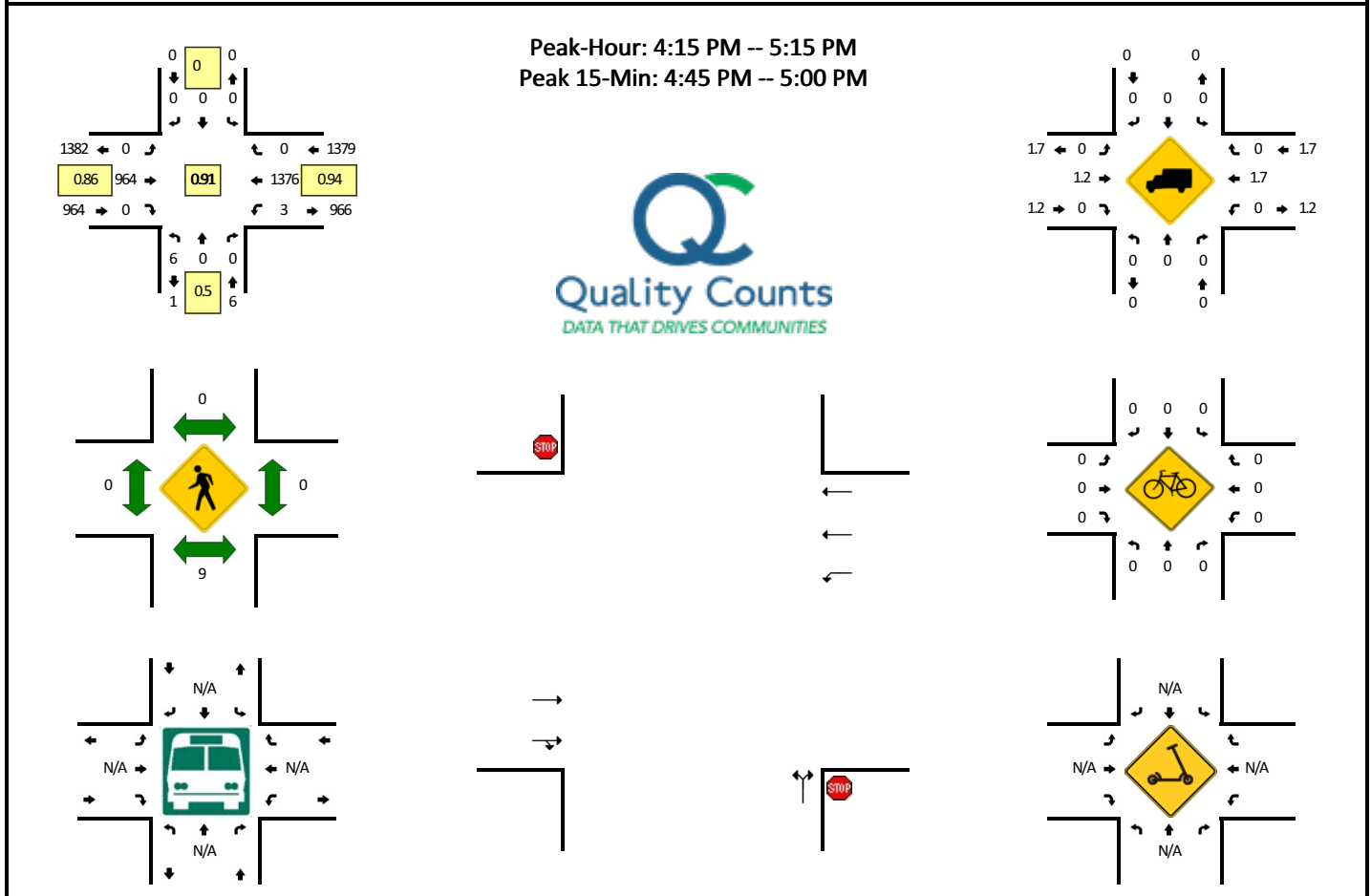


15-Min Count Period Beginning At	10565 Main St East Dwy (Northbound)				10565 Main St East Dwy (Southbound)				Main St (Eastbound)				Main St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
3:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
6:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	0	0		0	
Buses																		
Pedestrians		12				4				0				0			16	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

Comments: AM and PM periods share footage

LOCATION: 10555 Main St Dwy West -- Main St
CITY/STATE: Fairfax, VA

QC JOB #: 15056206
DATE: Tue, Sep 10 2019

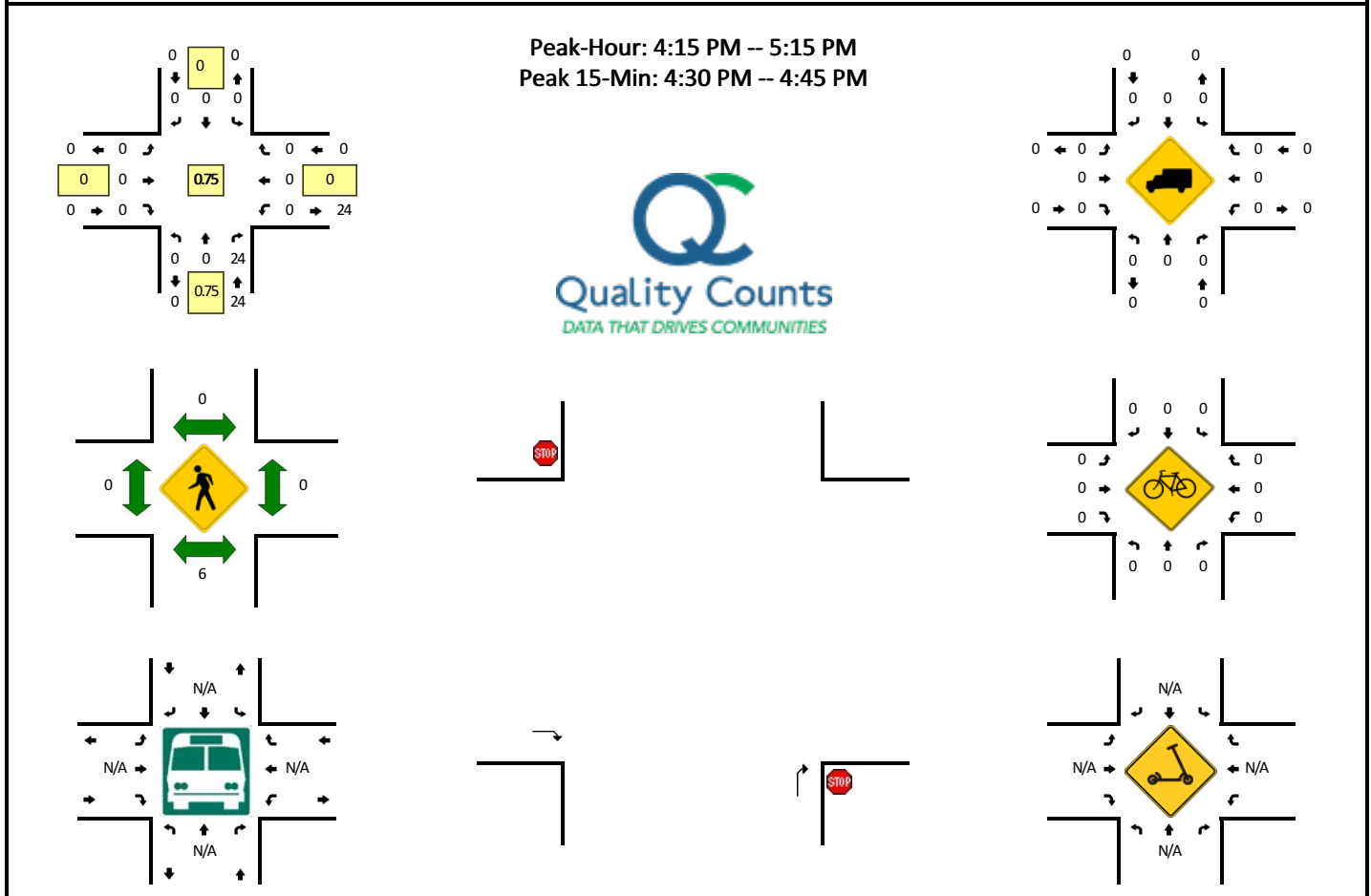


15-Min Count Period Beginning At	10555 Main St Dwy West (Northbound)				10555 Main St Dwy West (Southbound)				Main St (Eastbound)				Main St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	1	0	0	0	0	0	0	0	0	204	0	0	1	363	0	0	569	
4:15 PM	3	0	0	0	0	0	0	0	0	210	0	0	0	329	0	0	542	
4:30 PM	1	0	0	0	0	0	0	0	0	228	0	0	0	345	0	0	574	
4:45 PM	0	0	0	0	0	0	0	0	0	280	0	0	1	364	0	1	646	2331
5:00 PM	2	0	0	0	0	0	0	0	0	246	0	0	0	338	0	1	587	2349
5:15 PM	4	0	1	0	0	0	0	0	0	218	0	0	1	345	0	1	570	2377
5:30 PM	3	0	0	0	0	0	0	0	0	235	0	0	0	305	0	0	543	2346
5:45 PM	0	0	0	0	0	0	0	0	0	242	0	0	0	295	0	0	537	2237
6:00 PM	0	0	0	0	0	0	0	0	0	210	0	0	0	348	0	1	559	2209
6:15 PM	1	0	0	0	0	0	0	0	0	210	0	0	0	334	0	0	545	2184
6:30 PM	0	0	0	0	0	0	0	0	0	186	0	0	0	299	0	0	485	2126
6:45 PM	0	0	0	0	0	0	0	0	0	189	0	0	0	302	0	0	491	2080
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	0	0	0	0	0	1120	0	0	4	1456	0	4	2584	
Heavy Trucks	0	0	0	0	0	0	0	0	0	12	0	0	0	20	0	0	32	
Buses																		
Pedestrians		8				0				0				0			8	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scooters																		

Comments:

LOCATION: 10555 Main St Dwy East -- Main St
CITY/STATE: Fairfax, VA

QC JOB #: 15056216
DATE: Tue, Sep 10 2019

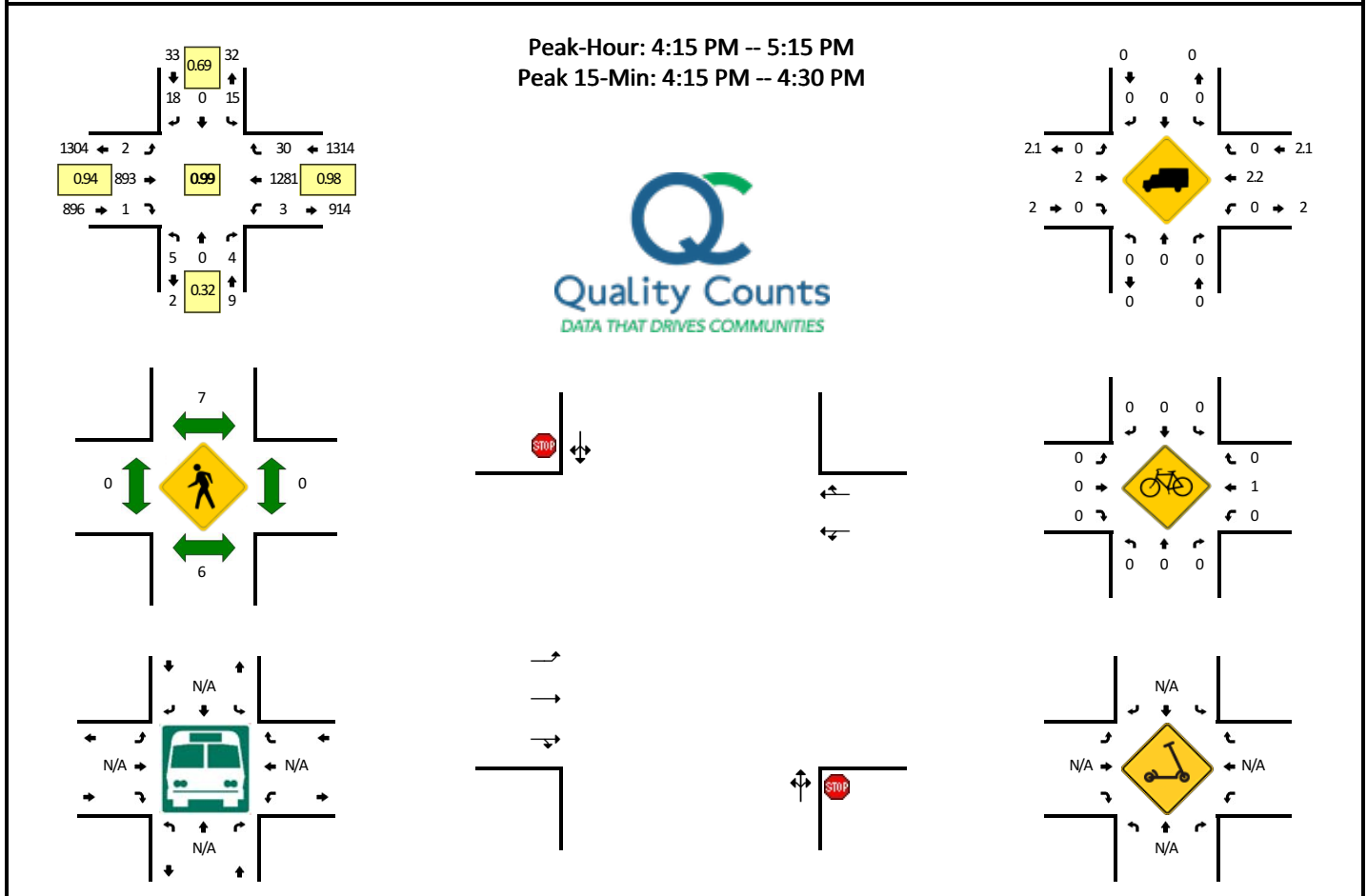


15-Min Count Period Beginning At	10555 Main St Dwy East (Northbound)				10555 Main St Dwy East (Southbound)				Main St (Eastbound)				Main St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
4:15 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
4:30 PM	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
4:45 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	21
5:00 PM	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8	24
5:15 PM	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8	28
5:30 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	23
5:45 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	22
6:00 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	17
6:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	10
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0	32	
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	0	0		0	
Buses																		
Pedestrians		8				0				0				0			8	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

Comments:

LOCATION: 10523 Main St Entrance/Mosby Tower Entrance -- Main St
CITY/STATE: Fairfax, VA

QC JOB #: 15778406
DATE: Thu, May 5 2022

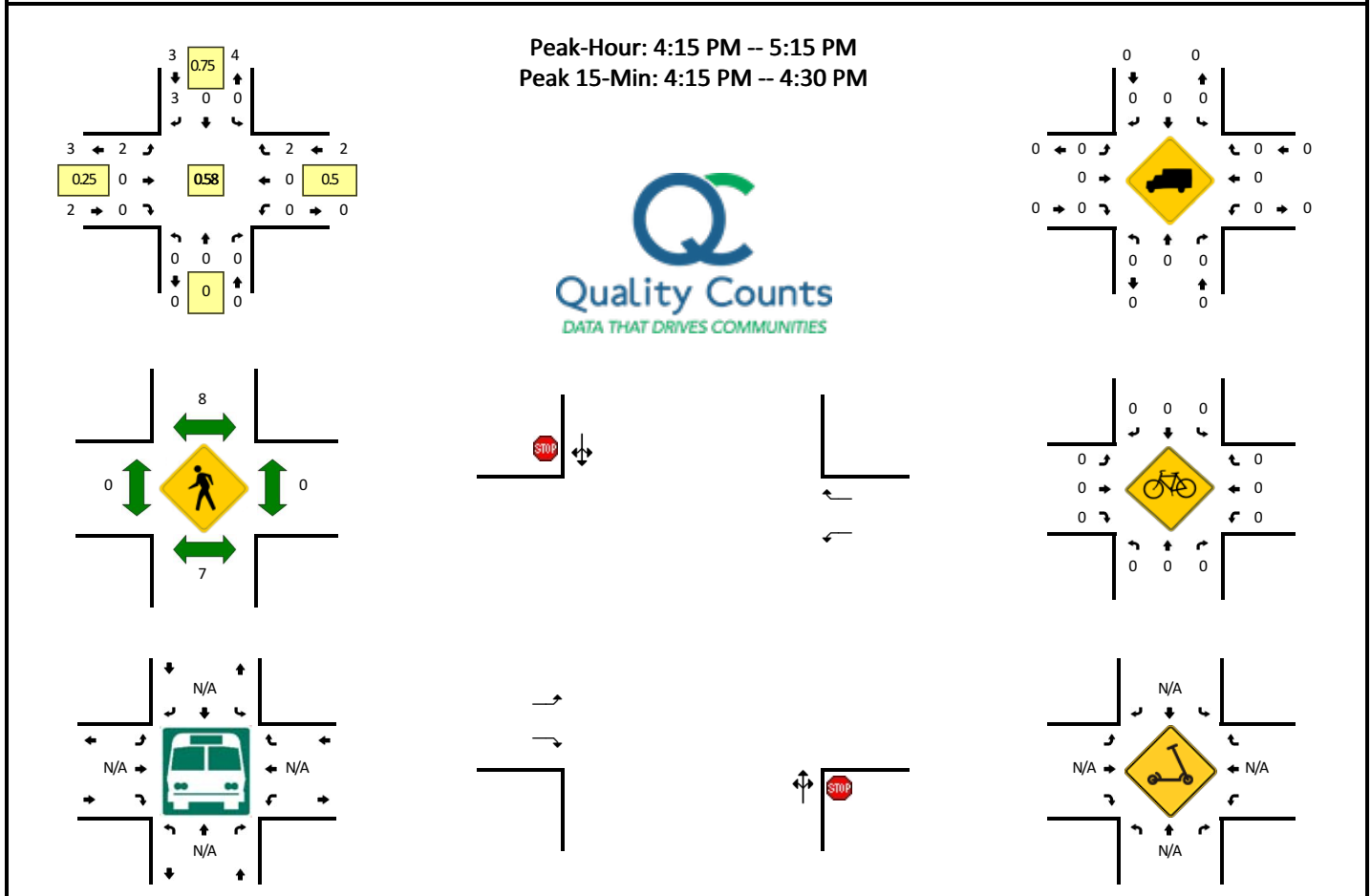


15-Min Count Period Beginning At	10523 Main St Entrance/Mosby Tower Entrance (Northbound)				10523 Main St Entrance/Mosby Tower Entrance (Southbound)				Main St (Eastbound)				Main St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	0	0	4	0	4	0	0	0	2	212	0	0	0	302	3	0	527	
3:45 PM	0	0	0	0	4	0	6	0	2	212	0	0	0	312	7	0	543	
4:00 PM	1	0	0	0	0	0	3	0	1	212	1	0	0	319	3	0	540	
4:15 PM	0	0	0	0	4	0	2	0	0	238	0	0	0	320	6	0	570	2180
4:30 PM	1	0	0	0	4	0	8	0	1	214	0	0	0	331	5	0	564	2217
4:45 PM	0	0	1	0	1	0	5	0	0	230	0	0	0	304	10	2	553	2227
5:00 PM	4	0	3	0	6	0	3	0	1	211	1	0	1	326	9	0	565	2252
5:15 PM	1	0	2	0	8	0	1	0	0	212	1	0	0	334	8	0	567	2249
5:30 PM	1	0	1	0	2	0	3	0	1	221	1	0	0	308	8	0	546	2231
5:45 PM	1	0	1	0	2	0	3	0	5	242	0	0	1	326	8	0	589	2267
6:00 PM	1	0	0	0	7	0	6	0	2	196	0	0	0	333	4	0	549	2251
6:15 PM	0	0	1	0	1	0	6	0	0	224	0	0	1	317	4	0	554	2238
6:30 PM	0	0	1	0	4	0	3	0	2	195	0	0	0	272	9	0	486	2178
6:45 PM	0	0	0	0	6	0	4	0	0	166	0	0	0	218	3	0	397	1986
7:00 PM	0	0	0	0	6	0	2	0	1	187	0	0	0	238	4	0	438	1875
7:15 PM	0	0	0	0	3	0	5	0	2	151	0	0	0	219	4	0	384	1705
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	16	0	8	0	0	952	0	0	0	1280	24	0	2280	
Heavy Trucks	0	0	0	0	0	0	0	0	0	28	0	0	0	24	0	0	52	
Buses																		
Pedestrians		12				12				0				0			24	
Bicycles	0	0	0		0	0	0		0	0	0		0	4	0		4	
Scoters																		

Comments: AM and PM periods share footage

LOCATION: Church Dwys -- Main St
CITY/STATE: Fairfax, VA

QC JOB #: 15778424
DATE: Thu, May 5 2022



15-Min Count Period Beginning At	Church Dwys (Northbound)				Church Dwys (Southbound)				Main St (Eastbound)				Main St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	0	0	0	0	0	0	5	0	2	0	0	0	0	0	3	0	10	
3:45 PM	0	0	0	0	0	0	4	0	1	0	0	0	0	0	0	0	5	
4:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	
4:15 PM	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	3	19
4:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	2	11
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	7
5:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	7
5:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	5
5:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	5
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
6:00 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	3	6
6:15 PM	0	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	5	10
6:30 PM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2	10
6:45 PM	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	3	13
7:00 PM	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	12
7:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	2	9
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	0	0	4	0	8	0	0	0	0	0	0	0	12	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Buses																		
Pedestrians		12				16				0				0			28	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

Comments: AM and PM periods share footage

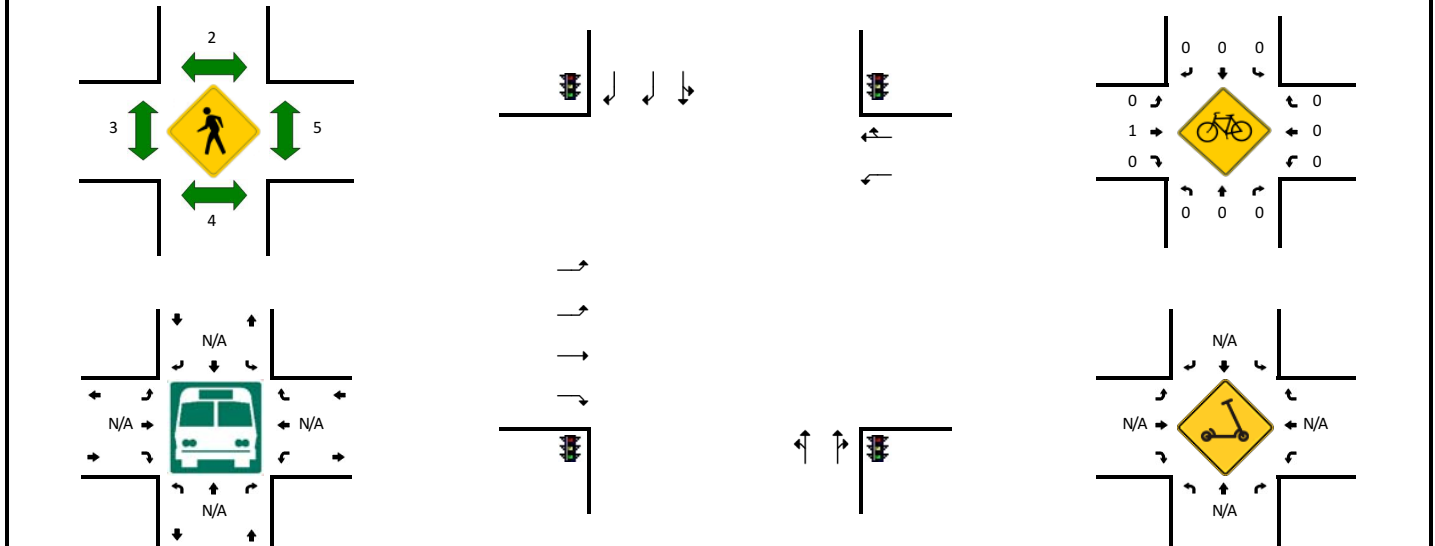
LOCATION: West St -- Main St

CITY/STATE: Fairfax, VA

QC JOB #: 15778408

DATE: Thu, May 5 2022

Peak-Hour: 4:15 PM -- 5:15 PM
Peak 15-Min: 4:30 PM -- 4:45 PM



15-Min Count Period Beginning At	West St (Northbound)				West St (Southbound)				Main St (Eastbound)				Main St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	21	2	8	0	7	9	224	0	136	72	4	0	4	55	0	0	542	
3:45 PM	23	3	10	0	3	6	234	0	120	80	5	0	5	57	0	0	546	
4:00 PM	30	2	5	0	4	3	240	0	128	91	3	0	3	52	0	0	561	
4:15 PM	21	4	10	0	0	7	245	0	138	81	6	0	2	60	0	0	574	2223
4:30 PM	50	2	19	0	4	5	238	0	158	69	2	0	1	51	0	0	599	2280
4:45 PM	35	4	10	0	1	13	222	0	139	76	6	0	2	55	1	0	564	2298
5:00 PM	17	2	1	0	1	9	254	0	138	99	3	0	0	70	0	0	594	2331
5:15 PM	18	2	5	0	4	4	263	0	129	72	2	0	1	59	1	0	560	2317
5:30 PM	17	2	5	0	2	2	224	0	140	84	4	0	0	72	0	0	552	2270
5:45 PM	15	0	9	0	3	8	267	0	168	79	2	0	1	58	1	0	611	2317
6:00 PM	25	5	6	0	3	5	229	0	123	82	0	0	1	81	0	0	560	2283
6:15 PM	13	0	2	0	5	3	233	0	130	101	0	0	0	73	2	0	562	2285
6:30 PM	16	0	2	0	2	5	215	0	106	72	4	0	2	43	1	0	468	2201
6:45 PM	15	1	0	0	2	3	142	0	100	93	1	0	1	62	1	0	421	2011
7:00 PM	29	1	1	0	8	2	167	0	87	91	1	0	0	51	0	0	438	1889
7:15 PM	7	1	1	0	0	1	168	0	98	68	0	0	0	47	0	0	391	1718
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	200	8	76	0	16	20	952	0	632	276	8	0	4	204	0	0	2396	
Heavy Trucks	0	0	0	0	0	0	20	0	12	8	0	0	0	4	0	0	44	
Buses																		
Pedestrians		4				4				8				4			20	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scooters																		

Comments: AM and PM periods share footage

D. Intersection Analysis Worksheets – Existing (2022)

Queues

1: Judicial Drive & Main Street

EX 2022

Timing Plan: AM Peak

	→	↘	↙	←	↖
Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1287	351	35	964	262
v/c Ratio	0.47	0.24	0.11	0.33	0.71
Control Delay	9.0	0.5	3.8	4.2	91.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	9.0	0.5	3.8	4.2	91.7
Queue Length 50th (ft)	295	0	6	125	162
Queue Length 95th (ft)	366	9	15	167	208
Internal Link Dist (ft)	425			206	540
Turn Bay Length (ft)		125	95		
Base Capacity (vph)	2713	1477	332	2891	870
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.47	0.24	0.11	0.33	0.30

Intersection Summary

HCM Signalized Intersection Capacity Analysis

1: Judicial Drive & Main Street

EX 2022

Timing Plan: AM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↓	↑↑	↑↑	
Traffic Volume (vph)	1145	312	31	858	210	23
Future Volume (vph)	1145	312	31	858	210	23
Ideal Flow (vphpl)	1900	1900	1900	1900	2100	1900
Total Lost time (s)	7.0	6.3	7.0	7.0	6.3	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.99	
Flt Protected	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (prot)	3505	1583	1752	3471	3765	
Flt Permitted	1.00	1.00	0.18	1.00	0.96	
Satd. Flow (perm)	3505	1583	327	3471	3765	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	1287	351	35	964	236	26
RTOR Reduction (vph)	0	48	0	0	5	0
Lane Group Flow (vph)	1287	303	35	964	257	0
Confl. Peds. (#/hr)					1	
Heavy Vehicles (%)	3%	2%	3%	4%	2%	2%
Turn Type	NA	pm+ov	pm+pt	NA	Prot	
Protected Phases	2	4	1	6	4	
Permitted Phases		2	6			
Actuated Green, G (s)	145.7	164.1	158.3	158.3	18.4	
Effective Green, g (s)	145.7	164.1	158.3	158.3	18.4	
Actuated g/C Ratio	0.77	0.86	0.83	0.83	0.10	
Clearance Time (s)	7.0	6.3	7.0	7.0	6.3	
Vehicle Extension (s)	5.0	3.0	3.0	5.0	3.0	
Lane Grp Cap (vph)	2687	1367	314	2891	364	
v/s Ratio Prot	c0.37	0.02	0.00	c0.28	c0.07	
v/s Ratio Perm		0.17	0.09			
v/c Ratio	0.48	0.22	0.11	0.33	0.70	
Uniform Delay, d1	8.2	2.2	4.8	3.7	83.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.6	0.1	0.2	0.3	6.1	
Delay (s)	8.8	2.3	4.9	4.0	89.3	
Level of Service	A	A	A	A	F	
Approach Delay (s)	7.4			4.0	89.3	
Approach LOS	A			A	F	

Intersection Summary

HCM 2000 Control Delay	13.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	20.3
Intersection Capacity Utilization	48.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
2: Funeral Home Driveway West/Mosby Tower Driveway West & Main Street Timing Plan: AM Peak

																
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR				
Lane Configurations		 			 			 			 					
Traffic Volume (veh/h)	9	1177	2	3	862	4	0	0	1	4	0	8				
Future Volume (Veh/h)	9	1177	2	3	862	4	0	0	1	4	0	8				
Sign Control	Free			Free			Stop			Stop						
Grade	0%			0%			0%			0%						
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85				
Hourly flow rate (vph)	11	1385	2	4	1014	5	0	0	1	5	0	9				
Pedestrians	5															
Lane Width (ft)	12.0															
Walking Speed (ft/s)	3.5															
Percent Blockage	0															
Right turn flare (veh)																
Median type	None			None												
Median storage (veh)																
Upstream signal (ft)	738			1085												
pX, platoon unblocked				0.86			0.86			0.86	0.86	0.86				
vC, conflicting volume	1019				1392				1937	2440	698	1740				
vC1, stage 1 conf vol																
vC2, stage 2 conf vol																
vCu, unblocked vol	1019				1125				1760	2347	316	1531				
tC, single (s)	4.1				4.8				7.5	6.5	8.9	7.5				
tC, 2 stage (s)																
tF (s)	2.2				2.5				3.5	4.0	4.3	3.5				
p0 queue free %	98				99				100	100	93	100				
cM capacity (veh/h)	677				397				44	30	393	67				
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1								
Volume Total	11	923	464	4	676	343	1	14								
Volume Left	11	0	0	4	0	0	0	5								
Volume Right	0	0	2	0	0	5	1	9								
cSH	677	1700	1700	397	1700	1700	393	151								
Volume to Capacity	0.02	0.54	0.27	0.01	0.40	0.20	0.00	0.09								
Queue Length 95th (ft)	1	0	0	1	0	0	0	8								
Control Delay (s)	10.4	0.0	0.0	14.2	0.0	0.0	14.2	31.2								
Lane LOS	B				B			B	D							
Approach Delay (s)	0.1				0.1			14.2	31.2							
Approach LOS							B	D								
Intersection Summary																
Average Delay				0.3												
Intersection Capacity Utilization				43.7%			ICU Level of Service			A						
Analysis Period (min)				15												

HCM Unsignalized Intersection Capacity Analysis
3: Funeral Home Driveway East & Main Street Timing Plan: AM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗↗			↗↗		↗
Traffic Volume (veh/h)	1182	0	0	869	0	0
Future Volume (Veh/h)	1182	0	0	869	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)	1391	0	0	1022	0	0
Pedestrians					5	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	903			920		
pX, platoon unblocked			0.86		0.86	0.86
vC, conflicting volume			1396		1907	700
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1128		1725	317
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)			524		68	579
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	696	696	511	511	0	
Volume Left	0	0	0	0	0	
Volume Right	0	0	0	0	0	
cSH	1700	1700	1700	1700	1700	
Volume to Capacity	0.41	0.41	0.30	0.30	0.00	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	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			36.0%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
4: 10555 Main Street Driveway West & Main Street

EX 2022
Timing Plan: AM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔	↘	↙	↔	↖	↗
Traffic Volume (veh/h)	1173	9	10	869	0	0
Future Volume (Veh/h)	1173	9	10	869	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	1222	9	10	905	0	0
Pedestrians					3	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	970			853		
pX, platoon unblocked			0.88		0.88	0.88
vC, conflicting volume			1234		1702	618
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			985		1519	282
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		100	100
cM capacity (veh/h)			609		94	625
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1
Volume Total	815	416	10	452	452	0
Volume Left	0	0	10	0	0	0
Volume Right	0	9	0	0	0	0
cSH	1700	1700	609	1700	1700	1700
Volume to Capacity	0.48	0.24	0.02	0.27	0.27	0.00
Queue Length 95th (ft)	0	0	1	0	0	0
Control Delay (s)	0.0	0.0	11.0	0.0	0.0	0.0
Lane LOS			B			A
Approach Delay (s)	0.0		0.1			0.0
Approach LOS						A
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			36.0%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
5: 10555 Main Street Driveway East & Main Street

EX 2022
Timing Plan: AM Peak

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	 			 		
Traffic Volume (veh/h)	1173	0	0	879	0	0
Future Volume (Veh/h)	1173	0	0	879	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)	1380	0	0	1034	0	0
Pedestrians					4	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	1113			710		
pX, platoon unblocked			0.88		0.88	0.88
vC, conflicting volume			1384		1901	694
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1164		1752	381
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)			522		67	541
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	690	690	517	517	0	
Volume Left	0	0	0	0	0	
Volume Right	0	0	0	0	0	
cSH	1700	1700	1700	1700	1700	
Volume to Capacity	0.41	0.41	0.30	0.30	0.00	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	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			35.8%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
6: 10533 Main Street Driveway/Mosby Tower Driveway East & Main Street

EX 2022

Timing Plan: AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	1163	7	6	874	13	1	0	1	6	0	4
Future Volume (Veh/h)	3	1163	7	6	874	13	1	0	1	6	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	1264	8	7	950	14	1	0	1	7	0	4
Pedestrians		1			2			8				
Lane Width (ft)		12.0			12.0			12.0				
Walking Speed (ft/s)		3.5			3.5			3.5				
Percent Blockage		0			0			1				
Right turn flare (veh)												
Median type		None			TWLT							
Median storage (veh)					2							
Upstream signal (ft)		1226			597							
pX, platoon unblocked				0.90			0.90	0.90	0.90	0.90	0.90	
vC, conflicting volume	964			1280			1776	2260	646	1612	2257	483
vC1, stage 1 conf vol							1282	1282		971	971	
vC2, stage 2 conf vol							494	978		641	1286	
vCu, unblocked vol	964			1089			1640	2178	384	1458	2174	483
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			99	100	100	97	100	99
cM capacity (veh/h)	710			568			189	197	547	242	195	529
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1	SB 1					
Volume Total	3	843	429	482	489	2	11					
Volume Left	3	0	0	7	0	1	7					
Volume Right	0	0	8	0	14	1	4					
cSH	710	1700	1700	568	1700	280	302					
Volume to Capacity	0.00	0.50	0.25	0.01	0.29	0.01	0.04					
Queue Length 95th (ft)	0	0	0	1	0	1	3					
Control Delay (s)	10.1	0.0	0.0	0.4	0.0	17.9	17.4					
Lane LOS	B			A		C	C					
Approach Delay (s)	0.0			0.2		17.9	17.4					
Approach LOS						C	C					
Intersection Summary												
Average Delay	0.2											
Intersection Capacity Utilization	43.0%			ICU Level of Service				A				
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis
7: 10515 Main Street Driveway & Main Street

EX 2022

Timing Plan: AM Peak

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1170	0	0	893	0	0
Future Volume (Veh/h)	1170	0	0	893	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)	1376	0	0	1051	0	0
Pedestrians					5	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage (veh)	2			2		
Upstream signal (ft)				478		
pX, platoon unblocked						
vC, conflicting volume			1381		1906	464
vC1, stage 1 conf vol					1381	
vC2, stage 2 conf vol					526	
vCu, unblocked vol			1381		1906	464
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			490		185	543
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	550	550	275	526	526	0
Volume Left	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.32	0.32	0.16	0.31	0.31	0.00
Queue Length 95th (ft)	0	0	0	0	0	0
Control Delay (s)	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			28.0%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
8: 10501 Main Street Driveway West/Church Driveways & Main Street

EX 2022

Timing Plan: AM Peak

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		  			 			 			 		
Traffic Volume (veh/h)	14	1156	0	0	889	8	0	0	0	0	0	4	
Future Volume (Veh/h)	14	1156	0	0	889	8	0	0	0	0	0	4	
Sign Control	Free				Free				Stop				
Grade	0%				0%				0%				
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	
Hourly flow rate (vph)	16	1360	0	0	1046	9	0	0	0	0	0	5	
Pedestrians									5	2			
Lane Width (ft)									12.0	12.0			
Walking Speed (ft/s)									3.5	3.5			
Percent Blockage									0	0			
Right turn flare (veh)													
Median type	TWLTL				TWLTL								
Median storage veh	2				2								
Upstream signal (ft)					320								
pX, platoon unblocked													
vC, conflicting volume	1057				1365				1925	2454	458	530	
vC1, stage 1 conf vol							1397	1397	1052			1052	
vC2, stage 2 conf vol							528	1057	485			1397	
vCu, unblocked vol	1057				1365				1925	2454	458	530	
tC, single (s)	4.2				4.1				7.5	6.5	6.9	6.9	
tC, 2 stage (s)							6.5	5.5	6.5			5.5	
tF (s)	2.3				2.2				3.5	4.0	3.3	3.3	
p0 queue free %	97				100				100	100	100	99	
cM capacity (veh/h)	624				497				136	160	547	493	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1	SB 1						
Volume Total	356	680	340	697	358	0	5						
Volume Left	16	0	0	0	0	0	0						
Volume Right	0	0	0	0	0	9	5						
cSH	624	1700	1700	1700	1700	1700	493						
Volume to Capacity	0.03	0.40	0.20	0.41	0.21	0.00	0.01						
Queue Length 95th (ft)	2	0	0	0	0	0	1						
Control Delay (s)	0.8	0.0	0.0	0.0	0.0	0.0	12.4						
Lane LOS	A							A	B				
Approach Delay (s)	0.2				0.0				0	12.4			
Approach LOS							A	B					
Intersection Summary													
Average Delay				0.1									
Intersection Capacity Utilization				42.1%	ICU Level of Service				A				
Analysis Period (min)				15									

HCM Unsignalized Intersection Capacity Analysis
9: 10501 Main Street Driveway East & Main Street

EX 2022

Timing Plan: AM Peak

														
Movement	EBT	EBR	WBL	WBT	NBL	NBR								
Lane Configurations	↑↑↑↱			↑↑		↱								
Traffic Volume (veh/h)	1156	0	0	897	0	0								
Future Volume (Veh/h)	1156	0	0	897	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)	1360	0	0	1055	0	0								
Pedestrians					6									
Lane Width (ft)				12.0										
Walking Speed (ft/s)				3.5										
Percent Blockage				1										
Right turn flare (veh)														
Median type	TWLTL			None										
Median storage (veh)	2													
Upstream signal (ft)				140										
pX, platoon unblocked														
vC, conflicting volume			1366		1894	346								
vC1, stage 1 conf vol					1366									
vC2, stage 2 conf vol					528									
vCu, unblocked vol			1366		1894	346								
tC, single (s)			4.1		6.8	6.9								
tC, 2 stage (s)					5.8									
tF (s)			2.2		3.5	3.3								
p0 queue free %			100		100	100								
cM capacity (veh/h)			496		188	646								
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	NB 1							
Volume Total	389	389	389	194	528	528	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	0.23	0.23	0.23	0.11	0.31	0.31	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	Intersection Capacity Utilization	28.1%	ICU Level of Service	A									
			0.0											
			15											

Queues

10: West Street & Main Street

EX 2022

Timing Plan: AM Peak

	EBL	EBT	EBR	WBL	WBT	NBT	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	853	470	21	17	165	70	65	823
v/c Ratio	0.65	0.67	0.03	0.05	0.70	0.32	0.22	0.49
Control Delay	36.6	40.3	0.1	19.7	73.4	52.1	51.2	15.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.6	40.3	0.1	19.7	73.4	52.1	51.2	15.3
Queue Length 50th (ft)	313	341	0	6	145	27	51	194
Queue Length 95th (ft)	432	#559	0	19	216	45	93	303
Internal Link Dist (ft)	60				306	268	482	
Turn Bay Length (ft)				125				
Base Capacity (vph)	1313	698	660	345	237	494	299	1686
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.67	0.03	0.05	0.70	0.14	0.22	0.49

Intersection Summary

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

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

10: West Street & Main Street

EX 2022

Timing Plan: AM Peak

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↑	↔	↔	↑		↔	↔	↔	↔	↑	↔
Traffic Volume (vph)	734	404	18	15	142	0	47	3	10	8	48	708
Future Volume (vph)	734	404	18	15	142	0	47	3	10	8	48	708
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	2200
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0			6.0			6.8	7.0
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00			0.95			1.00	0.88
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00			0.99			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	0.85	1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.96			0.99	1.00
Satd. Flow (prot)	3090	1644	1377	1587	1660			2715			1665	2794
Flt Permitted	0.95	1.00	1.00	0.49	1.00			0.96			0.99	1.00
Satd. Flow (perm)	3090	1644	1377	825	1660			2715			1665	2794
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	853	470	21	17	165	0	55	3	12	9	56	823
RTOR Reduction (vph)	0	0	12	0	0	0	0	11	0	0	0	0
Lane Group Flow (vph)	853	470	9	17	165	0	59	0	0	65	823	
Confl. Peds. (#/hr)	1		4	4		1	4		5	5		4
Heavy Vehicles (%)	2%	4%	2%	2%	3%	2%	8%	2%	30%	2%	2%	5%
Turn Type	Prot	NA	Perm	pm+pt	NA		Split	NA		Split	NA	pm+ov
Protected Phases	5	2		1	6		3	3		4	4	5
Permitted Phases			2	6								4
Actuated Green, G (s)	58.3	58.3	58.3	40.0	20.0			9.7			25.2	83.5
Effective Green, g (s)	58.3	58.3	58.3	40.0	20.0			9.7			25.2	83.5
Actuated g/C Ratio	0.42	0.42	0.42	0.29	0.14			0.07			0.18	0.60
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0			6.0			6.8	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	1286	684	573	344	237			188			299	1666
v/s Ratio Prot	c0.28	c0.29		0.01	0.10			c0.02			0.04	c0.21
v/s Ratio Perm			0.01	0.01								0.09
v/c Ratio	0.66	0.69	0.02	0.05	0.70			0.31			0.22	0.49
Uniform Delay, d1	32.9	33.4	24.0	36.1	57.1			62.0			49.0	16.2
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	2.7	5.6	0.0	0.1	8.6			1.0			1.7	1.0
Delay (s)	35.6	39.0	24.0	36.2	65.7			62.9			50.6	17.2
Level of Service	D	D	C	D	E			E			D	B
Approach Delay (s)		36.6			62.9			62.9			19.7	
Approach LOS		D			E			E			B	

Intersection Summary

HCM 2000 Control Delay	33.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	26.8
Intersection Capacity Utilization	76.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Queues

1: Judicial Drive & Main Street

EX 2022

Timing Plan: PM Peak

	→	↘	↙	←	↖
Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	925	352	56	1401	490
v/c Ratio	0.36	0.25	0.13	0.50	0.84
Control Delay	12.6	0.5	6.5	9.5	102.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	12.6	0.5	6.5	9.5	102.6
Queue Length 50th (ft)	253	0	17	350	358
Queue Length 95th (ft)	330	9	33	447	415
Internal Link Dist (ft)	425			206	540
Turn Bay Length (ft)		125	95		
Base Capacity (vph)	2546	1393	464	2779	833
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.36	0.25	0.12	0.50	0.59

Intersection Summary

HCM Signalized Intersection Capacity Analysis

1: Judicial Drive & Main Street

EX 2022

Timing Plan: PM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↕↕	↘	↙	↕↕	↕↕	
Traffic Volume (vph)	842	320	51	1275	392	54
Future Volume (vph)	842	320	51	1275	392	54
Ideal Flow (vphpl)	1900	1900	1900	1900	2100	1900
Total Lost time (s)	7.0	6.3	7.0	7.0	6.3	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.98	
Flt Protected	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (prot)	3539	1540	1770	3539	3745	
Flt Permitted	1.00	1.00	0.27	1.00	0.96	
Satd. Flow (perm)	3539	1540	496	3539	3745	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	925	352	56	1401	431	59
RTOR Reduction (vph)	0	44	0	0	5	0
Lane Group Flow (vph)	925	308	56	1401	485	0
Confl. Peds. (#/hr)		3	3			1
Confl. Bikes (#/hr)		2				1
Turn Type	NA	pm+ov	pm+pt	NA	Prot	
Protected Phases	2	4	1	6	4	
Permitted Phases		2	6			
Actuated Green, G (s)	158.3	192.2	172.8	172.8	33.9	
Effective Green, g (s)	158.3	192.2	172.8	172.8	33.9	
Actuated g/C Ratio	0.72	0.87	0.79	0.79	0.15	
Clearance Time (s)	7.0	6.3	7.0	7.0	6.3	
Vehicle Extension (s)	5.0	3.0	3.0	5.0	3.0	
Lane Grp Cap (vph)	2546	1345	433	2779	577	
v/s Ratio Prot	0.26	0.04	0.00	c0.40	c0.13	
v/s Ratio Perm		0.16	0.10			
v/c Ratio	0.36	0.23	0.13	0.50	0.84	
Uniform Delay, d1	11.7	2.2	6.5	8.4	90.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.4	0.1	0.1	0.7	10.6	
Delay (s)	12.1	2.3	6.7	9.0	101.1	
Level of Service	B	A	A	A	F	
Approach Delay (s)	9.4			8.9	101.1	
Approach LOS	A			A	F	

Intersection Summary

HCM 2000 Control Delay	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	220.0	Sum of lost time (s)	20.3
Intersection Capacity Utilization	58.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
2: Funeral Home Driveway West/Mosby Tower Driveway West & Main Street Timing Plan: PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	861	0	4	1301	7	1	0	5	9	0	34
Future Volume (Veh/h)	26	861	0	4	1301	7	1	0	5	9	0	34
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	29	957	0	4	1446	8	1	0	6	10	0	38
Pedestrians									4	3		
Lane Width (ft)									12.0	12.0		
Walking Speed (ft/s)									3.5	3.5		
Percent Blockage									0	0		
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)	738			1085								
pX, platoon unblocked												
vC, conflicting volume	1457			961			1788	2484	482	2004	2480	730
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1457			961			1788	2484	482	2004	2480	730
tC, single (s)	4.1			4.1			9.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			4.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	94			99			93	100	99	69	100	90
cM capacity (veh/h)	459			709			15	27	528	33	27	364
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	29	638	319	4	964	490	7	48				
Volume Left	29	0	0	4	0	0	1	10				
Volume Right	0	0	0	0	0	8	6	38				
cSH	459	1700	1700	709	1700	1700	90	117				
Volume to Capacity	0.06	0.38	0.19	0.01	0.57	0.29	0.08	0.41				
Queue Length 95th (ft)	5	0	0	0	0	0	6	44				
Control Delay (s)	13.4	0.0	0.0	10.1	0.0	0.0	48.4	55.8				
Lane LOS	B			B			E	F				
Approach Delay (s)	0.4			0.0			48.4	55.8				
Approach LOS							E	F				
Intersection Summary												
Average Delay	1.4											
Intersection Capacity Utilization	46.6%			ICU Level of Service			A					
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis
3: Funeral Home Driveway East & Main Street Timing Plan: PM Peak

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	875	0	0	1312	0	2
Future Volume (Veh/h)	875	0	0	1312	0	2
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)	1029	0	0	1544	0	2
Pedestrians					3	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	903			920		
pX, platoon unblocked						
vC, conflicting volume			1032		1804	518
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1032		1804	518
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)			667		70	501
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	514	514	772	772	2	
Volume Left	0	0	0	0	0	
Volume Right	0	0	0	0	2	
cSH	1700	1700	1700	1700	501	
Volume to Capacity	0.30	0.30	0.45	0.45	0.00	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	0.0	0.0	0.0	0.0	12.2	
Lane LOS					B	
Approach Delay (s)	0.0		0.0		12.2	
Approach LOS					B	
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			39.6%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
4: 10555 Main Street Driveway West & Main Street

EX 2022
Timing Plan: PM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔		↔	↔	↔	
Traffic Volume (veh/h)	877	0	3	1306	6	0
Future Volume (Veh/h)	877	0	3	1306	6	0
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)	964	0	3	1435	7	0
Pedestrians					9	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					1	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	970			853		
pX, platoon unblocked						
vC, conflicting volume			973		1696	491
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			973		1696	491
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		92	100
cM capacity (veh/h)			698		82	519
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1
Volume Total	643	321	3	718	718	7
Volume Left	0	0	3	0	0	7
Volume Right	0	0	0	0	0	0
cSH	1700	1700	698	1700	1700	82
Volume to Capacity	0.38	0.19	0.00	0.42	0.42	0.08
Queue Length 95th (ft)	0	0	0	0	0	7
Control Delay (s)	0.0	0.0	10.2	0.0	0.0	52.7
Lane LOS			B			F
Approach Delay (s)	0.0		0.0			52.7
Approach LOS						F
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			46.1%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
5: 10555 Main Street Driveway East & Main Street

EX 2022
Timing Plan: PM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔		↔
Traffic Volume (veh/h)	877	0	0	1309	0	24
Future Volume (Veh/h)	877	0	0	1309	0	24
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)	1032	0	0	1540	0	28
Pedestrians					6	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					1	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	1113			710		
pX, platoon unblocked						
vC, conflicting volume			1038		1808	522
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1038		1808	522
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	94
cM capacity (veh/h)			662		70	497
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	516	516	770	770	28	
Volume Left	0	0	0	0	0	
Volume Right	0	0	0	0	28	
cSH	1700	1700	1700	1700	497	
Volume to Capacity	0.30	0.30	0.45	0.45	0.06	
Queue Length 95th (ft)	0	0	0	0	4	
Control Delay (s)	0.0	0.0	0.0	0.0	12.7	
Lane LOS					B	
Approach Delay (s)	0.0		0.0		12.7	
Approach LOS					B	
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			39.5%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
6: 10533 Main Street Driveway/Mosby Tower Driveway East & Main Street Timing Plan: PM Peak

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations														
Traffic Volume (veh/h)	2	898	1	3	1286	30	5	0	4	15	0	18		
Future Volume (Veh/h)	2	898	1	3	1286	30	5	0	4	15	0	18		
Sign Control	Free			Free			Stop			Stop				
Grade	0%			0%			0%			0%				
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99		
Hourly flow rate (vph)	2	907	1	3	1299	30	5	0	4	15	0	18		
Pedestrians								6			7			
Lane Width (ft)								12.0			12.0			
Walking Speed (ft/s)								3.5			3.5			
Percent Blockage								1			1			
Right turn flare (veh)														
Median type	None			TWLTL										
Median storage veh)				2										
Upstream signal (ft)	1226			597										
pX, platoon unblocked														
vC, conflicting volume	1336				914				1591	2260	460	1788	2245	672
vC1, stage 1 conf vol								918	918		1327	1327		
vC2, stage 2 conf vol								674	1342		462	918		
vCu, unblocked vol	1336				914				1591	2260	460	1788	2245	672
tC, single (s)	4.1				4.1				7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)								6.5	5.5		6.5	5.5		
tF (s)	2.2				2.2				3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100				100				98	100	99	90	100	95
cM capacity (veh/h)	509				737				235	180	545	154	183	396
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1	SB 1							
Volume Total	2	605	303	652	680	9	33							
Volume Left	2	0	0	3	0	5	15							
Volume Right	0	0	1	0	30	4	18							
cSH	509	1700	1700	737	1700	314	231							
Volume to Capacity	0.00	0.36	0.18	0.00	0.40	0.03	0.14							
Queue Length 95th (ft)	0	0	0	0	0	2	12							
Control Delay (s)	12.1	0.0	0.0	0.1	0.0	16.8	23.2							
Lane LOS	B				A				C					
Approach Delay (s)	0.0				0.1				16.8					
Approach LOS							C							
Intersection Summary														
Average Delay				0.4										
Intersection Capacity Utilization				48.6%	ICU Level of Service			A						
Analysis Period (min)				15										

HCM Unsignalized Intersection Capacity Analysis
7: 10515 Main Street Driveway & Main Street Timing Plan: PM Peak

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	917	0	0	1319	0	0
Future Volume (Veh/h)	917	0	0	1319	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)	1079	0	0	1552	0	0
Pedestrians					7	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					1	
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage (veh)	2			2		
Upstream signal (ft)				478		
pX, platoon unblocked						
vC, conflicting volume			1086		1862	367
vC1, stage 1 conf vol					1086	
vC2, stage 2 conf vol					776	
vCu, unblocked vol			1086		1862	367
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			634		235	626
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	432	432	216	776	776	0
Volume Left	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.25	0.25	0.13	0.46	0.46	0.00
Queue Length 95th (ft)	0	0	0	0	0	0
Control Delay (s)	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			39.8%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
8: 10501 Main Street Driveway West/Church Driveways & Main Street

EX 2022

Timing Plan: PM Peak

																
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR				
Lane Configurations		  			  			 				 				
Traffic Volume (veh/h)	2	915	0	0	1316	2	0	0	0	0	0	0	3			
Future Volume (Veh/h)	2	915	0	0	1316	2	0	0	0	0	0	0	3			
Sign Control	Free			Free			Stop			Stop						
Grade	0%			0%			0%			0%						
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85			
Hourly flow rate (vph)	2	1076	0	0	1548	2	0	0	0	0	0	0	4			
Pedestrians									7					8		
Lane Width (ft)									12.0					12.0		
Walking Speed (ft/s)									3.5					3.5		
Percent Blockage									1					1		
Right turn flare (veh)																
Median type	TWLTL				TWLTL											
Median storage veh	2				2											
Upstream signal (ft)					320											
pX, platoon unblocked																
vC, conflicting volume	1558				1083				1865	2645	366	1920	2644	783		
vC1, stage 1 conf vol									1087	1087		1557	1557			
vC2, stage 2 conf vol									778	1558		363	1087			
vCu, unblocked vol	1558				1083				1865	2645	366	1920	2644	783		
tC, single (s)	4.1				4.1				7.5	6.5	6.9	7.5	6.5	6.9		
tC, 2 stage (s)									6.5	5.5		6.5	5.5			
tF (s)	2.2				2.2				3.5	4.0	3.3	3.5	4.0	3.3		
p0 queue free %	100				100				100	100	100	100	100	99		
cM capacity (veh/h)	417				636				189	141	627	113	142	334		
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1	SB 1									
Volume Total	271	538	269	1032	518	0	4									
Volume Left	2	0	0	0	0	0	0									
Volume Right	0	0	0	0	2	0	4									
cSH	417	1700	1700	1700	1700	1700	334									
Volume to Capacity	0.00	0.32	0.16	0.61	0.30	0.00	0.01									
Queue Length 95th (ft)	0	0	0	0	0	0	1									
Control Delay (s)	0.2	0.0	0.0	0.0	0.0	0.0	15.9									
Lane LOS	A					A	C									
Approach Delay (s)	0.0			0.0		0.0	15.9									
Approach LOS						A	C									
Intersection Summary																
Average Delay	0.0															
Intersection Capacity Utilization	46.4%			ICU Level of Service						A						
Analysis Period (min)	15															

HCM Unsignalized Intersection Capacity Analysis
9: 10501 Main Street Driveway East & Main Street

EX 2022

Timing Plan: PM Peak

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑↱			↑↑↑		↱	
Traffic Volume (veh/h)	915	0	0	1318	0	0	
Future Volume (Veh/h)	915	0	0	1318	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)	1076	0	0	1551	0	0	
Pedestrians					3		
Lane Width (ft)					12.0		
Walking Speed (ft/s)					3.5		
Percent Blockage					0		
Right turn flare (veh)							
Median type	TWLT			None			
Median storage (veh)	2						
Upstream signal (ft)				140			
pX, platoon unblocked							
vC, conflicting volume			1079		1854	272	
vC1, stage 1 conf vol					1079		
vC2, stage 2 conf vol					776		
vCu, unblocked vol			1079		1854	272	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)					5.8		
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	100	
cM capacity (veh/h)			640		237	724	
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	NB 1
Volume Total	307	307	307	154	776	776	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	0.18	0.18	0.18	0.09	0.46	0.46	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	39.8%			ICU Level of Service		A	
Analysis Period (min)	15						

Queues

10: West Street & Main Street

EX 2022

Timing Plan: PM Peak

	EBL	EBT	EBR	WBL	WBT	NBT	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	591	335	18	5	244	180	41	989
v/c Ratio	0.50	0.57	0.03	0.01	1.02	0.57	0.14	0.61
Control Delay	35.5	43.1	0.1	18.4	121.8	58.1	49.8	20.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.5	43.1	0.1	18.4	121.8	58.1	49.8	20.0
Queue Length 50th (ft)	206	244	0	2	~235	73	32	277
Queue Length 95th (ft)	296	388	0	10	#411	105	68	413
Internal Link Dist (ft)	60				306	268	482	
Turn Bay Length (ft)				125				
Base Capacity (vph)	1189	585	565	417	239	542	299	1621
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.57	0.03	0.01	1.02	0.33	0.14	0.61

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis

10: West Street & Main Street

EX 2022

Timing Plan: PM Peak

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	573	325	17	5	236	1	123	12	40	6	34	959
Future Volume (vph)	573	325	17	5	236	1	123	12	40	6	34	959
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	2200
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0			6.0			6.8	7.0
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00			0.95			1.00	0.88
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00			0.99			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	0.85	1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	3090	1676	1375	1585	1675			2928			1664	2878
Flt Permitted	0.95	1.00	1.00	0.56	1.00			0.97			0.99	1.00
Satd. Flow (perm)	3090	1676	1375	932	1675			2928			1664	2878
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)	591	335	18	5	243	1	127	12	41	6	35	989
RTOR Reduction (vph)	0	0	12	0	0	0	0	22	0	0	0	0
Lane Group Flow (vph)	591	335	6	5	244	0	0	158	0	0	41	989
Confl. Peds. (#/hr)	2		4	4		2	3		5	5		3
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	2%	2%
Turn Type	Prot	NA	Perm	pm+pt	NA		Split	NA		Split	NA	pm+ov
Protected Phases	5	2		1	6		3	3		4	4	5
Permitted Phases			2	6								4
Actuated Green, G (s)	53.9	48.9	48.9	45.0	20.0			14.1			25.2	79.1
Effective Green, g (s)	53.9	48.9	48.9	45.0	20.0			14.1			25.2	79.1
Actuated g/C Ratio	0.38	0.35	0.35	0.32	0.14			0.10			0.18	0.56
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0			6.0			6.8	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	1189	585	480	416	239			294			299	1626
v/s Ratio Prot	0.19	c0.20		0.00	c0.15			c0.05			0.02	c0.23
v/s Ratio Perm			0.00	0.00								0.11
v/c Ratio	0.50	0.57	0.01	0.01	1.02			0.54			0.14	0.61
Uniform Delay, d1	32.7	37.1	29.8	32.3	60.0			59.9			48.3	20.2
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	1.5	4.0	0.0	0.0	63.7			1.9			1.0	1.7
Delay (s)	34.2	41.1	29.8	32.3	123.7			61.8			49.2	21.9
Level of Service	C	D	C	C	F			E			D	C
Approach Delay (s)	36.6				121.9			61.8			23.0	
Approach LOS	D				F			E			C	

Intersection Summary

HCM 2000 Control Delay	41.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	26.8
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

E. Intersection Analysis Worksheets – Future without Development (2025)

Queues

1: Judicial Drive & Main Street

FB 2025

Timing Plan: AM Peak

	→	↘	↙	←	↖
Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1293	349	35	963	261
v/c Ratio	0.48	0.24	0.11	0.33	0.71
Control Delay	9.0	0.5	3.8	4.1	91.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	9.0	0.5	3.8	4.1	91.8
Queue Length 50th (ft)	297	0	6	125	162
Queue Length 95th (ft)	374	9	15	170	210
Internal Link Dist (ft)	425			206	540
Turn Bay Length (ft)		125	95		
Base Capacity (vph)	2714	1477	330	2892	870
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.48	0.24	0.11	0.33	0.30

Intersection Summary

HCM Signalized Intersection Capacity Analysis

1: Judicial Drive & Main Street

FB 2025

Timing Plan: AM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↓	↑↑	↑↑	
Traffic Volume (vph)	1190	321	32	886	216	24
Future Volume (vph)	1190	321	32	886	216	24
Ideal Flow (vphpl)	1900	1900	1900	1900	2100	1900
Total Lost time (s)	7.0	6.3	7.0	7.0	6.3	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.99	
Flt Protected	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (prot)	3505	1583	1752	3471	3765	
Flt Permitted	1.00	1.00	0.18	1.00	0.96	
Satd. Flow (perm)	3505	1583	325	3471	3765	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1293	349	35	963	235	26
RTOR Reduction (vph)	0	48	0	0	5	0
Lane Group Flow (vph)	1293	301	35	963	256	0
Confl. Peds. (#/hr)					1	
Heavy Vehicles (%)	3%	2%	3%	4%	2%	2%
Turn Type	NA	pm+ov	pm+pt	NA	Prot	
Protected Phases	2	4	1	6	4	
Permitted Phases		2	6			
Actuated Green, G (s)	145.7	164.1	158.3	158.3	18.4	
Effective Green, g (s)	145.7	164.1	158.3	158.3	18.4	
Actuated g/C Ratio	0.77	0.86	0.83	0.83	0.10	
Clearance Time (s)	7.0	6.3	7.0	7.0	6.3	
Vehicle Extension (s)	5.0	3.0	3.0	5.0	3.0	
Lane Grp Cap (vph)	2687	1367	312	2891	364	
v/s Ratio Prot	c0.37	0.02	0.00	c0.28	c0.07	
v/s Ratio Perm		0.17	0.09			
v/c Ratio	0.48	0.22	0.11	0.33	0.70	
Uniform Delay, d1	8.2	2.2	4.8	3.7	83.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.6	0.1	0.2	0.3	6.0	
Delay (s)	8.8	2.3	5.0	4.0	89.2	
Level of Service	A	A	A	A	F	
Approach Delay (s)	7.4			4.0	89.2	
Approach LOS	A			A	F	

Intersection Summary

HCM 2000 Control Delay	13.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	20.3
Intersection Capacity Utilization	50.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
 2: Funeral Home Driveway West/Mosby Tower Driveway West & Main Street
 FB 2025
 Timing Plan: AM Peak

																
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR				
Lane Configurations		 			 			 			 					
Traffic Volume (veh/h)	9	1223	2	3	890	4	0	0	1	4	0	8				
Future Volume (Veh/h)	9	1223	2	3	890	4	0	0	1	4	0	8				
Sign Control	Free			Free			Stop			Stop						
Grade	0%			0%			0%			0%						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92				
Hourly flow rate (vph)	10	1329	2	3	967	4	0	0	1	4	0	9				
Pedestrians	5															
Lane Width (ft)	12.0															
Walking Speed (ft/s)	3.5															
Percent Blockage	0															
Right turn flare (veh)																
Median type	None			None												
Median storage (veh)																
Upstream signal (ft)	738			1085												
pX, platoon unblocked				0.86			0.86			0.86	0.86	0.86				
vC, conflicting volume	971				1336				1854	2332	670	1660				
vC1, stage 1 conf vol																
vC2, stage 2 conf vol																
vCu, unblocked vol	971				1057				1661	2220	280	1436				
tC, single (s)	4.1				4.8				7.5	6.5	8.9	7.5				
tC, 2 stage (s)																
tF (s)	2.2				2.5				3.5	4.0	4.3	3.5				
p0 queue free %	99				99				100	100	95	100				
cM capacity (veh/h)	706				425				52	36	420	79				
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1								
Volume Total	10	886	445	3	645	326	1	13								
Volume Left	10	0	0	3	0	0	0	4								
Volume Right	0	0	2	0	0	4	1	9								
cSH	706	1700	1700	425	1700	1700	420	192								
Volume to Capacity	0.01	0.52	0.26	0.01	0.38	0.19	0.00	0.07								
Queue Length 95th (ft)	1	0	0	1	0	0	0	5								
Control Delay (s)	10.2	0.0	0.0	13.5	0.0	0.0	13.6	25.1								
Lane LOS	B				B			D								
Approach Delay (s)	0.1				0.0			25.1								
Approach LOS							B	D								
Intersection Summary																
Average Delay				0.2												
Intersection Capacity Utilization				44.9%			ICU Level of Service			A						
Analysis Period (min)				15												

HCM Unsignalized Intersection Capacity Analysis
 3: Funeral Home Driveway East & Main Street
 FB 2025
 Timing Plan: AM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗↗			↗↗		↗
Traffic Volume (veh/h)	1228	0	0	897	0	0
Future Volume (Veh/h)	1228	0	0	897	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1335	0	0	975	0	0
Pedestrians					5	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	903			920		
pX, platoon unblocked			0.86		0.86	0.86
vC, conflicting volume			1340		1828	672
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1060		1630	280
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)			556		79	610
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	668	668	488	488	0	
Volume Left	0	0	0	0	0	
Volume Right	0	0	0	0	0	
cSH	1700	1700	1700	1700	1700	
Volume to Capacity	0.39	0.39	0.29	0.29	0.00	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	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			37.3%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
4: 10555 Main Street Driveway West & Main Street

FB 2025
Timing Plan: AM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	1219	9	10	897	0	0
Future Volume (Veh/h)	1219	9	10	897	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	1270	9	10	934	0	0
Pedestrians					3	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	970			853		
pX, platoon unblocked			0.86		0.86	0.86
vC, conflicting volume			1282		1764	642
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1008		1568	267
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		100	100
cM capacity (veh/h)			587		86	629
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1
Volume Total	847	432	10	467	467	0
Volume Left	0	0	10	0	0	0
Volume Right	0	9	0	0	0	0
cSH	1700	1700	587	1700	1700	1700
Volume to Capacity	0.50	0.25	0.02	0.27	0.27	0.00
Queue Length 95th (ft)	0	0	1	0	0	0
Control Delay (s)	0.0	0.0	11.2	0.0	0.0	0.0
Lane LOS			B			A
Approach Delay (s)	0.0		0.1			0.0
Approach LOS						A
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			37.3%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
5: 10555 Main Street Driveway East & Main Street

FB 2025
Timing Plan: AM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	1219	0	0	908	0	0
Future Volume (Veh/h)	1219	0	0	908	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1325	0	0	987	0	0
Pedestrians					4	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	1113			710		
pX, platoon unblocked			0.86		0.86	0.86
vC, conflicting volume			1329		1822	666
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1068		1638	302
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)			559		79	598
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	662	662	494	494	0	
Volume Left	0	0	0	0	0	
Volume Right	0	0	0	0	0	
cSH	1700	1700	1700	1700	1700	
Volume to Capacity	0.39	0.39	0.29	0.29	0.00	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	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			37.0%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
6: 10533 Main Street Driveway/Mosby Tower Driveway East & Main Street

FB 2025

Timing Plan: AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	3	1208	7	6	902	13	1	0	1	6	0	4
Future Volume (Veh/h)	3	1208	7	6	902	13	1	0	1	6	0	4
Sign Control	Free				Free				Stop			
Grade	0%				0%				0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	1313	8	7	980	14	1	0	1	7	0	4
Pedestrians	1				2				8			
Lane Width (ft)	12.0				12.0				12.0			
Walking Speed (ft/s)	3.5				3.5				3.5			
Percent Blockage	0				0				1			
Right turn flare (veh)												
Median type	None				TWLTL							
Median storage (veh)					2							
Upstream signal (ft)	1226				597							
pX, platoon unblocked					0.87				0.87			
vC, conflicting volume	994				1329				1840			
vC1, stage 1 conf vol									1331			
vC2, stage 2 conf vol									509			
vCu, unblocked vol	994				1072				1661			
tC, single (s)	4.1				4.1				7.5			
tC, 2 stage (s)									6.5			
tF (s)	2.2				2.2				3.5			
p0 queue free %	100				99				99			
cM capacity (veh/h)	692				556				185			
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1	SB 1					
Volume Total	3	875	446	497	504	2	11					
Volume Left	3	0	0	7	0	1	7					
Volume Right	0	0	8	0	14	1	4					
cSH	692	1700	1700	556	1700	282	294					
Volume to Capacity	0.00	0.51	0.26	0.01	0.30	0.01	0.04					
Queue Length 95th (ft)	0	0	0	1	0	1	3					
Control Delay (s)	10.2	0.0	0.0	0.4	0.0	17.9	17.7					
Lane LOS	B			A		C	C					
Approach Delay (s)	0.0			0.2		17.9	17.7					
Approach LOS						C	C					
Intersection Summary												
Average Delay	0.2											
Intersection Capacity Utilization	44.3%				ICU Level of Service				A			
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis
7: 10515 Main Street Driveway & Main Street

FB 2025

Timing Plan: AM Peak

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1215	0	0	922	0	0
Future Volume (Veh/h)	1215	0	0	922	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1321	0	0	1002	0	0
Pedestrians					5	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage (veh)	2			2		
Upstream signal (ft)				478		
pX, platoon unblocked						
vC, conflicting volume			1326		1827	445
vC1, stage 1 conf vol					1326	
vC2, stage 2 conf vol					501	
vCu, unblocked vol			1326		1827	445
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			514		198	558
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	528	528	264	501	501	0
Volume Left	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.31	0.31	0.16	0.29	0.29	0.00
Queue Length 95th (ft)	0	0	0	0	0	0
Control Delay (s)	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			28.8%		ICU Level of Service	
Analysis Period (min)			15		A	

HCM Unsignalized Intersection Capacity Analysis
8: 10501 Main Street Driveway West/Church Driveways & Main Street

FB 2025

Timing Plan: AM Peak

															
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR			
Lane Configurations		  			 			 				 			
Traffic Volume (veh/h)	14	1201	0	0	918	8	0	0	0	0	0	4			
Future Volume (Veh/h)	14	1201	0	0	918	8	0	0	0	0	0	4			
Sign Control		Free			Free			Stop			Stop				
Grade		0%			0%			0%			0%				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Hourly flow rate (vph)	15	1305	0	0	998	9	0	0	0	0	0	4			
Pedestrians									5			2			
Lane Width (ft)									12.0			12.0			
Walking Speed (ft/s)									3.5			3.5			
Percent Blockage									0			0			
Right turn flare (veh)															
Median type		TWLTL			TWLTL										
Median storage (veh)		2			2										
Upstream signal (ft)					320										
pX, platoon unblocked															
vC, conflicting volume	1009			1310			1843	2349	440	1470	2344	506			
vC1, stage 1 conf vol							1340	1340		1004	1004				
vC2, stage 2 conf vol							503	1009		465	1340				
vCu, unblocked vol	1009			1310			1843	2349	440	1470	2344	506			
tC, single (s)	4.2			4.1			7.5	6.5	6.9	7.5	6.5	6.9			
tC, 2 stage (s)							6.5	5.5		6.5	5.5				
tF (s)	2.3			2.2			3.5	4.0	3.3	3.5	4.0	3.3			
p0 queue free %	98			100			100	100	100	100	100	99			
cM capacity (veh/h)	652			522			148	171	562	236	174	511			
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1	SB 1								
Volume Total	341	652	326	665	342	0	4								
Volume Left	15	0	0	0	0	0	0								
Volume Right	0	0	0	0	0	9	4								
cSH	652	1700	1700	1700	1700	1700	511								
Volume to Capacity	0.02	0.38	0.19	0.39	0.20	0.00	0.01								
Queue Length 95th (ft)	2	0	0	0	0	0	1								
Control Delay (s)	0.8	0.0	0.0	0.0	0.0	0.0	12.1								
Lane LOS	A					A	B								
Approach Delay (s)	0.2			0.0		0.0	12.1								
Approach LOS						A	B								
Intersection Summary															
Average Delay	0.1														
Intersection Capacity Utilization	42.9%			ICU Level of Service			A								
Analysis Period (min)	15														

HCM Unsignalized Intersection Capacity Analysis
9: 10501 Main Street Driveway East & Main Street

FB 2025

Timing Plan: AM Peak

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑↑↔			↑↑		↔↑	
Traffic Volume (veh/h)	1201	0	0	926	0	0	
Future Volume (Veh/h)	1201	0	0	926	0	0	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	1305	0	0	1007	0	0	
Pedestrians					6		
Lane Width (ft)				12.0			
Walking Speed (ft/s)				3.5			
Percent Blockage				1			
Right turn flare (veh)							
Median type	TWLTL			None			
Median storage (veh)	2						
Upstream signal (ft)				140			
pX, platoon unblocked							
vC, conflicting volume			1311		1814	332	
vC1, stage 1 conf vol					1311		
vC2, stage 2 conf vol					504		
vCu, unblocked vol			1311		1814	332	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)					5.8		
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	100	
cM capacity (veh/h)			521		201	660	
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	NB 1
Volume Total	373	373	373	186	504	504	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	0.22	0.22	0.22	0.11	0.30	0.30	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	28.9%			ICU Level of Service			A
Analysis Period (min)	15						

Queues

10: West Street & Main Street

FB 2025

Timing Plan: AM Peak

	↖	→	↘	↙	←	↑	↓	↗
Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	822	452	32	21	159	75	89	792
v/c Ratio	0.65	0.68	0.05	0.06	0.67	0.33	0.30	0.48
Control Delay	37.7	41.3	0.1	19.8	71.8	53.0	52.9	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.7	41.3	0.1	19.8	71.8	53.0	52.9	15.7
Queue Length 50th (ft)	299	324	0	7	139	29	71	185
Queue Length 95th (ft)	440	#570	0	24	#221	51	126	309
Internal Link Dist (ft)	60			306			482	
Turn Bay Length (ft)				125				
Base Capacity (vph)	1257	669	638	347	237	500	300	1635
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.68	0.05	0.06	0.67	0.15	0.30	0.48

Intersection Summary

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

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

10: West Street & Main Street

FB 2025

Timing Plan: AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 		 	 	 			 		 	 	
Traffic Volume (vph)	756	416	29	19	146	0	50	8	11	8	74	729
Future Volume (vph)	756	416	29	19	146	0	50	8	11	8	74	729
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	2200
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0			6.0			6.8	7.0
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00			0.95			1.00	0.88
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00			0.99			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	0.85	1.00	1.00			0.98			1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	3090	1644	1377	1587	1660			2747			1668	2794
Flt Permitted	0.95	1.00	1.00	0.50	1.00			0.97			0.99	1.00
Satd. Flow (perm)	3090	1644	1377	838	1660			2747			1668	2794
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	822	452	32	21	159	0	54	9	12	9	80	792
RTOR Reduction (vph)	0	0	19	0	0	0	0	11	0	0	0	0
Lane Group Flow (vph)	822	452	13	21	159	0	64	0	0	89	792	
Confl. Peds. (#/hr)	1		4	4		1	4		5	5		4
Heavy Vehicles (%)	2%	4%	2%	2%	3%	2%	8%	2%	30%	2%	2%	5%
Turn Type	Prot	NA	Perm	pm+pt	NA		Split	NA		Split	NA	pm+ov
Protected Phases	5	2		1	6		3	3		4	4	5
Permitted Phases			2	6								4
Actuated Green, G (s)	57.0	57.0	57.0	40.0	20.0			11.0			25.2	82.2
Effective Green, g (s)	57.0	57.0	57.0	40.0	20.0			11.0			25.2	82.2
Actuated g/C Ratio	0.41	0.41	0.41	0.29	0.14			0.08			0.18	0.59
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0			6.0			6.8	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	1258	669	560	346	237			215			300	1640
v/s Ratio Prot	c0.27	c0.27		0.01	0.10			c0.02			0.05	c0.20
v/s Ratio Perm			0.01	0.01								0.09
v/c Ratio	0.65	0.68	0.02	0.06	0.67			0.30			0.30	0.48
Uniform Delay, d1	33.5	33.9	24.8	36.2	56.9			60.9			49.7	16.7
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	2.7	5.4	0.1	0.1	7.3			0.8			2.5	1.0
Delay (s)	36.2	39.3	24.9	36.3	64.1			61.6			52.2	17.7
Level of Service	D	D	C	D	E			E			D	B
Approach Delay (s)	37.0				60.9				61.6			
Approach LOS	D				E				E			

Intersection Summary

HCM 2000 Control Delay	33.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	26.8
Intersection Capacity Utilization	77.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Queues

1: Judicial Drive & Main Street

FB 2025

Timing Plan: PM Peak

	→	↘	↙	←	↖
Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	946	359	58	1438	500
v/c Ratio	0.37	0.26	0.14	0.52	0.84
Control Delay	13.0	0.5	6.7	10.0	101.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	13.0	0.5	6.7	10.0	101.7
Queue Length 50th (ft)	264	0	17	370	365
Queue Length 95th (ft)	348	9	36	480	420
Internal Link Dist (ft)	425			206	540
Turn Bay Length (ft)		125	95		
Base Capacity (vph)	2533	1394	452	2768	834
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.37	0.26	0.13	0.52	0.60

Intersection Summary

HCM Signalized Intersection Capacity Analysis

1: Judicial Drive & Main Street

FB 2025

Timing Plan: PM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗↗	↘	↙	↗↗	↗↗	
Traffic Volume (vph)	870	330	53	1323	404	56
Future Volume (vph)	870	330	53	1323	404	56
Ideal Flow (vphpl)	1900	1900	1900	1900	2100	1900
Total Lost time (s)	7.0	6.3	7.0	7.0	6.3	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.98	
Flt Protected	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (prot)	3539	1540	1770	3539	3744	
Flt Permitted	1.00	1.00	0.26	1.00	0.96	
Satd. Flow (perm)	3539	1540	481	3539	3744	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	946	359	58	1438	439	61
RTOR Reduction (vph)	0	46	0	0	6	0
Lane Group Flow (vph)	946	313	58	1438	494	0
Confl. Peds. (#/hr)		3	3			1
Confl. Bikes (#/hr)		2				1
Turn Type	NA	pm+ov	pm+pt	NA	Prot	
Protected Phases	2	4	1	6	4	
Permitted Phases		2	6			
Actuated Green, G (s)	157.5	192.1	172.1	172.1	34.6	
Effective Green, g (s)	157.5	192.1	172.1	172.1	34.6	
Actuated g/C Ratio	0.72	0.87	0.78	0.78	0.16	
Clearance Time (s)	7.0	6.3	7.0	7.0	6.3	
Vehicle Extension (s)	5.0	3.0	3.0	5.0	3.0	
Lane Grp Cap (vph)	2533	1344	420	2768	588	
v/s Ratio Prot	0.27	0.04	0.00	c0.41	c0.13	
v/s Ratio Perm		0.17	0.10			
v/c Ratio	0.37	0.23	0.14	0.52	0.84	
Uniform Delay, d1	12.1	2.2	6.8	8.8	90.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.4	0.1	0.2	0.7	10.5	
Delay (s)	12.5	2.3	7.0	9.5	100.5	
Level of Service	B	A	A	A	F	
Approach Delay (s)	9.7			9.4	100.5	
Approach LOS	A			A	F	

Intersection Summary

HCM 2000 Control Delay	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	220.0	Sum of lost time (s)	20.3
Intersection Capacity Utilization	60.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
 2: Funeral Home Driveway West/Mosby Tower Driveway West & Main Street Timing Plan: PM Peak

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (veh/h)	26	889	0	4	1349	7	1	0	5	9	0	34	
Future Volume (Veh/h)	26	889	0	4	1349	7	1	0	5	9	0	34	
Sign Control	Free			Free			Stop			Stop			
Grade	0%			0%			0%			0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	28	966	0	4	1466	8	1	0	5	10	0	37	
Pedestrians								4		3			
Lane Width (ft)								12.0		12.0			
Walking Speed (ft/s)								3.5		3.5			
Percent Blockage								0		0			
Right turn flare (veh)													
Median type	None			None									
Median storage (veh)													
Upstream signal (ft)	738			1085									
pX, platoon unblocked													
vC, conflicting volume	1477				970			1804	2511	487	2025	2507	740
vC1, stage 1 conf vol													
vC2, stage 2 conf vol													
vCu, unblocked vol	1477				970			1804	2511	487	2025	2507	740
tC, single (s)	4.1				4.1			9.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)													
tF (s)	2.2				2.2			4.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	94				99			93	100	99	68	100	90
cM capacity (veh/h)	451				704			15	26	524	32	26	358
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1					
Volume Total	28	644	322	4	977	497	6	47					
Volume Left	28	0	0	4	0	0	1	10					
Volume Right	0	0	0	0	0	8	5	37					
cSH	451	1700	1700	704	1700	1700	77	112					
Volume to Capacity	0.06	0.38	0.19	0.01	0.57	0.29	0.08	0.42					
Queue Length 95th (ft)	5	0	0	0	0	0	6	45					
Control Delay (s)	13.5	0.0	0.0	10.1	0.0	0.0	55.9	58.8					
Lane LOS	B				B			F	F				
Approach Delay (s)	0.4				0.0			55.9	58.8				
Approach LOS							F	F					
Intersection Summary													
Average Delay				1.4									
Intersection Capacity Utilization				47.9%			ICU Level of Service			A			
Analysis Period (min)				15									

HCM Unsignalized Intersection Capacity Analysis
 3: Funeral Home Driveway East & Main Street Timing Plan: PM Peak

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	904	0	0	1361	0	2
Future Volume (Veh/h)	904	0	0	1361	0	2
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)	983	0	0	1479	0	2
Pedestrians					3	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	903			920		
pX, platoon unblocked						
vC, conflicting volume			986		1726	494
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			986		1726	494
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)			694		80	519
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	492	492	740	740	2	
Volume Left	0	0	0	0	0	
Volume Right	0	0	0	0	2	
cSH	1700	1700	1700	1700	519	
Volume to Capacity	0.29	0.29	0.43	0.43	0.00	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	0.0	0.0	0.0	0.0	12.0	
Lane LOS					B	
Approach Delay (s)	0.0		0.0		12.0	
Approach LOS					B	
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			41.0%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
4: 10555 Main Street Driveway West & Main Street

FB 2025
Timing Plan: PM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔		↘	↔	↖	
Traffic Volume (veh/h)	906	0	3	1355	6	0
Future Volume (Veh/h)	906	0	3	1355	6	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	985	0	3	1473	7	0
Pedestrians					9	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					1	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	970			853		
pX, platoon unblocked						
vC, conflicting volume			994		1736	502
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			994		1736	502
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		91	100
cM capacity (veh/h)			686		77	511
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1
Volume Total	657	328	3	736	736	7
Volume Left	0	0	3	0	0	7
Volume Right	0	0	0	0	0	0
cSH	1700	1700	686	1700	1700	77
Volume to Capacity	0.39	0.19	0.00	0.43	0.43	0.09
Queue Length 95th (ft)	0	0	0	0	0	7
Control Delay (s)	0.0	0.0	10.3	0.0	0.0	56.1
Lane LOS			B			F
Approach Delay (s)	0.0		0.0			56.1
Approach LOS						F
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			47.5%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
5: 10555 Main Street Driveway East & Main Street

FB 2025
Timing Plan: PM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔		↗
Traffic Volume (veh/h)	906	0	0	1358	0	24
Future Volume (Veh/h)	906	0	0	1358	0	24
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)	985	0	0	1476	0	26
Pedestrians					6	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					1	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	1113			710		
pX, platoon unblocked						
vC, conflicting volume			991		1729	498
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			991		1729	498
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	95
cM capacity (veh/h)			689		79	514
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	492	492	738	738	26	
Volume Left	0	0	0	0	0	
Volume Right	0	0	0	0	26	
cSH	1700	1700	1700	1700	514	
Volume to Capacity	0.29	0.29	0.43	0.43	0.05	
Queue Length 95th (ft)	0	0	0	0	4	
Control Delay (s)	0.0	0.0	0.0	0.0	12.4	
Lane LOS					B	
Approach Delay (s)	0.0		0.0		12.4	
Approach LOS					B	
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			40.9%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
6: 10533 Main Street Driveway/Mosby Tower Driveway East & Main Street

FB 2025

Timing Plan: PM Peak

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		 			 			 			 		
Traffic Volume (veh/h)	2	927	1	3	1334	30	5	0	4	15	0	18	
Future Volume (Veh/h)	2	927	1	3	1334	30	5	0	4	15	0	18	
Sign Control		Free				Free				Stop			
Grade		0%				0%				0%			
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	
Hourly flow rate (vph)	2	936	1	3	1347	30	5	0	4	15	0	18	
Pedestrians								6			7		
Lane Width (ft)								12.0			12.0		
Walking Speed (ft/s)								3.5			3.5		
Percent Blockage								1			1		
Right turn flare (veh)													
Median type		None				TWLTL							
Median storage (veh)					2								
Upstream signal (ft)		1226				597							
pX, platoon unblocked													
vC, conflicting volume	1384			943			1644	2336	474	1851	2322	696	
vC1, stage 1 conf vol							946	946		1375	1375		
vC2, stage 2 conf vol							698	1390		476	947		
vCu, unblocked vol	1384			943			1644	2336	474	1851	2322	696	
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9	
tC, 2 stage (s)							6.5	5.5		6.5	5.5		
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3	
p0 queue free %	100			100			98	100	99	90	100	95	
cM capacity (veh/h)	488			719			225	171	533	144	174	382	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1	SB 1						
Volume Total	2	624	313	676	704	9	33						
Volume Left	2	0	0	3	0	5	15						
Volume Right	0	0	1	0	30	4	18						
cSH	488	1700	1700	719	1700	303	218						
Volume to Capacity	0.00	0.37	0.18	0.00	0.41	0.03	0.15						
Queue Length 95th (ft)	0	0	0	0	0	2	13						
Control Delay (s)	12.4	0.0	0.0	0.1	0.0	17.3	24.5						
Lane LOS	B			A		C	C						
Approach Delay (s)	0.0			0.1		17.3	24.5						
Approach LOS						C	C						
Intersection Summary													
Average Delay				0.5									
Intersection Capacity Utilization				49.9%	ICU Level of Service				A				
Analysis Period (min)				15									

HCM Unsignalized Intersection Capacity Analysis
7: 10515 Main Street Driveway & Main Street

FB 2025

Timing Plan: PM Peak

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑	↔	
Traffic Volume (veh/h)	947	0	0	1368	0	0
Future Volume (Veh/h)	947	0	0	1368	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1029	0	0	1487	0	0
Pedestrians					7	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					1	
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage (veh)	2			2		
Upstream signal (ft)				478		
pX, platoon unblocked						
vC, conflicting volume			1036		1780	350
vC1, stage 1 conf vol					1036	
vC2, stage 2 conf vol					744	
vCu, unblocked vol			1036		1780	350
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			662		250	642
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	412	412	206	744	744	0
Volume Left	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.24	0.24	0.12	0.44	0.44	0.00
Queue Length 95th (ft)	0	0	0	0	0	0
Control Delay (s)	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			41.1%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
8: 10501 Main Street Driveway West/Church Driveways & Main Street

FB 2025

Timing Plan: PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			 			 			 	
Traffic Volume (veh/h)	2	945	0	0	1365	2	0	0	0	0	0	3
Future Volume (Veh/h)	2	945	0	0	1365	2	0	0	0	0	0	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	1027	0	0	1484	2	0	0	0	0	0	3
Pedestrians								7			8	
Lane Width (ft)								12.0			12.0	
Walking Speed (ft/s)								3.5			3.5	
Percent Blockage								1			1	
Right turn flare (veh)												
Median type		TWLT			TWLT							
Median storage veh		2			2							
Upstream signal (ft)					320							
pX, platoon unblocked												
vC, conflicting volume	1494			1034			1783	2532	349	1839	2531	751
vC1, stage 1 conf vol							1038	1038		1493	1493	
vC2, stage 2 conf vol							745	1494		346	1038	
vCu, unblocked vol	1494			1034			1783	2532	349	1839	2531	751
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	99
cM capacity (veh/h)	442			663			203	152	642	124	153	351
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1	SB 1					
Volume Total	259	514	257	989	497	0	3					
Volume Left	2	0	0	0	0	0	0					
Volume Right	0	0	0	0	2	0	3					
cSH	442	1700	1700	1700	1700	1700	351					
Volume to Capacity	0.00	0.30	0.15	0.58	0.29	0.00	0.01					
Queue Length 95th (ft)	0	0	0	0	0	0	1					
Control Delay (s)	0.2	0.0	0.0	0.0	0.0	0.0	15.4					
Lane LOS	A					A	C					
Approach Delay (s)	0.0			0.0		0.0	15.4					
Approach LOS						A	C					
Intersection Summary												
Average Delay	0.0											
Intersection Capacity Utilization	47.8%			ICU Level of Service			A					
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis
9: 10501 Main Street Driveway East & Main Street

FB 2025

Timing Plan: PM Peak

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑↑			↑↑		↑	
Traffic Volume (veh/h)	945	0	0	1367	0	0	
Future Volume (Veh/h)	945	0	0	1367	0	0	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	1027	0	0	1486	0	0	
Pedestrians					3		
Lane Width (ft)				12.0			
Walking Speed (ft/s)				3.5			
Percent Blockage				0			
Right turn flare (veh)							
Median type	TWLTL			None			
Median storage (veh)	2						
Upstream signal (ft)				140			
pX, platoon unblocked							
vC, conflicting volume			1030		1773	260	
vC1, stage 1 conf vol					1030		
vC2, stage 2 conf vol					743		
vCu, unblocked vol			1030		1773	260	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)					5.8		
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	100	
cM capacity (veh/h)			668		252	737	
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	NB 1
Volume Total	293	293	293	147	743	743	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	0.17	0.17	0.17	0.09	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	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			41.1%		ICU Level of Service		A
Analysis Period (min)			15				

Queues

10: West Street & Main Street

FB 2025

Timing Plan: PM Peak

	EBL	EBT	EBR	WBL	WBT	NBT	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	608	345	21	6	252	222	47	1019
v/c Ratio	0.53	0.61	0.04	0.01	1.05	0.64	0.16	0.64
Control Delay	37.1	45.4	0.1	18.7	129.5	61.8	50.2	21.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.1	45.4	0.1	18.7	129.5	61.8	50.2	21.7
Queue Length 50th (ft)	219	260	0	2	~250	94	37	303
Queue Length 95th (ft)	306	402	0	10	#428	131	75	432
Internal Link Dist (ft)	60				306	268	482	
Turn Bay Length (ft)				125				
Base Capacity (vph)	1153	565	551	416	239	543	299	1588
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.61	0.04	0.01	1.05	0.41	0.16	0.64

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis

10: West Street & Main Street

FB 2025

Timing Plan: PM Peak

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	590	335	20	6	243	1	136	35	45	6	40	988
Future Volume (vph)	590	335	20	6	243	1	136	35	45	6	40	988
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	2200
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0			6.0			6.8	7.0
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00			0.95			1.00	0.88
Flpb, ped/bikes	1.00	1.00	0.97	1.00	1.00			0.99			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	0.85	1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	3090	1676	1375	1585	1675			2952			1666	2877
Flt Permitted	0.95	1.00	1.00	0.55	1.00			0.97			0.99	1.00
Satd. Flow (perm)	3090	1676	1375	924	1675			2952			1666	2877
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)	608	345	21	6	251	1	140	36	46	6	41	1019
RTOR Reduction (vph)	0	0	14	0	0	0	0	18	0	0	0	0
Lane Group Flow (vph)	608	345	7	6	252	0	0	204	0	0	47	1019
Confl. Peds. (#/hr)	2		4	4		2	3		5	5		3
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	2%	2%
Turn Type	Prot	NA	Perm	pm+pt	NA		Split	NA		Split	NA	pm+ov
Protected Phases	5	2		1	6		3	3		4	4	5
Permitted Phases			2	6								4
Actuated Green, G (s)	52.3	47.3	47.3	45.0	20.0			15.7			25.2	77.5
Effective Green, g (s)	52.3	47.3	47.3	45.0	20.0			15.7			25.2	77.5
Actuated g/C Ratio	0.37	0.34	0.34	0.32	0.14			0.11			0.18	0.55
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0			6.0			6.8	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	1154	566	464	415	239			331			299	1592
v/s Ratio Prot	0.20	c0.21		0.00	c0.15			c0.07			0.03	c0.24
v/s Ratio Perm			0.01	0.00								0.12
v/c Ratio	0.53	0.61	0.02	0.01	1.05			0.62			0.16	0.64
Uniform Delay, d1	34.2	38.6	30.8	32.4	60.0			59.3			48.4	21.6
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	1.7	4.8	0.1	0.0	73.3			3.4			1.1	2.0
Delay (s)	35.9	43.5	30.9	32.4	133.3			62.7			49.6	23.6
Level of Service	D	D	C	C	F			E			D	C
Approach Delay (s)	38.5				130.9			62.7			24.7	
Approach LOS	D				F			E			C	

Intersection Summary

HCM 2000 Control Delay	44.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	26.8
Intersection Capacity Utilization	76.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

F. Intersection Analysis Worksheets – Future with Development (2025)

Queues

1: Judicial Drive & Main Street

TF 2025

Timing Plan: AM Peak

	→	↘	↙	←	↖
Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1391	349	35	1014	261
v/c Ratio	0.51	0.24	0.12	0.35	0.71
Control Delay	9.5	0.5	3.9	4.2	91.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	9.5	0.5	3.9	4.2	91.8
Queue Length 50th (ft)	334	0	6	134	162
Queue Length 95th (ft)	420	9	15	182	210
Internal Link Dist (ft)	425			206	540
Turn Bay Length (ft)		125	95		
Base Capacity (vph)	2714	1477	300	2892	870
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.51	0.24	0.12	0.35	0.30

Intersection Summary

HCM Signalized Intersection Capacity Analysis

1: Judicial Drive & Main Street

TF 2025

Timing Plan: AM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↓	↑↑	↑↑	
Traffic Volume (vph)	1280	321	32	933	216	24
Future Volume (vph)	1280	321	32	933	216	24
Ideal Flow (vphpl)	1900	1900	1900	1900	2100	1900
Total Lost time (s)	7.0	6.3	7.0	7.0	6.3	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.99	
Flt Protected	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (prot)	3505	1583	1752	3471	3765	
Flt Permitted	1.00	1.00	0.16	1.00	0.96	
Satd. Flow (perm)	3505	1583	286	3471	3765	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1391	349	35	1014	235	26
RTOR Reduction (vph)	0	48	0	0	5	0
Lane Group Flow (vph)	1391	301	35	1014	256	0
Confl. Peds. (#/hr)					1	
Heavy Vehicles (%)	3%	2%	3%	4%	2%	2%
Turn Type	NA	pm+ov	pm+pt	NA	Prot	
Protected Phases	2	4	1	6	4	
Permitted Phases		2	6			
Actuated Green, G (s)	145.7	164.1	158.3	158.3	18.4	
Effective Green, g (s)	145.7	164.1	158.3	158.3	18.4	
Actuated g/C Ratio	0.77	0.86	0.83	0.83	0.10	
Clearance Time (s)	7.0	6.3	7.0	7.0	6.3	
Vehicle Extension (s)	5.0	3.0	3.0	5.0	3.0	
Lane Grp Cap (vph)	2687	1367	281	2891	364	
v/s Ratio Prot	c0.40	0.02	0.00	c0.29	c0.07	
v/s Ratio Perm		0.17	0.10			
v/c Ratio	0.52	0.22	0.12	0.35	0.70	
Uniform Delay, d1	8.6	2.2	5.4	3.7	83.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.7	0.1	0.2	0.3	6.0	
Delay (s)	9.3	2.3	5.6	4.1	89.2	
Level of Service	A	A	A	A	F	
Approach Delay (s)	7.9			4.1	89.2	
Approach LOS	A			A	F	

Intersection Summary

HCM 2000 Control Delay	13.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	20.3
Intersection Capacity Utilization	52.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
2: Funeral Home Driveway West/Mosby Tower Driveway West & Main Street

TF 2025

Timing Plan: AM Peak

																
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR				
Lane Configurations		 			 			 			 					
Traffic Volume (veh/h)	9	1313	2	3	937	4	0	0	1	4	0	8				
Future Volume (Veh/h)	9	1313	2	3	937	4	0	0	1	4	0	8				
Sign Control	Free			Free			Stop			Stop						
Grade	0%			0%			0%			0%						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92				
Hourly flow rate (vph)	10	1427	2	3	1018	4	0	0	1	4	0	9				
Pedestrians	5															
Lane Width (ft)	12.0															
Walking Speed (ft/s)	3.5															
Percent Blockage	0															
Right turn flare (veh)																
Median type	None			None												
Median storage (veh)																
Upstream signal (ft)	738			1087												
pX, platoon unblocked				0.84			0.84			0.84	0.84	0.84				
vC, conflicting volume	1022				1434				1977	2481	720	1760				
vC1, stage 1 conf vol																
vC2, stage 2 conf vol																
vCu, unblocked vol	1022				1127				1776	2379	272	1517				
tC, single (s)	4.1				4.8				7.5	6.5	8.9	7.5				
tC, 2 stage (s)																
tF (s)	2.2				2.5				3.5	4.0	4.3	3.5				
p0 queue free %	99				99				100	100	100	94				
cM capacity (veh/h)	675				386				42	28	417	67				
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1								
Volume Total	10	951	478	3	679	343	1	13								
Volume Left	10	0	0	3	0	0	0	4								
Volume Right	0	0	2	0	0	4	1	9								
cSH	675	1700	1700	386	1700	1700	417	168								
Volume to Capacity	0.01	0.56	0.28	0.01	0.40	0.20	0.00	0.08								
Queue Length 95th (ft)	1	0	0	1	0	0	0	6								
Control Delay (s)	10.4	0.0	0.0	14.4	0.0	0.0	13.7	28.3								
Lane LOS	B				B			D								
Approach Delay (s)	0.1				0.0			28.3								
Approach LOS							B	D								
Intersection Summary																
Average Delay				0.2												
Intersection Capacity Utilization				47.4%			ICU Level of Service			A						
Analysis Period (min)				15												

HCM Unsignalized Intersection Capacity Analysis
3: Funeral Home Driveway East & Main Street

TF 2025

Timing Plan: AM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗↗			↗↗		↗
Traffic Volume (veh/h)	1318	0	0	944	0	0
Future Volume (Veh/h)	1318	0	0	944	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1433	0	0	1026	0	0
Pedestrians					5	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	903			922		
pX, platoon unblocked			0.83		0.83	0.83
vC, conflicting volume			1438		1951	722
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1128		1743	269
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)			511		65	605
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	716	716	513	513	0	
Volume Left	0	0	0	0	0	
Volume Right	0	0	0	0	0	
cSH	1700	1700	1700	1700	1700	
Volume to Capacity	0.42	0.42	0.30	0.30	0.00	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	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			39.8%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
4: 10555 Main Street Driveway West & Main Street

TF 2025
Timing Plan: AM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↕↕		↘	↕↕	↖	
Traffic Volume (veh/h)	1309	9	10	944	0	0
Future Volume (Veh/h)	1309	9	10	944	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	1364	9	10	983	0	0
Pedestrians					3	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	970			855		
pX, platoon unblocked			0.84		0.84	0.84
vC, conflicting volume			1376		1883	690
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1070		1672	254
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		100	100
cM capacity (veh/h)			543		71	626
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1
Volume Total	909	464	10	492	492	0
Volume Left	0	0	10	0	0	0
Volume Right	0	9	0	0	0	0
sSH	1700	1700	543	1700	1700	1700
Volume to Capacity	0.53	0.27	0.02	0.29	0.29	0.00
Queue Length 95th (ft)	0	0	1	0	0	0
Control Delay (s)	0.0	0.0	11.8	0.0	0.0	0.0
Lane LOS			B			A
Approach Delay (s)	0.0		0.1			0.0
Approach LOS						A
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			39.8%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
5: 10555 Main Street Driveway East & Main Street

TF 2025
Timing Plan: AM Peak

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1309	0	0	955	0	0
Future Volume (Veh/h)	1309	0	0	955	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1423	0	0	1038	0	0
Pedestrians					4	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	1113			712		
pX, platoon unblocked			0.84		0.84	0.84
vC, conflicting volume			1427		1946	716
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1134		1749	289
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)			514		65	594
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	712	712	519	519	0	
Volume Left	0	0	0	0	0	
Volume Right	0	0	0	0	0	
cSH	1700	1700	1700	1700	1700	
Volume to Capacity	0.42	0.42	0.31	0.31	0.00	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	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			39.5%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
6: 10533 Main Street Driveway/Mosby Tower Driveway East & Main Street

TF 2025

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (veh/h)	3	1298	7	6	949	13	1	0	1	6	0	4	
Future Volume (Veh/h)	3	1298	7	6	949	13	1	0	1	6	0	4	
Sign Control	Free				Free				Stop				
Grade	0%				0%				0%				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	3	1411	8	7	1032	14	1	0	1	7	0	4	
Pedestrians	1				2								
Lane Width (ft)	12.0				12.0								
Walking Speed (ft/s)	3.5				3.5								
Percent Blockage	0				0								
Right turn flare (veh)													
Median type	None				TWLTL								
Median storage (veh)					2								
Upstream signal (ft)	1220				605								
pX, platoon unblocked					0.84				0.84				
vC, conflicting volume	1046					1419					1956	2481	712
vC1, stage 1 conf vol									1421	1421	1768	2478	524
vC2, stage 2 conf vol									535	1060	1053	1053	
vCu, unblocked vol	1046					1127					1763	2385	288
tC, single (s)	4.1					4.1					7.5	6.5	6.9
tC, 2 stage (s)									6.5	5.5	6.5	5.5	
tF (s)	2.2					2.2					3.5	4.0	3.3
p0 queue free %	100					99					99	100	99
cM capacity (veh/h)	661					520					169	177	597
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1	SB 1						
Volume Total	3	941	478	523	530	2	11						
Volume Left	3	0	0	7	0	1	7						
Volume Right	0	0	8	0	14	1	4						
cSH	661	1700	1700	520	1700	263	275						
Volume to Capacity	0.00	0.55	0.28	0.01	0.31	0.01	0.04						
Queue Length 95th (ft)	0	0	0	1	0	1	3						
Control Delay (s)	10.5	0.0	0.0	0.4	0.0	18.8	18.6						
Lane LOS	B					A					C		
Approach Delay (s)	0.0					0.2					18.8		
Approach LOS									C				
Intersection Summary													
Average Delay					0.2								
Intersection Capacity Utilization					46.4%				ICU Level of Service				
Analysis Period (min)					15				A				

HCM Unsignalized Intersection Capacity Analysis
8: Main Street & Church Driveways

TF 2025

Timing Plan: AM Peak

Queues

10: West Street & Main Street

TF 2025

Timing Plan: AM Peak

								
Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	828	459	32	46	159	161	151	779
v/c Ratio	0.70	0.73	0.05	0.13	0.67	0.55	0.50	0.50
Control Delay	41.0	45.7	0.2	20.9	71.8	62.4	58.4	17.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.0	45.7	0.2	20.9	71.8	62.4	58.4	17.2
Queue Length 50th (ft)	320	350	0	17	139	70	126	199
Queue Length 95th (ft)	444	#585	0	43	#221	101	201	302
Internal Link Dist (ft)	130			306			482	
Turn Bay Length (ft)	115			125				
Base Capacity (vph)	1187	631	609	346	237	505	300	1571
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.73	0.05	0.13	0.67	0.32	0.50	0.50

Intersection Summary

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

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

10: West Street & Main Street

TF 2025

Timing Plan: AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	762	422	29	42	146	0	109	21	18	8	131	717
Future Volume (vph)	762	422	29	42	146	0	109	21	18	8	131	717
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	2200
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0			6.0			6.8	7.0
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00			0.95			1.00	0.88
Frpb, ped/bikes	1.00	1.00	0.97	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	0.85	1.00	1.00			0.98			1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.96			1.00	1.00
Satd. Flow (prot)	3090	1644	1377	1587	1660			2787			1671	2793
Flt Permitted	0.95	1.00	1.00	0.50	1.00			0.96			1.00	1.00
Satd. Flow (perm)	3090	1644	1377	833	1660			2787			1671	2793
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	828	459	32	46	159	0	118	23	20	9	142	779
RTOR Reduction (vph)	0	0	20	0	0	0	0	9	0	0	0	0
Lane Group Flow (vph)	828	459	12	46	159	0	152	0	0	151	779	
Confl. Peds. (#/hr)	1		4	4		1	4		5	5		4
Heavy Vehicles (%)	2%	4%	2%	2%	3%	2%	8%	2%	30%	2%	2%	5%
Turn Type	Prot	NA	Perm	pm+pt	NA		Split	NA		Split	NA	pm+ov
Protected Phases	5	2		1	6		3	3		4	4	5
Permitted Phases			2	6								4
Actuated Green, G (s)	53.8	53.8	53.8	40.0	20.0			14.2			25.2	79.0
Effective Green, g (s)	53.8	53.8	53.8	40.0	20.0			14.2			25.2	79.0
Actuated g/C Ratio	0.38	0.38	0.38	0.29	0.14			0.10			0.18	0.56
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0			6.0			6.8	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	1187	631	529	345	237			282			300	1576
v/s Ratio Prot	c0.27	c0.28		0.02	0.10			c0.05			c0.09	0.19
v/s Ratio Perm			0.01	0.02								0.09
v/c Ratio	0.70	0.73	0.02	0.13	0.67			0.54			0.50	0.49
Uniform Delay, d1	36.3	36.8	26.8	36.8	56.9			59.8			51.8	18.4
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	3.4	7.2	0.1	0.2	7.3			2.0			5.9	1.1
Delay (s)	39.7	44.0	26.9	37.0	64.1			61.8			57.7	19.5
Level of Service	D	D	C	D	E			E			E	B
Approach Delay (s)	40.9				58.0				61.8			
Approach LOS	D				E				E			

Intersection Summary

HCM 2000 Control Delay	38.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	26.8
Intersection Capacity Utilization	90.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
11: E/W Road & Site Entrance 1

TF 2025
Timing Plan: AM Peak

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↗	↖		↘	↙
Sign Control		Stop	Stop		Stop	
Traffic Volume (vph)	75	27	10	54	37	15
Future Volume (vph)	75	27	10	54	37	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	82	29	11	59	40	16
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total (vph)	111	70	56			
Volume Left (vph)	82	0	40			
Volume Right (vph)	0	59	16			
Hadj (s)	0.18	-0.47	0.01			
Departure Headway (s)	4.3	3.7	4.3			
Degree Utilization, x	0.13	0.07	0.07			
Capacity (veh/h)	825	957	799			
Control Delay (s)	7.9	6.9	7.6			
Approach Delay (s)	7.9	6.9	7.6			
Approach LOS	A	A	A			
Intersection Summary						
Delay		7.6				
Level of Service		A				
Intersection Capacity Utilization		22.2%		ICU Level of Service	A	
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis
12: E/W Road & Site Entrance 2

TF 2025
Timing Plan: AM Peak

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↗	↖		↘	↙
Traffic Volume (veh/h)	27	37	54	48	56	10
Future Volume (Veh/h)	27	37	54	48	56	10
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)	29	40	59	52	61	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	111				183	85
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	111				183	85
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				92	99
cM capacity (veh/h)	1479				791	974
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	69	111	72			
Volume Left	29	0	61			
Volume Right	0	52	11			
cSH	1479	1700	814			
Volume to Capacity	0.02	0.07	0.09			
Queue Length 95th (ft)	1	0	7			
Control Delay (s)	3.2	0.0	9.9			
Lane LOS	A		A			
Approach Delay (s)	3.2	0.0	9.9			
Approach LOS			A			
Intersection Summary						
Average Delay		3.7				
Intersection Capacity Utilization		20.5%		ICU Level of Service	A	
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis
13: West Street & E/W Road

TF 2025
Timing Plan: AM Peak

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑↑	↑	
Traffic Volume (veh/h)	80	13	22	68	121	81
Future Volume (Veh/h)	80	13	22	68	121	81
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	87	14	24	74	132	88
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)					168	
pX, platoon unblocked	0.90	0.90	0.90			
vC, conflicting volume	261	176	220			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	130	36	84			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	88	98	98			
cM capacity (veh/h)	756	930	1366			
Direction, Lane #	EB 1	NB 1	NB 2	SB 1		
Volume Total	101	49	49	220		
Volume Left	87	24	0	0		
Volume Right	14	0	0	88		
cSH	776	1366	1700	1700		
Volume to Capacity	0.13	0.02	0.03	0.13		
Queue Length 95th (ft)	11	1	0	0		
Control Delay (s)	10.3	3.9	0.0	0.0		
Lane LOS	B	A				
Approach Delay (s)	10.3	1.9		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			2.9			
Intersection Capacity Utilization			29.9%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
14: Connector Road & Main Street

TF 2025
Timing Plan: AM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑		↑
Traffic Volume (veh/h)	1203	102	0	969	0	24
Future Volume (Veh/h)	1203	102	0	969	0	24
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)	1308	111	0	1053	0	26
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLT			TWLT		
Median storage (veh)	2			2		
Upstream signal (ft)	1285			540		
pX, platoon unblocked						
vC, conflicting volume			1419		1890	492
vC1, stage 1 conf vol					1364	
vC2, stage 2 conf vol					526	
vCu, unblocked vol			1419		1890	492
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	95
cM capacity (veh/h)			476		190	523
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	523	523	373	526	526	26
Volume Left	0	0	0	0	0	0
Volume Right	0	0	111	0	0	26
cSH	1700	1700	1700	1700	1700	523
Volume to Capacity	0.31	0.31	0.22	0.31	0.31	0.05
Queue Length 95th (ft)	0	0	0	0	0	4
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	12.2
Lane LOS						B
Approach Delay (s)	0.0			0.0		12.2
Approach LOS						B
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			35.5%	ICU Level of Service	A	
Analysis Period (min)			15			

Queues

1: Judicial Drive & Main Street

TF 2025

Timing Plan: PM Peak

	→	↘	↙	←	↖
Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	968	359	58	1467	500
v/c Ratio	0.38	0.26	0.14	0.53	0.84
Control Delay	13.2	0.5	6.7	10.1	101.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	13.2	0.5	6.7	10.1	101.7
Queue Length 50th (ft)	273	0	17	383	365
Queue Length 95th (ft)	359	9	36	497	420
Internal Link Dist (ft)	425			206	540
Turn Bay Length (ft)		125	95		
Base Capacity (vph)	2533	1394	443	2768	834
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.38	0.26	0.13	0.53	0.60

Intersection Summary

HCM Signalized Intersection Capacity Analysis

1: Judicial Drive & Main Street

TF 2025

Timing Plan: PM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗↗	↘	↙	↗↗	↗↗	
Traffic Volume (vph)	891	330	53	1350	404	56
Future Volume (vph)	891	330	53	1350	404	56
Ideal Flow (vphpl)	1900	1900	1900	1900	2100	1900
Total Lost time (s)	7.0	6.3	7.0	7.0	6.3	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.98	
Flt Protected	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (prot)	3539	1540	1770	3539	3744	
Flt Permitted	1.00	1.00	0.25	1.00	0.96	
Satd. Flow (perm)	3539	1540	468	3539	3744	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	968	359	58	1467	439	61
RTOR Reduction (vph)	0	46	0	0	6	0
Lane Group Flow (vph)	968	313	58	1467	494	0
Confl. Peds. (#/hr)		3	3			1
Confl. Bikes (#/hr)		2				1
Turn Type	NA	pm+ov	pm+pt	NA	Prot	
Protected Phases	2	4	1	6	4	
Permitted Phases		2	6			
Actuated Green, G (s)	157.5	192.1	172.1	172.1	34.6	
Effective Green, g (s)	157.5	192.1	172.1	172.1	34.6	
Actuated g/C Ratio	0.72	0.87	0.78	0.78	0.16	
Clearance Time (s)	7.0	6.3	7.0	7.0	6.3	
Vehicle Extension (s)	5.0	3.0	3.0	5.0	3.0	
Lane Grp Cap (vph)	2533	1344	411	2768	588	
v/s Ratio Prot	0.27	0.04	0.00	c0.41	c0.13	
v/s Ratio Perm		0.17	0.11			
v/c Ratio	0.38	0.23	0.14	0.53	0.84	
Uniform Delay, d1	12.2	2.2	6.9	8.9	90.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.4	0.1	0.2	0.7	10.5	
Delay (s)	12.7	2.3	7.1	9.6	100.5	
Level of Service	B	A	A	A	F	
Approach Delay (s)	9.9			9.5	100.5	
Approach LOS	A			A	F	

Intersection Summary

HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	220.0	Sum of lost time (s)	20.3
Intersection Capacity Utilization	60.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
2: Funeral Home Driveway West/Mosby Tower Driveway West & Main Street

TF 2025

Timing Plan: PM Peak

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations		 			 			 			 			
Traffic Volume (veh/h)	26	910	0	4	1376	7	1	0	5	9	0	34		
Future Volume (Veh/h)	26	910	0	4	1376	7	1	0	5	9	0	34		
Sign Control	Free			Free			Stop			Stop				
Grade	0%			0%			0%			0%				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		
Hourly flow rate (vph)	28	989	0	4	1496	8	1	0	5	10	0	37		
Pedestrians							4			3				
Lane Width (ft)							12.0			12.0				
Walking Speed (ft/s)							3.5			3.5				
Percent Blockage							0			0				
Right turn flare (veh)														
Median type	None			None										
Median storage (veh)														
Upstream signal (ft)	738			1087										
pX, platoon unblocked				0.89			0.89			0.89	0.89	0.89		
vC, conflicting volume	1507				993				1842	2564	498	2066	2560	755
vC1, stage 1 conf vol														
vC2, stage 2 conf vol														
vCu, unblocked vol	1507				757				1706	2513	204	1957	2508	755
tC, single (s)	4.1				4.1				9.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)														
tF (s)	2.2				2.2				4.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	94				99				94	100	99	69	100	89
cM capacity (veh/h)	439				758				16	23	715	32	23	350
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1						
Volume Total	28	659	330	4	997	507	6	47						
Volume Left	28	0	0	4	0	0	1	10						
Volume Right	0	0	0	0	0	8	5	37						
cSH	439	1700	1700	758	1700	1700	87	112						
Volume to Capacity	0.06	0.39	0.19	0.01	0.59	0.30	0.07	0.42						
Queue Length 95th (ft)	5	0	0	0	0	0	5	45						
Control Delay (s)	13.8	0.0	0.0	9.8	0.0	0.0	49.4	58.7						
Lane LOS	B				A				E	F				
Approach Delay (s)	0.4				0.0				49.4	58.7				
Approach LOS							E	F						
Intersection Summary														
Average Delay				1.3										
Intersection Capacity Utilization				48.7%			ICU Level of Service			A				
Analysis Period (min)				15										

HCM Unsignalized Intersection Capacity Analysis
3: Funeral Home Driveway East & Main Street

TF 2025

Timing Plan: PM Peak

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↻↻			↻↻		↻
Traffic Volume (veh/h)	925	0	0	1388	0	2
Future Volume (Veh/h)	925	0	0	1388	0	2
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)	1005	0	0	1509	0	2
Pedestrians					3	
Lane Width (ft)				12.0		
Walking Speed (ft/s)				3.5		
Percent Blockage				0		
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	903			922		
pX, platoon unblocked			0.90		0.90	0.90
vC, conflicting volume			1008		1762	506
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			776		1618	215
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)			747		84	706
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	502	502	754	754	2	
Volume Left	0	0	0	0	0	
Volume Right	0	0	0	0	2	
cSH	1700	1700	1700	1700	706	
Volume to Capacity	0.30	0.30	0.44	0.44	0.00	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	0.0	0.0	0.0	0.0	10.1	
Lane LOS					B	
Approach Delay (s)	0.0		0.0		10.1	
Approach LOS					B	
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			41.7%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
4: 10555 Main Street Driveway West & Main Street

TF 2025
Timing Plan: PM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔		↘	↔	↖	
Traffic Volume (veh/h)	927	0	3	1382	6	0
Future Volume (Veh/h)	927	0	3	1382	6	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1008	0	3	1502	7	0
Pedestrians					9	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					1	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	970			855		
pX, platoon unblocked			0.90		0.90	0.90
vC, conflicting volume			1017		1774	513
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			787		1632	225
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		91	100
cM capacity (veh/h)			735		82	692
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1
Volume Total	672	336	3	751	751	7
Volume Left	0	0	3	0	0	7
Volume Right	0	0	0	0	0	0
cSH	1700	1700	735	1700	1700	82
Volume to Capacity	0.40	0.20	0.00	0.44	0.44	0.09
Queue Length 95th (ft)	0	0	0	0	0	7
Control Delay (s)	0.0	0.0	9.9	0.0	0.0	53.3
Lane LOS			A			F
Approach Delay (s)	0.0		0.0			53.3
Approach LOS						F
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			48.2%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
5: 10555 Main Street Driveway East & Main Street

TF 2025
Timing Plan: PM Peak

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	 			 		
Traffic Volume (veh/h)	927	0	0	1385	0	24
Future Volume (Veh/h)	927	0	0	1385	0	24
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)	1008	0	0	1505	0	26
Pedestrians					6	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					1	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	1113			712		
pX, platoon unblocked			0.90		0.90	0.90
vC, conflicting volume			1014		1766	510
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			787		1626	226
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	96
cM capacity (veh/h)			739		83	694
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	504	504	752	752	26	
Volume Left	0	0	0	0	0	
Volume Right	0	0	0	0	26	
cSH	1700	1700	1700	1700	694	
Volume to Capacity	0.30	0.30	0.44	0.44	0.04	
Queue Length 95th (ft)	0	0	0	0	3	
Control Delay (s)	0.0	0.0	0.0	0.0	10.4	
Lane LOS					B	
Approach Delay (s)	0.0		0.0		10.4	
Approach LOS					B	
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			41.6%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
6: 10533 Main Street Driveway/Mosby Tower Driveway East & Main Street

TF 2025

Timing Plan: PM Peak

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations														
Traffic Volume (veh/h)	2	948	1	3	1361	30	5	0	4	15	0	18		
Future Volume (Veh/h)	2	948	1	3	1361	30	5	0	4	15	0	18		
Sign Control		Free			Free			Stop			Stop			
Grade		0%			0%			0%			0%			
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99		
Hourly flow rate (vph)	2	958	1	3	1375	30	5	0	4	15	0	18		
Pedestrians	7													
Lane Width (ft)	12.0													
Walking Speed (ft/s)	3.5													
Percent Blockage	1													
Right turn flare (veh)														
Median type	None			TWLTL										
Median storage (veh)	2													
Upstream signal (ft)	1220			605										
pX, platoon unblocked				0.91			0.91			0.91	0.91	0.91		
vC, conflicting volume	1412				959			1674			2380	480		
vC1, stage 1 conf vol							962			962	1403	1403		
vC2, stage 2 conf vol							712			1418	487	963		
vCu, unblocked vol	1412				755			1541			2319	227		
tC, single (s)	4.1				4.1			7.5			6.5	6.9		
tC, 2 stage (s)							6.5			5.5	6.5	5.5		
tF (s)	2.2				2.2			3.5			4.0	3.3		
p0 queue free %	100				100			98			100	99		
cM capacity (veh/h)	476				774			248			171	705		
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1	SB 1							
Volume Total	2	639	320	690	718	9	33							
Volume Left	2	0	0	3	0	5	15							
Volume Right	0	0	1	0	30	4	18							
cSH	476	1700	1700	774	1700	348	212							
Volume to Capacity	0.00	0.38	0.19	0.00	0.42	0.03	0.16							
Queue Length 95th (ft)	0	0	0	0	0	2	13							
Control Delay (s)	12.6	0.0	0.0	0.1	0.0	15.6	25.0							
Lane LOS	B				A	C			D					
Approach Delay (s)	0.0				0.1	15.6			25.0					
Approach LOS							C	D						
Intersection Summary														
Average Delay				0.4										
Intersection Capacity Utilization				50.7%			ICU Level of Service			A				
Analysis Period (min)				15										

HCM Unsignalized Intersection Capacity Analysis
8: Main Street & Church Driveways

TF 2025

Timing Plan: PM Peak

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		 	 		 	
Traffic Volume (veh/h)	2	985	1391	2	0	3
Future Volume (Veh/h)	2	985	1391	2	0	3
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)	2	1071	1512	2	0	3
Pedestrians					8	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					1	
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage (veh)		2	2			
Upstream signal (ft)			322			
pX, platoon unblocked						
vC, conflicting volume	1522				1882	765
vC1, stage 1 conf vol					1521	
vC2, stage 2 conf vol					361	
vCu, unblocked vol	1522				1882	765
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	99
cM capacity (veh/h)	431				159	343
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1
Volume Total	216	428	428	1008	506	3
Volume Left	2	0	0	0	0	0
Volume Right	0	0	0	0	2	3
cSH	431	1700	1700	1700	1700	343
Volume to Capacity	0.00	0.25	0.25	0.59	0.30	0.01
Queue Length 95th (ft)	0	0	0	0	0	1
Control Delay (s)	0.2	0.0	0.0	0.0	0.0	15.6
Lane LOS	A					C
Approach Delay (s)	0.0			0.0		15.6
Approach LOS						C
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			48.5%		ICU Level of Service	A
Analysis Period (min)			15			

Queues

10: West Street & Main Street

TF 2025

Timing Plan: PM Peak

								
Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	639	357	21	26	252	303	107	1014
v/c Ratio	0.59	0.68	0.04	0.06	1.05	0.73	0.36	0.67
Control Delay	40.6	50.1	0.1	19.6	129.5	64.9	54.2	24.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.6	50.1	0.1	19.6	129.5	64.9	54.2	24.1
Queue Length 50th (ft)	244	283	0	11	~250	133	86	324
Queue Length 95th (ft)	327	423	0	28	#428	178	147	436
Internal Link Dist (ft)	130			306			482	
Turn Bay Length (ft)	115			125				
Base Capacity (vph)	1085	528	523	414	239	545	300	1523
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.68	0.04	0.06	1.05	0.56	0.36	0.67

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

10: West Street & Main Street

TF 2025

Timing Plan: PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	620	346	20	25	243		1	166	71	57	6	98
Future Volume (vph)	620	346	20	25	243		1	166	71	57	6	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	2200
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0			6.0			6.8	7.0
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00			0.95			1.00	0.88
Flpb, ped/bikes	1.00	1.00	0.97	1.00	1.00			0.99			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	0.85	1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.97			1.00	1.00
Satd. Flow (prot)	3090	1676	1375	1586	1675			2971			1672	2876
Flt Permitted	0.95	1.00	1.00	0.55	1.00			0.97			1.00	1.00
Satd. Flow (perm)	3090	1676	1375	914	1675			2971			1672	2876
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)	639	357	21	26	251		1	171	73	59	6	101
RTOR Reduction (vph)	0	0	14	0	0	0	0	16	0	0	0	0
Lane Group Flow (vph)	639	357	7	26	252	0	0	287	0	0	107	1014
Confl. Peds. (#/hr)	2		4	4		2	3		5	5		3
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	2%	2%
Turn Type	Prot	NA	Perm	pm+pt	NA		Split	NA		Split	NA	pm+ov
Protected Phases	5	2		1	6		3	3		4	4	5
Permitted Phases			2	6								4
Actuated Green, G (s)	49.2	44.2	44.2	45.0	20.0			18.8			25.2	74.4
Effective Green, g (s)	49.2	44.2	44.2	45.0	20.0			18.8			25.2	74.4
Actuated g/C Ratio	0.35	0.32	0.32	0.32	0.14			0.13			0.18	0.53
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0			6.0			6.8	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	1085	529	434	413	239			398			300	1528
v/s Ratio Prot	0.21	c0.21		0.01	c0.15			c0.10			0.06	c0.23
v/s Ratio Perm			0.00	0.01								0.12
v/c Ratio	0.59	0.67	0.02	0.06	1.05			0.72			0.36	0.66
Uniform Delay, d1	37.1	41.7	32.9	32.8	60.0			58.1			50.3	23.7
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	2.3	6.8	0.1	0.1	73.3			6.4			3.3	2.3
Delay (s)	39.5	48.4	33.0	32.8	133.3			64.4			53.6	26.0
Level of Service	D	D	C	C	F			E			D	C
Approach Delay (s)	42.5				123.9			64.4			28.7	
Approach LOS	D				F			E			C	

Intersection Summary

HCM 2000 Control Delay	47.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	26.8
Intersection Capacity Utilization	77.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis
11: E/W Road & Site Entrance 1

TF 2025
Timing Plan: PM Peak

	EBL	EBT	WBT	WBR	SBL	SBR
Movement						
Lane Configurations		↗	↘		↖	↗
Sign Control		Stop	Stop		Stop	
Traffic Volume (vph)	18	6	10	49	58	34
Future Volume (vph)	18	6	10	49	58	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	20	7	11	53	63	37
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total (vph)	27	64	100			
Volume Left (vph)	20	0	63			
Volume Right (vph)	0	53	37			
Hadj (s)	0.18	-0.46	-0.06			
Departure Headway (s)	4.4	3.7	4.0			
Degree Utilization, x	0.03	0.07	0.11			
Capacity (veh/h)	801	947	867			
Control Delay (s)	7.5	6.9	7.5			
Approach Delay (s)	7.5	6.9	7.5			
Approach LOS	A	A	A			
Intersection Summary						
Delay		7.3				
Level of Service		A				
Intersection Capacity Utilization		19.9%		ICU Level of Service	A	
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis
12: E/W Road & Site Entrance 2

TF 2025
Timing Plan: PM Peak

	EBL	EBT	WBT	WBR	SBL	SBR
Movement						
Lane Configurations		↗	↘		↖	↗
Traffic Volume (veh/h)	6	58	49	40	37	10
Future Volume (Veh/h)	6	58	49	40	37	10
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	63	53	43	40	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	96				152	74
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	96				152	74
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				95	99
cM capacity (veh/h)	1498				836	987
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	70	96	51			
Volume Left	7	0	40			
Volume Right	0	43	11			
cSH	1498	1700	865			
Volume to Capacity	0.00	0.06	0.06			
Queue Length 95th (ft)	0	0	5			
Control Delay (s)	0.8	0.0	9.4			
Lane LOS	A		A			
Approach Delay (s)	0.8	0.0	9.4			
Approach LOS			A			
Intersection Summary						
Average Delay		2.5				
Intersection Capacity Utilization		18.0%		ICU Level of Service	A	
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis
13: West Street & E/W Road

TF 2025
Timing Plan: PM Peak

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑↑	↑	
Traffic Volume (veh/h)	79	16	13	216	66	76
Future Volume (Veh/h)	79	16	13	216	66	76
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	86	17	14	235	72	83
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)					168	
pX, platoon unblocked	0.94	0.94	0.94			
vC, conflicting volume	259	114	155			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	184	30	74			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	88	98	99			
cM capacity (veh/h)	736	979	1437			
Direction, Lane #	EB 1	NB 1	NB 2	SB 1		
Volume Total	103	92	157	155		
Volume Left	86	14	0	0		
Volume Right	17	0	0	83		
cSH	767	1437	1700	1700		
Volume to Capacity	0.13	0.01	0.09	0.09		
Queue Length 95th (ft)	12	1	0	0		
Control Delay (s)	10.4	1.2	0.0	0.0		
Lane LOS	B	A				
Approach Delay (s)	10.4	0.4		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay		2.3				
Intersection Capacity Utilization		27.7%		ICU Level of Service	A	
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis
14: Connector Road & Main Street

TF 2025
Timing Plan: PM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑		↑
Traffic Volume (veh/h)	944	25	0	1395	0	44
Future Volume (Veh/h)	944	25	0	1395	0	44
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)	1026	27	0	1516	0	48
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage (veh)	2			2		
Upstream signal (ft)	1285			540		
pX, platoon unblocked						
vC, conflicting volume			1053		1798	356
vC1, stage 1 conf vol					1040	
vC2, stage 2 conf vol					758	
vCu, unblocked vol			1053		1798	356
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	93
cM capacity (veh/h)			657		248	641
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	410	410	232	758	758	48
Volume Left	0	0	0	0	0	0
Volume Right	0	0	27	0	0	48
cSH	1700	1700	1700	1700	1700	641
Volume to Capacity	0.24	0.24	0.14	0.45	0.45	0.07
Queue Length 95th (ft)	0	0	0	0	0	6
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	11.1
Lane LOS						B
Approach Delay (s)	0.0			0.0		11.1
Approach LOS						B
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			41.9%		ICU Level of Service	A
Analysis Period (min)			15			